# Natural Area Mapping and Inventory of Reed's Basket Willow Swamp 2011–2012 Survey

## Prepared by the Greenbelt Natural Resources Team



Michael R. Buomberg, Mayor Veronica M. White, Commissioner Adena L. Long, Staten Island Borough Commissioner Steven Cain, Greenbelt Administrator

## **Table of Contents**

Section I.	Reed's Basket Willow Swamp Natural Area Mapping & Inventory	2
Introduc	tion	2
Entitatio	n	1
Acknowl	edgements	ō
Section II.	Entitation Maps	Ś
Reed's B	asket Willow Swamp Entitation Map	5
Cover Ty	pe Map	7
Manager	nent Concerns Map	3
Section III.	Reed's Basket Willow Swamp Unit Descriptions, Surveyed 2011-2012	9
Section IV.	APPENDIX 1: Glossary	1
Section V.	APPENDIX 2: Species List	3

# Section I. Reed's Basket Willow Swamp Natural Area Mapping & Inventory

**52.4 acres** 

### Introduction

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

**Until the 1980's,** DPR 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, DPR 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 park's unusual name is inspired by the Read family, owners of the land for several generations. John Read (1786-1849), started a family tradition when he decided to try his luck at basket making, and planted the swampy land around his farm with purple willow trees. The willow tree buds every spring, at which point it is at the peak condition to be harvested. The sap flowing under the bark makes it easy for farmers to peel the bark off the trunk. After the bark has been removed and soaked in water, it is cut into strips and woven into the distinctive baskets.

Basket weaving was a common occupation among rural Staten Islanders. The island's ecological conditions promoted the industry by providing a perfect climate for the willow, oak, and ash trees needed for the manufacture. The work was highly specialized, requiring a long apprenticeship to learn the tools and techniques of production. Local craftsmen continued to make baskets on Staten Island even after other, much cheaper, mass-produced containers became available in the 1870s. The story of the Read family ended in an odd fashion, however, when the son of John Read sold the house and land. He then "grew despondent," and burned the house down.

A forest covers nearly half the area of this property. Young oak (*Quercus spp.*) predominates, interspersed with birches (*Betula spp.*), tulip magnolias (*Liriodendron tulipifera*), hickory (*Carya spp.*), and chestnut trees (*Castanea spp.*). Hiking trails guide explorers through the woods. The yellow trail can be found on Ocean Terrace near Todt Hill Road, and at the top of Emerson Court. Three ponds and a swamp round out the terrain.

Brooks and ponds were a common sight on Staten Island up until the 1950s, when construction of pipelines and trenches began to wreak changes on the physical landscape. Large cranes and bulldozers loosened the soil surrounding open water, causing serious erosion. The depth and area of

many ponds was severely reduced. The Great Swamp (now known as Long Creplebush), Clove Valley Swamp, Lower Swamp, and Reed's Basket Willow Swamp (Upper Swamp) were some of the larger bodies of water to be affected by construction. While some of the natural vegetation in these areas was killed off as a result of the changing ecosystem, these changes opened the way for vigorous new growth. Blackberry bushes (*Rubus allegheniensis*), Japanese knotweed (*Polyganum cuspidatum*), swamp white azaleas (*Rhododendron viscosum*), and flowering dogwood (*Cornus florida*) are just a few of the many species of trees and shrubs presently found in the park.

In 1978, the property was designated as a protected freshwater wetland by the New York State Department of Environmental Conservation, permanently ensuring its preservation under state law. The City had acquired the property in the early 1970s, and it was transferred to Parks on November 18, 1980 in recognition of its ecological importance and protected status. By 1997, the addition of several parcels of land swelled the park to its current size.

**Reed's Basket Willow Swamp lies at the top of Emerson Court, bounded by Ocean Terrace and** Merrick Avenue. It is part of the Greenbelt, the largest subsystem of parks located in New York City. Established in 1984 and covering nearly 3,000 acres in central Staten Island, the Greenbelt is home to a variety of plant and animal life, as well as roughly 35 miles of nature trails. Other parks in the system include High Rock Park, Greenbelt Native Plant Nursery, the William T. Davis Wildlife Refuge, LaTourette Park, and Willowbrook Park. The Greenbelt Conservancy, Inc., founded in 1989, helps Parks to protect and care for the Greenbelt, sponsoring weekend nature walks and other environmental education programs and festivals.

The Greenbelt Natural Resources Team (GNRT) oversees the development and implementation of ecologically based management practices throughout Reed's Basket Willow Swamp and the entire Staten Island Greenbelt to preserve the environmental integrity of the natural parkland. In 2011 and 2012, to continue addressing the natural resource management and restoration needs of the Greenbelt, an inventory of Reed's Basket Willow Swamp was conducted by GNRT with the assistance of a New York State Department of Environmental Conservation Urban and Community Forestry Grant. GNRT utilized entitation, a process of identifying and describing ecologically distinct plant communities, using aerial photographs and field reconnaissance. The plant communities were delineated into 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 Reed's Basket Willow Swamp resulted in maps and a database that can be used to locate valuable and threatened areas, plan invasive species management, track future restoration efforts and indicate possible capital improvement projects in and around the park. The maps and database also serve as a baseline for measuring change over time. Both maps and a report from the database are included in this report.

## Entitation

Entitation is a type of plant community inventory well suited to the patchy environments often found in urban areas. Originally designed for European landscapes, the system was revised by **NRG in 1985 for use in New York City's urban parklands. NRG has us**ed entitation widely and successfully to facilitate acquisition and restoration decisions. Put simply, entitation is a process of **breaking up a park into manageable parts called "entities" or "entitation units." Entitation units** are defined using a weighted list of criteria. Distinction is based on:

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

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

**In Reed's Basket Willow Swamp, staff identified 103 discrete vegetation units** in the 52.4 acres. To **date, Reed's Basket Willow Swamp, High Rock Park,** Willowbrook Park and Deere Park have completed entitation inventories in the Greenbelt. High Rock Park entitation units are 1 to 60, Willowbrook Park entitation units are 61 to 240, Deere Park entitation units are 241 to 266 and **Reed's Basket Willow Swamp begins with unit 267 ending with unit 369**.

### Acknowledgements

Cover page photo credit: Clara Holmes

2012 Greenbelt Natural Resources Team Internship 2011: Olena Borkovska, Jared Segal,

2012 Greenbelt Natural Resources Team Internship 2012: Johnathan Wadolowski, Anna Puchkoff, Scott Stuk

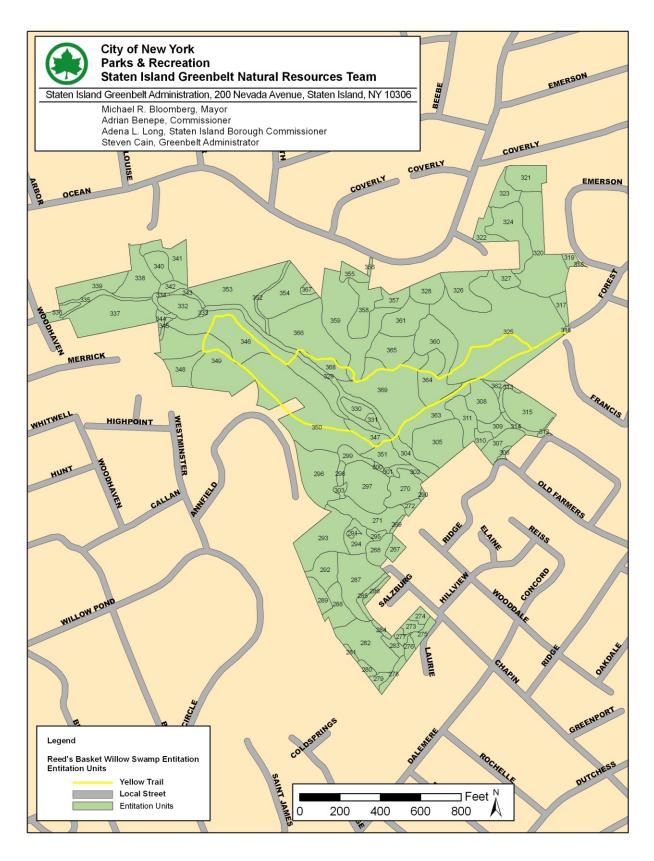
New York City Parks Natural Resources Group technical advisors: Tim Wenskus, Clara Pregitzer

Greenbelt Entitator: Brian Widener, Clara Holmes

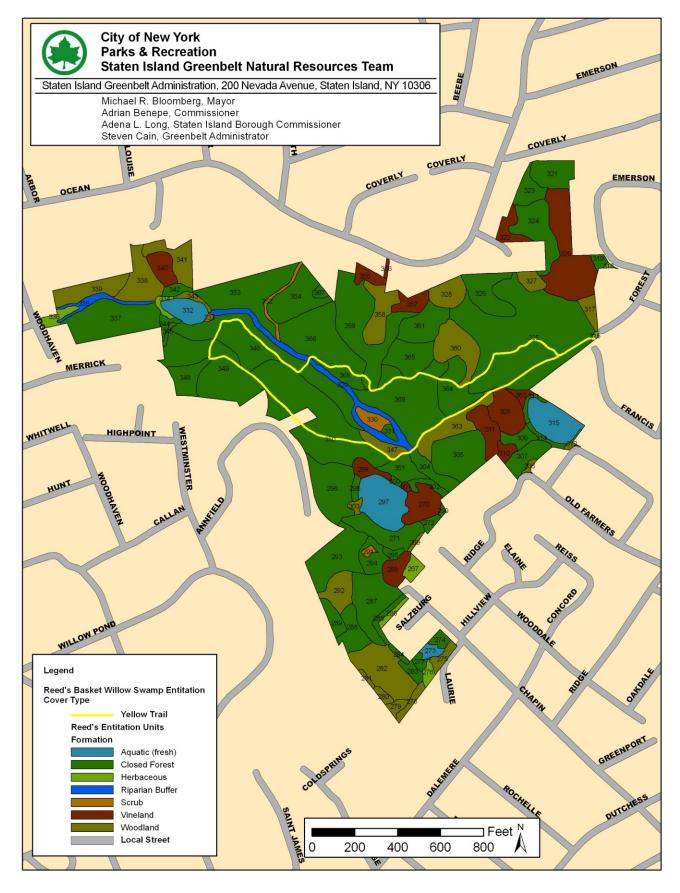
Greenbelt Natural Resources Manager: Tony Rho

\*Partially funded by the New York State Department of Environmental Conservation Urban and Community Forestry Grant.

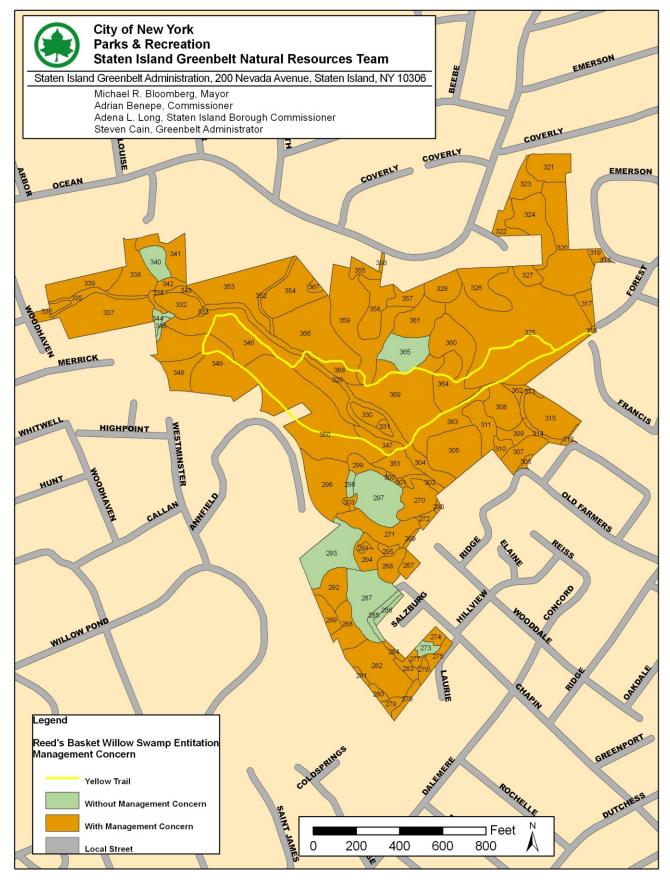
## Section II. Entitation Maps



City of New York, Parks and Recreation, Greenbelt Natural Resources Team June, 2012 Page 6



City of New York, Parks and Recreation, Greenbelt Natural Resources Team June, 2012 Page 7



City of New York, Parks and Recreation, Greenbelt Natural Resources Team June, 2012 Page 8

# Section III. Reed's Basket Willow Swamp Unit Descriptions, Surveyed 2011-2012

Reed's Basket Willow Swamp Entitation Unit Descriptions, Surveyed 2011-2012

Unit: Acreage Date:		ion IV 3B3 position changing? No structure changing? Ye		Manageme Deer Impact Invasive Sp.	ent Conce	erns
Site: Herbaceous Deciduous Geophytes Dry/Moist Slope	<b>Species</b> mugwort common plantain cool season grass clover spp. dandelion common plantain	<u>Height</u> <5' <5' <5' <5' <5' <5'	Exot Yes No Yes Yes Yes Yes	ic Historical Full-crown tree	<u>Uses</u>	<u>Disturbances</u> None

#### **Comments**

This is an herbaceous unit. There was PlaNYC planting here. The unit is at the end of Chapin Ave. behind some homes. Other species include flowering dogwood, white pine, tulip poplar, oak, sedges, Japanese honeysuckle, rhododendron, foxtail, strawberry, mugwort, multiflora rose, wild onion and dandelion.

Unit: Acreage Date:	0.31068 Is specie	ification VIII B es composition changing? nunity structure changing?	No No		Manageme Invasive Sp.	ent Concerns	ž
<u>Site:</u>	<b>Species</b>	Hei	<u>ght</u>	<u>Exotic</u>	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland Deciduous Chamaephytes Dry/Moist Slope	multiflora roso porcelainberry mugwort Japanese hone sweetgum Rubus	y <5'-: <5' 8 eysuckle <5' <5'-:	α 5-30'	Yes Yes Yes No No		Foot traffic	Dumping Trash

#### **Comments**

This unit is a vineland. It is at the end of Chapin Ave. and a desire line runs through it. There is a "Greenbelt Chapin Woods" sign. The unit is dominated by vines with some trees overtaken by them. Other species include pokeweed, moss spp., tulip poplar, poison ivy, eastern hackberry, black walnut, black birch, London planetree, sweetgum and porcelainberry.

Unit:	269	Classification II A2ae
Acreage	0.040525	Is species composition changing?
Date:	3/31/2011	Is community structure changing?

#### Management Concerns

Invasive Sp. Encroachment

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<b>Disturbances</b>
Woodland Evergreen Lianas Dry/Moist Level	Arborvitae, nigra English ivy cool season grass	>30' & 5-30' <5' <5'	No Hedgerow Yes Yes	Dumping Trash

No

No

#### **Comments**

This unit is a woodland. The unit is a hedgerow of arborvitae and looks to be planted by the homeowner as a screen. There is a lot of landscape dumping. Other species include English ivy and Norway maple.

Unit: Acreage Date:	270 0.551431 3/31/2011	Classification Is species compositic Is community structu	5 5	No No	Manageme Invasive Sp.	ent Concerns	<u>5</u>
<u>Site:</u>	<u>Spe</u>	<u>ecies</u>	<u>Heig</u>	<u>ht</u>	Exotic Historical	<u>Uses</u>	<u>Disturbances</u>
Vineland Deciduous Chamaephytes Dry/Moist Undulating	porc orier Japa	tiflora rose elainberry ntal bittersweet anese honeysuckle etgum	<5' & 5 <5'- >3 <5'- >3 <5'- >3 <5'- >3 <5'- >3	60' 60' 60'	Yes Yes Yes No	Foot traffic	Erosion Dumping Vandalism

#### **Comments**

This unit is a vineland located in the south part of the park adjacent to a large pond. There is a stream that runs through it and a road that enters the unit at the park boundary. It looks as if this is a dumping site for landscape waste. Other species include black cherry, blackberry, sassafras, skunk cabbage, yew, red oak, black birch and privet.

Unit:	271	Classification   B2a2	
Acreage	0.686955	Is species composition changing?	No
Date:	3/31/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exoti</u>	<u>c Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Dry/Moist Knoll	red oak sweet pepperbush black birch American beech white oak sassafras	<5'->30' <5' & 5-30' <5'->30' <5'->30' >30' & 5-30' <5'->30'	No No No No No	Landfill	Foot traffic Vehicle access	Soil compaction Dumping Vandalism

#### **Comments**

This unit is a closed forest. It is a large berm that slopes down to a pond, and there is a desire line that goes through the unit. Also, there is a steep slope to the south side as well. This is a heavily used area with access to the pond and evidence of paintball. A dirt road enters into the unit from Ridge Loop. Other species include highbush blueberry, pinxter azalea, spruce spp., tulip poplar, black cherry, black locust, moss, striped wintergreen, sweetgum, yew, roundleaf wintergreen and flowering dogwood.

Unit:	272	Classification	I B2a1		Managemo	ent Concerns	8
Acreage	0.095076	Is species compositio	n changing?	No	Invasive Sp.		
Date:	3/31/2011	Is community structu	ure changing?	No			
<u>Site:</u>	<u>Spe</u>	ecies	<u>Heig</u>	<u>ht</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	blac	< birch	<5'->3	0'	No		Dumping
Deciduous	SWee	etgum	<5'->3	0'	No	Foot traffic	Trash
Phanerophytes	sassi	afras	<5'->3	0'	No	Vehicle access	
Wet	orier	ntal bittersweet	<5'->3	0'	Yes		
Slope	Engl	ish ivy	<5'		Yes		

#### **Comments**

This unit is a closed forest. It is adjacent to a large vineland and the park boundary behind a home in the south part of the park off of Ridge Loop. There is a lot of trash and landscape dumping in the unit. Other species include white pine, Rhododendron spp., highbush blueberry, pin oak, red maple, wisteria, oriental bittersweet, English ivy and multiflora rose.

Unit:	273	Classification IV B1b	
Acreage	0.125902	Is species composition changing?	No
Date:	4/5/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Aquatic (fresh)	Phragmites	<5' & 5-30'	Yes	
Deciduous	sweetgum	>30' & 5-30'	No	
Geophytes	American elm	<5' & 5-30'	No	
Surface water	pondweed	<5'	No	
Depression				

#### **Comments**

This is a pond that is maintained by homeowners in the neighborhood. The pond is in a maintained park at the corner of Chapin Ave. and Laurie Ct.

Unit:	274	Classification	I B2a2		Managem	ent Concerns	<u>}</u>
Acreage Date:		Is species composition Is community structur	5 5	No No	Invasive Sp.		
<u>Site:</u>	<u>Spec</u>	<u>cies</u>	<u>Heig</u>	<u>ht</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Dry/Moist Undulating		pepperbush lora rose aple	<5'->3 <5'&5 <5'&5 <5'->3 <5'->3	-30' -30' 0'	No No Yes No Yes		Trash

#### **Comments**

The unit is located off of Chapin Av. behind a large house. The unit is natural compared to other surrounding units. Other species include hickories, black cherry, poison ivy, white ash, blackhaw, moss spp., asters, southern arrowwood, highbush blueberry, river birch, multiflora rose, Japanese honeysuckle and porcelainberry.

Unit:	275	Classification II B2a4	
Acreage	0.159966	Is species composition changing?	No
Date:	4/5/2011	Is community structure changing?	Yes

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exoti</u>	<u>c Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland Deciduous Geophytes Moist Level	cool season grass Phragmites goldenrod red maple serviceberry weeping willow	<5' <5' & 5-30' <5' & 5-30' <5' & 5-30' <5' >30'	Yes Yes No No Yes	Full-crown tree	Other Foot traffic	Trash

#### **Comments**

The unit runs along Laurie Ct., between the court and a pond. The spot is heavily maintained and landscaped by the neighbors. An outlet from the pond empties out into a drain on the street. Other species include Rhododendron spp., kousa dogwood, black locust, buttonbush, chokecherry, swamp rose, sweetgum, London planetree, green ash, multiflora rose, Phragmites and mugwort.

Unit: Acreage Date:	1	ation IV A3a6 mposition changing? y structure changing?	No No	Manager Encroachme	ment Conce ent	<u>rns</u>
<u>Site:</u>	<b>Species</b>	<u>Heig</u>	<u>ht Exc</u>	otic <u>Historica</u>	<u>l</u> <u>Uses</u>	<b>Disturbances</b>
Herbaceous Mixed Geophytes Moist Level	cool season grass arborvitae Phragmites Eastern cottonwoo pussy willow	<5' 5'-30' <5' >30' 5'-30'	Yes No Yes No No	Hedgerow	Picnic	

#### **Comments**

This is an herbaceous community. It is a lawn area by a neighboring home. Other species include yucca.

Unit:	277	Classification   B2a2	
Acreage	0.086758	Is species composition changing?	No
Date:	4/5/2011	Is community structure changing?	No

**Species** 

**Management Concerns** 

Invasive Sp. Encroachment

Exotic Historical Uses

Disturbances

ous wee ephytes barr viol cres	eeping willow mboo spp. olet ess spp.	5'-30' 5'-30' <5' <5' <5' <5'	No Yes No No Yes
---	--	--	------------------------------

Height

#### **Comments**

Site:

This is a closed forest unit. It is adjacent to a pond and a lawn from a nearby home. Other species include goldenrod, oak, red maple, sycamore, plantain, black walnut, daffodils, garlic mustard, mugwort, Norway spruce, multiflora rose, rose of Sharon and wild onion.

Unit: Acreage Date:	278 0.146745 4/26/2011	Classification Is species compositi Is community struct	on changing?	No Yes		Manageme Invasive Sp.	ent Concerns	<u>s</u>
<u>Site:</u>	<u>Spe</u>	ecies	<u>Heig</u>	<u>ht</u>	<u>Exoti</u>	<u>c Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland Deciduous Chamaephytes Dry/Moist Slope	black Norv black garlio	iflora rose < locust vay maple < cherry c mustard tal bittersweet	<5' & 5 <5'- >3 <5'- >3 <5'- >3 <5'- >3 <5' <5'- >3	0' 0' 0'	Yes Yes No Yes Yes	Exotic planting		Erosion

#### **Comments**

This is a woodland along the edge of Chapin Woods by Chapin Ave. The unit is a steep slope facing south. Other species present include asters, goldenrod, poison ivy, oak spp., multiflora rose, oriental bittersweet, Japanese honeysuckle, black locust, Norway maple and garlic mustard.

Unit:	279	Classification II B2a2	
Acreage	0.107558	Is species composition changing?	No
Date:	4/26/2011	Is community structure changing?	Yes

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical	<u>Uses</u>	<u>Disturbances</u>
Woodland Deciduous Chamaephytes Dry/Moist Slope	red oak multiflora rose fox grape black birch black locust	>30' & 5-30' <5' & 5-30' >30' & 5-30' <5'->30' <5'->30'	No Yes No No Yes	Foot traffic	Erosion Trash Dumping

#### **Comments**

This is a woodland that is adjoining a lawn separated by cypress trees. The unit is disturbed by trash and invasive species. Other species present include asters, catbrier, poison ivy, spicebush, sassafras, tulip poplar, red maple, multiflora rose, Japanese honeysuckle and garlic mustard.

Unit: Acreage Date:	<ul><li>280 Classification</li><li>0.088013 Is species composition</li><li>4/26/2011 Is community structed</li></ul>	0 0		Managem Invasive Sp. Encroachment	ent Concern	<u>ns</u>
Site: Woodland Deciduous Lianas Dry/Moist Slope	<b>Species</b> black birch black locust Japanese honeysuckle poison ivy multiflora rose Japanese knotweed	<u>Height</u> <5'->30' <5'->30' <5'->30' <5'->30' <5' & 5-30' <5' & 5-30'	Exot No Yes No Yes Yes Yes	<u>ic</u> <u>Historical</u> Road Hedgerow	<u>Uses</u> Foot traffic	Disturbances Dumping Trash Erosion

#### **Comments**

This is a woodland bordering a lawn. It appears to have been leveled for a driveway. Other species include black cherry, sassafras, hayscented fern, catbrier, spicebush, red maple, Japanese knotweed, Japanese honeysuckle, multiflora rose, Japanese angelica tree and black locust.

Unit:	281	Classification II B2a1	
Acreage	0.041504	Is species composition changing?	No
Date:	4/26/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u> <u>Historica</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland Deciduous Phanerophytes Dry/Moist Undulating	Japanese honeysuckle Japanese angelica poison ivy sassafras multiflora rose	<5' <5' & 5-30' <5'- >30' <5' & 5-30' <5' & 5-30'	Yes Road Yes No No Yes	Foot traffic	Erosion Trash

#### **Comments**

This is a woodland adjacent to a home. It has a tree house built on three oak trees. Other species present include Rubus spp., grasses, spicebush, goldenrod, tulip poplar, Japanese honeysuckle, multiflora rose, wineberry, Japanese angelica tree and wild onion.

Unit:	282	Classification II B2	2a1	Managem	ent Concerns	<u>i</u>
Acreage	1.055603	Is species composition chan	5 5	Deer Impact		
Date: <u>Site:</u>	4/26/2011 <u>Spe</u>	Is community structure chai	nging? No <u>Height</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland Deciduous Phanerophytes Dry/Moist Slope	red c map black poise	< birch pak leleaf viburnum < cherry on ivy flower	<5'->30' <5'->30' <5' & 5-30' <5'->30' <5'->30' <5'->30'	No No No No No	Foot traffic	Trash Other

#### **Comments**

This is a closed forest unit consisting of mainly black birch and oaks. Four female deer were spotted nearby. There is a tree house built on a dead oak tree in the unit. Other species include hickory, sassafras, arrowwood, lowbush blueberry, catbrier, red maple, Rubus spp., spicebush, tulip poplar, hayscented fern, goldenrod, white ash, Norway maple and winged euonymus. Environmental disturbance "other" is a treehouse.

Unit:	283	Classification   B2a4	
Acreage	0.13871	Is species composition changing?	No
Date:	4/26/2011	Is community structure changing?	No

Management Concerns

Encroachment Invasive Sp.

<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 Dry/Moist Slope	black locust black birch multiflora rose Japanese knotweed aster Norway maple	<5'- >30' <5'- >30' <5' & 5-30' <5' & 5-30' <5' <5' >30'	Yes No Yes No Yes	Foot traffic	Trash

#### **Comments**

This is a closed forest adjacent to a shed from a neighboring house. Other species present include black cherry, poison ivy, white oak, red maple, red oak, London planetree, Japanese knotweed, multiflora rose and garlic mustard.

Unit: Acreage Date:	284 0.066051 4/26/2011	Classification Is species compositi Is community struct	ion changing?	No No		Manageme Encroachment	ent Concerr	<u>ns</u>
<u>Site:</u>	Spe	<u>ecies</u>	<u>Heig</u>	<u>ht</u>	<u>Exoti</u>	<u>c Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Moist Level	cool swee aster	tree	<5' & 5 <5' <5'->3 <5'->3 <5'->3 <5'	0'	Yes Yes No No No No	Hedgerow Full-crown tree Exotic planting	Foot traffic Other	Soil compaction Erosion Other

#### **Comments**

This is a closed forest adjacent to a lawn with swings and a shed. A small stream with a man made pipe culvert exists in the unit. Two chickens were observed in the unit. Other species present include spruce spp. and oak spp.

Unit:	285	Classification   B2a6	
Acreage	0.161838	Is species composition changing?	No
Date:	4/26/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Lianas Dry/Moist Level	tulip tree red oak English ivy sweetgum multiflora rose	<5'- >30' >30' & 5-30' <5'- >30' <5'- >30' <5' & 5-30'	No Fence No Exotic planting Yes No Yes		Trash Dumping

#### **Comments**

This is a closed forest adjacent to a fenceline and nearby the Chapin Woods entrance. It is also adjacent to a vineland. Other species present include black cherry, Rubus spp., multiflora rose, Japanese knotweed, Japanese honeysuckle and English ivy.

Unit: Acreage Date:	286Classification0.091659Is species composition4/26/2011Is community struct	on changing? No		Management Conc Encroachment	<u>eerns</u>
<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exot	ic <u>Historical</u> <u>Uses</u>	<b>Disturbances</b>
Herbaceous Deciduous Geophytes	cool season grass arborvitae English ivy	<5' <5' & 5-30' <5' & 5-30'	Yes No Yes	Fence Hedgerow Exotic planting	Soil compaction Other

#### **Comments**

Dry/Moist Level

This is an herbaceous unit near Chapin Ave and Salzburg Ct. There is significant encroachment into the park. Both houses use this as their backyard.

Unit:	287	Classification   B2a2	
Acreage	0.992373	Is species composition changing?	No
Date:	4/26/2011	Is community structure changing?	No

#### Management Concerns

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Use	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Dry/Moist Slope	tulip tree multiflora rose sweetgum black birch Japanese honeysuckle poison ivy	<5' - >30' <5' & 5-30' <5' - >30' <5' - >30' <5' - >30' <5' - >30'	No Exotic planting Yes No No Yes No	Dumping Trash

#### **Comments**

This is a closed forest unit north of Salzburg Ct. and east of the end of Chapin Ave.

Unit: Acreage Date:		ation I B2a6 mposition changing? No y structure changing? No		<u>ncerns</u>
<u>Site:</u> Closed Forest Deciduous	<u>Species</u> red oak black birch	<u>Height</u> <5'- >30' <5'- >30'	Exotic Historical Uses No No	<u>Disturbances</u> Trash Other
Lianas Dry/Moist Slope	poison ivy red maple Norway maple spicebush	<5'- >30' <5'- >30' <5'- >30' 5'-30'	No No Yes No	

#### **Comments**

The unit is a ravine located in the southern arm of the park. There is a deep drop in elevation and recent topping of large trees. Other species present include yew, American beech, fern spp., asters, moss, Canada mayflower, tulip poplar, black cherry, Virginia creeper, pin oak, Hercules club, Japanese barberry, wineberry, multiflora rose, Norway maple, porcelainberry.

Unit:	289	Classification   B2a6	
Acreage	0.230743	Is species composition changing?	Yes
Date:	5/31/2011	Is community structure changing?	Yes

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Closed Forest	Norway maple	<5'- >30'	Yes	Trash
Deciduous	English ivy	<5'- >30'	Yes	Dumping
Lianas	poison ivy	<5'- >30'	No	
Dry/Moist	oriental bittersweet	>30' & 5-30'	Yes	
Slope	red oak	>30'	No	
	pachysandra	<5'	Yes	

#### **Comments**

The unit is in the southern arm of the park and borders homes up on a ridge top. The unit is dominated by invasive vines and trees. Other species include black cherry, black birch, spicebush, Dicentra spp., aster, sweetgum, grape, Virginia creeper, sedges, catbrier, **smooth Solomon's seal, multiflora rose, oriental bittersweet, Japanese pachysandra, Engl**ish ivy, Norway maple, wild onion, orange daylily, daffodils, Japanese knotweed, Japanese angelica-tree and Japanese honeysuckle.

Unit:	290	Classification	I B2a2		Managem	ent Conc	<u>erns</u>
Acreage	0.027496	Is species composi	tion changing?	No	Invasive Sp.		
Date:	5/31/2011	Is community strue	cture changing?	Yes			
<u>Site:</u>	<u>Spe</u>	<u>ecies</u>	<u>Heig</u>	<u>ht</u>	Exotic Historical	<u>Uses</u>	<b>Disturbances</b>
Closed Forest	swee	tgum	<5'->3	30'	No		
Deciduous	black	< cherry	<5'->3	30'	No		
Chamaephytes	mult	iflora rose	<5' & 5	-30'	Yes		
Dry/Moist	poiso	on ivy	<5'->3	30'	No		
Undulating	orier	ntal bittersweet	<5' & 5	-30'	Yes		

#### **Comments**

This is a closed forest located in the southeast section of the park and wedged in between a vineland unit and some residential lots adjacent to the park boundary. Vines are climbing into the unit. Other species present include catbrier, pin oak, Virginia creeper, porcelainberry and Japanese honeysuckle.

Unit:	291	Classification III A1	
Acreage	0.048125	Is species composition changing?	No
Date:	6/1/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

Site: **Species** Height Exotic Historical Uses Disturbances Scrub multiflora rose <5' & 5-30' Yes Deciduous porcelainberry <5' & 5-30' Yes Chamaephytes blackberry <5' No Dry/Moist poison ivy <5' No Depression oriental bittersweet <5' & 5-30' Yes

#### **Comments**

This is a scrubland. Surrounding areas are high in elevation. It is adjacent to a foot trail. The perimeter of the unit is layered with climbing invasive vines. Other species present include asters, pokeweed, spicebush, multiflora rose, porcelainberry, and oriental bittersweet.

Unit:	292	Classification	II B2a2		<u>Managem</u>	ent Concerns	<u>i</u>
Acreage	0.456588	Is species compositio	n changing?	No	Invasive Sp.		
Date:	6/15/2011	Is community structu	ire changing?	Yes			
Site:	Spe	<u>ecies</u>	<u>Heig</u>	<u>ht</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	red c	bak	>30'		No		Erosion
Deciduous	spice	ebush	<5' & 5	-30'	No		Dumping
Chamaephytes	blacl	< birch	<5' & 5	-30'	No		Other
Dry/Moist	mult	iflora rose	<5' & 5	-30'	Yes		
Depression	poise	on ivy	<5'->3	0'	No		

#### **Comments**

This is a woodland. The unit has some tall trees that were recently topped. The unit is on the steep slope below some homes, in the south area of the park. Currently and throughout the years there has been dumping in the unit. Other species present are Norway maple, pokeweed, asters, sweetgum, black cherry, horse chestnut, hickories, jewelweed, Rubus spp., Virginia creeper, Vitis spp., Multiflora rose, Norway maple, Porcelain berry, Aralia spp., oriental bittersweet, wild onion, mapleleaf viburnum and Japanese honeysuckle. Environmental Disturbance "Other" is tree topping.

Unit:	293	Classification   B2a2	
Acreage	1.077373	Is species composition changing?	No
Date:	6/16/2011	Is community structure changing?	No

#### **Management Concerns**

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Dry/Moist Slope	red oak black birch mapleleaf viburnum black cherry poison ivy sweetgum	<5'- >30' <5'- >30' <5' & 5-30' <5'- >30' <5'- >30' <5'- >30'	No No No No No	Foot traffic	Dumping Trash Auto

#### **Comments**

This is a closed forest unit in the south part of the park bordering homes. There is dumping at the edge of the park. There is a trail that runs through the unit. The overstory is dominated by red oak and black birch. Other species present include Rubus spp., musclewood, asters, sassafras, multiflora rose, spicebush, red maple, fern spp., striped wintergreen, Canada Mayflower, grass spp., white oak, Japanese maple, witch hazel, tulip poplar, Azalea spp., catbrier, oriental bittersweet, white pine, white ash, hickory spp., Viburnum spp., sedges, goldenrod, false Solomon's seal, common cinquefoil, moss spp., plantains, pokeweed, jewelweed and Norway maple.

Unit:	294 Classification	<b>n</b> I B2a6	<u>Managem</u>	ent Concer	<u>ns</u>
Acreage	0.330249 Is species composi	tion changing? No	Invasive Sp.		
Date:	6/16/2011 Is community strue	cture changing? No			
<u>Site:</u>	<b>Species</b>	<u>Height</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	tulip poplar	<5'- >30'	No	Foot traffic	Erosion
Deciduous	Norway maple	<5'- >30'	Yes		Dumping
Lianas	sweetgum	<5'- >30'	No		
Dry/Moist	poison ivy	<5'- >30'	No		
Undulating	oriental bittersweet	<5'- >30'	Yes		
_	multiflora rose	<5' & 5-30'	Yes		

#### **Comments**

This is a closed forest that surrounds an open vineland. It is in the south part of the park and the trail runs through it. Other species present are bigtooth aspen, black cherry, American beech, yew, northern red oak, sassafras, hickories, Virginia creeper, grass spp., black birch, crabapple, sweet pepperbush, asters, mapleleaf viburnum, goldenrod, Rubus spp., highbush blueberry, flowering dogwood, Vitis spp., Japanese honeysuckle, wisteria, porcelainberry, multiflora rose, oriental bittersweet and Norway maple.

Unit:	295	Classification   B2a1	
Acreage	0.085325	Is species composition changing?	No
Date:	6/28/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Phanerophytes Dry/Moist Knoll	red oak sweetgum sweet pepperbush tulip poplar sassafras white wood aster	>30' <5'->30' <5' & 5-30' >30' <5'->30' <5'	No No No No No	Foot traffic Other	Dumping Fire Trash

#### **Comments**

This is a closed forest, on top of the knoll, overlooking the south pond of the park. The unit is north of the trail which ends at Chapin Av. There are signs of social gatherings. Other species present are white oak, mapleleaf viburnum, cool season grass, black cherry, chokeberry, goldenrod, poison ivy, blackgum, Japanese stiltgrass, sedges, pin oak, Virginia creeper, blueberry, round-leaf pyrola, oriental bittersweet, porcelainberry and Japanese honeysuckle.

Unit:	296	Classification	I B2a6		<u>Managem</u>	ent Concern	<u>ns</u>
Acreage	1.08178 I	Is species compositio	n changing?	No	Invasive Sp.		
Date:	6/28/2011 I	Is community structu	ire changing?	No			
<u>Site:</u>	<u>Spec</u>	<u>eies</u>	<u>Heig</u>	ht	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest	red oal	k	<5'- >3	0'	No	Foot traffic	Erosion
Deciduous	black b	birch	<5'- >3	0'	No		
Lianas	sweetg	jum	<5'- >3	0'	No		
Dry/Moist	spiceb	ush	<5' & 5	-30'	No		
Slope	poison	n ivy	<5' & >	30'	No		
	black o	cherry	<5' & 5	-30'	No		

#### **Comments**

This is a closed forest. There is a trail from Chapin Av. that runs through the unit. The unit is bound by two streams, one on the north and one on the south. The unit is in the south part of the park and is west of a pond and east of Annfield Ct. There is some erosion on the uphill part of the unit starting from Annfield Ct. and also along the streams. Other species present include wild sarsaparilla, grass, red maple, highbush blueberry, partridgeberry, mapleleaf viburnum, aster, hickories, catbrier, Virginia creeper, white oak, Japanese maple, yew, American hornbeam, pokeweed, sedges, moss spp., fern spp., tulip poplar, blackberry, Japanese honeysuckle, sycamore maple, Norway maple and multiflora rose.

Unit:	297	Classification VI B2	
Acreage	1.01627	Is species composition changing?	No
Date:	6/29/2011	Is community structure changing?	No

#### Management Concerns

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Aquatic (fresh) Deciduous Hydrophytes Surface water Depression	duckweed red maple sweet pepperbush	<5' >30' <5'	No No No	Dumping Trash

#### **Comments**

This unit is a pond in the south part of the park, a few hundred feet from the end of Chapin Ave. The following fauna were observed: ducks, a turtle, an egret, an eagle. There is snag habitat at the west part of the pond. Other species present are highbush blueberry and porcelainberry.

Unit: Acreage Date:	298 0.08777 6/29/2011	<b>Classification</b> I B2a2 Is species composition changing Is community structure changing	5	<u>Manageme</u>	nt Concerns	1
<u>Site:</u>	<u>Spc</u>	ecies <u>H</u>	<u>leight</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Dry/Moist Slope	swee	k birch > bush blueberry <	30' 30' 30' 5' & 5-30' 5'	No No No No		Trash

#### **Comments**

This is a closed forest, adjacent to the west side of the pond. Other species include red oak, skunk cabbage, moss, multiflora rose, poison ivy and Canada mayflower.

Unit:	299	Classification VIII C	
Acreage	0.21005	Is species composition changing?	No
Date:	6/29/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Vineland	porcelainberry	<5'->30'	Yes	Dumping
Deciduous Lianas	multiflora rose jewelweed	<5' & 5-30' <5' & 5-30'	Yes No	Trash
Moist	poison ivy	<5'->30'	No	
Undulating	black willow	>30' & 5-30'	No	
J. J	catbrier	<5'- >30'	No	

#### **Comments**

This unit is a vineland, adjacent to the northwest part of the pond. There are a lot of wetland species in the unit. Other species include skunk cabbage, Virginia creeper, spicebush, sassafras, fern spp., black cherry, false nettle, green ash, highbush blueberry, multiflora rose, porcelainberry and catbrier.

Unit: Acreage Date:	300Classification0.034435Is species compo7/6/2011Is community str		Management Conce Invasive Sp.	<u>erns</u>
<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<b>Disturbances</b>
Closed Forest	sweetgum	<5'- >30' <5'- >30'	No	Trash
Deciduous Chamaephytes	black birch multiflora rose	<5 - >30 <5' & 5-30'	No Yes	
Moist	pin oak	>30'	no	
Slope	poison ivy	<5'- >30'	No	
	sassafras	<5' & 5-30'	No	

#### **Comments**

This is a closed forest unit that hugs the pond in the south part of the park. The unit is 100 ft south of the Yellow Trail. Part of the unit is wetland in nature. Other species present include Virginia creeper, catbrier, goldenrod spicebush, skunk cabbage, Rumex spp., black oak, elderberry, jewelweed, American beech, swamp loosestrife, sensitive fern, Oriental bittersweet, Japanese barberry, Japanese honeysuckle, garlic mustard, mimosa, multiflora rose and porcelainberry.

Unit:	301	Classification VIII C	
Acreage	0.035931	Is species composition changing?	No
Date:	7/6/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exoti</u>	<u>c Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland Deciduous Chamaephytes Dry/Moist Slope	porcelainberry oriental bittersweet fox grape multiflora rose poison ivy	<5'- >30' <5'- >30' >30' <5' & 5-30' <5'- >30'	Yes Yes No Yes No	Foundation Landfill	Foot traffic Other	Dumping Trash Vandalism

#### **Comments**

This unit is a vineland covering a significant number of tree species. It is adjacent to the north part of the pond and south of the Yellow Trail. There is an old well in the unit. Other current use is social gathering activity and a makeshift fort made of 2-by-4s and tree branches. Other species present include smooth sumac, tulip poplar, sassafras, sweetgum, black cherry, catbrier, Rubus spp., pin oak, red oak, Virginia creeper, path rush, Japanese honeysuckle, porcelainberry, multiflora rose, oriental bittersweet, white mulberry and tree of heaven.

Unit: Acreage Date:		ation I B2a2 mposition changing? Yes ty structure changing? Yes		Manageme Invasive Sp.	ent Concer	<u>'ns</u>
<u>Site:</u>	<b>Species</b>	<u>Height</u>	<u>Exot</u>	<u>ic Historical</u>	<u>Uses</u>	<b>Disturbances</b>
Closed Forest Deciduous Chamaephytes Dry/Moist Slope	sweetgum tree of heaven tulip poplar American elm multiflora rose catbrier	<5'->30' <5'->30' >30' >30' & 5-30' <5' & 5-30' <5'->30'	No Yes No Yes No	Foundation Exotic planting	Foot traffic	Trash

#### **Comments**

This unit is a closed forest, located north of a pond in the southern part of the park. This unit contains the ruins. Other species include black cherry, spicebush, green ash, Virginia creeper, goldenrod, jewelweed, red oak, skunk cabbage, poison ivy, sensitive fern, multiflora rose, Japanese honeysuckle, porcelainberry, oriental bittersweet and tree of heaven.

Unit:	303	Classification II B2a3	
Acreage	0.071499	Is species composition changing?	No
Date:	4/6/2011	Is community structure changing?	No

#### **Management Concerns**

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Woodland	red maple	>30'	No	Dumping
Deciduous	skunk cabbage	<5'	No	1 0
Hemicryptophytes	Japanese knotweed	<5' & 5-30'	Yes	
Wet	stinging nettle	<5'	No	
Depression	buttercup spp.	<5'	No	
	multiflora rose	<5' & 5-30'	Yes	

#### **Comments**

This unit is adjacent to the pond, and is east of a trail. The unit is filled with skunk cabbage in the understory and red maple in the canopy. Other species include sweetgum, moss, spicebush, grasses, multiflora rose and Japanese knotweed.

Unit: Acreage Date:	304 0.333021 7/14/2011	<b>Classification</b> I B2a Is species composition chang Is community structure chang	ing? No	Managem Invasive Sp.	ent Concerns	
<u>Site:</u>	<u>Spe</u>	ecies	<u>Height</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<b>Disturbances</b>
Closed Forest Deciduous Hemicryptophytes Dry/Moist Slope	red r gree mult	etgum naple n ash tiflora rose nk cabbage	>30' >30' & 5-30' <5' - >30' <5' & 5-30' <5'	No No No Yes No		Dumping Trash Erosion

No

#### **Comments**

spicebush

This is a closed forest located in the south part of the park between the Yellow Trail and the park boundary about 200 feet northwest of Ridge Loop. There is a stream that runs into this unit and dries up here. Other species present include red oak, moss, poison ivy, black cherry, ferns, asters, American elm, smartweed, black birch, sassafras, catbrier, warm and cool season grasses, arrowwood, white oak, jewelweed, Virginia creeper, goldenrod, black willow, multiflora rose, Japanese honeysuckle, Japanese stiltgrass, oriental bittersweet, Japanese barberry and garlic mustard.

<5' & 5-30'

Unit:	305	Classification   B2a2	
Acreage	1.052101	Is species composition changing?	No
Date:	7/14/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Dry/Moist Slope	sweetgum tulip poplar black oak spicebush catbrier multiflora rose	<5'->30' <5'->30' >30' <5' & 5-30' <5'->30' <5' & 5-30'	No No No No Yes	Dumping Trash

#### **Comments**

This is a closed forest located in the south part of the park. The unit is south of a vineland and borders the eastern park boundary. The unit is heavily dominated by sweetgum with some vines in the understory. Other species present include black birch, Virginia creeper, red oak, arrowwood, black cherry, white oak, poison ivy, red maple, highbush blueberry, wild strawberry, sassafras, multiflora rose, catbrier, oriental bittersweet, Japanese honeysuckle and Norway maple.

Unit:	306 <b>C</b>	lassification	I B2a4		<u>Manager</u>	nent Conce	erns
Acreage		species composition c	5 5	No	Encroachme	nt	
Date:	7/19/2011 Is	community structure	changing?	No	Invasive Sp.		
<u>Site:</u>	<u>Speci</u>	<u>es</u>	<u>Heig</u>	<u>ht</u>	<u>Exotic</u> <u>Historica</u>	l <u>Uses</u>	<b>Disturbances</b>
Woodland	red oak		>30'		No	Other	Other
Deciduous	black ch	ierry	<5' & 5	-30'	No		
Geophytes	sweetgu	m	>30' &	5-30'	No		
Dry/Moist	cool sea	son grass	<5'		Yes		

#### **Comments**

Level

This unit is a woodland which is the front lawn of 60 Ridge Loop. From the map it looks as if the property owner has encroached upon the park. Current use "other" is front lawn to private home. Environmental disturbance "other" is boundary discrepancy. Other species include Japanese pachysandra, poison ivy, clovers, common dandelion, smartweed and oriental bittersweet.

Unit:	307	Classification   B2a6	
Acreage	0.399007	Is species composition changing?	Yes
Date:	7/19/2011	Is community structure changing?	No

Management Concerns

Invasive Sp. Encroachment

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u> I	<u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Lianas Dry/Moist Slope	sweetgum black cherry red oak poison ivy oriental bittersweet multiflora rose	<5'->30' <5' & 5-30' >30' <5'->30' <5'->30' <5'->30' <5' & 5-30'	No E: No No Yes Yes	xotic planting	Foot traffic	Trash Dumping Other

#### **Comments**

This is a closed forest located at the corner of Ridge Loop. It is dominated by sweetgum in the canopy. Part of 90 Ridge Loop encroaches into the unit. Other species include pokeweed, Virginia creeper, deertongue, goldenrod, Japanese maple, oriental bittersweet, porcelainberry, English ivy, mugwort, Japanese pachysandra, Japanese angelica tree, Japanese knotweed, Japanese honeysuckle, winged euonymus, multiflora rose, bittersweet nightshade and smartweed.

Unit: Acreage Date:	308Classification0.615689Is species composit7/19/2011Is community struct	ion changing? Yes		Managem Invasive Sp.	ent Concerr	<u>ns</u>
Site:	<b>Species</b>	<u>Height</u>	<u>Exot</u>	<u>ic Historical</u>	<u>Uses</u>	<b>Disturbances</b>
Vineland Deciduous Lianas Dry/Moist Slope	porcelainberry poison ivy spicebush oriental bittersweet English ivy multiflora rose	<5'->30' <5'->30' <5' & 5-30' <5'->30' <5'->30' <5' & 5-30'	Yes No No Yes Yes Yes	Foundation	Foot traffic	Trash Trash Trash

#### **Comments**

This is a vineland that is located west of a pond and southeast of the Yellow Trail. A large social gathering area 100 feet northwest of the unit. There is a large American elm in the unit. Other species present are sassafras, red maple, black cherry, catbrier, red oak, ferns, Japanese holly, multiflora rose, porcelainberry, oriental bittersweet, winged euonymus, English ivy, tree of heaven and dodder.

Unit:	309	Classification   B2a2	
Acreage	0.224814	Is species composition changing?	Yes
Date:	7/20/2011	Is community structure changing?	Yes

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Dry/Moist Slope	sweetgum black cherry red oak red maple multiflora rose	<5'- >30' <5'- >30' >30' <5'- >30' <5' & 5-30'	No No No Yes	Foot traffic	Erosion Trash

#### **Comments**

This is a closed forest located approximately 200 feet from the intersection of Ridge Loop and Old Farmers Ln. in the eastern part of the park. It is surrounded by vineland units and the northern boundary is about 20 feet south of a pond. Other species include American elm, spicebush, sassafras, yew, poison ivy, catbrier, white oak, European birch, pokeweed, oriental bittersweet, English ivy, multiflora rose, porcelainberry, Japanese honeysuckle, tree of heaven, mugwort, garlic mustard and white mulberry.

Unit: Acreage Date:	1 1	DN VIII C osition changing? No ructure changing? No		Manageme Invasive Sp.	ent Concer	<u>ns</u>
Site:	<u>Species</u>	<u>Height</u>	Exoti	<u>c Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Vineland Deciduous Lianas Dry/Moist Slope	porcelainberry poison ivy oriental bittersweet Japanese honeysuckle sassafras Japanese angelica	<5'->30' <5'->30' <5'->30' <5'->30' <5' & 5-30' <5' & 5-30'	Yes No Yes Yes No Yes	Foundation Road	Foot traffic	Trash Auto Vandalism

#### **Comments**

This is a vineland unit in the eastern part of the park approximately 200 feet from Ridge Loop and Old Farmers Ln. There are historical foundations within the unit and indication of an old road. A desire line runs through the unit. Other species include ferns, pokeweed, America beech, spicebush, sweetgum, black cherry, Virginia creeper, grasses, Vitis spp., Rubus spp., catbrier, smartweed, porcelainberry, oriental bittersweet, mugwort, Japanese angelica tree, multiflora rose, Japanese honeysuckle, garlic mustard, wineberry, English ivy and orange daylily.

Unit:	311	Classification VIII B	
Acreage	0.450648	Is species composition changing?	No
Date:	7/20/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<b>Disturbances</b>
Vineland	porcelainberry	<5'- >30'	Yes	Trash
Deciduous	oriental bittersweet	<5'- >30'	Yes	Dumping
Lianas	Japanese honeysuckle	<5'- >30'	Yes	
Dry	multiflora rose	<5' & 5-30'	Yes	
Knoll				

#### **Comments**

This unit is a vineland on top of a knoll in the eastern part of the park and approximately 200 feet from Ridge Loop and Old Farmers Ln. The unit is mostly dominated by porcelainberry and there is dumping within the unit. Other species present include lettuce spp., sassafras, poison ivy, trumpetweed, sweet cicely, English ivy, oriental bittersweet, multiflora rose, Japanese honeysuckle, Japanese angelica tree, garlic mustard and loosestrife spp.

Unit: Acreage Date:		cation II B2a4 omposition changing? ity structure changing?	No No	Managem Encroachment	ent Concern	<u>ns</u>
<u>Site:</u> Woodland Deciduous Geophytes	Species sweetgum white pine red maple	<b>Heig</b> <5' & > >30' >30'		<b><u>otic</u> <u>Historical</u></b> Hedgerow Full-crown tree Exotic planting	Foot traffic	<u>Disturbances</u> Other
Dry/Moist Level	cool season grass Japanese barberi		Yes Yes			

#### **Comments**

This unit is a woodland located on Ridge Loop and adjacent to a wetland in the east section of the park. Most of the unit is landscaped with a lawn. Other species include Hydrangea spp., purple leaf plum, kousa dogwood, pine spp., juniper spp., weeping Norway spruce, arrowwood, yew, witch hazel, cherry spp., black eyed Susan, poison ivy and moss. Current Use "Other" is front yard use. Environmental disturbance "Other" is lawn.

Unit:	313	Classification   B2a2	
Acreage	0.089048	Is species composition changing?	No
Date:	7/26/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Closed Forest Deciduous Phanerophytes Dry/Moist Level	sweetgum red maple pussy willow sassafras catbrier	<5'- >30' <5'- >30' >30' & 5-30' <5'- >30' <5'- >30'	No Fence No No No No	Trash Dumping Erosion

#### **Comments**

This unit is a closed forest located west of a pond in the east part of the park. There are several downed logs and wood debris in the unit. Other species include pokeweed, American elm, poison ivy, Virginia creeper, white oak, red oak, jewelweed, black cherry, grape spp., tulip poplar, gray birch, catbrier, porcelainberry, multiflora rose, oriental bittersweet, Japanese knotweed and Japanese angelica tree.

Unit: Acreage Date:	314 0.102948 7/26/2011	<b>Classification</b> I B2 Is species composition char Is community structure cha	0 0		Manageme Encroachment Invasive Sp.	ent Concerns	
Site: Closed Forest Deciduous Phanerophytes Dry/Moist Slope	swee red r black catbr	e <b>cies</b> tgum naple < cherry ier nese knotweed	<u>Height</u> <5'- >30' <5'- >30' <5'- >30' <5'- >30' <5' & 5-30'	Exoti No No No Yes	<b>ic <u>Historical</u></b> Fence Hedgerow	<u>Uses</u>	<u>Disturbances</u> Trash Dumping

#### **Comments**

This unit is a closed forest located southwest of a pond and in the eastern part of the park. It is also located behind a house on Ridge Loop. According to crew map part of 75 Ridge Loop falls within the unit. Other species include Alberta spruce, American pokeweed, jewelweed, poison ivy, American beech, yew, cool season grasses, tulip poplar, American elm, black oak, spicebush, Canada mayflower, hazelnut spp., black birch, cherry spp., sassafras, New York fern, red chokeberry, Japanese angelica tree, multiflora rose, Japanese knotweed, English ivy and bittersweet nightshade.

Unit:	315	Classification III B1e	
Acreage	0.779773	Is species composition changing?	No
Date:	7/26/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Aquatic (fresh)	buttonbush	<5' & 5-30'	No	Trash
Deciduous	swamp loosestrife	<5' & 5-30'	No	
Chamaephytes	algae	<5'	No	
Surface water	porcelainberry	<5' & 5-30'	Yes	
Depression				

#### **Comments**

This unit is a pond located in the eastern part of the park almost next to Ridge loop. Buttonbush dominates the center of the unit. Wildlife was noted including Heron, and possible toads or frogs chirping and skipping across the water. Also a large amount of dragonflies, including whitetail skimmer. Other species include jewelweed, nettle spp., pussy willow, oriental bittersweet and porcelainberry.

Unit: Acreage Date:	316 0.022302 7/27/2011	Classification Is species composition Is community structur	5 5	No No		Manageme Invasive Sp.	ent Conceri	<u>ns</u>
<u>Site:</u> Herbaceous Deciduous Geophytes	cool Japa	ecies season grass nese knotweed c mustard	<u>Heig</u> <5' <5'	<u>ht</u>	<u>Exotio</u> Yes Yes Yes	<b>c</b> <u>Historical</u> Road Exotic planting Full-crown tree	<u>Uses</u> Foot traffic	Disturbances Trash Soil compaction
Dry	5	rado blue spruce	5'-30'		Yes	i dii-ci owii ti ee		

#### **Comments**

Level

This unit is a landscaped area at the end of Francis PI. and Forest Rd. where the Yellow Trail begins. It looks like both roads connected at this spot at one time. There is a guardrail in the unit. Other species include boxwood, Yucca spp., juniper spp., sweetgum, arborvitae, common dandelion, common plantain, forsythia, Japanese barberry, butterfly bush, multiflora rose, euonymus spp. and English ivy.

Unit:	317	Classification II B2a4			<u>Managem</u>	ent Conc	erns
Acreage	0.192128	Is species composition changing?	No		Invasive Sp.		
Date:	7/27/2011	Is community structure changing?	No		Encroachment		
<u>Site:</u>	Spe	ecies Heig	<u>ght</u>	<u>Exot</u>	<u>ic Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland	silve	r maple >30'		No	Fence	Other	Other

>30'

<5'

>30'

5'-30'

Exotic planting

Full-crown tree

No

Yes

Yes

Yes

#### **Comments**

Deciduous

Geophytes

Dry/Moist

Slope

white pine

cool season grass

Norway maple

Japanese maple

This is a woodland that falls into part of the private property at 501 Forest Rd. The crew map indicates that this unit is in parkland property. A deck and backyard are part of the unit. Other species include grape spp., sweetgum, poison ivy, black cherry, Virginia creeper, catbrier, blue atlas cedar, sassafras, goldenrod, tulip poplar, forsythia, English ivy, Japanese angelica tree, Japanese honeysuckle, oriental bittersweet, tree of heaven, multiflora rose and smartweed. Current use "other" is backyard. Environmental disturbance "other" is encroachment.

Unit:	318	Classification IV A2	h		<u>Managem</u>	ent Conc	erns
Acreage Date:	0.018395 7/28/2011	Is species composition changi Is community structure chang	5		Encroachmen	t	
<u>Site:</u>	Spe	ecies	<u>Height</u>	<u>Exoti</u>	<u>c Historical</u>	<u>Uses</u>	<b>Disturbances</b>
Herbaceous Evergreen Geophytes Dry/Moist		j	<5' 5'-30'	Yes No	Hedgerow	Other	

#### **Comments**

Slope

This is an herbaceous unit that is the front lawn of a home on 107 Emerson Ct. According to the crew maps this unit falls within park boundaries. Current Use "Other" is front lawn. Other species include common dandelion.

Unit:	319	Classification   B2a6	
Acreage	0.090618	Is species composition changing?	No
Date:	7/28/2011	Is community structure changing?	No

#### Management Concerns

Disturbances

Dumping Trash

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exoti</u>	<u>c Historical</u>	<u>Uses</u>
Closed Forest Deciduous Lianas Dry/Moist Slope	Norway maple Ailanthus black cherry Japanese honeysuckle English ivy garlic mustard	<5'->30' <5'->30' <5'->30' <5'->30' <5'->30' <5'->30' <5'	Yes Yes No Yes Yes Yes	Hedgerow Exotic planting	

#### **Comments**

This unit is a closed forest consisting of primarily Norway maple. It is located between two homes on Emerson Ct. Throughout the years there seems to have been a lot of dumping within the unit. Other species present include tulip poplar, American pokeweed, honeylocust, rose of Sharon, English ivy, multiflora rose, Japanese honeysuckle, porcelainberry, tree of heaven, garlic mustard, bush honeysuckle, winged euonymus and white mulberry.

Unit:	320 Classification	VIIIC	Management Concerns			
Acreage	1.619417 Is species composition	on changing? No	Invasive Sp.			
Date:	7/28/2011 Is community struct	ure changing? No				
<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	Foot traffic	Trash	
Deciduous	Japanese honeysuckle	<5'- >30'	Yes	Other	Dumping	
Lianas	catbrier	<5'- >30'	Yes			
Dry/Moist	multiflora rose	<5' & 5-30'	Yes			
Slope	tree of heaven	<5'- >30'	Yes			
	blackberry	<5' & 5-30'	No			

#### **Comments**

This unit is a vineland located in the northeast arm of the park between Ocean Terrace and Emerson Court. The unit has a steep slope to the east where there is a great view of Brooklyn and the Verrazano Bridge. The unit is dominated by porcelainberry and has some tall trees scattered throughout, especially tree of heaven. Other species present are yew, red maple, red oak, sweetgum, grape spp., tulip poplar, poison ivy, spicebush, American pokeweed, black cherry, arrowwood, boxelder, bindweed, multiflora rose, porcelainberry, oriental bittersweet, garlic mustard and English ivy.

Unit:	321	Classification   B2a2	
Acreage	0.550121	Is species composition changing?	No
Date:	8/2/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Dry/Moist Slope	sweetgum red oak black cherry multiflora rose catbrier Norway maple	<5'->30' <5'->30' <5'->30' <5'&5-30' <5'->30' <5'->30'	No No Yes No Yes	Dumping Trash

#### **Comments**

This unit is a closed forest located in the northeast arm of the park. The unit is adjacent to some houses and shares a small boundary with Coverly Av. This unit is at the top of the park, very steep, and prone to dumping from the road above. Other species are Virginia creeper, cherry spp., spicebush, American beech, deertongue, sassafras, American pokeweed, poison ivy, tulip poplar, red maple, hickory species, arrowwood, Rubus spp., Vitis spp., English ivy, multiflora rose, Japanese honeysuckle, black locust, oriental bittersweet, Norway maple, Japanese angelica tree, porcelainberry, Japanese barberry, tree of heaven and garlic mustard.

Unit:	322 Classification	VIII C	Management Conc	<u>cerns</u>
Acreage	0.276163 Is species composition	changing? No	Invasive Sp.	
Date:	8/2/2011 Is community structure	e changing? No		
<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<b>Disturbances</b>
Vineland	porcelainberry	<5'- >30'	Yes	Dumping
Deciduous	Japanese honeysuckle	<5'- >30'	Yes	Trash
Lianas	Japanese knotweed	<5' & 5-30'	Yes	
Dry/Moist	multiflora rose	<5'- >30'	Yes	
Slope	English ivy	<5'- >30'	Yes	
	catbrier	<5'->30'	No	

# **Comments**

This unit is a vineland dominated by porcelainberry. The unit is located in the northeast arm of the park behind 528 Ocean Terr. and adjacent to Oceanview Ln. Other species include sweetgum, red oak, American pokeweed, black cherry, Eastern red cedar, multiflora rose, Japanese angelica tree, oriental bittersweet, Japanese honeysuckle, Japanese knotweed and Japanese pachysandra.

Unit:	323	Classification   B2a2	
Acreage	0.347522	Is species composition changing?	No
Date:	8/2/2011	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Dry/Moist Slope	sweetgum Japanese angelica tree of heaven multiflora rose red oak	<5'- >30' <5'- >30' <5'- >30' <5'- >30' <5'- >30'	No Yes Yes No	Trash Dumping

#### **Comments**

This unit is a closed forest located in the northeast arm of the park, behind 560 Ocean Terr. Other species include Virginia creeper, American beech, deertongue, American pokeweed, poison ivy, arrowwood, tulip poplar, red maple, Rubus spp., Vitis spp., English ivy, multiflora rose, Japanese honeysuckle, oriental bittersweet, Norway maple, porcelainberry, garlic mustard and Japanese knotweed.

Unit: Acreage Date:	324 0.832172 8/2/2011	Classification Is species composi Is community strue	tion changing?	No No	Managem Invasive Sp.	<u>ient Conce</u>	<u>rns</u>
Site:	<u>Spe</u>	cies	Heig	<u>ht</u>	<u>Exotic</u> <u>Historical</u>	Uses	<b>Disturbances</b>
Closed Forest	sweet	5	<5'->3	•	No		Trash
Deciduous	red o		<5'->3	-	No		
Phanerophytes		poplar	<5'->3	•	No		Dumping
Dry/Moist	Norw	/ay maple	<5'- >3	0'	Yes		
Slope	spice	bush	<5' & 5	-30'	No		
	multi	iflora rose	<5'->3	0'	Yes		

# **Comments**

This unit is a closed forest in the northeast arm of the park. It is behind 10 Oceanview Ln. Other species are river birch, Virginia creeper, Cherry spp., spicebush, American beech, deertongue, sassafras, American pokeweed, poison ivy, hickory spp., arrowwood, Rubus spp., Vitis spp., black cherry, yew, black oak, American elm, English ivy, black locust, multiflora rose, Japanese honeysuckle, oriental bittersweet, Norway maple, Japanese angelica tree, porcelainberry, tree of heaven, garlic mustard and Japanese knotweed.

Unit:	325	Classification   B2a6	
Acreage	4.918618	Is species composition changing?	No
Date:	8/4/2011	Is community structure changing?	No

# Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Lianas Dry/Moist Slope	red oak black oak white oak catbrier sassafras highbush blueberry	<5'- >30' <5'- >30' <5'- >30' <5' & 5-30' <5' & 5-30' <5' & 5-30'	No No No No No	Foot traffic	Trash

#### **Comments**

This unit is a closed forest located in the northeast part of the park. The unit takes a steep decline from 300 feet elevation above, down to the beginning of the Yellow Trail at 190 feet elevation. The Yellow Trail traverses the south part of the unit. This unit is dominated by oaks with areas of catbrier or mapleleaf viburnum in the understory. Other species are black cherry, blackgum, American beech, hickory spp., musclewood, American elm, blackhaw, American pokeweed, flowering dogwood, Rubus spp., blueberry spp., bush honeysuckle, striped wintergreen, fern spp., deertongue, river birch, Virginia knotweed, Virginia creeper, warm season grasses, plantain spp., poison ivy, red maple, swamp white oak, tulip poplar, garlic mustard, English ivy, goldenrod, Vitis spp., green ash, arrowwood, common hackberry, oriental bittersweet, pinxter bloom azalea, porcelainberry, smartweed, tree of heaven, Japanese angelica tree and black locust.

Unit:	326 Classification	I B2a6	Management Conc	<u>erns</u>
Acreage	0.712763 Is species composit	ion changing? No	Invasive Sp.	
Date:	8/4/2011 Is community struc	ture changing? No	Encroachment	
<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Closed Forest	sweetgum	<5'- >30'	No	Dumping
Deciduous	red oak	<5'- >30'	No	Trash
Lianas	American beech	<5'- >30'	No	
Dry/Moist	hickory spp.	<5'- >30'	No	
Slope	catbrier	<5' & 5-30'	No	
	highbush blueberry	<5' & 5-30'	No	

# **Comments**

This unit is a closed forest. It is in the northeast area of the park adjacent to the homes on Oceanview Ln. The unit starts above a bowl like depression and ends halfway down the depression. Sweetgum and northern red oak dominate the canopy, catbrier and mapleleaf viburnum dominate the understory. There is also a shack in the unit. Other species present include white oak, musclewood, poison ivy, black cherry, blueberry spp., fern spp., sassafras, yew, red maple, forsythia, black oak, Rubus spp., river birch, Japanese angelica tree, oriental bittersweet, Vitis spp., English ivy, periwinkle, Japanese pachysandra, garlic mustard and multiflora rose.

Unit:	327	Classification II B2a2
Acreage	0.213653	Is species composition changing?
Date:	5/14/2012	Is community structure changing?

### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Woodland Deciduous Chamaephytes Moist Slope	Japanese angelica garlic mustard catbrier multiflora rose	<5' & 5-30' <5' <5' <5'	Yes Yes No Yes	

#### **Comments**

This unit is a woodland just southeast of Ocean Terr. in the northeast corner of the park. The unit starts at the top of a steep slope and continues down the slope. There are a few canopy trees (sweetgum, black oak) but primarily Japanese angelica tree dominates. The understory is predominantly vines & invasive herbs, other species include Rubus spp., poison ivy, Japanese honeysuckle, multiflora rose, Virginia creeper, red maple and black cherry.

Unit: Acreage Date:	328Classification0.430605Is species compositie5/7/2012Is community struct	5 5	Io Encroachment ies Deer Impact	<u>ıt Concerns</u>
<b>Site:</b> Woodland Deciduous Lianas Moist Undulating	<b>Species</b> catbrier wild sarsaparilla Japanese honeysuckle multiflora rose garlic mustard sweetgum	Height <5' <5' <5' <5' >30' <5' - >30'	Exotic Historical ( No No Yes Yes Yes No	Uses Disturbances Erosion

# **Comments**

This is an edge unit that is a woodland. Mostly invasive vines in the understory perhaps causing the community structure to shift to a vineland in the future. Other species include English ivy, mapleleaf viburnum, poison ivy, highbush blueberry, Japanese maple, spicebush, asters, Rubus spp., Virginia creeper, Japanese barberry, Japanese knotweed, long-styled sweet cicely and some black cherry regeneration. Other canopy species include American beech, Japanese angelica tree, black birch, black cherry, white oak, red oak, sassafras, American hophornbeam, mockernut hickory, Norway maple and tulip poplar.

Unit:	329	Classification III B1b	
Acreage	0.840009	Is species composition changing?	No
Date:	4/13/2012	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Riparian Buffer Deciduous Hemicryptophytes Surface water	multiflora rose trout lily skunk cabbage spicebush	<5' <5' <5' <5' & 5-30'	Yes No No	Erosion Trash
Slope	mayflower	<5'	No	

# **Comments**

This is a stream. It runs from northwest to southeast of the park and starts from a Phragmites unit. Stream banks are eroding and the southern portion contains a lot of multiflora rose. It has one major tributary on its northwestern slope. It splits into two streams toward the southern end. Other species present include black birch, jewelweed, Japanese honeysuckle, poison ivy, mapleleaf viburnum, English Ivy, violets, cool season grasses, garlic mustard, red maple, Japanese barberry, beaked hazelnut and oak spp. The stream has cobble as the dominant bed material, has a moderate entrenchment ratio, a moderate width/depth ratio, low sinuosity and is categorized as a B-3 stream by the Rosgen classification system.

Unit: Acreage Date:	330 0.206799 4/13/2012	Classification Is species composit Is community struc	tion changing?	No No	Manageme Invasive Sp.	<u>ent Con</u>	<u>cerns</u>
Site: Scrub Deciduous Chamaephytes Dry Slope	mult skun jewel garlio	ecies iflora rose k cabbage lweed c mustard season grass	<b>Heig</b> <5' <5' <5' <5' <5'	<u>ht</u>	Exotic Historical Yes No Yes Yes No	<u>Uses</u>	Disturbances Erosion Trash

# **Comments**

This is a scrubland that is in-between two streams. Several fallen trees are in the area. Other species are violet, mugwort, silky dogwood, Japanese honeysuckle, poison ivy, catbrier, Vitis spp., oriental bittersweet, American pokeweed, spicebush, red oak, trout lily, white snake root, goldenrod, wild onion, fern spp., crabapple and red maple.

Unit:	331	Classification   B2a2		Management Concerns
Acreage Date:		Is species composition changing? Is community structure changing?	No No	Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<b>Disturbances</b>
Closed Forest	multiflora rose	<5'	Yes	Trash
Deciduous	spicebush	5'-30'	No	
Chamaephytes	ash spp.	>30'	No	
Wet	garlic mustard	<5'	Yes	
Slope	trout lily	<5'	No	
·	red maple	>30'		

# **Comments**

This is a closed forest between two streams. Forest floor is covered in trout Iily. Southern area has a few vines climbing up to the canopy. Other species include catbrier, skunk cabbage, red oak, Japanese honeysuckle, oriental bittersweet, grape spp., American elm, poison ivy and silky dogwood.

Unit:	332	Classification IV A1a2	2	Managemo	ent Concerns	<u>.</u>
Acreage	0.435842	Is species composition changin	ig? No	Invasive Sp.		
Date:	4/13/2012	Is community structure changi	ng? No			
Site: Aquatic (fresh) Deciduous Geophytes Surface water Depression	Phra	agmites <	<b>Height</b> 5' & 5-30' 5'	<u>Exotic</u> <u>Historical</u> Yes Yes	<u>Uses</u>	<u>Disturbances</u>

# **Comments**

This is a large Phragmites unit at the west end of the park. There is standing water throughout. There is some skunk cabbage mixed in along the edges and a large patch of multiflora rose in the middle. Other species present are highbush blueberry, burdock spp. and elderberry.

Unit:	333	Classification III B1b	
Acreage	0.025056	Is species composition changing?	No
Date:	4/13/2012	Is community structure changing?	No

# Management Concerns

Deer Impact

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<b>Disturbances</b>
Scrub Deciduous Chamaephytes Wet Depression	multiflora rose garlic mustard	<5' & 5-30' <5'	Yes Yes	Dumping

#### **Comments**

This is a small scrubland on the eastern border of the Phragmites unit. There are a few mature elderberry shrubs and a couple pussy willow trees; one of which has some evidence of deer rub. There is also a downed red maple across the unit. Other species present are Phragmites, catbrier, jewelweed, burdock spp., skunk cabbage, red maple, cool season grasses, Japanese barberry, oriental bittersweet, Rubus spp., fern spp. and poison ivy.

Unit:	334	Classification	IV B1c		Management Conce	erns
Acreage	0.087626	Is species composition	on changing?	No	Invasive Sp.	
Date:	4/13/2012	Is community struct	ure changing?	No		
<u>Site:</u>	Spe	<u>ecies</u>	<u>Heig</u>	<u>ht</u>	Exotic Historical Uses	<b>Disturbances</b>
Vineland	mult	iflora rose	<5'		Yes	Dumping
Deciduous	garli	c mustard	<5'		Yes	
Hemicryptophytes	s Japa	inese honeysuckle	<5'		Yes	
Moist	porc	elainberry	<5'		Yes	
Depression	Japa	inese knotweed	<5' & 5	-30'	Yes	

#### **Comments**

This is a young vineland unit on the north and western border of the Phragmites unit, but still part of the depression. There are a few tires dumped in the unit. There is one lone green ash on the western edge. Other species present include mugwort, mapleleaf viburnum, Phragmites, cool season grasses, lesser celandine, skunk cabbage, daffodil and Japanese angelica tree.

Unit:	335	Classification IV B1a	
Acreage	0.242003	Is species composition changing?	No
Date:	4/13/2012	Is community structure changing?	No

## Management Concerns

Invasive Sp.

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<b>Disturbances</b>
Riparian Buffer Deciduous Chamaephytes Surface water Slope	multiflora rose Japanese knotweed	<5' & 5-30' <5' & 5-30'	Yes Yes	Dumping Trash Erosion

# **Comments**

This is a gully/stream starting at the north western edge of the park, near Wooddale Avenue. It starts up high near the subdivision and descends steeply, west to east, to the herbaceous unit that borders the Phragmites. The banks are eroding. Other species present include garlic mustard, Vitis spp., skunk cabbage, Japanese angelica tree and Rubus spp. The stream has cobble as the dominant bed material, has a high entrenchment ratio, a low width/depth ratio, low sinuosity and is categorized as an A-3 stream by the Rosgen classification system.

Unit:	336	Classification	IV A1d		<u>Managem</u>	<u>ent Concerns</u>	
Acreage	0.175202	Is species composit	ion changing?	No	Invasive Sp.		
Date:	4/20/2012	Is community struc	ture changing?	No	Encroachment		
<u>Site:</u>	<u>Spe</u>	<u>ecies</u>	<u>Heig</u>	<u>ht</u>	<u>Exotic Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Herbaceous	Japa	nese knotweed	<5'		Yes		Dumping
Deciduous	mult	iflora rose	<5'		Yes		Trash
Hemicryptophyte	s garli	c mustard	<5'		Yes		Erosion
Dry	orier	ntal bittersweet	<5' & 5	-30'	Yes		

#### **Comments**

Slope

This unit is an island between two drainage ditches. It starts at Wooddale Avenue and descends toward the Phragmites unit, but does not extend the length of the drainage ditch. The edges are eroding into the stream. It is mostly herbaceous invasives, but there are a few canopy trees such as black birch, red oak, red and sugar maple, black cherry, sweetgum and American elm. Other species present are spicebush, Japanese angelica tree, Virginia creeper, aster spp. and grape spp.

Unit:	337	Classification   B2a2	
Acreage	1.421797	Is species composition changing?	No
Date:	4/20/2012	Is community structure changing?	No

Management Concerns

Deer Impact Ecol. Interact/Ref. Site

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Moist Slope	mapleleaf viburnum highbush blueberry black cherry red oak black birch sweetgum	<5' & 5-30' <5' & 5-30' <5' & 5-30' >30' >30' & 5-30' >30' & 5-30'	No No No No No	Dumping Trash Erosion

#### **Comments**

This unit is a closed forest consisting of primarily red oak and black birch. There are also several red maples and sweetgums. The unit runs from the herbaceous unit at Wooddale Ave east to the Phragmites unit. Other species present include spicebush, oriental bittersweet, garlic mustard, Japanese maple, multiflora rose, musclewood, Rubus spp., asters, poison ivy, Virginia creeper, catbrier, Solomon's seal, Japanese knotweed, American beech, Canada mayflower, round-leaf pyrola, white oak, Northern lady fern, New York fern and pinxter bloom azalea.

Unit:	338	Classification	II B2a2		<u>Manage</u>	<u>ment Conce</u>	erns
Acreage	0.730781	Is species composition	n changing?	No	Deer Impac	t	
Date:	4/20/2012	Is community structu	re changing?	Yes			
<u>Site:</u>	<u>Spe</u>	<u>cies</u>	<u>Heig</u>	<u>ht</u>	Exotic Historic	al <u>Uses</u>	<b>Disturbances</b>
Woodland	multi	flora rose	<5' & 5	-30'	Yes		
Deciduous	spicel	bush	<5' & 5	-30'	No		
Chamaephytes	catbri	ier	<5'		No		
Dry	Japar	nese honeysuckle	<5'		Yes		
Slope	red oa	ak	>30'		No		
	white	oak	>30'		No		

# **Comments**

This unit is a woodland northwest of the Phragmites unit and north of the drainage ditch. Dominant canopy species include red oak, white oak, red maple and black birch. Other canopy species present are sweetgum and tulip poplar. The vegetation under fifteen feet is mostly scrub and vines. This unit could be shifting into a vineland. Other species present are asters, Rubus spp., Virginia creeper, cool season grasses, jewelweed, black cherry, grape spp., oriental bittersweet, cleavers, mapleleaf viburnum, poison ivy, mugwort and Northern lady fern. There is significant deer rub on many trees as well as an active game trail through the unit.

Unit:	339	Classification II B2a2	
Acreage	0.589669	Is species composition changing?	No
Date:	4/20/2012	Is community structure changing?	No

Management Concerns

Deer Impact Herbivory

#### Site: **Species** Height Exotic Historical Uses Disturbances Woodland spicebush <5' & 5-30' No Dumping multiflora rose Deciduous <5' Yes Trash Chamaephytes garlic mustard <5' Yes English ivy <5'- >30' Yes Dry Slope jewelweed <5' No red oak >30' No

# **Comments**

This is a woodland that runs from Wooddale Ave. east. It is just north of the drainage ditch and borders private property. Dominant canopy species are red oak, sweetgum, black birch and tulip poplar. Other trees present but not dominant include red maple, scarlet oak, hickory spp. and white oak. Vegetation under fifteen feet is shrubby, dominated by spicebush. Other species present are poison ivy, Virginia creeper, mapleleaf viburnum, witch hazel, black cherry, Northern lady fern, cinnamon fern, Japanese knotweed, wild onion, Japanese honeysuckle and smooth blackhaw. There is significant deer impact throughout the unit.

Unit:	340 <b>Cl</b>	assification	VIII C		Manager	nent Conce	<u>rns</u>
Acreage Date:		species composition community structu	5 5	No No			
Site: Vineland Deciduous Lianas Moist Slope	Specie catbrier red oak	<u>*S</u>	<u>Heig</u> <5'- >3 >30'		<u>Exotic</u> <u>Historica</u> No No	<u>l</u> <u>Uses</u>	<u>Disturbances</u>

# **Comments**

This is a vineland that starts along the property line on the north/northwest end of the park. It descends down a steep slope to a game trail/desire line. It is predominantly catbrier. Other species include sassafras, red maple, spicebush, black cherry, mapleleaf viburnum, Japanese honeysuckle, poison ivy, cinnamon fern, aster, lesser celandine, black locust, garlic mustard, sweetgum, Virginia creeper, bedstraw, jewelweed, cool season grasses, oriental bittersweet, Canada mayflower and Solomon's seal.

Unit:	341	Classification II B2a2		Management Concer	<u>ns</u>
Acreage	0.529274	Is species composition changing?	No	Invasive Sp.	
Date:	4/25/2012	Is community structure changing?	Yes	Deer Impact Herbivory	
Site:	<u>Spe</u>	ecies Heig	<u>ht</u>	Exotic Historical Uses	<b>Disturbances</b>

>30'

<5'

<5'

<5'

<5' & 5-30'

Yes

No

No

Yes

Yes

Yes

Yes

No

Dumping

# **Comments**

Woodland

Deciduous

Moist

Slope

Chamaephytes

black locust

lesser celandine

Japanese honeysuckle

Japanese honeysuckle

garlic mustard

spicebush

spicebush

catbrier

This unit is a woodland dominated by black locust. It borders the property line near Ocean Terr. and is north of the Phragmites unit. It is likely transforming into a vineland. Other species present include hickory spp., violet, New York fern, red oak, cherry spp., scarlet oak, aster, garlic mustard, poison ivy, Solomon's seal, Japanese honeysuckle, mapleleaf viburnum, sassafras, Rubus spp., multiflora rose, Japanese angelica, tree of heaven, wild onion, cool season grass, black birch, red maple, black cherry and Japanese maple. There is a very large Japanese knotweed unit to the north, just out of parks property, but could easily spread into this unit. The multiflora rose is significantly discolored.

Unit:	342 Classification	I B2a2		Managem	ent Concerns	<u>i</u>
Acreage Date:	0.136167 Is species composit 4/25/2012 Is community struc	0 0	No No	Deer Impact		
<u>Site:</u>	<u>Species</u>	<u>Heigh</u>	<u>t Exot</u>	<u>ic Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous	black birch multiflora rose	>30' <5' & 5-3	No 30' Yes	Road		

<5'

<5'

<5' & 5-30'

#### Comments

Chamaephytes

Undulating

Moist

This unit is a closed forest just north of the Phragmites unit. It appears to be an old road bed. Black birch dominates the canopy with multiflora rose dominant in the understory. The rose is seriously affected by both herbivory or cutting and either an herbicide or a disease. Other species present include sweetgum, Virginia knotweed, viburnum spp., mapleleaf viburnum, oriental bittersweet, Vitis spp., black cherry, sassafras, poison ivy, cool season grass, catbrier, Japanese angelica tree, tree of heaven, Virginia creeper, violets, aster, Japanese maple, tulip tree and black locust. Within this unit, there is a strip of American beech, red oak and scarlet oak on the northwest edge that borders the locust unit. There is significant deer impact.

Unit:	343	Classification II B2a6	
Acreage	0.098373	Is species composition changing?	No
Date:	4/25/2012	Is community structure changing?	No

#### Management Concerns

Invasive Sp.

Site: **Species** Height Exotic Historical Uses Disturbances Woodland red oak >30' No Deciduous red maple <5' & >30' No Lianas multiflora rose <5' Yes catbrier <5' No Dry Slope spicebush <5' & 5-30' No

#### **Comments**

This unit is a woodland that borders the Phragmites unit. It is diverse. There is quite a bit of catbrier, and multiflora rose in the understory. Tree species include white oak, bitternut hickory, red maple, black locust, American beech and black oak. Other species include garlic mustard, Canada mayflower, poison ivy, aster, violets, cool season grass, Virginia creeper, black cherry, oriental bittersweet, Japanese honeysuckle, Vitis spp., mapleleaf viburnum, European spindletree and Japanese angelica tree.

Unit:	344	Classification   B2a2	
Acreage	0.104871	Is species composition changing?	No
Date:	4/25/2012	Is community structure changing?	No

#### **Management Concerns**

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Closed Forest	red oak	>30'	No	Erosion
Deciduous	black birch	>30'	No	Dumping
Chamaephytes	spicebush	<5' & 5-30'	No	Trash
Moist	mapleleaf viburnum	<5' & 5-30'	No	
Slope	American beech	>30' & 5-30'	No	

# **Comments**

This unit is a small closed forest unit between the nice oak/birch forest and the gully. It is a slope leading into a depression. Other species include tulip poplar, black cherry, pinxter bloom azalea, wild sarsaparilla, roundleaf pyrola, Canada mayflower, asters, Japanese maple, red maple, Japanese barberry, sassafras, highbush blueberry, Northern lady fern, cool season grasses and poison ivy.

Unit:	345	Classification   B2a2	
Acreage	0.046274	Is species composition changing?	No
Date:	4/25/2012	Is community structure changing?	No

# Management Concerns

Other

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Riparian Buffer Deciduous Chamaephytes Moist Slope	red oak black birch	>30' >30'	No No	Erosion Dumping Trash

# **Comments**

This is a gullied out stream with an oak canopy. It runs from Merrick Ave, north into the Phragmites unit. Vegetation below fifteen feet is extremely minimal; mostly boulders cover the ground. Other species present include shagbark hickory, black oak, Japanese knotweed, highbush blueberry, multiflora rose, Norway maple, mapleleaf viburnum, aster, Virginia creeper, cinnamon fern, Northern lady fern, poison ivy and cherry spp. The stream has boulder as the dominant bed material, has a high entrenchment ratio, a low width/depth ratio, low sinuosity and is categorized as an A-2 stream by the Rosgen classification system.

Unit: Acreage Date:	346 2.186294 4/30/2012	<b>Classification</b> Is species composition Is community structor	5 5	No No	<u>Managem</u> Ecol. Interact/		<u>erns</u>
Site: Closed Forest Deciduous Phanerophytes Moist Slope	red c Ame mapl	e <b>cies</b> bak rican beech leleaf viburnum e oak	<b>Heig</b> <5' & > <5' - >3 <5' & 5 <5' - >3	>30' 30' 5-30'	Exotic Historical No No No No	<u>Uses</u>	<u>Disturbances</u>

# **Comments**

This is a closed forest unit comprised of mainly oak and American beech. It starts near the Phragmites unit and runs east along the Yellow Trail and just south of the stream. It has a dense healthy understory consisting of highbush blueberry, spicebush and tree regeneration (American beech, red oak white oak, black cherry and black birch). Other species present include sassafras, sweetgum, lowbush blueberry, pinxter bloom azalea, aster, sweet pepperbush, New York fern, hayscented fern, cinnamon fern, Virginia creeper, Rubus spp., poison ivy, Canada mayflower, red maple, tulip poplar, Japanese honeysuckle, Japanese angelica, smooth blackhaw, garlic mustard, wild onion, white snakeroot, multiflora rose, cool season grass, smartweed, cluster snakeroot, lady's thumb and deertongue grass. There was an Eastern box turtle found in this unit.

Unit:	347	Classification II B2a6		Management Concerns
Acreage	0.246094	Is species composition changing?	No	Invasive Sp.
Date:	4/30/2012	Is community structure changing?	No	

5	<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
١	Woodland	multiflora rose	<5' & 5-30'	Yes	Foot traffic	
[	Deciduous	oriental bittersweet	<5'	Yes		
l	_ianas	poison ivy	<5'- >30'	No		
[	Dry	Virginia creeper	<5'	No		
0	Slope	0				

# **Comments**

This is an edge unit that borders the yellow trail and the stream unit. Mostly vines in the herb stratum. The canopy species include black birch, red maple, sweetgum, American beech, red oak and pin oak. Other species include ash seedlings, black cherry regeneration, cool season grasses, Rubus spp., aster, sassafras, porcelainberry, Japanese honeysuckle, round-leaf pyrola, goldenrod, catbrier, deertongue grass and cinquefoil.

Unit: Acreage Date:	0.429152 Is sp	ecies composition of the provident of th	0 0	Yes Yes		Manageme Invasive Sp. Deer Impact Herbivory	ent Concerns	
Site: Closed Forest Deciduous Chamaephytes Moist Slope	Species red oak Japanese I garlic mus wild sarsa mapleleaf	knotweed stard	<u>Heigh</u> >30' <5' & 5- <5' <5' <5' & 5-	30'	No Yes Yes No No	<u>e</u> <u>Historical</u> Road Other	<u>Uses</u>	<b>Disturbances</b> Trash

# **Comments**

This is an edge unit that borders the Natural Gas right of way and the south west property line. Red oak is dominant in the canopy, but there is little regeneration. Most of the understory is invasive, both herbs and shrubs. There is an old road that runs from the house (by the lighthouse) down to the right of way. Other species present include poison ivy, red maple, Virginia creeper, aster spp., goldenrod, American pokeweed, black cherry, hickory spp., Rubus spp., spicebush, winged euonymus, Japanese stiltgrass, Japanese angelica tree, Canada mayflower and blackgum. Historical indicator "other" is Natural Gas pipeline.

Unit:	349	Classification   B2a2	
Acreage	1.874796	Is species composition changing?	No
Date:	5/3/2012	Is community structure changing?	No

## Management Concerns

Ecol. Interact/Ref. Site Succession Deer Impact

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exot</u>	<u>ic Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Moist Slope	red oak black birch mapleleaf viburnum sweet pepperbush highbush blueberry white oak	<5' & >30' <5'- >30' <5' & 5-30' <5' & 5-30' <5' & 5-30' <5' & 5-30' <5' & >30'	No No No no No	Road Other	Foot traffic	Trash

# **Comments**

This is a large oak/birch closed forest unit. The Yellow Trail transverses the unit. The beech unit is to the north and the property line is to the south. There is a lot of oak, black birch, American beech, black cherry and red maple regeneration. There is also an intact, mostly native, understory. Other species include poison ivy, Japanese stiltgrass, spicebush, pinxter bloom azalea, cinquefoil, wild sarsaparilla, Japanese angelica, Virginia creeper, cool season grass, Rubus spp., wineberry, Aster spp., garlic mustard, oriental bittersweet, violets, Japanese barberry, Japanese knotweed, Canada mayflower, striped wintergreen, sassafras, hickory app., jewelweed, multiflora rose, Northern lady fern and hayscented fern. There is also a sapling of American chestnut in this unit, it is resprouting from a larger dead tree that was affected by the blight.

Unit: Acreage Date:	2.949447	Classification Is species composition Is community struct	0 0	No No		Managemon	ent Conceri	<u>ns</u>
<u>Site:</u>	Spec	<u>cies</u>	Heig	<u>ht</u>	<u>Exoti</u>	<u>e Historical</u>	<u>Uses</u>	<b>Disturbances</b>
Closed Forest Deciduous Chamaephytes Moist Undulating	maple	oak	<5'&> <5'&> <5'&> <5'&> <5'& <5'&5 <5'&5	-30' -30'	No No No No No	Full-crown tree	Foot traffic	Trash Dumping

# **Comments**

This is a large closed forest unit running on both sides of the Yellow Trail along the south edge of the park. It is similar to unit 349 in composition, but less dense in the understory. There are several desire lines between the two parts of the Yellow Trail. Other species present include American beech, red maple, black cherry and black cherry regeneration, sweetgum and sweetgum regeneration, white oak, black birch and black birch regeneration, swamp white oak, Solomon's seal, poison ivy, aster, catbrier, Canada mayflower, dogwood spp., highbush blueberry, grape spp., goldenrod, striped wintergreen, cool season grasses, multiflora rose, cinquefoil, Japanese honeysuckle, oriental bittersweet, viburnum spp., spicebush, lady's thumb and Virginia creeper. There are also two American chestnut saplings resprouting from dead parent trees that was affected by the blight.

Unit:	351	Classification   B2a3		<u>Management Concerns</u>
Acreage	0.374455	Is species composition changing?	No	Other
Date:	5/3/2012	Is community structure changing?	Yes	

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Hemicryptophytes Moist Undulating	catbrier mayflower white oak sweetgum	<5' <5' <5' & >30' >30'	No No No	Foot traffic	Other

#### **Comments**

This is a small closed forest unit north of the pond and south of the stream. Several desire lines run through it and surround it. The canopy is predominantly white oak and sweetgum with a couple American beech and black birch. There is a lot of catbrier and Canada mayflower, but there is also some white oak regeneration and cherry regeneration in the understory. Other species present are mapleleaf viburnum, highbush and lowbush blueberry, wild sarsaparilla, aster, poison ivy, flowering dogwood and pinxter bloom azalea. "Other" disturbance is vandalism by axe.

Unit: Acreage Date:	<ul><li>352 Classification</li><li>0.140625 Is species composition</li><li>5/4/2012 Is community structure</li></ul>	0 0	<u>Management Co</u> Invasive Sp. Other	<u>ncerns</u>
<b>Site:</b> Scrub Deciduous Lianas Moist Slope	<b>Species</b> multiflora rose garlic mustard oriental bittersweet Japanese honeysuckle spicebush	Height <5' & 5-30' <5' & 5-30' <5' & 5-30' <5' & 5-30'	Exotic Historical Uses Yes Other Yes Yes No	Disturbances Erosion Dumping Trash

# **Comments**

This is a unit that has been primarily used as a place to dump tires. It is a steep slope descending from Ocean Terr., south. It seems to be a former gully that people filled in with tires years ago. It runs almost to the stream. The understory is mostly vines and invasives. The canopy is mostly open. Other species present include Japanese stiltgrass, violets, Japanese barberry, porcelainberry, mugwort, Virginia creeper, poison ivy, jewelweed, Norway maple, cool season grass and cluster snakeroot.

Unit:	353	Classification   B2a2	
Acreage	1.379033	Is species composition changing?	No
Date:	5/4/2012	Is community structure changing?	No

# Management Concerns

Deer Impact

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous	red oak black birch	<5' & >30' <5'- >30'	No No	Foot traffic	Trash
Chamaephytes Moist Undulating	spicebush Japanese honeysuckle sweetgum catbrier	<5' & 5-30' <5' >30' & 5-30' <5'	No Yes No No		Other

#### **Comments**

This is a large closed forest unit south of Ocean Terr., east of the locust unit and north of the stream. The canopy is mostly red oak, black birch and sweetgum with a few sassafras, white oak, swamp white oak, shagbark hickory and American beech. The understory is a combination of spicebush, Japanese honeysuckle and catbrier with a diverse presence of other species. These include red maple, tulip poplar, Norway maple, musclewood, black oak and sycamore maple in the canopy. Red oak, tulip poplar, sassafras and black cherry are all regenerating. Roundleaf pyrola, wild onion, oriental bittersweet, Japanese barberry, violets, goldenrod, crabapple, highbush and lowbush blueberry, Canada mayflower, aster, pinxter bloom azalea, mapleleaf viburnum, wild sarsaparilla, Rubus spp., poison ivy, grape spp., Northern lady fern, New York fern, cinnamon fern, multiflora rose, jewelweed, white mulberry, garlic mustard, flowering dogwood, cleavers, Virginia creeper, Japanese maple, Japanese boxwood, viburnum spp., dodder spp., long-styled sweet cicely and partridge-berry.

Unit: Acreage Date:	<ul><li>354 Classification</li><li>0.888977 Is species composi</li><li>5/4/2012 Is community strue</li></ul>	tion changing? No	Invasive Sp.	ent Conceri	<u>ns</u>
<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<b>Disturbances</b>
Closed Forest	red oak	>30'	No		Trash
Deciduous	pin oak	>30'	No		Other
Lianas	white oak	>30'	No		
Moist	catbrier	<5'	No		
Slope	Japanese honeysuckle	<5'	Yes		
	multiflora rose	<5'	Yes		

# **Comments**

This is a small closed forest unit with little regeneration or native shrub understory. It is comprised of canopy trees (red oak, pin oak, swamp white oak, white oak, black birch, mockernut hickory) and vines (catbrier, Japanese honeysuckle and multiflora rose). Other species include American beech, Norway maple, ash, oriental bittersweet, lowbush blueberry, Virginia creeper, mapleleaf viburnum, cool season grass, Rubus spp., aster, tulip poplar, goldenrod, sweetgum, blackhaw, poison ivy and sassafras.

Unit:	355	Classification VIII D	
Acreage	0.206391	Is species composition changing?	No
Date:	5/4/2012	Is community structure changing?	No

#### Management Concerns

Deer Impact

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Vineland	Japanese knotweed	<5' & 5-30'	Yes	Erosion
Deciduous	oriental bittersweet	<5'	Yes	Dumping
Lianas	Japanese honeysuckle	<5'	Yes	Trash
Moist	, ,			
Slope				

#### **Comments**

This unit is a vineland just south of Ocean Terr. It is a steep slope descending south from a house. Other species present (in minimal amounts) are multiflora rose, spicebush, jewelweed, jetbead, catbrier, wineberry, garlic mustard, elderberry, American pokeweed, grape spp., cleavers, Rubus spp., mugwort, lambsquarters, porcelainberry, bitter dock and cool season grass.

Unit:	356 Classifica	tion VIIIC		<u>Managem</u>	ent Concer	ns
Acreage Date:		position changing? structure changing?	No No	Invasive Sp.		
Site:	<u>Species</u>	Heig	<u>ht Exo</u>	<u>tic Historical</u>	<u>Uses</u>	Disturbances
Vineland Deciduous Lianas	Japanese knotweed oriental bittersweet English ivy	<5' & 5 <5' & 5 <5'		Other		Soil compaction Planting

#### **Comments**

Moist Level

This is a vineland on the edge of Ocean Terr. and between two houses. It is just north of the other vineland. Species are similar but there are a couple trees and a couple shrubs that are not present in the adjacent vineland. Other species include cleavers, sycamore maple, cherry regeneration, sweetgum, mugwort, Japanese honeysuckle, porcelainberry, bitterdock, aster, pignut hickory, rose of Sharon, Rubus spp., goldenrod, violets and hostas.

Unit:	357	Classification VIII C	
Acreage	0.274985	Is species composition changing?	No
Date:	5/7/2012	Is community structure changing?	No

# Management Concerns

Invasive Sp. Encroachment Deer Impact

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical Uses	<b>Disturbances</b>
Vineland	Japanese honeysuckle	<5'	Yes	Fire
Deciduous	multiflora rose	<5'	Yes	Erosion
Lianas	oriental bittersweet	<5' & 5-30'	Yes	Soil compaction
Moist	garlic mustard	<5'	Yes	
Slope	jetbead	<5'	Yes	

# **Comments**

This is a very disturbed edge unit south of Ocean Terr. There is significant encroachment, past and present. It is a steep slope primarily covered in Japanese honeysuckle and multiflora rose. Other herbaceous species include catbrier, poison ivy, porcelainberry, cool season grasses, cleavers, English ivy, jewelweed, Virginia creeper, goldenrod, American hazelnut and bracken fern. There are a couple surviving trees in the unit, they are mockernut hickory, sassafras, and red oak. Several trees have been overcome by the vines. In addition, dumping is also a factor of environmental disturbance. The multiflora rose and Japanese honeysuckle have similar disease/biocide discoloration that is present on the western side of the park.

Unit: Acreage Date:	<ul><li>358 Classification</li><li>0.628583 Is species compositio</li><li>5/7/2012 Is community structure</li></ul>	5 5	Managen Invasive Sp. Encroachme Deer Impact	nent Concern	<u>s</u>
Site:	<u>Species</u>	<u>Height</u>	Exotic Historica	<u>Uses</u>	<b>Disturbances</b>
Woodland Deciduous	catbrier Japanese honeysuckle	<5' <5'	No Yes		Fire Erosion
Lianas Moist Slope	Japanese angelica red oak oriental bittersweet	<5'->30' >30' <5' & 5-30'	Yes No Yes	Vehicle access	Dumping

# **Comments**

This unit is a woodland starting at the north edge of the park that borders Ocean Terr. It runs down a steep slope into a closed forest, the vines become less dense at the south edge of the unit. The canopy is primarily composed of red oak with a few swamp white oaks and sassafras mixed in. The ground vegetation is primarily catbrier and Japanese honeysuckle. There is a lot of sassafras and black cherry regeneration and some red maple, red oak and swamp white oak regeneration. There are also several Japanese angelica trees and one large community of wineberry. Other species present include porcelainberry, multiflora rose, Solomon's seal, Japanese knotweed, aster, Virginia creeper, cool season grasses, mapleleaf viburnum, lowbush blueberry, pinxter bloom azalea, cinnamon fern, jetbead, garlic mustard, jewelweed, English ivy, winged euonymus, Rubus spp., American hazelnut, American holly and poison ivy. Regenerating species are sassafras, black cherry and red maple.

Unit:	359	Classification   B2a2	
Acreage	1.820737	Is species composition changing?	No
Date:	5/7/2012	Is community structure changing?	No

#### Management Concerns

Deer Impact

<u>Site:</u>	<u>Species</u>	<u>Height</u>	Exotic Historical	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Moist Undulating	catbrier mapleleaf viburnum lowbush blueberry red oak pinxter bloom azalea American beech	<5' <5' >30' <5' & 5-30' <5' & 5-30'	No No No No No	Foot traffic	Trash

#### **Comments**

This is a closed forest unit north of the stream and south of Ocean Terr. There is a lot of tree regeneration despite the ground cover being primarily catbrier. Canopy species include black oak, white oak, swamp white oak, bitternut hickory, mockernut hickory, red maple, sassafras, black birch and chestnut oak. Other species present include American holly, asters, sweetgum, Northern lady fern, Hercules club, cinquefoil, New York fern, spicebush, highbush blueberry, mushroom spp., pinxter bloom azalea, white snakeroot, Canada mayflower, Virginia creeper, deertongue, cool season grasses, oriental bittersweet, goldenrod, mapleleaf viburnum, Rubus spp. and smartweed. Regenerating species are sassafras, black cherry, sweetgum, black birch, red maple, white oak, swamp white oak and American beech.

Unit: Acreage Date:	<ul><li>360 Classification</li><li>0.81275 Is species compositi</li><li>5/8/2012 Is community struct</li></ul>	on changing? No	Manageme Invasive Sp. Deer Impact	<u>ent Conce</u>	<u>rns</u>
<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Woodland Deciduous Lianas Moist Knoll	catbrier oriental bittersweet Japanese honeysuckle garlic mustard sassafras multiflora rose	<5'->30' <5'->30' <5' <5' <5' <5' & 5-30'	No Yes Yes No Yes		Soil compaction

# **Comments**

This unit is a small woodland that may be transitioning into a vineland. It covers the top and part of the sides of a knoll in the north/northeast part of the park, close to the Ocean Terr. boundary. The canopy is mostly sassafras and young red oak with a few black cherry, tree of heaven and hickories mixed in. The understory is predominantly catbrier and oriental bittersweet which have ascended many trees. Other species present include Rubus spp., long-styled sweet cicely, aster, Japanese angelica tree, flowering dogwood, multiflora rose, deertongue, poison ivy, lowbush blueberry, goldenrod, white oak, swamp white oak, pin oak, Virginia creeper, cool season grass, black birch, porcelainberry, wineberry, cleavers, Canada mayflower, mockernut hickory and shagbark hickory. Regenerating species are black cherry, red maple, American beech, white oak, red oak and swamp white oak.

Unit:	361	Classification   B2a1	
Acreage	0.674013	Is species composition changing?	No
Date:	5/8/2012	Is community structure changing?	No

#### Management Concerns

<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 Moist	black birch black cherry	<5'- >30' <5'	No No	Foot traffic	Dumping Trash

#### **Comments**

Slope

This is a small closed forest unit dominated by young black birch trees. It is south of Ocean Terr. Other canopy species include red oak, pin oak, sweetgum, swamp white oak, American beech, red maple, white oak and sassafras. The understory is sparse, but species include mapleleaf viburnum, blueberry, striped wintergreen, Solomon's seal, poison ivy, Virginia creeper, Japanese honeysuckle, Japanese maple, cool season grass, goldenrod, shagbark hickory, catbrier, aster and pinxter bloom azalea. Regenerating species are sassafras, red maple, white oak and red oak.

Unit: Acreage Date:	<ul><li>362 Classification</li><li>0.099914 Is species compositi</li><li>5/9/2012 Is community struct</li></ul>	on changing? No	Manageme Invasive Sp. Herbivory Deer Impact	<u>ent Concerns</u>
<b>Site:</b> Vineland Deciduous Lianas Moist Slope	<b>Species</b> porcelainberry multiflora rose Japanese honeysuckle garlic mustard	<u>Height</u> <5' & 5-30' <5' & 5-30' <5' <5'	Exotic Historical Yes Yes Yes Yes	Uses Disturbances Erosion Soil compaction Dumping

#### **Comments**

This is a steeply sloped vineland west of a pond maintained by a neighborhood association. There are a few canopy trees, including red oak, sweetgum, pin oak, Norway maple and American elm, but most of the canopy is open. Other species include cleavers, wild sarsaparilla, poison ivy, Virginia creeper, jewelweed, English ivy, New York fern, spicebush, grape spp., catbrier, mugwort, bitter dock and long-styled sweet cicely. Trash is also an environmental disturbance.

Unit:	363 Classification	II B2a1	<u>Manager</u>	nent Conce	erns
Acreage	0.675148 Is species composition	changing?	No Herbivory		
Date:	5/9/2012		Is community structure changi	ng? No	Deer Impact
Site:	<b>Species</b>	<u>Heig</u>	<u>nt Exotic Historica</u>	l <u>Uses</u>	<b>Disturbances</b>
Woodland	pin oak	>30'	No	Foot traffic	Dumping
Deciduous	poison ivy	<5'- >3	D' No		Trash
Phanerophytes	sweetgum	<5'- >3	D' No		
Wet	Japanese honeysuckle	<5'	Yes		
	black cherry	<5'- >3	D' No		
	tulip poplar	<5'- >3	D' No		

#### **Comments**

This unit is a closed forest with one large canopy gap on the southern end of it. The understory is dominated by multiflora rose in the canopy gap. The Yellow Trail runs along the west border of the unit. There is a lot of canopy tree regeneration. Other species include English ivy, garlic mustard, New York fern, wild sarsaparilla, Virginia creeper, poison ivy, spicebush, wild onion, Japanese honeysuckle, aster, blackgum, jewelweed, catbrier, Japanese angelica tree, American beech, mapleleaf viburnum, swamp cabbage, oriental bittersweet, Canada mayflower, cool season grasses, Japanese stiltgrass and American basswood. Regenerating species are sweetgum, red oak, ash spp., tulip poplar, red maple, black cherry, swamp white oak, white oak and sassafras.

Unit:	364	Classification   B2a	2	<u>Managem</u>	ent Conceri	ns
Acreage	0.751564	Is species composition chang	ing? No	Herbivory		
Date:	5/9/2012	Is community structure change	ging? No	Deer Impact		
<u>Site:</u>	Spe	ecies	<u>Height</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<b>Disturbances</b>
Closed Forest	red o	bak	<5' & >30'	No	Foot traffic	Dumping
Deciduous	lowb	oush blueberry	<5'	No	Picnic	Trash
Chamaephytes	whit	e oak	<5'- >30'	No		Trash
Moist	blac	k birch	<5' & >30'	No		

# **Comments**

Slope

This is a closed forest unit that has the Yellow Trail running through it and has a picnic site in it. The canopy is mostly red oak, white oak and black birch. Other trees in the canopy are American beech, black oak and sassafras. There is a lot of white oak regeneration and a lot of lowbush blueberry in the understory. Other species include Virginia creeper, cool season grasses, mapleleaf viburnum, goldenrod, poison ivy, highbush blueberry, flowering dogwood, spicebush, aster, American chestnut and Japanese angelica tree. Regenerating species are red oak, American beech, black birch, black cherry, sassafras, sweetgum and hickories.

Unit:	365	Classification   B2a2	
Acreage	0.681372	Is species composition changing?	No
Date:	5/10/2012	Is community structure changing?	No

# **Management Concerns**

<u>Site:</u>	<u>Species</u>	<u>Height</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Moist Slope	red oak black birch white oak lowbush blueberry	>30' >30' & 5-30' >30' & 5-30' <5'	No No No	Foot traffic	

#### **Comments**

This unit is a closed forest south of Ocean Terr. and north of the Yellow Trail. There is very little understory. Canopy is mostly red oak, white oak and black birch. Other species include lowbush blueberry, flowering dogwood, catbrier, blackgum, pinxter bloom azalea, mapleleaf viburnum, American chestnut, cinnamon fern and black cherry. Regenerating species are sassafras, black birch, white oak, sweetgum, red oak, red maple, American beech and black cherry.

Unit:	366	Classification   B2a2		Managem	ent Conceri	ns
Acreage	1.568871	Is species composition changir	ng? No	Deer Impact		
Date:	5/10/2012	Is community structure chang	ng? No	Herbivory Ecol. Interact/	Ref. Site	
Site:	Spe	ecies 1	<u>Height</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes	5	bush blueberry <	<5' & >30' <5' & 5-30' <5' & >30'	No No No	Foot traffic	

# **Comments**

Moist Undulating

This is a nice closed forest unit. Dominant canopy trees are red oak, white oak and black oak. Highbush blueberry is dominant throughout the understory. Other species include lowbush blueberry, spicebush, black birch, pinxter bloom azalea, catbrier, mapleleaf viburnum, cinnamon fern, New York fern, cool season grass, Canada mayflower, aster, sassafras, Virginia creeper, oriental bittersweet, trout lily, red maple, American beech, black birch, blackgum and sweetgum. Regenerating species are black birch, red oak, white oak, black cherry, red maple, sweetgum and sassafras.

Unit:	367	Classification   B2a2		Management Conce	erns
Acreage	0.068338	Is species composition changin	ng? No	Encroachment	
Date:	5/10/2012	Is community structure changi	ng? No		
	~		- • • •		<b>-1</b> - 1
<u>Site:</u>	<u>Spe</u>	<u>ecies</u> <u>I</u>	<u>Height</u>	Exotic Historical Uses	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes	witch red o		<5' & 5-30' >30'	No No	

#### **Comments**

Moist Slope

This is an oak closed forest that has a lot of witch hazel, it's a solid healthy population. Other species present are pinxter bloom azalea, sassafras, black birch, red maple, American beech, catbrier, black oak and black cherry. A red-backed salamander was observed in the unit. Regenerating species is sassafras. The witch hazel is a rare species within the park, and the size of this stand is unrivaled within the park.

Unit:	368 (	Classification   B2a2		Manageme	ent Concerns	
Acreage Date:		s species composition changing? s community structure changing?	No No	Deer Impact		
<u>Site:</u>	Speci	ies <u>Heig</u>	<u>ht</u>	<u>Exotic</u> <u>Historical</u>	<u>Uses</u>	<u>Disturbances</u>
Closed Forest Deciduous Chamaephytes Moist	catbrie blackgu spicebu	um <5'->3		No No No		Trash

#### **Comments**

Moist Level

This is a closed forest unit north of the stream and the island between the stream split. Blackgum dominates the canopy with one American elm, one musclewood and a few red oaks present. Spicebush and catbrier dominate the understory. Other species include poison ivy, multiflora rose, long-styled sweet cicely, jewelweed, Canada mayflower, hackberry, Japanese barberry, cinnamon fern, oriental bittersweet, aster, Solomon's seal, mapleleaf viburnum, garlic mustard, Vitis spp., Virginia creeper, Northern lady fern, white snakeroot and American hazelnut. Regenerating species are black birch, sweetgum, black cherry, blackgum, white oak, swamp white oak, red maple, American elm and tulip poplar.

Unit:	369	Classification	I B2a2		Management Concerns
Acreage	2.035642	Is species composition	changing?	No	Succession
Date:	5/14/2012	Is community structure	e changing?	No	Ecol. Interact/Ref. Site Deer Impact
Site:	Spe	ecies	Heig	ht	<u>Exotic Historical</u> <u>Uses</u>

Deciduous Chamaephytes Moist Slope

**Closed Forest** 

red oak

highbush blueberry

# **Comments**

This is a large closed forest unit just north of the stream on the eastern side of the park. There are a lot of tulip poplar, red maple and white oak saplings. There is also black cherry, sweetgum, sassafras, red oak and swamp white oak regeneration. Several desire lines cut through the unit, as does the Yellow Trail. Other species present include highbush blueberry, lowbush blueberry, wild sarsaparilla, New York fern, aster, Solomon's seal, catbrier, flowering dogwood, poison ivy, Japanese angelica tree, goldenrod, Virginia creeper, cool season grass, cinnamon fern, striped wintergreen and mapleleaf viburnum.

<5' & >30'

<5' & 5-30'

No

No

**Disturbances** 

Foot traffic

# Section IV. APPENDIX 1: Glossary

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

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

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

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

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

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

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

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

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

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

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

Graminoid: Grasses and grass-like plants.

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

Hemicryptophyte: Shoots die back to ground level.

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

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

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

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

Knoll: A small isolated hillock.

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

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

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

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

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

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

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

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

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

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

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

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

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

# Section V. APPENDIX 2: Species List

The following list of species are found in the Northeast United States.

# Common Name

Adam's needle adder's-mouth orchid agrimony alder alfalfa algae spp. alkaligrass Allegheny blackberry Allegheny monkeyflower alternateleaf dogwood alumroot American alumroot American basswood American beachgrass American beech American bittersweet American bladdernut American bur-reed American cancer-root American chestnut American elm American false pennyroyal American featherfoil American hazelnut American holly American hornbeam American ipecac American mannagrass American mountain ash American plum American pokeweed American red raspberry American senna American speedwell American strawberry bush American sycamore American water plantain American white waterlily American wintergreen American witchhazel American yew Amur corktree Amur honeysuckle Amur maackia Amur maple anemone anisescented goldenrod annual bluegrass annual canarygrass annual wildrice apple arborvitae arborvitae arctic rush

# Scientific Name

Yucca filamentosa Malaxis spp. Agrimonia gryposepala Alnus spp. Medicago spp.

Puccinellia spp. Rubus allegheniensis Mimulus ringens Cornus alternifolia Heuchera spp. Heuchera americana Tilia americana Ammophila breviligulata Fagus grandifolia Celastrus scandens Staphylea trifolia Sparganium americanum Conopholis americana Castanea dentata Ulmus americana Hedeoma pulegioides Hottonia inflata Corylus americana Ilex opaca Carpinus caroliniana Euphorbia ipecacuanhae Gluceria arandis Sorbus americana Prunus americana Phytolacca americana Rubus idaeus Senna hebecarpa Veronica americana Euonymus americanus Platanus occidentalis Alisma subcordatum Nymphaea odorata Pyrola americana Hamamelis virginiana Taxus canadensis Phellodendron amurense Lonicera maackii Maackia amurensis Acer ginnala Anemone spp. Solidago odora Poa annua Phalaris canariensis Zizania aquatica Malus spp. Thuja occidentalis Thuja spp. Juncus arcticus

# Common Name

arrow arum arrowfeather threeawn arrowhead arrowhead rattlebox arrowleaf tearthumb arrowleaf violet arrowwood ash Asian flatsedge Asiatic bittersweet Asiatic dayflower asparagus aster aster aster aster Atlantic mannagrass Atlantic white cedar Austrian pine autumn coralroot autumn olive avens bald brome baldcypress balsam fir balsam poplar baneberry barbed bristlegrass barley barnyardgrass basil mountainmint bastard toadflax bay forget-me-not bayberry beach clotbur beach false foxglove beach pea beach plum beach sedge beaked spikerush beaksedge bear oak Bebb willow bedstraw beech beechdrops beechfern beggarticks bellwort bent sedge bentgrass Bermudagrass big bluestem big cordgrass

# Scientific Name

Peltandra spp. Aristida purpurascens Sagittaria spp. Crotalaria sagittalis Polygonum sagittatum Viola sagittata Viburnum dentatum Fraxinus spp. Cyperus amuricus Celastrus orbiculatus Commelina communis Asparagus spp. Eurybia spp. Ionactis spp. Oclemena spp. Symphyotrichum spp. Glyceria obtusa Chamaecyparis thyoides Pinus nigra Corallorhiza odontorhiza Elaeagnus umbellata Geum spp. Bromus racemosus Taxodium distichum Abies balsamea Populus balsamifera Actaea spp. Setaria verticilliformis Hordeum spp. Echinochloa crus-galli Pycnanthemum clinopodioides Comandra umbellata Myosotis laxa Morella spp. Xanthium strumarium Agalinis fasciculata Lathyrus japonicus Prunus maritima Carex silicea Eleocharis rostellata Rhynchospora spp. Quercus ilicifolia Salix bebbiana Galium spp. Fagus spp. Epifagus virginiana Phegopteris spp. Bidens spp. Uvularia spp. Carex styloflexa Agrostis spp. Cynodon dactylon Andropogon gerardii Spartina cynosuroides

big devils beggartick bigbract verbena bigtooth aspen billion-dollar grass bindweed birch birdeye speedwell birdfoot violet bitter panicgrass bittercress bitternut hickory black alder black baneberry black bindweed black birch/sweet birch black cherry black huckleberry black knapweed black locust black maple black oak black walnut black willow blackberry blackeyed Susan blackgum blackhaw blackjack oak blackseed plantain blackseed speargrass bladderfern blazing star bloodroot blue atlas cedar blue huckleberry blue sedge blue skullcap blue waxweed blue wild indigo blueberry bluecurls blue-eyed grass bluegrass bluejacket bluejoint bluestem bluet blunt broom sedge blunt spikerush bluntleaf bedstraw bluntlobe cliff fern bog fern bog rush bog yellowcress Boston ivy bouncing bet boxelder brackenfern bright green spikerush

### Scientific Name

Bidens vulgata Verbena bracteata Populus grandidentata Echinochloa frumentacea Convolvulus spp. Betula spp. Veronica persica Viola pedata Panicum amarum Cardamine spp. Carya cordiformis Alnus glutinosa Actaea racemosa Polugonum convolvulus Betula lenta Prunus serotina Gaylussacia baccata Centaurea nigra Robinia pseudoacacia Acer nigrum Quercus velutina Juglans nigra Salix nigra Rubus spp. Rudbeckia hirta Nyssa sylvatica Viburnum prunifolium Quercus marilandica Plantago rugelii Piptochaetium avenaceum Cystopteris spp. Liatris spp. Sanauinaria canadensis Cedrus atlantica Gaylussacia frondosa Carex glaucodea Scutellaria lateriflora Cuphea viscosissima Baptisia australis Vaccinium spp. Trichostema spp. Sisyrinchium spp. Poa spp. Tradescantia ohiensis Calamagrostis canadensis Andropogon spp. Houstonia spp. Carex tribuloides Eleocharis obtusa Galium obtusum Woodsia obtusa Thelypteris simulata Juncus biflorus Rorippa palustris Parthenocissus tricuspidata Saponaria officinalis Acer negundo Pteridium spp. Eleocharis olivacea

#### Common Name

bristlegrass bristly buttercup bristly dewberry brittle bladderfern broad beechfern broadfruit bur-reed broadleaf cattail broadleaf rosette grass brome brookweed broomcorn millet broomrape broomsedge bluestem brown knapweed brown widelip orchid brownish beaksedge browntop buckeye buckwheat bull thistle bulrush bur cucumber bur oak burdock burnet burningbush bur-reed bush honeysuckle bushy bluestem bushy knotweed butter and eggs buttercup butterfly milkweed butternut button sedge buttonweed calico aster callery pear camphorweed campion Canada bluegrass Canada goldenrod Canada lettuce Canada lily Canada mayflower Canada thistle Canada toadflax Canadian blacksnakeroot Canadian clearweed Canadian lousewort Canadian rush Canadian serviceberry Canadian woodnettle canarygrass cankerweed cantaloupe cardinalflower Carolina geranium Carolina mosquitofern

# Scientific Name

Setaria spp. Ranunculus hispidus Rubus hispidus Cystopteris fragilis Phegopteris hexagonoptera Sparganium eurycarpum Typha latifolia Dichanthelium latifolium Bromus spp. Samolus spp. Panicum miliaceum Orobanche spp. Andropogon virginicus Centaurea jacea Liparis liliifolia Rhynchospora capitellata Microstegium spp. Aesculus spp. Fagopyrum esculentum Cirsium vulgare Scirpus spp. Sicyos spp. Quercus macrocarpa Arctium spp. Sanguisorba spp. Euonymus alatus Sparganium spp. Diervilla spp. Andropogon glomeratus Polygonum ramosissimum Linaria vulgaris Ranunculus spp. Asclepias tuberosa Juglans cinerea Carex bullata Diodia spp. Symphyotrichum lateriflorum Pyrus calleryana Pluchea spp. Lychnis spp. Poa compressa Solidago canadensis Lactuca canadensis Lilium canadense Maianthemum canadense Cirsium arvense Nuttallanthus canadensis Sanicula canadensis Pilea pumila Pedicularis canadensis Juncus canadensis Amelanchier canadensis Laportea canadensis Phalaris spp. Prenanthes serpentaria Cucumis melo Lobelia cardinalis Geranium carolinianum Azolla caroliniana

Carolina rose carpetweed catalpa catberry catbrier catchfly catnip cat's ear cattail cattail sedge cedar celandine cereal rye chainfern cheatgrass chestnut chestnut oak chicory Chinese chestnut Chinese wisteria chokeberry chokecherry Christmas fern churchmouse threeawn cinnamon fern cinquefoil clammy hedgehyssop clearweed cliff fern climbing false buckwheat climbing hempvine climbing nightshade Clinton's woodfern clover clustered mille graines clustered mountainmint clustered snakeroot coast cockspur grass coastal jointweed coastal plain blue-eyed grass cockspur grass codlins and cream colicroot Collins' sedge Colorado blue spruce columbine common barberry common blue violet common blue wood aster common boneset common buckthorn common buttonbush common chickweed common cinquefoil common dandelion common dittany common evening primrose common fleabane common goldstar

#### Scientific Name

Rosa carolina Mollugo spp. Catalpa spp. Ilex mucronata Smilax spp. Silene spp. Nepeta cataria Hypochaeris spp. Typha spp. Carex typhina Chamaecyparis spp. Chelidonium majus Secale cereale Woodwardia spp. Bromus tectorum Castanea spp. Quercus prinus Cichorium intybus Castanea mollissima Wisteria sinensis Photinia spp. Prunus virginiana Polystichum acrostichoides Aristida dichotoma Osmunda cinnamomea Potentilla spp. Gratiola neglecta Pilea spp. Woodsia spp. Polygonum scandens Mikania scandens Solanum dulcamara Dryopteris clintoniana Trifolium spp. Oldenlandia uniflora Pycnanthemum muticum Sanicula ordorata Echinochloa walteri Polygonella articulata Sisyrinchium fuscatum Echinochloa spp. Epilobium hirsutum Aletris spp. Carex collinsii Picea pungens Aquilegia spp. Berberis vulgaris Viola sororia Symphyotrichum cordifolium Eupatorium perfoliatum Rhamnus cathartica Cephalanthus occidentalis Stellaria media Potentilla simplex Taraxacum officinale Cunila origanoides Oenothera biennis Erigeron philadelphicus Hypoxis hirsuta

#### Common Name

common grape hyacinth common hackberry common hop common hoptree common juniper common ladyfern common mallow common milkweed common moonseed common mullein common oat common pear common pepperweed common periwinkle common persimmon common plantain common pricklyash common ragweed common serviceberry common sheep sorrel common sowthistle common spikerush common threesquare common velvetgrass common winterberry common yarrow compact dodder composite dropseed cone-cup spikerush coneflower cool season grass coon's tail coralroot cordgrass corn chamomile corn gromwell corn speedwell Cornelian cherry cosmopolitan bulrush cottongrass cow vetch cowbane cowparsnip crabgrass crack willow cranberry crapemyrtle cream avens creeping bentgrass creeping buttercup creeping lespedeza creeping velvetgrass creeping woodsorrel crested saltbush crested woodfern crippled cranefly crownbeard crowngrass cryptomeria

# Scientific Name

Muscari botryoides Celtis occidentalis Humulus lupulus Ptelea trifoliata Juniperus communis Athyrium filix-femina Malva neglecta Asclepias syriaca Menispermum canadense Verbascum thapsus Avena sativa Pyrus communis Lepidium densiflorum Vinca minor Diospyros virginiana Plantago major Zanthoxylum americanum Ambrosia artemisiifolia Amelanchier arborea Rumex acetosella Sonchus oleraceus Eleocharis palustris Schoenoplectus pungens Holcus lanatus Ilex verticillata Achillea millefolium Cuscuta compacta Sporobolus compositus Eleocharis tuberculosa Rudbeckia spp.

Ceratophyllum demersum Corallorhiza spp. Spartina spp. Anthemis arvensis Buglossoides arvensis Veronica arvensis Cornus mas Schoenoplectus maritimus Eriophorum spp. Vicia cracca Oxypolis spp. Heracleum Digitaria spp. Salix fragilis Vaccinium macrocarpon Lagerstroemia indica Geum virginianum Agrostis stolonifera Ranunculus repens Lespedeza repens Holcus mollis Oxalis corniculata Atriplex cristata Dryopteris cristata Tipularia discolor Verbesina spp. Paspalum spp. Cryptomeria japonica

cucumber-tree cudweed Culver's root cunila curly dock curly pondweed curlyheads currant cursed buttercup cutgrass cutleaf evening primrose cutleaf grapefern cypress panicgrass cypress spurge daisy fleabane Darnel ryegrass dawn redwood dayflower decodon deerberry deertongue densetuft hairsedge Deodar cedar Deptford pink desert false indigo devil's beggartick devil's darning needles devil's walkingstick devil's-tongue dock dodder dogbane dogtooth violet dogwood dotted smartweed doubtful knight's-spur Douglas-fir dovefoot geranium downy carrionflower downy goldenrod downy milkpea downy rattlesnake plantain downy wildrye downy yellow false foxglove downy yellow violet draba dropseed duckweed dutchman's breeches dutchman's pipe dwarf cinquefoil dwarf ginseng dwarf huckleberry dwarf saltwort dwarf spikerush dwarfdandelion early azalea early bluegrass early buttercup

### Scientific Name

Magnolia acuminata Gnaphalium spp. Veronicastrum virginicum Cunila spp. Rumex crispus Potamogeton crispus Clematis ochroleuca Ribes spp. Ranunculus sceleratus Leersia spp. Oenothera laciniata Botrychium dissectum Dichanthelium dichotomum Euphorbia cyparissias Erigeron annuus Lolium temulentum Metasequoia glyptostroboides Commelina spp. Decodon spp. Vaccinium stamineum Dichanthelium clandestinum Bulbostylis capillaris Cedrus deodara Dianthus armeria Amorpha fruticosa Bidens frondosa Clematis virginiana Aralia spinosa Opuntia humifusa Rumex spp. Cuscuta spp. Apocynum spp. Erythronium americanum Cornus spp. Polygonum punctatum Consolida ajacis Pseudotsuga menziesii Geranium molle Smilax pulverulenta Solidago puberula Galactia volubilis Goodyera pubescens Elymus villosus Aureolaria virginica Viola pubescens Draba spp. Sporobolus spp. Lemna spp. Dicentra cucullaria Aristolochia macrophylla Potentilla canadensis Panax trifolius Gaylussacia dumosa Salicornia bigelovii Eleocharis parvula Krigia spp. Rhododendron prinophyllum Poa cuspidata Ranunculus fascicularis

#### **Common Name**

early meadow-rue earth loosestrife eastern annual saltmarsh aster eastern blue-eyed grass eastern cottonwood eastern gamagrass eastern grasswort eastern hemlock eastern Joe Pye weed eastern leatherwood eastern marsh fern eastern redbud eastern redcedar eastern silver aster eastern star sedge eastern straw sedge eastern teaberry eastern waterleaf eastern white pine ebony spleenwort elderberry Elliott's goldenrod elm enchanter's nightshade English ivy English oak English plantain erect knotweed European beech European birch European cranberrybush European gooseberry European heliotrope European hornbeam European larch European lily of the valley European mountain ash European privet European spindletree European stickseed evening primrose fall panicgrass fall phlox false baby's breath false daisy false hellebore false indigo false mannagrass false nettle false pennyroyal false pimpernel false Solomon's seal false spleenwort fern fern flatsedge fernleaf yellow false foxglove fescue feverwort field bindweed

# Scientific Name

Thalictrum dioicum Lysimachia terrestris Symphyotrichum subulatum Sisyrinchium atlanticum Populus deltoides Tripsacum dactyloides Lilaeopsis chinensis Tsuga canadensis Eupatoriadelphus dubius Dirca palustris Thelypteris palustris Cercis canadensis Juniperus virginiana Symphyotrichum concolor Carex radiata Carex straminea Gaultheria procumbens Hydrophyllum virginianum Pinus strobus Asplenium platyneuron Sambucus canadensis Solidago latissimifolia Ulmus spp. Circaea spp. Hedera helix Ouercus robur Plantago lanceolata Polygonum erectum Fagus sylvatica Betula pendula Viburnum opulus Ribes uva-crispa Heliotropium europaeum Carpinus betulus Larix decidua Convallaria majalis Sorbus aucuparia Ligustrum vulgare Euonymus europaeus Lappula squarrosa Oenothera spp. Panicum dichotomiflorum Phlox paniculata Galium mollugo Eclipta prostrata Veratrum spp. Amorpha spp. Torreyochloa spp. Boehmeria cylindrica Hedeoma spp. Lindernia spp. Maianthemum racemosum Deparia spp.

Cyperus filicinus Aureolaria pedicularia Festuca spp. Triosteum perfoliatum Convolvulus arvensis

field brome field chickweed field horsetail field mustard field pansy field paspalum field pennycress field pepperweed field sagewort field sowthistle field thistle fig buttercup figwort fimbry fineleaf sheep fescue fir fireweed fiveleaf orchid flatsedge flax flaxleaf whitetop aster fleabane floating mannagrass flowering dogwood forget-me-not forked bluecurls forked rush forsythia fountaingrass four o'clock fowl mannagrass fox grape fox sedae foxtail foxtail barley foxtail bristlegrass foxtail sedge fragrant sumac fringed loosestrife fringed orchid fringed sedge fuzzy wuzzy sedge fuzzybean galearis gall of the earth gamagrass garden asparagus garden sorrel garden vetch garlic mustard gentian geranium giant fescue giant goldenrod giant hyssop giant knotweed giantchickweed ginkgo ginkgo

#### Scientific Name

Bromus arvensis Cerastium arvense Equisetum arvense Brassica rapa Viola arvensis Paspalum laeve Thlaspi arvense Lepidium campestre Artemisia campestris Sonchus arvensis Cirsium discolor Ranunculus ficaria Scrophularia spp. Fimbristylis spp. Festuca filiformis Abies spp. Chamerion angustifolium Isotria spp. Cyperus spp. Linum spp. Ionactis linariifolius Erigeron spp. Glyceria septentrionalis Cornus florida Myosotis spp. Trichostema dichotomum Juncus dichotomus Forsythia spp. Pennisetum spp. Mirabilis spp. Glyceria striata Vitis labrusca Carex vulpinoidea Alopecurus spp. Hordeum jubatum Setaria italica Carex alopecoidea Rhus aromatica Lysimachia ciliata Platanthera spp. Carex crinita Carex hirsutella Strophostyles spp. Galearis spp. Prenanthes trifoliolata Tripsacum spp. Asparagus officinalis Rumex acetosa Vicia sativa Alliaria petiolata Gentiana spp. Geranium spp. Schedonorus giganteus Solidago gigantea Agastache spp. Polygonum sachalinense Myosoton aquaticum Ginkgo biloba Ginkgo spp.

#### Common Name

ginseng globe flatsedge globefruit primrose-willow glossy buckthorn goatgrass goatsbeard golden clover golden hedgehyssop golden ragwort goldenaster goldenraintrees goldenrod goldenseal Goldie's woodfern goldthread goosefoot goosegrass grape grape hyacinth grapefern grassleaf rush grass-like starwort grasswort gray birch gray dogwood gray poplar great blue lobelia great ragweed green adder's-mouth orchid green arrow arum green ash green bristlegrass green bulrush green carpetweed green comet milkweed green fringed orchid Greene's rush ground ivy groundcherry groundnut groundsel tree hackberry hairgrass hairsedge hairy cat's ear hairy crabgrass hairy lespedeza hairy lettuce hairy skullcap hairy small-leaf ticktrefoil hairy Solomon's seal hairy sunflower hairy woodland brome halberd-leaved rose mallow handsome Harry hard fescue hardy rubber tree harvestbells hawkweed

# Scientific Name

Panax spp. Cyperus echinatus Ludwigia sphaerocarpa Frangula alnus Aegilops spp. Tragopogon spp. Trifolium aureum Gratiola aurea Packera aurea Chrysopsis spp. Koelreuteria paniculata Solidago spp. Hydrastis canadensis Dryopteris goldiana Coptis spp. Chenopodium spp. Eleusine spp. Vitis spp. Muscari spp. Botrychium spp. Juncus marginatus Stellaria graminea Lilaeopsis spp. Betula populifolia Cornus racemosa Populus ×canescens Lobelia siphilitica Ambrosia trifida Malaxis unifolia Peltandra virginica Fraxinus pennsylvanica Setaria viridis Scirpus atrovirens Mollugo verticillata Asclepias viridiflora Platanthera lacera Juncus greenei Glechoma bederacea Physalis spp. Apios spp. Baccharis halimifolia Celtis spp. Deschampsia spp. Bulbostylis spp. Hypochaeris radicata Digitaria sanguinalis Lespedeza hirta Lactuca hirsuta Scutellaria elliptica Desmodium ciliare Polygonatum pubescens Helianthus hirsutus Bromus pubescens Hibiscus laevis Rhexia virginica Festuca brevipila Eucommia ulmoides Gentiana saponaria Hieracium spp.

hawthorn hayscented fern hazel alder hazel dodder hazeInut heartleaf four o'clock heartleaf plantain hedge false bindweed hedge maple hedgehyssop hedgenettle Heller's rosette grass helmet flower hemlock rosette grass hempvine Henbit hepatica herbwilliam hickory highbush blueberry hoarypea hobblebush holly hollyfern hollyhock honewort honeylocust honeysuckle hooded arrowhead hooked bristlegrass hop hophornbeam hoptree horehound hornwort hornwort Horsebalm horsechestnut horseflyweed horsetail horseweed hound's tongue Howell's pussytoes huckleberry husk tomato hydrangea hyssop hyssop loosestrife hyssopleaf hedgenettle hyssopleaf thoroughwort Illinois pinweed Indian cucumber Indian goosegrass Indian paintbrush Indian strawberry Indiangrass Indianpipe Indian-tobacco inkberry

### Scientific Name

Crataegus spp. Dennstaedtia spp. Alnus serrulata Cuscuta coryli Corylus spp. Mirabilis nyctaginea Plantago cordata Calystegia sepium Acer campestre Gratiola spp. Stachys spp. Dichanthelium oligosanthes Scutellaria integrifolia Dichanthelium sabulorum Mikania spp. Lamium spp. Hepatica nobilis Ptilimnium capillaceum Carya spp. Vaccinium corymbosum Tephrosia spp. Viburnum lantanoides Ilex spp. Polystichum spp. Alcea spp. Cryptotaenia spp. Gleditsia triacanthos Lonicera spp. Sagittaria calycina Setaria verticillata Humulus spp. Ostrya virginiana Ptelea spp. Marrubium vulgare Anthoxanthum spp. Ceratophyllum spp. Collinsonia spp. Aesculus hippocastanum Baptisia tinctoria Equisetum spp. Conyza spp. Cynoglossum spp. Antennaria howellii Gaylussacia spp. Physalis pubescens Hydrangea spp. Hyssopus officinalis Lythrum hyssopifolium Stachys hyssopifolia Eupatorium hyssopifolium Lechea racemulosa Medeola virginiana Eleusine indica Castilleja spp. Duchesnea indica Sorahastrum nutans Monotropa uniflora Lobelia inflata Ilex glabra

#### Common Name

intermediate woodfern interrupted fern inundated clubmoss iris ironweed ivy Jack in the pulpit Jacob's-ladder Japanese angelica-tree Japanese barberry Japanese black pine Japanese bristlegrass Japanese honeysuckle Japanese hop Japanese knotweed Japanese maple Japanese pachysandra Japanese snowball Japanese snowbell Japanese sophora Japanese tree lilac Japanese yew Japanese zelkova Jerusalem artichoke Jesuit's bark jetbead jewelweed jimsonweed Joe Pye weed Johnsongrass jointed goatgrass jointweed juniper justiceweed katsura tree Kentucky bluegrass Kentucky coffeetree kingdevil kinnikinnick kiss me over the garden gate knight's-spur kousa dogwood kudzu kwanzan cherry Labrador tea lace grass lady's slipper lady's thumb lady's tresses lambsquarters lanceleaf figwort larch large St. Johnswort large whorled pogonia large yellow loosestrife largebracted plantain large-flower primrose-willow late purple aster lateflowering thoroughwort

# Scientific Name

Dryopteris intermedia Osmunda claytoniana Lycopodiella inundata Iris spp. Vernonia spp. Hedera spp. Arisaema triphyllum Polemonium spp. Aralia elata Berberis thunbergii Pinus thunbergii Setaria faberi Lonicera japonica Humulus japonicus Polygonum cuspidatum Acer palmatum Pachysandra terminalis Viburnum plicatum Styrax japonicus Styphnolobium japonicum Syringa reticulata Taxus cuspidata Zelkova serrata Helianthus tuberosus Iva frutescens Rhodotypos scandens Impatiens capensis Datura stramonium Eupatoriadelphus spp. Sorghum halepense Aegilops cylindrica Polygonella spp. Juniperus spp. Eupatorium leucolepis Cercidiphyllum japonicum Poa pratensis Gymnocladus dioicus Hieracium praealtum Arctostaphylos uva-ursi Polygonum orientale Consolida spp. Cornus kousa Pueraria montana Prunus 'Kwanzan' Ledum spp. Eragrostis capillaris Cypripedium spp. Polygonum cespitosum Spiranthes spp. Chenopodium album Scrophularia lanceolata Larix spp. Hypericum majus Isotria verticillata Lysimachia punctata Plantago aristata Ludwigia grandiflora Symphyotrichum patens Eupatorium serotinum

laurel lavender thrift leafy pondweed leather flower leatherleaf leathery grapefern Leggett's pinweed lespedeza lesser burdock lesser Canadian St. Johnswort lesser snakeroot lettuce Leyland cypress lilac lily linearleaf snapdragon lined sedge little bluestem little evening primrose little lovegrass littleleaf buttercup littleleaf linden lizard's tail lobelia log fern Lombardy poplar London planetree longleaf summer bluet Long's sedge longstalk starwort longstyle sweetroot loosestrife lopsided rush lousewort lovegrass low rough aster low spearwort lowbush blueberry lowland bladderfern lowland yellow loosestrife magnolia Mahaleb cherry maiden fern maidenhair fern maleberry mallow man of the earth mannagrass manyspike flatsedge manzanita maple mapleleaf goosefoot mapleleaf viburnum marginal woodfern marijuana marsh bristlegrass marsh cudweed marsh fimbry marsh marigold

#### Scientific Name

Kalmia spp. Limonium carolinianum Potamogeton foliosus Clematis spp. Chamaedaphne calyculata Botrychium multifidum Lechea pulchella Lespedeza spp. Arctium minus Hypericum canadense Ageratina aromatica Lactuca spp. x Cupressocyparis leylandii Syringa spp. Lilium spp. Misopates orontium Carex striatula Schizachyrium scoparium Oenothera perennis Eragrostis minor Ranunculus abortivus Tilia cordata Saururus cernuus Lobelia spp. Dryopteris celsa Populus nigra Platanus hybrida Houstonia longifolia Carex longii Stellaria longipes Osmorhiza longistylis Lythrum spp. Juncus secundus Pedicularis spp. Eragrostis spp. Eurybia radula Ranunculus pusillus Vaccinium angustifolium Cystopteris protrusa Lysimachia hybrida Magnolia spp. Prunus mahaleb Thelypteris spp. Adiantum spp. Lyonia ligustrina Malva spp. Ipomoea pandurata Glyceria spp. Cyperus polystachyos Arctostaphylos Acer spp. Chenopodium simplex Viburnum acerifolium Dryopteris marginalis Cannabis sativa Setaria parviflora Gnaphalium uliginosum Fimbristylis castanea Caltha spp.

#### Common Name

marsh rose gentian marsh seedbox marsh St. Johnswort marsh straw sedge marshpepper knotweed Maryland goldenaster Maryland sanicle mat sandbur mayapple mayflower meadow anemone meadow fescue meadow foxtail meadow garlic meadow spikemoss meadowbeauty meadowparsnip meadow-rue melon mermaidweed Mexican muhly Mexican tea mild water pepper milk puslane milkpea milkweed mimosa mint minute duckweed misopates moccasin flower mockernut hickory monkeyflower moonseed morning-glory Morrow's honeysuckle mosquitofern moss moss phlox moth mullein mountain laurel mountain silverbell mountainmint mouse-ear chickweed mugwort Muhlenberg's sedge muhly mulberry multiflora rose nailwort nannyberry Nantucket serviceberry narrowleaf bluecurls narrowleaf blue-eyed grass narrowleaf cattail narrowleaf evening primrose narrowleaf vervain narrowleaf whitetop aster necklace sedge

# Scientific Name

Sabatia dodecandra Ludwigia palustris Triadenum virginicum Carex hormathodes Polygonum hydropiper Chrysopsis mariana Sanicula marilandica Cenchrus longispinus Podophyllum peltatum Maianthemum spp. Anemone canadensis Schedonorus pratensis Alopecurus pratensis Allium canadense Selaginella apoda Rhexia spp. Thaspium spp. Thalictrum spp. Cucumis spp. Proserpinaca spp. Muhlenbergia mexicana Chenopodium ambrosioides Polygonum hydropiperoides Chamaesyce maculata Galactia spp. Asclepias spp. Albizia julibrissin Mentha spp. Lemna perpusilla Misopates spp. Cypripedium acaule Carya alba Mimulus spp. Menispermum Ipomoea spp. Lonicera morrowii Azolla spp. Phlox subulata Verbascum blattaria

Kalmia latifolia Halesia tetraptera Pycnanthemum spp. Cerastium fontanum Artemisia vulgaris Carex muehlenbergii Muhlenbergia spp. Morus spp. Rosa multiflora Paronychia spp. Viburnum lentago Amelanchier nantucketensis Trichostema setaceum Sisyrinchium angustifolium Typha angustifolia Oenothera fruticosa Verbena simplex Sericocarpus linifolius Carex projecta

needle spikerush needlepod rush netted chainfern New England aster

New Jersey tea New York aster New York fern New York ironweed nightshade nimblewill nodding fescue noddina thistle noddingcaps northern bayberry northern bog aster northern bugleweed northern coastal violet northern long sedge northern maidenhair northern red oak northern spicebush northern wildrice Norway maple Norway maple 'crimson king'

Norway spruce Norwegian cinquefoil nutgrass nutrush Nuttall's milkwort Nuttall's ticktrefoil oak Oakes' evening primrose oat oatgrass oatgrass obedient plant oldenlandia olney threesquare oneflowered broomrape onion opium poppy orange daylily orange milkwort orchardgrass osage orange osmunda oval-leaf knotweed ovate spikerush overcup oak oxeye daisy pale false mannagrass pale smartweed pale touch-me-not palegreen orchid panicgrass panicledleaf ticktrefoil paper birch

#### Scientific Name

Eleocharis acicularis Juncus scirpoides Woodwardia areolata Symphyotrichum novae-angliae Ceanothus americanus Symphyotrichum novi-belgii Thelypteris noveboracensis Vernonia noveboracensis Solanum spp. Muhlenbergia schreberi Festuca subverticillata Carduus nutans Triphora spp. Morella pensylvanica Symphyotrichum boreale Lycopus uniflorus Viola brittoniana Carex folliculata Adiantum pedatum Quercus rubra Lindera benzoin Zizania palustris Acer platanoides Acer platanoides 'Crimson king Picea abies Potentilla norvegica Cyperus rotundus Scleria spp. Polygala nuttallii Desmodium nuttallii Quercus spp. Oenothera oakesiana Avena spp. Arrhenatherum spp. Danthonia spp. Physostegia virginiana Oldenlandia spp. Schoenoplectus americanus Orobanche uniflora Allium spp. Papaver somniferum Hemerocallis fulva Polygala lutea Dactylis glomerata Maclura pomifera Osmunda spp. Polygonum arenastrum Eleocharis ovata Quercus lyrata Leucanthemum vulgare Torreyochloa pallida Polygonum lapathifolium Impatiens pallida Platanthera flava Panicum spp. Desmodium paniculatum Betula papyrifera

#### Common Name

paper mulberry paradise apple Parlin's pussytoes parsnip partridge pea path rush pawpaw pea peach pearl millet pearlwort pencilflower Pennsylvania bittercress Pennsylvania blackberry Pennsylvania buttercup Pennsylvania sedge Pennsylvania smartweed pennycress pepperweed perennial ryegrass perennial saltmarsh aster perennial wallrocket perfoliate bellwort periwinkle Peruvian dodder Philadelphia panicgrass phlox phragmites pickerelweed pickleweed piedmont staggerbush pignut hickory pigweed pilewort pimpernel pin cherry pin oak pine pine barren flatsedge pine barren stitchwort pinesap pink azalea pink fuzzybean pinweed pipsissewa pitch pine pitseed goosefoot plantain plantain lily pleatleaf knotweed Plukenet's flatsedge plum pointedleaf ticktrefoil Poison ivy poison sumac polygala polypody pond water-starwort

### Scientific Name

Broussonetia papyrifera Malus pumila Antennaria parlinii Pastinaca spp. Chamaecrista fasciculata Juncus tenuis Asimina triloba Lathyrus spp. Prunus persica Pennisetum glaucum Sagina spp. Stylosanthes spp. Cardamine pensylvanica Rubus pensilvanicus Ranunculus pensylvanicus Carex pensylvanica Polygonum pensylvanicum Thlaspi spp. Lepidium spp. Lolium perenne Symphyotrichum tenuifolium Diplotaxis tenuifolia Uvularia perfoliata Vinca spp. Cuscuta obtusiflora Panicum philadelphicum Phlox spp. Phragmites australis Pontederia cordata Salicornia spp. Lyonia mariana Carya glabra Amaranthus spp. Erechtites hieraciifolia Anagallis spp. Prunus pensylvanica Quercus palustris Pinus spp. Cyperus retrorsus Minuartia caroliniana Monotropa hypopithys Rhododendron periclymenoides Strophostyles umbellata Lechea spp. Chimaphila umbellata Pinus rigida Chenopodium berlandieri Plantago spp. Hosta Polygonum tenue Cyperus plukenetii Prunus spp. Desmodium glutinosum Toxicodendron radicans Toxicodendron vernix Polygala spp. Polypodium spp. Callitriche stagnalis

pond-lily pondweed pondweed poorjoe poorland flatsedge poor-man's-pepper poppy porcelain-berry possumhaw post oak poverty brome poverty dropseed poverty oatgrass prairie cordgrass prairie sunflower prairie threeawn prickly lettuce pricklyash pricklypear primrose-willow prince's pine princesstree privet prostrate knotweed prostrate pigweed prostrate ticktrefoil purple bergamot purple chokeberry purple gerardia purple loosestrife purple lovegrass purple meadowparsnip purple milkweed purple sandgrass purpleaf plum purple-head sneezeweed purplestem aster purplestem beggarticks purpletop tridens purslane pussy willow pussytoes quackgrass guaking aspen Queen Anne's lace queendevil quill sedge rabbitfoot clover radish ragged robin ragweed ragwort rare clubmoss rattlebox rattlesnake fern rattlesnake mannagrass rattlesnakemaster rattlesnakeroot rattlesnakeweed

#### Scientific Name

Nuphar spp. Potamogeton spp. Stuckenia spp. Diodia teres Cyperus compressus Lepidium virginicum Papaver spp. Ampelopsis brevipedunculata Viburnum nudum Quercus stellata Bromus sterilis Sporobolus vaginiflorus Danthonia spicata Spartina pectinata Helianthus petiolaris Aristida oligantha Lactuca serriola Zanthoxylum spp. Opuntia spp. Ludwigia spp. Chimaphila spp. Paulownia tomentosa Ligustrum spp. Polygonum aviculare Amaranthus albus Desmodium rotundifolium Monarda media Photinia floribunda Agalinis purpurea Lythrum salicaria Eragrostis spectabilis Thaspium trifoliatum Asclepias purpurascens Triplasis purpurea Prunus cerasifera Helenium flexuosum Symphyotrichum puniceum Bidens connata Tridens flavus Portulaca spp. Salix discolor Antennaria spp. Elymus repens Populus tremuloides Daucus carota Hieracium gronovii Carex tenera Trifolium arvense Raphanus spp. Lychnis flos-cuculi Ambrosia spp. Packera spp. Lycopodium obscurum Crotalaria spp. Botrychium virginianum Glyceria canadensis Eryngium aquaticum Prenanthes spp. Hieracium venosum

#### **Common Name**

red chokeberry red clover red columbine red fescue red goosefoot red hickory red maple red milkweed red mulberry red pine red spruce redosier dogwood redring milkweed redstem stork's bill redtop redtop panicgrass reed reedgrass reflexed sedge rhododendron rice cutgrass ridged yellow flax river birch riverbank wildrye roadside pepperweed rock polypody rose rose gentian rose mallow rose moss rose of Plymouth rose of Sharon rosepink rosette grass rotala rough avens rough barnyardgrass rough bentgrass rough bluegrass rough boneset roughfruit amaranth rough-fruited cinquefoil roundhead lespedeza roundleaf greenbrier roundleaf thoroughwort roundleaf yellow violet roundseed panicgrass royal fern rue anemone rush Russian olive Russian thistle rye rye brome ryegrass sagebrush saline saltbush saltbush saltarass

# Scientific Name

Photinia pyrifolia Trifolium pratense Aquilegia canadensis Festuca rubra Chenopodium rubrum Carya ovalis Acer rubrum Asclepias rubra Morus rubra Pinus resinosa Picea rubens Cornus sericea Asclepias variegata Erodium cicutarium Agrostis gigantea Panicum rigidulum Phragmites spp. Calamagrostis spp. Carex retroflexa Rhododendron spp. Leersia oryzoides Linum striatum Betula nigra Elymus riparius Lepidium ruderale Polypodium virginianum Rosa spp. Sabatia spp. Hibiscus moscheutos Portulaca grandiflora Sabatia stellaris Hibiscus syriacus Sabatia angularis Dichanthelium spp. Rotala spp. Geum laciniatum Echinochloa muricata Agrostis scabra Poa trivialis Eupatorium pilosum Amaranthus tuberculatus Potentilla recta Lespedeza capitata Smilax rotundifolia Eupatorium rotundifolium Viola rotundifolia Dichanthelium sphaerocarpon Osmunda regalis Thalictrum thalictroides Juncus spp. Elaeagnus angustifolia Salsola kali Secale spp. Bromus secalinus Lolium spp. Artemisia spp. Atriplex subspicata Atriplex spp. Distichlis spicata

saltmarsh alkaligrass salt-marsh bulrush saltmarsh false foxglove saltmeadow cordgrass saltmeadow rush sand bittercress sandbar willow sandbur sanddune sandbur sandgrass sandhill thistle sandmat sandspurry sanicle sarsaparilla sassafras saucer magnolia sawbrier sawgrass sawtooth oak scarlet Indian paintbrush scarlet oak scarlet pimpernel Scots pine sea lavender searocket seaside brookweed seaside goldenrod seaside spurge seaside threeawn sedge seedbox seepweed senna sensitive fern serviceberry sesame sessileleaf bellwort shagbark hickory shallow sedge sharpwing monkeyflower sheep laurel shepherd's purse shingle oak shining clubmoss shore little bluestem shortawn foxtail shortleaf pine showy orchid showy skullcap shrubby cinquefoil Siberian elm sidebeak pencilflower Siebold's viburnum silky dogwood silver maple silverleaf linden silverrod silvery sedge

### Scientific Name

Puccinellia fasciculata Schoenoplectus robustus Agalinis maritima Spartina patens Juncus gerardii Cardamine parviflora Salix interior Cenchrus spp. Cenchrus tribuloides Triplasis spp. Cirsium repandum Chamaesyce spp. Spergularia spp. Sanicula spp. Smilax aristolochiifolia Sassafras albidum Magnolia x soulangiana Smilax glauca Cladium spp. Quercus acutissima Castilleja coccinea Quercus coccinea Anagallis arvensis Pinus sylvestris Limonium spp. Cakile spp. Samolus valerandi Solidago sempervirens Chamaesyce polygonifolia Aristida tuberculosa Carex spp. Ludwigia alternifolia Suaeda spp. Senna spp. Onoclea sensibilis Amelanchier spp. Sesamum orientale Uvularia sessilifolia Carya ovata Carex lurida Mimulus alatus Kalmia angustifolia Capsella bursa-pastoris Quercus imbricaria Huperzia lucidula Schizachyrium littorale Alopecurus aequalis Pinus echinata Galearis spectabilis Scutellaria serrata Dasiphora fruticosa Ulmus pumila Stylosanthes biflora Viburnum sieboldii Cornus amomum Acer saccharinum Tilia tomentosa Solidago bicolor Carex canescens

#### Common Name

sixweeks fescue skullcap skullcap speedwell skunk cabbage sleepydick slender blue iris slender bunchflower slender crabgrass slender fimbry slender flatsedge slender nutrush slender rose gentian slender sowthistle slender woodoats slender yellow woodsorrel slimleaf panicgrass slimspike threeawn slippery elm small pondweed smallflower sweetbrier smartweed smartweed dodder smooth beggartick smooth blue aster smooth brome smooth carrionflower smooth cordgrass smooth crabgrass smooth forked nailwort smooth sawgrass smooth Solomon's seal smooth sumac smooth ticktrefoil smooth winterberry snailseed pondweed snakeroot snowberry snowberry soft rush Solomon's seal sorahum southern bog clubmoss southern magnolia southern red oak southern woodland violet sowthistle speargrass speckled alder speedwell spiderwort spikemoss spikerush spindletree spineless hornwort spiney glasswort spinulose woodfern spirea spleenwort spoonleaf purple everlasting

# Scientific Name

Vulpia octoflora Scutellaria spp. Veronica scutellata Symplocarpus foetidus Ornithogalum umbellatum Iris prismatica Veratrum latifolium Digitaria filiformis Fimbristylis autumnalis Cyperus bipartitus Scleria minor Sabatia campanulata Sonchus tenerrimus Chasmanthium laxum Oxalis dillenii Dichanthelium linearifolium Aristida longespica Ulmus rubra Potamogeton pusillus Rosa micrantha Polygonum spp. Cuscuta polygonorum Bidens laevis Symphyotrichum laeve Bromus inermis Smilax herbacea Spartina alterniflora Digitaria ischaemum Paronychia canadensis Cladium mariscoides Polygonatum biflorum Rhus glabra Desmodium laevigatum Ilex laevigata Potamogeton bicupulatus Ageratina spp. Gaultheria spp. Symphoricarpos spp. Juncus effusus Polygonatum spp. Sorghum bicolor Lycopodiella appressa Magnolia grandiflora Quercus falcata Viola hirsutula Sonchus spp. Piptochaetium spp. Alnus incana Veronica spp. Tradescantia spp. Selaginella spp. Eleocharis spp. Euonymus spp. Ceratophyllum echinatum Salicornia depressa Dryopteris carthusiana Spiraea spp. Asplenium spp. Gamochaeta purpurea

spotted Joe Pye weed spotted knapweed spotted pondweed spotted wintergreen spreading dogbane spring avens spring forget-me-not springbeauty spruce spurge squarestem spikerush squarrose sedge squash St. Andrew's cross St. Anthony's turnip St. Johnswort staggerbush staghorn sumac star magnolia star of Bethlehem stargrass star-grass starry false lily of the valley starved panicgrass starwort steeplebush sticky catchfly stiff cowbane stiff ticktrefoil stiff yellow flax stinging nettle stitchwort stork's bill strawberry strawcolored flatsedge striped maple sugar maple sumac summer grape sunflower swamp azalea swamp cottonwood swamp doghobble swamp loosestrife swamp lousewort swamp milkweed swamp sunflower swamp verbena swamp white oak swamppink Swan's sedge sweet cherry sweet fern sweet mock orange sweet pepperbush sweet vernalgrass sweet woodreed sweetbay sweetflag

#### Scientific Name

Eupatoriadelphus maculatus Centaurea Potamogeton pulcher Chimaphila maculata Apocynum androsaemifolium Geum vernum Myosotis verna Claytonia spp. Picea spp. Euphorbia spp. Eleocharis quadrangulata Carex squarrosa Cucurbita spp. *Hypericum hypericoides* Ranunculus bulbosus Hypericum spp. Lyonia spp. Rhus typhina Magnolia stellata Ornithogalum spp. Cynodon plectostachyus Hypoxis spp. Maianthemum stellatum Dichanthelium depauperatum Stellaria spp. Spiraea tomentosa Silene caroliniana Oxypolis rigidior Desmodium obtusum Linum medium Urtica dioica Minuartia spp. Erodium spp. Fragaria spp. Cyperus strigosus Acer pensylvanicum Acer saccharum Rhus spp. Vitis aestivalis Helianthus spp. Rhododendron viscosum Populus heterophylla Eubotrys racemosa Decodon verticillatus Pedicularis lanceolata Asclepias incarnata Helianthus angustifolius Verbena hastata Ouercus bicolor Helonias bullata Carex swanii Prunus avium Comptonia peregrina Philadelphus coronarius Clethra alnifolia Anthoxanthum odoratum Cinna arundinacea Magnolia virginiana Acorus americanus

#### Common Name

sweetgrass sweetgum sweetroot sweetscented Joe Pye weed switchgrass sycamore maple tall blue lettuce tall buttercup tall fescue tall lespedeza tall meadow-rue tall morning-glory tall oatgrass tall rattlesnakeroot tall thimbleweed tall thistle tamarack tapered rosette grass taperleaf water horehound tapertip rush Tatarian honeysuckle tawny cottongrass terrestrial water-starwort thicket sedge Thickseed sunflower thimbleberry thin paspalum thistle thoroughwort threadleaf crowfoot threadleaf false foxglove threeawn threebirds threeleaf goldthread threelobe beggarticks threepetal bedstraw threeseed mercury threeway sedge thymeleaf pinweed thymeleaf speedwell ticktrefoil tidalmarsh amaranth timothy tiny vetch tipularia toad rush toadflax toothed whitetop aster Torrey's mountainmint touch-me-not trailing arbutus tree of heaven tridens trident maple trillium true forget-me-not trumpet creeper trumpet honeysuckle trumpetweed

# Scientific Name

Hierochloe odorata Liquidambar styraciflua Osmorhiza spp. Eupatorium purpureum Panicum virgatum Acer pseudoplatanus Lactuca biennis Ranunculus acris Schedonorus phoenix Lespedeza stuevei Thalictrum pubescens Ipomoea purpurea Arrhenatherum elatius Prenanthes altissima Anemone virginiana Cirsium altissimum Larix laricina Dichanthelium acuminatum Lycopus rubellus Juncus acuminatus Lonicera tatarica Eriophorum virginicum Callitriche terrestris Carex abscondita Bidens coronata Rubus parviflorus Paspalum setaceum Cirsium spp. Eupatorium spp. Ranunculus trichophyllus Agalinis setacea Aristida spp. Triphora trianthophora Coptis trifolia Bidens tripartita Galium trifidum Acalypha spp. Dulichium arundinaceum Lechea minor Veronica serpyllifolia Desmodium spp. Amaranthus cannabinus Phleum pratense Vicia hirsuta Tipularia spp. Juncus bufonius Nuttallanthus spp. Sericocarpus asteroides Pycnanthemum torrei Impatiens spp. Epigaea repens Ailanthus altissima Tridens spp. Acer buergerianum Trillium spp. Myosotis scorpioides Campsis radicans Lonicera sempervirens Eupatoriadelphus fistulosus

tuberous grasspink tufted hairgrass tufted loosestrife tufted lovegrass tuliptree Turkish hazelnut turk's-cap lily turtlehead tussock sedge twoflower dwarfdandelion umbrella flatsedge umbrella-sedge upland bentgrass valdivia duckweed variable panicgrass velvet panicum velvet sedge velvetgrass vernal water-starwort veronicastrum vervain vetch viburnum violet violet lespedeza violet woodsorrel viper's bugloss Virginia bunchflower Virginia chainfern Virginia creeper Virginia dwarfdandelion Virginia groundcherry Virginia iris Virginia knotweed Virginia pine Virginia rose Virginia snakeroot Virginia spiderwort Virginia springbeauty Virginia tephrosia Virginia water horehound Virginia wildrye wallrocket walnut warm season grass warty panicgrass water hyacinth water knotweed water mannagrass water sedge water speedwell watercress waterhorehound waterlily watermelon watermoss waterplantain spearwort water-starwort waterthread pondweed

City of New York, Parks and Recreation, Greenbelt Natural Resources Team June, 2012 Page 74

#### Scientific Name

Calopogon tuberosus Deschampsia cespitosa Lysimachia thyrsiflora Eragrostis pectinacea Liriodendron tulipifera Corylus colurna Lilium superbum Chelone spp. Carex stricta Krigia biflora Cyperus diandrus Fuirena spp. Agrostis perennans Lemna valdiviana Dichanthelium commutatum Dichanthelium scoparium Carex vestita Holcus spp. Callitriche palustris Veronicastrum spp. Verbena spp. Vicia spp. Viburnum spp. Viola spp. Lespedeza violacea Oxalis violacea Echium spp. Veratrum virginicum Woodwardia virginica Parthenocissus quinquefolia Krigia virginica Physalis virginiana Iris virginica Polygonum virginianum Pinus virginiana Rosa virginiana Aristolochia serpentaria Tradescantia virginiana Claytonia virginica Tephrosia virginiana Lycopus virginicus Elymus virginicus Diplotaxis spp. Juglans spp.

Panicum verrucosum Eichhornia crassipes Polygonum amphibium Glyceria fluitans Carex aquatilis Veronica anagallis-aquatica Nasturtium officinale Lycopus spp. Nymphaea spp. Citrullus lanatus Salvinia spp. Ranunculus ambigens Callitriche spp. Potamogeton diversifolius

#### Common Name

wavy hairgrass waxflower shinleaf waxweed waxyleaf meadow-rue wayfaringtree weak stellate sedge weeping alkaligrass weeping Higan cherry weeping willow western brackenfern western vervain western waterweed wheat wheatgrass whip nutrush white ash white avens white baneberry white clover white colicroot white fire white fringed orchid white heath aster white meadowsweet white mulberry white oak white panicle aster white poplar white snakeroot white turtlehead white vervain white wallrocket white willow white wood aster whitegrass whitemouth dayflower whitetinge sedge whitetop whitetop whitetop aster whorled milkweed whorled mountainmint whorled wood aster widelip orchid wild bergamot wild carrot wild chervil wild comfrey wild cucumber wild garlic wild geranium wild indigo wild parsnip wild radish wild strawberry wild yam wildrice wildrye willow

# Scientific Name

Deschampsia flexuosa Pyrola elliptica Cuphea spp. Thalictrum revolutum Viburnum lantana Carex seorsa Puccinellia distans Prunus subhirtella Salix × sepulcralis Pteridium aquilinum Verbena lasiostachys Elodea nuttallii Triticum spp. Thinopyrum spp. Scleria triglomerata Fraxinus americana Geum canadense Actaea pachypoda Trifolium repens Aletris farinosa Abies concolor Platanthera blephariglottis Symphyotrichum ericoides Spiraea alba Morus alba Ouercus alba Symphyotrichum lanceolatum Populus alba Ageratina altissima Chelone glabra Verbena urticifolia Diplotaxis erucoides Salix alba Eurybia divaricata Leersia virginica Commelina erecta Carex albicans Cardaria draba Doellingeria spp. Sericocarpus spp. Asclepias verticillata Pycnanthemum verticillatum Oclemena acuminata Liparis spp. Monarda fistulosa Daucus spp. Anthriscus sylvestris Cynoglossum virginianum Echinocystis lobata Allium vineale Geranium maculatum Baptisia spp. Pastinaca sativa Raphanus raphanistrum Fragaria virginiana Dioscorea villosa Zizania spp. Elymus spp. Salix spp.

Scientific Name

willow dock willow oak willowherb wineberry winged sumac wingstem winter bentgrass winter creeper Wintergreen Wisteria Witchgrass Witchhazel woman's tobacco wood anemone wood lily Woodfern woodland bulrush woodland muhly woodland strawberry woodland sunflower Woodoats Woodreed Woodsorrel Woolgrass woolly beachheather Yam Yarrow yellow birch yellow flatsedge yellow fringed orchid yellow giant hyssop yellow loosestrife yellow marsh marigold yellow nutsedge yellow pond-lily yellow thistle yellow water buttercup yellowseed false pimpernel Yellowwood Yew yoshino cherry Yucca

Rumex salicifolius Quercus phellos Epilobium spp. Rubus phoenicolasius Rhus copallinum Verbesina alternifolia Agrostis hyemalis Euonymus fortunei Pyrola spp. Wisteria spp. Panicum capillare Hamamelis spp. Antennaria plantaginifolia Anemone quinquefolia Lilium philadelphicum Dryopteris spp. Scirpus expansus Muhlenbergia sylvatica Fragaria vesca Helianthus divaricatus Chasmanthium spp. Cinna spp. Oxalis spp. Scirpus cyperinus Hudsonia tomentosa Dioscorea spp. Achillea spp. Betula alleghaniensis Cyperus flavescens Platanthera ciliaris Agastache nepetoides Lysimachia spp. Caltha palustris Cyperus esculentus Nuphar lutea Cirsium horridulum Ranunculus flabellaris Lindernia dubia Cladrastis kentukea Taxus spp. Prunus × yedoensis Yucca spp.

Scientific Name