PULANTPRESS

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Newsletter of the Friends of the Herbarium



Fall 2024

From the Director

am back from a very productive sabbatical year filled with exciting research and looking forward to reengaging with my teaching program. As many of you know, this past year I embarked on two very different research journeys, both with former students of mine. This summer, Dr. Sarah Neumann and I had a large crew of students from Tennessee State University and Sewanee re-inventorying long-term forest plots at Fall Creek Falls State Park as part of our three-year USDA grant. The Block Fellows from this past year, Rob Phillips, Keegan Congleton, and J.T. Michel, had all worked the previous summer at Franklin State Forest and so they served as crew leaders. teaching others both tree identification and mapping skills. Rob and Keegan will both be using the data from the two summers as part of their honors projects as senior biology majors.



When he was not helping at Fall Creek Falls, J.T. Michel also worked with Dr. Ashley Morris at Furman University and me over the summer to complete the genetic and ecological analyses in our Phacelia project. J.T. continues in my lab as a Herbarium Post-Baccalaureate Fellow this academic year, where his first order of business is to assist with the preparation of the manuscript where we officially describe a new species of Phacelia! More on this very exciting news in the next issue of the Sewanee Plant Press.

The Herbarium, with the able assistance of Mary Priestley, has volunteered to coordinate the Tennessee Plant Conservation Alliance this year. One of our goals for the year is to highlight plant conservation here on the Cumberland Plateau. J.T. and I will be compiling a master list of plants of conservation concern for the Plateau, and we will be preparing management recommendations for public lands on the Cumberland Plateau to assist with safeguarding these species.

J.T.'s post-baccalaureate fellowship is funded in part from generous gifts to the Herbarium in honor of George Ramseur, who passed away this year. The University has created an endowment for the Herbarium to continue to honor his legacy in this way. Thank you for your contributions over the years. It is these gifts that make all our programs at the Herbarium possible. If you are ever in Sewanee and would like to have a tour of the Herbarium or the Webb Greenhouse, please be sure to let us know. Thanks again for supporting the Sewanee Herbarium!

-Jon Evans

New Ramseur Post-Baccalaureate Fellow

t is wonderful to be back in full force, devoting all of my time to the research and endeavors of the Sewanee Herbarium as the Ramseur Post-Baccalaureate Fellow. I am expanding on my activities and pursuits as a Block Undergraduate Fellow and am taking on a few new, exciting tasks as well!

The majority of my time will be devoted to coordinating the publication of a handful of academic articles such as the *Phacelia* species paper that I worked on throughout my last two years as a Block Fellow. Though all the papers I will be working on are truly enthralling, I am also particularly excited to use the data I helped collect for the past two summers at Franklin State Forest and Fall Creek Falls to provide insight on how old-growth forests store and accumulate biomass over time. This will be particularly useful for providing yet another example of how our old-growth forests in Tennessee are helping mitigate climate change and provide various benefits to our natural ecosystems.

The Sewanee Herbarium also has the distinct honor of serving as the interim coordinator for the Tennessee Plant Conservation Alliance, and during my fellowship, I will be involved in the various projects of this organization, as well as being the social media coordinator. Finally, I will be assisting in organizing the Southeastern Public Interest Environmental Law Conference (SPIEL) being held at Sewanee Oct. 11–13. This is bound to be a conference full of vitally important information and insight on how legal avenues can help support critical conservation efforts in this region.

I cannot wait to jump right into this fellowship and am so thankful for all of the support the Sewanee Herbarium receives, especially from the late George Ramseur, to make this post-baccalaureate position possible.

– J.T. Michel, C'24 Ramseur Post-Baccalaureate Fellow

Summer into Fall with The Webb Greenhouse Teaching Collection (take 2)



hough I've said in the past that plants are why we're here (meaning on this planet), I would be inclined with perfect hindsight to amend that to suggest that plants are how we're here. In addition to the oxygen we breathe, they're a major part of the planet in terms of the food we eat, the clothes we wear, and the products we consume, among other things. But this is only part of the value of having a teaching collection on campus.

This summer had some exciting events taking place in the greenhouse. The Agave species, which flowered over the late spring on a mere 5 ½ feet tall flower spike, produced several clusters of fruit following successful attempts at pollination. The fruits were slowto-develop dry capsules that eventually split open along the lines of the carpels. Now back on my front porch, most of the capsules have opened, and I believe that we will have many seedlings available for distribution in the future.

The largest division of the "whale-fin" Sansevieria masoniana, now classified as Dracaena masoniana, grew a flower spike. The flower spike was approximately the

same height as the leaves, with hundreds of flowers that opened, a dozen or so per night for several weeks. I did not find the fragrance that the open flowers emitted after sunset as strong or as striking as that produced by some of the other species, but it was in the same group that tends to attract moths, one of the main nighttime pollinators. While no moths were observed visiting the flowers, several fruits are now developing up and down the

Various families were represented with blooms over the course of the summer, as is typical for a teaching collection. In this house the Gesneriad family is always well-represented, especially by Kohleria, Achimenes, Gesneria and Sinningia spp. and cultivars. The Bromeliad family showed off with its most well-known member. Ananas. the pineapple, as well as two Pitcairnia spp. (Unfortunately the pineapple fruit was past before I realized it, and so the sweetest tasting fruit was missed this time round.) The Begonia family was represented by Begonia spp, while the Asphodel family (lily in the very broadest sense) was represented by the well-known Aloe vera as well as Gasteria spp. The Cactus family was showing off with Mammillaria as well as a less often seen night-bloomer, Echinopsis subdenudata. And I'm sure that I'm forgetting a couple.*

More recently, we had a "Night-Blooming Cereus" (actually not in the genus Cereus, but scientifically known as Epiphyllum oxypetalum), a tree-dwelling cactus, epiphytic, which may sometimes be seen up in the tree canopy from Mexico down through central South America. Hard to know how many may have stopped by to see this beauty, but it was well-publicized on campus and coincided with the beginning of students coming onto campus.

"Our" Amorphophallus titanum—the plant more commonly known as the titan arum or "corpse flower" has started emerging. This time it's a leaf. Though the tuber when we repotted it last fall weighed in at 65 lbs, it's still not surprising that this would be a leaf, since it flowered just over a year ago. It uses a lot of energy in the flowering process, so producing a leaf will allow the tuber to grow, storing up energy for the next flowering. At this point (late August), the leaf is better than seven inches in diameter at its base and is rising eight feet into the air. At this size, it's hard to miss. It looks like a leaf pretending to be a lichen-spotted palm tree.

As we move into fall, just to mention a few goodies, our *Dendrochilum* sp. (Orchid family) is coming into bloom, and there are two spikes on the Sansevieria kirkii (Dracaena pethera). The latter may mean a couple of evening events. The fragrance of the flowers on this species is not to be missed!

In addition to all these plants being a delight for the eyes, and often for the nose as well, they're also a bridge to other cultures, other people. They not only can take you anywhere you want to go as far as a discipline, but they've taken me anywhere I've wanted to go as far as bridges to other places. That's pretty good.

*One reason for listing these plants like this is that it allows for anyone interested to do some further research online. Also, the reason the *Echinopsis* is less often seen is that the flowers tend to not open until between 10 p.m. and 1 a.m. Though they're open until mid-morning the following day, they still tend not to be seen like many of the other nightbloomers.

-Jonathan Ertelt

From the Editor

nticipating Yolande Gottfried's wildflower walks along the Meadow Trail (see our Calendar of Events), I took a stroll there recently and was thrilled to see the array of wildflowers and their pollinators—so many that they inspired the illustrations for this issue of the Sewanee Plant Press. I hope you will be able to get out and enjoy them on your own, or on one of our walks.

Several botanical art exhibits sponsored by the herbarium are in the works: the nature journaling group is hanging a show titled "Nature" at the Artisan Depot in Cowan that

will be up until late-October. January through mid-February, members of that same group will display "Invasive Exotic Plants and Animals of Sewanee" at Stirling's Coffee House on the University campus, and in May they hang "All Things Red" at Frame Gallery in downtown Sewanee. (Think: red flowers, fruits, redheaded woodpeckers, etc.)

This coming year, 2025, is the 40th anniversary of Tennessee's Rare Plant Protection and Conservation Act. Roger McCoy, Tennessee's director of conservation and state naturalist, has agreed to give a talk for us this

spring-look for the date and time to be announced. Also, artist and author Laura Martin will hang a show at Stirling's from mid-April to mid-May. Titled "Imperiled Beauty," the exhibit will focus on



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Friends of the Sewanee Herbarium

The Friends of the Sewanee Herbarium support the work of the herbarium: education, research, and conservation. A \$10 annual contribution would be very much appreciated. The date of your most recent contribution is printed on your address label.

Name and address (if different from that on the mailing label on the back):		
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Fall Calendar of Events

FALL FLORA OF THE RES Sunday, Sept. 8, 2 p.m. Mary Priestley. Join us for a leisurely walk around the St. Andrew's-Sewanee Reservoir, known familiarly as

"the Res." This short one-mile trail actually traverses four distinct plant habitats and encounters a population of one rare plant (*Diamorpha smallii*, elf orpine). Plus, at this time of year the plants along the dam are in full flower. Meet at the intersection of Firetower and Deepwoods Roads. We are invited to park in the lot on Firetower behind SAS's Simmonds academic building. One mile, easy.

MEADOW TRAIL

(South Cumberland State Park Visitor's Center), Saturday, Sept. 21, 10 a.m. and Sunday, Sept. 22, 2 p.m. Yolande Gottfried. The Herbarium is offering two opportunities to celebrate the first weekend of fall and catch the late summer/early fall wildflower display on the Meadow Trail behind the South Cumberland State Park Visitor's Center. One hour easy walk. Meet at the kiosk to the right of the Visitor's Center that marks the trailhead.

TRAVELS IN AUSTRALIA

Monday, Oct. 28, 1:30 p.m. Jonathan Ertelt. Sewanee Women's Garden Club is hosting Jonathan at its October meeting, held at St. James Episcopal Church, 898 Midway Rd., where he will present an overview of his four teaching trips to Northeastern Australia, experiencing the impressive diversity of both flora and fauna found in this amazing country.

REUNION/HOMECOMING GREENHOUSE OPEN HOURS

Friday-Saturday, Nov. 1-2, 3-5 p.m. Jonathan Ertelt. Continuing a tradition started just last year, the Webb Greenhouse will have open hours for visitors and alumni to come and see the diverse collection within. Jonathan Ertelt, C'78, will be on hand to point out special plants and answer questions.

NATURE JOURNALING continues weekly. See Mary Priestley (mpriestley0150@ gmail.com) for more information.

All times are Central Time. Wear appropriate shoes on these walks. Risks involved in hiking include physical exertion, rough terrain, forces of nature, and other hazards not present in everyday life. Picking flowers and digging plants are prohibited in the above-mentioned natural areas.

THE SEWANEE PLANT PRESS

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Drawings, by Mary Priestley, were made on the Meadow Trail at South Cumberland State Park.

HERBARIUM PUBLICATIONS

Fiery Gizzard: Voices from the Wilderness What If Trees Could Walk? Sewanee Wildflowers in Watercolor

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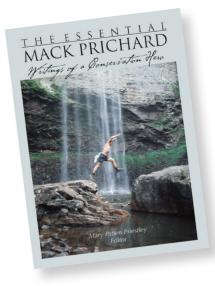


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ADDRESS SERVICE REQUESTED



From the Editor, continued from page 2



Continuing on the subject of rare plants, as Jon Evans mentioned, I am working this year with the Tennessee Plant Conservation Alliance, a group of partners focused on the conservation of rare plants in Tennessee. Partners include individuals, professional biologists, academic institutions, state

and federal agencies, botanical gardens, commercial growers, and other organizations that voluntarily identify plant conservation projects and implement them on the ground. We hope that within a few months a permanent coordinator will be named, but until then I am looking forward to working with J.T. Michel and others, learning more about this important organization, and helping where I can.

Last, I edited a new book recently: The Essential Mack Prichard, Writings of a Conservation Hero, which is available on amazon. As described there, "Mack Prichard was Tennessee's most passionate and articulate advocate for preservation of natural and cultural resources. Celebrated as the 'Conservation Conscience of Tennessee' by state senate decree, Prichard was officially designated Tennessee's State Park Naturalist Emeritus upon his retirement from a storied half-century career with the Tennessee Department of Environment and Conservation. In this collection, he

commends, advises, and preaches. He salutes those he admires, admonishes those with whom he disagrees, and is bitter in defeat. This book offers insight into this complex and driven man. ..." This anthology was a joy to compile. If you're looking for inspiring reading, this may be the book for you.

Mary Priestley

