The Sewanee PLANT PRESS Volume IXX, No. 3 Newsletter of the Friends of the Herbarium

From Callie Oldfield, Our Post-Baccalaureate Fellow

My introduction to the Sewanee Herbarium came in the summer of 2013, when I was a rising junior. Having finished the Field Study in Belize course, I spent eight weeks identifying species from thousands of photos that had been taken by the class. As I plodded through the photos, learning by heart the scientific names of fish, corals, and birds, I uploaded them onto the crowdsourcing site iNaturalist, where they could be publicly viewed and confirmed. By the end of the project, I had identified 429 different species, for a total of 706 different observations at our

rainforest and reef sites. During this time, the Herbarium was abuzz with activity: Nathan Bourne (C'11) was the post-baccalaureate fellow at the time, and he worked with Hali Steinmann (C'15) and Dr. Evans, herbarium director, to resample woody stems and understory herbs of permanent plots which were characteristic representatives of particular habitats on the Domain. It was during one of these trips that we discovered an unexpected Kentucky Coffeetree (*Gymnocladus dioicus*) downslope from King Farm.

After a whirlwind summer, I spent the next semesters absorbed in a dataset describing a population of chestnut oaks (*Quercus montana*) that had been tracked since the late 1990s. I helped Dr. Van de Ven and Dr. Evans spatially map trees and continued an internship with the Herbarium in the summer where I began basic analyses and investigated the environmental variables, such as soil moisture, soil depth, and leaf litter depth. The Herbarium was much quieter that summer, as there was only one other intern—Thomas Walters (C'15), who was examining the effects of burning and clonal structure of the newly-discovered hill cane (*Arundinaria appalachiana*).

After my first semester of senior year, where I continued my research on chestnut oaks, I discovered that I had completed all of the necessary credits for my bachelor of science in biology and minor in environmental science without needing to attend the final semester. As a result, I became the first post-baccalaureate fellow in environmental stewardship and sustainability so that I could continue my projects and participate in many others.

In January, I took my comprehensive examinations, and also began my job as postbaccalaureate fellow. I completed a manuscript detailing an unusual interaction between invasive wild hogs (*Sus scrofa*) and yellow nutsedge (*Cyperus esculentus*) in a barrier island ecosystem, which is under review. I also sat in on a statistical modeling course and helped monitor an amphibian population.

My primary goal last semester was to complete the task of organizing and analyzing the Herbarium specimen database in order to publish the complete flora of the Domain. I have seen mentions of completing the flora since the fellowship of Leighton Reid (C'06), leading me to feel cautiously optimistic that this long-ongoing project will be finished in my time. Indeed, Dr. Evans has already written the majority of the paper. Just last week we finished assigning habitat designations to each of the 1116 species-and we do hope that the number of species remains at 1116. The recent discovery by Dr. Evans of interrupted fern (Osmunda claytoniana) was a highlight. Once the manuscript is finished, we will be able to publish checklists of the flora along with more detailed information on where to find certain species.

We are beginning comprehensive studies about forest change on the Cumberland Plateau, with one study complete and another just beginning. In the fall, Dr. Evans, Kevin Hiers, and I resampled parallel plots placed along the cove and plateau. We will compare compositional and structural change in these plots in the years of sample (1995, 2005, and 2014) this summer.

This month we begin another historical project with four interns: Ed Haubenreiser (C'16), Katie Kull (C'17), Zack Loehle (C'17), and Emily Riedlinger (C'18). We will continue a project that was started by Dr. George Ramseur, director emeritus of the Herbarium, along with other researchers. In 1977 and 1978, they surveyed permanent plots at Franklin State Forest and Fall Creek Falls for vegetation. We will repeat this study, which will then give us the ability to test the effect of perturbations, such as dogwood blights, on community composition and structure. We are interested in whether these result in directional change or give evidence of plateau forest resiliency. This will allow us to ask many other fundamental questions, leading us to partner with other research groups to explore them.

This research will not only represent the forging of a new connection, but will also incorporate many past students. In mid-May, Dr. Sarah McCarthy Neumann (C'99) brought a class from Alma College, Michigan. These nine students helped us survey nearly all of the first hectare in Franklin State Forest in the two days that they were able to help.

I look forward to spending this next year working in the Herbarium with the goal of completing research that increases our understanding of forests on the Cumberland Plateau and involving many new and past researchers in our investigations.

Callie Oldfield C'15

The Sewanee Herbarium: Education — Research — Conservation



A Hidden Garden—Piecing Together Rebel's Rest's Early Landscaping

Mrs. Fairbanks "tamed the grounds around Rebel's Rest but not too much, because the bushes and undergrowth reminded her of the early days." —from Rebel's Rest Remembers, by Rene Lynch

y now, you surely have heard: Sewanee's sawn timber and log guesthouse, Rebel's Rest, suffered a catastrophic fire in July of 2014. Thankfully, no one was in residence at the time, but the damage was extensive. It was decided to disassemble what remained, label the salvaged members, and store them for possible use in a future structure.

Meanwhile, Sarah Sherwood, professor of environmental studies and university archaeologist, and Jerry Smith, professor of religion and associate university historiographer, began

an intensive study of the site. The two have now assembled a writing team to produce a book about the building and the land on which it stood. Publication is projected for the fall of 2016, 150 years after Rebel's Rest's 1866 construction.

As part of the book, Margaret Woods and I have been invited to contribute an essay on the home's early landscaping. We'll be writing on the general topic

of domestic landscaping in Sewanee in the late 19th and early 20th centuries, with an emphasis on Rebel's Rest.

What an intriguing project for a couple of "woods women" who enjoy both horticulture and Sewanee history! Margaret, who spent much of her childhood living here, holds a post-graduate certificate in garden design from George Washington University. She did most of her woody plant field work at the National Arboretum. A member of the Friends of the Herbarium, Margaret conducts tours of the University's Arboretum and participates in our nature journaling group. As herbarium curator, I have a good knowledge of the plants of the Domain. Apropos to this project, I know which ones preceded settlement of this area and which ones the settlers brought with them when they came, as well as those that tagged along of their own accord.

Major George Rainsford Fairbanks and his wife Susan built Rebel's Rest, and it "grew like Topsy" to house their large and extended family. The name refers to the Major's happily settling down after years as a quartermaster with the Confederate army. He chose the site, close to the ATO Spring, and laid out a 7-acre



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lease. Initially, the family lived year-round at Rebel's Rest. When Major Fairbanks became involved in business and politics in Florida, they lived here during the summers only. Upon the major's death, Susan returned to live in Rebel's Rest fulltime until she died in 1911.

This was the Victorian era, and even in the Tennessee woods, gardens reflected the formality that Victorians loved. Perennial beds and garden paths were designed with symmetry in mind. Trellised vines often graced entryways. Waring McCrady, emeritus professor of French and a student of Sewanee history, noted that photos of Victorian gardens almost always show a large, elaborate cast iron urn as a focal point. We know that Susan Fairbanks enjoyed gardening, and we have a general idea of the landscaping. Her flowerbeds were laid out in a square, surrounded by paths. She loved oleanders, which she brought from Florida. The plants overwintered in a backyard pit, and every spring she would have them replanted along the home's circular drive. We also know that the family had apple and pear trees. The orchard shared the back of the lease with servants' quarters, a barn, and other outbuilding. Hops vines shaded the back porch.

> But, as Margaret commented, many interesting questions tug at us, including: How did the challenges of the mountain affect homeowners' plant choices? How were plants procured? Were there any garden elements that were chosen for status?

And the sixty-four thousand dollar question: when was the wisteria planted?

Do you remember the gener-

ous wisteria vines that graced Rebel's Rest's front porch? This beautiful exotic with the voluptuous lavender inflorescences survived the fire. Ground-level and below-ground features of the building remain. But when viewed from the street, the vines, their metal supports, a new arbor, and an old office are all that can be seen of the lovely old guesthouse.

Wisteria sinensis was first imported from China to the United States in the early nineteenth century. An individual plant can live more than 100 years. Did Susan Fairbanks oversee planting these—or their forebears—at Rebel's

(continued on back page)

Summer Calendar of Events

CHOCOLATE /

GOLDEN -

Introduction to Nature Journaling Wed., June 24, 4 p.m., Mary Priestley

Learn about nature journaling and make a sample journal "page" to take home. Choose from quotations, observations, sketches, pressed plants, and more to organize your page. Who knows? You may discover that nature journaling is a wonderful way to bring your outdoor memories to life. Meet in Spencer room 173 for this one-hour indoor workshop.

Introduction to Nature Journaling Wed., July 8, 4 p.m., Mary Priestley Missed it June 24? This will be a second

chance to make a "memory catcher" for your outdoor experiences. We'll be in Spencer room 173.

Foster Falls

Sat., August 1, 9 a.m., Mary Priestley

This has long been a favorite spot for late season wildflowers that thrive in the open sun, such as blazing star and numerous asters. Meet at the Foster Falls parking area for this one- to two-hour easy walk in the power line right-of-way above the gorge with optional short but steep trek to the bottom of the falls and back to see some trees and ferns. Contact the South Cumberland State Park Visitors' Center for directions (931.924.2980). Want to take a dip after the walk? Bring your suit! Foster Falls is also a wonderful place for a picnic. Mountain Goat Trail

Sun., Aug. 23, 2 p.m., Yolande Gottfried Explore part of the new section (and maybe some of the old) for seasonal wildflowers. Watch for details in the Messenger and on the herbarium website.

Nature Journaling. A nature journaling group, sponsored by the Herbarium, meets Thursday mornings, 9–11. We are meeting in Abbo's Alley for the summer. An informal gathering, participants share observations and writing, and sketch plants or other natural objects.

ROUGHI

Everyone is welcome. Get in touch with Mary Priestley for more information.

All times are CST or CDT.

Wear appropriate shoes on all of 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 all of the above-mentioned natural areas. For more information on these or other Sewanee Herbarium events, please contact Yolande Gottfried at the Herbarium (931.598.3346) or by email at ygottfri@ sewanee.edu. Directions are available on the herbarium website, lal.sewanee.edu/herbarium/, under the calendar of events.

THE SEWANEE PLANT PRESS

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Drawings are of wisteria, chestnut oak, interrupted fern, and Rebel's Rest in 1866.

HERBARIUM BLOG

sewaneeherbarium.wordpress.com

Friends of the Sewanee Herbarium

The Friends of the Sewanee Herbarium support the work of the Herbarium: education, research, and conservation. A \$10.00 annual contribution would be very much appreciated. The date of your most recent contribution is printed on your address label.

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-Mary Priestley

To date, Margaret and I have identified more than 70 species of perennials on the site, several of which may have been planted by the Fairbankses. We hope that this on-the-ground poking around, together with library research, interviews, and the archaeological expertise that others bring to the project, will enable us to arrive at a somewhat accurate picture of what the grounds at Rebel's Rest were like when Major and Mrs. Fairbanks and their brood called it home.

Want to get involved?

Prof. Sarah Sherwood, University archaeologist, will be offering training sessions, beginning June 15, for people who would like to

help with the archaeological work at Rebel's

Rest. For more information, see The Sewanee

Mountain Messenger or email Sarah at sher-

wood@sewanee.edu.

Rebel's Rest, continued from page 2

the landscape plan?

Rest? Or does their gnarled and twisted appearance belie the fact that they are actually relatively young plants and recent additions to