

Questions and Answers about Street Trees

Q01: What exactly defines a tree as a “street tree”?

A01: A “street tree” (at least here in New York City) is a tree that is planted in the ground alongside the street, usually about two feet from the curb. In our Tribeca neighborhood this requires cutting out a section of sidewalk pavement to make a “tree pit”, if no tree pit exists. The tree’s roots grow in the soil within the boundaries of the tree pit as well as into the surrounding soil below the sidewalk. Another way to have trees near the street is to plant trees in planters that rest on the sidewalk, although trees in planters typically do not attain a large size unless the planter is extremely large. Other urban trees are in parks or other “off-street” public places, or in private areas and yards.

Q02: Who has jurisdiction over street trees and the tree pits?

A02: In New York City, the New York City Department of Parks & Recreation (Forestry Division) has jurisdiction. Interestingly, *before* the tree pit is created, the New York City Department of Transportation “owns” the sidewalk; *after* the tree pit is created - through the proper process! - the section of ground that is now the tree pit as well as the tree within it become part of the domain of the NYC Department of Parks & Recreation. You’ve seen the birth of a “*mini-Park*”!

Q03: If I can’t plant a street tree, can I get a tree in a planter?

A03: Maybe! As noted in “Q01”, there is another set of rules and restrictions about where a tree planter can be placed. Our neighbors at Friends of Duane Park (duanepark.org) have an active, ongoing tree planter project called Trees for Tribeca; more information on this program can be obtained by going to their website and then contacting them.

Q04: Who pays for planting street trees?

A04: Most often, street trees are planted by the New York City Department of Parks & Recreation (Parks). The other method of planting street trees is to hire (and pay!) an NYC-Parks-approved private contractor. Building managers and institutions often elect this approach to planting trees at their location, typically during new construction. For either planting approach, the tree pit planting sites must be approved by Parks before the

planting can take place. Each year Parks allocates a limited pro-rata share of their pool of available trees to each part of the City, so the number of these trees available for our neighborhood is set at a specific level. That makes it very important to seek out buildings willing and able to plant their own trees where ever possible in order to more quickly expand the number of street trees planted in our neighborhood.

Q05: I've heard about the Million Trees Program that was announced in the spring of 2007, and about all the extra trees being planted. How many of those extra trees will we see in Tribeca?

A05: Not that many, actually. Parks *is* planting many more trees than usual under Million Trees Program of PlaNYC - at nearly 2 ½ times the former rate (and we applaud this). These additional trees are going to neighborhoods around the City that historically have had very few trees. For its part, Tribeca will continue receiving about 30 to 40 trees annually either for new tree pits or to replace trees that have died. So, let's keep them healthy and long-lived!

Q06: Who takes care of street trees?

A06: Parks provides some tree pruning at the rate of about once per decade! Otherwise, any care that our street trees receive is provided by the public through its own efforts. For example, some businesses and institutions provide tree care, but very often it is up to volunteers to learn how to provide this care and to actually provide it. The Tribeca Street Trees project is actively urging individuals, businesses and institutions to care for the trees adjoining their homes, offices or facilities, and we have had solid success with this effort. There is more to do, of course!

Q07: What is the actual sequence of events when a tree gets planted?

A07: The process of planting of a street tree today in Tribeca and New York City includes these steps:

- A07 step 1:** The Tribeca Street Trees volunteer program has surveyed most of Tribeca, and has reported to the Parks Department detailed information about the locations that can accommodate street trees.
- A07 step 2:** Parks personnel inspect these locations and checks to see that each one is (or isn't) suitable for street tree planting under Parks' guidelines.
- A07 step 3:** Parks and/or the contractor cross-check with other parties (Con Ed, etc.) to be sure that there won't be a problem with below-surface problems, such as sidewalk vaults, gas lines, electric

lines, phone lines and cables, sewer lines, subway tunnels and other infrastructure when they dig the pit.

This sometimes reveals a below-ground, unforeseen problem with the location

A07 step 4: The City (DoT) issues its planting permits to Parks who then gives the permits to its own contractors, or to the private contractor hired by a building manager or owner.

A07 step 5: The borders of the new tree pit are marked on a sidewalk with spray paint, and a large letter “T” is spray-painted near the curb. This is usually completed during early late winter or early fall for the upcoming tree planting season. In an existing tree pit, the pit or dead stump will also be marked. (Note, planting methods in neighborhoods with grass strips between the street and sidewalk are slightly different, but the general process is the same.)

A07 step 6: Possibly that same day, or sometimes, many days or even weeks later, a specific crew hired by the Contractor cuts the sidewalk cement along the edges of the new pit (for a new tree pit).

A07 step 7: Still later that day or on a later date another crew jackhammers the sidewalk where the pit is planned and removes the rubble, digs out the pit down a couple of feet, and replaces the cement, old soil, brick, rocks, etc. with new topsoil.

A07 step 8: Later, a tree planting crew plants the tree. This is normally carried out between about March 15 and May 15, or between October 15 and December 15, when the trees have become dormant for the winter, or when the ground has thawed enough to dig up the trees for transplanting. The tree is staked to prevent it from being blown over during the first season or two until its roots take hold.

A07 step 9: Several weeks later, another crew lays down Belgian (granite) block or cement block around the edge of the pit to help prevent soil compaction. (NOTE!: to allow vital oxygen and more of the rain water to reach the tree’s roots, these bricks are NOT to be cemented in place except for a little cement on the side nearest the tree’s trunk, to keep them in place!). Sand should be used to fill in between the bricks that are nearer to the outside of the tree pit.

A07 step 10: A care giver from the Tribeca Street Trees project (or your neighborhood group), or any interested person, will do the tree a great favor by giving the new tree regular watering, especially during the first year when the tree is becoming established in its new home and its roots are unable to absorb as much water as the upper part of the tree needs.

Q08: The trees that they plant are so *LITTLE!* Why don't they plant bigger ones? Wouldn't they do better?

A08: Actually, smaller trees do much better than larger ones over the long term. Their roots are not disturbed nearly as much, and so the relative shock from transplanting is much less; they're also much easier (and cheaper) to dig up and transport to the planting site. On the other hand, a somewhat larger tree is less likely to be crushed or heavily damaged in this urban environment. So the compromise is usually to transplant street trees when they are between five and eight years old. Larger trees are often planted at new construction sites to flatter the new buildings more quickly, but these trees are relatively vulnerable to drought and other stresses. Suburban trees are often planted at a smaller size, which does reduce costs.

Q09: Someone told me that there wasn't room for a street tree where I live. Why not?

A09: Unfortunately, there are a number of situations that disqualify a location as acceptable for street trees. These include minimum separation distances that are required so that a tree or tree pit is not too close to another object such as a building doorway, sign, light post, fire hydrant, or another tree. Other "show stoppers" are below-surface conditions such as sidewalk vaults, cables, sewer lines and gas lines. The Parks Department checks for these conditions, and takes responsibility for deciding *whether* and *exactly where* to plant a street tree. They do make mistakes on occasion (like anyone), but are responsible for repairing any cuts to the sidewalk if they are unable to finish creating a tree pit.

Q10: What is the story with sidewalk vaults?

A10: Sidewalk vaults, also called hollow sidewalks, are common, especially in older parts of the City. We have a large number of them here in Tribeca. Sidewalk vaults were built to add basement storage back when lower Manhattan in particular was a distribution hub, and space was at least as precious as it is today. Vaults may extend under the sidewalk all the way from the building line out to the edge of the street (a "full vault"). Other vaults may reach only about one-half of the way from the building line to the curb (a "half vault"). In the case of a full vault, a street tree cannot be planted. However, with a half vault, a tree *can* be planted, provided that there are no other tree pit site restrictions that apply.

It isn't always easy to know whether a building has a full vault or a half vault; and it often takes creativity and persistence to find out whether a vault is present. Again, the Parks Department takes full responsibility for confirming the situation at each location. However, the Tribeca Street Trees project of Friends of Greenwich Street makes a concerted effort to find out the situation at a site before we ask for a tree to be planted. Asking Parks to

plant at a location only to learn that in fact a full vault exists wastes Parks' scarce time and resources, and is likely to reduce the number of trees planted in our area for that season.

On a final note, it is *possible* to fill in an existing vault that is no longer needed; however, this would be a substantial project. If you would like to know more about this, contact us at volunteer@friendsofgreenwichstreet.org.

Q11: I've seen those boxes or borders that people put up around trees that they fill with several inches or more of soil in order to plant flowers. Is that OK?

A11: Actually, this is a big "no-no". Raising the soil around a tree's trunk creates an unnatural situation because the bark is subjected to constant moisture, and often rots the bark of the trunk, which can kill the tree. We have observed all too often that beautiful mature street trees (and for that matter, park and yard trees) are killed by this practice, generally by someone who would be horrified to know that their well-meaning efforts had caused any tree's death.

Q12: Well then, can I plant anything around my tree without hurting it?

A12: Yes. The Trees NY (treesny.com), the Parks Department (nyc.gov/parks), and the Brooklyn Botanical Garden (bbg.org) have excellent information about plants that are best to add around the trunk of a tree, and the method for doing so.

Q13: How much water does a street tree need?

A13: This varies greatly depending on the tree's size, variety, specific location, and weather conditions. A large tree can evaporate many tens of gallons of water daily during hot weather, so keeping up with that load is not always easy. Most important is that newly planted street trees should receive at least 20 gallons of water each WEEK during the summertime, especially during heat waves, since newly planted street trees are most vulnerable to water stress during their first and second growing seasons. Scientists predict increased length and intensity of heat waves from the accelerating global warming in the coming years, and so water loss and stress on plants will make watering during heat waves even more vital for assuring the trees' survival over the years. Use of "TreeGators" – those green plastic "bags" that you may have seen around the base of tree trunks, are a very effective way to water trees thoroughly and quickly. For information on how to use them and obtain them, please send an email to volunteer@friendsofgreenwichstreet.org and we'll let you know more.

Q14: Do trees need to be fertilized?

A14: Maybe! Trees in forests don't need fertilizer, because the leaves and other natural nutrients naturally fall to the ground and recycle to nourish the tree. In the City, the soil around street trees can become nutrient-depleted over a period of years. A professional tree care company may be contracted to "feed" trees. Keep in mind though that if such feeding is started, it is important to be consistent each year about continuing the feeding so that the tree doesn't become "confused" by an on-again, off-again source of nutrients. If you need the name of such a company, please send us an email to volunteer@friendsofgreenwichstreet.org and we'll put you in touch with an arborist.

Q15: How bad is dog urine, really?

A15: One visit by one dog doesn't hurt a tree very much. Taken together though, the accumulating urine acidifies the soil and makes it toxic to the tree, creating stress on the tree by the damage done to the tree's roots. This reduces the tree's growth rate, overall health, and longevity. It's common sense, really. For example, no one would knowingly put dog urine directly onto house plants (even without the odor)! Street trees are confined almost as if they were giant potted plants, and don't grow well in urine-soaked soil. If you see someone bringing their dog to a tree, kindly urge them to bring the dog to the curb instead. After all, the tree shades the sidewalk, and so helps to keep their paws cooler during the summer heat!

Q16: Do I need to put up a tree fence around my tree?

A16: You do not *have* to put a tree fence around your tree, but in our highly urban and busy neighborhood, having one certainly gives the tree a better chance of survival. The City has sanctioned several designs for tree fences. Also, tree fences must be installed by an authorized contractor who is licensed to do such work in the City. Please contact us at volunteer@friendsofgreenwichstreet.org if you'd like to know more about tree fences.

Q17: Where can I get training on tree care?

A17: The New York City tree advocacy and education organization, TreesNY (treesny.com), provides a great evening training course that is sanctioned by the New York City Department of Parks & Recreation, and upon completion, authorizes the trainee to prune any street tree in the entire City. Many of our volunteers and thousands of people around the City have attended their "Citizen Pruner" course over the past 20+ years. It includes four sessions that take place once weekly in weekday evening sessions, at many locations throughout New York City. The course finishes up with a hands-on workshop on a Saturday.

For our part, the FGS Tribeca Street Trees project is indebted to TreesNY for its encouragement and advice, and is very thankful to the people at TreesNY who have provided us with many valuable ideas and who have trained a number of our volunteers.

Q18: Can I prune a City street tree if I think I know how to?

A18: No! Unless you are carrying your "Citizen Pruner" NYC Parks-sanctioned card to prove that you're allowed to do so. You can be fined if you prune or cut trees without this Parks permit.

Q19: What kinds of soil do street trees need to have?

A19: The soil needs of different trees can vary, but usually good topsoil is fine for trees.

Q20: Why do we need to worry about street trees when no one worries nearly so much about individual trees in a park or a forest?

A20: Street trees live in a vastly more difficult environment than trees in more natural settings. The typical street tree environment is windier, hotter and more cramped, and has poorer, more compacted soil and less water available than a forest or suburban tree. One small positive is that diseases don't tend to spread as quickly among street trees since they are more isolated from other trees, and our urban (and sub-urban and rural) forests are truly under siege from invasive pests and pollution. But street trees have it even tougher.

Q21: I have heard about the Asian Longhorned Beetle (ALB). How serious a threat is it to our trees?

A21: ALB is a versatile insect that spreads easily and is an extremely serious threat to North American trees. It lives by drilling dime-sized tunnels throughout the heartwood of large trees, weakening and killing them. It is native to China, and has no native predators here in North America to limit its population growth. As a result, ALB has the potential to wipe out much of the forest in the eastern U.S. as we know it. Imagine Vermont without fall foliage and with millions of dying, collapsing maple, ash and beech trees. To reduce the chance of spreading ALB, parts of New York City, including Tribeca, are in a quarantine zone that prohibits transport of any wood from within the zone to areas outside of it.

For more information about this pest, the NYC Parks Department offers many details at http://www.nycgovparks.org/sub_newsroom/press_releases/press_releases.php?id=19873;

Tree Planting - Frequently Asked Questions, page 8 of 8

TreesNY website has additional ALB information at http://www.treesny.com/trees_nytimes Terraces.htm. The ALB pest has been found in Brooklyn, Queens, Manhattan, in New Jersey near the Hudson, and recently, in Staten Island, despite major efforts to stop it. Please take time to learn about it and how to keep an eye out for it.

Please note: This document represents our best current understanding based on a number of years experience regarding planting and care of street trees here in New York City. Like almost everything else in a busy urban area, this too isn't simple, so we're eager to learn of your experiences or to get your comments on the information provided here. Ultimately, the New York City Parks Department is the judge and jury about where trees should and can go, the species of trees that can be planted, and whether in fact a tree is "really, truly dead" before removal can even take place! Thanks for reading this, and good luck with your trees! June 5, 2008

**Friends of Greenwich Street,
Tribeca Street Trees Project
295 Greenwich Street #247
New York, NY 10007-1049
www.friendsofgreenwichstreet.org**



Street Trees on Greenwich Street help make it a pleasant place to relax and converse. (Photo: S. Boyce May 30, 2008)