



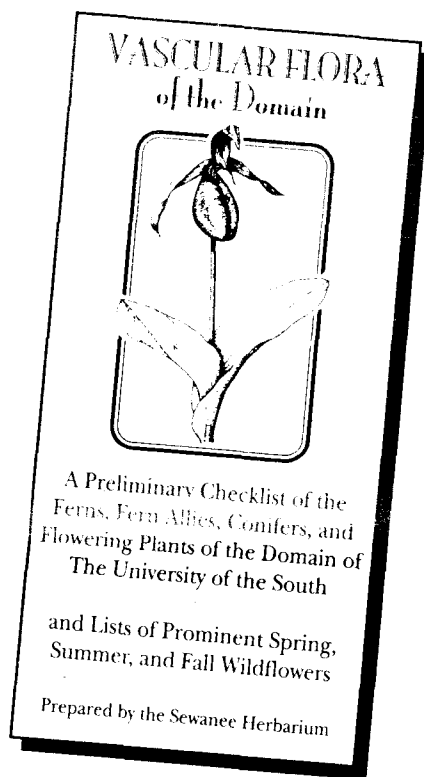
## Producing a Flora of the Domain

*This summer, the Herbarium produced a preliminary inventory of the plants of the Domain, with the help of student intern Caitlin Elam. She relates her summer experience here. The list is available at the University Bookstore or can be downloaded from the Herbarium's website. —MPP*

Anyone who has stayed in Sewanee during the summertime knows how many wonderful plants there are to see. That is why I feel so fortunate to have been able to spend a summer working with them. I am a senior at The University of the South and this past summer I received a Jessie Ball duPont Student Research Grant to work with Mary Priestley, the curator of the Sewanee Herbarium, on a preliminary checklist of the vascular flora of the Domain. In preparation for the internship, Mary and I set three goals for the summer, which I am proud to say we reached.

Our first goal was to create the preliminary checklist, which includes around 700 native and naturalized ferns, fern allies, conifers, and flowering plants. The list gives the Latin and common names, native or exotic status, and habit (life form) of each of the plants that have been recorded on the Domain to date. The list was compiled using current herbarium specimens that had been collected by the Sewanee Herbarium faculty and staff and by former botany students at the university. It was produced by Dr. Jon Evans, Director; Dr. George Ramseur, Director *emeritus*; and Curators Yolande M. Gottfried and Mary P. Priestley. Also included in the booklet are lists of prominent spring, summer, and fall wildflowers.

The second goal for the internship was to create a small collection of local plant species for my own personal reference. The "small" collection ended up including 250 plant species. The best part of making this collection for me were hikes,



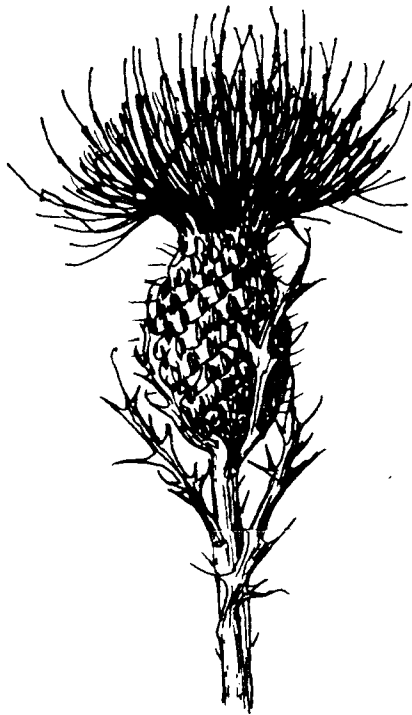
walks, and even drives that Mary and I would take to collect the plants. Through this kind of hands-on experience in the field, I obtained the knowledge of the plants found in this area that I was hoping to gain through this internship.

The third goal for me was to create a website about some medicinal plants that can be found on the Domain. The best part about this project was that it catered most to my own personal interests in botany. I am very interested in the field of ethnobotany (the study of people and their use of plants), more specifically herbalism and medicinal plants. The website I created is linked to the Sewanee Herbarium website, under Current Projects. The site contains information on 10 medicinal plants found on the Domain. The family, genus, species, common name(s), description, habitat, part(s) used, preparation, medicinal uses, and active constituents of each plant are given. Along with a written description of the plants, I included photographs (most of which I took with the Herbarium's digital camera) and scanned a herbarium specimen of each plant.

I learned a lot in the two months that I worked with Mary, and this internship has helped me to move forward toward my own personal goals. I think it is such a wonderful thing that I was able, through the funding of the Jessie Ball duPont Grant, to be able to spend the beautiful Sewanee summer getting hands-on experience in a field that I love. I only hope that other students are as fortunate as I was in finding extraordinary summer internships.

—Caitlin Elam

## Tall Fall Flowers



### THE PLANT PRESS

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Tammy Scissom

*The drawings in this issue are of  
elderberry, pink lady's-slipper, field thistle,  
turtlehead, and Joe-Pye-weed.*

If asked which flower is the tallest, many would answer with the sunflower. And the Sunflower Family, the Asteraceae, is the one to which nearly all of the tall fall "weeds" belong, the ones waving over our heads in open fields and along roadsides. Earlier in the year we make pilgrimages to the deciduous forest to see the spring wildflowers, many delicate and all but hidden in the leaf litter. (See *The Plant Press*, Spring, 1998.) They are members of the Lily Family, the Buttercup Family, the Violet Family, even the Mustard and Carrot Families, but few if any belong to the Asteraceae. And whereas it is fairly easy to identify and become familiar with the spring flora, the fall sunflowers and rosinweeds and goldenrods continue to drive amateur (and other) taxonomists crazy each season, accompanied by grumbling about those NYC's (darn yellow composites). They are called composites because what looks like a flower is really a complex inflorescence made up of a number of tiny flowers of two kinds, the ray flowers that look like the "petals" of the sunflower and the disc flowers, those in the center (see *The Plant Press*, Autumn, 2000). This article focuses on those composites that flower in the late summer and fall in open and/or disturbed areas of the Domain and that can grow to heights above our heads, at least two meters, the tall fall "flars".

The ones that really take the prize are annuals that tend to take over fields that have been abandoned for the first year, such as: Great ragweed (*Ambrosia trifida* L.), Horseweed (*Coryza canadensis* (L.) Cronq.), and in burned areas as well as open areas, American burnweed (*Erechtites hieracifolia* (L.) Raf. ex DC.). These attain heights of three or four meters, sometimes more. Ragweed and

Horseweed have inconspicuous, greenish flowers that are wind-pollinated, as allergy sufferers well know. American burnweed has no ray flowers and looks like it never blooms, until the dandelion-like fruits start floating through the air. Annual ragweed (*Ambrosia artemisiifolia* L.) has more deeply lobed leaves than Great ragweed and grows to only two meters or so. Another outstandingly tall species is Woodland lettuce (*Lactuca floridana* (L.) Gaertn.), a biennial that can grow to four or more meters. It has dandelion-like leaves and a loose panicle of blue flower heads and, like all lettuces, has a milky sap. Prickly lettuce (*Lactuca scariola* L.), an annual exotic, grows to "only" two meters and has yellow flower heads that often turn blue on drying.

The goldenrods and many of the other tall fall flowers that are more colorful than those just described are perennials and are insect-pollinated. Their later-blooming strategy may be an adaptation to the large numbers of flying insects at that time of year. Late goldenrod (*Solidago gigantea* Ait.) can reach 2.5 meters. Other equally tall yellow flowers found in the same habitats as goldenrod include Starry rosinweed (*Silphium asteriscus* L.), which looks somewhat like a sunflower, and Small woodland sunflower (*Helianthus microcephalus* Torr. & Gray). These can make a lovely display with the pale pinkish-purple domed flower clusters of the Sweet-scented Joe-Pye-weed (*Eupatorium purpureum* L.); the deep violet, more open flower clusters of Giant ironweed (*Vernonia gigantea* (Walt.) Trel.); or the lavender-purple heads of the biennial Field thistle (*Cirsium discolor* (Muhl. ex Willd.) Nuttall), which attains heights of three meters, and the similar Tall thistle (*Cirsium altissimum* (L.)

(continued on page 4)

## Autumn Calendar of Events

### Abbott Cotten Martin Ravine Garden

Sat., Sept. 28, 8 a.m. Mary Priestley  
Early-birds are invited for this Parents' Weekend stroll. Established as a park in the 1880s, "Abbo's Alley" did not begin to take shape until Professor Martin took it under his care in the 1940s. Meet on the Quadrangle. One mile, easy.

### Tall Fall Flowers

Sat., Oct. 5, 10 a.m. Yolande Gottfried  
Brush up on your fall flower identification skills—or learn the basics of identifying these autumn beauties for the first time. Meet at the Sewanee Market to drive to a location previously scouted by your leader. Easy to moderate.

### Shakerag Hollow

Sat., Oct. 12, 10 a.m. George Ramseur  
Shakerag's forest boasts a diverse assemblage of big, beautiful trees. This is probably the Domain's most popular hike year-round. Meet at Green's View. Two miles, moderate, culminating in a steep climb.



### Homecoming Open House

Fri., Oct. 18, 4—5 p.m.  
Join us for refreshments to celebrate the publication of *Vascular Plants of the Domain* and catch up on other Herbarium projects. We are located on the ground floor of Woods Labs science building, near the greenhouse.

### Watercolor Workshop

Sat., Oct. 26, 10 a.m. Margaret Smith  
Participants in this outdoor hands-on workshop will focus on using watercolors to depict a patch of the fall forest floor. Space is limited, so contact Mary Priestley at 931-598-1997 to sign up and learn about the particulars.

## From the Director

The Sewanee Herbarium is very excited to announce the release of the VASCULAR FLORA of the DOMAIN. This publication represents a cumulative history of botanical exploration on the Domain stretching back to the founding of the Sewanee Herbarium by George Ramseur almost 50 years ago. The project gained momentum in the late 1990's as part of the Herbarium's commitment to the University's Domain 2020 land-use study. This past summer Mary Priestley (Herbarium Curator) and Caitlin Elam '03 (duPont Summer Intern) put the project into high gear and made the final preparations for publication. The Domain Flora will serve as a valuable resource for students participating in field biology courses and for all the many native plant enthusiasts out there in the greater Sewanee community. The Flora will be updated yearly as we continue to document new species occurrences on the Domain. It is available at the University Bookstore or can be downloaded from the Herbarium's website. We welcome your feedback and we hope you find it useful!

—Jon Evans

## Membership Application/Renewal

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.

Name and Address (if different from that on the mailing label on the back):

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Others who might like to receive *The Plant Press*: \_\_\_\_\_

Spreng.), which can be even taller. White-flowered species also found in these same open areas include Late-flowering thoroughwort (*Eupatorium serotinum* Michx.), often quite large and weedy; Dog-fennel (*Eupatorium capillifolium* (Lam.) Small), with its waving stems of fine, thread-like leaves; and White crownbeard (*Verbesina virginica* L.), with its winged petioles and stems. Hoary mountain-mint (*Pycnanthemum incanum* (L.) Michx.), though not a composite, is often noticeable among this group of plants for its leaves, which tend to turn white toward the white and purple inflorescence.

Some tall species are more common in low or wet places. Spotted Joe-Pye-weed (*Eupatorium maculatum* L.), Hollow Joe-Pye-weed (*Eupatorium fistulosum* Barratt), Tall tickseed (*Coreopsis tripteris* L.), and Fall sneezeweed (*Helenium autumnale* L.) are among these. The Tall tickseed has a daisy-like flower with yellow rays and a red disc, and the leaves are divided into three segments. The sneezeweed has turned-back yellow rays with three scallops at the tips and a yellow globular disc. The Joe-Pye-weeds are all similar, with whorled leaves, but

the Spotted has a flatter, more deeply colored inflorescence, and the Hollow is hollow-stemmed while the others are solid. Bear's-foot (*Smallanthus uvedalius* (L.) Mackenzie ex Small), though less common, can also be found in these damper spots. Another non-composite, Jewelweed or Touch-me-not (*Impatiens* spp.), can reach two meters in wet places.

Finally, mention should be made of two species whose foliage is often noticed on spring wildflower pilgrimages. Lion's-foot (*Prenanthes serpentina* Pursh.) is a biennial and its distinctively lobed leaves are often found among the spring wildflowers, prompting questions. The flowering stems that can be over two meters tall with their open inflorescences of dangling yellow flowers do not appear until late summer. Tennessee leafcup (*Polymnia laevigata* Beadle) is also present as overwintering rosettes of thin, deeply-lobed leaves, but later can fill the woods with tall, weedy-looking masses of plants. Its local abundance belies the fact that it occurs only in a few widely-scattered locations in the Southeast.

—Yolande M. Gottfried

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Kricher, John C. 1988. *A Field Guide to Ecology of Eastern Forests*. Houghton Mifflin Company.

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Sewanee Herbarium Collection

Sewanee Herbarium. 2002. *Vascular Flora of the Domain*.



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