Expanding Our Educational Mission through Student Internships

Gaby Immerman

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ince its founding, Smith College has considered the study of botany and horticulture to be a pillar of its educational mission. The Lyman Plant House and Campus Arboretum have anchored Smith’s academic offerings in the field for over a century. The Botanic Garden’s recent administrative reassignment to Academics from Facilities and Operations emphasizes the importance of the plant collection as an academic asset on par with the Smith College Museum of Art. Yet, student opportunities to exploit these unique and valuable resources fully have remained largely confined to academic classes, with little possibility for practical learning.

This summer, the Botanic Garden will pilot a new internship program to fill this need. Building on our already successful partnership with the Stockbridge School of Agriculture at the University of Massachusetts Amherst, three to five Smith students will spend three months as apprentices to the Botanic Garden’s expert staff. This structured work experience will provide crucial training and insight into the tasks and skills associated with managing a public garden.

There is no question that student demand exists for a more substantial engagement with the horticultural campus. And for its part, the landscape can always use more attention. Smith College comprises over 125 acres of managed grounds and glasshouses, with thousands of diverse specimens, many beautifully mature and some rare. In participating in its care for the summer, students will gain invaluable experience in such specialties as display garden maintenance, taxonomy, pruning, propagation, collections management, public outreach, and greenhouse management—all in the incomparable setting of a pastoral Olmstedian landscape, one that must succeed as a campus and as a plant collection.

As the Lab Instructor for the Horticulture classes, I already serve as a primary liaison between Smith students and the campus landscape. It will be a natural expansion of my responsibilities to serve as coordinator of the new internship program. Students in the Horticulture labs use the grounds and greenhouses as their classroom, gaining exposure to skills such as pruning and propagation, and studying Smith’s rich collection of plant materials. The internship program will be similarly situated within a curricular framework, including rotations with Botanic Garden staff members, field trips, and individual projects. Having a dedicated coordinator will ensure that interns are exposed to the full range of botanic garden management duties, and are appropriately supervised and evaluated.

Smith students from Horticulture and the new Landscape Studies program will

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Change seems to be the rule in the past few years. Despite significant budget cuts to the Botanic Garden, external support from donors and the Friends is strong. We continue to offer excellent educational opportunities for students and the public (see page 11). Let’s face it, plants are popular. Enrollment in my Horticulture class is up 30% over last year; the number of visitors to last fall’s Chrysanthemum Show increased significantly; and the Landscape Studies minor is healthy and growing (see www.smith.edu/landscapestudies).

Our recent volunteer training session yielded eleven new and energetic volunteers who will surely bring new vitality to our education programs. They’ll be staffing the reception desk during the Bulb Show. So, be sure to say hello! My restless mind keeps coming up with new ideas, some of which actually come to fruition. One of the bigger ones is the installation of a wall of wood specimens—Woods of the World—near the offices and service entrance at Lyman Plant House. We are well on our way to collecting boards of 200 species, which will become a permanent educational display on the value of wood and the importance of sustainable harvesting and land preservation. A brochure identifying each wood and its use will accompany the exhibit. The bulk of the work is being done by the energetic Polly Ryan, a consultant funded by the Friends of the Botanic Garden.

Progress at Capen Garden continues with the ABC perennial garden (see opposite page) and, we hope by this fall, a variety trial exhibit. We await the relocation of a fenced nursery and major renovations to staff space at Capen garages. These changes are the result of the Ada Comstock Scholars housing project, which eliminated the Botanic Garden’s nursery behind Talbot House that we had been using for the past several decades.

Behind the scenes Elaine Chittenden, our new Manager of Living Collections, is busy revising our collections policy and working Polly Ryan to link a huge image base of our plants with our database so that images can be used by the public on web pages and by our staff on the database. It depends on rather sophisticated computer programming that I’d rather leave to them while I figure out how to make more hours in my day and keep us financially solvent. Which reminds me,—much thanks to our administrative assistant Sheri Peabody, who keeps us from ungluing completely.

We are sorry to report that Alice Barnett (Gay) Campbell died on February 23, 2006 at the Wingate Nursing Home in South Hadley. The wife of William I. P. Campbell, director of the Botanic Garden from 1937 to 1971, she was born in Scotland in 1905. She moved with her family to Wallingford, CT in 1921 and to Northampton with her husband in 1937, where Alice worked in the Education Department at Smith. In retirement she and her husband lived in Florida, but moved back to western Massachusetts in 1997 to be closer to family. She and Bill often visited the Garden until his death in 2000. The family has asked that any memorial gifts be made to the Friends of the Botanic Garden of Smith College.
Capen Garden Renovation Continues

As I write this, it's the beginning of February. Snowdrops are up, pussy willows are out, and the occasional spring birdsong can be heard. After an unusually warm January, native New Englanders wait for the inevitable payback. Who knows what horrors March will bring. One thing we gardeners can depend on, though, is the arrival of the new spring growth of the herbaceous perennial plants that form the backbone of the gardens of New England, beloved for their hardiness and their ability to thrive under the most adverse conditions.

In anticipation of the new growing season, we continue to work on plans for the renovation of Capen Garden and its development as the premier teaching garden on campus. The Ruth Brown Richardson Perennial Border near Lyman Plant House is chiefly ornamental, with perennials, annuals, and biennials growing happily all together. Although quite beautiful, this arrangement makes it difficult to label plants clearly. Visitors to the border are always pointing and asking, “What is that plant?” For Capen Garden, we envision a very organized border solely of perennials with clear labeling and informative signage.

To that end, our plan is to establish an A to Z perennial border at Capen. Each of forty-seven genera will have its own four foot by six foot bed in a border that will run alphabetically from Achillea to Zizia, covering 188 linear feet. Each of these beds will include several different species and/or cultivars of one genus, showing the diversity within each genus using garden-worthy representatives. Plans include a brochure, available to the public, which will list each genus, its cultural requirements and flowering and growth habits, as well as descriptions of each cultivar/species present, allowing the interested person to easily identify each plant.

In some cases, today’s perennials bear little resemblance to their ancestors that were grown in the cottage gardens of England. Intensive selection and hybridization have served to greatly increase the range of forms and colors in many genera, resulting in a much larger palette for garden design. The A to Z border at Capen Garden presents unique challenges; indeed, the alphabetical arrangement dictates an order counterintuitive to many rules of perennial border design. Because this will be a teaching garden, emphasis will be on showing the diversity of forms available rather than arranging them in an aesthetically pleasing way. Some colors that may not be ideal together will by necessity be juxtaposed in neighboring beds. We will certainly try to create as complementary a mixture as possible, and, ideally, any inharmonious combinations will be somewhat offset by the large buffer of green lawn. This large lawn area is almost perfectly square, approximately sixty-five feet per side. To bring the perennial border into proportion to the space, the plantings will be backed by a yew hedge fronted by a two-foot maintenance strip. The hedge, strip, and planting beds will bring the border out about twelve feet into the large lawn area, creating a U shape facing the teaching pavilion based around the low stone sitting walls.

We intend to incorporate the forms of each perennial genus most commonly seen in gardens as well as the newer cultivars that represent the latest breeding efforts. For example, the bed for Echinacea will include the standard purple coneflower represented by the cultivar ‘Rubinstern’ as well as a white-flowered form, the new double ‘Razzmatazz,’ and more recent hybrids ‘Sunrise’ (yellow) and ‘Sunset’ (orange). The genus Monarda will be represented by the five-foot-tall scarlet ‘Jacob Cline’ as well as the twelve-inch ‘Petite Delight’ along with several intermediate cultivars. The Hemerocallis bed will include the classic yellow daylily ‘Hyperion’ and some cultivars that show the features most sought after in recent hybridizing efforts, i.e., contrasting eye zones, watermarks, picotee-edged petals, double flowers, and spider-flowered forms. As the perennials mature and increase in size, the horticulture class will learn how to divide them, and the divisions could then be part of a plant sale for the Smith College community.

Establishment of the A to Z perennial border at Capen Garden is a first step in the development of the newly renovated area as a teaching garden for annuals and perennials. Other planned displays include an A to Z annual border and a trial garden showing the best of breed in peonies, tree peonies, iris, and roses. Another bed illustrating the history of daylily breeding is also being considered. The black fence at the entrance to the garden is a perfect foil for the exhibition of a variety of annual vines including morning glory, scarlet runner bean, thunbergia, hyacinth bean, cypress vine, and moonflower. These will also be labeled clearly for teaching purposes.

Today the winter sun is quite warm for February, making it easy to envision the bright new spring growth of hundreds of perennials breaking ground at Capen Garden a year from now. Let March bring on its worst; gardeners live for April and the promise of new growth, new plants, and new challenges.
Internships continued

(Continued from page 1)

greatly benefit from a practical placement that exposes them to the unique stewardship and interpretive requirements of a historic public landscape with a significant plant collection. Once established, the internship program could participate in exchanges with other American or international botanic gardens. It seems assured that both students and the Botanic Garden stand to benefit from this new endeavor. It will be exciting to see how this new program carves a niche for itself in the Smith College landscape.

What last summer’s interns from the Stockbridge School had to say:

Mark Becker, UMass Amherst '06

As a student of horticulture at UMass Amherst I found my internship at the Smith College Botanic Garden to be an invaluable experience that far exceeded my expectations. The program provided me the opportunity to both enhance and broaden the educational foundation I had built during my coursework at UMass, as well as providing a hands-on work experience that I doubt I would have found elsewhere. The diverse collection of plants and trees throughout the gardens, greenhouses, and arboretum and the extremely knowledgeable and supportive staff gave me the opportunity to pursue my individual interests as well as introduced me to perspectives in the field of horticulture that I had little or no knowledge of. The program gave me excellent insight into the running of a public garden, and gave me the opportunity to bring my educational experience to a new level. It was an experience I will not forget, and I feel fortunate to have participated.

Maria Guglietti, UMass Amherst '07

As soon as I read the description for the internship at the Smith Botanic Garden I knew it was the perfect opportunity. There is such an incredible array of horticultural experience on the campus... formal teaching gardens (including herb, systematic, and A to Z perennial), greenhouse, arboretum, and informal plantings. If I hadn’t come here I would never have discovered the interest in trees and woody ornamentals I have now. This summer I planted trees, perennials, annuals, shrubs, and even laid sod. I pruned trees and shrubs, collected seeds, staked plants, weeded, watered, edged garden beds, propagated, and more. I was even invited to accompany the Director and Chief Arborist to a large nursery to purchase trees as well as to smaller local ones to purchase perennials.

Smith was an extension of school and a terrific summer job rolled into one. The staff is extraordinarily nice, humorous, and supportive. They made work a pleasure and would do everything possible to encourage my interests. Every question I asked was met with a patient, detailed answer. I looked forward to coming here every day and am so sad to be leaving. After only a few days it felt like home. I feel I have made lifelong friends here and plan on visiting often.

Mum Hybrid Winner 2005

Students in the fall Landscape Plants and Issues class learn and practice hybridization techniques using chrysanthemum flowers. This Smith horticultural tradition dates to the early 1900s. Resulting hybrids bear the names of their creators and are exhibited at the following year’s Chrysanthemum Show. Visitors to the show get a chance to vote for their favorite hybrid.

Sarah Schwegler '05, a student in the fall 2004 class, produced the hybrid that received the most votes from visitors to the Mum Show in 2005. We’ll be adding it to our Chrysanthemum Hall of Fame, which you can see online at www.smith.edu/garden

Sarah Schwegler’s winning hybrid is a red/pink spoon mum with a yellow disk center.

Seedlings are now growing from the fall 2005 hybridizing. Come check out their blooms this fall and vote for your favorites at the 2006 Chrysanthemum Show in November!
High Tech Botany, Part I

The Smith College Botanic Garden and the Massachusetts Institute of Technology lie at two distant poles on the Massachusetts Turnpike and might be thought of as distant poles scientifically. But twice in the last few years, plants or pieces of plants have made the journey down the Mass Pike to MIT to become research subjects in that temple of high technology. We will share these stories in this article and in another in a future issue.

The initial contact from MIT was made by Felice Frankel, the noted science photographer. She had been part of a team called the DuPont MIT Alliance (DMA) that is “building on nature’s designs, harnessing nature’s ingenuity and inventiveness to meet the needs of society.” The team takes its cues from nature, gathering inspiration from the form, functions, and processes of the natural world to develop electronics, biosensors, bio-medical delivery systems, and new materials.

Botanical structure can sometimes give insight to materials engineers. For example, a class of lightweight structural materials, called porous metals, are cast under various pressurized gases which cause them to solidify with elongated cylindrical pores. These are called lotus-type porous metals as they look like lotus roots.

Felice was photographing MIT Professor Michael Rubner’s DMA project, which was fabricating surfaces characteristic of particular leaves, those to which water does not adhere. These are termed superhydrophobic, and water falling onto these leaves forms silver beads which shoot along the leaf surface and careen off the edge to fall again. Rubner created a material that is so hydrophobic that water cannot come to rest on it. The applications for such a material, according to DMA, could be “self-cleaning fabrics, water-repellant windshields, or plumbing that resists the growth of harmful bacteria by material, according to DMA, could be “self-cleaning fabrics, water-repellant windshields, or plumbing that resists the growth of harmful bacteria by preventing water from accumulating on its surface.” One also has to wonder if the hulls of ships could be coated with this material, cutting water resistance and improving fuel efficiency.

Felice had read that, in addition to the lotus leaf, the leaves of certain species of the aroid or Jack-in-the-pulpit family (Araceae) also displayed an amazing ability to shed water. She asked if we had ever noticed this particular phenomenon with any of our plants. I had and proceeded to inform her about a few specimens in particular.

Colocasia gigantea came to us as seed in 2001 from the Bogor Botanic Garden in Indonesia through their Index Seminum (seed list produced by botanical gardens that participate in an international seed exchange with other botanical). That garden is one of the oldest gardens in the tropics, originally established by the British Lieutenant Governor Thomas Raffles in 1817, and its 217 acres now support one of the more outstanding tropical collections in the world. Their seed list is usually about 600 items long and we carefully comb through it, as it has been the source of many tropical species we would be hard pressed to find otherwise. I selected the giant taro because I felt its striking outsized five-foot leaves would be a dramatic visual addition to our Palm House (now located in the center bed). Seed was ordered, germination accomplished, and by of the summer of 2001 we had a half dozen plants destined for botanical display. Felice came to the Lyman Conservatory for a visit and I displayed how quickly water drops shot off of the leaves of various aroids. On the powdery green upper surface of the giant taro leaves, the water formed silvery beads that just raced downward and off the leaf’s edge. Another taro, Colocasia esculenta, showed a similar effect, and Felice left with specimens of both to take to the MIT lab for examination.

The future research value of any of our accessions is unknown to us, and time and time again we have had researchers from around the world seek out pieces of our curated collections for their studies. Rarely, if ever before, have we had requests from engineering departments. As the great Fats Waller once philosophized, “One never knows, do one…”

An unusually rounded water droplet rolls along the superhydrophobic surface of a taro leaf. You can see it growing below the waterfall in the Warm Temperate House in Lyman Conservatory.
Over the past decade the Botanic Garden’s website has gone through some major changes. Back in 1995 it would have been hard to imagine what the web can do today. When I first began working at the Botanic Garden, we were just beginning to develop our website, one of the first department websites at the College. We hired a Smith College senior, Amanda Wight ’96, to create those first pages. It is kind of amusing now to look back at that website. It was heavy on text, with very few images, and we had fewer than 40 pages! But within a year, things were changing so fast that we hired two other Smith students, Belinda Darcey ’00 and Pamela Davis ’98 (both of whom now work in web management and design), to give our website a complete makeover. Since then we have added exciting features to that basic design. Now our virtual visitors gain a much better understanding and appreciation of what the Botanic Garden is all about.

On our Collections page (http://www.smith.edu/garden/collections/collections.html) it is now possible to search our plant database, so you can find out whether we have a particular plant and where it is located. You can search by common name or scientific name. For example, if you type in bat flower, three species pop up, and for one of them, Tacca chantrieri, the displays indicates that it was wild collected in Vietnam by Conservatory Manager Rob Nicholson. Soon that collections data will be linked to a searchable image library of our collection.

We continue to take advantage of the great pool of talented students available to us at Smith. In the fall of 2003 we hired work-study student Jane Connolly ’05 to develop a special section of the website just for kids. Over the course of two years and one summer, during which she telecommuted, Jane researched possibilities and came up with a wonderful design for the site (with, of course, many edits and redesigns). We tested it and got feedback from other botanical gardens and are thrilled with the final result. It is a fun component of our website and includes a virtual tour through the conservatory led by Leaping Lizzie the frog. Particular plants are highlighted and Lizzie explores where many of the plants have come from, as well as delves into issues such as the importance of biodiversity and how plants protect themselves. There are activities as well as links to other sites. All this in a really fun format. We hope you’ll explore these pages; they are not just for kids!

Finally, for those of you who are geographically challenged when it comes to visiting the Botanic Garden, you can now see what is happening here through live internet broadcasts via cameras known as webcams. Two years ago the College placed a camera on the roof of the Sabin Reed Hall and trained it on the gardens adjacent to the Lyman Plant House. You can see the Conservatory, Systematics Garden, the Ruth Brown Richardson Perennial Border. Inside the Conservatory, we moved the webcam that had been focused on the titan arum last summer, so that you can see the Bulb Show without all the jostling. Links to both webcams can be found on our home page: www.smith.edu/garden.
Plant Breeding Is A-Maizing

The number of new ornamental and vegetable plants that enter the market each year is astounding. Purple carrots, double-flowered cosmos, ultradwarf sunflowers, rainbow swiss chard—the list goes on and on. Yet, how new varieties get to market has changed significantly in the past few decades. Years ago, the land grant colleges were key players in the introduction of new vegetable and flower varieties. Faculty members specializing in plant breeding were hired to develop crops for their geographic area, the thought being that it would increase profits for local farmers and nurseries. One example is the famous ‘Waltham Butternut’ winter squash developed at the now extinct Waltham Experiment Station of the University of Massachusetts. Sadly, the days where a faculty member did not have to worry about funding his or her breeding programs are long gone. Support for faculty breeding work still exists in some states, but it is a fraction of what it once was and often is inadequate to bring a variety from conception to market. So how does the system work today? Often full-time breeders are hired by major seed companies, and breeders remaining on the faculty of colleges may have a formal arrangement with a supporting company. We are also seeing companies involved with importing new varieties from other countries as the world market opens up. For example, Thailand is becoming a significant player in the introduction of houseplant cultivars.

The idea for making a new plant variety comes from the creativity of the breeder. Sometimes he or she sees a need that is not being addressed, for example, flowering annuals for shade or disease-resistant zinnias. And then there is someone like myself who stumbles upon an idea from an angle quite different from most others. While on the faculty at the University of Massachusetts, I was involved in research that utilized leaf mutations to study leaf initiation and development. For example, mutations that reduced or eliminated the leaf blade were of interest to me since they might yield information on what is necessary to make a leaf blade develop normally. Rather than trying to generate new mutations (e.g., with radiation or mutagens), I was aware that with many species an extensive array of mutations already existed. They were generated years ago so traditional plant breeders could try to map important genes on chromosomes, in the days before molecular genetics made mapping a more exact science. It turns out that mutations leading to visible differences could be used as markers to map genes of agricultural significance that might not be so obvious to the eye. The end result was a long list of mutations for many important crops such as tomatoes, rice, and maize. I obtained the lists and books of mutations looking for leaf mutations that might be interesting for basic developmental research. One such book, Mutants of Maize (by M. Gerald Neuffer, Edward H. Coe, and Susan R. Wessler, Cold Spring Harbor Laboratory Press, 1997), describes in detail what each mutation does to a normal maize plant. The mutations include leaf, flower, and branching mutations, and even mutations that mimic disfiguring plant diseases. (Incidentally, this is an excellent text to bring on a commercial seed company into buying into the concept of marketing an ornamental grass made out of maize. The first two companies to which I sent the seeds for evaluation were not interested in marketing the plants for various reasons. The last try was successful. After Park Seed Company in South Carolina tried my maize they called me up excited about it. My varieties had done well in test plots in several geographic locations and were the talk of the town for those who say, “And now for something completely different.”)

If you are thinking you should start a new career as a plant breeder, don’t give up your day job. If you have any concept of marketing, the first sentence of this article tells you that when there are many choices of excellent varieties, no one variety will corner the market. Wealth for the company comes from having new and numerous varieties introduced and accepted. Today, the competition is stiff; new plants, while they may make profit for a while, often go away into the land of the unpopular within the first decade of their existence. My foray into commercial plant breeding was not an attempt to quit my job and become an independent breeder. It was, to a large extent, to challenge myself at something I had never done before: creating a new plant that everyone could enjoy and bringing it to market. Now, if I could only get that novel published.
The sweetshrub family, Calycanthaceae, is similar to the well-known magnolia family, Magnoliaceae. Both families provide us with landscape plants adorned with showy, fragrant flowers, aromatic wood, and interesting fruit. Both are considered primitive flowering plant families and have existed on Earth for at least 65 million years. Their shared primitive features include many flower parts, which, rather than initiating simultaneously in whorls, initiate one after the other and form spirals. Additionally, there is no distinction between petals and sepals (the bracts below the petals that are usually green), something you also see in cactus flowers. The “petals” in these instances are termed tepals.

Little known in the landscape, sweetshrubs are becoming ever more jazzy these days. There is a heightened interest in breeding new and exciting forms and exploring their genetics. From interns and academics in this country, to molecular scientists in China and Germany, the evolutionary and horticultural paths of sweetshrubs are being explored and mapped.

Two species of sweetshrub have long been known in the United States. California sweetshrub, Calycanthus occidentalis, is native to the Southwest and common sweetshrub, also known as strawberry-sweetshrub, is native to both. C. floridus, ranges from southern New York to Florida. Numerous cultivars of the latter, harderier species, are grown from zone 9 in the south to zone 4 in Maine. Both species, along with their closest but geographically disjunct Chinese relative, are being utilized in the production of new exciting hybrids for the landscape.

The Chinese wax shrub, Calycanthus chinensis, was published as a new species in 1963. A year later the plant was transferred to a new genus and renamed Sinocalycanthus chinensis (“sino” indicates its Chinese origin as does the species name). It was placed in a monotypic (containing only one species) genus because of its leaf size, petal shape and color, pollen characters, and the fact that the plant is endemic (indigenous only to a specified area) to Zhejiang Province. The showy lavender to white flowers of the wax shrub are distinctly larger and the petals rounded rather than strap-shaped as in the North American sweetshrubs. These characteristics make it quite desirable as a landscape plant, and consequently many attempts were made to cross the Chinese species with the North American ones, initially using Calycanthus floridus.

The successful cross of Sinocalycanthus chinensis with Calycanthus floridus was first published in 2001 as a new intergeneric (between two different genera) hybrid: ×SinocalycalyCalycanthus raulstonii ‘Hartlage Wine.’ The Code of Botanical Nomenclature (the official botanical rule book for naming plants) requires that the names of new intergeneric hybrids contain portions of each genus name, hence the second “caly” in ×SinocalyCALyCalycanthus. The species name raulstonii honors the late J. C. Raulston, noted plantsman and former director of the North Carolina State University Arboretum (now the JC Raulston Arboretum). The cultivar name ‘Hartlage Wine’ recognizes the hybridizer Richard Hartlage, the undergraduate who performed the crosses under the direction of J. C. Raulston. Wine, of course, refers to the wine-red color of the flowers, not to the undergraduate’s favorite beverage.

Indeed, Chinese wax shrub is a remarkable landscape plant and valuable for breeding. While plant breeders are providing new and wonderful plants, molecular research is clarifying patterns of migration and evolution. However, new molecular research challenges its placement in the genus Sinocalycanthus, which was initially based on its visible characteristics. Molecular scientists typically focus on explaining the evolutionary history of closely related species, which they do by analyzing DNA within a plant cell. The DNA of the sweetsrubs tells us that, not only are the Chinese wax shrub and North American sweetshrubs genetically very similar, but that Chinese wax shrub has been on Earth for at least 65 million years, long before the two North American species evolved.

If the Chinese wax shrub is accepted as another Calycanthus, then Calycanthus can be added to the long list of eastern Asian–eastern North American disjuncts.
Botanic Garden News

Calycanthus continued

(closely related plants naturally distributed in disconnected geographic areas). Over 60 genera, both woody and herbaceous, exhibit this Asian–American distribution pattern. Some of the more familiar examples include twinleaf (Jeffersonia), mayapple (Podophyllum), witch hazel (Hamamelis), tulip tree (Liriodendron), and magnolia. These Asian/American disjuncts, sometimes referred to as intercontinental species pairs, are considered to be evolutionary leftovers of more widely distributed genera in Northern Hemisphere forests during the Tertiary Period (from 65 to 2 million years ago).

Many plant enthusiasts are annoyed by name changes, as they often have little understanding of why names are changed. Name changes may be based on different interpretations of the same data or the results of new research. In the case of Sinocalycanthus, it is new molecular research data that would indicate that Sinocalycanthus and ×Sinocalycalycanthus can all be lumped together in the genus Calycanthus. However, the name Sinocalycanthus is well established in both the botanical and horticultural literature. So if you are looking for the new and improved sweetshrubs, you may find them under either name. Here at the Botanic Garden we’ve decided to label the Chinese wax shrub Calycanthus chinensis. To complicate matters, any name change would impact ×Sinocalycalycanthus raulstonii ‘Hartlage Wine,’ which would no longer be an intergeneric hybrid but rather an interspecific (between two different species), hybrid with the name of Calycanthus × raulstonii ‘Hartlage Wine.’ Whatever you are calling them, they are lovely hardy shrubs, and oh so sweet.

[Venus]PPAF is the newest cultivar of Calycanthus developed at North Carolina State University. It is a complex hybrid involving all three species of Calycanthus. It has fragrant, magnolia-like, white flowers infused with yellow and purple. Due to the less hardy western species in its pedigree, hardness in our area is questionable. Unlike ‘Hartlage Wine,’ ‘Venus’ is being patented (PPAF = plant patent applied for) so you can expect to pay more for it and will not be able to reproduce it commercially without paying royalties.

Botanical Additions to the Library

The Botanic Garden is lucky to have endowed funds expressly earmarked for the purchase of books for the Smith College Libraries. The following new horticultural and botanical books were recently purchased and added to the Libraries collections.


Drawing by Amy DeSorgher ‘09

Considered the Cinderella of the horticultural world, the vegetable garden has typically been outshone by her flashier floral stepsisters. Centuries ago, however, vegetable gardens were the belles of the ball, designed to be productive and pleasing to the eye. Over time, they shed their ornamental finery and became hardworking wallflowers. Today, fashions have changed once again. Vegetable gardens are taking center stage in many an American yard, and vegetables themselves proudly strut their stuff in flowerbeds. 

*Feast Your Eyes: The Unexpected Beauty of Vegetable Gardens* traces this transformation across centuries, continents, and cultures. The colorful exhibition begins with the “floating gardens” (chinampas) of Montezuma II’s Aztec empire, the vegetable gardens of China’s Ming dynasty, and the Baroque potager of Louis XIV at Versailles, where the modern phenomenon of ornamental vegetable gardens really took off.

For the next two and a half centuries, as *Feast Your Eyes* illustrates, gardeners and landscape designers in England and America, including Thomas Jefferson, could not aesthetically reconcile the vegetable garden with the more natural style of gardening that replaced French formalism. Vegetable gardens were placed out of view, while pride of place was taken by flowers and well-manicured lawns. During World Wars I and II, however, vegetable gardens, attractive or not, took on a renewed importance as war and victory gardens. Today, horticulturists develop some new varieties of vegetables just for their visual interest, and gardeners creatively incorporate those and other vegetables into a range of settings.

Over seventy images by noted photographer Carol Betsch trace the unusual landscape developments that characterize the American Country Place Era, an important design movement from the first half of the twentieth century (1895–1940). Together, these sites offer living testimony to the artistic accomplishments of the period’s finest practitioners, such as Jens Jensen, Beatrix Farrand, Fletcher Steele, and others. Curated by Robin Karson, the exhibition explores the significance of these places in historical context and offers insight into the multiple influences that helped shape their design. The exhibition also includes garden plans to show how the individual photographs fit into the larger vision for each site. Visitors will gain a new understanding of the field of landscape architecture and its defining role in American culture.
Spring Bulb Show
Opening Lecture & Reception

Friday, March 3, 2006, 7:30 pm
Carroll Room, Campus Center

Flowerbulbs and What They Can Do in Any Community
presented by
Hans van Waardenburg
Owner of B&K Flowerbulbs, a family owned and operated Dutch company founded in 1894 which sells over 200 million bulbs in the US, Hans van Waardenburg was one of the initiators of the New York Daffodil Project, begun after 9/11. B&K bulbs donated over 3 million daffodils to beautify the city as a memorial.

Followed by a Reception in the Lyman Plant House and a Preview of the Bulb Show in the illuminated Lyman Conservatory.

Lyman Conservatory Spring Bulb Show

Saturday March 4 – Sunday March 19, 2006
Public Hours: 10:00 am – 4:00 pm

Members-only hours: 9:00 – 10:00 am daily
Please bring your membership card

Special Evening Hours: Fridays, March 10 and March 17 6:00 – 8:00 pm

After the Show Bulb Sale — Benefit for Limbe
Proceeds go to the Limbe Botanic Garden in Cameroon

Saturday, March 25, 9 am to 3 pm  Friends Only
Please bring your membership card

Sunday, March 26, 9 am to 3 pm  General Public

Exhibition

Feast Your Eyes: The Unexpected Beauty of Vegetable Gardens

April 22 - June 18, 2006
Church Exhibition Gallery
Lyman Plant House

This exhibit traces the visual appeal of vegetable gardens across centuries, continents, and cultures. See page 10.

Developed by the Smithsonian Institution Horticulture Services Division in collaboration with the Smithsonian Institution Traveling Exhibition Service (SITES).

Arbor Day Lecture

Recommended Trees for the Landscape
Michael Marcotrigiano

Friday April 7, 7:30 pm
Church Exhibition Gallery, Lyman Plant House

Trees embellish the landscape and increase property values. Yet, every year there are more and more choices of trees to purchase. Most of us, however, do not own enough property to grow more than a few. In this slide show, the Director will recommend trees for different settings and say why he thinks his choices are some of the best. A few of the worst trees will also be presented so that you don’t make a very big mistake.
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 — 9:00 am to 10:00 am daily during the show
- Free admission and discounts at 170 other gardens around the country
- 10% discount on Botanic Garden merchandise
- Free audio tours of the Lyman Conservatory
- Invitations to show previews and receptions

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Enclosed is my check payable to The Friends of the Botanic Garden in the amount of $ _______________

Send to:

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Lyman Plant House, Northampton, MA 01063

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Or you may join online at www.smith.edu/friends

All contributions are tax-deductible.