

# Natural Area Mapping and Inventory of Riverdale Park

## 2012 Survey

Prepared by:



NYC Parks

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



## **Riverdale Park Natural Area Mapping & Inventory Surveyed 2012**

**46 acres**

### **Introduction**

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

Until the 1980's, Parks was primarily concerned with developed landscapes and recreation facilities rather than natural areas. In the absence of a comprehensive management policy, these areas succumbed to invasive species, pollution and erosion. In 1984, Parks established the Natural Resources Group (NRG) with a mandate to acquire, restore, and manage natural areas in New York City. The wetlands, forests, meadows, and shorelines under Parks' jurisdiction provide valuable habitat for hundreds of species, from rare wildflowers to endangered birds of prey. To facilitate the protection, management and restoration of natural areas, NRG began an inventory of parkland using entitation, a process of identifying and describing ecologically distinct plant communities (or entities).

### **Entitation**

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

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

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

### **Data Collection**

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

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

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

### **Riverdale Park Overview**

Riverdale Park is known for its secluded beauty, thick woods, spectacular views of the Palisades along the Hudson, and as a haven for birds. Twenty-seven species, including the screech owl (*Otus asio*), have been confirmed as breeding in the park. The bedrock of Riverdale is billion-year-old Fordham gneiss, the oldest rock formation in New York City. On top of the gneiss, lies Inwood marble, which was once quarried in Riverdale for the production of lime, remains of two lime kilns stand in the park today.

Riverdale parkland contains more than 45 acres most of which are forested, including mature oak-hickory forest, a forest that occurs on well-drained sites, often on ridge tops, upper slopes, or south and west facing slopes. Composed mainly of five species of oak with black birch and hickory, the woods are on their way to becoming a mature or "climax" forest – a forest whose shade-tolerant seedlings will survive beneath their parents. Although probably every area of Riverdale Park has been cleared at one time or another, the southern part is covered by the same type of forest that existed in pre-colonial times, where tulip trees as tall as 110-feet rise from the slopes of the ravine. Red oaks, black birch, black cherry, and hickory are scattered throughout the canopy. At the end of the ravine, a small grove of witch hazel grows on the eroded bluffs overlooking the Hudson. In the spring, woodland wildflowers like jack-in-the-pulpit and blue violet bloom along the shaded path. Later in summer, spikenard, blue-stemmed goldenrod, and joe-pye weed flower as well.

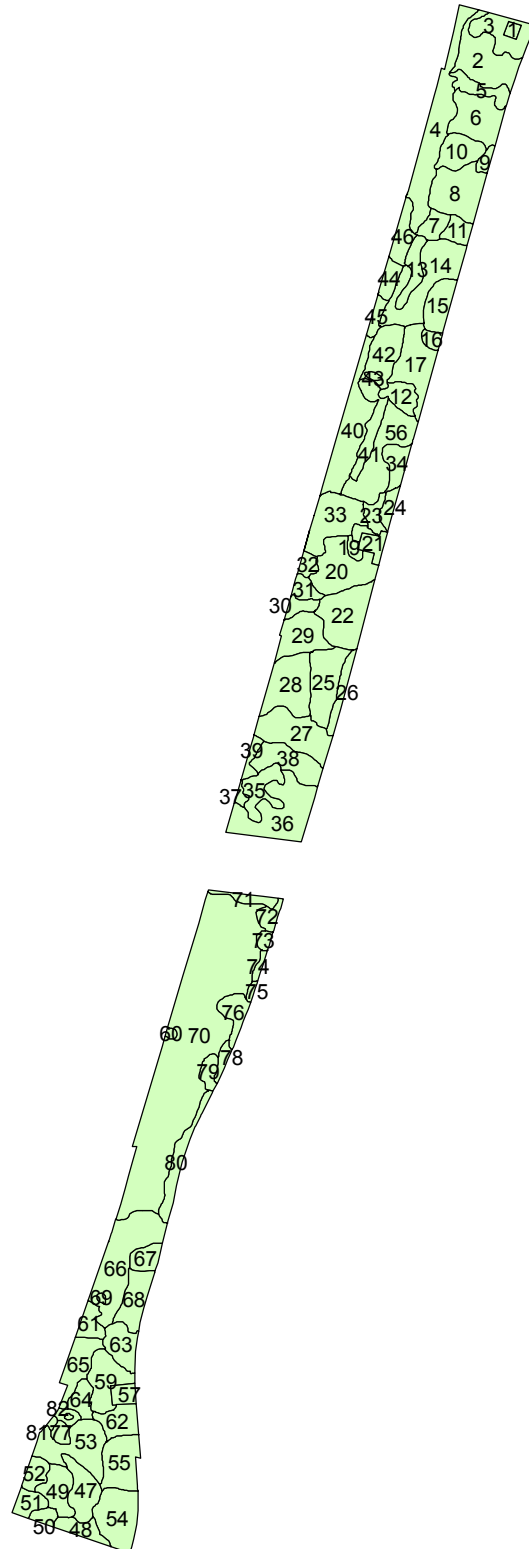
The Alderbrook wetland and surrounding forest have benefited from a restoration project, funded by the New York State Clean Water Clean Air Bond Act, Environmental Protection Fund, and the City. Prior to the restoration, the wetland was clogged by sediment from the Alderbrook stream and compacted soil around the railroad tracks. Stands of invasive mugwort and Japanese knotweed seven-feet high had crowded out other vegetation. The restoration re-created the stream channel and open water area, and replaced invasive forest vegetation with native. Breeding birds found in this area include yellow warblers and common yellowthroats, both of whom nest in the dense shrubbery.

Easy access to the Hudson River makes the path to the Alderbrook wetland one of the most heavily used trails in Riverdale Park. However, crossing the tracks is prohibited. High speed trains and 700 volts of electricity from Metro-North's third rail make crossing the tracks very dangerous.

With the PlaNYC initiative and implementation of MillionTreesNYC starting in 2007 several areas within Riverdale Park were identified as reforestation sites. Areas where invasive species were prevalent were restored and planted with native trees and shrubs between 2008-2012. The Natural Resources Group has had a continued presence managing this park and will use this entitation survey to serve as a baseline for future management in the park.

**Technicians:** Clara Pregitzer, Leila Mougoui Bakhtiari, Jeremy Lessing

# Riverdale Park 2012 Entitation Bronx, NY



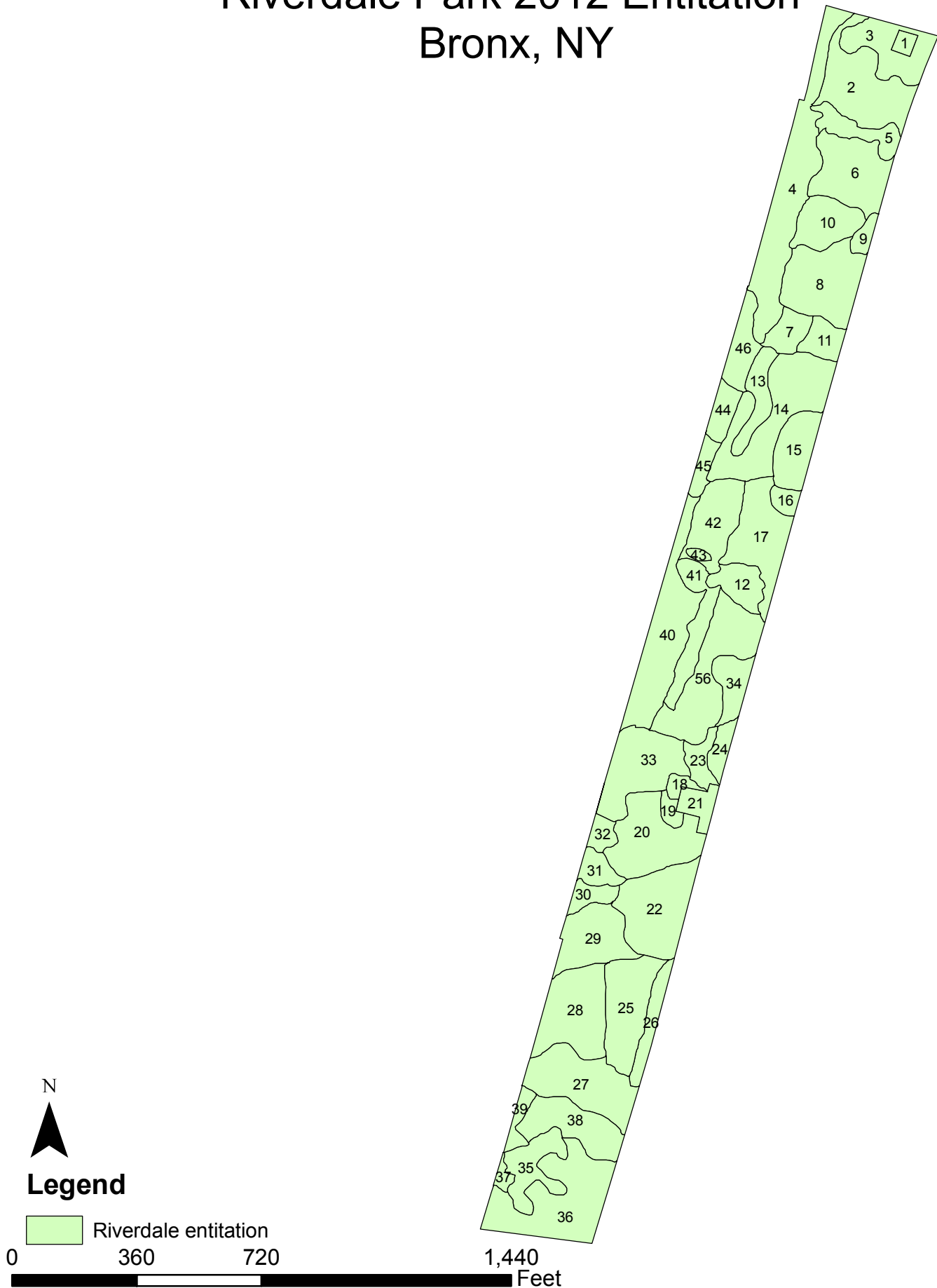
## Legend



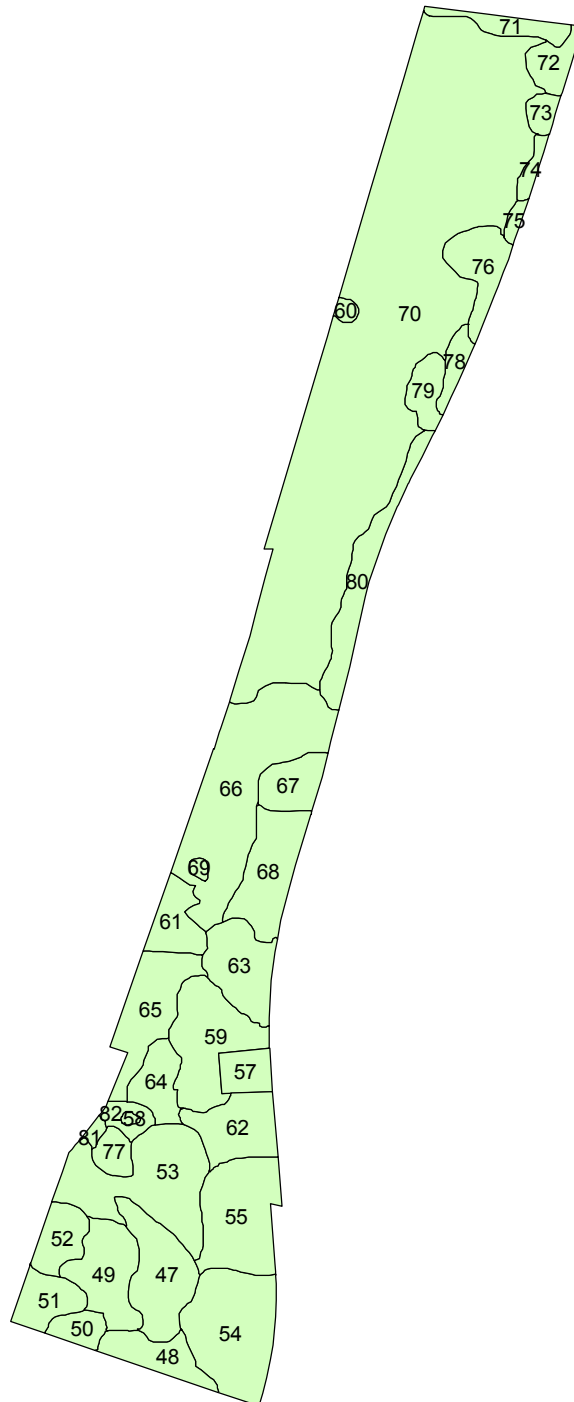
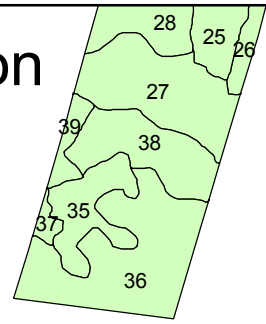
Riverdale entitation

0 750 1,500 3,000 Feet

# Riverdale Park 2012 Entitation Bronx, NY



# Riverdale Park 2012 Entitation Bronx, NY



## Legend



Riverdale entitation

0 360 720 1,440 Feet

**Unit:** 1                      **Date of Visit:** 6/20/2012                      **Species Composition Changing:** No  
**Acreage:** 0.08                      **Management Concern:** No                      **Community Structure Changing:** No  
**Classification:** VCD

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scarcely	Plantain, common	<5'	No	Fence	Vehicle	Soil compaction
Deciduous	Smartweed	<5'	Yes	Road		
Hemicryptophyte						
Level						
Dry						

**Comments:**

This is a scarcely vegetated fenced unit with a DEP pump station inside. It is located in the northern entrance of Riverdale Park at 254th street.

**Unit:** 2                      **Date of Visit:** 6/20/2012                      **Species Composition Changing:** No  
**Acreage:** 1.08                      **Management Concern:** No                      **Community Structure Changing:** No  
**Classification:** IB2a3

<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	Full-crown tree	Foot traffic	
Deciduous	Norway maple	5'-30'	Yes	Fence		
Hemicryptophyte	Mugwort	<5'	Yes			
Level	Smartweed	<5'	Yes			
Dry/Moist	Knotweed, Virginia	<5'	No			
	Mustard, garlic	<5'	Yes			

**Comments:**

This is a black locust, Norway maple closed forest unit, located at the northern part of the park. The unit consists of patches of disturbed areas caused by storm damage, that has created a multi successional mosaic. There is an old lime kiln on the western edge of this unit. Other species include: horse-chestnut tree, violet, honeysuckle bush, wineberry, poison ivy, English ivy, Japanese honeysuckle, jetbead, porcelainberry, sassafras, and white pine.

**Unit:** 3 **Date of Visit:** 7/9/2012 **Species Composition Changing:** No  
**Acreage:** 0.64 **Management Concern:** Yes **Community Structure Changing:** No  
**Classification:** IIB2a4

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Norway maple	<5' & 5-30'	Yes		Foot traffic	Soil compaction
Deciduous	Knotweed, Japanese	<5'	Yes			Trash
Geophytes	hogweed	<5'	Yes			Planting
Undulating	Locust, black	5'-30'	Yes			
Dry/Moist	Smartweed	<5'	Yes			
	Pokeweed	<5'	Yes			

**Comments:**

This is a disturbed woodland unit at the northern entrance of the park, two footpaths originate in this unit that extend throughout the park. This unit is mostly dominated by invasives including Norway maple and black locust with some native herbs including white wood aster and pokeberry. Other species include: burdock, thistle, spotted knapweed, mugwort, wineberry, porcelainberry, enchanters nightshade, and mulberry trees. The unit extends to the eastern edge of the park. It is considered a management concern because of the presence of invasive plants, trash and heavy foot traffic.

**Unit:** 4 **Date of Visit:** 7/9/2012 **Species Composition Changing:** No  
**Acreage:** 1.62 **Management Concern:** No **Community Structure Changing:** No  
**Classification:** IIB2a6

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Norway maple	5'-30'	Yes	Road		Trash
Deciduous	Goldenraintree	<5'	Yes	Foundation		
Lianas	Mugwort	<5'	Yes			
Level	Ivy, poison	<5'	No			
Moist	Honeysuckle, vine	<5'	Yes			
	Wineberry	<5'	Yes			

**Comments:**

This unit is a Norway maple woodland, located in the western edge of the park, along a stone wall next to the Metro North Railroad. It is a disturbed area with a lot of trash. There has been some storm damage and big fallen trees within the unit. Other species include: Queen Ann's lace, mullen, multiflora rose, princess tree, porcelainberry and goldenrod.



**Unit:** 5                      **Date of Visit:** 6/20/2012                      **Species Composition Changing:** Yes  
**Acreage:** 0.35                      **Management Concern:** Yes                      **Community Structure Changing:** Yes  
**Classification:** IVA3a5

<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	Fence	Foot traffic	
Deciduous	Goldenrod	<5'	No			
Hemicryptophyte	Bittersweet nightshade	<5'	Yes			
Level	Enchanter's nightshade	<5'	No			
Dry/Moist	Mulberry, white	5'-30'	Yes			
	Norway maple	5'-30'	Yes			

**Comments:**

This is an herbaceous open area by the fence on the eastern side of Riverdale park. It is covered mostly by mugwort. The western edge includes a cluster of young pine trees. There are several Ailanthus trees present in the unit.

**Unit:** 6                      **Date of Visit:** 7/8/2012                      **Species Composition Changing:** Yes  
**Acreage:** 0.89                      **Management Concern:** Yes                      **Community Structure Changing:** Yes  
**Classification:** IIB2a4

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Norway maple	5'-30'	Yes	Fence	Foot traffic	
Deciduous	Locust, black	5'-30'	Yes			
Geophytes	Elm, slippery	5'-30'	No			
Level	Sassafras	5'-30'	No			
Dry/Moist	Tulip tree	<5' & >30'	No			
	Samartweed	<5'	Yes			

**Comments:**

This woodland unit is located on the eastern side of the park and it continues to the western north/south path. There is a big cluster of old dead trees and the overstory is mostly Norway maple and black locust, also there are a lot of slippery elm trees on the western edge of the footpath. Other species include: sugar maple, jewelweed, buckthorn and multiflora rose.

**Unit:** 7 **Date of Visit:** 7/9/2012 **Species Composition Changing:** No  
**Acreage:** 0.27 **Management Concern:** No **Community Structure Changing:** No  
**Classification:** IB2a3

<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	>30'	No		Foot traffic	Soil compaction
Deciduous	Cherry, black	>30'	No			
Hemicryptophyte	Norway maple	>30'	Yes			
Level	Sugar maple	5'-30'	No			
Dry/Moist	Ivy, poison	<5'	No			
	Mustard, garlic	<5'	Yes			

**Comments:**

This is a closed forest unit located in the middle of the park. With an overstory of black and red oak, black cherry , Norway maple and a very herbaceous understory with lots of leaf litter. There is a downhill footpath on the north side of the unit with a fire camp ground that joins the footpath on the west side of the park. Other species in the unit include: Japanese honeysuckle, young sassafras trees, spicebush, wineberry and witch hazel.

**Unit:** 8 **Date of Visit:** 7/9/2012 **Species Composition Changing:** No  
**Acreage:** 1.01 **Management Concern:** No **Community Structure Changing:** No  
**Classification:** IB2a4

<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	Road	Foot traffic	
Deciduous	Sugar maple	>30'	No	Foundation		
Geophytes	Tulip tree	>30'	No			
Slope	Smartweed	<5'	Yes			
Dry/Moist	Jewelweed	<5'	No			
	Multiflora rose	<5'	Yes			

**Comments:**

This is a closed forest dominated by black locust, sugar maple and tulip tree. It is bordering the fence on the eastern side of the park. There is a trail that bisects the unit. There is an old stone wall running the length of the unit in the middle, halfway down slope.

**Unit:** 9 **Date of Visit:** 6/20/2012 **Species Composition Changing:** Yes  
**Acreage:** 0.11 **Management Concern:** Yes **Community Structure Changing:** No  
**Classification:** IIB2a3

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Sumac, staghorn	all	No			
Deciduous	Mugwort	<5'	Yes			
Hemicryptophyte						
Undulating						
Dry/Moist						

**Comments:**

This is a small patch of sumac with a mix of native and invasive understory in the northern section and on the east side of the park. A path runs through the unit. Other species include: violet, mugwort, wood sorrel, plantain, white wood aster, garlic mustard, porcelainberry, Virginia creeper, multiflora rose, Virginia knotweed, bittersweet nightshade and jewelweed. It is a management concern because of the presence of invasive plants.

**Unit:** 10 **Date of Visit:** 7/9/2012 **Species Composition Changing:** No  
**Acreage:** 0.53 **Management Concern:** No **Community Structure Changing:** No  
**Classification:** IB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Sassafras	all	No		Foot traffic	
Deciduous	Black cherry	5'-30'	No			
Phanerophytes	Norway maple	>30'	Yes			
Undulating	Black locust	>30'	Yes			
Dry/Moist						

**Comments:**

A mixed stand of sassafras and black cherry with a healthy understory of Virginia creeper, Virginia knotweed and an abundance of regenerating sassafras. The rest of the understory is mostly bare with a couple of fallen large trees. Other species in the unit include: poison ivy, evergreen euonymus, and false solomon seal.

**Unit:** 11      **Date of Visit:** 7/9/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.26      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IB2a6

<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	Sycamore maple	5'-30'	Yes			
Lianas	Norway maple	5'-30'	Yes			
Undulating	Sugar maple	5'-30'	No			
Dry/Moist	Multiflora rose	<5'	No			
	Oak, red	5'-30'	No			

**Comments:**

This unit is a closed forest with black locust and maple trees in the overstory, located south of the footpath . While the canopy is similar to the rest of the park there is a large thicket of multiflora rose in the understory. The understory is dominated by invasive plants and some regenerating red oaks. Other species in the unit include: hickory, garlic mustard, poison ivy, jewelweed, Virginia creeper and Virginia knotweed. This is a management concern because of the presence of invasive plants in the understory and protection of the regenerating red oaks.

**Unit:** 12      **Date of Visit:** 6/20/2012      **Species Composition Changing:** No  
**Acreage:** 0.34      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IA1a

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Pine, white	>30'	No		Foot traffic	Soil compaction
Evergreen	Tulip tree	<5'	No			Other
Phanerophytes	Locust, black	>30'	Yes			
Level	Sassafras	<5'	No			
Dry/Moist	Mustard, garlic	<5'	Yes			
	Sugar maple	<5'	No			

**Comments:**

This is a closed forest dominated by white pine with black locusts; emergent tulips and sassafras. Other species in the unit include: Virginia knotweed and pokeweed. This area is heavily used by dog walkers and is bordered by an active trail.



**Unit:** 13                      **Date of Visit:** 7/9/2012                      **Species Composition Changing:** Yes  
**Acreage:** 0.36                      **Management Concern:** Yes                      **Community Structure Changing:** Yes  
**Classification:** IVA3a2

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Pokeweed	<5'	No		Foot traffic	
Deciduous	Smartweed	<5'	Yes			
Lianas	Wineberry	<5'	Yes			
Slope	Sumac, staghorn	<5'	No			
Dry/Moist	Porcelainberry	<5'	Yes			
	Jewelweed	<5'	No			

**Comments:**

This unit is an herbaceous opening with young trees and is dominated by pokeweed and vines including porcelainberry and wineberry. It is a mix between an herbaceous and vineland coverytype. Other species in the unit include: slippery elm, black locust, spicebush, fig tree, Virginia knotweed, plantain, multiflora rose, black cherry, mugwort, blackberry and garlic mustard.

**Unit:** 14                      **Date of Visit:** 7/9/2012                      **Species Composition Changing:** Yes  
**Acreage:** 1.32                      **Management Concern:** No                      **Community Structure Changing:** Yes  
**Classification:** IB2a4

<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		Foot traffic	
Deciduous	Horse chestnut	>30'	No			
Geophytes	Oak, black	>30'	No			
Level	Mugwort	<5'	Yes			
Dry/Moist	Knotweed, Virginia	<5'	No			
	Slippery elm	5'-30'	No			

**Comments:**

This is a closed forest unit on the eastern side of the park that has some very old locust and oak trees and a relatively bare understory. There is a very big chestnut oak tree in this unit, also some English ivy, Virginia creeper, spicebush, tuliptree and Norway maple trees. There is some jewelweed on the edge of the footpath.

**Unit:** 15      **Date of Visit:** 7/9/2012      **Species Composition Changing:** No  
**Acreage:** 0.51      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a3

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Jewelweed	<5'	No	Fence	Foot traffic	
Deciduous	Knotweed, Virginia	<5'	No			
Hemicryptophyte	Mustard, garlic	<5'	Yes			
Level	Violet	<5'	No			
Moist						

**Comments:**

This is a small herbaceous unit dominated by jewelweed and knotweed on the eastern side of the park that has the path running in the middle of it. On the southern end it connects to the fence and Wave Hill grounds.

**Unit:** 16      **Date of Visit:** 7/9/2012      **Species Composition Changing:** No  
**Acreage:** 0.12      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a4

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Ivy, English	5'-30'	Yes		Foot traffic	
Deciduous	Locust, black	>30'	Yes			
Geophytes	Norway maple	>30'	Yes			
Level	Aster, New York	<5'	No			
Dry/Moist	Knotweed, Virginia	<5'	No			
	Oak, black	<5'	No			

**Comments:**

This is a black locust woodland unit with an understory dominated by English ivy. Other species include: false solomon seal, garlic mustard and swamp white oak.

**Unit:** 17                      **Date of Visit:** 7/9/2012                      **Species Composition Changing:** No  
**Acreage:** 0.88                      **Management Concern:** No                      **Community Structure Changing:** No  
**Classification:** IB2a4

<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	Restoration		
Deciduous	Oak, black	>30'	No			
Geophytes	Norway maple	30	Yes			
Level	Yellowwood	all	No			
Dry/Moist	Mulberry, paper	all	Yes			

**Comments:**

This is a closed forest dominated by large canopy trees with a short herbaceous understory just north of the pine stand. Dominant overstory species include black locust, Norway maple and black and red oaks. There is also a reforestation planting within this unit. Other species in the unit include jewelweed, dogwood, honeysuckle bush, arrowwood viburnum, multiflora rose, white wood aster, foxtail, English ivy, Virginia creeper, Virginia knotweed, garlic mustard, wineberry and white avens.

**Unit:** 18                      **Date of Visit:** 7/10/2012                      **Species Composition Changing:** No  
**Acreage:** 0.09                      **Management Concern:** No                      **Community Structure Changing:** No  
**Classification:** IB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Norway maple	>30'	Yes	Fence	Foot traffic	
Deciduous	Sugar maple	>30'	No	Road		
Phanerophytes	Locust, black	>30'	Yes			
Level	Oak, black	>30'	No			
Dry/Moist	Pokeweed	<5'	No			
	Honeysuckle, bush	5'-30'	Yes			

**Comments:**

This is a closed forest unit on the northwest side of the parking lot in the middle of the northern part of the park. Other species in the unit include: sycamore maple, slippery elm, Ailanthus, white mulberry, Virginia creeper, black cherry, green ash, Virginia knotweed, smartweed, multiflora rose, mugwort and wineberry.

**Unit:** 19      **Date of Visit:** 7/10/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.10      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IVA3a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Jewelweed	<5'	No	Fence	Foot traffic	Soil compaction
Deciduous	Bush honeysuckle	<5' & >30'	Yes			
Therophytes	Pokeweed	<5' & >30'	No			
Level	Porcelainberry	<5'	Yes			
Dry/Moist	Sycamore maple	<5'	Yes			
	Burdock, common	<5'	No			

**Comments:**

This is a disturbed herbaceous unit just west of the parking lot fence. This unit is dominated by bush honeysuckle, pokeweed, mugwort, jewelweed and porcelainberry. It is a management concern because of the invasives. Other species in the unit include: mugwort, common rush, jewelweed, bush honeysuckle, lamb's quarters, sycamore maple, oriental bittersweet, plantain, porcelainberry, white wood aster, burdock, spicebush.

**Unit:** 20      **Date of Visit:** 7/10/2012      **Species Composition Changing:** No  
**Acreage:** 1.03      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a6

<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	Road	Foot traffic	Soil compaction
Deciduous	Norway maple	>30'	Yes	Fence		
Lianas	Sycamore maple	5'-30'	Yes			
Level	Spicebush	5'-30'	No			
Dry/Moist	Oak, black	5'-30'	No			
	Pokeweed	<5'	No			

**Comments:**

This is a closed forest unit on the south side of the parking lot close to the intersection of Spaulding Lane and Palisade Avenue. This is a disturbed unit which includes an entrance to the park, and a culvert and drainage runoff and three trails that intersect. The overstory is mostly black locust and Norway maple with a variable understory including: New York aster, arrowwood, porcelainberry, wineberry, English ivy, Virginia knotweed, Virginia creeper, jewelweed, clover, poison ivy, devil's beggar ticks, white wood aster, bush honeysuckle, tulip, river grape and buckthorn.



**Unit:** 21                      **Date of Visit:** 7/10/2012                      **Species Composition Changing:** No  
**Acreage:** 0.22                      **Management Concern:** No                      **Community Structure Changing:** No  
**Classification:** VCD

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scarcely	Stiltgrass, japanese	<5'	Yes	Road	Vehicle	
Deciduous	Knotweed, Japanese	<5'	Yes	Fence		
Hemicryptophyte	Porcelainberry	<5'	Yes			
Level	Virginia creeper	<5'	No			
Dry	Pokeweed	<5'	No			
	Locust, black	<5'	No			

**Comments:**

This is a scarcely vegetated unit which contains the water pumping station and the surrounding fence and parking lot. Some trees overhang into the unit but no trees grow within it. On the eastern boarder lies a large mowed grass field. Other species include: smartweed, periwinkle, plantain, Japanese stilt grass, Japanese knotweed, Virginia creeper, pokeweed, porcelainberry, black locust and sycamore maple.

**Unit:** 22                      **Date of Visit:** 7/10/2012                      **Species Composition Changing:** No  
**Acreage:** 1.05                      **Management Concern:** No                      **Community Structure Changing:** No  
**Classification:** IB2a6

<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		Foot traffic	
Deciduous	Sycamore maple	>30'	Yes			
Lianas	Norway maple	>30'	Yes			
Slope	Ivy, English	<5'	Yes			
Dry/Moist	Bush honeysuckle	5'-30'	Yes			
	Ivy, poison	<5'	No			

**Comments:**

This is a closed forest dominated with oak, sycamore and Norway maple with an understory dominated with English ivy, bush honeysuckle and poison ivy. The English and poison ivy are creeping up into the mature canopy. This unit borders the fence along Palisade Avenue. Species include: poison ivy, porcelainberry, black locust, bush honeysuckle, Norway maple, violet, pin oak, burdock, red oak, sycamore maple, English ivy, poison ivy, spicebush, tulip tree, Virginia creeper, Oak, Japanese knotweed, yellowwood, and white oak.

**Unit:** 23                      **Date of Visit:** 6/20/2012                      **Species Composition Changing:** No  
**Acreage:** 0.22                      **Management Concern:** Yes                      **Community Structure Changing:** No  
**Classification:** IIB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Norway maple	>30'	Yes	Other	Foot traffic	Soil compaction
Deciduous	Sugar maple	>30'	No			
Phanerophytes	Ash, white	>30'	No			
Level	Mulberry, white	>30'	Yes			
Dry/Moist	Jewelweed	<5'	No			
	Knotweed, Japanese	<5'	Yes			

**Comments:**

This is a disturbed woodland unit alternating between mixes of invasive maples and native trees with a mosaic of herbs including jewelweed and knotweed and garlic mustard. Bordered by active trail and located under telephone lines and just north of the DEP pump station. The overstory is dominated by Sycamore maple, tulip tree, white pine, sugar maple and white mulberry. Other species include: bush honeysuckle, sycamore maple, dock, wineberry, pokeweed and black cherry.

**Unit:** 24                      **Date of Visit:** 6/20/2012                      **Species Composition Changing:** No  
**Acreage:** 0.18                      **Management Concern:** Yes                      **Community Structure Changing:** No  
**Classification:** IB1a1

<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	>30'	Yes	Fence	Foot traffic	Soil compaction
Mixed	Tulip tree	>30'	No		Other	Dumping
Phanerophytes	Pine, white	>30'	No			
Level	Sugar maple	>30'	No			
Dry	Mulberry, white	>30'	Yes			
	Ash, white	5'-30'	No			

**Comments:**

This is a closed forest dominated by maples and tulip tree bordered by fence and active trail near trail head. The understory contains a mix of native and invasive herbs, including Japanese knotweed and Asiatic day flower. There has been dumping of brush and mulch. Management concern for the future is the abundance of sycamore maples, other invasives and dumping of mulch. Other species in the unit include white snakeroot, paper mulberry, black locust, Virginia creeper, pokeweed, red oak, and white pine.

**Unit:** 25      **Date of Visit:** 7/10/2012      **Species Composition Changing:** No  
**Acreage:** 0.88      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a4

<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'	No	Fence		
Deciduous	Norway maple	>30'	Yes			
Geophytes	Sycamore maple	5'-30'	Yes			
Level	Locust, black	>30'	Yes			
Dry/Moist	Knotweed, Virginia	<5'	No			
	Mustard, garlic	<5'	Yes			

**Comments:**

This is a mature forest dominated by Norway and sycamore maple and a very large red oak. The understory is bare with some scattered native and invasive plants. It is located between the fence adjacent to Palisade Avenue. There is a trail in this unit and there are a lot of fallen trees and branches making it at risk for invasive species encroachment because the unit is bordering a patch of invasive plants next to the fence.

**Unit:** 26      **Date of Visit:** 7/10/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.30      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IIB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Norway maple	>30'	Yes	Planting		
Deciduous	Locust, black	>30'	Yes			
Phanerophytes	Porcelainberry	<5'	Yes			
Level	Oak, swamp white	>30'	No			
Dry/Moist	Oak, black	<5'	No			
	Knotweed, Virginia	<5'	No			

**Comments:**

This is a disturbed woodland unit dominated by Norway maple and black locust with porcelainberry in the understory. This unit runs along the fence along Palisade Avenue and is bordered at the other end by a mature healthy forest with little understory. Other species in the unit include: wineberry, garlic mustard, bittersweet nightshade, red oak, Virginia creeper, burdock, Japanese knotweed. There is a reforestation planting within this unit.

**Unit:** 27      **Date of Visit:** 7/10/2012      **Species Composition Changing:** No  
**Acreage:** 1.02      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a3

<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	Norway maple	>30'	Yes			
Hemicryptophyte	Devil's beggarticks	<5'	No			
Level	Porcelainberry	<5'	Yes			
Dry/Moist	Virginia creeper	<5'	No			
	Ivy, poison	<5'	No			

**Comments:**

A forested area with old emergent black locust and younger Norway maple in the midstory. The unit is located close to the railroad tracks. Other species in the unit include: false solomon's seal, smartweed, Virginia knotweed, enchanter's nightshade, English ivy and pokeweed.

**Unit:** 28      **Date of Visit:** 7/10/2012      **Species Composition Changing:** No  
**Acreage:** 1.00      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a4

<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	>30'	Yes			
Deciduous	Red maple	5'-30'	No			
Geophytes	Oak, black	>30'	No		Foot traffic	Soil compaction
Level	Spicebush	5'-30'	No			
Dry/Moist	Mustard, garlic	<5'	Yes			
	Ivy, poison	<5'	No			

**Comments:**

This is a closed forest unit dominated by Norway maple, red maple and mixed oak and continues on both sides on of a trail. The understory is patchy with both dense and bare areas and includes spicebush, garlic mustard, Virginia knotweed, and poison ivy. Other species include: magnolia.



**Unit:** 29      **Date of Visit:** 7/10/2012      **Species Composition Changing:** No  
**Acreage:** 0.72      **Management Concern:** No      **Community Structure Changing:** Yes  
**Classification:** IB2a3

<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	Sassafras	all	No			
Hemicryptophyte	Aster, white wood	<5'	No			
Level	Knotweed, Virginia	<5'	No			
Dry/Moist	Norway maple	<5'	Yes			
	Ivy, English	<5'	Yes			

**Comments:**

This is a small area along the walking path with large black oaks in the overstory. The midstory is dominated by a dense grove of regenerating sassafras trees. The understory is herbaceous, but not robust due to the dense sassafras. Other species include: wineberry, English ivy, sycamore maple, Norway maple, red oak, Virginia knotweed, poison ivy, mugwort and white wood aster.

**Unit:** 30      **Date of Visit:** 7/10/2012      **Species Composition Changing:** No  
**Acreage:** 0.19      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** VIIA1b2

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Aquatic (fresh)	Cattails, common	5'-30'	No			
Deciduous	Devil's beggarticks	<5'	No			
Hydrophytes	Silver maple	<5'	No			
Level	Jewelweed	<5'	No			
Moist	Pickereelweed	<5'	No			

**Comments:**

This is Alderbrook wetland located on the western side of the park close to the railroad tracks. It consists of a patch of cattail and a patch of bare soil. There is a CSO drainage pipe on the west side of the unit draining to the Hudson River.

**Unit:** 31                      **Date of Visit:** 7/10/2012                      **Species Composition Changing:** No  
**Acreage:** 0.21                      **Management Concern:** No                      **Community Structure Changing:** No  
**Classification:** IB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Red maple	>30'	No			
Deciduous	Silver maple	>30'	No			
Phanerophytes	Apple, crab	5'-30'	No			
Slope	Dogwood spp.	5'-30'	No			
Dry/Moist	Viburnum, arrowwood	<5'	No			
	Jewelweed	<5'	No			

**Comments:**

This is a closed forest unit dominated by red and silver maple and located on the western side of the park. There is a small wetland in this area and it is bordered by the railroad tracks. Other species in the unit include: slippery elm, garlic mustard, bush honeysuckle, Japanese knotweed, wood sorrel, devil's beggar ticks and poison ivy.

**Unit:** 32                      **Date of Visit:** 7/10/2012                      **Species Composition Changing:** Yes  
**Acreage:** 0.14                      **Management Concern:** Yes                      **Community Structure Changing:** Yes  
**Classification:** IB2a3

<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			
Deciduous	Red maple	5'-30'	No			
Hemicryptophyte	Knotweed, Japanese	<5'	Yes			
Level	Mustard, garlic	<5'	Yes			
Moist						

**Comments:**

This unit is a closed forest on the western edge of the park dominated by silver maple and red maple with a mostly bare understory and some patches of Japanese knotweed that are growing in small areas.

**Unit:** 33      **Date of Visit:** 7/10/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.94      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IB2a4

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Locust, black	>30'	Yes		Foot traffic	
Deciduous	Knotweed, Japanese	<5'	Yes			
Geophytes	Jewelweed	<5'	No			
Level	Pokeweed	<5'	No			
Dry/Moist	Viburnum, mapleleaf	<5'	No			
	Aster, white wood	<5'	No			

**Comments:**

This woodland unit is along the north side of the foot path going towards the Hudson river. It is an open area with large black locust trees. Other species in the unit include: arrowwood viburnum, poa grass, enchanter's nightshade, mugwort, slippery elm, black cherry, clover, porcelainberry and rush.

**Unit:** 34      **Date of Visit:** 6/20/2012      **Species Composition Changing:** No  
**Acreage:** 0.31      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IIB1a

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Sycamore maple	>30'	Yes		Foot traffic	Soil compaction
Mixed	Norway maple	>30'	Yes		Other	
Phanerophytes	Ash, green	5'-30'	No			
Level	Tulip tree	5'-30'	No			
Dry/Moist	Dogwood spp.	5'-30'	No			
	Jewelweed	5'-30'	No			

**Comments:**

This is a woodland consisting of sycamore maples and Norway maples with emergent tulip and ash trees. Understory is dominated by jewelweed and a mix of invasive plants including Japanese knotweed, garlic mustard, porcelainberry, and mugwort. Area borders active biking/walking/dog trail. Other plants in the unit include: green twig dogwood, slippery elm, broad leaf dock, wineberry, elderberry and white oak.

**Unit:** 35                      **Date of Visit:** 7/11/2012                      **Species Composition Changing:** No  
**Acreage:** 0.52                      **Management Concern:** Yes                      **Community Structure Changing:** No  
**Classification:** VIIIB

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Porcelainberry	<5'	Yes			
Deciduous	Multiflora rose	<5'	Yes	Fence		
Lianas	Honeysuckle vine	<5'	Yes			
Slope	Oriental bittersweet	<5'	Yes			
Dry/Moist	Honeysuckle, bush	5'-30'	Yes			
	Ivy, poison	<5'	No			

**Comments:**

This is a large, dense vineland, reaching ten feet of vertical growth. This area was so dense it was impassable at the time of the survey. This vineland is dominated by bush honeysuckle, multiflora rose, vine honeysuckle, oriental bittersweet and poison ivy. Management concern here is controlling this invasive vineland. This unit is located along the train tracks near the southern border of the northern half of the park.

**Unit:** 36                      **Date of Visit:** 7/11/2012                      **Species Composition Changing:** No  
**Acreage:** 1.42                      **Management Concern:** No                      **Community Structure Changing:** No  
**Classification:** IB2a3

<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	>30'	No			
Deciduous	Tulip tree	>30'	No			
Hemicryptophyte	Norway maple	>30'	Yes			
Slope	Viburnum, arrowwood	<5'	No			
Dry/Moist	Honeysuckle, bush	<5'	Yes			
	Oak, pin	<5' & >30'	No			

**Comments:**

This is a wide unit that starts from the Palisade Avenue extending across the park. The unit is a healthy forest dominated by oak and tulip tree with a few Norway maple and is adjacent to a very dense vineland. There is a built stone stream bed with no water that ends before the train tracks at the eastern edge of the park. Other species in the unit include: jetbead, black locust, bush honeysuckle, Japanese maple, green ash, poison ivy, garlic mustard, red oak, English ivy and enchanter's nightshade.



**Unit:** 37      **Date of Visit:** 7/11/2012      **Species Composition Changing:** No  
**Acreage:** 0.07      **Management Concern:** Yes      **Community Structure Changing:** No  
**Classification:** IIB2a4

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Locust, black	>30'	Yes	Road	Other	
Deciduous	Cherry, black	5'-30'	No			Trash
Geophytes	Barberry, Japanese	5'-30'	Yes			
Slope	Ash, green	5'-30'	No			
Dry	Ivy, English	<5'	Yes			
	Pokeweed	<5'	No			

**Comments:**

This is a black cherry and black locust woodland unit and is located along the fence bordering the railroad tracks. There is a big piece of concrete on the slope and three concrete manholes that have 2012 graffiti on them. This unit is currently used as a hangout spot there is a trail leading up to a concrete stage with a clear view of the Hudson river. Other species in the unit include: mugwort, porcelainberry and oriental bittersweet.

**Unit:** 38      **Date of Visit:** 7/11/2012      **Species Composition Changing:** No  
**Acreage:** 0.71      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a3

<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	>30'	No		Foot traffic	
Deciduous	Planetree, London	>30'	Yes			
Hemicryptophyte	Oak, red	>30'	No			
Level	Sycamore maple	5'-30'	Yes			
Dry/Moist	Norway maple	5'-30'	Yes			
	Mustard, garlic	<5'	Yes			

**Comments:**

This is closed forest with mature red and black oak as well as two very old London plane trees towards the end on the western side. The understory is bare and it looks very similar to adjacent units. Other species in the unit include: Virginia knotweed, jewelweed, crab apple and arrowwood viburnum.

**Unit:** 39      **Date of Visit:** 7/11/2012      **Species Composition Changing:** No  
**Acreage:** 0.15      **Management Concern:** Yes      **Community Structure Changing:** No  
**Classification:** IB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Cottonwood, Eastern	all	No			
Deciduous	Norway maple	all	Yes			
Phanerophytes	Hickory, bitternut	all	No			
Undulating	Horsechestnut	>30'	No			
Dry/Moist	Honeysuckle, Amur	<5'	Yes			
	Multiflora rose	<5'	Yes			

**Comments:**

This unit just north of the vineland and on the western boarder of the park. It is characterized by large hickory and cottonwood. One of the hickory trees seems to be diseased. Species include: English ivy, multiflora rose, Norway maple, sycamore maple, poison ivy, dogwood, Virginia knotweed, garlic mustard, wood sorrel, black oak, arrowwood viburnum, bush honeysuckle, false solomon's seal and poison ivy.

**Unit:** 40      **Date of Visit:** 7/11/2012      **Species Composition Changing:** No  
**Acreage:** 1.25      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Oak, black	>30'	No	Road	Foot traffic	
Deciduous	Locust, black	>30'	Yes			
Phanerophytes	Norway maple	5'-30'	Yes			
Slope	Devil's beggarticks	<5'	No			
Dry/Moist	Spicebush	<5'	No			
	Rush spp.	<5'	No			

**Comments:**

This unit is located on the western edge of the trail going down the slop towards the river. Other species in the unit include: Japanese maple, violet, garlic mustard, Virginia knotweed, pokeweed, Virginia creeper, white oak, bittersweet nightshade, English ivy, spicebush.

**Unit:** 41      **Date of Visit:** 7/11/2012      **Species Composition Changing:** No  
**Acreage:** 0.52      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IB2a1

<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	>30'	Yes	Restoration	Foot traffic	
Deciduous	Sugar maple	5'-30'	No			
Phanerophytes	Oak, white	5'-30'	No			
Level	Tulip tree	5'-30'	No			
Dry/Moist	Oak, red	5'-30'	No			
	Ash, green	5'-30'	No			

**Comments:**

This is a restoration planting area that encompasses both sides of the trail. Overstory includes Norway maple, sugar maple and oak. Understory includes planted tulip and oak. It is a management concern to maintain the reforestation plantings.

**Unit:** 42      **Date of Visit:** 7/11/2012      **Species Composition Changing:** No  
**Acreage:** 0.65      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Japanese maple	>30'	Yes			
Deciduous	Cherry, black	>30'	No			
Phanerophytes	Norway maple	>30'	Yes			
Level	Virginia creeper	<5'	No			
Dry/Moist	Rush spp.	<5'	No			
	Witch hazel	<5' & >30'	No			

**Comments:**

This unit is in the middle of the northern section of the park and includes a very old ornamental Japanese maple and a very old black cherry. A trail runs through this unit. There are some young horse-chestnut trees, poison ivy and which-hazel within, otherwise the understory is relatively bare.

**Unit:** 43      **Date of Visit:** 7/11/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.04      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IIB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Ailanthus	all	Yes		Foot traffic	
Deciduous	Woodland sunflower	<5'	No			
Phanerophytes	Mustard, garlic	<5'	Yes			
Slope	Virginia creeper	<5'	No			
Dry/Moist						

**Comments:**

This unit is a young ailanthus patch with garlic mustard, Virginia creeper and woodland sunflower in the understory.

**Unit:** 44      **Date of Visit:** 7/11/2012      **Species Composition Changing:** No  
**Acreage:** 0.23      **Management Concern:** Yes      **Community Structure Changing:** No  
**Classification:** IB2a4

<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	>30'	Yes			
Deciduous	Norway maple	5'-30'	Yes			
Geophytes	Locust, black	>30'	Yes			
Slope	Mustard, garlic	<5'	Yes			
Dry/Moist	Knotweed, Japanese	<5'	Yes			

**Comments:**

This is an oak, maple and locust forest on the steep slope heading towards the railroad tracks. The understory is relatively bare with some garlic mustard and Japanese knotweed colonizing in the understory.

**Unit:** 45      **Date of Visit:** 7/11/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.17      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IIB2a6

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Knotweed, Japanese	<5'	Yes			
Deciduous	Mustard, garlic	<5'	Yes			
Lianas	Norway maple	>30'	Yes			
Slope	Oak, black	>30'	No			
Dry/Moist	Locust, black	>30'	Yes			

**Comments:**

This unit is a patch of Japanese knotweed on the western side of the northern section of the park. This is a dense patch going downhill towards the river.

**Unit:** 46      **Date of Visit:** 7/11/2012      **Species Composition Changing:** No  
**Acreage:** 0.38      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Oak, black	>30'	Yes			
Deciduous	Locust, black	>30'	Yes			Foot traffic
Phanerophytes	Norway maple	<5' & >30'	Yes			
Slope	Sugar maple	<5' & >30'	No			
Dry/Moist	Mustard, garlic	<5'	Yes			
	Aster, New York	<5'	No			

**Comments:**

This unit is on a very steep slope going towards the Metro North Railroad tracks. Soil in the steepest parts is very loose and there is a lot of erosion and large fallen trees. There are a lot of regenerating sassafras in this unit. Other species in the unit include: Japanese honeysuckle, garlic mustard, poison ivy, Virginia creeper, Virginia knotweed, poa grass and chicory, false solomon seal and bush honeysuckle. In the eastern part of the unit there is a stone wall and more bare understory.

**Unit:** 47      **Date of Visit:** 7/23/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.60      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** VIIIA

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Porcelainberry	5'-30'	Yes			
Deciduous	Grape, fox	5'-30'	Yes			
Lianas	Rubus	<5'	Yes			
Slope	Ivy, English	<5'	Yes			
Dry/Moist	Mugwort	<5'	Yes			
	Jewelweed	<5'	No			

**Comments:**

This unit is an open vineland at the southern end of the northern part of the park dominated by porcelainberry. The vines are growing on the trees surrounding the unit and are very dense throughout this area. Other species include: pokeweed, poison ivy and bittersweet night shade.

**Unit:** 48      **Date of Visit:** 7/23/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.31      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IIB2a6

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Locust, black	>30'	Yes			Dumping
Deciduous	Norway maple	>30'	Yes			Trash
Lianas	Cherry, black	>30'	No			
Slope	Ivy, English	<5'	Yes			
Dry/Moist						

**Comments:**

This woodland unit is dominated by black locust and Norway maple and borders a house on the southern edge of the park at 232nd Street. English ivy is growing on many of the mature trees. Other species in the unit include: wild sunflower, Virginia creeper, ladies thumb, lambs quarters, white wood aster, ragweed, garlic mustard, wood sorrel, pokeweed, fox grape, porcelainberry, English ivy, false solomon seal, smartweed, mugwort, and Asiatic day flower.

**Unit:** 49                      **Date of Visit:** 7/27/2012                      **Species Composition Changing:** Yes  
**Acreage:** 0.52                      **Management Concern:** Yes                      **Community Structure Changing:** Yes  
**Classification:** IB2a6

<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'	No			
Deciduous	Hickory spp.	>30'	No			
Lianas	Locust, black	>30'	Yes			
Level	Sassafras	all	No			
Dry/Moist	Multiflora rose	<5'	Yes			
	Mustard, garlic	<5'	Yes			

**Comments:**

This unit is a closed forest dominated by mature tulip tree with a multiflora rose understory. Other species in the unit include: white mulberry, Japanese maple, slippery elm, black cherry, Norway maple, poison ivy, porcelainberry, wineberry, spicebush, Virginia creeper, Japanese honeysuckle and oriental bittersweet.

**Unit:** 50                      **Date of Visit:** 7/27/2012                      **Species Composition Changing:** No  
**Acreage:** 0.15                      **Management Concern:** Yes                      **Community Structure Changing:** Yes  
**Classification:** IVA3a5

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Mustard, garlic	<5'	Yes			Trash
Deciduous	Honeysuckle, bush	5'-30'	Yes			Dumping
Hemicryptophyte	Norway maple	5'-30'	Yes			
Depression	Nightshade, enchanter's	<5'	No			
Dry/Moist						

**Comments:**

This is a small herbaceous unit with a lot of trash and dumping. This unit is dominated by garlic mustard, bush honeysuckle and scattered Norway maple. Porcelainberry is just starting to emerge. This is a management concern because of the invasive species. Other species in the unit include, pokeweed, black locust, garlic mustard, porcelainberry and poison ivy.

**Unit:** 51      **Date of Visit:** 7/23/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.27      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IIB2a6

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Tulip tree	>30'	No	Other		
Deciduous	Hickory	5'-30'	No			Trash
Lianas	Porcelainberry	<5'	Yes			Dumping
Slope	Multiflora rose	<5'	Yes			
Dry/Moist	Oriental bittersweet	<5'	Yes			
	Ivy, poison	<5'	No			

**Comments:**

This woodland unit is in the southwestern edge of the park bordered by the metro north rail road. There is a big dead tulip tree snag that has allowed a small area of open vineland to proliferate. Other species in the unit include: black cherry, mugwort, smartweed, Queen Ann's lace, large-leaved aster, ragweed, bush honeysuckle, mullen and Asiatic day flower.

**Unit:** 52      **Date of Visit:** 7/23/2012      **Species Composition Changing:** No  
**Acreage:** 0.26      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Oak, red	>30'	Yes	Road	Foot traffic	Erosion
Deciduous	Sugar maple	5'-30'	No			
Phanerophytes	Hickory, spp.	5'-30'	No			
Slope	Birch, black	all	No			
Dry/Moist						

**Comments:**

This unit is located on a very steep slope bordering the west side of the park. It is a healthy forest with some stinging nettle, horsetail, Norway maple, false solomon's seal, poison ivy and black oak. There is one large black cherry snag present in this unit.



**Unit:** 53                      **Date of Visit:** 7/23/2012                      **Species Composition Changing:** No  
**Acreage:** 1.02                      **Management Concern:** No                      **Community Structure Changing:** Yes  
**Classification:** IB2a1

<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'	No			
Deciduous	Tulip tree	>30'	No			
Phanerophytes	Hickory, bitternut	<5' & >30'	No			
Undulating	Sassafras	<5' & >30'	No			
Dry/Moist	Cherry, black	<5' & >30'	No			
	Norway maple	<5' & >30'	Yes			

**Comments:**

This unit is characterized mainly by very large red oak and large tulip trees in the over story and a thick understory of young sassafras and bitternut hickory. The unit is in the center of the park and extends downhill to the western end of the park. Other species include: black locust, enchanter's nightshade, blackberry, garlic mustard, white snake root, oriental bittersweet, hickory, Virginia creeper, false solomon's seal, poison ivy, spicebush, and Norway maple.

**Unit:** 54                      **Date of Visit:** 7/23/2012                      **Species Composition Changing:** Yes  
**Acreage:** 0.91                      **Management Concern:** Yes                      **Community Structure Changing:** Yes  
**Classification:** IB2a3

<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	>30'	No			
Deciduous	Norway maple	5'-30'	Yes			
Hemicryptophyte	Hickory, bitternut	30	No			
Undulating	Tulip tree	5'-30'	No			
Dry/Moist	Slippery elm	5'-30'	No			
	Mustard, garlic	<5'	Yes			

**Comments:**

This unit is directly accessible from an entrance in the fence and is characterized by a large amount of wind damage. There are many black locusts and Norway maples which have blown over causing many small patches of open area. Other species include: bush honeysuckle, poison ivy, multiflora rose, false solomon's seal, white mulberry, slippery elm, enchanter's nightshade, black locust, Norway maple, mugwort, poke weed, stinging nettle, garlic mustard, English ivy, and Virginia creeper.

**Unit:** 55                      **Date of Visit:** 7/23/2012                      **Species Composition Changing:** No  
**Acreage:** 0.77                      **Management Concern:** Yes                      **Community Structure Changing:** Yes  
**Classification:** IIB2a6

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Oak, red	>30'	No			Trash
Deciduous	Hickory, pignut	all	No			
Lianas	Multiflora rose	5'-30'	Yes			
Level	Honeysuckle, bush	5'-30'	Yes			
Dry/Moist	Norway maple	5'-30'	Yes			
	Mustard, garlic	<5'	Yes			

**Comments:**

This unit is a mature oak and hickory forest with some black locust storm debris from several years ago. The understory is blanketed by multiflora rose in most of the unit. Other species include: sassafras, tulip tree, Virginia creeper, spicebush, dogwood, red oak, jewelweed, multiflora rose, Norway maple, hickory, black cherry, garlic mustard, and poison ivy.

**Unit:** 56                      **Date of Visit:** 6/20/2012                      **Species Composition Changing:** No  
**Acreage:** 1.20                      **Management Concern:** No                      **Community Structure Changing:** No  
**Classification:** IB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Norway maple	>30'	Yes		Foot traffic	Soil compaction
Deciduous	Sugar maple	>30'	No			
Phanerophytes	Cherry, black	>30'	No			
Level	Oak, pin	>30'	No			
Dry/Moist	Ash, white	5'-30'	No			
	Japanese maple	>30'	Yes			

**Comments:**

This unit is a closed forest dominated by Norway maple. Other overstory species include sugar maples, black cherry, ash, pin oak and ornamental Japanese maple. The understory is dominated by Virginia creeper and garlic mustard. Emergent tulip trees are also present. The unit is bordered by actively used trail.

**Unit:** 57      **Date of Visit:** 7/24/2012      **Species Composition Changing:** No  
**Acreage:** 0.20      **Management Concern:** Yes      **Community Structure Changing:** No  
**Classification:** VCD

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Scarcely	Grape, fox	<5'	No	Road	Other	Trash
Deciduous	Jewelweed	<5'	No	Fence		
Lianas	Porcelainberry	<5'	Yes			
Level	Smartweed	<5'	Yes			
Dry	Plantain, common	<5'	No			
	Wineberry	<5'	Yes			

**Comments:**

This unit is a scarcely vegetated water pumping station on the eastern edge of the park surrounded by a fence on all four sides. This unit partially encompasses a active restoration area. The residual vegetation is under two feet tall and consists of grape vine, porcelainberry, Virginia creeper, yellow wood sorrel, jewelweed, porcelainberry, mugwort, false solomon seal, Asiatic dayflower, smartweed and burdock.

**Unit:** 58      **Date of Visit:** 7/30/2012      **Species Composition Changing:** No  
**Acreage:** 0.01      **Management Concern:** Yes      **Community Structure Changing:** No  
**Classification:** VIID

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Porcelainberry	<5'	Yes			
Deciduous	Jewelweed	<5'	No			
Lianas						
Undulating						
Dry/Moist						

**Comments:**

This unit is an invasive porcelainberry vineland with some jewelweed. This is on the western edge of the park and adjacent to healthy forested areas making it a management concern.

**Unit:** 59                      **Date of Visit:** 7/24/2012                      **Species Composition Changing:** No  
**Acreage:** 0.71                      **Management Concern:** Yes                      **Community Structure Changing:** Yes  
**Classification:** IVA3a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Locust, black	>30'	Yes			
Deciduous	Norway maple	>30'	Yes			
Geophytes	Red maple	<5' & >30'	No			
Level	Oak, red	>30'	No			
Dry/Moist	Jewelweed	<5'	No			
	Knotweed, Virginia	<5'	No			

**Comments:**

This unit is located in the southern section of the park just north and surrounding the DEP pump station. The area has herbicide sprayed recently to treat porcelainberry and other invasives. There are some white pine trees close to the pump station fence that are not healthy and are covered in vines. Other species in the unit include: pokeweed, jewelweed, Virginia creeper, false solomon's seal, clover, plantain, Japanese and bush honeysuckle, porcelainberry, hickory, smartweed, white mulberry, fox grape and garlic mustard.

**Unit:** 60                      **Date of Visit:** 7/30/2012                      **Species Composition Changing:** Yes  
**Acreage:** 0.04                      **Management Concern:** Yes                      **Community Structure Changing:** Yes  
**Classification:** VIIIA

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Multiflora rose	<5'	Yes			
Deciduous	Oriental bittersweet	<5'	Yes			
Lianas	Ivy, poison	<5'	No			
Slope	Sassafras	5'-30'	No			
Dry/Moist	Porcelainberry	<5'	Yes			

**Comments:**

A small gap in the canopy colonized by vines. There is a large black cherry snag covered in poison ivy. Other dominant species include multiflora rose, oriental bittersweet, sassafras and porcelainberry.

**Unit:** 61      **Date of Visit:** 7/30/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.28      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** VIID

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Porcelainberry	all	Yes			
Deciduous	Oriental bittersweet	all	Yes			Trash
Lianas	Honeysuckle bush	5'-30'	Yes			
Slope	Pokeweed	<5'	No			
Dry/Moist	Mulberry, white	5'-30'	Yes			
	Mugwort	<5'	Yes			

**Comments:**

This is a big vineland that starts from the trail and goes down the slope towards the railroad. There are very tall oriental bittersweet and porcelainberry in this unit, there is also some Japanese knotweed.

**Unit:** 62      **Date of Visit:** 7/23/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.45      **Management Concern:** No      **Community Structure Changing:** Yes  
**Classification:** IIB2a4

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Planetree, London	5'-30'	Yes	Restoration		
Deciduous	Oak, white	5'-30'	No			Trash
Geophytes	Red maple	5'-30'	No			
Level	Tulip tree	5'-30'	No			
Dry/Moist	Pokeweed	5'-30'	No			
	Knotweed, Virginia	<5'	No			

**Comments:**

This unit is a woodland unit with some saplings from a reforestation planting. Most of the planted trees are healthy, however there is some tall jewelweed, porcelainberry and pokeweed that are surrounding the seedlings. This unit is located oh the south side of the DEP station.

**Unit:** 63                      **Date of Visit:** 7/23/2012                      **Species Composition Changing:** No  
**Acreage:** 0.49                      **Management Concern:** No                      **Community Structure Changing:** No  
**Classification:** IB2a3

<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	Norway maple	>30'	Yes			
Hemicryptophyte	Cherry, black	<5' & >30'	No			
Undulating	Bush honeysuckle	<5'	Yes			
Dry/Moist	Pokeweed	<5'	No			
	Mustard, garlic	<5'	Yes			

**Comments:**

Mostly black locust canopy with a few smaller black cherry and a few large Norway maples. This unit lies north of the pump house along the eastern fence and into the park. Some parts have a bare understory. An entrance to the park is located in this unit. Other species in the unit include jewelweed, white wood aster, Virginia knotweed and dogwood spp.

**Unit:** 64                      **Date of Visit:** 7/30/2012                      **Species Composition Changing:** No  
**Acreage:** 0.28                      **Management Concern:** Yes                      **Community Structure Changing:** No  
**Classification:** VIIIA

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Porcelainberry	<5'	Yes			
Deciduous	Oriental bittersweet	<5'	Yes			
Lianas	Multiflora rose	<5'	Yes			
Undulating	Honeysuckle bush	5'-30'	Yes			
Dry/Moist	Grape, fox	<5'	No			
	Ivy, poison	<5'	No			

**Comments:**

This unit is a large invasive vineland dominated by porcelainberry, oriental bittersweet and multiflora rose. Other species in this unit include: black cherry, wine berry, black locust, hickory and sassafras. This area is in need of management to control the invasive vines.

**Unit:** 65      **Date of Visit:** 7/30/2012      **Species Composition Changing:** No  
**Acreage:** 0.57      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a3

<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	>30'	No		Foot traffic	
Deciduous	Oak, white	>30'	No			
Hemicryptophyte	Cherry, black	5'-30'	No			
Level	Cherry, black	5'-30'	No			
Moist	Hickory, bitternut	5'-30'	No			
	Birch, black	5'-30'	No			

**Comments:**

This unit is a mostly native closed forest with healthy understory located on the western end of the park. Other species in the unit include: porcelainberry, sassafras, multiflora rose, Norway maple, snakeroot, pignut hickory, maple leaf viburnum and poison ivy.

**Unit:** 66      **Date of Visit:** 7/23/2012      **Species Composition Changing:** No  
**Acreage:** 1.57      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IB2a3

<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	Planting		Trash
Deciduous	Locust, black	>30'	Yes	Restoration		Dumping
Hemicryptophyte	Norway maple	>30' & 5-30'	Yes			
Undulating	Mulberry, paper	<5'	Yes			
Moist	Oak, red	<5'	No			
	Oak, white	<5'	No			

**Comments:**

This unit is dominated by eastern cottonwoods with an understory that is relatively bare in some parts and covered by porcelainberry. The closer to the west side fence the vines become more abundant along with jewelweed, porcelainberry and fox grape. Other species in the unit include: violet, enchanter's nightshade, spicebush, yellowwood sorrel, Virginia knotweed, jetbead, white pine, porcelainberry, poke weed, Virginia creeper, clover, fox grape, mugwort and witch-hazel.

**Unit:** 67      **Date of Visit:** 7/25/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.29      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IVA3a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Pokeweed	<5'	No	Planting		
Deciduous	Giant ragweed	<5'	Yes	Restoration		
Geophytes	Oak, red	<5'	No	Fence		
Undulating	Tulip tree	<5'	No			
Dry/Moist						

**Comments:**

This unit contains a reforestation planting with a variety of oaks and some tulip trees. This planting area is being taken over by pokeweed and giant ragweed. This unit is located in the southern section of the park on the east side.

**Unit:** 68      **Date of Visit:** 7/25/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.58      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IB2a3

<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	Planting		
Deciduous	Norway maple	>30'	Yes	Restoration		
Hemicryptophyte	Cherry, black	5'-30'	No			
Undulating	Oak, white	<5'	No			
Dry/Moist	Oak, red	<5'	No			
	Hog peanut	<5'	No			

**Comments:**

This is a reforestation area on the eastern side of the park between the fence and the trail. This is a closed forest with a black locust and Norway maple canopy with a relatively bare understory. There are white, black and red oaks planted as well as tulip tree and serviceberry. There is some black locust seedlings emerging among the native trees. Other species in the unit include: porcelainberry, pokeweed, garlic mustard, bush honeysuckle and Virginia knotweed.



**Unit:** 69                      **Date of Visit:** 7/24/2012                      **Species Composition Changing:** Yes  
**Acreage:** 0.02                      **Management Concern:** Yes                      **Community Structure Changing:** Yes  
**Classification:** IVA3a2

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland	Porcelianberry	<5' & 5-30'	Yes	Road		
Deciduous	Sumac, staghorn	5'-30'	Yes			
Lianas	Grape, fox	<5'	No			
Slope	Oriental bittersweet	<5'	Yes			
Dry/Moist						

**Comments:**

This is a vineland unit with some scattered staghorn sumac that slopes towards the railroad tracks. All of the staghorn sumac is covered with porcelainberry, grape and oriental bittersweet. Other species in the unit include: Virginia creeper, pokeweed, Queen Ann's lace and garlic mustard.

**Unit:** 70                      **Date of Visit:** 7/25/2012                      **Species Composition Changing:** No  
**Acreage:** 6.99                      **Management Concern:** No                      **Community Structure Changing:** No  
**Classification:** IB2a3

<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	>30'	No		Foot traffic	
Deciduous	Oak, red	>30'	No			
Hemicryptophyte	Tulip tree	all	No			
Undulating	Birch, black	all	No			
Dry/Moist	Cherry, black	all	No			
	Viburnum, mapleleaf	<5'	No			

**Comments:**

This is a very large unit encompassing the top half of the southern section of the park with the exception of the edge. A heavily used path runs in the middle of this unit. It is a mature oak forest with a mostly native understory and scattered native midstory. This is a relatively healthy forest containing a mosaic of native oak, cherry, black birch and hickory, shrubs including mapleleaf and arrowwood viburnum, some spicebush and herbaceous communities including aster, goldenrod, poison ivy, fern, true and false solomon's seal, and Virginia creeper. While there are invasive plants present in this unit most of them appear to be controlled. The overall composition is the same throughout this unit there are slight variations in places for example, tulip trees were most common in the midstory at the south and middle of this unit tulip however towards the northern end of this unit black birches were more common in the midstory. Other species in the unit include: swamp white oak, black locust, sensitive fern, pignut hickory, smartweed, devil's beggarticks, enchanters nightshade, pokeweed, porcelainberry, sumac, sassafras, snakeweed, oriental bittersweet, poison ivy, Rubus spp. and smilax.

**Unit:** 71                      **Date of Visit:** 7/25/2012                      **Species Composition Changing:** No  
**Acreage:** 0.19                      **Management Concern:** Yes                      **Community Structure Changing:** No  
**Classification:** IIB2a6

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Oak, red	>30'	No	Road	Foot traffic	
Deciduous	Norway maple	>30'	Yes			
Lianas	Hickory, bitternut	5'-30'	No			
Slope	Jetbead	<5'	Yes			
Dry/Moist	Jewelweed	<5'	No			
	Burdock, common	<5'	No			

**Comments:**

This unit is on the north edge of the southern part of the park bordering the private road leading to the in holding of private property. This unit is encroached upon by the homeowners and parts maintained as a lawn and dumping of mulch and stacking of firewood. This unit is dominated by red and black oak, Norway maple, jetbead and jewelweed. Other species in the unit include: black cherry, black locust, Virginia knotweed, lady's thumb, porcelainberry, poison ivy, Virginia creeper, white wood aster, English ivy, oriental bittersweet, sycamore maple and white avens.

**Unit:** 72                      **Date of Visit:** 7/25/2012                      **Species Composition Changing:** No  
**Acreage:** 0.19                      **Management Concern:** No                      **Community Structure Changing:** No  
**Classification:** IB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	Oak, black	>30'	No			
Deciduous	Oak, willow	>30'	No			
Phanerophytes	Norway maple	>30'	Yes			
Level	Mulberry, white	5'-30'	Yes			
Dry/Moist	Yew, Japanese	5'-30'	Yes			
	Jetbead	<5'	Yes			

**Comments:**

This is a small closed forest unit by the fence with invaded understory. Overstory species include black oak, willow oak, Norway maple and white mulberry. Other species in the unit include: garlic mustard, poison ivy, multiflora rose, porcelainberry, enchanter's nightshade and Virginia creeper.

**Unit:** 73      **Date of Visit:** 7/25/2012      **Species Composition Changing:** No  
**Acreage:** 0.10      **Management Concern:** No      **Community Structure Changing:** Yes  
**Classification:** IIB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Oak, black	>30'	No	Road		
Deciduous	Sassafras	5'-30'	No	Fence		
Phanerophytes	Cherry, black	5'-30'	No			
Undulating	Norway maple	5'-30'	Yes			
Dry/Moist	Horse chestnut	5'-30'	No			
	Virginia creeper	<5'	No			

**Comments:**

This woodland unit is located along the western edge of the park in the gap created by a large fallen oak tree. While overstory species include black oak, sassafras, black cherry and Norway maple some of the vine species are thriving in the sunlight created by the gap. Other species in the unit include: porcelainberry, poison ivy, hickory and enchanters night shade.

**Unit:** 74      **Date of Visit:** 7/25/2012      **Species Composition Changing:** No  
**Acreage:** 0.08      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IIB2a6

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Mulberry, white	>30'	Yes	Road		
Deciduous	Norway maple	>30'	Yes	Fence		
Lianas	Hickory, spp.	5'-30'	No			
Level	Honey suckle bush	5'-30'	Yes			
Dry/Moist	Oak, red	<5'	No			
	Porcelainberry	<5'	No			

**Comments:**

This woodland unit is in along the eastern edge of the southern section of the park. There are honeysuckle and porcelainberry vines growing on the fence. Other species in the unit include: horse-chestnut, Japanese honeysuckle, poison ivy, garlic mustard and some regenerating red oaks.

**Unit:** 75      **Date of Visit:** 7/27/2012      **Species Composition Changing:** No  
**Acreage:** 0.05      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a6

<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	Road		
Deciduous	Oak, red	>30'	No	Fence		Foot traffic
Lianas	Ash, green	>30'	No			
Slope	Mulberry, white	5'-30'	No			
Dry/Moist	Hackberry	5'-30'	No			
	Ivy, poison	<5'	No			

**Comments:**

This is a woodland unit dominated by black locust, red oak, green ash, hackberry and white mulberry. The species composition and absence of vines along the fence make this unit different than adjacent units along the fence. There is some poison ivy starting to climb into the canopy. There is some regeneration. This unit lies directly across 4516 Palisade Ave.

**Unit:** 76      **Date of Visit:** 7/27/2012      **Species Composition Changing:** Yes  
**Acreage:** 0.36      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IIB2a6

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Locust, black	>30'	Yes	Road		
Deciduous	Mulberry, white	5'-30'	Yes	Fence		Foot traffic
Lianas	Oak, red	>30'	No			
Slope	Norway maple	<5' & >30'	Yes			
Dry/Moist	Honeysuckle, bush	<5'	Yes			
	Porcelainberry	5'-30'	Yes			

**Comments:**

This is a woodland unit dominated by black locust and white mulberry with an understory of vines and is located just south of 4516 Palisade Avenue. There is a gap created by a large fallen tree. It is a management concern because of the existence of many invasive species such as: moonwort, garlic mustard, oriental bittersweet, honeysuckle bush and porcelainberry. Other species include: poison ivy, pokeweed, winged euonymus, blackberry, Virginia creeper, devil's beggar ticks, and red oak.

**Unit:** 77 **Date of Visit:** 7/30/2012 **Species Composition Changing:** No  
**Acreage:** 0.14 **Management Concern:** No **Community Structure Changing:** No  
**Classification:** IB2a3

<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'	No			
Deciduous	Sycamore maple	5'-30'	Yes			
Hemicryptophyte	Cherry, black	>30'	No			
Slope	Ash, green	>30'	No			
Dry/Moist	Witch hazel	5'-30'	No			
	Nightshade, enchanter's	<5'	No			

**Comments:**

This unit is located on the edge of the sloped path down towards the railroad. There is a lot of erosion and a lot of root exposure in this unit. Other species include: poison ivy, garlic mustard, false solomon's seal and Virginia creeper.

**Unit:** 78 **Date of Visit:** 7/27/2012 **Species Composition Changing:** Yes  
**Acreage:** 0.13 **Management Concern:** Yes **Community Structure Changing:** Yes  
**Classification:** IVA3a2

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Porcelainberry	5'-30'	Yes	Road		
Deciduous	Mugwort	<5'	Yes	Fence		Foot traffic
Lianas	Mulberry, white	5'-30'	Yes			
Slope	Pokeweed	<5'	No			
Dry/Moist	Jewelweed	<5'	No			
	Ailanthus	5'-30'	Yes			

**Comments:**

This is an open gap colonized mostly by invasive plants. Porcelainberry is overtaking all of the other plants. There is also yellowwood seedlings present in this unit.

**Unit:** 79      **Date of Visit:** 7/24/2012      **Species Composition Changing:** No  
**Acreage:** 0.20      **Management Concern:** Yes      **Community Structure Changing:** Yes  
**Classification:** IIB2a6

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Locust, black	>30'	Yes	Road		
Deciduous	Sassafras	all	No	Fence		Foot traffic
Lianas	Porcelainberry	5'-30'	Yes			
Slope	Mulberry, white	all	Yes			
Dry/Moist	Cherry, black	5'-30'	No			
	Ailanthus	5'-30'	Yes			

**Comments:**

This is a unit that is slowly being taken over by porcelainberry. It is along the western fence of the park. Other species in the unit include: red oak, Smilax, yellow wood sorrel, hog peanut, wine berry, garlic mustard, and bush honeysuckle.

**Unit:** 80      **Date of Visit:** 7/27/2012      **Species Composition Changing:** No  
**Acreage:** 0.52      **Management Concern:** No      **Community Structure Changing:** No  
**Classification:** IB2a6

<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	Road		
Deciduous	Mulberry, white	>30'	Yes	Fence		
Lianas	Oak, red	>30'	No			
Level	Ailanthus	all	Yes			
Dry/Moist	Jewelweed	<5'	No			
	Porcelainberry	<5'	Yes			

**Comments:**

This is a narrow unit along the edge of the fence that is dominated by black locust and Norway maple with a lot of white mulberry trees on the edge. In some areas red oaks that are dominant in the adjacent unit shade and blend into this unit too. There are parts of the unit that are being taken over by porcelainberry. The unit ends where the adjacent round apartment building is located. Other species in this unit include: poison ivy, Norway maple, slippery elm, sassafras, ladies thumb, English ivy, hickory, oriental bittersweet, black cherry, pokeweed, bush honeysuckle, milkweed, garlic mustard and Virginia creeper.

**Unit:** 81                      **Date of Visit:** 7/30/2014                      **Species Composition Changing:** No  
**Acreage:** 0.03                      **Management Concern:** No                      **Community Structure Changing:** No  
**Classification:** IIB2a3

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Oak, black	>30'	No	Road		Erosion
Deciduous	Oak, white	>30'	No	Other		Trash
Hemicryptophyte	Mulberry, white	>30'	Yes			
Level	Jewelweed	<5'	No			
Dry	Hickory, shagbark	<5'	No			

**Comments:**

This unit is located on the western side of the park adjacent to the railroad tracks and river. The soil is very sandy. It also borders a small porcelainberry and jewelweed patch and is at risk of becoming a vineland. Other species in the unit include: multiflora rose, honeysuckle bush, Virginia creeper and black cherry.

**Unit:** 82                      **Date of Visit:** 7/30/2012                      **Species Composition Changing:** No  
**Acreage:** 0.11                      **Management Concern:** Yes                      **Community Structure Changing:** No  
**Classification:** IIB2a1

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	Oak, black	>30'	No		Campfire/	
Deciduous	Ash, green	>30'	No		Foot traffic	Trash
Phanerophytes	Norway maple	>30'	Yes			
Depression	Yellow wood	all	No			
Moist	Hickory, pignut	5'-30'	No			
	Locust, black	30	Yes			

**Comments:**

This unit is a woodland which could be flooded sometimes. Overstory species include: black oak, green ash, Norway maple, yellowwood and pignut hickory. The soil is very sandy in some locations. Within this unit there is another unit that is being taken over by porcelainberry making a management concern. Other species include: enchanter's nightshade, Virginia creeper, honeysuckle bush, jewelweed, maple leaf viburnum, pokeweed, garlic mustard, poison ivy, and multiflora rose.