



City of New York
Parks & Recreation

The Arsenal
Central Park
New York, New York 10021

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Commissioner

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Natural Resources Group Forest Restoration Team Spring 2004 Summary

This spring was a productive season for the Natural Resources Group (NRG) Forest Restoration Team. For the season, the team consisted of 7 full time foresters, and 3 JTP participants. Assistance was provided by other NRG staff, and 11 volunteer and school groups. Plantings took place in 9 parks in Queens, Manhattan, Brooklyn, and the Bronx. The following is a summary of the work completed in the Spring of 2004.

- Planted 7,259 2-3' containerized trees and shrubs
- Planted 1,179 1-2' bareroot trees in the field
- Potted 9,610 1-2' seedlings for use in the fall
- Planted 30 6-8' B&B trees
- Planted 12,304 herbaceous plants
- Hosted 20 volunteer events with 10 different volunteer and school groups
- Planted 516 pounds of native groundcover seed



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Natural Resources Group Forest Restoration Team Planting Report Spring 2004

I. Tree Plantings

During the Spring 2004 planting season, the Natural Resources Group (NRG) Forest Restoration Team planted a total of 7,289 trees and shrubs, comprised of 7,259 containerized trees and shrubs, and 30 balled and burlaped trees. These plantings, containing 38 species, took place throughout 7 different parks in 4 boroughs. The majority were 2-3 foot containerized plants.

A. Containerized Plantings by Park

Alley Pond Park – Queens	1,724	containerized trees and shrubs
Four Sparrow Marsh – Brooklyn	1,557	containerized trees and shrubs
Riverdale Park – Bronx	1,284	containerized trees and shrubs
Inwood Hill Park – Manhattan	1,222	containerized trees and shrubs
Cunningham Park – Queens	776	containerized trees and shrubs
Bronx River – Bronx	432	containerized trees and shrubs
Seton Falls Park – Bronx	264	containerized trees and shrubs

TOTAL **7,259 Trees and Shrubs**

B. Containerized Plantings by Species

882	Northern red oak (<i>Quercus rubra</i>)
658	Tulip poplar (<i>Liriodendron tulipifera</i>)
561	Gray dogwood (<i>Cornus racemosa</i>)
486	Red maple (<i>Acer rubrum</i>)
436	Arrowwood viburnum (<i>Viburnum dentatum</i>)
414	Black oak (<i>Quercus velutina</i>)
400	Staghorn sumac (<i>Rhus typhina</i>)
276	White oak (<i>Quercus alba</i>)
217	Chestnut oak (<i>Quercus prinus</i>)

210	Elderberry (<i>Sambucus canadensis</i>)
200	Bayberry (<i>Myrica pensylvanica</i>)
200	Pitch pine (<i>Pinus rigida</i>)
175	Flowering dogwood (<i>Cornus florida</i>)
174	American sycamore (<i>Platanus occidentalis</i>)
168	Spicebush (<i>Lindera benzoin</i>)
159	Red-osier dogwood (<i>Cornus serotina</i>)
151	Sugar maple (<i>Acer saccharum</i>)
148	Silver maple (<i>Acer saccharinum</i>)
145	Green ash (<i>Fraxinus pennsylvanica</i>)
143	Black birch (<i>Betula lenta</i>)
142	Pin oak (<i>Quercus palustris</i>)
118	American elm (<i>Ulmus americana</i>)
109	Black chokeberry (<i>Aronia melanocarpa</i>)
100	Sassafras (<i>Sassafras albidum</i>)
90	Silky dogwood (<i>Cornus amomum</i>)
50	Blackjack oak (<i>Quercus marilandica</i>)
50	Beach plum (<i>Prunus maritima</i>)
45	Witch hazel (<i>Hamamelis virginiana</i>)
44	Hackberry (<i>Celtis occidentalis</i>)
27	American beech (<i>Fagus grandifolia</i>)
25	Gray birch (<i>Betula populifolia</i>)
25	Swamp white oak (<i>Quercus bicolor</i>)
22	Eastern red cedar (<i>Juniperus virginiana</i>)
6	American strawberry bush (<i>Evonymus americanus</i>)
6	White ash (<i>Fraxinus americana</i>)
6	Eastern hornbeam (<i>Carpinus caroliniana</i>)
6	Eastern white pine (<i>Pinus strobus</i>)

TOTAL

7,259 Containerized Trees and Shrubs

C. Balled and Burlaped Plantings by Park

Alley Pond Park – Queens	30 trees
TOTAL	30 Trees

D Balled and Burlaped Plantings by Species

6	Pin oak (<i>Quercus palustris</i>)	
6	Red oak (<i>Quercus rubra</i>)	
4	Chestnut oak (<i>Quercus phellos</i>)	
4	Black oak (<i>Quercus velutina</i>)	
3	Tulip poplar (<i>Liriodendron tulipifera</i>)	
3	Sweetgum (<i>Liquidambar styraciflua</i>)	
2	Yoshino cherry (<i>Prunus X yedoensis</i>)	
2	White oak (<i>Quercus alba</i>)	
	TOTAL	30 Trees

E. Bareroot Plantings by Park

Fort Washington Park – Manhattan	1,164
Alley Pond Park – Queens	10
Inwood Hill Park - Manhattan	5
TOTAL	1,179 Bareroot Trees

F. Bareroot Plantings by Species

375	Red oak (<i>Quercus velutina</i>)	
200	Sugar maple (<i>Acer saccharum</i>)	
200	Black birch (<i>Betula lenta</i>)	
150	Red maple (<i>Acer rubrum</i>)	
138	Black oak (<i>Quercus velutina</i>)	
96	Eastern hornbean (<i>Carpinus caroliniana</i>)	
20	American chestnut (<i>Castanea dentata</i>)	
	TOTAL	1,179 Bareroot Trees

II. Groundcover Plantings

During the Spring 2004 planting season, NRG Forest Restoration staff planted a total of 12,304 herbaceous groundcover plants, representing 16 species. Groundcover root systems reduce sedimentation and non-point source pollution by stabilizing steep, eroded slopes and streambanks. Cribbing and jute or coir mats temporarily stabilize the slope and groundcover vegetation is planted through the mat. The mats and cribbing eventually biodegrade as the root systems become established. The majority of these plants were 2 ½ “ by 2 ½ “ plugs.

A. Groundcover Planting Totals by Park

Riverdale Park – Bronx	3,922	plants
Inwood Hill Park – Manhattan	2,973	plants
Alley Pond Park - Queens	1,880	plants
Seton Falls Park – Bronx	1,420	plants
Bronx River – Bronx	1,288	plants
Four Sparrow Marsh – Brooklyn	821	plants

TOTAL **12,304 Groundcover Plants**

B. Groundcover Planting Totals by Species

2,234	Heart leaf aster (<i>Aster cordifolia</i>)
1,804	Path rush (<i>Juncus tenuis</i>)
1,387	White snakeroot (<i>Eupatorium rugosum</i>)
1,168	White wood aster (<i>Aster divaricatus</i>)
1,005	Virginia creeper (<i>Parthenocissus quinquefolia</i>)
996	Blue stemmed goldenrod (<i>Solidago caesia</i>)
800	Salt marsh cordgrass (<i>Spartina alterniflora</i>)
661	Pennsylvania sedge (<i>Carex pennsylvanica</i>)
558	Appalachian sedge (<i>Carex appalachica</i>)
538	Rough avens (<i>Geum canadensis</i>)
427	Woodland sunflower (<i>Helianthus divaricatus</i>)
216	Wild columbine (<i>Aquilegia canadensis</i>)
200	Poverty oatgrass (<i>Danthonia spicata</i>)
144	Flattened sedge (<i>Danthonia compressa</i>)
96	Thin-fruit sedge (<i>Carex flaccosperma</i>)
38	Skunk cabbage (<i>Symplocarpus foetidus</i>)

TOTAL **12,304 Groundcover Plants**

III. Bioengineering

During the Spring 2004 planting season, 120 linear feet of streambank stabilization were completed. This work involves regrading portions of eroding streambanks and slopes, stabilizing them with biodegradable coconut fiber logs, wooden logs, and rock, covering surfaces prone to erosion with various geotextile mats and blankets, and planting large amounts of woody and herbaceous plant material. While the fabric and fiber products provide the immediate erosion control, it is the roots of the plant material which will provide the long term stabilization of the eroded site.

A. Soundview / Lafayette

The Team assisted in the salt marsh restoration in Soundview Park in the Bronx. 720 square feet of coir mattresses and bog mats were installed at the site, containing 800 *Spartina alterniflora* plants.