

Natural Area Mapping and Inventory of High Rock Park 2008 Survey



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Section I. High Rock Park Natural Area Mapping & Inventory

90 acres

Introduction

City of New York Parks & Recreation (DPR) 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, 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.

Often referred to as one of the most tranquil places in New York City, High Rock Park, located in Staten Island and bordered by the Richmond Parkway and Moravian Cemetery at Rockland Avenue, is noted for its quiet ponds and deep woods.

Over the past two centuries, prominent Staten Island families including the Vanderbilts, Flaggs, Conners, Ebbets, and Tonkings have occupied parts of this land. In the 1930s, the Boy Scouts Council owned the land, receiving thousands of campers every year. In 1951, the Boy Scouts sold the property to the Girl Scouts Council of Greater New York. Gretta Moulton (1912-1971), an energetic camping consultant from Massachusetts, helped with the Girl Scout Camp's program. Recognizing the magnificent beauty of this place, she worked to preserve it from the growing pressures of urban development.

In 1964 during a real estate boom on the island, the Council sold the property to a private developer. The following year, after complicated negotiations with the developer, the City of New York took ownership of the land and turned responsibility for running the park over to the Staten Island Institute of Arts & Sciences. Fortunately, through the efforts of Gretta Moulton, along with Borough President Albert V. Maniscalco (1908-1998), Robert Moses (1888-1981), Nelson Rockefeller (1908-1979), Laurence Spellman Rockefeller (1910-1966), and other concerned citizens, High Rock was officially dedicated as parkland in July 1965, and the High Rock Nature Conservation Center opened to the public. In 1971, the Conservation Center was designated an "Educational Landmark" by the United States Department of the Interior, one of only eleven such awards at the time. It was the first to be named in the field of environmental education. In 1988, an additional 4.9 acres were acquired by Parks.

High Rock Park lies within 2,800 acres that comprise the Greenbelt, a collection of public and private properties on Staten Island. By the end of the 1990s, the asphalt parking lot at the end of Nevada Avenue and at the entrance to High Rock Park was completed. The parking lot accommodates the many visitors whom come to High Rock Park, not just for the environmental programs and activities, but also to enjoy the quiet, scenic views, trails, and natural landscape.

Today, the historic camp facilities serve as the headquarters for both the Greenbelt Conservancy and the Greenbelt Administration. The Greenbelt Natural Resource Team (GNRT) oversees the development and implementation of ecologically based management practices throughout High Rock Park and the entire Staten Island Greenbelt to preserve the environmental integrity of the natural parkland.

In 2008, to begin addressing the natural resource management and restoration needs of the Staten Island Greenbelt, an inventory of High Rock Park was collaboratively conducted by NRG and GNRT through entitation, a process of identifying and describing ecologically distinct plant communities. Using aerial photographs and field reconnaissance, Parks staff delineated distinct ecological entities, known as entitation 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. Entitation of High Rock Park resulted in a map and database that can be used to locate valuable and threatened areas. The map and database also serve as a baseline for measuring change over time.

Entitation

Entitation 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 New York City's urban parklands. 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. Distinction is based on:

- Cover type (e.g. closed forest, vineland, scrub)
- Canopy species composition
- Understory type (e.g. herbs, vines, shrubs),
- Understory species composition.
- Additional factors that define entitation units, such as topography and soil condition (e.g. wet, moist, dry) are recorded.

To prepare for fieldwork, mapping technicians examine aerial photographs and delineate areas of similar cover. The mapping staff uses the aerial information to create a strategy for delineating entitation units in the area. In the field, boundaries are identified as described above. For each

unit, staff records the data listed above, as well as current uses, environmental disturbances, historical indicators, community stability, and comments.

***Partially funded by the Hudson River Foundation New York City Environmental Fund and New York State Department of Environmental Conservation Urban and Community Forestry Grant.**

Acknowledgements

Cover page photo credit: Matthew D. Sullivan

2007 Youth Stewards Internship: Daniel Brown, Cody Mendoza, Julie Flores

2008 Youth Stewards Internship: Daniel Brown, Ryan Chan, Amanda Mattsson

2009 Greenbelt Natural Resource Internship: Christopher Chin, Charles Salzer, Nehal Gohel

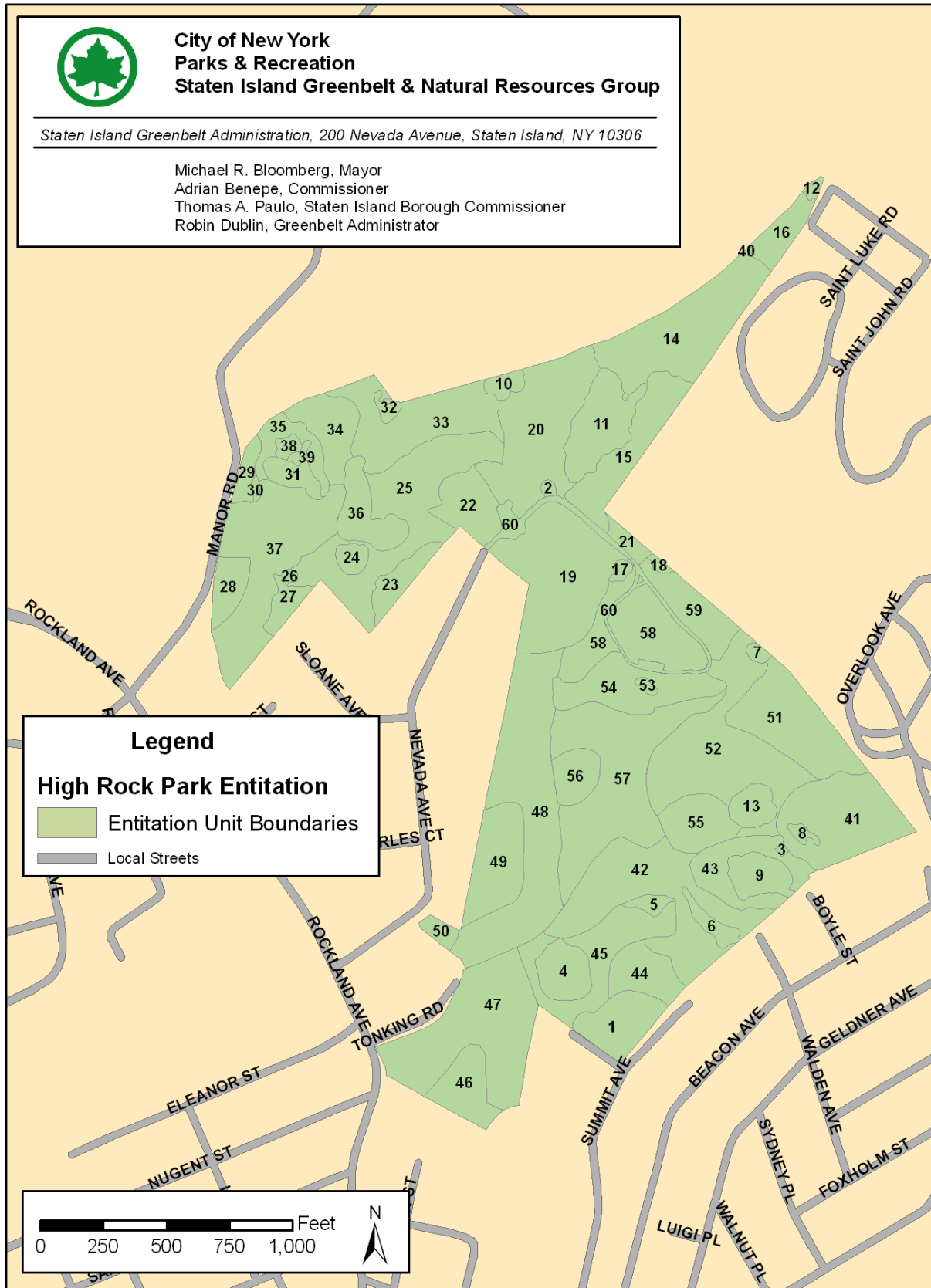
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Section II. Entitation Maps

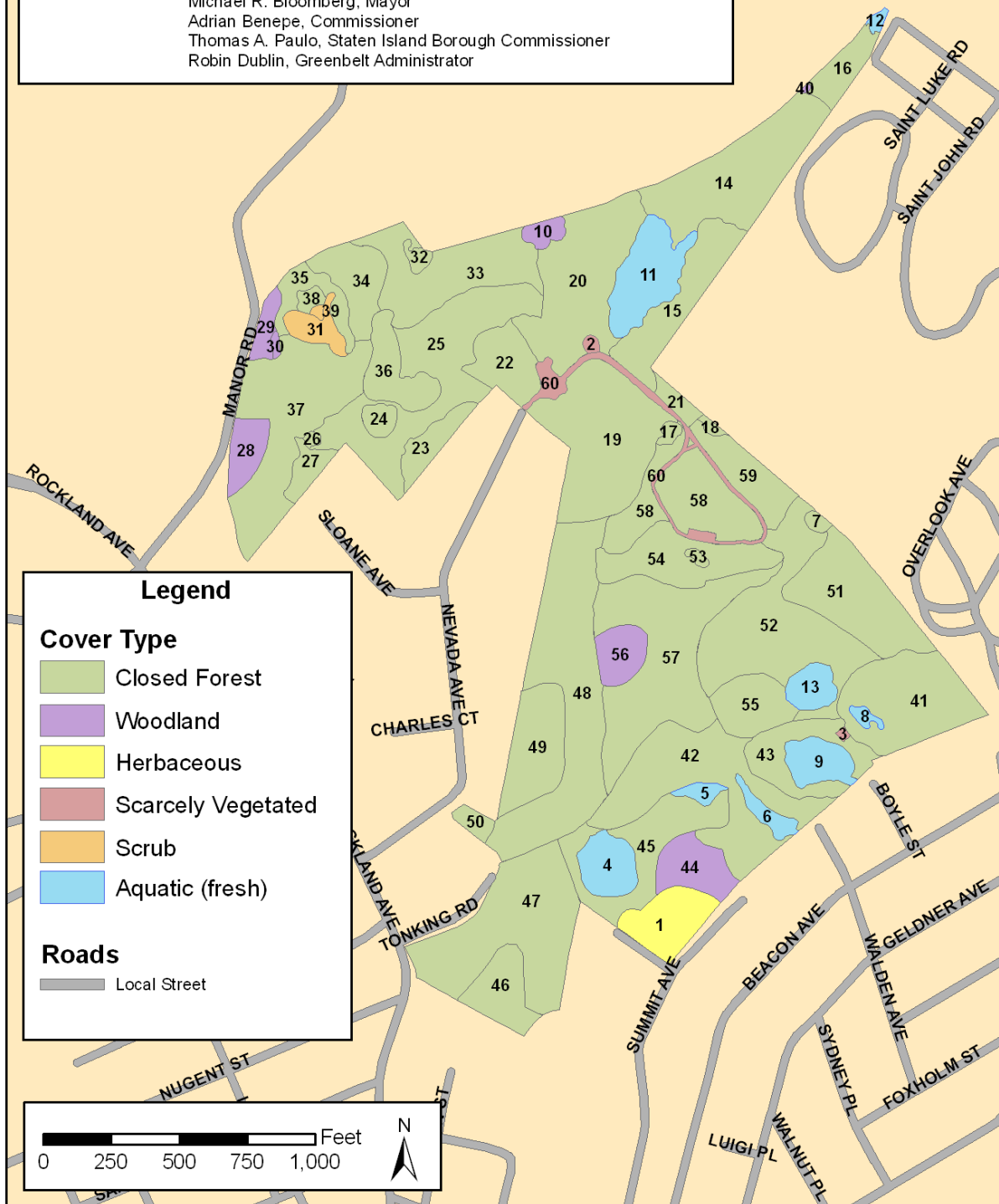




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Parks & Recreation
Staten Island Greenbelt & Natural Resources Group**

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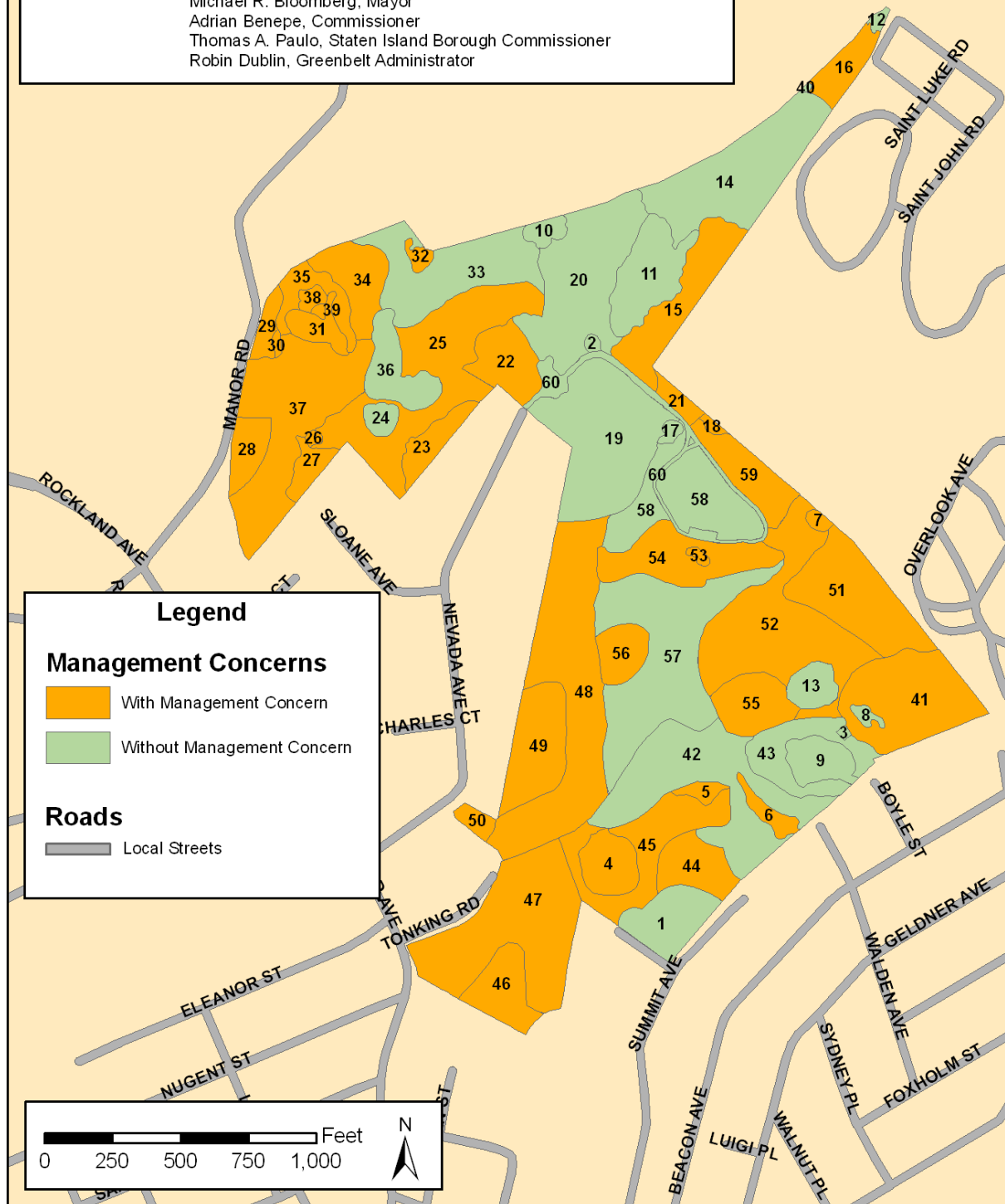




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Section III. High Rock Park Unit Descriptions, Surveyed 2008

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 1
Acreage 1.362
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	Grass spp.	<5'		Road	Vehicle access	
Deciduous	Walnut, black	5'-30'		Foundation	Foot traffic	
Hemicryptophytes	Oak, pin	>30'				
Level	Cherry, black	5'-30'				
Dry/Moist	Sweetgum	>30'				

Comments

This unit is an herbaceous community located near Summit Avenue. Other species present: Russian olive, English ivy, Multiflora rose, and Winged euonymus. The unit consists of a lawn and a parking lot, also known as the Summit Avenue parking lot.

Unit: 2
Acreage 0.075
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				Road	Picnic	
Deciduous					Foot traffic	
Hemicryptophytes					3 Trail heads	
Slope						
Moist						

Comments

This unit is scarcely vegetated. There are 3 trailheads located at this unit: Yellow, Blue, and Lavender trails. The unit has several picnic tables and a kiosk for park visitors.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 3
Acreage 0.037
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				Foundation	Vehicle access	Soil compaction
Deciduous					Foot traffic	
Chamaephytes						
Level						
Dry						

Comments

This unit is scarcely vegetated. The Altamont House residents reside within this unit. This unit encompasses the foundations of Altamont House, a New York City Parks and Recreation owned property.

Unit: 4
Acreage 0.961
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Aquatic (fresh)	Lily spp.	<5'	yes		Obsv. Deck	Trash
Deciduous	Pepperbush, sweet	<5'				
Hydrophytes	Sweetgum	5'-30'				
Depression	Oak	5'-30'				
Surface water						

Comments

This is an aquatic plant formation unit which is a pond. 80% of the surface is covered with Water lilies. Other species include: Highbush blueberry, Hickory sp., Mapleleaf viburnum. MC: Trash, water lilies.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 5
Acreage 0.218
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Aquatic (fresh)	Duckweed	<5'				
Deciduous	Buttonbush	<5'				
Hydrophytes	Knotweed, Japanese	<5'	yes			
Depression						
Surface water						

Comments

This is a freshwater wetland. Other species include: Sweet pepperbush, Black birch, and American beech. MC: Japanese knotweed along the edges.

Unit: 6
Acreage 0.363
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Aquatic (fresh)	Duckweed	<5'				Dumping
Deciduous	Japanese knotweed	5'-30'	yes		Foot traffic	Trash
Hydrophytes						
Depression						
Surface water						

Comments

This is a freshwater wetland located off the Paw trail in the southern areas of High Rock Park, east of Walker Pond. The edges of the pond are lined with American beech, Swamp White oak and Red oak. MC: Trash, Japanese knotweed.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 7
Acreage 0.123
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	Sycamore, common	5'-30'			Foot traffic	
Deciduous	Sweetgum	5'-30'				
Phanerophytes	Loosestrife, fringed	5'-30'				
Depression	Lesser Celandine	<5'	yes			
Wet	Skunk cabbage	<5'				

Comments

This unit is a closed forest and the understory is sparse. The unit seasonally floods. The unit parallels the fenceline between High Rock Park and the Moravian Cemetery. MC: Lesser celandine

Unit: 8
Acreage 0.13
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Aquatic (fresh)	Duckweed	<5'				
Deciduous	Devils walking stick	5'-30'	yes			
Hydrophytes	Pepperbush, sweet	5'-30'				
Depression	Oak, red	5'-30'				
Surface water	Tulip tree	5'-30'				
	Hickory, shagbark	5'-30'				

Comments

This is an aquatic plant formation unit, northeast of the Altamont House and is a vernal pond. Other species include Jewelweed along the vernal pond.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 9
Acreage 0.836
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Aquatic (fresh)	Buttonbush	<5'				
Deciduous	Duckweed	<5'				
Hydrophytes	Red maple	5'-30'				
Depression						
Surface water						

Comments

This is an aquatic plant formation unit west of the Altamont house. The unit is a wetland undergoing succession, where Buttonbush shrubs are naturally growing. Other species include: Oak species, American beech, Black birch, Sweet pepper bush.

Unit: 10
Acreage 0.296
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	Red maple	>30'				
Deciduous	Black gum	5'-30'				
Chamaephytes	Pepperbush, sweet	5'-30'				
Depression	Skunk cabbage	<5'				
Surface water	Carolina fern	<5'				
	Highbush blueberry	5'-30'				

Comments

This unit is a woodland located northwest of Loosestrife Pond. This unit shows signs of seasonal flooding, sparse vegetation in certain areas along with a rich organic layer of soil.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 11
Acreage 0.778
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Aquatic (fresh)	Loosestrife, swamp	<5'			Foot traffic	
Deciduous	Hyssop	<5'				
Hydrophytes	Black bulrush	<5'				
Depression	Arrowhead	<5'				
Surface water	Blueberry, highbush	5'-30'				
	Red maple	5'-30'				

Comments

This is an aquatic plant formation unit. It is known as Loosestrife Pond. Swamp Loosestrife covers 80% of the pond and appears to be very healthy, void of invasive species. Natural succession is occurring, becoming a more herbaceous community.

Unit: 12
Acreage 0.093
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Aquatic (fresh)	Underwater pond weed	<5'		Fence	Deck viewing	
Deciduous	Sweetgum	5'-30'		Hedgerow		
Hydrophytes	Red maple	5'-30'		Obsv. Deck		
Depression	Birch, black	5'-30'				
Surface water	Oak, red	5'-30'				

Comments

This is an aquatic plant formation unit. This is called Pump House Pond where there is a public observation deck. Location of the unit is at the northeastern tip of High Rock Park. Other species include: Water lily species.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 13
Acreage 0.585
Mgmt. Concern: No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Aquatic (fresh)	Duckweed	<5'		Road	Vehicle access	
Deciduous	Smartweed	<5'			Foot traffic	
Hydrophytes	Sweetgum	5'-30'				
Depression	Oak, white	5'-30'				
Surface water						

Comments

This unit is a wetland located north of the Altamont house. The wetland has numerous dead semi-submerged standing trees, mainly Sweetgum. Adjacent to this unit is a roadway leading to the Altamont House.

Unit: 14
Acreage 3.69
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	Oak, red	>30'		Fence		
Deciduous	Oak, white	>30'		abandoned trail		
Chamaephytes	Viburnum, Mapleleaf	<5'				
Undulating	Hickory, mockernut	5'-30'				
Dry/Moist	Birch, black	5'-30'				
	Sassafras	5'-30'				

Comments

This unit is a closed forest located east of the Blue and Yellow trail. The closed forest rolls southward ending in a depression where a seasonal water body forms. Other species include Sweet pepperbush, Asters, American beech, Sweetgum and American chestnut. Chestnut blight is affecting the American chestnut tree.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 15
Acreage 1.987
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	Oak, red	>30'			Foot traffic	Soil compaction
Deciduous	Oak, white	>30'		Fence		
Chamaephytes	Pepperbush, sweet	5'-30'				
Level	Sweetgum	5'-30'				
Moist	Red maple	5'-30'				
	Viburnum, Mapleleaf	<5'				

Comments

This unit is a closed forest located east of Loosestrife Pond. The unit borders the Moravian Cemetery Fence. MC: Amur corktree, Garlic Mustard, Asiatic bittersweet.

Unit: 16
Acreage 0.76
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	Sweetgum	5'-30'		Fence		Trash
Deciduous	Oak, red	5'-30'		Yellow trail		
Phanerophytes	Oak, pin	>30'				
Undulating	Japanese maple	5'-30'	yes			
Dry/Moist	Norway maple	5'-30'	yes			
	Ivy, poison	<5'				

Comments

This unit is a closed forest. The unit is located along the northeast tip of High Rock Park. Other plant species include Amur corktree, Mayflower, Virginia creeper, Devil's walking stick. The Yellow trail once traversed through the area. MC: Amur corktree, Exotic Maples, Devil's walking stick.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 17
Acreage 0.123
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	Sweetgum	>30'		Road		
Deciduous	Pepperbush, sweet	<5'		Culvert		
Chamaephytes	Blueberry, highbush	<5'				
Level	Red maple	5'-30'				
Moist	Fern, hay-scented	<5'				

Comments

This unit is a closed forest. The main High Rock Park entrance road is adjacent to the unit. An old cement culvert structure extends underneath the main entrance road, allowing the hydrologic flow of water to slowly drain east. The forest seasonally floods during the wet season, and the understory is relatively sparse.

Unit: 18
Acreage 0.085
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	Princess tree	5'-30'	yes	Foundation		
Deciduous	Jewelweed	<5'				
Hemicryptophytes	Tulip tree	>30'				
Slope	Mustard, garlic	<5'	yes			
Moist	Sweetgum	5'-30'				
	Ailanthus	>30'	yes			

Comments

This unit is a closed forest. The unit is adjacent to the Moravian Cemetery fence. The understory consists of Garlic mustard, Jewelweed and White aster. There is a rock foundation on the corner of the unit. MC: Princess tree, Garlic mustard, Ailanthus tree.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 19
Acreage 4.228
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	Black birch	>30'		Fence	Foot traffic	
Deciduous	Oak, red	>30'			Unmarked trails	
Phanerophytes	Beech, American	>30'				
Undulating	Viburnum, Mapleleaf	<5'				
Dry/Moist	Highbush blueberry	5'-30'				
	Virginia creeper	<5'				

Comments

This unit is a closed forest. There is a fenceline on the western border of the unit. Multiple desire lines exist within the unit and are used by the public in the form of foot traffic. Also present are wooden outdoor benches. The unit gradually slopes with regeneration occurring in the understory consisting of Black birch and Oak species. Other species include: Spicebush, Sweetgum

Unit: 20
Acreage 3.845
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	Oak, white	>30'		Foundation	Foot traffic	
Deciduous	Pepperbush, sweet	<5'			Seating arrange	
Chamaephytes	Viburnum spp.	<5'				
Undulating	Mayflower	<5'				
Dry/Moist	Highbush blueberry	5'-30'				

Comments

This unit is a closed forest and is bordered by a wetland on the northwest boundary and bordered by Loosestrife Pond on the east. There is a foundation in the center of the unit and a Green and Yellow trail intersection. Other spp. Include: Poison ivy, Virginia creeper, Pink azalea, Lowbush blueberry.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 21
Acreage 0.3
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	Oak, red	>30'		Road	Picnic	
Deciduous	Aster, white wood	<5'		Fence	Foot traffic	
Hemicryptophytes	Virginia creeper	<5'				
Level	Birch, black	5'-30'				
Dry/Moist	Sweetgum	>30'				
	Oak, pin	>30'				

Comments

This unit is a closed forest bordering a road on the west side. The Blue trail runs through, which creates some foot traffic, and there is a picnic table. The unit is adjacent to the Moravian Cemetery. Other sp. include: Asiatic bittersweet, Hayscented fern, Goldenrod. MC: Asiatic bittersweet.

Unit: 22
Acreage 1.222
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	Red maple	>30'		Fence	Foot traffic	
Deciduous	Sweetgum	>30'		Parking lot		Trash
Phanerophytes	Oak, red	>30'				
Slope	Mustard, garlic	<5'	yes			
Moist	Multiflora rose	5'-30'	yes			
	Tulip tree	>30'				

Comments

This unit is a closed forest in the eastern area of High Rock Park. The unit is near the lower parking lot of High Rock Park by Nevada Avenue. Other species include: Amur corktree and Asiatic bittersweet. MC: Asiatic bittersweet, trash, Amur corktree.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 23
Acreage 0.697
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	Sweetgum	>30'		Fence		Dumping
Deciduous	Virginia creeper	<5'				Trash
Hemicryptophytes	Viburnum, Mapleleaf	<5'				
Slope	Oak, red	>30'				
Dry/Moist	Spicebush	<5'				
	Devil's walking stick	5'-30'	yes			

Comments

This unit is a closed forest that parallels Nevada Avenue behind abutting residential houses. Other spp. include: Catbrier, English ivy, Mayflower, Tulip poplar, Sassafras. MC: Devil's walking stick and trash.

Unit: 24
Acreage 0.304
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	>30'				
Deciduous	Catbrier	<5'				
Lianas	Blueberry, lowbush	<5'				
Slope	Sweetgum	>30'				
Dry/Moist	Viburnum, Mapleleaf	<5'				
	Mayflower	<5'				

Comments

This unit is a closed forest mainly consisting of Sassafras with an understory of Catbrier. The yellow trail runs along the unit as well as a stream with a wooden bridge. The wooden bridge allows Park patrons to cross over the stream.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 25
Acreage 4.297
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	Oak, red	>30'		Fence	Foot traffic	Dumping
Deciduous	Beech, American	>30'				
Chamaephytes	Oak, black	>30'				
Undulating	Viburnum, Mapleleaf	<5'				
Dry/Moist	Sarsaparilla, wild	<5'				
	Mayflower	<5'				

Comments

This unit is a closed forest located in the mid-northeast region of High Rock Park. It has an undulating topography with a fence bordering the south portion. Other species include Asters, Sweetgum, Arrowwood viburnum. MC: dumping and Amur corktrees.

Unit: 26
Acreage 0.064
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	Amur corktree	>30'	yes		Foot traffic	
Deciduous	Jewelweed	<5'				
Hemicryptophytes	Ash, white	>30'				
Depression	Spicebush	5'-30'				
Wet	Virginia creeper	<5'				
	Skunk cabbage	<5'				

Comments

This unit is a small closed forest of Amur corktrees located north of the Yellow and Green trail. It has a herbaceous community consisting of Jewelweed. There is a small bridge that goes across the patch of Jewelweed leading to a depression. MC: Amur corktree

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 27
Acreage 0.461
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	Beech, American	5'-30'			Foot traffic	Dumping
Deciduous	Viburnum, Mapleleaf	<5'				
Phanerophytes	Aster, white wood	<5'				
Undulating	Oak, red	>30'				
Dry/Moist	Birch, black	5'-30'				
	Viburnum spp.	<5'				

Comments

This unit is a closed forest. The understory is scarcely vegetated due to shading by American beech and consists of Viburnum sp., Oak sp, Black birch, White wood aster, and Sweetgum. There is woody debris dumping. MC: Dumping

Unit: 28
Acreage 0.704
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Ivy, poison	>30'				Dumping
Deciduous	Grape, wild	5'-30'				
Lianas	Multiflora Rose	5'-30'	yes			
Level	Periwinkle	<5'	yes			
Dry/Moist	Oak, red	>30'				
	Virginia creeper	<5'				

Comments

This unit is a woodland. The understory is dominated by vines. Other species include Mock-orange shrubs. MC: Multiflora rose, Periwinkle vine, dumping.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 29
Acreage 0.384
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Red maple	>30'		Bridge	Foot traffic	
Deciduous	Sweetgum	>30'		Stream		
Chamaephytes	Multiflora Rose	5'-30'	yes			
Slope	D. walking stick	5'-30'	yes			
Dry/Moist	Oak, black	>30'				
	Mustard, garlic	<5'	yes			

Comments

This unit is a woodland located on the northwestern tip of High Rock Park by Manor Road. The unit has a dense population of invasive plants. Other species include: Japanese honeysuckle, Black cherry and Asiatic bittersweet. MC: Multiflora rose, Devil's walking stick, Garlic mustard, Japanese honeysuckle and Asiatic bittersweet

Unit: 30
Acreage 0.061
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Persimmon	5'-30'		Road	Foot traffic	
Deciduous	Aster	<5'				
Chamaephytes	Honeysuckle sp.	<5'	yes			
Slope	Mustard, garlic	<5'	yes			
Dry/Moist	Mayflower	<5'				
	Multiflora rose	<5'	yes			

Comments

This unit is a woodland along the Green trail, parallel to Manor Road. In the northern part of High Rock Park there is a rare grove of Persimmon trees ranging from mature to saplings. Other species include Arrowwood viburnum, Green ash, Mockernut hickory, Virginia creeper and Asiatic bittersweet. MC: Multiflora rose, Garlic mustard, Japanese honeysuckle and Asiatic bittersweet.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 31
Acreage 0.547
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scrub	Multiflora Rose	5'-30'	yes			
Deciduous	Elderberry	<5'				
Chamaephytes	Catbrier	<5'				
Depression	Honeysuckle, Japanese	<5'	yes			
Moist	Grape, wild	<5'				

Comments

This unit is scrubland in the northern section of High Rock Park. There is evidence of community structure change as vines cover much of the vegetation. MC: Multiflora rose, Japanese honeysuckle.

Unit: 32
Acreage 0.171
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	Red maple	5'-30'				
Deciduous	American Snowbell	5'-30'	yes			
Chamaephytes	Pepperbush, sweet	5'-30'				
Level	Skunk cabbage	<5'				
Moist	Catbrier	<5'				
	Buttonbush	<5'				

Comments

This unit is a palustrine swamp closed forest located in the northern section of High Rock Park. Other species include Carolina fern, Jewelweed and small vine patches. MC: Amur corktree and American snowbell. American snowbell may be invasive due to the relative size of the population.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 33
Acreage 2.964
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	Oak, red	5'-30'				
Deciduous	Sweetgum	5'-30'				
Chamaephytes	Pepperbush, sweet	5'-30'				
Slope	Blueberry, highbush	5'-30'				
Dry/Moist	Viburnum, Mapleleaf	<5'				
	Blueberry, lowbush	<5'				

Comments

This unit is a closed forest located in the northwestern section of High Rock Park. Other sp. consist of Mayflower, Sarsaparilla. There is a small amount of evergreen pines present near the center. Other species include Sassafras, Tulip poplar, Mockernut hickory and small clusters of White and Scotch pines.

Unit: 34
Acreage 1.278
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	Oak, red	>30'				
Deciduous	Hickory spp.	<5' & 5'-30'				
Lianas	Catbrier	<5'				
Level	Mayflower	<5'				
Dry/Moist	Oak, white	>30'				

Comments

This unit is a closed forest located in the northwest section of High Rock Park. The understory consists mainly of catbrier. MC: Thickets of catbrier preventing regeneration of woody saplings.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 35
Acreage 0.77
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	Sassafras	5'-30'				
Deciduous	Mayflower	<5'				
Hemicryptophytes	Catbrier	<5'				
Undulating	Hickory, pignut	5'-30'				
Dry	Aspen, bigtooth	5'-30'				
	Amur corktree	5'-30'	yes			

Comments

This unit is a closed forest in the northwestern part of High Rock Park. A seasonal stream exists as well. There is also a large amount of catbrier. MC: Amur corktree.

Unit: 36
Acreage 1.204
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	Birch, black	5'-30'			Foot traffic	
Deciduous	Oak, white	5'-30'				
Phanerophytes	Viburnum, Mapleleaf	<5'				
Undulating	Mayflower	<5'				
Dry	Sedge	<5'				
	Sassafras	<5'				

Comments

This unit is a closed forest located in the mid northwest part of High Rock Park with the green and yellow trails running through. There is sparse understory vegetation and a stream runs through the unit bordered by Jewelweed.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 37
Acreage 4.307
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	Red maple	>30'			Foot traffic	Dumping
Deciduous	Sweetgum	>30'				
Chamaephytes	Oak, red	>30'				
Level	Spicebush	5'-30'				
Dry/Moist	Catbrier	<5'				
	Virginia creeper	<5'				

Comments

This large unit is a closed forest in the northwestern part of High Rock Park. It is bordered by the yellow and green trails. A few active streams run through this unit with amphibians, an indication of a healthy environment. Other species include Poison Ivy, tulip poplar, White pine, Black birch. MC: Dumping

Unit: 38
Acreage 0.166
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	Tulip tree	5'-30'			Foot traffic	
Deciduous	Sweetgum	5'-30'				
Chamaephytes	Virginia creeper	<5'				
Level	Honeysuckle, Japan	<5'	yes			
Moist	Cherry, black	5'-30'				
	Bittersweet, Asiatic	<5'	yes			

Comments

This unit is a closed forest located in the northwest part of High Rock Park. There are chamaephytes as well as lianas dominating the understory. MC: Japanese honeysuckle, Asiatic bittersweet, garlic mustard.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 39
Acreage 0.047
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scrub	Devil's walking stick	5'-30'	yes			
Deciduous	Honeysuckle, Japan	<5'	yes			
Lianas	Catbrier	<5'				
Slope	Oak, red	5'-30'				
Moist	Sweetgum	5'-30'				
	Virginia creeper	<5'				

Comments

This unit is a scrubland. The understory consists mainly of Devil's walking stick and Sweetgum all under 15ft. MC: Invasive vines, Devil's walking stick

Unit: 40
Acreage 0.021
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	Red maple	>30'				
Deciduous	Oak, red	>30'				
Chamaephytes	Pepperbush, sweet	5'-30'				
Depression	Viburnum, Mapleleaf	<5'				
Wet	Blueberry, highbush	5'-30'				
	Mayflower	<5'				

Comments

This unit is a woodland. The understory consists mainly of Sweet pepperbush. The soil conditions of the unit are moist.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 41
Acreage 3.086
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	Sweetgum	5'-30'	yes	Road		Trash
Deciduous	Ivy, English	<5'	yes			
Phanerophytes	Pepperbush, sweet	5'-30'				
Undulating	Norway maple	>30'	yes			
Dry/Moist	Aster, white	<5'				
	Beech, American	5'-30'				

Comments

This unit is a closed forest located south of High Rock Park. The canopy has a mixed range of trees. Other species include: American elm, Japanese honeysuckle, Tiger lily, Ironwood and Devil's Walking stick. MC: Norway maple, D. walking stick, Japanese honeysuckle.

Unit: 42
Acreage 4.366
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	Oak, red	>30'		Fence	Foot traffic	Soil compaction
Deciduous	Red maple	5'-30'		Foundation	House	
Chamaephytes	Sweetgum	>30'				
Level	Pepperbush, sweet	5'-30'				
Dry/Moist	Arrowwood	<5'				
	Mayflower	<5'				

Comments

This unit is a closed forest with three dominant species of trees. The soil condition is mostly dry until you reach the pond area. There is a significant moss population.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 43
Acreage 1.494
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	Sweetgum	>30'		Fence	Foot traffic	
Deciduous	Oak, red	>30'				
Chamaephytes	Red maple	>30'				
Undulating	Pepperbush, sweet	5'-30'				
Dry/Moist	Aster, white wood	<5'				
	Beech, American	5'-30'				

Comments

The unit is a closed forest. The unit contains a pond and a fenceline exists along the southern boundary of High Rock Park. The understory consists of Sweet pepperbush, White wood aster, and saplings of American beech. Other species include native grasses.

Unit: 44
Acreage 1.121
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Sweetgum	>30'		Road	Foot traffic	Trash
Mixed	Ivy, poison	<5'				
Lianas	Pine, white	>30'				
Slope	Cedar, eastern red	5'-30'				
Dry/Moist	Multiflora rose	<5'	yes			
	Mustard, garlic	<5'	yes			

Comments

This unit is a woodland located in the southern region of High Rock Park near Summit Avenue. The unit tree species are mixed with evergreens and deciduous plants. MC: Garlic mustard, Multiflora rose, Japanese knotweed, Japanese honeysuckle.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 45
Acreage 2.22
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	Oak, white	>30'		Road	Foot traffic	
Deciduous	Birch, black	5'-30'			Pawtrail	
Chamaephytes	Pepperbush, sweet	5'-30'				
Slope	Beech, American	>30'				
Moist	Knotweed, Japanese	5'-30'	yes			
	Oak, chestnut	5'-30'				

Comments

This unit is a closed forest. The canopy consists of Birch, White oak, Chestnut oak and the understory consists of Mayflower and patches of Japanese knotweed. The Paw trail runs through the unit and leads to a road by the parking lot. MC: Japanese knotweed.

Unit: 46
Acreage 1.189
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	Ailanthus	5'-30'	yes	Fence		Erosion
Deciduous	Norway maple	5'-30'	yes			Dumping
Chamaephytes	Multiflora Rose	5'-30'	yes			Trash
Undulating	Ivy, poison	<5'				
Moist	Mustard, garlic	<5'	yes			
	Periwinkle	<5'	yes			

Comments

This unit is a closed forest located in the southwestern part of High Rock Park near Rockland Avenue. A small stream traverses the unit. There is also a considerable amount of dumping in the unit from an adjacent property. MC: small grove of Ailanthus and Norway maples, dumping.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 47
Acreage 4.658
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	Sweetgum	>30'		Road	Foot traffic	Dumping
Deciduous	Spicebush	5'-30'				Trash
Chamaephytes	Oak, red	>30'				
Level	Ivy, poison	5'-30'				
Moist	Virginia creeper	<5'				
	Beech, American	5'-30'				

Comments

This unit is a closed forest located in the southwestern part of High Rock Park. It is bordered by Rockland Avenue, Tonking Road, and a few residential properties. Other spp. include Catbriar, Hemlock, Ailanthus, Periwinkle, Carolina fern, Arrowwood viburnum, Jewelweed, Mayflower, and Highbush blueberry. MC: Multiflora rose and Garlic mustard.

Unit: 48
Acreage 5.69
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	Oak spp.	>30'		Fence	Foot traffic	Erosion
Deciduous	Sweetgum	>30'				Dumping
Chamaephytes	Spicebush	5'-30'				
Slope	Beech, American	>30'				
Dry/Moist	Birch, black	>30'				
	Virginia creeper	<5'				

Comments

This unit is a closed forest bordering Nevada Avenue. It contains a healthy mix of deciduous trees that make up the canopy. Other sp include Poison ivy, Mapleleaf viburnum, Hickory sp. and White wood aster. Residential dumping is a problem. MC: English ivy.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 49
Acreage 1.888
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	Sweetgum	5'-30'				Dumping
Deciduous	Ivy, English	<5'	yes			Trash
Lianas	Japanese maple	5'-30'	yes			
Knoll	Beech, American	5'-30'				
Dry/Moist	Aster	<5'				
	Hickory, pignut	>30'				

Comments

This unit is a closed forest located in the southwestern part of High Rock Park. The unit understory contains large amounts of Japanese maple saplings. MC: Japanese maple, trash and dumping.

Unit: 50
Acreage 0.266
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	Norway maple	5'-30'	yes	Road		Dumping
Deciduous	Akebia	5'-30'	yes			
Chamaephytes	Winged burning bush	<5'	yes			
Undulating	Japanese maple	<5'	yes			
Dry/Moist	Sweetgum	5'-30'				
	Bittersweet, Asiatic	<5'	yes			

Comments

This unit is a closed forest at the western end of High Rock Park and borders Nevada Avenue. Other species include: White oak, Spicebush and Red maple. MC: Norway maple, Winged burning bush, Five-leaf akebia, Asiatic bittersweet and dumping.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 51
Acreage 2.787
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	Sweetgum	>30'		road	Foot traffic	Dumping
Deciduous	Norway maple	5'-30'	yes	Fence		Trash
Hemicryptophytes	Aster, white	5'-30'				
Slope	Spicebush	5'-30'				
Moist	Multiflora Rose	5'-30'	yes			
	Tulip tree	>30'				

Comments

This unit is a closed forest located in the southeastern part of High Rock Park. This unit is a Sweetgum/Tulip poplar forest with a Norway maple understory. MC: Norway maple, Multiflora rose and English ivy.

Unit: 52
Acreage 4.574
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	Tulip tree	>30'		Road	Foot traffic	
Deciduous	Sweetgum	>30'				
Chamaephytes	Hickory, bitternut	5'-30'				
Slope	Spicebush	5'-30'				
Dry/Moist	Multiflora Rose	<5'	yes			
	Mustard, garlic	<5'	yes			

Comments

This unit is a Sweetgum/Tulip polar forest. The understory consists mainly of Spicebush. Other species include Eastern redcedar, Devil's walking stick, and Fringed loosestrife. MC: Garlic mustard and Multiflora rose.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 53
Acreage 0.078
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	Rhododendron	5'-30'		Road	Foot traffic	
Deciduous	Hickory, bitternut	>30'		Exotic planting	Benches	
Chamaephytes	Tulip tree	>30'				
Level						
Dry/Moist						

Comments

This unit is a closed forest located next to the Administration building. There is a Rhododendron garden. Other species include Periwinkle, English ivy, Arrowwood viburnum, Evergreen species, Yew sp., Eastern white pine, and Highbush blueberry. MC: Periwinkle, English ivy

Unit: 54
Acreage 2.054
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	Oak, red	>30'		Road	Picnic	
Deciduous	Tulip tree	5'-30'		Hedgerow	Vehicle access	
Hemicryptophytes	Beech, American	5'-30'			Foot traffic	
Slope	Akebia	<5'	yes			
Dry/Moist	Jewelweed	<5'				
	Red maple	5'-30'				

Comments

This unit is a closed forest along Nevada Avenue. Park facilities include: the Education bldg, Visitor studio, Administration building, garage, Urban Park Ranger bldg, and restrooms. Other sp include: Sugar maple, Spicebush, Sweetgum, Black cherry, Virginia creeper, Shagbark hickory and Bitternut hickory. MC: Ailanthus, Amur corktree, Garlic mustard, Japanese knotweed.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 55
Acreage 1.233
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	Sweetgum	>30'			Foot traffic	
Deciduous	Devil's walking stick	5'-30'	yes			
Chamaephytes	Spicebush	5'-30'				
Slope	Beech, American	>30'				
Moist	Jewelweed	<5'				
	Tulip tree	>30'				

Comments

This unit is a closed forest. It has a very similar canopy to surrounding units but there is an infestation of Devil's walking stick that is a Management Concern. Other species include White wood aster and Virginia creeper. MC: Devil's walking stick.

Unit: 56
Acreage 0.789
Mgmt. Concern: Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Devil's walking stick	5'-30'	yes		Foot traffic	
Deciduous	Sweetgum	>30'				
Chamaephytes	Spicebush	5'-30'				
Depression	Hickory spp.	5'-30'				
Dry/Moist	Aster, white wood	<5'				
	Catbrier	<5'				

Comments

This unit is a woodland. The understory contains a good population of Spicebush. The Greenbelt Environmental Education building is in proximity to this unit, as well as the Paw Trail. MC: Devil's walking stick.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 57
Acreage 5.052
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	Sweetgum	>30'			Foot traffic	
Deciduous	Hickory, bitternut	5'-30'				
Chamaephytes	Spicebush	5'-30'				
Depression	Catbrier	5'-30'				
Moist	Oak, red	>30'				
	Mayflower	<5'				

Comments

This unit is a closed forest located on the western part of High Rock Park. It borders the Paw trail and the Education bldg. Other species include American beech, White wood aster, Virginia creeper, Devil's walking stick.

Unit: 58
Acreage 2.794
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	Sweetgum	>30'		Road	Vehicle access	
Deciduous	Tulip tree	>30'			Foot traffic	
Chamaephytes	Cherry, black	5'-30'			Stage	
Depression	Pepperbush, sweet	5'-30'				
Dry/Moist	Virginia creeper	<5'				
	Viburnum, Mapleleaf	<5'				

Comments

This unit is a closed forest located at the center of High Rock Park. There is a wetland to the north, and a circular drive-way runs through and borders the unit. In addition, an outdoor-stage with sitting arrangements is within the unit. There is a slight depression and undulating topography. Other species include Hickories, Oaks, beeches.

High Rock Park Unit Descriptions, Surveyed 2008

Unit: 59
Acreage 1.246
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	Sweetgum	5'-30'		Road	Foot traffic	
Deciduous	Oak, red	>30'		Fence		
Chamaephytes	Pepperbush, sweet	5'-30'				
Slope	Aster, white wood	5'-30'				
Dry/Moist	Blueberry, highbush	5'-30'				
	Tulip tree	>30'				

Comments

This unit is a closed forest located at the western edge of High Rock Park. Other spp. include Bitternut hickory, Nightshade, Garlic mustard, and Virginia creeper. MC: Garlic mustard.

Unit: 60
Acreage 1.012
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				Road	Vehicle access	
Deciduous						
Hemicryptophytes						
Level						
Dry						

Comments

This unit is scarcely vegetated. It is the circular road that leads up to the Greenbelt Administration/Conservancy headquarters, and includes the parking area at the top of the road, and the parking area at the main entrance to the park.

Section IV. 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 100 in 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, grass like plants, and herbaceous plants are predominant. Woody plants may be sparingly present, but cover less than 30% of area.

Intertidal community: 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. It is 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.