

BOTSOC NEWS



Georgia Botanical Society

Volume 84
Number 6
November
2010

NOTES FROM THE BOTSOC ANNUAL MEETING

On September 11, 2010, a board of directors meeting and the Georgia Botanical Society's annual meeting were held in the Theater at Pickett's Mill Battlefield Historic Site in Paulding County. Anita Reaves took meeting notes. The following is a summary of items from both meetings.

Newsletter. Last year, one-third of our membership opted to download a digital/electronic version of the newsletter from our website. We hope that participation will increase as the benefits of an electronic newsletter (no paper, no postage costs, speedier delivery, color photographs) become more widely known. A download of the electronic newsletter is now the default option on the 2011 Renewal Form (inserted in this issue). Members without Internet access or those who prefer a paper copy can still receive the printed version by checking a box on the renewal form. After seven years as BotSoc News editor, Jean Smith, plans to step down soon and is requesting volunteers for that position. If you are interested, please give her a call (706.783.2308).

2011 Pilgrimage. The 2011 pilgrimage will be held in Carrollton, GA Friday, April 15 through Sunday April 17, 2011. Headquarters will most likely be the Holiday Inn. Friday's social will be in the historic WPA building; Saturday's banquet will be at West Georgia University. Look for details in an upcoming newsletter. The suggested flower for the T-shirts is the crested iris (*Iris cristata*).

Field Trips. Maureen Donohue reported that 2010 had 65 field trips. One concern is the diminishing pool of trip leaders and a need for more volunteers (especially for young naturalists to volunteer). Another concern was an inability to hear the leader on field trips with large groups. In the future, knowledgeable members will be asked to space themselves along the row of hikers when large groups are present. Maureen also reported on the Georgia aster count at Pickett's Mill (2500 in the 1st year, slightly less the 2nd year and a 3rd year's count complicated by the accidental mowing of plants). A burn was conducted in January 2010. The 4th and final count was to be held October 30; no count is scheduled for 2011.

Tipularia. The Board approved public access to selected *Tipularia* articles from our website with the Society retaining control of the content. A committee was formed to recommend policy; a report is expected at the 2011 Pilgrimage.

Financial Report. Rich Reaves reported the Society is expected to come out even for 2010 (Society income was approximately \$11,000 in 2010). He also reported that electronic payment of memberships dues through our website would not be economical due to the fees involved.

Membership. Anita Reaves reported current membership of 395, down 42 from 2009. Society bylaws were changed to no longer require the publication of a membership directory. A membership directory (derived from the membership application form) is available to members only upon request to Anita Reaves.

New Officers. Nominating Committee Chair Hugh Nourse presided over the election of the slate of officers for 2011 – 2012: President Jim Drake; Vice-President Jerry Hightower; Treasurer Rich Reaves; Secretary Linda Chafin.

IN THIS ISSUE:

Society News –
p2

Book Review–
p3

*Georgia's
Trees* –
p4

*Upcoming
Field Trips* –
p6

*Field Trip
Reports* –
p8



BotSoc's new officers (from left) Vice-President, Jerry Hightower; Treasurer, Rich Reaves; President, Jim Drake; Secretary, Linda Chafin was absent.
Photo by Anita Reaves.



BotSoc News

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

Submission deadline is December 1 for the January issue.

Subscriptions are included with membership.

Website:
www.gabotsoc.org

Editorial Office
Jean Smith
1135 Barwick Hill Rd
Coker, GA 30629
ph 706.783.2308
email:
jss2holly@
windstream.net

© 2010 **Georgia Botanical Society**
a private nonprofit
organization under IRS
501(c)3.
Founded in 1926.

PRESIDENT'S PERSPECTIVE

As newly elected president of the Georgia Botanical Society, I am both honored and humbled to be associated with such a storied and historical organization. Founded in 1926 with lofty goals, today's Society continues to be as strong as ever in promoting the understanding and appreciation of plants and their environment as well as supporting the conservation of our precious botanical resources. My role in perpetuating those ideals is a daunting task. However, with the help of an amazingly gifted network of supporting volunteers, I look forward to the challenge. Past president Ed McDowell has established a high standard to follow, and I will freely seek his counsel in the coming months.

One of our goals will be the expansion of membership. The Society has something to offer for everyone interested in the botanical environment from professional botanists to those of us who just want to admire the beautiful wildflowers. Many of our members fall into the latter category. For the more active, an array of field trips is offered ranging from difficult to easy. When we feel like being less physically active, workshops and roadside botanizing trips are available. For indoor activity, especially in cooler months, slide presentations abound, and let's not forget the annual holiday party. The spring wildflower pilgrimage attracts a large group of participants. Among the Society's more noted benefits are the periodic newsletters and annual journal, *Tipularia*. The information included in these publications is an amazingly valuable asset.

Society News

Being a person who learns better by observation, I find the Society's numerous activities to be amazing natural laboratories for gaining knowledge. Many years ago as a biology student, my most memorable courses were those supplemented by interesting field trips.

The reservoir of potential new members is vast. If we make concerted efforts to tell everyone about Society benefits, membership from students to people of all ages should increase. One of my first duties will be to explore ways of getting our valuable message out.

Jim Drake



Jim Drake

I would also like to encourage our members to submit a photo for this column with a few lines of text explaining what you saw and where you saw it. We'll select one for each issue. For example, this is monkshood (*Aconitum uncinatum*) - one of the special finds on the Oct. 2 Brasstown Bald/Track Rock field trip in Union County. Please send your photo to Jim Drake (drake3800@charter.net).



Townsend Wildlife Management Area (WMA) was in the news recently for the stands of old growth bald cypress (*Taxodium distichum*) that are now protected within its boundaries and for one tree in particular that might be Georgia's largest bald cypress. The tree measures 44 feet and 5 inches in circumference and although it is difficult to estimate the age of a hollowed out trunk, Matt Elliott of Georgia's Department of Natural Resources thinks the tree is at least 700 years old. Even its knees - the conical projections from the trees' root systems that aid in respiration in the often-flooded landscape - are enormous, easily topping 15 feet. The WMA's 18,258 acres of wetlands and associated upland habitats in McIntosh and Long Counties is home to at least 17 state-listed rare and endangered species including Rafinesque's big-eared bat, the gopher tortoise, the Eastern indigo snake and Radford's mint (*Dicerandra radfordiana*), a cinnamon scented mint that is one of Georgia's rarest plants.

Photo by Charles Seabrook, who also wrote an article for the Atlanta Journal-Constitution (Sept 17, 2010) that describes being inside one of the WMA's giant bald cypress trees with eight people **and** a roosting Rafinesque's big-eared bat.

Book Review

Have you read Carol Kaesuk Yoon's book, *Naming Nature: The Clash between Instinct and Science*? Carol Yoon has a PhD in evolutionary biology and is a science writer for the *New York Times*. To me, this book is an interesting history of taxonomy from Linnaeus to Linus Pauling and Willi Hennig and shows the changing goals and methods of scientific classification.

In discussing these changes, the author notes the bitter battles among taxonomists with every change. She argues part of the problem is that humans are hard wired for looking at their living environment by comparing differences and similarities.

She provides anthropological and psychological evidence for this *umwelt* by arguing that people are now good at differentiating logos and products in the mall, but are not so capable of differentiating things in their living environment. People no longer care about the disappearance of species because they no longer have this way of looking at the living world and identifying its inhabitants.

Part of the reason is that taxonomy has gotten away from looking at living things the way people automatically do. Taxonomists have done so for very good reason, but Yoon thinks all of us need to reconnect with the living world by using whatever naming system gets us thinking about the living

world. It almost pushes me into thinking about using folk names for plants rather than scientific names.

As a second thought - why does taxonomy have to use species names to represent evolutionary relationships? Titles of books are not changed every time a library changes the order of knowledge. There is a separate system for the ordering of knowledge and each book has its own title, which stays the same. I guess I am thinking of this because two species that I have known very well have just been changed: Heller's bird's-foot trefoil has been changed from *Lotus helleri* to *Acmispon helleri*, and the bunchberry dogwood is no longer *Cornus canadense* but *Chamaepericlymenum canadense*.



Taxonomists no longer recognize bunchberry dogwood as *Cornus canadense* but as *Chamaepericlymenum canadense*.
Photo by Gary A. Monroe
© USDA-NRCS PLANTS Database

Reviewed by Hugh Nourse

Naming Nature: The Clash between Instinct and Science

Carol Kaesuk Yoon

Hardcover edition, 2009, W. W. Norton & Company, Inc., New York

ISBN 978-0-393-06197-0 352 pages

Paperback edition, 2010, Territory Rights: Worldwide Paperback, New York
ISBN 978-0-393-33871-3 341 pages \$9

Thousand Canker Disease (TCD) of Black Walnut Found in Knoxville, TN

Thousand canker disease (TCD) of black walnut was recently identified in the Knoxville, TN area. Originally thought to be limited to Colorado and a few other western states, the Knoxville cases are the first to occur east of the Mississippi River. Because of the severity of the disease in Tennessee, TCD has probably gone undetected there for years. Foresters mistakenly believed the declining walnut trees were dying due to drought stress. These same conditions exist throughout Georgia and many tree species are showing symptoms of stress.

TCD is caused by a fungus, *Geosmithia sp.*, introduced into the tree by a twig beetle. Infected trees die from multiple cankers that infect the cambial tissues of the trunk and branches and interfere with water and nutrient transport. Once symptoms of crown decline are evident, which can

be several years after infestation by the beetle, infected trees die within 2-3 years. There is no control other than removal of infected trees and wood to reduce disease and beetle spread.

TCD has not been identified in Georgia; however, beetles can reproduce within cut logs and it is believed that transport of infested wood (logs with bark still attached) can spread the beetle and disease to new areas. The best control for this disease is early detection. If you receive calls from arborists, foresters or homeowners with declining black walnuts, you might want to get a sample to determine if TCD is the cause.

More information about TCD can be found on the website for the Tennessee Department of Agriculture (<http://tn.gov/agriculture/regulatory/tcd.html>).

Richard Ware

Georgia's Trees

ATLANTIC WHITE CEDAR

CHAMAECYPARIS THYOIDES

(LINNAEUS) BRITTON, STERNS & POGGENBURG

by Hal Massie

Despite the fact that it is a stately native tree, few people would readily recognize Atlantic white cedar. The range of this rare conifer is restricted to the Fall Line sandhills in Georgia and even there it is confined to acidic streams and peaty bogs, almost wholly on private land. Not only is the tree rare, but it is the keystone species that defines the habitats where it is found - habitats that are also rare and becoming more scarce each year.

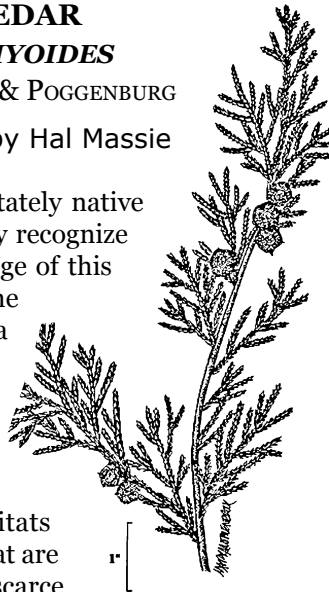
Common Names: Atlantic white cedar is also known as white-cedar, false-cypress, swamp-cedar, southern white-cedar, juniper, and post cedar. Its common name is sometimes written as Atlantic white-cedar and even as Atlantic whitecedar.

Synonyms: *Cupressus thyoides* Linnaeus, *Chamaecyparis henryae* Linnaeus, *Chamaecyparis thyoides* (L.) Britton, Sterns & Poggenb. var. *henryae* (L.) Little

Taxonomy: Atlantic white cedar is a member of the cypress family (Cupressaceae), which includes several native conifers: bald cypress (*Taxodium distichum*), pond cypress (*T. ascendens*), eastern red cedar (*Juniperus virginiana*) and common juniper (*J. communis* var. *depressa*). The Cupressaceae includes about 30 genera world-wide and ~125 species. The genus *Chamaecyparis* includes 5 species, of which only Atlantic white cedar is represented in Georgia. Western white cedar occurs on the Pacific Coast, while the remaining three species are found in Japan and Taiwan. *Chamaecyparis* is a combination of the Greek *khamai*, meaning 'on the ground', and *kuparissos* for cypress, alluding to a 'dwarf cypress'. '*Thyoides*' means citrus-like, a reference, presumably, to the aromatic leaves.

Conservation Status: Atlantic white cedar is legally protected as a 'rare' species in Georgia. The Georgia Natural Heritage Program ranks it as G4/S2 - meaning that it is apparently secure globally, but imperiled in the state. About 40 populations occur in Georgia, nearly all of them on private land, mostly in the West Central Georgia sandhills.

Habit: Mature Atlantic white cedars are narrow, spire-like trees which often grow in dense stands. The limbs and twig tips are pendulous, giving this rare tree a graceful, feathery appearance. In the south, the leaves tend to be deep green,



while in northern parts of its range the leaves are often blue-green. Atlantic white cedar can grow to heights between 50 and 80 feet, though individuals may be taller.

Bark, Twigs and Leaves: The leaves of this rare conifer are arranged in close opposite pairs, scale-like, deep green or bluish-green with dorsal glandular resin dots. Old leaves are persistent for several years, even after turning brown by the end of the second year. Fresh growth is more needle-like. The twigs are thin and arranged in flat 'sprays', one of the key characters for identifying this species. The bark on mature trees is thin, red-brown to gray, with fibrous, interlacing ridges, and is quite handsome.

Flowers and fruits: The staminate cones are numerous, yellowish, and less than 1/8th of an inch long. They are borne singly at the tips of twigs and persist for several months. Ovulate cones are greenish-blue initially, globose, and far fewer than the male cones. Mature fruits are nearly round, purplish, and fleshy. After opening and releasing the numerous seeds, the cones become woody and open, usually in September and October.

Habitat and Distribution: In Georgia, Atlantic white cedar only occurs along clear, sandy-bottomed streams in the Fall Line sandhills. The vast majority of these trees occur in seven counties in West-Central Georgia. The North American distribution extends along the Gulf Coast from Louisiana to northwestern Florida, inland to the Fall Line sandhills in Georgia and South Carolina, then along the Atlantic Coast from North Carolina to Maine.

Natural History: Where Atlantic white cedar occurs in Georgia it is often associated with other rare species, including sweet pitcher plant (*Sarracenia rubra*), dwarf witch alder (*Fothergilla gardenii*), clearwater butterwort (*Pinguicula primuliflora*), Carolina bog laurel (*Kalmia carolina*), bog sneezeweed (*Helenium brevifolium*), and lax water milfoil (*Myriophyllum laxum*). Because Atlantic white cedar often grows in very dense stands, it is an important tree for nesting birds. A bird census in the Great Dismal Swamp National Wildlife Refuge in Virginia and North Carolina showed that almost twice as many birds were using the Atlantic white cedars than the surrounding maple-gum forest. The wood of this tree is noted for its decay resistance and durability. At one time it was used for constructing piers, pilings, and boats. Some local harvesting still occurs, but few populations are now large enough to sustain use of this tree as a timber species.

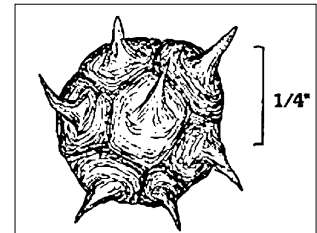
Horticultural Uses: At least 45 cultivars of Atlantic white cedar are known, though they are generally very hard to find in all but specialty nurseries. Great potential exists for this tree as an ornamental and as a tree for reforesting wetlands. Dwarf forms and varieties with metallic-blue foliage have been described. One of the best uses for this tree is as a native alternative for the ubiquitous, and disease-prone, Leyland cypress (*X Cupressocyparis leylandii*).

Georgia's Trees

Not To Be Confused With: Eastern red cedar (*Juniperus virginiana*) is the tree most likely to be confused with Atlantic white cedar from a distance. Up close, the twigs of Atlantic white cedar are flattened; in red cedar they are four-angled. The ovulate cones of Atlantic white cedar are purplish, larger and open at maturity, while those of red cedar are bluish-green and do not open.

Champions: The National Champion Atlantic white cedar is in, absurdly, Muskingum, Ohio, where it graces the front lawn of a Lutheran Church. That tree is 57 feet high, has a crown spread of 26 feet and has a circumference of 194 inches, for a total of 258 points. The Georgia State Champion is owned by the Boy Scouts in Macon. It has a height of 94 feet, a crown spread of 24 feet, and a circumference of 114 inches, for a total of 214 points.

Where You Can See It: Because of its sandhill habitat and the lack of public lands that contain this species, it can be difficult to see up close. It can be observed from the highway where GA 137 W crosses Whitewater Creek west of Butler, Georgia. Otherwise, watch for Botanical Society trips in the western sandhills, or work something out with the Boy Scouts in Macon. Outside of Georgia, The Great Dismal Swamp National Wildlife Refuge in Virginia and North Carolina has trails that meander through beautiful stands of old Atlantic white cedar.



The leaves of Atlantic white cedar are arranged in close opposite pairs. The twigs, thin and arranged in flat 'sprays', are one of the key characters for identifying the species. Cones are numerous, less than 1/8th of an inch long, borne singly at the tips of twigs and persist for several months.

Top photo: Robert H. Mohlenbrock. USDA NRCS. 1995. Northeast wetland flora: Field office guide to plant species. Bottom photo: Keith Kanoti, Maine Forest Service, Bugwood.org. Line drawings from USDA NRCS. Wetland flora: Field office illustrated guide to plant species. USDA Natural Resources Conservation Service.

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.

Chafin, Linda G., "Field Guide to the Rare Plants of Georgia", 2007, State Botanical Garden of Georgia.

Dirr, Michael A., "Manual of Woody Landscape Plants", 1998, Stipes Publishing.

Laderman, Aimlee D., "The Ecology of Atlantic white cedar wetlands: A community Profile", 1989, US Fish & Wildlife Service Biologic Report 85(7.21).

Sheridan, Philip M. & Thomas S. Patrick, "A Rare Plant Survey of Atlantic White-Cedar, *Chamaecyparis thyoides* (L.) B.S.P., Habitats of the Georgia Westcentral Fall Line Sandhills", 1999, Georgia Natural Heritage Program.

USDA, "National Plants Database," <http://plants.usda.gov>.

Weakley, Alan S., "Flora of the Carolinas, Virginia, Georgia, and Surrounding Areas", 8 March 2010 Working Draft, Unpublished.

Upcoming Field Trips

Date	Description	Directions	Leader
Nov 05 Friday 1:00 PM - 4:00 PM Meet at parking lot.	East Palisades, Whitewater Creek Unit - Chattahoochee River NRA, Fulton County We'll walk along the Chattahoochee River, watching ducks, geese and great blue herons on the river as we soak in the fall colors that surround us. Along the way we'll identify leaves for early spring wildflowers that will delight us in March. We'll climb one large hill for breathtaking fall views from the Palisades' cliffs. As we walk back to our cars, we can practice our tree I.D. skills using fall leaf colors as our guide.	From I-75 North take exit 256, Mount Paran Rd. Turn right then take 1 st left, Sentinel Post (small green sign). After several speed bumps take 1 st right onto Whitewater Creek Rd (sign often hidden by shrubs). From I-75 South take exit 258, Cumberland Blvd. Turn right to then turn left on Cobb Pkwy, US 41 and travel south, across the river (name changes to Northside Dr). Turn left on Mount Paran Rd (traffic light and enormous church on right) to follow directions above. Note: No left turn off I-75 South exit to Mount Paran. Difficulty: Easy 3 to 3.5 mi; one moderate hill. Facilities: None. Bring: Water, snacks, tree guide and hand lens, \$3.00 parking fee or annual pass.	Maureen Donohue macaire75@att.net 678.687.7963 cell
Nov 06 10:00 AM Meet at Pocket Picnic Shelter.	Fall Color Hike & Tree ID Walk, Floyd County We will hike either the Pocket Nature Trail (~1½ mi) or the Pocket Hiking Trail (~2.7 mi), depending on interest and enthusiasm. Hopefully the fall color will be spectacular and at peak! We will also identify the fall wildflowers that might still be in bloom along the trail and the good variety of trees, including some very large specimens of yellow buckeye (<i>Aesculus flava</i>). After the walk, if time permits, we may visit John's Mtn. Overlook for spectacular views of the Ridge and Valley.	From Atlanta on I-75 take exit 320 west (LaFayette/Resaca). Turn left on GA 136 toward LaFayette. After ~14 mi, turn left onto Pocket Rd. Recreation area is on the left after ~7 mi. The 2nd driveway goes to the Picnic Shelter. Pocket of Floyd County (not Pigeon Mtn.) 6044 Everett Springs Rd, Armuchee, GA 30105. Facilities: At meeting site. Walking: Either 1½ mi or 2.7 mi depending on trail taken; relatively flat, easy. Bring: Lunch to eat at picnic tables after walk (preferable). Late lunch, so bring snacks.	Richard & Teresa Ware 706.232.3435 cell, but probably no service at field trip 706.766.5143 gabotany@comcast.net
Nov 11 Thursday 10:00 AM Meet at parking lot.	Chattahoochee River NRA, Paces Mill Unit, Cobb County We'll enjoy the fall colors of the trees this Veterans Day with a beautiful walk along the West Palisades from Paces Mill to the next unit at Akers Mill. On the way, we'll see some Georgia asters (<i>Symphotrichum georgianum</i>) in bloom, and great views of the Devils' staircase, the East Palisades and the river. We'll also visit two wetlands and Rottenwood creek enroute. The Paces Mill Unit is located at 3445 Cobb Parkway, Atlanta, GA 30339	From I-75 South exit 258, turn right on Cumberland Blvd and then left on Cobb Pkwy (US 41). Go downhill thru light at Paces Mill Rd. Brown NPS sign is just beyond BP Station on right. From I-75 North exit at Mount Paran Rd, turn left and then turn right onto Northside drive (US41N). Continue north over the river; park entrance is on left, just before BP station and just after you enter Cobb County. For other directions, contact leader. Walking: Moderate 4-5 mi; two long somewhat strenuous hills to walk slowly. Easy terrain. Facilities: At Paces Mill. Bring: Sack lunch, \$3.00 parking or annual pass, poles (optional), tree book and hand lens.	Maureen Donohue macaire75@att.net 678.687.7963 cell

Upcoming Field Trips

Date	Description	Directions	Leader
------	-------------	------------	--------

Georgia Botanical Society Annual Holiday Party

Saturday, December 4, 2010 10:00 AM

Candee and Jim Drake's House
3800 Hickory Branch Trail Suwanee, GA 30024
678.482.2127 678.793.2127 cell drake3800@charter.net

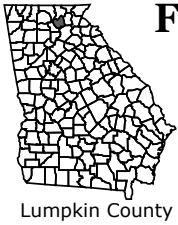


Bring: Your favorite dish with enough to feed several people; drinks will be provided. This very informal gathering will have no walk and no formal presentations - but attendees are encouraged to bring botanically related items such as photos, articles, new books, write-ups of new species, or other information for a table display. Because of limited display space, please bring only a small amount of material and plan on informally discussing your topic with interested individuals.

Directions: From I-85, take Suwanee exit 111, Lawrenceville-Suwanee Rd, to go northwest toward Suwanee for ~0.7 mi. Turn right onto Satellite Blvd and travel 0.9 mi to turn left onto Smithtown Rd. Travel 0.8 mi to turn right (across from tree farm) onto Westbrook Rd. Travel 0.7 mi to turn right onto Ridge Rd. Travel 0.6 mi to turn left onto Hickory Branch Trail (Olde Branch sub-division). After 100 ft, turn left onto Hickory Branch Trail (again). 3800 Hickory Branch Trail is down the hill. From Peachtree Industrial Blvd, travel southeast on Suwanee Dam Rd (GA Hwy 317) for 1.6 mi. Turn left onto Smithtown Rd and travel 0.9 mi to turn left (across from tree farm) onto Westbrook Rd and follow directions above.

<p>Jan 17 Monday</p> <p>10:00 AM</p> <p>Meet at parking lot across from Callaway Country Store.</p>	<p>Springheads on Pine Mountain, Harris County</p> <p>The 2011 botanical season starts early this year with a visit to Callaway Preserve on Pine Mountain. The 8,500-acre preserve is not open to the general public, so this trip represents a rare chance to visit a seldom seen part of Pine Mountain. We will visit a series of unique springheads on the north side of the mountain. While we won't see much in flower (but we will look), the springheads are usually surrounded by broadleaf evergreens, including devilwood (<i>Osmanthus americana</i>), sweetbay magnolia (<i>Magnolia virginiana</i>), horse sugar (<i>Symplocos tinctoria</i>), titi (<i>Cyrilla racemiflora</i>), and redbay (<i>Persea palustris</i>). Higher on the ridge we will see scattered examples of montane longleaf pine.</p>	<p>From Atlanta take I-85 South to Exit 21 (I-185 South). Take I-185 south to Exit 42 (US 27). Turn left (south) onto US 27 and follow it past Callaway Gardens and to the top of the Pine Mountain ridge and the intersection of GA 190 / US 27. Turn left onto GA190 and then immediately right into the parking lot across from the Callaway Country Store.</p> <p>From Columbus, take I-185 North to Exit 34 (GA 18) and go east on GA 18 to Pine Mountain. Turn right on US 27 South and follow the above directions.</p> <p>Walking: Moderate, about 3 mi. Roughly half the walk will be on old dirt roads, the other half will be cross country along the slopes of Pine Mountain and will be rocky with deep leaf litter at times.</p> <p>Facilities: Bathrooms are available at the Callaway Country Store. After that, rocks and strategically placed trees will be available.</p> <p>Lunch: Bring a lunch to eat near one of the springheads.</p> <p>Bring: Food and water. Warm clothing is recommended, as well as sturdy boots.</p>	<p>Hal Massie 478.957.6095 (cell) massiefarm@aol.com</p> <p>Vicki Williams 404.396.1363 (cell) masterweeder@yahoo.com</p>
--	--	---	---

Field Trip Reports



Lumpkin County

FREEMAN TRAIL, AUGUST 15, 2010

On a hog muggy summer day, ten members and guests of the Botanical Society gathered for an adventure on the south side of Blood Mountain. The Appalachian Trail quickly gains altitude there for the first half mile, but at Botanical Society pace, the rise was hardly noticed. Soon our trip leader, Linda Chafin began calling out plants: great Indian plantain (*Arnoglossum reniforme*), sweetscented Joe-pye weed (*Eutrochium purpureum*), the ubiquitous southern harebell (*Campanula divaricata*), roughleaf sunflower (*Helianthus strumosus*) with its sandpaper-like leaves and showy flowerheads, Carolina phlox (*Phlox carolina*), and black-eyed Susan (*Rudbeckia hirta*). Despite our being high in the mountains, the day was so steamy that it seemed like even the names of the plants were getting lost in the thick air.

Still, we got excited over the frilly white flowers of starry campion (*Silene stellata*) and marveled at the bright yellow flowers of Appalachian oak-leach (*Aureolaria laevigata*), a plant that is a hemiparasite on the roots of oaks. Beside the trail we found Allegheny hawkweed (*Hieracium paniculatum*), a summer-flowering hawkweed with leaves along the stem, as opposed to the more familiar rattlesnake weed (*H. venosum*), which has basal leaves. We passed under black birch, and Chafin noted that the crushed leaves smell strongly of wintergreen, so we all practiced a little scratch-and-sniff botany.

Not long after the black birch, we found our first striped maple (*Acer pennsylvanicum*) of the day. Nearby, we were able to compare three Ericaceous shrubs – bear huckleberry (*Gaylussacia ursina*), highbush blueberry (*Vaccinium corymbosum*), and deerberry (*Vaccinium stamineum*). Here we also found our single holly of the day, mountain holly (*Ilex montana*), as well as smooth hydrangea (*Hydrangea arborescens*) and shrubby St. Johnswort (*Hypericum prolificum*).

As would be expected along a Georgia mountain trail in late summer, asters were everywhere. We saw Gall-of-the-earth (*Prenanthes serpentina*) with its annoyingly variable leaves, toothed whitetop aster (*Sericocarpus asteroides*), and white wood aster (*Eurybia divaricata*), along with two tickseeds – golden tickseed (*Coreopsis tripteris*) and greater tickseed (*C. major*).

After about half a mile, we took a lunch break on a huge rock that jutted above the trail. There are worse ways to spend a thirty-minute lunch than sitting on a huge rock outcrop on a mountainside in North Georgia with a group of like-minded friends! After lunch, we passed the balancing rock at Flatrock Gap and turned off the Appalachian Trail onto the Freeman Trail. The walk had been fun to this point, but it was about to get... exciting.

About 200 yards up the Freeman Trail, we came to another flat rock outcrop. Here, Chafin pointed out glade rushfoil (*Croton wildenowii*). I always like to look for rock harlequin (*Capnoides sempervirens*) on mountain outcrops, so I wandered down the rock looking for its pink flowers and blue-gray foliage. Suddenly, I realized there was a snake directly in front of me – a timber rattlesnake (*Crotalus horridus*). Backing up quickly and yelling for the rest of the group, I nearly stepped on a second rattlesnake! Parrie Pinyon was one of the first of the group to reach me and I heard her shouting, “Copperhead”! I started to argue, but quickly realized that she had come from a different angle and was indeed seeing, not one, but two copperheads (*Agkistrodon contortrix*)! As if four snakes weren't quite enough, it turned out that there was a third rattlesnake on the other side of the copperheads! Five venomous snakes! They had all been, at least partially, in the shade of a rock with an overhanging ledge. The rattlesnakes had begun shaking their rattles and we all agreed that it sounded a lot like insects, especially cicadas.

Needless to say, seeing that many venomous snakes made us wary and heightened our powers of observation for the rest of the trip. Which



Maureen Donahue was excited to see mountain catchfly (*Silene ovata*), a species she is monitoring for the Appalachian Trail Conservancy (top photo). Everyone on the field trip was excited to see six (6!) venomous snakes including this timber rattlesnake (*Crotalus horridus*) who would not move from the trail (bottom photo).

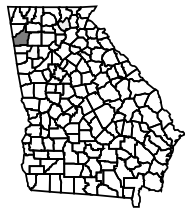
Field Trip Reports

turned out to be a good thing.

Farther up the Freeman Trail we came across northern horsebalm (*Collinsonia canadensis*) in flower, as well as palespike lobelia (*Lobelia spicata*), wild yam (*Dioscorea villosa*), anise-scented goldenrod (*Solidago odora*), white oldfield aster (*Symphotrichum pilosum*), and mountain clethra (*Clethra acuminata*). Soon, we found another lobelia, great blue lobelia (*L. siphilitica*). Just before reaching Bird Gap and the Appalachian Trail, we came upon a particularly rich area that contained eastern figwort (*Scrophularia marilandica*), American bellflower (*Campanulastrum americanum*), forest sunflower (*Helianthus decapetalus*), and yellow jewelweed (*Impatiens pallida*). The rarest plant of the day was also found here – mountain catchfly (*Silene ovata*), which excited Maureen Donahue, who is monitoring this species for the Appalachian Trail Conservancy.

After a brief break at Bird Gap, part of the group continued toward the summit of Blood Mountain on the AT, while the rest of us started back down the Freeman Trail. On the walk back, we didn't see many new plants, but we did have several wildlife encounters, including flushing at least 5 ruffed grouse. We also had a common raven pass close overhead. At one point, Parrie Pinyon was in the lead and almost walked over another timber rattlesnake! This one was in the middle of the trail and refused to move until we used a hiking stick to pick it up and move it out of the way. The rest of the walk was uneventful and we were all ready for cold drinks and dry clothes by the time we reached Neel's Gap. We'd all like to thank Linda Chafin for her amazing knowledge of Georgia's flora and her obvious passion for our mountains.

Article and photos by Hal Massie, Mussela



FALL FLOWERS, VINES, FRUITS AND TREE ID SEPTEMBER 26, 2010

Floyd County

For the past 6-8 weeks or so, Floyd County has endured 90-plus degree heat daily, and virtually no rain. So, naturally, the planned BotSoc trip for Sunday took place on a rather rainy day, where we registered over two inches of glorious precipitation. The good news is that those stalwarts who came, spent four hours in light drizzle, and had a wonderful time seeing many plants, trees, and vines of the fall season. Richard and Teresa Ware led five others along the Oostanaula Riverbank walkway. For those who couldn't make it, the walkway is a very gentle stroll with lots to see, so check it out.

Highlights included approximately 40 species of trees with several large Shumard oaks (*Quercus shumardii*), white oaks (*Q. alba*), silver maples (*Acer saccharinum*), bitternut hickories (*Carya cordiformis*), and naturalized pecans (*C. illinoensis*), drawing special attention.

It was rather unusual to see both bladder nut (*Staphylea trifolia*) and hoptree or wafer ash (*Ptelea trifoliata*) growing along the riverwalk, since you wouldn't think this habitat would have sweet (limestone) soils.

Many different vines were present along the way, often with flowers or fruit still visible, and they included the aromatic honey vine (*Cynanchum laeve*), five-lobed cucumber (*Cayaponia quinqueloba*), cupseed (*Calycocarpum lyonii*), melonette (*Melothria pendula*), bur cucumber (*Sicyos angulatus*), moonseed (*Menispermum canadense*), and coralbeads (*Cocculus carolinus*).

Special interesting flowers included yellow wingstem (*Verbesina alternifolia*), and white frostweed (*V. virginica*),

whose stems look just like those of the winged elm tree (*Ulmus alata*). Turnsole (*Heliotropium indicum*), with its long helical spikes was blooming nicely. Other unusual flowers blooming include frog fruit (*Phyllanthus lanceolatus*), branched foldingwing (*Dicliptera brachiata*), Peruvian daisy (*Galinsoga quadriradiata*), and eastern black nightshade (*Solanum americanum*). But the star of the day was valley redstem (*Ammannia coccinea*), with large patches of reddish carpet growing near several wetland ponds by the ballpark. From a distance, it



turnsole (*Heliotropium indicum*)

Richard & Teresa Ware

looked much like the heather of a Scottish hillside.

The perfect day ended with good Mexican food like it always does with the Wares.

Stuart Smith, Rome

Field Trip Reports

A SPECTACULAR TRIP TO ROAN MOUNTAIN JULY 10 - 11, 2010

Congratulations fellow BotSoccers! You are the proud adoptive parents of an Angora goat named Georgia 610. A few of your fellow BotSoccers adopted her for the Georgia Botanical Society on Saturday, July 10, 2010. We met and fell in love with her on the Appalachian Trail between Jane Bald and Grassy Ridge where she spends her summers.

But let me start my bald tale from the beginning. On Friday afternoon Jane Trentin, Faye Borthick and I began the long drive from Lilburn to the cabins at Roan Mountain State Park. After a dinner stop at the Laughing Seed Restaurant in Asheville that seemed longer than the drive, we arrived at the park late in the evening, where a warm and wonderful cabin waited for us.

The next morning we joined Candee and Jim Drake, Anita and Rich Reaves, Kitty Pupedis and Ben Cash for a wonderful bald day. We began at Carver's Gap, a spot on the Appalachian Trail about eight miles from our cabins. Jamey Donaldson, botanist, Roan Mountain volunteer, and goatherd, was our guide for this unique journey.

We began our ascent to Grassy Ridge. We knew right away that Jamie was energetic, enthusiastic and dedicated to Roan Mountain and the goat project. As we climbed bald by bald to Grassy Ridge, Jamie talked without stopping to breathe. By the time we reached the first bald (Round Bald), he had

told the history of the Southern Appalachians Balds. The balds, extremely rare worldwide and critically imperiled, are natural and predate European settlement. As he talked about the harsh environment of the last ice age that may have helped their development and the large herbivores that grazed them, he pointed out the wonderful landscape. It struck me as a cross between mountains and moorlands - stark and beautiful.

The trail was clearly cut through the grasslands with no need for trail markers. The path was easy - just keep going up, and up again toward the Ridge. The sky surrounding the ridge-

line was sometimes clear and sunny, inviting us to climb and sometimes covered in clouds and gloom inviting thoughts of our warm cabin eight miles away. But Jamey continued his stories and we continued to climb.

At the second bald (Jane Bald), Jamey told us how Jane had died of milksick as she crossed the bald. I thought of Lincoln's mother and wondered if Jane's cow had also eaten white snakeroot (*Ageratina altissima*).

Leaving Jane's Bald, we continued our upward journey. Jamey started to speak of the goats and the dogs that guarded them. He mentioned the volunteers who carried supplies up from Carver's Gap and water from nearby springs because there is no water on the balds. We had seen some of these volunteers descending as we climbed. They seemed incredibly happy to be helping with the goat project in spite of the physical hardness of their tasks.

Soon we were near the pens where a small herd of very appealing goats stared back at us as we watched them. They were chewing and continued to chew throughout our visit. Jamey explained that the goats love to eat the smooth blackberry (*Rubus canadensis*) threatening the bald. The goats live in mobile pens that are moved periodically so the goats can work their way through the brambles.

One of the very large white Great Pyrenees dogs came near to check us out. There was a fence between us, but he was a giant and very intent on guarding his goats. Jamie explained that they have had problems with visitors, particularly those with pet dogs who went too near the fence.



Georgia 610 with her protector Mr. Bean, a Great Pyrenees.

Jim Drake



Jamey describing a flower species to Kitty, Faye, Maureen and Jane.

Jim Drake

Field Trip Reports

We talked of adopting a goat, but left the decision as to which one until the return trip. It was time to climb to Grassy Ridge. The sun was strong and hot. Some of us turned back to Carvers Gap, and the rest of us continued up.

We took some photos of the herd and the dogs and then Jamey urged us on. He spoke of the unique plants we had seen along the way. We spotted the rare Roan Mountain bluet (*Houstonia montana*) in several locations. We had found the very rare Gray's lily (*Lilium grayi*) still in bloom, a short way off the Ridge trail, down the Appalachian Trail. It presented a photo opportunity for many of us. Jamey told us he would show us some rare plants on the other side of the ridge since we were a small group. So we continued.

Finally reaching the ridgeline, we were in full strong sun with a warm wind in spots. Jamey pressed on to point out bent avens (*Geum geniculatum*). Now we started down the other side of the ridgeline. The path was rocky, but we had splendid views over sunny valleys. We were near the edge of the rocks above the valley. Jamey went closer to the edge, leaned out and announced that the avens were still in bloom.

Jane Trentin took his invitation and leaned out, stretching her neck to see the plants. So then I got brave and did the same. It looked worse from where the group was standing, but it really wasn't scary and worth the opportunity to see such a rare plant.

I began to feel that my energy was on the wane and decided leave the group to start back to Carver's Gap. It was a wonderful solo journey. I was able to recall what I learned and saw at each place along the way; I was able to "soak in" the moors and mountains and the affect the balds had on



Turk's cap lily (*Lilium superbum*)

Maureen Donohue



Polk milkweed (*Asclepias exaltata*)

Jim Drake



The rare bent avens (*Geum geniculatum*)

Jim Drake



The Roan Mountain Group

Jim Drake & Jane Trentin

me. Sometimes I felt like I was in a 19th century English novel in Yorkshire. It was my favorite part of the trip.

However, my solitary journey did cause me to miss the selection of goat 610, renamed Georgia 610, as the Georgia Botanical Society goat. I fell in love with her picture as I'm sure you will. Her name reminded me of a boutique brewery brand. Perhaps we can go visit Georgia 610 in the next year or so.

That evening Jamey and the BotSoc group met in our cabin for dinner. It was an early evening for all of us as we had had a full day.

On Sunday morning, we came back to Georgia via a portion of the Blue Ridge Parkway. The array of wildflowers was wonderful. We found Polk milkweed (*Asclepias exaltata*) and Turk's cap lily (*Lilium superbum*). Eastern goat's beard (*Aruncus dioicus* and Appalachian false goat's beard (*Astilbe biternata*) were conveniently in bloom next to each other to help me see the differences between them. A beautiful display of flowering spurge (*Euphorbia corollata*) made me appreciate

even this small, common native flower. At this point we took our group photo. It was time to leave this idyllic world of blooms and balds.

Many thanks to Jim Drake for organizing and Jamey Donaldson for leading this adventure.

Epilogue

By now Georgia 610 is back in her home pasture in Shady, TN, dreaming of blackberries. I hope she and her fellow goats will be back on the balds next summer, eating blackberries and helping to keep this rare natural environment part of today's world.

For more information on the Baatony project, see Jamey Donaldson's blog at <http://baatanygoatproject.blogspot.com>.

Maureen Donohue,
Atlanta

Society Contacts

OFFICERS and BOARD MEMBERS

President - Jim Drake (678.482.2127) drake3800@charter.net
Vice-President - Jerry Hightower (678.538.1245) jerry_hightower@nps.gov
Treasurer - Rich Reaves (770.827.5186) rich.reaves@att.net
Secretary - Linda Chafin (706.548.1697) lchafin@uga.edu
Past President - Ed McDowell (478.929.1267) ed.mcdowell@cox.net
 Richard Ware (706-232-3435) gabotany@comcast.net
 Teresa Ware (706.232.3435) teresaaware@comcast.net
 Bobby Hattaway (912.653.2228) botanikman@g-net.net
 Gil Nelson (229.377.1857) gnelson@bio.fsu.edu
 Eddi Minche (678.313.2582) eddmin@gmail.com

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

Chair Representatives

Field Trip - Eddi Minche (678.313.2582) eddmin@gmail.com
 Membership - Anita Reaves (770.827.5186) rich.reaves@att.net
 Member Recruitment Committee - Linda Chafin (Chair), Amy Delaplaine, Hal Massie, Anita Reaves
 BotSoc Boutique - Jenneke Somerville (706.354.7837) jenneke1@hotmail.com
 Marie Mellinger Grant Fund - Elaine Nash (770.922.7292) einash33@bellsouth.net
 Historian - Nancy Shofner (404.881.6346) nshof@mindspring.com
 Publications
 Tipularia Chairman - Richard Ware (706.232.3435) gabotany@comcast.net
 Tipularia Art Director - 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
 Electronic Publications Committee - Gil Nelson (Chair), Ed McDowell, Linda Chafin, Jim Drake, Hugh Nourse
 Chapter Representative
 Martha Joiner (912.764.6329) joiners@frontiernet.net
 Bobby Hattaway (912.653.2228) botanikman@g-net.net

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



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