

# BotSoc News



Georgia Botanical Society

Volume 84  
Number 4  
July  
2010

## WAS THERE A MASTODON IN YOUR PAWPAW PATCH?

July is a good month to think about the Pleistocene. As the thermometer inches ever upward and “Hot enough for you?” becomes the standard greeting, we should all remember that just a short 10,000 years ago we were suffering through the last ice age. Well, maybe not us exactly, but life could not have been easy for the mastodons that once ranged the Appalachian semi-tundra.

When Carol Ann McCormick, Assistant Curator for the University of North Carolina Herbarium, thinks about the last ice age, she wonders about the plants whose seeds evolved to be eaten and dispersed by the now extinct mastodons. She put her thoughts into an article for the North Carolina Botanical Garden Newsletter that suggests your local pawpaw patch is a much more interesting place than you might imagine.

As Ms. McCormick tells it, there was a massive extinction of megafauna at the end of the Pleistocene. Without the American mastodon (8,000 - 12,000 pounds), the giant ground sloth (3,000 - 5,000 pounds) and the American camel (1300 pounds), many neotropical plants bearing very large fruits with large, hard seeds also faced extinction or at best, a severe restriction in their population and geographic range. In a world of now relatively small mammals, a tree with big fruits to attract huge mammals as dispersers of its seeds was a plant chronologically out of place – an ecological anachronism.

There are several clues that a plant may be missing its seed disperser. If its seeds germinate and grow well in upland habitats when planted, but the plant is mostly restricted to floodplains in the wild, gravity and flowing water may be substituting for megafaunal dispersers. The fruits of anachronistic plants may also rot beneath the canopy with new seedlings in clumps or thickets developing from the rotted fruit. If passage through the animals gut is needed for efficient seed germination, the plant may persist primarily by vegetative reproduction. In this case, the trees will most often be found in clumps or thickets formed as root suckers.

Which of our native plants are candidates for anachronism? Ms. McCormick believes our local pawpaw, *Asimina triloba*, certainly may be one. The trees are common along streams in eastern North America, often as root suckers in clumps or thickets. The pawpaw is the largest fruit of any tree native to the United States. The oblong-cylindric fruit can reach the size of a sweet potato (3 to 15 cm long, 3 to 10 cm wide and weighing from 200 to 400 g). Its 4 to 9 large brown seeds (up to 3 cm each) are embedded in pulp. If swallowed whole, the seeds can pass through the digestive tract intact, but if chewed, their emetic alkaloids may impair mammalian digestion.

Ms. McCormick also lists several other North American natives as ecological anachronisms:

Kentucky coffee-tree (*Gymnocladus dioica*). This tree produces short, heavy, leathery pods with sticky sweet pulp and a half dozen rock-hard seeds that are difficult to germinate, resisting all but the most determined efforts at scarification.

Osage orange (*Maclura pumila*). The fruit is a bright green, bumpy sphere the size of a softball, full of seeds and an unpalatable milky latex. The fruits fall to the ground and rot beneath the tree.

Honey locust (*Gleditsia triacanthos*). Multi-branched spikes cover the trunk of this tree to a height of 20+ feet (far beyond the reach of present day browsers but providing good protection from foraging mammoths - should they return).

Carol Ann McCormick. “Where’s a Good Giant Ground Sloth When You Need One?” March-April 2010 Newsletter of the North Carolina Botanical Garden at the University of North Carolina, Chapel Hill.

Barlow, Connie. “Anachronistic Fruits and the Ghosts Who Haunt Them”. <http://arnoldia.arboretum.harvard.edu/pdf/articles/618.pdf>.

### IN THIS ISSUE:

Society News –  
p2

Pilgrimage  
Photos-  
p3

Georgia’s  
Trees-  
p4

Upcoming  
Field Trips –  
p6

Field Trip  
Reports -  
p10



### BotSoc News

is published seven times a year (Jan, Mar, May, July, Sept, Nov and for the Spring Wildflower Pilgrimage).

### Submission deadline

is August 1 for the September issue.

### Subscriptions

are included with membership.

### Website:

[www.gabotsoc.org](http://www.gabotsoc.org)

### Editorial Office

Jean Smith  
1135 Barwick Hill Rd  
Columbus, GA 30629  
ph 706.783.2308  
email:  
[jss2holly@windstream.net](mailto:jss2holly@windstream.net)

### © 2010 Georgia Botanical Society

a private nonprofit organization under IRS 501(c)3.  
Founded in 1926.

## Society News

### GEORGIA BOTANICAL SOCIETY ANNUAL MEETING AND ELECTION OF OFFICERS

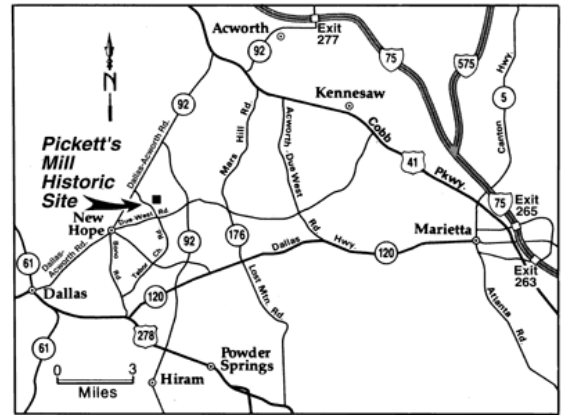
SATURDAY SEPTEMBER 11, 2010

PICKETT'S MILL BATTLEFIELD HISTORIC SITE  
MEET AT THE GROUP SHELTER AT 11:00 AM  
BRING A PICNIC LUNCH.

The metro flood of 2009 is well behind us and we will try Pickett's Mill again for our annual business meeting. Please mark your calendars now and plan to attend; you will not be disappointed. After a picnic lunch, Tom Patrick will lead a very interesting hike. The Georgia Botanical Society has been involved with a plant inventory at Pickett's Mill. One of the plants of interest, Georgia aster (*Symphotrichum georgianum*), should be in flower.

This is an even year and election of officers will be a major agenda item. According to our bylaws, a slate of officers is nominated four months prior to election and sent to all voting members via the newsletter. Additional nominations from the floor are permitted, and in case of competition for any office, voting is by written ballot by members present at the annual meeting. Elected officers assume their duties following their election. The 2010 Nominating Committee\* recommends the following officers to serve from September 2010 to September 2012:

Jim Drake, President  
Jerry Hightower, Vice-President  
Linda Chafin, Secretary  
Rich Reaves, Treasurer



### Pickett's Mill Battlefield Historic Site

4432 Mt. Tabor Church Rd  
Dallas, GA 30157  
<http://www.gastateparks.org>

Take I-20 exit #44. Turn left onto Thornton Rd. (Hwy 278) West. Follow Hwy 278 for 10 miles. Make a right onto Hwy 92. Travel North on Hwy 92 for approximately 6 miles. Look for brown Pickett's Mill signs as you continue. Turn left onto Due West Rd. Continue 2 miles. Turn right onto Mt. Tabor Church Rd. The site is 1/2 mile on the right.

\*2010 Nominating Committee: Hugh Nourse (Chair), Leslie Edwards, Ed McDowell, Elaine Nash, and Tom Patrick.



### The group at Devil's Den (Fannin County), May 1, 2010: Clayton Webster, Rich Reaves, Maureen Donohue, Shepherd Howell, and James Van Home.

Trip leader Tom Govus reported that he had never seen such an abundant population of ramps (*Allium tricoccum*) as they found that day in Devil's Den. They also saw *Trillium simile* and would have done more exploration of the area if the day had not been so wet.  
Photo by Tom Govus.

# 41<sup>st</sup> Spring Wildflower Pilgrimage



The explorers at Silver Lake (Trip 2). Photo by Jim Drake.



Linda Chafin and Gil Nelson at limestone outcrop Florida Caverns (Trip 15). Photo by Hugh Nourse.

**MARCH 12-14, 2010**  
**BAINBRIDGE, GA**



Searching for pitcherplants and bog buttons at Doe Run (Trip 24). Photo by Hugh Nourse.



The Pilgrimage's signature plant, the Atamasco lily (*Zephrantes atamasca*). Photo by Jim Drake.



Like Moses led his people to the promised land, Tom Patrick and his wooden staff led the trip to Faceville Ravines (Trip 20). Photo by Charles Hunter.



Longleaf pine woodland at Wade Tract (Trip 18). Photo by Anita Reaves.

## Georgia's Trees



American mountain ash (*Sorbus americana*). Photo by Hal Massie.

# A MERICAN MOUNTAIN ASH

***SORBUS AMERICANA***  
**MARSHALL**

by  
Hal Massie

I am fond of showy native trees, especially when they have the added benefit of being particularly attractive to wildlife. Usually, I track the tree down and acquire a specimen for my garden. That's why I find American mountain ash (*Sorbus americana*) so frustrating. A mountain ash in flower or fruit is as beautiful as any native Georgia tree. It also has handsome foliage and good fall color, as well as fruits that are favored by many birds. Unfortunately, mountain ash is restricted to high elevations in our mountains and can only be grown by those lucky enough to live in our most northern counties. In Central Georgia, where I live, the best you can do is take a long drive or stare longingly at pictures of this lovely tree.

**Common Names:** American mountain ash is also called American rowan, dogberry, roundwood, small-fruited mountain ash and, my favorite, misseymossey. In Quebec it is known as cormier. About half of the references I found hyphenate mountain-ash. A few, including Dirr, run the words together - mountainash.

**Synonyms:** *Pyrus americana* (Marshall) De Candolle



The showy red fruit of American mountain ash matures in late summer and persists into the winter. Photo by William S. Justice, USDA-NRCS

**Taxonomy:** Mountain ash is included in the Rosaceae, one of the largest and most economically important plant families. The rose family includes fruit trees like apple and peach which are important to our own state economy. Plums, pears, cherries, blackberries, raspberries, and almonds are also members of the rose family. Many members of this family are showy ornamentals, with roses being the most notable, but also including spiraea, cotoneaster, and ornamental cherries.

The genus *Sorbus* contains 75-250 species, depending on the reference, mostly of temperate portions of the Northern Hemisphere. Three species are native to North America. The Euro-

pean mountain ash (*Sorbus aucuparia*) has been introduced to the United States and is sometimes planted as an ornamental. *Sorbus americana* does not have any recognized varieties or subspecies.

**Habit:** This is a small tree or large shrub, not usually exceeding 30 feet and more often only 10-15 feet in height. The crown is open and rounded with a straight trunk that seldom is larger than 18 inches and is typically only 8 inches in diameter. In shrub form, mountain ash often has multiple stems. American mountain ash grows very slowly, but is relatively short-lived.

**Leaves:** The leaves of American mountain ash are pinnately compound, alternate, and deciduous. The individual leaflets are opposite, toothed, 3x longer than wide, and can range from 9-17. The shiny, dark green leaflets give the tree a fine-foliaged 'feathery' appearance which helps to pick it out among other trees in dense forest. The petiole is long - 3 inches or more - and reddish.

**Flowers:** American mountain ash has very showy flowers in thick corymbs. The individual flowers are white and very small, less than 1/8<sup>th</sup> of an inch in

## Georgia's Trees

diameter. The flowers are perfect, with a large number of stamens, a single pistil, and have 5 petals. In Georgia, mountain ash begins flowering in late May and continues into June and sometimes early July.

**Fruit:** Mountain ash fruits are technically pomes. They appear in showy orange-red clusters that mature in late summer and persist well into the winter. Individual fruits are round and about 1/4th of an inch in diameter.

**Twigs:** The twigs of mountain ash are thick, red-tinged, with long lenticels. The terminal bud is conical and has red scales, hairy inner scales and the tip is usually curved to one side. The bud scars are raised and crescent or U-shaped with 5 bundle scars. Lateral buds are smaller.

**Habitat and Distribution:** In Georgia, American mountain ash is at the southern limit of its range and only occurs in the three most northeasterly counties - Union, Towns, and Rabun. It is found at high elevations with white and red oak, yellow buckeye, yellow birch, striped and mountain maple, and rhododendrons.

In North America, the range of mountain ash is broader - Minnesota and the eastern part of the Dakotas, northeast to Nova Scotia and Newfoundland, south to Pennsylvania and New Jersey, extending further south in the Appalachians to Georgia and South Carolina. It is far more common in the northern parts of its range and occurs at much lower elevations, often along the edges of bogs and lakes. It is only considered rare in Georgia.

**Natural History:** The fruits of American mountain ash are favored by a number of birds, particularly cedar waxwings, thrushes, robins, and ruffed grouse. A number of small mammals also use the fruits, including squirrels and other rodents. The foliage is browsed by white-tailed deer and is a favorite food of moose. The fruit aren't palatable to humans, but are occasionally used to make jelly. The tree

is generally too small and the wood too weak for lumber.

Where it can be grown, mountain ash is one of our showiest native trees for horticultural use. The large inflorescence, neat feathery leaves, and brightly colored fruit that persist late into winter, make this a prized ornamental tree. Where you can grow it ... which does not, unfortunately, include most of Georgia.

**Not To Be Confused With:** Because Georgia's mountain ash only grows at high elevation, it isn't easily confused

with any tree in our flora. The showy inflorescence, persistent red-orange fruits, and fine, pinnately compound leaves with red petioles make it easy to identify.

**Champions:** The Georgia Champion American mountain ash occurs on Brasstown Bald and can be seen from the Wagon Train Trail. It is 38 feet high, has a 19 foot crown, and a circumference of 26 inches. The National Champion American mountain ash is in the Jefferson National Forest in Virginia. It is 25 feet high with a canopy spread of 38 feet and a 107 inch circumference.

**Where You Can See It:** The easiest place to see American mountain ash in Georgia is at the parking lot on Brasstown Bald. Go to the southeast corner of the parking lot where the picnic tables are. While looking out at the stunning view from the picnic tables, there is a mountain ash to the right, not far from the first picnic table. This tree can also be encountered on Brasstown Bald along both the Arkaquah Trail and the Wagon Train Trail. On the Blue Ridge Parkway, mountain ash can be seen up close in the parking lot of the Pisgah Inn.



American mountain ash  
(*Sorbus americana*).  
Britton & Brown, 1913.  
USDA-NRCS PLANTS Database.

### References:

- American Forests National Register of Big Trees, American Forests, <http://www.americanforests.org/resources/bigtree>
- Brown, C. L. & L. K. Kirkman, "Trees of Georgia and Adjacent States," 1990, Timber Press
- Dirr, Michael A., "Manual of Woody Landscape Plants," 1998, Stipes Publishing
- Elias, Thomas S., "The Complete Trees of North America," 1980, Book Division, Times Mirror
- Foote, L. E. & S. B. Jones, Jr., "Native Shrubs & Woody Vines of the Southeast," 1989, Timber Press
- Sullivan, Janet. 1992. *Sorbus Americana*. In: Fire Effects Information System, (Online). US Department of Agriculture, Forest Service. <http://www.fs.fed.us/database/feis/>
- USDA, "National Plants Database," <http://plants.usda.gov>
- Weakley, Alan S., "Flora of the Carolinas, Virginia, Georgia, and Surrounding Areas", 17 Apr 2008 Working Draft, Unpublished

## Upcoming Field Trips

### July 10 - 11 Roan Mountain and Blue Ridge Parkway Weekend

The Roan Mountain and Blue Ridge Parkway (BRP) trips on July 10 - 11 can be combined as a weekend trip or enjoyed as a one day trip. Lodging can be found in Spruce Pine, Burnsville and Johnson City and Roan Mountain State Park has Tent/RV camping (on a first-come-first-served basis; campers must make their own reservations). The park website (<http://www.tennessee.gov/environment/parks/RoanMtn/>) has more information.

**Contact:** Jim Drake 678-482-2127 drake3800@charter.net

**Directions:** From Asheville, take US 19N (Future I-26) north toward Johnson City, TN. Take Exit 9 toward Burnsville (US 19). Continue on US 19E to just past (bypass) Burnsville. Turn left onto NC 197 toward Bakersville. At Red Hill, turn right onto NC 226 toward Bakersville. At traffic light in Bakersville, turn left onto NC 261 toward Roan Mountain. Follow NC 261 to Carver's Gap (the Saturday meeting spot). This is also the NC/TN state line and NC 261

becomes TN 143 as it crosses the state line. The Roan Mountain State Park cabins and Sunday's meeting site are 8 miles farther along in Tennessee on TN 143. Carpooling is highly recommended and will facilitate Sunday's trip.



Jim Drake

#### Roan Mountain, North Carolina - Saturday, July 10 - Meet at 9:30 AM (note early time!) at Carver's Gap parking lot.

Saturday's hike begins at Carver's Gap on the Tennessee/North Carolina border and proceeds along the Appalachian Trail up Grassy Ridge, over Round Bald, up and over Jane Bald, up Grassy Ridge Bald leaving the Appalachian Trail and bearing right up the ridge; return by the same route. Along the way we will see the Baa-tany Project and the rare Gray's lily the project hopes to protect, Roan Mountain bluets, *Geum radiatum* (maybe not in bloom), Roan Mountain hypericum and several other rare species. The Catawba rhododendrons and flame azaleas will be just past peak but we will likely see a few late bloomers. Co-leader Jamey Donaldson manages the goat restoration project and as he practically and actually lives on the Bald, he is intimately familiar with the species and ecosystem (balds, spruce fir) on Roan Mountain. Between us, we should have some interesting stories about the Roan – like the time I carried a dehydrated and homeless beagle several miles off the Roan. We named him "Carver."

**Difficulty:** Hiking varies from extended upward inclines to fairly easy stretches along the tops and down ridges to more strenuous climbs, and rocky steep trail sections in some areas near the end of the hike.

**Bring:** Lunch, water, good hiking shoes, rain gear, sunscreen, insect repellent. Also, Jamey has asked us to adopt a goat, so bring a \$4.00 per person contribution. The goat does not go home with you.

**Facilities:** At Carver's Gap parking area.

#### Blue Ridge Parkway, North Carolina - Sunday, July 11 - Meet at 8:00 AM (note early time!) at Roan Mountain State Park.

This will be a full day of roadside botanizing along the scenic route back to Georgia. We will caravan to the junction of the BRP at mile post 330 (Gillespie Gap) to travel south with stops and some short hikes at selected overlooks (plus Mt. Mitchell, Craggy Gardens, and possibly the Folk Art Center). Depending upon time, we will investigate the wet rock outcrop at MP 425 before leaving the BRP to return home. Some wildflowers we have seen in the past are: black cohosh (blooms), possibly Turk's Cap and Carolina Lilies (although maybe too early for blooms), Indian pink, monarda species, impatiens, oenothera species, chelone, hypericum and possibly some surprise orchids.

**Difficulty:** Mostly easy at overlooks and short hikes.

**Bring:** Water, sturdy footwear, lunch.

**Facilities:** At Roan Mountain SP and at some stops.

## Upcoming Field Trips

Date	Description	Directions	Leader
<p><b>July 17</b> 10:00 AM</p> <p>Meet at visitor center.</p>	<p><b>Providence Canyon State Park, Stewart County</b> A midsummer stroll to see plumleaf azalea in full bloom and a downstream walk through hardwood forests reminiscent of the Blue Ridge Mountains' lower slopes. Mostly on trails and walking in a shallow streambed. Tremendous tree and shrub diversity with at least 4 magnolia species, leatherwood, and oakleaf hydrangea.</p>	<p>From Columbus take US Hwy 27 south 40 mi to Lumpkin, then go west on GA Hwy 39C ~7 mi to Visitor Center. From elsewhere, go to Lumpkin, take US Hwy 27 (bypass) and follow signs to park. <b>Walking:</b> Moderate to steep walk into canyon, then mostly downstream to shuttle, ~3 mi total. <b>Facilities:</b> At Visitor Center and day use areas. Lodging/restaurants in Lumpkin; Florence Marina State Park offers camping and cottages. <b>Bring:</b> Hand lens, notebook, water, picnic lunch, sturdy waterproof boots or wading shoes.</p>	<p>Tom Patrick 706.476.4541 (cell)  Tom.Patrick@dnr.state.ga.us</p>
<p><b>Aug 7</b> 10:00 AM</p> <p>Meet at the Dunwoody Library (library not open until 10).</p>	<p><b>Slide Show on Interior Alaska, Dunwoody Library, Dekalb County</b> Back in the winter, Scott Ranger gave a presentation on the area around Juneau, Alaska, which is well southeast of the area that will be covered in this talk. The presentation will focus on multiple areas: around the towns of Anchorage, Seward, and Fairbanks plus visits to Denali NP and Wrangell-St. Elias NP. Flora, fauna, and scenery will be presented, along with a short discussion of the Trans-Alaska Pipeline.</p>	<p>From the West, take I-285E to Exit 29. Turn left onto Ashford Dunwoody Rd. Bear right onto Mt. Vernon Rd. Turn right on Chamblee Dunwoody Rd. The Library is on the left. From the East, take I-285 North or West to Exit 29. Turn right on to Ashford Dunwoody Rd. Continue right on Mt. Vernon Rd. Follow as above. (Note, the facility does not open until 10 am, so early arrivals may have to wait on the doors opening.) <b>Facilities:</b> Yes. <b>Lunch:</b> Optional at local restaurant after show.</p>	<p>Rich Reaves rich.reaves@att.net  770.827.5186</p>
<p><b>Aug 15 Sunday</b> 10:00 AM</p> <p>Meet at Byron Herbert Reese parking area.</p>	<p><b>Freeman Trail, Lumpkin County</b> We will hike the first 0.7 mi on the Byron Herbert Reese Trail, switchbacking through rhododendron and mountain laurel up stone staircases to Flatrock Gap. There the Freeman Trail begins its wind around the south side of Blood Mountain, over a mostly level but rugged and rocky terrain across several small rocky streams and rock outcrops. Outcrops should be ablaze with late summer composites, such as sunflowers and gay feathers. We should see a rare grass, Porter's Reed Grass, as well as fertile chestnut trees. After 1.8 mi (at Bird Gap and the AT), some of us may want to return to the parking lot (for a gentle to moderate hike of 5 mi). Others may want to continue to the summit of Blood Mountain and return to the parking lot on the AT (for a strenuous hike of 6.8 mi).</p>	<p>Meet at the Byron Herbert Reese parking area (\$5.00 parking fee) on the west side of US Hwy 129, ~0.5 mi north of the Walasy-i Mountain Crossing Appalachian Trail Store at Neel's Gap. Neel's Gap is 18 (slow) miles north of Cleveland. <b>Facilities:</b> None on the trail; bathrooms, snacks, water, etc at the Mountain Crossing store. <b>Difficulty:</b> 5 mi round-trip BHR Trail is moderate steepness, Freeman Trail is nearly level but very rocky. It is likely to be hot. <b>Bring:</b> \$5.00 parking fee, lunch, water, sunscreen, hat, insect repellent, rain gear and hiking poles.</p>	<p>Linda Chafin  Lchafin@uga.edu  706.548.1697</p>

## Upcoming Field Trips

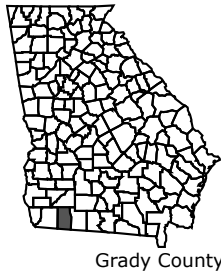
Date	Description	Directions	Leader
<b>Aug 21</b> 10:00 AM to 3:00 PM Meet at Powers Island.	<b>Palisades Canoe Float &amp; Late Summer Flora, Chattahoochee River NRA, Fulton/Cobb County</b> Join us for a leisurely 3 mi float on the Chattahoochee River from Powers Island to Paces Mill at US Highway 41 (3 mild class 1.5 rapids suitable for beginners). The Palisades' narrow floodplains and steep ridges offer oak-hickory, mesic ravine and floodplain forest habitats. The river banks will offer an extraordinary array of late summer wildflowers and butterflies as well. We will stop at Devil's Stair Step Beach (Diving Rock) for lunch and a short loop walk.	Meet at Powers Island, 5862 Interstate North Pkwy, Sandy Springs, Georgia 30328 at 10:00 AM to unload equipment, take the majority of the vehicles to Paces Mill and shuttle the drivers back to Powers Island. Please let me know if you have a multi-passenger vehicle and could help with the shuttle. <b>Directions:</b> 678-538-1200 or www.nps.gov/chat. Bring your own canoe or kayak or obtain rental venter contact information from the number above or www.nps.gov/chat. <b>Bring:</b> Lunch for picnic along the river, sunscreen, hat, rain gear, water and day pack or bag to secure items inside your boat. \$3.00 daily parking pass or annual parking pass needed. <b>Facilities:</b> At Powers Island, lunch stop, Paces Mill.	Jerry Hightower 678.538.1245 jerry_hightower@nps.gov 770.206.0338 cell, day of walk  <b>Reservations required:            678-538-1200</b>
<b>Aug 27 Friday</b> 10:00 AM Meet at front (near the building) of the Paces Mill Parking Area.	<b>Paces Mill Unit, Chattahoochee River NRA, Cobb County</b> This paved multi-use trail with 3 foot bridges has cool river views and ruins of old mill works. Asters will be out in profusion, including the Georgia aster ( <i>Symphyotrichum georgianum</i> ), and a multitude of grasses to test your ID skills. At a secret bridge on Rottenwood Creek hidden below the on/off ramps to I-285, you'll think you are in the mountains. It is worth the walk. We'll return to enjoy lunch in the shaded, riverside picnic area.	From I-75S-Cumberland Blvd exit 258, turn right onto Cobb Pkwy, US41. Turn left (down-hill) just beyond the BP station at Paces Mill Rd. Turn right at the large brown National Park sign. From I-75N Mt Paran Rd exit, turn left at the exit ramp and right onto Northside/US41 (becomes Cobb Pkwy) Turn left at the National Park sign just before Paces Mill Rd. <b>Bring:</b> Lunch to eat near cars, water, hat, sunscreen and \$3 parking fee or annual pass. <b>Facilities:</b> Restrooms in the parking area. <b>Walking:</b> Moderate, ~4 mi, mostly paved with an optional side dirt trail for .5 mi round trip. One large hill each way. <b>Paces Mill Parking Area, 3445 Cobb Pkwy Atlanta, GA 30339</b>	Maureen Donohue  macaire75@att.net  678.687.7963 cell
<b>Sept 04</b> 10:00 AM Meet at Woody Gap parking area.	<b>Woody Gap, Union/Lumpkin Counties</b> We will walk south from the trailhead and examine the late summer flora and return by the same route. Afterwards, if any are interested, we can walk north and see what is up that way. On the southern walk, we should be treated to a spectacular display of <i>Heuchera parviflora</i> (small-flowered alum-root) and numerous other flowers including <i>Campanulastrum americanum</i> (American bellflower), <i>Silene stellata</i> (starry campion), a host of composites (various aster, coreopsis, joe-pye weed, and goldenrod), <i>Amphicarpaea bracteata</i> (hog peanut), <i>Impatiens capensis</i> (orange jewel weed), and others.	Head north from Dahlonega on US 19. At the "Y" (the rockpile) turn left on GA 60 toward Suches. The Woody Gap parking area is where the Appalachian Trail crosses the road (you will see hiker crossing signs approximately 0.5 mile before the parking area. Parking is on both sides, facilities are on the right as you come up the mountain from Dahlonega. <b>Facilities:</b> Flushless toilets at meeting site. <b>Lunch:</b> Bring to eat along the trail.	Rich Reaves  rich.reaves@att.net  770.827.5186



## Upcoming Field Trips

Date	Description	Directions	Leader
<b>Sept 11</b> 11:00 AM Meet at group shelter.	<b>GEORGIA BOTANICAL SOCIETY ANNUAL MEETING</b> <b>PICKETT'S MILL BATTLEFIELD HISTORIC SITE</b> <small>DETAILS AND DIRECTIONS ON PAGE 2.</small>		Ed McDowell 478.396.8901 (cell) ed.mcdowell@cox.net
<b>Sept 18</b> 10:00 AM Meet at visitor center.	<b>Red Top Mountain Plant Inventory, Bartow County</b> This 6 <sup>th</sup> inventory features the Georgia aster and other fall wildflowers. The state park (770 975-0055) has a lodge, tent camping and yurts; nearby Cartersville has abundant motels.	From I-75 take exit 285 Red Top Mountain Rd. and go 1.5 mi east to Visitor Center. <b>Walking:</b> Easy to moderate, some bushwhacking off trails. <b>Facilities:</b> At visitor center and in picnic area for lunch. <b>Bring:</b> Hand lens, notebook, water, picnic lunch	Tom Patrick 706.476.4541 (cell) Tom.Patrick@dnr.state.ga.us
<b>Sept 24 Friday</b> 1:00 PM to 4:00 PM Meet at bulletin board in parking lot.	<b>Indian Trail East Palisades, Chattahoochee River National Recreation Unit</b> We will walk down and up the hills of East Palisades in search of late summer wildflowers and early signs of Fall. Along the way we have lots of beautiful river views, a chance to identify trees and plants perhaps including <i>Fothergilla major</i> .	From I-285 East exit 22, turn right on Northside Dr to Powers Ferry Rd. Go through intersection at Powers Ferry Rd and travel 1.1 mi to Indian Trail. Turn right on Indian Trail (dead end at the unit's entrance). From I-285 West exit 22, go straight to 2nd traffic light. Turn left onto Northside Dr and follow as above. For additional directions, contact leader. <b>Walking:</b> Moderate, ~4-mi with two big hills. Terrain is not difficult. <b>Facilities:</b> None at Indian Trail. Fast food on Powers Ferry Rd. <b>Bring:</b> Water, a hand lens, sunscreen, tree or field guide, camera and notebook, \$3.00 parking fee or annual pass.	Maureen Donohue macaire75@att.net 678.687.7963 cell
<b>Sept 25</b> 10:00 AM Meet at parking lot of HJ Gas Station, south of Butler.	<b>Sandhills, Taylor County</b> This exploratory trip to two of our newest Natural Areas - Fall Line Sandhills and Black Creek Natural Area - will target the protected species pond spicebush ( <i>Lindera melissifolia</i> ) and sandhill golden-aster ( <i>Pityopsis pinifolia</i> ). Pickering morninglory ( <i>Stylisma pickeringii</i> var. <i>pickeringii</i> ), another protected species, occurs here, but will be past flowering. We may also find sandhill specialties like Carolina pineland-cress ( <i>Warea cuneifolia</i> ). Fall is the best wildflower season in the sandhills, so many common species, especially members of the aster family, should be in flower. Both Natural Areas had prescribed burns this past winter and spring, allowing us to see the impact of fire on sandhill plants.	Take US 19 south through Butler to light at intersection with GA 96. Cross GA 96 to HJ gas station on the left. From the south, take US 19 north to intersection with GA 96. From the east or west, take GA 96 to US 19 south of Butler. As you turn south onto US 19; gas station is on left. If carpooling is needed, we'll condense into fewer vehicles at Fall Line Sandhills Natural Area. <b>Facilities:</b> At meeting place only. <b>Walking:</b> We'll be walking on old sandy logging roads. Walking will be fairly easy, but the sand will be deep at times and it could be very hot. We may make side trips down old fire lines. Total walking for the day won't exceed 3 miles. <b>Lunch:</b> Bring to eat near the vehicles. A picnic blanket or some other cover to sit on is recommended. <b>Bring:</b> Hat, bug spray, water and food.	Hal Massie massiefarm@aol.com 478.836.4907 478.957.6095 (cell for hike, reception not guaranteed)

## Field Trip Reports



Grady County

### PILGRIMAGE TRIP #4 WOLF CREEK PRESERVE MARCH 13, 2010

Wolf Creek Preserve is an area of about 140 acres of rather open beech-oak-hickory forest with a north-facing slope that has never been logged. Its main attraction is a groundcover of Southern Appalachian trout lily (*Erythronium umbilicatum*) growing thickly on 40 of those acres. The hillside is owned by Grady County and set aside in June 2009 with the help of the Florida and Georgia Native Plant Societies and the Georgia Botanical Society.



At Wolf Creek, the Southern Appalachian trout lily (*Erythronium umbilicatum*) is two to three times larger than the same species growing in the piedmont of Georgia. Photo by Beth Woodward.

When I asked why the trout lilies would form such a lush carpet on this forest floor, I was told that this whole north facing slope is a seep, oozing water toward Wolf Creek. Despite our severe droughts, it is consistently moist, one requirement for *E. umbilicatum*. The soil is a mix of yellow clay and sand over limestone.

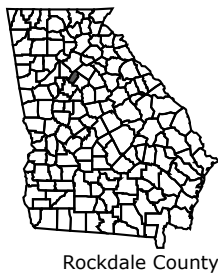
February 15<sup>th</sup> is the usual week of peak bloom, but with a cooler than average spring, plants were blooming two and a half weeks later. Lucky for us because the trout lilies were still in bloom, though we missed their peak, which was the previous weekend. As Ed McDowell led 12 Bot Soccers

into the area, we came across spotted trillium (*Trillium maculatum*) in full bloom. About 99% of the flowers of this species are maroon and 1% yellow. Their seeds ripen in about 30 days.

With no official trail into the area, it was impossible not to step on some trout lilies as we wove our way down the hillside. As far as the eye could see, in all directions laid a carpet of trout lilies. The flowers here are two to three times larger than that of the same species growing in the piedmont of Georgia. The seeds ripen in late May; the leaves disappear in mid to late June.

This was a beautiful spring day. As we walked we heard the calls of the red-bellied woodpecker, red-shouldered hawk, a pileated woodpecker, chickadees and tufted titmouse. Spider-lilies (*Hymenocallis* sp.) were just beginning to emerge in scattered patches. Four orchids can be found in this habitat. The diminutive southern twayblade (*Listera australis*) was in full bloom. It, too, likes the open woods of this wet hillside. We had a little trouble finding Wister's coralroot (*Corallorhiza wisteriana*), but Stuart Smith finally located a few and we eventually found a large cluster at the base of a tree. Both *Epidendrum* and *Tipularia* can be found in bloom in the summer. We all enjoyed this beautiful spring morning in such a special habitat.

Albie Smith, Athens



Rockdale County

### OUR LADY OF THE HOLY SPIRIT MONASTERY MARCH 20, 2010

All things were in our favor, this day! The timing was right, the weather was perfect and it was close to Atlanta! Translation, we had a huge crowd (48-50) on hand for leader Jim Allison and Bot Soc's initial visit to Our Lady of the Holy Spirit Monastery. Naturalist Francis Michael Stiteler, the monastery's Abbot, was also on hand to assist with information on the monastery and the 2,100 acre grounds, including the Honey Creek Woodlands, a conservation burial ground for all faiths on the grounds of the monastery. And, to top it all off, the gift shop was open selling fudge and other goodies. What more could you ask for?

The first stop of the day was to have been to the trail where we'd see the promised plant of the day yellow fumewort (*Corydalis flavula*). But alas, the thinning operations for loblolly pine impeded our progress and we were forced to move on to

stop 2, the Honey Creek Woodlands conservation burial grounds. Here Abbot Stiteler gave us more information on the monastery's purchase of the land, which saved it from being developed as a sub-division and the "green" burial grounds, where everything is biodegradable. More information is on their website ([www.trappist.net](http://www.trappist.net)). As we walked the short distance to the site along a gravel road, we observed wild pansy (*Viola bicolor*), ground ivy (*Glechoma hederacea*), tiny bluet (*Houstonia pusilla*), daffodil or buttercup (*Narcissus* sp.), and Carolina green-and-gold (*Chrysogonum virginianum* var. *brevistolon*). We were told this area would be showier in the fall when the composites would be in bloom. Entering the woods behind the burial grounds, we saw a red maple (*Acer rubrum*) displaying beautiful red flowers, and even some branches

## Field Trip Reports

showing young fruit, also red. Heading downhill toward a creek, we saw more green-and-gold and near the creek several dark blue-purple round-lobed hepaticas (*Anemone americana*) in perfect bloom.

After lunch, we did the portion of the field trip that was supposed to be in the morning. We parked at an old home place to take a 2-mile loop trail. Early on we saw some of the same plants as that morning like ground ivy, tiny bluet and field pansy, but we also saw common periwinkle (*Vinca minor*). After ascending a hill we walked down toward the South River to walk an old roadbed which skirted the base of the hill just above the river floodplain. I always enjoy seeing the massive trees which usually frequent a river floodplain left undisturbed. Here were giant oaks and hickories, especially memorable northern red oaks (*Quercus rubra*) and bitter-nut hickories (*Carya cordiformis*). Then we started seeing a stemless light blue violet called Walter's violet (*Viola walteri*) and all of a sudden Jim was saying that he had found the yellow fumewort (*Corydalis flavula*) in bloom! This was a big treat for us, since we'd never seen the plant in person before. The plants were just beginning to flower and were pretty small. The strong wind made photography a challenge. I had mistakenly thought they would be about the same size as *Corydalis sempervirens*,

(which Weakley is now calling *Capnoides sempervirens*) that we'd seen on a field trip to Rabun Bald several years ago, but these plants were much smaller. As we continued down the river and turned to start an uphill climb, we saw a mayberry (*Vaccinium elliotii*) starting to bloom.

After arriving back at the cars, everyone said their thank you's and goodbye's and went their own way. We backed out from under the huge post oak (*Quercus stellata*) we had parked under and headed back to the monastery with our leader, Jim Allison, and our other rider Anne Armstrong. After an hour of interesting conversation between, Jim, Abbot Stiteler, Nick Douglas, my wife Teresa and myself, we began our long drive back to Rome. It was a great day and another interesting BotSoc field trip!



The botanical highlight of the Monastery field trip was yellow fumewort (*Corydalis flavula*) - in bloom!  
Photo by Teresa Ware.

Richard Ware, Rome

### FOX CREEK, CHATTAHOOCHEE NRA APRIL 21, 2010

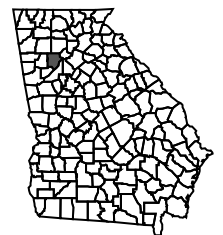
A good number of BotSocers and guests of the park joined naturalist Jerry Hightower on this midweek walk along beautiful Fox Creek. This is a fairly heavily forested area now, with oak and hickory dominant in the canopy, but Jerry asked us all to imagine what it looked like devoid of all trees in the 1850's, when cotton was planted in this part of Cobb County. Little from that era remains, aside from roads now used as trails.

Cotton has been replaced by a number of native plants, many of which were blooming. The highlights of the day were sweet Betsy (*Trillium cuneatum*), Catesby's trillium (*T. catesbaei*), southern nodding trillium (*T. rugelii*), violet wood sorrel (*Oxalis violacea*), common yellow wood-sorrel (*O. stricta*), and Piedmont azalea (*Rhododendron canescens*). We also saw two Jack-in-the-pulpit species, including the uncommon *Arisaema triphyllum*, ssp. *quinatum*, which appears to have 5 leaflets.

A large number of sweet shrub (*Calycanthus floridus*) lined both sides of the trail for quite a distance. Green-and-gold (*Chrysogonum virginia-*

*num*), wild geranium (*Geranium maculatum*), and cinquefoil (*Potentilla simplex*), along with a dozen other wildflowers added several shades of color to this interesting part of metro Atlanta. Jerry will be leading several other hikes, as well as canoe trips, in the Park this spring. Consult the "upcoming trips" schedule in the newsletter and on our web-site for details.

Mike Christison, Marietta



Cobb County



A good number of Bot Soccers and guests of the park joined naturalist Jerry Hightower for a midweek walk along beautiful Fox Creek.  
Photo by Susan Caster.

## Society Contacts

### OFFICERS AND BOARD MEMBERS

President - Ed McDowell (478.929.1267) ed.mcdowell@cox.net  
 Vice-President - Jim Drake (678.482.2127) drake3800@charter.net  
 Treasurer - Rich Reaves (770.827.5186) rich.reaves@att.net  
 Secretary - Linda Chafin (706.548.1697) lchafin@uga.edu  
 Past President - Leslie Edwards (404.892.6026) edwa1616@bellsouth.net  
 Field Trip - Maureen Donohue (770.818.9303) macaire75@att.net  
 Membership - Anita Reaves (770.827.5186) rich.reaves@att.net  
 BotSoc Boutique - Jenneke Somerville (706.354.7837) jenneke1@hotmail.com  
 Marie Mellinger Grant Fund - Elaine Nash (770.922.7292) einash33@bellsouth.net  
 Pickett's Mill State Park Project - Elaine Nash (770.922.7292) einash33@bellsouth.net  
 Historian - Nancy Shofner (404-881-6346) nshof@mindspring.com

### CHAPTER REPRESENTATIVES

Martha Joiner (912.764.6329) joiners@frontiernet.net  
 Bobby Hattaway (912.653.2228) botanikman@g-net.net

### MEMBERS AT LARGE

Hal Massie (478.836.4907) massiefarm@aol.com  
 Wayne Morris (334-670-3940) mwmorris@troy.edu  
 Teresa Ware (706.232.3435) teresaware@earthlink.net  
 Vicki Williams (770.423.1012) 72064.1017@compuserve.com  
 Gil Nelson (229.377.1857) gnelson@bio.fsu.edu

**TIPULARIA** Chairman - Richard Ware (706.232.3435) gabotany@comcast.net

**TIPULARIA** Editor - Brad Sanders (706.548.6446) bsandersga@fevertreepress.com

**NEWSLETTER** Managing Editor - Jean Smith (706.783.2308) jss2holly@windstream.net

**NEWSLETTER** Trip Report Editor - Carol Howel Gomez (706.624.9262) chowel\_gomez@comcast.net

**WEBMASTER** Merrill Morris (706.354.4139) merrill.morris@gmail.com

For all Membership inquiries please contact:  
 Rich or Anita Reaves  
 (770.827.5186)  
 rich.reaves@att.net

2718 Stillwater Lake Lane  
 Marietta, GA 30066-7906  
 www.gabotsoc.org



NONPROFIT ORG.  
 U.S. POSTAGE PAID  
 ATHENS, GA  
 PERMIT NO. 1