



Friends of Congaree Swamp News

www.friendsofcongarree.org

Winter 2015

Save the date

Congaree Nomads

Friends of Congaree Swamp will sponsor a free performance of Congaree Nomads at Conundrum Music Hall on **Saturday, Feb. 21**, at 8 p.m.

Presented by Michael Pisaro, Greg Stuart and Nathan Halverson, the performance will combine audio by Pisaro and Stuart with a new video by visual artist Halverson and Stuart consisting of nine still-frame shots from Congaree National Park.

Congaree Nomads is Part II of "Continuum Unbound," a three-disc collection by composer Pisaro and percussionist Stuart which has been widely and enthusiastically reviewed online and in the national press.

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Sampson Island yields glimpses into its history

The results of the May 2014 archaeological field surveys of Sampson Island provide another glimpse into the area's history.

Sampson Island is located in the Bates Fork Tract of Congaree National Park where U.S. 601 crosses the Congaree River. The purpose of the surveys, conducted by Georgia State University archaeology professor Dr. Daniel Bigman and his students, was to get a more comprehensive look at the prehistoric human occupations in the area. Together with previous archaeological surveys, the 2014 field school provided valuable information about the cultural history of the island.

The surveys recovered ceramics primarily from the Late Archaic period (3000–1000 B.C.) and the Early Woodland period (1000–500 B.C.), suggesting prolonged occupation at Sampson Island during those periods.

The Late Archaic period is characterized by major economic and technological shifts, including increased long-distance exchange networks, manufacturing and use of ceramic vessels, and the cultivation of plants. As populations grew, territories for hunter-gatherer groups shrank, which led to decreased mobility among the population.



Artifacts unearthed on Sampson Island include some from the Late Archaic period, first row, the Early Woodland period, second row, and the Mississippian period, third row.

These shifts influenced how groups of people organized their residential lives. While a number of possible motivators have been suggested for the development of ceramic vessel manufacture—such as horticulture, intensified

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President's Corner

Dr. John Grego

Thanks to Nelson, Mullins

I would like to acknowledge the Nelson Mullins Riley & Scarborough law firm, which has hosted our Board meetings for many years. NMRS partner and former Friends of Congaree Swamp board member Zoe Sanders originally offered the use of their conference space for our meetings, and has arranged our meetings since her departure in 2006. We appreciate the use of the facilities, the great views from the 17th floor of the Meridian Building, and NMRS's secret stash of free Cokes.

Facebook Album Index

This past fall, students in my South Carolina Honors College service course on natural history, cultural history and public engagement at Congaree National Park completed end-of-the-term service projects. We have been able to put one of the projects immediately to use—an index for our numerous Facebook photo albums. This is a project that had increasingly weighed on my mind as album after album has been uploaded to Facebook with no convenient way to search through them. How many albums had photos of Eastern Box Turtle, a favorite photographic subject? Where was that photo of Rafinesque's Big-eared Bat?

Student Siobhan Kibbey designed a data entry form in Google Docs that allows the user to classify information contained in all the photos in a given album, marking categories such as

Reptiles, Birds, Trails, Stills, Waterbodies, etc., and entering all flora and fauna common names (no people yet, though) in text boxes. Since a link to the album is saved, the user can link to an album after a search on a particular category or name.

Initially, Siobhan and her team members, Bailey Foster and Morgan McBride, handled the data entry for more than 300 albums, but now regular contributors to the Facebook page can upload album information as well.

The data for albums from 2009 to 2014 will be available soon at the Friends of Congaree Swamp website as an Excel workbook for anyone's perusal, along with instructions and a couple examples for its use. If you have ever used Sort or Filter in Excel, you should be able to use the workbook for your own search of our albums.

In the meantime, there are 19 albums with Eastern Box Turtle photos, and the Rafinesque's Big-eared Bat was photographed during a November 2013 river trip to Joe's Lake.

Bates Ferry Trail

The official title of our Richland County Conservation Commission community conservation grant is McCords Ferry Trail Project, but a funny thing happened on the way to the river.

As park staff planned interpretive signs and materials for the new trail, they asked the advice of Dick Watkins, John Cely and others about a proper name for the trail. The consensus definitely favored Bates Ferry Trail—McCords Ferry is on the other side of U.S. 601, and the 1.1-mile trail ends at Bates Ferry landing overlooking the Congaree River.

If you have been on the trail, you have likely noticed the kudzu and chinaberry trees. The park's Exotic Plant Management Team treated these and other unwanted species along the trail. Maintenance staff has roughed out a small parking lot beyond the current gate (a new gate will be installed south of the parking lot), and begun filling potholes along the trail.

Interpretive staff has received a three-panel interpretive kiosk for the trailhead, and Friends members recently provided draft text on ferry history to be used on one of the panels. So the project is moving swiftly along and we are looking forward to a Spring grand opening.

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

Meteor shower lights up bird count

The Congaree Swamp Christmas Bird Count began on a spectacular note.

With the Geminid meteor shower particularly active, participants counting owls in the early morning were treated to constant meteor activity in the northern skies. The shower must have been good for Barred Owls—we heard 46, the highest count we have recorded in the 21-year history of the count.

We added two new species to the count. Grasshopper Sparrow were observed by Cathy Miller, Carl Miller, Dick Watkins and Luther Wannamaker at excellent sparrow habitat on the Congaree River Bluffs and four American Coot were observed at Dry Branch by Kathleen O'Grady and Alice Steinke.

Even though some of our parties did not get into the field this year, we recorded several record counts, though some were simply observations of single birds that tied previous years' observations.

A couple were near to our

heart, since they included some of the park's most prominent over-wintering or permanent residents. In addition to the 46 Barred Owl, we observed 16 Black-and-white Warbler.

Publicity in "The State" attracted some new counters to the park and it was great to have several additional pairs of eyes on our boardwalk party, including young birder Sam Messinides.

We ended the day with 93 species, similar to species counts prior to last year's extraordinary count of 109 species.

Here is our list of 36 participants—thanks, ya'll!

Ron Ahle, Linda Allman, Kent Bedenbaugh, Molly Bonnell, Frances Brown, John Cely, Kimberly Clark, John Culp, Brad Dalton, Steve Dennis, Caroline Eastman, Corinne Fenner, Dennis Forsythe, Gwendolyn Galphin, John Grego, Kate Hartley, Maria Lauricella, Jon Manchester, George McCoy, Steve McInnis, Susan McInnis, Sam Messinides, Carl Miller, Cathy Miller, Kathleen O'Grady (co-organizer),



Pileated Woodpecker

Miriam Oudejans, Richard Sasnett, Donna Slyce, Warren Steckle, Alice Steinke, Cindy Tufford, Dan Tufford, Ed Vincent, Patricia Voelker, Luther Wannamaker and Dick Watkins.

Ron Ahle took the photos along the Oakridge Trail.

Record counts

Pied-billed Grebe 9
Great Egret 3
Lesser Scaup 2
Hooded Merganser 42
Merlin 1
Barred Owl 46
American Crow 391
Yellow-throated Warbler 1
Black-and-white Warbler 16
Chipping Sparrow 513
Lincoln's Sparrow 1

Additional species and counts

Double-crested Cormorant 8
Anhinga 2
Great Blue Heron 19
Black Vulture 55
Turkey Vulture 159
Wood Duck 39
Mallard 2
Ring-necked Duck 64
Bald Eagle 1
Northern Harrier 4
Sharp-shinned Hawk 3
Cooper's Hawk 1
Red-shouldered Hawk 21
Red-tailed Hawk 22
American Kestrel 19



Barred Owl



Pine Siskin

See *Bird count*, page 4

Cherrybark Oak nominated for Treasured Tree program

Friends of Congaree Swamp nominated the large Cherrybark Oak on the Kingsnake Trail as a Treasured Tree, a program sponsored by City of Columbia's Forestry & Beautification Department.

This tree was recognized at a ceremony Dec. 5 on the Governor's Mansion grounds. Friends of Congaree Swamp donated the plaque to the park, which has a quite a collection now, comprising nominations for four Bald Cypress, two Loblolly Pine, one Beech tree, and one Cherrybark Oak.

The Cherrybark is one of the largest hardwood trees in Congaree National Park at more than 22 feet in circumference and over 150 feet tall. Though not the largest Cherrybark in the park, it is impossible to miss, standing only a few feet off the Kingsnake Trail along the bank of Tear Pond (accessibility is one criterion for the program).

We felt it was past time to nominate such an excellent example of the old-growth hardwoods to be found in Congaree National Park.



Bird count

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Wild Turkey 26
Killdeer 31
Greater Yellowleg 2
American Woodcock 3
Rock Pigeon 8
Mourning Dove 65
Eastern Screech-Owl 2
Great Horned Owl 2
Belted Kingfisher 7
Red-headed Woodpecker 23



Hermit Thrush

Red-bellied Woodpecker 150
Yellow-bellied Sapsucker 80
Downy Woodpecker 45
Hairy Woodpecker 6
Northern Flicker 173
Pileated Woodpecker 126
Eastern Phoebe 116
Loggerhead Shrike 10
White-eyed Vireo 4
Blue-headed Vireo 15
Blue Jay 45
Fish Crow 1
Horned Lark 4
Carolina Chickadee 152
Tufted Titmouse 156
White-breasted Nuthatch 23
Brown-headed Nuthatch 17
Brown Creeper 5
Carolina Wren 175
House Wren 14
Winter Wren 47
Golden-crowned Kinglet 157
Ruby-crowned Kinglet 229
Blue-gray Gnatcatcher 3
Eastern Bluebird 91
Hermit Thrush 134
American Robin 2182
Gray Catbird 2

Northern Mockingbird 35
Brown Thrasher 18
European Starling 60
American Pipit 20
Cedar Waxwing 49
Yellow-rumped Warbler 126
Pine Warbler 45
Common Yellowthroat 7
Eastern Towhee 86
Field Sparrow 10
Savannah Sparrow 57
Fox Sparrow 21
Song Sparrow 317
Swamp Sparrow 27
White-throated Sparrow 524
Dark-eyed Junco 27
Northern Cardinal 200
Red-winged Blackbird 12,322
Eastern Meadowlark 53
Rusty Blackbird 16
Brewer's Blackbird 2
Common Grackle 522
Brown-headed Cowbird 886
Purple Finch 6
House Finch 27
Pine Siskin 11
American Goldfinch 153
Total Species 93

Volatile organic compounds persist

Advocates once again reviewed annual monitoring reports and correspondence related to Richland County's Northeast Landfill to study any on-site pollution problems. These documents have been studied and subsequent findings shared with Richland County Council since 2011, when Richland County voted to extend the landfill's life beyond the original 2019 closing date.

THE LANDFILL accepted only 145,000 tons of waste last year—much lower than the previous year's total of 170,000 tons, mostly due to a drop in contaminated soil from Lexington County.

Unfortunately, the amount of industrial process waste nearly doubled to 17,000 tons. Process waste can include solvents and lubricants that may contribute to the landfill's continuing problems with the presence of volatile organic compounds in its monitoring wells.

SPEAKING OF THOSE wells, volatile organic compounds continued to be found in several of the wells in November 2013 and May 2014. Two of these wells are delineation wells, which are supposed to define the

leading edge of groundwater contamination from the site.

A third delineation well tested positive for arsenic above the groundwater protection standard in November 2013 and again in May 2014.

THERE WAS SOME discussion about whether the pollution in the third well was from landfill gas, the source of much of the pollution onsite, or leachate (run-off from landfill waste), which could be a sign of more serious problems onsite, such as leaks from one of the lined pits at the landfill.

Northeast Landfill's consultants argued the pollution detected at the well was likely due to landfill gas, although the S. C. Department of Health and Environmental Control was skeptical about that claim.

DHEC ALSO expressed concern that pollution on the landfill's southeastern boundary could be migrating off-site. Northeast Landfill's consultants had modified groundwater flow maps so that groundwater appears to travel along the southeastern boundary, never encroaching upon the adjacent property.

The consultant's

groundwater maps from previous reports would suggest groundwater flowing across the boundary, while the consultants argued the modifications were the result of updated studies of flow.

The outcome of that discussion is yet to be resolved, although groundwater has been detected on the southeastern boundary for several years now.

A SEPARATE SET of wells monitors landfill gas. The gas should be no more than 5 percent methane by volume, but excursions up to 20 percent methane are common, with methane readings above 40 percent occurring every year.

Most of these readings are along the western edges of the site, corresponding to the earlier phases of the landfill.

DHEC had encouraging words for the increased effectiveness of the landfill's Gas Collection and Control System, although the most recent sets of readings in mid-2014 showed an increasing trend in methane output, suggesting that the problem is not yet stable, let alone consistently meeting DHEC's standards.

Survey

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shellfish exploitation, and container efficiency—the actual reason remains unclear.

During this time, people living near the Savannah River began producing fiber-tempered pottery around 2600 B.C. This is the earliest known ceramics in the Southeastern United States. However, the earliest pottery located near the Congaree River (referred to as Thom's Creek) is tempered with sand and doesn't appear until about 2000 B.C. In addition to ceramics, artifacts found near Thom's Creek include tools made from a variety of materials, such as Coastal Plain chert, quartz, quartzite, rhyolite, bone and shell.

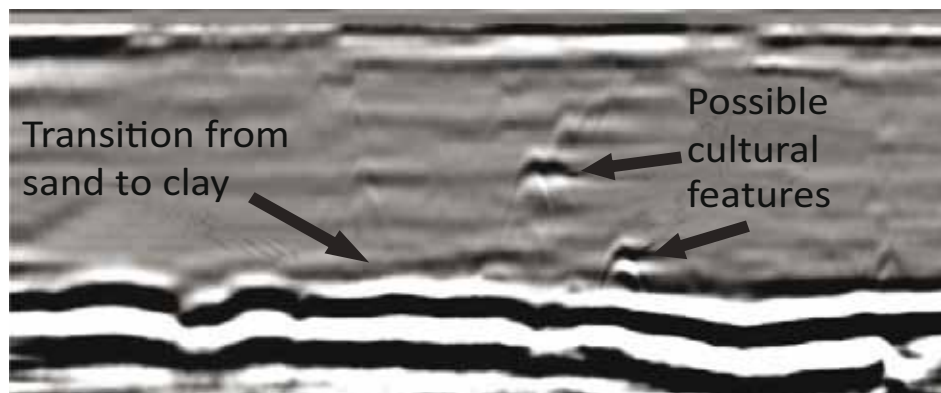
The Early Woodland period in this region is considered a major transitional period when semi-permanent and permanent villages resulted in more intensive horticultural practices and pottery became widespread throughout the Southeastern U.S. The Woodland-era South Carolina-Georgia Coastal Plain ceramics primarily consist of two types, which archaeologists call Refuge and Deptford. Refuge ceramics were composed of sand, grog (crushed pieces of ceramics) or a combination of the two. Deptford wares

were made of sandy-paste material and often had simple-stamped or check-stamped decorations on the exteriors.

The GSU field school students also recovered five sherds from the Mississippian

survey. The radar recorded the highest frequency of reflection anomalies in the same area where the highest concentration of artifacts were recovered.

Future archaeologists



Ground-penetrating radar from the southern portion of Sampson Island showing possible cultural features under the ground surface.

period (1000-1600 A.D.) in the same level, suggesting they came from the same vessel.

Despite the relatively low number of artifacts recovered during the May field school, the higher frequency of Late Archaic and Early Woodland ceramics suggests prolonged occupation at Sampson Island during these time periods. The Mississippian sherds suggest that Sampson Island was used as an overnight or short-use encampment for hunting or seasonal activities.

Ground-penetrating radar identified potential cultural features under the ground's surface. Students from the University of South Carolina visited Sampson Island during GSU's field school to assist with the geophysical

working at Sampson Island will be able to build off the 2014 data and help further our understanding about the prehistoric occupations of the area.

Students involved in the field survey were Emma Mason, Mary Banschbach, Chris Curry and Sarah Love.

Acknowledgements

Dr. Bigman and his students would like to thank Frank Henning, David Shelley, and everyone at Congaree National Park and the National Park Service for their guidance, support and enthusiasm during the field school.

Also, they would like to express their gratitude to the Catawba Nation for its support during the consultation process.



SwampFest! student art contest

Friends of Congaree Swamp co-sponsored the SwampFest! 2014 student art contest with our partners, South East Rural Community Outreach (SERCO). Student entries in grades K-8 were judged by park staff and \$50 prizes were awarded to the winners. Friends donated \$250 for the prizes.

Save the date

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It combines 24 three-minute field recordings from Congaree National Park with a 48-part orchestra of bowed percussion instruments.

Stuart, a music professor at University of South Carolina and winner of “Jasper” magazine’s 2014 Artist of the Year in music, collected the recordings over several days in the winter of 2012-2013 at the park.

Conundrum Music Hall is located at 626 Meeting Street in West Columbia.

Adopt-a-trail workday

The February adopt-a-trail workday will be held **Saturday, Feb. 28**, from 9 a.m. to about 1:30 p.m.

We will be clearing our adopted trails (Boardwalk, Sims Trail, Weston Lake Loop Trail, Oakridge Trail) and other trails of fallen limbs, switch cane, flotsam, and intruding branches. The theme is Yellow-throated Warbler, and we will be listening for these early migrants on the trail.

Meet at the Visitor Center at

9 a.m. Work gloves, light hiking boots, water, and a snack are recommended. Bring loppers, long-handled shears (good for switch cane) or bow saws, if you have them. Friends members and park staff will provide gear if you do not have any.

Contact John Grego (jrgrego@sc.rr.com or (803) 331-3366) if interested.

Dawn Chorus

This year’s Robin Carter Dawn Chorus Walk will be held Sunday, May 3.

Robin Carter, who passed away in 2008, did more than anyone else to promote birding at Congaree National Park. He established most of the annual birding events, maintained a 20-year database of Congaree bird reports, and turned enthusiastically to sound recording late in his birding career.

The walk is named for him in celebration of his legacy. Robin started the walk in 2005, and we now celebrate the event with the rest of the world on International Dawn Chorus Day. This year, we will be joined by some special

guests—Robin’s sisters Janice Evans and Patty Sentor, who will travel from out-of-state to attend in honor of Robin. There may be an additional surprise in store as well.

We will meet at the Visitor Center at 5:30 a.m. This will provide an opportunity to listen to the pre-dawn sounds of owls, nightjars, and migrating thrushes before the main event, which begins a half hour before sunrise. We can reasonably expect to hear as many as 40 species of birds calling. Bird song experts will be on hand to help you identify what you hear, or you can just listen and take in the experience. Donna Slyce will be our leader.

The Dawn Chorus hike will be followed by a free breakfast at 7:30 a.m. organized and prepared by Friends members. The menu changes slightly from year to year, but will include shrimp and creamy grits, bacon/date and cherry/orange scones, cheddar drop biscuits, a breakfast strata, fresh fruit, juice and lots of coffee.

Contact John Grego, jrgrego@sc.rr.com or call (803) 331-3366.



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Join Friends of Congaree Swamp today!

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!

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