With the Smith Campaign well under way, we felt the Friends would enjoy an update of how the Botanic Garden, in a campaign for the first time in ages, is faring. What is becoming clear is that the reasons alumnae cite for giving are as diverse as the reasons people mention for visiting our gardens. Some visitors come to marvel at a particular orchid or rock garden plant, or to collect DNA samples or cuttings for propagation. Some come to create art with camera, paintbox, or pen. Teachers from the surrounding schools may bring their young flocks to visit the tropics while January winds rage outside. Others are aficionados of greenhouse architecture, and our amazing maze of glass never fails to delight them.

The Friends of the Botanic Garden are the best informed and most invested group of alumnae and supporters that understands our mission and activities. Not only do they endow us through yearly and special donations, but they continue to draw in other Smith alumnae through the networking they do at reunion events and Smith Club meetings.

Two alumnae have responded in a manner that will help to ensure the plant sciences will thrive and grow at Smith College.

Ann Hubbard ’55 has always had an appreciation for old buildings. “My husband and I have been active members of the New York Botanical Garden since the sixties, and after our experience with the restoration of that facility while he was on the Board, I became even more aware of the need to preserve the Lord and Burnham structure at Smith. It’s a gem that graces the campus and serves an important academic function. I love to see the proper restoration of good old buildings. Their structure is visually interesting and charming, which draws people in. In winter light, when there is snow around the building, Smith’s Conservatory is a sight not to be forgotten.

“Landscape painting, not notwithstanding the multiplication of its productions by engravings, and by the recent improvements in lithography, is still productive of a less powerful effect than that excited in minds susceptible of natural beauty by the immediate aspect of groups of exotic plants in hot-houses or in gardens. I have already alluded to the subject of my own youthful experience, and mentioned that the sight of a colossal dragon-tree and of a fan palm in an old tower of the botanical garden at Berlin implanted in my mind the seeds of an irresistible desire to undertake distant travels. He who is able to trace through the whole course of his impressions that which gave the first leading directions to his whole career, will not deny the influence of such a power.”

From Cosmos 1851, by Alexander Von Humbolt, Explorer, Scientist, Father of Phytogeography
“It’s a big project,” Ann notes, “but the rewards of restoring a building like that are great. I hope this gift will motivate others to join in supporting the preservation and improvement of one of the most interesting architectural elements of Smith’s campus.”

Another significant donor has asked to remain anonymous but relates that the Lyman Plant House is the first place she always goes whenever she gets to campus. She values the conservatories for their quiet, contemplative spaces. She remains informed about and supportive of our species conservation and medicinal plant research.

A local photographer of some skill, Judy Messer, came by recently with some work she had created in our conservatories. One shot, reproduced on the cover, captures the essence of the gardens. The young Campus School student is so absorbed in her study of plants that you can sense the firing of her imagination and the illumination of her mind. It is a process we see continually at all age levels, from toddlers to Smith seniors to graying seniors, and is perhaps the best product of our house of botanical wonders.

It is never easy to appeal to people for donations of their hard-earned money. But when you strongly believe in and are as committed to the mission and activities of the Smith College Botanic Garden as the staff is, we feel that we are extending an opportunity to others to become part of a crucial process: the art and science of building strong minds.

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**Friends Indeed continued**

(Continued from page 1)

We are always looking for contributions of all sorts for *Botanic Garden News*. We welcome submissions of photographs, artwork, and articles, as well as suggestions for topics you would like to see covered. Please contact Madelaine Zadik at the Botanic Garden.


**Presidential Plantings: Past and Present**

*Tracey Putnam*

In the spring of 1999 I started a new position as the President’s Residence gardener after 12 years as pruner/propagator for the Botanic Garden. In my previous position I worked exclusively with woody plants, maintaining our current collection campus-wide, propagating new trees, shrubs, and vines, and collecting seed from woody species in the wild. My new position allows me to work with a much more diverse plant collection. In addition to some outstanding trees and shrubs, the collection here includes an extensive rose garden, medieval herb garden, kitchen garden, perennial borders, and shade garden areas. I grow annuals, perennials, herbs, roses, vegetables, cut flowers, shrubs, trees, and lawns in one of the most beautiful settings on campus.

Topographically the grounds are unique, with long green vistas to Paradise Pond, stone walls, and steep stone steps behind the statue of St. Francis leading to the upper terrace. To the right of the house beyond the terrace, the land slopes dramatically to a deep, shaded ravine whose sides are covered with pachysandra and ferns, with a brook running along the bottom. In the heat of summer this appears as cool and exotic as a rain forest. On the other side of the vista, thriving in the deep shade, native wild white trillium (*Trillium grandiflorum*) grace the banks of pachysandra. Birdlife is plentiful—catbirds follow my weeding hoe picking up insects, a pair of cardinals raised a family behind the house this summer, ruby-crowned kinglets flit about in the hemlocks, and a piliated woodpecker frequents the woods by the terrace, startling all with his raucous cry. Hummingbirds visit the gardens, and the kingfisher’s rowdy call drifts up from the pond. What more could a gardener want? (Yes, there were warblers in the evergreens last summer!)

Herbaceous and woody plants of interest grace the area surrounding the house. First to bloom, some years through the snow, is *Adonis amurensis* on the back terrace. This six-inch tall golden, ferny-leaved member of the Ranunculaceae opens its bright yellow flowers on a sunny morning in late February to mid-March depending on the weather. *Adonis amurensis* is native to Manchuria and Japan. Unfortunately, it flowers before any insects are available to pollinate it, so we are never able to collect seed.

Another interesting member of the Ranunculaceae on the terrace is one of my favorite perennials, *Anemonopsis macrophylla*, false anemone. The pendant, waxy lavender-pink flowers of this Japanese native hang gracefully above foliage reminiscent of columbine (yes, the specific epithet is inappropriate in late summer, anemonopsis flowers in sun and shade, preferring the latter in afternoon. Hard to find in the trade, and tricky to propagate from seed, it can also be seen in the Systematics Garden near Lyman Conservatory. Also on the terrace is a large specimen of *Kirengeshoma palmata*, another Japanese native from wooded mountains in the south. A member of the saxifrage family, this plant is three feet tall by three feet across and has elongated, waxy pale yellow bells with closely overlapping petals, appearing in August above broadly palmate foliage.

Mature specimens of *Dictamnus albus*, the gas plant, adorn the narrow borders behind the herb garden. It produces beautiful white blooms in June alongside the interplanted blue Siberian iris. I have added ten new groupings of peonies to this border to complement the iris and gas plants. I have also planted thirteen peonies in the iris border along the sidewalk by the white fence. Two of these are very old single varieties that flower quite early, right at Commencement last year. One of these, a pale pink, was already growing in the border by the herb garden, and the other, a pale yellow, grows in Capen Garden. There is no record of the varietal names but I suspect they are Saunders hybrids from the 1940s, possibly two of his quadruple hybrids using *Paeonia lactiflora*, *P. macrophylla*, *P. mlokosewitschii*, and *P. peregrina*. Other varieties that were planted in the gardens last fall include 'Cytherea,' 'Windchimes,' 'Burma Midnight,' 'White Wings,' 'Mons. Jules Elie,' and a others. Many of these were purchased at Ridge Peony Farm in Conway, sets, which should be on your destination list for next June. I am currently searching seed lists for *Paeonia officinalis* and *P. ostii* for use in the medicinal bed in the herb garden.

(Continued on page 4)
Presidential’s Garden continued

(Continued from page 3)

Ronsard (‘Eden’) have been planted on the white fence surrounding the herb and kitchen gardens, and Rosa gallica ‘Officinalis,’ the Apothecary’s rose, or Red Rose of Lancaster, has been added to the medicinal bed in the herb garden. New English roses from David Austin include ‘Graham Thomas,’ ‘The Prince,’ ‘Heritage,’ and ‘Lucetta.’ ‘Frederic Mistral,’ ‘Carefree Wonder,’ and ‘Ballerina’ are new shrub roses, and two old varieties, ‘Ispahan’ (a damask) and ‘Mrs. John Laing’ (hybrid perpetual), were also planted. The latter was first planted in the gardens here in 1891. Mention of this is made in a journal in the Smith College Archives along with an unattributed quote: “I deem the rose the nightingale of flowers.” It will be interesting to see if the performance of this rose stands up to its longevity in commerce of over 100 years.

Other woody plants of significance on the grounds include a venerable specimen of the royal azalea, Rhododendron schlippenbachii, planted in front of the house in the 1930s. In his Manual of Woody Landscape Plants, Mike Dirr says of this azalea “[there is] no adequate way to do justice to the beauty of this plant by the written word.” It is in full and glorious bloom in May. To the right of the house stands a handsome example of the cut-leaf European beech, Fagus sylvatica ‘Laciniata,’ which, according to our records, measured fifteen inches in diameter in 1932. Perfectly proportioned and lovely year-round, it becomes a cloud of gold in the fall, a color echoed by Fothergilla major by the garage to the left of the house. Several shades of gold along with orange, red, and burgundy brighten the foliage of these plants in autumn for an outstanding effect. Also with golden fall color is the statuesque specimen of Halesia monticola, mountain silverbell, atop the slope behind the garage. In late April to mid-May this tree is covered with pendent white bells—a breathtaking sight.

At the bottom of the sloped lawn toward Paradise Pond the fruits of Ilex verticillata ‘Jolly Red’ glow scarlet even in mid-January. This cultivar has much larger fruits than those found in the wild, and it can be clearly seen from College Lane. The twin specimens of Wisteria floribunda on the back of the house reach 35 feet, and the old, twisting branches are covered with foot-long lavender racemes in April, appearing before the foliage. They are so magnificent in bloom that the Yankee Candle Company wanted to photograph them in 1999 for a new candle jar. They came a bit late with their cameras, though, as a heavy rain had decimated the flowers. In June, nothing rivals the Cornus kousa, Kousa dogwood, growing just beyond the terrace. This species is a favorite of mine, and this particular plant is the most floriferous of any I have seen. It presents a spectacular vision seen from the rose garden.

Some of you may be familiar with the huge Magnolia × soulangiana ‘Alexandrina’ across from the herb garden above the iris border. If you do visit it, make sure to walk in among its multiple trunks—they are unusually large and beautiful. Up until the ice storm of 1997, this tree created a veritable wall of pink flowers in April. It suffered serious damage in the storm and has been heavily pruned in hopes of its recovery. This tree was planted in the late 1920s and flowered initially in April of 1933. We look forward to a return of its original splendor.

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The Long Green Line
Constance A. Parks ’83

West Point cadets proudly declare they are part of the Long Gray Line stretching back to the first graduate of the academy. Conservatory Manager Rob Nicholson, when illustrating the educational mission of a botanical garden to the 1999 Horticulture class, compared the Long Gray Line to one hundred years of Horticulture students at Smith who make up the Long Green Line.

That analogy prompted this inquiry: What is the tradition of Horticulture at Smith College? From previous research and experience, I knew that Horticulture was a relative newcomer (c. 1900) to the well-established botany curriculum of an institution founded in 1875, in which its founder Sophia Smith specified that “all the education and all the discipline shall be pervaded by the Spirit of Evangelical Christian Religion.” I’d also seen careful yet stylized drawings of elephant’s ear (Begonia sp.), brake (Pteris cretica), chrysanthemums, and others from a Botany V (Horticulture) notebook of Emily Rankin Watkins ’11.

I knew the Chrysanthemum and Bulb shows to be longtime traditions involving Smith students. Finally, as Laboratory Instructor in Horticulture, I know what students are currently learning about the art and science of growing plants. Perhaps I could find evidence of a trend in teaching horticulture, progressing from reflective contemplation of God’s work to active investigation of Nature.

With the help of College Archivist Nanci Young and the staff of the Smith College Archives, I found much interesting information on Horticulture, plus some surprises. In the first archival box relating to the Botany Department (which in 1966-67 merged with the departments of Biology, Microbiology, and Zoology to become Biological Sciences) was a 1947 article by Dorothy W. Woodruff that included this: “A description of the Botany Department cannot be left without a glance at the gardening and horticulture classes and the work done in the courses on Plant Materials and Planting Design.” Period, end of paragraph. The writer continues, however, by stating that the Botany Department responded to the World War I “Food for Victory” movement by “instituting a course in Horticulture, which has been part of the curriculum ever since.” In truth, Horticulture became part of the Smith curriculum in 1900, and the institution that grew out of Smith students’ helping Connecticut Valley farmers get in their crops during WWI was the Smith College School for Social Work.

The tradition of helping others was exemplified in World War II as well, when a local grower facing a labor shortage asked the Botany Department for help. A greenhouse of gardenias needed grafting, and Smith Horticulture students were recruited. According to Woodruff, “The girls returned to the college laden down with exquisite blossoms to the loudly expressed envy of their friends.” Fringe benefits are a Horticulture tradition to this day. Just ask any in the Long Green Line what is her or his favorite “cultivar” of Coleus × hybridus (syn. C. blumei, renamed Solenostemon scutellaroides). The coleus collection at Smith, maintained for a century, is a treasury of readily rooting material. To become true cultivars, however, they need officially approved and issued names—perhaps their nicknames would suffice: Patches, Freckles, Ruffles, ....

I wanted to find out if there were records of the first Bulb Show or the first Mum Show, and to determine the connection, if any, to Horticulture. A press release on the Mum Show from 1952 announcing the debut of mums by seniors Miss Margaret Knecht of Allentown, Pennsylvania, Miss Jean Richmond of Kenilworth, Illinois, and Miss Bernice Low of Singapore contained this clue, “An annual feature for over 50 years, this display was begun under Dr. William F. Ganong, head of the Botany department, and Mr. E. G. Canning, head of the Garden department.” This suggests that the first Mum Show was held in 1900 or 1901, coinciding with the beginning of Horticulture. A slightly earlier press release on the Bulb Show confirms that bulbs were potted by the Horticulture students, so the Horticulture—flower show connection seems solid. Indeed, in 1999, members of the Long Green Line not only potted up and ferried to the cooler a long line of green pots filled with bulbs, but they also genetically engineered plants, so to speak, by selectively hybridizing mums, potentially creating unique flowers to be seen nowhere else on Earth.

The earliest mention of the floral exhibitions were in the student newspaper, Smith College
(Continued on page 6)
The Long Green Line continued

(Continued from page 5)

Weekly, which was published from 1911 to 1947. Calendar listings for the Mum Show and Bulb Show in 1911 and 1912, respectively, announced exhibitions of chrysanthemums and of spring flowering bulbs and shrubs “by the students of the Class in Horticulture.” How quickly are traditions established that they require no explanation or further notation of “Tenth Annual” or “Twelfth Annual”!

My initial focus on the Horticulture curriculum was to find a change from passive teaching to active involvement. Instead my search revealed a dynamic equilibrium. The course description for Horticulture for 2000-01 is not dissimilar to that of 1900-01. I know that the stylized drawings from Emily Rankin Watkinson’s Horticulture notebook of 1910-11, which appeared to be the result of passive copying, were actually preprinted, perhaps with the assignment to find, to identify, and to research the plants depicted.

In 1909, the phrase “and elements of landscape gardening” was added to the description of Horticulture, and in 1912 a separate course in Advanced Horticulture and Landscape Architecture was offered. The landscape architecture branch of the Long Green Line, bolstered by the merger of the Cambridge School of Design with Smith in 1938, later suffered drastic pruning. What caused the number of Landscape Architecture majors to drop to zero by 1949-50? The retirement of Kate Ries Koch, the instructor!

As I celebrate one hundred years of Horticulture at Smith College, I keep coming back to the image of the Long Green Line. I envision the Long Green Line growing and spreading well beyond Northampton to become an immense green web. I imagine all the life-forms that have been touched by the works and ways of the Long Green Line. There is no doubt that students love Horticulture (see http://www.smith.edu/czakrzew). The instructors enjoy the course. Even parents are appreciative. In a 1950 letter to College Horticulturist W.I.P. Campbell, Virginia Arnold wrote, “If all the parents get as much out of your class in Horticulture as we did out of Edith (Arnold’s) course, you should be grateful. I have learned so much through her and we have had tremendous pleasure from her many plants.”

Let us hope that the next hundred years of Horticulture bring many more pleasures—and challenges. Indeed, how much we all love Lyman Conservatory may be put to the test with the upcoming renovations to that jewel at the center of the Immense Green Web.

Send any recollections of your experience with the Long Green Line and subsequent work in horticulture to Connie Parks, Lyman Conservatory, for use in the sequel—The Immense Green Web.

Tradition Trivia

How well do you think you know Smith traditions, past and present? To confirm whether the following are actual or fictitious traditions, see page 8.

1. Walk through the grotto once with a man, and he will want to hold your hand. Walk through the grotto twice with a man, and he will want to kiss you. Walk through the grotto a third time, and he will propose.

2. No one walks through the Grecourt Gates, because one who traverses the gate will either not graduate or not marry, depending on the direction.

3. Campus goers require lecture on care of grass, assisted by Grass Cops.

4. In the morning, place a note on trees in the old orchard to reserve them in order to hang your hammock for studying or sleeping.

5. Go to Mount Holyoke for science and Smith for humanities.

6. If an acorn falls on your head in front of Neilson Library, you will marry a man named William or Allan.

7. Every incoming Smith student receives an ivy (Hedera helix) on arrival at Smith.

8. The spring semester of Horticulture ends with a

Course description for Horticulture, 2000

202 Horticulture Theory and practice of plant cultivation in managed environments, including applications to plant conservation, annual and perennial flowers, bulbs, plant propagation, evergreen shrubs and trees, planting practices, hybridization, insects, and diseases.

203 Horticulture Laboratory Practical application of horticultural practices and techniques to include soil preparation, propagation, using common hand tools, bulb planting, and identifying harmful insects and diseases.

204 Horticulture Continuation of 202. Includes study of house plants, epiphytes, vegetable gardening, herbs, deciduous trees and shrubs, design and planting plans, wildflowers, and advanced plant propagation.

205 Horticulture Laboratory Continuation of 203. Includes seed treatments, plant identification, flower arranging, advanced plant propagation techniques, pruning, and installation of planting plans.
The Cary MacRae McDaniel ’69 Internship

Madelaine Zadik

We wish to express our sincere thanks to the following donors to the Fund:

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A Student’s Account

Gabrielle Dean ’00

Of the many internships I have had over the course of my Smith career, I consider my work as the Cary MacRae McDaniel Intern at the Botanic Garden to be the most rewarding, educational, and entertaining.

I have often heard other students complaining about going to their shifts at other on-campus jobs, but I must say that I have always looked forward to my hours in the Lyman Conservatory. How many people show up at work and are surrounded by a feast of colorful and aromatic flowers? I couldn’t have asked for a more stress-relieving job! And did I mention that I get to play in the dirt? (Of course, all good plant enthusiasts know that I mean soil. After all, soil is for gardeners; dirt is for gossip columnists!)

In all seriousness, I have learned so much during my two years in the plant house and I feel that it has made many exciting opportunities available to me. For example, from my experiences here, I was able to obtain an internship writing educational materials for the prestigious Field Museum of Natural History in Chicago last summer.

Assuming that you are a frequent visitor to the Botanic Garden of Smith College, you will have seen the staff going about their daily duties of maintaining an educational garden with their usual camaraderie. But how does an intern at the Botanic Garden spend her time? Over the past two years I have been exposed to a wide variety of duties in all areas of the Botanic Garden. My first year was spent honing my horticultural skills by pruning, transplanting, and propagating a broad range of plants. I assisted with the annual bulb and chrysanthemum shows, mapped the rock garden, catalogued plants, and performed general greenhouse duties. This year I have worked on educational brochures for the palm and fern houses, as well as the systematics beds. Along with Brita Dempsey ’00, I have also served as a student representative on the Lyman Conservatory Renovation Committee.

As my senior year at Smith draws to a conclusion, I am treasuring my last weeks in these lush surroundings. I will soon transplant myself to a new spot beyond the Smith garden, but I will continue to treasure the camaraderie, knowledge, and experiences I have acquired through my internship at Smith.
Volunteer Musings

Ellice Gonzalez

On a bitterly cold January day two years ago, I walked through the doors of the Lyman Conservatory for the first time. At once I felt transported to a magical place—one streaming with sunlight highlighting a kaleidoscope of colors and with the air full of seductive fragrances. I had entered a tropical paradise. This was the first day of my training, and I knew immediately that I would enjoy volunteering at the Botanic Garden of Smith College. What I did not know was how this experience would go far beyond a delightful exposure to beautiful plants.

In September of 1997, my husband and I moved to the Valley from Long Island. Our choice was made because of the geographical beauty and cultural richness of the area. But moving meant establishing a new network of friends and activities. On Long Island most of my volunteer work was at the board level, and I truly wanted a more hands-on experience. I have a serious interest in gardening, and that interest combined with a desire to meet people made volunteering at the Botanic Garden a natural fit.

From the beginning I knew this was no ordinary volunteer experience. The thorough and intense training sessions gave me a taste of academic life at Smith. Indeed, the on-going training—visiting the many gardens and specimen trees on campus—is a continuing education for me. Symposia and workshops on land management, landscape architecture, horticulture, and flower arranging broadened my horizons beyond my initial desire to learn about plants. The effort given to train and educate volunteers is a testimony to how seriously the Botanic Garden’s staff appreciates our contribution and how much they value our time.

The best part of volunteering at the Garden is the people I meet. Giving tours has its own rewards—especially when you see a child’s eyes light up as they make a connection between the plants they observe and something they learned in the classroom. Whenever I walk into the Conservatory, it is like visiting a close friend’s home. The staff—Madelaine, Rob, Susan, Steve, Maryjane, Diane, and Jeff—are always welcoming and friendly in spite of the many demands on their time. They have the patience to answer my questions, no matter how many times I ask the same one. The volunteers I have met are a diverse and fascinating group of people. Two of my closest friends in the Valley are women I met through the Botanic Garden volunteer program.

My desire to have a hands-on volunteer experience couldn’t be more hands on—potting and moving plants for the plant sale, filling seed orders for the Index Seminum, and fighting my way through throngs of people at the Bulb Show to get supplies into the women’s bathroom! My volunteer experience nurtures my interest in gardening and is an extraordinary opportunity for educational enrichment. It has opened doors to the social life of my new community, and teaching others, especially children, about the natural world richly rewards me. In my new position as Historic Site Administrator at the William Cullen Bryant Homestead in Cummington, I am working with another group of volunteers. The volunteer program at the Garden serves as my model. My ultimate goal is to provide the Homestead volunteers with the same level of enjoyment that I have experienced at the Botanic Garden of Smith College.

Answers: Tradition Trivia (from page 6)

2. True, from Lissa Harris ’98, personal communication.
3. True, from Smith College Weekly, October 1, 1913, April 23, 1930, and April 13, 1932.
5. True, from prep school advice cited by Blossom Hansen ’63, Smith College Archives.
6. Fictitious.
Plants & Medicine, Phytopharmaceutical Research at the Botanic Garden

The last ten years in the United States have seen a tremendous resurgence of popularity among the general public in over-the-counter plant based remedies and nutritional supplements. In many regards the United States is shifting to a health model that a majority of the world already has, where botanical compounds play an everyday role in regulating health.

New prescription drugs, such as the anticancer compound taxol, have become ingrained in the public consciousness as one of the latest miracle remedies from the plant world. Popular movies such as “The Medicine Man” portray botanists as swarthy iconoclasts combing the rain forests for yet another miracle cure. Botanical gardens themselves have contributed to the public’s perception of the world of plants as an unending source of new medicines, and have, in their desire to preserve remaining tracts of wild space, used the “unfound cures” gambit as a rationale for conservation. Is this a Trojan Horse, and have we exhausted the world of plants as a source of new cures? Has the world of plants been vastly oversold as a resource for the medical sciences? The recent involvement of the Botanic Garden of Smith College with a variety of biotechnology firms, pharmaceutical firms, and hospital research groups would clearly argue that the world of plants still offers many possibilities in medicine and that new techniques, such as transgenic therapies, will only increase this potential.

During the past eight years our staff has collaborated in research worldwide, collecting plant samples in remote rain forests, the New England woods, as well as within our own collections.

The Taxol Trail
The remarkable news that the yew plant, that mainstay of suburban foundation plantings, holds within its needles and bark a potent anticancer agent began to reach the public in 1989. Finding sources for this compound became an immediate problem, as the plant only produced the alkaloidal compound in minute quantities. One biotechnology firm, Phyton Inc., pioneered the culture of yew cells in sterile conditions and the manipulation of these cell lines to produce vastly higher amounts of taxol. But are all yew trees created equal? Smith scientists worked with Phyton to answer this crucial research question. A full exploration of the worldwide genetic diversity of all species of Taxus ensued. Smith botanists helped the biochemists of Phyton wrestle with the confusing issues of Taxus identification and taxonomy and mounted a series of collecting expeditions that secured specimens from remote corners of the globe. In Oaxaca State, Mexico, Smith scientists and students searched through the misty cloud forests for Taxus globosa, a rare and endangered yew from Mexico. Smith biology major Xochitl Munn ’95 helped lead the expedition, and her relatives in the Mexican mountains proved invaluable guides.

(Continued on page 10)
have a particular compound that was being investigated as a possible treatment for a nervous system disorder. Students Sarah McMullen '97 and Heather Peckham '97 collected samples from plants within the Conservatory collections and from the grounds of the Botanic Garden, and these seeds and samples were sent to Pfizer for analysis. Collecting trips were mounted to South Carolina, Georgia, Florida, New Mexico, Arizona, and California to collect seeds and samples from the wild. Hundreds of samples were acquired, which helped move this project another step forward. Though the project reached a dead end owing to toxicity problems, the plants we collected remain in our collections and gardens, beautiful specimens awaiting their next call to action.

Phytera
The biotechnology firm Phytera, based in Worcester, Massachusetts, and Sheffield, England, has contracted with the Botanic Garden of Smith College to provide plant material, both seed and live tissue, for use in research and development. This firm uses innovative high-throughput screening programs coupled with combinatorial chemistry techniques to identify new compounds for pharmaceutical application. But low-tech plants still provide the raw material for this screening system, and since 1998 the Smith Botanic Garden has sent hundreds of samples to their laboratories.

The National Cancer Institute (NCI)
One of the missions of the National Cancer Institute’s Natural Products Branch is to aid in the discovery and preclinical development of anti-AIDS agents. By 1993 four genera of plants were identified as having potential for development. One of these, Homalanthus, was first collected by Dr. Paul Cox of Brigham Young University during ethnobotanical investigations in Samoa. The compound within the plant’s bark, prostratin, showed strong activity against HIV-infected cell lines. Smith Botanic Garden botanists traveled to the Philippines under a USDA Germplasm Collections Grant to collect samples of species of Homalanthus native to this island complex. With the help of Philippine botanists, expeditions were mounted to remote mountain areas, and four species were bagged and forwarded to NCI. Despite better success with other anti-AIDS therapies, research continues with this compound.

Other samples of rare plants were collected from genera within the Smith Botanic Garden collections and sent to NCI as part of their broad based screening and sample repository program.

The Albert Einstein Medical College (AEMC)
Success breeds success. Dr. Chris Albanese of AEMC had heard of our work with Taxus and contacted us for assistance in sourcing plant material for his line of research, a remarkable new anticancer therapy. Dr. Albanese uses a plant compound in combination with transgenic manipulations to arrest tumor growth. In the two years that we assisted him we supplied novel plant material for screening for this compound and did large-scale extractions to provide him with this rare compound. Biology major Elanor Kuntz '01, one of this year’s Kew Interns, helped collect and process all the samples from our collections. To our satisfaction, Dr. Albanese reported that the first sample we extracted showed three to four times the activity of the previous samples he had obtained from other sources.

Universities
The Botanic Garden of Smith College shares the genetic resources of its collections with colleges and universities worldwide. During the past decade we have supplied researchers at the University of Michigan, University of Montana, and Harvard University as well as researchers in Mexico, Taiwan, and Vietnam.

The process of developing new pharmaceuticals is a long chain with many links, involving professionals from many disciplines. The staff of the Botanic Garden of Smith College and the diverse collections we maintain have proved time and again that the seemingly archaic world of botany is still a strong and crucial link in maintaining human health. As the nation’s third oldest botanic garden, we stand poised for another century of service, fulfilling our mission to increase the knowledge, utilization, and appreciation of the plant kingdom.
Spring 2000 Events

Madelaine Zadik

The Botanic Garden’s calendar has been quite full this spring. We collaborated with the Smith College Landscape Studies Steering Committee to offer Designs on the Land, a five-part lecture series. Our Spring Bulb Show hosted crowds anxiously awaiting spring, and they were not disappointed by our greenhouses bursting with blooms. An enthusiastic group of pruners-in-training honed their skills as they followed instructions given by Tracey Putnam, currently the President’s Residence gardener but formerly the pruner/propagator. We are very excited to be cosponsoring a bus trip to New York with the Friends of the Smith College Museum of Art. We are visiting the Brooklyn Botanic Garden and the Brooklyn Museum. And it is not too late to register for our Creative Floral Design workshop with Master Flower Show Judge Pearl Edwards on July 8.

Designs on the Land kicked off on March 1 with “The Recovery of Landscape,” presented by Professor James Corner of the Department of Landscape Architecture and Regional Planning at the University of Pennsylvania. In the lecture, which was also sponsored by the Beatrix Farrand Fund, Professor Corner challenged us to define landscape—is it art, is it environment, or is it an economic or political commodity? He examined landscape’s roots as “working settlements” (networks of relationships of people and the environment) and “paintings” (symbolic images reflective of a deeper mode of understanding). After assessing landscape in America today, he introduced us to some of his more provocative projects, such as the Los Angeles River, Governor’s Island, and a section of Stockholm.

We opened the first Bulb Show of the millennium on March 3 with a truly inspiring slide show and lecture by Scott Kunst, of Old House Gardens, the country’s only mail-order source devoted to heirloom flower bulbs (734-995-1486). Scott Kunst, a landscape historian and preservationist, presented “Heirloom Bulbs for Gardens Old and New.” He took us on a journey tracing the history of bulbs in gardens from the Middle Ages through the 1930s, and he spotlighted heirloom varieties that are still available today. One example that stands out is the tulip ‘Prince of Austria,’ a shining-red single early tulip that is sweetly fragrant in addition to being so vigorous it increases each year in the garden! We had quite a full house for that lecture and even ran out of chairs. Our wondrous evening of bulbs continued with a nighttime preview of the Bulb Show in the illuminated Conservatory.

On March 21, Gary Koller, garden designer and former curator at the Arnold Arboretum, shifted the focus to woody plants. He introduced us to “Up and Coming Plants: Lesser Known Plants for Garden Design.” Although he concentrated on trees and shrubs, he also included some uncommon herbaceous perennials. In his engaging and humorous style, he showed slides of new and unusual plants as well as unconventional techniques and uses of plant material. He clearly favors the bold, large-leaved, variegated plants. Corylus avellana ‘Rote Zeller,’ red leaf hazelnut, with striking reddish-pink catkins is one noteworthy plant that we are thinking of adding to the Botanic Garden collections. Fortunately, he also included a source list, so listeners interested in his suggestions will be able to find those rarities that caught their fancy.

Cello notes wafted through the air in Wright Hall on March 29 as the auditorium filled for Julie Moir Messervy’s talk about designing the Toronto Music Garden in collaboration with famed musician Yo-Yo Ma. What a treat to have this garden designer from Wellesley give such an intriguing presentation! Rebecca Green ’01 played Bach’s First Suite for Unaccompanied Cello, the piece on which the garden design is based. Not only is Rebecca Green a very talented cellist, she is also a work-study student at the Botanic Garden and has been selected to be one of the Kew Interns for this coming summer. Julie Messervy presented her unique approach to designing contemplative gardens using seven distinct archetypal vantage points of the garden (see her book, The Inward Garden, for a full explanation of her creative method). During the second half of the presentation the audience was asked to close their eyes as Rebecca played the different movements of the cello piece. We imagined the gardens that we would design based on the music and shared the images the music brought to mind as well as our thoughts of how the music stimulated us. Messervy showed how the music inspired her, and she then led us through the magical garden spaces she designed.

On April 7, we hosted our final speaker in the series. Lynden Miller ’60 is clearly among the most talented garden designers to come out of Smith. As a public garden designer in New York City, her credits include Bryant Park, Wagner Park in Battery Park City, and perennial gardens at the New York Botanical Garden. At Smith she studied art history, and in her garden design one can clearly see the influence of Lynden Miller the painter. In her exquisite designs she paints with a lovely palette of plants using sweeps of color and texture. A perfect example is the resurrection of the Conservatory Garden in Central Park, of which she is the director, from a derelict and downtrodden garden to a now vibrant and enthralling space. Her presentation was inspiring and eye-opening in terms of how design can be used to enhance the attributes of individual plants. Our cities unquestionably need more designers of her caliber and determination.
You are invited to join

The Friends of the Botanic Garden of Smith College

ALL MEMBERS RECEIVE:

- A copy of Celebrating a Century: The Botanic Garden of Smith College
- Botanic Garden News and our calendar of events, twice a year
- Invitations to plant show preview parties and receptions
- Invitations to members-only hours at the annual Plant Sale
- Invitations to Botanic Garden symposia
- Invitations to Botanic Garden travel/study programs

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