



City of New York
Parks & Recreation

The Arsenal
Central Park
New York, New York 10021

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Natural Resources Group Forest Restoration Team Spring 2006 Summary

This spring was a productive season for the Natural Resources Group (NRG) Forest Restoration Team. For the season, the team consisted of 4 full time foresters. Assistance was provided by other NRG staff, and 7 volunteer and school groups. Plantings took place in 5 parks in Queens, Manhattan, and the Bronx. The following is a summary of the work completed in the Spring of 2005.

- Planted 4,286 2-3' containerized trees and shrubs (2005 – 4,381)
- Planted 2,400 1-2' bareroot trees in the field (2005 – 4,700)
- Planted 4,691 herbaceous plants (2005 – 4,367)
- Hosted 13 volunteer events with 7 different volunteer and school groups (2005 – 15, 10)
- Planted 162 pounds of native groundcover seed (2005 – 615)



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Natural Resources Group Forest Restoration Team Planting Report Spring 2006

I. Tree Plantings

During the Spring 2006 planting season, the Natural Resources Group (NRG) Forest Restoration Team planted a total of 6,686 trees and shrubs. These plantings, containing 31 species, took place throughout 4 different parks in 3 boroughs. The majority were 2-3 foot containerized plants.

A. Containerized Plantings by Park

Alley Pond Park – Queens	2,153	containerized trees and shrubs
Riverdale Park – Bronx	1,349	containerized trees and shrubs
Inwood Hill Park – Manhattan	701	containerized trees and shrubs
Fort Tryon Park – Manhattan	83	containerized trees and shrubs

TOTAL **4,286 Containerized trees and Shrubs**

B. Containerized Plantings by Species

522	Tulip poplar (<i>Liriodendron tulipifera</i>)
435	Gray dogwood (<i>Cornus racemosa</i>)
366	Arrowwood viburnum (<i>Viburnum dentatum</i>)
312	Northern red oak (<i>Quercus rubra</i>)
270	Silky dogwood (<i>Cornus amomum</i>)
252	Black birch (<i>Betula lenta</i>)
224	Spicebush (<i>Lindera benzoin</i>)
204	Black oak (<i>Quercus velutina</i>)
179	White oak (<i>Quercus alba</i>)
158	Chestnut oak (<i>Quercus prinus</i>)
154	Red maple (<i>Acer rubrum</i>)
131	River birch (<i>Betula nigria</i>)
129	Hackberry (<i>Celtis occidentalis</i>)

127	Staghorn sumac (<i>Rhus typhina</i>)
120	American sycamore (<i>Platanus occidentalis</i>)
97	Green ash (<i>Fraxinus pennsylvanica</i>)
97	Elderberry (<i>Sambucus canadensis</i>)
96	Black gum (<i>Nyssa sylvatica</i>)
85	White ash (<i>Fraxinus americana</i>)
71	Highbush blueberry (<i>Vaccinium corymbosum</i>)
55	Pin oak (<i>Quercus palustris</i>)
41	Sweetgum (<i>Liquidambar styraciflua</i>)
30	Sugar maple (<i>Acer saccharum</i>)
30	Red-osier dogwood (<i>Cornus serotina</i>)
24	Butternut (<i>Juglans cinerea</i>)
20	Red chokeberry (<i>Aronia arbutifolia</i>)
17	Fragrant sumac (<i>Rhus aromatica</i>)
15	Eastern white pine (<i>Pinus strobus</i>)
10	Pussy willow (<i>Salix discolor</i>)
10	Pitch pine (<i>Pinus rigida</i>)
5	Swamp white oak (<i>Quercus bicolor</i>)

TOTAL **4,286 Containerized Trees and Shrubs**

C. Bareroot Plantings by Park

Fort Washington Park – Manhattan	2,140
Fort Tryon Park – Manhattan	122
Inwood Hill Park – Manhattan	78
Alley Pond Park – Queens	60

TOTAL **2,400 Bareroot Trees**

D. Bareroot Plantings by Species

200	White ash (<i>Fraxinus americana</i>)
400	Red oak (<i>Quercus rubra</i>)
300	Sugar maple (<i>Acer saccharum</i>)
400	Black birch (<i>Betula lenta</i>)
300	Black oak (<i>Quercus velutina</i>)
300	Winterberry holly (<i>Ilex verticillata</i>)
200	Flowering dogwood (<i>Cornus florida</i>)
300	Red maple (<i>Acer rubrum</i>)

TOTAL **2,400 Bareroot Trees**

II. Groundcover Plantings

During the Spring 2006 planting season, NRG Forest Restoration staff planted a total of 4,691 herbaceous groundcover plants, representing 11 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	2,769	plants
Inwood Hill Park - Manhattan	1,897	plants
Fort Tryon Park – Manhattan	25	plants
TOTAL	4,691	Groundcover Plants

B. Groundcover Planting Totals by Species

990	Blue stemmed goldenrod (<i>Solidago caesia</i>)
400	White snakeroot (<i>Eupatorium rugosum</i>)
400	Path rush (<i>Juncus tenuis</i>)
250	Poverty oatgrass (<i>Danthonia spicata</i>)
356	Appalachian sedge (<i>Carex appalachica</i>)
750	Pennsylvania sedge (<i>Carex pennsylvanica</i>)
700	White wood aster (<i>Aster divaricatus</i>)
154	Virginia creeper (<i>Parthenocissus quinquefolia</i>)
550	Heart leaf aster (<i>Aster cordifolia</i>)
13	May-apple (<i>Podophyllum peltatum</i>)
128	Lady fern (<i>Athyrium felix-femina</i>)
TOTAL	4,691 Groundcover Plants

III. Bioengineering

During the Spring 2006 planting season 37 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. Riverdale

A total of 600 cuttings were installed in Riverdale Park. Nearly 37 linear feet of trenches were dug along eroding slopes of Alderbrook Pond, and the cuttings were densely planted to form hedgerows to stabilize the soil.

B. Bioengineering by Park

Riverdale Park – Bronx	600 Cuttings
TOTAL	600 Cuttings

C. Bioengineering by Species

200	Silky dogwood (<i>Cornus amomum</i>)
200	Arrowwood viburnum (<i>Viburnum dentatum</i>)
200	Pussy willow (<i>Salix discolor</i>)
TOTAL	600 Cuttings