

BotSoc News



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Georgia Botanical Society

Wilbur H. Duncan 1910 – 2005

After forty years as a University of Georgia botany professor, Wilbur Duncan retired to spend almost thirty years researching and writing botanical guidebooks. Those who are given this much time to do what they love, almost always achieve great things. Such was the case with Georgia's best-known botanist.

Wilbur Duncan, who died at his Athens residence on March 25, 2005, was an extraordinary field botanist. Armed with an encyclopedic knowledge of southeastern flora, he recognized and described three new species. Two of the species, persistent trillium (*Trillium persistens*) and hairy rattlebox (*Baptisia arachnifera*), are federally endangered. The third species, the Oglethorpe oak (*Quercus oglethorpensis*), was the first new oak species found east of the Mississippi in 90 years – an event so newsworthy that Time magazine did a feature article about the tree.

In addition to teaching, Dr. Duncan also directed the UGA Herbarium, increasing its collection from 16,000 to 135,000 specimens. Some claim that he knew the name of every last one of them.

And he probably had a photograph on file for most of them. Duncan had slides of thousands of species, stored in duplicate in a UGA vault and at home. Each slide was labeled by plant name with the date and location where the plant was found, and with a series of one to three asterisks. In Duncan's organizational scheme, one asterisk meant the photo was not worthy of publication; three asterisks meant that it was good enough for a book cover. The U.S. Postal Service thought enough of one of his photographs to include it in a series on rare plants.

In collaboration with his wife Marion, also a botanist, the Duncans wrote three guidebooks. All are still in print, and their "Wildflowers of the Southeastern United States" has been one of UGA

Press' best selling books since its publication in 1975. A fourth book, "Shrubs of the Southeastern United States", is in advance stages for publication.

Dr. Duncan's interests extended beyond botany. He shared his love of nature, geography, history, music and art with his wife and their children, Mack, Lucia, and Douglas, and later with their four grandchildren. He was an avid sports fan, although his participation was limited to ballroom and square dancing, and to horse-shoes – he was the 1932 Indiana Intramural Horseshoes Champion.

Dr. Duncan's integrity and personal and professional ethics were of a caliber some would describe as old-fashioned, but it transcended generations. He was an egalitarian, judging only by one's character. An example is his bold signature on the 1961 UGA Faculty

Petition in Support of Desegregation.

Many people hope to leave this world a better place than they found it. Wilbur Duncan achieved this goal in many ways.

The family requests that those wishing to remember Dr. Duncan do so by donation to the Wilbur and Marion Duncan Publishing Fund, a charitable trust established with the UGA Foundation to ensure the publication of the Duncans' last manuscript, "Shrubs of the Southeastern United States". It is a significant scholarly work of over 1700 pages and 700 color photographs, and a lasting tribute to a remarkable man. Those wishing to participate may send tax-deductible contributions to:

The UGA Foundation
Wilbur and Marion Duncan Publishing Fund
394 S. Milledge Avenue, Suite 100
Athens, GA 30602-5582

Written by Jean Smith with information provided
by Marion Duncan

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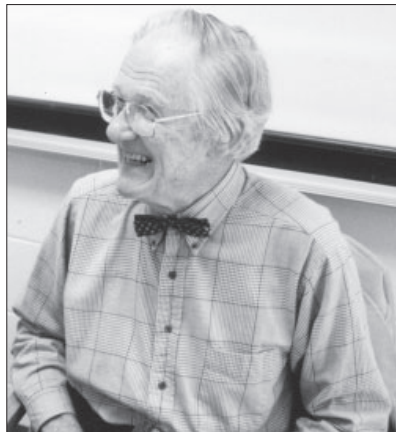
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Jean Smith



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Plant Family Workshop

On Saturday, March 12, the Georgia Botanical Society joined the Native Plant Society at Agnes Scott College in Decatur to present the first of a series of Plant Family Workshops. Bot Soc President Tom Patrick began the day with a brief history of botanical nomenclature emphasizing the importance of plant family groups to field identification. He then led the audience in chanting “ace” “a”

“e”, the correct pronunciation of the Latin ending for most family names, “aceae”. For the rest of the day, the instructors, Patrick McMillan, Curator of the Clemson Herbarium and Phil Gibson, Agnes Scott botanist and biology professor, took the participants through the field characteristics of the most important Southeastern plant families. Although the seminar description promised a review of only six families, the instructors were quick to let us know that life is not that simple. Quite a bit of taxonomic reorganization has taken place in recent years as taxonomy seeks to better reflect evolutionary relationships among plant species. The audience got a wild ride through this new world of nomenclature. The lily family in particular had experienced significant reorganization and Patrick McMillan covered 18 families, most the result of rearrangement in Liliaceae. The instruction was excellent, however, and the numerous handouts and projected images made the information accessible, even if sometimes overwhelming. We all came away with a greater appreciation of field botany and its practitioners.

Jean Smith



Important Information about Georgia Botanical Society Email Announcements

A few years ago BotSoc began sending email announcements to members regarding upcoming trips. This provided a method to remind folks of what was coming up and to alert members to impromptu trips that were not part of the regular schedule. The recent Montezuma Bluffs trip in March of this year was an impromptu trip with a short notice.

The membership chair is the person in BotSoc who handles these announcements. We do it because email offers an effective way to reach many of our members with these notices. BotSoc understands that not all members have email access and we cannot reach everyone. However, we reach as many as we can.

The purpose of this note is to let all members know about this service. If you did not provide an email address with your membership and would like to receive these notices, contact the Membership Chair, Anita Reaves, at rpreaves@earthlink.net. I have a separate email address (gabotsoc@earthlink.net) that the messages are sent from, but this address is set to block messages from people not on the distribution list. This raises another issue with the notification lists. Several folks that provided us with email addresses have their spam blocker set to prevent delivery of our messages, which also means my mailbox gets crammed with the undeliverable notices. Some of the undeliverable messages may be accidental since the Membership Chair, and the associated email address from which the messages are sent typically changes every two year (including most recently October of 2004). If you provided an email address and do not wish to receive these announcements, please let me know and I will remove your address from the mailings. If you have stopped receiving announcements and would like to receive them again, check your spam blocker setting and also let me know. I have removed many of the addresses that were continually not deliverable.

Botanical News

A Best Standard for Nomenclature - the Discussion Continues

Early this year, Hugh and Carol Nourse asked several members of the Society for help with nomenclature references in their new book, "Favorite Wildflower Walks in Georgia". This prompted a spirited discussion that Hugh thought the membership might enjoy reading. In the March issue of BotSoc News, Tom Patrick endorsed Weakley's "draft flora" as having progressed far enough to be used as a standard reference for scientific and common names. The discussion continues below with Scott Ranger's comments on the subject.

I generally agree with Tom, but find significant areas of, shall we say, confusion.

First, Tom said that an unpublished flora to him isn't troubling.

It is to me, and it is to many others. We are a long way from the dust settling on what the internet allows and what authority an internet publication should carry. A huge problem is developing with the "publishing" of provisional names that then end up on online databases. Some herald this as a wonderful development; others shudder with horror. The rule of the ICBN and similar organizations seems to be eroding and those who adhere to those rules seem to be retreating to the castle of last refuge and throwing out their spears and lances. The problem is most acute where advanced amateurs are heavily involved as in *Lepidoptera* and tropical fishes. Online "journals" are popping up all over the place (notably in China) that are very different creatures than traditional journals like *Systematic Botany*.

Second, Tom said "You can't separate nomenclature from taxonomy and merely use someone's standardized list as a reference."

I say "Why not?" It's been done for years and years. Online lists like PLANTS, ITIS, and NatureServe are used like this and will continue to be used like this. Why? Because there is nothing else out there that does it quite as well! There is a vocal minority among plant systematists for a formal registration system. The majority seems to dislike such a thing as it threatens their independence. It works reasonably well with birds (I'm not talking about their common name rules here), why not plants?

Third, Tom said "The Flora of North America (FNA) project will be ongoing for at least another decade and because various treatments - even if available on a website - are rather scattered, vary in

quality, and usually lack input from Georgia experts, I cannot recommend this effort as the best standard for nomenclature OR taxonomy."

Quite frankly, I think this identical argument (save Georgia experts) can be made against Weakley. He's been at it for at least a decade, and there's still a lot more to be done. I'm sure even he would admit that his work varies in quality in the treatments. FNA has a very different view with advantages to it, just as there are advantages to a regional work. They have always been different and always will be. They have different purposes. For Tom and the Heritage Program to use Weakley makes sense. Tom doesn't work in a vacuum and is aware of the nuances of systematics. The readers of Hugh's book won't be. Tom is not like Richard and Angus who simply refuse new names. Hugh and Carol are stuck in a miserable middle place.

My concern has become one based upon communication. The current revolution in systematics in all fields is turning our naming conventions on their heads. As Hugh Nourse has said, "It's reaching the point where common names may be more stable than scientific names"! (An I'm NOT referring to the horrible names called "common" by the Kartesz/PLANTS/BONAP database.) This development is not helpful for communication, particularly with the abysmal state of science education and general science knowledge today. Communication by taxonomic experts is not what I'm talking about. I'm talking about making the body of knowledge useful for the public. They should not be expected to even care about all this! Especially when so many seem to only be concerned with the "kinds" God made.

I'm assuming that the Nourse's new book is not meant for taxonomic experts. So they are faced with the problem of communicating with their intended

readers. I'd simply recommend picking a resource as a standard and stick to it. Let the readers know what was used and then let the taxonomic wars be fought where they belong - not with the readers. Just include a note in your introduction of whichever working draft of Weakley was used as the standard for names, but add that there will be differences of opinion!

The elegance of a nomenclature system based upon phylogeny that I learned is now anything but elegant. It's no wonder many herbariums have abandoned the plant classification system of Engler and Prantl and simply gone to an alphabetical arrangement. Every time someone publishes a new name can mean a wholesale reshuffling of herbarium cases! What a burden. This is not helpful in communication in any fashion. I use FNA and PLANTS for my database and don't worry about the name changes as they occur, but do try to keep up with them and keep the synonyms at the ready. To change my slide and digital names is at least as much work as rearranging herbarium cabinets! It's just not worth it.

Scott Ranger

Sources mentioned in Scott's comments:

1. Weakley's Draft Flora (www.herbarium.unc.edu/flora.htm)
2. PLANTS (<http://plants.usda.gov/index.html>)
3. ITIS, Integrated Taxonomic Information System (www.itis.usda.gov)
4. NatureServe (www.natureserve.org)
5. FNA, The Flora of North America (www.efloras.org)
6. Dr. John Kartesz is the author of "A Synonymized Checklist of the Vascular Flora of the United States, Canada, and Greenland," 2nd ed. 1994, and the derived PLANTS database.
7. BONAP, Biota of North America Program founded by Dr. Kartesz
8. Adolf Engler and Karl Prantl were German botanists of the early 20th century who emphasized the importance of geological history in the study of plant geography. The Engler and Prantl system of flowering plant classification was the principal one in use until the 1970s.

Historical Botany

A Botanical Epiphany or A Journey into Nomenclature

by
Jim Smith

Plants don't know their own names and it's a good thing they don't care as many times as most of them have had their names changed. Even as a boy and later as a forester I dealt with the frustrations of plant nomenclature. Now retired, I am neither forester nor botanist, but living the words Thomas Jefferson wrote to Charles Peale: "Though an old man, I am but a young gardener." I had thought by now plant classification would have been worked out in great detail, but as a gardener and plant lover, I continue to learn and enjoy the twists and turns of taxonomy.

A local botanical druggist nurtured my youthful interest in native plants. He gave me my first plant book, "American Medicinal Plants of Commercial Importance – Misc. Publication No. 77 of the United States Department of Agriculture." He also gave me a list of plants that he purchased and their prices that varied by seasons and market demand. His lists always contained the admonition that "all Roots, Barks and Herbs are used for medicine and must be clean". I quickly classified all plants into two groups: those that could be sold and those that could not.

Among the plants on his list was Indian Turnip (a.k.a. jack-in-the-pulpit) that fetched \$0.40 per pound. Being one of the higher-priced items, it received special attention. I learned it had a number of other names such as: bog onion, brown dragon, cuckoo plant, devil's ear, dragon root, lords and ladies, priest's pintle, wake robin and memory root. The fresh corms, because of the oxalic crystals in them "... impart an almost caustic sensation to the mucous membrane, and swelling of the parts, when chewed." This action upon the mouths of schoolboys probably gave rise to the name "memory root", as they never forget its effects.

A number of other plants on his list had multiple common names. I learned many of them so I could discuss the plants with neighbors and assay the prospects for profit. The Latin names were included in the book I was given, but they meant little to me. A local priest knew Latin but he didn't know plants and my acquaintances who knew the plants didn't know Latin. Many of the common names reflected characteristics of the plant.

The mucilaginous inner bark of the slippery elm gave the tree its name. There was a similar logic in the names swamp white oak, weeping willow and others. Less logically, several plants sometimes shared the same name. Yellow root was applied to *Berberis vulgaris*, *Hydrastis canadensis*, and *Xanthorrhiza simplicissima*.

My interest in natural history and plants grew but my education in nomenclature was stunted. I continued to use only common names. To use Latin names at that time and in that place would have been considered an effete affectation verging on snobbery. Plant classification, for me, was based on economics and appearance and the plant's medical uses. I read about the systems developed by Theophrastus, Caesalpino and Tournefort, but my classification seemed to be as useful. My education took a leap forward when my grandmother gave me a copy of "Gray's School and Field Botany, the 1887 edition". It described the well-known system devised by Carl von Linné who had studied medicine at a time when training in botany was part of the medical curriculum and Latin was the "lingua franca" of the scientific community. In fact, he adopted the latinized version of his name, "Carolus Linnaeus" in his writings. Coincidentally, I learned the basics of Linnaeus' binomial system of nomenclature at the same time I was studying Latin. He placed great significance on plant reproduction. He also drew parallels between plant sexuality and human love when he wrote in 1729:

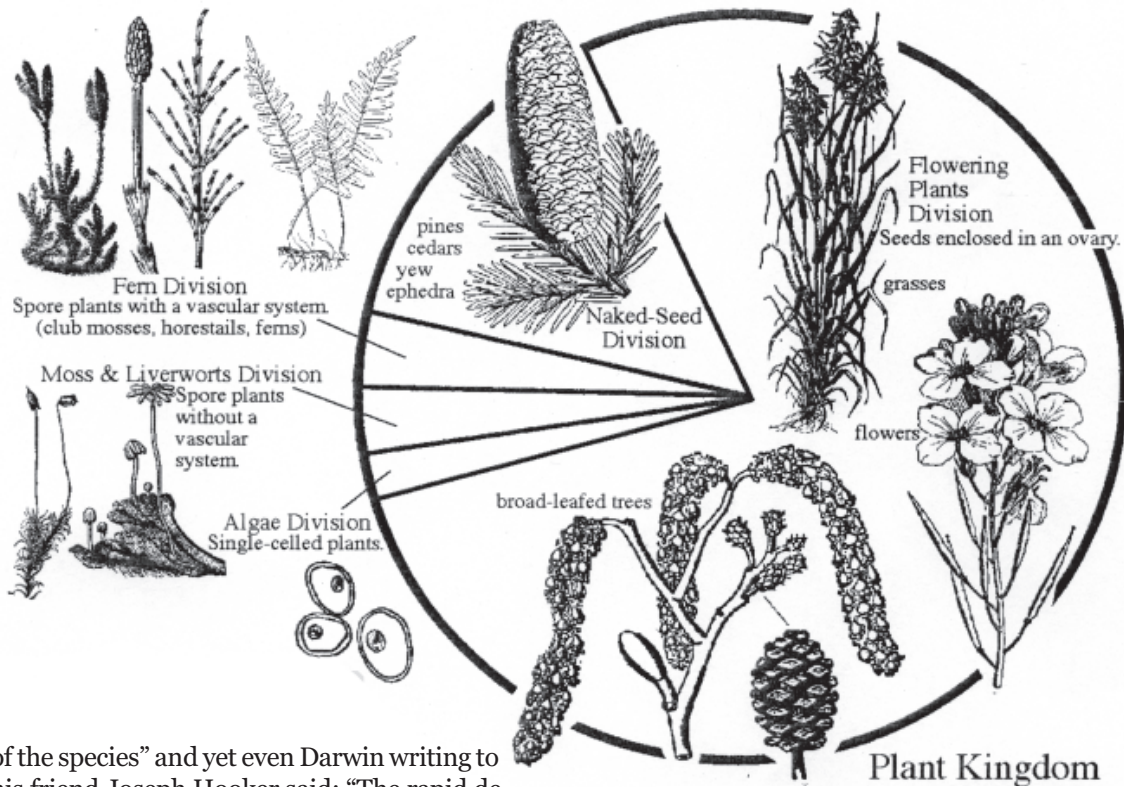
"The flowers' leaves serve as bridal beds which the creator has so gloriously arranged, adorned with such noble bed curtains, and perfumed with so many soft scents that the bridegroom with his bride might there celebrate their nuptials with so much the greater solemnity."

One of his severest critics was botanist Johann Siegesbeck who objected to the sexually explicit nature of his system and defined it as "loathsome harlotry". Linnaeus had the last word by naming a small useless European weed "Siegesbeckia".

At about the same time I read Darwin's "The Origin of the Species" whose theory seemed to conflict with Linnaeus' idea of the "invariability

Historical Botany

THE EVOLUTION OF PLANTS



of the species” and yet even Darwin writing to his friend Joseph Hooker said: “The rapid development as far as we can judge of all the higher plants within recent geological times is an abominable mystery”. Some of the mystery remains and continues to be fodder for the debate between “creationists” and those who subscribe to Darwin’s evolutionary theory.

I went on to study forestry. Already convinced of the considerable confusion in common names, I was a willing convert to the use of scientific names. I was also easily convinced of the logic of phylogenetic classification based on presumed relationships or common origins. My education continues as I acquire a rudimentary understanding of cladistics.

The seminar on plant families that was recently sponsored by BotSoc and the Georgia Native Plant Society was helpful in understanding the directions plant classification is taking. Tom Patrick’s article “A Discussion of the Best Standard for Nomenclature” that appeared in the March 2005 issue of BotSoc was certainly helpful. For many years, I clung to the “Manual of the Vascular Flora of the Carolinas” by Radford, Ahles, and Bell as my botanical bible. Even as I

embrace my friend Tom Patrick’s advice and seek out the best current standard for nomenclature, I will keep my “bible” handy.

Changing classifications as more is learned seems inevitable, but it would be nice for those of us with failing memories if the currently accepted Latin names could be frozen. In my lifetime, one of my favorite trees has carried the common name of yellowwood, but the scientific name has changed from *Virgilia lutea* to *Cladrastis tinctoria* to *Cladrastis lutea* to *Cladrastis kentuckea* to *Cladrastis kentukea*.

After all, nomenclature can be useful without being needlessly complex.

Illustration from Elpel, T.J. 2000. *Herbal Field Guide to Plant Families*, 4th edition.

2005 Marie Mellinger Field Botany Grant

Marie Mellinger Field Botany Research Grant 2005 Recipient – Lee Echols

With all the talk of molecular methods supplanting morphological observation in plant taxonomy, you might expect a herbarium to be a forgotten place - a room stacked floor to ceiling with the musty collections of now aged field botanists. The University of Georgia – Georgia Museum of Natural History Herbarium is none of that. Housed in the newly remodeled Department of



Lee Echols, an M.S. candidate in the Plant Biology Department, UGA, is the 2005 recipient of the Marie Mellinger Field Botany Grant. Photo by Jean Smith.

Plant Biology, the herbarium is a model of modernity. The plant collections reside in state of the art cabinets that glide across the floor at the touch of a button. Rows of microscopes line an adjacent wall. A reference library of classical and modern botanical texts is just

a few steps away. Everything that a young field botanist needs to classify and house a research collection is close at hand. And now, with funding from the Marie Mellinger Field Botany Research Grant, Lee Echols, the 2005 recipient of Marie's Grant, is poised to begin his graduate research there.

Working under Dr. Wendy Zomlefer, curator of the UGA Herbarium, Lee will use Marie's grant to study the flora and vegetation patterns of Georgia's remnant blackland prairies, one of the least known plant communities within the state. Documented only from Houston County in southern Georgia, these relics form the easternmost examples of blackland prairie in the nation. Blackland prairie communities possess a G2 rarity ranking (globally imperiled due to range restriction, habitat degradation and destruction; NatureServe 2004).

Georgia's blackland prairies are associated with limestone formations originating approximately 30 million years ago when a shallow sea covered much of the Southeast. The vegetation is characterized by a mosaic of grassland and mixed southeastern forest types. Prairie soils are alkaline and sticky with high clay content. These unique soil outcrops harbor a number of rare and/

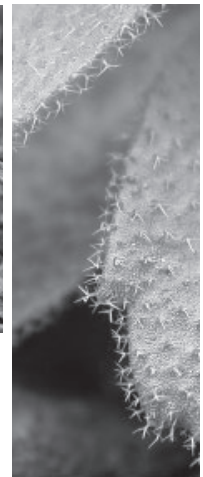
or disjunct taxa within Georgia. In a preliminary reconnaissance of the study site last fall, Tom Patrick found a sizable population of Georgia aster, *Symphytotrichum georgianum*, a candidate for federal listing and Lee has since documented several state and county records, including wedgeleaf Whitlow grass (*Draba cuneifolia* var *cuneifolia*).

The Houston County prairies exist in at least ten patches ranging in size from less than an acre to several acres. Lee's study will be conducted at Oaky Woods, a Wildlife Management Area leased and actively managed by the GA DNR. A private landowner currently holds the property, and although the DNR has expressed interest in the prairies' protection and restoration, their ultimate fate is yet to be determined. It is hoped that Lee's study will provide the ecological information that natural resource managers need to acquire this fascinating remnant of Georgia's geologic history.

Now in its third year of funding, the Marie Mellinger Field Botany Grant was established to honor former Georgia Botanical Society president, Marie Mellinger. Elaine Nash chaired this year's



Wedgeleaf Whitlow-grass (*Draba cuneifolia* var *cuneifolia*) with close-up of leaf margin. Photo by Lee Echols of specimen found at Oaky Woods.



Grant Committee: Hugh Nourse, Richard Ware, and Sheila Goldthwaite. Research applications for the grant are distributed in late summer with a November 30 deadline. Forms may be obtained from Elaine Nash, Richard Ware, or Wayne Morris. Grants are awarded in January.

Upcoming Field Trips

Date	Description	Directions	Leader
<p>May 14</p> <p>10:00 A.M.</p> <p>Meet at Webb Wildlife Center, Garnett SC</p>	<p>Webb Wildlife Center Garnett, South Carolina</p> <p>Operated by the SC Wildlife and Marine Resources Dept., the Webb Center is a wildlife management area on the Savannah River with about 40 miles of roads and trails through river swamp, hardwood forest, and upland pine forest. Some rare plants found there are green-fly orchid, wild coco, long-horn orchid, Virginia bunchflower, and 2 rare sedges.</p>	<p>From Atlanta: Take I-75 south to I-16 east then exit 137/GA 119. Take GA 119 north through Springfield to Garnett SC. GA 119, now SC 119, will intersect with SC20 in Garnett. Turn left/west onto SC20 and continue ~2 mi to Webb Center on the left. Follow the dirt road to the Center. From Savannah: Take I-95 north to exit 109/GA21. Turn left/north on GA21 and continue to the intersection with GA119 in Springfield. Turn right/northeast and follow final steps of Atlanta directions.</p> <p>Lunch: Bring to eat in field.</p> <p>Walking: Moderate, may be wet in places.</p> <p>Facilities: Only at meeting place.</p> <p>Bring: Water and insect repellent.</p>	<p>Lamar Zipperer contact: Martha Joiner</p> <p>(912)764-6329</p> <p>joiners@frontiernet.net</p> <p>(912)481-1623 cell, day of trip</p>
<p>May 14</p> <p>10:00 A.M. Central Time</p> <p>Note time change!</p> <p>Meet at Horse Mountain Orchids Shelbyville, TN</p>	<p>Alice Jensen's Place, TN</p> <p>Alice Jensen will explain in detail as we walk through the sassafras woods/cedar glade on her 70 acre wooded property. We will see Kentucky coffee trees and Shumard oaks. In the meadow are Indian pink and <i>Physalis heterophylla</i>. This portion of the property may be destroyed if the TN DOT proceeds with plans to construct a bypass. Tour includes the pioneer homestead and orchid greenhouses.</p>	<p>Take I-75 north to I-24 west at Chattanooga. Continue west to Exit 117. Turn left and continue through Arnold AFB/AEDC to US41A in Tullahoma. Take US41A to Shelbyville. At 2nd light (Union Planters/Regions Bank on corner), turn right and continue to Horse Mountain Rd. Turn right on Horse Mountain Rd and continue for 1.2 mi. Turn left at sign "Horse Mountain Orchids" on paved drive just past white church, 1371 Horse Mountain Rd, Shelbyville, TN.</p> <p>Lunch: Bring to eat in field.</p> <p>Walking: Easy on tractor-width trails.</p> <p>Facilities: Yes.</p> <p>Bring: Water, insect repellent</p>	<p>Alice Jensen</p> <p>(931)684-7851</p> <p>alicejen@bellsouth.net</p>
<p>May 21</p> <p>10:00 A.M.</p> <p>Meet at the trailhead.</p>	<p>Rabun Bald, Rabun County</p> <p>We'll visit Georgia's second highest mountain top by hiking 1.3 mi on a trail from Alex Gap to the Bartram Trail then 0.9 mi on the Bartram Trail for a total of 4.4 mi total roundtrip with an elevation change of ~1,100 feet.</p>	<p>Go north from Dillard on US441, to turn right at light onto GA246 (becomes NC106). Turn right on Old Mill Creek Rd (~4 mi from US441). Go ~1 mi, then turn right into Sky Valley and left at guardhouse. Go ~1 mi past restaurant on right, turn left onto Overlook Way and almost immediately right onto Knob Drive. Continue ~1 mi (pavement ends at 1.1 mi) and turn right up hill. Trailhead is ~0.1 mi. Limited parking.</p> <p>Lunch: Bring to eat in field.</p> <p>Walking: Moderate, but significant climb.</p> <p>Facilities: None.</p> <p>Bring: Water, insect repellent.</p>	<p>Ben Cash</p> <p>(706)778-5155</p> <p>bencash@hemc.net</p>

Upcoming Field Trips

Date	Description	Directions	Leader
<p>June 4</p> <p>10:00 A.M.</p> <p>Meet in Rolator Park, Cave Spring</p>	<p>Coosa Prairies - Part 1 Floyd County</p> <p>The Coosa Prairies, a new >900 acre conservation area, is a cooperative effort between Temple-Inland Forest Products and The Nature Conservancy. Plants we hope to find in bloom: prairie milkweed, climbing milkvine, dense blazing star, scaly blazing star, Mohr's Barbara's buttons, prairie coneflower, small blue wild indigo, wavyleaf purple coneflower, and Michigan lily.</p>	<p>Take I-75 north to the second Cartersville exit (exit 290, GA20 - sign says Rome/Canton). Turn left (west) to follow GA20 and then US411 to Rome where GA20 and US411 split, ~20 mi. Take US411 (left fork) toward Cave Spring. At 2nd traffic light turn right to stay on US411 to traffic light in Cave Spring. Go straight, cross bridge and immediately turn left into Rolator Park. Meet at parking area for cave on right.</p> <p>Lunch: Bring lunch to eat near cars.</p> <p>Walking: Easy, mostly flat terrain, 1-2 mi, depending on road conditions.</p> <p>Facilities: Meeting site only.</p>	<p>Richard & Teresa Ware</p> <p>(706)232-3435</p> <p>richard_ware@netzero.net</p> <p>teresaware@earthlink.net</p>
<p>June 11</p> <p>10:00 A.M.</p> <p>Meet at Wood Bros. Grocery & Amoco Station Green Pond, SC</p>	<p>Donnelley Wildlife Center (ACE Basin), Colleton County, SC</p> <p>The Donnelley WMA, part of the ACE Basin, is where the Ashepoo, Combahee, and Edisto Rivers flow into the Atlantic Ocean. It is part marshy wetland and part maritime forest, and a great place to see shore birds and the plants that comprise their habitat.</p>	<p>From Atlanta: Take I-20 east to I-520 south (exit 196A) in Augusta. Travel I-520 to exit 3A, Gordon Hwy/US78. Turn left/east on US78. Travel to intersection with I-95 at St. George, SC. Take I-95 south to SC303 at Walterboro, SC. Travel SC303 to deadend at US17. Turn left onto US17. Wood Bros. grocery will be 2 mi past sign for Donnelley Center. From Savannah: Take US17 north (merges briefly with I-95, then diverges at Pocotaligo, SC). Just beyond left turn for SC303 at Green Pond, look for Wood Bros. Grocery 2 mi past sign for Donnelly Center.</p> <p>Lunch: Bring to eat in field.</p> <p>Walking: Could be wet. Bring wading shoes.</p> <p>Facilities: At meeting site and on Center property.</p> <p>Bring: Water and insect repellent.</p>	<p>Martha Joiner</p> <p>(912)764-6329</p> <p>joiners@frontiernet.net</p> <p>(912)481-1623 cell, day of trip</p>
<p>June 12</p> <p>Sunday</p> <p>Note Day!</p> <p>10:00 A.M.</p> <p>Meet at McDonalds in West Rome</p>	<p>Fraser's Loosetrife & The Pinhoti Trail, Floyd County</p> <p>We will see a population of rare Fraser's loosetrife discovered last year and only known from 5 GA counties. We hope to see several other rare plants including creamy meadow parsnip, Michigan lily, and Allegheny spurge, and more common, but perhaps not often observed plants like marsh parsley, and veiny peavine, along with some interesting ferns.</p>	<p>Take I-75 north to the second Cartersville exit (exit 290, GA 20 / Rome/Canton). Turn left (west) and follow GA20 and US411 to Rome, ~20 mi. In Rome, GA20 and US411 split; follow GA20 toward downtown Rome (right fork). Stay on GA20, look for Floyd Medical Center on left (walkway goes over road here from parking deck on right). From Floyd Medical Center continue west on GA20 (Shorter Ave.) for 2.9 mi, to McDonald's on the left.</p> <p>Lunch: Bring lunch to carry on walk.</p> <p>Walking: Easy, flat terrain (old RR grade), 2-3 miles.</p> <p>Facilities: Meeting site only.</p>	<p>Richard & Teresa Ware</p> <p>(706)232-3435</p> <p>richard_ware@netzero.net</p> <p>teresaware@earthlink.net</p>

Upcoming Field Trips

Date	Description	Directions	Leader
<p>June 25</p> <p>10:00 A.M.</p> <p>Meet at the parking lot on Brasstown Bald</p>	<p>Brasstown Bald, Union County</p> <p>Georgia's highest mountain provides unique habitat, especially the cooler northern slope. Several northern species occur here.</p>	<p>From Cleveland, GA take US129 north ~24 mi, then turn right on GA180 and proceed 7.5 mi to GA180 Spur on left. The Brasstown Bald parking lot is 2.5 mi up GA180 Spur.</p> <p>Lunch: Bring lunch to eat during the hike.</p> <p>Walking: A short portion to the Visitor Center will be steep, paved trail. The balance is easy on an abandoned roadbed and maintained trail. Total distance is <5 mi, probably much less. You can return to the parking lot at any point to reduce the total distance.</p> <p>Facilities: Restrooms at parking lot.</p> <p>Bring: \$3 per vehicle parking fee (USFS), water, insect repellent.</p>	<p>Ben Cash</p> <p>(706)778-5155</p> <p>bencash@hemc.net</p>
<p>July 9</p> <p>10:00 A.M.</p> <p>Meet in the parking lot of the Hampton Inn at Waycross</p>	<p>Coastal Plain Roadside Botanizing</p> <p>We will travel from Waycross toward the coast along Hwy 82 and return along the same route. As we spot interesting stuff along the road, we will stop and investigate. The road shoulder is sufficiently wide to pull off without risk anywhere we would stop. Car-pooling is encouraged to make pulling off easier. <i>Platanthera nivea</i>, <i>Befaria racemosa</i>, and <i>Rhexia lutea</i> were spotted along this route before. Pitcher plant trumpets will be up, though past flowering. There will be an assortment of early summer flowers for our enjoyment.</p>	<p>Take I-75 south to US82. Take US82 east to Waycross.</p> <p>Lunch: Bring lunch to eat or purchase along the way (sparse pickings).</p> <p>Walking: Short excursions along the roadside, never out of sight of the vehicles.</p> <p>Facilities: Possible at stores/stops along route.</p>	<p>Rich Reaves</p> <p>(770) 827-5186</p> <p>rpreaves@earthlink.net</p>
<p>July 9 to July 17/18</p>	<p>2005 Rocky Mountain National Park (RMNP), Colorado</p> <p>We plan to see wildflowers in montane and subalpine forests and explore alpine tundra.</p>	<p>The group will fly to Denver, rent a car, camp some, and stay in a cabin a few nights. We plan to finish the week hiking a relatively easy 14er, Gray's and Torrey's. Prior arrangements required.</p>	<p>Amy Delaplaine</p> <p>(404)352-2558</p> <p>amydel@mindspring.com</p>

Trip Report

The Pocket at Pigeon Mountain - March 26, 2005

It has become a Georgia Botanical Society rite of spring to go on a wildflower walk in the Pocket of Pigeon Mountain, led again this year by Mike Christison. We were greeted this year with blue skies and a bounty of blooms.

The walk started on streamside flats behind the parking lot, where wildflowers – sharp-lobed hepatica (*Hepatica acutiloba*), rue anemone (*Thalictrum thalictroides*), trailing trillium (*Trillium decumbens*), Canada violet (*Viola canadensis*), giant chickweed (*Stellaria pubera*), cutleaf toothwort (*Dentaria laciniata*) and long-spurred violet (*Viola rostrata*) – were so profuse that it was hard not to step on them. Mayapples (*Podophyllum peltatum*) were bursting open, their leaves looking shiny-wet. Carol Nourse showed us how to distinguish dimpled troutlily (*Erythronium umbilicatum*) from American trout lily (*Erythronium americanum*): each of the three petals of dimpled trout lily - but not the three sepals - has ears: wedge-shaped protrusions at the base of the leaves.

We proceeded to the boardwalk path that winds through a small canyon that has a canyon floor of Chattanooga shale, but is cut between cliffs of Bangor limestone and of Fort Payne chert, which has a limestone component. The Pocket is nestled within the northwest-facing side of Pigeon Mountain, so its aspect keeps it cool and moist, while the limey colluvium from the cliffs above and lime-rich floodplain alluvium create rich soils: a boon for species found almost nowhere else in Georgia. The lushness and rarity of many of the plants here make this one of the premier wildflower walks in Georgia. The impossibly vivid purple and blue flowers of Virginia bluebell (*Mertensia virginica*)

were in full bloom, contrasting with the butter-yellow celandine poppies (*Stylophorum diphyllum*). Bent trillium (*Trillium flexipes*) was about to flower. All the plants we'd seen in the flats were blooming here, too, along with perfoliate bellwort (*Uvularia perfoliata*), an occasional bloodroot (*Sanguinaria*

canadensis), wild geranium (*Geranium maculatum*), blue cohosh (*Caulophyllum thalictroides*) and spring beauties (*Claytonia caroliniana*), causing Linda Chafin to exclaim that “every square inch is covered with some fabulous spring wildflower!” Harbinger-of-spring (*Eriogonum bulbosum*) is critically imperiled in Georgia, but the small leaves of this calcium-loving plant were locally abundant here; the small, disk-shaped schizocarp fruits were already appearing on some plants, while others still sported the small, white-petaled, dark-anthered flowers that give it its alternate name, pepper-and-salt. Linda noted a walking fern (*Asplenium rhizophyllum*) climbing a boulder and explained how this fern can extend its leaves into tendril-like extensions that root and send out new shoots, thereby “walking” over rocks and logs. Sharp-lobed hepaticas were especially beautiful throughout, arranged like small displays on boulders, with flowers ranging from purple to white, and new leaves emerging even as the old dark ones died off. Dutchman's breeches (*Dicentra cucullaria*) bloomed upslope. The tiny flowers of Bishop's caps (*Mitella diphylla*) were emerging and gorgeous under our hand lenses. The path ended in a waterfall that plunges over a chert cliff, and is coated with limestone tufa. Here, purple phacelia was in glorious bloom on a rock, and a frog lurked in a crevice. Adding to the celebratory feeling of newly-launched spring after the cool, rainy March, Stuart Smith noted several butterflies: Juvenal's Dusky Wings; Spring Azures, West Virginia Whites, Falcate Orange Tips and Hackberry Emperors.

Back in the parking lot for lunch, Chuck Wilson regaled us with tales of orchid hunts and orchid thieves in Florida. (Turns out that the orchid on the cover of the book *The Orchid Thief* is both non-native and upside down!) Laura Breyfogle passed around another spring treat: Girl Scout cookies. Fortified, we walked up the path that hugs the cliffs across the stream from the boardwalk, finding pennywort (*Obolaria virginica*) and pussytoes (*Antennaria plantaginifolia*) in bloom, and wild columbine (*Aquilegia canadensis*) beginning to flower.

A treat awaited us at the end of the day. Jay Clark, a land steward for the Pigeon Mountain



The wildflower walk in the Pocket of Pigeon Mt. was led again this year by Mike Christison.

Photo by Leslie Edwards.



Walking fern (*Asplenium rhizophyllum*). Drawing from Snyder L.H. & J.G. Bruce. 1986. Field Guide to the Ferns and Other Pteridophytes of Georgia.

Book Review

Wild Orchids of the Southeastern United States, North of Peninsular Florida

written by Paul Martin Brown with drawings by Stan Folsom



Brown and Folsom have once again produced a beautiful and indispensable guide to native orchids, this time to taxa found in the southeastern US. The guide includes distribution information, descriptions, and

habitat information for 76 species, 4 varieties, 61 forms, and 13 hybrids, most with two or more color photos and a drawing. The 285 color photographs and 97 drawings are both beautiful and practical. The book is more than a useful field guide, as it also provides information about natural history, worldwide distribution, taxonomic history, and interesting anecdotal observations by the author (such as the fondness of skunks for showy orchis!).

Orchid identification can be daunting because of the incredible diversity of flower morphology and the vocabulary peculiar to this family. This guide provides a brief and clear introduction to orchid biology that should make orchid enjoyment accessible to all. I especially appreciate the conservation ethic expressed in several places throughout the book: the key is designed so that plants need not be collected to be identified, and warnings about the pointlessness of transplanting orchids from the wild appear in several places. Information about seasonality and good descriptions of the physiographic provinces of the region make for fun and inspiring reading in the 'Orchid Hunting in the Southeast' chapter.

The book has other outstanding features such as Mr. Brown's lovely photographs and a key to

genera. The photographs are very practical in terms of highlighting key features and illustrating the color and size variations found within a species. The key to genera is clear and easy to use and is illustrated by detailed drawings of key characters. Species accounts are arranged alphabetically by genus, making field use quick and easy.

My only quibbles with this book concern the distribution information and range maps. First, there is the definition of the "southeastern United States" that excludes most of Tennessee and North Carolina and all of Virginia. The area covered could more accurately be called "the deep south" except for the inclusion of southeastern Arkansas. Most of the species covered in this book can be found throughout the wider southeastern region, so it seems a shame that distribution within the entire region was not addressed and that the few remaining species were not included. Brown partially addresses this limitation by equipping the maps with arrows that indicate the general direction in which the species range. There is also an appendix devoted to distribution by state.

My second quibble is that the range maps are very general, especially to someone used to working with county-level precision. However, given that collections and discoveries are being made every day, I can understand a reluctance to commit to more detailed maps. As they are, the maps provide enough information to allow a user to exclude a species from consideration during the identification process.

Highly recommended for professional and amateur botanists, conservationists, orchid enthusiasts, and those who enjoy identifying and protecting wildflowers.

Reviewed
by
Linda Chafin

University Press of
Florida (www.upf.com).
Cloth \$65.00 / Flexibind
\$27.95

Photo by Fred Milesenko.
From top left: rosebud
orchid (*Cleistes
divaricata*)

The Pocket, cont.

area, took us to a new site for twinleaf (*Jeffersonia diphylla*), a Georgia protected plant. The beautiful, delicate leaves were abundant on the limestone slope, and a few plants were in perfect flower. Incredibly, this site also hosts a healthy population of the Georgia-protected Alabama snow wreath (*Neviusia alabamensis*).

Many thanks to Mike for once again starting our wildflower season off in this spectacular area, and for preparing a plant list that greatly increased our appreciation of the plants we were seeing. Thanks to Jim Renner for providing information on the geology of the site.

Submitted by Leslie Edwards, Atlanta

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In addition to the *BotSoc News*, the Georgia Botanical Society offers field trips, workshops, and a journal (*Tipularia*) focused on botanical interests of Georgia and the Southeast. Membership is open to all.

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