

# **Natural Area Mapping and Inventory of Givans Creek Woods 2007 Survey**



Prepared by the Natural Resources Group  
Michael R. Bloomberg, Mayor  
Adrian Benepe, Commissioner  
Bill Tai, Director

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# **Givans Creek Woods Park Natural Area Mapping & Inventory**

12.31 acres

## ***Introduction***

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

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

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

In 1795 Robert Givan, his wife Agnes Thompson, and their seven children, emigrated from Kelso, Scotland to what was then Westchester. They settled on a tract of land purchased from the Bartow family, chosen for its high elevation and a navigable creek that emptied into the Hutchinson River. Givan established a mill here which he powered with the tidal run of the creek which bore his name. He built his estate, named Edman after his home county in Great Britain, east of the present day Givan Square, at the intersection of Eastchester Road and East Gun Hill Road. Givan died in 1830, leaving his considerable estate to his descendants. They included members of the Palmer, LeRoy, and Morgan families, whose names are preserved in nearby streets. The property remained in the family until 1881, when it was divided into house lots for sale.

Much of this region remained undeveloped into the 1950s with the exception of a few farms. Though the Freedomland U.S.A. amusement park (in operation from 1960 to 1965) had a short life, it paved the way for the development of Co-op City, the massive housing complex that was built between 1968 and 1970. The desire to preserve remaining natural areas heightened in the 1980s and, after a seven-year effort by community activists and environmentalists, Givans Creek Woods was designated as passive parkland by Mayor Giuliani in 1995. At this time the Friends of Givans Creek Woods was formed to ensure citizen participation in the preservation of the natural area.

Though the creek itself is now covered by Co-op City, natural diversity endures in Givans Creek Woods, which is bounded by the New England Thruway and Tillotson Avenue on the west, Rombouts Avenue on the north, and Co-op City Boulevard on the south and east. Comprised of upland forests of oak and hickory, a low-lying wooded wetland, surrounding meadows, and rocky outcrops covered with mosses and lichens, it contains fragments of several original habitats otherwise lost on the west bank of the Hutchinson River. Among the more than 150 species of plants and 45 species of animals living in the park, several New York State protected plants have made their home, including Flowering Dogwood, Wild Pink, and native ferns.

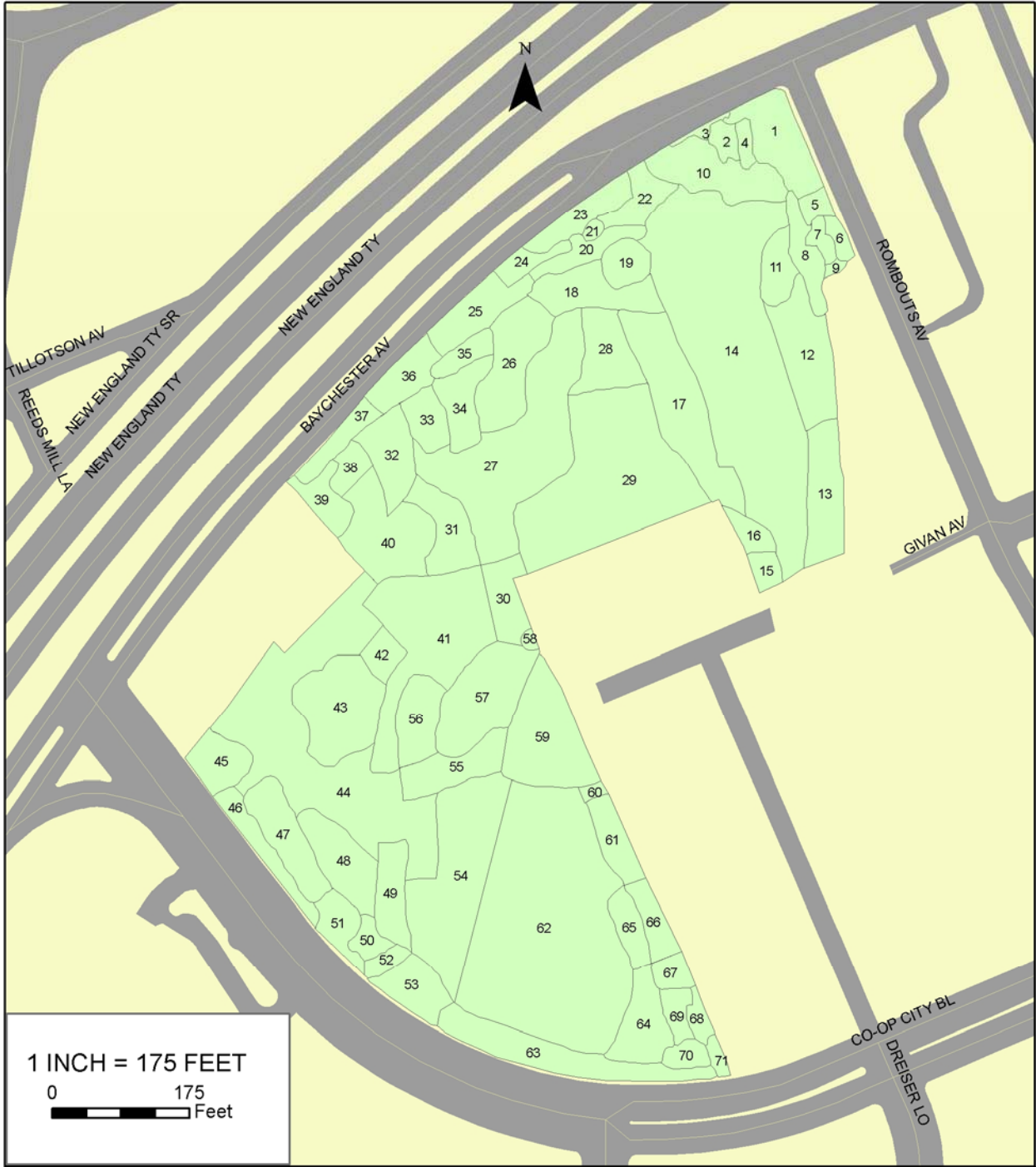
To facilitate the protection, management and restoration of Givans Creek Woods, NRG completed an inventory of the area using entitation, a process of identifying and describing ecologically distinct plant

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 Givans Creek Woods Park resulted in a map and database that can be used to locate valuable and threatened areas. They also serve as a baseline for measuring change over time.

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

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



1 INCH = 175 FEET  
 0 175 Feet

**ENTITATION UNITS - SEPTEMBER 2007  
 GIVAN'S CREEK WOODS  
 BRONX COUNTY, CITY OF NEW YORK**

11/21/2007



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

*Arsenal North, 1234 Fifth Avenue, New York, NY 10029*

Michael R. Bloomberg, Mayor  
 Adrian Benepe, Commissioner  
 Bill Tai, Director  
 Tim Wenskus, Deputy Director  
 Craig Mandel, GIS/ Data Manager  
 April Bisner, Project Associate  
 Joshua Nakash, Inventory Monitoring Technician  
[www.nyc.gov/parks](http://www.nyc.gov/parks)

2007.21.11.01

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 1  
**Acreage:** 0.18  
**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	Mugwort	<5'	yes	Landfill		Trash
Deciduous	Grass spp.	<5'				
Hemicryptophytes	Clover, sweet white	<5'	yes			
Level						
Dry/Moist						

**Comments:**

This is an herbaceous community dominated by mugwort at the corner of Rombouts Avenue and Tillotson Avenue. Other species present include: white mulberry saplings, cottonwood, Siberian elm sapling, black locust sapling, Ailanthus sapling, staghorn sumac sapling, porcelainberry, Virginia creeper, bindweed, Oriental bittersweet, dogbane, pineapple weed, red clover, ragweed, foxtail, plantain, chicory, Queen Anne's lace, mullein, timothy, fleabane, evening lychnis, and vervain.

**Unit:** 2  
**Acreage:** 0.03  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Knotweed, Japanese	<5'	yes			
Deciduous						
Geophytes						
Level						
Dry/Moist						

**Comments:**

This is a small unit of Japanese knotweed at Tillotson Ave. near Rombouts Ave. Other species present include: mulberry sapling, ragweed, and Oriental bittersweet. MC: Japanese knotweed is an invasive species.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 3  
**Acreage:** 0.01  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous Deciduous Hemicryptophytes Level Dry/Moist	Ragweed, common	<5'	no	Landfill		

**Comments:**

This unit is a small unit that is bordered by the guardrail at Tillotson Avenue near Rombouts Avenue. Other species present include: black locust sapling, bindweed, dodder, spiny sow thistle, foxtail, dogbane, crabgrass, and chicory.

**Unit:** 4  
**Acreage:** 0.03  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Phanerophytes Level Dry/Moist	Locust, black Sumac, staghorn Mugwort	<5' & 5-30' <5' & 5-30' <5'	yes no yes			

**Comments:**

This unit is a small unit at the edge of a forest and herbaceous community. Black locust dominates the canopy, staghorn sumac dominates the understory, and mugwort dominates the herbaceous layer. Other species present include: black raspberry, porcelainberry, ragweed, evening primrose, horseweed, and garlic mustard.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 5  
**Acreage:** 0.03  
**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	Mulberry, white	5'-30'	yes			
Deciduous	Locust, black	<5' & 5-30'	yes			
Hemicryptophytes	Mugwort	<5'	yes			
Level						
Dry/Moist						

**Comments:**

This is a very small unit next to Rombouts Avenue on the north side of the park. It is bordered by a herbaceous community and a vineland. This unit contains 2 white mulberries, 1 black locust, black locust saplings, black cherry, Norway maple, Ailanthus sapling, and mostly mugwort in the understory. Other species present include: multiflora rose, porcelainberry, poison ivy, Virginia creeper, dogbane, and bindweed.

**Unit:** 6  
**Acreage:** 0.03  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Locust, black	5'-30'	yes		Vagabond	Trash
Deciduous	Oriental bittersweet	<5' & 5-30'	yes			
Lianas	Porcelain berry	<5' & 5-30'	yes			
Level						
Dry/Moist						

**Comments:**

This is a vineland that is climbing up and over trees. It is bordered in part by Rombouts Avenue. Tree species include black locust, black cherry, and Ailanthus. Other species present include: bitternut hickory sapling, smooth sumac, multiflora rose, wineberry. Japanese honeysuckle, Boston ivy, poison ivy, and garlic mustard. MC: Oriental bittersweet and porcelainberry are invasive species.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 7  
**Acreage:** 0.03  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous Deciduous Geophytes Level Dry/Moist	Knotweed, Japanese	<5' & 5-30'	yes			Trash

**Comments:**

This is a very small, rocky, Japanese knotweed unit, which is located between two forested vinelands. It is on the east side of the park. Other species present include: bitternut hickory sapling, and blackberry. MC: Japanese knotweed is an invasive species.

**Unit:** 8  
**Acreage:** 0.09  
**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	Cottonwood, Eastern	5'-30'	no			
Deciduous	Porcelain berry	<5' & 5-30'	yes			
Lianas	Oriental bittersweet	<5' & 5-30'	yes			
Undulating	Ivy, poison	<5' & 5-30'	no			
Dry/Moist	Cherry, black	5'-30'	no			

**Comments:**

This is a cottonwood forest engulfed in vines. A large depression is within the unit. Other species present include: sycamore, white mulberry, bitternut hickory sapling, Amur honeysuckle, multiflora rose, and Virginia creeper. MC: Oriental bittersweet is an invasive species.



Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 9  
**Acreage:** 0.01  
**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	Mugwort	<5'	yes			Trash
Deciduous	Ivy, poison	<5'	no			
Hemicryptophytes						
Level						
Dry/Moist						

**Comments:**

This is a very small unit bordered by two forested vinelands. Other species present include: Ailanthus, bitternut hickory sapling, smooth sumac, Japanese honeysuckle, Virginia creeper, Oriental bittersweet, and garlic mustard.

**Unit:** 10  
**Acreage:** 0.2  
**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 maple	5'-30'	yes			Dumping
Deciduous	Red maple	5'-30'	no			Trash
Lianas	Oriental bittersweet	<5' & 5-30'	yes			
Depression						
Dry/Moist						

**Comments:**

This unit is a depression. Sycamore maple is more dominant on the edges and red maple is more dominant in the center. The outside of this unit has a lot of vines. Inside there are many leafless vines including oriental bittersweet and porcelain berry. Other species present include: green ash, white mulberry, pin oak, devil's walking stick, bitternut hickory sapling, elm sapling, Amur honeysuckle, multiflora rose, raspberry, Japanese knotweed, Japanese honeysuckle, poison ivy, and porcelainberry. MC: invasives such as Oriental bittersweet, dumping, and trash.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 11  
**Acreage:** 0.08  
**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, pin	>30'	no	Landfill		Dumping
Deciduous	Norway maple	5'-30'	yes			Trash
Lianas	Ivy, poison	<5'	no			
Depression						
Dry/Moist						

**Comments:**

This is a rocky, garbage filled ditch. A mix of trees are present including a few pin oaks, red maples, Norway maples, bitternut hickory saplings, red oak, black cherry, green ash, silky dogwood, and American elm. Poison ivy, rose, and Virginia creeper make up the ground cover. About half the ditch is bare soil with garbage. Other species present include: Oriental bittersweet. MC: rash and dumping.

**Unit:** 12  
**Acreage:** 0.23  
**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	Cherry, black	5'-30'	no			Dumping
Deciduous	Sassafras	5'-30'	no			Trash
Chamaephytes	Multiflora rose	<5'	yes			
Level	Wineberry	<5'	yes			
Dry/Moist	Hickory, bitternut	<5' & 5-30'	no			
	devil walking stick	<5' & 5'-30'	yes			

**Comments:**

This unit is behind houses on Rombouts Avenue. It is a sassafras/black cherry forest with rose, wineberry, and vines underneath. Bitternut hickories are mostly under 5'. Other species present include: white mulberry, green ash, crab apple, oak sapling (black or red), Amur honeysuckle, porcelainberry, cucumber vine, Virginia creeper, English ivy, poison ivy, Oriental bittersweet, and garlic mustard. MC: invasive vines.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 13  
**Acreage:** 0.18  
**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	Hickory, bitternut	all	no			Trash
Deciduous	Oak, red	<5' & 5-30'	no			
Phanerophytes	Norway maple	5'-30'	yes			
Slope	Multiflora rose	<5'	yes			
Dry/Moist	Mustard, garlic	<5'	yes			

**Comments:**

This unit is a red oak/ bitternut hickory forest with a few Norway maples. It is located behind some houses on Rombouts Avenue and Givans Avenue. The terrain is a rocky and slightly sloped. There is a possible encroachment issue with a shed on park's property.

Other species present include: green ash, black cherry saplings, sassafras saplings, multiflora rose, Amur honeysuckle, rose-of-Sharon, cat briar, poison ivy, Virginia creeper, wood aster, Virginia knotweed, garlic mustard, and wood aster.

**Unit:** 14  
**Acreage:** 1.25  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Porcelain berry	<5' & 5-30'	yes		Foot traffic	
Deciduous	bittersweet, Oriental	<5' & 5-30'	yes			
Lianas	honeysuckle, Japanese	<5' & 5-30'	yes			
Level	Wineberry	<5'	yes			
Dry/Moist	Ivy, poison	<5'	no			
	Multiflora rose	<5' & 5'-30'	yes			

**Comments:**

This is a large vineland which climbs over trees on the edges. The vines also have taken over a few trees in the center to the point that the trees underneath are no longer visible. Other species present include: black cherry, sycamore maple, Ailanthus, pin oak, sycamore, white mulberry, Amur honeysuckle, grape, Virginia creeper, jewelweed, and Japanese knotweed. A trail runs through the unit. MC: invasive species such as porcelainberry and Oriental bittersweet.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 15  
**Acreage:** 0.04  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Cottonwood, Eastern	>30'	no			
Deciduous	Virginia creeper	<5'	no			
Lianas	Raspberry, black	<5'	no			
Level						
Dry/Moist						

**Comments:**

This unit is a cottonwood woodland with quite a few saplings and a tiny bit of mugwort. Virginia creeper covers the ground. Other invasive vines are encroaching into the area (MC). The unit is located next to the fence of a parking lot. Other species present include: white mulberry, bitternut hickory saplings, oak saplings (black or red), black cherry saplings, black locust saplings, Oriental bittersweet, horse gentian and garlic mustard.

**Unit:** 16  
**Acreage:** 0.05  
**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	Locust, black	5'-30'	yes			
Deciduous	Mugwort	<5' & 5-30'	yes			
Hemicryptophytes						
Level						
Dry/Moist						

**Comments:**

This is a small black locust/ mugwort unit with encroaching vines on trees, which is bordered by fenced in trees near a parking lot and vineland. Other species present include: mulberry, bitternut hickory, multiflora rose, Amur honeysuckle, Virginia creeper, poison ivy, porcelainberry, and garlic mustard.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 17  
**Acreage:** 0.34  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Sassafras	<5' & 5-30'	no		Foot traffic	
Deciduous	Oak, red	<5' & 5-30'	no			
Phanerophytes	Red maple	<5' & 5-30'	no			
Depression						
Dry/Moist						

**Comments:**

This unit includes a dried up creek and the bank on one side of the old creek. Sassafras, oak, and maple dominate the unit. There are many sassafras saplings. A footpath runs through the unit. Other species present include: sweetgum, green ash, black cherry, crab apple, dogwood, pin oak, bitternut hickory, trembling aspen, Ailanthus, mimosa, royal Paulownia, black locust, multiflora rose, raspberry, sumac sapling, Japanese knotweed, porcelainberry on trees at edge of forest, green briar, and Oriental bittersweet.

**Unit:** 18  
**Acreage:** 0.16  
**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' & 5-30'	no			Trash
Deciduous	Sassafras	<5' & 5-30'	no			
Phanerophytes	Ash, green	<5' & 5-30'	no			
Level	Dogwood, silky	<5' & 5-30'	no			
Dry/Moist						

**Comments:**

This unit is dominated by red maple in the overstory and sassafras in the understory. Ash and dogwood are mostly in the understory. A vineland is climbing trees on one side of the unit (MC). Other species present include: sycamore maple, pin oak, bitternut hickory sapling, Amur honeysuckle, multiflora rose, raspberry, poison ivy, Virginia creeper, Japanese honeysuckle, porcelainberry, garlic mustard, and Virginia knotweed .

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 19  
**Acreage:** 0.07  
**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	Walnut, black	>30'	no			
Deciduous	Cottonwood, Eastern	>30'	no			
Chamaephytes	Wineberry	<5'	yes			
Level	Mustard, garlic	<5'	yes			
Dry/Moist						

**Comments:**

This is a small unit of three >30' walnuts and two >30' cottonwoods with wineberry and garlic mustard beneath. Other species present include: white mulberry sapling, Amur honeysuckle, raspberry, white avens, white snakeroot, and porcelainberry.

**Unit:** 20  
**Acreage:** 0.08  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Oak, red	<5' & 5-30'	no			
Deciduous	Red maple	<5' & 5-30'	no			
Phanerophytes	Sycamore maple	<5'	yes			
Level	Mugwort	<5'	yes			
Dry/Moist						

**Comments:**

This unit is a small unit dominated by oak and maple saplings that were planted in 1999. It is bordered by a vineland and Japanese knotweed units #21 and # 24. Other species present include: green ash, dogwood, silver maple, white pine, wineberry, Amur honeysuckle, multiflora rose, Virginia knotweed, poison ivy, porcelainberry, garlic mustard, and goldenrod.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 21  
**Acreage:** 0.01  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous Deciduous Geophytes Level Dry/Moist	Knotweed, Japanese	<5' & 5-30'	yes			

**Comments:**

This is a small patch of Japanese knotweed between a vineland and some saplings. MC: Japanese knotweed is an invasive species.

**Unit:** 22  
**Acreage:** 0.09  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Geophytes Level Dry/Moist	Locust, black Mulberry, white Knotweed, Japanese Honeysuckle, Amur Mugwort	>30' <5' & 5-30' <5' & 5-30' <5' & 5-30' <5'	yes yes yes yes yes			Trash

**Comments:**

This unit has a black locust canopy with many white mulberry trees and saplings in the understory. A patchy mixture of Japanese knotweed, Amur honeysuckle, and mugwort is present. One large osage orange marks on end of unit. Other species present include: green ash, royal Paulownia, Ailanthus, black walnut, black cherry, osage orange, American elm, multiflora rose, raspberry, wineberry, bittersweet nightshade, white snakeroot, goldenrod, garlic mustard, and Japanese honeysuckle.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 23  
**Acreage:** 0.1  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Bittersweet, oriental	<5' & 5-30'	yes	Fence	Foot traffic	Dumping
Deciduous	Porcelain berry	<5' & 5-30'	yes	Phone pole		Trash
Chamaephytes	Multiflora rose	<5' & 5-30'	yes	FDNY call box		
Slope	Ivy, poison	<5'	no			
Dry/Moist						

**Comments:**

This unit is partially bordered by Tillotson Avenue. At points the vines are just on fence at other points they extend deeper into the forest, where they cover multiflora rose and trees. Other species present include: black cherry, green ash, black oak, crab apple, black locust, Ailanthus, Siberian elm, white mulberry, Amur honeysuckle, Japanese knotweed, Virginia creeper, Japanese honeysuckle, garlic mustard, white snakeroot, wineberry, mugwort, Asiatic dayflower, primrose, foxtail, and Phragmites. MC: because of invasives vines.

**Unit:** 24  
**Acreage:** 0.05  
**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	Knotweed, Japanese	5'-30'	yes	Landfill		Dumping
Deciduous						Trash
Geophytes						
Slope						
Dry/Moist						

**Comments:**

This unit is partially in between large boulders and concrete slabs and partially on level ground. Other species present include: mulberry, dogwood, red oak, and red maple. The red oak and red maple were planted in 1999. Tree canopy covers unit even though trunks are not in the unit. MC: Japanese knotweed is an invasive species.



Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 25  
**Acreage:** 0.14  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Mulberry, white	<5' & 5-30'	yes	Landfill		Dumping
Deciduous	Porcelain berry	<5' & 5-30'	yes			Trash
Lianas	Sycamore maple	<5' & 5-30'	yes			
Undulating	Multiflora rose	<5'	yes			
Dry/Moist						

**Comments:**

This unit is a strip of trees along Tillotson Avenue that surround an open vineland. Vines are climbing over the trees (MC). Other species present include: Norway maple, elm sp., black cherry, Ailanthus, Siberian elm, green ash, dogwood sp., Amur honeysuckle, pokeweed, horseweed, primrose, black nightshade, mugwort, lamb's quarter, Asiatic dayflower, dogbane, foxtail, and grass sp.

**Unit:** 26  
**Acreage:** 0.22  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Porcelain berry	<5' & 5-30'	yes			
Deciduous	grape	<5' & 5-30'	no			
Lianas	wild cucumber	<5' & 5-30'	no			
Level						
Dry/Moist						

**Comments:**

This unit is an open vineland surrounded by a dogwood/willow unit and a red maple unit. The vines climb the trees at the edges of the unit. MC: porcelainberry is an invasive species.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 27  
**Acreage:** 0.62  
**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	Red maple	all	no		Vagabond	
Deciduous	Dogwood , silky	<5' & 5-30'	no			
Phanerophytes	Ash, green	all	no			
Level	Ivy, poison	<5'	no			
Dry/Moist	Virginia creeper	<5'	no			

**Comments:**

This unit is dominated by red maple in the canopy and dogwood and ash in the understory. There is also a cluster of arrowwood viburnum. Poison ivy and Virginia creeper cover the ground where it is not bare. Sticks are piled in such a way that suggests that the homeless frequent here. Other species present include: white mulberry, black oak, sweetgum, green ash, English elm?, dogwood, bitternut hickory saplings, black cherry saplings, black locust saplings, multiflora rose, arrowwood, Amur honeysuckle, raspberry, Japanese knotweed, Japanese honeysuckle, and Virginia knotweed.

**Unit:** 28  
**Acreage:** 0.15  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Locust, black	>30'	yes			
Deciduous	Multiflora rose	<5'	yes			
Chamaephytes	Honeysuckle, Amur	<5' & 5-30'	yes			
Level	Ivy, poison	<5'	no			
Dry/Moist						

**Comments:**

This is a small unit dominated by black locust with multiflora rose and honeysuckle. It is located next to an old creek. Other species present include: white mulberry, box elder, green ash, black cherry, hawthorn saplings, blackberry, Virginia creeper, Oriental bittersweet, Virginia knotweed, goldenrod, and pokeweed.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 29  
**Acreage:** 0.74  
**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	Cottonwood, Eastern	>30'	no			
Deciduous	Porcelain berry	<5' & 5-30'	yes			
Lianas	Knotweed, Japanese	<5' & 5-30'	yes			
Level	Multiflora rose	<5' & 5-30'	yes			
Dry/Moist	Honeysuckle, Japanese	<5'	yes			
	Honeysuckle, Amur	<5' & 5'-30'	yes			

**Comments:**

This unit is a large cottonwood woodland with patches of vines and Japanese knotweed. Scattered saplings and a few trees are in unit as well. This unit is located next to a fence that borders parking lot. Other species present include: box elder, black walnut, white mulberry, pin oak, bitternut hickory, American elm sapling, Norway maple sapling, dogwood, Virginia creeper, Oriental bittersweet, and mugwort. MC: because of invasives such as porcelainberry, Japanese knotweed, multiflora rose, etc...

**Unit:** 30  
**Acreage:** 0.11  
**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	Cottonwood, Eastern	5'-30'	no			Trash
Deciduous	Mulberry, white	5'-30'	yes			
Geophytes	Honeysuckle, Amur	<5' & 5-30'	yes			
Level	Knotweed, Japanese	<5' & 5-30'	yes			
Dry/Moist						

**Comments:**

This unit is a rocky cottonwood and mulberry forest located next to a parking lot. The understory is patches of Amur honeysuckle and Japanese knotweed. Other species present include: royal Paulownia, black walnut, sycamore, bitternut hickory sapling, garlic mustard, and mugwort. MC: Japanese knotweed is an invasive species.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 31  
**Acreage:** 0.14  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Locust, black	>30' & 5-30'	yes			Dumping
Deciduous	Knotweed, Japanese	<5'	yes			Trash
Geophytes	Honeysuckle, Amur	<5' & 5-30'	yes			
Slope						
Dry/Moist						

**Comments:**

This unit is a rocky slope with black locust in the canopy and a patchy distribution of Japanese knotweed and Amur honeysuckle. Other species present include: white mulberry, Ailanthus, pin oak, cottonwood, black walnut, multiflora rose, and poison ivy.

MC: Japanese knotweed is an invasives species.

**Unit:** 32  
**Acreage:** 0.14  
**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, black	5'-30'	no			
Deciduous	Oak, pin	5'-30'	no			
Chamaephytes	Oak, white	5'-30'	no			
Undulating	Hickory, bitternut	<5' & 5-30'	no			
Dry/Moist	Hickory, pignut	<5' & 5-30'	no			

**Comments:**

This is an oak/ hickory forest. Parts of this unit have more vines, such as cat brier, while other parts have more wood aster and other herbaceous plants. Amur honeysuckle is also dominant in some areas. Other species present include: Ailanthus, crab apple, red maple, black cherry, green ash, sassafras saplings, elm saplings, Amur honeysuckle, multiflora rose, blackberry, raspberry, wood aster, enchanter's nightshade, poison ivy, Virginia creeper, catbrier, Japanese honeysuckle, Solomon's seal, garlic mustard, common nightshade, and white snakeroot.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 33  
**Acreage:** 0.08  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	honeysuckle, Japanese	<5' & 5-30'	yes			
Deciduous	Virginia creeper	<5'	no			
Lianas						
Level						
Dry/Moist						

**Comments:**

This unit is a vineland dominated by Japanese honeysuckle. In the center of the unit jewelweed and dogwood have been overtaken. On the edges of the unit the vines grow on adult trees. Other species present include: green ash, white mulberry, crab apple, sycamore maple, poison ivy, porcelain berry, dogwood, jewelweed, enchanter's nightshade, and garlic mustard. MC: Japanese honeysuckle is an invasive species.

**Unit:** 34  
**Acreage:** 0.11  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Willow, black	>30'	no			
Deciduous	Dogwood spp.	<5' & 5-30'	no			
Lianas	honeysuckle, Japanese	<5'	yes			
Level	Multiflora rose	<5'	yes			
Dry/Moist						

**Comments:**

This unit borders two vinelands. Willows are in the overstory and dogwoods are in the understory. Vines are climbing some of the trees. There is a fallen willow within the unit. Other species present include: white mulberry, green ash, bitternut hickory, Amur honeysuckle, porcelain berry, Virginia creeper, poison ivy, pokeweed, enchanter's nightshade, Japanese knotweed, and Virginia knotweed.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 35  
**Acreage:** 0.05  
**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, chestnut	>30' & 5-30'	no			Dumping
Deciduous	Cherry, black	<5' & 5-30'	no			Trash
Lianas	Ivy, poison	<5'	no			
Slope						
Dry/Moist						

**Comments:**

This is a very small unit of chestnut oak and black cherry with poison ivy in the herbaceous area. Other species present include: sycamore maple, white mulberry, green ash, bitternut hickory sapling, black oak sapling, black locust sapling, multiflora rose, Amur honeysuckle, Virginia creeper, Japanese honeysuckle, grape vine, and garlic mustard.

**Unit:** 36  
**Acreage:** 0.1  
**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	Elm, American	<5' & 5-30'	no		Vagabond	Dumping
Deciduous	Mugwort	<5'	yes			Trash
Hemicryptophytes						Feces
Undulating						
Dry/Moist						

**Comments:**

This unit is located along Tillotson Ave. It is dominated by American elm. There is a lot of trash in the unit. Other species present include: white mulberry, Norway maple, Siberian elm, pin oak, rose, Amur honeysuckle, raspberry, Virginia creeper, poison ivy, spiny sow thistle, lamb's quarter, Asiatic dayflower, common nightshade, and foxtail. MC: trash and dumping.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 37  
**Acreage:** 0.07  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Locust, black	<5' & 5-30'	yes	Phone pole	Vagabond	Dumping
Deciduous	Mugwort	<5'	yes	fire hydrant		Trash
Hemicryptophytes	Honeysuckle, Amur	<5'	yes			
Knoll						
Dry/Moist						

**Comments:**

This is a strip of black locust that is bordered by Tillotson Avenue. The unit is on a rocky hill. MC: there is a lot of trash and dumping along the side of road. Other species present include: black cherry, Siberian elm, green ash, hackberry, white mulberry, multiflora rose, Japanese honeysuckle, Virginia creeper, catbriar, poison ivy, Asiatic dayflower, black nightshade, garlic mustard, grass sp., wineberry, and dogbane.

**Unit:** 38  
**Acreage:** 0.05  
**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	Cherry, black	5'-30'	no	Landfill		Dumping
Deciduous	Locust, black	5'-30'	yes			Trash
Chamaephytes	Honeysuckle, Amur	<5' & 5-30'	yes			
Depression	Elm, American	5'-30'	no			
Dry/Moist						

**Comments:**

This is a small unit that sits on a depression. Large rocks, concrete slabs, pvc posts, and other dumping is within the area (MC). Black cherry and black locust dominate the canopy. A large American elm is within the unit. Other species present include: crab apple, royal Paulownia, devil's walking stick, multiflora rose, cat brier, green brier, Japanese honeysuckle, and Virginia creeper.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 39  
**Acreage:** 0.08  
**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	Cottonwood, Eastern	5'-30'	no	Landfill		Soil compaction
Deciduous	Mugwort	<5'	yes			Dumping
Hemicryptophytes	Elm, American	<5' & 5-30'	no			Trash
Level	Walnut, black	5'-30'	no			
Dry/Moist						

**Comments:**

This unit is a woodland where the understory is dominated by mugwort. The middle of the unit is a mugwort stand. Trees are located along the fence that borders the parks from a construction site. The tree canopy from a neighboring forest unit provides canopy cover for this unit. Other species present include: crab apple, white mulberry, Amur honeysuckle, multiflora rose, poison ivy, goldenrod, and garlic mustard. MC: dumping and trash. PVC pipes from neighboring construction site are present. Watch for more dumping.

**Unit:** 40  
**Acreage:** 0.25  
**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	Cottonwood, Eastern	>30'	no			
Deciduous	Porcelain berry	<5' & 5-30'	yes			
Lianas	Grape	<5' & 5-30'	no			
Level	Knotweed, Japanese	<5' & 5-30'	yes			
Dry/Moist	Honeysuckle, Amur	<5'	yes			

**Comments:**

This unit is a cottonwood woodland with a mix of vines, Amur honeysuckle, and Japanese knotweed patches in the understory. It is located next to a construction site. Other species present include: black locust, bitternut hickory saplings, oak sapling, multiflora rose, Japanese honeysuckle, Oriental bittersweet, poison ivy, and mugwort.



Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 41  
**Acreage:** 0.46  
**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	Silver maple	5'-30'	no			Trash
Deciduous	Walnut, black	<5' & 5-30'	no			
Hemicryptophytes	Hackberry	5'-30'	no			
Level	Ash, white	5'-30'	no			
Dry/Moist	Mugwort	<5'	yes			
	Mustard, garlic	<5'	yes			

**Comments:**

This is a stand of young trees that were planted in 1999 by NRG. The canopy has filled in nicely and the mugwort that is in it is less than 2ft and sparse. MC: Amur honeysuckle and porcelain berry are encroaching on the edges (MC). There are staghorn sumacs on the north side of the unit with some Japanese knotweed on the edge. One large cottonwood is in the unit. Other species present include: black cherry, black locust, Ailanthus, bitternut hickory saplings, multiflora rose, and Virginia creeper.

**Unit:** 42  
**Acreage:** 0.05  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Locust, black	5'-30'	yes			
Deciduous	Mugwort	<5'	yes			
Hemicryptophytes	Mustard, garlic	<5'	yes			
Level						
Dry/Moist						

**Comments:**

This is a black locust forest with a mugwort understory. It is located on the west side of the park.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 43  
**Acreage:** 0.27  
**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	Cottonwood, Eastern	>30'	no			
Deciduous	Ash, green	<5' & 5-30'	no			
Lianas	Oak, pin	<5' & 5-30'	no			
Undulating	Ivy, poison	<5'	no			
Dry/Moist						

**Comments:**

This unit slopes up over large rocks and down into a rocky depression. This unit was not filled at the time the surrounding units were filled. It is the original grade of the site. Poison ivy dominates the ground cover. Eastern cottonwoods are mostly on the periphery with a mix of black oak, pin oak, and green ash scattered throughout. Pignut hickories are clustered on one side of the unit. Other species present include: dying eastern red cedar, pignut hickory, red maple, white mulberry, black cherry, hawthorn, witch hazel, sassafras, bitternut hickory, black locust, Ailanthus, Amur honeysuckle, raspberry, Japanese knotweed, Oriental bittersweet, Virginia creeper, porcelain berry, catbrier, and garlic mustard.

**Unit:** 44  
**Acreage:** 0.86  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scrub	Mugwort	<5' & 5-30'	yes			Trash
Deciduous	Cottonwood, Eastern	>30'	no			
Hemicryptophytes	Sumac, staghorn	<5' & 5-30'	no			
Level	Goldenrod	<5' & 5-30'	no			
Dry/Moist	Sumac, smooth	<5' & 5-30'	no			
	Ailanthus	<5' & 5'-30'	yes			

**Comments:**

This is a large unit with a mix of cottonwood, sumac, Ailanthus, mugwort, and goldenrod, Some planted trees are also present. Other species present include: Norway maple, black locust, red cedar, black cherry, green ash, white pine, silver maple, Amur honeysuckle, Japanese knotweed, Oriental bittersweet, and poison ivy.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 45  
**Acreage:** 0.1  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Locust, black	5'-30'	yes	Landfill		
Deciduous	Mugwort	<5'	yes			
Hemicryptophytes						
Level						
Dry/Moist						

**Comments:**

This is a small closed forest in the NW corner of the park next to the Econo Lodge. Several large rocks are in the area. Other species present include: black walnut, white mulberry, staghorn sumac, privet, garlic mustard, evening primrose, and cushion moss.

**Unit:** 46  
**Acreage:** 0.1  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Grass spp.	<5'				Trash
Deciduous	Mugwort	<5'	yes			
Hemicryptophytes	Locust, black	<5' & 5-30'	yes			
Level						
Dry/Moist						

**Comments:**

This unit is a herbaceous community along the guardrail of Co-op City. It has a patchy distribution of grass and mugwort with black locust saplings and a few black locust trees. Other species present include: Ailanthus, hackberry sapling, poplar sp.sapling, river birch sapling, smooth sumac, Oriental bittersweet, Queen Anne's lace, sweet clover, daisy fleabane, and goldenrod.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 47  
**Acreage:** 0.16  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	hybrid poplar	5'-30'	yes		experiment plot	
Deciduous	Locust, black	<5' & 5-30'	yes			
Hemicryptophytes	Silver maple	<5' & 5-30'	no			
Level	Walnut, black	<5' & 5-30'	no			
Dry/Moist	Mugwort	<5'	yes			

**Comments:**

This is an experimental planting site. The four species being grown here are; hybrid poplar, black locust, silver maple, and black walnut. Mugwort dominates the understory. Other species present include: smooth sumac, Amur honeysuckle, oak sapling, porcelainberry, and garlic mustard. A dead skunk was found in the unit.

**Unit:** 48  
**Acreage:** 0.16  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Locust, black	5'-30'	yes			
Deciduous	Ash, green	5'-30'	no			
Hemicryptophytes	Mugwort	<5' & 5-30'	yes			
Level						
Dry/Moist						

**Comments:**

This is a planted area located next to the bareroots experimental planting area. Other species present include: grey birch, Siberian elm, cottonwood, black cherry, and black walnut.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 49  
**Acreage:** 0.11  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Hackberry	<5' & 5-30'	no	planting plot	experiment plot	
Deciduous	Box Elder	<5' & 5-30'	no			
Hemicryptophytes	Cherry, black	<5' & 5-30'	no			
Level	cedar, eastern red	<5'	no			
Dry/Moist	Mugwort	<5'	yes			

**Comments:**

Experimental planting plot of the above four tree species. Other species present include: cottonwood, Ailanthus, black locust sapling, Ailanthus saplings, mulberry sapling, Amur honeysuckle, dogbane, milkweed, poison ivy, and Oriental bittersweet.

**Unit:** 50  
**Acreage:** 0.04  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Mugwort	<5'	yes	Landfill		
Deciduous	Sumac, smooth	<5' & 5-30'	no			
Hemicryptophytes	Birch, river	<5'	no			
Level						
Dry/Moist						

**Comments:**

This unit is an herbaceous community with many saplings. Other species present include: black cherry saplings, black walnut saplings, and goldenrod.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 51  
**Acreage:** 0.08  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Locust, black	<5' & 5-30'	yes			
Deciduous	Mugwort	<5'	yes			
Hemicryptophytes	Sumac, smooth	<5'	no			
Level						
Dry/Moist						

**Comments:**

This is a black locust closed forest bordered in part by Co-op City Blvd. Other species present include: a silver maple sapling, sweet clover, grass sp., cottonwood, and Ailanthus.

**Unit:** 52  
**Acreage:** 0.03  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	poplar, Lombardy	5'-30'	yes	Landfill		Vandalism
Deciduous	Birch, river	5'-30'	no			
Hemicryptophytes	Walnut, black	5'-30'	no			
Level	Cherry, black	5'-30'	no			
Dry/Moist	Mugwort	<5'	yes			

**Comments:**

This small unit is a mix of the above species in patchy distribution. Other species present include: silver maple, Norway maple, white mulberry, black locust sapling, sumac sapling, sweet clover, grass sp, and dodder. MC: cut trees.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 53  
**Acreage:** 0.12  
**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	Poplar, white	<5' & 5-30'	yes	Landfill		Trash
Deciduous	Locust, black	<5' & 5-30'	yes			Vandalism
Hemicryptophytes	Mugwort	<5'	yes			
Level						
Dry/Moist						

**Comments:**

This unit is bordered by a guardrail along Co-op City Blvd, a closed forest, and woodlands. On the street side of the unit black locust is dominant and on the other side white poplar is dominant with a stand of dead Ailanthus at the edge. White poplar and black locust saplings are scattered throughout. Other species present include: bitternut hickory, river birch, hackberry, Eastern red cedar, staghorn sumac, silver maple saplings, mulberry saplings, Amur honeysuckle, Virginia creeper, bindweed, dodder, wood sorrel, sweet clover, poor man's pepper, Queen Anne's lace, goldenrods, grass spp., and horseweed. MC: trash and cut trees.

**Unit:** 54  
**Acreage:** 0.46  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Cottonwood, Eastern	>30'	no			Dumping
Deciduous	Ailanthus	<5' & 5-30'	yes			
Lianas	bittersweet, oriental	<5' & 5-30'	yes			
Depression	Ivy, poison	<5'	no			
Dry/Moist	Mugwort	<5'	yes			

**Comments:**

This unit is on the edge of a closed forest. Part of the unit is within a depression. Cottonwood and Ailanthus are the dominant tree species of the unit. Other species present include: black cherry, green ash, buckthorn, white mulberry, devil's walking stick, royal Paulownia, sycamore maple, oak saplings, red maple saplings, dogwood, Amur honeysuckle, multiflora rose, smooth sumac, wineberry, porcelain berry, Virginia creeper, white avens, snakeroot, dogbane, false Solomon's seal, and goldenrod.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 55  
**Acreage:** 0.14  
**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	Ash, white	<5' & 5-30'	no			
Deciduous	Walnut, black	<5' & 5-30'	no			
Hemicryptophytes	Mugwort	<5' & 5-30'	yes			
Level						
Dry/Moist						

**Comments:**

This unit is a planted area where the canopy is not closed and mugwort is over 5' tall. Other species present include: silver maple (a few that have been predated upon by insects) and wineberry.

**Unit:** 56  
**Acreage:** 0.13  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Mugwort	<5' & 5-30'	yes			
Deciduous	Porcelain berry	<5' & 5-30'	yes			
Hemicryptophytes						
Level						
Dry/Moist						

**Comments:**

This unit is a herbaceous community that will become a vineland if left alone. A few trees are present. Other species present include: silver maple, Ailanthus, Amur honeysuckle, black willow, poison ivy, and Japanese honeysuckle. MC: porcelainberry is an invasive species.



Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 57  
**Acreage:** 0.26  
**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' & 5-30'	no			Dumping
Deciduous	Cherry, black	<5' & 5-30'	no			
Phanerophytes	honeysuckle, japanese	<5'	yes			
Undulating	Multiflora rose	<5'	yes			
Dry/Moist						

**Comments:**

This unit is a sassafras and black cherry forest with many sassafras saplings. Japanese honeysuckle covers the ground. This unit is located next to a ditch and a black locust forest. The unit includes the ditch. Other species present include: green ash, red maple, shagbark hickory, pin oak, black oak, Norway maple, white mulberry, sycamore, black willow, sweetgum, raspberry, wineberry, Amur honeysuckle, catbriar, poison ivy, grape, false Solomon's seal, and mugwort. MC: dumped car parts.

**Unit:** 58  
**Acreage:** 0.01  
**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	Mugwort	<5' & 5-30'	yes			
Deciduous	Dogbane	<5'	no			
Hemicryptophytes						
Slope						
Dry/Moist						

**Comments:**

This is a very small mugwort field located between forested units and parking lot fence. Other species present include: wineberry, Japanese honeysuckle, porcelainberry on fence, and pokeweed.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 59  
**Acreage:** 0.29  
**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	Locust, black	5'-30'	yes			Trash
Deciduous	Cottonwood, Eastern	>30'	no			
Hemicryptophytes	Mugwort	<5' & 5-30'	yes			
Undulating	Honeysuckle, Japanese	<5'	yes			
Dry/Moist						

**Comments:**

This unit is a black locust woodland with a few large cottonwoods. The herbaceous layer is mostly mugwort and vines with a large patch of Japanese knotweed. Other species present include: sycamore, black cherry, mimosa, Norway maple, peach tree, white mulberry, bitternut hickory saplings, dogwood, Amur honeysuckle, multiflora rose, raspberry, Japanese knotweed, Oriental bittersweet, porcelainberry, poison ivy, Virginia creeper, dogbane, and garlic mustard.

**Unit:** 60  
**Acreage:** 0.01  
**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	Mugwort	<5' & 5-30'	yes			
Deciduous						
Hemicryptophytes						
Level						
Dry/Moist						

**Comments:**

This is a mugwort field next to a nursing home. Other species present include: Ailanthus, Virginia creeper. A brown snake was observed.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 61  
**Acreage:** 0.09  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Locust, black	>30'	yes			Trash
Deciduous	Virginia creeper	<5'	no			
Lianas	Porcelain berry	<5'	yes			
Level	Mugwort	<5'	yes			
Dry/Moist	Mustard, garlic	<5'	yes			

**Comments:**

This unit is a black locust forest with half vines underneath and half mugwort underneath. It is located next to the west side of a building. Other species present include: Ailanthus, crab apple, cucumber, and goldenrod.

**Unit:** 62  
**Acreage:** 1.25  
**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	all	no			
Deciduous	Oak, black	all	no			
Phanerophytes	Sassafras	all	no			
Undulating	Hickory, pignut	<5' & 5-30'	no			
Dry/Moist	Cherry, black	<5' & 5-30'	no			
	Ash, green	all	no			

**Comments:**

This is a oak, hickory, and sassafras forest. Clusters of black birch are present as well as green ash and black cherry. Other species present include: sweetgum, bear oak, red maple, pin oak, red oak, shagbark hickory, mockernut hickory, bitternut hickory, crab apple, mimosa, white mulberry, royal Paulownia, Ailanthus, sycamore, devil's walking stick, Amur honeysuckle, maple leaf viburnum, raspberry, multiflora rose, grape, poison ivy, Virginia creeper, cat briar, Oriental bittersweet, English ivy, white snakeroot, mugwort, garlic mustard, goldenrod, smooth false fox glove, true and false Solomon's seal, grass sp., and wood aster.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 63  
**Acreage:** 0.25  
**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 Deciduous Hemicryptophytes Level Dry/Moist	Locust, black Mugwort	<5' & 5-30' <5'	yes yes			trash

**Comments:**

This unit is a strip of mixed herbaceous species predominantly mugwort (~1') with black locust scattered throughout. It is located along the guardrail at Coop City Blvd. Other species present include: Ailanthus, white mulberry, Eastern red cedar, smooth sumac, bindweed, sweet clover, dogbane, dock, mullein, Queen Anne's lace, milkweed, garlic mustard, common nightshade, evening primrose, dodder, poor man's pepper, grass spp, and foxtail.

**Unit:** 64  
**Acreage:** 0.14  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous Deciduous Hemicryptophytes Level Dry/Moist	Mugwort Dogbane	<5' & 5-30' <5'	yes no			

**Comments:**

This is an herbaceous unit dominated by mugwort and dogbane. Other species present include: Ailanthus, crab apple, mulberry, sweet clover, goldenrod, Queen Anne's lace, and milkweed.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 65  
**Acreage:** 0.07  
**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	Cottonwood, Eastern	>30'	no			
Deciduous	Ivy, poison	<5'	no			
Lianas						
Level						
Dry/Moist						

**Comments:**

This is a small edge unit located on the edge of the sassafras/ oak/ hickory forest. It is dominated by cottonwoods and poison ivy. Other species present include: black locust, royal Paulownia, buckthorn, black cherry, white mulberry, pin oak sapling, bitternut hickory sapling, raspberry, Virginia creeper, Oriental bittersweet, and garlic mustard.

**Unit:** 66  
**Acreage:** 0.07  
**Mgmt. Concern:** Yes

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Mulberry, white	5'-30'	yes			Trash
Deciduous	Ailanthus	5'-30'	yes			
Hemicryptophytes	Norway maple	5'-30'	yes			
Level	Mugwort	<5'	yes			
Dry/Moist	Hops, Japanese	<5'	yes			
	Mustard, garlic	<5'	yes			

**Comments:**

This unit is a closed forest bordered by a lawn next to a building. Japanese hops is on the south side of unit. Other species present include: box elder, American elm, bitternut hickory sapling, black locust sapling, black cherry saplings, Amur honeysuckle, Virginia creeper, poison ivy, wild cucumber, pokeweed, and goldenrod. MC: homeless camp during summer according to neighbor. Pheasants, rabbits, and skunk have been observed by neighbor.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 67  
**Acreage:** 0.04  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Hops, Japanese	<5'	yes			
Deciduous	Bindweed	<5'	yes			
Lianas						
Level						
Dry/Moist						

**Comments:**

This is a vineland of Japanese hops and bindweed. It is next to a bordering parking lot/ lawn. Other species present include: Ailanthus, mugwort.

**Unit:** 68  
**Acreage:** 0.03  
**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	Mugwort	<5' & 5-30'	yes			
Deciduous						
Hemicryptophytes						
Level						
Dry/Moist						

**Comments:**

This is a very small unit bordered by large boulders which separates it from a neighboring lawn and a closed forest. Other species present include: 2 planted Eastern red cedar, white mulberry, 2 Ailanthus, dogbane, wood sorrel, and Japanese hops.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 69  
**Acreage:** 0.05  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scrub	Sumac, staghorn	5'-30'	no	Landfill		
Deciduous	Mugwort	<5'	yes			
Hemicryptophytes	Dogbane	<5'	no			
Level						
Dry/Moist						

**Comments:**

This unit is a staghorn sumac dominated scrub. Most of the sumacs are about 20' tall. A mix of mugwort and dogbane make up the herbaceous layer. Other species present include: planted Eastern red cedar, Ailanthus sapling, elm sapling, black locust saplings, and bindweed. Cats are present.

**Unit:** 70  
**Acreage:** 0.04  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Silver maple	<5' & 5-30'	no			
Deciduous	Ailanthus	5'-30'	yes			
Hemicryptophytes	Mugwort	<5'	yes			
Level						
Dry/Moist						

**Comments:**

This unit is an equal mix of Ailanthus and planted silver maple. Mugwort dominates the herbaceous layer. Other species present include: sumac saplings, dogbane, and garlic mustard.

Givan's Creek Woods Entitation Unit Descriptions, Surveyed September 2007

**Unit:** 71  
**Acreage:** 0.02  
**Mgmt. Concern:** No

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Phanerophytes Level Dry/Moist	Mulberry, white	5'-30'	yes			

**Comments:**

This is a very small unit of white mulberry that borders the park from a neighboring lawn. Other species present include: mugwort, garlic mustard, lamb's quarter, and common plantain. A few large boulders are in the understory. The ground cover is sparse. A few dead Ailanthus are in this unit.



## APPENDIX: Glossary

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

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

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

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

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

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

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

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

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

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

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

**Graminoid:** Grasses and grass-like plants.

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

**Hemicryptophyte:** Shoots die back to ground level.

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

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

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

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

**Knoll:** A small isolated hillock.

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

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

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

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

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

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

**Slope:** Ground that forms a natural or artificial incline.

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

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

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

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

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

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