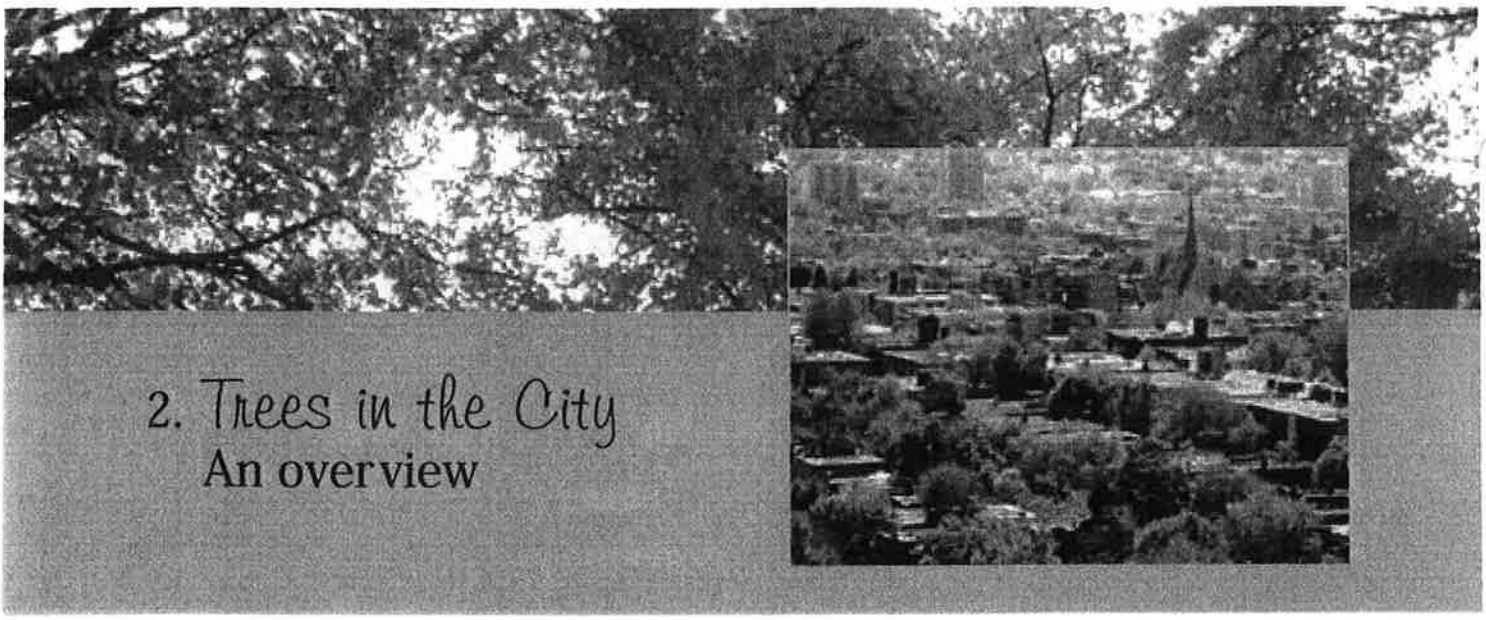


# 2. Trees in the City
## An overview

**Montréal's most common street trees**

Silver maple
Norwegian maple
Honey locust
Northern red ash
Hackberry
Siberian or Chinese elm
Little leaf linden

*In Montréal, trees represent the dominant element of the landscape. One need only cast a glance out over the City to behold the striking vista. Street layout is overlaid with the foliage of the trees that line them. Every here and there, readily visible clumps of trees and woodlots provide telltale signs of City squares and parks.*

### Trees are assets deserving of development...

Montréalers view this backdrop of green as an asset. However, if it is to be protected and maintained, the City's arboreal heritage requires painstaking care and attention. Indeed, trees planted in an urban environment are often subjected to considerable stress which can put their health, if not their survival, at risk.

The situation is all the more worrisome given that the urban forest cannot regenerate on its own. Hence trees having survived for a hundred years or more in the City centre are not only of inestimable dollar value but also of indisputable heritage value!



### ... yet remain largely misunderstood

At present, Montréal is lacking a comprehensive overview of the island's arboreal heritage and its current state of health. Urban forest knowledge, challenges, concerns and management techniques differ widely from one borough to the next.

However, there would appear to be a fairly accurate understanding of the pressures and stress which combine to imperil the wellbeing of City trees. It is important to realize that urban trees are located in an environment quite different from that originally intended. The trees which suffer the most as a result of these altered conditions are the street trees. The multiple threats and constraints they regularly face significantly hinder both growth and longevity.

**Following are examples of the types of threats and constraints suffered by Montréal's urban trees:**

**• Decreased rate of planting**

Owing to budget constraints, the number of trees planted on the island has decreased considerably in recent years. Proper urban forest stewardship techniques are essential if Montréal is to protect its forest assets and enhance the life expectancy of the City's trees.

• **Major infestations**

A lacking diversity of species of trees can increase the risk of major infestations and epidemics. A case in point was the outbreak of Dutch elm disease in the mid-20th century which killed some 30 000 American elm trees on the Island of Montréal. With international exchanges on the rise, infestations and epidemics of a similar order are made that much easier and could severely decimate Montréal's urban forest if nothing is done to ensure a proper degree of diversity.

• **Injuries**

Trees are frequently injured through negligence during construction, development or maintenance work and ignorance of the fundamentals of environmental citizenship. Injuries thus sustained can shorten a tree's lifespan and, in some instances, prove fatal. Albeit compensatory measures do exist in a number of boroughs, they are rarely enforced for legal reasons.



• **Unjustified felling**

Citizens sometimes bring pressure to bear upon stewards and elected officials to have public trees removed. In the absence of a specific policy, trees are all too often felled for no good reason. To this must be added the felling of trees in the private domain without the necessary permits, often because individuals are unaware of applicable regulations and procedures.

• **Invasion of public infrastructure**

All too often, pubic infrastructure (electricity, natural gas, water mains, sewers, telephone lines, cables, street lighting, road signs, etc.) and other equipment designed to boost visibility (commercial signs and billboards, etc.) are installed without proper allowance having been made for trees and their vital needs. Once again, growth and life expectancy are seriously impacted.

• **Non-recognition of noteworthy trees**

Noteworthy trees are those which are privileged witnesses to our past. In both the public and private domains, some of these exceptional trees are threatened owing to non-recognition of their worth or the absence of appropriate protective measures.

*Appendix H*

## Establishing a Municipal Tree Risk Management Program

Mark T. Duntemann
Natural Path Urban Forestry Consultants
natpath@earthlink.net

Every community should have a process for assessing, monitoring, and mitigating high-risk public trees. While trees that have been properly cared for throughout their life generally pose little safety concern, there is always some risk associated with maintaining large-diameter, over-mature trees in public use areas.

In the very rare instance of litigation occurring because of a tree or limb failure, a community would have to demonstrate that they have implemented a "reasonable" tree-risk management program. What is reasonable is a function of the resources available to a community. In other words, the level of care given to the trees in one community may not be reasonable for another because of limited staff, equipment and budget.

Physical harm and financial loss are the two types of risk associated with trees that a community needs to consider. Municipalities minimize the financial risk by managing the tree resource to reduce the risk of physical harm from occurring.

Two broad goals are required of every well-defined tree risk program: establishing a reasonable program and clearly documenting the program. The first goal addresses the risk of physical harm. The second goal allows a community to defend their program if litigation occurs, thus minimizing the financial risk. Both goals are realized by initiating policies at both the micro-scale and the macro-scale. Microscale refers to the community's policies toward individual trees. Macroscale refers to community policies directed at managing the total urban forest.

**Goal 1** (Establish a Reasonable Community Tree Risk Program) – Design and implement a program that identifies and mitigates the highest risk features in the tree population.

**Microscale** – Promote activities that increase staff's knowledge, skills and experience evaluating individual trees for risk. The following tasks are examples for achieving the microscale element of this goal.

1. Conduct repeated hazard tree assessment training for all staff that work with trees.

2. Require the arboricultural staff to become certified by the International Society of Arboriculture.

3. Fund staff attendance to regional, state, and national arboriculture conferences.

4. Conduct short, monthly "tailgate" refresher courses on proper arboricultural practices, insect and disease identification, hazard assessments, chainsaw safety, etc.

5. Conduct forensic evaluations, with all staff present, of any major tree part failure.

**Macroscale** – Promote activities that allow the community to create and manage risk at a reasonable level for all of the trees under its stewardship. There are five steps to defining the level of care that is appropriate for the community. These steps are:

1. Assess the Tree Population - The community should strive to reduce the most problematic features in the tree population. The tree inventory is the best tool for identifying these features. Risk increases when combinations of the following five items occur: problem species, large diameter, poor condition, structural defects and high target.

2. Evaluate the Resources Available to Manage the Tree Population - Once a refined list of risk trees has been established, assess the budget, equipment and labor force to determine the level of care that is possible for the community.

3. Create A Risk Policy Statement - A strong policy statement identifies the overall mission of the community toward their high-risk trees. The tree risk policy statement should include the following:

    - State the community's understanding of its responsibility to maintain safe public areas and right-of-ways.
    - Identify the manager of the risk reduction program.
    - List any general constraints on managing hazard trees such as financial or personnel.

4. Implement A Risk Management Plan - Once the first three tasks have been completed, a community should implement a risk management plan that defines a series of risk reduction objectives and associated actions to achieve each objective. The portion of the tree population with the highest probability of failure should be the initial target of any management strategy designed. Subsequent strategies focus on defining achievable monitoring programs of the complete urban forest.

5. Evaluate the Program – On an annual basis staff should meet and discuss any significant tree failures from the previous year. In addition, staff should review whether the outcomes defined in the risk reduction plan are being met. If they are not being met, what changes have to occur to allow the outcomes to happen?

**Goal 2** (Defensible Program) – The community must be able to articulate the specific program that it has developed. The easiest way to accomplish this is through documentation.

**Microscale** – Document that the staff are fully qualified to assess trees for risk and to make recommendations on how to best mitigate that risk. For each employee:

1. List any and all specific training courses attended. Include the title of the course, the date, the duration, and any applicable CEU credits.

2. List any specific certifications achieved. Include the title, affiliation, and date.

3. List all conferences and workshops attended. Include the title, location, date range, and sessions attended.

4. List all "tailgate" training attendance. Include the subject, date and duration.

5. List all forensic discussions attended. Include the location, date, species, diameter, type of failure, and the final determination by staff of what caused the failure to occur.

**Macroscale** – Document the outcomes from each of the five steps from the macroscale part of Goal 1.

1. Summarize the assessment of the tree population. Summaries should include distributions for species, condition, diameter and defects. The high target areas of the community should be mapped. Identify in writing all of the problem areas within the tree population.

2. Summarize the fiscal, staff and equipment resources available to the community.

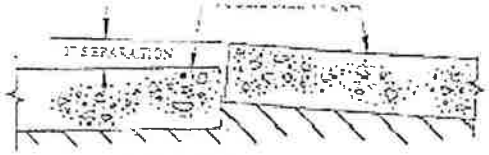
3. Document the tree risk policy statement

4. Document all of the objectives and actions defined in the tree risk management plan.

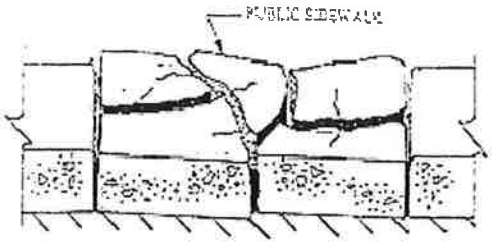
5. Document the annual program review. Include the date of the meeting, minutes and outcomes.

All documents created in Goal 2, from both the micro-scale and macro-scale elements, should reside in a tree risk management manual. The manual allows easy access for staff and forms the basis for articulating the community's tree risk program.

A management program's overall focus is to identify those features of the tree population that pose the highest risk to the public, and then concentrate the available resources to mitigate those features. A long-term risk reduction program defines a level of care that is appropriate within a community's available resources. As a result, a defensible program will have been established. A community manages the tree resource to reduce the potential of harm occurring. When properly managed and documented, the financial risk will be diminished.




SKETCH A

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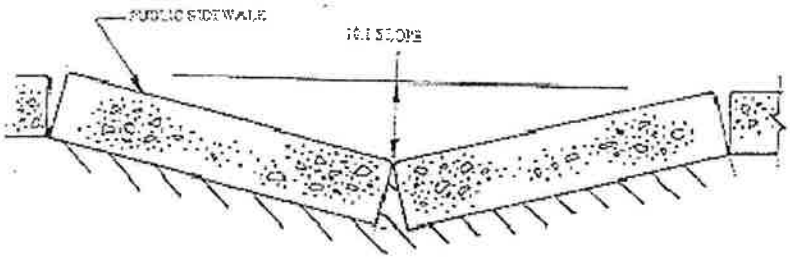


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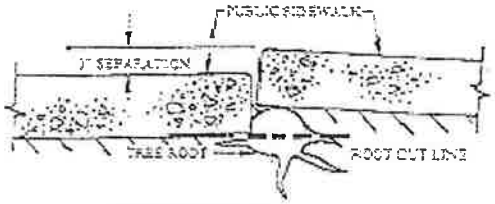


SKETCH D

*Appendix 1*

# City of Perrysburg Public Sidewalk Repair Policy

**Purpose-** The purpose of this policy is to protect the public health, safety and welfare of the citizens and inhabitants of the City by preventing and eliminating tripping, hazards on the public sidewalks to pedestrians, by repairing and/or replacement of required sections of sidewalks, to achieve, as close as possible, a uniform grade.
Public sidewalk- "Public sidewalk" means any main or approach sidewalk, between the curb line and private property line.

**Responsibility-** Every owner of any lot or parcel of land situated within the City shall keep, repair and maintain the sidewalk along all public streets, avenues, boulevards or lanes adjoining such lot or parcel. The cost of such keeping, repairing and maintaining shall be the responsibility of the individual owner. (Section 1022.03(b)). Sidewalk sections which extend from existing sidewalks to the curb to facilitate the crossing of streets are the responsibility of the City.

**Determination factor-** A public sidewalk is required to be repaired or replaced when a section(s) has a separation of one (1 ") inch or greater in the surface elevation which creates a tripping hazard. See sketch A. Also, a section(s) which have cracks or separations which create an uneven surface and are large enough to create either a tripping hazard or a possible ankle turning situation, must be replaced. See sketch B. Sidewalk sections, which meet with sev ere slopes or rises, greater than 10: 1, shall be repaired as required. See sketch C. City inspection of sidewalks to identify sidewalks which require repair and/or replacement, will be done by walking the designated area and using a one inch template, to measure the amount of separation. Sidewalks with manholes in them will be inspected and if the grade of the casting can be altered, the City

will make an attempt to do so, however, repair or replacement of the sidewalk around the manhole shall be the responsibility of the property owner.

**Repair/Replacement**- Public sidewalk repair and/or replacement can be accomplished by the following methods:

1 . Remove the existing damaged section(s) of sidewalk and replace with new section(s) of sidewalk per City Sidewalk Specifications.

2. Raise or lower specific section(s) of sidewalk using compacted berm stone as a sub-base for the walk. Sidewalk leveling can also be achieved by concrete leveling contractors who drill hole in sidewalk and pump concrete mixture under the walk, which raises it and levels the walk.

3. Ramping or grinding of sidewalk sections to achieve a uniform grade is prohibited.

4. Where the section(s) of sidewalk requiring repair and/or replacement has been caused by tree roots undermining the walk, the City will inspect the tree and determine if the roots can be cut safely without damaging or destabilizing the tree. City crews must cut tree roots 2 inches in diameter or larger. The property owner is responsible for replacing the sidewalk and removing the cut tree roots. See sketch D.
a. If the tree roots cannot be cut, the sidewalk must be removed and the sidewalk replaced by curving the sidewalk around and away from the tree.
b. If the roots can be cut the sidewalk must be removed to expose the roots, the City called by the property owner to cut the roots, then a City crew will cut the root and the sidewalk can be replaced. The property owner is responsible for removing the cut tree root.

5. If the section(s) break or separation is not located at a sidewalk joint, then the sidewalk section(s) must be replaced with new sidewalk.

6. If a property owner wishes to repair/replace the sidewalk himself, or hires a contractor to repair/replace the adjacent sidewalk, they must first obtain a sidewalk permit from the City.

7. Sidewalk sections which must be replaced with new concrete must meet the sidewalk specifications of the City of Perrysburg. Copy is attached.

**Sidewalk Marking-** Sidewalks requiring repair/replacement will be marked by City Inspection personnel during the initial inspection. The markings used will be as follows:

1 . A solid green line on the edge of a section of sidewalk which has a separation of one inch or greater means the section can be repaired by either leveling the adjacent section of sidewalk or the lower section can be replaced with new concrete.

2. Two lines with arrows in between means that all sections between the arrows must be replaced with new concrete.

3. "CR" marked on sidewalks at curbs means the sidewalks and curb must be removed and replaced with curb ramps in accordance with ODOT standards. This is normally done by and is the responsibility of the City.

## City of Perrysburg Sidewalk Specifications for Residents Installing Their Own

1. DESCRIPTION: Sidewalks shall be four (4) feet wide and four (4) inches thick. ( It is required that they be six (6) inches thick across driveways.) Walks shall slope toward the street one-quarter (1,14) inch per foot (thus the closest edge to the street shall be one (1) inch lower than the edge adjacent the property line). It is recommended that two (2) inches of either berm stone, or item 304 aggregate base, be placed under the sidewalk.

2. SUBGRADE: All spongy material shall be removed and replaced with suitable material and compacted until firm. Grass and other plant material must be removed. The subgrade should be wet down the night before the concrete is poured, and shall be damp at the time of pouring.

3. FORMS: Forms shall be of wood or metal and extended the full depth of the concrete, and of sufficient strength to resist the pressure of the concrete without springing.

4. CONCRETE: Shall test 3750 psi at 28 days with not less than six (6) sacks of cement per cubic yard
of concrete regardless of the strength obtained, and not over six and one-half (6 1/2) gallons of water
per sack of cement and not over five (5) inch slump. The amount of air

entrained in the concrete shall
be between four (4) and seven (7) percent. In general, materials shall meet item 608.02 of the State of
Ohio Department Highway Construction and Material Specifications, except as otherwise provided
herein.

5. FINISHING: The concrete shall be deposited in a single layer. It shall struck off with a template and smoothed with a float to obtain a sandy texture. No plastering will be permitted. All outside edges shall be edged with a quarter (114) inch radius edging tool. It must have a broom finish.
z
6. JOINTS: Tooled joints shall be placed at intervals of five (5) feet and shall be perpendicular to the outside edges of the walk. Premolded expansion joints, 1/2 inch thick, shall be placed not more than twenty-five (25) feet apart and whenever sidewalks abuts another sidewalk, curbs and driveways.

7. DRIVEWAYS: Where there is an existing portland concrete or asphaltic concrete drive in reasonably good condition, the sidewalk may terminate at the edge of such drive. Where stone or dirt driveways exist or the drive in the area of the sidewalk is not in good condition, then the sidewalk shall be constructed across the driveway and shall be six (6) inches thick.

8. CONSTRUCTION STAKES: Will be provided by the City. Generally the stakes are located three (3) feet toward the street from the edge of the sidewalk closest to the street. (The purpose of this is to keep the stakes from being destroyed during construction.) Where grades are required, the grades placed on the stakes are for the high edge of the walk. Where a "C" or "F" plus a number accompanies the mark, this indicates that you should go above (F) the mark by the prescribed number of inches and below (C) the mark to get your elevation. If your elevation looks questionable, please call us.

DIVISION OF PLANNING AND ZONING
419-872-8015 or 419-872-7987

*Appendix J*

**City of New York**
**Parks & Recreation**

**TREES AND SIDEWALKS PROGRAM**

# TREE & SIDEWALK DESIGN SOLUTIONS

*The goal of the Trees and Sidewalks Program is to design repair solutions for sidewalks that maximize the growing space for tree roots, minimize the need for root cutting and shaving, and provide durable, long-lasting infrastructure. Listed below are some general "fix types" that run from the simplest options to the most complex. The associated contract items are required to for each fix type, although additional items included in the contract may be necessary to use depending on site requirements, as determined by the Borough Forester.*

## 1. Tree Pit Expansion

This simple solution is to enlarge the tree pit without additional concrete work. Tree pits are enlarged when heaved sidewalk flags are directly adjacent to the tree, but the remainder of the sidewalk meets DOT standards. Item #7, "Expansion of Sidewalk Tree Pits," incorporates sawcutting, excavation, and topsoil into one payment item.

Items include:

| | |
|---|---|
| #2 | Tree Wrap |
| #7 | Expansion of Sidewalk Tree Pits |
| #38 | Shredded Bark Mulch |

## 2. Curving Sidewalk

When the tree exists in a lawn pit, the damaged sidewalk flags are removed and new concrete sidewalk is created in an arc around the tree. The sidewalk may be curved beyond the linear edge of adjacent sidewalk if kept within the public right-of-way. A signed waiver form is required when the proposed sidewalk would encroach on private property.

Items include:

| | |
|---|---|
| #2 | Tree Wrap |
| #5 | Saw Cut Pavement |
| #9 | Hand and/or Pneumatic Excavation |
| #14 | Concrete Pavement w/o Base – 4" (or other concrete item, #12-22) |
| #23 | Foundation Material for Concrete |
| #38 | Shredded Bark Mulch |

## 3. Reinforced Sidewalk

Concrete sidewalks can be reinforced with steel fabric, for increased strength in anticipation of future root expansion below ground.

Items include:

| | |
|---|---|
| #2 | Tree Wrap |
| #5 | Saw Cut Pavement |
| #9 | Hand and/or Pneumatic Excavation |
| #14 | Concrete Pavement w/o Base – 4" (or other concrete item, #12-22) |
| #23 | Foundation Material for Concrete |
| #26 | Steel Fabric Reinforcement |
| #38 | Shredded Bark Mulch |

## 4. Ramped Sidewalk

This solution also incorporates reinforced sidewalk concrete, but the sidewalk is sloped over the root system to avoid root cutting. The slope may not exceed 8% as specified by the Americans with Disabilities Act. DOT

standards indicate a maximum slope of 3.9%, but this was established more on an esthetic basis. DOT will allow us to exceed their slope standards within reason to accommodate tree roots. Foundation material consisting of crushed stone (not reconstituted concrete) is used to infill between roots and provide the base for the sidewalk.

Items include:

#2 Tree Wrap
#5 Saw Cut Pavement
#9 Hand and/or Pneumatic Excavation
#14 Concrete Pavement w/o Base – 4" (or other concrete item, #12-22)
#23 Foundation Material for Concrete
#26 Steel Fabric Reinforcement
#38 Shredded Bark Mulch

## 5. Flexible Sidewalk

This version of the ramped sidewalk uses steel bar reinforcement between sidewalk flags rather than steel fabric. The goal is that when roots grow, adjacent sidewalk flags will be lifted in unison rather than separately, minimizing a potential vertical edge tripping hazard. The steel bars are inset within a sleeve to provide for future movement. Styrofoam (specified within all concrete items) is installed between flags to maintain a seal as the flags shift.

Items include:

#2 Tree Wrap
#5 Saw Cut Pavement
#9 Hand and/or Pneumatic Excavation
#14 Concrete Pavement w/o Base – 4" (or other concrete item, #12-22)
#23 Foundation Material for Concrete
#25 Steel Bar Reinforcement
#38 Shredded Bark Mulch

## 6. Structural Soil Breakout Zone

This design solution is appropriate for trees with smaller existing roots. It describes the use of structural soil in specific areas below sidewalks adjacent to lawn strips. The structural soil provides a compactable base for the sidewalk, but allows roots to grow below the sidewalk and extend into unpaved areas located beyond without causing damage to the sidewalk above as the roots grow.

Items include:

#2 Tree Wrap
#5 Saw Cut Pavement
#8 Unclassified Excavation
#9 Hand and/or Pneumatic Excavation
#14 Concrete Pavement w/o Base – 4" (or other concrete item, #12-22)
#31 Structural Soil Foundation Material
#38 Shredded Bark Mulch

## 7. Root Paths

Similar to the Structural Soil Breakout Zone, this design solution allows roots to bypass the compacted sidewalk foundation into unpaved areas more conducive to root growth. Channels are created below the sidewalk that radiate away from the tree. The channels may be either 4" trenches with topsoil and a plastic aeration sheet, or 6"-8" plastic pipes filled with topsoil.

Items include:

#2 Tree Wrap
#5 Saw Cut Pavement
#9 Hand and/or Pneumatic Excavation
#14 Concrete Pavement w/o Base – 4" (or other concrete item, #12-22)
#33 Root Paths with Plastic Aeration Sheet (or Items #34 or #35)
#38 Shredded Bark Mulch

# *Appendix K*

## Permitted Street Tree List (To be used for planting in utility strips)

Recommendations by Richard Gibney- RLA/ISA Certified Arborist, on August 12, 2005

The following is a list of many of the trees that could be included in a successful and diverse street tree planting. There are many other species and varieties that can be used but this is a good starting list for the Northeast. (* denotes Wire Friendly Trees as per LIPA and should be strongly considered when planting under utility wires)

- Acer campestre (Hedge Maple)*
- Acer rubrum (Red Maple)
- Acer griseum (Paperbark Maple)
- Amelanchier Canadensis (Shadblow)
- Carpinus betulus (European Hornbeam)
- Carpinus caroliniana (American Hornbeam)
- Carpinus japonica (Japanese Hornbeam)
- Cercidiphyllum japonicum (Katsura Tree)
- Cercis Canadensis (Redbud)
- Cornus kousa (Korean Dogwood)*
- Cornus mas (Cornellian Cherry)
- Eucommia ulmoides (Hardy Rubber Tree)
- Fraxinus Americana (American Ash)
- Fraxinus pennsylvanica 'Summit' (Summit Ash)
- Ginkgo biloba (Maidenhair Tree) Male tree only
- Gleditsia triacanthos (Honeylocust)
- Koelreutéria paniculata (Goldenrain Tree)*
- Liquidambar styraciflua (Sweetgum)
- Liriodendron tulipifera (Tulip Tree)
- Maackia amurensis (Amur Maackia)*
- Magnolia stellata (Star Magnolia)
- Parrotia persica (Persian Parrotia)
- Platanus acerifolia (London Plane Tree)
- Prunus yedoensis (Yoshino Cherry)
- Quercus acutissima (Sawtooth Oak)
- Quercus robur (English Oak)
- Quercus rubra (Red Oak)
- Stewartia pseudo-camellia (Japanese stewartia)
- Syringa reticulata 'Ivory Silk' (Japanese Tree Lilac)*
- Tilia Americana 'Redmond' (Redmond Linden)
- Tilia cordata (Littleleaf Linden)
- Tilia tomentosa (Silver Linden)
- Ulmus americana 'Princeton' (Princeton Elm)

- Zelkova serrata (Japanese Zelkova)

Says Richard Gibney- RLA/ISA Certified Arborist.

"The goal is always to plant the right tree in the right place. Consideration of soils, overhead wires, underground utilities and traffic/circulation conditions must be included in the decision making process. Sometimes no tree is the best solution. There are other situations where it is possible to plant a group of trees, stagger a row of trees or use evergreens and/or shrubs. Good horticulture, creativity, species diversity and common sense will result in a successful "community forest"."

"The tree list should be as long as it can be. Species diversity is the key to not only a successful tree program but one that can make your Village more vibrant and unique. Different flowering and Spring leaf emergence times along with a variety of Fall colors will enhance the Village throughout the year. A variety of conditions dictate a variety of trees. A general rule among arborists is that no single tree species should make up more than 10% of the community tree population (ideally -- however very few if any Villages reach this goal)."

"I won't try to dictate how many species you use but you could stick to a group of 5 or 6 dependable varieties (Tilia, Zelkova, Carpinus, Quercus, Gleditsia). A healthy diversity of species doesn't have to look like an arboretum but can make individual streets or areas unique.'

'I will let you know that a three foot strip is inadequate for any of the larger tree species and any tree can eventually cause a problem in this size strip.' Trees to consider are:

Cornus kousa (Japanese dogwood)
Syringa reticulata (Tree lilac)
Amelanchier (shadblow)
Carpinus (Hornbeam)
Prunus (Sargent Cherry, Yoshino Cherry)

It is important not to pick a standard list and distribute them randomly or in a uniform fashion through the Village - site considerations should be made on a case by case basis unless certain sites are found to have identical characteristics

To answer an earlier question you raised - a tree inventory for the entire Village would cost approximately 20 - 25 dollars per tree depending on the quality of the base map you can provide. For example if you have 1200 trees, the complete survey can be done and computerized for between 24 and 30 thousand dollars. An updated Village map would be additional (provided by a surveyor). The map should show utilities, lot lines, street addresses, curbs and street lights (overhead wires would be helpful also)
There are several programs available or we could customize one for you. The technology changes annually.

*Appendix L*

## Prohibited Street Tree List

Recommendations as per Richard Gibney, RLA/ISA Certified Arborist, August 12, 2005

Trees that should be avoided are as follows:

Tsuga canadensis (Eastern Hemlock)
Acer platanoides (Norway Maple)
Pyrus calleryana (Bradford Pear and varieties) Too many in Village
Betula (Birch)
Populus ( Poplar)
Hawthorn (Hawthorn)
Sorbus (Mountain Ash)
Quercus palustris (Pin Oak)- Too many in our Village
Platanus (Sycamore) Too many in our Village

Quote from Richard Gibney, RLA/ISA Certified Arborist. "The goal is always to plant the right tree in the right place. Consideration of soils, overhead wires, underground utilities and traffic/circulation conditions must be included in the decision making process. Sometimes no tree is the best solution. There are other situations where it is possible to plant a group of trees, stagger a row of trees or use evergreens and/or shrubs. Good horticulture, creativity, species diversity and common sense will result in a successful "community forest"."

*Appendix M*

## Noteworthy Tree List

A. Deciduous trees

Ash (Fraxinus)
Birch (Betula)
Black Locust (Robinia)
Coffee Tree (Gymnocladus)
Elm (Ulmus)
Flowering Cherry (Prunus)
Flowering Crab Apple (Malus)
Flowering Dogwood (Cornus) (governed by state law)
Hawthorne (Crataegus)
Hickory (Carya and Hickoria)
Honey Locust (Gleditsia)
Hornbeam (Carpinus)
Horsechestnut (Aesculus)
Japanese Pagoda Tree (Sophora)
Linden (Tilia)
Magnolia (Magnolia)
Maidenhair (Ginkgo)
Maple (Acer)
Mountain Ash (Sorbus)
Oak (Quercus)
Plane Tree (Platanus)
Sassafras (Sassafras)
Service Berry (Amelanchier)
Sweet Gum (Liquidambar)
Sycamore (Platanus)
Tulip (Liriodendron)
Tupelo (Nyssa)
Walnut (Juglans)
Willow (Salix)
Yellow Wood (Cladtastis)

B. Evergreen Trees

Arbor Vitae (Thuja)
Cedar (Chamaecyparis and Thuja)
Douglas Fir (Pseudotsuga)
Fir (Abies)
Hemlock (Tsuga)
Holly (Ilex)
Pine (Pinus)
Spruce (Picea)
Zelcova

*Appendix N*

# *A Technical Guide To Urban and Community Forestry*


Sponsors

U.S. Department of Agriculture, Forest Service, Pacific Northwest and Pacific Southwest Regions
Washington State Department of Natural Resources
Oregon Department of Forestry
California Department of Forestry and Fire Protection

Produced by

World Forestry Center in Portland, Oregon and
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A Technical Guide to Urban and Community Forestry
in Washington, Oregon and California

# Introduction

Trees growing within cities and towns form a forest--an urban forest. But urban trees require special attention, because they are expected to exist within the urban environment. With its infrastructure of streets, sidewalks, curbs, buried utilities, overhead power lines and buildings, the urban environment places tremendous stresses on trees. With proper care, trees become assets which grow in value over time. Without care, tree value declines, eventually becoming a liability to the community. *The Technical Guide to Urban Forestry* was produced to help communities develop, manage and protect their urban forest resources. The purpose of this publication is to provide technical information about growing trees in the relatively adverse urban environment.

This guide is a sequel to *An Introductory Guide to Community and Urban Forestry in Washington, Oregon and California.* The two publications have been designed to complement each other. Together they provide introductory and technical information regarding urban forestry programs and projects. Both guides were produced in response to requests from local officials and professional tree managers.

The need for tree management is never clearer than when urban development eliminates a significant stand of trees, or even a single well placed specimen. Sometimes trees are lost inadvertently, resulting from a lack of information. For example, roots are a tree's most vulnerable part, yet heavy equipment routinely runs over roots. By the time the tree starts to show signs of physical deterioration, five to ten years may have passed. Other times trees are killed intentionally as developers "land-scrape" before construction. This approach portrays an attitude that trees have little or no value in developed areas. Those who guide local development need to understand urban stress factors and the role they play in the premature death of trees.

The topics covered in this guide include: tree values, principles of tree growth, planning, tree selection, site preparation, planting and early care of trees, maintenance of established trees, handling trees affected by development, utility forestry, and the politics of municipal tree care. This guide is intended for use by citizens, government decision makers, land developers, and workers out on the streets. Like the original *Introductory Guide,* this *Technical Guide* is written for anyone in the private or public sectors who cares enough about their environment to see that trees in their community are planted, valued and protected.

The *Technical Guide* was written by a team of professionals identified on the last page. This group of researchers, educators and practitioners from throughout Washington, Oregon and California are dedicated to providing information on the urban forest resource. Their volunteer efforts reflect the need for people everywhere to contribute their energy and knowledge to make cities more livable for trees.

**Tree pruning involves not only** knowledge of tree growth, but technical expertise **with equipment** and supplies as well as strength and athletic agility.

# Urban Forestry Planning

Planning is a method for achieving an end, a detailed formulation of a program of action, or an orderly arrangement of parts of an overall design or objective. Planning is the process of establishing goals, policies, and procedures for a social or economic unit. Some people believe the planning process culminates with the publication of a document that presents detailed instructions for reaching a goal, but it does not end there. The final result of planning is the attainment of the goals, not publication of the plan.

Planning for the infinite future could be a daunting task, so the process is generally divided into smaller components: long-range, short-range, and site-specific. Long-range planning tends to be extensive, broadly worded, and enforced through a legally adopted comprehensive plan. Often, these comprehensive plans are refined to specifically address development with regional impacts. Short-range planning, also known as current planning, tends to be explicit, and is enforced through zoning ordinances. Site specific land development regulations may overlap zoning ordinances.

## Long-range Planning

Long-range planning mainly concerns growth management, and encompasses the preparing, maintaining, and updating of a comprehensive plan. State government establishes guidelines that must be met by comprehensive plans at the state, region, and county levels. Urban forestry concerns must be reflected in comprehensive planning. By adopting the plan, government officials signify their support for trees in the urban environment.

Comprehensive plans generally contain, among other things, elements that address the environment and transportation. Both of these elements should contain references to trees as they relate to the urban infrastructure. The environmental element should identify the need for preservation of the natural environment within developed areas. This element should also contain language calling for planting, maintenance, and preservation of native and introduced species along streets and in other open spaces. The transportation element should incorporate aesthetic considerations in the development of traffic circulation systems, and in providing for adequate right-of-way for tree planting.

## Short-range Planning

These plans help achieve desirable land-use allocation and distribution based on an assessment of the cumulative impact to a given area. Short-range plans usually serve to refine comprehensive plans and development proposals. They are enforced through zoning ordinances. Supporters of urban forestry can use the short-range plans to document areas in need of special attention. This may include preservation of critical habitat, development of tree-lined corridors or beautification of major entrances to the community. Including these concerns in the short-range planning process helps solidify support from planning staff and local decision-makers.

## Site Specific Planning

Planning for a specific site also has several levels: conceptual, schematic, and master. Conceptual planning illustrates possible physical forms and relationships between various elements of the project. This phase may even be done before a site is selected. Schematic planning may develop several design alternatives for a specific site, but not in enough detail to implement them. Once a schematic design is selected, the master plan refines the design and adds details. Based on an approved master plan, designers produce development plans, which may be reviewed by building, zoning or transportation departments.

Site specific planning includes efforts concentrated on site plan review. Enforced through land development regulations, this level of planning affects preservation and planting of trees on particular sites. Significant individual trees or entire stands may be planted, saved or removed based on a plan at this level. So regardless of the contents of higher level plans, site specific plans should be scrutinized before approval is given. Before development, sites should be inspected to verify that plans have been drawn correctly and that tree protection measures comply with development regulations.

## Management Planning

Then there are management plans, which define the overall scope and methodology of certain operations, such as urban forestry or transportation service.

Urban forestry management plans generally follow the planning process mentioned previously. They may also include: maintenance standards, tree inventories, work record processing, planting, removals, reforestation, rotation planting, phased removal, tree selection processes, design criteria, personnel training and development, budgets, and coordination within an agency, as well as with other agencies and citizens.

Two specific types of management plans—tree inventory system planning and long-range tree rotation planning—deserve further description. These types of management plans are important because of their effect on the efficiency of urban forestry operations, their impact on budget justifications, and the potential for conflict within the community.

**Tree inventory system planning** is a method for obtaining and organizing information about the number, condition, and distribution of urban trees. Information that is accurate, accessible, and simple is one of the best tools for making planning and management decisions. With tree in-

ventory information, program resources can be allocated appropriately among the various tree management functions, work can be scheduled for maximum efficiency, and financial decision-makers can evaluate various work plan proposals by comparing expected results with projected budgets.

Several inventory systems have been developed by cities, universities, extension services, and consulting firms. They range from quick, inexpensive survey methods that provide basic information to sophisticated, computerized systems that are integrated with daily tree care activities. *A Guide to Urban Tree Inventory Systems* was developed by the School of Forest Resources at Pennsylvania State University in 1979. It contains a general review of the characteristics of urban tree inventory systems, as well as profiles of 25 systems and references to 24 other inventories.

All inventories share the same general goal—to provide information about the nature of the urban forest. Most inventories have several objectives. The simplest systems might provide information to support the establishment of a tree care budget, start a community tree program, or at least, initiate a tree advisory board. At this level, the desired information may be as simple as three estimates: the total number of trees, their average condition, and their monetary value.

Computerized systems may be used to justify and prepare annual budgets, organize daily work assignments, keep records on individual trees, aid long-range planning, and support management analyses. These types of inventory systems link day-to-day operations with long-range planning.

**Long-range tree replacement or rotation plans** should be based on inventory information. Because tree removal or replacement generates community concern, citizens and policy makers should both be involved in the process.

The basic elements of a rotation plan are:

- ◊ Criteria for tree removal;
- ◊ Complete versus phased removal;
- ◊ Diversity versus monoculture in replacement species;
- ◊ Management plan for replacement activities; and
- ◊ Fiscal budget.

*Criteria for tree removal* form the basis for objectivity in the midst of the emotional furor that often develops over tree removal in urban areas. Objective criteria would include: current and future maintenance costs, years of estimated useful life, structural integrity, and public welfare. Because they are more subjective, the following items should be considered only as secondary criteria: diminishing aesthetics, amenities, and engineering values, such as noise abatement and wind reduction.

Removal recommendations must clearly identify priorities for tree removal. These priorities could become a sequence for removal. Dead or dying trees might be first. Second would be trees representing a potential hazard to adjacent property, buildings, parked cars or people. Next might be stumps from trees cut previously. The final category could be trees growing in undesirable locations.

*Complete versus phased removal* is one important decision that must be made before a management plan for tree removal is developed. Complete removal, as the name suggests, is the removal of all trees within a given area in one operation. In phased removal, a predetermined portion of a stand is removed on a schedule covering a period of years. Where space allows, new trees can be planted among existing ones that have been scheduled for removal. This approach, known as interplanting, encourages age diversity in the stand and minimizes aesthetic and environmental impacts of large-scale tree removal. Interplanting copies nature by providing new trees to take over before older trees come down.

*Diversity or monoculture* in tree species replacement will usually be an issue in most communities. Species diversity stabilizes the urban forest and tends to reduce losses due to harmful insects or disease. While having similar maintenance requirements is a primary consideration in species selection, large-scale monocultures should be avoided. Diversity also offers the adjacent property owners some individuality. Again, citizen involvement is valuable in developing the rotation plan.

Management planning for replacement trees must ensure the long-range maintenance for these replacement trees. Young trees require considerable care, such as watering, fertilizing, insect and disease control, and regularly scheduled pruning. Any plan must ensure long-range maintenance to protect the investment of public funds in replanting. For example, scheduled trimming of young trees reduces the need for expensive corrective pruning of mature trees.

*Budget and long-range funding* for tree replacement is an obvious element of the basic rotation plan. Many of the criteria mentioned previously will provide meaningful budget information. Cost/benefit approaches are helpful in justifying tree rotation plans, because policy makers often reduce programs to dollars and cents.

## Work Plans

Work plans fill in the details by guiding operations through specific periods of time (from several months to several years) and through specific locations (from a park to a watershed). Because on-going projects need funds, allocated budgets are an essential element of work plans. Because work plans generally address active projects, they change periodically as the projects change. Work plans might address specific planting projects, new tree care, care of established trees or implementation of a tree inventory.

*Appendix O*


# Tri-County Plumbing

NASSAU
(516) 437-5343
Master Plumber Lic #2060
NYC
(718) 470-0808
Master Plumber Lic #1008

Instant Plumbing and Heating, LLC
144 GERARD AVENUE
NEW HYDE PARK, NEW YORK 11040


## To Clog Or Not To Clog

by Frank Musella, Jr.

A sewer overflow in one's home can be an unsanitary mess that many times can be avoided. Periodic cleanings of sewer lines that are prone to backups can prevent costly cleanups at unpredictable times (mostly in the middle of the night or right before family members arrive for a holiday party). In my business it is almost guaranteed that my phone will ring on Thanksgiving morning with a frantic homeowner on the other end, pleading for my assistance.

On one occasion, several years ago a regular customer of mine called us one Saturday morning in early June. They were stuck in an uncomfortable predicament. The Smith's lived on a large property on the north shore and had been preparing for their daughter's wedding. They had out-of-town guests staying with them and many other partygoers on the way. They had made meticulous plans for the wedding, from the silverware to the music. The one thing they overlooked was the sanitary system. Unbeknownst to them, roots had been silently growing within their pipe for some time and had decided to clog the line at the most inopportune moment. We arrived to much fanfare and electrically cleaned the line to remove the stoppage. This relieved the frantic Bride and mother (as well as the guests who were also waiting to be relieved). The mess was cleaned and the nuptials completed. We still receive a thank you card each year on their anniversary.

Sewer systems are tacit necessities that are often not thought about until a problem arises. Any one that has ever had a sewer stoppage knows the inconvenience, expense and mess that can follow. For those of you who have never had a sewer backup let me bring you up to speed. The

pipe that carries sewerage from your house to the municipal sewer can often clog with soaps and greases, roots, construction debris or countless other objects that catch onto damaged sections of pipe. When this occurs in the house any water that is used in the house will overflow out of the lowest point in the house (basement toilets or showers, laundry sinks, etc...).

My company, Tri-County Plumbing has been serving the New York metro area for 44 years. We are a second-generation family owned and operated business. During this period we have come across just about every type of stoppage. Roots are a major cause of these stoppages. The roots grow into hairline cracks or faulty joints in the pipes. These can be caused by improper installations or the settling of the ground over time. A regular cleaning of these lines with an electric snake can help prevent these stoppages. Sometimes people remove trees in an attempt to stop the root growth, but in fact the tree roots continue to grow for many years after the tree is cut down. Chemical root growth inhibitors can also be helpful but should be added right after the roots have been cut. If a customer wishes to eliminate the root growth the best way to solve the problem is by excavating and replacing the line.

Using video inspection equipment we can get a better idea of the condition of the pipe. An inspection is performed by inserting a camera head that is mounted on a long rod into the pipe. The camera head transmits a picture of the interior walls to an accompanying monitor. These images are then examined. This tool aids in determining how to handle each specific sewer line; whether the line can be maintained by periodic cleanings or by complete replacement or by performing a point repair .

When deciding how to handle your sewer system remember these points:

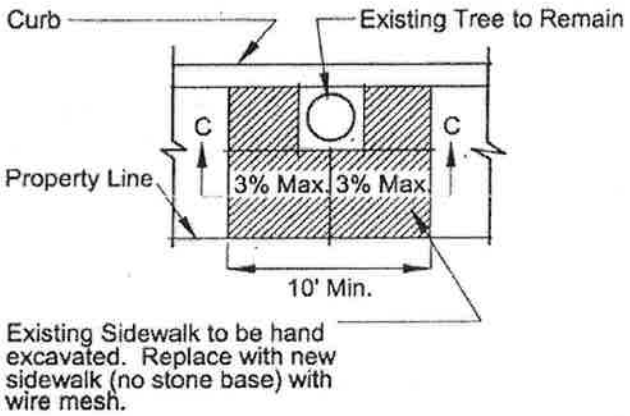
1) An ounce of prevention is worth a pound of cure.
2) If you are planning a party at your home don't overlook your drainage system. (kitchen sink and main sewer)
3) Be cautious with your sewer cleaning company, some are less scrupulous than others. If you're not sure get a second opinion.
4) Jetting is usually not necessary.
5) Gurgling is symptomatic of a line ready to backup.
6) Avoid spilling greases down drains.
7) Chemical pipe cleaners are caustic and will corrode pipes over time.
8) When planting shrubs or trees be conscious of the location of your sewer line. The round plate with holes on it (vent cover) on your house indicates location of sewer line.
9) The line should be cleaned from the main house trap not through the vent.

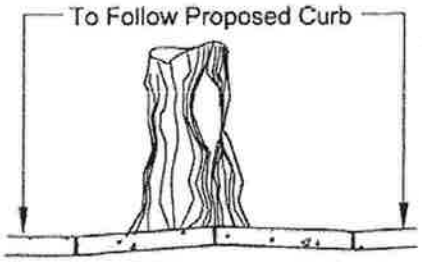
Frank Musella, Jr. is a licensed master plumber in NYC and Nassau County and can be reached at (516) 437-5343.

*Appendix P*

## 2 RAMPING OF SIDEWALK OVER TREE ROOT

not to scale

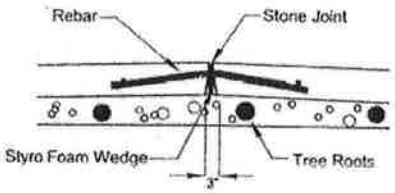


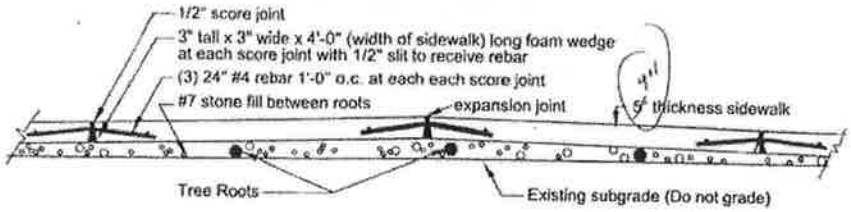



# *Appendix Q*

## 3 FLEXIBLE SIDEWALK
SECTION

Not to Scale



*Appendix R*

# Application and Instructions

New York State
Department of Environmental Conservation
Urban and Community Forestry Program

## 2005 Tree Planting Cost-Share Grants for Urban and Community Forestry in New York State

The New York State Department of Environmental Conservation, as part of a tree planting partnership with the New York State Energy Research and Development Authority, is pleased to announce that $300,000 in funding from the Environmental Protection Fund is available for urban and community forestry tree planting projects. Tree planting grants in cities with populations of 65,000 or more must request a minimum of $5,000, and may not exceed a maximum of $20,000 in State funds. Tree planting grant requests for municipalities with populations under 65,000 must request a minimum of $2,500 and may not exceed $7,500 in State funds. All grants must be equally matched by local resources. Grant funding must be used for tree planting on public sites in neighborhoods and parks. Announcement of grant awards from this program are anticipated in early winter 2005.

**Application Deadline October 31, 2005**

**Tree Planting Grants:**

The goal of this Urban and Community Forestry Grant Program is to support local community tree planting projects throughout neighborhoods and parks for energy savings, habitat creation, increased property values, and improved quality of life for New York urban residents. Grants are intended to have a lasting impact on neighborhoods especially where there is a need for increased tree cover. Grant applications should be responsive to cost effective tree planting opportunities on public properties or rights-of-way in neighborhoods that will provide tree canopy shading of buildings, streets, parking lots or other infrastructure for energy savings and mitigation of urban heat island effect. Planting trees should lead to the restoration and revitalization of neighborhoods and enhance property values. Grant applications may propose reforestation of urban parks and open spaces to create habitat and generate an increased urban forest canopy. Local communities should give appropriate consideration to under-served neighborhoods within their urban areas when selecting sites for tree planting projects. Grant applications should indicate if they compliment other federal, state and municipal projects for urban areas that are designed to revitalize these neighborhoods and improve the quality of life for residents. Proposals should demonstrate how the tree planting project will improve the quality of forest in parks or open spaces; have an impact on urban air and water resources; enhance the quality of urban life and improve associated public health.

**Who May Apply:**

Municipalities, public benefits corporations, public authorities, school districts and not-for-profit corporations having a public ownership interest in the property or acting on behalf of a public property owner. Such an interest may be outright ownership (fee simple), or a lesser interest, such as development rights, an easement or a long-term lease. ***Not-for-profit corporations must be subject to New York State's not-for-profit corporation law, have a charities registration number, and be approved for tax-exempt status under the Federal IRS code.***

**Matching Requirements:**

Matching share is that portion of the applicant's share used to match the grant. All grants must be matched at least equally (dollar for dollar). This is a **reimbursement** grant program, and the applicant's availability of funds is a critical factor when evaluating grant applications. Successful applicants must expend and fully document all project expenditures in order to receive reimbursement of funds. As a result, grantees must plan their financial arrangements accordingly. The maximum project award shall not exceed 50% of the approved total project costs. **PLEASE NOTE:** Federal or State funds will not be considered as an eligible match under this grant program. Applicants' match may include cash and/or the value of force account labor, professional services, volunteer labor, equipment, supplies and materials, and private and public non-federal contributions.

**Affirmative Action Requirements:**
The NYS DEC is committed to programs of Affirmative Action and Department staff will assist you in undertaking Affirmative Action initiatives as you plan your project. Article 15A of the Executive Law pertains to Minority and Women-owned Business Enterprises (M/WBE)/Equal Employment Opportunities (EEO). For assistance with identifying names of New York State Certified M/WBEs, you may access the New York State Department of Economic Development's M/WBE Directory via the Internet at: http://www. Empire.state.ny.us or contact Brenda Moulhem at (518) 402-9311.

**Environmental Justice:**
Through this grant program, DEC demonstrates a commitment to environmental justice and remedy for communities which may be burdened by negative environmental consequences. Environmental justice is defined by the DEC as the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

All applicants are encouraged to develop and implement community-based management plans or projects. Community-based activities engage the community or neighborhood within a municipality in conducting inventories, assessments, development of management plans, and carrying out urban forestry practices.

This Tree Planting Grant initiative will give additional consideration to those projects which satisfy evaluation criteria and benefit communities or neighborhoods which remain challenged by past social and environmental practices. This consideration will seek to remedy communities, including minority and low-income communities, burdened by negative environmental consequences and will also ensure the equitable distribution of environmental benefits to all New York State communities.

**Grant Funding Period**:
Funding will be available for two years from the date of the grant award.

**Application Deadline:**
Applications must be **postmarked or delivered by October 31, 2005.** ***No facsimiles or email submissions will be accepted.*** Applications will be reviewed and awards will be announced in late summer.

**Technical Assistance:**
Questions concerning this RFP may be directed to Frank Dunstan, by phone (518) 402-9425, or email fmdunsta@gw.dec.state.ny.us. Technical Questions or assistance concerning tree planting specifications, tree maintenance and care procedures and appropriate tree species for planting locations should be directed to DEC Regional Forestry Offices (a list of these offices is attached). Ask for the regional urban forester. Grant applicants are strongly advised to seek technical assistance from regional urban forestry staff prior to submitting proposals.

**PROPOSALS MUST CONSIDER THE FOLLOWING**:

1. The applicant shall clearly define the scope of the proposed work. What are the deliverables? How many trees will be planted? Where will the urban reforestation occur (include photos)? Estimate the percentage of trees planted (at maturity) that will provide summer shade to streets, parking lots, buildings and other infrastructure. In the case of parks and open spaces, estimate the percentage of forest canopy cover per acre that trees planted will have when mature. What tree maintenance and future tree care will be in place to insure tree survival? Is the tree planting project consistent with an existing management plan? Does the planting project have community and neighborhood support?

2. The applicant must describe the reforestation or tree planting methodology that will be used to achieve the project, including the cost effectiveness of meeting objectives and deliverables. Proposals should include a list of tree species to be planted; the appropriate tree planting specifications for the project location(s) and the intended tree maintenance and care program to be implemented after planting.

3. The proposal must include an itemized project budget that details all related expenses and indicates the number of trees to be planted. The budget must clearly distinguish expenses being claimed under the State grant share and as local match. The State share of project funds may only be used for tree planting and at least 50% of the local matching funds must also be used directly for tree planting. The remaining percentage of the local match may be for other associated project costs. See attached Schedule A - Project Budget/Schedule.

4. The applicant must describe any public outreach and education that have been undertaken or is proposed to be undertaken in conjunction with the tree planting project. How have, or will community residents be involved and informed about the project? What will be the community educational benefit as a result of the project?

## EVALUATION OF PROPOSALS

The New York State DEC has identified the following criteria to reflect program goals and we will use them to evaluate proposals. Applicants are encouraged to refer to these criteria in formulating their proposals.

1. The contribution that the tree planting project will have toward energy savings.
   - The projected amount of tree canopy shading (at maturity) of urban streets, parking lots, buildings and other infrastructure.
   - The projected increase of forest canopy cover (at maturity) in parks and other urban open spaces.

2. The contribution that the tree planting project will have on additional community benefits.
   - Urban air quality, storm water run off, fish and wildlife habitat, property values, and other quality of life values.
   - Environmental Justice. Urban tree planting projects should consider all neighborhoods in the municipality and address inclusion of minority populations and under-served communities.
   - Strengthen community partnerships between organizations.
   - Compliment other urban programs

3. The use of Best Management Practices ( sound urban forestry principals and management techniques) in the tree planting project.
   - The use of proper tree planting specifications for the project planting situation to enhance tree survival.
   - The use of proper maintenance and care procedures, including watering and pruning.

4. The methodology and techniques used in the tree planting project that will result in optimal numbers of trees planted /grant dollar expended for the project (cost effectiveness).
   - The use of appropriate planting material for the situation, for example bare root stock, size of planting material, species, structural soils, pit size, etc.

5. The tree planting project is consistent with a municipal Urban and Community Forestry Management Plan, if one exists for the municipality.

6. The tree planting project is preceded by community outreach to urban residents in the project area and they are provided information and education on the goals and benefits of the project.

## APPLICATION PROCEDURE

All application materials should be typed and submitted on white 8.5" x 11" paper.

All applicants must provide a narrative description of their project. The narrative should be no more than three typed 8.5' x 11" pages, and should include the following points:

- type of project
- the work proposed
- the overall existing condition of the project, sites, or facilities
- the role of those involved with the project
- the relationship of the proposed project to any significant resources on the property and how those resources will be managed and impacted
- the current and anticipated financial resources of your organization
- environmental justice

**To apply, send one original and five copies (5 total) to:**

Frank Dunstan
Division of Lands and Forests
NYSDEC
625 Broadway
Albany, NY 12233-4253

## REQUIRED ADDITIONAL INFORMATION

**The Original and Five Copies of The Application Must Include the Following Attachments**

- PHOTOS - Planting Projects
  All urban planting projects must include 3 X 5 photos showing the project area in enough detail to clearly document the existing conditions of the site, keyed to plans and project schedule. It is not necessary to include photos of every tree planting site. However, photos should clearly represent the project and be able to verify the proposed project benefits.

- Highlighted excerpts in local planning documents or the municipal urban forestry management plan that support the project narrative.

- Proposals must include detailed planting specifications including tree species to be planted and the type of planting site.

- Proposals must include future plans for maintenance and care of the project trees.

**One Copy of The Following Supplemental Information Must Accompany the Original Application Package**

**Permits:**
Depending on the project scope, some tree planting projects may require permits from agencies such as the NYS DEC or the US Army Corps or Engineers (COE). All applications should address whether permits are required, and if they are, the status of the permit application. It is recommended that you consult with the Governor's Office of Regulatory Reform (GORR) Permit Assistance Hotline at 1-800-342-3464, or DEC and/or the COE directly, to determine if any permits are needed, especially if your project is located in or adjacent to a water body, (e.g., stream, lake, wetland, canal). Other permit considerations could include: historic review requirements for projects that involve properties listed on, or eligible for, the State/National Register, all work undertaken as part of a grant-assisted project must conform to the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation; projects located in coastal or river front communities must meet coastal consistency requirements for the NYS Secretary of State's Coastal Management Program.

**Documentation of Ownership and Public Interest in Property**:
Grant applications must be able to document adequate ownership rights in and to the subject property, and that the ownership or use of the subject property is of a public nature.
A duly licensed attorney is to provide an opinion of council certifying that the applicant has title or other property right or license in and to the property, and that such right allows use of a public nature.

**Project Life**:
The recipient will be required to operate and maintain the project for at least 20 years.

**Municipal Endorsement**:
A municipal endorsement is required and must be submitted with the grant application by non-municipal applicants for projects that will be located on municipal property (Sample endorsement attached).

**Signed Original Authorizing Resolution:** ( Not required with application but must be submitted prior to grant award and completion of State Assistance Contract)
A sample of the resolution is included in this document.

**Subsequent Submittals:**

Upon notice of potential award, the responsive bidder may be required to submit, within 10 business days of receipt of the notice, any or all of the following items:

a. Vendor Responsibility Questionnaire
b. New York State Tax Law § 5-A Contractor Certification Forms (ST-220)
c. Successful grant applicants will be required to enter into a formal NY State assistance contract (which includes a project budget/schedule) and will be subject to all appropriate State rules, regulations, and reporting requirements.

## INSTRUCTIONS FOR APPLICATION FORMS

### General Project Information

**Applicant:** All applicants must include their Federal Employer ID number and Not-for-Profit Corporations must also include their New York State Charities Registration number.

**Project:** If the project is for a property listed on the State/National Historic Register, use the full, official name of the property as it is listed (the unofficial or popular name may be shown in parentheses). List the historic designation, if applicable.

**Authorized Official:** This is the person who should receive official notification about decisions regarding this application.

**Contact:** This is the person who should be contacted for additional information or questions about this project.

**Schedule A - Project Summary/Schedule**: Provide a detailed schedule for the project indicating the component, the number of units to be completed, the completion time frame (calculated in months from the start of the project) and the estimated costs associated with each component. Identify all project-related costs and identify the funding source of your match. Eligible categories and their components are:

**PRE-DEVELOPMENT: ( Pre-development costs may only be used as match, and may not exceed 30% of match.)**

- Design fees and other professional fees for the preparation of construction documents are not eligible for reimbursement, but may be used for the grant match.

-Pre-development costs must be incurred during the identified project term.

**IMPLEMENTATION: ( Tree planting costs must account for 100% of state grant funds and 50% of match funds.)**

- Material Costs: trees, stakes, soil, fertilizer, wood chips, etc.
- Personnel Costs: planting labor
- Transportation Costs: shipping/delivery costs
- Professional Services: site design, planning
- Equipment Costs: site preparation, equipment purchase or rental

**ADMINISTRATION: (Administration costs may only be used as match and may not exceed 20% of match.)**

-Planting Supervision may be provided by a qualified staff person or the design professional that prepared the planting documents.

-Grant Administration costs are costs associated with preparing the project agreement, and affirmative action, M/WBE and payment request documentation once the grant is awarded. The cost of preparing the grant application is not eligible.

-Advertising Costs: This budget item should cover the cost of advertising in newspapers, including minority newspapers, or appropriate construction publications.

- The Recipient agrees to give the NYS Department of Environmental Conservation appropriate credit for its support and shall note the following in all printed documents, video materials, and /or program advertisements resulting from this work. " This Project has been funded in part by a grant from the New York State Department of Environmental Conservation, Urban and Community Forestry Program through appropriations from the Environmental Protection Fund (EPF)".

**TYPES OF APPLICANT SHARE:**

- Cash
- Force Account (Paid Labor): Documentation of time worked, tasks, pay ratio and payment (including components and percentage of fringe benefit rate) will be required at time of reimbursement request.
- Supplies and Materials: the value of trees and planting items warehoused (not yet installed) with current market prices at the time they are obtained.
- Labor: Skilled and professional labor can be computed at the job rate. Unskilled labor, and work performed by professional or skilled labor in an area outside of their area of expertise must be computed at the minimum wage. (For example, a lawyer donating legal services may compute the value based on the standard billing rate; but the same lawyer donating time painting walls may bill only at the minimum wage.)
- Equipment Usage: Compute the value according to its fair market rental value in project location

**ACCEPTABLE SAMPLE RESOLUTIONS**

A resolution in the general format provided below must be passed at an official meeting of the governing body of the applicant and a copy attached to this application. The resolution must be typed on the applicant's stationery and should hold the official seal. The name of the applicant must be stated as it is recorded in the incorporation documents. Use the appropriate phrase in bold or brackets, depending on whether the applicant is a not-for-profit corporation, public benefit corporation, public authority, school district or municipality, respectively.

I, , [the duly elected and qualified secretary] OR [the duly qualified and action Clerk] of the (applicant) of (place) , New York, do hereby certify that the following resolution was adopted at a (regular) (special) meeting of the (governing body) held on (date), and is [incorporated in the original minutes of said meeting] OR [on file and of record], and that said resolution has not been altered, amended or revoked and is in full force and effect.

RESOLVED:

That (name) , as (title) of (applicant), or such person's successor in office is hereby authorized and directed to file an application for 50% matching funds in an amount not to exceed $ (grant), and upon approval of said request to enter into and execute a project agreement with the New York State Department of Environmental Conservation for such financial assistance to this [municipality] or [organization] for (grant project).

(Signature of Secretary) OR (Signature of Clerk)
Seal of Organization Seal of Municipality

*SAMPLE MUNICIPAL ENDORSEMENT for non-municipal projects located on municipal property.*

ACCEPTABLE MUNICIPAL ENDORSEMENT FOR USE WHEN APPLICANT IS NOT A MUNICIPALITY.

Resolution No. _____

_____WHEREAS, the (applicant name) is applying to the New York State Department of Environmental Conservation for a project grant under the Urban and Community Forestry Program to be located (insert location), a site located within the territorial jurisdiction of this (Board, Council or Legislature); and

WHEREAS, as a requirement of these programs, said ( type of applicant) must obtain the "approval/endorsement of the governing body of the municipality in which the project will be located",

NOW, THEREFORE, be it resolved that the (Board, Council or Legislature) of (municipality) hereby does approve and endorse the application of (applicant name) for a grant under the Urban and Community Forest Program for a project known as (project title) and located within this community.

DATE OF ADOPTION
CERTIFICATION OF CLERK

# 2005 Application for Tree Planting Grant

Applications must be postmarked or delivered by October 31, 2005. ***No facsimiles or email submissions will be accepted.***

_____ Application for tree planting in city with population of 65,000 or more.

_____ Application for tree planting in municipality (city, village or town) with population under 65,000.

**Name of Applicant: (Municipality/Agency/Organization Applying):**

_____

**Mailing Address:** _____
_____
_____

**County:** _____

**Project Title:** _____

**Project Site Address:** _____
**(include zip code)** _____
_____

**Project Contact:** _____

**Phone:** _____ **Fax:** _____ **E-mail** _____

**Federal ID#** _____ **Charities Registration#:**_____

**State/National Historic Register:** _____

**Local Historic Designation:**_____

**Ownership Information: Deed Liber** _____ **Page** _____

**Owner(s):** _____

**Applicant's interest in property, if not fee-simple ownership (e.g. lease, easement)**

_____

## AUTHORIZED OFFICIAL

**Name:** _____

**Title:** _____

**Telephone #:** _____

**Fax #:** _____

**E-Mail Address:** _____

**Business Address:** _____

_____

_____

**Grant Amount Requested:** $_____

**Amount of Match:** $_____

**Total Project Costs:** $_____

## SCHEDULE A
## PROJECT BUDGET/SCHEDULE

**1. Project Summary**: (a brief summary of project)

**2. Project Schedule:**

**Pre-development/Planning:** **Completion Date** **Cost**

(Pre-development/planning costs will not be reimbursed, but can be considered as eligible match for planting projects. Pre-development/planning amount may not exceed 30% of match.)

**Subtotal:$**_____

**Tree Planting Components:**

(Include the number of trees to be planted)

(100% of state grant funds and 50% of match funds **must be directly for tree planting**)

**Subtotal:$**_____

**Administration:**

(Administrative costs will not be reimbursed, but can be considered as eligible match for planting projects. Administrative amount may not exceed 20% of match.)

**Subtotal: $**_____

**Total Project Cost: $**_____

**Grant Amount: $**_____

**Match Amount: $**_____
(50% Match)

**Sources of Match: (**identify the source of your matching funds**)**

## Directory of Division of Lands and Forests Regional Offices

**Region 1** -Suffolk and Nassau counties
SUNY Campus
Loop Road, Building 40
Stony Brook, NY 11790-2356
(631) 444-0285

**Region 2** - Manhattan, Bronx, Queens, Brooklyn and Staten Island
1 Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407
(718) 482-4942

**Region 3** - Sullivan, Ulster, Orange, Dutchess, Putnam, Rockland and Westchester counties
Regional Office - New Paltz
21 South Putt Corners Road
New Paltz, NY 12561-1696
(845) 256-3076

Region 3 - Wappingers Falls Sub-Office
Stony Kill Environmental Education Center
79 Farmstead Lane
Wappingers Falls, NY 12590
(845) 831-8780

**Region 4** - Montgomery, Otsego, Delaware, Schoharie, Schenectady, Albany, Greene, Rensselaer and Columbia counties
Regional Office - Schenectady
1150 N. Wescott Road
Schenectady, NY 12306-2014
(518) 357-2066

Region 4 - Stamford Sub-Office
65561 State Highway 10, Suite1, Jefferson Road
Stamford, NY 12167-9503
(607) 652-7365

**Region 5** - Franklin, Clinton, Essex, Hamilton, Warren, Fulton, Saratoga and Washington counties
Regional Office - Ray Brook
P.O. Box 296, Route 86
Ray Brook, NY 12977-0296
(518) 897-1276

Region 5 - Warrensburg Sub-Office
232 Hudson Street
P.O. Box 220
Warrensburg, NY 12885-0220
(518) 623-1265

Region 5 - Northville Sub-Office
701 South Main Street
P.O. Box 1316
Northville, NY 12134-0458
(518) 863-4545

**Region 6** - Jefferson, St. Lawrence, Lewis, Oneida and Herkimer counties
Regional Office - Watertown
State Office Building
Watertown, NY 13601-3787
315) 785-2263

Region 6 - Potsdam Sub-Office
6739 US Highway 11
Potsdam, NY 13676
(315) 265-3090

Region 6 - Lowville Sub-Office
7327 State Route 812

Lowville, NY 13367
(315) 376-3521

Region 6 - Herkimer Sub-Office
225 North Main Street, P.O. Box 89
Herkimer, NY 13350-0089

(315) 866-6330

**Region 7** - Oswego, Cayuga, Onondaga, Madison, Tompkins, Cortland, Chenango, Tioga and Broome counties

Region 7 - Cortland Sub-Office
1285 Fisher Avenue
Cortland, NY 13045-1090
(607) 753-3095

Region 7 - Sherburne Sub-Office
2715 State Highway 80
Sherburne, NY 13460-4507
(607) 674-4036

Region 7 - Kirkwood Sub-Office
1679 NY Route 11
Kirkwood, NY 13795-9772
(607) 775-2545

**Region 8** - Orleans, Monroe, Wayne, Genesee, Livingston, Ontario, Yates, Seneca, Steuben, Schuyler and Chemung counties

Region 8 - Bath Sub-Office
7291 Coon Road
Bath, NY 14810-9728
(607) 776-2165

Region 8 -Avon Sub-Office
6274 East Avon-Lima Road
Avon, NY 14414

(585) 226-2466

**Region 9** - Niagara, Erie, Wyoming, Chautauqua, Cattaraugus and Allegany counties

Regional Office - Allegany
182 East Union Street, Suite 3
Allegany, NY 14706-1328
(716) 372-0645

Region 9 - Falconer Sub-Office
215 South Work Street
Falconer, NY 14733-1497
(716) 665-6111

Region 9 - Belmont Sub-Office
5425 County Route 48
Belmont, NY 14813-9758
(585) 268-5392

Region 9 - Buffalo Sub-Office
270 Michigan Ave.
Buffalo, NY 14203-2999
(716) 851-7000

## RECOMMENDED MINIMUM STANDARDS* FOR NY DEC TREE PLANTING GRANTS

The following are minimum standards that may be used for tree planting grant projects. Where local ordinances and guidelines require more stringent standards, use the more stringent standards. All tree planting work should be supervised by a qualified professional.

### PLANNING

A detailed tree planting and three year maintenance plan must be developed with input from local agencies to avoid conflicts. Where underground or above ground utilities are present, the local utility must be contacted.

### TREE SPECIES SELECTION

1. Species will be selected to fit the planting site, taking into consideration soils, rooting space, overhead space, adjacent utilities and buildings, drainage, and other site conditions.

2. All species will be appropriate for the hardiness zone in which they are located.

3. All trees used will be true to name. Size and grading standards will conform to the American Standard for Nursery Stock as established by the American Nurserymen's Association (www.anla.org).

### SITE SELECTION

1. No tree with a mature trunk diameter greater than 12 inches will be planted in a tree lawn less than 3 ft. wide.

2. Trees will not be planted within 30 feet of an intersection or 15 feet of driveways and alleys.

3. Trees will not be planted within 10 ft. of utility poles or hydrants.

4. Trees should be spaced an appropriate distance apart. For street trees;

   Large trees (mature height greater than 60 ft.) minimum of 45 ft. apart.

   Medium trees (mature height between 60 ft. and 30 ft.) minimum of 35 ft. apart.

   Small trees (mature height less than 30 ft.) minimum of 25 feet apart.

5. Only trees with mature heights less than 30 feet should be planted under or near power lines.

## PLANTING STANDARDS

1. Holes dug for planting of trees will be a minimum of 12 inches larger than the diameter of the root system or root ball. Preferably the hole should be at least twice the size of the root ball.

2. Trees will be planted no deeper than previously grown with allowance for settling. The root flair should be at or slightly above ground level.

3. Strings and twine will be removed from trunk of tree. Burlap and wire baskets will be rolled down into hole.

4. Backfill with existing soil when suitable. Avoid using excessive amounts of organic matter.

5. When sensitive species are exposed to direct sun, wrap lower trunk with a tree wrap. Remove wrap after first growing season.

6. Bark mulch will be applied around the tree, 3 to 4 inches deep, in a circle which extends beyond the planting hole. Mulch should not touch trunk above root flair.

7. Only dead, damaged or poorly located branches will be removed using proper pruning techniques.

8. All bare root trees (and balled and burlaped trees in exposed, windy areas) will be staked or guyed to keep them upright. Use commonly accepted staking techniques. Stakes will be removed within first year.

9. Newly planted trees will be watered with at least 2 inches of water at time of planting.

10. In caring for and handling trees prior to planting, all precautions customary in good trade practice will be taken.

11. A minimum one year warranty is recommended.

## THREE YEAR TREE MAINTENANCE

A detailed, written tree maintenance plan must be developed.

1. Trees will be inspected every six months to evaluate general health and disease and insect problems.

2. Treat disease and insect problems as needed to maintain tree health.

3. Water during growing season or as needed. Supplement rainfall so that the tree averages a minimum of 2 inches of water every 2 weeks during the growing season (May-September)

4. Trees will be pruned as needed to remove dead, damaged or poorly located limbs using accepted practices of the industry.

5. Any tree planting stakes and guying wire will be removed within first year.

* Modified from original received from J. Parry, USFS

Other sources: Tree Planting Specifications and information:

http://hort.ifas.ufl.edu/woody/planting/

http://www.isa-arbor.com/publication/cadDetails.asp

http://www.hort.cornell.edu/uhi

www.natlarb.com - Strategies for planting in pits, November, 2003 issue of TCI

7/1/04

*Appendix S*

## Application and Instructions

New York State
Department of Environmental Conservation
Urban and Community Forestry Program

# 2005 Small Community Cost-Share Grants for Urban and Community Forestry in New York State

The New York State Department of Environmental Conservation is pleased to announce that $80,000 in funding is available for grants to cities, villages and towns with a population of less than 65,000 as reported in the 2000 census, for conducting urban and community forestry planning. Individual grants must be used for development of a community forest/street tree inventory or community tree management plan. Planning grant requests may not exceed $5,000. Announcement of grant awards are anticipated later this fall.

**Application Deadline October 31, 2005**

**Who May Apply:**
Municipal governments with a population of less than 65,000 as reported in the 2000 census.
Eligible municipalities may designate a city agency or department to apply on their behalf.

**Matching Requirements:**
Matching share is that portion of the applicant's share used to match the grant. All grants must be matched at least equally (dollar for dollar). This is a **reimbursement** grant program, and the applicant's availability of funds is a critical factor when evaluating grant applications. Successful applicants must expend and fully document all project expenditures in order to receive reimbursement of matching funds. As a result, grantees must plan their financial arrangements accordingly. After a grant award is made, the State of New York shall not be responsible for any project increases exceeding 50% of the approved total project costs. **PLEASE NOTE:** Federal or State funds will not be considered as eligible match under this grant program. Applicant's match may include cash and/or the value of force account labor, professional services, volunteer labor, equipment, supplies and materials, and private and public non-federal, non-state contributions.

**Affirmative Action Requirements:**
The NYS DEC is committed to programs of Affirmative Action and Department staff will assist you in undertaking Affirmative Action initiatives as you plan your project. Article 15A of the Executive Law pertains to Minority and Women-owned Business Enterprises (M/WBE)/Equal Employment Opportunities (EEO). For assistance with identifying names of New York State Certified M/WBEs, you may access the New York State Department of Economic Development's M/WBE Directory via the Internet at: http://www. Empire.state.ny.us or contact Brenda Moulhem at (518) 402-9311.

**Environmental Justice:**
Through this grant program, the NYS DEC demonstrates a commitment to environmental justice and remedy for communities, which may be burdened by negative environmental consequences. Environmental justice is defined by the NYS DEC as the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

All applicants must develop or implement community-based management plans or projects. Community-based activities engage the neighborhood or community within a municipality in conducting inventories, assessments, development of management plans, and carrying out urban forestry practices.

Special consideration will be given to those projects, which satisfy evaluation criteria and benefit communities, which remain challenged by past social and environmental practices. This consideration will seek to remedy communities, including minority and low-income communities, burdened by negative environmental consequences and will also ensure the equitable distribution of environmental benefits to all New York State communities.

**Grant Funding Period**:
Funding will be available for two years from the date of the grant award.

**Application Deadline:**
Applications must be **postmarked by October 31, 2005.** ***No facsimiles or email submissions will be accepted.*** Applications will be reviewed, scored and awards made on a competitive basis. Grant awards will be announced later this Fall.

**Technical Assistance:**
Questions concerning program aspects of these instructions should be directed to Frank Dunstan, by phone (518) 402-9425, or email fmdunsta@gw.dec.state.ny.us .
NYS DEC Regional Forestry Staff are available to applicants for technical assistance in proposal development and project implementation. A list of DEC Regional Forestry Offices is included with this document.

## PROPOSALS MUST CONSIDER THE FOLLOWING

1. Scope of work should be clearly defined. What are the deliverables? What will be included in the urban forest/street tree inventory and what will the urban forest management plan cover?

2. Describe the methodology the applicant will use to achieve the final product. Public input, inventories, use of consultants, etc.

3. Include an itemized project budget that details all related expenses. Budget must clearly define expenses being claimed under the State grant share or as match. See attached Schedule A - Project Budget/Schedule.

4. Outreach and education. How will municipal residents be involved and informed about the planning? Does the project have educational benefits?

## EVALUATION OF PROPOSALS

The New York State DEC has identified the following criteria to reflect program goals and we will use them to evaluate proposals. Applicants are encouraged to refer to these criteria in formulating their proposals.

1. Create and strengthen partnerships among public, private, or volunteer organizations, and individuals in Urban and Community Forestry.

    - Information, education, and effective communication are key to improving public support of urban forestry programs and empowering policy makers and urban forestry professionals in implementation of projects.

    - Environmental Justice. Citywide plans and community-based plans should work with all members of the community and address inclusion of minority populations and under-served communities so that their urban forest needs are met.

2. Encourage and participate in comprehensive Urban and Community Forestry Planning.

    - A comprehensive urban and community forestry program embraces all facets of urban forestry from establishment through maintenance and removal. Both people and natural systems are considered as integral parts of urban forests. A comprehensive plan considers all of a place's forest resources from downtown to natural areas. While providing many benefits, street trees can also present a community with monumental management challenges. Tree inventories (a record of trees) and an approved management plan (a process for dealing with the resource) establish a sound approach and direction for meeting that challenge.

3. Best Management Practices are the use and understanding of sound urban forestry principles and management techniques. For example, Best Management Practices include proper tree planting, pruning, care and removal practices. The cost of the proposed project and practices are reasonable.

4. Promote ecosystem-based Urban and Community Forestry.

    - Developing a comprehensive urban forest management plan or implementing an existing plan requires a holistic view of urban forestry. It reveals a continuum of urban and community forestry-related issues and concerns, from inner city greening to wildlife and pest programs in rural urban interface areas. A holistic view reflects an ecosystem approach to managing urban forests for values and benefits that relate to urban air quality, storm water runoff, wildlife and fish habitat, and other related ecosystem benefits.

5. Educate the public about Urban and Community Forestry.

    - Informing people about the importance of urban and community forestry planning and project implementation is a necessary part of a long-term strategy to develop and preserve healthy urban and community forests.

## APPLICATION PROCEDURE

All application materials should be typed and submitted on white 8.5" x 11" paper.

All applicants must provide a narrative description of their project. The narrative should be no more than three typed 8.5' x 11" pages, and should include the following points:

- type of project
- the work proposed
- the overall existing condition of the project, sites, or facilities
- the role of those involved with the project
- the relationship of the proposed project to any significant resources on the property and how those resources will be managed and impacted
- environmental justice

**To apply, send one original and four copies (5 total) to:**

Frank Dunstan
Division of Lands and Forests
NYSDEC
625 Broadway
Albany, NY 12233-4253

## REQUIRED ADDITIONAL INFORMATION

**One Copy Of The Following Supplemental Information Must Accompany The Original Application Package**

**Permits:**
Depending on the project scope, some grant projects will require permits from agencies such as the NYS DEC or the US Army Corps or Engineers (COE). All applications should address whether permits are required, and if they are, the status of the permit application. It is recommended that you consult with the Governor's Office of Regulatory Reform (GORR) Permit Assistance Hotline at 1-800-342-3464, or DEC and/or the COE directly, to determine if any permits are needed, especially if your project is located in or adjacent to a water body, (e.g., stream, lake, wetland, canal). Other considerations could include: historic review requirements for projects that involve properties listed on, or eligible for, the State/National Register, all work undertaken as part of a grant-assisted project must conform to the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation; projects located in coastal or riverfront communities must meet coastal consistency requirements for the Secretary of State's Coastal Management Program.

**Documentation of Ownership:**
Grant applications where project funds will be used to implement a Urban Forestry Management Plan must document public interest in the project property. Submit a copy of the deed (showing liber and page number) to the property or documentation which substantiates ownership, and the agreement of any co-owner or holder of a mortgage or lien to subordinate that interest to the State. If the applicant is not the owner of the property, submit documentation establishing the applicant's interest in the property (e.g. lease, easement, contract, memorandum of understanding, purchase option, contract of sale).

**Signed Original Authorizing Resolution:**
Grant applicants (eligible city) must have and submit a resolution enacted by the applicants governing body that authorizes the organization to submit the grant.
A sample of the resolution is included in this document.

**Subsequent Submittals:**

Upon notice of potential award, the responsive bidder may be required to submit, within 10 business days of receipt of the notice, any or all of the following items:

a. Vendor Responsibility Questionnaire
b. New York State Tax Law § 5-A Contractor Certification Forms (ST-220)
c. Successful grant applicants will be required to enter into a formal NY State assistance contract (which includes a project budget/schedule) and will be subject to all appropriate State rules, regulations, and reporting requirements.

## INSTRUCTIONS FOR APPLICATION FORMS

## General Project Information

**Applicant:** All applicants must include their Federal Employer ID number

**Project:** If the project is for a property listed on the State/National Register, use the full, official name of the property as it is listed (the unofficial or popular name may be shown in parentheses). List the historic designation, if applicable.

**Authorized Official:** This is the person authorized to sign legal documents and who should receive official notification about decisions regarding this application.

**Contact:** This is the person who should be contacted for additional information or questions about this project.

**Schedule A - Project Summary/Schedule**: Provide a detailed schedule for the project indicating the component, the number of units to be completed, the completion time frame (calculated in months from the start of the project) and the estimated costs associated with each component. Identify all project-related costs and identify the funding source of your match. Eligible categories and their components are:

**PRE-DEVELOPMENT: (may only be used as match, and may not exceed 15% of implementation costs.)**

- Design fees and other professional fees for the preparation of documents are not eligible for reimbursement, but may be used for the grant match.

-Pre-development costs must be incurred during the identified project term.

**IMPLEMENTATION:**

- Material Costs: educational signs, publications, displays, brochures, ect.
- Personnel Costs: survey and other planning activities
- Transportation Costs: shipping/delivery costs
- Professional Services: site design, management plan development including tree inventory.

**ADMINISTRATION: (Administration costs should not exceed 10% of the grant amount)**

- Project Supervision may be provided by a qualified staff person or the design professional that prepared the project documents.

-Grant Administration costs are costs associated with preparing the project agreement, and affirmative action, M/WBE and payment request documentation once the grant is awarded. The cost of preparing this application is not eligible.

-Advertising Costs: This budget item should cover the cost of advertising in newspapers, including minority newspapers, or appropriate publications.

- The Recipient agrees to give the Department appropriate credit for its support and shall note the following in all printed documents, video materials, and /or program advertisements resulting from this work- " This Project has been funded in part by a grant from the Urban and Community Forestry Program of the New York State Department of Environmental Conservation and the US Forest Service."

**TYPES OF APPLICANT SHARE:**

- Cash

- Force Account (Paid Labor): Documentation of time worked, tasks, pay ratio and payment (including components and percentage of fringe benefit rate) will be required at time of reimbursement request.

- Supplies and Materials: the value of items warehoused (not yet installed) with current market prices at the time they are obtained.

- Labor: Skilled and professional labor can be computed at the job rate. Unskilled labor, and work performed by professional or skilled labor in an area outside of their area of expertise must be computed at the minimum wage. (For example, a lawyer donating legal services may compute the value based on the standard billing rate; but the same lawyer donating time painting walls may bill only at the minimum wage.)

- Equipment Usage: Compute the value according to its fair market rental value in project location.

## ACCEPTABLE SAMPLE RESOLUTIONS

A resolution in the appropriate format provided below must be passed at an official meeting of the governing body of the applicant and a copy attached to this application. The resolution must be typed on the applicant's stationery and should hold the official seal. The name of the applicant must be stated as it is recorded in the incorporation documents.

**I, , [the duly qualified Clerk] of the [(municipality) of (place) ,**

**New York, do hereby certify that the following resolution was adopted at a (regular) (special) meeting of the (governing body) held on (date), and is [incorporated in the original minutes of said meeting] OR [on file and of record], and that said resolution has not been altered, amended or revoked and is in full force and effect.**

**RESOLVED:**

**That (name) , as (title), or such person's successor in office of (municipality ) is hereby authorized and directed to file an application for funds in an amount not to exceed $ (grant), and upon approval of said request to enter into and execute a project agreement with the New York State Department of Environmental Conservation for such financial assistance to this (municipality) for (grant project).**

**Date:**

**(Signature of Clerk)**
**(Print Name)**
**Seal of Municipality**

**2005 SMALL COMMUNITY URBAN AND COMMUNITY FORESTRY GRANT APPLICATION**

Applications must be postmarked or delivered by **October 31, 2005**. ***No facsimiles or email submissions will be accepted.***

Only **one** application per Municipality will be funded.

**Name of Applicant: (Municipality Applying):**

_____

**Mailing Address:** _____

_____

_____

**County:** _____

**Project Zip Code(s)** _____

**Project Title:** _____

**Project Site Address:**

**Project Contact:** _____

**Phone:** _____ **Fax:** _____ **E-mail**

**Federal ID#** _____ **Charities Registration#:**_____

**State/National Historic Register:** _____

**Local Historic Designation**:

**Ownership Information**: **Deed Liber** _____ **Page** _____

**Owner(s):**

**Applicant's interest in property, if not fee-simple ownership (e.g. lease, easement)**

## AUTHORIZED OFFICIAL

**Name:** _____

**Title:** _____

**Telephone #:** _____

**Fax #:** _____

**E-Mail Address:** _____

**Business Address:**

_____

_____

**Grant Amount Requested: $**_____

**Amount of Match:** **$**_____

**Total Project Costs:** **$**_____

## SCHEDULE A
## PROJECT BUDGET/SCHEDULE

**1. Project Summary**: (a brief summary of project)

**2. Project Schedule:**

**Pre-development/Planning:** **Completion Date** **Cost**

(Pre-development/planning costs will not be reimbursed, but can be considered as eligible match. Pre-development/planning amount may not exceed 15% of project's implementation costs.)

**Subtotal:$**_____

**Implementation or Planning Components:**

**Subtotal: $**_____

**Administration:**

(Administrative costs should not exceed 10% of the grant amount.)

**Subtotal: $**_____

---

**Total Project Cost: $**_____

**Grant Amount:** **$**_____

**Match Amount:** **$**_____
(50% Match)

**Sources of Match: (**identify the source of your matching funds**)**

## Directory of Division of Lands and Forests Regional Offices

**Region 1** -Suffolk and Nassau counties
SUNY Campus
Loop Road, Building 40
Stony Brook, NY 11790-2356
(631) 444-0285

**Region 2** - Manhattan, Bronx, Queens, Brooklyn and Staten Island
1 Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407
(718) 482-4942

**Region 3** - Sullivan, Ulster, Orange, Dutchess, Putnam, Rockland and Westchester counties
Regional Office - New Paltz
21 South Putt Corners Road
New Paltz, NY 12561-1696
(845) 256-3076

Region 3 - Wappingers Falls Sub-Office
Stony Kill Environmental Education Center
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Wappingers Falls, NY 12590
(845) 831-8780

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Schenectady, NY 12306-2014
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Stamford, NY 12167-9503
(607) 652-7365

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Ray Brook, NY 12977-0296
(518) 897-1276

Region 5 - Warrensburg Sub-Office
232 Hudson Street
P.O. Box 220
Warrensburg, NY 12885-0220
(518) 623-1265

Region 5 - Northville Sub-Office
701 South Main Street
P.O. Box 1316
Northville, NY 12134-0458
(518) 863-4545

**Region 6** - Jefferson, St. Lawrence, Lewis, Oneida and Herkimer counties
Regional Office - Watertown
State Office Building
Watertown, NY 13601-3787
315) 785-2263

Region 6 - Potsdam Sub-Office
6739 US Highway 11
Potsdam, NY 13676
(315) 265-3090

Region 6 - Lowville Sub-Office
7327 State Route 812
Lowville, NY 13367
(315) 376-3521

Region 6 - Herkimer Sub-Office
225 North Main Street, P.O. Box 89
Herkimer, NY 13350-0089
(315) 866-6330

**Region 7** - Oswego, Cayuga, Onondaga, Madison, Tompkins, Cortland, Chenango, Tioga and Broome counties

Region 7 - Cortland Sub-Office
1285 Fisher Avenue
Cortland, NY 13045-1090
(607) 753-3095

Region 7 - Sherburne Sub-Office
2715 State Highway 80
Sherburne, NY 13460-4507
(607) 674-4036

Region 7 - Kirkwood Sub-Office
1679 NY Route 11
Kirkwood, NY 13795-9772
(607) 775-2545

**Region 8** - Orleans, Monroe, Wayne, Genesee, Livingston, Ontario, Yates, Seneca, Steuben, Schuyler and Chemung counties

Region 8 - Bath Sub-Office
7291 Coon Road
Bath, NY 14810-9728
(607) 776-2165

Region 8 -Avon Sub-Office
6274 East Avon-Lima Road
Avon, NY 14414
(585) 226-2466

**Region 9** - Niagara, Erie, Wyoming, Chautauqua, Cattaraugus and Allegany counties
Regional Office - Allegany
182 East Union Street, Suite 3
Allegany, NY 14706-1328
(716) 372-0645

Region 9 - Falconer Sub-Office
215 South Work Street
Falconer, NY 14733-1497
(716) 665-6111

Region 9 - Belmont Sub-Office
5425 County Route 48
Belmont, NY 14813-9758
(585) 268-5392

Region 9 - Buffalo Sub-Office
270 Michigan Ave.
Buffalo, NY 14203-2999
(716) 851-7000

*Appendix T*

**FOR IMMEDIATE RELEASE**
**PR- 116-05**
**March 31, 2005**

**MAYOR MICHAEL R. BLOOMBERG ANNOUNCES TREES & SIDEWALKS REPAIR PROGRAM**

***Pilot Program to Repair Sidewalks Damaged by Street Trees Throughout All Five Boroughs at No Cost to the Homeowner***

Mayor Michael R. Bloomberg and Parks & Recreation Commissioner Adrian Benepe today announced the Trees & Sidewalks Repair Program – an initiative that will enable Parks & Recreation to fix sidewalks damaged by the roots of street trees citywide, at no cost to the homeowner. The $3.4 million initiative was developed with the help of the Department of Transportation (DOT) and is funded by the Mayor and Borough Presidents of the Bronx, Queens, and Staten Island. As many as 2,000 damaged sidewalks are slated to be repaired in the first year of the program. The Mayor was also joined by DOT Commissioner Iris Weinshall, Queens Borough President Helen Marshall, Staten Island Borough President Jim Molinaro and Bronx Borough President Adolfo Carrion at the announcement in Middle Village, Queens.

"Street trees make a neighborhood alive and vibrant, but unfortunately, they can also damage its sidewalks leaving them unsightly and hazardous," said Mayor Bloomberg. "Up until now, the cost to repair this damage has been borne by the homeowner, and can reach as much as $1,000 per tree. The new Trees & Sidewalks Repair Program will relieve the financial burden of homeowners who are trying to keep their sidewalks safe and beautiful. I want to thank Borough Presidents Marshall, Molinaro and Carrion for their support of this project, and urge all New Yorkers who have sidewalks damaged by street trees to call 311."

"Street trees provide innumerable benefits to the economy, health, and aesthetics of New York City," said Commissioner Benepe. "This initiative will enable us to more efficiently care for our urban canopy while lessening the burden of tree/sidewalk repairs on individual New Yorkers."

Every year, Parks & Recreation receives 2,500 requests for sidewalk inspection and generates close to 3,000 work orders for tree root pruning and the accompanying sidewalk repair. Prior to the Trees and Sidewalks Repair Program, when a street tree damaged a homeowner's sidewalk, the homeowner would have to hire a private contractor to open up the sidewalk on a date scheduled by Parks & Recreation. After Parks' Forestry Division made repairs to the tree's root system, the homeowner would have to arrange for a private contractor to repair the sidewalk. All expenses had to be covered by the homeowner, and could be as much as $1,000.

In the new pilot program, the City will take full responsibility for all repairs to the root system of the tree and the sidewalk. Instead of hiring a contractor and scheduling a Parks & Recreation Forestry crew to evaluate the roots, homeowners will now only need to make one call to 311. Parks & Recreation will then inspect, design, and construct a sidewalk solution around the tree in front of their home. The program will be targeted to the owners of 1-2-3 residential (tax class 1) properties. Homeowners in all neighborhoods will be able to benefit from the new program, as every Community Board will have some funds allocated to address tree and sidewalk repairs.

"Queens has more street trees than any other borough," said Queens Borough President Marshall. "That's why this program will be a welcome one and one that I was happy to embrace and support with $500,000 in discretionary funding. I want to thank Mayor Bloomberg, Commissioner Benepe and the Department of Transportation for their initiative and support for this new program."

"I applaud Mayor Bloomberg for extending this help to homeowners with sidewalks damaged by tree

roots," said Staten Island Borough President Molinaro. "Many residents on Staten Island face this problem. Our Borough has over 1,000 miles of roads and 90,000 street trees. The funding by the Mayor and Borough Presidents, including $500,000 from my capital budget, will allow residents to gain new, safe sidewalks at no cost to them. This is an example of government getting to the root of a problem and solving it. Staten Island residents appreciate Mayor Bloomberg's leadership in helping to protect our neighborhoods."

Repairs will be prioritized according to severity of sidewalk damage, what percentage of the sidewalk is impacted by the damage, and whether the sidewalk is in a high-traffic area. Sidewalks will be repaired in one of three ways: increasing growing space for tree, ramping sidewalk over roots or increasing the strength of the sidewalk. Constituents interested in taking advantage of the pilot program can call 311 and ask for the Trees & Sidewalks Repair Program.

Parks & Recreation cares for 500,000 street trees and 2 million more in Parks citywide.

**MEDIA CONTACT:**

Edward Skyler / Robert Lawson (212) 788-2958

GENERAL CONTACT:

Warner Johnston (Parks & Recreation Dept.)
(212) 360-1311

**Please note**: This document provides a reference listing different tree sizes for various planting situations. This list is only to be used as a guide and must be cross referencing with the Permitted Village Street Tree Planting list when selecting trees for planting.

# Recommended Street Trees for Long Island 2000

**Prepared by:** **New York ReLeaf - Long Island Region**
**NYS Department of Environmental Conservation**
**Cornell Cooperative Extension - Nassau County**
**Cornell Cooperative Extension - Suffolk County**
**Long Island Arboricultural Association**
**Long Island Nursery & Landscape Association**
**Planting Fields Arboretum State Historic Park**
**Long Island Power Authority (LIPA)**
**KeySpan**

New York ReLeaf

NOTES:

Cornell University's **Recommended Urban Trees** book should be consulted for further species-specific information - i.e., growth habit/spread, soil needs, flowers/fruits. **Contact Cornell University at 607-255-4586.**

- This list does not cover all possible site conditions - only treelawn and wires. Other site conditions that should be considered include underground utilities, soil conditions, and local insect and disease problems.
- The recommended tree heights and treelawn widths are for the benefit of the tree. Trees can be planted outside of these recommendations, but then they may not reach their full potential, and they may cause infrastructure conflicts.
- Some of these species may be less available than others - KEEP ASKING FOR THEM.
- If you have any comments, suggestions, or questions for this list, contact the NYS-DEC Urban and Community Forester at SUNY-Stony Brook, (516) 444-0285.

## SMALL TREES:

**Suitable within 15 feet of 35-foot high electric wires, or in restricted treelawn areas (less than 4 feet wide).**
TREE HEIGHTS APPROXIMATELY 20 FEET - 40 FEET

| Scientific Name | | Common Name |
|---|---|---|
| *Acer buergeranum* | tree form | Trident Maple |
| *Acer campestre* | | Hedge Maple |
| *Acer ginnala* | tree form | Amur Maple |
| *Acer tataricum* | tree form | Tatarian Maple |
| *Amelanchier* cultivars **(resistant cultivars only)** | tree form | Serviceberry i.e., 'Cumulus' 'Autumn Sunset' 'Robin Hill' |
| *Carpinus caroliniana* | tree form | American Hornbeam |
| *Cornus kousa* | tree form | Kousa Dogwood |
| *Crataegus crus-galli inermis* | tree form | Thornless Cockspur Hawthorn |
| *Crataegus punctata inermis* | tree form | Thornless Ohio Pioneer Hawthorn |
| *Koelreuteria paniculata* | | Goldenraintree |
| *Maackia amurensis* | | Amur Maackia |
| *Malus* cultivars **(resistant cultivars only)** | | Crabapple |
| *Phelodendron amurense* | | Amur Corktree (wide canopy) |
| *Prunus* cultivars **(less than 35' tall)** | | Flowering Cherry i.e., 'Accolade' 'Okame' (wide canopy) 'Schubert' 'Yoshino' (wide canopy) |
| *Pyrus calleryana* **(not the cultivar 'Bradford')** | | Callery Pear i.e., 'Aristocrat' 'Chanticleer' 'Cleveland Select' |
| *Syringa reticulata* | tree form | Japanese Tree Lilac i.e., 'Ivory Silk' 'Summer Silk' |

## MEDIUM TREES:

**Should be set back at least 15 feet from overhead wires and in treelawns at least 6 feet wide.**
TREE HEIGHTS APPROXIMATELY 40 FEET - 70 FEET (depending on site conditions)

| Scientific Name | Common Name |
|---|---|
| *Acer pseudoplatanus* [40-60'] | Sycamore Maple |
| *Acer x freemanii* [45-70'] | Freeman Maple i.e., 'Armstrong' 'Autumn Blaze' |
| *Carpinus betulus* [30-60'] | European Hornbean |
| *Celtis occidentalis* [40-60'] | Hackberry |
| *Corylus colurna* [50-70'] | Turkish Filbert |
| *Eucommia ulmoides* [40-60'] | Hardy Rubber Tree |
| *Fraxinus pennsylvanica* [50-60'] | Green Ash |
| *Gleditsia triacanthos inermis* [40-100'] **(resistant cultivars only)** | Thornless Honeylocust i.e., 'Shademaster' 'Skyline' 'Halka' |
| *Nyssa sylvatica* [40-70'] | Tupelo |
| *Ostrya virginiana* [30-50'] | American Hophornbeam |
| *Prunus sargentii 'Columnaris'* [40-50'] | Columnar Sargent Cherry |
| *Quercus acutissima* [40-50'] | Sawtooth Oak |
| *Quercus phellos* [40-60'] | Willow Oak |
| *Quercus robur* [50-60'] | English Oak |
| *Sophora japonica* [40-70'] | Japanese Pagoda Tree |
| *Tilia cordata* [40-80'] | Littleleaf Linden |
| *Ulmus parvifolia* [30-50'] | Chinese Elm |
| *Ulmus* cultivars [40-50'] **(resistant cultivars only)** | Elm hybrids i.e., 'Urban' 'Homestead' 'Pioneer' 'Princeton' 'Sapporo Autumn Gold' |
| *Zelkova serrata* [40-80'] | Japanese Zelkova |

## LARGE TREES:

**Should be set back at least 25 feet from overhead wires and in treelawns at least 8 feet wide.**
TREE HEIGHTS APPROXIMATELY 60 FEET - 100 FEET (depending on site conditions)

| Scientific Name | Common Name |
|---|---|
| *Gingko biloba* (male only) [50-100'] | Gingko |
| *Gymnocladus dioicus* (male only) [70-80'] | Kentucky Coffeetree |
| *Metasequoia glyptostroboides* [70-100'] | Dawn Redwood |
| *Platanus x acerifolia* [70-100'] | London Planetree |
| *Quercus rubra* [60-90'] | Northern Red Oak |
| *Tilia tomentosa* [60-80'] | Silver Linden |

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New York State Department of Environmental Conservation

OFFICE OF PARKS · RECREATION · HISTORIC PRESERVATION NEW YORK STATE

LIAA

LIPA Long Island Power Authority

KEYSPAN

Cornell Cooperative Extension

To Bob Wei Appendix V 3 pages –
Mayor Pro

# WIRE FRIENDLY TREES

| Common Name | Latin Name |
|---|---|
| Kousa Dogwood | *Cornus kousa* |
| Amur Maple | *Acer ginnala* |
| Hedge Maple | *Acer campestre* |
| Trident Maple | *Acer buergeranum* |
| Tatarian Maple | *Acer tataricum* |
| Shantung Maple | *Acer truncatum* |
| Serviceberry | *Amelanchier "Autumn Sunset," "Cumulus," "Robin Hill Pink"* |
| Goldenrain Tree | *Koelreuteria paniculata* |
| Japanese Tree Lilac | *Syringa reticulata* |
| American Hornbeam | *Carpinus caroliniana* |
| Thornless Cockspur Hawthorn | *Crataegus cruz-galli "Inermis"* |
| Amur Maackia | *Maackia amurensis* |
| Flowering Crabapple (disease resistant cultivars only) | *Malus spp.* |
| Accolade Flowering Cherry (disease resistant cultivars only) | *Prunus spp. "Accolade"* |
| Canada Red Cherry | *Prunus virginiana "Canada Red"* |
| Callery Pear (not Bradford) | *Pyrus calleryana "Chanticleer," "Aristocrat," "Capital," "Whitehorse"* |

**Please Note:** It is extremely important to select the correct tree species when planting near electric wires. Tall trees are the major cause of electric outages. Local arborists and nurserymen developed this list of Wire Friendly Trees for use in this area.

LIPA
Long Island Power Authority

Electric Service Department
175 E. Old Country Road
Hicksville, NY 11801

Martin J. Mullarkey, P.E.
Manager - Line Clearance

I.S.A. Certified Arborist
mmullarkey@keyspanenergy.com

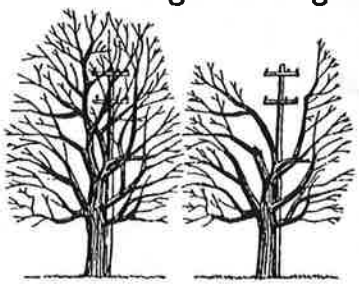
(516) 545-5606
Fax (516) 545-5200

FC 11238

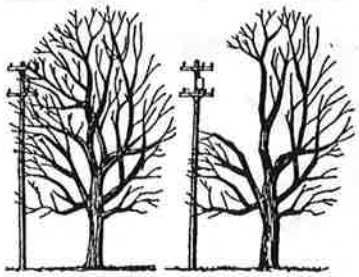
Initially, your trees will look different following directional trimming, but this practice provides the best opportunity for the tree to stay healthy.

## Directional Pruning

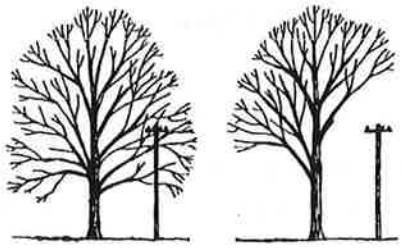
### Through Pruning



### Side Pruning



### Under Pruning





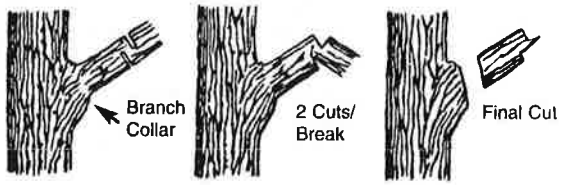
**Who will remove the debris?**
We will remove the debris that results from our regularly scheduled line clearance program. However, when responding to emergencies or customer requested work the debris is the responsibility of the tree owner.

**Line Clearance One Circuit at a Time**
Our Line Clearance Program focuses on trimming trees along an entire electrical circuit, which can be several miles long. Circuits that experience the most outages are handled first. This is our most effective way of reducing outages to a majority of customers. Line clearance work is performed all year long.

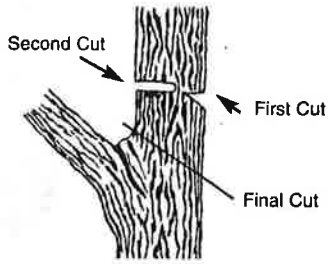
**Individual Requests**
LIPA's response to individual line clearance requests is limited to EMERGENCIES ONLY. For example call us right away at 1(800) 490-0075 if a broken tree limb is actually leaning *heavily* on a LIPA wire or has caused a wire to come down. Customers who desire more frequent trimming may hire qualified private arborists.

## TYPES OF CUTS

### PROPER COLLAR CUT




### PROPER LATERAL CUT






**LIPA presents:**


LIPA
Long Island Power Authority
The Power of Change

George E. Pataki
Governor

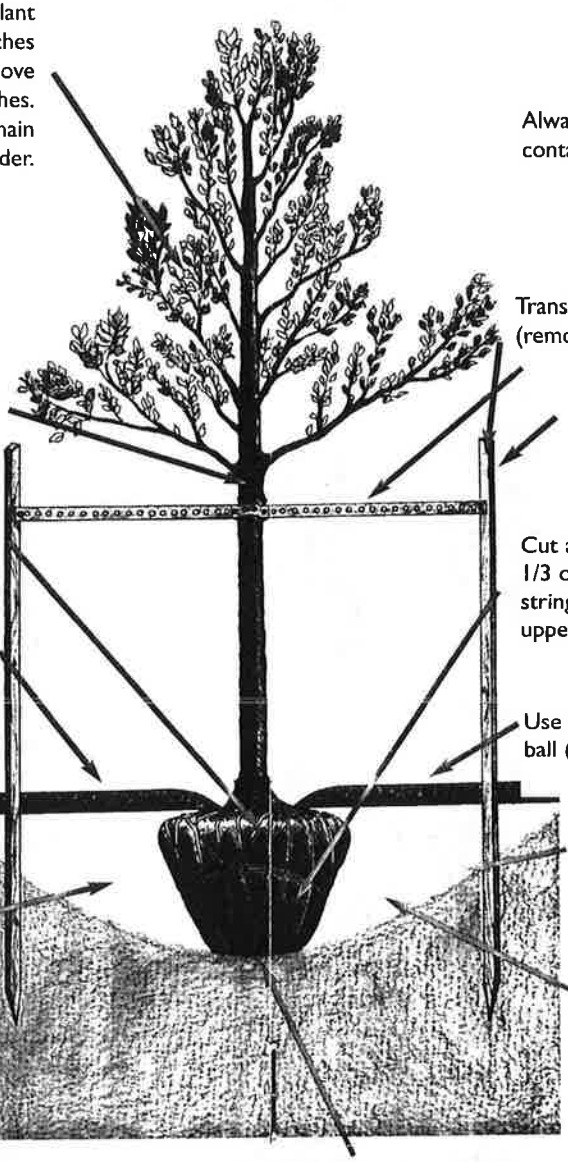
Richard M. Kessel
Chairman

www.lipower.org

3/03

## Proper Planting Information

**Proper planting is critical for proper root development and tree growth.**



While retaining normal plant shape, thin interior branches and foliage and remove crossing or parallel branches. Do not trim back main central leader.

Always pick up tree by container or root ball.

Most trees do not require staking. If required for protection or stability, use tree strapping or hose covered wire. Leave 1" space between hose and all sides of trees. (Remove after 1 year).

Transit trunk guards (remove after planting).

Hardwood stakes 2" x 2", two or more per tree, if required (remove after 1 year).

Tree should be put into ground with root flare 1" above soil grade to allow for settling.

Cut and remove burlap from upper 1/3 of ball. Remove **all** synthetic string and synthetic fabric. Remove upper 1/2 of wire basket.

Spread 2-4" of mulch (aged wood chips, shredded bark, etc.) uniformly over disturbed soil.

Use 3" mound of earth over ball (to retain water).

Slope sides outward to 3 times diameter of root ball.

Backfill with existing top soil or a soil mixture consisting of four parts by volume of soil mixed with one part of peat moss or composted organic material. Do not compact soil around root ball except at very bottom of root ball for stability.

Hole diameter should be at least twice the diameter of root ball. Dig hole no deeper than the depth of the ball.

Firm undisturbed soil.

- Water thoroughly after planting. During dry periods occurring within the first year of planting, soak the planting hole once a week.
- Fertilize only in special circumstances if recommended by your nursery professional.



LIPA
Long Island Power Authority
The Power of *Change*

George L. Pataki
Governor

Richard M. Kessel
Chairman

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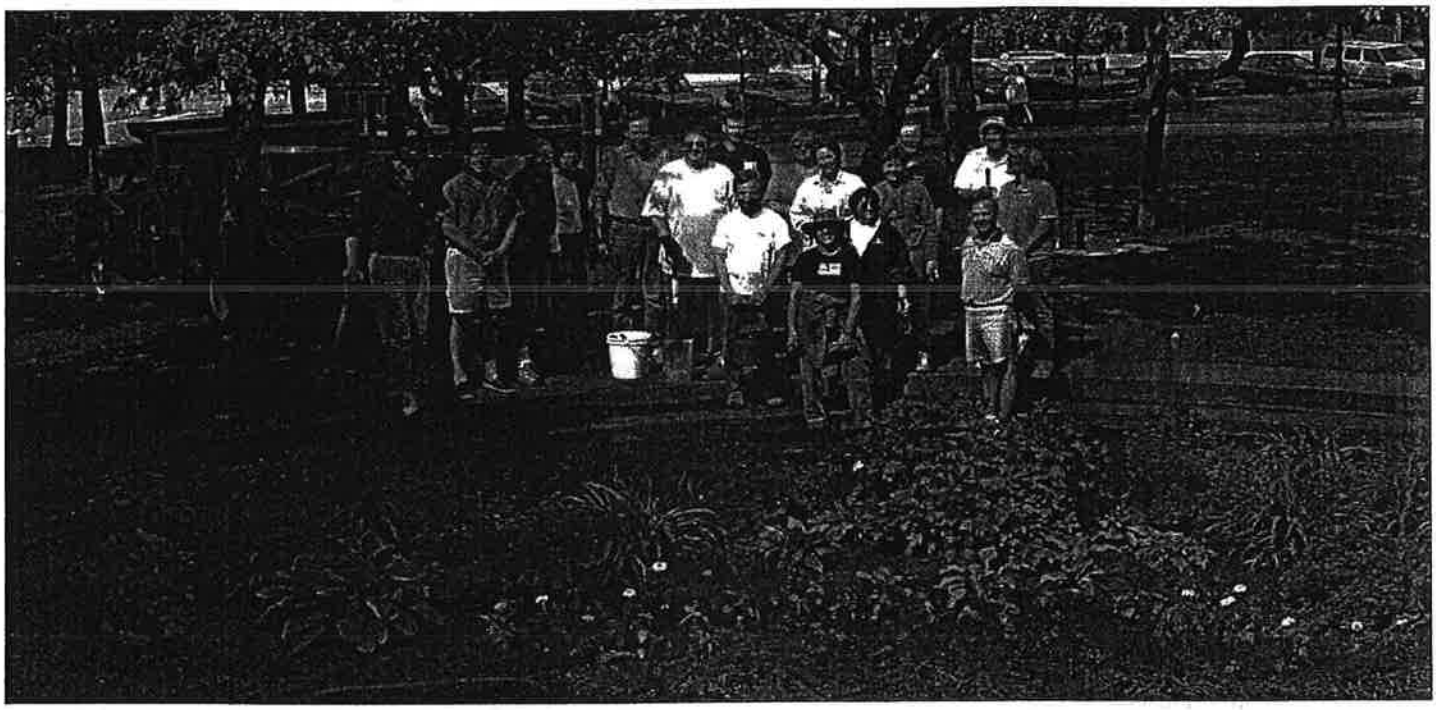
LIPA

# Tree Talk

*Appendix X*

TREE CITY USA®
BULLETIN
2004 ANNUAL REPORT
Dr. James R. Fazio, Editor • $3.00

# Tree City USA – 3,000 and Growing



Warren Spinner

*Local citizens are at the heart of making Tree City USA a powerful force for better community forests and tree care. The Rotary Club in Burlington, Vermont, is an example of those who help plant and care for trees in our nation's parks and street rights-of-way. Burlington has been a Tree City USA award winner for ten years.*

We've come a long way, America! What started as a good idea with 42 participating communities in 1976 is now a strong partnership encompassing military bases, urbanized counties, and communities of all sizes in all parts of the nation. This year the number of Tree City USA awards passed the 3,000 mark and continues to grow. From tiny towns like Calvin, North Dakota and Samaria, Idaho to Los Angeles and Chicago, the distinctive signs and flag of Tree City USA signal to the world that here live people who care about trees.

Thanks to the structure of the criteria, Tree City USA awards are available to any municipality regardless of size. The four basic standards are: (1) a tree board or department, (2) a tree care ordinance (designed to meet the needs of the particular community – not a cookbook or one-size-fits-all ordinance), (3) a forestry program as demonstrated by an annual expenditure of $2 per capita on trees, and (4) an Arbor Day proclamation and observance.

The purpose of the Tree City USA program is to encourage continuous, systematic tree planting and care. It was created as a lasting legacy of the nation's bicentennial and it has been successful beyond anyone's imagination. Those who sponsored the first efforts continue working together today. Credit for the growth and success of the program goes first to thousands of local volunteers, employees and officials, then to the USDA Forest Service for financial and technical support, the National League of Cities and the U. S. Conference of Mayors for their endorsements, the National Association of State Foresters for statewide program management, and The National Arbor Day Foundation for sponsorship and coordination.

Published by
The National Arbor Day Foundation®
100 Arbor Avenue • Nebraska City, NE 68410

# Tree Line USA Continues to Grow

The number of utilities, both private and municipal, that received Tree Line USA awards has continued to grow. This year, 115 utilities deserve the honor, up from 102 last year! These utilities have met the standards for: (1) properly pruning trees near overhead lines, (2) training workers, and (3) providing education and service related to trees in the communities in which they operate. As a token of appreciation, the Foundation took out a full-page ad in *The Wall Street Journal* in which all award winners were named. The goal is to encourage all utilities to adopt the standards and help make trees and utilities compatible.

AEP Public Service Company of Oklahoma *11 years
AEP SWEPCO (Arkansas, Louisiana, Texas) *9 years
AEP Texas Central Company (Texas) *7 years
AEP Texas North Company *5 years
Alabama Power Company *4 years
Alliant Energy (Illinois, Iowa, Minnesota, Wisconsin) *6 years
Ameren (Illinois, Missouri) *5 years
Arizona Public Service *8 years
Austin Energy (Texas) *3 years
Azusa Light and Water (California) *2 years
Bath Electric, Gas, & Water Systems (New York)
Benton Public Utility District (Washington) *5 years
Brigham City Light & Power (Utah) *4 years
Bristol Electric System (Tennessee) *5 years
Brownsville Public Utilities Board (Texas) *2 years
Burbank Water and Power (California)
Central Vermont Public Service Corporation (Vermont) *2 years
Chicopee Electric Light (Massachusetts) *3 years
Choptank Electric Cooperative (Maryland)
Chugach Electric Association (Alaska) *5 years
Citizens' Electric Company (Pennsylvania) *2 years
City of Anaheim Public Utilities Department (California)
City of Batavia Municipal Electric Utility (Illinois) *7 years
City of Forest Grove Light and Power (Oregon) *3 years
City of Lompoc Utility Services (California) *2 years
City of Redding Electric Utility (California) *10 years
City of Riverside Public Utilities (California)
City of Stoughton Utilities (Wisconsin) *3 years
City of Tallahassee (Florida) *2 years
City of Westerville Electric Division (Ohio) *6 years
City Public Service of San Antonio (Texas) *3 years
City Utilities of Springfield (Missouri) *10 years
Clark Public Utilities (Washington) *5 years
Cleveland Utilities (Tennessee) *4 years
Clinton Utilities Board (Tennessee) *2 years
Colorado Springs Utilities (Colorado) *9 years
Columbia Water & Light (Missouri) *7 years
ComEd (Illinois) *5 years
Conectiv (Delaware, Maryland, New Jersey, Virginia) *5 years
Consumers Power (Oregon) *6 years
Crawford Electric Cooperative (Missouri) *2 years
Cuivre River Electric Cooperative (Missouri) *3 years
Cuyahoga Falls Electric Department (Ohio) *4 years
Delaware Electric Cooperative (Delaware) *2 years
Detroit Edison (Michigan) *9 years
Duquesne Light Company (Pennsylvania) *6 years
Dyersburg Electric System (Tennessee) *5 years
Edmond Electric (Oklahoma) *4 years
Entergy Corporation (Arkansas, Louisiana, Mississippi, Texas) *3 years
First Energy (New Jersey, Ohio, Pennsylvania) *6 years
Florida Power & Light (Florida) *2 years
Gaffney Board of Public Works (South Carolina) *4 years
Gainesville Regional Utilities (Florida) *5 years
Golden Valley Electric Association (Alaska) *2 years
Hartford Electric (Wisconsin)
Idaho Power Company (Idaho, Nevada, Oregon) *8 years
Illinois Power Company *4 years
Independence Power & Light (Missouri) *5 years
Indianapolis Power & Light Company (Indiana)
Johnson City Power Board (Tennessee)
Kansas City Power & Light (Missouri)
Knoxville Utilities Board (Tennessee) *3 years
Lakeland Electric (Florida) *4 years
Lansing Board of Water & Light (Michigan) *2 years
Long Island Power Authority (New York) *6 years
Los Angeles Department of Water & Power (California) *5 years
Madison Gas & Electric Company (Wisconsin) *7 years
Matanuska Electric Association (Alaska) *6 years
MidAmerican Energy Company (Iowa, Illinois, Nebraska, South Dakota) *3 years
Mishawaka Utilities (Indiana)
National Grid USA (Massachusetts, New Hampshire, Rhode Island) *4 years
Nebraska City Utilities (Nebraska) *2 years
New York State Electric and Gas (New York)
Niagara Mohawk Power Corporation (New York) *5 years
Northern Indiana Public Service Corporation *11 years
NSTAR (Massachusetts) *4 years
Ocala Electric Utility (Florida) *3 years
OG&E Electric Services (Oklahoma) *7 years
Omaha Public Power District (Nebraska) *4 years
ONCOR (Texas) *4 years
Opelika Light & Power Department (Alabama) *4 years
Orange and Rockland Utilities (New Jersey, New York, Pennsylvania) *3 years
Orlando Utilities Commission (Florida) *6 years
Pacific Gas & Electric Company (California) *10 years
PacifiCorp (California, Idaho, Oregon, Utah, Washington, Wyoming) *3 years
Pasadena Water & Power (California) *2 years
Peninsula Light Company (Washington) *6 years
People's Electric Cooperative (Oklahoma) *4 years
PEPCO (District of Columbia, Maryland) *3 years
Pioneer Electric Cooperative (Ohio) *2 years
PPL Corporation (Pennsylvania) *2 years
Provo City Power (Utah) *8 years
Public Service Company of New Mexico *5 years
PUD #1 of Chelan County (Washington) *6 years
Puget Sound Energy (Washington) *4 years
Rappahannock Electric Cooperative (Virginia) *2 years
Richland Electric Cooperative (Wisconsin) *3 years
Richland Energy Services (Washington)
Richmond Power & Light (Indiana) *5 years
Rochester Gas & Electric Corporation (New York)
Ruston Light and Power (Louisiana) *2 years
Sacramento Municipal Utility District (California) *4 years
Salt River Project (Arizona) *7 years
San Diego Gas & Electric Company (California) *2 years
Shawano Municipal Utilities (Wisconsin)
Snohomish County PUD District No. 1 (Washington) *3 years
Southern California Edison *4 years
Upper Peninsula Power Company (Michigan)
Vernon Electric Cooperative (Wisconsin) *3 years
Village of Rantoul Public Works Electric Division (Illinois) *3 years
Wayne-White Counties Electric Cooperative (Illinois) *2 years
Westar (Kansas) *5 years
We Energies (Wisconsin) *6 years
Wisconsin Public Service Corporation (Michigan, Wisconsin) *9 years
Xcel Energy (AZ, CO, KS, MI, MN, ND, NM, OK, TX, WI, WY) *9 years

For a listing of all communities that have earned the Tree City USA designation, please visit arborday.org and click on "Programs", then "Tree City USA." Below are some of the special honors this year.

# Communities With Dual Honors

The following 50 communities have the unique distinction of not only earning Tree City USA®, but also Tree Line USA for their municipal utility.

- Opelika, Alabama
- Anaheim, California
- Azusa, California
- Burbank, California
- Lompoc, California
- Los Angeles, California
- Pasadena, California
- Redding, California
- Riverside, California
- San Diego, California
- Sacramento, California
- Colorado Springs, Colorado
- Gainesville, Florida
- Lakeland, Florida
- Ocala, Florida
- Orlando, Florida
- Tallahassee, Florida
- Batavia, Illinois
- Rantoul, Illinois
- Indianapolis, Indiana
- Mishawaka, Indiana
- Richmond, Indiana
- Chicopee, Massachusetts
- Lansing, Michigan
- Columbia, Missouri
- Independence, Missouri
- Kansas City, Missouri
- Springfield, Missouri
- Nebraska City, Nebraska
- Omaha, Nebraska
- Bath, New York
- Rochester, New York
- Cuyahoga Falls, Ohio
- Westerville, Ohio
- Edmond, Oklahoma
- Forest Grove, Oregon
- Bristol, Tennessee
- Cleveland, Tennessee
- Johnson City, Tennessee
- Knoxville, Tennessee
- Austin, Texas
- Brownsville, Texas
- Brigham City, Utah
- Provo, Utah
- Richland Center, Washington
- Hartford, Wisconsin
- Madison, Wisconsin
- Richland Center, Wisconsin
- Shawano, Wisconsin
- Stoughton, Wisconsin

# Long Time Honors – Sterling Communities

Sterling Community designation is given to those communities that have earned the Tree City USA Growth Award for 10 years. This year, 16 communities achieved this honor, bringing the total to 95. The Growth Award recognizes achievements beyond the four requirements for a Tree City USA Award. To receive a free guide to activities and projects that can help your city qualify for this special designation, use the coupon on page 8 to receive a free *Tree City USA Growth Award* application.

- Alamosa, Colorado
- Grand Junction, Colorado
- Westminster, Colorado
- Moscow, Idaho
- Wilmette, Illinois
- DeWitt, Iowa
- Marion, Iowa
- El Dorado, Kansas
- Lindsborg, Kansas
- Battle Creek, Nebraska
- Secaucus, New Jersey
- Asheville, North Carolina
- Farmville, North Carolina
- Wahpeton, North Dakota
- Alva, Oklahoma
- Provo, Utah

## Did You Know?

The number of communities receiving Tree City USA awards continued to grow over the past year, despite the economic problems and other less positive events that have marked the year. Growth of the Tree City USA program helps more communities to begin or improve continuous, systematic tree planting and care.

| | |
|---|---|
| Number of 2003 Tree City USA awards | 3,007 |
| Percent increase from previous year | 4% |
| Number of new Tree Cities | 141 |
| Number of Growth Awards (performance that exceeds the four basic standards of the Tree City USA Award) | 529 |
| Percent increase from previous year | 8% |
| People living in Tree Cities | 110 million |
| Smallest Tree City USA | Calvin, North Dakota (pop. 26) |
| Largest Tree City USA | Los Angeles, California (pop. 3.7 million) |

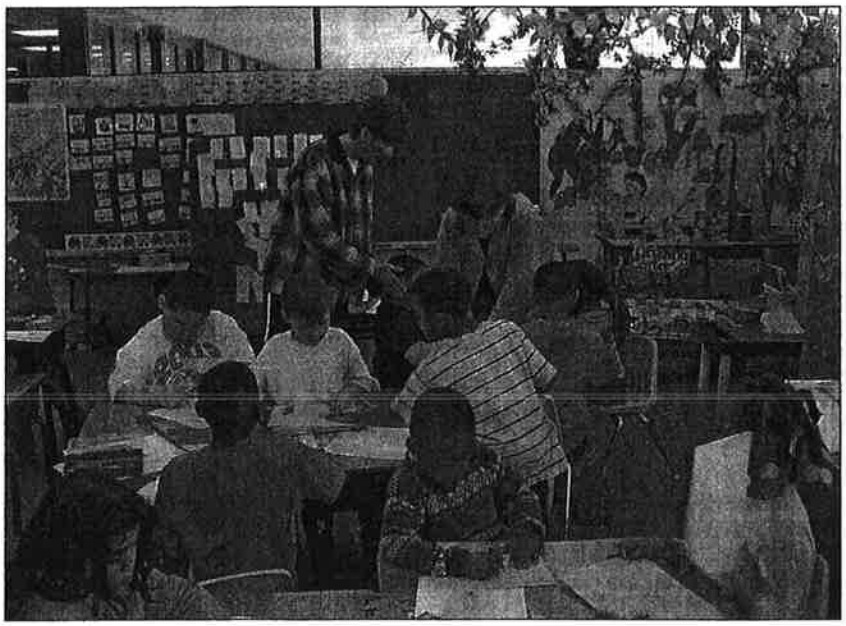
TREE CITY USA®

# Introducing the Next Generation to Trees

Children have been part of Arbor Day and other tree planting activities since J. Sterling Morton introduced the holiday in 1872. Today, in Tree City USA communities around the nation, youngsters are being introduced to all aspects of the world of trees both inside and outside the classroom.

## Muskogee, Oklahoma

*Urban forester Carri Abner (right) assists first grade teacher Peggy Jones with a lesson on leaf shapes and sizes. Besides helping these little people look more closely at the trees in their world, Carri hopes to deliver the message that it takes all kinds, shapes and sizes of trees to make a well-balanced forest and it takes all kinds, shapes and sizes of students to make a harmonious classroom.*



*Phil Sepiensa*

TREE CITY USA®

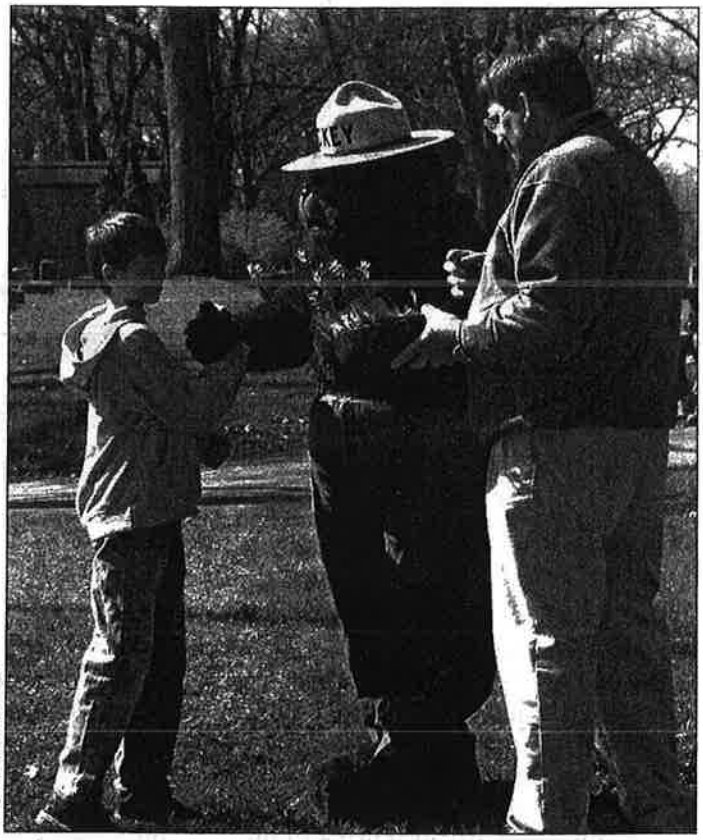
*City of Grand Junction Parks and Recreation Department*

## Grand Junction, Colorado

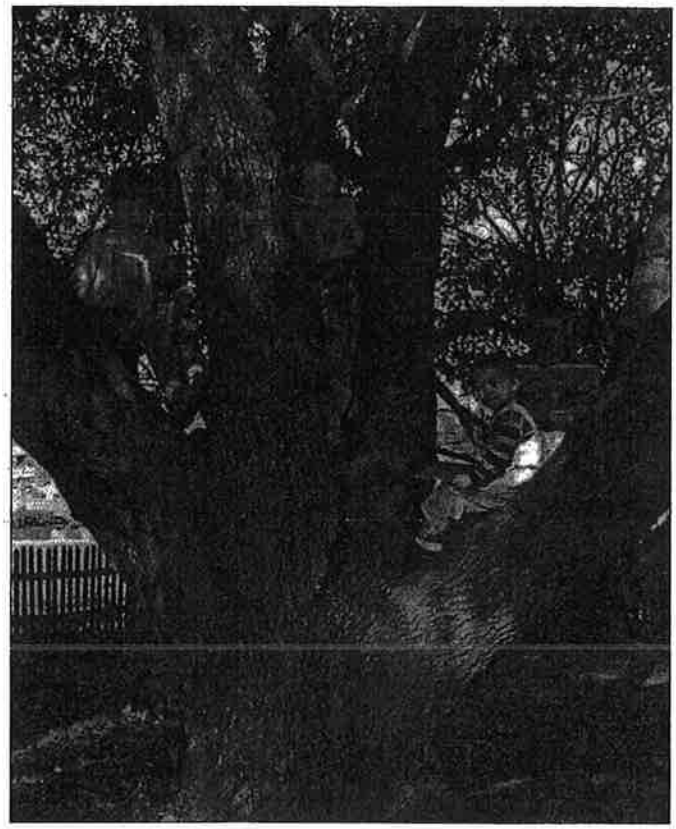
*In Grand Junction, a Tree City USA community for 21 years, there is a passion for planting trees, teaching residents about tree care, and helping youngsters gain a greater appreciation for trees. So city forester Mike Vendegna was delighted when high school senior Heather Ahuero phoned to ask about a project that could be done when her group hosted a regional conference of P.A.C.T. – Perceptions Actively Changed by Teens. Local residents were delighted too, and pitched in $2,000 to help with the project Mike proposed. Local and visiting students then not only got lessons about leadership and communication skills, they put learning service into action by planting 27 trees in a once-barren park.*

## Allegan, Michigan

*The band played and Smokey Bear handed out tree seedlings in a traditional Arbor Day ceremony at Allegan, Michigan. Perhaps not so traditional was the planting site. It was in Oakwood Cemetery and included not only the beautifying addition of new trees, but 400 enthusiastic school children raking leaves and cleaning up litter. Mayor Jon Cook orchestrated the activities and Senator Patty Birkholz spoke to participants about the role of citizen stewardship and the difference an individual can make.*



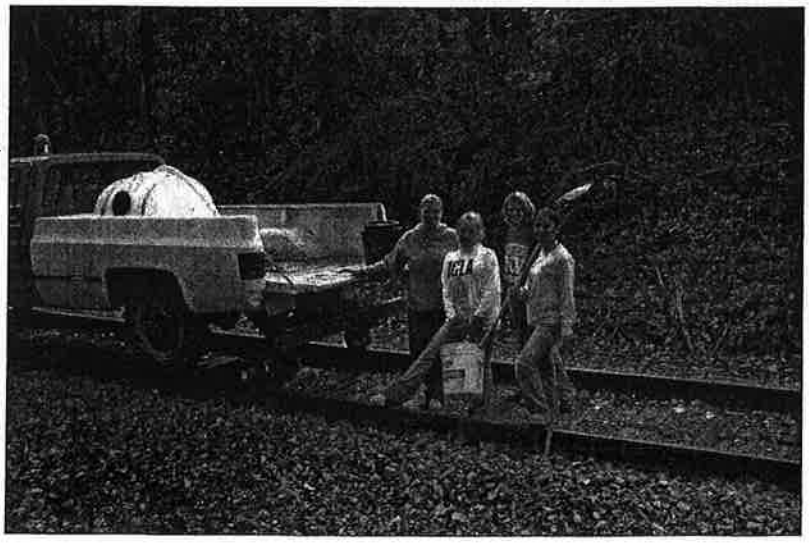
*Allegan Public Schools*



*Courtesy of Moultrie-Colquitt County Library*

## Moultrie, Georgia

*Look closely and you can see some natural markings on this ancient live oak tree that have given it the name "The Smiling Oak Tree at the Public Library." Children's librarian Norma McKellar finds it magical. She also finds the tree to be a great way to interest children in both reading and trees. Library programs also include an Arbor Day celebration, talks about rocks and other ways to link nature and reading. Moultrie has been a Tree City USA for 14 years.*



*Joyce Thomas, President of Trees Forever, Centerville, IA*

## Centerville, Iowa

*"I've been working on the railroad," may well have been sung by these high school students as they planted redbud trees along ten miles of Appanoose County Community Railroad tracks between Centerville and Moravia, Iowa. The project was intended to beautify an area used by tourists who take nostalgic rides on these historic tracks. The planting was made possible through an exemplary partnership that included Iowa Trust and Savings Bank, Historic Hills Corridor Project, Trees Forever, and Alliant Energy.*

# Taking Trees Seriously

**Dr. Seuss' Lorax once said, "I speak for the trees." Today he has lots of company. From Tree City USA reports nationwide it is apparent that communities are making serious efforts to protect trees and fund tree care through local budgets.**

## Organization and Vigilance Pays Off

The surest protection for trees is through tree protection ordinances or provisions in other city ordinances. For example, the small community of Weed, California (pop. 3,000) has used its authority to fine a motel operator who topped a mature cedar in order to increase sign visibility (after a permit to do so was rejected). The city also used ordinance enforcement to prevent a business from removing mature trees next to the city-owned water retention basin.

In Twin Falls, Idaho, the city tree commission sponsored advertising in the local paper to warn residents about the ill-effects of topping.

Another example of the proactive approach to tree protection can be found in Jefferson Parish, Louisiana. When Forest Service Director of Urban Forestry Mark Buscaino came to visit, he mentioned to state officials something he saw being used elsewhere. From that seed of an idea, the Tree Troopers were born in Metairie, Louisiana, a community that is part of a first-year, parish-wide (county) Tree City USA. This group of volunteers goes beyond tree planting. Rather, the members are trained in all aspects of tree protection. After 16 hours of classroom instruction and field application, the first class of 57 volunteers was ready for action. Projects now include helping with tree inventories, monitoring building sites, and educating home owners about tree care. Louisiana Urban Forestry Program Director Tom Campbell hopes that the project will serve as a model to begin other Tree Trooper groups statewide.

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*Louisiana's 'Tree Troopers' are an army for tree protection and education. Following training, these volunteers serve their community and assist over-extended professionals in watching over the urban forest.*

Journal and Courier, Lafayette, Indiana

What used to be the organization "Trees for Sagamore" and is now "The West Lafayette Tree Fund" has been responsible for planting 3,000 trees over the past 20 years. Although planting continues, volunteers in West Lafayette, Indiana, now spend their Thursday evenings on summertime pruning of trees for form and clearance. About $20,000 in donations are received from residents each year to fund the program. The city parks department supplies equipment and helps with labor and cleanup. Shown is volunteer Piroska Haywood helping to prune lower limbs to improve visibility and clearance for pedestrians.

Sometimes it is a single individual who saves an important tree, usually by speaking out at the right moment. Cheryl Anderson of Azle, Texas, is such a person. When plans for highway expansion were made public, Cheryl went to bat for a 100-year-old live oak. She won the support of Burton Clifton, a highway engineer, and the result was a slight change in highway plans and a sturdy fence around the dripline of the tree. The Texas Department of Transportation even agreed to install a small park around the tree after construction. When equipment parked beneath the tree before the fence got erected, and when the fence ended up closer to the tree than agreed, Cheryl again made her voice heard. Corrections were made and residents today still have the old oak lending its grace and beauty at the side of the road.

Kim Grubbs/Star-Telegram

*By speaking up at the right moment, Cheryl Anderson was able to team up with highway engineer Burton Clifton to successfully save this large live oak during highway reconstruction.*

## Budgets Reflect Responsibility For Trees

In some Tree City USA communities, there is positive news about funding issues. These reflect an increasing awareness of local responsibility for tree care and perhaps less reliance on grants and other sources of unreliable 'soft' money.

Significant increases in budgets were reported from several communities. Some increases were for special projects like planting or contract pruning, but others were general increases. Those reporting notable increases included:

- Crowley, Louisiana
- Fort Wayne, Indiana
- Daphne, Alabama
- Lebanon, Ohio

Many communities reported the establishment of specific budget line items for tree maintenance. In most cases, this helps assure continued funding and it often reflects an increase both in total amount and in flexibility for using the funds for pruning, watering, mulching and other needs beyond planting or removals. In all cases, this step forward for community forestry helped that community earn a Tree City USA Growth Award with points awarded under Activity No. C1, "Tree-Maintenance Budget."

- Brielle, New Jersey
- Gurnee, Illinois
- Galesburg, Illinois
- Laughlin Air Force Base, Texas
- Decatur, Illinois
- Miramar, Florida
- Downey, Idaho
- Oak Lawn, Illinois
- Gowrie, Iowa
- Twin Falls, Idaho

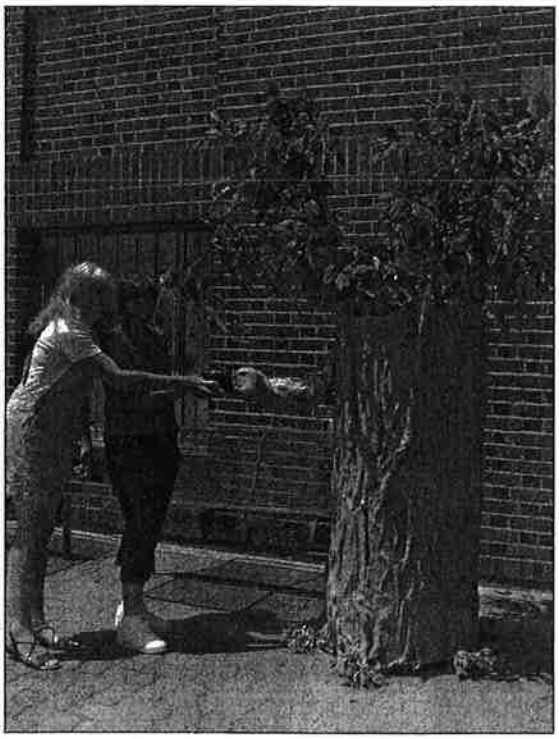
## Sparking Support in Sparks, Nevada

At the 2004 Community Forestry at its Best Conference, Dale Carlon, Urban Forester for the City of Sparks, Nevada, (pop. 72,000) shared his thoughts of how to help ensure his community forestry program's share of the city budget even in tough times. Dale says "Get out in public and be visible."

Dale and staff's public appearances include:

- Visiting 11 schools to celebrate Arbor Week with second graders. A 30-minute talk about the importance of trees in the city is followed by tree planting on school grounds.
- Workshops for the public at parks throughout the city.
- Attendance at job fairs for high school and middle school students again talking about the importance of trees in the city and career opportunities available to them in the future.
- Partnering with a local nursery to conduct workshops there on Saturday mornings speaking on topics such as tree care, irrigation and landscape design.
- Articles on tree care in the local newspaper including a biography of the urban forester and how and why the urban forestry division came to be.
- Booth at weekly farmers' market during the summer.
- Costumed celebrity Barkley Shades is a hit with the public and receives significant press coverage.

According to Dale, these efforts not only educate the public, they garner support for Sparks' urban forestry program and give staff a source of inspiration.



*Barkley Shades*

*Sparks Urban Forestry*

# Other Sources of Information

## The Power of Communication

Only through communication and education will the Tree City USA program and its many activities continue to grow. On this page you will find a wealth of ideas and sources of help for use in your community.

### Doorknob Hangers Provide Direct Communication

Lewiston, Idaho, has found doorknob hangers to be highly effective for informing residents that their trees need water or pruning. City forester Mike Bowman carries a supply with him wherever he goes and uses them as he spots problem trees. He has also won the cooperation of the city engineer and street sweeper driver to do likewise. Volunteers and tree board members could also help with distribution. Each hanger uses cartoon figures and friendly language to convey information about a specific need. It also includes a 'thank you' for helping, and the phone number of the city forester in case the homeowner has questions. Most copy shops and printing establishments have blank forms of various sizes and colors, and the cost is quite reasonable.

### Link Your Web site to Ours

You can add some pizzazz and useful information to your Web site by linking it to some exciting features found at arborday.org. For example, you can add a "lookup window" that searches The National Arbor Day Foundation's hardiness zone database and displays the results at your site. Other features you can add are the "Online Tree Guide," "Right Tree Right Place Quiz," and "Virtual Pruning" with support provided by the USDA Forest Service Urban and Community Forestry Program. To add hardiness zones, simply go to arborday.org/zonetool and sign up. For directions on linking to any or all of the others, please contact Michael Jaquez at 888/448-7337.



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arborday.org

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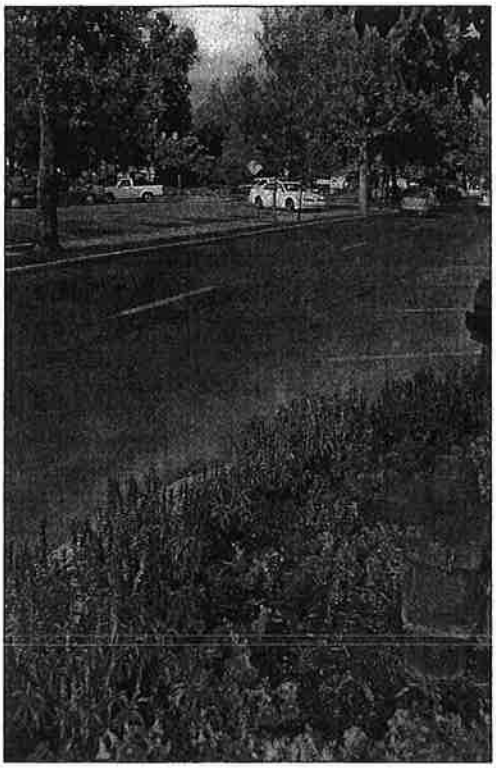

*Jim Fazio*

*In Provo, Utah, trees and sidewalks in the median strip downtown are used to make that barrier beautiful and useful to pedestrians while at the same time having a 'calming' effect on traffic. Flowers surrounding fire hydrants and shade trees along both sides of the street add another touch of class to this Tree City USA award winner of 20 years.*

## *Tree City USA* Bulletin ORDER FORM

Name _____
Organization _____
Address _____
City _____ State ___ Zip _____
Phone _____

| | | |
|---|---|---|
| How to Landscape to Save Water | $3.00 | |
| How to Reduce Wildfire Risk | $3.00 | |
| Celebrate Arbor Day Guidebook | Free | |
| Conference and Seminar Schedule | Free | |
| Growth Award Slide Show | $28.50 | |
| Handbook for Tree Board Members | $2.95 | |
| Handbook for Tree Board Members (50 pack) | $99.00 | |
| National Arbor Day Awards Brochure | Free | |
| Resource Kit for Volunteers | $29.95 | |
| Trenching and Tunneling Booklet | $3.00 | |
| Urban & Community Forestry– A Practical Guide to Sustainability | $9.95 | |
| Tree City USA Application | Free | |
| Tree City USA "Greening America" Video | $14.95 | |
| Tree City USA Growth Award Application | Free | |
| Tree City USA Recertification | Free | |
| Tree Line USA Application | Free | |
| 2004 Tree City USA Annual Report | $3.00 | |
| | TOTAL | |

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211 N. 12th St., Lincoln, NE 68508

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