



## Domain Flora Project Summer Interns

This summer we — Environmental Studies: Ecology and Biodiversity majors Nathan Bourne and Katie Qualls — spent eight weeks working with professor Jonathan Evans, contributing to the Flora of the Domain project by supplementing it with plant community assessments.

By conducting surveys of species found in a variety of habitats across the Domain, we produced a comprehensive list of all of the unique plant communities. The main goal of the project was to quantify these communities in aspects of composition and structure. We visited dozens of different sites that are representative of the diversity of habitats found on the Domain and compiled a list of the plant species for each site, augmented by data on location, species abundance, land use, and a variety of abiotic factors.

The collected data, which we entered into an electronic database, will be useful for the Flora of the Domain, a publishable paper about plant species of the Domain (now over 1,020). It will

also serve as a catalyst for future student research, providing detailed community information and raw data to be used for other floristic or overall community studies. The community information will also be used in the creation of a new Domain Management Plan for Biodiversity. Created in part by students, this plan will help to guide the University in its management of the Domain's 13,000 acres. Ecological data was added to the Herbarium database, and pressed specimens will be added to the herbarium collection.

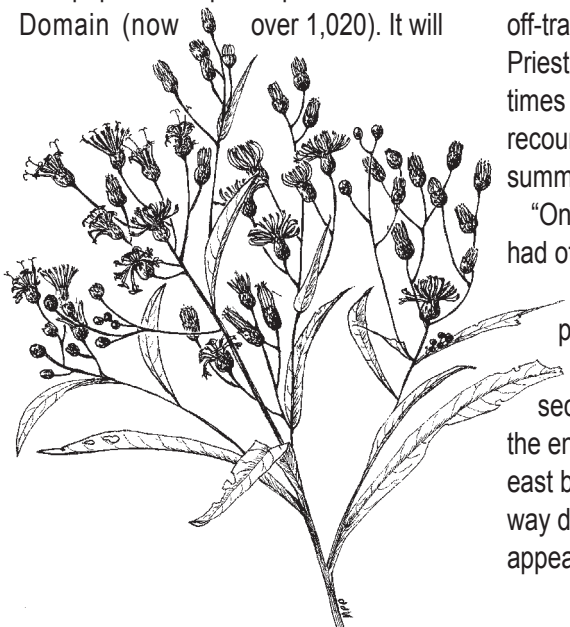
From our viewpoint, the project was practical as well as fun. Many days were spent with Dr. Jon Evans hiking to a location on the Domain and collecting data. We learned many new scientific names of plants and by the end of the summer, were able to identify most of the common plants found on the Domain by sight. Some days were spent searching for species not yet collected on the Domain. These days usually consisted of going on explorational off-trail hikes on the Domain with Mary Priestley (Herbarium Curator) to sometimes nearly inaccessible places. Katie recounts some of her most memorable summer days:

“One day when Dr. Evans and Nathan had other commitments, Mary and I hiked down into Lost Cove to look for new plant species. Lost Cove is a newly acquired and not very explored section of the Domain. We parked at the entrance to a fire lane near the northeast bluff line of Lost Cove and found a way down into the cove by following what appeared to be an old logging road.

“From there, we set off into the forest. I was examining a large Jack-in-the-Pulpit when I heard Mary call through the woods ‘Katie, come look at this!’. I scrambled over a fallen log and through a large patch of stinging nettle (Ouch!) to discover that Mary had found a beautiful waterfall cascading over a lip of limestone into a pool below. We collected several specimens at the waterfall, including a wide-leaved sedge species I found on a ledge of limestone behind the waterfall that had accumulated some soil. Soon after our excursion into Lost Cove, Mary identified the sedge as a new species for the Domain and dubbed the waterfall ‘Katie’s Cascade’.

“Another fun day Nathan, Mary, and I got to borrow the all terrain vehicle that belongs to Domain Management and study the flora in the old fields around Lake Dimmick. The fields were full of blackberry bushes and we were very grateful to be driving the Gator and not trying to walk through the brambles. It was also great to be able to reach out and grab ripe blackberries off the bushes without having to do the work of walking around in the well-defended bushes. That day we collected a lot of specimens including some water plants that Nathan bravely collected by walking through knee-high mud and water near a beaver dam and found two new species, including a *Catalpa* tree — more new species for the Domain.”

Nathan Bourne (C'11)  
Katie Qualls (C'12)



## Close Observation

*This, the first in an occasional series, is written and illustrated by Herbarium Associate Curator Yolande Gottfried. Her drawing is of the small woodland sunflower. — Ed.*

**A**ugust 15, 2002, the Feast of the Assumption of the Blessed Virgin Mary — there is a sense of shifting in the seasons, even though the weather is still hot and one would think that summer is full upon us. This year it has been so particularly dry that it has felt almost painful. The tulip-poplars are turning yellow, like glowing towers on the plateau slopes, and their leaves are falling — I saw one sailing in slow, side-to-side swings, cup-shaped resting on the air. Other trees are changing color, too — black gum and sassafras and dogwood . . . it seems an appropriate time to start this sabbatical journal project. Robin is on sabbatical this year and I've decided to do a sabbatical project of my own — to really get to know and record the natural world here on our piece of land."

So I began, eight years ago, and this year, at the end of another sabbatical year for my husband, I begin again. August 15 does indeed seem to mark a shift away from the heat of the dog days of July and August and toward cooler weather. In fact, it is marked by major festivals in many world traditions — perhaps the reason this date was chosen by the Catholic Church for the Assumption feast. This year, on schedule, the weather shifted from highs in the 90s to highs in the 80s and, with cooler nights, color is beginning to show in the trees.

My observations so far are limited to what I can see from the porch or in the yard. Every year I resolve not to be put off from going into the woods by the threat of ticks and chiggers, and every year I find myself at the end of summer, not having been back there since late spring. But as soon as I start consciously noticing, it is amazing how much there is to see-and hear-and smell!

This time of the year there are usually numerous large bolete fungi near the house. They seem quite distinctive, yet every time I think that one must surely be so unique that I can find it in the field guide, I am stymied once again. These seem to be either *Boletus bicolor*, a choice edible, or its poisonous look-alike, *Boletus sensiblis*, and I am not about to risk my life or health on that! It's probably the latter, "common and often abundant in oak woods." The color is lovely — salmon and mahogany and burnt umber — with yellow flesh exposed, so something eats it! But when these large mushrooms begin to decay, you would think there was a dead animal somewhere.

One of the first fall composites to flower is the late goldenrod (a misnomer) on the pond dam, identified by the plume-like inflorescence and distinguished from Canada goldenrod by the stem smooth below. The buds on the small woodland sunflower under the oaks around the house also begin to open. If I brave the tall growth on the banks of the pond, I will probably find Maryland meadow beauty and candyroot both blooming pink.

But it's safer to stay close to the house and watch the animals. On a mountain mint near the porch, I watch a hairstreak (I think!) butterfly, not sure for a while which end is which. Looking it up to make sure of the identification, I read that these butterflies have a reddish eye-spot on their hindwings with tails that look like antennae, and use a sawing motion of the hindwings to attract attention to the wrong

end, and that "it is not unusual to find individuals who have sacrificed the missing portions of their HW to birds." So gratifying to find one's observations confirmed by the guidebook, and it sure fooled me for a while!

From inside the house, even safer, I see one of those fat spiders with orange-striped legs (name anyone?) that spin large webs on porches and windows this time of year (where were they all the preceding months?) actually rolling up (eating?) its web from the previous night. My Golden Guide book of spiders and their kin is inadequate to answer my questions. One day there was even a green heron patrolling the edges of the pond for quite a while, watched from the window with binoculars. The bird book was quite helpful in confirming its hunched hunting stance and its coloration as first summer plumage.

As the weather cools, I intend to get back into the woods and explore more thoroughly — I'm probably missing the cardinal flower in our wet-weather streams.

### Bibliography

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Horn, Dennis and Tavia Cathcart, eds., 2005. *Wildflowers of Tennessee, the Ohio Valley, and the Southern Appalachians*. Lone Star Publishing.

Lincoff, Gary H., 1981. *National Audubon Society Field Guide to North American Mushrooms*. Alfred A. Knopf.

Sibley, David Allen, 2003. *The Sibley Field Guide to Birds of Eastern North America*. Alfred A. Knopf.



# Fall Calendar of Events

## The Cross/Perimeter Trail/Tennessee Avenue Trail — Sat., Sept. 25, 1:30 p.m., Yolande Gottfried

This 1.25-mile loop hike is one of those featured in the summer 2008 issue of the *Sewanee* magazine, in the article "Sewanee's Best Day Hikes," which calls it "an easy and relaxing hike through rolling topography." This should be a lovely fall walk, which includes Liesegang bands and other geological features. Meet at the War Memorial Cross.

## A Guided Walk Through Abbo's Alley — Sat., October 2, 7:45 a.m., Mary Priestley

A Family Weekend tradition! Meet at the Quadrangle for this one-hour easy walk in the Abbott Cotten Martin Ravine Garden. There are a surprising number of things to see and learn on this familiar trail.

## Trails at St. Andrew's—Sewanee School — Sat., Oct. 23, 10 a.m., Yolande Gottfried

The walk leader will have selected the most interesting parts of the trail system for the time of year. This will be a moderate 2-hour walk. Meet in the parking lot behind the gym at St. Andrew's—Sewanee School.

## Caldwell Rim Trail (Lost Cove) — Sun., Nov. 7, 1:30 p.m., Mary Priestley

This trail, named for Hugh Caldwell, philosophy professor and founder of the Sewanee Outing Club, was established just this summer by Sewanee Outing Program Director John Benson and his summer interns. The trail is located largely along the rim of Lost Cove with glimpses into the University's newly-acquired property. Meet at the Sewanee Market for this easy 2-mile hike.

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 events, call the Herbarium at 931-598-3346. Directions are available at the Herbarium website, <http://lal.sewanee.edu/herbarium>.



## THE SEWANEE PLANT PRESS

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Sondra Bridges

*Drawings by Mary Priestley  
are of ironweed, blackgum,  
and evening primrose.*

## 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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## From the Editor's Inbox

Sewanee mathematics and computer science professor Chris Parrish, who is known for his enthusiasm about nature and nature photography, has put together a photo essay on Lichens of Sewanee. Google it to see more than 100 photographs of lichens that Chris has identified here. Also look for links on the herbarium website to Chris's Macrolichens of North America project, which is nearing completion as we go to press.

I received an email in mid-August from Karen Dixon, who with her family runs Granddaddy's Farm, a working farm near Winchester, TN, that hosts elementary school groups and runs a fall market. For more information, see [www.granddaddysfarm.com](http://www.granddaddysfarm.com).

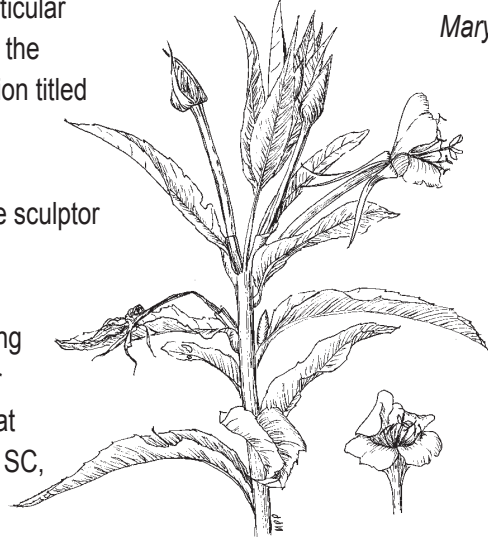
If you go, check out the nature trail, with which I gave her some help.

Sculptor Jim Wheeler (C'75) emailed from New Zealand where he lives to bring us up-to-date on his work. Of particular interest to those of us who live in the Southeastern U.S. is his installation titled "Kudzu!" that was at the Botanic Gardens in Auckland. See [www.jimwheelersculptor.com](http://www.jimwheelersculptor.com) or google sculptor Jim Wheeler Kudzu.

Recent grad Kate Cummings (C'10), whose Plant Homesteading Guidebook was mentioned in our summer issue, emailed to say that she's in grad school at Clemson, SC,

where she is studying ethnobotany. She will be concentrating on *Ilex vomitoria* Aiton, yaupon holly, whose leaves Native Americans roasted for use as a caffeinated tea.

Mary Priestley



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