

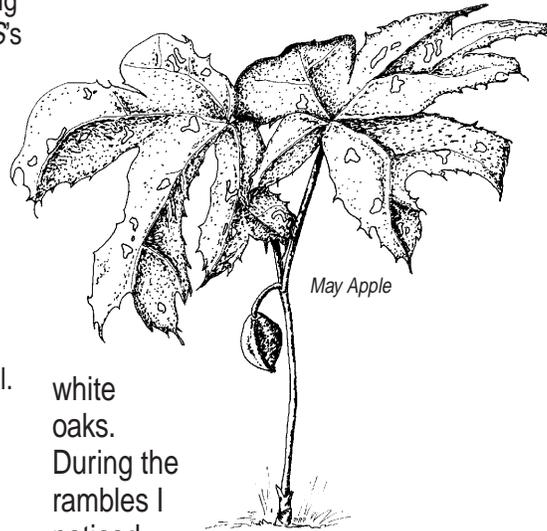
Sewanee in Summer by Sam Pickering

Edward and I also spent two days roaming the Cumberland Plateau at Sewanee. Edward wanted to hear “the eloquence of the canebreak rattler” and see copperheads curled like pies on ledges. Alas, we saw only two snakes, a red-bellied snake half a shoelace in length and a black racer which slipped across our path, vanishing like a draft when a window is shut. Still, we saw scores of millipedes, all wedges and rammers. Brown and two inches long, the rammers seemed chains of metal rings. The insects’ legs extended from the trunks of their bodies, resembling the legs of Victorian tables, curving like S’s turned sideways. The wedges were dark brown with orange or yellow lines separating the segments of their bodies like washers. Instead of walking, wedges rolled forward as if surfing the crests of three waves. Early in the morning wood thrushes called from damp woods below Morgan’s Steep. In the afternoon hawks shrieked and rode thermals above Proctor’s Hall, a box-shaped stone tunnel.

Most spring flowers had swollen to seed. But at the sunny beginnings of trails American ipecac bloomed, and along humid paths spiderwort stamens hovered loose and yellow above purple webs of petals. Fire pinks twisted from cracks under sandstone overhangs and sprawled lazily along the ground, their stamens flaring like matches. While leaves of leafcup sliced hillsides jagged, pools of May apples filled dells, yellow rectangles splotching the umbrellas of leaves, the green fruits floating above the ground, bobbing in

shallows. Greenbriar tangled tops of slopes while poison ivy and Virginia creeper knotted trees and boulders together. Redbud, sassafras, and tulip tree saplings sprouted in the hedges. Above them fanned witch hazel and spice bush. For the first time I saw mountain hydrangea, the sterile outer flowers on clusters, three petaled, broken fans.

Above the undergrowth towered sycamores, buckeyes, and



white oaks. During the rambles I noticed bark: jerky strings of black locust; gray trails melting down northern red oak; the red cork of large chestnut oaks; and the light gray bark of small tulip trees, blue strips drifting then spreading, dammed behind green mounds. When I rested, I noticed small things, circles of maidenhair ferns then fragile ferns spilling out of crevices. Under a ledge gray-and-white orb weavers

hung webs, and a green salamander pressed itself against stone, gold patches glittering like nuggets along its back.

Days were hot. No matter what we saw and how we rested, walking exhausted us. Late the second afternoon we swam at Lake Cheston on the Sewanee campus. Afterward I drove to the Dairy Queen in Monteagle, seven miles away. I bought us each a medium-sized cone dipped in chocolate and costing \$1.15. We ate the cones outside, sitting in plastic chairs at a green plastic table. Vanilla seeped in rivulets through the chocolate and running over our fingers dripped onto the table. We watched the Monteagle policeman cruise back and forth waiting for speeders hurrying off the interstate. Above us stood a sign advertising the Dairy Queen. “Family Owned and Operated. Established in 1962 by Don and Phoebe Underhill,” the sign said. “This is a glorious life,” I said, biting off a hunk of chocolate. “You bet it is,” Edward said, “what fun.”

Sam Pickering, 1963 Sewanee graduate and Friend of the Herbarium, gave us permission to reprint this excerpt from his recent book, A Little Fling and other essays, published by the University of Tennessee Press in 1999. Sam is the author of more than a dozen books. He teaches at the University of Connecticut.

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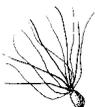
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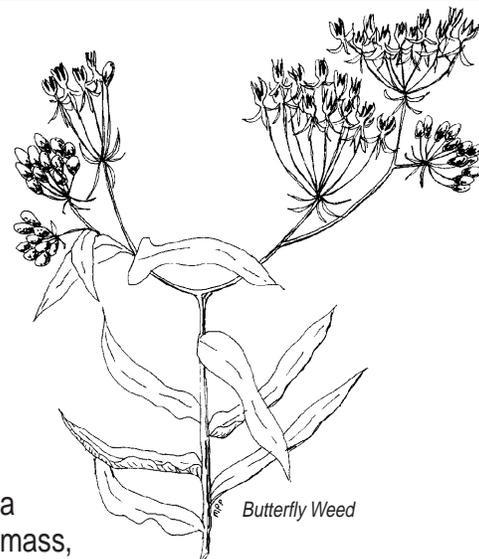
Milkweeds



Some of the most showy perennials in bloom around early summer are the milkweeds, easily recognizable by their distinctive flowers and seeds. Several species are found in open areas and along roadsides and are perhaps taken for “weeds” brought over from the Old World, as was Queen Anne’s lace, but almost all species are natives of the New World. Indeed, Carlos Linnaeus, the great Swedish naturalist and classifier of the eighteenth century, named the common milkweed *Asclepias syriaca* in the mistaken belief that it came from Syria rather than eastern North America.

The name milkweed refers to the milky sap found in most of these species. The scientific name of the genus, *Asclepias*, refers to Aesculapius, the Greek god of medicine. It is perhaps so named because many species contain powerful chemicals that may be useful for medicinal purposes, as well as poisonous to humans and other animals. These properties are evident in other names for common milkweed—emetic root, snake milk, and milk ipecac—and for butterfly-weed, also called pleurisy-root. The most familiar of these chemicals are the cardiac glycosides, which are the compounds ingested by the larvae of the monarch butterfly. They accumulate in the body and remain in the adult, making bird predators violently ill.

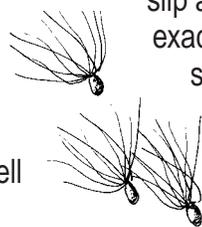
The flowers of milkweed have a distinctive structure called a corona, which sits above the five turned-back petals and sepals. The corona is formed by five petal-like hoods, each of which has a horn or crest curving in toward the center of the flower, thereby looking like a little crown. Such a complex flower indicates a specialized use of insects as pollinators, and milkweeds are similar to orchids in this. In milkweeds, the pollen is united into



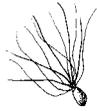
a mass, and pairs of these form a structure called a pollinium, which is waxy. When an insect lands, the legs slip on this waxy surface through slits and pick up the entire pollinium, transferring it intact to another flower, where the legs again slip and place the pollinium on an exactly-shaped receptive area of the stigma.

The seeds are borne in pod-like follicles, standing upright on the plants. In the fall, these open, and the seeds are wind-borne by their tufts of silky hairs called a coma (like the tail of a comet). During World War II, this hair from milkweed seeds was used to fill life jackets, because the United States was unable to import kapok.

The milkweed family, the Asclepiadaceae, is mainly of tropical and subtropical distribution, but with numerous species in the temperate zone. *Hoya* and *Ceropegia*, used as ornamental houseplants, are members of this family, as is *Stapelia*, the carrion flower of semiarid regions in Africa. There is at least one species of milkweed for every region of the United States, including Hawaii and Puerto Rico, with the possible exception of Alaska. In Tennessee, there are fourteen species and subspecies in a wide range of habitats, from the white-flowered poke



Continued on page 4



Summer Calendar of Events

Aquatic Plants

Wed., June 28, 4 PM—Yolande Gottfried
Investigate the abundant and varied flora in and around one of the lakes of the Domain. Meet at the pavilion at Lake Cheston. Easy.

Nature Writing

Mon., July 10, 1:30–3:30 PM—Jill Carpenter
For this interactive workshop, Jill will share some excerpts of nature writing and

journaling, and participants will do some nature writing of their own. Call to sign up (598-0795 or 598-9376). Meet at Jill Carpenter Bookstore on University Avenue. Bring a notebook and pen or pencil.

Natural Bridge

Thurs., July 13, 4 PM—George Ramseur
Explore the unique plants of this beautiful sandstone formation. Expect to see cliff-dwelling ferns, especially the rare filmy fern. Meet at Natural Bridge. Easy.

Summer Wildflowers

Sat., July 22, 10 AM—Mary Priestley
The outer loop of the Meadow Trail behind the South Cumberland State Recreation Area visitors center winds through a variety of plant habitats. Expect to see a number of plants in bloom, including Joe-Pye weed, milkweeds, and asters, as well as some of the summer orchids. One mile, easy. The visitors center is located on Hwy. 41 between Monteagle and Tracy City.



For more information on these outings, contact Mary Priestley at (931) 598-1324 or <mpriestl@sewanee.edu>.

From the Editor

Miriam Keener, a Friend of the Herbarium, has opened Dancing Fern Nursery in Sequatchie, TN, selling native plants. We are pleased to report that all of Miriam's plants are propagated from seeds, spores, cuttings, or by division.

Did we mention in our spring, 2000, article on trilliums that they occur in only three parts of the world? Eastern Asia contains approximately five or six species;



the West Coast of North America about seven; and eastern North America 35 or so, depending on who is counting. No species occurs in more than one of these three areas. Friend of the Herbarium Jim Scheller of Larkspur, CA, sent us some information on the West Coast trilliums, as well as an evocative poem entitled "Trillium," by Pulitzer Prize winner Louise Glück.

On the subject of prize-winning poets, Yolande Gottfried's "Milkweeds" piece in this issue brings to mind Richard Wilbur's poem "Two Voices in a Meadow." Of milkweeds, he writes, "Shatter me great wind; I shall possess the field."

—Mary Priestley

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.

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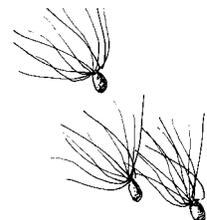
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Milkweeds continued from page 2



milkweed of the higher elevation forests, *Asclepias exaltata*, to the deep pink swamp milkweed of wet areas, *A. incarnata*, to the orange-flowered butterfly-weed of dry fields and roadsides, *A. tuberosa*. Besides being the only orange one, this last also differs in not having milky sap and in having alterate rather than opposite leaves. Seven of these species are represented in the Sewanee Herbarium.

—Yolande Gottfried

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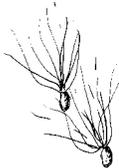
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Appalachian Wildflowers

Dr. Tom Hemmerly, professor at Middle Tennessee State University and Friend of the Herbarium, has just published his latest book, *Appalachian Wildflowers, an ecological guide to flowering plants from Quebec to Georgia*. It should be in bookstores soon.

The book is user-friendly: the 377 color plates appear alongside the plant descriptions, eliminating the need to flip back and forth between photo and description. Tom includes information about each plant's habitat, abundance, and geographical distribution, as well as ethnobotanical, economic, and medicinal uses. For those plants found in French-speaking areas of the mountains, he gives the common name in both English and French.

There is an extensive section on ecology of the Appalachians with chapters on people and their mountains, dynamics of mountain ecosystems, treeless mountain ecosystems, mountain wetlands, and identifying mountain wildflowers. In the appendices, he includes a listing and description of the best places in the Appalachians for finding wildflowers. One of his favorites is Savage Gulf, right in our backyard. Tom is also author of *Wildflowers of the Central South*, published in 1990.

—Mary Priestley

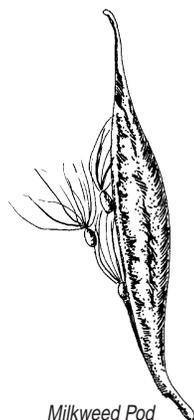
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Investors. Press center. The Seattle Spheres. Menu. The Woodinville Greenhouse, housing samples of exotics plants used in the Amazon Spheres, photographed Friday, Nov. 10, 2017, in Woodinville, WA. (JORDAN STEAD / Amazon). Photo by JORDAN STEAD/(JORDAN STEAD / Amazon). The Spheres Plant Press. Read about the latest horticultural happenings at The Spheres on our plant blog. Chelyabinsk Forge-and-Press Plant is one of the leading forging companies and first in Russia certified according to ISO/TS 16949. Clearly defined quality management system, implementation of up-to-date management strategies and continuous production system improvement ensure stability of the plant and best quality of products. The main keystones to success of our company in any economic situation are broad field of competence and diversification of activity. Production range of CHKPZ today includes plant press

Structure typically made of two ventilated frames 12 x 18 (30 x 45 cm), within which plant specimens are arranged between sheets of driers and ventilators, tightly strapped together with press straps, in preparation of being added to

Expanded glossary of Cycad terms. Plant cell Plant cells are eukaryotic cells that differ in several key respects from the cells of other eukaryotic organisms.