BotSoc



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Marie Mellinger Grants Awarded

This year's recipients of the Marie Mellinger Field Botany Research Grant Program monies Columbus State University will use Marie demonstrate a positive trend in research by Grant funds in a program that attempts to smaller institutions in the state of Georgia. The determine need for research on native plants, particularly introgression in sympatric populations of endangered and threatened populations, is Sarracenia rubra and S. psittacina, two statewide and smaller institutions are often species that are listed as threatened within the uniquely located near areas of concern. The state of Georgia. The information from the Grant committee* awarded \$1500 among the 3 winners.

Heather J. Gladfelter along with other faculty members and students of Brenau University will use Marie's Grant to evaluate the propagation and re-introduction of endangered plant species Asplenium heteroresiliens, Draba aprica, Gentianopsis crinita, and Oxypolis canbyi into their native habitats and their establishment into safe-guarding sites for the purpose of species preservation. The Brenau team will have assistance from botanists from the Georgia Department of Natural Resources, The Nature Conservancy (TNC), and Georgia Plant Conservation Alliance who will guide and assist undergraduate student researchers in the following areas: collection, development of micro-propagation techniques, introduction of culture-derived endangered plants in situ and ex situ and the monitoring of the introduction success of the endangered plants in their native habitat. The outcome of this project will advance scientific information using alternative propagation methods for preserving some of Georgia's vulnerable vegetation enhancing each student's knowledge and commitment to endangered plant preservation efforts.

Asplenium heteroresiliens

Cristina Caldwell, a graduate student at the occurrence of genetic program will provide insight into the process of introgressive hybridization occurring between these two rare species and may help state agencies and land managers to better preserve these plants.



Emma York, student, and Timothy Menzel PhD (pictured above), Associate Professor, of Piedmont College will use Marie's Grant to further a project investigating micro-scale effects on growth and survival of out-planted individuals of Helonias bullata in a high mountain bog. Their work continues a project began in the summer of 2011 when 40 Helonias bullata were planted in a mountain bog located in Rabun County, GA. The plants were propagated from an extant population in another bog in the same county which currently has the only natural population of the species. They were grown at the Atlanta Botanical Garden before out-planting. Their focus on micro-scale relations for this study is particularly relevant to the introduction of greenhouse grown plants into the wild.

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^{*} The 2012 Marie Mellinger Field Botany Research Grant committee: Elaine Nash, Hugh Nourse, Richard Ware, and Ed McDowell.



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Society News

President's **Perspective**

Choosing an optimum date for the annual BotSoc Pilgrimage is always a challenge. The groundhog not withstanding, the arrival of another of my four favorite seasons, spring, is often unpredictable. Although the winter of 2010/2011 was unusually frigid, 2011/2012 saw no really cold weather at all. Recently, a friend from western North Carolina reported finding Trillium grandiflorum blooming in mid-March at the 4000 feet elevation - a highly unusual phenomenon for such a date. Fortunately, this year's pilgrimage selection, Clayton, Georgia, can be counted upon to exhibit floral wonders no matter when spring decides to appear. In greatest ever. Many accolades are due to the cadre of volunteers supporting all facets of the Society's operations including production of the Pilgrimage.

This year, the Friday pre-pilgrimage has been expanded to three trips, a half-day and two full day outings. Hopefully, this will attract a wide array of participants with varied interests. The Friday evening social hour speaker, Rich Reaves, will recount the mid-February adventure he lead to Florida and produced which numerous floral and faunal finds. As bird-watching opportunities examples. were phenomenal along the Anhinga Trail, and unique and interesting wildflowers were seen along each of the numerous trails visited. Rich's descriptions and photos of the trip will evoke memories for those who attended and prove interesting

to those who were unable to participate and to those planning a future visit.

The pilgrimage Saturday trip lineup should offer choices to accommodate any botanically inclined person. The Saturday evening banquet of good food will be followed by a U.S. Forest Service presentation on the unique ecosystem of mountain bogs. For a grand finale, Sunday trips promise to be even more educational and exciting.



Trillium grandiflorum (E. Honeycutt)

fact, this year's event may be one of our Recently, I spoke to the Northeast Georgia Orchid Society. At the end of the presentation, I advocated membership in Georgia Botanical Society mentioning the many benefits we offer. Prior to the meeting, I had visited the Society's web pages for a review of our varied activities. Admittedly, enthusiasm for wildflowers is one of my traits. However, member can be any spokesperson for the Society. Our educational field trips. workshops, presentations and annual pilgrimages are unequaled. The Marie Mellinger Grant Program serves a noble purpose, and needs support. Volunteer opportunities are always available and offer rewarding experiences.

> Wishing everyone a beautiful spring and a wonderful and rewarding pilgrimage.

Jim Drake

Discoveries

Crackin' the Shellbark

By Richard Ware

This is the story of the re-discovery of shellbark hickory and techniques to separate it from the other two "shagbark" hickory species, shagbark (C. ovata) and southern shagbark (C. carolinae-septentrionalis). This newsletter article is a precursor to an article treating all eleven species of hickory found in Georgia, entitled "Hickories of Georgia," to appear in this year's Tipularia, our botanical journal.

We, as field botanists, owe a great debt of gratitude to all the early botanical explorers, some who risked their very lives collecting the flora of the new world. I was very privileged to know a contemporary explorer from the same mold as these early explorers, Dr. Wilbur Duncan from the University of Georgia. Dr. Duncan, with his wife Marion, collected thousands of plants from all over Georgia for the UGA Herbarium, for which he was curator for many years. He increased the herbariums collections from 16,000 to 135,000 specimens during his tenure.

Recently, I have been trying to relocate some of plants that he collected from northwest Georgia in the late 1940s and early 1950s. These plants are either rare in general, rare in Georgia, and/or haven't been seen since his original collections. Luckily, Tom Patrick (GA DNR), had sent me a copy of the pages of Wilbur's collection journal that contains his collections of shellbark hickory from 1948. He collected it from one site in Chattooga Co., two from Gordon Co., one from Whitfield Co., and one from Catoosa Co. I arranged a field trip with fellow botanist, Max Medley, in an attempt to locate Dr. Duncan's original collection sites. The difficulty was in reconciling Wilbur's directions from 1948 with today's much altered landscape. For example, his directions to one site were: "6.4 miles south, 15° east of Dalton, on NE banks of Jobs Creek a short distance from the Conasauga River, elevation about 650'." Today, we would include the names of the nearest highways, roads, etc., making the sites much easier to find. Luckily, this site seems to be relatively undisturbed since Dr. Duncan's discovery. We actually did find this location, which is the only one we did find so far. Strangely enough the road where the hickories are located is called Hickory Flat Road. Hopefully, if the other sites still exist, we will locate them at a later time.

Carya laciniosa (Michaux f.) G. Don, Shellbark Hickory. (Carya laciniosa) in Georgia and a description of the tree Carya is actually an ancient Greek name of the Walnut. The species name laciniosa means full of flaps or folds, from the loosening plates of bark. Shellbark ranges from NY west through southern Ontario, southern MI, and southeastern NE, south to eastern KS, eastern OK, MS, AL, northern GA, and northern NC. It is primarily found west of the Appalachian mountains. In GA, one source shows shellbark from Chattooga, Gordon and Whitfield counties, while another source shows it only from Walker county. The Chattooga, Gordon and Whitfield locations are based on collections made in 1948 by Wilbur Duncan (the Whitfield Co. site rediscovered and confirmed). The Walker Co. site information comes from the NatureServe website which is based on information supplied by our state Natural Heritage Program.





Carya laciniosa bark and leaflet. Pictures by Richard Ware

Shellbark is found on deep, fertile, moist soils of bottomlands and floodplains. It is similar to common shagbark (C. ovata) in many aspects, differing in these characteristics: leaves are larger, with 7 or 9 leaflets, and are velvety hairy below; no tufts of hairs on leaf margins; twigs orange-brown with orange lenticels; fruit is larger (1 ³/₄ to 2 ½ in. long), with a 4-6 ribbed nut, usually pointed at both ends; the bark plates tend to be flat at their free ends, instead of curving; even mature trees have a tendency to retain the leaf rachis/petiole through winter.

Field Trip Report: Everglades, Big Cypress

Although high on our list of places to visit, my husband and I had never been to the Everglades. Something always got in the way. But this year, when Rich Reaves offered to organize a BotSoc trip to Everglades National Park and Big Cypress National Preserve with side trips to a couple of state parks in the Keys, we knew it was time to set aside all other priorities and head south. There would never be a better way to see the Everglades than with a wetland ecologist as our guide!

There were 17 of us in the group. It was sunny and not too warm. We started each day early, ended late, and covered a lot of territory. I won't try to recount everything we saw, but maybe just enough to elicit envy in those who couldn't make the trip.

Our first stop on Monday morning was the Anhinga Trail, a very popular short boardwalk through a sawgrass marsh. I took a few notes about the plants there (e.g., sawgrass (Cladium jamaicense) is a sedge, not a grass), but the first part of our Everglades adventure was really all about birds.

The sightings began at the trailhead where dozens of black vultures waited hopefully in the parking lot. We were relieved to learn it was not our mortal flesh they hoped for, but our windshield wiper blades. The rubber-eating vultures are such a problem at this site that the Park Service provides courtesy tarps to cover parked cars.

Leaving the disappointed birds behind us, we entered the boardwalk to see an astounding number and variety of wading birds. The eponymous anninga was everywhere. its bright turquoise eye ring announcing to the world that breeding season was underway. Little blue and tricolored herons posed for us in the shallow water of Taylor Slough. purple gallinules walked along the edges, and an American bittern peeked out of the taller sawgrass clumps. All were seemingly oblivious to our presence. My black-crowned night-herons. (An off-hand remark by Rich Reaves led me to read about bird name-hyphens, a surprisingly interesting subject even for a casual-birder like me, but with the unfortunate side effect of an up-tick in hyphen-use in my writing.)

There were other birds here and elsewhere, including wood storks, yellow-crowned night-herons, ibis, grebes, great egrets, and the wonderfully pink roseate spoonbills at Mrazek Pond, but I must leave room for at least a few of the trip's botanical wonders. And wonders we did see as with decades of experience as a naturalist for Miami-Dade soon as we entered the nearby pineland habitat of Long Pine Key, the most floristically diverse plant community in the Everglades and home to several plants found no wildflowers of the Everglades and Keys. His presence was where else on earth.

By Jean Smith



Looking for roseate spoonbills (Rich Reaves)



Jean looks closely at Bletia purpurea (Virgina Craig)

Experienced BotSoccers use different tactics to get the most out of these trips. The more botanically knowledgeable come with a list of must see plants. Jim Drake had to see the parasitic ghostplant (Voyria favorites were the black legged, flamboyantly yellow parasitica), a saprophytic gentian found only in south footed snowy egrets and the controversially hyphenated Florida, and Rich Reaves was after the longleaf milkweed (Asclepias longifolia), a plant that grows in wet soils and prairies from Delaware to Louisiana and Florida, but is difficult to find. Both succeeded.

> My tactic was to come with only a vague idea of what to expect, but to stick close to the leader and take copious notes (phonetic, by necessity) about anything that was interesting enough to make the group stop. This was an especially successful tactic on Monday when our guest trip leader was Roger Hammer. Roger is a native Floridian Parks. He is also a butterfly, bird and orchid enthusiast and the author of the must-have field guides to the yet another reason to be sorry if you missed this trip.

and the Keys Feb 19-24, 2012

Among the MANY pineland plants we saw with Roger as In his article in the AJC about our Everglades trip (Atlanta our guide were: pineland Jacquemontia (Jacquemontia curtisii), pineland heliotrope (Heliotropium polyphyllum), purpurea). My plant list even included a few pineland plants without pine in their name such as tickseed (Coreopsis leavenworthii), southern colicroot (Aletris squarestem bracteata), Everglades (Melanthera parvifolia), and southern fogfruit (Phyla stoechadifolia).



Roger Hammer on Long Pine Key Trail (Rich Reaves)

After a short discussion, we opted to eat a late lunch in Flamingo, where we saw what was arguably the prize non-botanical sighting of the whole trip: five American crocodiles lazing in the sun near Flamingo marina. South Florida is the only place in the world where alligators and crocodiles coexist.

On Tuesday we headed west to Big Cypress National Preserve. We rendezvoused at the Oasis Visitor Center were we could watch West Indian manatees while we waited for the group to coalesce. Good trip leader that he is, Rich, with his eagle-eyed wife Anita as co-pilot, had already scouted out a number of plants for us to see along the roads in the Preserve. Chief among them were the alligator lily (Hymenocallis palmeri) and the string-lily (Crinum americanum).



Crinum americanum (Jean Smith)

Journal & Constitution, February 22, 2012), Charles Seabrook included a picture of our group standing in one pineland acacia (Acacia pinetorum), and pine-pink (Bletia of the sawgrass prairies where these beautiful plants were abundant and avidly photographed.

> We also visited Kirby Storter Roadside Park with its mile long boardwalk into an impressive stand of pond cypress (Taxodium ascendens). The dark trunks of the still leafless trees were a beautiful foil for the white egrets that waded between them. We ended the day at Shark Valley for more wading birds and extremely close encounters with alligators.



Cypress pond (Jean Smith)

Wednesday's adventures were in two parks on Key Largo. At John Pennekamp Coral Reef State Park we took a glass bottom boat several miles out to Molasses Reef. After lunch we walked a trail at Dagny Johnson Key Largo Hammock Botanical State Park, one of the largest tracts of West Indian tropical hardwood hammock in the United States. My most interesting notes from this park describe poisonwood (Metopium toxiferum), a member of the cashew or sumac family (Anacardiaceae) and related to poison sumac and poison oak. In the Keys, poisonwood sometimes grows to a 35 feet tall tree. Its colorful reddishbrown or gray bark is quite attractive, but splotched with dark, oily patches of a gummy sap that contains the alkaloid urushiol, a skin and respiratory irritant. This beautiful tree grows abundantly in the Keys and warning signs were posted in all public parks we visited.

Sam and I left the group on Thursday and most everyone else started their journey home on Friday. It was a great trip and if Rich can ever gather enough courage to repeat it, a trip you shouldn't miss.

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Date	Description	Directions	Leader
May 19 8:30 am NOTE EARLY START TIME	Flint River and the Shoals Spider Lilies This outing will take us through one of the most beautiful and ecologically diverse sections of the Flint River, Sprewell Bluff and the Fall Line Ravines. Here the coastal plain flora and fauna intermixes with species of the upper piedmont and mountains. We will travel 6-9 miles of river that have several easy class two rapids. Then we will car caravan to the Big Lazar Creek WMA for a stroll to Hightower Shoals and the rare and endangered Shoals Spider Lilies. The large white flowers open in the late afternoon and begin to release a most pleasant scent. Call the outfitter to make your own reservations for camping across the river in the campground.	Meet at the Flint River Outpost (706-647-2633), west of Thomaston on Highway 36. Canoes and kayaks can be rented. There is a shuttle fee. NOTE: Please make your own reservations for the morning shuttle. Hotels are in Thomaston and camping is at the Outpost and WMA. Facilities: Restrooms are located at the Outpost and at Sprewell Bluff WMA. The Outpost has a store. Difficulty: Some experience needed Bring: Lunch, sunscreen, a hat, rain jacket, and water. Camera, binoculars, and maybe a hand lens are all recommended. Bring a day pack or waterproof bag to secure items inside your boat.	Jerry Hightower RSVP 770-206-0338, cell or jerryhightower @hotmail.com
May 19 10:00 am	Atlanta Botanical Gardens We are fortunate to have the rare opportunity to go behind the scenes at the Atlanta Botanical Garden and learn about the conservation efforts the Garden conducts, both in Georgia and globally. Botanists/staff from the garden will give us a 2 hour tour of the tissue culture lab, conservation greenhouse, and the orchid center. After the tour, we will lunch then look at the bog garden and walk through Storza Woods. The Garden is located adjacent to Piedmont Park at: 1345 Piedmont Avenue, Atlanta, GA, 30309.	Meet at the Visitor Center of the Atlanta Botanical Garden. Note: we are considered a meeting/tour sponsored by the Conservation Department, so there is not an individual entry fee into the garden. However, if you wish to park at the garden, it is \$2.00/hour. If you decide to park in surrounding neighborhoods, look at the parking signs very carefully. Lunch: Bring or purchase on site Facilities: On site Difficulty: Easy walking on paved surfaces	Leslie Edwards Registration required edwa1616@ bellsouth.net
May 19-20	Fall Line Seeps Weekend Two days, beginning in Butler, and traveling to various Atlantic Whitecedar swamps to see various bog plants, including butterworts and pitcherplants. Different bogs each day. Facilities: Near meeting place and at lunch. Bring: Lunch; old sneakers for bogs; long pants and long-sleeved shirt due to briers; bug spray and long socks for chiggers and ticks; camera; extra water.	Proceed to Butler from the north and south via US Hwy. 19, or from the east and west via GA Hwy. 96 or Hwy. 137. Meet at Courthouse Square, Butler, Taylor County near jct. US Hwy. 19 and GA Hwy. 137. Walking: Mostly moderate, not steep but likely to be wet and off trail; some walking in shallow streams; total walking distance 2 – 3 miles daily.	Tom Patrick 706-468-2805 (Home) 706-476-4541 (Cell) gapeapatch@bellsouth.net

Date	Description	Directions	Leader
May 26	Black Rock Mountain State Park Hike the Tennessee Rock Trail, a 2.2 mile loop trail profiled in Hugh and Carol Nourse's book, Favorite Wildflower Walks in Georgia. If you went on the pilgrimage walk here, see how it has changed in three weeks. We hope to dodge the rainfall of Biblical proportions we had two year's ago.	From Clayton, drive 3 mi north on US 441 to Mountain City. Turn left on Black Rock Mountain Pkwy (brown directional signs in Mountain City.) Trailhead is 0.5 mi before Visitor Center. Lunch: Bring lunch to eat during walk Facilities: At Visitor Center. Gas/food in Clayton.	Rich Reaves 770.827.5186 - cell but may not have service at trailhead rich.reaves@ att.net
	Black Rock Mountain State Park 3085 Black Rock Mountain Pkwy, Mountain City, GA 30562.	Walking:2.2 mi, moderate with steep sections including a 440 ft climb. Part of trail is along ridgeline and steeply downhill on both sides. Bring: Lunch, water, raingear, insect repellent, sturdy footwear.	
May 27 10:00 am	Old Growth Forest Hike, Cooper Creek Scenic Area, Suches This short trail in the Cooper Creek Scenic Area will take us through stands of oldgrowth forest including yellow poplars with circumferences up to 17-feet. Large black birch, red oak, white oak, and hemlocks also grow in this area. The trail runs parallel to Cooper Creek, through moist coves harboring nice wildflower displays, including Trillium vaseyii, masses of Viola canadensis, and a dizzying array of herbs with ternately compound leaves – black cohosh (Actaea), blue cohosh (Caulophyllum), spikenard (Aralia), doll's eyes (Actaea), Astilbe, Goat'sbeard (Aruncus), Angelica and Ligusticum. We will eventually come to an area known as the 'Valley of the Giants'. We'll do some off-trail exploring at this point to search for big trees and measure their diameter and circumference.	Take GA 60 north from Dahlonega for approximately 20 miles. GA 180 will intersect from the right in Suches. Meet at the service station on the corner (usually has lots of motorcycles in the parking lot). Lunch: Bring lunch Facilities: Bathrooms are available at the gas station/convenience store Difficulty: Easy. The trail follows an old logging road that is fairly level. We may wander off the trail at times to look for particularly large trees. We'll walk a mile in and a mile back, but it will take us at least three miles to do that. Bring: Water, hand lens, insect repellent, field guide, binoculars (to see leaves high on the trees).	Hal Massie 478-836-4907 478-957-6095 (cell on the morning of the hike) massiefarm@ aol.com

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Date	Description	Directions	Leader
May 27 10:00 am	Chestatee River Informal Canoe & Kayak Float This beautiful tributary of the Chattahoochee River flows out of the mountains north of Dahlonega and provides an easy 6.3 mile float punctuated with several very mild rapids. 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. Shear 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. This river is more beautiful than the gold beneath its waters. If you would like more info on rentals or to reserve a canoe or kayak please call Appalachian Outfitters at 1-800-426-7117.	Meet at the Appalachian Outfitters Outpost on Highway 60 near Dahlonega. There is a small shuttle fee. Bring your own boat or rent canoes and kayaks from the store. Hwy. 400 ends at Hwy. 60. Turn left at the light and the Outfitter is located on the left just before you start up the hill and into Dahlonega proper. Lunch: Bring lunch to picnic on river Facilities: Restrooms and changing rooms are available at Appalachian Outfitters Outpost. Difficulty: Suitable for beginners with some experience on rivers. Class 1.5 Bring: Sunscreen, a hat, rain jacket, and water. Camera and binoculars are all recommended. Binoculars for turtles more than birds. Bring a day pack or other bag to secure items inside your boat. Secure valuables in a water proof container or bag.	Jerry Hightower RSVP 770-206-0338, cell or jerryhightower @hotmail.com
May 28 10:00 am	Reed Branch Reed Branch Wet Meadow is a Nature Conservancy Preserve that protects the only natural population of Federally Endangered green pitcher plant, Sarracenia oreophila in Georgia. It is also the last example in Georgia of a low mountain bog. Reed Branch is also host to numerous plants normally associated with the coastal plain – colic root (Aletris farinosa), spoonleaf sundew (Drosera intermedia) and hatpins (Eriocaulon decangulare), among others. The preserve encompasses 5 acres, with the green pitcher plants concentrated into about 1 acre of the property. We will walk along a fence to the bog proper and then wander into the bog a few at a time. Reed Branch is not open to the public and we have special permission for this trip. This is a very sensitive area – please follow the guidance of the trip leader and obey all restrictions.	Take US 76 to Hiawassee from either the west or east. In Hiawassee, turn north on GA 75 and go approximately 3 miles to Mull Rd., which will be on the left. If you see a sign that says 'Welcome to North Carolina', you have gone too far. Almost immediately after turning left onto Mull Road, there will be a parking area on the left just behind a gate. Lunch: Bring lunch Facilities: None Difficulty: Easy walk. Bring: Camera, hat, hand lens, sunny disposition	Hal Massie 478-836-4907 478-957-6095 (cell on the morning of the hike) massiefarm@ aol.com

Date	Description	Directions	Leader
June 2 10:00 am	Coosa Prairies, Part 1 We will visit the Coosa Prairies, a Nature Conservancy conservation easement of 929 acres. These remnant prairie sites in extreme western Floyd Co. are listed as the rarest habitat in Georgia by the Nature Conservancy. Some of the many wildflowers we hope to see include: prairie milkweed (Asclepias hirtella), climbing milkvine (Matelea obliqua), scaly blazing star (Liatris squarrosa), Mohr's Barbara's buttons (Marshallia mohrii), prairie coneflower (Ratibida pinnata), and wavyleaf purple coneflower (Echinacea simulata).	Take I-75 north to the second Cartersville exit (exit 290, GA 20). The sign says Rome / Canton. Turn left (west) on Ga. 20. Follow Ga. 20 and then US 411 to Rome, around 20 miles. In Rome, Ga. 20 and US 411 will split. Follow US 411 (left fork) toward Cave Spring. At 2nd traffic light turn right (stay on US 411) and follow all the way to Cave Spring. At traffic light in Cave Spring, go straight, cross bridge and immediately turn left into Rolator Park. Meet at parking area for cave on right. Lunch: Bring lunch to eat near cars, not carried on walk Facilities: Meeting site only Walking: Easy, mostly flat terrain, 1-2 mi., depending on road conditions. Bring: Lunch, plenty of water; bug spray.	Richard and Teresa Ware 706-232-3435 gabotany@ comcast.net
June 3 10:00 am	Oaky Woods, Blackbelt Prairies 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 priairie coneflower (Ratibida pinnata), Dakota mock vervain (Glandularia bipinnatifida), prairie larkspur (Delphinium carolinianum), Florida milkvine (Matelea flavidula), green milkweed (Asclepias viridiflora), and much, much more, time permitting. Those who have participated in this field trip in previous years know that the prairies are very hot even in early June so please bring an over abundance of water. Location for map programs - Flash Food 130, 498 Ga Hwy 247S, Bonaire, Ga 31005	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 I75 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 and carpool to the site. Lunch: Bring lunch to eat in field Facilities: Meeting site only Walking: Easy, level, never more than 1/2 mile from vehicles at prairies Bring: Bug spray, sunscreen, water, hiking shoes, camera, hand lens, and binoculars	Ed McDowell 478.396.8901 ed.mcdowell@cox.net

Date	Description	Directions	Leader
June 9	Tray Mountain Boulderfield	Travel north from Helen GA on GA 75.	Ben Cash
10:00 am	In the Tray Mountain Wilderness Area, we'll walk about ¾ mi. and gain over 600 ft. on the Appalachian Trail to reach the peak of Tray Mt. at 4,430 feet. Just beyond the peak we'll leave the trail to bushwhack down the steep north side of the mountain in Mossy Cove Boulderfield to Corbin Creek Rd. Just below the summit there are large, widely spaced, old growth black birches and yellow birches with occasional beeches and yellow buckeyes. Both striped maples and mountain maples, large witch hazels and mountain winterberries plus red elder and running strawberry bush grow underneath.	Approx 1 mile north of intersection with GA 356, turn right in a curve onto Tray Mt. Rd. (FS 79). Allow about half an hour just to drive the 8 miles on FS 79 up to Tray Gap. Lunch: Bring to eat during the hike probably on the peak of Tray Mt. Facilities: None Walking: Less than two miles with a short vehicle shuttle. Walking up the trail is moderately difficult. Walking down through the boulderfield is very difficult especially when you can't see where you are stepping beneath the herbs. Bring: Water, lunch, sturdy footwear, rain	706-778-5155, bencash@ hemc.net 706-968-3841 cell, day of hike although service may not be available at trailhead
		protection. A staff or hiking sticks may be very helpful.	
June 16	Sweetwater Creek State Park: Heron Rookery and Montane Longleaf	Meet at the Interpretive (Visitor) Center of Sweetwater Creek State Park	Leslie Edwards
10:00 am	Sweetwater Creek has many special aspects, and we will visit 2 of them. First, the heron rookery (the chicks will have hatched, and the adults will be feeding them). We will also visit the site where an old montane longleaf pine was discovered, and learn more about the Park's plans to restore a montane longleaf natural community there. Limited to 14 participants—registration is required.	1750 Mt. Vernon Road Lithia Springs , GA 30122. Take I-20 west from Atlanta, exit #44 at Thornton Road, turn left and go 1/4 mile. Turn right on Blairs Bridge Road. After 2 miles, turn left on Mount Vernon Road and proceed to the park. Lunch: Bring a lunch. Facilities: At visitor's center Walking: Easy to moderate, with a few somewhat steep slopes along the river and leading down to the rookery	RSVP edwa1616@ bellsouth.net

Date	Description	Directions	Leader
June 23 10:00 am	Pigeon Mountain Limestone Ledges This is a search for the American Smoketree (Cotinus obovatus) known to occur on limestone ledges above The Pocket on Pigeon Mountain. The unusual habitat is very dry and boulder with other Pigeon Mountain specialties. We will begin on the boardwalk for late spring flora, then continue up an old road up the mountain to the limestone outcropping. You will need the new user fee pass (GORP).	Proceed to Lafayette and take GA Hwy. 193 west 8 miles to Davis Crossroads; turn left on Hog Jowl Rd. for 2.7 mi., turn left on Pocket Rd. and go 1.2 mi. to parking lot. Facilities: None. Walking: Away from boardwalk, trail is moderate to strenuous, and off trail among large boulders and ledges. Total walking distance 4 miles. Bring: Lunch; sturdy hiking boots due to some rock climbing and need for ankle sup- port. Wear long pants and long-sleeved shirt due to poison ivy and sharp rocks; bug spray and long socks for chiggers and ticks; camera; extra water.	

Shellbark hickory, Carya laciniosa (continued from page 3)





Carya laciniosa twig and nut. Pictures by Richard Ware.

Feature comparison chart:

Characteristic	C. laciniosa	C. ovata	C. carolinae-septentrionalis
leaves	15-22 in. long; not ciliate on margin	8-16 in. long; ciliate on margin	6-12 in. long; ciliate on margin
leaflets	7 or 9	5	5
twigs	very stout, glabrous, orange-brown with orange lenticels	stout, hairy, brown with lighter lenti- cels	slender, glabrous, brown with lighter lenticels
end buds	sharp pointed, slightly hairy, brown, up to 1 in.	blunt, very hairy, brown, up to ¾ in. long	blunt, glabrous, black, up to ½ in. long
fruit	1 ³ / ₄ -2 ¹ / ₂ in. long	1-2 in. long	³⁄4-1 ½ in. long
nut	pointed on both ends	rounded on one end	rounded on one end
leaf rachis	held through winter on mature trees	deciduous on mature trees	deciduous on mature trees
bark	plates flat on free ends	plates curving on free ends	plates curving on free ends

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