



Friends of Congaree Swamp News

Save the date

Paw Paw Trail Cleanup

Our quarterly trail clearing will be held **Sunday, Aug. 28**, on the Weston Lake Loop Trail and Oakridge Trail.

The Paw Paw fruit, our August mascot, seems to ripen earlier in the season, but we should still find some to sample along the way.

We will meet at the Visitor Center at 9 a.m. and finish in the early afternoon. Be prepared for warm weather, bugs and spider webs. Work gloves, light hiking boots, plenty of water, and a snack are recommended.

If you have loppers, shears or bow saws, bring them along. We will obtain loppers and saws from park staff as needed.

If interested, contact John Grego, information below.

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Where has all the water gone?

Megafarms withdrawing huge amounts of surface water from South Carolina’s rivers has been an ongoing topic of concern, and the issue has hit much closer to home recently.

During a Friends hike on the Kingsnake Trail on June 8, Friends members noticed that Cedar Creek at Bridge L was abnormally low, even accounting



Cedar Creek upstream of Bridge L at 1.4 feet on June 8

for recent dry conditions. The stream appeared too low for paddling, and online comments suggested that local concessions and visiting paddlers either had to shorten paddling trips or cancel them altogether.

When we checked the Cedar Creek gage online (the current gage measures stage, but not flow), we saw something we had not seen before—an abrupt drop from an already-low mean daily stage of 2 feet to 1.4 feet, the second-lowest level recorded in the 37-year history of the gage!

Since the sudden drop indicated a manmade rather than a natural event, we checked the S.C. Watershed Atlas for surface water withdrawal permits or registrations in the area. We confirmed that Southland Fisheries, an aquaculture facility immediately upstream, had two surface water intakes registered, while Walker Farm north of Airbase Road had one surface water intake registered.

The surface water registrations for the two combined sites at Southland Fisheries was over 100 million gallons per year, which

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President's Corner

Dr. John Grego

Lower Cedar Creek Trail Guide

Board member Neal Polhemus recently collaborated with me on the twelfth installment of our online trail guides, covering the lower reach of Cedar Creek from Elder Lake to Mazyck's Cut on the Congaree River. The guide covers a remote area of the park, requiring a four-mile paddle just to reach the starting point.

Rewards include visiting Elder Lake, paddling a reach entirely within the park's old-growth boundary, and viewing the former state champion Sweetgum that has apparently recovered from losing its entire crown 10 years ago. The paddle is either a strenuous single day paddle, or an opportunity for camping on the Congaree River as part of an overnight trip.

Our trail guides, often crafted in collaboration with University of South Carolina Honors College students, include all numbered surface trails and Cedar Creek. I do not see additional surface trail guides in the foreseeable future, though we recently revised several of our trail guides in reaction to changes in the trail system.

Paddling guides for the east end of the park, particularly Running Lake and Bates Old River, could have real potential, though we would prefer that the landing at Bates Old River be renovated before preparing guides for use by park visitors.

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 Dr. John Grego, President Sharon H. Kelly, Editor



Cherrybark oak, March 2022

Fallen state champion cherrybark oak

We are sorry to report the loss of the large cherrybark oak off the River Trail, for which John Cely and Jeff Fellers of Clemson University Extension Service were preparing a national co-champion nomination. During their March 2022 visit, the tree was measured at 26 feet 3 inches around and 148 feet tall.

The tree has been the high point of more than one of our big tree hikes over the years. Some rotting at the base has been observed, and it had lost a part of one its two largest side limbs in 2021. Otherwise, it had little damage compared to some of the old-growth hardwoods that have been documented in the park, which euphemistically display a lot of "crown complexity" and yet continue to thrive.

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Water

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translates to a modest year-round flow of less than 0.5 cubic feet per second, while the registration at Walker Farm was 23.5 million gallons per year.

For some perspective, in response to our inquiries, the S.C. Department of Health and Environmental Control had shared data from a retired Cedar Creek gage that reported typical mean flows in the 1980s of 50-80 cubic feet per second.

On a monthly basis, the registration is more generous for Southland Fisheries, though the annual amount is 101 million gallons, the monthly amount can be as high as 22 million gallons, or a little over one cubic foot per second if averaged over the entire month. If that withdrawal were to take place over a shorter time period, perhaps a day or two, its impact upon Cedar Creek at low levels could be significant.

Bear in mind that these withdrawals are from a reservoir—Duffies Pond—with significant capacity beyond the creek itself, but the potential for impact on the aquatic life and recreational uses of Cedar Creek cannot be overlooked.

Fortunately, Southland Fisheries' monthly and annual withdrawals are typically far below the limits for which it

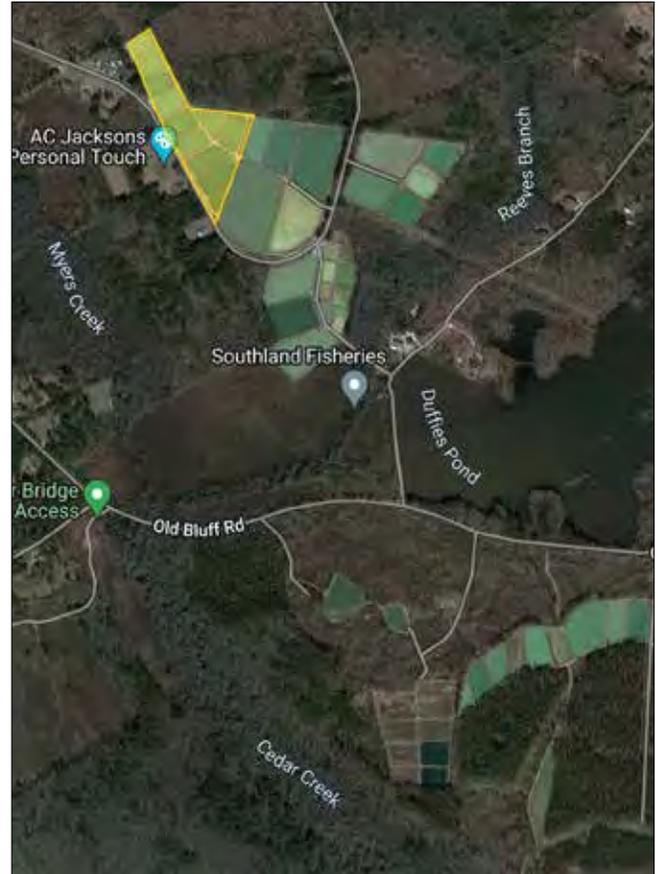
is registered. Nonetheless, the withdrawal policy could lead to the sort of event witnessed in June.

South Carolina's current surface water withdrawal policy, enacted in June 2011, requires surface water withdrawal for agriculture to be registered rather than permitted, though only for agricultural facilities withdrawing over three million gallons in any one month prior to that date.

For those existing facilities that are registered, the amount of water that can be withdrawn depends not on the stream's seasonal flow, but instead on the design capacity of the intake pumps or the highest reported level prior to June 2011, whichever is higher. Surface water withdrawers may request additional capacity provided "safe yield" capacity is not exceeded.

Fish impoundments can be found on land owned by both Congaree Bluff Farm LLC (up to 30 impoundments along Basehill Road and south of Old Bluff Road) and Southland Fisheries Corporation (21

impoundments along Base Hill Road), though only Southland Fisheries is registered for



New Southland Fisheries impoundments highlighted in yellow.

surface water withdrawals.

One cause for increasing concern is the expansion of Southland Fisheries. Eleven new impoundments were constructed and filled by 2021, placing additional demand on Cedar Creek. In fact, water withdrawals were high in 2021, likely as a result of filling the new impoundments.

For now, obvious impacts on Cedar Creek's water levels have been rare, and perhaps could be forestalled through better communication.

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Butterfly count

The Fall North American Butterfly Association Count produces a wonderful variety of butterflies in all areas of the park. Last year we found the first Northern Broken Dash and Dion Skipper officially recorded in Richland County.

This year's count will be held **Saturday, Sept. 17**, at 9 a.m. Congaree National Park's Dr.

David Shelley and Carolina Butterfly Society members Marty and David Kastner are organizing the annual event.

Participants will spend the day counting butterflies along the trail system and within various habitats in the park. The count will last until about 3 p.m., weather permitting. You can help out for just a couple hours or stay for the entire day.

We will meet at the Harry Hampton Visitor Center. All ages and experience levels are welcome. Appropriate clothing is required, including long pants and closed-toed shoes.

Butterflies like the sun, so bring sun protection and plenty of water. Bug spray, water, snacks, and a sack lunch are also recommended. Close-focus



Viceroy butterfly

binoculars are recommended as well, but not required. Please RSVP at either email below.

For more information please contact Marty Kastner (kastners@aol.com) or Claludia Santiago, biological science technician, claudia_santiago@nps.gov or (803) 647-3968.

National Public Lands Day

As part of National Public Lands Day **Saturday, Sept. 24**, Friends of Congaree Swamp members will meet from 9:30 to 11 a.m. at Bates Bridge landing off U.S. 601 to collect trash at the Congaree River

boat ramp, parking lot and access road.

Depending on attendance, some of us may drive to Bates Old River landing, Bates Ferry trailhead, Fork Swamp trailhead and Congaree Ferries pullout to clean those sites as well. Keep the Midlands Beautiful will provide trash pickers, trash bags, gloves, etc.

to assist with the clean-up and we will use the dumpster on site to dispose of non-recyclables. Light hiking boots, plenty of water, sun protection and a

snack are recommended.

There will be some impromptu birding for migrating fall birds after the clean-up.

Contact John Grego if interested.

Migratory bird hike

Join us **Sunday, Oct. 2**, for a fall hike to look for migratory birds moving through the park on their way to points south.

This is also a chance to see if we can still find some of our breeding migrant species that have not yet moved on.

During the hike, we will have the opportunity to practice identification skills (mostly of resident and summer species), and will be able to observe several species up close—American Redstart are always found in good numbers and thrush may be found foraging in undergrowth.

The hike will be part of the Fall North American Migration Count for Congaree National Park, an idea first originated by Kathleen O'Grady, and our observations



Yellow-bellied Cuckoo

will be part of a statewide compilation.

We plan to cover other areas of the park both preceding and

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NPS announces new superintendent

ATLANTA — National Park Service (NPS) South Atlantic-Gulf acting Regional Director Lance Hatten today announced the selection of Gregory Hauburger as the new superintendent of Congaree National Park in Hopkins, South Carolina. Hauburger begins his assignment in October.



Gregory Hauburger

“Gregory joins Congaree National Park with a proven track record in leadership, management, partnerships and more,” said Hatten. “He is a capable and approachable leader and I look forward to seeing him succeed in his new role at Congaree.”

“I am honored and excited to serve as the next superintendent of Congaree National Park,”

said Hauburger. “I look forward to working with the staff, volunteers, partners and the local community to protect and preserve such incredible resources, while also providing an excellent visitor experience.”

Hauburger currently serves as superintendent of President William Jefferson Clinton Birthplace Home National Historic Site in Hope, Arkansas.

He began his federal civilian career as a contract specialist with the Bureau of Reclamation Lower Colorado Regional Office in 2013 before joining the NPS in 2015.

Hauburger’s previous NPS assignments include serving as acting deputy superintendent at

Badlands National Park, chief of staff at Lake Mead National Recreation Area and lead contracting officer for a major acquisition buying office at the Pacific West Regional Office.

Prior to entering the civilian federal service, Hauburger served in the United States Air Force from 2004 to 2013 and deployed in support of Operation Iraqi Freedom and the Global War on Terrorism.

A native of Middletown, New York, Hauburger holds a bachelor’s degree in business administration from Southwestern College and a master’s degree in public administration from Arkansas State University.

Hauburger’s wife, Rochelle, daughter, Taryn, and cat, Peri, will join him in South Carolina at the end of the school year. In his spare time, Hauburger enjoys hiking, fishing and reading.



Friends members assisted with litter pick-up at our Adopt-a-Waterway site, Bates Bridge landing, on National Trails Day in June. From left are Dave Schuetrum, Ed Ingram, Bob McGinnes, John Grego, Mary Bull, Dave Cannon, Robb Schmidt and Steve Dennis.

Grego

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Some of the park's largest cherrybark oaks have fallen in recent years, particularly along the Oakridge Trail, due in part to the series of natural events from 2014 to 2018 described by John Cely in the Fall 2019 newsletter. For the general state of the cherrybark oaks at Congaree National Park, read John's Fall 2018 newsletter entry, which describes Congaree as the "finest cherrybark oak forest in the world."

After learning of the tree's toppling, there was much discussion about the next apparent state champion, with general agreement that the large cherrybark oak along Nelson Pond on the Kingsnake Trail should be the next nominee.

Visitors to the park can still see outstanding cherrybark oaks growing directly along the Weston Lake Loop Trail, River Trail, Oakridge Trail and Kingsnake Trail.

Adopt-a-Stream sampling

It has been a year since monthly water quality sampling at Tom's Creek began as part of S.C. Department of Health and Environmental Control and Clemson's Adopt-a-Stream sampling program.

During that time, we have found that dissolved oxygen can fluctuate from lows of 5 parts per million during summer to almost 10 ppm in the winter



Tom's Creek

with bacterial counts well within normal range, except following large precipitation events. Actually, we are not supposed to sample after large rain events, but sampling logistics prevent us from always sampling under recommended conditions.

Flow at Tom's Creek has been consistent even during dry spells and always runs clear. We sampled the creek in the floodplain, and there was concern that the site would be inaccessible during flooding, but we were able to sample every single month, and were turned back only once by flooded conditions. We have not yet undertaken training for quarterly macroinvertebrate sampling, but hope to jump that hurdle soon.

We had always planned to sample at McKenzie Creek as well, but found stagnant conditions during our first four visits from August to

November. Flow resumed in December, but by the time we added the stream to the Adopt-a-Stream network in April and began sampling, the creek was dry again in May.

Observation of a seasonal flow pattern is valuable in its own right, though cause for concern. There is an upstream pond that could be withdrawing water for agriculture, though the amount withdrawn must be sufficiently low that no reporting is required. Observing flow upstream and downstream of the pond has been inconclusive so far, but we will continue to monitor it.

We are indebted to Sierra Hylton, S.C. Adopt-a-Stream program coordinator with DHEC, and Chanda Cooper, Richland County Soil & Water Conservation District, for sharing water quality sampling supplies for our monthly trips.

Water

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You may feel that the reach of Cedar Creek within the park designated as the only Outstanding National Resource Waters in South Carolina (see our Summer 2006 newsletter) would provide some protection. Cedar Creek is protected under the antidegradation rules in the state's Water Quality Standards.

The policy has special rules for Outstanding National Resource Waters, which ensure that existing water quality standards will be maintained to the extent of DHEC's regulatory authority.

Given the policy, one could question whether the additional impoundments

would be allowed under the antidegradation policy, but the existing registered withdrawals are so generous that they readily accommodate the new impoundments. So even though the new impoundments have an impact, it would be well within the existing registered withdrawals.

Statewide environmental organizations, including Congaree Riverkeeper, are working actively with the S.C. Department of Natural Resources as it updates the State Water Plan. River basin plans are being developed for each of the eight major watersheds in the state.

Once complete, findings from the regional plans will be integrated into the State Water

Plan to provide water policy, legislative and regulatory recommendations for each basin.

In addition, changes to the narrative flow standards are being debated as part of the S.C. Water Quality Standards Triennial Review. The changes could place a premium on aquatic life and recreation, as opposed to other uses, including surface water withdrawals.

Our hope is that current water policy on Cedar Creek can serve as a cautionary case study of the current shortcomings of the state's approach and lead to recommendations that better preserve the creek's aquatic life and recreational values.

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following the morning hike and welcome additional volunteers.

We will meet at the Harry Hampton Visitor Center at 8:30 a.m. and the hike should last until noon. Bring water, insect repellent and binoculars. The hike will follow portions of the Sims Trail, Boardwalk Loop Trail and Bluff Trail. If interested, contact John Grego.

Adopt-a-Stream field trip

We will be sponsoring a field trip to Tom's Creek on **Saturday, Oct. 22**, for those interested in participating in the S.C. Adopt-a-Stream program.

The field trip will provide the opportunity to see sampling in

action and encourage Friends members to pursue training so that sampling can take place at other stream sites in or near the park.

We will first conduct water quality sampling at McKenzie Creek, provided it is flowing, and then sample Tom's Creek as well. Sampling takes about 30 minutes and includes temperature readings, pH analysis, dissolved oxygen analysis, and collection of a water sample for cultivating bacteria at home in an incubator.

Meet at the South Cedar Creek parking lot at 10 a.m. We will carpool to our parking area near Kingville, then hike one mile to the sampling sites.

Some parts of the hike will be over uneven ground in a planted pine forest. Sturdy hiking boots should suffice, though you will need hip waders if you want to get in the water. Bring insect repellent, snack or lunch, and water. We should finish about 2 p.m.

This outing is solely for members of Friends of Congaree Swamp and will be limited to 12 participants. Contact John Grego to register.

To sign up for all but the butterfly count, contact John Grego at (803) 331-3366 or email friendsofcongarceeswamp@gmail.com



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Yes, I want to support conservation of Congaree Swamp for future generations. Enclosed is my tax-deductible contribution of \$ _____. (Please make checks payable to Friends of Congaree Swamp.)

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Please keep your information current to receive special notices about field trips, events, scheduling changes and acknowledgements in addition to a quarterly newsletter.

*For a contribution of \$35 or more, you may choose one:

Baseball cap maroon _____ tan _____

Tan visor _____

Bandana with map of Congaree National Park gold _____ blue _____ red _____

**For a contribution of \$100 or more you will receive a copy of "The Natural History of Congaree Swamp."

In addition, I would like to donate \$ _____ as a gift.

Thank you for supporting Friends of Congaree Swamp!

Friends of Congaree Swamp, P.O. Box 7746, Columbia, SC 29202-7746
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