Arboretum/National Park Service Partnership Receives Two Major Grants

Phyllis Andersen, Landscape Historian

The Arboretum’s partnership with the regional office of the National Park Service, known as the Olmsted Center for Landscape Preservation, is strengthened this year by the receipt of two grants for historic landscape preservation of national importance. We have just received a grant of $40,000 from the National Center for Preservation Technology and Training to produce a technical publication on the preservation of woody plants in historic landscapes. The publication will evolve out of a series of working group sessions involving professionals actively engaged in the landscape management of historic sites. It will address historic tree maintenance, the management of features such as woodlands, hedges, and vistas, the inventory and documentation of woody plants and the use of computer technology for both mapping and inventory control. We are particularly proud that this grant, one of only two awarded to landscape projects, is among the first group given by the newly created National Center for Preservation Technology and Training, which is located at Northwestern State University of Louisiana in Natchitoches. The Center, established in 1992 by an Act of Congress, is part of the National Park Service. Its mission is to develop and disseminate skills and technologies for both architectural and landscape preservation and conservation.

The Olmsted Center has also received a grant of $12,500 from the Preservation Assistance Division of the National Park Service to hold a Forum on Historic Vegetation Management at the Arnold Arboretum in the spring of 1995. This one-day event will bring together speakers from all over the country to participate in panel discussions on a variety of topics including arborectural practices at historic sites, the management of plant succession, and the identification, condition assessment, and replacement strategies for woody plants of historic importance. The Forum will be geared to individuals responsible for the ongoing management of historic sites with some space available for the general public.

Our partnership with the Olmsted Center continues to place us in the forefront of landscape preservation work. We are unique as an arboretum in our commitment. By bringing our traditional strengths in plant identification, propagation, and woody plant management to bear on the newly emerging methods of landscape preservation we are adding solid botanical and horticultural skills.
to those of landscape architects, preservation professionals, and general maintenance specialists. Our projects are diverse. Peter Del Tredici has identified plants lost to Fairsted, the home and office of Frederick Law Olmsted, from historic photographs of that site. Peter's work has contributed a new layer of authenticity to the treatment plan currently being implemented at Fairsted. Jack Alexander has grafted old apple varieties from Weir Farm, the home of American impressionist painter Alden Weir, now a property of the National Park Service, and from the Franklin Delano Roosevelt site in Hyde Park, New York, to provide replacement plants for historic orchards. The Olmsted Center, now located at the Frederick Law Olmsted National Historic Site in Brookline, has been nationally recognized as the only facility within the National Park Service devoted exclusively to historic landscape preservation, training, and technology development. The future of our partnership looks promising, and we are currently engaged in strategic planning to enable it to continue to play a leadership role in cultural and natural landscape preservation.

National Preservation Conference Honors Arboretum Staff

Bob Cook, director of the Arnold Arboretum, was given a Heritage Hero award by Roger Kennedy, director of the National Park Service, on the occasion of the 48th National Preservation Conference sponsored by the National Trust for Historic Preservation held in Boston, October 26–30, 1994. Heritage Hero awards are given to individuals who have made major contributions to the preservation mission of the National Park Service. Boston Mayor Thomas Menino was also honored with this award at a ceremony at the Park Plaza Hotel on October 27.

The renovation of Harvard Yard, including the Yard landscape, buildings, and encircling fence received the National Preservation Honor Award from the National Trust for Historic Preservation. Peter Del Tredici, assistant director for living collections, was a member of the committee that prepared the replanting plan, which will add over 250 trees to the Yard over the next 7 to 10 years. The replanting plan is a unique contribution to the field of landscape preservation in its detailed and sensitive approach to dealing with the loss of the key landscape element, the American elm.

The Arnold Arboretum interns of 1994 are, from left to right in the front row, Kirsten Thornton, Todd Forrest, Amy Spencer, Debra Castellano, Kirsten Ganshaw, and in the back row, Vincent DiFusco, Andy Bell, Amy Capron, Scott Wunderle, Lisa Farino, Chris Fannin, Merrill Whittington, Kyle Orr, and Pam Snow. Irina Kadis is missing from the photo. Their training included hands-on experience in grounds maintenance—including an extra dose of hard work on Peters Hill and Bussey Hill—labelling and mapping of trees and shrubs, plant propagation, and library curation. They also participated in plant identification and landscape maintenance classes and joined Arboretum staff members for tours and talks.
The Rain Forest Connection

Robert E. Cook, Director

Last month the Arboretum entered into an unusual collaboration with a company called Tom Snyder Productions. Supported by a $90,000 grant from the National Science Foundation, we will be working with them to develop The Rain Forest Connection, an interactive CD-ROM-based curriculum package for middle-grade students. CD-ROM is a technology that places vast volumes of information on a compact disc that can be rapidly accessed at any point. Tom Snyder Productions has extensive experience in creating award-winning educational materials that effectively integrate science content with cooperative learning, decision-making, and technology.

Based on our ongoing search for plants containing anti-cancer and anti-AIDS compounds in Indonesian tropical forests, The Rain Forest Connection will combine real-life narratives with collaborative problem-solving based on actual scientific research on the discovery and management of biological resources. The CD-ROM will include video, animation, still images, data sets, maps, remote sensing images, sound and music to provide story, information, background, incentives, and feedback. Classroom students will work in small cooperative teams made up of different scientific "experts." Each team will collect, organize, and analyze data from the CD-ROM, print booklets, and related hands-on activities.

Because each student "expert" has unique information, the team can succeed only by sharing their knowledge and ideas. As the teams make decisions, the direction of the narrative changes, reflecting the consequences of their choices and presenting new opportunities for problem-solving and decision-making.

John Burley, director of our programs in Indonesia, and Andrew MacDonald, our research associate who has just returned from six months in the forests of Borneo, will be working with me and a production team at Tom Snyder to develop the narrative and ensure scientific accuracy. It promises to be a very creative collaboration and will bring the work of the Arboretum to thousands of schoolchildren across the country.


Peter Del Tredici, Assistant Director for Living Collections

Hubei Province figures prominently in the history of the Arnold Arboretum. It has been the source of many of our most prized introductions. E. H. Wilson collected many plants in the vicinity of Yichang (on the Yangtze River) in the late 1800s and early 1900s, and in 1980 Chennongjia Mountain in the western part of the province was the principal site of the Sino-American Botanical Expedition, the first major plant-collecting expedition to China since 1949.

This fall, representatives from four of the institutions in the North American-China Plant Exploration Consortium (NACPEC), working in cooperation with the Nanjing Botanical Garden, joined in a collecting expedition to Wu Dang Mountain in northern Hubei Province. I was accompanied on the trip by Paul Meyer of the Morris Arboretum, Philadelphia, Kevin Conrad from the U.S. National Arboretum, Washington, D.C., and Mr. Zen of the Science and Technology Committee, Dang Jiang Kou City in Hubei Province, holds a fruiting specimen of Emmenopterys henryi collected on the 1994 NACPEC Expedition.
R. William Thomas from Longwood Gardens, Kennett Square, Pennsylvania, and two botanists from the Jiangsu Institute of Botany, Mao Cailiang and Hao Riming. As well as being botanically interesting, Wu Dang Shan is famous throughout China as one of the principal centers of Daoism during the Ming Dynasty. Over 500 years ago, some 300,000 workers were employed in the building of some 46 temples and halls, 72 shrines, 39 bridges, and 12 pavilions on the mountain, many of which are still standing.

The mountain itself is 5,285 feet in elevation. A good paved road takes visitors up to about 3,000 feet, where a handful of hotels are located. Beyond this point a steep stone path leads to the summit, which is crowned with the spectacular Golden Temple. Chinese tourists and pilgrims visit the mountain at all times of year, but their impact is generally confined to the immediate vicinity of the stone path. While the vegetation adjacent to the path shows signs of wear and tear, one can find well-preserved forest just a short distance from it. Indeed, it was very exciting to see many “old friends” from the Arboretum growing in their native habitat. Among the most interesting plants whose seeds we collected were Acer griseum, Castanea henryi, Emmenopterys henryi, Hamamelis mollis, and Sinowilsonia henryi.

In all, we made 127 collections of seed that are now being processed for germination at the Dana Greenhouses. With luck, this new generation of Chinese plants will flourish at the Arboretum well into the next century. In addition, many of them will be distributed to other botanical gardens and nurseries in order to diversify the germplasm currently available in this country. Readers of Arnoldia can expect a more detailed report on the trip in the near future.

**Open House**

On Sunday, October 16, Arboretum members and friends from the surrounding community joined director Bob Cook and staff for a special open house. In addition to tours of the landscape, greenhouses, and Hunnewell Building, participants enjoyed a demonstration of the Arboretum’s High Ranger truck (above) with arborist John Olmsted and grounds superintendent Patrick Willoughby.

**Support for Field Studies**

Arnold Arboretum Committee president Jim Gorman recently presented a check to Diane Syverson, manager of school programs, and friends from the Joseph Lee School in Dorchester. The recent donation caps a total of $26,000 contributed by the Committee to support the participation of Boston Public School students in the Arboretum’s Field Study Experiences Program.
Growing Classroom Gardens

As every good gardener knows, the experience of cultivating plants engages our best observational skills and provides a fascinating close-up window on the natural world. Through a recent grant from Northeastern University's CESAME (Center for the Enhancement of Science and Mathematics Education), the Arboretum will make this experience part of the science programs at elementary schools in Dorchester, Hyde Park, and Mattapan. Coordinated by Arboretum school program manager Diane Syverson, the project will enable teachers from the Arboretum's LEAP (Learning About Plants) program to lead children in gardening science investigations developed by the Arboretum and the National Gardening Association. Known as The Growth Connection, the program is part of the Arboretum's ongoing efforts to tap the potential of the world of plants and horticulture for hands-on science learning.

Arboretum Renovation Receives Preservation Award

Each year the Boston Preservation Alliance recognizes exemplary contributions to the preservation of the City's rich architectural and landscape heritage. This October the Arnold Arboretum received a 1994 Preservation Award for "its outstanding restoration and the creation of handicapped access in the historical Hunnewell Building, circa 1892." Preserving the historic character of both the Hunnewell Building and the surrounding landscape was a primary goal of the recent renovation, and we wish to extend recognition for the project's success to Arboretum renovation manager Sheila Connor (and horticultural research archivist), landscape architect Carol Johnson, and architectural consultants The Primary Group.

Loretta Wilson and Flora Bussewitz were among the many honored at the recent luncheon held in recognition of Arboretum volunteers. Al Bussewitz's illustrated lecture on Henry David Thoreau was the highlight of the event.

New Staff at the Arboretum

Todd Forrest, our new curatorial assistant in the Mapping and Labelling department, came to the Arboretum from Portland, Oregon, as a grounds-crew intern in April of this year. His primary responsibility will be updating the Arboretum's plant records using accessioning and planting lists and nursery inventory. In Oregon, Todd worked for a retail nursery as a landscape design consultant and spent his free time studying the ecology of the Douglas fir forests of the Western Cascades. He is a 1991 graduate of Wesleyan University and an inveterate plantsperson.

Ann-Marie Luciano is a recent addition to the Arnold Arboretum staff at the Harvard University Herbaria. She will be assisting John Burley with day-to-day tasks on the Biodiversity Collections Project with the government of Indonesia. Ann-Marie comes to us from the Department of Organismic and Evolutionary Biology. She was awarded a B.S. in journalism and public relations from Northeastern University in 1993.
12th Annual Plant Sale and Auction

A splendid selection of unusual and choice plants from the Arboretum and other botanical collections, nurseries, and private collectors ensured a highly successful 12th Annual Arnold Arboretum Plant Sale and Auction. The Arboretum expresses its many thanks to the 55 volunteers who contributed over 780 hours of excellent effort to the event.

The calm before the storm: volunteers prepare to register bidders before the 12th Annual Rare Plant Auction.

Members choose their bonuses outside the Case Estates barn.

New England plant societies and horticultural organizations gathered on Society Row.

A magnolia and other plants head for new grounds.
The Arnold Arboretum’s Education Department offers many short courses, lectures, and programs during the winter months. These cold months give gardeners the time to plan their gardening activities for the coming season, and to learn about new plant materials and horticultural techniques.

For a complete catalogue of programs and events at the Arboretum, call (617) 524-1718, ext. 162. Please note that course catalogue fees printed in boldface are for Arboretum members.

**J A N U A R Y**

**HOR 377  Woody Plant Groupings: Designing With Trees and Shrubs**
Laura Ettenger, Landscape Designer

This class will examine the ways in which woody plants can be combined to shape space in boundary plantings. The instructor will also discuss canopy layers, understory levels, groves, allees, and orchards. The last session will emphasize ornamental pruning as a way of enhancing the effect of the tree and shrub groupings. Slides and plan drawings will be used to illustrate striking uses of woody plants.

Fee: $64, $77
4 Thursdays, January 5, 12, 19, 26/ 6:30–8:30 pm
(Dana Greenhouse)

**F E B R U A R Y**

**HOR 406 Building the Design: How to Solve Problems in Landscape Construction**
Bob Hanss, Landscape Architect and Design/Build Professional

This course is designed for the needs of landscape professionals, but homeowners or gardeners interested in doing their own subcontracting are also welcome. The class will see slides of current or recently completed projects that illustrate how to deal with the many problems and issues of turning a plan into reality. Topics to be covered include cost analysis and materials selection.

Fee: $54, $65
3 Wednesdays, February 1, 8, 15/ 6:30–8:30 pm
(Dana Greenhouse)

**HOR 210 Fundamentals of Garden Design**
Douglas Reed, Landscape Architect

Gardening begins with a plan, whether you are renovating an existing garden or starting from scratch. This course will help participants to visualize good garden design, get a plan down on paper, and choose plants consistent with the design.

The instructor will use lectures and slides to convey the steps in developing a plan, using before-and-after slides of garden sites and the sketches that led to the final plan drawings. Students will participate in weekly critiques of their plans in progress. Please note that all class members create a plan for the garden visited during the first class.

Prerequisite: Some knowledge of the basics of plan drawing is needed in this course.

Fee: $95, $110
1 Sunday, February 5/ 1:00–3:00 pm
(Hunnewell Building and required site visit)
and 5 Tuesdays, February 7, 14, 21, 28, March 7/ 6:30–8:30

**HOR 277 The Business of Design**
Carol Julsen, Garden Designer

Every landscape practitioner, whether landscape architect, designer, installer, or maintenance specialist, has business issues that need to be successfully resolved. Experienced garden designer Carol Julsen will introduce and discuss many of these business-related questions.

Fee: $40, $46
3 Mondays, February 6, 13, 27/ 6:30–8:30 pm
(Dana Greenhouse)

**WAL 311 Classic and Choice Garden Roses**
Stephen Scanniello, Rosarian, Brooklyn Botanic Garden

As Chairman of the Heritage Rose Foundation and a judge at the International Rose Competition held each year in Paris, Stephen Scanniello sees and evaluates the best rose introductions. This beautifully illustrated slide lecture will give rose admirers a chance to shake the winter doldrums and plan spring purchases.

Fee: $15, $18
Thursday, February 16/ 7:30–9:00 pm
(Hunnewell Building)

**BOT 100 Introduction to Botany**
James Martin, Arborist and Horticultural Instructor

An introduction to botany for students new to the discipline and a refresher for those who feel the need to brush up on old skills. Among the topics to be explored are plant cells and tissues, cell division, plant anatomy and morphology, plant diversity,