

Volume 86 Number 3 Mav 2011

2011 MARIE MELLINGER GRANT AWARD

Amanda Hershberger, a PhD candidate in the University of Georgia's Department of Horticul- is currently restricted to five populations in ture, is the 2011 recipient of our Marie Mellinger areas of limestone outcrops and calcareous Field Botany Research Grant. The \$1500 grant will be used to examine genetic diversity within and among populations of Indian pink (Spigelia County). Typically found growing as a solitary *marilandica*) and the closely related gentian pinkroot varieties (S. gentianoides var. alabamensis and S. gentianoides var. gentianoides) part of a fire-prone longleaf pine-wiregrass and to develop better propagation methods to ecosystem that is declining rapidly as a result P4preserve the genetic material of these beautiful of land conversion and disruption of pre-hisnative plants.

Indian pink occurs

rather uncommonly in calcareous woods and hardwood slope forests throughout the southeastern U.S. from South Carolina west to southern Indiana, and south to eastern Texas and northern Florida. Since a species that occupies such a wide geographic area has the potential for significant genetic variability among

its populations, Ms. Hershberger intends to collect plant material from at least 10 different sites (30 plants per site) for her genetic studies and propagation experiments. Spigelia marilandica is not considered a threatened species; however, its habitat is often under threat from land use changes – a fact that Ms. Hershberger knows first hand. One of her study populations was severely damaged between 2009 and 2010.

Indian pink and orders of magnitude less com- maturity while the corollas of Florida plants mon. In fact, a very narrow distribution and a remain closed and "gentian-like" in appearlow population density garnered a federal En- ance). Further study by James Affolter, Direcdangered species designation for Spigelia gen- tor of Research at the State Botanical Garden of tianoides in 1990.

soils in the Florida panhandle (Jackson and Calhoun Counties) and SE Alabama (Geneva individual or in small clumps in predominately well drained upland pinelands, the plants are

Spigelia gentianoides var. gentianoides

torical and historical fire regimes.

Spigelia gentianoides var. alabamensis is found only in Bibb County, AL and restricted to 17 of 40 small Reportglades (open, almost p11 treeless areas within woodland) that have developed over an ancient rock formation known as Ketona Dolomite. Although the total glade area is small (a zone of

~18 km long and at most 0.8 km wide), gentian pinkroot is quite abundant there, mainly as small clumps adjacent to rocks. The Nature Conservancy protects some of the area, but plant populations on private property are threatened by land use changes.

In 1996, Katherine Gould studied both Florida and Alabama gentian pinkroot populations and found sufficient differences for taxonomic distinction (e.g.,

Gentian pinkroot is less well known than the corollas of Alabama plants open fully at

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Field Trip

Amanda Hershberger is the 2011 recipient of our Marie Mellinger Field Botany Research Grant. She will use the grant's \$1500 to study Indian pink (Spigelia marilandica, shown at left) and the closely related gentian pinkroot varieties (S. gentianoides var. alabamensis and S. gentianoides var. gentianoides). Amanda's photo by Sherrod Baden; Amanda photographed the Indian pink in Bonaire, GA.





Society News



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PRESIDENT'S PERSPECTIVE

We arrived home Sunday evening, tired but still invigorated. After unloading and cleaning up, I immediately uploaded photos and began reliving some of the memorable moments from the previous three days. After a year of planning, it was hard to believe the Carrollton Pilgrimage was over. Although attendance was somewhat restrained this year, the entire event can be declared a success. Representatives from the City of Carrollton and the University of West Georgia were gracious in welcoming our group to their beautiful city. The meeting facilities were excellent and the food was great.

The number of Society volunteers contributing to the success is almost innumerable. Our trip leaders were a stellar group of knowledgeable individuals. The Friday evening hors d'oeuvres brought by the food volunteers provided a virtual banquet in itself. Thanks to Jerry Hightower for organizing the interesting field trips. The excellent Pilgrimage brochure prepared by Jean Smith found much use in providing participants descriptions and directions to the various events. Webmaster, Merrill Morris had kept us updated all along through information on the website.

The design by Jenneke Somerville made the commemorative t-shirts true classics. Special thanks to Anita and Rich Reaves whose tireless work pulling it all together through management of registrations and receipts made the whole thing possible. They are truly unsung heroes.

We were fortunate in having had perfect weather during all the field trips. However, many were severely affected, particularly in North Carolina, by the eastwardly moving storms that blew through the Carrollton area Friday night. We should keep those people in our thoughts and sympathies.

Soon, planning for next year's pilgrimage will begin. Hopefully, it will also provide great enjoyment and lasting memories for all attendees.

Following the banquet, a board meeting was held Saturday, April 16, 2011. During the meeting, several items were discussed some of which are tentative and will be discussed on a later occasion. Treasurer, Rich Reaves reported that, preliminarily, it appears this year's pilgrimage at least broke even which is desirable, and that the t-shirt sales were high. T-shirt profits benefit the Marie Mellinger Scholarship Fund.

Locations for next year's pilgrimage were discussed and a final decision should be forthcoming. The possibility of producing permanent Georgia Botanical Society shirts with the Society's logo produced favorable comments.

Jean Smith reiterated the need for revamping the newsletter format and will provide suggestions to the board. Also, Jean would like to have a volunteer or volunteers to take over responsibilities of newsletter editor.

Discussions also included efforts to recruit new Bot Soc members and how to reach out to youth.

A few other agenda items were either tabled or will need board approval. Updates should be provided as information is received.

Jim Drake



Rich and Anita Reaves found and photographed these yellow lady's slippers (*Cypripedium parviflorum* var. *pubescens*) at this year's Pilgrimage trip to Paulding Forest (Sunday Pilgrimage Trip 23). Readers are encouraged to submit their favorite wildflower photograph for inclusion in future issues of BotSoc News.

2011 Spring Wildflower Pilgrimage

SHARE YOUR PILGRIMAGE DISCOVERIES IN THE JULY ISSUE OF BOTSOC NEWS!

Write a paragraph or two about the places you visited and the plants (and animals) that you saw during this year's Pilgrimage. Or if that is too daunting a task, just send a captioned photo. My address and email are on page 2. As an example, I have included two photos from Trip 21 - along with a few of the things I learned from a day on the "flatrocks". Your pictures and comments are an important way of supporting our mission to "promote the understanding and appreciation of plants and their relationship to the environment" -- Jean Smith, BotSoc News



Mike Christison uses his hand lens to look for quillwort spores at one of several granite outcrops in Chattahoochee Bend State Park (Sunday Pilgrimage Trip 21). Quillworts (Isoetes sp.) are found in the temporary and seasonal pools of water and thin soil that form on granite "flatrocks" in the Piedmont. Two species, the black-spored quillwort (I. melanospora) and the mat-forming quillwort (I. tegetiformans) are found only in Georgia.



Only a few inches deep, this vernal pool at Chattahoochee Bend was a beautiful miniature garden of red leaves of elf orpine (*Diamorpha smallii*) and white flowers of sandwort (*Minuartia unifolia*). Granite out-crops are popular as recreational sites, but when the fragile beauty of these landscapes is not understood, they may be used inappropriately. This outcrop showed damage from off-road vehicle traffic.

2011 MARIE MELLINGER GRANT AWARD (cont. from page 1)

and one of Ms. Hershberger's research advisors, confirmed that the morphologic distinctions between the two populations persist when both varieties are raised from seed to maturity in a common greenhouse. It is hoped that evidence from the genetic studies funded by Marie's Grant will shed further light on the evolutionary relationship between these unusual plants.

Although gentian pinkroot is not known to occur in Georgia, the plant does have an important Georgia connection. In 1992, while canoeing the Little Cahaba River as part of a U.S. Fish and Wildlife survey, Georgia botanist Jim Allison discovered both the Ketona Glades and the gentian pinkroot later to be known as Spigelia gentianoides var. alabamensis. Because of the number of unusual and rare plants Allison found there, the Ketona Glades are often referred to as the "Botanical Lost World of Bibb County." The area and its plant life have been the subject of several popular and scientific articles and, in what is arguably a first for field botany, S. gentianoides var. alabamensis with the dolomite that nourishes it are the graphic features on the side of over 600 U-Haul vans in the "Venture across America" series (see http://jimbotany.com/bibb-co-al.htm for a lively account of his exploration of the Ketona Glades and visit the "super graphics" area of the U-Haul web site to see the surprising number of states whose U-Haul vans have botanical themes).



S. gentianoides var. *alabamensis* and the dolomite that nourishes it are featured on over 600 U-Haul vans. Illustration from www.uhaul.com.

2011 Marie Mellinger Field Botany Research Grant Program Reviewers were Richard Ware, Hugh Nourse and Elaine Nash.

Discoveries

RECENT RARE PLANT DISCOVERIES AT LULA LAKE LAND TRUST

PART I

by Richard Ware and Max Medley **Introduction**: This article continues the series started in the March 2011 issue of BotSoc News on recent rare plant discoveries or major range extensions in Georgia. While Hal was able to speak so well and eloquently about one species, we will discuss four main species and mention two other rare species discovered recently. So, please consider our article in the context in which it is being submitted - more a report from the field than a regular article. All of the new finds were discovered on the Lula Lake Land Trust: one by Tom Patrick and the others by Max Medley. The Lula Lake Land Trust is a privately owned 4,000 acre preserve on Lookout Mountain in Northwest Georgia. Lookout Mountain is a massive, cave riddled and heavily forested ridge that stretches from North Alabama through the extreme northwest corner of Georgia to Tennessee. At this time, they are only open to the public one day a month. Please visit their website (http://www.lulalake.org/) for more information. Most of these discoveries were made while observing the very rare Virginia spiraea (*Spiraea virginiana* Britton), a plant that is ranked G2/S1, GA-Threatened, US-Threatened and is known from three sites at the Land Trust.

Solidago arenicola B.R. Keener & Kral black warrior goldenrod

November 7, 2009 - While observing *Spiraea virginiana* populations at the Lula Lake Land Trust (Lula Falls) on the Cumberland Plateau in extreme northwest GA, Max Medley discovered a *Solidago* in the *S. simplex* complex that looked the same as the *Solidago* of stream scour communities of major rivers of the Cumberland Plateau in southeastern Kentucky and northeastern Tennessee. The identify confirmation was made on September 25, 2010, when the plants were in



black warrior goldenrod Solidago arenicola

good flower. This plant occurs only on river and stream banks that are annually scoured by flash floods and dominated by grasses, forbs, shrubs and very stunted trees. These habitats occur on bars composed of cobbles and boulders at the mouths of major tributaries and on the curves of bends in the stream. The species was previously known only from the type locality on

Locust Fork Branch on the Cumberland Plateau in north central Alabama (Keener & Kral 2003) and on the Cumberland Plateau in southeastern Kentucky and northeastern Tennessee, (Braun 1943, Fernald 1950, Medley 1993).



black warrior goldenrod (Solidago arenicola)

In the southeast, this species is most closely related to *Solidago racemosa* Greene [*S. simplex* var. *racemosa*] and *S. plumosa* Small. *S. racemosa* is a mostly northern species that occurs mostly in stream-scour habitats. It occurs sporadically southward, with its southern-most population apparently at Great Falls on the Potomac River on the Piedmont Fall Line. The populations

Discoveries

of *S. arenicola* in Kentucky and Tennessee were formerly thought to be *S. racemosa* (Braun 1943, Fernald 1950, Medley 1993, Chester et. al. 1997). *S. plumosa* is known only from stream-scour communities from the Yadkin River in the Piedmont of central North Carolina (Weakley 2010).

According to NatureServe, *Solidago arenicola* was originally thought to be an Alabama endemic, but the authors of *Solidago* in the "Flora of North America" (Semple and Cook 2006) transferred the TN material that was previously know as *S. simplex* var. *racemosa* to *S. arenicola*. The KY plants also identified as the same as the TN material will probably also be identified as *S. arenicola*, agreeing with the discoverer of the species in GA.

Calamovilfa arcuata K.E. Rogers Cumberland sandreed

Tom Patrick discovered Cumberland sandreed on a trip to Lula Lake Land Trust, Walker County, with Brian Davis on August 24, 2011. They were exploring the streambank and bouldery gravel bars for the federally listed Virginia spiraea (*Spiraea virginiana*). Tom noted a bunch grass just beginning to flower and passed it by. Then a few days later it hit him. The narrow stiff leaves and the gravel bar habitat reminded him of searches for

this rare grass in Tennessee some 30 years before. He called Max Medley who jumped at the prospect of going on a field trip to find a state record. "We (Max and I) just had to go back and capture this grass for identification purposes when the inflorescence had matured." The specific epithet "arcuata" refers to the distinctive curved or arcuate floret, plus there is a characteristic plug of cottony hairs at the base of the floret - both characters easily determined in the field with a hand lens. Well, they returned to the site and discovered the state record grass in full glory (flowers and fruits) on September 4, 2011. In Georgia, there is only one known occurrence along Rock Creek, Lula Lake Preserve; therefore, the state rarity rank is S1; the global rarity rank is G2G3.

Calamovilfa arcuata is known from gravel bars kept open by flooding events. It sometimes grows with other rarities for the southern Cumberland Plateau, including Cumberland rosemary (*Conradina verticillata*) in KY and TN; Virginia spiraea in TN and GA; and sweet-fern (*Comptonia peregrina*), also in Tennessee. This is an attractive deeply rooted stabilizer of gravel bar habitats. This quote from NatureServe seems to be accurate and now pertains to Georgia as well:

"A species of open gravel/cobble bars maintained by river scour, Calamovilfa arcuata has a disjunct distribution, with one cluster of populations in southern Kentucky, Tennessee, and northern Alabama and a second cluster in eastern Oklahoma and western Arkansas. Approximately 20-60 occurrences are believed extant, depending on how adjacent plant clusters are aggregated; most of these occurrences have less than 100 individuals. Although reservoir construction has destroyed some of this species' historical habitat, many of the extant occurrences appear relatively stable. Because C. arcuata requires river scour, changes in river hydrology are the major threat to its persistence; such changes can arise from reservoir construction, watershed-level impacts such as strip mining, or other processes that alter flood frequency/intensity. Woody invasive species that colonize cobble bars are also a threat in at least Kentucky."



Solidago arenicola herbarium specimen from http://www.herbarium. unc.edu/images/. Photo by John C. Semple, Univ. of Waterloo (http://www. jcsemple.uwaterloo.ca/). *Calamovilfa arcuata* herbarium specimen from B. Eugene Wofford, Univ. of Tennessee Herbarium (http://tenn.bio.utk. edu/vascular/vascular.



Cumberland sandreed Calamovilfa arcuata

Upcoming Field Trips

May 1 Sunday 10:00 AM Lake Winfield Scott Loop, Union County Note day!

Description: This is a moderately strenuous hike with 1 mi on the Jarrard Gap Trail (mostly uphill), 2 mi on the Appalachian Trail (mostly level) and 2.5 mi on the Slaughter Creek Trail (mostly downhill). We will hike through hemlock-heath forest, southern Appalachian cove forest, oak ridge forest, and oak-pine-heath forest. Interesting wildflowers that should be in bloom include pink lady's-slipper, speckled wood lily, doll's-eyes, blue cohosh, toothwort, umbrella leaf, yellow mandarin, two species of bellwort, six species of violet, and four species of trillium. We will see most during the first mile (Jarrard Gap Trail) -- feel free to return when you are ready.

Directions: From Atlanta, take GA 400 north for ~60 mi to its end south of Dahlonega. Turn left on Hwy 60 toward Dahlonega and Suches. After Stone Pile Gap, bear left to stay on Hwy 60. Shortly after Woody Lake on the right, watch for Hwy 180 on the right (motorcycle resort/service station at corner). Turn right on Hwy 180 and go ~4.5 mi to turn right into Lake Winfield Scott Recreation Area, pay \$5 entrance fee. Park in the parking lot above Lake Winfield Scott bath house and walk back downhill to **meet at the trailhead**.

Facilities: At meeting site.

Walking: Mostly moderate with some strenuous stretches. 5.5 miles.

Bring: Lunch to eat on trail, \$5 entrance fee, sturdy shoes for hiking, trekking poles, rain gear (you never know!), water. **Leader**: Linda Chafin Lchafin@uga.edu 706.548.1697

May 4 Wednesday 10:00 AM - 1:00 PM Chattahoochee River NRA Vickey Creek Reservation Required

Description: We'll hike through the oak hickory ridge forest, mesic forest, and the ridge top trail on the steep slopes above the scenic Vickery Creek Ravine. We'll see very large big leaved umbrella magnolia (*M. macrophylla*). Our loop will take us past beautiful areas with native ferns, shrubs and wildflowers and observe a succession area several years after a pine beetle kill. The ridge top trail shows plants which survive in shallow soils, cliff areas, and dry conditions - a great trail to discover.

Directions: From the Historic Roswell Square travel north on Atlanta St (Hwy 9). Oxbow Rd is at the bottom of the hill on the right. **Meet in parking area and trailhead** in City of Roswell Park on Oxbow Rd.

Facilities: Trees and thick shrubs.

Difficulty: This hike is moderately strenuous with a few steep slopes.

Bring: Pack a lunch and we will picnic in the forest. Camera, hand lens, and binoculars are recommended.

Leader: Jerry Hightower 770.206.0338 cell 678.538.1245 office jerry_hightower@nps.gov

Trip limit of 25 participants and reservations required for both of Jerry's hikes - please call 678.538.1200

May 4 Wednesday 2:00 PM - 5:00 PM Chattahoochee River NRA Vickey Creek Reservation Required

- **Description**: We'll hike across scenic Vickery Creek through the covered bridge and into the forest with its abundance of native rhododendron and mountain laurel. We'll walk a 19th century road trace under glorious big leaf magnolias and see the mill dam waterfall and ruins of once bustling mills. Learn facts and a fable or two about the human as well as natural history of this extraordinary area amongst beautiful ferns and wildflowers.
- **Directions**: We'll **meet at the trail entrance arbor** in the lower parking area off the Roswell Square (across from Hwy 120 at its intersection with Atlanta St / Hwy 9).

Facilities: At Roswell Visitor Center on the Square.

Difficulty: Moderate with a several short, but steep, ascents and descents.

Bring: Dress for weather and wear hiking shoes. Bring binoculars, hand lens, notebook and camera. **Leader**: Jerry Hightower 770.206.0338 cell 678.538.1245 office jerry_hightower@nps.gov

May 6 Friday 1:00 PM - 4:00 PM Paces Mill, West Palisades, Chattahoochee River NRA, Cobb County

- Description: We'll walk north along the river to the cliffs for a beautiful display of mountain laurel (Kalmia latifolia), and maybe Catesby's trillium (Trillium caetsbaei) and Carolina rhododendron (Rhododendron minus). We'll then double back to a gentle long trail up to the ridge to look for the perfoliate bellwort (Uvularia perfoliata) and an abundant display of mayapples that may be in bloom or in fruit, depending on the weather. In addition, we should see fire pinks (Silene virginica) and some ragwort. We'll check the progress of tree blossoms as we climb and see some blooming buckeyes. At the top of the ridge, we'll find flame azalea (Rhododendron flammeum) and we'll walk on a trail high above the river with gorgeous views. As we head back down downstream, we'll view cinnamon ferns (Osmunda cinnamomea) and royal ferns (Osmunda regalis) in the swamp and then visit the silky dogwood (Cornus amomum) that resides along Rottenwood creek.
- **Directions:** Traveling south on I-75, take exit 258 to turn right on Cumberland Blvd and then left on Cobb Parkway (US 41). Go through light at Paces Mill Rd and past BP Station on right to NPS entrance sign. Traveling north on I-75, take the Mount Paran Rd exit to turn left on Mt. Paran Rd and then right onto Northside Dr. Go north across the river. Park entrance is on left, just before BP station. Meet at Paces Mill parking lot, near the restroom building. For other directions, contact leader. Paces Mill Unit, 4600 Cobb Parkway, Atlanta, GA 30339.
- Walking: Easy. 3 mi combination of payed and dirt trail with easy footing. Gentle 0.5 mi climb to the flat ridge trail. Facilities: At Paces Mill parking lot.

Bring: Comfortable walking shoes, hand lens, \$3.00 parking fee or annual pass, water, camera, field guide. Leader: Maureen Donohue macaire75@att.net 678 687-7963 cell

May 7 Saturday 10:00 Rabun Bald, Rabun County

- Description: In addition to being very scenic, Georgia's second highest mountaintop harbors many plant species seldom encountered elsewhere in the state such as American mountain ash (Sorbus americana), minnie bush (Menziesia pilosa), pale corydalis or rock harlequin (Corydalis sempervirens), Catawba rhododendron (Rhododendron catawbiense) and wild sarsaparilla (Aralia nudicaulis).
- **Directions**: Traveling north from Dillard on US 441, turn right at traffic signal onto GA 246 which becomes NC 106. Approximately 4 mi from US 441, turn right onto Old Mill Creek Rd. Go another mile then turn right into Sky Valley. Go left in Sky Valley about 1 mi then turn left onto Overlook Way and then almost immediately turn right onto Knob Dr. Continue up Knob Dr (pavement ends), turn right at T-intersection. Meet at Trailhead.

Facilities: None.

Walking: 4.4 mi, difficult, strenuous. Some trail sections are steep and rocky.

Bring: Water, lunch to eat on trail, sturdy footwear, rain protection.

Leader: Ben Cash 706-778-5155 bencash@hemc.net 706-968-3841 cell, service unreliable at trailhead

May 8 Sunday 10:00 am Cypripedium Gulch, Suches, Union County Note day!

- Description: "Cypripedium Gulch", the informal name given this favorite spot by BotSoc years ago, is unique in the number of orchids growing in close proximity. Near the access, we should see pink lady's slippers (Cypripedium acaule) in bloom. At stop 1 along the access, we should see a nice bunch of large vellow lady's slippers (C. parviflorum) and possibly a stem or two of small yellow lady's slippers (C. parviflorum) and a few lily-leaved twayblade (Liparis lilifolia), maybe not yet in bloom. At stop 2 we'll hike up a hill and bushwhack into a 2nd gulch and more yellow lady's slippers, a few showy orchis (Galearis spectabilis), possibly slightly past bloom, plenty of ferns, perhaps a flame azalea and several other wildflowers. Following the Cypripedium Gulch walk, those interested can travel by auto a short distance farther along GA60 to a parking area at Little Cedar Mountain and a large gneiss dome exposure above Canada Creek. We will hike up a trail to the dome overlook to see saxifrage and other rock inhabitants. On the way we will see green gentian (Frasera caroliniensis), maybe in bloom, but not guaranteed. We may also see other treats such as trilliums, birdfoot violets and others.
- Directions: From Dahlonega, take GA60 north toward Suches. At cairn (pile of rocks) where the road veers, stay left on GA 60. The road ascends and crosses Woody Gap (bathroom opportunities here) and heads down toward Suches and Woody Lake on the right. Shortly, you'll see an abandoned store on the left at the junction of Cooper Gap Rd. We'll meet at the store's parking area. No restrooms at store so stop at Woody Gap or McDonalds in Dahlonega.
- Difficulty: Bushwhack (off trail) most of the day and climbing ~300 feet at a 2,600 ft elevation. Requires sure footing due to underlying slippery rocks in some places and walking through a shrub understory. Snakes possible. Optional post trip is mostly an old road/trail with the most difficult part at a ditch crossing to get to the trailhead. Bring: Water, lunch, camera, walking stick.

Leader: Jim Drake 678-447-8686 cell, not guaranteed coverage drake3800@charter.net

May 14 Saturday 10:00 AM Cascade Springs Nature Preserve, Fulton County

Description: This preserve, nestled in the heart of Atlanta, has two creeks, a waterfall, hiking trails, and a lush hardwood forest on 134 acres of land. We'll explore to see what treasures can be found. We may also briefly explore the Beecher Hills Greenway, home to some rare species, and perhaps the Atlanta Outdoor Activity Center, to learn more about green space preservation efforts and challenges in the middle of the city.

Directions: From I-20 West Atlanta, take exit 52A to merge onto GA-280 S/Hamilton E Holmes Dr NW toward Holmes Dr. This continues as Peyton Rd SW. Go ~2.1 mi and turn left at Benjamin E Mays Dr SW, then take an immediate right onto Veltre Cir SW. After 0.7 mi, turn onto Old Sandtown Rd SW; then drive ~200 feet to meet at 2852 Cascade Rd.
 Walking: Easy

Facilities: None

Leaders: Steve Bowling 404-317-2817 botanybowling@gmail.com; Leslie Edwards edwa1616@bellsouth.net

May 21 Saturday 10:00 AM - 3:00 PM Appalachian Trail (Tesnatee Gap to Hogpen Gap), Rabun & Towns Counties

- **Description**: A walk in the Raven Cliffs Wilderness that will reward us with beautiful vistas, abundant Catawba rhododendron and rocky outcrops rich with lichens. We may see ginseng (*Panax quinquefolius*), pink lady slipper (*Cypripedium acaule*), striped maple (*Acer pensylvanicum*), wild sasparilla (*Aralia nudicaulis*) and bush honeysuckle (*Diervilla sessilifolia*); but, since Tom Patrick is co-leading, we are bound to identify a number of other plants.
- **Directions**: GA 400 to Dahlonega, then north on US 19 and US19/GA129 to Vogel State Park where GA 180 joins the road. Stay on GA 180 as it bears to the right ~5 mi north of the Park. Turn right onto Richard Russell Scenic Highway (GA 348). Travel ~5 mi to **meet at Hogpen Gap** to do a short car shuttle to Tesnatee Gap (look for small rectangular sign with hiker icon).

Facilities: Outhouse available at Whitley shelter (lunch stop).

Difficulty: ~3 mile, some strenuous portions. Initial 1.0 mi to Wildcat Ridge gains >500 ft; remaining hike mostly moderate. **Bring**: Water, lunch, binoculars, hand lens, notebook, camera, rain protection.

Leaders: Tom Patrick and Eddi Minche eddmin@gmail.com 678-313-2582, cell (iffy at meeting site)

May 21 Saturday 8:00 AM to 5:00 PM Flint River Shoals Spider Lilies, Upson County Reservation Required

Description: We'll float Sprewell Bluff and the Fall Line Ravines, where Coastal Plain flora and fauna intermix with species of the upper Piedmont and mountains along 6 to 9 river miles with several easy class II rapids. Afterwards, we'll car caravan to Big Lazar Creek Wildlife Management Area for a very short stroll to Hightower Shoals and the rare and endangered shoals spider lilies, whose large white flowers open in the late afternoon to release a most pleasant scent. Threatened Barbour's Map Turtles and Shoals Bass are inhabitants of these shoals as well.

Directions: Meet at the Flint River Outpost (706-647-2633), west of Thomaston on Hwy 36 at 8:00 am. Canoes and kayaks can be rented at the outpost. There is a shuttle fee. NOTE: Please make your own reservations for the morning shuttle. Hotels are nearby in Thomaston and camping is available at the Outpost and the WMA.
 Facilities: Restrooms are located at the Outpost and at Spruill Bluff State Park. The Outpost has a store.
 Difficulty: Easy paddling suitable for beginners, but persons must have basic canoeing or kayaking skills.

Bring: Pack a lunch for picnic along the river. Sunscreen, a hat, rain jacket, and water, camera, binoculars, and maybe a hand lens are all recommended. Bring a day pack or other bag to secure items inside your boat.

Leader: Jerry Hightower; 770-206-0338, cell; 678-538-1245, office; jerry_hightower@nps.gov

Reservations required for both of Jerry's floats - please call 770-971-8919 or email jerryhightower@hotmail.com.

May 28 Saturday 10:00 AM to 4:00 PM Chestatee River Float, Dawson County Reservation Required; Limited to 26 Description: This easy 6.3 mile float is punctuated with several very mild rapids. We'll paddle past banks covered with Rhododendron and mountain laurel, ferns, and wildflowers. Large river birch, oaks, and sycamores tower overhead draped with muscadine, Virginia creeper, and cross vine. Sheer cliffs slip into the currents that flow around the remains of old gold mining operations. We will stop at Big Bend Beach for a picnic lunch and perhaps a swim.

Directions: We will meet at the Appalachian Outfitters Outpost (1-800-426-7117) on Hwy 60 near Dahlonega at 10:00 AM. There is a small shuttle fee. Bring your own boat or rent from the outfitters. Limit: 26 persons.
 Facilities: Restrooms and changing rooms are available at Appalachian Outfitters Outpost.

Difficulty: Suitable for beginners with some experience on rivers. Class 1.5

Bring: Pack a lunch for picnic along the river. Sunscreen, a hat, rain jacket, and water, camera, binoculars, and maybe a hand lens are all recommended. Bring a day pack or other bag to secure items inside your boat.
 Leader: Jerry Hightower; 770-206-0338, cell; 678-538-1245, office; jerry_hightower@nps.gov.

May 28 Saturday 10:00 AM Roadside Botanizing: Cohutta Mountains, Gilmer & Fanin Counties

Description: We will drive along the Forest Service roads stopping to look at flowers along the way. There will be several short excursions form the cars, always along the road. We can expect to find several trilliums, 4-leaved milkweed (*Asclepias quadrifolia*), wild geranium (*Geranium maculatum*), Solomon's seal (*Polygonatum biflorum*), lily-of-the-valley (*Convallaria majuscula*), wood betony (*Pedicularis canadensis*), fire pink (*Silene virginica*), and much more. Carpooling from the meeting site will be necessary on the narrow unpaved roads.

Directions: Take I-575/ GA 515 north to East Ellijay to turn left on GA 52. At ~5 mi west of the square on GA 52, turn right on Gates Chapel Rd. When pavement ends, take Wilderness Trail/ FR 90 (dirt road to the right - almost straight ahead). At ~0.9 mi do not turn left at WMA sign for Pinhoti Trail. Continue 0.1 mi to Pinhoti Trail Parking on right on FS90. **Meet at Pinhoti Trail Parking Area on FS90**.

Walking: Easy, probably all within 500 feet of cars.

Facilities: Only what nature provides.

Bring: Lunch, water, bug spray.

Leader: Rich Reaves 770-827-5186 rich.reaves@att.net

May 29 Sunday 11:00 AM Woody Gap, Preaching Rock & Beyond, Fannin County - Note day and time!

Description: We'll go north on the Appalachian Trail to Big Cedar Mountain and two rock outcrops with incredible views and a nice population of Appalachian fameflower (*Phemeranthus teretifolius*), though we must linger into the afternoon to see it in flower. We should see fire pink (*Silene virginica*), whorled loosestrife (*Lysimachia quadrifolia*), flame azalea (*Rhododendron calendulaceum*) and maybe a few late yellow ladies slippers (*Cypripedium parviflorum*).
 Directions: From Atlanta, take GA 400 north for ~60 mi to its end. Turn left on GA Hwy 60 and follow around Dahlonega north to Stone Pile Gap. Bear left to stay on Hwy 60 as US 19 bears to the right. Meet at Woody Gap parking lot on GA 60 where the Appalachian Trail crosses the road (you'll see hiker crossing signs ~0.5 mi before parking area). Parking is on both sides; facilities are on the right as you come up the mountain from Dahlonega.
 Walking: ~3.0 mi moderate walk at a naturalist's pace; one strenuous, but short switchbacking climb to Preaching Rock.

Facilities: Flushless toilets at Woody Gap parking (can be crowded), strategically placed trees and shrubs on trail. **Bring**: Lunch to eat on a rock outcrop with a scenic view, hat, water, bug spray, curiosity.

Leader: Hal Massie 478-836-4907; 478-957-6095 (cell, morning of hike, reception iffy) massiefarm@aol.com

May 30 Monday (Memorial Day) 9:30 AM Arkaqua Trail, Brasstown Bald, Fannin County - Note time!

- **Description**: We'll split our annual Brasstown Bald visit between a morning hike on the upper portions and an afternoon ramble on the lower portions of the Arkaquah Trail. In the morning, we'll hike from GA's highest elevation down to a rock outcrop that should have flowering rock harlequin (*Capnoides sempervirens*). Along the way, we should see plenty of Vasey's trillium (*Trillium vaseyi*) and a few pink lady's slipper (*Cypripedium acaule*), as well as mountain (*Acer spicatum*) and striped (*A. pensylvanicum*) maple. In previous years, we've had as many as 6 different species of trilliums on this trail. We should also see Canada mayflower (*Maianthemum canadense*), teaberry (*Gaultheria procumbens*) and, perhaps, minnie-bush (*Menziesia pilosa*). After lunch, we will walk back to the parking lot to drive down to Track Rock Gap and the bottom end of the Arkaquah Trail. The ultramafic soils at the base of Brasstown Bald should yield the tall flowering stalks of American columbo (*Frasera caroliniensis*), as well as hound's tongue (*Cynoglossum virginianum*), lily-leaved twayblade (*Liparis lilifolia*), and horse gentian (*Triosteum perfoliatum*).
- Directions: From Blairsville, take US 19 south for 8 mi, then turn left onto GA 180 for another 8 mi. At the sign for Brasstown Bald, turn left onto GA 180 Spur and follow it to **meet at parking lot on top of Brasstown Bald**. From Dahlonega, take GA 60/US 19 north to Stonepile Gap. Stay on US 19 as it veers to the right. Turn left at Turner's Corner at the Chestatee River. After Neel's Gap and Vogel State Park, take GA 180 to the right; GA 180 Spur will be 8 mi further, on the left.
- **Bring**: Parking fee at Brasstown Bald entrance booth; parking at Track Rock Gap is free, but limited. Bring lunch to eat at a rock outcrop along the trail

Facilities: Only at the Brasstown Bald parking lot. After that, it's trees and boulders.

- **Walking**: The Arkaquah Trail is strenuous. The first part of this hike is mostly downhill, but will be a gradual uphill walk back to the parking lot. Total distance will be about 4 miles. Because we are doing an out-and-back walk this year, we will miss the most strenuous portions of the trail, but persons with physical limitations should still be aware of the rugged nature of this area.
- Leaders: Rich Reaves & Hal Massie 478-836-4907; 478-957-6095 (cell, morning of hike, reception iffy) massiefarm@aol.com

June 3 Friday 1:00 - 4:00 PM Chattahoochee River NRA, Paces Mill, Cobb County Note day!

Description: We'll walk along the river trail to the Palisades cliffs where we hope to find *Rhododendron maximum* in bloom. Then we will walk up Rottenwood Creek to see what's blooming creekside. We'll continue up the creek to view the old Akers Mill ruins and follow the paved trail back identifying the many plants, trees and grasses we find along the way.

Directions: Traveling south on I-75, take Exit 258, turning right on Cumberland Blvd and then left on Cobb Parkway (US 41S). Go beyond the light at Paces Mill Rd and the BP Station to the large brown NPS sign for the park entrance. Traveling north on I-75, exit at Mount Paran Rd to turn right onto Northside drive. Continue north until you cross the river. The park entrance is shortly after you enter Cobb County, on the left, just before the BP station. For other directions, contact leader. **Meet in the Paces Mill parking area** just south of Paces Mill Rd and Cobb Parkway (US 41) at the restroom building near the pay station. Paces Mill Unit, 3445 Cobb Parkway, Atlanta, GA 30339

Facilities: Available in the parking area.

Difficulty: Flat terrain along the river and creek with an easy climb up to the mill and the paved trail.

Bring: Water for drinking, \$3.00 parking fee or annual pass, binoculars, hand lens, notebook, camera.

Leader: Maureen Donohue macaire75@att.net 678 687-7963 cell

June 4 Saturday 10:00 AM Blackbelt Prairies, Oakey Woods, Houston County

- **Description**: The remnant blackland prairies of central Georgia are an extremely rare collection of habitat types related to similar vegetation found in neighboring Alabama. The calcareous clay soils are home to over 20 rare plant species, some of which are found nowhere else in the state. We should see expanses of pinnate prairie coneflower (*Ratibida pinnata*), Dakota mock vervain (*Glandularia bipinnatifida*), prairie larkspur (*Delphinium carolinianum*), Florida milkvine (*Matelea flavidula*), green milkweed (*Asclepias viridiflora*) and much more. The prairies are very hot even in early June so please bring an over abundance of water.
- Directions: From I-75 in south Macon, take exit 160A toward Warner Robins. Continue south on Ga 247, past Robins AFB until you reach the intersection with Ga 96 in Bonaire. Alternately, take I-475, south of Forsyth to skirt downtown Macon, rejoining I-75 south of Macon. Continue south to exit 142, GA 96/Houser's Mill Road. Proceed east on Ga 96 to Bonaire. Meet at Flash Foods/Taco Bell parking lot at crossroads of Ga 96 and Ga 247 tocarpool to the site. Flash Food 130, 498 Ga Hwy 247S, Bonaire, Ga 31005

Bring: Lunch to eat in the field, bug spray, sunscreen, water, hiking shoes, camera, hand lens, and binoculars. **Facilities**: Only at meeting location.

Walking: Easy, level, never more than 1/2 mile from vehicles at prairies **Leader**: Ed McDowell 478.396.8901 ed.mcdowell@cox.net

June 5 Sunday 10:00 AM Dwarf Hatpins Adventure, Walton County - Note day!

- **Description**: An early summer hike to see dwarf hatpins (*Eriocaulon koernickianum*), one of the rarer plants found on granitic rock outcrops in Georgia. Hopefully, spring rains will continue and these diminutive plants will be thriving. We will have two or three potential sites to explore, mostly in Walton County area between Logan-ville and Walnut Bottom. Mostly on easily accessible flatrock habitats.
- Directions: From the north in Loganville take GA Hwy 20 E (south) ~5 miles, and meeting place is at the gas station at the big intersection with stoplight at Miller Bottom Rd. From the south in Conyers, merely take GA Hwy 20 W (north), pass into Walton County ~1 mi (total of 12 miles from I-20). Meet at Chevron Gas Station, junction of GA Hwy. 20 (Miller Bottom Rd on east and Rosebud Rd on west).

Walking: Easy to moderate short walks from nearby cars, ~1 or 2 miles total.

Facilities: At meeting place and in nearby county park at lunch areas. Nearest lodging and restaurants are in Loganville along US Hwy 78 or in Conyers near the I-20 exit. Nearest state park camping at Ft. Yargo, Winder.
Bring: Hand lens, notebook, water bottle, picnic lunch, sturdy waterproof boots with ankle support or old sneakers to wade in tiny streams (only after recent rain). Be sure to bring sunscreen and a hat for sun protection.

Leader: Tom Patrick 706-476-4541 (cell) tom.patrick@dnr.state.ga.us

Field Trip Report

FALL COLOR HIKE & TREE ID WALK NOVEMBER 6, 2010



Floyd County

The morning was bitterly cold as eight members of the Botanical Society gathered at The Pocket Recreation Area just barely inside Floyd County. Though the trip was billed as a fall color hike, the season was rather advanced and most of the deciduous trees were already bare. Snow had covered much

of the North Georgia mountains just two days before.

Richard Ware started the walk with a stroll through the Pocket Recreation Area. The Pocket Recreation Area in northwest Georgia is named for a low-lying area sur-

rounded by the steep ridges of Horn and Mill Mountains, and is the former site of Civilian Conservation Corp Camp F-16. The highlight here is a beautiful, ice cold spring where people come to cool off in the summer. The area also includes several large yellow buckeyes (*Aesculus flava*), American beech (*Fagus grandifolia*), and many different species of ferns, evident in the summer months.

As we left the picnic area and started out on the Pocket Nature Trail, Richard pointed out the scaly bark of white oak (*Quercus alba*) and the



Our native climbing fern (*Lygodium palmatum*) is always a good field trip find. *Photo by Anita Reaves.*

(*Doellingeria infirma*), the remaining flowers as tattered as those of the oakleach. Though not in flower, Richard pointed out the huge basal leaves of kidneyleaf rosinweed (*Silphium compositum*) not far off the trail.

The prize wildflower of the day was striped gentian (*Gentiana villosa*). The flowers of this gentian are about 2 inches long, but a dull greenish-white, making them easy to overlook. On closer inspection the corollas have thin purple longitudinal stripes and are quite lovely.

At one point in the walk I heard Richard Ware talking to someone about smoking rabbit tobacco (*Pseudognaphalium obtusifolium*). I've always been curious about how rabbit tobacco was used, so I caught up with Richard and asked him. He stooped down to a rabbit tobacco plant and closed one hand around the base of the stem. Then, with practiced

ease, he slowly moved his hand up the stem. When he stood back up and opened his fist, he had what looked like a fuzzy, fat, gray cigar in his palm. The next step in the process is to roll the 'tobacco' tightly in your hand, and then roll it inside paper, such as the paper from a brown paper sack. With a grin, he then told me that you, "Just light the end of it". Disclaimer: this activity is not recommended and Richard claims he hasn't done this since he was a youngster!

We eventually made it back to the picnic tables and parking lot where we enjoyed

distinct blocky bark of sourwood (*Oxydendron arboreum*). We found a few leaves still hanging on a maple-leaf viburnum (*Viburnum acerifolium*) near a few recognizable leaves of tall rattlesnake root (*Prenanthes altissima*). Rich Reaves pointed out a patch of eastern lousewort (*Pedicularis canadensis*) beside the trail, seemingly out of place because of its deep green leaves.

The dominant trees here included northern red oak (*Quercus rubra*) and mockernut hickory (*Carya tomento-sa*), though we puzzled for a few moments over a mockernut hickory that didn't seem to have the typical latticework pattern to the bark that makes it easy to recognize in winter. A lower, wetter area yielded a stiff dogwood (*Cornus stricta*), also known as southern swamp dogwood.

A few wildflowers were still hanging on. We found a few battered and faded flowers of downy oakleach (*Aureolaria virginica*), a plant that is a hemiparasite of oaks. Occasionally we would see Appalachian flat-topped white aster

a chilly lunch, but in the presence of warm company. After lunch, we piled into our cars and drove to a parking lot at the top of John's Mountain. The view looking down on the valley to the north of the mountain was spectacular, but the biting wind soon drove us back into our vehicles. It was tempting to explore the trail on John's Mountain, but we all were in favor of saving that for a warmer day! We did stop on the way down from the overlook to check out a population of our native climbing fern, *Lygodium palmatum*, which is always a good find.

As usual, Richard Ware was a fountain of botanical knowledge and we thank him for leading what has become a Georgia Botanical Society tradition. Kudos also go to the eight hardy souls who braved the freezing temperatures with good humor and great curiosity.

Hal Massie, Musella

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