

BotSoc News



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Renew Your Membership

It's time to renew your Georgia Botanical Society membership. Protect your valuable member benefits, including the *Tipularia* Botanical Journal and *BotSoc News*, by renewing prior to the deadline. This year only, the renewal deadline has been extended from January 31 to February 28.

NEW FOR 2019: In a single online transaction, you can now renew your membership and donate to one of the BotSoc funds, such as the Marie Mellinger Research Grant, *Tipularia*, or Habitat Conservation. Many thanks to our webmaster, Merrill Morris, for this improvement to members' online experience! You may pay by credit card or PayPal account. Follow the on-screen instructions at:

https://www.gabotsoc.org/?page_id=2

If you prefer, you can renew by mail and pay by check. A copy of the renewal form is included as an insert in this issue of the paper newsletter. The form is also available on the BotSoc website at:

<https://www.gabotsoc.org/wordpress/wp-content/uploads/2017/10/BotSoc-Membership-Form.pdf>

Regardless of whether you renew online or by mail, please take note of the following information about membership categories.

- **Individual membership** is \$25 (electronic newsletter) or \$35 (print newsletter). Individual memberships are limited to 1 person. In order to enter 2 or more names, you must purchase a family/group membership.
- **Student membership** is \$10 and includes the electronic newsletter only. Student membership requires current student enrollment.
- **Family/group membership** is \$30 (electronic newsletter) or \$40 (print newsletter). These memberships include 2 or more persons, and you may provide 2 email addresses for the e-newsletter.
- **Donor membership** is \$100 and you may choose either the electronic or the print newsletter. Please indicate your preference on the online or print renewal form.
- **Life membership** is \$350 and you may choose either the electronic or the print newsletter. Please indicate your preference on the online or print renewal form.

If you have questions about membership renewal, please contact Membership Chair Jo Anne Romfh at joannromfh@aol.com.

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BotSoc News

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Welcome to 2019! This is going to be a great year for the Georgia Botanical Society. In just a few months we'll be heading up to Clayton for our annual Spring Wildflower Pilgrimage (April 12-14). We are a little bit behind on our field trip list for the year due to the difficulty we had in finding a new Field Trip Coordinator. However, Elliott Horner has graciously agreed to take on that mantle and we'll soon have a full list of exciting field trips.

One of the pleasures of being president of this group is representing the Society at meetings and conferences. In late October I spent three days at the Georgia Plant Conservation Alliance meeting which was held at George T. Smith State Park. On the first full day of the meeting we listened to numerous speakers talk about plant conservation efforts and programs across Georgia and the southeast. Our own Lisa Kruse was presented with a prestigious award from the US Fish and Wildlife Service for her outstanding work on preserving Canby's dropwort (*Oxypolis canbyi*), a federally and state endangered species of Coastal Plain wetlands. (See the article on page 9.) The award was a complete surprise, and sitting next to Lisa I got to see her reaction when she realized they were talking about her. Well deserved, Lisa!

That evening we were treated to a tour of the Canoochee Bogs complex. We found several interesting plants still in flower, including flameflower (*Macranthera flammea*). After the bog tour, a professor from Georgia Southern set up two panels with lights attached to them and we were treated to a close look at night-flying insects, especially moths.

The next day, Malcolm Hodges, a Nature Conservancy ecologist (and well-known member of our Society) and Marylou Moore, a DNR biologist, led our group on a tour of two sites at Ochoopee Dunes WMA. Marylou is the new Manager of Ochoopee Dunes and, hopefully, a future field trip leader. There was still an amazing array of plants in flower, including spectacular displays of the brightly-colored scarlet calaminth (*Clinopodium coccineum*).

The Holiday Party on Dec. 1 was well attended, despite absolutely miserable weather. We had 40 members being jolly and enough food to feed a small army. I have to admit that I was a bit worried when we only had a handful of people at 10:00. Fortunately, holiday revelers continued to stream in and we ended up with a good crowd. After the meal, Rich Reaves dazzled us with his deep knowledge of western plants and stunning photographs from the October BotSoc trip to west Texas and southeast New Mexico. A few of us braved the drizzle later that afternoon and did a tour of the Clayton County water treatment ponds, led by the Newman Wetland Center director, Danielle Bunch. We saw a few interesting plants, but the highlight of the tour was seeing two bald eagles perched at the top of a tree.

We have much to look forward to in 2019. I hope to see each and every one of you high on a mountain trail, low in a Coastal Plain bog, or puzzling over some mysterious and rare plant somewhere in the wilds of Georgia. Let's make this the best year of botanizing we've ever had.

Hal Massie

Botanical Wonders on One of Georgia's Remotest Ridges

By Jess Riddle

I've asked several botanically inclined people about the high ridge between Eagle Mountain and Hightower Bald, and I usually get an answer along the lines of "I've always wondered about that area, but never been able to explore it as much as I would like." Running mostly east-west through the Southern Nantahala Wilderness in Towns County, the six-mile-long ridge has six named peaks above 4,000 feet elevation and never drops below 3,600 feet. The potential for northern species rarely encountered in Georgia is obvious. Place names like Mayapple Knob, High Cove Ridge, and Sugar Cove further stimulate the imagination. The problem is getting there. A complete lack of maintained trails and a buffer of private land ensure any bushwhacks start at least 1,000 feet below the ridgeline.

The names and topographic lines do not mislead. Sugar maple dominates parts of Sugar Cove, and yellow birch grows in almost every north facing cove. Each finger of the higher coves has a fingernail of boulderfield. Mountain maple, prickly gooseberry, running strawberry bush, and moss mass mats hide the boulders, which include not only the gneiss typical of the Georgia Blue Ridge but also some chunks of dark amphibolite.

The amphibolite enriches the coves with magnesium and calcium and probably accounts for the consistently high fertility and lushness. Cove after cove supports a soaring canopy and dense herbaceous layer. Summer grape and Dutchman's pipe vine clamber high on tuliptrees, yellow buckeyes, white ash, and black

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Left: Sugar maple, tuliptree, and yellow buckeye dominate a rocky section of Sugar Cove. Right: Dutchman's pipe vines dangle off sugar maple and yellow buckeye in Sugar Cove. Photos: Jess Riddle



One of Georgia's Remotest Ridges (cont'd)

cherries. Expected rich cove species are common, including large-flowered bellwort, yellow mandarin, blue cohosh, and rue anemone. Large-flowered and wake-robin are the common trilliums. Yellowwood trees fill the midstory in almost every north-facing cove, and they shade patches of other uncommon to rare species, such as spotted mandarin, Goldie's fern, and squirrel corn. Even some of the coves on the south side of the ridge are floristically impressive. Large-flowered trillium, mayapple, and bloodroot are common over broad areas, and uncommon species include great Indian plantain and green violet.

The south side also contains extensive rock outcrops. The dark, largely vertical outcrops on Hightower Bald reach as high as 4,200 feet elevation. Mountain dwarf-dandelion and Biltmore sedge, both Southern Appalachian endemics, drape off ledges and out of crevices. The more rounded and extensive outcrops on the south side of Eagle Mountain sport islands of red cedar, fringetree, oaks, and shrubby St. John's wort. *Grimmia* dry rock moss paints large patches of open rock a distinctive blue-gray, and fameflower, star tickseed, and mountain mints emerge from crevices and thinner soils. The outcrops also provide some of the finest views in north Georgia, taking in Brasstown Bald, Unicoi Gap, the Kelly Ridge Roadless Area, and most of Towns County.

The main ridgeline itself has a claim to the title "lushest ridge in Georgia" and is, for the most part, an easy walk. Only on a few craggy, thin-soiled sections do mountain laurel or rhododendron crowd the top, and conifers are entirely absent. Instead, waist-high or taller herbs blanket the ridge. A mix of white snakeroot and rather robust Curtis' goldenrod dominates east of Hightower Bald, and acres of uninterrupted jewelweed flood the ridge north of Eagle Mountain. Along the entire length, patches of monkshood recline all over themselves. In more select locations, species normally associated with cove forests, like white basswood, cutleaf toothwort, and ramps, grow on the absolute crest.

Other communities and populations are surprising no matter how much you look at the topography and geology. At over 4,000 feet on Eagle Mountain, hoptree or wafer ash grows in the shade of shagbark hickory. Along Shoal Branch, thickets of buffalo nut, a parasitic shrub, cover entire slopes. A handful of species commonly associated with bogs, including white meadowsweet and tuberous grasspink, grow high in the area, raising the question of whether they exchange pollen and propagules with bogs in the surrounding valleys. These surprising species make you wonder: what else up there is waiting to be discovered?



Wake-robin trilliums dance after a late frost hits Sugar Cove.
Photo: Jess Riddle

Wildflower Pilgrimage

Watch your email or mailbox for the 2019 BotSoc Wildflower Pilgrimage brochure! As a reminder, the Pilgrimage will be held in Clayton, Georgia, from April 12th to 14th. Clayton is located in Rabun County in extreme northeast Georgia and was the site of our 2012 pilgrimage. This year we are having it a little earlier than we did in 2012.

The Pilgrimage hotels with blocked rooms are:

Days Inn by Wyndham Clayton
54 US-441, Clayton, GA 30525
Phone: (706) 782-4258 (use this number, not the one that appears on Google searches)

America's Best Value Inn – Clayton
698 US-441, Clayton, GA 30525
Phone: (706) 782-4702

The number of rooms is limited, so please book now. To get the blocked room rate of \$59.95 plus tax, tell the reservations agent that you are a Georgia Botanical Society member attending the 2019 Spring Wildflower Pilgrimage. Be clear about your room preferences. For Pilgrimage questions or concerns, please contact Bobby Hattaway, BotSoc Vice President, at:

botanikman@g-net.net

BotSoc Holiday Party Photos

Members enjoyed the 2018 BotSoc Holiday Party, held on December 1 at the Newman Wetlands Center.



Welcome New Members

The following new members joined the Botanical Society during October and November. Welcome aboard! We look forward to seeing you on field trips and the Wildflower Pilgrimage.

Malcolm Hodges
Lance & Kathy Jones
Sheri Kennedy

Riverdale GA
Dublin GA
Decatur GA

Eric & Theresa Martin
Tom Redmon

Canton GA
Atlanta GA

Name That Plant

Each month the **NAME THAT PLANT** contest appears on the Georgia Botanical Society's website, courtesy of Richard Ware. A prize is awarded to the first person to get all of the plants correct, as well as the person with the most correct answers for the year. You may use reference books or the Internet to help you identify the plants, and you must submit the scientific names before midnight on the last day of the month.

Below are the plants from the November contest, and the answers are on page 11 of this newsletter. For the current contest, please see http://www.gabotsoc.org/?page_id=289. Good luck!

Plant #1



Habitat: Rich cove forests, other mesic and moderately to very fertile forests. May-Aug.

Range: W MA south to SC and c. GA, west to OH, IN, and MO.

Plant #2



Habitat: Variety of mesic to dry forests, pine savannas, sandhills, meadows. May-Jul.

Range: S. NY, PA, MO, and OK, south to Panhandle FL, MS, and AR.

Plant #3



Habitat: Moist, nutrient-rich forests and woodland borders. May-Jun.

Range: NY and PA west to IN, south to NC, SC, GA, and AL.

Arabia Mountain Field Trip

By Jane Trentin

On a chilly but clear Sunday morning, seven BotSoc members and several guests met at the Visitor Center at Arabia Mountain Nature Preserve to "hike" through part of this 2,250 acre site in DeKalb County. We started with a climb up to the vernal pools on Bradley Peak where we were pleased to see some fall color in the form of newly emerged elf orpine (*Diamorpha smallii*) in solution pits on the mountain. Being careful not to step in these sensitive areas, we climbed upward to investigate the larger "pits" that were full of water from our recent rains. Two granite outcrop endemics were thriving in the bigger ones. Pool sprite (*Gratiola amphiantha*) also known as snorkelwort, had its tiny paired leaves floating on the surface attached by threadlike stems to the thin soil at the bottom of these shallow pools. Black-spored quillwort (*Isoetes melanospora*) was also present in these pools. It looked like tiny clumps of grass growing underwater.

As we headed down the mountain, we were lucky to see some still-blooming Stone Mountain daisy (*Helianthus porteri*). We also spotted a lone bloom near an older, deeper solution pit, which Ron Smith identified as slender false foxglove (*Agalinis tenuifolia*). We saw some Georgia oak (*Quercus georgiana*), which was also on the rock. It was holding onto its smallish leaves and showing some fall color. As we entered the woods to start our hike around the lake, we noted mountain laurel (*Kalmia latifolia*) thriving in the shade at the edge of the open rock. There were nice views of fall leaf color reflected in the lake. Along this stretch we saw our first Georgia savory (*Clinopodium georgianum*) in bloom. We would see more later as we walked along the edge of a meadow. An eye-catching yellow composite, camphorweed (*Heterotheca subaxillaris*) was also seen along the shoreline trail. All along this part of the hike, Elliott Horner pointed out and identified many species of fungi. The most unusual one he showed us had to be knocked down from fairly high in a tree to be examined. It was the rare, unusual and edible lion's mane (*Hericium erinaceus*). He had no takers when he offered to knock more down for anyone who wanted to take some home to cook!

Once past the lake, we walked across lichen and moss covered rock dotted with eastern red cedar (*Juniperus virginiana*) until we came out at an open area where the trail bordered a meadow. Here is where we all



Continued on next page

Exploring the solution pits
Photo: Jane Trentin

Arabia Mountain Field Trip (cont'd)

learned about a new-to-us small tree or shrub, Carolina buckthorn (*Frangula caroliniana*). It was about five feet tall and had shiny, pointed, deep green leaves.

Once back on open rock, we followed cairns to the kiosk at the parking area for AWARE, Atlanta Wild Animal Rescue Effort. Here our group split up, some walking back to their cars at the Visitor Center and the rest walking up North Goddard Road to where the PATH Trail crossed it. All but two of us went back to the Visitor Center from here.



Thank you to everyone who showed interest in the varied and rich habitat of Arabia Mountain Nature Preserve and participated in this BotSoc "hike." Our youngest field trip participant was 3-year-old Zyla, daughter of Genesis Palomino, who was carried on her father's back for much of our hike. Genesis and I had been in Leslie Edwards' Certificate in Native Plants class in Athens earlier this year, and this trip met her field trip requirement for that program. Zyla took a special liking to Karen Lindauer, who showed her some of the cool plants on top of Bradley Peak. Special thanks to Susan Cowan who showed me the route our trip followed and stuck with me to do more exploring after the others left. She is no stranger to granite outcrops, since she is fortunate enough to live on one in nearby Conyers!

Lion's mane mushroom. Photo: Jane Trentin

Canoochee Bogs Work Day



BotSoc members and other dedicated volunteers took part in a work day at Canoochee Bogs on November 11. The bogs are located in southeastern Georgia in the Canoochee River watershed and are home to 3 species of pitcherplants as well as 7 species of orchids. The workers removed dense shrubs on a seepage slope in order to restore pitcherplant bog habitat.

Photo: Lisa Kruse

Canby's Dropwort

Compiled by Jim Drake

We frequently read about some species or another of endangered plant that is on the brink of extinction due to habitat destruction or inappropriate environmental management. However, when we do hear of a success story, it should be repeated and exemplified. One such example involves Canby's dropwort [*Oxypolis canbyi* (Coulter & Rose) Fernald]. As an update note, the current species nomenclature is *Tiedemannia canbyi* [(J.M. Coulter & Rose) Feist & S.R. Downie] and resides in the carrot family, Apiaceae/Umbelliferae (Weakley, 2015).

Canby's dropwort is a perennial herb which produces colonies by long underground stems referred to as rhizomes. The stems, which are up to 5 feet tall, are green upper and purple below with branching near the top. Alternate leaves are 8-12 inches long, round in cross-section, tapering to a point. Flowers are in flat-topped clusters containing several smaller flat-topped clusters. The flowers are made up of very small white petals. Flowering is typically June-August and occasionally later (Chafin 2007). For comparative purposes, the flowers of Canby's dropwort resemble those of Queen Anne's lace. However, unlike the fern-like leaves of Queen Anne's lace, Canby's dropwort's leaves are reduced essentially to the midribs and are quill-shaped (Kruse 2018). Habitat includes wetlands with fluctuating water levels, cypress ponds, sloughs and wet savannas. The range is limited habitats in the Coastal Plain of GA, SC, NC, MD and DE. For Georgia, the species is listed as endangered both State and Federally (Chafin 2007).

In Georgia, Canby's dropwort is currently known to exist in 19 populations. Of these, only 6 are in excellent condition. Because these 6 populations, with proper management, have a possibility of long-term existence in the wild, restoration efforts have given priority to these sites (Kruse 2018). Protecting this endangered species and the wetland habitat within which it grows has required a comprehensive approach. Landowners and governmental agencies are teaming up to conserve the rare wetlands where this rare species grows in southwest Georgia (GA DNR 2017). Several grants from various sources have been obtained for the purpose of conserving the wetlands.

The Georgia Wildlife Conservation Section (WCS) Wildlife Resources Division (WRD) uses a variety of federal and private conservation funding sources and works with landowners in conservation efforts. For example, WCS/WRD receives support from the U.S. Fish and Wildlife Service (US FWS). The US FWS has funded a 35-acre cypress savanna restoration at Big Dukes Pond WMA and protection of a privately-owned 35-acre wetland in Dooly County. Working with landowners is also an important aspect in the species' conservation (Kruse 2018). Further, the U.S. Department of Agriculture last year awarded \$1.19 million to restore and protect 850 acres of cypress wetlands along with their Canby's dropwort population in Lee County (GA DNR 2017).

Continued on next page



Photo by Linda May

Lisa Kruse with FWS award.
Photo: Linda May

Canby's Dropwort (cont'd)

Lisa Kruse, a botanist with the Georgia WCS WRD and a perennial friend of the Georgia Botanical Society, has been given the lead by her agency for conservation efforts for Canby's dropwort. This involves working with a number of partners in coordinating funding and monitoring progress in protecting Canby's dropwort and its wetland habitats. In addition to her dedicated work with the WCS WRD, Lisa often finds time to lead interesting field trips for the Botanical Society. During the 12th Annual GPCA Symposium, held October 18-19 2018 at George L. Smith State Park, Lisa was recognized by the U.S. Fish and Wildlife Service as their "2017 Regional Recovery Champion for her significant contributions to the recovery of Canby's dropwort."

Lisa credits the work of a multitude of individuals in making this a success story. Her dedication and appreciation are reflected in her own words: "I am especially amazed at how much can be accomplished by people working together, moving forward with faith in success a little bit at a time, never giving up. I am so thankful for everyone's support and assistance in this work."

For her many contributions, the Georgia Botanical Society is very proud of Lisa, and we look forward to her continued association with the Society.



Photo by Bobby Hattaway

Canby's dropwort. Photo: Bobby Hattaway

References

Chafin, L. G. 2007. Field guide to the rare plants of Georgia. Pp. 245-246. State Botanical Garden of Georgia.

Georgia Department of Natural Resources (GA DNR). Wildlife Resources Division. (2017, December 7). *New Partnership Protecting Lee County Wetlands, Endangered Plant*. [Press Release]. Retrieved from: https://georgiawildlife.com/new-partnership-protecting-lee-county-wetlands-endangered-plant?utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term=

Kruse, L. 2018. Personal Communication.

Weakley, A.S. 2015. Flora of the southern and mid-Atlantic States working draft of 21 May 2015. University of North Carolina Herbarium (NCU) North Carolina Botanical Garden, University of North Carolina at Chapel Hill. Assessed online December 3, 2018: http://herbarium.unc.edu/FloraArchives/WeakleyFlora_2015-05-29.pdf

Upcoming Field Trips



Our heartfelt thanks to Elliott Horner, who has agreed to take on the position of Field Trip Chair!

Elliott is currently working on the 2019 field trip schedule. If you have led a walk in the past or have an idea for a walk, please reach out to him (678-249-8856) about your willingness to lead a walk. With your help, we can make this a great year for field trips.

Name That Plant Answers

Here are the names of the plants pictured on page 6 of this issue. These plants were featured in the November 2018 online edition of "Name That Plant." Please see the BotSoc website for the current month's contest.

Actaea racemosa
(Black cohosh)



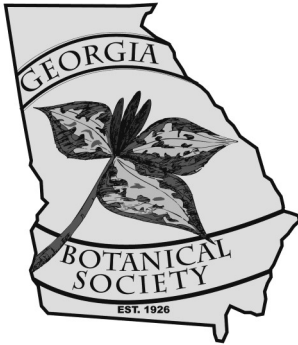
Amianthium
muscitoxicum
(Fly-poison)



Aruncus dioicus
(Goat's-beard)



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