



Friends of Congaree Swamp News

www.friendsofcongarree.org

Summer 2021

Save the date

Adopt-a-Trail Workday

Join us **Saturday, Aug. 28**, for a late summer trail-clearing workday. We will meet at the Visitor Center at 9 a.m. and finish in the early afternoon.

Paw paw, our August mascot, seems to ripen earlier in the season, but we should still find some to sample on the park's trails.

We should be able to arrange a Western Boundary Road shuttle to cover a portion of the River Trail in addition to some of our usual trails.

Be prepared for warm weather, spider webs and bugs. Work gloves, light hiking boots, plenty of water and a snack are recommended. If you have loppers, shears or bow saws, bring them along. Park staff

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Big trees tug at the heart

By **Graham Norman**

I grew up in the Blue Ridge Mountains of North Carolina, where I spent my free time climbing mountains and searching for birds. Upon moving to Columbia, my first trips to Congaree were like most, I imagine—biased. The park lacked the big views, roaring rivers, and cascading waterfalls I grew up exploring.

One day I noticed a scheduled “Big Tree Hike.” I joined and my eyes were opened to just how significant these large trees are, and how easy it can be to overlook them, but there’s something about big trees that tugs at the heart, and that tug hooked me good.

In Spring 2018, I got a John Cely map from the visitor center and started navigating the backcountry. By Fall 2018, the area around Sams Lake caught my eye, the words “virgin cypress” consumed me and I started trying to research the old cypress of the park.

Outside of an article featuring a photo of the

Stump Gut Cypress, there was little on the ancient giants of Congaree, so I talked a friend into a roughly 18-20 mile bushwhack to the Stump Gut



Norman with a cypress at Clear Lake

Cypress and to see the areas of old growth cypress. It was that day, standing under a massive cypress on the southern shore of Sams Lake that I told my friend Spencer Farris “I’ve got to know how many are out here”.

I focused on areas highlighted in John’s map and began

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President's Corner

Dr. John Grego

Annual meeting

Before the COVID-19 delta variant emerged, we anticipated a regular fall schedule of events, including our annual meeting, typically held the last Sunday of October.

At our recent board retreat, while discussing whether annual meeting plans should be adjusted, we talked about the traditional timing of the event. There was a sentiment that late October could still be warm and buggy, and perhaps alternative times of the year should be considered (so long as we were still in prime oyster season, of course).

Nothing in our by-laws addresses the timing of the annual meeting, so we will experiment with a late winter event instead. Look for more information about the annual meeting in our fall newsletter.

Membership database manager

A heartfelt thank you to Mary Bull, who all of you know through her ongoing role as membership coordinator for Friends. Mary has agreed to take over membership database responsibilities from Herb Lord while continuing as membership coordinator.

City of Columbia raw water intake

We recently provided comments to the U.S. Army Corps of Engineers and S.C. Department

of Health and Environmental Control on the draft NPDES permit for the new structure the City of Columbia plans to construct to withdraw water directly from the Congaree River along the Riverfront Park canal embankment.

We strongly supported the project, since the failure of the existing raw water intake due to a canal breach during the October 2015 flood pointed toward the need for an alternative system to withdraw water directly from the river.

From the intake structure, water would be pumped through a pair of large pipes over the canal along a newly constructed bridge before discharging to the Canal Water Treatment Plant Reservoir.

We urged a public hearing on the project since it will have such a strong visual impact on a well-traveled and much-beloved public space. Concept drawings available on the city's website suggest the large water intake structure has an attractive design, but we felt that public input could positively affect final design decisions.

There is some measure of irony in casting this project as part of the city's water-resiliency plan. A similar system failed in August 1908 floods, when debris piled up against the bridge that carried two 18-inch raw water intake pipes across the canal. That failure likely led to the decision to withdraw water directly from the canal instead of the river.

Regardless, it will be beneficial to have two alternative means—the river and the canal—for maintaining the city's water supply. For now, the new structure will serve as a backup to the existing water intake system in the canal.

We requested that construction of the water intake structure take place outside spring migration and spawning to minimize possible impacts on species such as striped bass and American shad.

In addition, we wanted to know what measures are being taken to ensure that fish species in general, and migrating fish in particular, are not entrained (i.e., pulled into and killed) in the raw water intake. The new intake, since it is located directly along the river, would presumably entrain more fish than the canal.

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

Big trees

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making regular walks deep off trail searching for these trees. It's just under a six-mile hike to the old growth boundary, so needless to say, progress was slow. Each day I would be lucky to count 12-18 cypress before the winter sun began to set and I had to start my return walk.



Norman measuring a cypress

I was in regular communication with John Cely about what I was doing. As the drought of 2019 hit, navigating the floodplain became easy, and as communications continued, John offered to join me out at Sams Lake. Aided by boat and guided by a lifetime of knowledge in this forest, John, Neal Polhemus, Spencer and myself counted more than 86 cypress 14 feet in circumference or greater along the Sams Lake area.

This trip laid the foundation that prompted me to request a permit from the park to officially go out and survey the remaining cypress 14-plus feet in circumference and try to determine whether they are old-growth cypress.

In the nearly two years since

(with several lost months to floods and Covid shutdown) countless hours have been spent in the park by foot and by paddle searching for these big trees.

Fall is one of the best times to be out there and is one of the most productive times to make gains on the survey. I intend this fall to be no different when I plan to map out Big Cypress

Gut and the low area between Big Cypress Gut and Hugers Gut, as well as continue exploratory searches north of Racoon Pond and Mazycks Cut.

To date we have noted just under 300 cypress 14-plus feet in circumference and GPS tagged just under 200 cypress that meet the criteria for target cypress, in addition to several large oaks, sycamores, sweetgum, tupelo, hickory, and swamp cottonwoods.

We've found large cypress never before noted in the park, completely mapped out Hugers



A raccoon keeps watch from a safe distance.

Gut, Sams Lake, the flat south of Sams Lake, Elm Wash and Hugers Slough. Last fall we measured a cypress greater in circumference than the General Greene cypress and then

confirmed that size to be 30.1 feet.

With all of these highlights, there has been one more great find during this survey—a genuine love for this forest. While this park may lack the vistas of the Smokies, or dazzle you with the night sky like Joshua Tree, and may not give you the roar of water like the Colorado cutting through the Grand Canyon, there is a steady calm in the flow Cedar Creek, a peaceful whisper of wind through the branches of a mighty oak, and a story as old as time at the base of the old-growth cypress.

When you immerse yourself in this forest, getting lost in time watching otters swim, see the patience of a cottonmouth at water's edge, or go to sleep with the chorus of the Barred Owl, you truly begin to understand the words of Harry Hampton, "Here is the place that blesses straining man."

I would like to mention this work would not be possible if it were not for the support, companionship, and guidance of the following: Congaree National Park, John Cely, Kailey Encarnacion, Spencer Farris, Brice Janvrin, Jordan Morris, Neal Polhemus, Seth Shelby and my amazing wife Makenzie who has supported my vast amount of time gone off in search of trees.

I can be reached at grahamnorman23@gmail.com for any questions you may have and you can follow along with my time in the park on [instagram@landofthelostgiants](https://www.instagram.com/landofthelostgiants).

Update on Westinghouse situation

Since our Summer 2020 newsletter update on Westinghouse's Columbia Fuel Fabrication Facility, several events have come to pass.

At the time, we noted that the Nuclear Regulatory Commission (NRC) was asking for comments on the scope of the Environmental Impact Statement (EIS) for the facility.

Friends of Congaree Swamp provided comments that focused on several areas that included (1) Westinghouse's history of incidents and its reporting failures for some of those incidents; (2) important cultural sites in the area; (3) the inconclusiveness of the Technetium-99 source investigation; (4) the lack of follow-up on a fish tissue study on the Congaree River; and (5) continued concerns about the results of groundwater, surface water, and sediment sampling.

After receiving scoping comments, the NRC released a Request for Additional Information, which included queries on groundwater modeling, pollution source studies, and cultural impacts. The request raised questions about Westinghouse's Conceptual Site Model for

groundwater flow, and whether the model actually represented the way in which pollutants would travel through and below Mill Creek and into the surrounding floodplain.

There was also skepticism about the source of Uranium and Technetium-99 contamination. Westinghouse suggested that any Uranium contamination was the legacy of a 1.5-million gallon wastewater lagoon spill in 1971.

The State Historic Preservation Office and others raised concerns about plans to protect cultural sites, including Denley Cemetery, an historic African-American cemetery onsite. The NRC requested additional information on protocols to protect cultural artifacts, particularly while drilling wells.

While awaiting the draft EIS, we continued to review activities required under Westinghouse's Consent Agreement with the S.C. Department of Health and Environmental Control.

Westinghouse conducted a passive soil gas survey to identify the source of chlorinated volatile organic compounds in groundwater. Results from that study identified hot-spots associated

with two long-retired "oil houses"—storage sites for industrial chemicals and solvents. In addition, more groundwater monitoring wells have been placed in the floodplain to the south of Mill Creek and the Sunset Lakes, reflecting continued concern about the migration of pollutants into the sensitive floodplain ecosystem.

NRC finally released the draft EIS in late July and the public will have 45 days to respond. The document considered alternative outcomes of no license renewal; a 20-year license renewal; and a 40-year license renewal.

A wide range of economic and environmental factors were studied, and each alternative was rated as to whether it would have a small, moderate or large impact on each factor. The NRC identified no large impacts for any alternative, and only a handful of factors with either a small to moderate, or moderate impact for each alternative. In the end, it recommended that Westinghouse be granted a 40-year license renewal, with only a couple modest additional reporting requirements.

Most advocacy organizations had pushed for a 20-year renewal. Apparently NRC favors shorter licenses when





Native American artifacts found along the Congaree

As we noted in a long-ago newsletter (Fall 2004), a trip the park's sandbars on the Congaree River can lead to the discovery of Native American artifacts, both sherds, which are pieces of pottery, and shards, which refer to a wider class of materials.

These pieces lack context, having been washed miles downstream, but should not be collected without a permit, according to the Superintendent's Compendium. It's quite rewarding to simply take photographs and share them with an

expert who can identify the pottery.

Chris Judge with University of South Carolina-Lancaster identified the first two pieces as Mississippian mound builder pottery circa AD 1250-1350.

Both designs are stamped by a wooden paddle, but the second piece is over-stamped—hit twice with a carved wooden paddle at different angles on nearly the same spot.

The third piece is Deptford Linear Check, representing the main occupation at Green Hill Mound (more than 10 miles upstream), BCE 500 to AD 500.

Westinghouse

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facilities plan new processes or additional construction. The absence of new plans on the part of Westinghouse certainly played a part in NRC's decision to set aside a shorter license renewal. Nonetheless, Friends of Congaree Swamp and many others are reviewing the draft EIS and will provide public comments and consider further action.

Arguments strongly in favor of a shorter license are the

ongoing investigations under the Consent Agreement. The draft EIS notes that Technetium-99 pollution seems to be chronic, rather than due to a single event, but the Technetium-99 source investigation has been inconclusive and further investigation will be necessary.

In addition, likely sources of chlorinated volatile organic compounds have been identified, but a remediation plan has not yet been presented. The groundwater monitoring network has been expanded to the floodplain, but we do not

yet have a monitoring history from those wells.

The NRC, rather than addressing these deficiencies directly, places an extraordinary burden on DHEC and its Consent Agreement in each of these instances, by assuming the problems are resolvable, and that DHEC will put effective countermeasures in place.

The uncertainty surrounding these investigations demands a shorter license renewal, as well as a postponement of the final EIS until the Consent Agreement is fully resolved.

Save the date

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will provide loppers, pruning shears and saws as needed. Please contact John Grego at friendsofcongareeswamp@gmail.com or (803) 331-3366 if interested.

Butterfly Count

This year's Fall North American Butterfly Association Count count will be held **Saturday, Sept. 18**, starting 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.

The count always produces a wonderful variety of butterflies in copious numbers. Last year's count

included the first Giant Swallowtail butterfly seen in the park, and the first Zebra Longwing butterflies observed on the count.

Participants will spend the day conducting field observations counting butterflies along the trail system and within various habitats in the park. The count will last until about 3 p.m., weather permitting, though 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 of all participants, including long pants and closed-toed shoes.

Butterflies like the sun, so bring sun protection and plenty of water. Bug spray, snacks, and a sack lunch are also recommended. Close-focus binoculars are recommended as well, but not required.

This program is free, but space remains limited due to ongoing COVID-19 restrictions. Advance reservations are requested.

For more information please contact Marty Kastner at kastners@aol.com or David Shelley, director of the Old-Growth Bottomland Forest Research and Education Center, at david_shelley@nps.gov or (803) 647-3966.

Trash collection

As part of National Public Lands Day **Saturday, Sept. 25**, Friends of Congaree Swamp members will meet at 9 a.m. at Bates Bridge landing on 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 Congaree National Park's 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. We will work in smaller groups than usual and wear masks when social distancing is not possible.

We should be finished about 11 a.m. There will be some impromptu birding for migrating fall birds after the clean-up.

Please contact John Grego at friendsofcongareeswamp@gmail.com or (803) 331-3366 if interested.

Migratory bird hike

Join us **Sunday, Oct. 3**, for a fall hike to look for migratory birds moving through the park on their way back to the Caribbean, Central America and South America. This is also a chance to see if we can still find some of our summer resident bird 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, for instance.

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 will be part of a statewide compilation. We plan to cover other areas of the



Zebra Longwing

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Employees at Santee Debris contacted Friends of Congaree Swamp this spring about donating a section of a bald cypress trunk salvaged from Lake Marion. Santee Debris contracts with Santee Cooper to salvage hundreds of logs from Lake Marion and Lake Moultrie. This section is unusually well-preserved, and displays original axe and crosscut saw harvesting techniques dating from the Santee River Cypress Lumber Company era at the turn of the 20th century. Friends facilitated communication between Santee Debris and park staff. The park has agreed to accept the donation and display the log in the wooded area between the first and second parking bays at the Harry Hampton Visitor Center parking lot. The park will develop an interpretive plan to accompany the outdoor display.

Garrick Road is used by park staff and researchers to reach an otherwise inaccessible section of upland pine savanna. Deep ruts can render the road impassable from time to time. Repairs made in 2018 have held up well, with the exception of a spot where a stream crosses the road—a large pool had developed and persisted even in dry conditions. Friends of Congaree Swamp reached out to Richland County about the poor condition of the road, and repairs have been made. The objective is to keep the road passable, but not in such condition that it attracts poachers or those wishing to illegally dispose of trash.



Save the date

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park, both before and after 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 at (803) 331-3366 or friendsofcongareswamp@gmail.com.



At the urging of Keep the Midlands Beautiful, Friends will participate in its Adopt-a-Waterway program, which formalizes the biannual clean-ups we have already been conducting at Bates Bridge Landing. In addition, Friends of Congaree Swamp members, including David Schuetrum, informally monitor the trash receptacle at the landing. Whenever it is overfull, we report to Marlin Henderson with Richland County's Solid Waste and Recycling Division, and he promptly contacts the solid waste contractor to empty the container. The old receptacle, above, has been replaced by a larger receptacle managed by a new contractor.



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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.)

Individual \$15 Name(s) _____
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 Advocate \$50 City _____ State _____ Zip _____
 Partner \$100 ** Phone _____ Email _____
 Benefactor \$500
 Patron \$1000
 Nonprofit \$50
 Corporate \$1000

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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