

## Seeking and Sharing in Queens

An Eastern Region area meeting was held at the Queens Botanical Garden (QBG), in the Flushing Queens section of New York City, on August 2<sup>nd</sup>. Attendees gathered for a morning of talks followed by an afternoon tour of the gardens and the many innovative environmental stewardship projects underway there.



*Fresh water is conserved & recycled.*

**Patty Kleinberg**, Deputy Director of the Queens Botanical Garden, spoke about the water management strategies employed at the Garden. In buildings and collections throughout, water is conserved, collected, cleansed, and recycled. Low maintenance, drought resistant plants are used in Garden landscapes to reduce the need for irrigation. Throughout the Garden, rainwater is filtered and absorbed into the soil through a 125-space parking garden and bioswales instead of entering the city's combined sewer, reducing pollution in Long Island Sound. Patty discussed their goals for embracing

storm water: slow it down, direct it to where it's useful, absorb it and keep it out of the overburdened sewer system.

**Camille Joseph**, Head Propagator at the Greenbelt Native Plant Center (GNPC), Staten Island, spoke about plant conservation at the Center. The mission of the Center is to provide native plants and seeds from local, wild plant populations in support of the conservation, restoration and management of many of New York City's most valuable natural areas. Their programs include seed collection and seed banking, propagation and greenhouse/nursery production and bulk seed production. Camille discussed the sampling strategy and



field data collection protocol involved in their seed collection program. She stated that the GNPC currently has 1500+ collections representing 400-450 species from the New York City metro area. She discussed the propagation of fresh seed vs. stored seed as well as production methods at the GNPC, their seed trials and their founder/bulk seed program. Camille noted that guided tours of the facility were available.

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**Marc Hachadorian**, Manager of the Nolen Greenhouse at the New York Botanical Garden (NYBG), discussed how the state of the art greenhouse is used for plant science research and to produce exotic plant displays for the garden's conservatory. His detailed description of how his growers produce up to twelve foot wide chrysanthemum displays, using only one plant, kept everyone captivated.



Marc also talked about the NYBG's role as a Plant Rescue Center (PRC). Plants seized at ports of entry in accordance with the Convention for International Trade in Endangered Species (CITES) are redistributed to an interested PRC where they are inspected and catalogued upon arrival. The plants are propagated, protected and returned to their country of origin. Some common CITES regulated families include: Cactaceae, Euphorbiaceae, Orchidaceae, Cycadaceae and Zamiaceae, and Sarraceniaceae and

Nepenthaceae. Marc stated that plant rescue aligns with the Botanical Garden mission of conservation through propagation and cultivation.

**Susan Lacerte**, Executive Director of the Queens Botanical Garden, spoke about the role of the Garden in the community.

The Garden is located in the heart of one of New York City's most ethnically diverse areas. The Garden was designed with ideas from community leaders, adapted over the years by listening to its visitors and today sponsors events with meaning to the communities that call Queens home. They strive to combine culture with sustainability through events like a Ground Honoring Ceremony before the start of construction. On a daily basis the Garden hosts events that remind visitors of their overseas homes. For example, on the group's arrival the day of the meeting, they witnessed close to a hundred people doing daily Chinese Tai-Chi exercise in the plaza. Susan said on weekends, over three hundred people come for the exercise. Susan then detailed some of the ways that the Queens Botanical Garden showcases smart environmental design in preparation for the afternoon tour.



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After a fabulous box lunch, Susan led a tour that started with the Visitors & Administration Building, the most advanced green building in New York City. This building has Achieved LEED™ (Leadership in Energy & Environmental Design) platinum certification from the U.S. Green Building Council's Leadership in Energy and Environmental Design Green

Building Rating System, the highest possible certification. It is a veritable encyclopedia of building techniques that conserve water, tap renewable energy, and work with nature to mitigate global warming.

Susan took the entire group into an environmentally friendly rest room where she proudly showed-off the low water-use toilet, explaining how the Garden treats sanitary water. Graywater from the Visitor & Administration Building's sinks, dishwashers, and shower is piped to a constructed wetland, while rainwater cascades off the terrace roof into a cleansing biotrope. In both places, water is filtered and treated naturally through bacterial activity on the roots of carefully selected plants. The treated graywater is returned to the building for use in toilet flushing, while the cleansed rainwater supplies a meandering water feature and fountain.



*View down green roof.*

The tour continued to the building's innovative and publicly accessible green-roof, which slopes from two stories high to street level. Visitors can walk up the sloping roof to experience the landscape firsthand and see the Garden from above. The 3,000-square-foot roof is planted with a wide variety of primarily native plant species that require minimal watering. The group also visited various water features, low water use gardens, a behind-the-scenes view of the community garden, and the maintenance area. A special treat was to see the beautiful garden rented for events like weddings.

**Thanks to the meeting sponsors:**

