



SIERRA CLUB
GEORGIA CHAPTER

Savannah River Group

Dear friend,

Greetings from your friends at the Savannah River Group! Our March newsletter includes information about upcoming meetings and events, including several outings, our stream monitoring program and more. We hope to see you at one of our gatherings soon!

Upcoming meetings

The Savannah River Group is glad to offer our members and supporters the option to attend our hybrid meetings either in person or virtually via Zoom. Both in-person and virtual attendees are encouraged to RSVP using the links below to help us plan our meetings. For those attending in-person, we meet at the Unitarian Universalist Church at 3501 Walton Way Extension, Augusta. For those attending virtually, you will receive a Zoom link via email after you RSVP using the links below.

[Tuesday, March 19, 6:30 PM](#): Join us to learn about restoring native environments and habitats from John Patten “JP” Moss. JP is an Augusta native and active conservationist in the area who currently works as a wildlife biologist with the Fort Eisenhower Natural Resources Branch. When not at work, you can find him volunteering with the restoration of Pendleton King Park or off chasing birds around the state.

[RSVP for our March 19 meeting](#)

[Tuesday, April 16, 6:30 PM](#): Our guest speaker this month will be a member of the Bath Gardens Foundation. Bath Gardens, a private estate for decades, has blossomed into a public place just 20 minutes from downtown. Home to historic springs, learn how this tangled jungle was transformed into beautiful gardens now open to the public.

[RSVP for our April 16 meeting](#)

The Savannah River Group holds six Executive Committee (ExCom) meetings each year, always on the fourth Monday of the month. ExCom meetings for 2024 are scheduled for February 26, April 22, June 24, August 26, October 28, and December 30, all starting at 6:30 PM. Any Sierra Club members are welcome to join. For more information, contact Cathy Black at sonnyandcathyblack@gmail.com.

Upcoming Outings & Events

Dog Walk (with or without a dog) along the Augusta Canal- Saturday, March 3, 1:30 PM: (3 miles, 2 mph, easy/paved) We will follow this in-and-out paved trail across the Canal, under Riverwatch Parkway, and traverse two foot bridges parallel to the Savannah River before we turn back. Meet at the Lake Olmstead Trailhead near the Augusta Canal located at the bathrooms at the intersection of Lake Shore Loop and the end of Milledge Road next to the Augusta Canal. Bring water for you and your dog and poop bags for the dog. Hat if desired. Dogs and their owners must be healthy enough to walk three miles. [Learn more and RSVP at the link.](#)

Kayaking at Betty's Branch - Sunday, March 10, 1 PM: (7 miles, moderate) Paddling is back! We will leave Betty's Branch and go upstream on the Little River to the Savannah River. Then paddle downstream on the Savannah River to the mouth of the Little River and complete the loop around German Island to Betty's Branch. The Spring weather should be excellent. Total 7 miles. Experienced paddlers only please. Whistle and life jackets are required to be worn at all times. Also bring a hat, suntan lotion, and plenty of water. Limit 8. Contact Outings Leader Cathy Black with questions at sonnyandcathyblack@gmail.com. [Learn more and RSVP at this link.](#)

Savannah River Shores Urban Hike - Saturday, March 30, 10 AM: (3-4 miles, 2 mph, easy) Join us for a beautiful spring hike as we rediscover urban Augusta and North Augusta around the Savannah River. In North Augusta, we will include Brick Pond Park, the Green Jackets baseball stadium, Hammonds Ferry, the Savannah River shoreline, and part of the North Augusta Greenway. We will hike down to Freedom Bridge and cross over the Savannah River to downtown Augusta. Various venues will be pointed out in downtown Augusta as we make our way back to the 13th Street Bridge completing the loop to the trailhead in North Augusta. The trailhead will be the open parking lot on Center Street below the Municipal Building, the lots closest to the River (see map when registering). Wear hiking shoes and bring water and snacks. Limit 12. Contact Outings Leader Richard Dillenbeck with questions at rvdillenbeck@knology.net. [Learn more and RSVP at this link.](#)

Rock Dam Trail - Saturday, April 6, 10 AM: Beautiful Rock Dam Trail in Mistletoe State Park makes you feel like you are in the rolling foothills. We will do a spring hike through pine uplands and hardwood bottoms and make four stream crossings. There is a \$5 parking fee, but state park passes are available at your local library for free. Bring lots of water, good hiking shoes/boots, and lunch. Limit 12. Contact Outings Leader Richard Dillenbeck with questions at rvdillenbeck@knology.net. [Learn more and RSVP at this link.](#)

Bath Gardens Tour - Friday, April 26, 10:30-11:30 AM: Twenty minutes from Augusta is a beautiful garden built in the 1960s. What was once a tangled forest is now a piece of heaven open to the public. We will carpool from the Unitarian Universalist Church (3501 Walton Way Ext., Augusta) at 10 AM or meet at Bath Gardens (3855 Bath Edie Road, Bythe, GA) at 10:30 AM for a guided tour of the gardens. [Learn more and RSVP at this link.](#)

Congaree National Park Hike - Saturday, April 27, 8:45 AM - 5 PM: (7 miles, 2 mph) We will carpool at 9 AM from the Unitarian Church (3501 Walton Way Ext.,

Augusta) to Congaree National Park and hike the largest area of old growth hardwood forest and the most champion trees in the eastern U.S. We will hike the Oakridge Trail following portions of an interpretive boardwalk, then traverse the largest contiguous river-bottom land east of the Mississippi and view some of the largest trees you may have ever seen. Bring your lunch, water, bug spray, and hiking boots for a fascinating, all-day outdoor experience. Limit 12. Contact Outings Leader Richard Dillenbeck with questions at rvdillenbeck@knology.net. [Learn more and RSVP at this link.](#)

Earth Day Celebration - Saturday, April 27, 10 AM - 3 PM: Celebrate Earth Day with the Savannah River Group and join us at our booth at Phinizy Swamp Nature Park (1858 Lock and Dam Rd, Augusta). We invite you to stop by and say hello, or, better yet, volunteer to help us share information about the Sierra Club, our local Savannah River Group and its activities, and encourage folks to get outdoors. For information and to help at the booth, contact Linda McBurney at 706-631-1489 or msmcb@outlook.com.

Okefenokee Update

The [Georgia Environmental Protection Division \(EPD\) has issued draft groundwater withdrawal, air quality, and surface mining permits](#) to Alabama-based Twin Pines Minerals, LLC, to mine on Trail Ridge next to the Okefenokee Swamp. The permits are currently open for comments from the public, but the public comment period ends on April 9. Twin Pines intends to mine for minerals containing titanium and zircon by digging about 50 feet deep just four to five miles from the southeast border of the Okefenokee Wildlife Refuge.

Twin Pines is calling this project a “demonstration mine” to attempt to prove to the Georgia EPD that mining will not damage the swamp. They have also indicated that mining at this site will likely be finished in four years with reconstruction taking another year. Our fear is that the mining will disrupt the hydrology of Trail Ridge, which provides the eastern containment of the swamp. But hydrological problems can take years to show up. And, if they are allowed to continue to mine on Trail Ridge moving north, the mines will get closer to the swamp and likely be more hydrologically disruptive. This poses a threat to the millions of tons of peat in the swamp collected over hundreds of thousands of years.

Indeed, the Okefenokee is one of the world’s largest carbon sinks and, as such, is important in slowing climate change. Changing the hydrology of the swamp can expose that carbon sink to more frequent wildfires damaging the carbon storage capacity of the swamp.

We encourage comments from our members on the Draft Mining Permits for Twin Pines.

[Send in your comment using the form linked here.](#) Be sure to add a personal message about how important the Okefenokee Swamp is to you.

Conservation Update

Comparison of E. coli levels in streams in the CSRA

Over the past 13 years, we have monitored nine stream sites in the Central Savannah River Area (CSRA). The E. coli data for seven of those sites are presented in the table below in the order of most monitoring events (144) to fewest monitoring events (60). Two sites are missing (Upper Euchee and Kiokee) because data for those sites were not available on the Adopt-a-Stream website.

Escherichia coli (E. coli) is a bacterium that is normally present at low counts (<100 cfu/100 mL) in our streams (cfu = colony forming units; cfu/100 mL is standard unit of presentation for bacteria concentrations). But all of the average concentrations in the table are above that standard, indicating occasional spikes in the E. coli populations during the monitorings. The lower the average, the fewer or lower the spikes. So the conclusion to draw is that there are spikes in the population of E. coli at all of our sites, even those with the lowest averages (120 at Reed Creek Dowling and 131 at Butler Creek).

There may be reasons that the number or intensity of the spikes at those sites are lower. The Reed Creek Dowling site is immediately below Spring Lake. The effect of the lake on E. coli populations is to dilute them because in the quieter waters of the lake the E. coli settles to the bottom. In Butler Creek there is likely a different cause. The sewage treatment plant at Grovetown was ordered by EPD to pump its effluent into Butler Creek instead of releasing it to Euchee Creek. Since it is treated water, it not only has lower populations of E. coli (dilution effect), but it likely has residual chlorine that would be toxic to E. coli.

The site on Rae's Creek has the highest average E. coli population, indicating repeated and/or intense spikes in E. coli contamination. Indeed, our team identified two such spikes that we reported to the county. Rae's Creek has suffered from relatively frequent and sometimes intense spikes from sewage leaks into the stream.

While the average E. coli concentrations in the streams allow us to make some conclusions, the standard deviations of the numbers derived from our monitorings are also sources of information. Note that only one of the standard deviations is smaller than its paired average. That means that the variation in the numbers is extreme, i.e. the spikes are high relative to the normal readings. The only standard deviation that was lower than the average is the one with the highest average (Rae's Creek). This means that the spikes were more frequent at this site, raising the average and lowering the differences between the average and each spike, thus bringing the relative standard deviation down.

For example, let's compare two simple sets of numbers (9, 10, 11, 11, 10, 9) and (0, 10, 20, 20, 10, 0). The mean (average) for both sets is 10, but the standard deviation for the first set is 0.816 and the standard deviation for the second set is 8.165. But even that standard deviation is better (less variability) than our best set of numbers. Because of the spikes in E. coli concentrations, our sets of numbers are extremely variable.

I will present more of our data from our monitorings in the next newsletter.

If you are interested in assisting or observing our stream monitoring team, contact Adopt-A-Stream Coordinator Frank Carl at 706-513-1527 or frankcarl@knology.net.

Frank Carl

Conservation Chair, Savannah River Group

Site	Creek	# Months Sampled	Avg. E. Coli Count	Std. Dev.
S-2402	Butler	144	131	155
S-975	Reed I	132	478	604
S-971	L. Euchee	118	335	500
S-3090	Rae's	72	783	732
S-4871	Reed D	66	120	370
S-5166	Reed S	63	335	416
S-5215	Rocky	60	495	769

(Average E. coli counts for seven monitoring sites over 8-15 years. Site refers to AAS site number. Avg. E. coli count is average of all samples. Std. Dev. is the standard deviation of the average counts.)

Outreach Updates

Sierra Club Yard Sale Fundraiser

Spring cleaning is here! Time to clean out your shop, closets, and storage and donate to the Sierra Club! We are collecting items for our yard sale to be held March 16 as a fundraiser to support your local Savannah River Group of the Sierra Club. Have items to donate? Contact Cathy at sonnyandcathyblack@gmail.com or Ann at annb57@comcast.net. We begin accepting items March 9.

The yard sale will be held on March 16 from 8 AM to 2 PM at 706 Chamblin Road Grovetown, GA.

Stop by and find yourself a treasure! We expect a wide variety of items, including yard tools, furniture, kitchen wares, clothes, and more. All items not sold will be donated to charity.

Meet the Savannah River Group

Get involved with your local Savannah River Group! Plug in to one of our issue committees by contacting the leaders below. Not sure where to start? Reach out to our co-chairs and let them know what you're interested in!

Your new 2024 Executive Committee for the Savannah River Group is:

- Co-Chair: [Cathy Black](#)
- Co-Chair: [Greg Sutherland](#)

- Secretary: [Bridget Brown](#)
- Treasurer – [Moiria Nonnweiler](#)
- Georgia Chapter ExCom Delegate: [Jeffrey Holder](#)
- At-Large Member: [Ann Brown](#)
- At-Large Member: [Chris Hall](#)

The Savannah River Group's leaders also include:

- Conservation Chair: [Frank Carl](#)
- Fundraising Chair: Vacant
- Membership Chair: [Bill Jackson](#)
- Newsletter Editor: [Sam Booher](#)
- Outreach Coordinator: [Linda McBurney](#)
- Outings Chair: [Cathy Black](#)
- Political Chair: [Tim Nelken](#)
- Transportation Chair: [Chris Hall](#)
- Web Master: [Charlotte Gardner](#)
- Adopt-a-Stream Program Coordinators
 - Richmond County: [Frank Carl](#)
 - Columbia County: [Tim Nelken](#)

Thanks for all you do to help protect the environment in the Augusta area, across Georgia, and beyond. Hope to see you at one of our upcoming meetings or events!

P.S. - If you ever need to contact the Savannah River Group by "snail mail," you can reach us at this address: Savannah River Group, Sierra Club, PO Box 14463, Augusta, GA 30919.