



# Friends of Congaree Swamp News

[www.friendsofcongarree.org](http://www.friendsofcongarree.org)

Winter 2019

## Two of Congaree's trees receive honors

Two of Congaree's historic trees, nominated by Friends, have recently received local and state honors.

One of the 18-foot circumference Swamp Chestnut Oaks along the Oakridge Trail has been named a Treasured Tree, a designation sponsored by City of Columbia Forestry and Beautification Division, Columbia Tree and Appearance Commission and the Columbia Garden Club.

Friends had actually planned to nominate a nearby Swamp Chestnut Oak, but its crown was damaged sometime during the summer. Only in Congaree could you find another forest giant only a couple hundred yards away!

Swamp Chestnut Oaks, which thrive in bottomland hardwood forests, have large acorns that are invaluable for wildlife, and early settlers and

enslaved African-Americans used the wood for weaving baskets. This is the second Swamp Chestnut Oak we have nominated as a Treasured Tree.

The designation of the General Greene tree—the 30-foot circumference bald cypress off the Bates Fork Trail—as a S.C. Heritage Tree places it in the company of Charleston's Angel Oak and McClellanville's Deerhead Oak.

Trees South Carolina created the award in 2004 to recognize trees with outstanding historical or cultural significance, and recognition for one of Congaree's trees was long overdue.

Board member David Schuetrum attended the awards ceremonies at Folly Beach and the park. Unfortunately, the on-site ceremony could not include a visit to the tree itself, since the Bates Fork Trail was under water. We hope that the



*Swamp Chestnut Oak*

award plaque can be placed somewhere along an improved route to the tree in the future.

The award nomination provides some useful context for the General Greene tree's significance:

In a forest of champions, the General Greene bald cypress has the largest circumference of any bald cypress in Congaree National Park, measuring

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# President's Corner

*Dr. John Grego*

## Government Shutdown

The park has weathered government shutdowns in the past, but this shutdown caused real hardship for park staff and threatened park resources. As the shutdown lengthened, we received numerous offers to support the park during the shutdown, which had us scrambling for guidance.

We wanted to balance our love for the park while fighting against the notion that the parks could somehow remain open to the public without staffing. What a terrible diminution of the park's mission to suggest that emptied trashcans matched visitors' expectations for a national park visit.

Fortunately, national advocacy organizations shared our philosophy. National Parks Conservation Association and The Trust for Public Land both argued that parks should be closed if they could not be fully staffed. This message developed a real sense of urgency after accounts were widely circulated of resource destruction at Joshua Tree National Park. They also counseled that park partners should not advertise organized clean-up efforts, in part due to liability considerations, and in part not to support the message that it was still business-as-usual at the parks during the shutdown.

Regardless, many people who love the park were not going to sit idly by as the weeks passed, and efforts to police campgrounds, clean up trash, and empty trash cans were undertaken both on a regular basis by some of

the park's VIPs, and on a more informal basis by Friends members and regular visitors.

On one trip to the park, I came across Charleston's "Three Corners of Law"—employees from state, federal and local agencies in the Lowcountry who had come to the park equipped to collect trash while they hiked. A handful of the park's staff did continue to police the park—unpaid—and requested that anyone participating in a clean-up sign a release form. Throughout the shutdown, we answered questions about visiting and helping out, and used social media to share guidance and interesting articles from national groups and explain how to share concerns with South Carolina's political leadership.

When their first paycheck was missed, our Board discussed some way to support park staff. We approved the purchase of substantial gift cards for the staff, but found that U.S. Department of Interior ethics regulations and the park service's own Director's Orders strictly forbid any such large gift. Even modest tokens can be difficult to arrange since they may need to be provided to a much larger group of federal employees or may require a waiver, which could not be sought due to the shutdown.

In the end, we waited till the shutdown ended, and hosted an appreciation lunch for park staff. The park service used to have better mechanisms for supporting staff affected by shutdowns and natural disasters; perhaps the best take-away here would be to revisit the issue with national park advocacy groups.

## Bates Ferry Trail Guide

We have added an eighth trail guide to our collection with the completion of the Bates Ferry Trail guide in December. The guide was developed by USC Honors College students Blakeney Adlam and Cory Hawkinson as their project for a service learning course on Congaree National Park. In addition to highlighting sights on the main trail, the guide includes a side trip to the General Greene tree. The guide can be downloaded as a pdf file under the Visit tab on our website. Plans by another student for a Fork Swamp Trail guide are deferred till this summer since flooding made the tract difficult to visit during the latter part of the fall semester.

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Friends of Congaree Swamp advocates for Congaree National Park and its unique environment.

Dr. John Grego, President

Sharon H. Kelly, Editor

# Paddle to visit Congaree's 'East End'

By John Cely

The acquisition of properties over the past 15 years at the east end of the park, specifically the Bates Fork and Riverstone tracts, has enhanced recreational opportunities for park visitors.

Because of abundant open water and large sloughs, kayaking and canoeing are now outstanding ways to visit Congaree's "East End."

We will do just that on Saturday, April 6, with a paddle to beautiful Big Lake and Little Lake. These are small natural oxbow lakes on Running Lake, a primary creek/slough that runs eastward from the Kingville railroad into Bates Old River.

To get there, we will paddle

through Running Slough, a large, tree-filled cypress-tupelo slough reminiscent of Sparkleberry Swamp.

Bring your own canoe or kayak. We will launch from the primitive throw-in landing on the east side of Bates Old River. To get there, get on U.S. 601, and for those driving south, the entrance to the launch site is 1.16 miles south of the railroad track at Wateree—look for a pull-off on the left (east) side of 601 and take the dirt drive leading to Bates Old River. For those driving north, the pull-off to get to the landing is about a third of a mile on the right as you cross Bates Old River on your right.

Regardless of which direction you come from, **make sure**

**that you use your turn signal well in advance of the turn to alert trailing traffic.**

This is about a five-mile round-trip paddle. We would like to get under way by 9 or 9:15, so come a little early in order to get launched and have your gear ready.

I would suggest leaving your coolers and lunch behind but bring a snack and beverage for the paddle. A change of clothes in a well-sealed garbage bag is recommended. The launch site may be a little muddy, so rubber boots or old tennis shoes may be in order.

This trip is limited to 12 canoes/kayaks with members getting preference. Contact John Cely at [cowasee@gmail.com](mailto:cowasee@gmail.com) or (803) 782-7450 to sign up.



## *John Cely's Congaree Journal*

*John Cely visited the park intensively from 2014 to 2015, taking a more measured and reflective approach in his trips. In his own words, "I switched gears and began focusing on a more methodical view of the park, one that involved taking second and third looks at the ground I was used to walking over and where progress was measured in the length of time sitting and observing as much as the number of paces taken. I soon became convinced that more could be learned about Congaree sitting at the base of a big oak tree for an hour than walking through it for half a day."*

*He collected his observations from that time in a journal, which we are now hosting on our website as John Cely's Congaree Journal. Entries are posted coincident with the calendar date (e.g., the February 7, 2014 entry was posted the first week in February 2019), and reminders are shared via social media. We look forward to reading and sharing John's experiences for the next two years.*

# Landfill problems persist amid new concerns

We have reviewed and reported on Republic Services' management of Richland Northeast Landfill annually since 2011. It has been almost two years since we reviewed Northeast Landfill's files, so a Freedom of Information request and review was long overdue.

The review showed that our previous communications with the S.C. Department of Health and Environmental Control have had some effect, but some chronic problems persist and new concerns arise.

**The landfill continues to accept waste well below its capacity.** The landfill accepted 180,000 tons of waste in 2017, which is somewhat higher than in recent years, but continues to be well below its permitted capacity of 529,600 tons. Most categories of waste were stable, including almost 35,000 tons of contaminated soil, asbestos, medical waste and food waste. We remain concerned with the levels of industrial process waste, which matched the 2016 total of 21,700 tons. Process waste could well be the source of volatile organic compounds found in groundwater on site.

**Groundwater pollution off-site is now being remediated, but additional issues have materialized.** After years of documenting concerns about groundwater pollution along the site's boundary, off-site testing was initiated in 2015. Off-site wells have detected volatile organic compounds ever since they were installed,

and the problem was persistent enough that DHEC required a remediation plan.

The proposed solution was biostimulation, in which nutrients are injected into the soil to encourage microbial activity. In practice, soybean oil was injected in 10 closely spaced wells at the site's boundary in November 2017, with the expectation that reductions in volatile organic compounds would be observed within a year. It is still too early to confirm the effectiveness of this approach, but the November 2018 groundwater monitoring report showed little effect.

In the meantime, volatile organic compound pollution has shown up in a most unwelcome place. A couple wells on the southeast boundary that are far downgradient from previous hotspots have shown high levels of pollutants for the last three semi-annual monitoring events.

This is concerning because it suggests that the groundwater plume is more extensive than believed, and remediation at the southeastern boundary of the site was too limited in scope. DHEC has requested an action plan for one of the wells, but has been inexplicably silent on the other.

Republic Services' response to DHEC's request was dismissive—attempting to rationalize the event rather than present a substantive action plan.

**DHEC is finally enforcing solutions to the explosive levels of landfill gasses at the site's boundary.** Though the landfill has an extensive and expanding system of gas extraction wells that collect landfill gasses then flare them, monitoring wells at the northwestern and western boundaries of the site often record levels of methane well above the Lower Explosive Limit of 5 percent. After years of complacency, DHEC finally asked Republic Services to provide a remediation plan.

Republic Services suggested a couple different approaches, including purchase of adjacent land as a buffer, and use of air injection to limit the migration of the methane. To date, the effect of remedial measures appears modest, as all the targeted gas probes continue to show high levels of methane.

The purchase of adjacent property as a buffer is a reasonable solution, but Republic Services had earlier suggested that it would purchase that property as a source of cover soil. It is not clear that the property would be effective as both a source of cover soil and as a buffer for landfill gasses migrating offsite.

**The landfill has had difficulty finding enough sources of soil to provide daily cover and has received permission to use questionable alternatives.** The landfill is

*Continued on next page*

# Superfund site cleanup still continues

Most Midlands residents who visit the park are aware of the superfund site opposite the Westinghouse plant on Bluff Road, but likely have little sense of its history.

We recently submitted a Freedom of Information request to the S.C. Department of Health and Environmental Control so we could fill in yawning gaps in our own knowledge. The site has been out of business and under remediation for so long that recent documents are few and far between, but five-year reviews in particular contain useful histories of the site.

The source of pollution is small—a four-acre parcel that was first the site of an acetylene gas manufacturer. The site was purchased in 1975 by Columbia Organic Chemical Company to store, recycle and dispose of chemical waste, and then operated for the same purpose by South Carolina Recycling and Disposal Inc (SCRDI) from

1976 to 1982. When the plant closed in 1982, 7500 drums of chemical waste were stored on site. The U.S. Environmental Protection Agency ordered the drums removed in 1982, and the site was placed on the Superfund Program's National Priorities List one year later. EPA issued a clean-up plan in 1990, and soil on site was remediated from 1994 to 1996.

In 1996, the groundwater recovery system that still runs today was put in place. The system runs like a giant circulation pump. Groundwater is injected into a shallow aquifer upgradient of the contaminated site, then recovery wells downgradient of the site pump out the contaminated groundwater, which is treated before being reinjected.

The contamination is split into two separate plumes, both of which first trend northeast toward Myers Creek before veering sharply southwest toward Mill Creek. In addition

to the injection and recovery wells, monitoring wells, including a couple on the southwest side of Bluff Road, measure contaminants in both the shallow aquifer and a deeper aquifer that has not shown signs of contamination.

The system has removed a total of 4,208 pounds of volatile organic compounds since it was first put in place. The most consistent pollutants on the site include industrial solvents like trichloroethene, and chemicals used to manufacture refrigerants, like carbon tetrachloride and chloroform. The total mass of volatile organic compounds has decreased by 97 percent, and the amount removed has flattened in recent years.

Nonetheless, several of the monitoring wells contain levels of pollutants that still do not meet the contaminant level and the 2018 five-year review recommended that the system continue to run.

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## Landfill

*continued from page 4*

required to cover any new material with a layer of soil each day to help prevent runoff from the site. Since 2017, the landfill has made multiple requests to use tarps as a temporary cover, first for no more than 24 hours, and then for 48 hours. In addition, it has requested that auto “fluff” (material from shredded cars) be used as both cover material, and material for interior

roads. Brownfield soil from Sola Station (the canal-side development in Columbia) has also been requested.

In each case, DHEC has acquiesced, though testing of the auto fluff in particular showed that samples contained toxic cadmium and lead, albeit below regulatory limits. Each year, the landfill is required to confirm that they have enough soil for landfill operations. We plan to press DHEC to enforce this requirement more strictly so that ineffectual

or unsatisfactory remedial measures can no longer be used.

While we are relieved to see DHEC taking some action to remediate problems at the site, it is clear that it takes continual pressure to ensure DHEC will act, and even more persistence to ensure that substantive action is taken. We plan to share our most recent findings with DHEC and Richland County Council with the anticipation that DHEC will take additional enforcement actions.

# Flooding hampers Christmas Bird Count

Compilers have never watched river gages as closely as they did for this year's count, though it became clear early in the week of the count that our floodplain parties would have to be pulled from their usual routes and the Congaree River party would not be able to launch.

We combined a couple parties and had excellent coverage of the bluff edge north of the park, which accounted for a couple of our record-high counts. In addition to almost all our usual parties in both Richland and Calhoun counties, we had a new party cover the evocatively named Doodle Hill Farm in Calhoun County.

The count was punctuated with the usual interesting adventures, including a rabbit's hindquarters unceremoniously dumped at the feet of one counter by a Barred Owl, and a local resident's call to the sheriff to report the apparently suspicious activities of another counter.

In contrast to the flooding, the weather could not have been more cooperative, with excellent conditions for sighting birds for much of the day. The outstanding sighting was Brad Dalton's immature Golden Eagle along U.S. 601. Ron Ahle saw one last winter (though not on the CBC), and one was sighted on the 2015 CBC.



Photo by Carl Miller

Swamp Sparrow

It's interesting to speculate why this species may be over-wintering in the Midlands.

We shouldn't overlook other unusual species simply because our counters are diligent in finding them year after year, including Sedge Wren, White-crowned

Sparrow and Virginia Rail. We saw 94 species this year, a good total given the lack of access to some of our better habitats. Without access to the park's trails, we will not be competitive for high counts nationally with some of our usual woodpeckers and winter specialties, though we did have record count totals of Blue-headed Vireo, Ring-billed Gull, Red-shouldered Hawk and Eastern Bluebird.

Our 36 participants were:

Ron Ahle, Cindy Balaam, John Balaam, Andy Brady, Mary Bull, John Cely, Brad Dalton, Mary Desportes, Caroline Eastman, John Ebert, Dennis Forsythe, Lex Glover, John Grego, Mark Hopey, Carol Jaworski, Jay Keck, and Sharon Kelly.

Also, Jon Manchester, George McCoy, Steve McInnis, Susan McInnis, Catherine Miller, Carl Miller, Robert Miller, Julie Mobley, Ann Nolte, Kathleen O'Grady, Neal Polhemus, Jean Prothro, Clover Robichaud, Dave

Schuetrum, Alice Steinke, Julie Taylor, Patricia Voelker, Scott Warner, and Dick Watkins.

## Species sighted were:

Pied-billed Grebe 3  
Double-crested Cormorant 4  
Anhinga 4  
Great Blue Heron 12  
Great Egret 3  
Black Vulture 193  
Turkey Vulture 184  
Canada Goose 12  
Wood Duck 118  
Mallard 2  
Ring-necked Duck 8  
Hooded Merganser 12  
Bald Eagle 1  
Golden Eagle 1  
Northern Harrier 2  
Sharp-shinned Hawk 1  
Cooper's Hawk 2  
Red-shouldered Hawk 41  
Red-tailed Hawk 13  
American Kestrel 13  
Wild Turkey 3  
Virginia Rail 1  
Killdeer 60  
Wilson's Snipe 1  
American Woodcock 9  
Ring-billed Gull 401  
Rock Pigeon 4  
Mourning Dove 209  
Common Ground Dove 2  
Eastern Screech-Owl 3  
Barred Owl 32  
Great Horned Owl 9  
Belted Kingfisher 7  
Red-headed Woodpecker 5  
Red-bellied Woodpecker 97  
Yellow-bellied Sapsucker 47  
Downy Woodpecker 38  
Hairy Woodpecker 4  
Northern Flicker 126  
Pileated Woodpecker 30  
Eastern Phoebe 73  
Loggerhead Shrike 10  
White-eyed Vireo 6  
Blue-headed Vireo 33  
Blue Jay 80  
American Crow 195  
Fish Crow 3  
Carolina Chickadee 83  
Tufted Titmouse 66

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# Trees

*continued from page 1*

more than 30 feet around. The tree was named after Revolutionary War General Nathanael Greene, who first met Francis Marion, the Swamp Fox, nearby. The General Greene bald cypress is representative of an old growth ecosystem that used to cover 50 million acres of floodplains in the Southeast. Only small remnants of this system remain, with the finest intact example of this ecosystem found at Congaree National Park.

The bald cypress is several hundred years old, dating to a time before European contact. It grows close to Bates Old River, a former channel of the river whose bank provided a convenient route across the floodplain for Native Americans and settlers alike.

The historic McCords Ferry Road, whose eponymous ferry was active from 1766 until 1792, followed the bank and passes nearby. The tree would

have been witness to historic events big and small, including the movements of American and British forces during the battle of Fort Motte, and land and water trade between the Lowcountry and the Midlands. Ferry and boat traffic, often piloted by enslaved African-Americans, would have conveyed passengers, livestock, and cargo within sight of the ancient tree.

With its hollow trunk and broken crown, the tree would not be worth harvesting, which explains why it survived when loggers turned their attention to Southeastern forests in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. Enormous stumps of its neighbors from that time stand nearby, more than a century after they were harvested.



*General Greene Bald Cypress*

Fortunately, portions of the floodplain were never intensely harvested, and when timber cutting resumed in the 20<sup>th</sup> century, this bald cypress was representative of the big trees that inspired efforts to protect the floodplain forest.

# Birds

*continued from page 6*

Red-breasted Nuthatch 3  
 White-breasted Nuthatch 16  
 Brown-headed Nuthatch 26  
 Brown Creeper 2  
 Carolina Wren 157  
 House Wren 25  
 Winter Wren 18  
 Sedge Wren 2  
 Golden-crowned Kinglet 101  
 Ruby-crowned Kinglet 169  
 Blue-gray Gnatcatcher 3  
 Eastern Bluebird 181  
 Hermit Thrush 34  
 American Robin 539

Gray Catbird 5  
 Northern Mockingbird 41  
 Brown Thrasher 13  
 European Starling 27  
 American Pipit 62  
 Cedar Waxwing 63  
 Orange-crowned Warbler 2  
 Yellow-rumped Warbler 51  
 Pine Warbler 110  
 Black-and-white Warbler 9  
 Common Yellowthroat 5  
 Eastern Towhee 95  
 Chipping Sparrow 344  
 Field Sparrow 11  
 Savannah Sparrow 35  
 Fox Sparrow 14  
 Song Sparrow 165

Swamp Sparrow 53  
 White-throated Sparrow 172  
 White-crowned Sparrow 3  
 Dark-eyed Junco 47  
 Northern Cardinal 230  
 Red-winged Blackbird 7505  
 Eastern Meadowlark 50  
 Rusty Blackbird 64  
 Common Grackle 514  
 Brown-headed Cowbird 130  
 House Finch 21  
 Pine Siskin 2  
 American Goldfinch 132  
 House Sparrow 4  
**Total Species 94**  
**Total Count 13,242**



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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) \_\_\_\_\_  
\_\_\_\_\_ Family \$35 \*      Mailing address \_\_\_\_\_  
\_\_\_\_\_ 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!**

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