



City of New York
Parks & Recreation

The Arsenal
Central Park
New York, New York 10021

Adrian Benepe
Commissioner

Natural Resources Group

Arsenal North
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Natural Resources Group - Forest Restoration Team Fall 2004 Summary

This fall was a productive season for the Natural Resources Group (NRG) Forest Restoration Team. For the season, the team consisted of 6 full time foresters. Assistance was provided by other NRG staff, and 8 volunteer and school groups. Plantings took place in 9 parks in all five boroughs. The following is a summary of the work completed in the Fall of 2004.

- Planted 8,958 2-3' containerized trees and shrubs
- Planted 21 B&B trees
- Planted 9,421 herbaceous plants
- Hosted 14 volunteer events with 397 volunteers from 8 different volunteer and school groups
- Planted 142 pounds of native groundcover seed



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Natural Resources Group Forest Restoration Team Planting Report Fall 2004

I. Tree Plantings

During the Fall 2004 planting season, the Natural Resources Group (NRG) Forest Restoration Team planted a total of **8,979** trees and shrubs, comprised of 8,958 containerized trees and shrubs, and 21 balled and burlaped trees. These plantings, containing 46 species, took place throughout 8 different parks in all five boroughs. The majority were 2-3 foot containerized plants.

A. Containerized Plantings by Park

Riverdale Park – Bronx	2,813	containerized trees and shrubs
Alley Pond Park – Queens	2,537	containerized trees and shrubs
Bronx River – Bronx	1,716	containerized trees and shrubs
Inwood Hill Park – Manhattan	1,038	containerized trees and shrubs
Pralls Island – Staten Island	509	containerized trees and shrubs
Cunningham Park - Queens	216	containerized trees and shrubs
Fort Tryon Park – Manhattan	107	containerized trees and shrubs
Four Sparrow Marsh – Brooklyn	22	containerized trees and shrubs

TOTAL **8,958 Trees and Shrubs**

B. Containerized Plantings by Species

1,088	Northern red oak (<i>Quercus rubra</i>)
876	Arrowwood viburnum (<i>Viburnum dentatum</i>)
777	Spicebush (<i>Lindera benzoin</i>)

553	Black birch (<i>Betula lenta</i>)
400	Silky dogwood (<i>Cornus amomum</i>)
386	Black chokeberry (<i>Aronia melanocarpa</i>)
369	Pin oak (<i>Quercus palustris</i>)
356	White ash (<i>Fraxinus americana</i>)
329	Britton's oak (<i>Quercus X brittonii</i>)
326	Tulip poplar (<i>Liriodendron tulipifera</i>)
321	Black oak (<i>Quercus velutina</i>)
299	Red maple (<i>Acer rubrum</i>)
260	White oak (<i>Quercus alba</i>)
247	Winterberry (<i>Ilex verticillata</i>)
227	Grey-twig dogwood (<i>Cornus racemosa</i>)
223	Sweetgum (<i>Liquidamber styraciflua</i>)
221	Sugar maple (<i>Acer saccharum</i>)
200	Green ash (<i>Fraxinus pensylvanica</i>)
184	American sycamore (<i>Platanus occidentalis</i>)
157	Elderberry (<i>Sambucus canadensis</i>)
138	Chestnut oak (<i>Quercus prinus</i>)
129	Blackjack oak (<i>Quercus marilandica</i>)
103	Eastern hophornbeam (<i>Ostrya virginiana</i>)
100	Hackberry (<i>Celtis occidentalis</i>)
100	Witchhazel (<i>Hamamelis virginiana</i>)
100	Pussy willow (<i>Salix discolor</i>)
84	Eastern white pine (<i>Pinus strobus</i>)
82	Flowering dogwood (<i>Cornus florida</i>)
60	Red chokeberry (<i>Aronia arbutifolia</i>)
50	Black gum (<i>Nyssa sylvatica</i>)
42	Eastern cottonwood (<i>Populus deltoides</i>)
40	Bush's oak (<i>Quercus X bushii</i>)
29	Blackhaw (<i>Viburnum prunifolium</i>)
25	Blackberry (<i>Rubus allegheniensis</i>)
22	Groundsel bush (<i>Baccharis halimifolia</i>)
14	American hornbeam (<i>Carpinus caroliniana</i>)
12	Sassafras (<i>Sassafras albidum</i>)
6	American chestnut (<i>Castanata dentata</i>)
6	(<i>Quercus X filias</i>)
6	Fragrant sumac (<i>Rhus aromatica</i>)
4	Bear oak (<i>Quercus illicifolia</i>)
2	Staghorn sumac (<i>Rhus typhina</i>)
2	Black cherry (<i>Prunus serotina</i>)
1	American elm (<i>Ulmus americanus</i>)
1	(<i>Quercus X rudkinii</i>)
1	Serviceberry (<i>Amelanchier canadensis</i>)

TOTAL

8,958 Containerized Trees and Shrubs

C. Balled and Burlaped Plantings by Park

Alley Pond Park - Queens 21 trees

TOTAL 21 Trees

D. Balled and Burlaped Plantings by Species

11 Pin oak (*Quercus palustris*)
3 Red oak (*Quercus rubra*)
3 White oak (*Quercus alba*)
2 Tulip poplar (*Liriodendron tulipifera*)
1 Chestnut oak (*Quercus prinus*)
1 Arrowwood (*Viburnum dentatum*)

TOTAL 21 Trees

II. Groundcover Plantings

During the Fall 2004 planting season, NRG Forest Restoration staff planted a total of 9,421 herbaceous groundcover plants, representing 22 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, however, 155 1-quart size plants are included in the total.

A. Groundcover Planting Totals by Park

Riverdale Park – Bronx	3,117	plants
Alley Pond Park - Queens	2,516	plants
Inwood Hill Park – Manhattan	2,424	plants
Four Sparrow Marsh - Brooklyn	821	plants
Fort Tryon Park - Manhattan	278	plants
Time Landscape - Manhattan	265	plants

TOTAL **9,421 Groundcover Plants**

B. Groundcover Planting Totals by Species

1,309	Virginia creeper (<i>Parthenocissus quinquefolia</i>)
1,292	White snakeroot (<i>Eupatorium rugosum</i>)
1,282	Heart leaf aster (<i>Aster cordifolia</i>)
840	Blue stemmed goldenrod (<i>Solidago caesia</i>)
821	Switchgrass (<i>Panicum virgatum</i>)
792	Path rush (<i>Juncus tenuis</i>)
704	White wood aster (<i>Aster divaricatus</i>)
500	Poverty oatgrass (<i>Danthonia spicata</i>)
424	Appalachian sedge (<i>Carex appalachica</i>)
265	Hay-scented fern (<i>Dennstaedtia punctilobula</i>)
176	Woodland sunflower (<i>Helianthus divaricatus</i>)
163	Mountain mint (<i>Pycnanthemum virginianum</i>)
152	Zig-zag goldenrod (<i>Solidago flexicalis</i>)
114	Bottlebrush grass (<i>Elymus hystrix</i>)
102	Wild columbine (<i>Aquilegia canadensis</i>)
100	Lady fern (<i>Athyrium felix-femina</i>)
99	Rough avens (<i>Geum virginianum</i>)
96	Deertongue grass (<i>Panicum clandestinum</i>)

- 72 Pennsylvania sedge (*Carex pensylvanica*)
- 72 Globose flatsedge (*Cyperus echinatus*)
- 38 Rough-leaved goldenrod (*Solidago rugosa*)
- 35 New York fern (*Thelypteris noveboracensis*)

TOTAL

9,421 Groundcover Plants