

Arborist Exchange to the Wilds and Streets of NYC

By Marty Frye, Arborist for Residential Plantings, Casey Trees

New York City Parks is exemplifying what strong, informed municipal work in the public interest should look like. I had the distinct pleasure of spending time with members of the New York City Parks Department, digging into the nuts and bolts of how this work gets done. I also had the opportunity to compare both the wild side of the “back woods” of New York with its street side counterpart. This arborist exchange was professionally exhilarating and left me craving more knowledge.

The first stop on my tour of the greener side of NYC was the Alley Pond Park natural area at the outskirts of the borough of Queens. Most of my visits to New York land me towards the center of the city, so getting to explore a vast natural area at the city’s edge gave me a fresh perspective of the Big Apple.

My guides for the day were Christina Pedros and Kip

Stein, who were both excited to share their work with me. Christina and Kip are foresters with the Department of Parks responsible for the ecological restoration of degraded lands. With them, I got the chance to walk through part of the many-hundred acres of Alley Pond and see the NYC Parks restoration regime in three different stages of progress.

The three different phases were roughly 10 acres (4 ha) each. Most notable in their process was the commitment to site preparation. Two years of mowing and herbicide application comes before a seed or tree is even put in the ground. I was also excited to see very successful seeding of native wildflowers, which gave an excellent cover to the soil between the roughly four-foot-tall (1.2 m) trees planted four feet on center. Such dense planting combined with the wildflower seeding seemed to be doing a great job, and invasive vine presence was little to absent.



Entrance to the Alley Pond natural area and Christina Pedros, one of Marty’s superb hosts during the exchange.



A treatment area of Alley Pond in early stages of regrowth after native herbaceous seeding and tree planting. This area was once a giant swath of invasive vines.



Durable tree tags support public awareness of tree planting efforts and are integral to the system used to track watering by contractors.



Thank you to those SMA members who support the Urban Forest Foundation and the annual conference silent auction and 50/50 raffle, all of which make the Arborist Exchange possible.

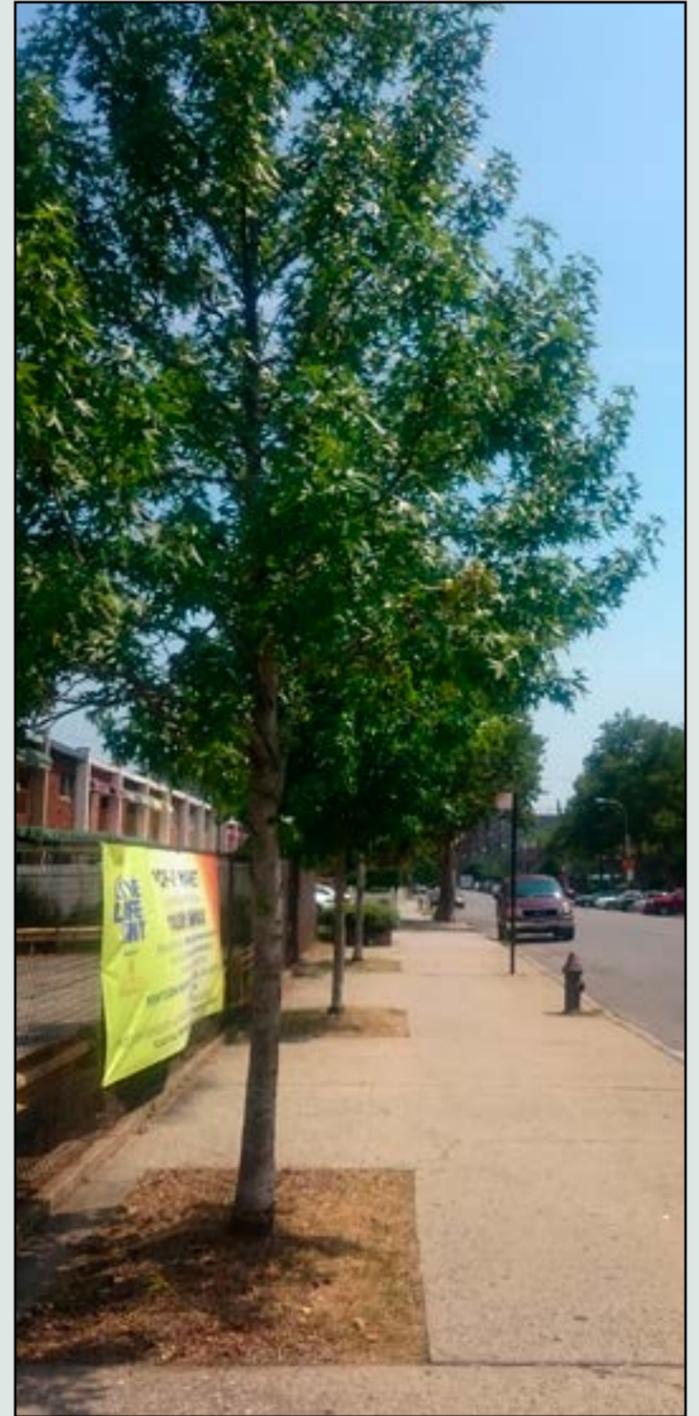
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Through many years of doing this work, NYC Parks has developed a thorough process for reliably restoring native biodiversity and suppressing the pressure from invasive species, as demonstrated by their work at Alley Pond. Alley Pond is the second largest park in Queens and its value as an urban natural area is clear. There, just a few hundred yards from a roaring highway, I got the sense that I was outside of the city. In comparing the degraded vinelands to the areas in restoration, it was clear that the site truly was being improved and that the hope of restoring robust ecological function and biodiversity to severely impacted urban sites is more than just a dream.

For the remainder of my two days in New York, NYC Parks Director of Street Tree Planting Matthew Stephens served as a gracious host and diligent imparter of knowledge and perspective. With Matthew I got the chance to tour various iterations of street tree plantings, take a look at some higher-dollar planting projects funded through public-private partnership, and get a peek at their data and project management processes.

What stood out most with the City's street tree work was, as with their restoration work, a commitment to thorough site preparation. Tree boxes were first widened to 5 by 10 feet (1.5 by 3 m). On the day of planting, tree boxes are then completely excavated and soil is replaced with a prepared mix of sifted site soil, sand, and organic matter. High standards for nursery stock and a tree selection system that tailors species choices to one of eighteen urban "biotopes" helps ensure that the trees are primed for success. The process was further bolstered by a strong system of contractor management and third-party verification to ensure that standards are being maintained.

Newer plantings were adorned with a durable aluminum tag used by watering contractors to verify that they have visited and watered the trees. A QR code is scanned by the contractor and watering data can be tracked back in the office in real time. The proof is in the pudding and sure enough, plantings at six-plus years old were



(left) Trees planted near the heart of New York City. A long strip of structural soil as well as iron tree guards and good mulching practice should provide for some very healthy urban trees.

Successful street tree plantings. New tree boxes were cut at locations significantly set back from the curb to minimize damage caused by activity close to the street.

showing strong growth and low mortality numbers. Seeing significant canopy on streets with plantings under a decade old makes this work feel all the more worthwhile. I was excited to hear that ~45% of street tree plantings city-wide are actually resident requests, suggesting that residents, too, are excited about trees.

Investment in a typical street tree in New York City is already quite high compared to other municipalities and cities. But I also got the chance to tour some plantings that took it to the next level. Matthew Stephens's side project is running the New York Tree Trust, a non-profit that is able to leverage funding and community support to provide for advances in the NYC urban forest.

The Tree Trust projects that I witnessed were able to use funding from businesses and residents to conduct more intensive site preparation for planting. In one case, structural soils covered with pervious surface lined the planting strips for blocks at the heart of the city. Only time will tell, but I will be excited to revisit these sites and check for increased growth rates. It is clear that partnerships involving public, private, and non-profit entities can yield novel new funding models and create planting projects that may never have happened otherwise.

In addition to geeking out about tree box sizes and

methods of seeding wildflowers, there were some other notable moments of my trip. I got to sit in on a conference call with the urban forestry office of Melbourne, Australia, where they discussed a new method for inventorying the expected life spans of their existing trees. I had the opportunity to present to Matthew's staff on my own work with Casey Trees managing our residential planting programs. (The difference in average residential yard size in New York City compared to Washington, D.C. is, of course, drastic.) I was also thoroughly impressed with the geospatial information software that NYC Parks has developed in-house.

New Yorkers often seem to think they are the first or the best at anything and I will admit that New York City Parks sets a high bar for urban forestry work. Both in their restoration planting and their work in intensively urbanized settings, they maintain high standards and continue to innovate. Their commitment to making the urban forest both viable in the center city, as well as ecologically robust in large parcels off the beaten track, is particularly commendable. Many thanks to my chief host Matthew Stephens, as well as to Christina and Kip for a fun and informative couple of days, and to the SMA for making this rich Arborist Exchange possible. I look forward to continuing my own arboricultural work in the spirit of knowledge-sharing that defines this exchange program. 🌿

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How the City of Philadelphia increased annual street tree planting and ensured better survival — without increasing staff.

To some, a sixfold increase might be considered small, medium or even large, but to the City of Philadelphia, it was monumental. In 2012, the city's Parks and Recreation Department's tree planting program went from 500 trees a year to 3,000 as part of its *Greenworks* sustainability plan.

Philadelphia boasts more than **ONE MILLION TREES** on over **5,600 ACRES** of urban forest land.

"Our goal is to increase tree canopy 30 percent by 2025," says Joan Blaustein, Director of the Urban Forestry and Ecosystem Management Division. "And though we received funding for installation, we didn't receive any for additional staff."

Factor in some pretty dramatic changes to planting specifications, an at-capacity staff, and a lone planting contractor, and Blaustein and her team were left momentarily scratching their heads.

"We needed qualified professionals and certified arborists who understood our planting specifications and sustainability goals."

— Joan Blaustein, Philadelphia Parks & Recreation

"We had to do something," she says, "that would enable us to increase numbers, yet still manage everything from planting to initial inspection to warranty sign off."

An RFP went out for a Contract Forestry Services provider and in came Davey Resource Group (DRG).

Selected for what Blaustein calls "their expertise, ability to work in a local office and long history of understanding urban trees issues," DRG is doing what otherwise would have been impossible for the Division's in-house team.

Andy Hillman, DRG's Regional Business Developer, explains: "We're supplying the staffing and expertise required to properly oversee the city's program and increase tree survivability."

Now in its third year, the partnership is working very well indeed. DRG has oversight and inspection responsibilities for the City's five different planting contractors. And they've leveraged technology to streamline processes, improve reporting and ensure contract compliance.

Blaustein couldn't be happier. "We had certain ideas of what we wanted to accomplish, and through this collaboration we accomplished even more," she says. "DRG has given us good advice along the way, bringing technical knowledge to help us refine our program, well above and beyond what I expected."

4 benefits of using contract forestry services:

1. Provides **ADDITIONAL EXPERTISE** for specific projects and tasks.
2. Allows for **EASIER RELEASE** from service.
3. Includes **NECESSARY EQUIPMENT**, vehicles and insurance.
4. Requires **MINIMAL SUPERVISION**, especially when paired with clearly defined roles and responsibilities.