

Natural Area Mapping and Inventory of Ewen Park 2007 Survey



Prepared by the Natural Resources Group
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Ewen Park Natural Area Mapping & Inventory

8.04 acres

Introduction

City of New York Parks & Recreation (DPR) manages one of the most extensive and varied park systems of any city in the world. These 29,000 acres of city park property occupy about 15 percent of New York City's total area. In addition to flagship parks such as Central Park and Prospect Park, the city's parklands include over 11,000 acres of natural areas.

Until the 1980's, the Parks Department was primarily concerned with developed landscapes and recreation facilities rather than natural areas. In the absence of a comprehensive management policy, these areas succumbed to invasive species, pollution and erosion.

In 1984, Parks established the Natural Resources Group (NRG) with a mandate to acquire, restore and manage natural areas in New York City. The wetlands, forests, meadows, and shorelines under NRG's jurisdiction provide valuable habitat for hundreds of species, from rare wildflowers to endangered birds of prey. In addition to the goals mentioned above, NRG serves as a clearinghouse for technical research to aid in the protection and restoration of the city's natural resources. This inventory of Ewen Park was conducted in 2007 as part of NRG's commitment to improving the natural areas of New York City parks.

Ewen Park is located in the Bronx between Johnson Avenue and Riverdale Avenue just south of West 232nd Street. Eliza M. Ewen, daughter of General John Ewen, donated the land on which they lived to the City in 1916, on the condition that she be "allowed the use of the buildings and grounds for the remainder of her life undisturbed and without any changes in the grounds." The park was designed in 1935, following the death of Eliza Ewen. The steep hillside was traversed by a large stairway linking the communities of Kingsbridge and Riverdale.

The northern edge of Ewen Park was improved in 1955 when two basketball courts were installed. A rehabilitation of the walls, rails, and steps of the park was completed in 1973. The basketball courts and stairs were restored, and several new plantings were added in 1980. Council Member June M. Eisland funded the \$720,000 capital reconstruction in 1999 of the large flight of stairs including new stone treads, cheek walls, handrails, and a safe durable landing pavement connecting each set of steps. New planting along the step path was also included in the reconstruction plan to help stabilize the stone.

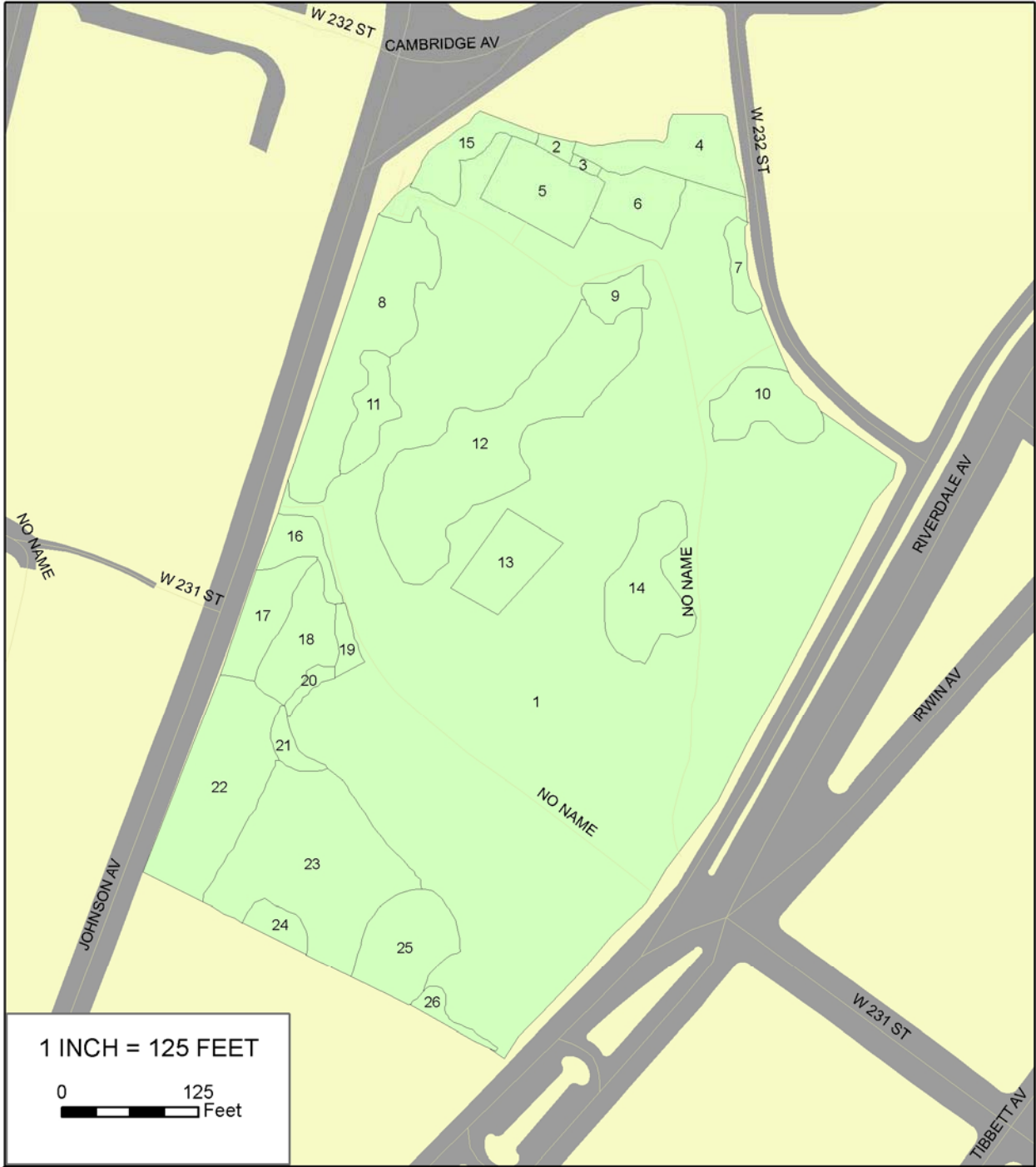
To facilitate the protection, management and restoration of Ewen Park, NRG completed an inventory of the area using entitiation, a process of identifying and describing ecologically distinct plant communities. Using aerial photographs and field reconnaissance, Parks staff delineated distinct ecological entities, known as entitiation units, based on cover type, understory structure, species composition, and topography. Evidence of historical use, current use, environmental disturbance, and additional notes were also recorded for each unit. Entitiation of Ewen Park resulted in a map and database that can be used to locate valuable and threatened areas. They also serve as a baseline for measuring change over time.

Entitiation

Entitiation is a type of plant community inventory well suited to the patchy environments often found in urban areas. Originally designed for European landscapes, the system was revised by NRG in 1985 for use in

urban parkland. NRG has used entitation widely and successfully to facilitate acquisition and restoration decisions. Put simply, entitation is a process of breaking up a park into manageable parts called “entities” or “entitation units.” Entitation units are defined using a weighted list of criteria. The first level of distinction is based on cover type (e.g. closed forest, vineland, scrub), followed by canopy species composition, understory type (e.g. herbs, vines, shrubs), and understory species composition. Additional factors, such as topography and soil condition (e.g. wet, moist, dry) are also taken into account.

To prepare for fieldwork, mapping technicians examine aerial photographs and delineate areas of similar cover. The mapping staff use the aerial information to create a strategy for covering land area. In the field, boundaries are identified as described above. For each unit, staff record the data listed above, as well as current uses, environmental disturbances, historical indicators, community stability, and comments.



1 INCH = 125 FEET



**ENTITATION UNITS - AUGUST 2007
EWEN PARK
BRONX COUNTY, CITY OF NEW YORK**

12/04/2007



**City of New York
Parks & Recreation
Natural Resources Group**

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Ewen Park Entitation Unit Descriptions, Surveyed August 2007

Unit: 1
Acreage: 4.92
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous Deciduous Hemicryptophytes Undulating Dry/Moist	Cool season grass	<5'	yes	Hedgerow	Foot traffic	

Comments:

This is lawn with associated trees and ornamental plantings, which includes cluster of trees where soil is bare under trees. A hedgerow of pin oaks and Norway maples are along Riverdale Avenue. Some tree species include: hawthorn, tulip poplar, Norway Maple, crab apple, sweet gum, sycamore, linden, black cherry, sassafras, pin cherry, American elm, walnut, and London plane. Other species present include: Ranunculus.

Unit: 2
Acreage: 0.01
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland Deciduous Lianas Level Dry/Moist	Porcelain berry Smartweed Dayflower, Asiatic	<5' <5' <5'	yes yes yes		Foot traffic	Trash

Comments:

This is a vineland that is located behind the basketball court. Other species present include: burdock and Virginia creeper. MC: Porcelainberry is an invasive species.

Ewen Park Entitation Unit Descriptions, Surveyed August 2007

Unit: 3
Acreage: 0.01
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Box Elder	5'-30'	no			
Deciduous	Porcelain berry	<5' & 5-30'	yes			
Lianas						
Level						
Dry/Moist						

Comments:

This is a stand of box elder with a porcelainberry dominated ground cover. The porcelainberry has begun to climb the trees closest to open vineland unit 2. Other species present include: multiflora rose, Amur honeysuckle, English ivy, Asiatic dayflower, common nightshade, Virginia knotweed, wood aster, violet, garlic mustard, and burdock. MC: Porcelainberry is an invasive species.

Unit: 4
Acreage: 0.14
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Porcelain berry	<5' & 5-30'	yes	Fence		
Deciduous	Multiflora rose	<5'	yes			
Lianas	Virginia creeper	<5'	no			
Slope						
Dry/Moist						

Comments:

This is a vineland growing around trees and shrubs. It is bordered by houses on the east side of the park and 232nd Street. In the center of the unit ground vegetation is sparse. Other species present include: Norway maple, Ailanthus, black cherry, sycamore maple, box elder, oak sapling, black locust sapling, Amur honeysuckle, poison ivy, English ivy, yam-leaved clematis, Virginia knotweed, garlic mustard, burdock, pokeweed, white snakeroot, and periwinkle. MC: Porcelainberry and multiflora rose are invasive species.

Ewen Park Entitation Unit Descriptions, Surveyed August 2007

Unit: 5
Acreage: 0.15
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scarcely vegetated					Sports	

Level
 Dry

Comments:
 This unit is the basketball court.

Unit: 6
Acreage: 0.1
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Elm, slippery	<5' & 5-30'	no	manhole		
Deciduous	Cherry, black	5'-30'	no			
Lianas	Norway maple	<5' & 5-30'	yes			
Slope						
Dry/Moist						

Comments:
 This is a small closed forest located next to the basketball court. Other species present include: 2 black locust, 1 large American sycamore, box elder, slippery elm, multiflora rose, Amur honeysuckle, wineberry, poison ivy, wood aster, garlic mustard, violet, white snakeroot, and Virginia knotweed.

Ewen Park Entitation Unit Descriptions, Surveyed August 2007

Unit: 7
Acreage: 0.04
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Locust, black	>30'	yes			
Deciduous	Elm, slippery	<5' & 5-30'	no			
Hemicryptophytes	Box Elder	5'-30'	no			
Slope	Norway maple	<5' & 5-30'	yes			
Dry/Moist						

Comments:

This is a small strip of forest bordered on its' east side by 232nd Street. Ground cover is sparse. Black locust are on the east side of the unit, box elder are on the west side of the unit, and maples are in the center. Other species present include: mulberry sapling, Amur honeysuckle, English ivy, porcelainberry, Virginia creeper, Asiatic dayflower, Virginia knotweed, wood sorrel, and wood aster.

Unit: 8
Acreage: 0.3
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Norway maple	5'-30'	yes			
Deciduous	Sycamore maple	5'-30'	yes			
Chamaephytes	Mulberry, white	5'-30'	yes			
Slope	Box Elder	5'-30'	no			
Dry/Moist	Locust, black	5'-30'	yes			
	Multiflora rose	<5'	yes			

Comments:

This is a forested area that has not yet been taken over by vines. Other species present include: slippery elm, privet, Amur honeysuckle, English ivy, poison ivy, porcelainberry, Virginia knotweed, garlic mustard, pokeweed, and burdock.

Ewen Park Entitation Unit Descriptions, Surveyed August 2007

Unit: 9
Acreage: 0.04
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	yam- leaved clematis	<5'	yes			
Deciduous	Locust, black	5'-30'	yes			
Lianas	Honeysuckle, Amur	<5'	yes			
Slope						
Dry/Moist						

Comments:

This is a small vineland located between stairs and large rocks. Other species present include: black walnut, white mulberry, slippery elm, multiflora rose, porcelainberry, poison ivy, pokeweed, and burdock. MC: invasive species.

Unit: 10
Acreage: 0.11
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Elm, slippery	<5' & 5-30'	no			
Deciduous	Hazelnut, American	<5'	no			
Chamaephytes	Box Elder	<5' & 5-30'	no			
Slope	Honeysuckle, Amur	<5'	yes			
Dry/Moist						

Comments:

This is a small closed forest bordered by 232nd Street near Riverdale Avenue. Other species present include: Ailanthus, white mulberry, Norway maple, black cherry, burdock, Virginia knotweed, pokeweed, wood aster, wood sorrel, and smartweed.

Ewen Park Entitation Unit Descriptions, Surveyed August 2007

Unit: 11
Acreage: 0.07
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland Deciduous Lianas Slope Dry/Moist	Porcelain berry	<5' & 5-30'	yes			

Comments:

This unit is the outer portion of a closed forest where porcelainberry has taken over. The vines are climbing over the tops of trees. Other species present include: black cherry, black locust, Norway maple, hawthorn, slippery elm, box elder, white mulberry, multiflora rose, Virginia knotweed, and pokeweed. MC: Porcelainberry is an invasive species.

Unit: 12
Acreage: 0.46
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Locust, black	>30'	yes	Full-crown tree		
Deciduous	Box Elder	<5' & 5-30'	no			
Chamaephytes	Norway maple	<5' & 5-30'	yes			
Slope	Cherry, black	<5' & 5-30'	no			
Dry/Moist	Elm, slippery	<5' & 5-30'	no			
	Mulberry, white	<5' & 5-30'	yes			

Comments:

Forested area with patches of Amur honeysuckle and multiflora rose. There are large rocks in unit. Other species present include: red oak, American sycamore, Kentucky coffee tree, pokeweed, Asiatic dayflower, porcelainberry, Oriental bittersweet, Virginia creeper, poison ivy, burdock, mugwort, smartweed, wood aster, garlic mustard, and Virginia knotweed.

Ewen Park Entitation Unit Descriptions, Surveyed August 2007

Unit: 13
Acreage: 0.11
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous Deciduous Hemicryptophytes Level Dry/Moist	Cool season grass	<5'	yes		dog run	Soil compaction

Comments:

John's Run dog run. Other species present include: Sycamore, burdock, and porcelainberry on fence.

Unit: 14
Acreage: 0.17
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Hemicryptophytes Level Dry	Sassafras	all	no		Foot traffic	Soil compaction Trash

Comments:

This unit is a small stand of sassafras with white mulberry and pin oaks. A rock outcrop is in the center of the unit. This unit is downhill from the dog run. Other species present include: black cherry, Siberian elm, sycamore maple, Amur honeysuckle, poison ivy, burdock, pokeweed, Virginia knotweed, wood aster, and mugwort.

Ewen Park Entitation Unit Descriptions, Surveyed August 2007

Unit: 15
Acreage: 0.08
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Locust, black	5'-30'	yes			
Deciduous	Violet	<5'	no			
Geophytes	Cool season grass	<5'	yes			
Level						
Dry/Moist						

Comments:

This is a small unit near the basketball court, which is dominated by black locust with violet and cool season grass in the herbaceous layer. There is a flowering dogwood at either end of this unit. The unit extends a little bit behind the basketball court. Other species present include: slippery elm, white mulberry, box elder, Amur honeysuckle, dogwood, multiflora rose, yam-leaved clematis, porcelainberry, English ivy, Virginia knotweed, and burdock.

Unit: 16
Acreage: 0.06
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Porcelain berry	<5' & 5-30'	yes			
Deciduous	Honeysuckle, Amur	<5' & 5-30'	yes			
Lianas						
Slope						
Dry/Moist						

Comments:

This is a small vineland bordered by Johnson Avenue and a staircase that leads into the park. Other species present include: black locust, white mulberry, Norway maple, ash sp., multiflora rose, yam-leaved clematis, Virginia creeper, Oriental bittersweet, and pokeweed. MC: invasives.

Ewen Park Entitation Unit Descriptions, Surveyed August 2007

Unit: 17
Acreage: 0.1
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Norway maple	<5' & 5-30'	yes			
Deciduous	Mulberry, white	<5' & 5-30'	yes			
Chamaephytes						
Slope						
Dry/Moist						

Comments:

This unit is located on the north side of the park and is bordered by a sidewalk along Johnson Avenue. This unit is mostly devoid of ground vegetation except along edges. Other species present include: sycamore maple, slippery elm, 1 mimosa sapling, multiflora rose, privet, Amur honeysuckle, poison ivy, Virginia creeper, and porcelain berry.

Unit: 18
Acreage: 0.12
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Cherry, black	<5' & 5-30'	no			
Deciduous	Norway maple	<5' & 5-30'	yes			
Chamaephytes	Elm, slippery	<5' & 5-30'	no			
Slope						
Dry/Moist						

Comments:

This is a closed forest dominated by black cherry and Norway maple. The ground is mostly devoid of vegetation except along edges. Other species: 2 pin oaks, slippery elm, multiflora rose, Amur honeysuckle, English ivy, poison ivy, and Oriental bittersweet.

Ewen Park Entitation Unit Descriptions, Surveyed August 2007

Unit: 19
Acreage: 0.02
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Knapweed, black	<5'	yes			Trash
Deciduous	Burdock, common	<5'	yes			
Hemicryptophytes						
Slope						
Dry/Moist						

Comments:

This is a small herbaceous community between a forested unit and steps. Porcelainberry vines threaten to take over area (MC). Other species present include: mulberry sapling, Japanese honeysuckle, wood sorrel, Asiatic dayflower, mugwort, pokeweed, and ragweed.

Unit: 20
Acreage: 0.02
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Porcelain berry	<5' & 5-30'	yes			
Deciduous	yam-leaved clematis	<5' & 5-30'	yes			
Lianas						
Slope						
Dry/Moist						

Comments:

This is a small vineland bordering a black cherry unit. It has taken over a black cherry tree and is spreading (MC). Other species present include: sycamore maple saplings, Amur honeysuckle, Oriental bittersweet, Virginia creeper, black knapweed, garlic mustard, and wood aster.

Ewen Park Entitation Unit Descriptions, Surveyed August 2007

Unit: 21
Acreage: 0.03
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Ragweed, great	<5' & 5-30'	no			
Deciduous	Knapweed, black	<5'	yes			
Hemicryptophytes						
Slope						
Dry/Moist						

Comments:

This is a small herbaceous unit with encroaching vines. Other species present include: black cherry saplings, porcelainberry, Virginia creeper, smartweed, dock, wood aster, and switch grass. MC: Porcelainberry is an invasive species.

Unit: 22
Acreage: 0.31
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Sycamore maple	<5' & 5-30'	yes			
Deciduous	Norway maple	<5' & 5-30'	yes			
Phanerophytes	Locust, black	all	yes			
Slope						
Dry/Moist						

Comments:

This unit is bordered by Johnson Ave and a building in the NW corner of the park. Other species present include: slippery elm, box elder, white mulberry, black cherry saplings, red oak saplings, forsythia, multiflora rose, Oriental bittersweet, poison ivy, Virginia creeper, white snakeroot, garlic mustard, wood sorrel, Virginia knotweed, and pokeweed. Parts of the unit have bare ground.

Ewen Park Entitation Unit Descriptions, Surveyed August 2007

Unit: 23
Acreage: 0.45
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Sassafras	<5' & 5-30'	no		Foot traffic	Trash
Deciduous	Sycamore maple	<5' & 5-30'	yes		drinking	
Phanerophytes	Elm, slippery	<5' & 5-30'	no			
Slope	Ivy, poison	<5'	no			
Dry/Moist	Multiflora rose	<5'	yes			

Comments:

This unit is a closed forest dominated by sassafras in the canopy and sycamore maple and slippery elm in the understory. There are many saplings in the understory. Other species present include: black cherry, Norway maple, box elder, black locust saplings, Amur honeysuckle, Japanese honeysuckle, English ivy, Virginia creeper, wood sorrel, garlic mustard, wood aster, and Virginia knotweed. Black knapweed, porcelainberry, and mugwort are on the edge of the unit.

Unit: 24
Acreage: 0.04
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Elm, slippery	5'-30'	no			
Deciduous	Knotweed, Japanese	<5' & 5-30'	yes			
Geophytes	Sycamore maple	<5' & 5-30'	yes			
Slope						
Dry/Moist						

Comments:

This is a small unit on the west side of the park. It is located at the edge of the property between two buildings. Slippery elm and sycamore maple are in the canopy with Japanese knotweed, and a few regenerating sycamore maples and sassafras in the understory. A footpath runs through the unit. Other species present include: black locust, a few fallen trees, English ivy, catbrier, and garlic mustard.

Ewen Park Entitation Unit Descriptions, Surveyed August 2007

Unit: 25
Acreage: 0.16
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Sycamore maple	<5' & 5-30'	yes			
Deciduous	Knotweed, Virginia	<5'	no			
Geophytes	Grass spp.	<5'				
Slope	Aster, white wood	<5'	no			
Dry/Moist	Dayflower, Asiatic	<5'	yes			

Comments:

This is a stand of sycamore maples with Virginia knotweed located in the SW region of the park. It is bordered by managed lawn and a forest. Other species present include: white mulberry, Ailanthus, black cherry, sassafras saplings, bittersweet nightshade, poison ivy, porcelain berry, English ivy, aster spp, plantain, lamb's quarter, mugwort, black knapweed, pokeweed, and wood sorrel.

Unit: 26
Acreage: 0.02
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Smartweed	<5'	yes			
Deciduous	Dayflower, Asiatic	<5'	yes			
Hemicryptophytes	Knotweed, Virginia	<5'	no			
Slope						
Dry/Moist						

Comments:

This is a strip of herbaceous community bordering the western fence. Other species present include: Ailanthus saplings, porcelainberry, and mugwort.

APPENDIX: Glossary

Many of these definitions are adapted from Marge Garguillo's unpublished *Plants of New York City Natural Areas: An ecological manual* (2005).

Chamaephyte: Mature branch or shoot system remaining perennially less than or equal to 100in above ground. Buds are produced on aerial branches close to the soil. (e.g. shrubs)

Closed forest: An area formed by trees at least 15 feet tall with interlocking crowns and at least 80% canopy closure.

Competition: The ability of one plant to overwhelm another plant by shading it out or otherwise overwhelming it.

Deciduous: Majority of trees shed their foliage in the autumn months.

Depression: A hollow, or low point, as compared to the surrounding topography. May or may not contain water.

Dominant: The most abundant plants in a particular plant community. A **codominant** plant is about equally as abundant as the dominant species.

Exotic: A species that does not naturally inhabit a specific area. An exotic plant may or may not be invasive where it is introduced.

Exotic planting: A gardened area where non-native species (e.g. privet, periwinkle) are tended.

Full-crown tree: Initially open-grown and free of competition: currently very large with a dominating crown.

Geophyte: Plants with buds or shoots surviving below the ground (rhizomes, bulbs, stem tubers, root tubers.)

Graminoid: Grasses and grass-like plants.

Hedgerow: Evidence of trees or shrubs planted in line i.e., maple or privet along road or path.

Hemicryptophyte: Shoots die back to ground level.

Herb: Plants without woody tissues that die back to the ground in the winter. This classification is usually applied to broad-leaved plants rather than grasses, but includes grasses for the purpose of entitation.

Herbaceous community: An area where grasses, grasslike plants, and herbaceous plants are predominant. Woody plants may be sparingly present, but cover less than 30% of area.

Intertidal Communities: Substrate is exposed and flooded by tides, includes the associated splash zone.

Invasive plant: A plant species that grows and reproduces without constraint, crowding or shading out other plants. The term is usually applied to plants that are not native to the given region. Invasiveness in a plant that is native to the region is rare and probably caused by unusual circumstances.

Knoll: A small isolated hillock.

Landfill: Topography altered by previous filling or dumping: i.e., while building a road or altering a wetland area. Look for rubble on the soil surface or sudden changes in grade.

Lianas: Vascular plants needing support, rooting in the ground permanently (vines).

Native plant: Plants that were growing in this region before Europeans came to North America. Native plants are adapted to the climate and soils of their region. They have relationships with birds, mammals, insects, and fungi and are integrated into the ecology of the region. New York City's native plants come from seed that spread northward after the last glaciers melted thousands of years ago.

Ornamental: Plants used as horticultural specimens in gardens or developed parks, not intended to reproduce or be part of a natural plant community. Very often they are non-native plants.

Phanerophyte: Plants that grow taller than 100 in. or whose shoots do not die back periodically to that height (e.g., trees).

Scrub: A shrubland or thicket, mainly composed of woody plants 1.5 to 15 feet tall.

Slope: Ground that forms a natural or artificial incline.

Soil compaction: Increasing soil density and decreasing porosity due to application of mechanical forces to the soil: i.e. due to vehicle, horse, or foot traffic.

Species: A group of organisms that can interbreed to produce fertile young.

Understory: Habitat below the tree canopy of a forest. The understory is a plant community of tree saplings, shrubs, herbs, graminoids, and mosses that can live in shade or part shade.

Undulating: The area has a wavy surface. Its neither a slope, a level area, or a depression, but rather a combination of all three.

Vineland: An area formed by at least 30% vines. Vines may be supported by vegetation, artificial means or ground surface. Often occurs on the forest or shrub border.

Woodland: An area formed by trees at least 15 feet tall, with most of their crowns not touching each other, but at least 30% canopy closure.