A Million Trees

New York City is in the midst of a major planting initiative, MillionTreesNYC, with the ultimate goal of planting one million trees by the year 2017. Of the one million trees, 220,000 will be street trees, 380,000 will be for reforestation efforts, and the remaining 400,000 will be planted on private property. The street trees get planted at 2.5-3 inch (63.5-76.2 mm) caliper.

Since MillionTreesNYC was announced in 2007, the City’s planting program has had to quickly evolve. Annual street tree planting numbers increased from around 6,000 to over 20,000. This led to many opportunities and challenges, including working with new contractors, training a new staff of foresters, and developing clear quantitative metrics to track the number of trees planted. Additionally, we asked, “Where will all of the trees come from?”

Prior to the initiation of the million tree planting goal, New York City Parks & Recreation (NYCDPR) procured all the street trees through contractors who did the planting. Working through these intermediaries, NYCDPR got all of the trees from ten to fifteen nurseries within 100 miles of the City. However, we determined that this supply system was not going to meet NYCDPR’s future demand, and it had been speckled with a variety of difficulties.

First and foremost, NYCDPR was not in direct control of the quality of trees, as they were sourced out by the contractors. Second, because there were many nurseries from which trees were being purchased, there were tree quality, pruning, and root ball size inconsistencies. Third, there were many species NYCDPR foresters specified that were unavailable or available in short supply. This shortage ultimately led to significant substitutions and/or bad species recommendations for individual planting sites. Finally, many species that were available were not being grown to the specifications that were most compatible for New York City’s infrastructure. At the forefront of that list was the need for all trees to be limbed to a minimum of five feet (1.5 m).

The Solution

NYCDPR needed a way of obtaining large quantities of trees that were grown to very specific standards and were of a consistent high

Tree procurement contracts have allowed NYC to get trees grown to specific urban tree standards. The trees on the right are Carpinus betulus with limbs to the ground—how they are typically sold in the U.S. The trees on the left are limbed up for NYC’s use.
quality. We brainstormed many potential solutions, including contractual changes to the possibility of growing the trees in-house, but only one option seemed to be cost effective and realistic in such a short time frame: contractual relationships with nurseries. The City would create long-term contracts with nurseries to grow desired species of trees to very exacting standards. After a long and fairly complicated process of navigating through NYC government bureaucracy, tree procurement contracts were created.

Once the contract was created, the next step was getting nurserypersons interested in becoming part of this business arrangement. We cold-called nurseries and visited trade shows to advertise this opportunity—but letting nurseries know the City wanted to buy five thousand trees a year was the easy part. The real challenge was to keep nurserypersons interested once they saw a 100 page document with terms like “upon request,” “chief contracting officer,” and “contract default.” Fast forward a few months and NYCDPR ended up with three fantastic nurseries that are very well qualified to meet our current and future needs. The nurseries we contracted with are Moon Nurseries in Chesapeake City, Maryland, Schichtel’s Nurseries in Buffalo, New York, and Whitman Nurseries of Long Island, NY.

**Contract Specifics**

The contracts we created started in the spring of 2009 and continue until the spring of 2017. The contract indicates that NYCDPR will purchase a minimum number of trees each year but has the right to purchase more assuming the trees are readily available and meet specifications. If for any reason NYCDPR does not purchase the minimum amount of trees, the nursery is able to collect compensation equal to five percent of their bid price per tree for each tree not purchased, provided it met specifications.

The minimum number of trees each nursery is required to supply each year is approximately 5000; the minimum was given careful consideration and is less than NYCDPR anticipated usage to act as a buffer in the unpredictable world of annual government fiscal allocation. Before any nursery was awarded a contract each had to pass a stringent weeklong test to confirm the following:

- The nursery had experience growing and delivering trees to the quality standards specified.
- The nursery had a minimum amount of diverse tree species already growing and in the ground and was familiar with growing a vast majority of trees on the contract species list.
- NYCDPR felt comfortable with each nursery business operation.

The contract requires NYCDPR personnel to tag all trees while they are in the ground. Each nursery is required to pay for NYCDPR personnel's transport and accommodations during tagging. (This cost was to be worked into their bid price per tree.) Based on experience, NYCDPR knew that no single nursery had all of the trees at the quantities that the City desired. Therefore, each nursery was able to subcontract up to sixty percent of trees for the first three years and only up to twenty percent for each year after.

A consistent batch of trees is delivered to New York City.

The consistency of rootballs has significantly increased with tree procurement contracts.
Each nursery is required to submit an annual work plan that summarizes the inventory of trees they have growing for NYCDPR and shows the year they are expected to be harvested. This annual plan is checked at least once a year by NYCDPR.

Finally, all growing and shipping standards were specified in the contract, including how long each tree should be grown before being harvested, pruning requirements, branching height, and root ball sizes. Particular attention was paid to pruning requirements to guard against over- or under-pruning.

**Benefits**

The contracts have been in effect for over a year, and a number of foreseen and a few unforeseen benefits have arisen. The single greatest benefit is that NYCDPR now has a steady supply of an amazingly wide diversity of trees that are being grown to the highest industry quality standards. The second benefit is the information NYCDPR now has: For the first time ever, NYCDPR knows in advance what quantity of every tree species is going to be available. There is also assurance that the same list of plants will be readily available until the contract expires in 2017. Therefore, NYCDPR is better able to plan and allocate resources so that planting plans do not have to be revised or substitutions made, saving a great deal of time. This also ensures that each plant specified is truly the right plant for the right location. In addition, NYCDPR now has a direct conduit into three impressive nurseries with a wealth of knowledge of street trees.

**Future**

There have been many benefits that have arisen from the creation of this formal relationship. For example, it is expected that by next fall NYCDPR will be planting approximately 400-500 goldenraintrees (*Koelreuteria paniculata*) a year. This tree formerly was planted at a rate of no more than fifty a year due to low availability. As the process continues to be refined, NYCDPR’s data will improve, and the City will be better able to track trends in the trees it is planting. If problems occur, NYCDPR will be able to track down the source, seek remedy, and provide valuable feedback to the industry on the trees that are successful in the urban landscape.

Establishing these contracts has been a challenging process with many detours along the way, but the benefits are clear. From our experience thus far, it is clear the nursery industry is open to developing relationships with municipalities as long as the relationships are built on fair and reasonable terms that allow each party to prosper. New York City is proof that such a relationship can be successful. As NYCDPR continues towards its goal of planting one million trees, please consider replicating the relationship in one form or another in hopes that you will benefit from New York City’s quest for amazing trees.

For more information, contact Matthew Stephens at matthew.stephens@parks.nyc.gov.

*Key Words*

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