



**Friends of
Congaree
Swamp**

www.friendsofcongarere.org
Summer 2007

Advocates for Congaree National Park and its unique environment.

Aquatic Biology Nature Hike – Congaree National Park

On Saturday, November 7, 2009, Dr. Jim Bulak (SCDNR), Bill Poly (SCDNR) and Dr. Theresa Thom (Congaree National Park) guided approximately 20 members along the Kingsnake Trail at Congaree National Park, highlighting some of the aquatic species that thrive in the different surface water habitats within the park. The primary purpose of this field trip was to offer an informal educational program highlighting the aquatic natural resources found within the park through “hands-on” learning.

Participants got the opportunity to see various techniques for sampling fish, invertebrates, and other aquatic species including electro-fishing, kick-net sampling with “D-nets” and minnow traps, which are sometimes used to collect crayfish. Despite the cold temperatures, more than 20 aquatic species were observed from Cedar Creek and sloughs along the Kingsnake Trail.

Several fishes were collected with the electro-fishing unit and dip nets, including; pirate perch (*Aphredoderus sayanus*), bluegill (*Lepomis macrochirus*), warmouth (*Lepomis gulosus*), yellow bullhead (*Ameiurus natalis*), margined madtom (*Noturus insignis*), redbfin pickerel (*Exox americanus*), banded pygmy sunfish (*Elassoma zonatum*), mosquitofish (*Gambusia holbrooki*), and eastern mudminnow (*Umbra pygmaea*). Bill Poly talked about some of his research documenting the unique reproductive strategies of pirate perch; the male and female fish actually spit their respective reproductive material (eggs and sperm) forcefully into underwater woody debris, rotten stumps, and other submerged habitat – thus preventing or reducing predation on the fertilized eggs. These behaviors are possible due to the fact that in embryonic development of the pirate perch, the anus actually migrates from the rear of the fish forward, and ends up right next to the mouth! Other interesting trivia included:

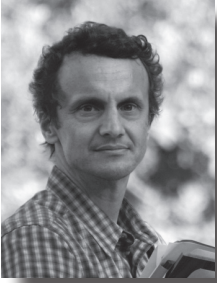
Banded pygmy sunfish are some of the smallest fish found in the park, typically measuring just over 1 inch long!

Redfin pickerel take advantage of spring floods, which can trigger spawning and provide flooded habitats for the larval pickerels (also reducing some predation on these small juveniles).

Several amphibian species were observed, including a three lined salamander (*Eurycea guttolineata*), marbled salamander (*Ambystoma opacum*), and southern dusky salamander (*Desmognathus auriculatus*). The southern dusky salamander was found in moist soil under a log, and was guarding numerous newly hatched babies that did not have obvious gills. Normally, young dusky salamanders have gills. This observation of possible direct development in southern dusky salamanders was incredible, and has triggered a new research project at the park with SCDNR herpetologist Steve Bennett.

Several invertebrates were collected using the kick-net sampling technique, including a larval mosquito, two true bugs (*Belostoma sp.* and *Notonecta sp.* = backswimmer), a dragonfly (*Dromogomphus spinosus*), a mayfly in the family Baetidae, 6 different aquatic beetles including one Whirligig Beetle *Dineutus sp.* and 5 species of predacious diving beetles; *Laccophilus maculosus*, *Neoporos clypealis*, *Rhantus calidus*, *Acilius semisuleatus*, and *Cybister fimbriolatus*. Most participants were brave enough to smell the sweet apple fragrance emitted by the Whirligig Beetle – a hormone released to evade predators like fish and birds. One crayfish species (*Procambarus chacei*) was collected, and numerous crayfish “chimneys” were seen.

Current research projects in the park were highlighted, including surface water and groundwater monitoring. Upcoming citizen science opportunities were mentioned, including moth inventories in the spring, and the upcoming Great Backyard Birdcount (February 6 and February 13). Special thanks to all who participated, and made this weekend outing informative and fun! For more information, please contact Theresa Thom (803) 695-0214 or visit the Congaree National Park website (<http://www.nps.gov/cong>).



Dr. John Grego

Canoe Trail Signs

First, some good news. Friends of Congaree Swamp had received an anonymous grant to help the park purchase Cedar Creek canoe/kayak trail mileage signs. This past fall, the park purchased multiple copies of each of the signs, which include trail mileage in ½-mile increments. The high water levels in the park this winter are ideal for park staff to install the new signs along Cedar Creek, and park staff has recently placed the signs all the way from Bannister Bridge to the South Cedar Creek canoe landing (over 6 miles). The signs are much larger than the old trail signs, are paired to face both upstream and downstream, and are placed high enough for all but the most extreme flood events. Friends of Congaree Swamp would once again like to thank our donor for improving the recreational experience and safety of paddlers on Cedar Creek, an Outstanding National Resource Waters.

Richland County's Storm Water Ordinances

On January 19, Richland County Council passed a revised set of storm water ordinances, completing a process that had been halted for almost a year while awaiting recommendations from the Site Planning Roundtable (the so-called "Development Roundtable"). In early November, council had unanimously passed the Development Roundtable's recommendations for 22 Site Design principles. Twelve members of the Development Roundtable (4 environmentalists, 4 developers/home builders, 4 county staff) met to craft the recommendations on Storm Water Outfalls and Water Quality Buffers into specific ordinance language.

The meetings were quite successful and we moved swiftly toward unanimous agreement on recommended amendments to present to council. Water quality buffers on most water bodies will be 50 feet or the width of the floodway, whichever is greater; the 50-foot standard can be increased for site-specific conditions. Members of the environmental community should be particularly pleased that the ordinance requires a minimum of 100-foot buffers for impaired water bodies, which includes several of the major streams and rivers

in Richland County.

The recommendations also include exemptions for both small property owners and developers. In particular, any single-family parcels of land smaller than 2 acres that are not part of a larger development are exempt. As a concession to developers who already had land development permits, sketch plan approval or preliminary plan approval for their property, the Development Roundtable recommended exempting these properties ("Entitled Properties") from the new storm water standards as well. The ordinance language also includes a waiver process in the event of economic hardship.

The Richland County Planning Commission (a panel of county residents appointed by council) was asked to review the recommendations at its January 4 meeting, and made several amendments, including two that could have seriously undermined the intent and effectiveness of the water quality buffer recommendations. The Planning Commission removed any reference to floodway/floodplain protection, so that river systems with wide floodplains, including Gills Creek and the Congaree River, would have water quality buffers only along rivers' edge, which would be ineffective in buffering their associated floodplains. Fortunately, council did turn back the Planning Commission's amendment excluding floodways from the buffer definition at its January 19 session.

The Planning Commission also broadened the definition of Entitled Properties that would be exempt from the ordinance. The Planning Commission proposed to expand Entitled Properties to include all property that had commenced development activity (including any grading or other land disturbance), or had approval to commence such an activity, regardless of the activity's relation to the water quality buffers, or the scope of the permitted activity relative to the property.

Unfortunately, in its memo to council summarizing the Planning Commission's amendments, the staff, while not supporting the exact Entitled Property language of the Planning Commission, proposed similar language (while adding a 7-year sunset provision) as a compromise measure. The Development Roundtable was not informed of the staff's decision prior to the release of the memo, and so we had very little leverage (and very little time) to argue for our definition of Entitled Property before council. Council accepted staff's recommendation on Entitled Property, though neither council nor staff could say how much land would receive an exemption under this language. We remain concerned that many large commercial and real estate development projects would meet the revised

definition of Entitled Property, and are exempt (for the next 7 years) from the new water quality buffer requirements. Given that large development projects were the primary focus of the Development Roundtable's recommendations, any water quality improvements that should have resulted from the new storm water ordinance language are likely to be deferred for some years to come.

The roundtable process should move forward, but we will need to revisit the partnership so that staff and council treat the environmental community as a full partner in the process.

US 601

In August 2009, SC Department of Transportation (SCDOT) had released a draft revised Environmental Assessment for the US Route 601 Bridges project, and provided opportunities for public input. The Environmental Assessment was in response to Judge Margaret Seymour's order in September 2008 to take a "hard look" at environmental issues along the project corridor, and to carefully explore environmentally sensitive alternatives to SCDOT's plans to maintain 3 miles of causeway in the floodplain. Friends of Congaree Swamp found the revised assessment to fall far short of Judge Seymour's request, and prepared an extensive critique of the Environmental Assessment (available on our website). It was the public comments of Superintendent Tracy Swartout, however, that caught everyone's attention. In particular, Superintendent Swartout's comments on a lack of constructive dialogue on the project struck a nerve with SCDOT, and SCDOT personnel scheduled a meeting with park staff to discuss these concerns.

Unfortunately, the resulting meeting followed a familiar pattern. Though SCDOT and the Federal Highway Administration (FHWA) consistently cite their cooperation with the park on the project, they invariably try to carefully circumscribe the agenda of any meeting—this meeting was no different. Specifically, minor alterations to the design to accommodate park visitors could be discussed, but the major issues that the park has consistently endorsed—including extensive additional bridging—were not supposed to be on the table. In addition, State Senator Darrell Jackson had asked to have a representative attend the meeting, but SCDOT and FHWA representatives voted to close the meeting. Neither this nor subsequent meetings included substantive discussions of the issues most important to the park.

At the September 2009 public hearing, SCDOT had posted a schedule indicating that construction on the bridge would start by mid-December 2009. The first step was to be a Finding of No Significant Impact (or FONSI) by the Federal Highway Administration. That finding has not yet been released, but would be the basis of any further appeals on the project. We remain committed to supporting Congaree National Park in its requests for substantial improvements in the bridges' design.

In Memory of Two Friends

Ron Jordan

You met Ron Jordan if you ever visited Congaree National Park on Thursday. Week-after-week, year-after-year, Ron greeted visitors on Thursday when they entered the Harry Hampton Visitor Center.

Former Congaree Superintendent Martha Bogle referred to Ron as "Mr. Thursday" – because he volunteered so long and so faithfully on Thursdays.

Indeed, Ron had received a Presidential Volunteer Service Award after his Congaree volunteer service reached 4,000 hours. He continued to volunteer, and his number of hours surpassed 5,000.

We were saddened to learn of Ron's death on January 7, 2010. January 7 was a Thursday, and Ron was stricken as he entered Congaree National Park for another day of welcoming visitors.

Mina Winn

Wilhelmina "Mina" Winn was an avid camper, naturalist, conservationist and advocate for both domestic and wildlife rescue and rehabilitation.

She demonstrated her interest in nature and animals as a member of many organizations and was a long time member of Friends of Congaree Swamp. When her health prevented her from actively participating in our activities she continued to do so behind the scenes up until her last month of life.

Mina loved to visit Congaree National Park where she hiked the trails and boardwalks. In her very last outing, she was pushed in her wheelchair around the Baidler Forest boardwalk.

Mina died at the age of 93 on November 16, 2010. We would like to say goodbye to an old friend.

Upcoming Field Trips & Events

Botany Hike

Saturday, March 27, 2010

9 AM-12 PM

**Harry Hampton Visitors Center
Parking Lot,
Congaree National Park
Leader: John Nelson**

In appreciation of the Park's flowering plants, Friends will organize a hike to the longleaf pine woods off Garrick Road. Professor John Nelson of USC's A.C. Moore Herbarium will lead the botany tour. Park staff has conducted controlled burns in the Garrick Road Tract for several years now, including an off-season burn in Fall 2009 to discourage undesirable competition for the longleaf savanna that the park is trying to restore.

This hike will be entirely off-trail; we will generally be hiking through open understory, though there will be plenty of sweetgum undergrowth to negotiate as well. Participants should be in moderate physical shape. Bring water and insect repellent; long pants are recommended. Jogging shoes or light hiking boots are appropriate. This hike is limited to the first 30 people to sign up. We will meet in the visitors center parking lot and carpool to Garrick Road.

Contact: John Grego
(803) 777-5110 (work) / grego@stat.sc.edu
(803) 331-3366 (cell) / jrgrego@mindspring.com

Dawn Chorus at Congaree National Park

**Sunday, May 2, 2009, 5:30 AM,
Visitors' Center, Congaree National Park
Leader: Donna Slyce (Chair, SC Records
Committee, Carolina Bird Club)**

One of the most important resources of Congaree National Park is its large numbers of breeding birds, including many neotropical migrants species which breed in North America, but go south in the winter to Mexico, Central America, the Caribbean, or South America. You can appreciate this by being out in the park at dawn during the main breeding season (late April through early June) and listening to the dawn chorus of bird song.

To encourage you to get up at an unreasonable hour and come out to the park, Friends will hold its Dawn Chorus Walk on Sunday, May 2, 2010. The Dawn Chorus Walk at Congaree National Park was started by Robin Carter in 2005, and we now celebrate the event with the rest of the world on International Dawn Chorus Day. Though Dawn Chorus Day is popular in Europe, particularly in the U.K., Congaree National Park is still the only site in North America that consistently participates in this event.

For those who like to sleep in, participating in the Dawn Chorus will be easier than ever this year! Rather than our traditional 5 AM start, we will meet at the Visitors Center at a much more civilized 5:30 AM. This will still give us a chance to listen to the pre-dawn chorus of Barred Owls, Whip-poor-wills, Chuck-will's-widows and night-migrating thrushes before the main event, which begins a half hour before sunrise, give or take a few minutes. We can reasonably expect to hear as many as forty 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.

As an additional incentive, the Dawn Chorus hike will be followed by an extravagant, yet free, breakfast at 7:30 AM prepared by Friends' board members.

Some things are worth missing a little sleep for.
Contact John Grego, jrgrego@mindspring.com

Upcoming Field Trips & Events

Big Tree Hike

Saturday, May 8, 2010

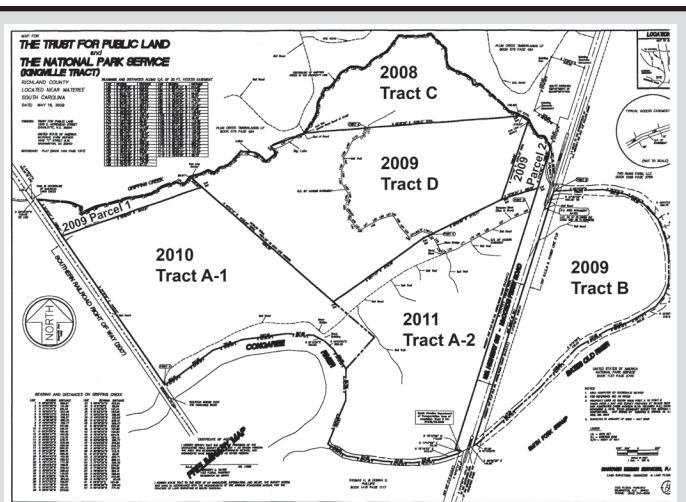
9 AM-1 PM

Harry Hampton Visitors Center

Friends of Congaree will host a big tree walk at Congaree National Park on Saturday, May 8, from 9 AM to 1 PM. We will see the national champion laurel oak, *Quercus laurifolia*, which is 22 feet in circumference. Currently this is one of six national champion trees found at the Park. We will also visit the Harry Hampton bald cypress, more than 23 feet in circumference and at nearly 150 feet, the tallest known bald cypress in the Park. This is the same cypress photographed with Harry standing beside it that's shown in the Visitors Center. We will also see the state champion bitternut hickory and some very nice specimens of sweetgum, cherrybark oak, swamp chestnut oak, and others.

Most of this hike will take place on the Oak Ridge Trail, although we will be doing some off-trail hiking in places. Participants should be in good physical shape. Total hiking distance will be about 6 miles. Wear comfortable hiking shoes and bring water and perhaps a mid-morning snack.

We will need to limit the group size to 30 people. Please call John Cely at 782-7450 or jecely@sc.rr.com for reservations.



The National Park Service has purchased the following tracts of the 1,840-acre Riverstone property as funding became available:

- Tract C (156.25 acres) was purchased in May 2008.
- Tracts B and D and Parcels 1 and 2 were purchased in June 2009, using \$2.69 million allocated by Congress for FY 2009. These four parcels total 837.75 acres.
- Tract A-1 (412.5 acres) will be purchased before mid-April 2010, using \$1.32 million allocated by Congress for FY 2010.

The National Park Service needs \$1.37 million to purchase the remaining 433.9 acres (Tract A-2).

In December 2009, Friends of Congaree Swamp asked Congressman Clyburn to request \$1.37 million for FY 2011 to complete Riverstone acquisition for Congaree National Park. The request for \$1.37 million will also be submitted to Senator Graham.

We are delighted that President Obama's FY 2011 budget – submitted to Congress on February 1, 2010 – requests \$1.4 million for Congaree National Park land acquisition.

Field Trips & Events in Review

Congaree Swamp Christmas Bird Count

(Participants: George McCoy, Richard Sasnett, John Cely, Kate Hartley, Peggy O'Neal, John Torrence, Dennis Forsythe, Kathleen O'Grady, Alice Steinke, Haven Barnhill, Lex Glover, John Grego, Sparkle Clark, Mike Stewart, Patricia Voelker, Heidi Hoerman, Judy Hurley, John Grego, Sudie Thomas, Laurel Barnhill, Dick Watkins, Jean Prothro)

The Congaree Swamp Christmas Bird Count once again faced a heavily inundated park on the day of the count (December 20). It is disappointing whenever we can't visit the interior of the park, but it's important to remain philosophical about this. After all, other count circles have their own obstacles: northern counts have severe winter weather, and coastal counts face rough offshore conditions. The parties assigned to the park could only pick around the edges of the floodplain, though we did cover a lot of the bluff and were able to visit part of the newest Bates Fork acquisition. Regardless, the floodplain specialties had low totals (with the exception of Blue-headed Vireo), and a couple species went missing.

We used the park's interpretive boat to travel the Congaree River--it's exciting to have counts with more representative numbers of Great Blue Herons and Double-crested Cormorants, and the boat trip successfully resolves that problem. In future counts, if water levels are lower, we may add a shorebird species or two, such as Spotted Sandpiper. Unbeknownst to the count leader, there was another participating boating party; Haven Barnhill paddled Bates Old River, and added Green-winged Teal and Ring-necked Duck to our total.

We continue to expand our coverage of Calhoun County. In addition to parties led by property owners (Richard Watkins and Jean Prothro; Richard Sasnett and George McCoy), some of our counting parties were led by resource agency employees who work with private landowners in government programs (e.g., the USDA's Wetlands Reserve program). Most of the Calhoun County parties reported that birding was slow, though Lex Glover had a great day on Singleton Plantation (not previously covered), including the count's first ever Le Conte's Sparrow.

With our increasing coverage, we reached 90 species for the first time ever! Species, species counts, new high counts, and parties solely responsible for a given species are recorded below.

Pied-billed Grebe	1	Loggerhead Shrike	23	Field Sparrow	21
Anhinga	1	White-eyed Vireo	4	Savannah Sparrow	86
Great Egret	1	Blue Jay	27	Fox Sparrow	2
Canada Goose	4	American Crow	123	Song Sparrow	216
Wood Duck	51	Horned Lark	8	Swamp Sparrow	27
Mallard	3	Carolina Chickadee	102	White-throated Sparrow	158
Green-winged Teal	2	Tufted Titmouse	74	White-crowned Sparrow	4
Ring-necked Duck	7	White-breasted Nuthatch	12	Dark-eyed Junco	128
Northern Harrier	6	Brown-headed Nuthatch	13	Northern Cardinal	219
Sharp-shinned Hawk	4	Carolina Wren	94	Red-winged Blackbird	3283
Cooper's Hawk	1	House Wren	9	Eastern Meadowlark	71
Red-shouldered Hawk	11	Winter Wren	6	Rusty Blackbird	20
Red-tailed Hawk	13	Marsh Wren	1	Common Grackle	367
American Kestrel	15	Golden-crowned Kinglet	110	Brown-headed Cowbird	5
Wild Turkey	2	Ruby-crowned Kinglet	205	House Finch	4
Northern Bobwhite	8	Blue-gray Gnatcatcher	1	American Goldfinch	108
Virginia Rail	1	Eastern Bluebird	88	House Sparrow	13
American Woodcock	3	Hermit Thrush	39		
Rock Pigeon	40	American Robin	189	New to the count:	
Mourning Dove	150	Gray Catbird	1	Ruddy Duck	1
Eastern Screech-Owl	4	Northern Mockingbird	32	Le Conte's Sparrow	1
Barred Owl	9	Brown Thrasher	13		
Great Horned Owl	1	European Starling	8	New high count:	
Belted Kingfisher	3	American Pipit	28	Double-crested Cormorant	12
Red-headed Woodpecker	27	Cedar Waxwing	20	Great Blue Heron	13
Red-bellied Woodpecker	70	Orange-crowned Warbler	1	Black Vulture	146
Yellow-bellied Sapsucker	31	Yellow-rumped Warbler	92	Turkey Vulture	145
Downy Woodpecker	23	Pine Warbler	30	Killdeer	150
Hairy Woodpecker	4	Palm Warbler	1	Blue-headed Vireo	21
Northern Flicker	114	Black-and-white Warbler	3	Chipping Sparrow	314
Pileated Woodpecker	32	Common Yellowthroat	1		
Eastern Phoebe	53	Eastern Towhee	97		

Garrick/Shivar Hike

On January 23, fifteen members of Friends of Congaree Swamp travelled to Red Bluff Road to learn more about one of the sites that USC History Masters' student Liz Almlie had researched the previous year. We deliberately scheduled a short upland hike during the winter to avoid the floods that can plague trip plans in the park's floodplain. Given the recent rains though, there were still plenty of water obstacles to negotiate on the way to the site.

Before we reached the small homesites still in evidence, Liz provided some background on the larger 830-acre tract that contains the sites. The so-called Elkins tract was mortgaged by William Elkins in 1866 to Josiah Crowell, an overseer and farmer. Crowell's descendants sold the land in 1882 to William Reynolds and Reuben Weston, who may have been African-American farmers. The land was sold at auction 7 years later for \$500 to Frederick and George Wagener, prominent Charleston grocers—Liz was excited that she had just eaten at a restaurant at the former Wagener warehouse in Charleston the night before. The Wageners "flipped" the property a month later for a \$1000 profit to book publishers W. J. and W. K. Duffie.

The tract was eventually bought by John Monteith Bates, whose family history is intertwined with the park's history. His family owned the Bates Fork tract recently purchased by the park, and he served as manager of the

Santee River Cypress Lumber Company. He was also a driving force behind the construction of the short-lived first bridge over the Congaree River at the site of Bates Ferry Road.

Bates eventually sold the land to Ernest Kaminer in 1905, who subdivided the land and sold a 36-acre tract to Joe Garrick in 1917, which brought us up to the time of the present homesites.

At the sites themselves, we found one set of foundation footings, including the remains of a chimney. This tract was owned by Jacob Garrick, Joe's father. Immediately south of this site, a well-preserved roof covers the foundation of a second house. Joe's brother Beverly, in 1950 court testimony to settle Jacob's estate, testified that Joe had lived in the house his entire life, which would place the house's construction as early as the 1880s. Joe fished Cedar Creek and was known to sell fish from the creek for income. The land was eventually transferred to Beverly and Margaret Garrick's daughter Carrie Shivar and other family heirs.

We took some time to explore the second site, which included a deep pit and a couple of misplaced gravestones, whose decedants had no relation to the site. After a brief detour to an overview of the flooded Cedar Creek, we returned to our cars and thanked our guide one more time for sharing the interesting past of a previously unexplored site in the park.



**Friends of
Congaree
Swamp**

Post Office Box 7746
Columbia, SC 29202-7746

www.friendsofcongarere.org
Spring 2007

Advocates for Congaree National Park and its unique environment.

**Please keep your email address current to
receive special notices
about new field trips and other events,
scheduling changes, and acknowledgements.**

Join Friends of Congaree Swamp today!

Yes, I would like to support conservation of Congaree Swamp for future generations. Enclosed is my tax deductible contribution of \$ _____. Please make your check payable to Friends of Congaree Swamp.

\$ 15.00 Individual \$ 50.00 Advocate \$ 500.00 Benefactor \$ 50.00 Nonprofit Org.
 \$ 35.00 Family \$ 100.00 Partner \$ 1000.00 Patron \$ 1000.00 Corporate

New Member Renewal

I would like to work on the following committee(s):

Name(s): _____
 Mailing Address: _____
 City: _____ State: _____ Zip: _____
 Hm Phone: (____) _____ Wk Phone: (____) _____
 E-mail: _____

Field Trips Fundraising
 Public Relations Membership
 Education Advocacy
 Events Newsletter
 Research Other: _____

**Please keep your email address current to receive special notices
about new field trips and other events, scheduling changes, and acknowledgements.**

In addition to my membership, I would like to give \$ _____
 as a donation to Friends of Congaree Swamp:
 In Memory of: _____
 In Honor of: _____
 As a Gift Membership to: _____

Please provide contact information so we can inform the person
 or family:
 Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____

Thank You For Supporting Friends of Congaree Swamp!

Friends of Congaree Swamp, PO Box 7746, Columbia, SC 29202-7746
 FCS is a nonprofit 501(c)3 corporation, EIN: 56-2057087.