

*OLMSTED CENTER
FOR
LANDSCAPE
PRESERVATION*



A partnership between the
National Park Service
and the
Arnold Arboretum of Harvard
University

**1994
PROGRESS REPORT**



INTRODUCTION

The Olmsted Center for Landscape Preservation, a partnership between the National Park Service and the Arnold Arboretum of Harvard University, is a center for landscape preservation, training, and technology development.

The Center's historical landscape architects and horticulturists, based at the Frederick Law Olmsted National Historic Site, work with park managers to resolve critical preservation issues. This team of professionals assembles multi-park crews to perform emergency and cyclic maintenance work. Every project trains resident park staff, strengthening each park's capability to preserve cultural landscapes.

The mission of the Olmsted Center is to:

- Address critical cultural landscape maintenance and preservation planning issues;
- Build the professionalism and skill level of park staff; and
- Develop state-of-the-art technology for landscape preservation.

Olmsted Center services include **cyclic maintenance work, emergency stabilization field work, resource protection projects, and maintenance and preservation planning.**

The work of the Olmsted Center is guided by a **Steering Committee** of park superintendents, facility managers, the director of the Arnold Arboretum, and other professionals.

Through the partnership between the National Park Service and the Arnold Arboretum, the Olmsted Center:

- Comprehensively addresses a broad range of landscape resources.
- Provides client-based services which concentrate money and staff at the park level where the need is greatest.
- Professionalizes park staff through the use of multi-park teams, on-the-job training, and workshops.
- Provides expertise not otherwise available to parks and broadens support for historic landscape preservation.

The Olmsted Center works collaboratively with other NPS regions, especially in the areas of emergency field work, training, professional development, and special studies. The Mid-Atlantic Region (MAR) has provided assistance on several technical assistance projects and has co-sponsored landscape maintenance workshops.



Historic Motor Road, Acadia National Park. The Olmsted Center has prepared a number of studies for the Motor Road including design guidelines for Federal Highways Administration rehabilitation work.

OLMSTED CENTER PARTNERS AND STAFF

The Steering Committee

The roles of the Steering Committee for the Olmsted Center are to:

- Establish policy for the Olmsted Center Program,
- Set priorities for the annual work program,
- Ensure accountability and quality of work.

The 1995 Steering Committee includes:

Sarah Olson, Superintendent, Weir Farm NHS
(Chair)
Bob Cook, Director, Arnold Arboretum of
Harvard University
Ted Davis, Facility Manager, Lowell NHP
Diane Dayson, Superintendent, Roosevelt-
Vanderbilt NHS
Rolf Diamant, Superintendent, Olmsted,
Longfellow, Kennedy NHS
Joe Finan, Facility Manager, Saratoga NHP
Mary Foley, Assistant Regional Director, Natural
Resources, NAR
Eugene Gabriel, Facility Manager, Adams NHS
Larry Gall, Assistant Regional Director, Cultural
Resources, NAR
Vidal Martinez, Superintendent, Sagamore Hill
NHS
Bob McIntosh, Associate Regional Director,
Research and Resource Management, NAR
Nancy Nelson, Superintendent, Minute Man NHP
Dave Price, Chief, Maintenance, NAR
Dave Rose, Facility Manager, Boston NHP
Terry Savage, Associate Regional Director,
Planning, Development and Engineering,
NAR

Partnership Parks

Specimen tree preservation is provided by
Roosevelt-Vanderbilt National Historic Sites:
Ronald Galente, Horticulturist
Steve Hanaburgh, Arborist

Urban horticulture and soils management is
provided by Statue of Liberty/Ellis Island
National Monuments:

Al Farrugio, Horticulturist

Gardener Intake Program and orchard management
is provided by the Adams National Historic Site:

Eugene Gabriel, Facility Manager

Care and facilities for historic plant nursery stock
are provided by Minute Man National Historical
Park:

Blaise Davi, Chief of Maintenance

The Arnold Arboretum of Harvard University

Robert Cook, Director
Phyllis Andersen, Landscape Historian
Kristin Claeys, Landscape Preservation
Field Assistant
Kirsten Thornton, Landscape Preservation
Assistant
Peter Del Tredici, Assistant Director for Living
Collections

Frederick Law Olmsted National Historic Site

Rolf Diamant, Superintendent
Lee Farrow Cook, Deputy Superintendent
BJ Dunn, Administrative Officer
Patti McAlpine, Administrative Technician
Ed Baciagalupo, Facility Manager

Olmsted Center Staff

Nora Mitchell, Manager, Olmsted Center
Lauren Meier, Preservation Planning Supervisor
Charles Pepper, Preservation Maintenance
Supervisor
Margaret Coffin, Historical Landscape Architect
Catherine Evans, Historical Landscape Architect
H. Eliot Foulds, Historical Landscape Architect
Heidi Hohmann, Historical Landscape Architect
Katharine Lacy, Historical Landscape Architect

Public Landscapes of America Second Annual Competition

The second annual "Public Landscapes of America" yielded five projects that exemplify the achievements of public-sector landscape architects.

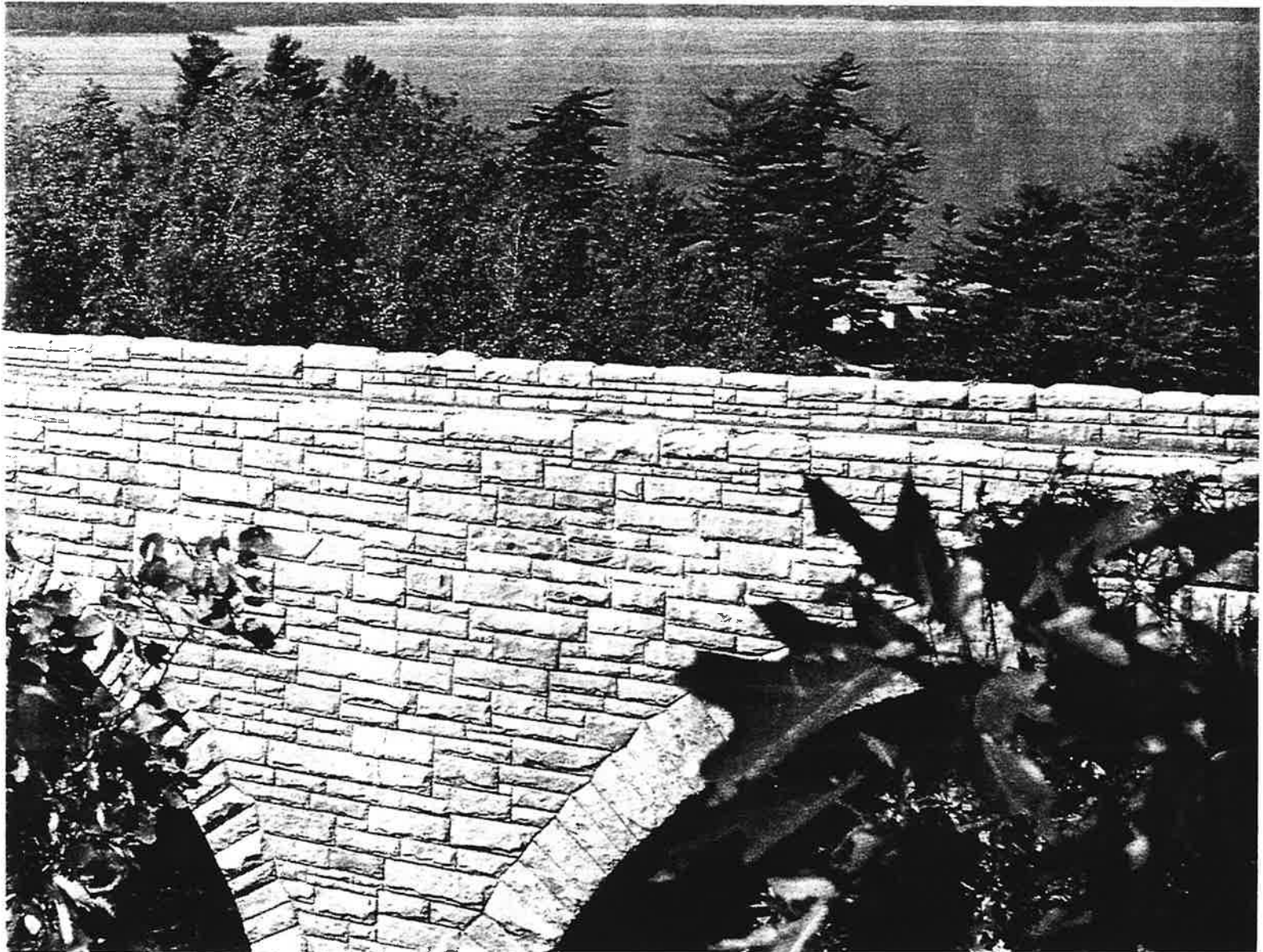
The jurors were Glenn Eugster, who trained as a landscape architect and is Watershed Program Manager for the Chesapeake Bay Program Office of the Environmental Protection Agency, and

Ron Tuttle, ASLA, national landscape architect with the Natural Resources Conservation Service (formerly the Soil Conservation Service).

The competition will be repeated next year (deadline September 18, 1995). An important change is that private-sector landscape architects working on public-sector projects are invited to enter.



Below: Historic motor road, Acadia National Park. Following page: Cape Cod National Seashore. Both parks have received technical assistance from the Olmsted Center. Jurors Eugster (left) and Tuttle cited the center for "making sure that plans are practical and day-to-day operations have a vision of the future."



Historic Preservation The Olmsted Center for Landscape Preservation



Project credits

Olmsted Center: Margaret Coffin, historical landscape architect; Lee Farrow Cook, deputy superintendent, Frederick Law Olmsted National Historic Site; Rolf Diamant, ASLA, superintendent, Frederick Law Olmsted National Historic Site; Catherine Evans, historical landscape architect; H. Elliot Foulds, historical landscape architect; Heidi Hohmann, historical landscape architect; Katharine Lacy, historical landscape architect; Lauren Meier, ASLA, historical landscape architect/preservation planning supervisor; Nora Mitchell, manager, Olmsted Center; Charles Pepper, horticulturist/preservation maintenance supervisor

Arnold Arboretum: Phyllis Andersen, landscape historian; Kristin Claeys, landscape preservation technician; Robert Cook, director; Peter Del Tredici, assistant director for living collections

Jury comments

RT: This work cuts across issues and design themes and puts landscape architects in a position of guiding the preservation of our landscape heritage rather than reacting to situations.

GE: The work of the Olmsted Center is very innovative in its concept—carrying on the tradition of F.L.O. in a hands-on way to help managers of federal areas and others preserve and manage significant landscapes.

The landscapes of the northeast region of the National Park Service (NPS)—remarkable for their diversity, complexity and historic significance—are, almost without exception, in serious decline. In 1991, parks in the northeast identified more than \$13 million in deferred landscape maintenance work—a 50-year backlog of tree maintenance at Morristown, New Jersey's Ford Mansion alone. In park after park, historic landscape features and plants are so deteriorated that they are in danger of being irretrievably lost.

The Olmsted Center for Landscape Preservation was created in 1992 to preserve this great landscape legacy through a partnership between NPS and Harvard's Arnold Arboretum, a national leader in plant taxonomy and conservation. Based at the Olmsted National Historic Site in Brookline, Massachusetts, the Olmsted Center is the first technical center for landscape preservation in NPS. It continues Frederick Law Olmsted's vision for the public landscapes of America by helping to preserve some of

the nation's most significant historic landscapes.

The Olmsted Center pulls together teams of experts—landscape architects, preservation planners, landscape historians, taxonomists, arborists, horticulturists and preservation/maintenance workers—to quickly solve critical problems. Project teams also train local staff to strengthen each park's capability to preserve and maintain its own historic landscape.

The center has developed a series of prototypical services and products that are becoming models for NPS. In its first three years of operation, the center has completed 70 technical assistance projects in 22 parks. Such projects have a short turn-around of one to eight weeks, in order to meet parks' urgent needs for the following technical services:

■ **Emergency stabilization:** hazardous tree removal; emergency propagation; remedying soil compaction, erosion, vandalism and storm damage.

■ **Cyclic preservation maintenance:** rejuvenative pruning; arboriculture; hedge management; vista management; replacement of missing or

deteriorated historic plants; field inspection and assessment.

■ **Resource protection work:** propagation of historic plants; historic site protection during construction; mitigation of vegetative threats; fire management planning.

■ **Preservation and maintenance planning:** maintenance plans; mapping and identification of historic plant material; cultural landscape reports; a regional cultural landscape inventory; determinations of eligibility for the National Register of Historic Places; historic period plans.

In addition to short-term technical assistance, the Olmsted Center provides training and technology development, from professional training for apprentice gardeners to workshops for state historic preservation offices. New technology developments include an upcoming publication, *Methods and Technologies for the Preservation of Woody Plants in Historic Landscapes*.

OLMSTED CENTER FOR LANDSCAPE PRESERVATION

FY 94 Accomplishments



1. TECHNICAL ASSISTANCE *29 projects - 22 projects mtce
16 parks*

Emergency Stabilization Field Work

- Hazard reduction (tree work)
- Emergency propagation
- Mitigating critical site impacts (compaction, drainage, erosion, vandalism)
- Evaluation and emergency mitigation of storm damage

Gateway NRA	Tree Pruning and Training, Fort Tilden
Gateway NRA	Tree Pruning and Hazard Reduction, Frank Charles Park
Saugus Iron Works NHS	Hazard Stabilization and Preservation Program for Historic Tree
Weir Farm NHS	Apple Tree Propagation

Cyclic Preservation Maintenance Work

- Rejuvenative pruning
- Orchard pruning
- Vista management
- Replacement of missing or deteriorated plant material
- Field inspection, condition assessment, monitoring landscape features
- Arboricultural services
- Hedge management

Edison NHS	Tree Assessment, Edison Laboratory
Saint Gaudens NHS	Hedge Restoration, Phase II
Saint Gaudens NHS	Hedge Restoration, Phase III, Nursery Rehabilitation
Statue of Liberty NM	Tree Pruning and Planting, Liberty Island
Statue of Liberty NM	Vegetation Mapping and Rejuvenation, Ellis Island
Weir Farm NHS	Inventory and Rejuvenative Pruning, Weir and Burlingham Gardens

Resource Protection Work

- Propagation of historic plants
- Mitigation of vegetative threats
- Assistance with fire management planning
- Temporary protection of historic landscape features
- Construction mitigation

Adams NHS	Propagation of Historic Plant Material
Boston NHP	Historic Tree Propagation, Charlestown Navy Yard
Cape Cod NS	Vegetation Management and Preservation of Stone Fences, Fort Hill
Minute Man NHP	Erosion Control/Shade Tree Management, North Bridge Trail
Minute Man NHP	Buttrick Mansion Garden Path Rehabilitation

Resource Protection Work (continued)

Roosevelt-Vanderbilt NHS	Orchard Tree Propagation, J.R. Roosevelt Farm
Salem Maritime NHS	Tree Identification, Propagation and Pruning, Derby House
Sagamore Hill NHS	Assess Historic Tree Age
Saint-Gaudens NHS	Historic Plant Cultivar Propagation
Saugus Iron Works NHS	Identification/Herbarium Specimens of Historic Tree

Maintenance and Preservation Planning

- Development of *Historic Landscape Preservation Maintenance Guides* - inventory, inspection, work calendar, and feature data
- Identification of historic plant material
- Review of existing landscape maintenance operations
- Determining age of historic plant material

Adams NHS	Historic Orchard Management Plan
Edison NHS	Specimen Tree Preservation Maintenance Guide
Gateway NRA	Tree Preservation Maintenance Guide, Fort Hancock

- Preparation of *Historic Landscape Assessments* - Site History, Existing Conditions, Identification of Preservation Issues, Recommendations
- Identification and evaluation of character-defining features
- Integrity analysis
- Review of proposed plans affecting cultural landscapes
- Project-specific historical research

• Gateway NRA	Historic Landscape Assessment, Fort Hancock
• Lowell NHP	Historic Landscape Assessment, Boott Mill Yard
• Marsh Billings NHP	Landscape Reconnaissance
• Minute Man NHP	Historic Overview for Erosion Control/Shade Tree Management, North Bridge Trail
• Saratoga NHP	Historic Landscape Assessment, DAR Monument, Phase I
• Weir Farm NHS	Restoration Planting Plan, Weir Garden

* Motor Roads & WEPA Planting

rehabilitation zone
rd & future
prior to leaving

2. SPECIAL PROJECTS

- *Land Use History*, Marsh-Billings NHP
- *Cultural Landscape Report, Volume 1*, Longfellow NHS
- Regional Cultural Landscape Inventory
- Regional Historic Plant Inventory for Roosevelt-Vanderbilt NHS, Saint-Gaudens NHS, and Adams NHS

3. TRAINING

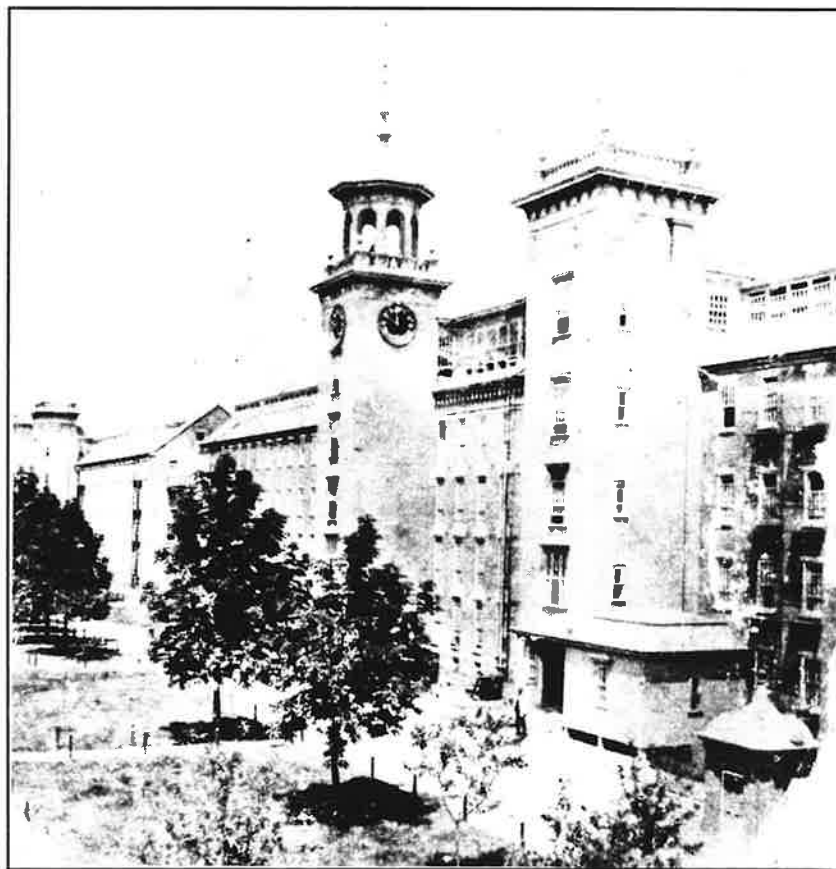
- Gardener Intake Program
- Historic Landscape Maintenance Workshop, July 18-20, 1994 co-sponsored with Maintenance Skills Team
- Resource Acadia: Seminar Exploring Resource Issues in Acadia National Park, July 30, 1994 "Historic Treasures vs Green Invaders"

OLMSTED CENTER FOR LANDSCAPE PRESERVATION
Selected Examples of FY 94 Accomplishments



HISTORIC LANDSCAPE ASSESSMENT
FOR
EASTERN MILL YARD,
BOOTT COTTON MILL No. 6

LOWELL NATIONAL HISTORICAL PARK
LOWELL, MASSACHUSETTS

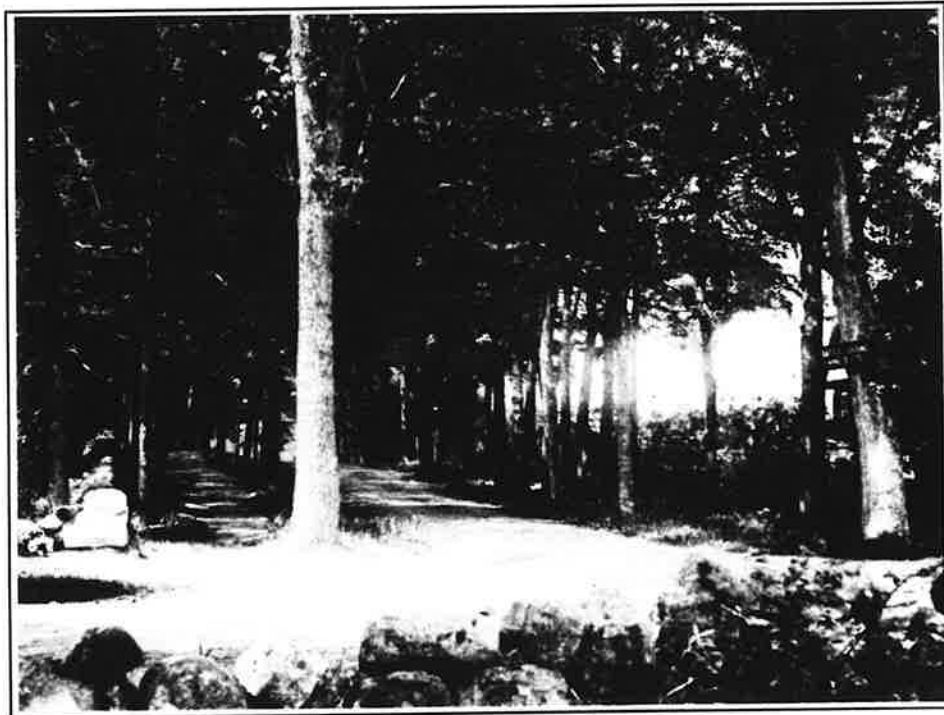


Prepared by the
Olmsted Center for
Landscape
Preservation

December, 1994

EROSION CONTROL AND SHADE TREE
MAINTENANCE
FOR THE
TRAIL TO NORTH BRIDGE

MINUTE MAN NATIONAL HISTORICAL PARK
CONCORD, MASSACHUSETTS



Prepared by the
Olmsted Center
for Landscape
Preservation

December, 1994

COMPLETION REPORT

Olmsted Center for Landscape Preservation

FY 94

PROJECT NAME: BUTTRICK ESTATE GARDEN REHABILITATION

PARK: Minuteman National Historic Park

SCOPE OF WORK: The Buttrick Estate Gardens are an historic and aesthetic focal point within the Minuteman NHP landscape. Maintaining safe visitor access and preservation of historic landscape resources are primary management objectives. Despite ongoing maintenance, many of the shrubs and trees within the gardens have grown too large, declined or died. In addition, several of the paved walkways and stairs have fallen into disrepair and have become unsafe. Minuteman NHP requested OCLP assistance to stabilize and correct the deteriorated and hazardous condition of resources within the Buttrick Gardens.

TASK ELEMENTS:

- Map and identify existing vegetative and masonry features
- Assess, research and document original plant species for plants to be replaced
- Condition/Hazard assessment of masonry features
- Park preparation and submittal of Historic Compliance documentation
- In-kind replacement of missing, deteriorated and overgrown woody plants
- Stabilization and repair of damaged and deteriorated trails and stairs

PRODUCT: Working collaboratively, OCLP and MIMA staff conducted a detailed condition assessment and mapped the woody vegetation and masonry features within the Buttrick Estate Gardens to determine the scope of field work needed. Plants which had failed, were seriously deteriorated, or overgrown and blocking major vistas, were removed and replaced in kind. Masonry and stone stairs and walkways, which were seriously deteriorated and presented visitor safety concerns, were stabilized and repaired. Field assistance was provided by landscape, trails and masonry preservation specialists from Acadia NP, Boston NHP, Saint Gaudens NHS and Salem Maritime NHS.



Re-planting of existing herbaceous material around re-placed Red Cedars.



Trail workers from Acadia NP repairing a stairway in the Buttrick Gardens.

**RECOMMENDATIONS FOR
PARK FOLLOW-UP:**

- Continue irrigating new plantings a minimum of 1" of water per week for one month after installation.
- Inspect new plantings in the spring of 1995 for winter damage. Remove deadwood and replant as needed.
- As new plantings grow and become established, carefully prune to maintain health, vigor and appropriate size.
- Remove all support stakes by mid-summer 1995.

- REQUEST ASSISTANCE FROM THE OCLP to:
 - Repair additional deteriorated masonry work.
 - Conduct an historic assessment of the Buttrick Estate Gardens to determine historic significance and identify preservation alternatives.
 - Prepare a site specific landscape preservation maintenance guide.

- REQUEST ASSISTANCE FROM THE REGIONAL CULTURAL LANDSCAPE PROGRAM to:
 - Assist with determining management objectives for the Buttrick Gardens.

OCLP TEAM:

Charlie Pepper, Supervisor, Preservation Maintenance Branch
Margie Coffin, Historical Landscape Architect
Eliot Foulds, Historical Landscape Architect
Lindsay Self, Student Conservation Association Resource Assistant

PARK ASSISTANCE:

Blaise Davi, Chief of Maintenance
Harry Braid, Grounds Supervisor
Robbie Neives, Gardener
Kelly-Ann Gorman, Volunteer
Paul Stewart, Volunteer

OTHER ASSISTANCE:

Plant Replacement:
Tom O'Neil, Grounds Supervisor, Boston NHP - Field Project Supervisor
James Haaf, Gardener, Saint Gaudens NHS
Peter Stone, Gardener, Saint Gaudens NHS
Paul Lynch, Gardener, Boston NHP
Mike Mckeon, Gardener, Boston NHP
Jim Gardener, Gardener, Boston NHP
Masonry Repair:
Tim Thornhill, Chief of Maintenance, Salem Maritime NHS
Donald Beale, Trails Foreman, Acadia NP
Christian Barter, Trails Worker, Acadia NP
Peter Coleman, Maintenance Worker, Acadia NP
Keith Johnston, Maintenance Worker, Acadia NP

PREPARED BY:

Lindsay Self, Student Conservation Association, Resource Assistant, OCLP

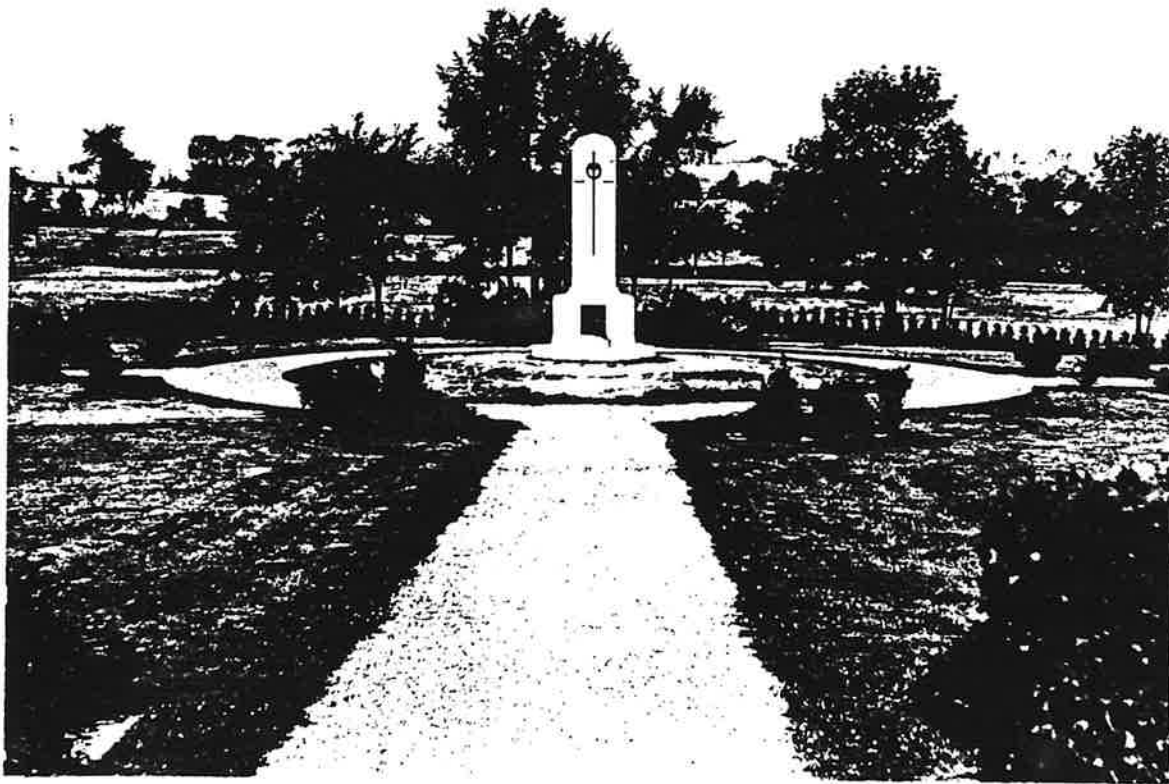
DATE:

October 5, 1994

HISTORIC LANDSCAPE ASSESSMENT
DAUGHTERS OF THE AMERICAN REVOLUTION
SARATOGA BATTLEFIELD MEMORIAL

SARATOGA NATIONAL HISTORICAL PARK

Phase 1: Assessment and Alternatives



prepared for
Saratoga National Historical Park
by the
Olmsted Center for Landscape Preservation



DRAFT - July 1994

HISTORIC LANDSCAPE ASSESSMENT FOR FORT HANCOCK

SANDY HOOK UNIT
GATEWAY NATIONAL RECREATION AREA



Prepared by the
Olmsted Center for
Landscape
Preservation

November
1994

COMPLETION REPORT

Olmsted Center for Landscape Preservation

FY 94

PROJECT NAME: SPECIMEN TREE PRESERVATION MAINTENANCE GUIDE
PARK: Gateway National Recreation Area, Fort Hancock

DESCRIPTION: Large specimen trees, including 90-year old sycamores, line the roads and paths of Fort Hancock. However with a multitude of maintenance issues related to the many buildings, much of the care and replacement of these trees has been deferred. Assistance from the Olmsted Center was requested to develop a maintenance plan and a scope of the work needed. This maintenance plan was developed in conjunction with a Historic Landscape Assessment for Fort Hancock (H. E. Foulds, OCLP, 1994) so that both documents could provide useful, accessible information about the site. During July 1994, approximately 200 trees were inspected to identify pest, disease and structural problems. Each tree was assigned a number. A map was prepared to show existing and missing trees that were planted within the fort area prior to 1940. Major issues and work needed were recorded in an inspection summary and list of "Field Work Needed". This information was organized into a Preservation Maintenance Guide to serve as a reference and record-keeping notebook for future work in the landscape. This Guide can be expanded to incorporate other landscape features on the property.

- inventoried, inspected and measured specimen trees within the historic core
- prepared field work needed recommendations
- developed feature data sheets and maintenance calendars for tree species
- assembled useful reference articles including tree planting, maintenance and pruning techniques.



*Fort Hancock,
Gateway National
Recreation Area,
July 1994*

**RECOMMENDATIONS FOR
PARK FOLLOW-UP:**

- Implement preservation maintenance program using the enclosed Maintenance Guide to document cyclic condition assessments and
- Determine what additional landscape features could be incorporated in the Guide
- Remove and replace trees that are in decline and structurally unstable in accordance with Section 106 compliance
- Plant missing historic trees in accordance with Section 106 compliance and water regularly

- **REQUEST ASSISTANCE FROM THE OCLP to:**
 - Perform emergency hazard reduction and stabilization work on all trees that are in poor condition with deadwood and hangers
 - conduct a taxonomical identification of existing plant species, in particular of all poplar species.
 - inspect and carry out rejuvenative pruning of all shrubs on the properties
 - plant replacement trees in accordance with Section 106 compliance
 - incorporate additional features into the Preservation Maintenance Guide

OCLP TEAM: Margie Coffin, Historical Landscape Architect
H. Eliot Foulds, Historical Landscape Architect

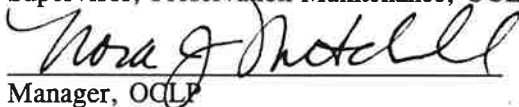
PARK CONTACTS: Lou Venuto, Gateway National Recreationa Area

PROJECT ASSISTANCE: Laura Hayes, Student Conservation Association

PREPARED BY: Margie Coffin, Landscape Architect, OCLP

DATE: January 1995

REVIEWED BY:  1/16/95
Supervisor, Preservation Maintenance, OCLP Date

CONCURRED BY:  January 16, 1995
Manager, OCLP Date

ATTACHMENTS: ■ Specimen Tree Preservation Maintenance Guide

LAND USE HISTORY FOR MARSH-BILLINGS NATIONAL HISTORICAL PARK



Olmsted Center for
Landscape Preservation



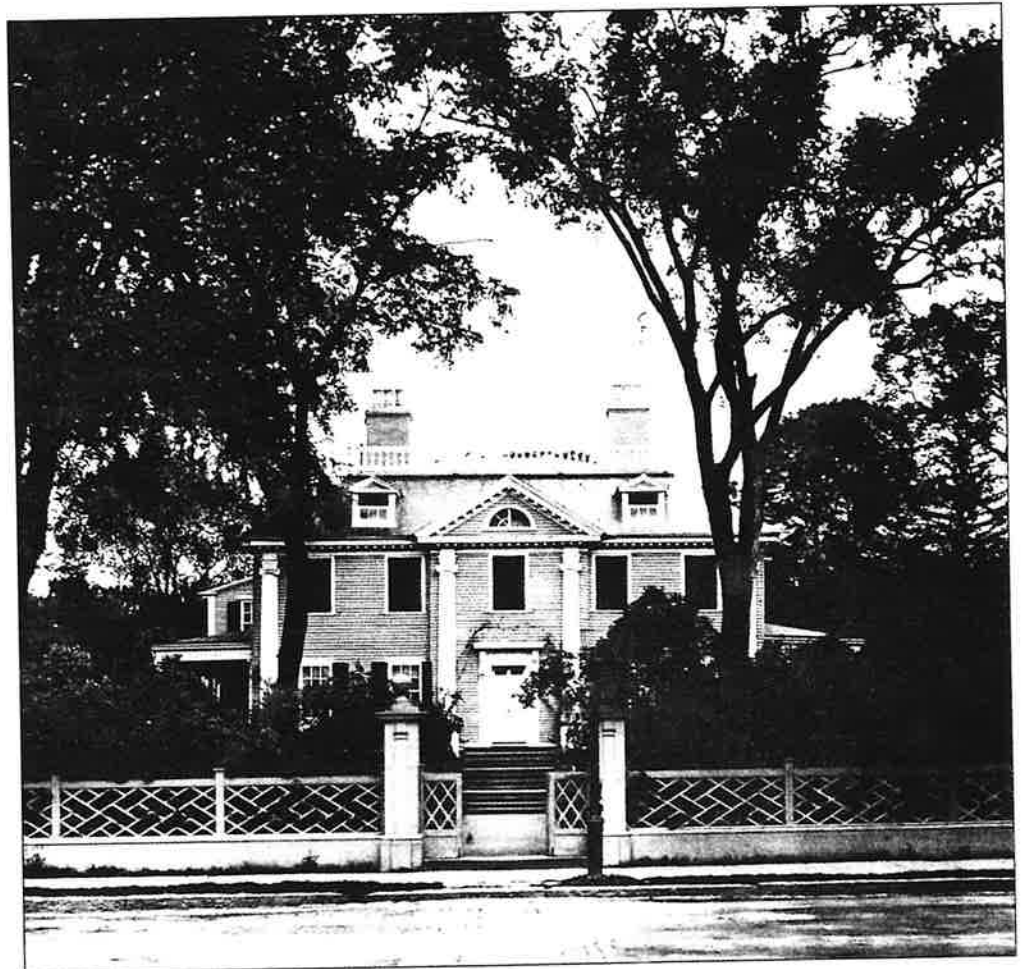
Cultural Landscape Program

North Atlantic Region

National Park Service

CULTURAL LANDSCAPE REPORT FOR LONGFELLOW NATIONAL HISTORIC SITE

Volume 1: Site History and Existing Conditions



Cultural
Landscape Program

Division of Cultural
Resources Management

North Atlantic Region

National Park Service

U.S. Department of
the Interior

National Park Service
CULTURAL LANDSCAPE INVENTORY

Initiated in 1992, the Cultural Landscape Inventory (CLI) is an evaluated inventory of all cultural landscapes in which the National Park Service has or plans to acquire legal interest. Concurrent with the development of a service-wide Cultural Landscape Program, the CLI will systematically compile baseline information on cultural landscapes in the National Park system, and serve as a powerful tool for defining programmatic needs. Ultimately, it is intended that information collected through the CLI will effectively interface with other databases being compiled within the Park Service including LCS, ICAP, CSI and the Historic Plant Inventory.

As a service-wide effort, the specific functions of the CLI are 1) to identify and document cultural landscapes in the parks, including location, historical development, existing conditions, and management; 2) to determine the National Register eligibility of previously undocumented cultural landscapes; and 3) to assist park managers and cultural resource specialists identifying research, treatment and management needs related to cultural landscapes in the parks. Within each Park Service region, these goals are being further modified to meet the specific management and informational needs of each park, and the region as a whole.

The Cultural Landscape Inventory includes three levels of documentation as follows:

Level I: The Reconnaissance or Windshield Survey

The Level I Survey is intended to identify the type, range, and character of all cultural landscapes in the region and set priorities for conducting subsequent, more in-depth inventory work. While an initial site visit to each park is generally preferable, in some cases it may not be necessary at this stage.

The Level I Survey includes:

- The establishment of park files
- A review of NPS documentation for each park
- The development of a brief chronological overview
- A cursory review of pertinent historical information, including primary and secondary written sources, site plans, photographs, and other graphic images.
- A description of National Register status and preliminary recommendation for nomination or amendment to existing nominations
- A review of management and treatment policies
- A brief description of existing conditions
- The development/procurement of a base map of existing conditions
- Initial site visit (for some sites this may not be necessary)
- Color slides, black and white photographs.
- The identification of additional information or programmatic needs (i.e. GMP, RMP, HSR,)

Level One Products

- A preliminary list of potentially significant cultural landscapes in the North-Atlantic Region
- Completed Level I inventory forms for each landscape
- Site files, including slides, photographs, and xeroxes of pertinent maps and written material
- A brief review of Park Service documents pertaining to each park, including the identification of additional documentation needs (i.e. CLR).

- A brief report outlining preliminary recommendations for new National Register nominations for landscapes in the parks, or landscape-related amendments to existing nominations

Level II Inventory (Site Analysis)

Based on the information collected during the Level I Inventory and input from park managers, priorities will be set for proceeding with a more in-depth site analysis *for landscapes for which it is deemed necessary and appropriate*. The Level II process will entail a comparison of existing with historical conditions such as boundaries, spatial organization, vegetation, topography, etc. Level II Information is compiled into a brief report, including xeroxed images and informal graphics when needed. The purpose of this stage of the CLI is to assess the significance and integrity of the landscape, identify and locate character-defining (historical) features of a particular cultural landscape, and establish priorities for the Level III inventory. Throughout the Level II process an effort will be made to identify any existing or potential threats to the integrity and/or condition of the site.

Level II Products

- A base map showing the location of structures and landscape features
- A brief report including a summarized site chronology; description of existing conditions; evaluation of significance and integrity and the identification of existing or potential threats or opportunities.
- Illustrative diagrams as needed to clarify report (site evolution, existing conditions, threats)

Level III: Inventory (Features Inventory)

The Level III Features Inventory will be used to document individual small-scale features of a particular cultural landscape. Some of these features may also be documented by LCS. Level III inventory will be designed to link the CLI with other NPS databases, including the List of Classified Structures (LCS), the Historic Plant Inventory and the Inventory and Conditions Assessment Program (ICAP).

Level III Products

- Completed features inventory forms keyed to base map
- Black and white photographs
- color slides

CLI Database

Ultimately, selected information from all three levels of the Cultural Landscape Inventory will be entered into a servicewide computer database. However, at this point database software has not yet been developed.

North Atlantic Region HISTORIC PLANT INVENTORY

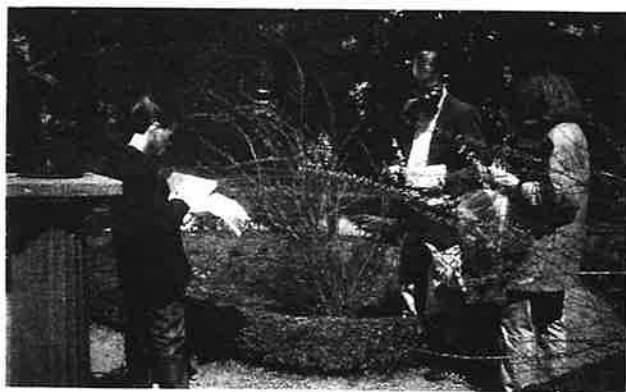
Within cultural landscapes, plants may have historical or botanical significance. A plant may have been associated with a historic figure or event or be part of a notable landscape design. A plant may be an uncommon cultivar, exceptional in size, age, rare and commercially/unavailable. If such plants are lost, there would be a loss of historic integrity and biological diversity of the cultural landscape. To ensure that significant plants are preserved, an inventory of historic plants is being conducted at the North Atlantic Region of the National Park Service.⁸ Historical landscape architects work with landscape managers and historians to gather oral and documented history on the plant's origin and potential significance. Each plant is then examined in the field by an expert horticulturist who records its name, condition, age, size, distribution, and, any notable botanic characteristics.

Plants that are difficult to identify or are of potential historical significance are further examined in the laboratory by a plant taxonomist who compares leaf, fruit, and flower characteristics with herbarium specimens for named species, cultivars and varieties. For plants species with many cultivars, such as apples, roses, and grapes, specimens may be sent to specialists for identification.

If a plant cannot be identified, is dying or in decline, and unavailable from commercial nurseries, it may be propagated. Propagation ensures that when rare and significant plants decline, they can be replaced with genetically-identical plants. Cuttings are propagated and grown to replacement size in a North Atlantic Region Historic Plant Nursery.



1. The Arnold Arboretum's preservation technician, lilac specialist, and horticulturist compare lilacs from the Vanderbilt Mansion National Historic Site in Hyde Park, New York with lilac specimens in the Arboretum's living collection. (courtesy Olmsted Center)



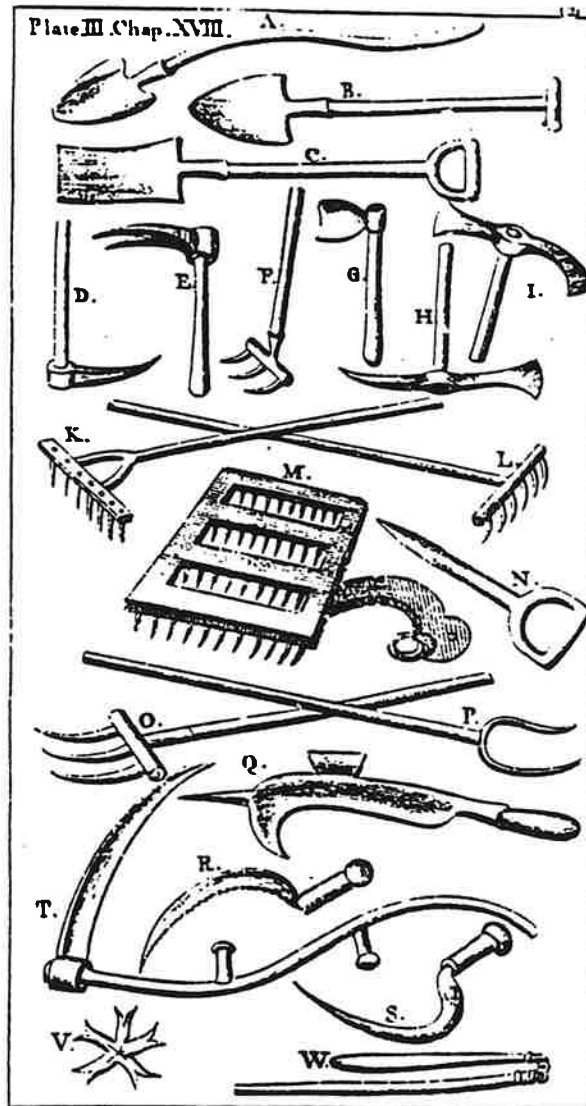
3. The Arnold Arboretum's horticulturist, landscape historian, and preservation technician examine shrubs at the Longfellow National Historic Site in Cambridge, MA. (courtesy Olmsted Center)



2. The Arnold Arboretum's horticulturist and preservation technician examine an enormous black locust tree at the Home of F.D. Roosevelt National Historic Site in Hyde Park, NY. (courtesy Olmsted Center)

Historic Landscape Maintenance Workshop

July 1994



*Co-sponsored by the
National Park Service
North Atlantic Regional Office
Division of Cultural Resources and
Maintenance Skills Team*



The Olmsted Center for Landscape Preservation



The Arnold Arboretum of Harvard University

NORTH ATLANTIC REGION
GARDENER INTAKE PROGRAM

COORDINATED BY THE OLMSTED CENTER FOR LANDSCAPE PRESERVATION
AND
ADAMS NATIONAL HISTORIC SITE

IN COLLABORATION WITH THE
NORTH ATLANTIC REGIONAL OFFICE OF FACILITY MANAGEMENT

The Gardener Intake Program was established to assist NAR parks with correcting shortfalls of skilled and proficient landscape maintenance staff. This nationally recognized, career development program has been successfully implemented to meet parks' staffing needs with qualified, well trained and highly motivated employees.

Over the past four years, nine participants have completed the program's rigorous training requirements, and are now working as professional gardeners at several National Parks in the greater Boston area. Two additional participants have recently advanced to an intermediate position, and have begun the final phase of training required to reach their target grades. Several North Atlantic Region parks have expressed interest in participating in the program in FY '95. In addition, park managers have indicated that an advanced level upward mobility program, providing specialized landscape management training, is needed.

The comprehensive training program demands a high level of commitment from participants, parks, and program coordinators with essential support provided by the regional office. In addition, the Arnold Arboretum of Harvard University provides and subsidizes academic horticultural training. These partnerships generate a cost sharing approach which enables the Gardener Intake Program to operate effectively.

Field Training projects completed by the Gardener Intake Program in FY 94 include:

Large tree planting, Weir Farm National Historic Site
Shrub planting, Lowell National Historic Park
Turfgrass sodding and seeding, Edison National Historic Site
Perennial garden rehabilitation, Sagamore Hill National Historic Site
Nursery plant digging, balling and burlaping, Gateway National Recreation Area
Orchard rejuvenation and pruning, Blackstone National Heritage Corridor

