



Friends of Congaree Swamp News

www.friendsofcongarree.org

Winter 2024

Save the date

Ethnobotany hike

On **Sunday, March 17**, Dr. Gail Wagner, distinguished ethnobiologist at the University of South Carolina and one of the few paleobotanists in the Southeast, will lead a walk along the Bluff Trail system as she shares little-known uses for everyday plants, with an emphasis on emerging spring plants.

Her interests focus on the relationships between people and plants, both past and present. She is a veteran of archaeological projects in the Southwest, Israel, India and South Carolina.

Meet at the Congaree National Park Visitor Center at 9 a.m. to learn how early settlers and Native Americans used plants for food, fiber, and medicines. Regular walking shoes should be sufficient;

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Research symposium draws more than 140 registrants

More than 140 registrants attended Congaree National Park's fourth research symposium held in early February at the University of South Carolina Alumni Center.

After 2022 Congaree Research Symposium, members of the organizing committee set up a plan to re-establish symposia on a regular biennial schedule.



Congaree National Park Superintendent Greg Hauburger leads a panel discussion featuring current and former park employees Liz Struham, Jon Manchester, and Greg Cunningham.

Congaree Biosphere Region was recertified in 2016, with the process placing a premium upon greater engagement of Congaree National Park and its biosphere partners with environmental and sustainability efforts in the Congaree Biosphere Region. As partners in the biosphere worked toward formal agreements and establishing

an active organization, we felt that a 2024 symposium that featured the Congaree Biosphere Region would help provide visibility and give the organization a boost.

In contrast to the 2022 symposium, all attendees were in person and only a couple speakers needed to present remotely. Friends of Congaree Swamp and Congaree National Park co-hosted the program, with support from sponsors Congaree Biosphere Region, Central Midlands Council of Governments, Carolina Outdoor Adventures and River Runner Outdoor Center. Congaree Land Trust and Palmetto Outdoor Center provided generous door prizes.

Chief Interpretive Ranger Jon Manchester welcomed conference

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President's Corner

Dr. John Grego



Ann Jennings, second from right, in March 2010 with a trail clearing crew.

Ann Jennings passes away

Ann Jennings passed away on November 30, 2023, after a long struggle with dementia.

Ann was a leader in the Columbia community in advertising and theater, and held leadership positions in environmental organizations for over 30 years. Her work on behalf of the effort to preserve Congaree Swamp in the 1970s was well-documented in publications of the time and revisited in Betsy Newman's filming of *Roots in the River* in 2009.

Ann became interested in environmental causes in the early 1970s and served as president of the South Carolina Environmental Coalition during the campaign to protect the park. The coalition

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

provided funding for Brian Blackwelder's effective lobbying work as executive director. During that era, she also served as S.C. conservation chair for the Joseph LeConte Chapter of the Sierra Club. She served as the executive director of the Congaree Land Trust starting in 1999 and stepped down from that position in 2007.

As her illness progressed, her husband Croft would drop her off on Friends' trail-clearing service days and she would accompany us on our work. She is pictured here in 2010 with some of our regular volunteers.

Remembering Mildred Myers

Mildred Myers, environmental justice activist and Lower Richland resident, passed away on November 13, 2023.

Starting with a successful protest of a poultry plant near her neighborhood, Mildred quickly became involved in environmental controversies throughout Lower Richland, including the Bluff Road superfund site, pipelines and landfill expansions.



Mildred Myers

As coordinator of S.C. Environmental Watch, Mildred became more and more involved in environmental justice issues, particularly the effect of air pollution from coal-fired power plants on the public health of African-American communities. She organized environmental justice seminars and traveled throughout the state to help other communities with environmental issues.

Mildred was an early board member of Friends of Congaree Swamp and we both served on the Richland County Conservation Commission. Lower Richland could not have had a more tenacious and knowledgeable advocate.

Station would monitor lead in Gills Creek

The S.C. Department of Health and Environmental Control recently requested public comment on a draft document for a lead-impaired water quality monitoring station on Gills Creek at Percival Road, downstream of Boyden Arbor Pond on Fort Jackson property.

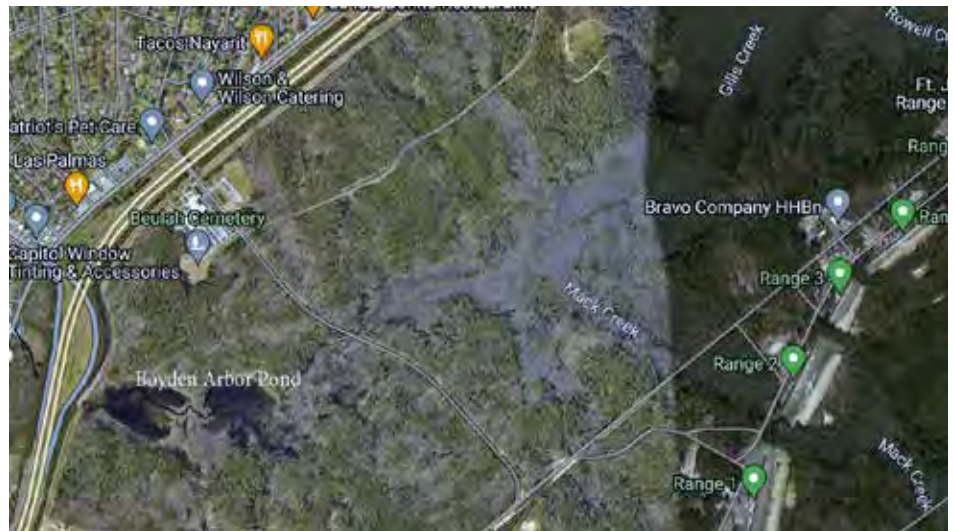
The document recommends a reduction of over 60% in lead levels for the surface waters of Gills Creek.

Friends of Congaree Swamp provided comments and submitted a Freedom of Information Act request to review studies of lead contamination submitted to DHEC by the U.S. Army. The requested materials could not be delivered promptly, but some of the information from the request is included in the narrative below.

We studied DHEC's review of possible continuous and intermittent point sources and non-point sources for the pollution, and largely agreed with analysis that eliminated several possible candidates (airborne pollution, known point sources, etc.) and settled on upstream firing ranges as the likely source—a conclusion also reached by the U.S. Army.

Fort Jackson has small arms firing ranges upstream from Boyden Arbor Pond dating to the 1940s, and review of aerial imagery suggests that the extant ranges have been in place in the same configuration for most of that time. Two tributary streams of Gills

Creek flow through the firing ranges—Mack Creek between Range 1 and Range 2 and Rowell Creek between Range 6 and Range 7, while a larger tributary, Bynum Creek, skirts the northern edge of the ranges.



Issues with lead contamination at the firing ranges, outside earlier studies, were brought into focus in 2013 as part of an Operational Range Assessment at Fort Jackson. Evidence of lead contamination in surface water and sediments was found in Gills Creek upstream of Boyden Arbor Pond (and downstream of the firing ranges). Similar results were obtained for copper, another constituent of small arms ammunition. A supplemental 2014 study of Boyden Arbor Pond farther downstream also found lead and copper contamination in surface water and sediments.

Fort Jackson studied remediation methods in 2016, and tested one of the most promising and cost-effective

methods—filter tubes placed in the primary drainages of the ranges that physically trapped lead through adsorption.

The tubes proved ineffective when placed in the primary drainages of the ranges,

with large stormwater events overwhelming them. The tubes were then moved to smaller drainages at individual range berms, but they clogged quickly and needed frequent maintenance. Based on the evidence of lead contamination, Boyden Arbor Pond on Fort Jackson property was added as an Area of Concern under the fort's hazardous waste permit administered by DHEC.

DHEC considered establishing targeted reduction limits for lead at other sampling sites in the Gills Creek watershed after a sampling site at Bluff Road was cited for lead contamination on its statewide 2018 list of impaired stream sites. Sampling at this and other sites in 2021-2022

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Rain dampens Christmas Bird Count

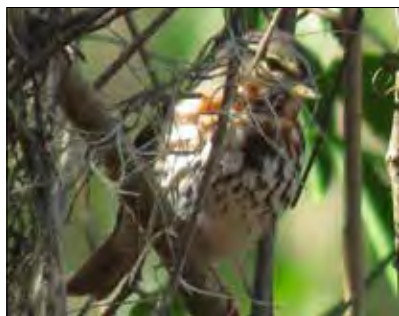
With 15 hours of continuous rain in the forecast, the Congaree Swamp Christmas Bird Count was initially postponed to December 29—the first time ever we have postponed the count due to weather.

In the interim, a second rainfall event flooded the park, so that we now faced two complications on the day of the count: several of our most experienced counters were not available on the make-up date, and the park was flooded. We resolved these issues in part by moving most of our floodplain parties to the open territories.

Nonetheless, we were spread a little thin. With less coverage than usual, we had low species diversity, falling short of 80 species, with no new species or new high counts. Regardless, we appreciated the flexibility and



Brown-headed nuthatch



Fox sparrow

patience of all those involved as we scrambled to re-arrange assignments and routes.

We did manage to have at least one party in the floodplain, paddling the numerous sloughs and ponds along the Kingsnake Trail throughout the day. As proof of concept, it was quite successful, with relatively little time focused on paddling, and a great deal of time listening for birds under ideal conditions, though mixed flocks were not so easy to track as on foot.

Thanks to all our volunteers. In spite of difficult circumstances—almost a given for this count—we added a couple new birders, and again increased assignment



Common yellowthroat

flexibility for future counts.

Thanks to our volunteers: Ron Ahle, Andy Brady, Kara Brown, Steve Dennis, Mary Desportes, Caroline Eastman, Hilda Flamholtz, Jon Flamholtz, John Grego, Jerry Griggs, Kathy Gunther, Mark Hopey, Grove Lucas, Tracy Martin, Carl Miller, Catherine Miller, Julie Mobley, James Moore, and Graham Norman.

Also, Kathleen O'Grady,

Aaron Olson, Bailey Slice Parker, Clay Parker, Neal Polhemus, Kate Satterfield, Hunter St. Germain, Kenny Bob St. Germain, Alice Steinke, Glenda Swearingen, Julie Taylor, Beth Tilley, John Tjaarda, Patricia Voelker, Dick Watkins, and Scott Wietcha.

Species Count

Pied-billed Grebe	4
Great Blue Heron	3
Great Egret	3
Black Vulture	52
Turkey Vulture	104
Canada Goose	8
Wood Duck	207
Osprey	1
Bald Eagle	1
Northern Harrier	1
Sharp-shinned Hawk	1
Cooper's Hawk	2
Red-shouldered Hawk	15
Red-tailed Hawk	11
American Kestrel	12
Killdeer	25
American Woodcock	3
Mourning Dove	31
Common Ground Dove	2
Eastern Screech-Owl	2
Barred Owl	30
Great Horned Owl	3
Belted Kingfisher	3
Red-headed Woodpecker	4
Red-bellied Woodpecker	105
Yellow-bellied Sapsucker	29
Downy Woodpecker	44
Hairy Woodpecker	2
Northern Flicker	95
Pileated Woodpecker	59
Eastern Phoebe	75
Loggerhead Shrike	9
Blue-headed Vireo	22
Blue Jay	27
American Crow	94
Carolina Chickadee	114
Tufted Titmouse	108
White-breasted Nuthatch	11
Brown-headed Nuthatch	37
Brown Creeper	1
Carolina Wren	113

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River development needs wider buffer

Since we have been involved with water quality buffers for some time, we wanted to share some thoughts on that topic related to the pickleball facility proposed along the Saluda River on a four-acre parcel upstream from Mill Race Rapids.

The facility's parking lot would lie in the current utility corridor, while the facility itself would require clearing a large portion of the riparian forest adjacent to the Saluda River.

City of Columbia ordinances typically require a water quality buffer along waterways. The buffer either extends 50 feet from bank edge, or the floodway, whichever is wider. On many rivers and streams, the latter condition can provide a buffer hundreds of feet wide—Gills Creek's floodway is extensive in places, for instance.

In this case, the Saluda River's floodway beyond the bank edge extends less than 50 feet, which leaves it relatively unprotected.

We would note that the city has the discretion in its ordinances to increase water quality buffers for impaired streams beyond the mandated 50 feet, but has apparently not done so for this reach of the Saluda River.

The Saluda River is impaired for bacterial contamination at numerous locations, including new 2022 listings for recreation

both downstream at the Riverbanks Zoo bridge and upstream at Oh Brother rapids.

Note that a 50-foot buffer, properly maintained, does have some value in filtering stormwater runoff and slowing it down so that more runoff can be absorbed into the soil and less sediment and pollution are carried into water bodies.

In general though, a water quality buffer should be wider to meet water quality improvement goals. A 50-foot buffer is particularly ill-suited to protecting water quality on the Saluda River due to the rocky riverbank that prevents effective filtering of stormwater. We would recommend a wider buffer for that consideration alone.

Since the Saluda Riverwalk has opened, nature enthusiasts have been drawn there by the variety and density of wildlife, especially birdlife, along its forested corridor. In this respect, it mimics the well-forested riparian corridor to be found at Saluda Shoals Park.

Though 50-100 foot corridors have some value in capturing

sediment and absorbing pollutants in run-off, they are ineffective in providing wildlife habitat. In fact, riparian corridors of 300 feet are recommended to protect wildlife habitat. Coincidentally, 300 feet represents the typical width of the forested corridor



Entrance to Saluda Riverwalk from parking lot

from the streambank to the powerline cut at this location.

Lacking a water quality buffer ordinance that protects wildlife habitat sufficiently, the City of Columbia could consider a special overlay district that would better protect riverside habitat along its major rivers.

The conflict we have seen over this small tract will only repeat itself as the city considers recreational and development plans along its rivers, and weak water quality buffer ordinances will lead to further degradation of wildlife habitat along important riparian corridors.

Save the date

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bring a snack and water.

This outing will be limited to 30 participants.

Big tree hike

On **Saturday, April 6**, we will travel east of Weston Lake Loop Trail to visit big trees, including the Loblolly Pine with the greatest circumference of any in the park.

Along the way, we will pass opposite the national champion Loblolly Pine, and see large specimen Overcup Oak, American Elm and Swamp Chestnut Oak.

Depending on conditions, we will also try to visit a few nearby large Baldcypress, then retrace our steps to Weston Lake Loop Trail and point out a couple hidden Baldcypress in Weston Slough.

Meet at the Visitor Center

at 9 a.m. This is not a long hike, though it will be off-trail and there will be one or two wet spots to negotiate. Regular hiking boots should be sufficient; bring a snack, insect repellent and water.

This outing is solely for members of Friends of Congaree Swamp and will be limited to 25 participants.

Dawn Chorus Walk

Friends will hold its annual Robin Carter Dawn Chorus Walk on International Dawn Chorus Day, **Sunday, May 5**.

Carter, who passed away in 2008, started the dawn chorus event at Congaree National Park in 2005. It was one of many birding events that Robin originated at the park and that we work to maintain through the present day.

Participants will meet at the Visitor Center at 5:30 a.m. This

will provide an opportunity to listen for the pre-dawn sounds of owls, nightjars, and migrating thrushes before the dawn chorus starts in earnest.

Bird song experts will be on hand to help you identify what you hear, or you can just listen and take in the experience.

Birds observed during the Dawn Chorus will be included as part of the North American Spring Migration Count day at the park. Stick around if you would like to help out!

The Dawn Chorus hike will be followed by breakfast at 7:30 a.m. organized and prepared by Friends members. The breakfast menu will be simplified this year, with pastries, scones, biscuits, fresh fruit, juice and coffee.

To sign up for any of these hikes, contact John Grego at friendsofcongareeswamp@gmail.com or (803) 331-3366.

Lead

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proved inconclusive, with the exception of the newly added sampling site at Percival Road. The Percival Road site violated the lead standard for 22 of 24 monthly sampling events during the study period.

In 2022, a detailed sampling plan by Fort Jackson was developed as part of field investigation requested by DHEC for the hazardous waste permit. Surface water

and sediment samples would be tested in Gills Creek, Boyden Arbor Pond and Rockyford Lake, an off-base water body immediately downstream of Boyden Arbor Pond. Results from that study are not yet available.

In our public comments, we supported DHEC's target recommendation for a 62.9% reduction in lead. We promised to submit supplemental comments upon receipt and study of the FOIA documents.

In addition to a study of lead

contamination, we requested that studies be conducted for other metals associated with the firing range (particularly copper) to see whether targeted reductions should be developed for these metals as well.

Having found from the FOIA documents that copper contamination is as systemic as lead contamination, we will reiterate our request for a plan to reduce copper contamination at the Percival Road sampling site.

Symposium

Continued from page 1



Professor Kirstin Dow discusses a NOAA-sponsored Columbia-area heat-mapping project.

participants, and National Park Service Science and Stewardship Coordinator Cliff McCreedy presented on the U.S. Biosphere Network.

We then had presentations on the 40-year history of the Congaree Biosphere, including video clips from Neal Polhemus' interview of Fran Rametta, who wrote the initial biosphere application in 1981. Rachel Post, who spoke from her Department of Defense office in Alaska, discussed

her successful re-certification application while working as a seasonal employee at the park. Other speakers caught us up to date on the biosphere.

Friday's sessions were organized around the mission of the UNESCO Man and the Biosphere Programme, including Biodiversity and Conservation Research, Integrating Local Communities in Research and Monitoring, Towards Environmentally Sustainable Regional Development in the Congaree Biosphere Region, and Monitoring Data and Park Management. The symposium closed with a panel on the future of the Congaree Biosphere Region. Video recordings organized by session will be available at our website.

We would like to thank organizing committee members, including board members and USC faculty Tameria Warren and Neal Polhemus, USC faculty John Kupfer, and now-U.S. Forest Service employee Greg Cunningham, all of



Professors Tameria Warren and John Kupfer have served on the organizing committee for the last two symposia.

whom helped organize the 2021 Water/Ways Symposium and 2022 Congaree Research Symposium. Congaree National Park staff Jon Manchester and Carson Lillard, chief of Resource Stewardship and Science, joined the organizing committee as they stepped into their new positions.

2026 will coincide with the 50th anniversary of the protection of Congaree Swamp, as well as the National Park Service's 250th commemoration of the Revolutionary War—guess what the theme of our next symposium will be!

Birds

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House Wren 6
Winter Wren 34
Golden-crowned Kinglet 165
Ruby-crowned Kinglet 291
Blue-gray Gnatcatcher 1
Eastern Bluebird 99
Hermit Thrush 50
American Robin 910
Gray Catbird 1
Northern Mockingbird 23
Brown Thrasher 5

European Starling 11
American Pipit 100
Cedar Waxwing 195
Orange-crowned Warbler 2
Yellow-rumped Warbler 70
Pine Warbler 57
Black-and-white Warbler 5
Common Yellowthroat 5
Eastern Towhee 29
Chipping Sparrow 99
Vesper Sparrow 1
Henslow's Sparrow 1
Savannah Sparrow 11
Fox Sparrow 9

Song Sparrow 68
Swamp Sparrow 22
White-throated Sparrow 156
Dark-eyed Junco 31
Northern Cardinal 140
Painted Bunting 1
Red-winged Blackbird 74
Eastern Meadowlark 83
Common Grackle 108
House Finch 4
American Goldfinch 50

Total Species 77

Total Count 4390



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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 _____
_____ Nonprofit \$50 Phone _____ Email _____
_____ Partner \$100**
_____ Benefactor \$500
_____ Patron \$1000 **Please keep your information current to receive special notices about field trips, events, scheduling changes and acknowledgements in addition to a quarterly newsletter.**
_____ Corporate \$1000

*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 _____ 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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