The Botanic Garden of Smith College
LEAFLET
2023
Art in Bloom | page 26

Students Become the Teachers | page 10
PLANT PICK: *Symlocarpus foetidus* (Skunk Cabbage)

ELAINE CHITTENDEN

From Tiger Doctor to Arborist

ALEX JULIUS

How to Water Everybody at the Same Time When Nobody Is On Anybody Else’s Schedule

JIMMY GROGAN

Celebrating a Career with a Lasting Impact

JOHN BERRYHILL

The Friends of the Botanic Garden Leadership Council

JULIE THOMSON

Your Botanic Summer Road Trip

JULIE THOMSON

The Next Generation of Plant Studies at Smith

GABY IMMERMAN

The Legacy of C. John Burk

PAULETTE PECKOL
Former conservation intern Katie Rahaim ’23J (top) and botanic garden student researcher Virginia Griswold ’23 working with seeds in Lyman.
While all gardens display and cultivate plants, what sets botanic gardens apart is a commitment to using plant collections for teaching, research and conservation. These three pursuits are the three-legged stool that all modern botanic gardens rest upon. Still, every botanic garden has its own unique lens for pursuing these activities, influenced by that garden’s location, collections, staff expertise, mission and history. The result is a constellation of organizations around the globe more similar than dissimilar, and also each distinct.

Whether for work or play, I never tire of visiting botanic gardens (and this edition of Leaflet has a few suggestions for those in our area; see page 38). Rather than seeing these institutions as competition, I find that visiting other gardens only deepens my appreciation for how truly unique the Botanic Garden of Smith College is. Instead of making me envious of what we are not, these visits make me appreciative of what only we can be: a botanic garden of, by, and for the liberal arts—just take a look at how assistant professor of biological sciences Jess Gersony approaches teaching botany through both science and art (page 44).

Since our garden is a college garden charged with serving the needs and enriching the learning environments of educators and students, it is no surprise we lean heavily into the educational side of things. Sarah Loomis’ article “Students Become the Teachers” (page 10) is a great example; even delivering our educational programs is an opportunity to teach students how to be educators. And as Lily Carone’s article “Art in Bloom” (page 26) shows, our blockbuster flower shows are powerful opportunities for students to showcase their skills in substantive ways and rare opportunities to navigate the challenges of putting on a show for 18,000 people in a historic greenhouse under an immovable deadline. Spoiler alert: They pulled it off.

One of the things I most love about our Smith student-centered approach is how our visitors and supporters respond to it, and how much these two audiences gain from each others’ presence. I dare say that only the Botanic Garden of Smith College could produce our upcoming exhibit, The Bell Jars: Lyman Conservatory and Sylvia Plath’s Botanical Imagination, which will, as exhibit co-developer and Assistant Professor of Anthropology Colin Hoag writes, “invite visitors to inhabit Lyman as Plath once did.”

We have a similar bent toward teaching in our research and conservation activities. This means creating opportunities for students to learn how to be researchers and conservation practitioners. Landscape Curator John Berryhill’s long-term research into how climate change is threatening mountain magnolia continues this summer and conservation work has begun—sharing seeds of this potentially threatened species with other gardens and propagating seeds for our own collections, all in partnership with student conservation interns (page 49).

This past year we have welcomed many new partners into our work and said goodbye to cherished longtime colleagues. As I wrote about our retired colleague Jeff Rankin (see article on page 22), while we work with plants we are really in the people business. Thank you for being part of our community.

Cheers,

Tim Johnson, director
Pamela joined the botanic garden staff in 2008, but began working here in 2006 as a work-study student when she was an Ada Comstock Scholar. Ever the lifelong learner, Pamela was in her late 40s when she enrolled at Smith College in 2004. She had already had a varied career, having served in the Army Reserves, worked in sales, delivered US postal mail, and managed the stables at Fuller Horse Facility. She earned an associate's degree in business from Holyoke Community College before attending Smith and earning her bachelor's degree in studio art in 2008.

As an “Ada,” Pamela worked as an office assistant, web design intern, and regular contributor of images and artwork to the botanic garden’s newsletter, Botanic Garden News. Upon graduating in 2008 she was hired into a full-time position which eventually came to be called the office assistant and tour coordinator. Those of us who worked with Pamela know that these job titles do not do justice to her role here. Pamela wore many hats. She greeted visitors, coordinated volunteers, scheduled tour visits, assisted donors and Friends of the Botanic Garden, and answered the wide range of questions that came to us from visitors, supporters and members of the community. She created social media content, webpages and newsletter articles. She fixed copiers, coordinated events and designed posters. And she continued to generate many of the botanic garden’s signature visuals, including the photographs in our lobby and exhibits, and the hand-drawn map of Lyman Conservatory that graces our visitors guide.

Pamela was an accomplished gardener, but her love of nature went beyond the managed landscape; sharing her love of the natural world was one of the ways she shared her joy for life with those of us who knew her. She was an observant naturalist—attuned to the seasonal cycles that unfolded inside and outside of Lyman, quick to catch a rare bird sighting on Paradise Pond, the first to notice the baby snapping turtles hatching in the little pond next to Lyman, roving the greenhouses daily to capture a flower unfurling. She loved riding horses, being outside in her garden and being on the water, paddle boarding or rowing. Plants and natural processes were a regular focus of her art, which knew no boundaries of media, and her experience as an Ada studying art unleashed the full extent of her creative talent. Her professors loved that she didn’t just complete an assignment, she threw herself into it with zeal. Each new medium was a fascinating challenge and she overachieved constantly, producing fine-lined graphite botanical still lifes of lithops, concrete leaf castings of Dioscorea bulbifera, a delicate and lifelike bronze statue of a woman emerging from a chrysalis, carefully composed digital scans of peony fruits and seeds.

None of this fully captures what it was like to work with or to know Pamela. Friendly, inquisitive, smart, capable, funny and humble. And also strong and wry and authentic. She gave great advice and when staff faced complicated challenges, whether at work or in our personal lives, we often told each other, “Pamela will know what to do!” She helped all of us, all the time, and embraced the hectic pace of life at the front desk of Lyman Conservatory with grace and warmth. Pamela had a great sense of humor and told the best stories. She made us laugh every day and her laugh echoed often through the glass houses. She loved her family, especially treasuring time with her precious grandkids and amazing daughters, her lifelong friends, and her agility dogs. What made her a talented artist—her lack of hubris, her undaunted curiosity, and her genuine love of creating and exploration—also made her a great mother, grandmother, partner, friend and colleague.

We work in a landscape full of memories of Pamela. We find her photos in our computer files and her words in the archives of our newsletters. We have lists of the things she agreed to do and things she had done. We have web pages that carry the cadence of her speech. Pamela was always creating, trying new things and making new connections. Her branches spread wide. We are fortunate to occupy a landscape shaped by her and to enact a mission and vision that she helped craft. Her absence is felt every time we step through the front door.
“I’ve learned so much about the wonder and diversity of the plant world; it never ceases to amaze me. Having been a lifelong lover of plants, I consider myself very lucky to be a part of the botanic garden.” – Pamela Dods
Oh, the glory of spring in New England, and the perennial bloom of the earliest native plant: skunk cabbage! Also known as swamp cabbage, polecat weed and fetid pothos, this plant is celebratory for those who seek it out along wet woods, swamps, streams, or otherwise shady seepage areas as early as March in southern New England. The species can be found from Tennessee to northern Canada.

Skunk cabbage is a member of the Araceae, aroid or arum family, which includes houseplants such as the peace lily (Spathiphyllum), calla lily (Calla) and flamingo lily (Anthurium), none of which are true lilies, and philodendron, which is both a common name for a familiar houseplant and the genus that these plants belong to. The Araceae family contains well over 105 genera, with more than 4,000 species, mostly from tropical and subtropical environments. They range in size from the smallest flowering plants known, duckweeds and watermeal (Lemna and Wolffia), to the plant with the largest unbranched inflorescence in the world, the titan arum (Amorphophallus titanum).

Apart from the duckweeds, most aroids feature a spike-like inflorescence known as a spadix, and a sheathing leaflike bract called a spathe. The bloom of skunk cabbage includes a short-stalked, cream- to maroon-colored knoblike spadix nestled within a spongy, hood-like maroon spathe, often streaked or mottled yellow, which looks more like a botanical bivalve than a flower. Skunk cabbage flowers display an amazing biological phenomenon: thermogenesis. The spadix produces its own heat, reaching temperatures up to 20°C (36°F) warmer than the outside air temperature. It does this by burning starch from its massive root system, day and night, for a period of 12 to 14 days. This heat melts any snow or ice covering the skunk cabbage in the early spring.

The heat produced by the spathe also wafts the skunky odor these flowers emit, caused by the aptly named chemicals putrescine and cadaverine. The chemicals attract the skunk cabbage’s pollinators, including gnats, carrion flies and beetles. Honeybees also find early pollen on skunk cabbage flowers and opportunist spiders may spin a web across the opening of the spathe to catch would-be pollinators looking for a warm place.

It is only after these bizarre blooms melt through the snow that the plants unfurl their leaves. Spear-shaped vegetative buds produce bright-green funnel-shaped rosettes of leaves with elongating petioles emerging from each plant’s underground rhizome. As the flowers set fruit, the spadix is transformed into what looks like a greenish-black grenade at the base of the rosettes. Populations can contain hundreds of plants and resemble a sea of common Hosta. By mid-July to mid-August the leaves wither and there may be evidence of bird or small mammal predation on the fruits.
Symplocarpus means connected fruits—the fruit morphology of skunk cabbage resembles a pineapple—but no part of this plant should ever be consumed fresh as it can be fatal; plants of this species and many other aroids are full of microscopic calcium oxalate crystals which deter nibbling. Even small doses of these irritating crystals can cause intense mouth and throat pain and swelling in the airway. Wild-food foragers harvest unfurling skunk cabbage leaves under 8 inches long and boil them for at least five minutes, using four changes of water, to dissolve and rinse away the calcium oxalate crystals in order to render the plant edible.

Skunk cabbage can be easily propagated by seed. Each fruit can contain over 50 chickpea-sized dull yellow to purple-streaked seeds. Seeds must be planted soon after harvesting or stored moist in a refrigerator to preserve viability. *Symplocarpus foetidus* is one species we regularly offer in Index Seminum, the international seed exchange program for botanic gardens. The species is always highly requested by other gardens.

*Top: Skunk cabbage sprouting green leaves. Bottom right: Skunk cabbage melting through the snow.*
STUDENTS BECOME THE TEACHERS
Through the Botanic Garden Student Educator Program

– Manager of Education Sarah Loomis –
At the botanic garden, we teach the practice of close observation, believing that carefully looking at stems, leaves and flowers provides a pathway for understanding the whole plant and its role in the greater system. We take this attention to the individual and apply it beyond the plants we study to the students we work with, acknowledging that like the flora surrounding us, each student also offers something unique and essential to the community.

The Botanic Garden Student Educator (BoGSE) program began with this observation and in recognition that our educational work benefits from the contributions of a diversity of students. The program consists of a student cohort hired to amplify the educational efforts of the botanic garden by facilitating events, projects and collaborations aimed at connecting more people—students, staff and visitors—to our work. Now in its second year, the program is having a rich impact.

This spring semester BoGSEs hosted a Late Night at Lyman program in collaboration with the Office of Multicultural Affairs and a self-love Valentine’s event; developed and led student tours; conducted tea blending, plant propagation and botanical body-care workshops; and officially launched the student-managed Learning Garden, first creating a planting plan for the space and then hosting seed-starting and sign-making workshops in support of it. Under the leadership of our education intern, the group is also curating a summer pop-up exhibit aimed at connecting young children and their families with our collection.

In addition to planning and executing projects, BoGSEs help us to think deeply and critically about big questions related to the student experience. Together we tackle challenging questions and invite critique and reflection on what is working and what could be working better. As BoGSEs, they have been tasked with expanding outreach efforts of the botanic garden and part of that work is to apply a critical eye to our current efforts. These student voices help guide our co-curricular programming efforts and ensure that we are working to be as student-centered as possible.

The program is an example of what happens when Smith students are intentionally mentored and simultaneously given space to bring their whole selves to their work. They rarely disappoint. There is, of course, an invisible hand providing structure and vision, and also gauging just how much responsibility allows students to soar without stretching them too thin as they learn how to operate in a professional space. In addition to guiding weekly team planning sessions, I meet with students individually to check in and provide direct support, ensuring that they have the tools they need to successfully accomplish their projects. Hiccups are expected. Miscalculated weekly obligations, mental health challenges and unexpected injuries, heartbreaks and family losses are reminders that we are human. Each situation provides an opportunity for self-reflection and continued personal and professional growth. Equally important is the way these challenges make space for the cohort to show up for one another—as one member of the team struggles, the others shift to support them.

This model has its vulnerabilities, as the work is so deeply influenced by interpersonal dynamics within the cohort. BoGSEs change annually, meaning the cohesive magic of one year may be challenging to build the next. But these potential issues are mitigated by the simple fact that our ultimate objective is not productivity—although there is plenty of that—but learning. And part of learning is recognizing that we do not work in silos, but in relationship to one another and, equally important, in relationship to the world around us.

As students dive deeply into their college experiences, programs like ours provide space for experimentation and application, which greatly enhances their academic studies. But the Botanic Garden of Smith College offers students something complementary and magnifying as well: the chance for connection both to one another and to the living things that surround us. In this way, our work is simple in approach but profound in impact. On the next page you can hear from four previous and current students as they reflect on the program. Some were part of its genesis, others were in its pilot year, and still others are current BoGSEs.

These collective voices demonstrate how the program is growing and shifting each year, as students continue to define what the BoGSE program is and what it can be. For my part, I’m excited to watch it evolve to tackle unique interests and trial new ideas. I have no doubt that these students, and those that come next, will continue to explore and demonstrate their own plant passion in unexpected and powerful ways, and the botanic garden will be all the better for it.
Meredith Jones ’24
Lyman is the place on campus where I feel most at home and part of the Smith community. As someone who grew up in Maine, feeling connected to the landscape around me is what makes me feel at home in new places. I was immediately drawn to the botanic garden as a first-year and I jumped at the opportunity to become more integrated into the Smith community and physical landscape through working as a BoGSE. I love working on a team of student educators who feel passionately about making the botanic garden a welcoming space for students to connect with each other and to plants. As an anthropology major with an interest in education, art and museum studies, I am able to marry a lot of my interests while working at the botanic garden, whether I am working to help set up an exhibit of student art in the gallery or leading a propagation workshop for students.

I am extremely grateful to be a part of the botanic garden through the BoGSE program. It allows me to develop invaluable professional experience with leadership, outreach and working on a team. The program has given me the opportunity to work with botanic garden staff and think about future careers that I might want to pursue in horticulture and education. I love that I am able to gain professional experience in a field I am interested in pursuing while connecting to my Smith community.

Above: 2022-23 BoGSE Paige Woodard ’25 (right) leading a propagation workshop.

Jamila dePeiza-Kern ’22
Before my senior year at Smith I heard about the BoGSE program and immediately knew I wanted to be involved. I was thrilled to be hired as the education intern, to work alongside Manager of Education Sarah Loomis, and witness the program’s development from infancy into a thriving part of the botanic garden’s landscape. I worked at the botanic garden all four years I spent at Smith, but this was my first foray into education. It felt daunting at first, but equally exciting.

The BoGSE program influenced my career journey. I had never before tried my hand at education, but because of the program, I developed an interest in teaching and the courage to apply for a job as a youth educator with Speak for the Trees, Boston the summer after my graduation.

I firmly believe that education is not a one-way street—flowing from knowledgeable teachers to questing students. Instead, everyone’s views are valuable, and we all learn from one another. This belief was exemplified during my time working with the BoGSEs. One of my favorite parts of the program was how, during our weekly meetings, we would take turns introducing plants from the collection and sharing what we had discovered through our research. When planning events, we collaborated to come up with interesting ideas to enrich the visitor experience. It was all really informative as well as a lot of fun. I’m very grateful for the time we all spent together.
Liliana Martinez
As a first-year student from South Texas, I felt out of place in the new landscape of Smith and was surprised to find familiar plants in the Lyman collection. I came to the realization that the natural world could connect a student body from a range of cultures and backgrounds. Plants served as a common ground, transcending borders and languages while honoring our distinct lived experiences. The botanic garden quickly became a favorite space of mine on campus, and becoming a BoGSE was significant for my Smith experience as a whole.

So much of education is limited to the intellectual, but I found hands-on learning and a world of knowledge not limited to that within the greenhouses. I learned from fellow BoGSEs and our mentors around the garden. I learned about BIPOC contributions to horticulture, local farm worker organizing, and food sovereignty within the Pioneer Valley. It felt like we BoGSEs contributed to a culture of growth and connection, starting with Smith and reaching into the greater community. I am deeply grateful for this experience, and continue to pursue growth and connection in my work and learning beyond Smith.

Below: 2022-23 BoGSEs (left to right) Malika Gottfried ’25, Allie Wornell ’25, Meredith Jones ’24 and Sophia Holmes ’26 learning how to introduce plants.

McKenzie Swart AC ’21
I came to Smith and for that whole first year, I didn’t want to be here. But then I started the botanic garden internship and then I helped lay the foundation for the BoGSE program. When the pandemic hit I struggled for a while, but through it all I was part of something here. Maybe I’m that type of person who has to be a part of something bigger in order to feel like my work matters. And I was always that here. I was always part of something new—with John Berryhill and his conservation work, with the concentration research, with exploring the BoGSE program—those were new ideas. And I always appreciated that—to be asked to show up in a way that was kind of different than I ever had been before.

Something that I learned here is that before coming to Smith, I didn’t really know the meaning of words like “community” and “engagement.” When you come from a place like I came from, you don’t have those things. So to come here and have someone say “Come and be a part of this” was really special and it significantly changed my life. And now I do that for others. My time here made me feel safe enough to reach out and invite people in. It became easy. It’s like learning a language and once you learn it, you don’t forget it.
WHERE ARE THEY NOW?

The Botanic Garden of Smith College launched an internship program in the summer of 2006. Over the years, this program has shifted to meet the needs of students and staff, but it has always offered students rich opportunities to explore their interest in public gardens, horticulture and arboriculture.

While some students continue on to different fields, others find their passion while at the botanic garden and discover their career paths during their summers with us. In the next few pages, you’ll hear from three former interns on their summer internship experiences. You’ll also find a personal essay from Alex Julius ’09, whose time as an arboriculture assistant at the botanic garden provided a foundation for her current trailblazing work in arboriculture.
“The thing that makes working on Smith’s campus special is the integration between the garden and the students. During my internship at the botanic garden, I had the opportunity to propagate and grow the plants gifted to all entering students when they start at Smith. It’s this really beautiful tradition that highlights how the botanic garden is part of the student experience. I still have my jade plant cutting that started out as a stump—it didn’t even have any leaves. Now, it has grown and I was even able to propagate that same plant again.”

Emily Hitchcock ’19  
Environmental science and policy major  
Spanish minor  
Sustainable food concentration

“I really enjoyed my internship at the Botanic Garden of Smith College, so right after I graduated I had a summer internship at the New England Botanic Garden at Tower Hill. I ended up getting a full-time position by the end of the summer and worked there for about three years. The experience opened my eyes to the different types of botanic gardens. My time at the Botanic Garden of Smith College showed me that education was an important part of the work for me in this field. And that is what led me to my current position as a greenhouse supervisor at Mount Holyoke College’s botanic garden. Being able to mentor students at a garden that’s rooted in a small liberal arts campus—to be able to take care of the plants that I enjoy and teach people at the same time—is so nice.”

Jessie Blum ’15  
Environmental science and policy major  
Biological sciences minor

“One of my very favorite moments of my botanic garden internship at Smith was seed collecting with Manager of Living Collections Elaine Chittenden at Hawley Bog. It was my first experience seed collecting and Elaine was openly excited about sharing her knowledge with me. After I graduated, I had an internship at Nasami Farm, where I got to go back to a bog to collect pitcher plant seeds. It was really fun and very exciting, because we were walking on the bog mat, which was jiggling under us, and we kept almost falling into the bog. One of my socks made it out dry, and my other leg got entirely wet. It was a very full-circle moment to end my Nasami internship with this experience because it reminded me of my first seed-collection outing with Elaine at Smith.”

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Saige Lloyd  
Class of 2022, University of Massachusetts Amherst  
MLA and MRP

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Like many before me, I arrived at Lyman Plant House rather unintentionally.

One of the many reasons I chose Smith College was its rock-climbing facility, because that seemed logical to 19-year-old me. As a first year, I set out as a chemistry major and took a work-study position at the rock wall. But before I finished my first semester I realized chemistry was not in my future. I switched gears and decided on an architecture major. Unfortunately (or fortunately), I was late selecting courses and couldn’t get into the architecture studio, so I ended up in a landscape architecture course. My adviser recommended that I enroll in a horticulture class taught at the botanic garden to accompany the course. That is how I found myself at Lyman—and how I ended up on the path to my current career.

Somewhere in the whirl of horticulture classes and a 2007 summer internship at the botanic garden, I found myself once again wandering into a new direction. Watching John Berryhill (who was chief arborist at that time and now serves as landscape curator) climbing trees, tying knots, pruning and using chainsaws, I knew that was where I wanted to be. But what was that even called? Arborist isn’t exactly a familiar term to most college advisers when they’re helping students plan their futures. With some behind-the-scenes wizardry facilitated by John and Gaby Immerman (experiential learning specialist), I was offered a work-study position in the arboretum and I learned how to climb trees—transferring my skills from rock climbing to tree climbing.

As a botanic garden intern, I was able to focus on developing my skills as an arborist. I took on the project of developing a five-year risk management plan for maintaining Smith’s roughly 1,200 accessioned trees. We were working from scratch, trying to develop a policy that would make the best use of Smith’s tree risk management resources. At this time, there were no other management plans we knew of to guide us.

After graduating from Smith, I continued my arboriculture education at the University of Massachusetts Amherst. Brian Kane, the professor who served as my adviser, had helped me up my first tree at Smith three years prior. Though I’d wanted to continue my Smith risk management plan as my thesis project, Brian had another idea that would profoundly shape my career: making sure tree care companies were working safely. I spent six months, and 15,000 miles driving around, observing tree care companies to assess their compliance with the industry safety standard set forth by the American National Standards Institute, ANSI Z133. Tree care is one of the deadliest industries, and it is still generally unregulated. My research was intended to find out if credentialing correlated with higher safety compliance.

When I began applying to tree care jobs, I had my master’s in arboriculture and was an International Society of Arboriculture (ISA) Certified Arborist. But I got few callbacks, and kept getting rejections. So I decided to remove any gender references on my resume, applied to another commercial tree care company as a tree trimmer, and I got the very next job I applied for. Was that the reason I got the job or was it just a coincidence? I’ll never know. But coming from the place of privilege I had as a woman at Smith, it was eye-opening to find myself unemployed as I sought a job in a male-dominated industry.

In 2013, I started at ISA as the educational development manager. I served as the program manager for the Tree Risk Assessment Qualification (TRAQ), an instructor-led course prompted by the release of the industry’s new standard for tree risk management, ANSI A300: Part 9. I spent six years working on the program, including content updates, delivery enhancements and instructor management. Today, the program serves as the leading credential for consulting arborists assessing trees for risk. This methodology became the backbone of Smith’s own tree care plan and arboriculture standards, and has served as the blueprint for such plans at botanic gardens, cultural institutions and municipalities around the country.

Four years ago I joined The Davey Tree Expert Company, one of the world’s largest tree companies, as the employee development and safety training specialist. My main areas of focus are arborist skills training, tree risk assessment, arborist
credentialing and safety. I am also part of a team working on a company-wide initiative for JEDI (justice, equity, diversity and inclusion). In addition, I contribute to the revisions of the Z133 safety standard, serve as an assistant instructor for the Women’s Tree Climbing Workshop, and build bridges to neighboring industries such as landscapers and public gardens.

Since graduating from Smith, tree care has taken me down some unexpected paths. I’ve earned a graduate certificate in instructional design, which informs how I approach developing educational content. I co-authored Tree Climbers’ Guide (4th edition) with Sharon Lilly (who is known as the mother of arboriculture), which covers the fundamentals of professional tree climbing and serves as a study guide for those seeking to become ISA Certified Tree Worker Climber Specialists. I’ve competed internationally in tree climbing three times, most recently representing the state of Illinois at the International Tree Climbing Championship (ITCC) in Denmark. That event had more women competing than ever before, showing an increase in representation at the local level. I was featured on the cover of the ISA publication Arborist News, depicting the changing face of arboriculture. That same year, in collaboration with other women in arboriculture, I presented at the American Public Gardens Association’s national conference (an effort that, by coincidence, reconnected me with John Berryhill).

Arboriculture still has a long way to go when it comes to equity, but I see change happening. There are more women and people of color in positions of influence in the industry. Industry leaders are broaching difficult conversations about how tree care needs to evolve to make space for a changing workforce, including discussing how these changes will have an overall positive influence on the industry at large.

I couldn’t have anticipated that my career would have led me to where I am now, particularly since I thought I was going to become a tiger doctor. Arboriculture is a constantly evolving industry, as new technology, research and the voices of a more diverse workforce allow us to expand what we can offer clients and colleagues.
HOW TO WATER EVERYBODY AT THE SAME TIME WHEN NOBODY IS ON ANYBODY ELSE’S SCHEDULE

- Conservatory Curator Jimmy Grogan -
Lyman Plant House is a big glass machine for growing plants from around the world. In its 12 separate houses we vary temperatures and watering regimes to approximate the environments these plants would encounter if they were at home in the wild. The trickiest part of the magic trick that is a happy, healthy collection of over 2,200 species of plants is water.

Every plant species requires water at rates through the seasons specific to its needs, needs which have been baked into its genetic code through evolutionary time by the seasonal availability (or not) of water in the place on Earth it calls home. Because every place is different from every other, no two plants share the same relationship to water.

How, then, can we water hundreds of plants at the same time when each individual plant needs a different amount of water and has a different tolerance for wet or dry soils? We do this by fiddling with the potting medium each plant’s roots encounter in the pot or ground where it lives in Lyman by mixing potting media on a spectrum of coarse to fine—meaning fast- to slow-draining—so that all the plants are equally “dry” at each watering.

To understand this better, we need to examine the ways that true soil and greenhouse potting media differ. Soil is a complex, living entity highly specific to place and time, composed in varying proportions of four main components: broken-down bedrock in a mix of tiny pieces called sand, silt and clay; organic matter, compliments of decomposing life; water, except under extremely dry conditions; and air space, a consequence of physical components fitting loosely up against each other. Soil is dense and heavy because it is full of stones and water, but the air spaces allow roots to penetrate and breathe.

An industrial potting medium, like the potting soil that you might buy in a garden supply store, resembles soil but is actually something quite different. It’s a sterile mix of finely shredded sphagnum moss, ground pine bark, perlite (tiny white spongy stones, also known as spongocrock) and various other ingredients in small amounts, including slow-release fertilizer to replace the fertility of organic matter in soils. It is feather-light compared to a similar volume of true soil because it lacks bedrock—no sand, silt or clay. The sphagnum moss substitutes for organic matter as a water-holding constituent, though without the metabolic and nutritional benefits that decomposing life provides to growing plants. Like soil, a potting medium holds a plant in place, but it leaves us responsible for adding water and nutrients essential to plant growth.

The key concept in understanding why different soils and potting media hold different amounts of water is texture. In soil, clay, silt and sand particles are orders of magnitude different in size. If clay particles were actually the size of fine gravel, then sand particles by comparison would be the size of boulders strewn across a New England hillside; silt would be the size of the rocks in the crumbling stone walls running through our forests which used to demarcate open pasture fields. The mix of these bedrock components determines how fast water flows through soil, and, to a large degree, which plants live where.

In Palm House, by way of example, it may feel uniformly wet and warm on a winter day’s visit. But we have created drier root zone conditions for some plants by mixing potting media with coarse texture that drains faster than media with fine texture, because no two tropical forests where these plants come from are the same in terms of how wet they are and how much water their soils retain. Even if the total amount of annual rainfall is equal between forests on different continents, the rates at which it falls through the seasons will be different. Equally important, the texture and depth of forest soils will also differ, meaning that one site will be wetter than the other, on average. By mixing some potting soils “drier” than others, we are able to expand the range of plants that can be grown together in a given house under whatever temperature and watering regime prevails in that space.

To do this we add “boulders” in various quantities to our in-house potting mix (which we’ve affectionately named the Special Sauce). By adding lightweight, inert stones or stone-like materials that come in a range of standard sizes—spongerock, coarse vermiculite, charcoal, kiln-fired clay pellets and especially a gray, stone-like industrial product known generically as stalite—we create potting mixes with rapid drainage and excellent airflow for plants that don’t like wet feet. Plant performance tells us whether we’re getting it right or not, and whether a wetter or drier mix is needed at the next repotting.

As you might expect, the most extreme example of fast-draining soils can be found in Succulent House. We grow cacti in a potting medium that is approximately one-half Special Sauce and one-half stalite. The Special Sauce is wettable, but adding so much stalite ensures that the mix dries quickly, making it perfect for cacti, succulent euphorbias and other plants adapted to arid conditions.

The orchids, bromeliads and other epiphytes in Stove House present yet another potting media puzzle. Epiphytes are plants that grow attached to other plants, often with specialized roots that grow completely exposed to light, air and rain. Many tropical orchids and bromeliads—the “air plants”—find their home high in the forest canopy perched on tree branches in bright sunlight. These plants typically get soaking wet during
late-afternoon thunderstorms, but then dry out completely during the next day’s blazing hot morning and early afternoon. Their roots are adapted to adhere to tree bark, to absorb water when they get very wet, and then to conserve water during the day when their environment turns hot and dry.

In Stove House, you will see many strategies for imitating natural rooting conditions for these beautiful plants. Species that grow highest in the forest canopy, in the most exposed, driest spots, are mounted on cork slabs—cork is bark peeled from a Mediterranean oak tree called *Quercus suber*—by binding them with fishing line until their roots grow out and naturally attach to the cork mounts. Orchids that want wetter conditions, but still need their roots to dry out daily, are mounted on slabs of fern roots, which hold some water after wetting but also drain quickly. Other orchids that can tolerate even wetter conditions are in pots filled with an “orchid mix” of pine bark, coarse spongerock and charcoal; by varying the size or grade of these ingredients we can control how fast the mix dries out after watering. In fact, from one potted orchid to the next around the perimeter of Stove House you will find almost as many grades of potting media as plants, calibrated so that we can water them all, almost every day, at the same time. Which of course is our objective in all of Lyman’s houses, whether wet or dry, warm or cool: to calibrate potting media on a plant-by-plant basis to be able to water them all at the same time. We pursue this goal one repotting at a time.

**About that Special Sauce**

The sphagnum moss in standard potting media makes them difficult to re-wet once they dry out—water may roll around on the soil surface without being evenly absorbed—and, over time, these mixes tend to lose interior air space and become compacted, dense and water-logged. To solve these problems of poor water absorption and compaction, we create our own in-house potting media, which we call the Special Sauce, from six basic ingredients: an industrial container mix, a standard “potting soil,” fine perlite, fine vermiculite, ground peat and stalite.

Stalite is the Special Sauce’s magic ingredient. The small gray stones create air space in what otherwise is a quite “heavy” potting soil (because of the container mix), and air space means that water can flow through and drain easily.

Over the years we have found that some woody plants are happier if we lighten the Special Sauce by mixing 1 part Special Sauce with 1 to 3 parts industrial potting mix. For cacti and succulents and other arid lands plants we mix the Special Sauce without peat, and add more stalite to create an even faster-draining mix.

If you would like to try your hand at mixing your own potting media, we’re sharing our proprietary Special Sauce recipe.

**Special Sauce**

**Ingredients:**

- standard container-type potting medium
- fast-drying potting medium (with a high organic content)
- fine perlite
- fine vermiculite
- ground peat
- stalite (a manufactured stone-like product)

**Instructions:**

1. Mix together the standard container-type potting medium with the fast-drying potting medium at a 2 to 1 ratio (we use 2-cubic-foot and 1-cubic-foot bags, respectively). The container “soil” will feel rich and moist coming out of the bag; it is formulated to retain water for growing a summer crop of thirsty annuals in outdoor planters.

2. To this add and mix thoroughly equal quantities of fine perlite, fine vermiculite, ground peat and stalite. How much of each ingredient? We fill a 7-inch standard plastic pot four times with each, but the precise amount will depend on how the Special Sauce will be used. For cacti and succulents, omit the peat, which holds extra water.
Top: The Rock Garden, our most diverse and intensively planted space, in mid-spring. Bottom left: One of over 30 varieties of hens and chicks (Sempervivum spp.) hidden throughout the Rock Garden. Bottom right: Canada lily (Lilium canadense), a charismatic native species. Next page: The shady north end of the Rock Garden in midsummer with its distinct plants and character.
For nearly three decades, Jeff Rankin was the kind face that met both newcomers and regulars alike in the gardens outside of Lyman Plant House and Conservatory. Jeff started at the botanic garden in 1986 as a greenhouse horticulturist. Five years later he became what today is called the gardener and assistant curator, serving as steward of the diverse horticulture collections between Lyman and Burton Hall.

Jeff further developed some of our most cherished historic gardens, such as the Rock and Systematics Gardens. He also introduced new plantings and new horticultural ideas, including the native plant border around Lyman Pond and the hardy cactus garden on the south side of Fern House. Jeff’s mastery of both the horticultural needs of plants and the aesthetic elements that make for great botanical presentations shines through in the Ruth Brown Richardson Perennial Border. While this garden predates Jeff’s time by a few years, his work on it turned it into a masterpiece of design that can be appreciated from the start of the growing season to the very end.

Jamila dePeiza-Kern ’22, a former botanic garden intern, captured the joy that Jeff brought to all of us: “He’s the reason I wanted to wake up at 7 a.m. on Friday!” That may be the highest praise a college student can pay someone, and it’s a testament to Jeff’s value as a mentor and teacher at the botanic garden.

Connecting with Jeff always meant learning. Colleagues, students and faculty alike were consistently struck by his seemingly endless knowledge as a horticulturist and a naturalist. But as impressive as his plant expertise was, it was Jeff’s selflessness and humility that truly defined him. If you asked Jeff a plant question, he would not only answer it well, but leave you feeling that you had done him a favor in asking it. “If you tried to pay Jeff a compliment he could somehow deflect it with the effortless technique of a kung fu master and the full force of the gesture would come right back at you,” says Conservatory Curator Jimmy Grogan.

With Jeff’s retirement in the fall of 2022, these are all things that we will miss. We are grateful for his dedication, generosity of spirit, and (although you will never get him to admit it) his remarkable achievements. Thank you, Jeff, for the smiles and beauty that you have given to the Smith community!
It's not about what Jeff said or did while working here—because that could be a book in itself—it is more about who he is. For me that made him the best coworker ever!

Elaine Chittenden, manager of living collections

Jeff was one of the kindest, most good-natured colleagues I’ve had the pleasure of working with during my 29 years at Smith. Jeff’s calm demeanor and encouraging words, combined with his sweet smile, put everyone at ease. I’ll miss working with Jeff and relying on him as a trusted member of the BG staff. But, mostly I’ll miss seeing my friend who brightened our work environment every day!

Sheri Lyn Peabody, business operations coordinator

Jeff Rankin! So important for us, in so many ways, for so many years. He was the social and professional glue for Lyman staff during the short three and a half years I was privileged to work with him. Jeff speaks plant, he is a botanical wizard, an orchidist, a scholar. The best listener maybe ever. He is funny ha ha, funny every which way, he made us all funny. That beautiful head of silver hair! One of the great people of my life. Thank you, Jeff.

Jimmy Grogan, conservatory curator

Jeff’s accumulated knowledge of the natural world is nothing short of astonishing! But what is even more astonishing is his willingness and desire to share this knowledge with such gracious humility. I will be forever grateful for his mentorship and friendship over the past two decades.

Nathan Saxe, chief gardener

My arrival at Smith just barely preceded Jeff’s retirement unfortunately. But over the course of the short time that we did overlap, his reputation as one of the kindest, most amiable and magnetic people I would ever meet was confirmed. Not to mention his unmatched skill and deeply sought-after knowledge as a gardener and horticulturist, about which he was very humble.

Lily Carone, greenhouse horticulturist
Whenever I was having a bad day, I knew if I swung by Jeff’s garden my mood would change. Jeff’s joy is contagious and he always knew how to make me smile. Visits to him were always a high point in my day.

Benjamin Green, chief arborist

For over three decades, Jeff was often the first member of our team that visitors met. He was the perfect ambassador. Warm and kind, interested and interesting, ever willing to set down a trowel to answer a question, or share a bit about what he was doing because Jeff knew that while we work with plants, we are really in the people business. It has been an incredible honor and privilege to work with Jeff.

Tim Johnson, director

I have had the good fortune of being around many talented horticulturalists in my life and Jeff is probably foremost among them, and yet that is the second thing that comes to mind when I think of him. The first is his kindness and generosity of spirit, which affects the lives of the people he spends time with. I am a different person because of his friendship.

John Berryhill, landscape curator

There are many things I miss about Jeff now that he’s retired—mainly the pure happiness he was able to bring into my life after every encounter. Jeff would work from the moment he got in to work to the moment his shift was over and he set a great example for me.

Dan Babineau, greenhouse horticulturist

Jeff’s depth of botanical knowledge was matched only by his patience for disruptions. His constant presence in the gardens secured his spot as the first point of contact for countless visitors. He was always free with his time, pausing to answer questions or share about the gardens. This generous spirit extended to his colleagues as well. I’m deeply grateful that our time overlapped.

Sarah Loomis, manager of education
Art in Bloom

- Greenhouse Horticulturist Lily Carone -
In line with our mission to “facilitate collaboration” and encourage and train students to be “informed and impactful change agents,” the botanic garden was thrilled to implement a new collaborative approach to the 2023 Spring Bulb Show. Beyond its familiarly spectacular nature, this year’s show boasted the visionary imagination and interpretation of three of Smith’s studio art majors: Wells Wells ’23, Anne (Annie) Uesugi ’23 and Benjamin (Benny) Kleinman-Eddy ’23.

In addition to the work that goes into growing the bulbs—this year a whopping 8,582!—the production also requires a certain amount of creative and cerebral labor. Historically, the show has been designed around a central artistic concept that extends beyond the springtime tableau to offer a narrative contextualized in conversation with the mass of flowering bulbs, elevating and deepening the experience for our visitors. Some may remember the evocative Monet motif from 2015, or “The Evil Garden of Edward Gorey” from 2016. Year after year, these inspired displays have offered fresh and dynamic perspectives to the show.

This year, in the spirit of reinvention, innovation and putting students at the center of our work, we enlisted students to create an artistic installation for the bulb show.

The idea to collaborate this way originated during my time at the Mount Holyoke College Botanic Garden beginning in 2018, when I invited students to produce a sculptural component for the spring bulb show. Not only did that project connect students with the botanic garden staff in a new and profound way, it also provided them with real-world experience, requiring them to work on a tight schedule while responding to site-specific demands and challenges inherent in commissioned work. Most significantly, the collaboration gave the students agency over the direction of this beloved tradition while publicly celebrating their interests and abilities.

I was eager to implement this approach at Smith, expecting that it would be a successful endeavor given the culture of creativity and cooperation here. Early in the fall of 2022, I began collaborating with Lynne Yamamoto, Jessie Wells Post Professor of Art, to commission original artwork from three senior studio art majors. After being selected and accepting the commission, Wells, Annie and Benny were provided with a prompt to initiate their interpretive process: “Given that all living things are impacted by the variable balance between light and dark, can you conceptualize a work that deals with light and darkness in a broad sense?”

In considering this question, and after conducting some research into the various bulb species that would be on display and their cultural and botanical histories, the artists focused on themes such as mythology, water and reflection, and the relationship between the concepts of above and below. The contemplation and artistic synthesis of these ideas led to a collaborative work titled *Between Bloom and Breadth*.

As hoped, the relationships that have grown out of this collaboration have been significant. The project engaged the students, and by extension their peers, more deeply with the horticultural work that we do, and it enriched and elevated not only the bulb show but the experience of all involved. After Wells, Annie and Benny presented their first concept proposal, Director Tim Johnson remarked enthusiastically, “These are students who we might never have met or interacted with otherwise.”

It has been incredibly rewarding to partake in this expansion of our connections across the community and to support our students’ creative pursuits. I am immensely grateful to Lynne, Wells, Annie and Benny for taking on this challenge and for sharing their time and creativity with us.
Benny Kleinman-Eddy is a fiber and textile artist whose work explores human, plant and animal bodies using whimsy, humor and softness. His recent work plays with abstract shapes and transforms them into something that resembles a living being. Benny lives in Northampton with his fiancé and their silly little dog.

Between

Materials: fabric, cyanotype dye, wire, embroidery floss, jump rings, fishing line


Between is a collaboration between plants, sun, water, fish, birds, my fiancé and myself. I used cyanotype, a process which teaches fabric to become light sensitive, such that where the sun rays touch the surface it becomes bright blue, and where leaves shield against the sun, the fabric remains white, creating a print that resembles an inverted shadow. These imprints of something once alive became beings who swim easily between water and sky, and play among the flowers. The creatures I created converse imperceptibly with the bulbs, sharing secret formulas to turn sunlight into breath. If you listen carefully, you might be able to hear them breathing.
**Bloom**

*Materials: steel, 4,000 feet of yarn, lights, water*

*Bloom* is a meditation on the time before flowering. The process of wrapping the yarn was long and monotonous; each individual strand represents a circle walked. As the piece burgeoned alongside young plants, each strand akin to a day of quiet, underground growth, the artwork and the bulb shoots reflected one another in mutual anticipation of spring—of bloom. When faced with difficult conditions, the bulb is a place of refuge. Storing food, keeping the plant alive—lying dormant until it is ready to bloom again. Through the pool, you can peek underground at this wonderful waiting period. Take time here with the bulb to wait and listen. It’s telling you that the time you spend healing—waiting for the right conditions to bloom—is worthwhile.

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**Wells Wells ’23**

Wells welds. Raised in Rochester, New York, Wells has worked with metal sculptor John Grieco for several years. Wells has since brought a wealth of metalworking skills to their artistic practice. Employing play and joy as central tenets of the making process, Wells’ artwork investigates material relationships. They work with steel and textiles to create sculptures and installations, exploring processes of healing using the natural world as a guide.
Annie Uesugi '23

Annie Uesugi is an installation artist who is interested in the experimental and weird. Born in Wahiawa, Hawaii, their art mainly focuses on the physical and the bodily, pushing and pulling the limits of desire and the grotesque. With a particular fondness for craft, they are a serial hobbyist, and aim to learn as tactiley as one possibly can.

Breadth

Materials: yarn, twine, pearls, fishing line

Historically, humans have always been fascinated with the fleeting beauty of flowers—the explosion of color, followed by the rapid decay of petals into sweet fruit. Tulips themselves have a reputation for being traded and sold; businessmen circulating these ornate blooms for immense profit. One of the most famous accounts of the mortal beauty of bulbs comes from the myth of poor Narcissus. Falling in love with his own reflection, realizing his inability to truly grasp his own beauty, to hold onto it tightly, caused his body to melt away, leaving behind only a single flower. This bulb show, held for many decades, is an extravagant celebration of that very fleetingness; it draws crowds out from miles to catch a glimpse of this magnificent show. And how lucky we are, to gaze into this beauty and to become like Narcissus, if only for a moment.
The Friends of the Botanic Garden Leadership Council

A New Charter, a New Chair and a Dedicated Mission

- Communications Coordinator Julie Thomson -

The Botanic Garden of Smith College is thrilled to announce that Betsy Anderson ’04 will become chair of the Friends of the Botanic Garden Leadership Council on July 1, 2023. Anderson is a landscape architect for the National Park Service where she facilitates both landscape-scale and site-based planning and design projects for national parks. With her background in gardens, and her steadfast support of the botanic garden as an irreplaceable resource for Smithies, we’re grateful to have her lead the efforts of our Friends group.

“For me, one of the reasons that the botanic garden is such a treasure is how welcoming it is to everyone,” Anderson says. “When I was a student, I was a French major. But I always had a home in the garden. The ability to connect people to plants from all disciplines is so special.”
While the Friends of the Botanic Garden Leadership Council was officially established in 2022, the roots of the group date back to 1992. That year, two dedicated alums, Paula Deitz Morgan ’59 and Susan Komroff Cohen ’62, started a membership program, the Friends of the Botanic Garden of Smith College. Their intention was to establish a strong base of financial support for the botanic garden, to keep Smithies involved and informed about the work happening at the botanic garden, and to ensure that the botanic garden prospered financially and intellectually.

Along with the Friends of the Botanic Garden, a committee of steadfast alum supporters was established. This group, originally called the Botanic Garden Visiting Committee and later known as the Advisory Committee for the Friends of the Botanic Garden, championed important projects, including endowing the Kew Internship at England’s Royal Botanic Gardens through the Muriel Kohn Pokross ’34 Travel/Internship Fund and securing funding to establish the college’s landscape studies program.

Over the past four years, under the leadership of Sue Ann Levin Schiff ’69, the advisory committee redefined itself, establishing a more formal operational and leadership structure and strengthening the connection with the college’s alumnae relations and development offices. Among its goals are creating opportunities for alums to experience the botanic garden both remotely and when on campus, growing membership in the Friends of the Botanic Garden, and increasing the botanic garden’s capacity to raise needed funds.

The process culminated in a governing charter adopted on April 15, 2022, and a new name for the group: the Friends of the Botanic Garden of Smith College Leadership Council, which began its first full year of operation on July 1, 2022.

Schiff, now retired, whose wide-ranging career includes work as a lawyer, corporate executive, higher education administrator and nonprofit leader, most recently as executive director of San Francisco Botanical Garden, joined the Friends Advisory Committee in 2014. In 2022, she became the inaugural chair of the Leadership Council.

“Sue Ann Schiff led the Friends Leadership Council with strength and vision over the course of the pandemic and has built the foundation for its next phase of growth. She has been a generous thought partner, an indispensable wealth of knowledge, and a valued mentor to me,” says Tim Johnson, director of the botanic garden.

“This is a team effort. We are inspired and guided by Tim’s vision and plans and how they are enriching the experience of students, the entire college community, and the botanic world beyond,” says Schiff. “Our charter provides a framework for creativity and initiative as we work with Tim, his staff, and alumnae relations and development to support the botanic garden and the college. I am thrilled that Betsy Anderson, who has led our planning for alum engagement, will now bring her care, insight and experience to her role as the Friends Leadership Council’s next chair.”

In the coming years, the council will play a critical role in helping the college realize its vision for the Landscape Master Plan, explore how Lyman Plant House and Conservatory can be updated to meet the needs of the college today, and bring exciting new botanical exhibits to the region.

Anderson looks forward to assuming the role of chair. “I have learned so much from the diversity and breadth of perspectives and talent in our group. Even though we’ve all done different things with our lives and in our careers, we’re coming together with our shared love of the botanic garden, which is the place where many of us first came to love plants. Being able to collaborate with such inspiring colleagues is an honor. Smith alums are incredible people to be around.”

Two Leadership Council members will complete their terms this June. Susan Goodall ’83 joined in 2014, led the subcommittee that became the Leadership Council’s governance committee, and served as the committee’s inaugural chair. Shirley Mah Kooyman ’73 also joined in 2014 and served on the Leadership Council’s alum engagement committee. Four other alums, who completed their terms earlier, were part of the team that planned the restructuring—Diana Xochitl Munn ’95, Connie Parks ’83, Alex Julius ’09 and Rachel Blake ’09. “It’s been an honor to work with all of these individuals,” says Johnson. “Their insights as alums and professionals have been instrumental in launching the Leadership Council, and in reminding us that our strength is rooted in connecting current Smithies, alums and our supporters to plants, to the environment and to each other.”
Summer has long been synonymous with road trips, and we can't imagine that this coming summer will be any different. There are many reasons to pack up the car and get on the open road—family visits, beach destinations, the thrill of adventure, to name just a few. We’d like to offer one more: discovering new botanic gardens and all the plant wonders they have to offer.

One of your benefits as a Friend of the Botanic Garden of Smith College is free or reduced entry at over 300 gardens nationwide through the American Horticultural Society’s Reciprocal Admissions Program. It’s like a passport to public gardens across North America. A passport we encourage you to fill with stamps.
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BY COMMUNICATIONS COORDINATOR JULIE THOMSON
Individual memberships get one entry to participating gardens, and family memberships will get at least two. Be sure to check with individual gardens for details. All members have access to this benefit, no matter where in the country you’re located, so be sure to check your state for participating gardens at the American Horticultural Society website. But if you’re located near us in Western Massachusetts, we’ve highlighted some of our favorite New England botanic gardens that are free to you and well worth taking a day or overnight trip to discover.

Almost all of these gardens would make for a lovely day-trip destination from Western Massachusetts. If you’re looking for a grander adventure, we’ve mapped out three road-trip journeys: the Northern New England Tour which hits the coast of Maine, the Lower New England Tour which dips into Connecticut, and the Eastern Mass Tour because there are so many public gardens worth visiting in this part of the state. Each of these road trips offers at least three gardens to explore, and guarantees loads of botanical beauty to fill your summer.
**The Northern New England Tour**

**Bedrock Gardens**  
**Lee, New Hampshire**

On a 30-acre former dairy farm, the creators Jill Nooney and Bob Munger designed and constructed a 20-acre garden notable for the variety of plants collected over the past 30 years. Original garden design features—including a fernery, the Dark Woods, the Wiggle Waggle water channel and the large Torii pergola in the middle of the 400-foot Allée—as well as many varied sculptures are found throughout the gardens. The main path, designed as a journey, winds its way through all these features.

*Regular admission: $15 for adults  
Admission with reciprocal entry: Free*

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**Justin Morrill State Historic Site Gardens**  
**Stratford, Vermont**

The grounds at the Justin Morrill Homestead are defined by circuitous serpentine walkways, arabesque beds planted with colorful annuals, and historic specimen trees including a *Magnolia kobus* and the oldest Norway spruce in Vermont. The homestead is open for guided tours Thursday-Sunday, from 10 a.m. to 5 p.m., May 26 through October 8. The grounds and gardens are always open to the public free of charge.

*Regular admission: $7 for adults  
Admission with reciprocal entry: Free*

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**Coastal Maine Botanical Gardens**  
**Boothbay, Maine**

Yes, it is a bit of a drive to make your way to Coastal Maine Botanical Gardens from Western Massachusetts, but we can’t think of a better garden to plan an overnight trip around. Located on over 300 acres along the Midcoast, this garden is a true Maine experience. Some of the highlights you’ll see on your visit are the Vayo Meditation Garden, a dahlia garden, and the Native Butterfly House—a 2,160-square-foot Gothic-style hoop house featuring a planting scheme dedicated to supporting the life cycles of moths and butterflies native to New England.

*Regular admission: $24 for adults  
Admission with reciprocal entry: Free*

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Coastal Maine Botanical Gardens is a fine example of a modern American botanical garden, celebrating and accentuating the natural beauty of this rugged environment. Worth an overnight trip to explore local shops and restaurants as well.
The Lower New England Tour

**Berkshire Botanical Garden**  
**Stockbridge, Massachusetts**  
Berkshire Botanical Garden encompasses 24 acres of gardens. The vast display of plants is a testament to the garden’s long history, having been established in 1934. Some of the highlights you’ll see on your visit are the contemplative Pond Garden, the historic 1937 Herb Garden, the Foster Rock Garden, and native plant gardens. Overall, the garden features over 3,000 species and varieties of herbaceous and woody plants.  
*Regular admission: $18 for adults*  
*Admission with reciprocal entry: Free*

**The Mount, Edith Wharton’s Home**  
**Lenox, Massachusetts**  
Edith Wharton’s estate at The Mount showcases traditional French, Italian and English design—evident both in the architecture of the home and the gardens. Here you’ll find sunken Italian gardens, formal French flower gardens, and even a rock garden. If you’re in the area, you’ll definitely want to add this stop to your itinerary and take a guided tour and/or the self-guided audio tour for a richer experience.  
*Regular admission: $20 for adults*  
*Admission with reciprocal entry: Free*

**Connecticut College Arboretum**  
**New London, Connecticut**  
The Connecticut College campus is home to a stunning arboretum which consists of 750 acres of plant collections. Some of these collections include the Native Plant Collection, the Caroline Black Garden, and the Campus Landscape and Greenhouse (all have interactive online maps to make exploring them even more engaging). There are also natural areas to explore like Mamacoke Island. Like the Botanic Garden of Smith College, the Connecticut College Arboretum is free and open to the public, and to members of the Reciprocal Admissions Program, year round.

Berkshire Botanical Garden is a staff favorite and easily couples with a visit to nearby The Mount for a day of gardens and culture. Visit the gift shop for a wide range of culinary products produced onsite by their dedicated volunteer Herb Associates.
New England Botanic Garden at Tower Hill
Boylston, Massachusetts

New England Botanic Garden at Tower Hill spans 171 acres. This expansive garden has something for everyone, such as its Garden of Inspiration, which is a formal garden with influences from historic French garden design, Pliny’s Allée, made up of a regal row of oak trees underplanted with lovely fothergilla, sweetspire and witch hazel, and the Wildlife Refuge Pond, which has a lovely viewing pavilion.

Regular admission: $19 for adults
Admission with reciprocal entry: Free

Garden in the Woods
Framingham, Massachusetts

For an immersive native plant experience, nothing beats a visit to Garden in the Woods (headquarters of Native Plant Trust). On these 45 acres, you’ll come across hundreds of plant species native to New England (as well as historical species from across North America). Throughout the both highly cultivated and minimally managed environments you’ll also come across a brook, a pond and lovely wetlands.

Regular admission: $16 for adults
Admission with reciprocal entry: Free

Arnold Arboretum of Harvard University
Boston, Massachusetts

The Arnold Arboretum is a full-day experience. This 281-acre preserve of trees and woody plants in the heart of Boston has been an aesthetic and educational resource since it was founded in 1872. Like our garden, the Arnold was designed by Frederick Law Olmsted and is committed to the Olmstedian principle that everyone is entitled to open space. A research museum set in a public park, its gates are open to everyone, every day, free of charge. Like the Botanic Garden of Smith College, the Arnold Arboretum is free and open to the public, and to members of the Reciprocal Admissions Program, year round.

Mary May Binney Wakefield Arboretum
Milton, Massachusetts

The Mary May Binney Wakefield Arboretum spans over 22 acres in Eastern Massachusetts and features formal gardens, orchards, woodlands and wetlands. We recommend making the trip during the month of June, when over 300 kousa dogwood trees are in flower. They call this time of year the Dogwood Days. We call it the best reason to get on the road.

Regular admission: $5 suggested donation for adults
Admission with reciprocal entry: Free
Gaby Immerman: What’s your story? Were you a plant nerd from the start?

Jess Gersony: I was born in Rutland, Vermont, and grew up all over the Northeast, including Vermont, Connecticut and Pennsylvania. I’ve always loved the forest, specifically! I remember being a kid and driving to Vermont for the holidays. When I would see the Green Mountains, I would feel at home.

What was your academic journey? Did you consider other scenarios for ‘when I grow up’ rather than the one that’s happening?

I’ve always been pulled between arts and sciences. I went to an arts high school in Philly, and from there I was torn between trying to go to a dance conservatory or going to college for science. Then I was in a professional tap dance company in New York City, and wasn’t sure if leaving to do a Ph.D. in plant biology in Boston would be the right thing for me. And then when I finished my Ph.D., I wasn’t sure if I should apply for master of fine arts programs in poetry or for faculty jobs in plant biology! I always leaned toward science because I felt that it can be very hard to “do” science outside of an institutional context, but it is possible to pursue art outside of institutions. I am very happy with my decisions so far because they brought me to Smith!

How did you become interested in your research field and what are the big questions you’re asking? Tell us about your lab!

I started my journey as a plant biologist working in the Arctic tundra in Alaska. I worked there for three summers, first as an undergraduate and then as a research technician. I was working on a team investigating how the tundra plants are responding to climate change. I fell in love with fieldwork. It was a moment where I felt that I had really found my people. I couldn’t believe you could get paid for doing this! After that experience, I knew I wanted to keep going on the scientific path.

In Alaska, I was working primarily on the ecological level, but I always wanted to know the underlying mechanisms of what was going on. Why were the shrubs taking over the grassland? What mechanisms did they have that allowed them to capitalize...
on the changing environment? I wanted to learn more about physiology (or the inner workings of plants), but with an eye on ecological problems, such as how plants are responding to climate change.

For my dissertation, I studied how trees respond to drought on the physiological level. Over the past few years drought has become more and more prevalent in the Northeast, and it’s predicted to continue. Specifically, I looked at how the phloem (the tubes in the plant that transport the sugars made from photosynthesis) responds to water stress. I was investigating if and when and how the phloem could lose functioning during a drought. Luckily (for the trees), we found that the phloem is extremely robust and doesn’t lose functioning easily.

My current work is investigating the variation of phloem functioning across and between species. My research is also looking at other physiological limitations to tree functioning. I am collaborating with the University of New Hampshire and Alabama A&M University to look at how different trees tolerate drought and cold stress. The goal of this work is to provide additional information to forest managers regarding the climate resiliency of different species. I’m also collaborating with Yoni Glogower, conservation and sustainability director for Holyoke, Massachusetts, and Professor Sage Franetovich of Holyoke Community College on supporting the city’s Urban Forest Equity Plan.

When I was a postdoc at UNH, I realized that one of my goals for my lab was to have more community engagement with an environmental justice leaning. I want to use my position to support and co-produce projects with communities and people that are doing amazing work toward social justice and equity. I went to a public arts high school in Philadelphia that was very diverse, and since then I’ve found that I can’t turn a blind eye to social injustices, and don’t feel fulfilled unless I am trying to be part of the solution. So that is definitely part of the motivation of trying to shift my work in this direction.

My lab and teaching also involve art. I have two art practices, tap dancing and poetry, that I have pursued for a long time. It brings me personal joy to integrate these into my scientific realms. I am also passionate about bringing art into the sciences. It has the capacity to build community and a positive learning environment; it increases the accessibility of science to students historically excluded because they are able to bring their own artistic practices into STEM spaces; it opens up new ways of knowing the world around us, inspired by Robin Wall Kimmerer [author of Braiding Sweetgrass]; and it brings me personal joy!

Integrating all of these interests is how I came up with my lab name (and goals!): the PLACE lab, which stands for PLant physiology, Arts and Community Engagement.

From the vast experience of one semester, how’s Smith going so far?

I’ve been blown away by the students. In my very first class here, they just went above and beyond any expectations I had. Their art projects were so creative, thoughtful and beautifully done. And the corresponding write-ups explaining how the work relates to what we’ve been learning literally made me cry multiple times.

I’ve felt very supported by the biology department. It has given me a manageable teaching load and minimized my department responsibilities, allowing me the time I needed to work on developing my class material and creating a vision for what I want my lab to look like.

I also have deeply treasured my interactions with everyone at Lyman Plant House and the botanic garden. I feel very welcomed and supported!

How does your personal identity inform your teaching? Have you felt supported as your full self so far at Smith?

It has been so cool to be in such inclusive spaces (for example, classes!) where the students are so open-minded and caring. As a queer woman, I definitely have not felt other-ed at all since being at Smith. That has been a super-positive experience, and not something to take for granted in STEM spaces. Honestly, my experience joining the Smith community has all been quite a dream.

Do you see yourself as taking your place in a century-old lineage of botany/horticulture education of women at Smith? What expresses that to you thus far? For me, the trees tell this story as much as anything!

Assistant Professor of Anthropology Colin Hoag shared with me the lab exercises Sylvia Plath did in her botany courses all those decades ago, and it was wild how similar they are to the ones we do now! Different technology of course, but the same questions: How can we quantify photosynthesis? How can we understand sugar storage in plants? Seeing those documents really blew my mind and made me feel I was part of over a hundred years of people teaching about how plants work. And I’m really honored, humbled and excited to continue in this lineage of building bridges and relationships between Smith students and plants!
John Burk excelled as a teacher-scholar at Smith College for nearly 50 years. Although he “retired” in 2009, he continued his scholarly pursuits at Smith until the COVID shutdown. In fact, he co-authored a 2020 article in the prestigious journal *Proceedings of the National Academy of Sciences*. His office was near mine, and I greatly enjoyed our frequent conversations. He showed interdisciplinary expertise and interests in his teaching and scholarship, spanning plant systematics, ecology, biogeography, and conservation, and played a pivotal role in establishing interdisciplinary programs at Smith and the Five Colleges.

John was passionate about all things plant-related, and generous with his time. When I first came to Smith College, I wanted to learn about nearby habitats and plant communities, so I joined John’s plant ecology class field trips. John was a very fast walker, and students sometimes had to jog to keep up! He was also an avid bird-watcher, offering annual “bird walks” for the Department of Biological Sciences.

John’s courses and research have engaged thousands of students directly—and many, many more indirectly as those students established themselves in their own careers. In fact, one of my former students (an Ada Comstock Scholar) first applied to Smith College on the urging of one of John’s former grad students who was then teaching at Holyoke Community College.

When John passed, a student of mine posted his obituary on social media, prompting numerous spontaneous comments about his legacy. Here, I share remarks from some of his former students—a testimony to the many lives John enriched through his long career of teaching and mentoring.

“My plant ecology class with John Burk in fall of 1988 was the turning point for me where I knew there was a place for me in biology.”

“He was amazing! Professor Burk agreed to be one of my advisers on my ‘design your own major’ in 1995—which was environmental science and policy. He championed my ideas and loved bridging the disciplines. He leaves such a tremendous legacy.”

“He was my senior thesis adviser. I learned so much from him. He helped me get my first internship, spending the summer counting trees and birds. He ignited passions that have continued my whole life. Those Plant Systematics romps in the woods were epic.”

“Professor Burk inspired me to become a naturalist, ecologist and teacher. When I left for graduate school, he gave me a Western bird book that I still treasure. He was an amazing professor and a kind human.”
notes from the
BOTANIC GARDEN

Learning and Engagement Plan Guides
Educational Approach and Focus for the Botanic Garden
Manager of Education Sarah Loomis

The Botanic Garden of Smith College announces the publication of its very first Learning and Engagement Plan (LEP). The LEP is anchored in the botanic garden’s larger strategic plan, *125 Years in the Making: 2019-2024 Strategic Plan*, as well as within the mission of Smith College, which links the power of the liberal arts to excellence in research and scholarship, thereby developing engaged global citizens and leaders to address society’s challenges.

The LEP defines our vision for teaching and learning at the botanic garden, shares the approaches and strategies we will use to realize that vision, and outlines topics—Science, Culture and Place—and accompanying themes that our educational programming and interpretation will focus on in years to come.

**Science**—Teaching the building blocks of plant science is core to our educational identity and history. By anchoring our educational opportunities in the sciences, we can help students more fully explore, communicate about and appreciate the botanical world. By studying basic biology and ecology, stakeholders begin to understand the key role plants play in sustaining all life, and can begin to proactively apply these concepts in support of real-world problem solving.

**Culture**—Throughout history, humans have used plants to sustain themselves physically and spiritually. This essential relationship with plants is central to our success as a species and our collective identity as people. Plants have impacted the development of cultures, just as humans have impacted plants. The immense and significant value of plants to human life and their value to human culture has been the motivating factor behind both inspired progress and terrible violence and conquest. Our collection presents an important opportunity to explore the complex histories and multifaceted stories at the intersection of people and plants.

**Place**—The Botanic Garden of Smith College is rooted in the liberal arts and is a foundation of the Smith experience. Founded on the premise that the scientific study of plants and their ornamental value could complement one another on a college campus, the Smith landscape and botanical holdings have inspired countless students, faculty and visitors. Today, we work with courses across the curriculum to make connections between botanical study and the liberal arts, and advocate for botanic garden’s use and enhancement as a learning resource. As stewards of the Smith landscape, we bear a responsibility to work with stakeholders to ensure it is a reflection of current values. We play a role in sharing its history and stewarding it ethically and intentionally from both an ecological and a culturally inclusive perspective.

The LEP is also a reflection of the botanic garden’s mission to foster environmental and social justice through teaching and learning about plants, people and place. The vision, approaches, strategies and topics enumerated in the LEP have been carefully crafted to best serve this mission. The stories we choose to tell, the topics we explore, and the ways we prepare to welcome and celebrate learners from diverse
backgrounds and all experiences matter. By aligning our educational initiatives with our mission we will better help learners expand the ways they understand the botanical world and their place in it.

Conservation Work with Mountain Magnolia Continues
Landscape Curator John Berryhill

This past year has given us exciting opportunities to build on our conservation efforts with native oaks and magnolias, particularly with mountain magnolia (Magnolia fraseri). In the last issue of Leaflet, we published an update of our ongoing involvement in this work. Today we’re thrilled to share that the work has led to exciting next steps, with Smith student involvement in collaborations with some of the biggest names in native plant conservation.

In the summer of 2022, our conservation interns, Krystal Bagnaschi ’22 and Katie Rahaim AC ’23J, and I traveled to the heart of mountain magnolia’s native range with Jesse Bellemare, associate professor of biological sciences, to expand research into how this species is being impacted by climate change. Our survey work confirmed that the range of the species is indeed contracting rapidly. While there, the team gathered tree ring data to further study growth rates at different elevations and also set up weather data recording devices for next year’s conservation interns to analyze.

The most exciting part of this work was bringing back over 2,000 seeds for germination research, which will form the beginnings of conservation collections at both Smith College and our partner institutions through the Global Conservation Consortium for Magnolia.

A highlight of the summer 2022 research trip was incorporating the findings into the Conservation Gap Analysis for Magnolias of the US and Canada, and we congratulate Rahaim for her work with faculty and staff on that publication. We also congratulate both Bagnaschi and Rahaim on their next steps in the world of plant conservation. Bagnaschi has been hired as an intern in forest ecology by the Smithsonian’s National Zoo and Conservation Biology Institute. Rahaim will be working with Jessamine Finch ’12, a research botanist with the Native Plant Trust, as the Petcavage Seed Conservation Intern.

The Bell Jars: Lyman Conservatory and Sylvia Plath’s Botanical Imagination, An Exhibit Coming to Lyman in the Fall of 2023
Department of Anthropology Assistant Professor Colin Hoag

Sylvia Plath graduated from Smith College in 1955 and went on to become one of the 20th century’s most important writers, celebrated for her poetry and her novel, The Bell Jar. Botanical images and tropes run throughout her work, partly owing to the fact that Plath took a year-long General Botany course at Smith’s Lyman Conservatory as a first-year student.

The bell jar, Plath’s famous metaphor for the oppressive...
conditions of life as a woman in the United States of the 1950s, is one example. Bell jars are a botanical technology used in horticulture and plant physiology, and Plath employed them during her lab experiments on photosynthesis. These same bell jars are still in use at Lyman.

During the 2023–24 academic year, the Botanic Garden of Smith College will curate an exhibit, symposium and other programming to highlight this history—and more broadly to examine the power of interspecies encounters between people and plants. Using archival materials and Plath’s literary work as a guide, *The Bell Jars: Lyman Conservatory and Sylvia Plath’s Botanical Imagination* will invite visitors to inhabit Lyman as Plath once did, with reconstructed historical photographs from Lyman’s past; literary analysis of botanical themes in Plath’s work; interactive drawing stations based on her lab exercises; audio recordings of Plath’s poetry readings; lectures and workshops by botanists and Plath scholars; and more. Cross-pollinating the humanities and natural sciences, we hope to shed light on Plath’s botanical imagination and Lyman’s role in cultivating it.

**New Faces in New Places**  
*Landscape Curator John Berryhill*

With Jeff Rankin’s retirement (see page 22), there will be a new face on our team this year, as well as a familiar face in a new place. David Dion, who has served as our gardener and assistant arborist at Capen Garden, has been appointed gardener and assistant curator. You will often find him in the gardens just outside Lyman. We congratulate him on his new path at the botanic garden and are glad to have him as the first face so many guests to our gardens will see.

We are also welcoming Andrew Rebelo to our botanic garden team as Capen gardener and assistant arborist (the position formerly held by Dion). You’ll often find him in Capen Garden or working among the arboretum trees with Ben Green, our chief arborist. Rebelo has collaborated with us many times as a member of the landscaping team in Smith’s Grounds Department, where he proved himself to be a passionate and talented horticulturist.

Rebelo’s love of trees and gardens started early and became the main driver of his educational pursuits. At the suggestion of a high school mentor he pursued a bachelor’s degree in ornamental horticulture at UMass Amherst with a minor in education. His path to Smith was a winding one, through various horticultural experiences—most notably, operating a small farm and edible plant nursery in Hadley, Massachusetts, where he still enjoys growing vegetables and ornamental plants as well as offering the occasional training workshop to fellow gardeners.
THE BOTANIC GARDEN OF SMITH COLLEGE

Dan Babineau
Greenhouse Horticulturist

John Berryhill
Landscape Curator

Lily Carone
Greenhouse Horticulturist

Elaine Chittenden
Manager of Living Collections

David Dion
Gardener and Assistant Curator

Benjamin Green
Chief Arborist

Jimmy Grogan
Conservatory Curator

Gaby Immerman
Experiential Learning Specialist

Tim Johnson
Director

Sarah Loomis
Manager of Education

Sheri Lyn Peabody ’87
Business Operations Coordinator

Andrew Rebelo
Gardener and Assistant Arborist

Nathan Saxe
Chief Gardener

Julie Thomson
Communications Coordinator

Friends of the Botanic Garden of Smith College Leadership Council
July 1, 2022 - June 30, 2023

Betsy Anderson ’04 (Chair, Alum Engagement Committee)
Syretha Brooks ’08
Susan Goodall ’83 (Chair, Governance Committee)
Mary Ellen Hannibal ’81
Shirley Mah Kooyma ’73
Elizabeth McCarthy ’06
Rachel Blake ’09 (Secretary)
Kathy Rogers ’70
Sue Ann Levin Schiff ’69 (Chair, Friends Leadership Council)

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Paula Deitz Morgan ’59
Shavaun Towers ’71

Ex Officio Members
Betsy Carpenter ’93
Associate Vice President for Development
Tim Johnson
Director - Botanic Garden

Blake: Ending January 2023
Rodgers: Beginning December 2022