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To inspire understanding, appreciation and conservation of plants and advance a sustainable relationship between people and nature.

Geranium maculatum
wild geranium
I couldn’t have said it any better myself

BY DAMON WAITT, NCBG DIRECTOR

Dear Members and Friends,

Like everyone else on planet Earth, I am captivated by the debut of ChatGPT, the artificial intelligence tool capable of generating human-like text. Since a big part of my job is using my human brain to generate human text (for example, crafting a creative and interesting Director’s letter for Conservation Gardener magazine), I began to worry if this new technology was going to render me non-essential, obsolete, a relic. So, I challenged ChatGPT to answer the most fundamental question of all, “Why is Conservation Gardening important?” Here is what it had to say...

Conservation gardening is important for several reasons:

- **Biodiversity:** Conservation gardening promotes the use of native plants and sustainable gardening practices, which can help to preserve biodiversity and provide habitat for local wildlife. By planting a diverse range of plant species and reducing the use of harmful chemicals, conservation gardeners can create healthy ecosystems that support a wide range of animal and plant species.

- **Climate Change Mitigation:** Conservation gardening can help to mitigate the effects of climate change by reducing carbon emissions and promoting carbon sequestration. Native plants absorb carbon dioxide from the atmosphere and store it in the soil, helping to reduce greenhouse gas emissions. In addition, conservation gardening practices such as composting and reducing water usage can help to reduce carbon emissions.

- **Water Conservation:** Conservation gardening promotes the use of drought-tolerant native plants and other sustainable gardening practices, which can help to conserve water resources. By reducing water usage, conservation gardeners can help to reduce the strain on local water supplies and promote water conservation.

- **Soil Health:** Conservation gardening practices such as composting, reducing tillage, and planting cover crops can help to improve soil health and reduce soil erosion. Healthy soil is essential for plant growth and provides important habitat for soil microorganisms, which play a key role in nutrient cycling and soil health.

- **Health Benefits:** Conservation gardening can have important health benefits, both for individuals and for communities. Studies have shown that spending time in green spaces and engaging in gardening activities can improve mental health and physical well-being. In addition, conservation gardening can help to promote social connections and community engagement.

Overall, conservation gardening is an important tool for promoting sustainable and environmentally friendly gardening practices. By planting native species, reducing the use of harmful chemicals, and promoting healthy ecosystems, conservation gardeners can help to promote biodiversity, reduce the effects of climate change, conserve water resources, and promote soil health.

“Uh oh! ChatGPT, find me a job working with my hands.”

Sincerely Yours,

Damon Waitt
Save the World with Citizen Science

By Jennifer Peterson, Managing Editor

As a member of the North Carolina Botanical Garden Foundation, you likely understand the importance of conservation. I imagine many of you have native plants in your landscape, and try to make your space a welcoming space for pollinators, birds, and other wildlife. You are definitely doing your part. But, is there more we can do?

The world is facing many big issues, including climate change and species extinction. Scientists are working to find solutions, but that work is obviously difficult. The sheer amount of data needed is mind-boggling. Did you know we, average people, are able to contribute to scientific research?

This issue of Conservation Gardener is focused on pitching in via citizen science.

I am excited Chris Goforth, local citizen science expert, has contributed an article explaining the importance of this work and a variety of projects to get involved in (p. 6). We follow this up with a list of citizen science projects the Garden is actively participating in (p. 9).

The UNC Herbarium has a long history working with citizen scientists, and Carol Ann McCormick describes the work of several important contributors (p. 10).

And, since this is Conservation Gardener, of course we have articles useful for the home gardener. Learn about the North Carolina Wildflower of the Year (p. 5), colorful plants for your shade garden (p. 13), and how to grow native plants from seed (p. 14).

We are also including information about both an invasive plant (p. 15) and an imperiled plant (p. 18), features we are planning to repeat in every issue.

As spring emerges throughout our region, take time to appreciate the native plants, pollinators, and birds close to you. And, if you are able, consider participating in citizen science. Your contributions could be vital to finding answers for the world’s big problems!

Note: We have used the term “citizen science” throughout this magazine. There is debate about using this term versus “community science.” As with many other organizations, our definition of citizen includes all people, regardless of where they are from. If you’d like to know more about this, I recommend visiting go.unc.edu/3456. I’m interested in your thoughts about this, too. Let me know what you think at jennifer.peterson@unc.edu.
Ten years ago, we expanded the scope of our Wildflower of the Year program to include a showy native shrub. In 2023, we are doing it again to celebrate buttonbush (*Cephalanthus occidentalis*), a large deciduous shrub that occurs throughout central and eastern North America in swamps, depressional wetlands, and along the banks of streams, rivers, and lakes.

In mid to late summer, buttonbush explodes with small, fragrant white flowers with long protruding styles that are densely arranged in spherical clusters, resembling little pincushions or fireworks. Buttonbush is truly a pollinator magnet as these flowers are an abundant and preferred nectar source for numerous species of bees and butterflies, as well as ruby-throated hummingbirds. In fact, buttonbush is considered a valuable plant among beekeepers, and it has been reported that this species was brought into the commercial trade in the 1700s as a nectar resource for honeybees. Globular seed heads of reddish-brown pyramid-shaped seeds develop in late fall and persist on the plant after the leaves have dropped. These clusters of seed heads resemble the spiky “gum balls” of sweetgum (*Liquidambar styraciflua*) but are softer and break apart quickly after falling to the ground. Ducks and other waterfowl, as well as mammals, consume the individual seeds.

Preparations of buttonbush roots and bark are used medicinally by several Indigenous tribes to treat a wide variety of ailments including headache, fever, dysentery, and muscle inflammation. The leaves of buttonbush contain the glycoside cephalothin and can be toxic to animals (including humans) if ingested in large doses, which means that deer typically avoid browsing on them.

Buttonbush thrives in consistently moist to wet, rich soils in full to part sun, but it is adaptable to various soil types and does not need to be planted in standing water to survive. It is not drought tolerant, so supplemental watering may be necessary if it is planted on drier sites. Growing up to 12 feet tall, buttonbush has an open, irregular form that can be pruned in late winter or early spring (before new growth appears) to maintain a more compact shape. If left untouched, buttonbush will eventually spread into an attractive but dense thicket, which is why it is often planted to control soil erosion along streambanks. It is the perfect choice for rain gardens or low-lying, wet areas with poor drainage.

Want to try your hand at growing buttonbush from seed? You can pick up a free seed packet from our exhibit hall or send a self-addressed, stamped envelope to:

North Carolina Botanical Garden  
UNC-Chapel Hill  
Attn: NCWFOY 2023  
CB 3375  
Chapel Hill, NC 27599-3375

The North Carolina Wildflower of the Year program is managed by the North Carolina Botanical Garden with some financial support from the Garden Club of North Carolina, Inc. Each year since 1982, a showy native perennial has been chosen and seeds of that wildflower are distributed to interested gardeners.
Can you remember a time where you witnessed or discovered something that filled you with wonder?

Maybe you saw an insect exhibiting a particularly interesting behavior that you couldn’t explain or you worked out that if you bounced a ball just right, you could make it ricochet off three walls and land neatly in a trash can. Science exists because humans are drawn to these sorts of discoveries and indulge our urges to explain how things work and learn about the world around us. Ask any scientist why they got into science and you will likely hear about a time when they witnessed or learned something amazing and simply had to explain it. The scientist’s need to satiate their curiosity and indulge their sense of wonder drives the important work that they do.

Unfortunately, scientific studies have been done nearly exclusively by professional scientists for the last 250 years or so, the work often done in a sort of black box that has increasingly excluded amateurs of any skill level. But why should professional scientists have all the fun and make all the best discoveries? Over the past three decades, the modern era of citizen science has arisen, a type of science that welcomes help from anyone regardless of their level of experience with science. While there are many names for this way of conducting scientific research (e.g., community science, public participation in scientific research, public science, contributory science, or participatory science), citizen science projects are partnerships between the public and professional scientists to answer scientific questions. These projects allow the world’s citizens to peek inside that black box of science and become an active member of the scientific process. In essence, anyone anywhere has the potential to contribute to scientific research as a citizen scientist and indulge that sense of wonder that we all share as humans.

There are thousands of citizen science projects looking for help from members of the public. Many of these are top-down projects, where a scientist asks for help conducting their research and often engages the public in the data collection or data processing portions of their work. These types of projects benefit the researchers by allowing them to access far more locations at more times than they could ever manage alone. They also allow researchers to pursue big questions, the ones that require hundreds if not thousands of people doing the...
work together to generate answers. Participants in these sorts of top-down projects can learn about the scientific process by taking part in the work, and the potential for learning and discovering something entirely new is high. Imagine being a participant in a citizen science project who discovers a new species or sees a new behavior that no scientist has ever seen! Citizen scientists have done this and more.

Other citizen science projects, especially those that use the name community science, are community-driven bottom-up projects that lead to real-world solutions to local problems, especially problems that adversely impact the community. These sorts of projects often address threats to human health, such as water or air pollution that leads to higher cancer or asthma rates in people who live nearby. In these cases, a scientist may advise on how to rigorously collect defensible data and help with the data analysis, but the end goal is usually a solution to a community problem. In these projects, new scientific discoveries may take a back seat to enacting meaningful local change.

While there is still mistrust of citizen-generated data within some scientific circles, there is ample evidence to suggest that carefully designed citizen science projects with good quality control measures in place can both generate massive amounts of high-quality data and lead to major scientific discoveries. For example, the eBird project asks people to report checklists of birds that they see and know how to identify. The project has thus far documented over two billion birds worldwide and has proven to be an invaluable tool in the understanding of bird migrations and bird conservation efforts.

Citizen scientists are also well-known for their ability to find and document rare things, such as discovering the locations of the handful of remaining wild populations of the once very common nine-spotted ladybug in New York state or North America’s rarest ant species spotted outside an apartment complex in Cary, North Carolina. Citizen science events such as the City Nature Challenge (CNC), a friendly competition between cities internationally to see which can photographically document the most wild living things over a four-day period, have documented thousands of rare and endangered species. In 2018, a CNC participant took a photo of a random plant in a Raleigh park that turned out to be veined skullcap, a rare, endangered plant that had not been seen in Wake County since the 1960s and was thought to be locally extinct. A simple photo taken by an event participant who knew only that the plant was one she had not yet photographed led to a major ongoing conservation effort to protect the growing population of this rare plant well into the future.

Projects vary greatly in scope. Those big questions that require help from many people often have a national or international focus and recruit, train, and support hundreds to millions of participants. These projects include the Community Rain, Hail, and Snow Network (or CoCoRaHS), a massive network of people across North America who measure precipitation with precision rain gauges and make daily reports. With so many people participating in so many locations, CoCoRaHS gathers finerscale data than well-known organizations such as the National Weather Service and has led to improved understanding of local rainfall patterns across the continent. Nature’s Notebook asks participants to report the current status of a wide range of plant and animal species to better understand the impacts of climate change across the US and Canada. Caterpillars Count, a project based at the University of North Carolina Chapel Hill, asks people to document the number and types of insects on tree leaves to study how the timing of the availability of these insects impacts migratory bird populations in our changing world.

“...anyone anywhere has the potential to contribute to scientific research as a citizen scientist and indulge that sense of wonder that we all share as humans.”
Other projects have a more local focus, such as the Carolina Bird Atlas. Built within eBird, the Carolina Bird Atlas allows local bird researchers to gather additional data on the breeding status of birds and more to support locally relevant studies and conservation efforts. The Carolina Ghost Hunt aims to document the range of the various species of ghost fireflies found in the Carolinas, including one that may be an entirely new species. The ecoEXPLORE project engages kids in grades K-8 across North Carolina in documenting biodiversity, earning prizes and badges as they learn and interact with scientists.

With so many citizen science projects available, there is a project for nearly every interest and every type of science.

Most of the projects mentioned thus far are great for anyone interested in plants, botany, or gardening. Want to know which insects are visiting your flowers or which weed is popping up in the corner of your garden? Try snapping a photo for Natural North Carolina, a project built within iNaturalist. iNaturalist has amazingly powerful artificial intelligence that can help you identify species while also sharing your photos with scientists who can use them in their work. You may also love the Great Sunflower Project, a project that aims to document pollination services across the US and help restore areas identified as “pollination deserts.” If you already know the butterflies in your yard or garden, consider submitting a checklist to the eButterfly project, the biggest database of butterfly data currently available to scientists. If you grow milkweed plants of any type, you may also want to look into Monarch Watch, a project that studies monarch migration by asking participants to place numbered stickers on monarch wings and releasing them, or the Monarch Larva Monitoring Project, which documents the breeding success of this iconic butterfly species across its range.

With so many major discoveries made by citizen scientists, the phenomenal opportunity to learn about and enjoy the world around you, and the potential to solve some of the biggest problems facing our world in a highly collaborative manner, citizen science projects are a great way for everyone to contribute to science. If you have any interest in science or nature, why not become a citizen scientist? Engage that sense of wonder that we all share and become a part of science. Perhaps that next great discovery will be yours!

Chris Goforth is a citizen science practitioner, entomologist, and educator based in Raleigh, North Carolina. She is currently the head of citizen science for the North Carolina Museum of Natural Sciences. She is also a dragonfly enthusiast! See her Lunchbox Talk on this topic (and other Lunchbox Talks) at ncbg.unc.edu/recordings.

SciStarter.org is a great place for prospective citizen scientists to start their search for projects. The website lists thousands of citizen science projects and makes them searchable by topic, location, activity type, indoor vs. outdoor, and more. Local organizations, such as the North Carolina Botanical Garden and the North Carolina Museum of Natural Sciences, are also great places to look for more hands-on activities, such as in-person trainings and educational programs to help you get started with a citizen science project.

LEARNING & ENGAGEMENT: A NEW NAME FOR NEW TIMES!

The Garden’s Education department is making a shift to the department’s name! The new name – Learning & Engagement – better describes the full breadth of departmental programs. All our programs still foster learning, and the new name intentionally centers people over and above the institution. It better defines how we are working shoulder to shoulder in community through the Carolina Community Garden, Edible Campus UNC, and Therapeutic Horticulture programs as well as our expanding partnership with the UNC American Indian Center. We look forward to leaning into this new name as we continue to provide quality learning activities and engage with the community. Your input into our programs and activities is always welcomed – ncbgregistrar@unc.edu!
Citizen Science at the Garden

Ready to engage in citizen science? The Garden is involved in several projects, and we’d love your help!

iNaturalist
iNaturalist is a free app that lets you record and share photos or observations of nature. You can identify species yourself, use iNaturalist’s artificial intelligence to narrow it down, or let other expert users identify what you’ve spotted. Many scientists use these observations in a variety of research projects. You can read more about iNaturalist, including tips for using it, in our Fall/Winter 2020/21 edition of Conservation Gardener at go.unc.edu/ConservationGardenerFall20.

Seek by iNaturalist - For Kids!
This app uses iNaturalist data to identify wildlife. Kids can earn virtual badges as they photograph and identify species.

Budburst
The North Carolina Botanical Garden is a Budburst satellite hub, partnering with local community organizations and schools to run “mini” Budburst Pollinators and Climate Project programming events and collect data. These events inspire and train community members to make observations about how plants and their pollinators are responding to a changing climate. Stay tuned to ncbg.unc.edu to learn about upcoming partner events. Check out budburst.org for more projects.

Caterpillars Count!
Caterpillars Count! is a community science project for measuring the seasonal variation, also known as phenology, and abundance of arthropods like caterpillars, beetles, and spiders found on the foliage of trees and shrubs. Caterpillars Count! was started by Allen Hurftbert, professor at UNC-Chapel Hill, and is part of a broader National Science Foundation funded project on phenological mismatch. Learn more at caterpillarscount.unc.edu.

Mason Farm Butterfly Project
The Mason Farm Butterfly Project monitors butterflies at Mason Farm Biological Reserve, a nature preserve in Chapel Hill managed by the Garden. A partnership between Joel Kingsolver’s lab in the UNC-Chapel Hill Biology Department and the Garden, participants are invited to record butterfly observations at Mason Farm and contribute their sightings to a database, which will be used by members of the Kingsolver lab to study changes in butterfly flight seasons over time. Learn more at ncbutterflies.web.unc.edu.

decoEXPLORER For Kids!
decoEXPLORER (Experiences Promoting Learning Outdoors for Research and Education) is an incentive-based citizen science program for children in grades K-8. Developed by the North Carolina Arboretum, this innovative program combines science exploration with kid-friendly technology to foster a fun learning environment while encouraging children to explore the outdoors and participate in citizen science. The North Carolina Botanical Garden is an decoEXPLORER Hotspot, a special area to make your observations. Learn more at www.ecoexplore.net.

Science Across NC
Science Across NC is a collaboration of organizations, including the North Carolina Botanical Garden, offering quarterly events to get people outside and participating in research-based science. Earn badges for each event by collecting and submitting data. Learn more at scienceacrossnc.org.
The University of North Carolina at Chapel Hill Herbarium is no stranger to citizen scientists. I’d guess that 10% of our vascular plant specimens were collected by people who are not botany graduate students, professors of taxonomy, or scientists with state or federal agencies. What we today call a “citizen scientist” in the past may have been called “a talented amateur” or “a keen observer of the local flora.” While some of our Citizen Scientist Collectors have jobs with nothing to do with science, many have jobs that use botany in very practical ways—forestry, horticulture, or gardening.

Henry Ashby Rankin
One “keen observer” was Henry Ashby Rankin, born in Fayetteville, North Carolina in 1872. He owned a sawmill and plywood business. Rankin never attended college and it’s not known how he came by his love and knowledge of botany. In a letter to William Chambers Coker, founder of the Herbarium, Rankin wrote, “I am not a botanist, but am much interested in the flora of the section.” Rankin’s letter to Coker dated 8 October, 1929, continues, “Last fall I sent Dr. Small of the N.Y. Botanical Garden, specimens of Parnassia about which he became rather excited. [Small] said it was the original P. caroliniana found by Michaux on the Carolina coast… and I am sending you specimens from Hallsboro [Columbus County, NC] and would like to know—well…”

I’m just wondering if perhaps [Small] is a little too enthusiastic about multiplying species.” French botanist Andre Michaux (1746-1802) found and named Parnassia caroliniana from a vague locality in the Coastal Plain of “Carolina.” Throughout much of the 19th and early 20th centuries, taxonomists assumed the “coastal plain” locality was erroneous, as Parnassia is a plant of cool habitats. However, 120 years later, citizen scientist H. A. Rankin had found Michaux’s Carolina Grass-of-Parnassus in the steaming savannas of the Carolinas!

Coker replied in a letter two days later, “I am much pleased to get your specimen of the plant [Parnassia caroliniana found near Hallsboro]; it will prove a valuable addition to our herbarium… I would like to get acquainted with you, and suggest that you take some opportunity to run up to Chapel Hill and see our herbarium and Arboretum. I would be much pleased to entertain you while in town.” The Herbarium in Chapel Hill curates about 54 vascular plant specimens collected by H.A. Rankin.

Terry Holdsclaw
Jumping forward about 100 years, we continue fruitful collaborations with citizen scientists. In 2002, Terry Holdsclaw, resident of Catawba County, called wanting to compare some plants he’d pressed with specimens in...
the Herbarium. I asked why he doubted his identifications, and he mentioned that the Manual of the Vascular Flora of the Carolina, published in 1968, had not documented the plants from the counties where he had found them. “I remember you telling me,” said Terry, “the Herbarium will take a specimen of anything that does not have a county dot in the Manual. Years ago, I was an undergrad at NC State University … majoring in Forestry, though I’ve never worked in that field… I ended up in horticulture, landscaping, and the nursery business.” When asked about the most exciting plant he’d found, he answered, “Prairie trillium, *Trillium recurvatum*. But actually, my uncle, Billy Holdsclaw was the one who noticed it first. He noticed that it did not look right for Little Sweet Trillium, *Trillium cuneatum*. I was very excited when it keyed easily to Prairie Trillium — a state record.” Over the past 23 years, Holdsclaw has deposited over a thousand specimens in the Herbarium in Chapel Hill – many of them county records – from Alexander, Catawba, Iredell, and Lincoln counties.

**Thomas Jones, Jr. and Mary G. Douglass**

Today, fortuitous meetings are facilitated by iNaturalist and Facebook. In October 2022, Thomas Jones, Jr. and Mary G. Douglass posted a photo of *Spinulum annotinum* on Weakley’s Flora of the Southeastern United States Facebook page, seeking confirmation of their identification. Why were they unsure? Stiff clubmoss had never been proven to occur in North Carolina! Within hours their post garnered a flurry of “surprised face” icons and comments such as, “This would be significant if verified – it sure does look to be *Spinulum*,” by Tom Govus and “Wow!!!! What a rediscovery for the region! Last seen in Tennessee on Thunderhead Mtn in the late 1880s,” by Dwayne Estes, and “What a great find!!!! Michaux points awarded! North Carolina distribution added to the Flora of the Southeastern United States… It would be great to get a specimen for the University of North Carolina at Chapel Hill Herbarium (NCU) as documentation,” by Alan Weakley.

Mary Douglass and Tom Jones retired to Buncombe County, North Carolina, about ten years ago, and they have a goal to hike all the sections of the Mountains-to-Sea Trail (MST) in that region. “We’re always looking at plants and insects, anything really, as we hike,” says Mary. Though both studied botany as undergraduates, neither was ever employed in that field. “Both of us have worked for the Animal and Plant Health Inspection Service with the US Department of Agriculture,” says Mary. They met in the 1970s as members of the South Carolina Association of Naturalists (SCAN). Both credit SCAN with expanding their knowledge of natural history and natural places in the Southeast. “During the winter,” says Tom, “I pick a group of plants to study. It is appealing to pick a group that’s not too large and with species that we’ve not yet seen. Last year, it was the clubmosses. I went to Weakley’s Flora and took notes so I’d be more aware of them.” That day on the MST, Tom was not feeling well, so as Mary hiked ahead, he rested on a rock. “As I sat there, I noticed the *Spinulum* and thought, Wow, isn’t that the clubmoss that isn’t supposed to be here? I took some photos, and when we got home, I showed them to Mary. She was NOT happy that she’d missed seeing this plant!” Mary responded, “I was the one who insisted that he post it on Weakley’s Flora of the Southeastern United States Facebook page, as it certainly looked right to me but we wanted confirmation. We were so pleased when the Herbarium in Chapel Hill asked us to revisit the mountain to collect a specimen. We are proud to see our names associated with this state record. Academics do not always appreciate citizen scientists, but we have found that Keith Bradley (South Carolina Heritage Trust Program) and Alan Weakley (University of North Carolina at Chapel Hill Herbarium) are open to our observations.” Tom and Mary’s *Spinulum* specimen was accessioned into our collection in October 2022.

**Becky Dill**

iNaturalist has proven to be fertile ground for the Herbarium to discover talented botanists. Ecologist Julie Tuttle was intrigued by plants found in Anson County, North Carolina by “gillydilly.” “I’ve been using iNaturalist for about three and a half years,” says Becky Dill, a.k.a. gillydilly. “My husband, Gene, and I retired to Anson County about 15 years ago. In college I majored in livestock production, though many of my electives were plant related. My husband and I both worked in Standardbred horse racing, and I’ve always enjoyed… looking at wildflowers. In Pennsylvania, I was a master gardener, but when we moved to Anson County, I...
encountered many unfamiliar plants. I love to pull over on a rural roadside and take flower photos on my phone, and sometimes I could get an identification using Pettersen's wildflower guide. Eventually my phone got so full of flower photos it wouldn’t function! I found iNaturalist, and when I saw that National Geographic was a developer, and that they stored your photos on their servers (freeing up space on my phone!), and that you could get help with identifications, I looked no further. I started posting and iNat user “jtuttle,” whom I now know is Julie Tuttle, was so helpful with identifications. She invited me to join her NC Piedmont Roadside Native Plants project. Tuttle explains, “The purpose of the NC Piedmont Roadside Native Plants project is to document native plant species on high-quality roadsides and powerline rights-of-way...[which] tend to harbor sun-loving native species that historically thrived in open, prairie-like or woodland sites.”

Becky Dill continues, “I was startled to find rare plants and plants that hadn’t been documented from Anson. In the spring of 2022, I got instructions from the Herbarium on how to collect and press plants, so I’ve been prioritizing plants that have not been documented from Anson County. I find nc-biodiversity.com to be so useful to determine which plants need documenting. For example, I know a place in neighboring Richmond County where giant ironweed, Vernonia gigantea, grows, so in August I went to collect it for the Herbarium. However, the Department of Transportation had graded and cleared the roadside, so the plant was gone. On my way home on a rural roadside I saw a tall aster with yellow flowers on naked stems, and my wildflower-identification-at-45mph was Helianthus atrorubens. I stopped, and upon looking closer I realized it was, prairie dock, Silphium terebinthinaceum – a county record! I posted it on iNaturalist, the botanists at the NC Natural Heritage Program saw it, and they contacted Bruce Sorrie, who asked if I could take him to the site.” Bruce Sorrie wrote of their September 2, 2022 foray, “As some of you may know, Becky Dill discovered a new pop [population] of Silphium terebinthinaceum earlier this week. It piqued my interest so met her today in the Triassic Basin portion of the county. This healthy roadside pop harbors at least 40 flowering plants plus other individuals with just basal leaves. As a follow-up we walked to the nearby powerline where immediately we were surrounded by Tridens strictus (?), “longspike tridens, last seen in North Carolina in 1957 and known only from four counties. We estimated >250 culms without having traveled very far into the powerline. Other county records included Hypericum virgatum, sharp-leaf St. John’s-wort, and Lechea tenuifolia, narrowleaf pinweed...Obviously this area of mafic soil needs additional fieldwork and Becky will return again soon.”

“What are my goals for 2023?” said Becky Dill when we chatted in early January 2023. “Let’s see. Collect Carex vestita in Anson County. UNC-Chapel Hill grad student Eric Ungberg alerted me to this species as he’d found it in Montgomery County. I think I have found it in Anson County, but I need to get a good specimen. And who knows what else is in Anson County, waiting to be found – that’s what keeps me exploring the beautiful roadsides of Anson County.”

The Herbarium always has and always will depend on volunteers, students, citizen scientists, and botanists to continue our mission to document and conserve the plants and natural places which sustain us.
Many of us garden in shade. At the beginning of the growing season, spring ephemerals abound followed by familiar perennials like phlox and columbine. There are lots of options for early color but once summer sets in, a shady garden is often dominated by green. Here are a few brighter choices.

Common Jack-in-the-pulpit (Arisaema triphyllum) (A) flowers are tiny and generally go unnoticed inside the pitcher shaped spathe that encloses them. That spathe, however, is worthy of notice and can show a lot of variation within and among Arisaema species. Spathes, or pulps, can be green or more colorful with white or purplish stripes, some are small, others large, and even their timing and persistence can differ. The clusters of brilliant red berries that follow are where the real color comes in. Only larger more mature plants make the female flowers which lead to the production of fruit. These ripen in summer and become increasingly apparent as fall proceeds and the lush summer green starts to fade.

Solomon’s plume (Mainthemenum racemosum) (B) also has red fruit which ripens in late summer and livens a green landscape. Its arching form helps each leaf receive sunlight and white flowers clustered at the tip are a sweet addition in spring.

Our native wild geranium (Geranium maculatum) (C) looks nothing like the scented geranium we’re familiar with as a bedding plant, but this shade tolerant groundcover produces lots of pink flowers when early spring bloomers are on their way out. Their seeds are dispersed by tiny catapults.

One of my favorite perennials for shade is white wood aster (Eurybia divaricata) (D). The starry white flowers topping a sprawl of stems are lovely for a long stretch of summer into fall. They pair well with axillary goldenrod (Solidago caesia) (E) which is a great goldenrod for shade. Its bowed architecture complements the asters and their overlapping bloom times makes for a good show.

Smooth oxeye (Heliopsis helianthoides) (F) and greenhead coneflower (Rudbeckia laciniata) (G) round out the sequence with yellow flowers in fall. Both are tall and robust, coarser than the others mentioned above, and capable of grabbing some attention. Smooth oxeye is the shorter and more floriferous of the two; green-head coneflower is taller and great for a wetter site. Both are also good for adding some upright structure and providing interest in the winter and food and habitat for wildlife.

Add a fern like broad beech fern (Phegopteris hexagonoptera) (H) and a groundcover like wild ginger, (Asarum canadense) (I) and you have a dynamic shade garden.
Growing Native Plants from Seed

BY HEATHER SUMMER, NCBG COLLECTIONS MANAGER & SEED PROGRAM COORDINATOR

As you may recall, in the last edition of Conservation Gardener, we provided instructions for collecting your own seeds for propagation. Now we will provide information on sowing those seeds!

What You’ll Need
- Trays or pots
- Large plastic bags (large enough for your pots to fit in; gallon-sized is usually sufficient)
- Commercial seed starting mix (this is finer in texture than potting soil and has no added fertilizer)
- Shallow tray without holes
- Possibly: plastic wrap, clear plastic humidity dome, and fertilizer

Storing
Store seeds in an airtight jar in the refrigerator until you are ready to sow.

Sowing
How to sow each species of seed can vary. There are some seeds you’ll need to stratify before they germinate, or expose to the equivalent of winter conditions, and others require no pre-treatment. You can find a chart of germination codes for common species at ncbg.unc.edu/codes, and instructions for each germination code can be found at go.unc.edu/germinationinstructions. General germination strategies include:
- No pre-treatment necessary
- Cold, moist stratification
- Soak seeds in warm water for eight hours before sowing
- Very fine seeds; do not cover with soil when sowing
- Sow seeds directly in garden
- Warm and then cold stratification

Watering
Place entire pot in a shallow tray of water. When the soil mix surface is moist, remove pot from the tray of water and allow it to drain. Always water seeds and small seedlings by this method. Check pots regularly to see if they need watering. They should not dry out or be kept soggy. Keep an eye on them – this early stage is important to survival.

Transplanting
Transplant seedlings into separate pots when they are large enough to handle, usually after two or three pairs of true leaves emerge. Plant seedlings in their permanent garden locations after roots are established but before they are potbound. For very slow growing species, it may take several years before this happens.

Fertilizing
Fertilizing is not necessary until seedlings emerge and have at least two pairs of true leaves. Fertilize seedlings with routine applications of an organic, water-soluble fertilizer at 1/4 to 1/3 the recommended strength during the active growing season.

Additional Resources
In a pinch, many seeds will germinate at a low percentage even if you ignore every rule, except the one about keeping them moist. Looking for further information? You’ll find a list of our recommended books for seed germination and perennial gardening at ncbg.unc.edu/resources.
Invasive Alert: Fig buttercup

BY THE NC INVASIVE PLANT COUNCIL

Fig buttercup (*Ficaria verna*) is an invasive plant aggressively taking over floodplain and streamside ecosystems in North Carolina. Its bulbils and tubers spread easily through water to start new colonies. Once established, it creates dense mats that out-compete native plants and disrupt the natural balance of our ecosystems.

Also called lesser celandine and pilewort, fig buttercup is generally only visible above ground in winter and spring. Its leaves appear in winter, and then its yellow flowers appear in March and April. By early summer, the flowers and leaves die back, and the plant becomes dormant until the following winter.

Native to Europe, North Africa, and West Asia, fig buttercup has long been invasive in the northeastern U.S. In the last 10 to 15 years, it has increasingly become a problem here in North Carolina. Sometimes grown as an ornamental plant, it can spread from home gardens into nearby streams and floodplains and through mulch.

**How can I identify fig buttercup?**
It’s important to correctly identify fig buttercup before trying to remove it, as we have a number of low-growing yellow native wildflowers here in North Carolina that look similar. See the sidebar for a description of its characteristics.

**What should I do if I see it?**
Make an observation on iNaturalist! iNaturalist is a joint venture between the California Academy of Sciences and the National Geographic Society that allows you to upload location-specific photos of plants, animals, and fungi to its free website or app. If you upload your observation of fig buttercup to iNaturalist, it helps track the plant’s spread through the state.

Or email to report your sighting! If you’re not comfortable with iNaturalist, send an email noting the location of the sighting, preferably including photos, to figbuttercupnc@gmail.com.

Learn more about fig buttercup at [nc-ipc.weebly.com/fig-buttercup-project.html](nc-ipc.weebly.com/fig-buttercup-project.html)

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**Fig Buttercup Characteristics**

**Location:** You’re most likely to find fig buttercup near a stream or along a floodplain forest.

**Leaves:** Dark green, shiny, hairless, succulent, heart-shaped.

**Stalks:** Smooth and hairless

**Flowers:** Bright, buttery yellow flowers with eight petals (occasionally more) and a slightly darker center. Each flower sits singly on a stalk above the leaves.

**Habit:** Grows low to the ground. A large infestation can appear like a green carpet with yellow dots over the forest floor.
American Indian Cultural Garden Growing

UNC’s American Indian Center has long planned a garden space featuring plants and elements important to American Indian culture, and the Garden has been a proud partner in this process. We are so excited to announce work has begun on the new garden’s site, after receiving approvals from UNC, the Town of Chapel Hill, and the historic district where it is located. The new garden space will wrap around our Carolina Community Garden, and several Garden staff helped clear the land of invasive species, opening up a canvas for the new space. Consider donating to this project at go.unc.edu/AICG.

Sustainability Tip: Shredded Paper

BY JANNA STARR, SUSTAINABILITY INFLUENCER, INSTAGRAM @WASTEFAIRY

What should you do with shredded paper? Shredded paper has shortened fibers, making it difficult to recycle. Check with your local municipality’s waste management website to see if they accept shredded paper in curbside recycling or at a special drop-off. In North Carolina, Orange, Durham, and Wake Counties do not accept shredded paper for recycling. Before you shred a document, think about if it needs to be shredded. And, rather than throwing your shredded paper in the trash, consider adding it to your compost bin or worm bin, or using it for packing or shipping fragile materials.

ARCHITECTS OF ABUNDANCE: INDIGENOUS REGENERATIVE LAND MANAGEMENT AND EXCAVATION OF HIDDEN HISTORY

APRIL 2; 5:30–6:45 P.M., VIRTUAL AND IN-PERSON OPTIONS
FREE – PREREGISTRATION REQUIRED

EVELYN MCNEILL SIMS LECTURE

Lyla June Johnston, an Indigenous musician, scholar, and community organizer of Diné (Navajo), Tsétšéstâhese (Cheyenne) and European lineages, will share her research about ways pre-colonial Indigenous Nations gardened large regions of Turtle Island (aka the Americas) to produce abundant food systems. Contrary to popular belief, Indigenous Peoples leveraged immense influence on their surroundings in ways that could heal our planet today. Her work brings this poorly understood history to the Western world and highlights the connection between Indigenous land ethics, decolonial narratives, and more.

DETAILS AT NCBG.UNC.EDU/SIMS
Renewing a Campus Treasure

The Coker Arboretum arbor is an iconic part of the UNC campus. Last replaced 25 years ago, its black locust timbers had begun to deteriorate, and the walkway under the arbor ended in a flight of stairs that made the path inaccessible to many people. The North Carolina Botanical Garden Foundation is partnering with the Garden and UNC Facilities Planning and Design to renovate the arbor and walkway to ensure they’re safe, accessible, and able to be enjoyed by students and community members for years to come.

The new walkway will have a new, sloping grade, roughly parallel with adjacent Cameron Avenue. In addition to better accessibility, this will mean greater visibility for public safety officers and community members in the Arboretum.

Andropogon Associates is developing the design plan for the future arbor. From community meetings, we know it’s important the structure maintain its rustic character and the play of light and shadow in the space. The stone gathering circle to the side of the arbor will remain in place, and the new arbor and walkway will connect to it.

Meanwhile, the old arbor has been removed. Construction of the new walkway will begin in August, and the new arbor will be constructed in October and November. The vine collection will be replanted in December.

The Class of 1997 contributed funds for the arbor 25 years ago, and they are renewing their senior class gift for their 25th anniversary. Thanks to leadership from North Carolina Botanical Garden Foundation Director Ladell Robbins, Class of 1997 president, they have raised significant funds for this project. Read more about Ladell and the Class of 1997 on page 18.

You can help us rebuild this campus treasure! Make a gift today at go.unc.edu/arbordonation. For questions about making a gift, contact Stephen Keith at 919-962-9458.
DONOR SPOTLIGHT: LADELL ROBBINS
LEADS CLASS OF 1997 TO SUPPORT ARBOR REPLACEMENT

North Carolina Botanical Garden Foundation Director and Class of 1997 Senior Class President Ladell Robbins worked this past year to organize his classmates to support the Coker Arboretum's capital project to replace the beloved wisteria arbor.

Ladell recalls, “My earliest memories of the Coker Arboretum are from freshman orientation. As a student I would often pass through the Arboretum, but before I knew it, the Arboretum became the destination.” Along with Amelia Zelnak, Class of 1997 Vice President, Ladell spent the summer of 1996 on campus making plans for the upcoming school year. Given the tragic fraternity fire in May of 1996, which resulted in the death of several class members, there was a strong urgency to have an impactful senior class gift. “Our idea was to find a senior class gift connected to a place where people gather, have the occasion to rest and reflect, and enjoy the natural environment.”

The Class Marshalls agreed, and 25 years ago, Carolina’s Class of 1997 accepted the North Carolina Botanical Garden’s proposal to fund a project to replace the 300-foot wooden arbor and build an adjacent central stone gathering area in the Coker Arboretum. This site was chosen as the senior class project to not only enhance an iconic location at Carolina, but to also remember classmates who died before graduation.

In 2022, with 22 members of the Class of 1997 homecoming planning committee, Ladell orchestrated a committee challenge to engage classmates to recommit to their original senior class gift in celebration of their 25th reunion. With gifts still coming in, they have inspired more than 85 donors and raised $45,000, easily surpassing their original class gift total.

Ladell and his classmates have a special affiliation with the Coker Arboretum and invite all Carolina alumni and community members to support the arbor renovation. “I encourage others to support Coker Arboretum because it is a living space on UNC’s campus that provides knowledge, peace, healing, and joy to all its visitors.”

You can follow the plans and construction timeline of the arbor renovation at ncbg.unc.edu/arbor. You still have time to support this community effort!

Imperiled Plant: Gray’s Lily

Gray’s lily (Lilium grayi) is listed as Critically Imperiled by NatureServe. This perennial wildflower grows in early summer at high mountain elevations in moist meadows, bogs, and forests. It is mostly found in North Carolina, but small numbers have been found in Virginia and Tennessee.

The decline in population is due to habitat alteration, succession, and wild collection. In addition, lily spot disease has recently been attributed to significant decline. Other threats include hybridization with Lilium canadense.

Gray’s lily is found in the protected lands of Roan Mountain, the Blue Ridge Parkway, and Bluff Mountain. The Garden has been working with this species for decades through the Center for Plant Conservation. We have been seed banking populations for the past few years to protect against decline due to lily spot disease.

Want to learn more about Gray’s lily and the work to conserve this plant? Ben Brewer was awarded the 2022 NCBG Award for his field research as a graduate student at Appalachian State University. Watch his Lunchbox Talk on this topic at go.unc.edu/grayslily
Do you remember your last hike in the woods or stroll through a wildflower meadow? Or perhaps you remember your last visit to the native plant collections of the North Carolina Botanical Garden. The rich biodiversity in these areas reminds us of the need to preserve and protect plants and animals (including insects, too!) all around us. Your participation with the Garden has a positive impact on projects highlighting biodiversity in the region. There are so many ways you have boosted the natural world.

In the summer of 2022, we hosted a second phase of planning for future enhancements of Koch Memorial Forest Theatre on UNC’s campus focused on a business model and business operation study. Community members Stewart Parker, Alice & John May, Tom Kenan, Paula Noell, Mal & Amanda Watlington, Patricia Beyle, and Lynn Knauff ensured we had the funds to hire the consultant firm Theatre Projects to lead community workshops and local focus groups. Thank you to the many survey respondents who helped shape the overall vision.

A record number of you gave over the summer and fall of 2022, and gifts to the general fund allow the Garden to meet its mission through its annual budget. Several larger annual gifts in the first half of the fiscal year from David & Laurie Joslin, Fran & Gary Whaley, Mike & Elston Miles, Janis McFarland & Rich McLaughlin, and Anne Harris, along with many others who responded to the end of year campaign, have kept the Garden in solid financial standing. This spring and summer you will continue to have opportunities to support the Garden through the spring brochure, through Event Host or Corporate Partner sponsorship, through GiveUNC, or by celebrating with us at the Carolina Moonlight Garden Party; the Garden’s largest fundraising event of the year. Harriet and DG Martin are our first 2023 Carolina Moonlight Event Hosts, and they invite many more supporters to join them.

Thank you for continuing to renew and share information about membership in the North Carolina Botanical Garden Foundation. Membership payments provide for daily needs at the Garden and support the people, programs and exhibits that make the Garden whole. With over 3,000 memberships, the Garden has a broad base of support. We are especially grateful for our Director’s Circle and Sustainer members who provide aspirational support. We recognize these members in each magazine publication (see page 22).

With an outpouring of support for open space preservation, we look forward to closing on a land deal to expand Stillhouse Bottom Nature Preserve. Thanks to many community gifts and the final pledge payments of an Anonymous Donor, Betty Lou & David Chaika, Lyn Headley, the New Hope Audubon Society, Richard & Karen Taylor, and Zhi Hong, more land in Chapel Hill will be preserved and foster local biodiversity. All donors to this project will receive an invitation to a dedication celebration once the land is officially transferred.

Many of you made the Coker Arboretum’s recent capital project a priority. We began fundraising for the Arbor renovation in the fall of 2022, coinciding with the Class of 1997’s recommitment to their senior class gift. You can follow the plans and construction timeline of the arbor renovation at ncbg.unc.edu/arbor/ and you still have time to support this campus icon. We are grateful for the recent gifts of Ladell Robbins ’97, Matthew & Paige Guest ’97, Chris & Katie Tebbit ’97, and many others (see page 18) to galvanize fellow class member participation. We also thank Carolina alumni Tom Kenan, Clay & Jane Harrell, and Jinny Clancy for their recent gifts to raise funds to rebuild the wooden arbor, with construction slated for late summer 2023.

There are many projects and priorities at the Garden, and it takes many dedicated folks to keep NCBG a national leader in public gardens. With Conservation, Learning & Engagement, and Horticulture staff working throughout the Triangle area, we have 14 named sites to

**Wild bleeding-heart (**Dicentra eximia**)**
Thank you for choosing to honor or remember friends and family through a gift to the North Carolina Botanical Garden.

Tribute gifts received between July 1 and December 31, 2022

IN HONOR OF

Mike and Mary Andrews
Jonathan L. Andrews

John William Benning
Thomas F. and
Betsy Lark B. Benning,
for Friends of UNC Herbarium

Catherine Bollinger and
Thomas Schettin
David M. and Susan H. Bollinger

Mike and Mary Andrews
IN HONOR OF

Catherine Bollinger and
Jack Haggerty,
Thomas A. and
Hannah E. Gavin,
The Gavin and Miller Families
Joanne Gardner
Adaline C. Smith and Gene
Lutte Lee Erwin
Adaline C. Smith and Gene
Liau, for Botanical Garden
Conservation Fund, Coker
Arboretum Improvement Fund,
and Educational Outreach

IN MEMORY OF

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Michael F. and Barbara D.
Perkins, for Coker Arboretum
Improvement Fund

Marcella T. Grendler
For Coker Arboretum
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Harriet and D.G. Martin
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Lisa C. Glover, for The North
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Thomas A. and
Barbara B. Driscoll,
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Jack Haggerty,
IN CELEBRATION OF HIS BIRTHDAY
Susan Kuhbach, for Mason Farm
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IN HONOR OF

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Kathy and Joseph Joyce, for
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Patricia M. Collins, for Carolina
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For Carolina Community Garden
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Martha A. Magenheimer, for
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Friends of UNC Herbarium

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Paul M. and Catherine M. Green,
for Natural Areas Endowment

NCCBG Staff and Volunteers
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Geoffrey Neal
Ken Moore and Kathy Buck,
for Coker Arboretum
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Olivea N. Shelton
Lynn S. Wilson and Paul Killoough

Our children
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Natural Areas Endowment

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for Stillhouse Bottom Natural Area
Missy and Sam Rankin,
for Botanical Garden
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Sonia J. Colnot, for Coker
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H. Shelton Earp III, for Coker
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UNC Herbarium General Endowment

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Stephanie D. and Samuel P. Davis III
Terry L. Noah and
Margaret R. Helton
Jessica T. Stark
Sue Tolleson-Rinehart

Melinda Kellner Brock
For Melinda Kellner Brock
Terrace
Katherine Magill Walters,
Suzanne, Dan, Sophia, and
Phoebe Weintraub

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Lâle A. Burk

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Ellen L. Cairns, for a Botanical
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Mary Cook Howes

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Patti Purcell Bonham, for Coker
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for Class of ’97 Restoration
WE REACHED OUR $30 MILLION UNC CAMPAIGN GOAL

In the last month of 2022, the Garden achieved its goal of raising $30 million in cash and commitments during UNC’s Campaign for Carolina. What an achievement! Counting gifts since the campaign launch in 2015, your support through annual giving, garden endowments, student internships, land preservation efforts, conservation management, as well as multiple capital projects, all combined to allow the Garden reach its goal. Thank You!

Alexander Eugene Kenan
Katie Bobbe, for Carolina Community Garden

Fred Oliver and
Mary Waggoner Kiger
Fred W. Kiger and Karen T. McCall, for Battle Park Endowment

Steven Worth Leonard
Charles M. and Carol C. Aregood
Wilson Baker and
Mary-Anne Bestebrutje
John B. Nelson, for Friends of UNC Herbarium

Mary MacFadyen, UNC Medicine Class of 1927
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Gail Moore

Grover Elmer Murray
Sally M. Murray, for Friends of UNC Herbarium

Robert Samuel (R.S.) and Yeran Kazanjian Najarian
Allison L. Essen

Norlene Newcomb
Martha Coates

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Martha L. Diehl

Jessi Seawright Ogburn
James H. and Melinda W. Ogburn, for The North Carolina Botanical Garden Student Intern Fund and General Support

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Martha Baldwin
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Angela Ensley
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Dana Gelin
Paige Green
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Irene Kesselman
Jenny and Joey Okun
William W. Palladino
For a Botanical Garden memorial bench
Neil and Debi Pedersen
Marilynn and Sandy Pittard

Susan Sanderford
Jake Stein and Sayaka Hino
Susan Trabka
Nicole M. Trimmer
Rhonda Underwood
Helen C. Wernet
Patricia A. Williams
Stephanie and Park Willis
Brian, Jessika, and Quinten Zimmer

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For Dr. Julie Mitchell Palmer Endowment for the Natural Areas

Artecho - Pamela Palmer, President and Landscape Architect
Candace C. Dee

Louise Wilson Pearson
William R. and Margaret Pearson, for Natural Areas Endowment

Hannah Pincus
Kelly and Michael Pincus, for the North Carolina Botanical Garden Student Intern Fund

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Mary N. Mulcahy, for Friends of UNC Herbarium

For the David Robert Fund for the Coker Arboretum

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Catherine Algurie and Bob Durovich, for Educational Outreach

Sara Waitt
Joseph A. Marcus, for Friends of UNC Herbarium
Ken Moore and Kathy Buck, for North Carolina Botanical Garden Director’s Fund

Dave Whittington, UNC ’77
Kathryn and Peter Enchelmayer, for Battle Park Endowment

Anne B. Winfield
Janet O’Neal and Dianne Lindsey, for Battle Park Endowment

Charles L. Wyrick, Jr.
James H. and Melinda W. Ogburn, for The North Carolina Botanical Garden Student Intern Fund and General Support

*Deceased

101% OF GOAL

NORTH CAROLINA BOTANICAL GARDEN
MEMBERSHIP RECOGNITION

Director's Circle

**($1,500)**
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Katherine Meeks
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Laurie E. McNeil
Ralph and Barbara Warren
Mal and Amanda Wallington
Deborah and M. Holland West
Peter and Carolyn White
Floyd and Diane Whitney
Tim-Lup and Sandy Wong
Cynthia Kaye Woodsong

Continued from page 19.

manage, including over 1,200 acres of Garden, Foundation,
and State-owned lands. A recent large gift to build the Battle
Park Endowment by Eunice Brock & Sam Magill will provide
Natural Area Steward Ben Heuser with the resources to sustain
the care of the forest and trails. A second gift from Bill Bracey
is ensuring our greenhouse and nursery operations can
operate sustainably (think compostable pots!). Your continued
support and enthusiasm allows the plant conservation mission
to thrive in many locations.

You helped us meet the North Carolina Botanical Garden’s
overall campaign goal in the ‘Campaign for Carolina’ (see page
21) that officially concluded at the end of 2022. Meeting and
exceeding the $30 million goal is a huge accomplishment to
support the current and future efforts of the Garden. Since the
campaign began in 2015, you helped us double our annual
giving, created three new student internship endowments,
established three new conservation management endowments,
allowed us to design compelling and beautiful interpretation,
implemented the Entranceway Master Plan, renovated the
growing operation and greenhouse facility, funded the
acquisition of land to increase the natural areas of Parker
Preserve and Stillhouse Bottom, and created a native plant
materials development center at Mason Farm. And much
more!

As I calculate the successful ‘Campaign for Carolina’ at NCBG,
planned giving and bequest commitments are a staggering
55% of our total. This reminds me how deeply you care about
the future of plant and land conservation. Planned giving is
an excellent way to have a direct impact on the Garden’s core
mission in conservation, research, native plant horticulture,
education, and engagement. As always, the development
team at NCBG and UNC are available to help you craft your
conservation legacy. Please contact me for more information.

As we enjoy another spring renewal and marvel at nature’s vast
tapestry, I encourage you to visit the many areas managed by
the Garden and delight in all the opportunities, both virtual
and on-site, to explore your role in plant conservation. Your
gifts and contributions continue to keep the Garden growing.
Thank you.

Stephen Keith
skelth@email.unc.edu
919-962-9458
THANK YOU, CORPORATE PARTNERS!

Corporate Partners are businesses who support the North Carolina Botanical Garden year-round by sponsoring the full year of signature events. Thanks to our 2022 Corporate Partners for their commitment to the Garden’s success. If you would like to become a Corporate Partner, please contact Stephen Keith at 919-962-9458.

MARK YOUR CALENDAR

April 2
Evelyn McNeill Sims Native Plant Lecture
*hybrid with speaker*

May 6
Spring Native Plant Sale

May 12-21
Go Public Gardens Days

May 20
Carolina Moonlight Garden Party

September 16
Sculpture in the Garden Preview Party

September 29 & 30
Fall Plant Sale

October 22
Fall Family Funday

November 5
Jenny Elder Fitch Memorial Lecture

November 17
NC Botanical Garden Foundation Membership Meeting

December 2
Winter in the Garden NCBGF Member Holiday Party

December 3
Winter in the Garden Craft Market

For more information: ncbg.unc.edu