



Natural Area Mapping and Inventory of Crotona Park 2011 Survey

Prepared by:



NYC Parks

City of New York Parks & Recreation
Forestry, Horticulture, and Natural Resources
Michael R. Bloomberg, Mayor
Veronica M. White, Commissioner

Crotona Park Natural Area Mapping & Inventory Surveyed 2011

133.51 acres

Introduction

The City of New York Parks & Recreation (Parks) manages one of the most extensive and varied parks 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, Parks 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 Parks' jurisdiction provide valuable habitat for hundreds of species, from rare wildflowers to endangered birds of prey. To facilitate the protection, management and restoration of natural areas, NRG began an inventory of parkland using entitation, a process of identifying and describing ecologically distinct plant communities (or entities).

Entitation

Originally designed for European landscapes, the system was revised by NRG in 1985 for use in urban parkland. This method of inventory was chosen because it is well suited to the patchy environments often found in urban areas. The focus of this type of survey is to break down a landscape into discrete, manageable units based primarily on dominant vegetation; each unit is described as an "entitation unit". Entitation units are defined using a weighted list of criteria. The following distinctions qualify entitation units:

- Vegetation cover type (e.g. closed forest, vineland, scrub)
- Dominant canopy vegetation (e.g. Norway maple, hickory, oak)
- Understory vegetation type (e.g. herbs, vines, shrubs)

Additional factors, such as topography, current use, environmental disturbance and soil condition (e.g. wet, moist, and dry) are also taken into account. Using aerial photographs and field reconnaissance, a landscape can be delineated and mapped into distinct ecological entities. These maps and descriptions will serve as baseline ecological data to plan and conduct natural areas management.

Data Collection

To prepare for fieldwork, mapping technicians examine aerial photographs, delineate areas of similar cover and create a strategy for on the ground surveys. In the field, boundaries are identified as described based on ground cover and vegetation types. For each unit, staff records the data listed above, current uses, environmental disturbances, historical indicators, community stability, and a narrative description of the area including management concerns and notable other species present.

Once collected, all of this data is then entered into a central entitation database. The field maps are then digitized in ArcGIS with the boundaries of each unit recreated and linked to the entitation database. Once the digital map and database are linked maps can be created and

information can be queried quickly. The final step is to convert the unit map and descriptions into a final report format.

Crotona Park Overview

For more than one hundred years, Crotona Park has been one of the most important public parks in the Bronx, a sanctuary of rolling grass, lofty trees, baseball diamonds, a pool, and a peaceful lake. It is the largest park in the South Bronx and the sixth largest in the borough.

The City of New York acquired the property from Andrew Bathgate as part of the consolidation of the Bronx park system in 1888. Known at the time as “Bathgate Woods,” the park was already famous for its views, its trees, and its pond. From high points in the park one could see the Palisades of New Jersey to the west and the towers of Brooklyn Bridge to the south. Although the city planned to name the park for the Bathgates, a dispute with the family led a Parks Department engineer to name it after Croton, an ancient Greek colony famed for its Olympic athletes. Croton is also the name of the old New York City aqueduct.

As ice skating grew popular in the Bronx around the turn of the century, the Department of Parks paved the perimeter of Indian Pond and installed a warming hut and concession stand for skaters. In the 1930s, Works Progress Administration employees built the present boathouse on the east side of the pond and entirely rebuilt the area around the lake. Other projects in Crotona Park completed during the tenure of Parks Commissioner Robert Moses (1934-60) included the construction or renovation of five baseball diamonds, twenty tennis courts, twenty-six handball courts, nine playgrounds, four comfort stations, and picnic and sitting areas. The most spectacular addition was the creation of an enormous swimming pool and bathhouse complex, which Mayor Fiorello LaGuardia and Commissioner Moses opened on July 24, 1936. A major restoration of the pool and bathhouse was completed in 1984.

Bronxites continue to treasure Crotona Park for its natural beauty and outstanding recreational facilities. Crotona Park is home to some of the most majestic and varied trees in the city. Around Indian Lake stand native tulip, black cherry, hickory, sassafras, sweetgum, and twenty-three other species, including specimens over a century old. The 3.3-acre lake was originally a natural pond and provides a home to ducks, turtles, and numerous species of fish. In the southwest corner of the park, generations of gardeners have tended plants and flowers. The old “Farm Garden” was established in the 1930s to teach children about plant science, conservation, nutrition, and hygiene.


Technicians: Chris Crews, Clara Pregitzer, Belinda Sun

Crotona Park Entitation 2011

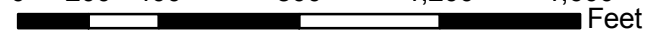
Bronx, NY



Legend

 Entitation Unit

0 200 400 800 1,200 1,600 Feet



Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 1
Acreage: 7.00
Classification IVA2a

Date of Visit: 7/20/2011
Management Concern: No

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Herbaceous	Cool season grass	<5'	No		Foot traffic	Trash
Mixed	Mugwort	<5'	Yes			Planting
Therophytes	Norway maple	>30'	Yes			
Slope	Oak, pin	>30'	No			
Dry	Pine, white	<5'	No			

Comments:

This is an herbaceous unit with mowed grass and some pin oak and Norway maple trees scattered throughout the unit. It surrounds a ball field, a comfort station and a path that runs through the park. This unit is bordered by Crotona Parkway north and Fulton Avenue on the west. At the southwest end of the unit there is a pool. There are several evergreen plantings near a playground adjacent to the pool that are included in the unit. The area between the playground and the ball field contains large rocks. Other species include: White pine, dawn redwood, Norway maple, American linden, white oak, sweetgum, pin oak, dandelion, green ash, white mulberry, Ailanthus, and river birch.

Unit: 2
Acreage: 1.94
Classification VD

Date of Visit: 7/20/2011
Management Concern: No

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Scarcely Vegetated					Sports	
Level						
Dry						

Comments:

This unit is a baseball field in the northwest corner of the park. It is located just north of the pool and playground unit.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 3
Acreage: 13.78
Classification IIB2a5

Date of Visit: 7/20/2011
Management Concern: Yes

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Woodland	Oak, red	>30'	No			
Deciduous	Oak, pin	>30'	No			
Therophytes	Planetree, London	>30'	No			
Undulating	Linden, American	5'-30'	No			
Dry	Norway maple	>30'	Yes			
	Ash, spp.	>30'	No			

Comments:

This is an oak woodland with patches of mowed lawn and some new B & B plantings. The unit runs along the western side of Crotona Avenue. Numerous rock outcroppings and patches of mugwort exist throughout the unit. Other species in the unit include: pin oak, Ailanthus, black cherry, slippery elm, siberian elm, red oak, red maple, blue beech, London plane, American linden, Norway maple, white ash, green ash, honey locust, sweetgum, white pine, tuliptree, Poor man's Pepper, cool season grass, plantain, clover, corktree, mugwort, black cherry, and white mulberry.

Unit: 4
Acreage: 5.21
Classification VD

Date of Visit: 7/20/2011
Management Concern: No

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Scarcely Vegetated				Other		
Slope						
Dry						

Comments:

This unit is a large swimming pool complex with an attached playground on the northern end. It is bordered by Fulton Avenue to the west. The area is fenced in with chain link and razor wire.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 5 **Date of Visit:** 7/20/2011 **Species Changing:** No
Acreage: 5.82 **Management Concern:** No **Community Structure Changing** No
Classification IIB2a5

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Planetree, London	>30'	No			
Deciduous	Oak, red	>30'	No			
Therophytes	linden, American	>30'	No			
Undulating	Oak, white	>30'	No			
Dry	Cool season grass	<5'	No			

Comments:

This is a woodland unit with some red/white oak and London planetrees with mowed grass understory. There are some new B & B plantings present in the unit. The unit is divided by several paved pathways and there is a baseball field in the middle of the unit. Other species include: London plane, cool season grass, plantain, clover, mugwort, pin oak, green ash, white oak, American linden, red oak, scholar tree, white pine, yellow buckeye, sweetgum, magnolia, hawthorn spp., Ailanthus, white mulberry, and black cherry.

Unit: 6 **Date of Visit:** 7/20/2011 **Species Changing:** No
Acreage: 1.35 **Management Concern:** No **Community Structure Changing** No
Classification VD

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scarcely Vegetated	Cool season grass					
Level						
Dry						

Comments:

This unit is a maintained baseball field dominated by mowed cool season grass.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 7 **Date of Visit:** 7/20/2011 **Species Changing:** No
Acreage: 5.12 **Management Concern:** No **Community Structure Changing:** No
Classification: IIB2a5

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Planetree, London	>30'	No		Foot traffic	Trash
Deciduous	Norway maple	>30'	Yes			
Therophytes	linden, american	>30'	No			
Undulating	Oak, red	>30'	No			
Dry	Cherry, black	>30' & 5-30'	No			
	Oak, pin	>30'	No			

Comments:

This unit is a woodland with mostly full canopy, mature trees and some clusters of young trees around rock outcroppings. The understory is mowed cool season grass, plantain, and sweet clover. Several paved pathways exist throughout the unit. A number of trees in the northwest portion appear to have lost large limbs in the past 2-5 years. The unit is located in the southwest corner of the park, bordered by Crotona Park south and Fulton Avenue. Other species include: white pine.

Unit: 8 **Date of Visit:** 7/20/2011 **Species Changing:** No
Acreage: 4.69 **Management Concern:** No **Community Structure Changing:** No
Classification: IVA2f

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Cool season grass	<5'	No		Foot traffic	Trash
Deciduous	Plantain, common	<5'	No			
Therophytes	Yellow Buckeye	5'-30'	Yes			
Level	Dawn Redwood	<5' & 5-30'	Yes			
Dry	Locust, honey	>30'	No			
	Planetree, London	>30'	No			

Comments:

This is an herbaceous unit with mostly mowed lawn and some scattered landscaped trees. It is bordered by Crotona Park South on the south and Crotona Avenue to the east. The northern end contains dawn redwood plantings and the middle area contains rock outcroppings. The unit extends past the playground and garden. Other species include: pin oak, white mulberry, American linden, Ailanthus, red oak, honey locust, crab apple, ornamental cherry, London plane, weeping willow, Kentucky coffeetree, yellow buckeye, redbud, blue beech, rock elm, northern hawthorn, bush honeysuckle, and white pine.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 9 **Date of Visit:** 7/18/2011 **Species Changing:** No
Acreage: 2.72 **Management Concern:** Yes **Community Structure Changing** No
Classification IIB2a3

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Oak, pin	>30'	No	Full-crown tree	Picnic	Soil compaction
Deciduous	Dogwood spp.	5'-30'	No		Foot traffic	Dumping
Hemicryptophytes	Norway maple	>30'	Yes			Trash
Undulating	Locust, honey	>30'	No			
Dry	Cool season grass	<5'	No			

Comments:

This is a woodland with mowed grass in the understory and some large trees. It is located at the northern edge of the park, bordered by Crotona Park north and Crotona Avenue. It contains mostly large pin oaks with dogwood and several large Norway maple and honey locust. The unit contains large rocks and a lot of trash. There is a standing dead large American elm tree present in the unit. Other species include: clover, dandelion, tuliptree, and common plantain.

Unit: 10 **Date of Visit:** 7/18/2011 **Species Changing:** No
Acreage: 4.51 **Management Concern:** No **Community Structure Changing** No
Classification VD

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scarcely Vegetated	Cool season grass	<5'	No		Sports	Soil compaction
Deciduous					Foot traffic	Trash
Hemicryptophytes						
Level						
Dry						

Comments:

This unit is a sports complex with mowed grass, containing two baseball fields and some large, dominant trees on the western edge of the unit outside of the fence. It is located on the northern edge of the park. Trees planted on the edge of the unit include: ornamental dogwood, Norway maple, red maple, ornamental cherry, American linden, burdock, red oak, and pin oak. There is trash throughout the strip between the field and the paved pathway.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 11 **Date of Visit:** 7/18/2011 **Species Changing:** No
Acreage: 4.41 **Management Concern:** No **Community Structure Changing** No
Classification VD

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scarcely Vegetated	Cool season grass	<5'	No		Sports	
Deciduous	Dandelion	<5'	No			
Hemicryptophytes	Smartweed	<5'	Yes			
Level						
Dry						

Comments:

This unit consists of tennis and handball courts. There are strips of mowed grass around and between the courts. White mulberry is growing next to the fence. Other species include mugwort and Ailanthus.

Unit: 12 **Date of Visit:** 7/18/2011 **Species Changing:** No
Acreage: 3.39 **Management Concern:** Yes **Community Structure Changing** No
Classification VIA

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Aquatic (fresh)	Arrow arum	<5'	No	Other	Foot traffic	Trash
Deciduous	Water lily	<5'	No			
Hydrophytes	Phragmites	<5'	Yes			
Depression	Cattails, common	<5'	No			
Surface water	Cottonwood, Easter	<5'	Yes			

Comments:

This is Indian lake located north of Claremont Parkway. The pond was recently extended south approximately 100 feet into a planted waterway. The pond is bisected by a footbridge. Other species: cattails, arrow arum, phragmites, water lilies, horsetail, arrowwood vibernum , milkweed, yarrow grass, clover, London plane, Ailanthus, iris spp., and Eastern cottonwood. There is a redwing blackbird nest on the eastern edge of the bridge. Phragmites is overtaking all of the northern part of the pond. On the eastern edge of the pond there are cattails present.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 13
Acreage: 3.41
Classification IVA3a5

Date of Visit: 7/18/2011
Management Concern: No

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Herbaceous	Cool season grass	<5'	No		Picnic	
Deciduous	Oak, white	>30'	No			
Hemicryptophytes	Planetree, London	>30'	No			
Undulating	Sweetgum	>30'	No			
Dry						

Comments:

This is an herbaceous unit with a large area of mowed grasses and some dispersed full-canopy trees and exposed rocks. The unit is slightly undulating with a small ridge in the center. It is bordered to the west by Crotona Avenue and to the north by handball courts. The unit contains an amphitheatre and some small tree clusters. Other species include: white oak, Norway maple, sweetgum, red maple, London plane, blue beech, mugwort, plantain, Kentucky bluegrass, red clover, cool season grass, hawthorn, black cherry, Ailanthus, slippery elm and Violet. The unit includes a few newly planted white pine plantings as well.

Unit: 14
Acreage: 2.25
Classification IVA2f

Date of Visit: 7/18/2011
Management Concern: No

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Herbaceous	Cool season grass	<5'	Yes	Fence	Sports	Soil compaction
Deciduous	Clover	<5'	No		Foot traffic	
Therophytes	Dandelion	<5'	No			
Level						
Dry/Moist						

Comments:

This unit is a baseball diamond located at the southeastern edge of the park. This unit is a fenced mowed lawn dominated by cool season grass with some mugwort and white mulberry growing next to the fence. Martin Van Buren playground and comfort station are next to the unit.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 15
Acreage: 0.21
Classification VD

Date of Visit: 7/18/2011
Management Concern: No

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Scarcely Vegetated Deciduous Therophytes Level Dry	Planetree, London	>30'	No		Picnic Sports Foot traffic	

Comments:

This unit is the Martin Van Buren Playground. It is bordered to the west by a baseball field, and to the east by Crotona Park east. There are several large London planetrees within and on the edges of the playground.

Unit: 16
Acreage: 3.38
Classification IIB2a3

Date of Visit: 7/18/2011
Management Concern: Yes

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Woodland Deciduous Hemicryptophytes Level Dry	Planetree, London Elm, American Locust, honey Cool season grass	>30' >30' 5'-30' <5'	No No No No	Full-crown tree	Picnic Campfire/ part Foot traffic	Soil compaction Trash

Comments:

This is a woodland unit with landscaped trees and mowed lawn,it is used as a picnic area. It is dominated by London planetree, American elm, honeylocust and cool season grass. It includes mowed lawn, picnic tables with benches, light posts, and grills that are heavily used. Crotona Park east is on the eastern edge of the unit. Other species include: shingle oak, gingko, tuliptree, white oak, plantain, white mulberry, mugwort, thistle, and red maple.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 17 **Date of Visit:** 7/19/2011 **Species Changing:** No
Acreage: 3.47 **Management Concern:** No **Community Structure Changing:** No
Classification: IIB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Norway maple	>30'	Yes		Foot traffic	Trash
Deciduous	Linden, American	>30'	No			Planting
Phanerophytes	Dogwood, flowering	>30'	No			
Slope						
Dry						

Comments:

This unit is a landscaped woodland with mowed grass. It borders Crotona Park East on the southeastern side. To the west of the unit is a ball field, ball court, and a playground. At the northern tip of the unit is another playground. Other species include: hawthorn, Siberian elm, common plantain, London plane, blue beech, white ash, red oak, mugwort, crab apple, Ailanthus, pin oak, black cherry, honey locust, sweetgum, American elm, and white mulberry.

Unit: 18 **Date of Visit:** 7/19/2011 **Species Changing:** No
Acreage: 0.62 **Management Concern:** No **Community Structure Changing:** No
Classification: VD

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scarcely Vegetated					Sports	
Knoll						
Dry						

Comments:

This unit is a scarcely vegetated enclosed sports court on a small knoll in the northeast portion of the park.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 19 **Date of Visit:** 7/18/2011 **Species Changing:** No
Acreage: 5.57 **Management Concern:** No **Community Structure Changing:** No
Classification IIB2a5

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Planetree, London	>30'	No		Foot traffic	Trash
Deciduous	Linden, american	>30'	No			Planting
Therophytes	Oak, pin	>30'	Yes			
Level	Plantain spp.	<5'	No			
Dry	Clover spp.	<5'	No			

Comments:

This unit is a landscaped ring around a ball field. It includes benches strips of cool season grass. The western edge includes a long landscaped strip with small ornamental cherry trees. The unit includes a large grass field northeast of a baseball field and also some large exposed rocks. Scattered trash exists throughout the unit. Other species include: black locust, Norway maple, blue beech, common plantain, pin oak, London plane, hosta, thistle, Oriental bittersweet, wood sorrell, asiatic dayflower, white wood aster, white mulberry, smartweed, porcelainberry, pokeberry and sweet clover.

Unit: 20 **Date of Visit:** 7/18/2011 **Species Changing:** No
Acreage: 4.35 **Management Concern:** No **Community Structure Changing:** No
Classification IIB2a3

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Planetree, London	>30'	No	Full-crown tree	Foot traffic	Soil compaction
Deciduous	Oak, white	>30'	No			Trash
Hemicryptophytes	Sweetgum	>30'	No			
Level	Norway maple	>30'	Yes			
Dry/Moist	Cool season grass	<5'	No			

Comments:

This unit is a landscaped woodland with mowed grass and snakes north along the Claremont Parkway. There are full crown white oak trees, London plane, sweetgum, and Norway maple trees in this unit. Several ornamental fruit trees exist on the southern edge. There is a paved path and trash throughout the unit. American elms are at the southeast corner. Other species include: White oak, Norway maple, sweetgum, London plane, red maple, and blue beech.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 21 **Date of Visit:** 7/18/2011 **Species Changing:** No
Acreage: 1.09 **Management Concern:** Yes **Community Structure Changing:** No
Classification: IIB2a5

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Cherry, black	>30' & 5-30'	No	Other	Foot traffic	Soil compaction
Deciduous	Oak, pin	>30'	No			Trash
Therophytes	Sweetgum	>30'	No			
Knoll	Mugwort	<5'	Yes			
Dry						

Comments:

This unit is a small rock outcropping to the west of the pond drainage and north of Claremont Parkway. There are large exposed rocks surrounded by black cherry, slippery elm, pin oak, and sweetgum trees. Small patches of cool season grass and mugwort are around the outcroppings, as well as a large amount of broken glass and trash throughout the unit.

Unit: 22 **Date of Visit:** 7/18/2011 **Species Changing:** No
Acreage: 0.35 **Management Concern:** No **Community Structure Changing:** No
Classification: IIB2a3

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	linden, american	>30'	No	Full-crown tree	Picnic	Soil compaction
Deciduous	Planetree, London	>30'	No		Foot traffic	Trash
Hemicryptophytes						
Level						
Dry/Moist						

Comments:

This unit is a picnic area with tables and open charcoal grills and mulch/woodchips spread on the ground. It is an active picnic area. There is almost no understory, cool season grass emerges in a few spots. There are large London plane and American linden trees in the unit. The unit borders the pond and Claremont Avenue to the south.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 23
Acreage: 1.08
Classification VD

Date of Visit: 7/18/2011
Management Concern: No

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Scarcely Vegetated	Basswood, America	5'-30'	No		Picnic	Trash
Deciduous	Plantain, common	<5'	No		Foot traffic	
Hemicryptophytes						
Level						
Dry						

Comments:

This unit is a scarcely vegetated handball and basketball court and playground. There are full crown basswood, a red maple, and arrowwood vibernum. Other species include: cool season grass, common plantain, and dandelion are growing in the cracks. This unit is an active recreation area with benches and chess tables.

Unit: 24
Acreage: 0.61
Classification IIB2a3

Date of Visit: 7/18/2011
Management Concern: Yes

Species Changing: Yes
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Woodland	Elm, American	>30' & 5-30'	No	Fence	Picnic	Soil compaction
Deciduous	Ailanthus	all	Yes			Trash
Hemicryptophytes	Cool season grass	<5'	No			
Undulating	Mugwort	<5'	Yes			
Dry	Plantain, common	<5'	No			

Comments:

This unit is a woodland just north of Claremont Parkway and Crotona Park East. It is bordered by the basketball courts to the west and a fence to the north. It contains mostly American elm and Ailanthus trees. There are a few large and several mid-diameter American elms. Ailanthus is present in all sizes. The area is rocky and dry with a mix of native and invasive understory. There is large amounts of trash throughout the unit. Other species: black cherry, white mulberry, dogwood, privet, pokeberry, thistle, sweet clover, smartweed, common plantain, and dandelion.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 25
Acreage: 1.03
Classification VD

Date of Visit: 7/18/2011
Management Concern: Yes

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Scarcely Vegetated	Sweetgum	>30'	No	Full-crown tree	Picnic	Trash
Deciduous	Planetree, London	>30'	No		Sports	
Hemicryptophytes					Foot traffic	
Level						
Dry						

Comments:

This unit is a sparse cement playground. It contains old equipment and trash everywhere. There are full-crown sweetgum and London planetrees present. Common plantain and cool season grass are growing in the sidewalk cracks.

Unit: 26
Acreage: 0.45
Classification IVA3a5

Date of Visit: 7/18/2011
Management Concern: Yes

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Herbaceous	Cool season grass	<5'	No		Foot traffic	Soil compaction
Deciduous	Clover	<5'	No			Trash
Hemicryptophytes	Mugwort	<5'	Yes			
Level	Dandelion	<5'	No			
Dry	Peppergrass	<5'	No			

Comments:

This unit is a sparce degraded area just south of the handball court. It has broken mixed concrete with herbaceous plants: clover, smartweed, mugwort, and peppergrass. This unit needs management.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 27 **Date of Visit:** 7/19/2011 **Species Changing:** No
Acreage: 3.55 **Management Concern:** No **Community Structure Changing** No
Classification IB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Locust, black	>30'	Yes		Foot traffic	Trash
Deciduous	Linden, american	>30'	No			
Phanerophytes	Norway maple	>30'	Yes			
Slope	Oak, red	>30'	No			
Dry						

Comments:

This unit is a woodland with landscaped trees and mowed lawn. It is located at the northeast corner of the park, the park boundary does not include this part of the park. It is bordered by Crotona Park East on the west side and by Crotona Park North on the north side. There are footpaths along the unit. Other species include: Japanese zelkova, scholar tree, cool season grass, violet, common plantain, wild carrot, burdock, and crab apple.

Unit: 28 **Date of Visit:** 7/19/2011 **Species Changing:** No
Acreage: 0.03 **Management Concern:** No **Community Structure Changing** No
Classification IVa2a

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Cool season grass	<5'	Yes		Sports	
Deciduous	Cedar, eastern whit	<5'	No			
Chamaephytes	Cherry, choke	<5'	Yes			
Knoll						
Dry						

Comments:

This unit is small and bare with recently planted herbaceous plugs. Some redbud and ornemental cherrys and cedar trees. Other species include: ornamental grass, common plantain.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 29 **Date of Visit:** 7/19/2011 **Species Changing:** No
Acreage: 1.41 **Management Concern:** No **Community Structure Changing:** No
Classification: VD

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scarcely Vegetated	Oak, black	>30'	No		Sports	
Deciduous	Planetree, London	>30'	No			
Phanerophytes						
Level						
Dry						

Comments:

This unit is a scarcely vegetated a sports complex and playground. There are a few large shade oak and London Plane trees on a strip dividing the basketball courts. At the end of the unit is Crotona Park East.

Unit: 30 **Date of Visit:** 7/19/2011 **Species Changing:** No
Acreage: 6.26 **Management Concern:** No **Community Structure Changing:** No
Classification: IIB2a5

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Linden, american	>30'	No		Foot traffic	Trash
Deciduous	Cherry, black	>30' & 5-30'	No			
Therophytes	Ash, green	>30'	No			
Undulating	Norway maple	>30'	Yes			
Dry	Cool season grass	<5'	No			

Comments:

This unit is a woodland with many large trees scattered throughout and several large grass patches between areas. It is located in the northern part of the park and encompasses several paved walkways and park sections. The unit is bordered to the north by the Crotona Parkway North. Other species include: American linden, green ash, black cherry, Norway maple, sweetgum, Ailanthus, red maple, red oak, blue beech, tuliptree, pin oak, bitternut hickory, American beech, and London planetree.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 31 **Date of Visit:** 7/19/2011 **Species Changing:** No
Acreage: 0.34 **Management Concern:** No **Community Structure Changing** No
Classification IIB2a5

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Planetree, London	>30'	No		Foot traffic	
Deciduous	Japanese zelkova	>30'	Yes			
Therophytes	Redwood, dawn	>30'	Yes			
Level	Scholar Tree	>30'	Yes			
Dry						

Comments:

This unit is a woodland strip on the eastern edge of a large recreation/playground area with Japanese zelkova, London plane, and red and black oak trees. The unit is located along the eastern and southern edge of the playground. It is bordered by Crotona Park East to the south. Other species include: scholar tree, crab apple, cool season grass, common plantain, mugwort, burdock, dawn redwood, American beech, and green ash.

Unit: 32 **Date of Visit:** 7/19/2011 **Species Changing:** No
Acreage: 16.40 **Management Concern:** No **Community Structure Changing** No
Classification IIB2a5

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Hickory, bitternut	>30'	No		Foot traffic	
Deciduous	Oak, red	>30'	No			
Therophytes	Oak, white	>30'	No			
Slope	cherry, cornelian	>30'	Yes			
Dry						

Comments:

This unit is a large woodland area dominated by bitternut hickory, oak and cherry with some mowed grass surrounding a playground. It is bordering Crotona Park East on the southern side. On the western side there is a pond and picnic area. Other species include: white oak, bitternut hickory, black cherry, shagbark hickory, mugwort, pignut hickory, sweetgum, wild carrot, common plantain, smartweed, dandelion, clover, burdock, tuliptree, dogwood, pin oak, American beech, redbud, choke cherry, white pine, and red maple.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 33 **Date of Visit:** 7/19/2011 **Species Changing:** No
Acreage: 1.38 **Management Concern:** No **Community Structure Changing:** No
Classification: IIB2a5

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Beech, blue	>30' & 5-30'	No			
Deciduous	Oak, red	>30'	No			
Therophytes	Cherry, black	5'-30'	No			
Slope	Sweetgum	>30'	No			
Dry/Moist						

Comments:

This is a small woodland unit that is bordering the ball field on the northeast side of it. Species include blue beech, red oak, tuliptree, sweetgum, black cherry, London plane, cool season grass, mugwort, common plantain, burdock, dandelion, choke cherry, river birch, ornamental cherry, pokeberry, white mulberry, and red maple.

Unit: 34 **Date of Visit:** 7/19/2011 **Species Changing:** No
Acreage: 1.43 **Management Concern:** No **Community Structure Changing:** No
Classification: IIB2a5

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Planetree, London	>30'	No		Foot traffic	
Deciduous	Oak, red	>30'	No			
Therophytes	Oak, white	>30'	No			
Slope						
Dry						

Comments:

This unit is a thin woodland strip between the Crotona Pond and the tennis courts. There is a paved path between the unit and the courts. It contains a few larger trees with many young plantings: white pine, blue beech, choke cherry. Other species: black cherry, common plantain, cool season grass, dandelion, sweet clover, willow oak, tuliptree, red maple, butterfly bush, dogwood, smartweed, white mulberry, wood sorrell, Jimson weed, Queen Anne's Lace, Ailanthus, landscaped shrubs around stone bench area on west center area of pond, ornamental rose and thistle.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 35 **Date of Visit:** 7/19/2011 **Species Changing:** No
Acreage: 1.98 **Management Concern:** No **Community Structure Changing** No
Classification IIB1e

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Norway maple	>30'	Yes			
Mixed	Linden, American	5'-30'	No			
Therophytes	Hemlock, Eastern	5'-30'	No			
Slope						
Dry/Moist						

Comments:

This unit is a small woodland strip that surrounds the tennis courts. The southern end is an open grassy area. At the northern end, evergreens are clustered around the border of the ball courts. The unit is located to the west of Crotona Avenue. Other species: red maple, sweetgum, London plane, Eastern red cedar, blue spruce, blue beech, hedge maple, bitternut hickory, cool season grass, honey locust, red oak, violet, green ash, white oak, and white pine.

Unit: 36 **Date of Visit:** 7/19/2011 **Species Changing:** No
Acreage: 3.26 **Management Concern:** No **Community Structure Changing** No
Classification IIB2a5

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Oak, red	>30'	No		Foot traffic	
Deciduous	Planetree, London	>30'	No			
Therophytes	Beech, blue	>30'	No			
Slope						
Dry						

Comments:

This is a thin U-shaped woodland strip running alongside the western edge of the Crotona pond. The area has a mature canopy with a grass understory interspersed with a few smaller trees, mostly white pines or red maples. Other species: willow oak, ornamental cherry, bitternut hickory, pignut hickory, cool season grass, common plantain, honey locust, American linden, mugwort, Norway maple, blue beech, American beech, mulberry, dogwood, white oak.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 37
Acreage: 1.74
Classification IIB2a5

Date of Visit: 7/20/2011
Management Concern: No

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Woodland	Oak, pin	>30' & 5-30'	No			
Deciduous	Linden, american	>30' & 5-30'	No			
Therophytes	Norway maple	>30' & 5-30'	Yes			
Slope	Ash, black	5'-30'	No			
Dry						

Comments:

This unit is a woodland that contains many clusters of large full crown trees. It is bordered on the south side by the Claremont Parkway. The unit is a horseshoe saped with a ball field at the northwestern end. There are several plantings of white pine at both ends of the unit. Other species include: common plantain, blue beech, white oak, red maple, green ash, linden, Norway maple, pin oak, white pine, yellowwood, hawthorn, dogwood, black cherry, sweetgum, Ailanthus, mugwort, black locust, slippery elm and London plane.

Unit: 38
Acreage: 0.51
Classification VD

Date of Visit: 7/20/2011
Management Concern: No

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Scarcely Vegetated					Sports	
Knoll						
Dry						

Comments:

This is a scarcely vegetated sports/recreation area along the western edge of the park. It is bordered by Fulton Avenue on the west side.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 39
Acreage: 0.83
Classification IIB2a5

Date of Visit: 7/20/2011
Management Concern: No

Species Changing: No
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Woodland	Planetree, London	>30' & 5-30'	No			
Deciduous	Linden, American	>30'	No			
Therophytes						
Level						
Dry						

Comments:

This unit is a large paved concrete area with basketball hoops on the southern edge of the park. It is bordered by Crotona Avenue on the east and by Crotona Park South to the south. Although the area is paved with asphalt, the canopy is mostly closed from mature London plane and American linden that surrounding the area. The understory is bare and paved but because of the canopy closure it is considered a woodland.

Unit: 40
Acreage: 0.67
Classification IVA2a

Date of Visit: 7/20/2011
Management Concern: No

Species Changing: Yes
Community Structure Changing No

Site:	Species	Height	Exotic	Historical	Uses	Disturbances
Herbaceous				Other	Other	Other
Mixed				Planting		
Therophytes						
Level						
Dry						

Comments:

This unit is the Victory Garden, part of the Green Bronx and Bronx Botanical Gardens community garden project. The area includes vegetable and ornamental plantings, trees, and various structures. It is enclosed by a metal fence.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 41 **Date of Visit:** 7/20/2011 **Species Changing:** No
Acreage: 0.67 **Management Concern:** No **Community Structure Changing:** No
Classification: VD

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scarcely Vegetated					Sports Foot traffic	
Level						
Dry						

Comments:

This unit is a playground and comfort station in the southwest corner of the park. It is located directly across the Victory Garden. It is bordered by Crotona Park South and Fulton Avenue to the west.

Unit: 42 **Date of Visit:** 7/20/2011 **Species Changing:** No
Acreage: 0.39 **Management Concern:** No **Community Structure Changing:** Yes
Classification: IVA2a

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Cool season grass	<5'	No		Foot traffic	
Mixed	Plantain, common	<5'	No			
Therophytes	JapaneUmbrealla P	<5' & 5-30'	Yes			
Slope	River birch	<5' & 5-30'	No			
Dry						

Comments:

This unit is a small opening along Claremont Avenue and directly above the playground. There are no canopy trees and the area has recently been replanted with Japanese Umbrella Pine and ornamental birch. A small desire line path bisects the unit diagonally from the southeast to northwest. Other species: cool season grass, red oak, common plantain, dandelion and clover.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 43 **Date of Visit:** 7/20/2011 **Species Changing:** No
Acreage: 0.40 **Management Concern:** No **Community Structure Changing** No
Classification VD

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scarcely Vegetated					Sports Foot traffic	
Level						
Dry						

Comments:

This unit is a small play area in the northwest part of the park, bordered to the north by Crotona Parkway North and to the east by Crotona Avenue. Several large pin oak and red oak are planted along the play area that borders the ring around the playground.

Unit: 44 **Date of Visit:** 7/20/2011 **Species Changing:** No
Acreage: 1.77 **Management Concern:** Yes **Community Structure Changing** No
Classification VIC

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Aquatic (fresh)	Phragmites	<5' & 5-30'	Yes	Other	Foot traffic	Trash
Deciduous	Cattails, common	<5'	No		Other	
Geophytes	Arrow arum	<5'	No			
Slope	Water lillies	<5'	No			
Wet	Viburnum spp.	<5'	No			
	Mugwort	<5'	Yes			

Comments:

This is a vegetated aquatic unit that surrounds the pond in the center of the park. The southern edge has new plantings along an extended waterway, a mix of native and ornamental plantings including arrowwood viburnum, milkweed, Eastern cottonwood, arrow arum, cattails. The northeast corner has a large mugwort patch spreading down the eastern shore. The entire pond fringe is slowly being choked out by phragmites. A water pipe feeds into the pond from the northern edge below a stone culvert, and the rocks and marshy area are stained bright orange. The unit is a management concern because of the presence of phragmites.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit: 45 **Date of Visit:** 7/20/2011 **Species Changing:** No
Acreage: 0.26 **Management Concern:** No **Community Structure Changing:** No
Classification: VD

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scarcely Vegetated					Foot traffic	Trash

Level
Dry

Comments:

This unit is a comfort station on the eastern side of the pond, located in the center of the park.

Unit: 46 **Date of Visit:** 7/20/2011 **Species Changing:** No
Acreage: 0.59 **Management Concern:** No **Community Structure Changing:** No
Classification: VD

<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 a small sports and recreation area at the northern edge of the park along Crotona Parkway North.

Crotona Park Entitation Unit Descriptions, Surveyed 2011

Unit:	47	Date of Visit:	7/20/2011	Species Changing:	No
Acreage:	0.22	Management Concern:	No	Community Structure Changing	No
Classification	VD				

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scarcely Vegetated					Sports Foot traffic	

Level
Dry

Comments:

This unit is a small playground and recreation area in the northeast corner of the park. It is bordered by Crotona Parkway North.