By now you are probably saying, “not another renovation update.” I’m with you. By the time you get this newsletter the majority of the work, noise, dust, and odors will be gone from Lyman Plant House and the Conservatory. As I write this, the contractors are removing scaffolding from the interior of Palm House, installing automated shade cloth in Cool Temperate House, meticulously completing the wood repairs to Succulent House, and allowing us to return many plants to their original places. I must say that all in all the process has been challenging but rewarding. We are very anxious to get back to our usual routine, expand our programs, and utilize these new spaces to the fullest.

The bulb show is scheduled to begin March 1, and our official grand reopening celebration is May 9. The place looks great! New additions include a furnished reception hall, exhibit hall, research lab, expanded offices, and increased work and storage space. We now have our own furnace and can, if necessary, heat our greenhouses with no dependence on the Smith heating system. This will prevent any catastrophic losses if one system fails. The control of the glasshouse environment is now extremely sophisticated. We have monitors that control greenhouse vents and in some houses humidity is detected and adjusted with fog injection. Ventilation is improved with the addition of forced air vents into houses that historically were poorly vented. In my talk on February 28 for the opening of the Bulb Show (see page 10 for details), I’ll show you pictures of the infrastructure and how it came to be—a fascinating process.

You might be wondering how the plant collection is faring. The staff’s efforts in caring for the collection are commendable. Few plants were lost although many had to have severe haircuts so that they could all fit in reduced space. Soon they will begin their rapid regrowth and you’ll never know that they’ve been through such a challenge.

After a year in the making, we now have the first formal Collections Policy for the Botanic Garden. Slowly but surely you will see new additions to the collections, and some of the more common plants as well as duplicates will be removed. By focusing on specific plant groups for specific greenhouses and gardens we hope to enhance the educational aspects of the collection. Under my directorship, a plant cannot just be pretty. It must be pretty and informative. For example, Show House, which had a somewhat diffuse purpose, will now focus on plants with scent, many of which will have a sign telling you why and where the scent is produced and of what value it is. Our hardy plant choices for the campus also come under a Collections Policy (see article by Nate Saxe on page 5). We hope that our new policies will lead to an increase in the value of our collections from both a botanical and educational standpoint.

We hope to see you at the Bulb Show opening as well as the Grand Reopening Celebration. It will be nice to see visitors once again!
We have recruited a new group of volunteers to join our dedicated team. They will be helping us with giving guided tours to the many school groups who visit the Lyman Conservatory and outdoor gardens. Volunteers will also be staffing the new Church Exhibition Gallery on weekends. When you come to the Spring Bulb Show, the volunteers will be here to answer your questions and help you find your way through the renovated facility. With our new reception desk we even have a place for them to greet you!

Without the many hours that our volunteers put in, the Botanic Garden would be unable to accomplish as much as we do with the limited staff that we have. We can never thank them enough.

Anyone interested in volunteering should contact Madelaine Zadik (mzadik@smith.edu).

Peace and Unity Bench

Last February we received an email from fifth grade students at the Toll Gate Grammar School in Pennington, NJ. They were on a quest for wood from each of the fifty states, which they were collecting for a special project: a “peace bench.” Their email asked for “a piece of wood that is native to Massachusetts that is 24 in. by 6 in. by 1½ in. or a branch that is between 24 - 36 inches long.” The students designed the bench with rustic builder David Robinson, then cut and fastened together all the pieces they had acquired, burning the state of origin into each piece. We donated a sugar maple limb that was pruned from a tree at Cutter and Ziskin. That branch is now part of the bench, pictured above on the school grounds. Below is the dedication poem the students wrote and inscribed on the bench.
In our spring 2002 newsletter I interviewed Phil Reid who was retiring from his position as Professor of Biology at Smith College. After an intense competition for his position, it was filled by Carolyn Wetzel. Carolyn comes to Smith from an assistant professor position at East Tennessee State University. The Botanic Garden is excited to have her here as an ardent supporter of our programs and our collections. Carolyn is enthusiastic, energetic, and has a broad knowledge of plants. I thought it would be fair to subject Carolyn to an interview, which you can read below.

Michael: There are many more biology majors interested in careers in health or in zoology. Why did you decide that studying plants would be your career goal?

Carolyn: I decided in eighth grade to study plants as my career and only deviated from that path for one summer when I “tried out” the lifestyle of a veterinary assistant. I had been gardening with my Mom for years, and spent many seasons exploring the local flora of southeastern Michigan with a tattered copy of Peterson’s guide. It was my junior high math teacher who pointed out to me that my interest in plants could be realized as a professional plant biologist. Actually, I have never been a biology major—I was a botany major for my bachelor’s and Ph.D. degrees, and did postdoctoral research in a botany department.

Michael: Carolyn, tell me about your education and career prior to coming to Smith.

Carolyn: I studied plant physiology and ecology for a bachelor’s degree at the University of Michigan in Ann Arbor, including three summers at their field research station. Then I did a Ph.D. in Botany at Cornell University with a major in plant physiology and minors in plant ecology and molecular biology. Afterwards, I spent several years in a postdoctoral research position at Iowa State University before getting my first job at East Tennessee State University.

Michael: Tell me what attracted you to the position at Smith College.

Carolyn: Honestly, I was not looking for a different job but a friend of mine sent me the job ad. I went on-line to the Smith web site and one of the first things I saw was a photo of the Lyman Plant House—I got really excited and delved further into the information about the college and the biology program. It was very impressive to see the caliber of students, faculty research, and resources available. The college obviously has a strong commitment to providing top-notch research experience for the students to complement their classroom learning. I was eager to be a part of it! I enjoy both teaching and research so it was satisfying to find a job where both are valued.

Michael: What was the toughest decision you had to make regarding accepting the new position?

Carolyn: Trying to decide if the improvement in my job would outweigh the disruption to my family. I have two young daughters that had to change schools. My husband, who is also a scientist, had to leave behind a research site in Tennessee that he really loves, and we had to sell our wonderful house and gardens.

Michael: When you finished graduate school, why did you choose an academic career rather than working for a major research company?

Carolyn: I never considered it. I don’t really know why not, I guess I don’t see myself as the commercial scientist-type. I love the whole academic environment, especially the interaction with people in so many different areas of science and non-science disciplines.

Michael: What type of research do you do?

Carolyn: The main project in my lab right now is to study, at a biochemical and molecular genetic level, one of the mechanisms that plants use to deal with stress imposed by overly high light. Plants absorb light energy to use for photosynthesis but sometimes the rate of energy coming in exceeds the rate that it can be used by the plant, so damage can occur. Or at least that is how the project started! It turns out that the kind of protein we study may also play a role in response to salt stress, and in the plant’s developmental processes of senescence (aging and death) and ripening of fruit. Plants are rooted in place so they cannot run away from bad conditions or toward good conditions. Instead they have to deal with whatever situation they are in, or die. This kind of pressure has led to the evolution of very elaborate and fine-tuned mechanisms to deal with stressful conditions, and it looks

(Continued on page 4)
like the protein we study has found a place both in development and stress responses. We are trying to figure out what kind of signals cause the protein to be made. Another area in the project is to figure out what the protein does. One approach is to generate plants that cannot make the protein and see what happens to their growth and physiology, then we can engineer altered forms of the protein and put them back in deficient plants to see what part of the protein structure is essential for its function.

Michael: What are the implications of this research both commercially and for the betterment of plants themselves?

Carolyn: My research is firmly in the realm of “basic research,” meaning that I myself am not aiming for a direct commercial application. However, the kind of basic information I am gathering is similar to what has been used in agrichemical development (herbicides, growth regulators) and even in development of new energy technologies. For example, a U.S. research group has used basic knowledge of the light energy transduction pathway of plants to design algae that generate large amounts of hydrogen gas, an application that has people excited. DOE funded their research, and I am still aware of the action around me. So far what I like best about Massachusetts is the energy of the people. There is a lot of activity, diverse interests, and intellectual stimulation. Of course, as a junior faculty member I am usually holed up in my office or lab working but I am still aware of the action around me.

Michael: You have moved from Tennessee to Northampton. What are you missing from Tennessee and what are you enjoying in Massachusetts?

Carolyn: I miss the near-perfect weather of eastern Tennessee—we lived in the Blue Ridge Mountains and had short winters, a long green spring and colorful autumn, and wonderful summers. We could garden in Zone 6b! The geography there is beautiful and the diversity of native plants is about the highest in the US. So far what I like best about Massachusetts is the energy of the people. There is a lot of activity, diverse interests, and intellectual stimulation. Of course, as a junior faculty member I am usually holed up in my office or lab working but I am still aware of the action around me.

Michael: What courses do you plan to teach at Smith?

Carolyn: I taught plant biology lecture and lab (BIO 240/241) during fall semester, and am teaching plant physiology lecture and lab (BIO 250/251) this semester.

Michael: Of all the teaching experiments you do with students, which one amazes them most?

Carolyn: Plant tissue culture—when the sterile cultures do not get contaminated! Students are amazed that you can take very small pieces of a plant and force them to regenerate a bunch of complete new plants while on a synthetic growth medium. Plus they like taking the plants home at the end.

Michael: I asked Phil what were his favorite trees on campus. You haven’t been here long but have you fallen in love with any of Smith’s trees?

Carolyn: I love the Metasequoias (dawn redwoods) on campus. I had a small one growing in my yard in Tennessee that I miss, and I am especially impressed with the size and rich history of the specimens on campus. They have such beautiful foliage and interesting bark and trunk shape.

Michael: You have moved from Tennessee to Northampton. What are you missing from Tennessee and what are you enjoying in Massachusetts?

Carolyn: I miss the near-perfect weather of eastern Tennessee—we lived in the Blue Ridge Mountains and had short winters, a long green spring and colorful autumn, and wonderful summers. We could garden in Zone 6b! The geography there is beautiful and the diversity of native plants is about the highest in the US. So far what I like best about Massachusetts is the energy of the people. There is a lot of activity, diverse interests, and intellectual stimulation. Of course, as a junior faculty member I am usually holed up in my office or lab working but I am still aware of the action around me.

Michael: Finally, if you had to tell someone why they should study plants what would you say?

Carolyn: Plants enrich our lives in every way, whether a vase of cut flowers on the table or a forest of towering old growth trees, from the paper you are reading right now to the coffee you drink. Society needs a strong body of scientists who study plants in order to keep advancing our knowledge of plants and development of novel uses of plant products. Especially with the pressures put on the Earth’s biosphere due to increasing population growth, it is essential to maximize efficient use of our limited natural resources. The serious plant biologist can contribute to the effort while having the pleasure of working on a wonderfully interesting organism. However, one doesn’t have to study plants at the level of a professional botanist to gain satisfying information. For example, an assignment that I use in my plant biology class is to have students read a series of published written works of different styles—poetry, essays, fiction—that incorporate some aspect of plant biology or metaphor. These were written by nonscientists who chose to stop and study plants from their own perspective and need, and then shared that perspective through the beauty of their language. The students determine if the botany represented by the author is accurate and comment on the effectiveness of the use of plants in the context of the work, and eventually compose a piece of creative writing of their own that incorporates knowledge of plants gained in the course. Anyone can do the same kind of exercise and have fun with it!
The majority of the work performed to date has focused on the entrance to the garden. Stone steps have been installed, and the surrounding area has been heavily planted with understory trees, shrubs, ferns, and wildflowers. Furthermore, the sunny, wet area in front of the garden has been planted as a wet meadow with the establishment of wildflowers naturally found in these growing conditions.

As important and rewarding as these physical changes are to the establishment of the garden, perhaps the most difficult and important accomplishment (at least from the perspective of a botanic garden) is the development of the Woodland Garden Plant Collections Policy. This succinct page-long document reads somewhat like the Ten Commandments. The Collections Policy describes the purpose, theme, and goals of the garden, and guides us in the acquisition of new plants. All plant collectors need a little reining in at times, so that we remain focused on our mission. The collections policy for the Edith Branwell Reilly Hand Wildflower Garden states that only native North American plant species of non-cultivar status shall be planted, and from the inception of this policy, all additions must be justified by meeting these criteria.

As for the theme of the garden, having a garden to display native plants is only half the story. The proximity of the Hand Wildflower Garden to the Japanese Garden also allows us to demonstrate a unique relationship that exists between the floras of North America and parts of Asia. Given the latitudinal and topographic (and therefore climatic) parallels between these regions, as well as their proximity prior to continental drift, many Asian and North American species share the same ancestry. The Japanese Garden and Tea House, located adjacent to the Hand Wildflower Garden, will offer a collection of Asian natives, and the Hand Wildflower Garden, a collection of native North American counterparts representing the same genera. Examples of this theme already existing include eastern redbud (Cercis canadensis) and Chinese redbud (Cercis chinensis), white fringetree (Chionanthus virginicus) and Chinese fringetree (Chionanthus retusus), and black cohosh (Cimicifuga racemosa) and Japanese cohosh (Cimicifuga racemosa) and Japanese cohosh (Cimicifuga racemosa).
Collections News

New Peonies

The Smith College Club of Greenwich-Stamford was looking for just the right gift to welcome Smith’s new president, Carol Christ. We worked together with the club and came up with a plan. The club decided to donate two Chinese tree peonies, which the Botanic Garden selected for the front of the President’s House. The peonies are ‘Zhao’s Pink’ (Zhao Fen in Chinese)—light pink, 6 to 8 inch flowers that vary from single to thousand petal shapes, with a sweet scent.

With luck, their gorgeous flowers will bloom in May and be focal points along the Commencement path. Tracey Putnam, the gardener at the President’s House, will also be planting tulips in those borders for earlier color. “Tree peonies can live for at least a hundred years,” said Tracey. “In ancient Chinese culture, the peony symbolized enduring love and loyalty, and represented an offer of friendship. The peony flower was also celebrated as the ‘Flower of Poets’ and often found in the gardens of scholars. What a perfect gift for our new president!”

Obituaries

We mourn the loss of some prominent campus trees.

Fagus sylvatica — Of European origin, this giant beech lived for nearly 100 years just off College Lane near Elm Street. Less than 10 years ago its roots were severely injured when Chapin Drive was widened. The tree was failing rapidly and becoming a hazard to all those below. We had to cut it down in January.

Zelkova serrata — Of Chinese origin and only 22 years old, this tree lived near Hatfield Hall. It was cut down in January following severe fungal infection.

Fagus sylvatica ‘Fastigiata’ — This upright beech was located in front of Neilson Library. Consultants believe the regrading that took place when Neilson Library was expanded may have been the cause of its demise. It was dying a slow death and was a hazard.

Traveling Willow

Last spring, gardeners John Berryhill (pictured here) and Nathan Saxe, with the help of Stockbridge School intern Dianna Destephano and Smith student Rachel Cole, placed a new addition to the arboretum in an appropriate home. This golden weeping willow, Salix babylonica ‘Aurea,’ should enjoy the rich, damp riverside soil on the north side of Paradise Pond Island. Like most willow trees it should grow quickly, and soon its pendulous yellow winter twigs will be reflecting in the pond, enjoyable even from a distance.

New Trees on Campus

Director’s note: We are planting many new trees on campus while keeping within the Campus Landscape Master Plan and Olmstedian ideals. New specimens include:

- A purple beech (Fagus sylvatica ‘Riversii’),
- A golden rain tree (Koelreuteria paniculata),
- A scarlet oak (Quercus coccinea) all near Cutter and Ziskin,
- Several disease resistant elms along Green Street (Ulmus ‘Prospector,’ Ulmus parvifolia Allee® and ‘Dynasty’),
- A hackberry (Celtis occidentalis ‘Magnifica’) and a row of Japanese maples (Acer palmatum) near Chase and Duckett,
- Acer × freemanii ‘Armstrong’ (Armstrong hybrid maple) in the front of Burton Hall, and
- Magnolia × loebneri ‘Ballerina’ in the Sage Hall circle.

If you are interested in adopting one of the above trees see our web page at http://www.smith.edu/garden/Giving/donations.html or call us for details.
Plants and their products are among the main commodities that drive the global economy. Many of these are agricultural or plantation-grown crops but horticultural commodities also have their own systems of production and distribution. Some, like the bulb industry of the Netherlands, have histories that stretch back hundreds of years, while other plants are new to the market or are experiencing expanded market share. If there is one horticultural commodity that would be considered a major growth stock it would have to be orchids. The mystique of orchids has been celebrated in recent bestsellers and documentaries, even Hollywood movies such as *Adaptation*. Overseas production of orchids in developing countries coupled with internet marketing and sourcing has led to an explosion of reasonably priced orchids of incredible beauty, often found on supermarket shelves next to the usual clusters of poinsettias, azaleas, and cacti.

As we have detailed in past issues of our newsletter, our collection of orchids has dramatically improved, and we have not yet had to go the commercial route. We have benefited from the generous donation of orchid collections by alumnae and friends. One such collection was the generous gift of Joan Throckmorton '53 and included rarities from Madagascar such as *Jumellea arachnantha*, *Oeoniella polystachys*, and *Aerangis citrata* (which is just now sending up a flower spike), as well as a fabulous slipper orchid, *Phragmipedium longifolium*, a native of Central and South America.

But it is another orchid from the Throckmorton collection, native to Mexico, Belize, and Honduras, that has so far proved to be my favorite addition. With a name such as *Rhyncholaelia digbyana*, it helps to have a beautiful flower, and this epiphytic orchid surely does. The generic name translates to “Laelia with a snout,” the snout being the bulging apex of the column. The species has been a taxonomic football since it was first described by the great orchidologist John Lindley in 1846 as *Brassavola digbyana*. Others considered it to be a *Cattleya* or *Laelia*, but the current genus of *Rhyncholaelia*, with only two species, *R. digbyana* and *R. glauca*, is correct. The two species are similar in terms of the yellowish green to creamy white six-inch flowers, but it is the spectacular lip of *R. digbyana* that distinguishes it from its more mundane cousin. The lip is very deeply fringed around the margin reminding one of a lacy collar seen in a painting by Rembrandt or Vermeer. This filigreed “edge effect” has been seized upon by hybridizers and has been used to produce large fimbriated lips in crosses with *Cattleya*. Add to the striking visuals a fresh lemony fragrance and we have a stellar addition to our conservatories.

This enthralling flower, likely to be viewed by generations of Smith students to come, has had a long history of cultivation and taxonomic debate. That a former Smith student, Joan Throckmorton, saw fit to share it with us completes a circle in the best botanical fashion.

Arianna Bruno will be the first graduate student in the Department of Biological Sciences to have the Botanic Garden Director, Michael Marcotrigiano, as a major advisor. She began in January and will pursue a Master of Science degree, developing cell culture methods for propagating rare and endangered species. At press time the new lab at Lyman Plant House is being outfitted with equipment such as sterile transfer hoods, autoclaves, and cell culture chambers. Arianna received her undergraduate degree from East Tennessee University and transferred to Smith from an M.S. program at North Carolina State University.
Southern Oaks for our Northern Collection

Tracy Omar

Some of the most important plants in our collection are large trees. Their abundance is one of the things that makes our campus such a pleasant environment. Sadly, trees do not live forever and many of the largest specimens on campus are entering their twilight years. We prepare for the inevitable demise of these giants by continually acquiring new plants as eventual replacements. In acquiring new plants, we consider many criteria. Of course we try to select species that will maintain and enhance the ambience of the campus environment. At the same time, we want to expand the diversity of the collection, so we look for species that are not already represented on campus. If we can find species that have interesting stories to tell, stories that might enhance the Garden’s education program, that is even better.

Oaks (Quercus) as a group are of interest to us because many are majestic, large trees providing shade, fall color, and winter interest. Most North American species were important to Native Americans as sources of food, fuel, or medicine. In addition, oaks are very important ecologically, often being the dominant tree in our deciduous forests. Oaks can live for hundreds of years, providing food and shelter for animals and shade for understory plants. For these reasons, adding oaks to the campus arboretum, especially species new to our collection, is always a priority.

In 2002 we acquired a group of seedling oaks representing six species not currently in the collection. Four will mature as large trees while two will remain shrubs. These new Quercus are all native to the eastern United States. We have not grown them before because they are considered only marginally hardy here. Their native ranges are generally the southeastern or mid-Atlantic states. However, we have reason to hope that these particular individuals will prove hardy. These seedlings came to us from Doug Goldman, a researcher at the Gray Herbarium at Harvard University. He spent several years identifying populations of each species that were growing in the coldest regions, and then collected seed from those populations. The seedlings he gave us were grown from seed he collected, so they should represent the most cold-hardy individuals of each species. For the moment, all are too small to be planted out on campus and are being grown in our nursery. We hope they will one day enjoy positions of prominence around campus.

The six species are as follows:

Quercus falcata, the southern red oak, is primarily a southeastern species, but extends as far north as New York. A common landscape tree in the southeast, it can reach 75 feet in height. L.H. Bailey, in his famous work The Standard Cyclopedia of Horticulture, calls it “handsome, with peculiarly distinct foliage.”

Quercus marilandica, the blackjack oak, ranges from Texas, across the southeast and north to New York. It is a small tree (as oaks go), reaching only 40 feet tall. Bailey calls it “a handsome tree, with large glossy foliage.”

Quercus nigra, the water oak, is another southeastern species but its range extends as far north as New Jersey. A large tree growing to 100 feet in height, it is a common street tree in the south.

Quercus stellata, the post oak, is a southeastern species with a range that extends as far north as coastal Massachusetts. It matures as a 50- or 60-foot tree with a dense, round canopy and interesting leaves. It is another “handsome” oak, according to Bailey.

Quercus prinoides, the dwarf chinquapin oak, and the next species, Q. ilicifolia, are interesting because they are shrubs rather than trees. Quercus prinoides is found throughout the eastern United States, from Arkansas to New Hampshire. It is a spreading shrub reaching about 6 feet in height, with slender stems and bright green leaves. Bailey calls it “a pretty shrub for covering dry and rocky ridges.”

Quercus ilicifolia, the bear oak, is found throughout the northeast, from West Virginia to Maine. It is usually a spreading shrub about 10 feet high, but can occasionally be a small tree reaching up to 20 feet.
**Issues in Landscape Studies**

**Lectures of Landscape Studies 100**

Mondays 2:40 – 4:00 pm, Wright Hall Auditorium

All lectures are open to the Friends of the Botanic Garden

Jan. 27 Nina James-Fowler, Mellon Fellow in Landscape Studies, Smith College.

*Introduction: What Isn’t Landscape Studies?*

Feb. 3 Andrew Guswa, Asst. Professor of Engineering, Smith College.

*The Inescapable Art of Bridges.*

Feb. 10 Barbara Kellum, Professor of Art, Smith College.

*The Art of Nature/The Nature of Art: Gardens in Roman Pompeii.*

Feb. 17 Harry Dodson, Landscape Architect, Ashfield, MA.

*Masterplan for Buffalo Bayou and Beyond: A Green Heart for Houston.*

Feb. 24 Signe Nielsen, Landscape Architect, New York City.

*Recapturing the Waterfront for Public Use.*

Mar. 3 Tom Wessels, Professor of Ecology, Dept. of Environmental Studies, Antioch/NE Graduate School.

*Interpreting Cultural History in Forested Landscapes.*

Mar. 10 Helen L. Horowitz, Sylvia D. Bauman Professor of American Studies, Smith College.

*Inspiration from an Unlikely Source: J. B. Jackson and the Landscape of Women’s Colleges.*

Mar. 24 Paula Varsano, Asst. Professor of East Asian Language and Literature.

*Three Ways to Love a Wall: The Lyric Gardens of China.*

Mar. 31 Sandy Isernstadt, Professor of Art History, Yale University.

*Four Views, Three of Them through Glass, or How Much Is That Vista in the Window?*

Apr. 7 Randolph Hester, Professor of Landscape Architecture, University of California, Berkeley.

*Pacing the Landscape: Slowing the City Down.*

Apr. 14 Alice Friedman, Professor of Art and Director, Architecture Program, Wellesley College.

*The Meditation Garden at Graceland: Rediscovering Lost Meaning in Landscape Design.*

Apr. 21 Leonard Hopper, Head of Landscape Architecture, NYC Housing Authority.

*Between the Building and the Street: The Landscape Architect and Security Design.*

Apr. 28 Henry Lu, Assoc. Professor Landscape Architecture and Regional Planning, UMass.

*From Ivory Tower to Family Kitchen: Contradictions and Opportunities — Lessons from Springfield.*

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**Environmental Conflict or Sustainable Peace — Lecture Series**

Co-sponsored by the Environmental Science and Policy Program, Landscape Studies, and the Botanic Garden

All lectures are open to the Friends of the Botanic Garden

Tuesdays 7:30 pm

Seelye Hall 106 or Neilson Browsing Room

Feb. 4 Michael Klare, Five College Professor of Peace and World Security Studies.

*Oil and Water: The New Flashpoints of Conflict.*

Seelye Hall Room 106.

Feb. 18 Sandra Postel, Director, Global Water Policy Project.


Neilson Library Browsing Room.

Mar. 4 Tina Clarke, Massachusetts Campaign Director for Clean Water Action.

*Environmental Impacts of War in the Gulf.*

Neilson Library Browsing Room.

Mar. 25 Barry Hill, Director, Office of Environmental Justice, EPA.

*The Relationship between Preserving Natural Resources and the Issue of Environmental Justice.*

Neilson Library Browsing Room.

April 8 Paul Wetzel, Research Associate, Smith College.

*The Biology and Politics of Restoring the Florida Everglades.*

Neilson Library Browsing Room.

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**Word Maize Solution**

The puzzle appeared in the Fall 2002 Botanic Garden News
### Calendar of Events — Spring 2003

#### Spring Bulb Show

**Opening Lecture & Reception**  
Friday, February 28, 7:00 PM  
Seelye Hall, Room 106  

**The Restoration of Lyman Conservatory**  
Michael Marcotrigiano, Director, Botanic Garden  
A pictorial overview of the restoration process, its problems, its solutions and what the renewed facilities will have to offer.  
Followed by a Reception in the Lyman Plant House and a Preview of the Bulb Show in the Illuminated Conservatory.

#### Grand Reopening Celebration  
Lyman Plant House & Conservatory

**Friday, May 9**  
4:00 pm to 8:00 pm  
Join the merriment as we celebrate the completion of the renovation and restoration of this facility. After six years of planning and two years of construction we are overjoyed to have our beloved Lyman back and we want to share our excitement with you as we plan for the future. Come and reacquaint yourself with our plant collections under glass.

#### Church Exhibition Gallery Schedule

**Plant Spirals: Beauty You Can Count On**  
On view now through March 31, 2003  
An exploration of the biology and mathematics of spiral patterns in plants (see article on page 11).  
Special Gallery Talk & Guided Tour  
Thursday, March 27, 5:00 pm

**Virginia Woolf: A Botanical Perspective**  
On view May 9 through September 30, 2003  
Showcasing the gardens and botanical artwork of Woolf's family and friends, this display takes you on a journey through botanical descriptions from Virginia Woolf's writings (see article on page 11).  
Opening Reception  
May 9, 4:00-8:00 pm  
Part of our Grand Reopening Festivities

#### Smith Chrysanthemums: Hybrid Alums  
November and December 2003

Horticulture students have been hybridizing chrysanthemums since the 1920s, establishing a Smith tradition. We will feature a historical look at the Smith Chrysanthemum Shows and display photographs of the Smith mum hybrids and their creators.

#### Spring Bulb Show

**Lyman Conservatory**  
Saturday March 1 – Sunday March 16  
Members-only hours:  
9:00 - 10:00 am daily  
(Please bring your membership card)  
Public Hours:  
10:00 am – 4:00 pm  
Special Evening Hours:  
Friday March 7 & Friday March 14  
6:00 – 8:00 pm

#### Bulbs from Show Offered to Public Donations to Benefit Limbe Botanic Garden

Saturday, March 22, 9 am to 3 pm (Friends Only)  
Friends, please bring your membership card  
Sunday, March 23, 9 am to 3 pm (General Public)  
The majority of the plants being offered are hardy bulbs and can be planted outdoors. After our last Bulb Show in 2001, the pots of bulbs brought in cash donations amounting to $900, which was sent to the Limbe Botanic Garden in Cameroon. We feel proud to be able to help this garden. They used the money (plus donations from the North Carolina Zoo) for some impressive work, including:  
1) Training of farmers in cultivation of bush mango (*Irvingia wombo*l), a non-timber forest product used as a soup-thickener, and *eru* (*Gnetum africanum*), an indigenous leafy vegetable rich in proteins, and of economic, medicinal, nutritional, and cultural importance to the people of Cameroon and Central Africa.  
2) Developing a field gene bank for ex-situ conservation of *Gnetum sp* from the five provinces of Cameroon (the entire ecological range) for conservation, research, and education.  
3) Initiating a fuel wood domestication program with the goals of identifying, collecting, and developing cultural methods for high-density production of quality firewood for domestic use, since the collection of firewood is threatening the rich and fragile biodiversity on Mount Cameroon.
In June Smith College is hosting the Virginia Woolf Conference, an international meeting that aims to focus attention on the “real world” aspects of Woolf’s life and work. (See http://www.smith.edu/woolfconference for more information.)

The Botanic Garden is proudly participating by mounting, Virginia Woolf: A Botanical Perspective, in the Church Exhibition Gallery.

You may wonder, what is the connection between the Botanic Garden and Virginia Woolf? We ask you to don a botanical lens and join us on an exploration of the world and work of one of the twentieth century’s literary geniuses.

Historic photographs, excerpts from her writing, and images of the gardens that played important roles in her life will be on display, as well as reproductions of the lovely botanical artwork that her sister, Vanessa Bell, created for the covers of Woolf’s books. Through a special arrangement with the Mortimer Rare Book Room, the Botanic Garden will display a first edition of Virginia Woolf’s short story, Kew Gardens, hand-printed by Leonard and Virginia Woolf in 1919, as well as the limited edition published by Hogarth Press in 1927, which includes illustrations by Vanessa Bell on every page.

Friends of the Botanic Garden are invited to the opening reception for the exhibit on Friday May 9, 4:00 – 8:00 pm, part of our Grand Reopening Celebration. The exhibition will remain on view through September 30, 2003.

From May 9 to May 25, 2003 the new administrative wing of the Lyman Plant House will feature recently executed landscape projects exploring the ecological base of sustainable development. Land, water, and air support creative and artful designs that limit the human impact on the natural environment.

Cornelia Hahn Oberlander, Smith class of 1944, was in the first Harvard Graduate School of Design class to admit women. She is coauthor of Smith’s Landscape Master Plan and is arguably the most distinguished and well-known landscape architect in North America. She has pioneered socially activist, green, and sustainable landscapes for individuals and for the public since the beginning of her career. Oberlander proves over and over that women can not only design private spaces, but can hold their own with city planners, politicians, and contractors to make big, ambitious projects happen. She is a passionate, focused, and articulate advocate for women in her profession, and for the ways in which their work can transform people’s sense of their place in and responsibility to the environment.

The exhibit will only be up through March 31, so if you haven’t seen it yet, be sure to visit. We have scheduled Guided Tours and Gallery Talks with the creators of the exhibit. These talks will present more in-depth material and allow for discussion. Come at 5:00 pm on Thursday, March 27 for a more detailed look at the math and biology behind spiral patterns in plants as well as the making of the exhibit.

Plant Spirals

Plant Spirals, the debut exhibit in the Church Exhibition Gallery, has been getting quite a bit of attention lately. It was featured on Bioresearch Online in January and Natural New England will include a piece about it in the April issue. Additionally, the Discovery Channel is interested in doing a segment about Plant Spirals for the Daily Planet, their daily science magazine show.

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Paradise Gate Takedown

While Patrick Dougherty’s Paradise Gate has been immensely popular with everyone on campus, the time has come for it to be taken down. It will come down during the second week of June, so if you have not had the chance to view this wonderful twig sculpture, you should set a date to come and see it.
You are invited to join

The Friends of the Botanic Garden of Smith College

ALL MEMBERS RECEIVE:

- A complimentary copy of *Celebrating a Century: The Botanic Garden of Smith College*, by C. John Burk
- *Botanic Garden News*, our newsletter and calendar of events, twice a year
- Admission to members-only hours at the Spring Bulb Show
- Free admission and discounts at 170 other gardens around the country
- 10% discount on Botanic Garden merchandise
- Advanced registration and discounts on trips and workshops
- Invitations to show previews and receptions

☐ **YES, I WANT TO BECOME A FRIEND OF THE BOTANIC GARDEN OF SMITH COLLEGE!**

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<tr>
<th>Membership Level</th>
<th>Amount</th>
<th>Benefits</th>
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<tr>
<td>Grand Supporter</td>
<td>$2000+</td>
<td>- A complimentary copy of <em>Celebrating a Century</em></td>
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<td>Champion</td>
<td>$1500</td>
<td>- Admission to members-only hours at the Spring Bulb Show</td>
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* local elementary or secondary teachers
** graduated within the past 5 years

Enclosed is my check to The Friends of the Botanic Garden of Smith College in the amount of $ ___________.

All contributions are tax-deductible. Send to: Friends of the Botanic Garden of Smith College, Northampton, MA 01063.

Or you may join on-line at [www.smith.edu/friends](http://www.smith.edu/friends)