



City of New York
Parks & Recreation

The Arsenal
Central Park
New York, New York 10021

Adrian Benepe
Commissioner

Natural Resources Group

Arsenal North
1234 Fifth Avenue
New York, New York 10029

Bill Tai, Director
(212) 360-1425 / bill.tai@parks.nyc.gov

Natural Resources Group Forest Restoration Team Planting Report Spring 2008

Spring 2008 proved to be another productive season for the Forest Restoration Team, which consists of 14 full-time employees and 5 seasonals for the season. The team received assistance from other members of the NRG staff along with 13 volunteer and school groups. In addition, numerous Parks staff assisted with the planting of 20,263 trees in a single day as part of the Million Trees initiative. Plantings took place in 20 properties in all 5 boroughs. Below is a summary of the work completed in the Spring of 2008.

- Planted 32,881 containerized trees and shrubs (2007 – 16,749)
- Planted 3,387 bareroot trees and shrubs (2007 – 0)
- Planted 119 balled & burlapped trees (2007 – 0)
- Planted 321 balled & burlapped trees through contractors (2007 – 0)
- Planted 19,057 herbaceous plants (2007 – 18,016)
- Hosted 25 volunteer events with 479 volunteers from 13 different volunteer and school groups (2007 – 19, 647, 11)
- Planted 10 pounds of native groundcover seed (2007 – 39)



City of New York
Parks & Recreation

The Arsenal
Central Park
New York, New York 10021

Adrian Benepe
Commissioner

Natural Resources Group

Arsenal North
1234 Fifth Avenue
New York, New York 10029

Bill Tai, Director
(212) 360-1425 / bill.tai@parks.nyc.gov

**Natural Resources Group
Forest Restoration Team Planting Report
Spring 2008**

I. Tree Plantings

The Natural Resources Group (NRG) Forest Restoration Team planted 36,708 trees and shrubs in total during the Spring 2008 planting season. 12,618 trees were planted as part of NRG's ongoing restoration work in the city's natural areas by NRG staff, and 20,263 trees were planted during the spring event as part of the Million Tree Initiative by volunteers, NRG and Parks staff, and contractors. Plantings of 58 species took place in 20 properties in all 5 boroughs. The majority of the plants were 2-3 foot containerized plants.

A. Containerized Plantings by Park

Pelham Bay Park	Bronx	5,884	containerized trees and shrubs
Canarsie Park	Brooklyn	5,000	containerized trees and shrubs
Kissena Corridor	Queens	4,050	containerized trees and shrubs
Van Cortlandt Park	Bronx	2,524	containerized trees and shrubs
Mount Loretto	Staten Island	2,500	containerized trees and shrubs
Bronx River	Bronx	2,445	containerized trees and shrubs
Riverdale Park	Bronx	2,100	containerized trees and shrubs
Ocean Breeze Park	Staten Island	1,333	containerized trees and shrubs
Alley Pond Park	Queens	1,285	containerized trees and shrubs
Idlewild Park	Queens	1,200	containerized trees and shrubs
Conference House	Staten Island	700	containerized trees and shrubs
Fort Washington	Manhattan	700	containerized trees and shrubs
Forest Park	Queens	650	containerized trees and shrubs
Inwood Hill Park	Manhattan	649	containerized trees and shrubs
University Heights	Bronx	557	containerized trees and shrubs
Chapin Woods	Staten Island	500	containerized trees and shrubs
Prall's Island	Staten Island	432	containerized trees and shrubs

NY Botanic Garden	Bronx	250	containerized trees and shrubs
Highbridge Park	Manhattan	122	containerized trees and shrubs

TOTAL **32,881 Trees and Shrubs**

B. Containerized Plantings by Species

2,880	Northern red oak (<i>Quercus rubra</i>)
2,645	Black gum (<i>Nyssa sylvatica</i>)
2,582	Pin oak (<i>Quercus palustris</i>)
2,396	Sweetgum (<i>Liquidambar styraciflua</i>)
1,767	Arrowwood viburnum (<i>Viburnum dentatum</i>)
1,699	Black oak (<i>Quercus velutina</i>)
1,622	Tulip poplar (<i>Liriodendron tulipifera</i>)
1,271	Red-osier dogwood (<i>Cornus sericea</i>)
1,240	White oak (<i>Quercus alba</i>)
1,220	Hackberry (<i>Celtis occidentalis</i>)
1,089	Red maple (<i>Acer rubrum</i>)
1,050	Swamp white oak (<i>Quercus bicolor</i>)
1,000	Eastern white pine (<i>Pinus strobus</i>)
896	Pitch pine (<i>Pinus rigida</i>)
800	Smooth alder (<i>Alnus serrulata</i>)
670	Gray dogwood (<i>Cornus racemosa</i>)
636	American sycamore (<i>Platanus occidentalis</i>)
578	Scarlet oak (<i>Quercus coccinea</i>)
573	Black cherry (<i>Prunus serotina</i>)
500	Silky dogwood (<i>Cornus amomum</i>)
454	Black birch (<i>Betula lenta</i>)
418	Chestnut oak (<i>Quercus prinus</i>)
401	Flowering dogwood (<i>Cornus florida</i>)
357	American elm (<i>Ulmus americana</i>)
346	Green ash (<i>Fraxinus pennsylvanica</i>)
280	Shadblow (<i>Amelanchier canadensis</i>)
266	Spicebush (<i>Lindera benzoin</i>)
251	Winterberry (<i>Ilex verticillata</i>)
221	Sugar maple (<i>Acer saccharum</i>)
215	Box elder (<i>Acer negundo</i>)
201	Mockernut hickory (<i>Carya tomentosa</i>)
199	Flowering redbud (<i>Cercis canadensis</i>)
188	Chokeberry (<i>Aronia arbutifolia</i>)
163	American elder (<i>Sambucus canadensis</i>)
151	Cottonwood (<i>Populus deltoides</i>)
150	Sweet pepperbush (<i>Clethra alnifolia</i>)
150	Persimmon (<i>Diospyros virginiana</i>)
127	Gray birch (<i>Betula populifolia</i>)
125	Silver maple (<i>Acer saccharinum</i>)
113	American hornbeam (<i>Carpinus caroliniana</i>)
110	Sassafras (<i>Sassafras albidum</i>)

109	Eastern red cedar (<i>Juniperis virginiana</i>)
108	Strawberry bush (<i>Euonymus americana</i>)
84	Early low blueberry (<i>Vaccinium pallidum</i>)
82	Witch hazel (<i>Hamamelis virginiana</i>)
72	Black walnut (<i>Juglans nigra</i>)
59	Shagbark hickory (<i>Carya ovata</i>)
49	Shining sumac (<i>Rhus copallina</i>)
48	Black raspberry (<i>Rubus occidentalis</i>)
45	American holly (<i>Ilex opaca</i>)
39	Pignut hickory (<i>Carya glabra</i>)
33	Smooth sumac (<i>Rhus glabra</i>)
30	Pinkster azalea (<i>Rhododendron periclymenoides</i>)
27	Bitternut hickory (<i>Carya cordiformis</i>)
25	Blackberry (<i>Rubus allegheniensis</i>)
25	Blackjack oak (<i>Quercus marilandica</i>)
20	Black chokeberry (<i>Aronia melanocarpa</i>)
16	Staghorn sumac (<i>Rhus typhina</i>)
10	Lowbush blueberry (<i>Vaccinium angustifolium</i>)

TOTAL **32,881 containerized trees and shrubs**

C. Bareroot Plantings

Conference House	Staten Island	1,862 Bareroot trees and shrubs
Highbridge Park	Manhattan	725 Bareroot trees and shrubs
Fort Washington Pk.	Manhattan	600 Bareroot trees and shrubs
Alley Pond Park	Queens	200 Bareroot trees and shrubs

TOTAL **3,387 Bareroot Trees and Shrubs**

D. Bareroot Plantings by Species

725	Black chokeberry (<i>Aronia melanocarpa</i>)
690	Eastern star sedge (<i>Carex radiata</i>)
409	Buttonbush(<i>Cephalanthus occidentalis</i>)
276	Northern red oak (<i>Quercus rubra</i>)
200	Sugar maple (<i>Acer saccharum</i>)
190	Pin oak (<i>Quercus palustris</i>)
151	Black cherry (<i>Prunus serotina</i>)
151	Smooth sumac (<i>Rhus glabra</i>)
150	Shadbush (<i>Amelanchier canadensis</i>)
130	Sage-leaved willow (<i>Salix candida</i>)
98	White oak (<i>Quercus alba</i>)
92	Chestnut oak (<i>Quercus prinus</i>)
50	Black tupelo (<i>Nyssa sylvatica</i>)
75	Arrowwood viburnum (<i>Viburnum dentatum</i>)

TOTAL **3,387 Bareroot Trees and Shrubs**

E. Balled & Burlapped Plantings

Pelham Bay Park	Bronx	69	Balled & Burlapped trees
Van Cortlandt Park	Bronx	50	Balled & Burlapped trees
TOTAL			119 Balled & Burlapped Trees

F. Balled and Burlapped Plantings by Species

50	Eastern red cedar (<i>Juniperus virginiana</i>)		
49	Northern red oak (<i>Quercus rubra</i>)		
20	Pin oak (<i>Quercus palustris</i>)		
TOTAL			119 Balled & Burlapped Trees

G. Contract Plantings

Conduit Blvd.	Brooklyn	321	Contract Trees
TOTAL			321 Contract Trees

H. Contract Plantings by Species

252	Eastern white pine (<i>Pinus strobus</i>)		
33	Pin oak (<i>Quercus palustris</i>)		
17	Hackberry (<i>Celtis occidentalis</i>)		
8	White spruce (<i>Picea glauca</i>)		
8	Dawn redwood (<i>metasequoia</i>)		
3	Eastern redbud (<i>Cercis canadensis</i>)		
TOTAL			321 Contract Trees

II. Groundcover Plantings

During the Spring 2008 planting season, NRG Forest Restoration staff planted a total of 19,057 herbaceous groundcover plants, representing 31 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

Pelham Bay Park	Bronx	9,200	plants
Riverdale Park	Bronx	6,276	plants

Prall's Island	Staten Island	2,173 plants
Inwood Hill Park	Manhattan	1,408 plants

TOTAL **19,057 Groundcover plants**

B. Groundcover Plantings Totals by Species

2,700	Virginia creeper (<i>Parthenocissus quinquefolia</i>)
1,900	White snakeroot (<i>Eupatorium rugosum</i>)
1,200	Rosy sedge (<i>Carex rosea</i>)
1,180	Heart-leaved aster (<i>Symphyotrichum cordifolium</i>)
1,128	Blue stemmed goldenrod (<i>Solidago caesia</i>)
1,100	White wood aster (<i>Eurybia divaricata</i>)
1,075	Rose mallow (<i>Hibiscus moscheutos</i>)
1,000	Appalachian sedge (<i>Carex appalachica</i>)
800	Pennsylvania sedge (<i>Carex pennsylvanica</i>)
696	Path rush/ Poverty rush (<i>Juncus tenuis</i>)
600	Flattened oatgrass (<i>Danthonia compressa</i>)
580	Common milkweed (<i>Asclepias syriaca</i>)
550	Black bulrush (<i>Scirpus atrovirens</i>)
500	Avens (<i>Geum canadense</i>)
500	Rough avens (<i>Geum virginianum</i>)
400	Indian hemp (<i>Apocynum cannabinum</i>)
400	Poverty oatgrass (<i>Danthonia spicata</i>)
400	Tall sunflower (<i>Helianthus giganteus</i>)
364	Switchgrass (<i>Panicum virgatum</i>)
300	Spotted joe-pye weed (<i>Eupatorium maculatum</i>)
300	Wild columbine (<i>Aquilegia canadensis</i>)
200	Early goldenrod (<i>Solidago juncea</i>)
200	Hollow-stemmed joe-pye weed (<i>Eupatorium fistulosum</i>)
200	New England aster (<i>Aster novea-belgii</i>)
192	Globe flatsedge (<i>Cyperus echinatus</i>)
156	Gamma grass (<i>Tripsacum dactyloides</i>)
100	Cardinal flower (<i>Lobelia cardinalis</i>)
100	Deer-tongue grass (<i>Panicum clandestinum</i>)
100	Grass-leaved goldenrod (<i>Euthamia graminifolia</i>)
100	Rough-leaved goldenrod (<i>Solidago rugosa</i>)
36	Skunk cabbage (<i>Symplocarpus foetidus</i>)

TOTAL **19,057 Groundcover plants**

III. Acknowledgements

20,263 of the trees reported here were planted on a major event on April 12th, with the generous assistance of other divisions of City of New York Parks & Recreation. Special thanks go to: Van Cortlandt Administrator's office, Pelham Bay Administrator's office, Bronx Operations, Bronx River Alliance, Staten Island Forestry, Staten Island Operations, Greenbelt Native Plant Center, Queens Operations, Queens Garage, Forest Park Administrator's office, Brooklyn Operations, Manhattan Operations, and the North Manhattan Administrator's office.

The following individuals assisted with the planting of these trees:

Holly Brown , Urban Park Rangers (UPR)
Jessica Carrero , UPR
Mary Pendergrass, UPR
Marc Sanchez, UPR
Sgt. Anthony Pastaro, UPR
Ranger T. Kerr, UPR
Ranger A. Reid, UPR
Sunny Carrao, UPR
Sabine Fischer, UPR
Ricardo Amorocho, UPR
Sgt. Dennis Annunziato, UPR
Andrew DiSalvo, UPR
Jeff Billick, UPR
John McCoy, UPR
Latesha Campbell, UPR
Anne-Marie Vaduva, UPR
Katy Clifford, UPR
A. Raunch, UPR
J. Billak, UPR
Gharim Khalil, UPR
Bonnie McGuire, UPR
Chirstinea Berrocal, UPR
Christina Somma, UPR

Brian Aucoin, Green Apple Corps (GAC)
Marc Salvadalena, GAC
Matt Genrich, GAC
Aria Bilal, GAC
Katie Boyle, GAC
Christi Byrd, GAC
David Collins, GAC
Jose Baez, GAC
David Navarro, GAC
Francisco Davila, GAC
Jason Stein, GAC
Takiya Watson, GAC
Anders Gurda, GAC
Mette Badhe, GAC
Elizabeth Canal, GAC
Jerry Heinzen, GAC
Bernice Goodwin, GAC

Robert Reeves, Parks Enforcement Patrol (PEP)
R. Mallory, PEP
CSA Johnson, PEP
Darlene Lewis, PEP
Jenon Major, PEP
Mary Troup, PEP
Chris Hanna-Dorsey, PEP
Darlene Diaz, PEP
Darlene Canino, PEP
Victoria Romano, PEP
Andrea Cusumano, PEP

Shawn Spencer, Green Thumb
Luis Pasuizaca, Green Thumb
Samuel Jackson, Green Thumb
Diego Pantoja, Green Thumb
Mike Gutierrez, Green Thumb

Marianne Anderson, Bronx
John Grayley, Bronx
Shawn Cargil, Bronx
Phil Koenig, Bronx
Gary Cullen, Bronx
Kevin Lonergan, Bronx
Felix Rodriguez, Bronx
Samuel Trestidge, Bronx
Michael Holoszyc, Bronx
Mike Polakoff, Bronx
Gloria Daniels, Bronx
Joseph Hawkes, Bronx
Loren Mercado, Bronx
Lidda Fuentes, Bronx
Lisaynea Ledee, Bronx
Diana Villanova, Bronx
Michael Mendez , Bronx
Margot Perron, Bronx
Carlos Bonilla, Bronx
Anibal Cerda, Bronx
Deborah Skourup, Bronx
Paul Teye, Bronx
Macsood Hoosein, Bronx

Michelle Williams, Bronx River Alliance (BRA)
Teresa Crimmens, BRA
Valerie Francis, BRA
Penny Matta, BRA
Elaine Feliciano, BRA
Norma Rosa, BRA
Mildred Torres, BRA
Rosa Perez, BRA
Miguel Rodriguez, BRA
Francies Knickmeyer, BRA
Donovan Goulbourne, BRA
Chris Squire, BRA

Fred Wilken, Brooklyn
Andrew Rabb, Brooklyn
James Harrit, Brooklyn
Thomas Auing, Brooklyn
Jessica Diccico, Brooklyn
Adam Doan, Brooklyn
Anthony Sookoo, Brooklyn
John Jordan, Brooklyn

John Matombo, Manhattan
Francisco Davito, Manhattan
Pat Oles, Manhattan
Richard Zeidler, Manhattan
Morgan Monaco, Manhattan
Jennifer Greenfeld, Manhattan
Danny Mercado, Manhattan
John Herrold, Manhattan
Jennifer Hoppa, Manhattan

Philip Sparacio, Queens
Tony Killeen, Queens
Felix Perez, Queens
John Kilkullen, Queens
Barbara Amarantinis, Queens
Frank Caputo, Queens
Al Galvin, Queens
Debby Kuha, Queens
Josephine Scalia, Queens
Eric Goetz, Queens
Yvonne Esposito, Queens
Duanne Wilson, Queens
Paul Guzman, Queens
Billy Hall, Queens
Laura Miraglia, Queens
Cho Chong, Queens
Kenny Sinclair, Queens
Duane Wilson, Queens
Francisco Preza, Queens
Purifio Guzman, Queens
Anthony Mazzallo, Queens

Todd Forrest, NY Botanical Garden (NYBG)
Jackie Martinez, NYBG
Margaret Faulk, NYBG
Kurt Morrell, NYBG
Corey Link, NYBG
Michelle Kehyaian, NYBG
Ellie Haber, NYBG
Raymond Canseco, NYBG
Erik Pioselli, NYBG
Lawrence Andrews, NYBG

Charles Duncan, NYBG
Billy Lopez, NYBG
Anthony Saporito, NYBG
Rafael Moricete, NYBG
Brian Kennedy, NYBG
Jessica Acarte, NYBG

Jeff Speich, NY State DEC (NYSDEC)
Gerard Miller, NYSDEC
Rob McDonald, NYSDEC
Gerard Blake, NYSDEC
Daniel Arroyo, NYSDEC
Jennifer Arroyo, NYSDEC
Melissa Cohen, NYSDEC
Rachel Kaminski, NYSDEC
Dawn McReynolds, NYSDEC
Steve Zahn, NYSDEC
Suzanne Mattei, NYSDEC
Pete Grannis, NYSDEC
Joe Pane, NYSDEC
Betsy Ukeritis, NYSDEC
Liz Simon, NYSDEC
Christy Wurmstedt, NYSDEC
Tom Panzone, NYSDEC
Arturo Costas-Garcia, NYSDEC

Wes Hamilton, Staten Island
Bill La Curtis, Staten Island
Mary Cali-Dalton, Staten Island
Leslie King, Staten Island
Rita Fama, Staten Island
Pamela Jones, Staten Island
Monika Farmer, Staten Island
Rob Mcgill, Staten Island
Steve Dillon, Staten Island
Jonathan Baggs, Staten Island
Michael Meli, Staten Island
Stephen Shea, Staten Island

Katerli Bounds, NRG
Sarah Bendit, NRG
Barbara Trees, NRG
Craig Mandel, NRG
Mike Feder, NRG
April Bisner, NRG
Adam Thornbrough, NRG
Janine Harris, NRG
Susan Stanley, NRG
Marjorie Ely, NRG
Kalem Howell, NRG
Eric Gaston, NRG
Kareem Starks, NRG
George Mercer, NRG
Russ Reiner, NRG
Victoria Ruzicka, NRG
Tim Wenskus, NRG
Ian Cumpston, NRG
Gabe Wilder, NRG
Charlie Philbrick, NRG
Josh Nakash, NRG
Mike Morris, NRG
Lonnell Richardson, NRG
Alex Summers, NRG

Ellen Pehek, NRG
Ellen Hartig, NRG
Cheri Brunault, NRG

Richard Sherman
Gary Rozman
Christine Curella
Cindy Goulder