My Time at Smith

Madelaine Zadik

My first visit to the Smith College Botanic Garden was in the early 1980s, on a New England field trip while in graduate school studying public horticulture administration. The director was Dick Munson, whom I knew from my undergraduate years at Cornell, where he was a graduate student. I remember being very impressed with the campus botanical garden and arboretum. I still have slides from that visit, which, even before working here, I featured in talks that I gave. Somewhere in the back of my mind I must have been thinking then that this would be a nice place to work.

My horticultural career went in many directions before my arrival at Smith. I started out in research, but quickly discovered that I wasn’t happy in a lab. My next adventure was as a horticultural therapist with the Veterans Administration. It was during that time that I decided that I was really interested in the connections between people and plants and that I wanted to work in a botanical garden. That sent me to the Longwood Graduate Program, where my research focused on social perspectives in horticulture and how to infuse that into college level horticulture courses. A job at the Massachusetts Horticultural Society took me to Boston, and other circumstances brought me to Northampton. A decade after that first visit to Smith, while living in Northampton and running a bookstore, I began volunteering at the Botanic Garden. Just a few months into volunteering, Dick Munson left and Interim Director Susan McGlew asked me to fill in temporarily as curator. The rest, as they say, is history.

I can hardly believe that was 24 years ago, but what a great 24 years it has been! I am grateful to have had the opportunity to contribute to this wonderful institution through three directors and three interim directors. My first week on the job, Susan and I wrote a grant proposal (many thanks to Sandy Doucett, now associate vice president for development, for her help) to underwrite the position of education coordinator. Since then, I have served as interim assistant director, horticulture instructor, and in my current position as manager of education and outreach. I have learned a tremendous amount and have been so enriched by the students I have taught, worked with, and mentored. It is so gratifying to see those I knew as students now advancing in their own professional careers.

I am extremely proud of my accomplishments at Smith, including envisioning and creating this newsletter you are reading, developing the exhibition program and producing over 25 educational exhibits, revamping and expanding the volunteer program, developing many publications, and overseeing the redesign of the website. I have been able to create new internship opportunities for students at the Smithsonian Institution and stewarded the Kew internship (see page 2) that was established by Paula Deitz, co-founder of the Friends of the Botanic Garden. Creating the Curricular Enhancement Program afforded me the opportunity to work with faculty across campus, helping them integrate the use of the Botanic

Garden into teaching their disciplines. This has been extremely rewarding and is a program unique to Smith.

My work here was all about engaging students on many levels, opening their eyes to the fascinating world of plants, and implanting within them an understanding of the importance of the plant kingdom. Early on, when I heard from some alums at reunion how they had never set foot in the Lyman Plant House as students, I vowed to make sure we would do everything possible to ensure that no alum would tell that story in the future.

As part of my job, I have also enjoyed speaking to a variety of Smith clubs all over the country. What a pleasure it is to see how devoted Smith alumnae are. The Friends of the Botanic Garden Advisory Committee has been a particularly dedicated group to team up with in

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It is going to be a very Smith year for Elizabeth McCarthy ’06. She had the pleasure of giving a Life Sciences seminar in honor of her academic advisor, Professor Robert Merritt, to celebrate his retirement. Bob had encouraged Elizabeth to apply for the Smith Kew internship. Little did she know at the time that the Kew internship would change the course of her life and set her career trajectory.

Elizabeth did her Kew internship in the summer of 2005 and loved it so much that she went back to England after graduating from Smith to pursue her PhD, joint with Kew, working on the same genus that she investigated during her internship—Nicotiana (tobacco). After a post-doctoral research fellowship at the New York Botanical Garden, Elizabeth followed her postdoc advisor, Amy Litt, to California, where she again engaged in research on Nicotiana evolution. Elizabeth is forever grateful for the opportunity that the Smith Kew internship provided her and is very excited to speak at the event commemorating the twenty-fifth anniversary of the internship program that will take place at Kew in June of this year.

Elizabeth will finish her current postdoc at the University of California, Riverside in July and will start a position as an assistant professor in the Department of Biological Sciences at SUNY Cortland in upstate New York in the fall, where she will continue her research on Nicotiana. Her lifelong love of and fascination with these plants began during her Kew internship, and she thanks Smith for making it all possible!
By the time this newsletter reaches you, another spring Bulb Show will be a memory. But it’s worth a quick retrospective as the show itself is only the culmination of a process that unfolds over many months. Our greenhouse technicians Dan Babineau and Steve Sojkowski began planning this year’s show in June of last year, performing the coveted work of scouring mail-order catalogs for the right mix of time-tested standard cultivars that we can trust to flower at just the right time and a few novel plants to test in hopes that one or two might steal the show.

In October, large boxes containing over 6,000 individual bulbs began arriving from The Netherlands. Horticulture students huddle into our potting room to carry out the planting. Each pot is meticulously tagged to preserve the identity of the buried bulbs before the pots are packed into our walk-in cooler to chill and be vernalized for weeks or months, depending on the needs of each species and hybrid. The goal is to trick them into thinking that winter has come and gone, that it is now spring, that pollinators are abundant, and therefore it is time to flower.

It’s exciting to see the parade of visitors who come for the show—families and friends, students and community members, first-timers and seasoned veterans alike—sharing the space, the experience, and their joy for this spring preview with one another. Some visitors are locals while others, like the bulbs themselves, have come from far-off places. How wonderful to witness the diversity of languages, accents, faces, and ages reflected in a space designed to captivate us with its diversity of plants—plants which have come to us from many places and many cultures and by many different routes.

The regal “Dutch” tulips, for example, are the hybrid descendants of *Tulipa* species indigenous to a large swath of central Asia. These plants were first cultivated in the Islamic gardens of Persia in the 12th century CE. The pungently perfumed garden hyacinth (*Hyacinthus orientalis*), which Homer referenced in his 8th century epic, the *Iliad*, hails from modern-day Turkey, Syria, and Lebanon. The daffodils (*Narcissus* species and hybrids), unlike many of their tropical relatives in the amaryllis family, are native to the Mediterranean region of Europe. And species of fritillaria (*Fritillaria spp.*) seem to come from almost everywhere in the northern hemisphere where a temperate climate is found.

As much as the Bulb Show is a harbinger of spring, it is also a reminder that what makes the world interesting is its diversity: diversity of plants, diversity of people, diversity of cultures, and diversity of perspectives. Most of our ancestors come from someplace else, as do the progenitors of the plants in our Bulb Show. People, just like plants, have moved and been moved all over the globe, and the world is richer and more interesting for it.

As advocates of biodiversity, we at the Botanic Garden are taking our own deep dive into issues of accessibility, equality, diversity, and inclusivity at the Botanic Garden. I am proud to be sharing a note with you in this newsletter about our ongoing efforts to create space where people of all backgrounds and identities feel free to be themselves (see article about the President’s Innovation Challenge grants on page 13). We are working to identify barriers to accessibility for one simple purpose: We love this place and we want to ensure that the transformative experiences that happen here are available to absolutely everyone.

This spring’s newsletter features many new contributors and the diverse perspectives of Botanic Garden staff, students, and educators. Assistant Professor of Art Elisa Kim, and Senior Lecturer in Italian Bruno Graziole share their intensive and innovative use of the Botanic Garden in their respective architecture and conversational Italian courses (pages 8 and 10). We have two articles from Smith students: June Ahn ’18 (page 7) and Sylvie Lednicky ’20 (page 6). The students we get to work with at Smith are amazing and these articles showcase the breadth of learning experiences students can engage in at the Botanic Garden. Gaby Immerman also unveils the student-designed plan for the beds in front of the Lyman Conservatory, facing College Lane; I’ll give you a hint: touching these plants will be encouraged (page 15)!

Last but certainly not least, a note of gratitude. Our education and outreach manager, Madelaine Zadik, will be retiring this summer after 24 years of service to the Botanic Garden. Madelaine has worn many different hats and has had many different titles over her time here. She served for a spell as the assistant director, taught our horticulture courses, oversaw the creation of and visioning for the Church Exhibition Gallery, grew our volunteer program while training over 300 volunteers in the process, edited and published every one of our newsletters since the first one in 1998, and developed our Curriculum Enhancement Program, which has yielded over 25 one-of-a-kind interdisciplinary courses, many of which Madelaine helped to envision and create.

It is hard to fully quantify Madelaine’s impact here; her work in our courses, exhibitions, programming, newsletters, and tours, as well as her incredible plant knowledge, has delighted hundreds of thousands of visitors over the years. But most of all, she has been a dogged advocate for the Botanic Garden’s educational mission, the importance of botanic gardens as scientific institutions, and the value of plants in our lives. She keeps us honest and reminds all of her colleagues to never forget how lucky we are to work in a place where we have a front row seat to other people’s discoveries. These are big shoes to fill—no one will fill them in the same way again. Thank you, Madelaine.

Cheers,

Tim

Tim Johnson
In Memoriam

Longtime Smith employee Susan Schaffner passed away on February 23, 2018. Sue worked at the Botanic Garden for over 30 years, retiring in 2003. She held a B.S. in horticulture from the University of Massachusetts and was an avid plant lover.

Sue started at the Lyman Conservatory working as the head greenhouse technician and later served as acting foreman for six months between conservatory managers. She survived a 1981 addition and a major renovation in 2001, and saw many other changes during her tenure at Smith. Serving under two conservatory managers and four Botanic Garden directors, it was clear that Sue adored working here.

Greenhouse gardener Steve Sojkowski worked with Sue for 22 years. Steve said that she was a great coworker and that Sue generously shared her extensive horticultural knowledge, teaching him a lot. Former Conservatory Manager Rob Nicholson observed, “Sue Schaffner had a deep connection to plants and excelled at nurturing them. She was a professional botanic gardener and took pride in keeping a diverse scientific collection in top condition. She was as New England as they come and I will miss the understated quality she brought to her life and her calling.”

Sue loved geraniums (Pelargonium spp.) and gesneriads, especially African violets, gloxinias, Columnea, and Streptocarpus. She also had a soft spot for variegated plants. Outings to Logee’s Greenhouses were her favorite, although she would often come home with many more plants than planned. Many plants in our collection came from Sue. In our records, a total of 45 accessions list her as the source. We still have 15 of them here. So while Sue may be gone, she lives on in our collection.

My Time cont’d

(Continued from page 1)

furthering the Botanic Garden’s mission.

Often people question why there is a botanical garden at Smith, since we are not a vocational school and don’t have a horticulture program or even a botany department. (It is interesting to note that at the time Smith was founded all Smith students were required to take botany.) Yet, a liberal arts institution is the perfect venue for a botanical garden to do its magic. We have the opportunity to ensure that students who might never have imagined themselves interested in studying plants will be touched by the wonders of the botanical paradise that is Smith.

It has been my good fortune to be able to use my creativity in developing programming that connects the Botanic Garden with the Smith community and beyond, and serves to inspire. Over the years, I have watched the reputation of this institution develop and grow. It has been a delight for me to contribute to this in a small way by representing Smith and the Botanic Garden at professional conferences and symposia. It has also been my honor to serve as peer reviewer for the American Alliance of Museums’ Museum Assessment Program, enabling me to share my expertise and help other gardens evolve into better institutions.

I am extremely grateful to have had the opportunity to learn and grow in this amazing environment. It has been a pleasure to work with Sheri Lyn Peabody and Pamela Dods; I especially want to thank them for their dedication and hard work. Deciding to retire has been an interesting process. There is no magic formula for figuring out the right time. Contemplating this issue has made me realize what a home Smith has been for me. I treasure the many relationships that nurtured me during these years here. Beyond the Botanic Garden staff, I have a rich network of work collaborators, yoga practitioners, artists, and friends, in a setting that has been intellectually stimulating.

It has been a privilege and honor to work here, and there is much that I will miss: the students, the volunteers, my coworkers and friends, the visitors, the Friends of the Botanic Garden, and the plants! The Botanic Garden of Smith College will always be with me, however. I look forward to strolling through the gardens and conservatory as an admiring visitor.
In my article on Smith’s champion trees in the Spring 2017 issue of Botanic Garden News, I referred to a tall white pine, *Pinus strobus*, growing on Smith property along the Mill River. Big tree expert Bob Leverett determined that pine to be the tallest measured tree in the Massachusetts portion of the Connecticut River Valley. Bob is a member of the Smith College Tree Committee and works with American Forests, a conservation group that maintains the most comprehensive and respected list of champion trees in the United States. He has devoted decades of time and energy to documenting and raising awareness about large, old trees in New England, a place where they are hard to come by. You can imagine our delight when he confirmed that this white pine, which his son had first noticed, was taller than any other measured tree in the valley.

*Pinus strobus* is simultaneously loved by many as an iconic New England tree and ignored or unappreciated by others as common and unremarkable. At a distance, it is easily distinguished from other pines by its soft, almost feathery texture and its impressive height at maturity. A closer look reveals the tree is our only native New England pine with five needles per cluster. These clusters of needles, called fascicles, are enveloped by a brown, papery sheath at the base. This is a unique trait of pines that makes them easy to distinguish from other conifers. White pine is a fast grower and often well represented in early successional forests within its native range. This fast growth and its natural beauty have made it a popular choice as a landscaping tree as well, especially for screening.

If you are visiting the Botanic Garden, a short walk will bring you to this humble giant. Take the path along the north bank of the Mill River and don’t forget to pause along the way and explore the newly renovated Japanese Garden as you enter the wooded area. A couple hundred yards farther, you will encounter this pine along with a few of its siblings on your left, just before the path rejoins the riverbank. Despite its unusual height, it is easy to disregard as just another tall tree unless you pause in the right spot, look up, and really take in the whole tree. Its first live limbs are over 80 feet off the ground, making it quite a challenge to climb. (If you are curious how it is done, we have a 6-foot-long slingshot that is designed to send a small, weighted beanbag attached to twine over high branches. This twine is then used to thread a climbing line through that branch union.)

In the spring of 2017, Bob Leverett and I visited this tree with a friend to get an accurate measurement and to clean out the dead and broken limbs in its canopy to support its health. Bob used a very precise instrument and felt confident that he got an accurate reading of 143.1 feet. A visit in the fall, after another season of growth, produced a measurement of 144.5 feet. Bob felt that this tree’s height and character were consistent with trees that are between 150 and 200 years old. While such age and height do not put it in the same class as the old growth pines of precolonial New England, the specimen is still extraordinary. One can easily imagine it as the type of tree that Thoreau would stop and marvel at to recharge his spirits, and that he would have felt a deep obligation to protect.

White pine has a more significant and fascinating role in the history of colonial America than most people realize. In the 1600s what seemed like endless stands of pure white pine were unlike anything Europeans had ever seen. The incredibly long and perfectly straight columns of wood, although soft and workable, had a strength to weight ratio that made them perfect for many uses, including ship masts. In fact, “mast pine” was one of the first English common names assigned to this species. With England’s expanding empire depending on both commercial and military dominance of the seas, these trees were as good as gold. Like the later gold rushes out west, exploitation of this resource resulted in small towns being created and abandoned in the

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Miracle Berry: From Sour to Sweet

The Palm House at the Lyman Conservatory is filled with amazing plants, but one that is especially interesting is Synsepalum dulcificum. Although this plant is commonly known as miracle berry, what it produces are, botanically speaking, drupes—fleshy fruits with a hard inner layer around a single seed. When eaten, these fruits have a surprising effect on our taste buds, temporarily modifying them so that sour foods taste sweet. This plant in the sapodilla family (Sapotaceae) is native to West Africa, where it has been used for centuries to enhance the taste of bitter meals.

In the 1970s, a businessman tried to popularize the taste-modifying protein that can be extracted from the fruit—miraculin—as a sugar substitute. In a controversial move, however, the U. S. Food and Drug Administration ruled that the substance was a food additive, which complicated the approval process, and it never took off. In recent years, this plant has gained attention for its fun, flavor-bending characteristics as well as its more practical uses. The Memorial Sloan Kettering Cancer Center includes Synsepalum dulcificum on its website as a possible agent for alleviating some of the negative effects that chemotherapy has on patients’ ability to taste and enjoy food.

At the end of December last year, some staff and students at the Botanic Garden participated in our own Synsepalum dulcificum tasting at the urging of Elaine Chittenden, manager of living collections. We wanted to learn more about the plant through an immersive approach, as well as to see what all the hype was about. We picked fresh fruits from the plant situated in the center of the Palm House next to the small stone bench. We also had some foods to sample, such as different kinds of citruses and vinegars, to see if they would taste any different. Elaine said that the miracle fruit was “a little sweet,” while Madelaine Zadik, manager of education and outreach, said that her impression was more of “sliminess” than of any flavor.

The really impressive changes came not with eating the fruits themselves, but in what we tried afterward, including eating entire slices of lemons and limes. While normally this would lead to an unpleasant sourness and a puckered face, the effects of the miraculin were such that the lemon tasted like “an orange covered in sugar, very saccharine,” according to Tim Johnson, director of the Botanic Garden. Curatorial intern Charlotte Palmer said that the lime tasted “sour but good.” In my opinion, all of the sour foods tasted absolutely delicious. We all marveled at the amazing effects of such a small fruit, and, in about 30 minutes, the magic had worn off. However, in the hopes of having many more experiences with this wonderful plant, we saved the leftover seeds and potted them up.

Pine continued

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The view from the top of the white pine, looking towards the quad, when John climbed the tree in April 2017.

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shingles, although early techniques for producing them would leave as much as 90% of the tree as waste on the forest floors to rot. One can only imagine the heartache that the very few conservationists at the time must have experienced if they encountered such a sight.

Although there are white pines still taller than the Mill River specimen, we can only imagine what the old-growth stands must have looked like. There is an account of an individual that was measured at 240 feet high, on the site of what is now Dartmouth College in Hanover, New Hampshire. Although most experts, our friend Bob Leverett included, believe this story to be a (forgive the pun) tall tale, the information we have from centuries ago paints a picture of beauty and awe-inspiring height in white pine forests.

This old tree along the Mill River will receive the reverence it deserves as a member of our accessioned collection. If you do get a chance to see it, please let it remind you that incredible plants with fascinating stories are hiding in plain sight everywhere. It is worth slowing down and noticing them.
Fun Exploring Lettuce

Lettuce, Lactuca sativa, is one of the most common and important leafy greens in our diet. Yet it was not always the salad powerhouse we know it as today. Like many of its ancestors, Lactuca sativa was bitter, prickly, and almost inedible. The ancient Egyptians prized it for its latex. In fact, the name Lactuca comes from the Latin word lac, meaning milk. Lettuce was considered an aphrodisiac and was associated with Min, the Egyptian god of fertility. Lettuce has been cultivated since 2500 BCE. The first signs of human domestication can be seen in tomb paintings. Yet, the origin of lettuce and the exact progenitor are still highly contested. Even today, there is no definitive answer, as proposed African and Asian centers of diversity have only recently come under close investigation.

The relationships of wild species to cultivated lettuce are not well understood. The high variability of the species in the Lactuca genus and the Asteraceae or daisy family have also presented some problems. Early on in the history of taxonomy, many species were often mislabeled as “lettuce” because of their similar uses and appearances. The relationships of Lactuca and its close allies have been revised several times, oscillating between splitting and lumping (de Vries, 1997). Breakthroughs in molecular technology have almost confirmed that lettuce had only one domestication event, with the most likely ancestor being Lactuca serriola, a highly competitive weed.

Although every American eats about 12 pounds of lettuce each year, lettuce’s popularity is not new. Lettuce is mentioned in the writings of early Greeks, such as Hippocrates (450 BCE), Aristotle (356 BCE), Theophrastus (322 BCE), and Dioscorides (60 CE). Lettuce was even more popular among Romans including Palladius in 210 CE, whose writings imply that different cultivars were grown. In China, Zhou Hou Bei Ji Fang (A Handbook of Prescriptions for Emergencies) widely circulated information about lettuce in 340 CE. Lettuce also appears in English literature, such as Chaucer, and scientific writings in 1340 CE. So how did this humble roadside weed take over the world?

One of the determining factors in salad domination is the extremely diverse genus. Ecologically, Lactuca species occur all over the world, ranging from ruderal, disturbed habitats to woodlands and seashore cliffs. Wild lettuce has been an important resource in the development of new varieties. Among the popular cultivars developed more recently, there is endless variation in size, shape, color, and texture of the leaves and even the arrangement of the head and stem length. The genome has enormous plasticity and has demonstrated that self-fertilization is not necessarily an evolutionary dead-end street. Despite the daisy family being one of the largest and most successful flowering plant families, only two species—sunflower and lettuce—have become major food crops, while many others are notorious weeds. Throughout this past year, I’ve been interested in how agriculture influences evolution. Due to their worldwide popularity, cultivars of lettuce are grown all over the world. While anything can grow well when growing in proper temperatures and provided with enough nutrients, water, and adequate sunlight, I was curious as to what kinds of genetic and phenotypic differences cultivars from all over the world exhibited. In one round of experiments, I’ve tested how lettuces from 36 different countries grow under controlled lab conditions as well as with salt stress. In another, I’ve tested lettuce progenitors Lactuca serriola and L. quercina in salt stress as well as different temperature gradients. I observed definite differences in the germination assays. This kind of research could be useful in the development of new cultivars of lettuce that are especially suited to different climates and environmental conditions.

This project has been an interesting intersection of plant biology, farming, and cultural anthropology. Critically examining agriculture and researching the origins and history of crop plants has the potential to provide solutions for more sustainable agriculture and new ways to feed the world.

References
Alternate Natures:
Architecture and the Botanical World

In the context of the modern research university, the architectural studio is deviant. It is a throwback to an earlier mode of education and an earlier epistemology of practice. ... It is the repository of longstanding traditions for education in the artistry of designing ... a setting for the acquisition of a competence to perform ... a setting for reflection in action.

Donald Schön, 1985

In reflecting upon the nature of architectural studio education in his 1985 book, The Design Studio, educational theorist Donald Schön captured its most innate quality—that of practice (or in today’s terms, experiential and project-based learning) within a social context. There is an ethical dimension to this type of project-based learning that is critical. Architectural practice done in a social context (be it in school or in the world) makes values public through the intractability of a physical outcome or artifact. These notions of practice then, or of thinking and learning through making, connect studio work to a specific place through what urban studies scholar Jane Jacobs described as “lessons nobody learns by being told.” In other words, practice is both how architects work in the world, and the way they learn about the world.

It is within this context and with the support of a Botanic Garden of Smith College Curricular Enhancement Program grant, that students in the advanced-level architectural studios engaged in a year-long project to imagine possible futures for the Botanic Garden. Through iterative processes of drawing and making, and sustained conversations with Botanic Garden Director Tim Johnson and Manager of Education and Outreach Madelaine Zadik, students explored alternative relationships between buildings, culture, and the environment. They questioned traditional notions of botanic gardens in relationship to programming, architectural tectonics, and cultural relevance. In the fall 2017 semester, students began by creating a miniature eco-unit—which acts as a self-sustaining ecosystem that supports plant life—and were challenged to nurture these plants and eco-units at their desks for the duration of the semester, developing a formal and ecological understanding of the relationship between space, climate, and atmosphere. Through a series of subsequent, interrelated projects, these small-scale constructions gradually led to a final design proposal for a greenhouse addition to the Botanic Garden of Smith College, a project which necessitates a deep understanding of plants and ecosystems through research and observation of atmospheric conditions, both inside and outside of built environments. As environmental performance becomes a vehicle for architectural intervention, it results in proposals that challenge traditional divisions between interior and exterior spaces, between habitation and transportation, between natural and artificial natures.

While the architecture studio space certainly functions as a social realm in which student work is produced, and in which notions of collegium—an ancient term that denotes the coming together of people bonded by shared educational, social, or cultural aspirations—are relived every day, extending this social sphere to the Botanic Garden was an invaluable experience for the students. First, the collaborations with Botanic Garden and the ability for students to engage a real client broke down common student assumptions about project constraints as detrimentally restrictive. On the one hand, the imaginative and open-ended perspectives and attitudes brought to the project by Botanic Garden staff pushed students to see constraints as expansive parameters and opportunities for more creative, more provocative, more experimental botanic imaginaries; on the other hand, the collaborations encouraged students to engage in a real site, against which proposals could be materially and physically tested through a series of scaled prototypes. The resulting fluid conversations, which occurred both inside and outside of the studio, oscillated between reality and speculation, between intuitive and analytical considerations, and in a space in which architectural considerations could be thought through within the larger contexts of environmental, ecological, and imaginaries.

The resulting student projects will culminate in a public presentation and critique, followed by an exhibition of student artifacts—drawings and models of The Future Smith College Botanic Garden—in the Lyman Conservatory throughout May 2018.

Assistant Professor of Art Elisa Kim leads the architecture curriculum at both introductory and advanced levels. She participated in the Botanic Garden’s Curricular Enhancement Program with this year’s advanced architectural design studios (Advanced Topics in Architecture, ARS 386 and ARS 388). Her research combines methodologies from environmental policy with architectural drawing and representation to engage a wide set of concerns about the environment, borders, and boundaries.
New Conservatory Curator
Tim Johnson

After a national search, the Botanic Garden of Smith College found our new conservatory curator just around the corner. Dr. James (Jimmy) Grogan, until recently Manager of Talcott Greenhouse at the Mount Holyoke College Botanic Garden in South Hadley, Massachusetts, joined our team in May. Jimmy grew up in the foothills of the Appalachian Mountains in Forest City, North Carolina. He earned a bachelor’s degree from the University of North Carolina at Chapel Hill in zoology and 19th century European history and had imagined a career in medicine. But a postgraduate year at the University of Freiburg in West Germany, coupled with subsequent travel, study, and work in Southeast Asia, turned his professional passion toward life as a plant researcher.

At Yale University’s School of Forestry and Environmental Studies, Jimmy studied tropical forest ecology and earned a master of forest science, completing work in the dipterocarp forests of Thailand and Malaysia. For his doctoral work in forest ecology at Yale, he moved to the Brazilian Amazon to study the life history of big-leaf mahogany, *Swietenia macrophylla*, as part of efforts to develop methods of sustainably harvesting this coveted hardwood species, which is used in high-end furniture, string instruments, and boat hulls.

Through his work with mahogany, Jimmy carries with him firsthand knowledge of how humans have harmed the natural world, and also optimism that the damage can be undone. When asked about this work, he said, “I like to call the mahoganies—which visitors can see in the Lyman’s amazing Woods of the World display—the panda bears of the botanical world. They are charismatic flora that nearly everyone recognizes by name if not by sight. So valuable they vanish on contact with people. My work in Brazil was about figuring out how to keep them standing in forests after logging, how to improve management practices so future generations might appreciate mahogany as much as we do today. To do that, you have to understand how the species functions on the landscape, what its patterns are, how it survives and thrives. And now, I’m super excited at the opportunity to continue telling these kinds of stories as a member of the Botanic Garden of Smith College team.”

Visitors can also learn more about the big-leaf mahogany in the current Vanishing Acts exhibit in our Church Exhibition Gallery.

Jimmy’s field studies on mahogany across the southern rim of Amazonia continued for 21 years, until a few years ago when he moved to the Pioneer Valley and pursued a career in horticulture with an emphasis on greenhouse horticulture and the gateway that tropical plant collections provide to other worlds. In his application, Jimmy wrote, “A plant in a pot under my care is a living being from someplace in this world. It represents its kind, which occurs as populations strewn across landscapes in patterns and densities particular to those places and to its own life history.”

The search committee was unanimous in its decision to hire Jimmy. Echoing feedback from staff, students, and faculty who engaged with the search process that Jimmy’s infectious passion for plants, insightful approach to education and discovery, and approachability make him an exceptional candidate. As conservatory curator, Jimmy will oversee operations in the Lyman Conservatory, direct the growth of the plant collection, and link the conservatory collections to educational opportunities for visitors and students alike.

“Our new conservatory curator will be engaged with our students, the community, and the Lyman collection itself in so many ways,” said landscape curator and search committee member John Berryhill. “We knew that our ideal candidate would need an almost impossibly broad skill set. Jimmy’s amazing history with tropical plants, his ability to tell their stories, and his humble, kindhearted approach to teamwork seemed like too much to hope for in one person. I am so grateful to have him on our team!”

Revised Collections Policy
Madelaine Zadik

Our new Collections Policy was approved by Provost and Dean of Faculty Katherine Rowe on January 10, 2018. It serves as a guide for the curation of all accessioned plants that the Botanic Garden maintains in the Lyman Conservatory, campus arboretum, named gardens, campus plantings, and natural areas. It enumerates priorities to guide our decisions about the acquisition, deaccessioning, and management of materials. It also sets forth a vision for an ideal collection, balancing our mission, the desires of curators, the needs of stakeholders (including students, faculty, staff, alumnae, Botanic Garden Friends, and the general public), and educational opportunities with the Botanic Garden’s available resources.

While the Collections Policy does not depict a clear endpoint for the collection, it does provide a thoughtful and vetted rationale for how we manage the collection with an eye toward increasing the overall value of the collections. The policy provides us with a metric that we can use to measure our progress toward our stated priorities and goals. Additionally, the policy provides transparency about how decisions are made by Botanic Garden staff. Although all staff play a role in curation by responding to stakeholder feedback, final decisions about accessioning and deaccessioning are the primary responsibility of the landscape curator and conservatory curator.

As a living document, the Collections Policy will be continuously scrutinized and revised as needed to address changing priorities, constraints, and opportunities. The full document is available on our website.
**Green Italian**

Bruno Grazioli joined the faculty at Smith in 2007, and teaches a wide range of courses from beginning level Italian to advanced conversation and writing, to Italian culture and design. He participated in the Botanic Garden’s Curricular Enhancement Program the past two years, with Green Italian (Intermediate Italian Conversation, ITL 235). His academic interests focus on nineteenth-century Italian culture and the process of national identity formation as well as development of new language learning and teaching methodologies and of students’ intercultural sensitivity.

Terms and concepts like environment, recycling, and sustainability are ubiquitous in today’s culture at Smith College. As we go about living our lives on campus (as students, faculty, or staff), we are constantly reminded to turn off lights, dispose of trash appropriately, and not waste food. This is among the reasons Smith is a unique working and studying place and it also ties the whole Smith community together, making us feel connected. With two environmental concentrations and more than half the academic departments engaged in sustainability research, Smith offers a wide array of opportunities to be or become green(er) on campus.

Whereas pairing the study of the environment with other academic disciplines has become not uncommon in our college, there are still areas where such combination is not as obvious. Foreign language instruction arguably tops the list. How can we integrate the study of nature when teaching the basis of a new language? How can we discuss environmental issues when lacking essential vocabulary?

Bringing these two components together is something that has preoccupied me, and although I have not quite been able to make that happen at the elementary level of our language classes (where students begin learning Italian from scratch), I believe I have taken one step toward bridging that gap by moving a whole Intermediate Italian Conversation class into the Botanic Garden. Yes, moving….

Thanks to the Botanic Garden’s Curricular Enhancement Program, thanks to the amazing collaboration with its staff (Madelaine Zadik, manager of education and outreach, above everyone else), and thanks to a Five College Innovative Language Teaching Fellowship opportunity, I was able to substantially revamp a conversation course that has been a staple offering of the Italian Studies department. The redesigned intermediate Italian conversation course, which I informally renamed Green Italian, is held in the classroom at the Lyman Plant House and focuses on Italian geography, environment, and natural landscape.

In principle, the course is based on project-based learning pedagogy (PBL), an approach widely recognized and valued for its student-centered, interdisciplinary, and collaborative approach to teaching and learning. Through PBL methodologies, students learn by doing, which in turn stimulates their interest, participation, and cooperative engagement. In the foreign language classroom, where one of the main goals is ultimately to support the development of students’ speaking skills in the target language, PBL also fosters social interaction and can positively impact their ability to communicate for communication’s sake.

Beside intensive practice in pronunciation, vocabulary, and aural comprehension through a series of topic-specific audios created ad hoc for the course, in Green Italian students learn about nature and botany, describe a variety of flowers and plants, herbs, and spices, sow and grow seeds, carry out microscope observations, give presentations in the Lyman Conservatory, and create art using only natural materials found on campus. By designing a course built around meaningful assignments and objective-driven tasks that require students to act, interact, negotiate, and communicate only in the foreign language, Green Italian aspires to situate the learning of the language outside of the traditional classroom. Learning takes place within a relaxed, nonthreatening and not so grade-oriented setting, like the rich natural environment of the Botanic Garden as well as among the community of people working in it.

Most weeks, students meander through the greenhouses in small groups and complete a task (describe color, shape, parts of a flower, identify different climates within the gardens, etc.) while speaking only in Italian. The midterm exam takes place in the Bulb Show, where students give a short presentation on a flower they have researched the history, origin, and meaning of. This year, for the final project students created an original tableau using only natural materials (wood, leaves, stones, etc.) easily found on campus. Students produced collages representing what Italian culture means to them, and, in a way, summing up what they have come to know and appreciate about Italy after spending almost 4 semesters studying the language. Students’ works will be on display in the corridor in the Lyman Plant House for the month of May.

(Continued on page 11)
**New Chief Arborist**

John Berryhill

In the summer of 2014, then University of Massachusetts arboriculture student Ben Green joined the Botanic Garden’s summer internship program. From his first day, the curiosity and drive that had earned him a near perfect GPA, consistent placement on the dean’s list, and an impressive assortment of academic scholarships were always on display. He quickly drew the respect, admiration, and gratitude of both the staff and his fellow interns. As impressive as his ability as an arborist was, he showed his joyful work ethic and unfailingly kind and supportive demeanor to everyone. During his summer with us, he exhibited the ideal mix of qualities that would make him succeed on our team and we hated to see him go when the fall semester began. It is with great excitement that we welcome him back as our chief arborist!

After four years in the U.S. Marine Corps, Ben realized he could put his GI benefits to good use and pursue his love of trees and the outdoors at the Stockbridge School of Agriculture at UMass. He earned an associate degree in 2014 in arboriculture and community forest management and a bachelor of science with a concentration in arboriculture and urban forestry in 2016. His appetite for learning often took him outside the classroom, and he left with a wealth of arboriculture experiences. He frequently teamed up on projects with professionals in municipal urban forestry, academia, and commercial tree care. Ben even had the rare honor of being the lead author on published research that he helped conduct as an undergraduate. See *HortTechnology* (October 2015, vol. 25 no.5, pp. 651–656) for the article about nursery systems and the cost of planting oaks in urban areas. After graduating, Ben remained immersed in arboriculture endeavors, including full-time work locally with Dostal Tree Service.

Ben told us that his internship at Smith was a pivotal moment as he assessed what he wanted his future to look like after graduating. The Stockbridge School has long been one of most respected arboriculture programs in the country, but the arboriculture program’s focus is primarily on preparing students for careers in commercial tree work. Working for a summer in an arboretum designed to support the kind of learning that had brought him so much joy in school convinced him that this is what he wanted to do. The breadth of plant material, the emphasis on a well-informed approach to plant health care, and the opportunity to support those who shared his love of plants (and those who don’t yet know they have it) made this job a dream come true. His diverse experience showed us that he was a natural mentor to his peers and would be very capable of meeting our department’s goals in supporting student learning and engagement in our gardens and the arboretum.

Ben joins us at a time when we are refining our tree risk management plan. The International Society of Arboriculture has developed a new program, the Tree Risk Assessment Qualification (TRAQ), to efficiently and effectively assess, mitigate, and communicate tree risk. Ben will become TRAQ certified and play a central role in our efforts going forward. The Capen gardener position (currently vacant) has been reshaped into a versatile gardener and assistant arborist position. Once filled (early this summer, we hope), Ben will have a capable teammate, enabling us to achieve a higher standard of care for our trees.

With Ben’s respect and genuine love for our plant collection, curated by the Botanic Garden since the late 1800s, we are confident that our trees are in good hands. If you see Ben on campus, please stop and say hello. He’ll be happy to talk trees and shrubs with you. If you know our current outdoor staff—Jeff Rankin and Nate Saxe—then you know we have a crew that is as friendly as it is talented. It is safe to say that Ben will fit in perfectly.

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**Italian continued**

(Continued from page 10)

One of the highlights of the whole semester is when we gather in the lab adjacent to our classroom and plant fennel seeds. Nate Saxe, chief gardener, prepares everything necessary (soil, pots, and seeds) and competently guides us through the various steps. For an out-of-class assignment following this activity, students create a video in Italian summarizing the planting process. Some students return to the lab to film themselves. Others draw the various steps of the process on paper. Whatever the result, students produce very creative videos. Links to some of them are on the Botanic Garden website at smith.edu/garden/education/italian.

Formal assessment carried out at the end of the spring semester 2017 showed that students enjoyed learning and using the Italian language in different ways than they had in previous semesters. They also appreciated the sense of achievement deriving from being able to communicate effectively in a foreign language: they not only acquired a stronger awareness of their speaking skills, but they also explored and learned new aspects about Italian culture. In general, by the end of the course students felt more in control of their ability to speak in Italian, and they also felt more confident listening and understanding recordings about topics they were not familiar with. Students reported that they were more in control of the linguistic knowledge they had acquired in the previous three semesters. As a result, they felt less insecure about initiating or being part of a conversation in Italian as previously might have been the case. Naturally, they became more aware of the fact that fluency in the language is a process requiring constant work and dedication, but also that it is a realistic goal that can be achieved.
Once in a while, you meet a kid you just know is going places. Madeleine Lombard, self-described “passionate plant nerd,” is one of those kids. At age 6, Magsy was asked by a friend if she believed in God. Her response was, “I believe in seeds.”

Magsy attended the local Hilltown Community Charter Public School for elementary school and then was homeschooled in Northampton until last fall, when she enrolled at Four Rivers Charter Public School in Greenfield for her junior and senior years of high school. We first encountered Magsy here at the Botanic Garden when she marched in at age 13, all four feet of her, to ask if she could audit the horticulture classes. Too young to enroll through the College, we accommodated her sitting in on lectures and labs without any formal paperwork. In her level of engagement, comprehension, and class participation, she was indistinguishable from (and often outperformed) her college-aged classmates. We knew we had a live one.

When Magsy turned 16 last year, she returned to discuss the possibility of participating in the Botanic Garden’s summer internship program. Past experience with Magsy inspired the extra effort to secure permission from the College’s labor union, the Office of Human Resources, and the Provost’s Office in order to hire our first-ever high-school-age intern. Again Magsy excelled. Her mother Lilly described the internship as “the most exciting, grounding, and socially, physically, and intellectually satisfying thing she has EVER done.” Based on her particular affinity for the tropical collection, Magsy was trained to cover for one of the greenhouse technicians on his day off, staffing the Lyman Conservatory every Monday all summer.

Her independent project analyzed the opportunities and responsibilities for botanic gardens in educating the public about the impacts of climate change. Magsy’s research included a review of efforts at other institutions and interviews with more than a dozen Smith faculty and administrators about their academic and professional work in the field. Her final recommendation was that the Botanic Garden begin planning for an original exhibit on the impacts of climate change on plants and the role of plants in mitigating climate change. Work on that project has been furthered by Botanic Garden staff and Smith students over the school year, with the goal of mounting an exhibit to coincide with Smith College’s Year of Climate Change in 2019-20.

Last fall, Magsy testified at the Massachusetts State House at a hearing contemplating renewable energy legislation. After citing her internship at Smith, Magsy assailed the committee:

At my age, did you, like me, have a driving passion? Did you look forward to a promising future to explore that passion? Did you ever imagine facing up to 70% extinction of the thing you most admired and that you knew supported life itself?... I plan on dedicating my professional life to harnessing plants to help solve climate change. YOU can dedicate YOUR careers to harnessing politics to help solve climate change. Model courage and focus and persistence to young people!

Beyond her relationship with Smith, Magsy has hurled herself into every opportunity she can find to engage with plants. This spring, through her high school, Magsy arranged for week-long internships at the New York Botanical Garden as well as the United States Botanic Garden in Washington, D.C. She’ll be working with us at Smith again this summer, piloting a new initiative to bring our TreeSpeak interpretive audio feature out to the street trees of Northampton. Recently, she received local and national press coverage for her project to raise seedlings from chestnuts provided by the American Chestnut Foundation. Her sixteen young trees were installed at the historic, local Bridge Street Cemetery, where Magsy herself used to play as a child. That story about Magsy was featured in “For the Love of Chestnuts,” an article written by her mother, which was published in the Winter 2018 issue of Chestnut, The Journal of the American Chestnut Foundation.

Magsy remembers “scampering through the Smith greenhouses” as a young child, “marveling at soft ferns, blooming banana plants, and sweet scented geraniums.” Nurturing Magsy as she matures into a young botanist has been as thrilling and delightful as watching a seedling stretch, unfurl its leaves, and set flowers. Says Mags, “The Smith Botanic Garden community has connected me to dear friends and mentors who share my passion for botany, and helped launch me toward a career in the field. Thank goodness I had that playground to feed my fascination!”

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Erythronium americanum, trout lily
Drawing by Madeleine Lombard
A team of Botanic Garden staff and Smith student collaborator Karime Gutierrez ’20 are taking a critical look at how students of color perceive and experience the Botanic Garden. We are excited to announce that the Botanic Garden is one of 16 recipients of Smith College Innovation Challenge grants that were awarded by President McCartney’s office in December for ideas that address issues of inclusivity, diversity, and equity at the college. The grant project, titled Coded Gardens: Exploring Barriers to Access Through Dialogue, will consist of a series of listening sessions with members of Smith College’s identity-based Unity groups in order to open a dialogue about how the Botanic Garden can support and enable the academic and professional success of students of color.

The project emerged after an initial internal assessment revealed that even though 55% of Smith College students identify as being non-white, the vast majority of students in the horticulture classes and Botanic Garden summer interns over the last 10 years have been white.

I believe that we have an opportunity and an obligation at the Botanic Garden of Smith College to make sure that all Smithies have the same opportunity to discover a passion for plants. Botanic gardens have historically been, and continue to be, dominated by white audiences and white staff. We are missing out on many important and insightful conversations and opportunities to learn if we are not engaging with our entire community.

To begin thinking about how to address this disproportionate underrepresentation of students of color, Landscape and Education Specialist Gaby Immerman and I reached out to colleagues and students at Smith who were already trailblazers on issues of inclusivity and diversity. Through conversations with Dean of Multicultural Affairs L’Tanya Richmond; Professor of Biology and Co-chair of the Science Center Committee on Diversity, Laura Katz; and Unity group members, Temar France ’18 and Karime Gutierrez ’20, the idea for the Coded Gardens project was born.

As with much of the work that happens at the Botanic Garden, students have been engaged with all aspects of this project. Both Temar and Karime contributed to the conceptualization, development, and writing of the grant, and Karime has continued to engage in the listening sessions as an investigator as part of her Achieving Excellence in Mathematics, Engineering and Sciences (AEMES) Scholar. Karime said she is “glad to know that the Botanic Garden values diversity and is willing to welcome all students equally,” expressing her hope that “in the future, more students of color will be aware that our whole campus is a botanic garden where they can learn as much as I have during my time here.”

Since learning about the award in December, Gaby has been working with Unity groups leadership to co-create listening session events that are about more than just gathering information—they are about building community and inviting diverse audiences into Botanic Garden spaces through participation and hands-on learning. Gaby observed, “It’s become really clear through this process that it’s not enough to have an open door. We need to come out of the Botanic Garden and invite students of color into this space. Inclusion is about feeling known, heard, and actively empowered.”

The inaugural listening session in March with the Black Students’ Alliance kicked off with a body oil and lip balm making workshop before participants sat down to share a meal and their individual perspectives and experiences. A listening session with the Latin American Students’ Organization in April started with a terrarium making workshop.

Over the coming year, the Botanic Garden will be holding four to six additional listening sessions. The feedback from these events will be used to better understand how the Botanic Garden can meet the needs of underrepresented students, address current barriers to access, and ensure that people of all identities feel affirmed in Botanic Garden spaces.

Alumna Update

Liz Esposito ’13, summer Botanic Garden intern in 2011 and an environmental science and policy major, was recently on campus as a speaker for the Smith Women in the Environment Alumnae Panel. She is now an associate planner at the Western Connecticut Council of Governments where she works on a variety of economic and community development projects for the region. She is also pursuing a master’s in geography at the University of Connecticut in the Sustainable Cities Research Cluster. At work and at school, she is honing the GIS (geographic information systems) skills she was first able to build as an intern in the Botanic Garden.
Mapping Collaboration

Smith’s Facilities Management, the Spatial Analysis Lab, and the Botanic Garden have collaborated with the City of Northampton Department of Public Works on a project to map the natural as well as built features (buildings, roads, sidewalks, etc.) on the Smith campus and across the city using state-of-the-art image processing and GIS-based (geographic information system) mapping software.

For several years, the Botanic Garden and Facilities have been discussing methods for easier access to campus data, such as location of infrastructure, to avoid damage to property or trees during construction and digging. The Spatial Analysis Lab provided a solution via ArcGIS, mapping software developed by Esri. The resulting planimetric map shows horizontal positions of features without topographic properties.

Today’s maps have come a long way from the old paper with dots, lines, and shapes representing features as seen from a bird’s-eye view. Mapping software now allows for separating features into individual layers, which can be superimposed on each other and turned on or off depending on what the viewer wishes to see.

What advantages does this provide? The primary benefit is that one is able to edit layers individually rather than having to edit the whole map. Digital technology allows for editing a specific portion of an object instead of the whole layer. The software also enables the use of databases to store information related to each layer, e.g., road size, type of surface, and traffic direction.

What I find to be supercool are the analytical tools. Statistics such as percentage of roads paved with impervious material within a given area or how much of the campus is covered in buildings versus open space can easily be calculated, as long as the information is in the database. Another useful tool is the data collection application, which the garden staff plans on using for updating collection inventory in the field.

Once completed this spring, the base map will be shared across Smith College, benefiting departments conducting geospatially related research projects.

Chrysanthemum Winner

Horticulture student Jessica Ryan, Ada Comstock Scholar in the class of 2017, produced the chrysanthemum hybrid that won the most votes in last fall’s Chrysanthemum Show. It was while taking the fall 2016 horticulture class that Jessica developed her mum hybrid. Seed resulting from her cross was collected, germinated, and grown on to flowering for display in the 2017 Fall Chrysanthemum Show. It sports an orange color with a yellow ring around the center disc flowers, giving it a sunburst appearance. Interestingly, for the last five years all the winning flowers have been orange!

Smith horticulture students have been hybridizing chrysanthemums for over a hundred years now. Everyone enjoys the tradition, including the visitors to the Fall Chrysanthemum Show, whose votes determine the winning mum. You can check out all the past student-bred mum hybrid winners dating back to 1920 at our online Chrysanthemum Hall of Fame on our website.
Horticulture Classes: Gateways to the Botanic Garden

Since the retirement of former Botanic Garden director Michael Marcotrigiano in spring 2016, I’ve had the pleasure of teaching both the lectures and labs for the two horticulture classes. Now in year three of this interim arrangement, I’ve developed my own teaching style and had the opportunity to make the courses my own. Most obviously, I’ve changed the course titles to be more descriptive, especially to students who may not have encountered the word horticulture prior to their arrival at Smith. The fall class (fondly known as the “outside class”) is now BIO 120/121 Horticulture: Plants in the Landscape, and the spring course (the “inside class”) is BIO 122/123 Horticulture: Botany for Gardeners. These titles align well with similar courses at other institutions and give students a good sense of what to expect in terms of course content.

My other major course renovation has been to seek alignment with the biological sciences and landscape studies departments as well as the Botanic Garden’s physical resources and staff wherever possible. For example, in the class we had not been using the outstanding plant evolution mural, Plant Life Through the Ages, displayed in the corridor of the Lyman Plant House, so I’ve added an evolution of plants lecture and a visit to the mural during lab. I also brought in Greenhouse Technician Dan Babineau to demonstrate air layering, had Manager of Living Collections Elaine Chittenden introduce collections management, and brought students to the Happy Chace ’28 Garden at the President’s House and the Japanese Garden, both so beautifully renovated over the last few years under the leadership of Chief Gardener Nate Saxe, to discuss garden design styles. The fall class now features guest lectures from Associate Professor Jesse Bellemare, who teaches ecology and systematics in the Department of Biological Sciences, and Reid Bertone-Johnson, who teaches the landscape studies studio courses. I see the horticulture classes as gateway experiences that aim to foster a love of plants and provide a path forward for students to get more involved with both academic and experiential plant-based learning opportunities on campus (and beyond).

Assignments for the classes have been shifted to offer more real world learning modules for our students. Building on Michael’s original TreeSpeak concept (see the Spring 2015 newsletter), students in the fall class research the cultural, biological, and historical story of signature campus trees, then record their narratives as audio files that can be accessed through QR codes on the tree labels as well as on our website. Spring term students lead class discussions on hot-button topics such as genetic engineering and conventional versus organic farming practices.

This year, we piloted a new fall assignment to generate concepts for the display beds that front the Lyman Plant House. Emphasizing annual species, students were asked to come up with a concept, a design sketch, and a planting list showing accurate calculations for number of plants required based on their size at maturity. Submissions were reviewed by staff gardeners, who selected the Fuzzy Garden design by Emerson Barry’19 as the winning entry. Emerson’s design statement indicates that the Fuzzy Garden “is intended to be calming both in appearance and through touch. All of the plants have soft, interesting textures, and the colors are mostly subdued purples, pinks, and pale greens.”

This winter, students in the spring course, which emphasizes propagation techniques, started seeds and took cuttings according to Emerson’s scheme. Expect species such as Ageratum houstonianum, Senecio cineraria, Celosia cristata, and Stachys byzantina to greet you as you enter the Lyman Plant House this summer. And as an incoming summer intern, Emerson will be here to install them! ☺️
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 a calendar of events, twice a year
- Members-only hours at the Bulb and Chrysanthemum Shows — 9:00 to 10:00 am daily
  Show dates: Fall Chrysanthemum Show: November 3 – November 18, 2018; Spring Bulb Show: March 2 – March 17, 2019
- Free admission and discounts at over 300 other gardens around the country
- A 10% discount on Botanic Garden merchandise
- Free audio tours of the Lyman Conservatory
- Invitations to show previews and receptions

Members at the Contributor level and above receive a packet of notecards with images of the Botanic Garden and our collections

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