



U. S. National Arboretum News and Notes

Fall 2003

Volume I, Issue 2

News and Notes is issued three times a year, in January, May, and September, to stakeholder organizations to keep them informed about recent arboretum accomplishments and activities. Stakeholders are encouraged to use material from this document in reports to their members. Please send comments to:

- Thomas S. Elias, Director
eliast@ars.usda.gov
- Scott Aker, Acting Gardens Unit Leader
akers@ars.usda.gov
- John Hammond, Floral and Nursery Plants Research Leader
hammondj@ars.usda.gov
- Nancy Luria, Education and Visitor Services Unit Leader
lurian@ars.usda.gov
- Dana Laster, Administrative and Marketing Manager
lasterd@ars.usda.gov

U.S. National Arboretum
3501 New York Avenue, NE
Washington, DC 20002
Phone: (202) 245-2726
Fax: (202) 245-4575
www.usna.usda.gov

Two Exciting New Red-Flowering Crapemyrtles Released

Two new crapemyrtles were introduced at the Southern Nursery Association annual trade show in Atlanta, Georgia, in late August. For the first time, gardeners and landscape designers will have two true bright red flowering crapemyrtles for use in cities and towns throughout the southern half of the United States. The ‘Arapaho’ crapemyrtle and the ‘Cheyenne’ crapemyrtle were released to the ornamental nursery industry to begin production for the retail market. ‘Arapaho’ is a hybrid of three different parents and has beautiful red flowers combined with an increased level of resistance to powdery mildew. It is a medium-size tree growing to about 20 feet tall. ‘Cheyenne’ also has vivid bright red flowers and mildew resistance, but is a shorter and more rounded growing tree. While there are many good crapemyrtles available today, a true strong red hybrid was lacking prior to these introductions. Both



Cheyenne

of these trees are the product of the tree breeding program of the arboretum’s Floral and Nursery Plants Research Unit. They should begin appearing in retail nurseries and garden centers throughout the country one to two years from now. More information about these two new hybrids is available on the arboretum’s web site:

Arapaho



[www.usna.usda.gov/
Newintro/awards.html](http://www.usna.usda.gov/Newintro/awards.html)

Education and Visitor Services Unit Receives New Funding

Thanks to a successful appeal to Congress by the arboretum's stakeholders, the Education and Visitor Services Unit received a permanent new appropriation of \$223,537 this year. With the new funding earmarked for increasing visitor services, the unit has been able to realize a number of long-held dreams for enhancing the visitor experience at the arboretum, including extending the hours that the grounds are open, providing self-service plant information in the lobby, contracting for an interpretive master plan, and renovating the outdoor information kiosks.

► Arboretum Open Friday Evenings Until 7:30

A stakeholder committee with representatives from the Friends of the National Arboretum, The National Bonsai Foundation, the National Capital Area Federation of Garden Clubs, and Cultural Tourism DC worked with arboretum staff to plan a pilot project to test the success of extending the arboretum's hours on designated summer evenings. The group chose Friday evenings based on visitor comments: workers wished they could stop by the arboretum on their way home; tourists wanted a beautiful, open space to stroll in after a day visiting museums; and gardeners argued that some of the best hours in the garden were those as the sun was setting. With generous support from members of the stakeholder committee groups who volunteered their time, the arboretum was staffed on seven Friday evenings during late June through mid-August. Volunteers supplemented paid staff in the collections and gardens and helped conduct evaluations by greeting all visitors at the R Street Gate and walking up to visitors on the grounds to ask them a series of questions. While the number of visitors who took advantage of the extended hours was small, the project proved how successful collaborative efforts between stakeholders and arboretum staff can be.

► Touch Screen Computer to Provide Plant Information in Lobby

A team of arboretum staff is working with an outside contractor to link a mapping program with existing plant records so that visitors can locate specific plants on the grounds. The plant records office has accessioned over 73,000 plants and has been providing the education unit with a printout of the list and location of these plants so that staff could assist visitors in finding plants. The problem has been providing maps that show an approximate location for each plant. With this new mapping system, a visitor, using a touch screen computer, will be able to select options to search the database for a particular plant and then to map it. Maps of specific gardens can be printed as well as a map showing all 446 acres to help guide the visitor to the correct spot on the grounds. The project completion date is late 2003.



► Interpretive Master Plan

Work continues on contracting for the Interpretive Master Plan. We hope to begin work this fall.

► Renovated Kiosks to be Unveiled this Fall

The outdoor information kiosks located at the edge of the parking areas at the R Street and New York Avenue entrances will receive facelifts in September. Peeling paint and faded backboards will be refreshed with new materials and visitors will find a newly designed map of the grounds. Over the years, visitors have asked for more detailed maps of the collections, ones that would show trails. They also want to know how long it will take them to walk from one side of the arboretum to the other and how difficult the various trails are. All of this information will be included on the new map. After a period of testing visitor response to the new maps, the education unit will work with the Agricultural Research Service Information staff to redesign the Visitor Guide brochure and to create a series of brochures for the collections and gardens. Please stop by and let us know what you think.

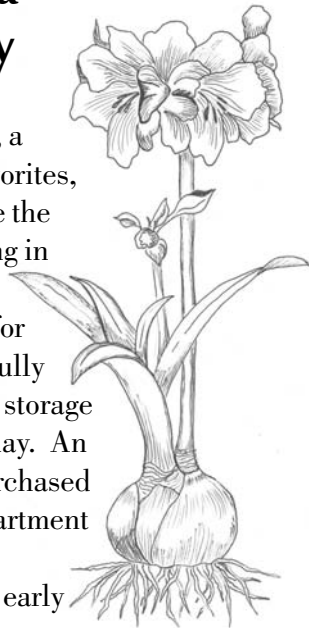
Please help us advertise this exciting September program!

Arboretum hosts Gleaning the Essence of Your Garden: An Herbal Harvest Symposium

This first-time half-day symposium on September 20 from 9:00 a.m. - 12:30 p.m. in the administration building auditorium celebrates the harvest season with lectures and workshops for herb lovers and growers. Subject experts will share their experiences growing, using, and storing herbs. Pat Kenny, national speaker and award-winning member of The Herb Society of America, begins the day with helpful advice on the best time to harvest and the best ways to store various herbs. As a concurrent session, choose either a cooking demonstration by Scott Kresge, owner of Emily Mae's Garden Shop; designing an herb garden with gardener, teacher, and garden writer, Yvonne England; herbal craft demonstrations with Carol Chewning owner of One to Grow On; or a tour of the National Herb Garden with the garden's curator, Jim Adams. For fresh herbs year round, Janet Walker, former National Herb Garden curator and past horticultural director of the American Horticultural Society, discusses which herbs grow best indoors and how to grow them successfully. The symposium promises to be fun and informative for all levels of herbalists. We want to fill the arboretum with participants, and need your help to do so. Please notify your members about this opportunity. If they're members of the Friends of the National Arboretum, they enjoy a 20% discount, too! For a complete symposium program and registration information, please call 202-245-5898. The fee is \$40 (FONA \$32).

Staff Gearing Up for a Hippeastrum Holiday

Deck the Halls with *Hippeastrum*, a glorious display of these holiday favorites, often known as amaryllis, will grace the lobby of the Administration Building in December and early January. Nearly 200 bulbs that were forced for a trial run last year have been carefully tended to and will soon go into cool storage to prepare them for the winter display. An additional 600 bulbs have been purchased to expand the show. The U.S. Department of Agriculture was involved in the hybridization of *Hippeastrum* in the early 1900s when the bulbs were known as Knight's Star Lilies. An historical perspective of *Hippeastrum* will be featured in the unique exhibit that will accompany the show. Three public programs—a lecture and two workshops—will focus on this fascinating plant. Please visit the arboretum web site to read about them and to register.



New Turfgrass Questions and Answers on Arboretum's Web Site

Lawns, turfgrass, and grassy areas are everywhere in our environment. Turfgrass is found around homes, in parks and stadiums, along rights of way and roadsides, and even on the tops of some high-rise apartment buildings in major cities. Turfgrass is a major component of our landscape, and many people have questions about how best to select and care for grass. For example, what is the best species of grass to grow for lawns? How often should I fertilize my lawn? How short can I mow my lawn? How often should I water my lawn? The answers to these and other questions can now be found on the arboretum's web site at www.usna.usda.gov/Gardens/faqs/turfgrassfaq1.html. A new turfgrass research program was established at the arboretum last year. This research may lead to the development of a new strain of turfgrass that is more pest- and disease-resistant, thus requiring less chemicals to maintain the lawns, and to grass types that would require less water. In addition, a turfgrass demonstration area is planned on the grounds of the arboretum's Washington, D.C., campus.

Stinky Plant at Botanic Garden Brings Visitors to USNA

In the stranger than fiction department this summer was not only the fact that the U.S. Botanic Garden (USBG) drew thousands of visitors to experience a plant renowned for its repulsive odor, but also the surprising fact that dozens of these visitors began their quest for the plant by either phoning or showing up at the National Arboretum. “We’re here to see that stinky plant!” they’d proclaim. Or, “Hello, we’re calling for directions to your place to see that big flower.” Yes, the rare *Amorphophallus titanum* that was on display at the USBG for two weeks in July helped increase the number of visitors to the arboretum, too. Our expert front desk staff took advantage of the confusion to inform visitors about the beautiful and pleasant smelling plants at the arboretum. The arboretum’s always plotting public relations maven, Mary Ann Jarvis, seized upon the flood of visitors to the USBG to increase publicity for the arboretum’s evening hours, taking hundreds of fliers to the garden’s information desk for distribution. Actually, visitors’ lack of knowledge about the difference between the arboretum and the botanic garden isn’t news to staff at either location. The USBG reports they get lots of people asking for the arboretum, too.



New Entrance Plans Nearing Completion

The detailed construction plans and specifications for the arboretum’s new main entrance off of Bladensburg Road is at the 95% completion stage. The plans have been submitted to the National Capital Planning Commission for review and approval. While this is occurring, Agricultural Research Service staff will be reviewing and refining the plans. The plans call for a grand new entrance about midway along the arboretum’s Bladensburg Road property line and for replacing the existing internal road around the west and south sides of Mt. Hamilton with a new road that will lead to new parking facilities. The new parking will replace the existing M Street parking area and will accommodate many more vehicles. This is urgently needed as the arboretum has inadequate parking during the peak periods of visitation during spring and fall weekends. The plans will be completed by this autumn. Construction will begin once funds are appropriated from Congress for this work. The renovation of Bladensburg Road is currently underway by the

Department of Transportation of the District of Columbia. This work will include new turning lanes for access to the arboretum’s new entrance.

Arboretum to be Featured on *Bloomin’ in the Garden* Cable TV Show

A 30-minute feature on the National Arboretum aired on Comcast Cable’s *Bloomin’ in the Garden* television show in August. The camera crew spent a full day in July filming collections and staff that represented the National Herb Garden, the National Bonsai & Penjing Museum, daylilies, low maintenance plants, and integrated pest management. Host for the show, George “Bloomin’” Newman, conducted interviews and declared the arboretum a wonderful place with knowledgeable staff that does an excellent job. *Bloomin’ in the Garden* is shown on cable stations from Massachusetts to Florida and has 6.2 million viewers.

Revised Strategic Plan Available Soon

Nearly 10 years ago, the staff of the U. S. National Arboretum developed and published a strategic plan to help guide its programs, activities, and development. Earlier this year, a team of staff members completed revisions to this plan to reflect important changes and developments, such as the growing use of the Internet to disseminate information about the arboretum. The plan was developed with considerable input from the arboretum’s many stakeholder organizations. Priorities identified in *Strategic Plan 2* will help the arboretum achieve its long-term goals. *Strategic Plan 2* is now at the printer and should to be available in printed form by October 2003. An electronic form of the plan will also be available on the arboretum’s web site.

First Distribution of New Plants for Cut Products



Prunus mume cultivar

Several cultivars of Japanese apricot, *Prunus mume*, have been distributed to specialty cut flower operations so that they may be evaluated for possible propagation as sources of cut flowers. With the help of the Association of Specialty Cut Flower Growers, the arboretum's Acting Gardens Unit Leader Scott Aker initiated this project to help supply and test cultivars not currently on the market. The *Prunus mume* cultivars are from a collecting trip to Asia that former research scientist Dr. William Ackerman took over 15 years ago. Japanese apricot has realized little of its commercial potential in North America. It is unusual because of its ability to bloom in winter, often in February. Branches can be forced earlier than any other *Prunus*. A second species that has been distributed is *Sambucus ebulus*, collected as seed in Armenia by USNA Botanist Alan Whittemore last year. Attempts have been made to harvest *Sambucus*—or elderberry—to use it as a cut berry crop, but it invariably wilts because it is a woody plant that does not conduct water very well. *Sambucus ebulus* is an herbaceous elderberry with nice berries that would be attractive in arrangements, and because it is herbaceous, it might not wilt. The ultimate purpose of the project is to distribute promising germplasm that growers cannot obtain elsewhere. The effort is just one aspect of the USNA's contribution towards supporting the Agricultural Research Service's small farms initiative—most specialty cut flower operations are small farm operations.

Rare and Endangered Plant Gets USNA Help

Native to the mid-Atlantic region of the eastern U.S., the box huckleberry, *Gaylussacia brachycera*, critically imperiled in Maryland, has piqued the interest and concern of arboretum research staff Margaret Pooler, Ruth Dix, and Rob Griesbach. In a cooperative agreement signed with the Maryland Department of Natural Resources, propagation of the last known plant of box huckleberry in Maryland has been successful, and the plant has been established in a protected location at the arboretum. Further propagation experiments with this plant are continuing in an effort to generate enough plants to reintroduce back into the wild in Maryland. Germplasm of box huckleberry collected under permit from the six other states in which it is native is also housed at the arboretum. In conjunction with the main purpose of rescue, propagation, and reintroduction of the Maryland germplasm, research is also being conducted to determine the genetic diversity of the species via molecular analysis of each collection ecotype. The information gleaned from these analyses will guide decisions regarding conservation, preservation, and breeding strategies. Controlled hybridization is planned to create new genotypes and to explore the possible uses for this plant as an evergreen ornamental groundcover that is particularly well-adapted to dry, shady areas.



USNA Attends Atlanta Trade Show

The National Arboretum displayed a booth at the Southern Nursery Association (SNA) Trade Show and Convention July 31 through August 2, 2003 at the Georgia World Congress Center in Atlanta Georgia. The display featured the arboretum's newly released crapemyrtles, 'Arapaho' and 'Cheyenne', herbarium specimen displays and information on other USNA and Floral and Nursery Plants Research Unit activities. The booth was manned by Ed McCarthy of the Gardens Unit and Suzanne Overbey and Edgar Davis from the McMinnville, Tennessee, worksite.



USNA scientists from the McMinnville worksite also participated in the 48th Annual SNA Research Conference which was held in conjunction with the trade show. Dr. Sandy Reed made an oral presentation and chaired the "Plant Breeding and Evaluation" section, while Dr. Donna Fare presented two poster papers and chaired the "Growth Regulators" section. Over 10 acres of products from 851 exhibitors were showcased at the trade show. As a new feature, floral, foliage, water garden, retail products, and equipment displays were included in the trade show. Attendance was estimated at 12,000.



Tennessee Green Industry Field Day

An exhibit showcasing National Arboretum activities was displayed at the 4th annual Tennessee Green Industry Field Day at the Tennessee State University Nursery Crop Research Station (TSU-NCRS) in McMinnville, Tennessee, on August 12, 2003. Both USNA scientists that are stationed at the TSU-NCRS, Dr. Sandy Reed and Dr. Donna Fare, were on hand to discuss their research programs with interested attendees. In addition, Dr. Fare led a nursery production irrigation demonstration/walking tour which emphasized best management practices for planning,

installing, and maintaining nursery production irrigation to promote optimal plant health and control runoff and contamination. Over 400 people attended the field day, which featured educational talks, guided tours of the research station, and nursery and equipment exhibits.

Arboretum's Volunteer Coordinator Wins Prestigious Secretary's Honor Award

On June 13, 2003, Mary Ann Jarvis, the arboretum's volunteer coordinator, received an Honor Award from the Secretary of Agriculture, Ann Veneman, for creating a volunteer program for the U.S. National Arboretum. The award was in the category "Operating an Efficient, Effective, and Discrimination-Free Organization."

Nominations for this award come from across the nation and represent the finest accomplishments within the Department of Agriculture. Mrs. Jarvis created the arboretum's volunteer program in 1993. Thanks to the streamlined procedures she helped to devise for ARS, the program not only became a model for the agency, but also it has grown to nearly 200 regular volunteers (each gives approximately 4 hours per week), who work

at a wide variety of jobs at the arboretum—everything from pulling weeds to conducting lab experiments. The hours that these volunteers contribute, along with those given by the hundreds of one-day volunteers who help with special projects, totaled 20,004 hours in 2002, with a value of \$321,064.



Volunteer Coordinator is Chair of the AABGA Volunteer Management Committee

The arboretum's volunteer coordinator, Mary Ann Jarvis, is serving the second year of her term as chair of the American Association of Botanic Gardens and Arboreta's (AABGA) Volunteer Management Committee. This committee provides professional expertise, guidelines, and resources for volunteer coordinators at member gardens both through the efforts of its committee members and at its bi-annual InterAction Conference. The committee is composed of 10 members representing AABGA member gardens nationwide.

Local Field Day Display Entices the Public

The National Arboretum had a chance to show off its assets to crowds of the curious at the 8th annual Beltsville Agricultural Research Center (BARC) Public Field Day in Beltsville, Maryland, on June 7, 2003. Sheltered from the steady rain under large tents, labs from BARC, of which the National Arboretum is a part, were able to demonstrate state-of-the-art science to an estimated 3500 visitors who came to see research in action. Although the National Arboretum's Research Unit has participated in Public Field Day in the past, this year was the first that featured aspects of the arboretum's Gardens Unit, Education Unit, and stakeholders Friends of the National Arboretum (FONA) and The National Bonsai Foundation (NBF). A large koi tank, set up and staffed by volunteers from the ZNA Koi Club, was a draw for all ages, while adults had the opportunity to educate themselves with herb tasting and a bonsai demonstration. An interactive "Name that Cultivar" matching game, an hourly drawing for prizes, and a table with handouts from FONA and NBF kept the booth buzzing with activity throughout the day. The efforts of the arboretum staff and volunteers paid off, as the arboretum's interactive and informative booth was awarded first place among the more than 50 exhibits.



Kim Bibbs, Marketing Intern

Intern Class of 2003 Contributes to Arboretum Accomplishments through Projects

Each year, arboretum interns work with their supervisors to design projects that both teach them something new and contribute to the arboretum's on-going work. Depending upon the length of time each intern is hired to work, the projects may be relatively simple or more complex. This year's three-month summer intern in Fern Valley, for example, used her landscape architecture skills—she's working on her degree at the University of Maryland—to do a

conceptual design for a new entrance to Fern Valley that will make it more accessible from the Capitol Columns. The three-month marketing intern, who returns to Frostburg State University this fall to continue work towards a master's degree in business administration, created draft brochures about the arboretum's photography rules, donation policies, and tram tours. Expertise with a digital camera is just one of the skills that the twelve-month plant records intern will need. She will be creating an electronic file of plant images to illustrate the arboretum's popular Hort Hot Spots, a year-round, bi-weekly listing of garden and collection highlights. The 2003 intern group counted 12 individuals from as far away as Massachusetts, Minnesota, and Florida. The intern program is funded through stakeholder (Friends of the National Arboretum, National Woman's Farm and Garden Association, The Herb Society of America, National Garden Clubs, Inc., and the Green Spring Valley Garden Club) and private donations.

Mary Byrne, Plant Records Intern



Irrigation System Installation Moves to Conifer and Dogwood Collections

The contract to install automated irrigation systems in several of the collections on the east side of the arboretum is moving ahead despite many delays due to poor weather. Work is now in progress to install automated systems in the Dogwood Collection and the Gotelli Collection of Dwarf and Slow Growing Conifers. Although rainfall has been abundant this year, severe droughts in past years underscored the need for modern, efficient irrigation systems throughout the arboretum. Irrigation work in the Asian Collections has been completed.

Gardens Staff Battle Erosion

Heavy rains throughout the spring and early summer resulted in serious damage to various collections, particularly the Asian Collections, the Fern Valley Native Plant Collection, and the Azalea Collection. Intense rainfall and saturated soil conditions have damaged paths and eroded roadsides. Staff has improvised to make temporary repairs, but the damage has brought to light the need for an arboretum-wide plan to standardize the design of paths and roadsides. In the near future, the arboretum will be working to upgrade trails and provide for stormwater management in an environmentally sensitive way.