

BotSoc News



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Georgia Botanical Society

Annual Holiday Party - Field Trip Report

By Steve and Rona Cook

*IN THIS
ISSUE:*

*Field Trip
Reports - P4*

*The Native
Garden - P8*

*Society News
- P10*

*Upcoming
Field Trips -
P11*

'Twas the 5th of December at ol' Sandy Creek
The place was alive with botany geeks
The hall was a-buzz with tales of neat plants,
And hungry Bot-Soccers wearing loose buffet pants.
Twixt the salmon, the pies, the rich deviled eggs,
We all said "good-bye" to our friend Jenny Craig.
All the tables festooned with green and with red,
By the time it was noon, we were more than well-fed.
While Rich and Anita auctioned off books,
We prepared for a hike with Dr. Walt Cook
'ere the hikers convened and plotted their courses,
We bade fond farewell to our good friends, the Nurses.
On the Cook trail we ambled to the ends of the park,
Then hustled on back, since the gates close at dark.
We charged out of the woods like a herd of rhinoceros
5 miles in 3 hours? It didn't seem posserous.
I saw puzzled looks on everyone's face,
"Should have taken all day at proper Bot-Soccer pace"
As we strode to the lot, where the crowds had once been,
We heard Maureen shout, "Merry Christmas, Bot-Soccers, see you all in '16!"



Don't forget to renew your membership - we really do want to see you again in 2016! If you are not sure if you've already paid, email us at members@gabotsoc.org. Paper newsletter recipients can check their mailing label. **An online renewal option with PayPal is now on the website!**

President's Perspective



BotSoc News

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We had a wonderful holiday party at the Sandy Creek Nature Center in Athens on December 5th. It included a fantastic lunch provided by all of us, a first look at the 2016 Field Trip Schedule that Bobby Hattaway assembled, a preview of the lovely 2016 Pilgrimage T-shirt that Jenneke Somerville designed, an after lunch walk led by Walt Cook, the opportunity to exchange native plant seeds, and a silent auction of 150 books from the library of Wilbur and Marion Duncan. Their collection was donated to the Georgia Botanical Society by Julie and Mac Duncan.

BotSocers bid enthusiastically on these books and, at the end of the day, we had collected over \$1,300. The Board had already voted to donate money from the auction for the conservation easements to protect the Manassas bogs. After all, as I mentioned in the November newsletter, 2016 is The Year of the Bog.

At our planning session in Macon, the Board of Directors approved fund-raising and service and educational activities in support of land conservation as the specific focus for 2016. We decided to amend membership materials to add "habitat conservation" as a donation category. These decisions came as the result of a conversation with DNR plant biologist Lisa Kruse, who is working on preserving these bogs that belong to small private landowners.

Landowners can get a tax break for agreeing to save property from future development. However there are costs the landowner will incur when putting land into an easement. These costs include survey costs and costs incurred by the land trust managing the easement as well as others. The costs associated with the conservation easements for the Manassas bogs is well over \$100,000. However DNR will work on preserving them bog by bog as funds become available.

When the Georgia Plant Conservation Alliance (GPCA) asked its members "If you could save only one rare plant location in Georgia, which would it be?" the answer was, "the Manassas Bogs."

DNR has asked BotSoc and other organizations for our support in their quest to preserve these lands. They are also pursuing grants and other sources of funds. In exchange for our support, DNR has agreed to provide us with field trips and educational opportunities to bog sites. We already have a few of these trips scheduled in 2016.

If you haven't been to south Georgia on a field trip or a pilgrimage, 2016 is a great year to try one. There are a few weekend opportunities, two day getaways with a "boggy" focus, so join us for one of them. We will have a short session on conservation easements at the pilgrimage in Valdosta, April 15-17, 2016.

Please renew your membership if you haven't already. I'm also asking you to make a donation to the Marie Mellinger Research Fund or the new Habitat Conservation Fund if possible. These donations go to encourage budding scientists in their research efforts and to support land conservation which in turn promotes healthy natural ecosystems.

I want to thank all of you for your support in 2015. We have had a very successful year. Our membership numbers are up. We have decided to become actively involved in habitat conservation. Meetings in 2015 were very well attended. We initiated a very successful scholarship program to enable college students to attend our annual pilgrimage and we will continue it. We recruited new biological technicians from DNR to lead a few field trips for us. We have just produced another exciting issue of our journal, *Tipularia*, which was mailed to you recently. Thank you Richard and Teresa Ware for another excellent edition.

I wish you all continuing success and a Happy New Year.

Maureen Donohue

Society News

2016 Spring Wildflower Pilgrimage

Valdosta will be the headquarters for the 47th Spring Wildflower Pilgrimage, Friday April 15 through Sunday, April 17th. Located in the lower Coastal Plains in south central Georgia, Valdosta has easy access to several interesting bogs, varied wetlands, and Carolina bays, as well as well-drained upland sites and xeric sandhills.

This year we will be celebrating the splendor of bogs that are a special habitat in the lower coastal plains. We selected mid-April so we can see pitcher plants in bloom. However, field trips will include a rich diversity of habitats. Jason Scott will lead the pre-Pilgrimage trip on Thursday afternoon to a limestone sinkhole in Climax, where we should be able to see interesting liverworts and relict plants before seeing bats emerging from the caves.

Some of the field trips will be to familiar places – Doerun bog, Grand Bay, and Reed Bingham State Park. Other trips may not be as well known – Lake Louise, Dudley Hammock, Lost Creek, and Quail Ridge plantation. Other sites will be entirely new sites for BotSoc field trips. Because of distances from Valdosta, some field trips will combine visits to several sites in close proximity. Some field trips on Friday and Sunday will include sites further north that you can include in your drive to and from Valdosta -- ABAC's Turner County bog, the Nature Conservancy's tract at Broxton Rocks, and DNR's Lentile tract.

During the **Friday evening social event** at the Bailey Science Center, Valdosta State University, Richard Carter will conduct tours of VSU's herbarium to highlight the importance of herbaria in promoting understanding of floristic and taxonomic botany. In addition, Lisa Kruse will give a brief update on efforts to conserve Manassas bog. Authors are encouraged to bring books for display and signing.

The **Saturday evening banquet** will be held at the University Center, Valdosta State University. The speaker has not been finalized, but we hope to focus on the theme of the **Year of the Bog**.

Block bookings have been made with Quality Inn, which is located next to the Mall close to Exit 18 on highway I-75, with convenient access to Valdosta State University where social functions will be held. Several other hotels are located at this exit and also at Exit 16. Call Quality Inn directly and give them the name of the block which is **GA Botanical Pilgrimage. Quality Inn - 65 rooms @\$68 per night** – 229-244-8800 or 229-242-6602.

Come join the Georgia Botanical Society as we explore the botanical wonders of diverse habitats in the lower Coastal Plains during our 2016 Spring Wildflower Pilgrimage! Be prepared for wet sites and bring waterproof boots.



Sarracenia minor and *Pinguicula caerulea*.
From the collection of the Natural History
Museum, London.

Hinds Road Outcrop/Little River Canyon Field Trip

By Julie Duncan

On a beautiful, almost fall day, nineteen BotSocers ventured out onto the grey and brown sandstone outcrop along Hinds Road, near Gadsden, Alabama. On this very uneven rock surface islands of moss grew lush with bright yellow Nuttall's rayless goldenrod (*Bigelowia nuttallii*), longleaf sunflower (*Helianthus longifolius*), pinweed (*Hypericum gentianoides*), small-head blazing-star (*Liatris microcephala*), glade rushfoil (*Croton willdenowii*), with occasional dayglow orange leaves and the pale blue flowers of poorjoe (*Diodia teres*). We wandered from plant island to plant island, some also with common blue curls (*Trichostema dichotomum*) and common dayflower (*Commelina communis*).



Small-head blazing-star (*Liatris microcephala*)
Photo by Richard and Teresa Ware



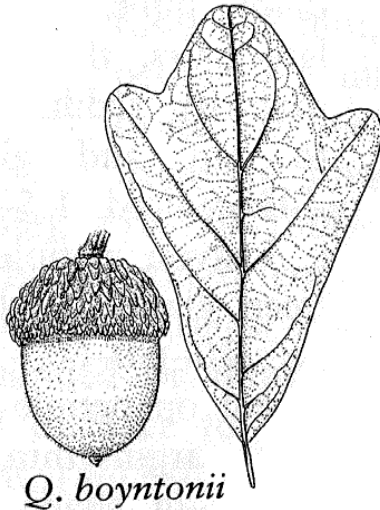
Nuttall's rayless goldenrod (*Bigelowia nuttallii*)
Photo by Richard and Teresa Ware

The rare Harper's dodder (*Cuscuta harperi*) grew in tangles of orange around the stems of the blazing-star, and the pinweed. Other island plants were Eastern prickly pear (*Opuntia humifusa*), crossvine (*Bignonia capreolata*), yellow jasmine (*Gelsemium sempervirens*) and reindeer moss (*Cladonia rangiferina*). The occasional small sparkleberry (*Vaccinium arboreum*) or fringe-tree (*Chionanthus virginicus*) grew in islands where water and soil were a little more available.

Teresa Ware brought our attention to the flatrock pimpinell (*Lindernia monticola*) which she had seen blooming in the spring. We found a plant showing both withered spring flower stalks and tiny, pale purple fall flowers held above a small rosette of rounded leaves.

Continued on next page

Hinds Road Outcrop (cont'd)



Q. boyntonii

Around the margins of the outcrop, Virginia pine (*Pinus virginiana*) grew in a bi-level form, the lower almost prostrate limbs were lush green while the upper branches were a sparse grey green. The rare Boynton oak (*Quercus boyntonii*) also exhibited this bi-level branching habit and had many leaf forms depending on what branch the leaves were on.

Evidence of the severity of this summer's drought could be seen in barren patches in the moss, the Boynton oak bearing both spring catkins and fall acorns, and a black gum (*Nyssa sylvatica*) with both spring male flowers and fall color.

The sandstone providing habitat for this unique flora is in the Pottsville Formation and was originally sand in a delta laid down by streams fanning out to form the delta as part of a "distributary system," sort of the reverse of a tributary system. This delta covered a very large area and was formed during the Pennsylvanian Period (360-300my).

Although we didn't find them at this location, marine and land fossils are found in the sandstone. Fossils of tree-size members of the horsetails (Equisetales order), Calamites, and quillworts (Isoetopsida class), *Lepidodendron*, are found in this rock in the Little River Canyon National Preserve.

We then carpoled to Ft. Payne and up Lookout Mountain and had our lunches at the picnic tables above the huge waterfalls on Little River. Below these falls the river forms the deep gorge which is Little River Canyon.



Lookout Mountain coreopsis (*Coreopsis pulchra*)
Photo by Richard and Teresa Ware



Little River Canyon Falls (Picture courtesy of Trip Advisor)

Hinds Road Outcrop (cont'd)

Our next stop was Lynn Overlook in Little River Canyon NP where we found Lookout Mountain coreopsis (*Coreopsis pulchra*) and had our first look at Menges' fameflower or rock pink (*Phemeranthus mengesii*) which at around 1:30 pm (Eastern Time) had not yet opened its bright pink flowers. While waiting for the fameflower's opening, we explored the flora of the sandstone rock outcrop and under the powerline, finding ladies'-tresses (*Spiranthes lacera* var. *gracilis*), perfoliate boneset (*Eupatorium perfoliatum*), goldenrods (*Solidago nemoralis* and *S. canadensis*), tiny flowered Nuttall's lobelia (*Lobelia nuttallii*) with two chartreuse nectar guides on the lower petals, downy lobelia (*Lobelia puberula*), Appalachian milkwort (*Polygala curtissii*), pencil flower (*Stylosanthes biflora*), fireweed (*Erechtites hieraciifolius*) and grease grass (*Tridens flavus*) which turned fields grayish purple on our drive between stops.

On our way back to the fameflower, we saw our first bees and butterflies on black senna (*Seymeria cassioides*), a hemiparasite on pine roots. Black senna buds are orange but open as yellow flowers which are attractive to bees; the plant was buzzing. A tattered buckeye butterfly and buckeye caterpillars with their branched spines were munching on the finely dissected foliage. Back on the outcrop, a few plants that we had seen at Hinds Road were also blooming here including longleaf sunflower (*Helianthus longifolius*), Nuttall's rayless goldenrod (*Bigelovia nuttallii*) and small-head blazing star (*Liatris microcephala*).



The fameflower now had a few flowers open at about 2:30 pm (Eastern Time). Counting of stamens began, the consensus seemed to be >50, but easier to see was the long style held well above the level of the anthers, confirming it to be Menges' rock pink.

All were thankful to our leaders for making our viewing of this brilliant flora possible, not to mention the much appreciated plant lists.

Menges' fameflower or rock pink (*Phemeranthus mengesii*)

Photo by Richard and Teresa Ware

Woodland Spider Lilies - Field Trip Report

By Kathy Stege

I agreed to lead my first BotSoc trip because others have been so generous to show me wonderful places, Hugh and Carol Nourse said the lilies I stumbled upon last year were too breath-taking not to share, and I didn't think many would attend an August trip in mid-Georgia. Plus, Hugh said that if I handled the logistics, he'd handle the botanizing.

The blooming butterfly pea (*Centrosema virginianum*) vines along the access road and parking area were the most anyone attending had ever seen. Once people were resigned to leaving the peas, the recent bike trail construction made for a short easy walk to the creek. We found an enormous azalea (*Rhododendron* sp.), St John's wort (*Hypericum* sp.), two kinds of spurge next to each other, river oats and wood oats (*Chasmanthium*), sparkleberry (*Vaccinium arboreum*), and (ta da!) about 30 clumps of *Hymenocallis caroliniana*, with 10-40 plants each.

The riparian area was logged once long ago, though not extensively, and never farmed. We didn't see invasive plants along the ½ mile lily stretch. It was a step back in time to what much of middle Georgia river corridors looked like. As we came into a more disturbed area, we indulged in a 10 minute *Microstegium* pulling frenzy; the trail maintainer contacted me the next day with thanks.

There were 19 present, including a couple from Chattanooga. Hugh was ill, but he asked Linda Chafin to fill in on short notice; she came through gloriously. There was a breeze, and the heat held off. The lilies were blooming, the creek was cool and gurgling, and even the yellow jackets stayed away. I'm still savoring the event... and enduring the chiggers.



Left: *Centrosema virginianum*, Right: *Hymenocallis caroliniana* (Photos by Rosemary Woodel)

Christmas Fern

An occasional series on using native plants in the home landscape.

By Ellen Honeycutt

Polystichum acrostichoides (Michx.) Schott

One of the first native plants that I learned about in Georgia was the Christmas fern (*Polystichum acrostichoides*). I was new to Georgia and our first home in the Piedmont contained a half acre of sloped woodland in the back. The Christmas ferns were scattered throughout that woodland, mixed with several species of oak (*Quercus*), American beech (*Fagus grandifolia*), native azaleas (*Rhododendron*) and black cohosh (*Actaea racemosa* var. *racemosa*) - the black cohosh was so common that I was sure it was a weed. I grew to appreciate the evergreen presence of the ferns as well as their help in holding the slope in place.

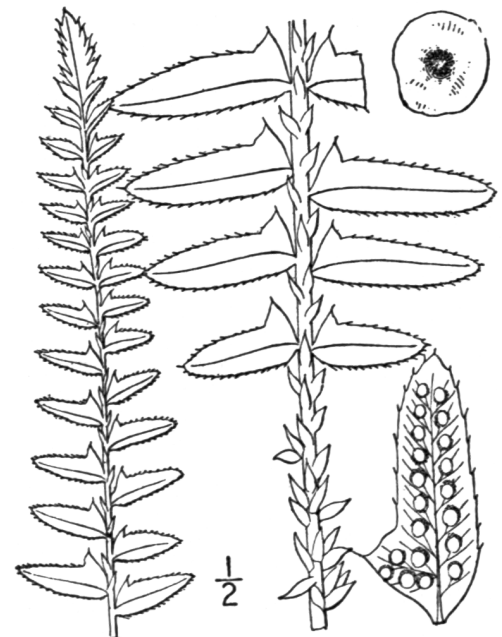
Common Name: Christmas fern

Synonyms: *Polystichum acrostichoides* (Michx.) Schott var. *acrostichoides*

Taxonomy: A member of the wood fern family (Dryopteridaceae), Christmas fern was first named *Nephrodium acrostichoides* by Andre Michaux in 1803. The epithet, which continues today, means "like Acrostichum," which is another genus of ferns known as 'leatherfern.' According to Snyder and Bruce, it was transferred in 1834 by Schott to the genus *Polystichum* which means "many rows," a reference to the sori which are visible on the back of the frond on the upper pinnae. Christmas fern shares the Dryopteridaceae family with many other familiar native Georgia genera such as lady fern (*Athyrium*), wood fern (*Dryopteris*), glade fern (*Diplazium*), sensitive fern (*Onoclea*), cliff fern (*Woodsia*) and others.

Habit: Christmas fern is a medium to large-sized, clumping fern that reaches 2 feet tall and 2 feet wide. The fronds are 12 to 24 inches long. In Georgia, it is evergreen throughout the winter although the fronds may be eaten or flattened by deer before spring. It grows in part to full shade in dry to medium conditions. Its rhizomatous roots help control erosion. Not a running fern, the clumps gradually increase in size; new plants are propagated primarily by spores, especially in areas with a moist ground layer such as light moss.

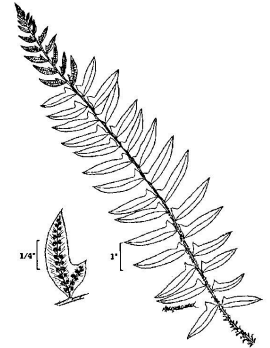
Its evergreen habit and thick, green fronds make this a handsome addition to woodland areas. Add to that its tolerance of drier conditions and relative pest-free nature (rabbits and deer tend not to bother it except in extreme conditions) and Christmas fern makes for a good choice when adding native plants to your shade garden. The large, silvery, scaled fiddleheads are a beautiful sight in spring.



Continued on next page

The Native Garden

Characteristics: The stout rootstock increases in size but does not run. The blade of the fern is up to 24 inches long and 3-4 inches wide; it is lanceolate, widest above the base. It is pinnate (divided once) with oblong-lanceolate pinnae. Margins of the pinnae are bristle-toothed. The fertile pinnae (those which bear the sori) are only on the upper 1/3 of the fertile fronds. The round-shaped sori, which contain the spores for reproduction, are found on the backside of the pinna and are usually in rows on each side of the midrib.



Habitat and Distribution: This fern is found in moist woods, shaded slopes and ravines and is tolerant of a range of soil conditions, dry to moist. It is found throughout Georgia, especially north Georgia, and throughout the Eastern U.S.

Natural History: The common name of Christmas fern is a reference to being used for Christmas decorations (although some say it is a reference to the shape of the pinna resembling that of a Christmas stocking). It was likely quite abundant in woodlands and woodland edges when settlers arrived. It is easy to transplant, and its leathery fronds would have made it a handsome addition to early settlements and welcome green foliage in the winter.

Although it was used medicinally by Native Americans, it appears to have little use in modern herbalism.



References: Field Guide to the Ferns and Other Pteridophytes of Georgia, Lloyd H. Snyder, Jr. and James G. Bruce, 1986, University of Georgia Press.

<http://www.pfaf.org/user/Plant.aspx?LatinName=Polystichum+acrostichoides>

Line drawings: Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. 3 vols. Charles Scribner's Sons, New York. Vol. 1: 16.

Society News

Pilgrimage Scholarship Program named for Hugh and Carol Nourse

President Maureen Donohue announced at the holiday party that the Board had voted to name the pilgrimage's student scholarship program "The Hugh and Carol Nourse Pilgrimage Scholarship Program." This honor recognizes the Nourses' many years of service and commitment to the Georgia Botanical Society.

Their leadership in the Society includes Hugh's time as President and Carol's role as Treasurer as well as many other positions they have held and continue to have today. They also helped to establish the annual T-shirt sale that funds the Marie Mellinger Research Grant program. They have led many field trips over the years, teaching countless participants both about plants and photography. Books that they have written and contributed photographs for have significantly contributed to the appreciation of Georgia's botanical treasures.



Left: Carol and Hugh Nourse at the Holiday party on December 5th. Right: A festive platter of cookies created by Joanne Romfh.



Left: Boccers browse the silent auction of books from the Wilbur and Marion Duncan collection. The silent auction raised over \$1300 which will be used to support the Manassas Bogs conservation easements. Right: *Viburnum dentatum* outside the nature center was very festive.

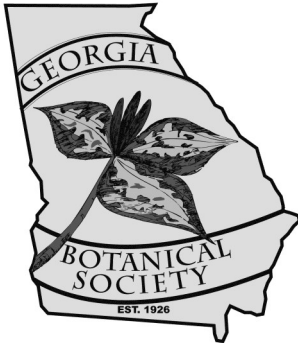
Upcoming Field Trips

<p>Jan 16 10:00 AM</p>	<p>Winter Woody Walk</p> <p>A casual stroll among deciduous hardwood trees and shrubs will give us plenty of opportunity to practice our woody plant identification using bark, old leaves and bare twigs.</p> <p>Big Trees Forest Preserve in Sandy Springs.</p>	<p>Directions: Meet in the parking lot at 7645 Roswell Rd, Sandy Springs, GA 30350</p> <p>Facilities: Yes.</p> <p>Walking: Easy, wear sturdy shoes.</p> <p>Bring: Water, snacks, camera, notebook.</p>	<p>Ellen Honeycutt ehoneycutt@bellsouth.net 678-576-5667 (c)</p>
<p>Jan 23 10:00 AM</p>	<p>January Winter Program and Potluck</p> <p>After several months of traveling to New Zealand and Australia, Susan Caster has returned to metro Atlanta. She worked on an organic farm in New Zealand where she helped pick 35 tons of the farm's cash crop, a delicious fruit named <i>feijoa</i> that is native to Brazil. During her New Zealand travels, she met some maori people, the indigenous people of New Zealand. They were conducting a survey of the kiwi bird in which Susan participated.</p> <p>Next she headed to Australia and worked for a month on a horse farm that trained carriage horses. She then worked for another month on a goat farm where she learned to make cheese from an excellent cheese maker. She also hiked the yuraygir trail, a coastal walk in Australia.</p>	<p>Come share Susan's fabulous pictures and adventures at the home of Jim and Candee Drake. Please <u>bring a pot luck dish to share</u> for lunch with fellow Botsoccers.</p> <p>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 0.9mi to turn left onto Smithtown Rd. Then 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 on Hickory Brach Trail (again). 3800 is down the hill.</p>	<p>Jim Drake drake3800@charter.net 678 482-2127 - home 678-793-2127- cell</p>
<p>Feb 13 1:00 PM</p> <p>Note: Later start time</p>	<p>Wolf Creek Preserve</p> <p>The Wolf Creek Tract is a 140-acre preserve owned by Grady County, managed by local conservation organizations, and recognized as the greatest expanse – about 8 acres – of trout lilies (<i>Erythronium umbilicatum</i>) in the world. Mixed in with the trout lilies are spotted trillium and three orchid species, Southern twayblade (<i>Listera australis</i>), Wister's coralroot (<i>Corallorhiza wisteriana</i>), and crane fly orchid (<i>Tipularia discolor</i>). (Depending on our winter, the first two orchids may not have emerged.) These along with other early spring wildflowers and the surrounding rich mesic forest will make this northeast-facing seep seem like a botanical wonderland.</p>	<p>Directions: Use any map program and navigate to the Wal-Mart parking lot on US Hwy 84 in Cairo, Ga. My preferred route from the north is I-75 south of Cordele, then take GA 300 through Albany to south of Pelham (Meigs). Turn right (SW) onto GA Hwy 111 and proceed to Cairo. At the intersection with US Hwy84, turn left (SE) and go for about 2 blocks – Wal-Mart will be on your left. We will caravan from the parking lot to the site.</p> <p>Facilities: None</p> <p>Difficulty: The site will be damp with maybe standing water in a few places so bring appropriate foot ware. Walking is easy.</p> <p>Bring: Water, snacks, camera, hand lens, a hiking stick, and rain gear.</p>	<p>Beth Grant Ed McDowell bethgrant@bellsouth.net ed.mcdowell@cox.net 478-396-8901 (c)</p>

If you haven't been on a BotSoc field trip recently, please join us in 2016. We always have a lot of fun and everyone learns something - even the leaders! Email or call the trip leader in advance if you have any questions about what it might be like. Hope to see you soon!



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