



## Botany in the Bushveld: Oliver's time in South Africa!



**H**ello to all the Friends of the Herbarium! I'm currently writing to you from Lower Sabie rest camp in Kruger National Park, South

Africa! For the better part of the last four months, I've been in South Africa and Eswatini, doing research and learning all about ecology and conservation. Let me tell y'all a bit about it!

My first three months here are thanks to the African Ecology and Conservation semester abroad program in South Africa, run by the Organization for Tropical Studies (OTS). I spent all that time getting fieldwork experience, attending lectures, and either participating in or designing research projects. It is by far the best ecology educational experience I have ever received, and I recommend it to all undergrads interested in an ecology study abroad experience.

The last two weeks and the next month here are thanks to the internship I got offered

by the OTS South Africa course director Dr. Laurence Kruger. Through the collaboration between OTS and the Herbarium Fellowship's staff, I was able to accept that offer and come back! I have spent the time working on the BROWSE project, a collaborative research project between the University of Florida, OTS, and the Nasani Trust that focuses on the effect of herbivory on the savanna landscape. I have spent my time getting more fieldwork experience, but also working on the project that will hopefully become my honor's thesis. And that's how a guy from Tennessee ends up spending four months in Southern Africa!

While I can't do the experience justice, I can give you some highlights. The research topics I've participated in are especially worth mentioning. The three months I spent with OTS were fundamentally built around fantastic research experience, but I especially love the work I did with fire and invasive reeds. For fire research, my classmates and I researched trait investment in several savanna grasses (family Poaceae) and used those traits to classify those grasses on a palatability-flammability

tradeoff scale. The idea there is that both fire and large herbivores are major "consumers" of grass, yet grasses cannot effectively defend against both without tradeoffs (If you're interested in learning more, look at the papers on the topic published by Dr. Gareth Hempson and Dr. Sally Archibald). For example, a grass can make itself woodier to make itself less palatable to herbivores, but all that extra carbon means that fire would burn through it much more severely! Looking at grass under this framework fundamentally changed how I saw grass; it's not just a lawn plant anymore; now it's all either a living tinderbox or good eating! For the invasive "reed" project, non-native *Arundo donax* could be reducing biodiversity by outcompeting the naturalized *Phragmites australis*.

To measure this biodiversity, we ended up counting hundreds of reed spiders, beetles, flies, and ants! The time spent under a microscope looking at tiny spiders was grueling, but I somehow left loving small invertebrates more than ever!

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# Nature Journaling



*This morning  
two mockingbirds  
in the green field  
were spinning and tossing*

*the white ribbons  
of their songs  
into the air.  
I had nothing*

*better to do  
than listen.  
I mean this  
seriously.*

—Mary Oliver

It's mid-June and things are hopping at Stirling's, Sewanee's campus coffee house. Cardinals are vying with goldfinches for perches on birdfeeders. A chipmunk is going after the seed that falls to the ground. Hummingbirds buzz around the jewelweed blossoms, and a watchful rabbit munches on the leaves below. A squirrel is checking out the trash can. High in a white oak, a red-shouldered hawk takes it all in.

On the porch, a group of humans catches one's eye: Their sketchbooks and watercolor paints share table space with coffee cups, muffins, and a variety of containers holding flowers, twigs, and fern fronds. Someone is closely observing an insect whose day has passed. The collective knowledge of these avid naturalists is impressive: Some know the birds or insects; others the amphibians, wildflowers, or mushrooms. All are delighted to share in their love of these little bits of the natural world. Welcome to the Herbarium-sponsored nature journaling group's weekly Thursday morning meeting!

Nature journaling has been a staple of Sewanee life for about 20 years, initially spurred by an article that Jill Carpenter, once a member of the community, wrote for this newsletter. That first group called itself the Dead Plants Society; now they're just the nature journalers. People have come and gone; interest has waxed and waned. Presently, the group numbers about 10 regulars plus a few more from time to time.

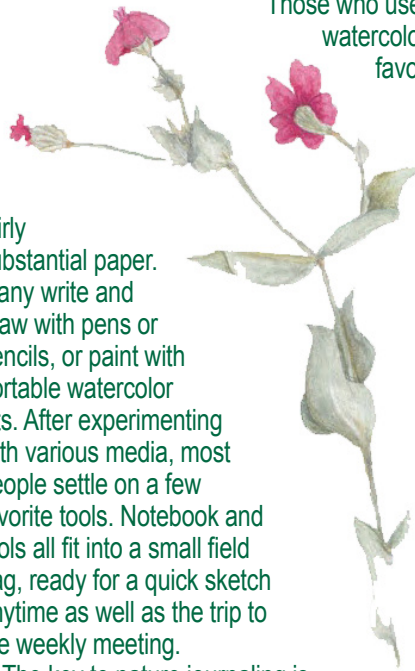
It takes very little in the way of materials to nature journal—paper and something to write or draw with are enough. Most nature journalers use an unlined notebook.

Those who use  
watercolor  
favor

fairly  
substantial paper. Many write and draw with pens or pencils, or paint with portable watercolor kits. After experimenting with various media, most people settle on a few favorite tools. Notebook and tools all fit into a small field bag, ready for a quick sketch anytime as well as the trip to the weekly meeting.

The key to nature journaling is the interest in keeping careful notes of what you observe—usually in the form of drawings and text. John Muir Laws, probably the leading current advocate of nature journaling, is himself an accomplished illustrator. But he will tell you that nature journaling is not about creating pretty pictures. It's about really taking a good look at something, recording it ... and enjoying the process!

Laws suggests three components of a nature journal entry: "I notice," "I wonder," and "This reminds me of ...." Often a person's observation ("I notice") consists of a drawing of a living thing, along with its name, if possible. (Naming an organism gives one a "handle" on the world, enables them to communicate about it.) Asking questions ("I wonder") takes the journaler deeper into what they are observing and often leads to a bit of research. "This reminds me of ..." helps



the person to see connections between this and other things they've seen, read or heard about, or otherwise experienced. A journal entry may also include a few lines of poetry, perhaps a photo, or some pressed plant material. An envelope taped into the back of the journal is also a good place to stash some of these treasures.

Some people say they shy away from this enjoyable endeavor because they think they can't draw. The cure for that is just to start doing it. Drawing is a skill, and if you keep it up you can only get better. Sewanee's nature journaling group includes people who are just beginning to draw as well as fine artists and illustrators.

Once it contains a few entries, the journal becomes as much fun to look back through as to augment, reminding us of occasions when we took the time to notice and record. As they continue to add entries, a nature journaler's notebooks become an informal record of what's happening in the natural world year after year: First hummingbird? Noted! ... Trilliums up? Drew one in full bloom! ... Snowy winter day? Jotted down a poem!

The Herbarium's nature journaling group meets to draw and chat week after week throughout the year, with short periodic breaks. If you would like to join us—or just come by and see what we're up to—drop me an email to be sure of where we'll be. We would love to have you!

Mary Priestley

For more information:

*How to Keep a Nature Notebook*, by Susan Leigh Tomlinson

*Nature Stewardship Through Science, Education, and Art*, by John Muir Laws, [johnmuirlaws.com](http://johnmuirlaws.com)



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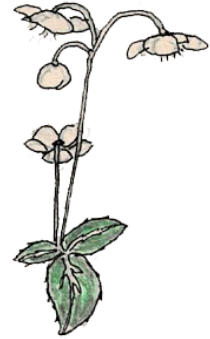
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## Summer Calendar of Events

As mentioned in the last issue of the *Sewanee Plant Press*, Herbarium events are now following a seasonal schedule. Spring and summer offerings will be wildflower walks. Fall will bring various activities focused on art, and winter's events will be instructional, e.g. plant identification using field guides. Nature journaling, as featured in this issue, will be an ongoing, year-round offering.

### Foster Falls Saturday, July 20, 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 Saturday, Aug. 27, 9 a.m., Yolande Gottfried

The Mountain Goat Trail is a paved walking/ biking trail following an old railroad bed. We will walk a short section of it to spot late summer wildflowers. Meet in the parking lot of the Franklin County/Sewanee Airport at 262 Airport Road.

### Nature Journaling

A group meets for nature journaling Thursday 9–11 a.m. Come try it out—stick with it if you like. Bring an unlined journal (or a few sheets of unlined paper) and a pen or pencil. No experience needed. For more information email [mpriestley0150@gmail.com](mailto:mpriestley0150@gmail.com).

All times are 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 get in touch with Yolande Gottfried by email at [ygottfri@sewanee.edu](mailto:ygottfri@sewanee.edu).

## THE SEWANEE PLANT PRESS

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*Drawings are by members of  
the nature journaling group.*

## HERBARIUM PUBLICATIONS

*Fiery Gizzard: Voices from the Wilderness*  
*What If Trees Could Walk?*  
*Trail Guide to Shakerag Hollow*  
*Sewanee Wildflowers in Watercolor*

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## **Bushveld**, continued from page 1

Besides research, I also want to accentuate the fieldwork I did, along with those I worked with. Upon coming to South Africa, I was excited to practice my plant family identification skills that I've been building. While I was happy to get so many answers and learn so much, one thing absolutely surprised me: Nobody here cares about showy flowers! I would see a beautiful hibiscus flower (family Malvaceae), ask an ecologist what it was, and they would have no idea! I was scared that I wouldn't be able to learn much about plants, but then I would meet someone who could identify a grass species from across a field, from the back of a moving safari vehicle, just by the color of the leaves alone! Suffice to say, I had a lot to learn about savanna grass from savanna grass experts. To them, grasses are everything, and pretty flowers are the side story. It's funny how in the U.S. it feels like the exact opposite!

I still have a month to go, but I feel like I can go ahead and reflect on the experience. After four months here I feel like I have a completely new understanding of ecology and the greater world. I had professors who simply asked that I try to look at the world with everything I have, and because of that I now see, hear, smell, and feel things that I never would have even noticed before! It almost feels like I wasn't even paying attention to the world before, but now I've been taught how to pay attention to everything. The result is that the world has never been more beautiful. I only wish people understood why my heart thumps at the sight of a new grass species! For this new way of seeing the world, I can only be thankful. Thank you to the game guards who kept us safe from the lions and elephants and thank you to the field technicians who have

taught me how to see the patterns that rule the world. Thank you to Dr. Kruger of OTS South Africa for giving me this opportunity and thank you Dr. Evans for assuring me that I had the backing I needed to take it. And thank you, reader, for listening to my excited ramblings about grass and flowers, even if you just wanted to hear about all the elephants, zebras, and giraffes. (They were cool, as far as non-plant organisms go). I just hope that y'all get the opportunity to see the savanna as I've seen it! Now if you'll excuse me, I have to get ready for tomorrow's fieldwork.

*Keep on plantin',  
Oliver Hutchens, C'23  
Block Herbarium Fellow*

