

## Of Margined Madtoms and Spotted Suckers

Leo Rose, Dept of Natural Resources

Many of us are well aware of the diversity of fauna in the Congaree floodplain, and the significance of its bird habitat. However, many are surprised to learn that the Park also has a very diverse fish population. In fact, the Park is home to almost forty percent of the freshwater fish species known to exist in South Carolina. Compare that to the fifty to sixty percent of the state's known tree species that are found within the Park and you can see that the fish of the Park almost rival the trees in terms of diversity.

Prior to 2000, there was only limited information on the fish population within the Park. As a biologist with the Department of Natural Resources, I have been working in cooperation with the National Park Service to expand on the existing information by developing a comprehensive inventory of fish species and evaluating the condition of the fish community within the Park.

From 1999 through 2002 we collected and identified over 10,000 fish from thirty-three distinct locations within the Park using a technique called electrofishing. This method allows researchers to apply a small electrical current to the water to temporarily stun fish. Scientists can then collect, measure, and identify the fish before returning them alive to the water. By sampling a variety of habitats including the streams, guts, sloughs, lakes and ponds in the Park we were able to develop an inventory including 56 species of fish. Twenty-four of these fish had not been previously reported in the Park.

Another advantage to using the electrofishing method is that it allows us to compare the structure of



*DNR staff and volunteers electrofish a 100-m stream reach.*

the fish community between locations. Surprisingly, this analysis showed that there were three overlapping but distinct community types within the Park. It appears that this difference may be due in part to the wide variety of available fish habitat within the Park. Tolerant fish like the eastern mudminnow, redbfin pickerel, flier and pirate perch are able to thrive in harsh conditions like backwater sloughs and slow-flowing streams where other fish cannot. For example, the eastern mudminnow can survive long dry periods of drought by burying itself in mud and entering a torpor state. This community was distinct from a second community found in the faster, deeper-bodied streams of the Park. Finally, the third community tended to take advantage of the floodplain nearest to the bluff. The bluff is a transition area where the Atlantic Southern Loam Plains meets the Southeastern Floodplains and Low Terraces

# President's Corner



Dr. John Grego

You may have read this past summer about the efforts of Paul Hoffman, an Interior Department official and former mayor of Cody WY, to rewrite National Park Service policies. One of the most explosive changes from that rewrite would have allowed activities that impacted Park resources so long as the impairment was neither permanent nor irreversible. Possibilities included much looser noise restrictions on aircraft overflights and snowmobiles, since their impact on park resources (it's natural soundscape in this instance) would not be "permanent."

Reaction to the "Hoffman Draft" was swift and overwhelmingly negative. The draft has since been revised with the sanction of the National Park Service, but worries about the new draft have hardly abated. Concerns have been expressed by groups such as the National Parks Conservation Association, the National Coalition for History, the Coalition of National Park Service Retirees, and six Republican senators. Despite the disparate nature of these groups, many of their concerns share a common theme: that the current draft abandons the fundamental primacy of protecting park resources in favor of commercial exploitation of the Parks.

As part of the public comment period, which ends February 18, Friends of Congaree Swamp has submitted a letter to the National Park Service outlining problems with the draft Management Policies. Some of our comments (excerpts from the letter appear in quotes) touched on:

- Changes in the fundamental missions of the parks: "As others have noted, many of the references to legislation and legal decisions

emphasizing preservation of resources have been removed, and replaced with a lengthy discussion of 'public enjoyment'. Contrary to your assertions, we feel that there is a difference between 'providing for enjoyment' and 'enjoyment' itself. We believe enjoyment should focus on enjoyment of the park's natural resources, and not be an end unto itself."

- Commercial uses of the parks: "The current draft shows unusual deference to commercial uses of the parks... The draft revision states that appropriate uses of the park, in the professional judgment of the responsible NPS manager, will not

- Cause an unacceptable impact
- Be inconsistent with the park purposes or values
- Unreasonably interfere with park programs or activities
- Disrupt the operations of park concessions or contractors
- Create an unsafe or unhealthful environment or visitors or employees
- Result in significant conflict with other appropriate uses or
- Diminish opportunities for current or future generations to enjoy park resources or values.

Which item does not belong here? It is hard to believe that an appropriate use of the Park that satisfies all other criteria could be overruled by concerns of a concessionaire. The other items in the list can at least be linked to protecting park resources and values. Protecting the interests of concessionaires is not a park value or resource."

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# Action Alert Updates



## US Highway 601 Corridor

The S.C. Dept. of Transportation (SCDOT) is planning to replace substandard bridges where US Highway 601 crosses the Congaree River and its floodplain. This highway segment includes the Congaree River Bridge and two bridges over Bates Old River. These three bridges – with a combined length of 0.75 mile – are connected by almost two miles of earthen embankments on the floodplain.

This section of US 601 is flanked east and west by lands and waters within the congressionally-authorized boundary of Congaree National Park, including the recently acquired 2,395-acre Bates Fork tract (reference: Fall 2005 newsletter).

SCDOT's preferred alternative would construct new bridges of nearly the same length as existing bridges. SCDOT's preferred alternative still involves almost two miles of earthen embankments, and would fill additional wetlands rather than restore natural hydrologic functionality of the river system.

Friends of Congaree Swamp and other conservation groups advocate bridging the 2.7-mile width of the Congaree River and its floodplain, thereby removing the earthen embankments – to facilitate flow of water and movement of wildlife.

Friends' Fall 2005 newsletter described the Nov. 15 public hearing at the S.C. Dept. of Health and Environmental Control (DHEC). Following the hearing, Friends of Congaree Swamp, the S.C. Wildlife Federation, the Southern Environmental Law Center, and the National Park Service submitted additional written statements to DHEC before the Dec. 15 deadline for comments.

As of Jan. 31, DHEC has not yet issued its decision about whether or not to certify SCDOT's application to fill Congaree wetlands for this project.

## Reclassification of Waters Within Congaree National Park

Last year, the National Park Service requested the S.C. Dept. of Health and Environmental Control (DHEC) to evaluate the waters within Congaree National Park for classification as Outstanding Resource Waters (ORW) and also to consider classifying a portion of Cedar Creek within the park as an Outstanding National Resource Water (ONRW). Following this evaluation, DHEC staff recommended proceeding with the multi-step process to reclassify waters within the park.

Several steps in this process were reported in the Friends' Fall 2005 newsletter.

Continuing this process, DHEC hosted a Staff Informational Forum on Jan. 4, 2006, at which Friends of Congaree Swamp President John Grego and Richard Watkins spoke in support of the proposed reclassification. We commended DHEC for advocating protection of Congaree National Park water quality. No one spoke in opposition to the proposed reclassification.

This newsletter article was written Jan. 31 – before the Feb. 9 meeting of the Board of Health and Environmental Control. The Board's Feb. 9 agenda includes a public hearing about the proposed reclassification of waters within Congaree National Park, followed by the Board's decision whether to approve the regulation. If approved by the Board, the proposed regulation will be submitted to the S.C. General Assembly for review.



# *Upcoming Field Trips & Events*

## **Cedar Creek Canoe/Kayak Trip**

**Congaree National Park: Meet in the After-Hours Parking Lot**

**Saturday, February 25, 2006 from 10 AM-2 PM**

The River Runner Outdoor Center will be sponsoring a canoe/kayak trip on Cedar Creek for Friends of Congaree Swamp. Cedar Creek meanders through the floodplain for most of the length of Congaree National Park. Depending on our route, we will have the opportunity to visit Dawson's Lake, a widened bend in Cedar Creek, or see a champion persimmon tree. Travelling by canoe or kayak also often provides the best opportunity to see wildlife in the Park.

We will leave from South Cedar Creek Landing and travel either upstream or downstream depending on creek conditions. This is an out-and-back trip, so there will be some paddling against the current. While not overly strenuous, the paddling will be somewhat more difficult than we encountered on the Bates Old River trip.

We will meet at 10 at the after-hours parking lot on National Park Road and then carpool to South Cedar Creek landing. Costs will be \$40 for canoe/kayak rental, while the trip will be free for those who provide their own boat. This trip is limited to the first 15 people to sign up. Call Guy Jones at (803) 771-0353 for reservations.

## **Wildflower Hike**

**Congaree National Park: Meet in the After-Hours Parking Lot**

**Saturday, April 1, 2006 from 9 AM-Noon**

If you have driven along the Park's entrance road in early Spring, you have probably noticed the wild azalea blooming along the roadside. In appreciation of all the Park's flowering plants, Friends will organize a hike along the bluff from the entrance road west to Bannister Bridge. In addition to wild azalea, we should see Jack-in-the-Pulpit, Atamasco Lily, Coral Honeysuckle, Green-and-Gold and others. Professor John Nelson of USC's A.C. Moore Herbarium will lead the botany tour, while John Grego will point out other highlights along the way.

As an added incentive, this is a transitional time for birds. We should see early Spring arrivals, as well as the last of some Winter visitors.

This hike will be entirely off-trail, but we will be on high ground in an open beech forest for most of the hike. 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 after-hours parking lot. Call John Grego in Columbia at (803) 777-5110 (work) or (803) 783-9270 (home); Email: [jrgrego@mindspring.com](mailto:jrgrego@mindspring.com) or [grego@stat.sc.edu](mailto:grego@stat.sc.edu).

## **NatureFest 2006**

**Congaree National Park**

**April 28—April 30**

**Public Invited Free of Charge**

NatureFest is Congaree National Park's celebration of Spring, held this year on April 28<sup>th</sup>, 29<sup>th</sup>, and 30<sup>th</sup>. The event is sponsored by the National Park Service with support from several state agencies, colleges, schools and volunteers.

The public is invited to attend free of charge. There will be special presentations on owls, canoeing, butterflies, fish, kid's stuff, nature hikes, and much more. The owl prowls and canoe trips require advance registration by calling (803) 776-4396. All programs begin at the Harry Hampton Visitor Center.

NatureFest will offer the opportunity for individuals and families to experience South Carolina's only national park. The public is invited to bring a picnic lunch and spend the day learning about and experiencing the Park's resources. Programs led by biologists, park rangers, other professionals and volunteers will give visitors the chance to explore the natural beauty of the Park with the aid of knowledgeable guides.

NatureFest is held to celebrate National Park Week and Earth Day. Indoor presentations are approximately one hour in length. Outdoor programs generally last one to two hours. For further information, send e-mail to [coswinformation@nps.gov](mailto:coswinformation@nps.gov); write to Superintendent, Congaree National Park, 100 National Park Road, Hopkins, SC 29061; or call (803) 776-4396.

# Upcoming Field Trips & Events



**The public is invited to rediscover the  
Ivory-Billed Woodpecker**  
**Keynote Speaker: Bobby Harrison**  
**Guest Speakers: Alex Sanders and John Cely**  
**Saturday, April 8, 2006**  
**SC Dept of Archives & History**  
**Starting at 6:30 PM**

Be sure to mark your calendar for the evening of April 8. That is when Bobby Harrison will be in Columbia to present a program about his experiences with the rediscovery of the Ivory-Billed Woodpecker in Arkansas.

Harrison, who is from Alabama, is one of those whose sighting of the Ivory-Billed help prompt the intensive search and habitat protection efforts that culminated in the announcement of the rediscovery in 2005.

The program will be at 7:00 PM in the auditorium at the SC Archives & History Building located at 8301 Parklane Road in northeast Columbia. A reception will begin at about 6:30 PM.

The program is being organized by Columbia Audubon Society and Friends of Congaree Swamp. Co-sponsors include the SC Wildlife Federation, the USC Institute for Southern Studies, the USC School of the Environment, SC Association of Naturalists, and others. Audubon Society of Columbia Executive Director Norm Brunswig will be the host for the evening.

Check the Columbia Audubon website ([www.columbiaaudubon.org](http://www.columbiaaudubon.org)) for more details as the date approaches. Contact Dan Tufford with questions (803-777-3292; [tufford@sc.edu](mailto:tufford@sc.edu)).

## **Dawn Chorus at Congaree National Park**

**Saturday, May 20, 2006**  
**Visitors' Center, Congaree National Park**  
**5:00 AM (Yes, that's AM!)**  
**Leader: Robin Carter**  
**Breakfast Host: John Grego**

One of the most important features of Congaree National Park is that it is the home and breeding area of a large numbers of birds, including many so-called Neotropical migrants—species which breed in North America but go south in the winter to Mexico, Central America, the Caribbean or South America. This is one of the main reasons why Congaree National Park has been named a Globally Important Bird Area by the American Bird Conservancy and Birdlife International.

An excellent way to help this dry fact become a personal experience is to be out in the park at dawn during the main breeding season (late-April through early-June) and listen to the dawn chorus of bird song. This is easy enough to do. The one drawback is that you have to be in the park at dawn. Unless you are camping out, this requires a bit of effort.

To encourage you to get up at an unreasonable hour and come out to the park, we are having a Friends of Congaree Swamp Dawn Chorus Walk on Saturday, May 20, 2006. We will gather at the Visitors Center at 5:00 AM (ouch!). This will give us a chance to listen to the pre-dawn chorus of Barred Owls, Whip-poor-wills, and Chuck-will's-widows before the main event, which begins about 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—hundreds of individual birds. Last year included an impressive amphibian chorus as well. We will have bird-song experts on hand to help you identify what you hear, or you can just listen and take in the experience.

The Dawn Chorus hike will be followed by a gourmet breakfast at 7:30 AM. Some things are worth missing a little sleep for. Contact Robin Carter, [rcarter@sc.rr.com](mailto:rcarter@sc.rr.com).

# Events in Review



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## Friends of Congaree Swamp and Carolinas' Nature Photographers Association Co-sponsored Exhibit at the Columbia Museum of Art

A large crowd gathered on Saturday, December 10, 2005 for a wine and cheese reception held at the Columbia Art Museum to thank those who contributed to the first Park specific book, *Images of Congaree National Park*.

Members of both Friends of Congaree Swamp, Carolinas' Nature Photographers Association and their families and friends gathered to kick off the month-long exhibit of photographs of many of the park's creatures and their habitats, offering a window into the unique environmental treasures the Park preserves.

"We would have loved to have displayed all 1000+ images that were submitted to us for review, but space was limited to only 20, although I snuck in 3 extras," said Virginia Winn.

Now that the display has come down from the Columbia Art Museum, we have added additional prints, and are ready to start lining up exhibits across the Carolinas. If you know of a location that would like to host an exhibit about Congaree National Park please contact Virginia Winn, [ve Winn@sc.rr.com](mailto:ve Winn@sc.rr.com) and be sure to use CNP Photo Exhibit as the subject.



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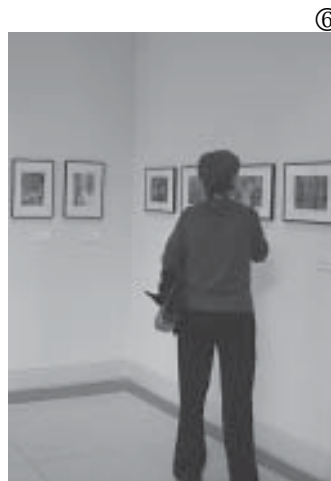
Photos by Lisel Shoffner

1. Friends and family gather for wine and cheese.

2, 3, 4. Martha Bogle, former Superintendent of Congaree National Park, Harriott Hampton Faucette, and Glenda Swearingen Foy, owner of Swearingen Ecology Associates, US, Inc. received a Certificate of Appreciation for their support of the Congaree National Park book project and exhibit.

5. Virginia Winn received a Certificate of Appreciation for her dedication to Friends of Congaree Swamp and her work on the book project and exhibit.

6, 7. Twenty-three images depicting life at Congaree National Park were on display and enjoyed by attendees.



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# Events in Review

## Congaree Swamp Christmas Bird Count

The Congaree Swamp Christmas Bird Count was conducted on Sunday, December 18, 2006. Seven participants in five parties tallied 79 species on the count, with two other species found just before or after the count, but not on the count day.

The count circle includes most of Congaree National Park (but not the extreme western part, which is in the Columbia CBC circle), plus Congaree Bluffs Heritage Preserve and farmlands as far south as St. Matthews and as far north as Gadsden. Much of the floodplain was under water, but at least one counter (John Grego) put on waders and plowed in anyway.

The results were typical, though having the new Bates Fork Tract, with its early successional habitats, meant that record numbers of Song and Swamp Sparrows were found. The most unusual species were found in the farmlands of Calhoun County, including Snow Goose (count week), Lapland Longspur (count week), Brewer's Blackbird and Baltimore Oriole. The most disappointing species missed was Hairy Woodpecker.

Snow Goose (Count Week only)	Loggerhead Shrike	Yellow-rumped (Myrtle) Warbler
Canada Goose	White-eyed Vireo	Pine Warbler
Wood Duck	Blue-headed Vireo	Black-and-white Warbler
Hooded Merganser	Blue Jay	Common Yellowthroat
Wild Turkey	American Crow	Eastern Towhee
Great Blue Heron (Blue form)	Fish Crow	Chipping Sparrow
Black Vulture	Horned Lark	Field Sparrow
Turkey Vulture	Carolina Chickadee	Savannah Sparrow
Northern Harrier	Tufted Titmouse	Fox Sparrow
Sharp-shinned Hawk	White-breasted Nuthatch	Song Sparrow
Cooper's Hawk	Brown-headed Nuthatch	Swamp Sparrow
Red-shouldered Hawk	Brown Creeper	White-throated Sparrow
Red-tailed Hawk	Carolina Wren	Dark-eyed (Slate-colored) Junco
American Kestrel	House Wren	Lapland Longspur (Count Week only)
Killdeer	Winter Wren	Northern Cardinal
Ring-billed Gull	Golden-crowned Kinglet	Red-winged Blackbird
Rock Pigeon	Ruby-crowned Kinglet	Eastern Meadowlark
Eurasian Collared-Dove	Blue-gray Gnatcatcher	Rusty Blackbird
Mourning Dove	Eastern Bluebird	Brewer's Blackbird
Barred Owl	Hermit Thrush	Common Grackle
Belted Kingfisher	American Robin	Brown-headed Cowbird
Red-headed Woodpecker	Gray Catbird	Baltimore Oriole
Red-bellied Woodpecker	Northern Mockingbird	House Finch
Yellow-bellied Sapsucker	Brown Thrasher	American Goldfinch
Downy Woodpecker	European Starling	House Sparrow
Northern (Yellow-shafted) Flicker	American Pipit	
Pileated Woodpecker	Cedar Waxwing	
Eastern Phoebe	Orange-crowned Warbler	

# Volunteers Needed at CNP

## Volunteer Opportunities for Winter/Spring 2006

Congaree National Park is seeking volunteer assistance with spring research activities. If you are interested in assisting researchers with data collection, serving as a hiking partner, recording research data, photo-documenting field activities, and/or searching for plants and other wildlife, please contact the Park's Biological Technician, Theresa Yednock, at 803-776-4396 ext. 21.

### Feral Hog Movement

The U.S. Geological Survey and Clemson University will continue with a feral hog movement project this Winter/Spring to determine animal movement patterns throughout the Congaree floodplain. Volunteers may be needed to assist with setting/checking hog traps and to assist with radio telemetry of study animals. Participation will include recording field data and significant off-trail hiking. The results of this study will enable the design of the most successful management program possible to maximize future hog control efforts at the Park.

### Crayfish Study

Clemson University will continue with research on crayfish at Congaree National Park this Winter. Baseline data was collected in a previous study with SC DNR, but this new research survey will focus on one particular crayfish species, *Procambarus troglodytes*. Volunteers may be needed to assist with locating burrows, field sampling and data collection. Off-trail hiking is required, and other aquatic sites may be accessed by canoe.

### Exotic Plant Management Team

An Exotic Plant Management Team has been established at Congaree to implement exotic plant control at 13 different parks in the southeast. Volunteers are welcome to assist the team with control of exotic plants such as Chinese privet (*Ligustrum sinense*) and Jerusalem Cherry (*Solanum pseudocapsicum*) at Congaree.

### Arachnid Survey

Clemson University will initiate a new spider inventory survey beginning this winter to characterize the spider diversity of Congaree National Park. Volunteers can assist this researcher with spider collecting by hand, branch traps, pitfall traps, sweepnets, and other similar methods. The information obtained will help to characterize the biodiversity of the Park, to educate the public and will include students in the research project.

### Bat Survey

U.S. Forest Service Southern Research Station at Clemson University will initiate research by surveying the roosting and foraging ecology of two known bat species at the Park. Volunteers must be willing to work through the night, and can assist with mist netting, identification of bats and radio-telemetry. For safety reasons, volunteers will not be allowed to handle the bats directly.

# Volunteers Needed at CNP

## VOLUNTEER OPPORTUNITY: Ivory-Billed Woodpecker Searches in South Carolina

### Description:

The U.S. Fish and Wildlife Service, in cooperation with their partners in the South Carolina Ivory-billed Woodpecker Working Group, are seeking volunteers for conducting ground searches for the Ivory-billed Woodpecker (IBWO) in South Carolina for the 2006 Field Season. Work will begin on/around February 20, 2006 and may continue through April 30, 2006.

### Background:

In April 2005, the rediscovery of the IBWO in Arkansas was announced. Following that announcement, reassessments of historically-occupied areas throughout the Southeast have begun. This process, coupled with sighting reports in South Carolina from recent years, has spurred interest in bringing together resources and expertise from across the state in an effort to evaluate the possible presence of the species in South Carolina.

The South Carolina Ivory-billed Woodpecker Working Group is a joint partnership between Federal and State agencies, non-governmental organizations, and private entities, sharing information and resources related to Ivory-billed Woodpecker issues in South Carolina. This group will be funded by the U.S. Fish and Wildlife Service to conduct searches for IBWO in South Carolina during the 2006 Field Season. Searches will be conducted primarily on public lands where sightings have been reported (pre- and post-rediscovery announcement) and where the bird was historically known to occur in South Carolina.

### Location of Proposed Activities:

The work will be conducted primarily on public lands in the Congaree-Wateree-Upper Santee Region of South Carolina (near Columbia) as well as the Lower Santee Region (near Jamestown). Other areas of the state may be investigated if valid sighting reports occur during the period of activity to be covered.



### Qualifications/Requirements:

Individuals with birding experience and keen field observation skills are desired. The work will consist of traversing remote and rugged bottomland hardwood forests and floodplain terrain, potentially entailing long periods of arduous walking and/or hiking through flooded swamps. The work will also require long periods of remaining sedentary at specific observation points. Because of the nature of this project, each participant may be required to carry documentation equipment such as digital video camera, audio-playback equipment, and GPS units. Portions of the searches may also require significant travel by canoe/kayak, so experience with these boats would be helpful. Those individuals also possessing skills in habitat assessment (i.e.—age/stand classification, forest resources, etc...) will be of a major benefit to the effort.

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## **Ivory-Billed Searches** continued from page 9

Volunteers will be paired to form a crew with the necessary field skills and are requested for a one-week (minimum) period of time. Other arrangements can be made on a case-by-case basis, depending on volunteer(s) availability and perceived value to the project. Volunteers will be provided with a training manual and are required to undergo a 1/2-day training session (as are all participants) before commencing work on the project.

Each participant will also be required to sign a Confidentiality Notice before participating in the project. Any positive data gathered during the project may have tremendous impacts for the recovery of the species; therefore information on findings will be controlled by the South Carolina Ivory-billed Woodpecker Working Group and the National Recovery Team.

### **Equipment Needed/Provided:**

Because of limited funds, it is requested that each volunteer provide their own boots (waterproof), waders (hip/chest), camouflage, foul weather gear, cell phones, and binoculars. Volunteers willing to bring additional equipment that could be of value to the project are encouraged to do so. Due to the remote nature of some of the search areas, programmable portable radios may be available for search teams. Other equipment that may be provided to volunteer search teams: canoes/kayaks (where appropriate), Garmin Rino GPS units,

Canon digital video cameras, audio-playback units, first-aid kits, insect repellent and maps/aerials of search locations.

### **Benefits:**

Besides being involved in an historic event, travel, lodging and per diem will be covered by the project. Vehicle travel will be reimbursed at the rate of 28.5 cents/mile. *Due to the limited amount of funds for this project, stipends will not be paid.* Depending on search locale, lodging may be on-site or in hotel/motel accommodations. Some of the on-site accommodations will be shared, dormitory-style housing but there are opportunities to stay on secluded properties of high ecological value.

### **Other:**

Interested individuals need to provide a brief summary of experience and potential dates for participation. A listing of any additional equipment that could be of value to the project will be of great assistance. Volunteers will sign primary agreements with the U.S. Fish and Wildlife Service and any ancillary agreements as deemed necessary, depending upon search locale. Search Area Coordinators will contact those applicants that fit criteria for the project to make arrangements for their participation.

### **Contact:**

Jennifer Koches (USFWS)  
jennifer\_koches@fws.gov  
(843) 727-4707 ext. 214

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## **President's Corner** continued from page 2

- Threats to natural soundscapes: The first sentence of the existing Management Policies states that NPS “will preserve, to the greatest extent possible, the natural soundscapes of the Park.” This sentence has been removed in the new draft, though it remains as a stated goal for other Park resources (e.g., Natural Lightscapes and Chemical Information and Odors). Given that NPS feels that “appropriate uses” of the parks include those that can be “successfully mitigated or eliminated through temporal spatial, or numerical limitations on use,” natural soundscapes are one of the park resources most threatened in the current draft and

require as much or more protection than in the past.

Certainly NPS Management Policies should be revisited regularly, but the current process and current draft revisions serve as counter-examples to what should take place. NPS should either discontinue the process, or proceed in a way that allows wider community participation and seeks to improve, rather than degrade, our nation’s “best idea,” the National Park System.

## Senator Hyman Rubin 1913-2005

Just as the Congaree National Park's forest contains an army of giant trees, there was an army of people who made giant contributions toward the Park's establishment. Congaree lost one of these giants, Hyman Rubin, on December 18, 2005. Rubin's contribution in the effort to preserve this magnificent forest came at a critical hour in the campaign.

Born in 1913, Hyman Rubin grew up in Norway, S.C. Later moving to Columbia, he graduated from Columbia High School and received a BA degree, magna cum laude, from the University of South Carolina.

He and his brother ran the family textile business until their retirement. Hyman became a member of the Columbia City Council in 1952 and served until 1966 when he was elected to the State Senate.

In 1972 Senator Rubin became chairman of the Richland County delegation. It was at this time that he held town-type meetings at the old Columbia Hospital. In the mid '70's, the Congaree Swamp National Preserve Association asked Sen. Rubin to speak at one of these meetings. Based on the lack of political support for the Association's efforts up to this time, hopes of gaining the delegation's endorsement were not high. At the end of the presentation Sen. Rubin gave his thanks and stated that the delegation was grateful for the update. It was no surprise that further interest from the delegation was not forthcoming.

It was in February of 1976 that Sen. Marion Gressette introduced Resolution 15.S744 putting the SC Senate on record as being firmly against the federal government using condemnation to acquire the property required for the Congaree Preserve. This was at the same time that Congaree Swamp legislation was moving toward hearings in the U.S. House of Representatives.

A short time before the vote in the state Senate, the SC legislators were invited to the hunt club in the Swamp for an evening barbecue. It was on a moonlight walk on this occasion that Sen. Rubin got a personal introduction to the Swamp, and was quoted as saying, "Saving these trees is a moral imperative. To lose them would be a sacrilege."

Remembering the Congaree Swamp National Preservation Association's presentation to the

Richland County delegation more than a year earlier, Rubin was the first legislator to call the Preserve Association to ask what he could do to help. Rubin mounted a three-day filibuster to prevent the SC Senate from voting on the Congaree resolution. Although he was not successful in preventing the resolution from passing, he was able, through compromise, to change the wording, thus weakening the resolution. Rubin later admitted that he did not believe in filibuster, but the "moral imperative" of preserving the Congaree Swamp required drastic action. He resorted to the use of filibustering for the first and last time of his political tenure. Several months later he flew to Washington, D.C. to testify for preservation of Congaree floodplain lands during the U.S. Senate hearings.

Hyman Rubin's life was filled with passion to champion causes for a better society: supporting senior citizens, the handicapped, home rule, and racial justice. He was a major backer of USC's School of Medicine, and his love of the outdoors was always evident.

Sen. Rubin received numerous awards and recognition for service, including the "Order of the Cypress" given by Friends of the Congaree Swamp to those whose contributions to the preservation of the Congaree Swamp were outstanding. The award was inscribed, "For taking the initiative to aggressively defend the preservation of the Congaree Swamp during the Senate debate April 1976." These words encapsulate Sen. Rubin's heroic defense of what is now Congaree National Park.

It was not unusual for Sen. Rubin to drop in on volunteer events to boost morale. For the rest of his years Rubin claimed that his association with the Congaree Swamp effort was one of his life's greatest achievements. Shortly after Sen. Rubin's death, his son, Hyman Rubin, Jr., confirmed the great satisfaction his father felt in contributing to the preservation of this resource.

Both Sen. Rubin and his late wife, Rose, were friends to the Congaree community for over 30 years. Their memories will be held amongst the giants of the Congaree.

ecoregion. Often these ecoregion transition areas exhibit unique habitats and higher diversity because organisms can utilize suitable habitat requirements from each region.

Some may recall that during 1999 through 2002 the state experienced severe drought conditions. During that time the Congaree floodplain did not experience typical flooding events. 2003 brought a break from the drought and the Park had a more normal flood cycle. Chance had given us a unique opportunity to directly observe how a flood influences floodplain fish populations after a long period of drought. Additional post-flood sampling was scheduled for the summer of 2003. Five locations throughout the Park were selected for additional sampling.

It is well known that flood events can release nutrients to an aquatic system, provide additional spawning and foraging habitat and help redistribute fish populations. Therefore, we were not surprised to find that all five of the post-flood locations almost doubled in total fish numbers when compared to pre-flood (drought) numbers. However, comparing species composition made it clear that certain species exploited the flood event to increase population abundance while others decreased in abundance. Pirate perch and redfin pickerel showed the greatest increase after flooding. Bluegill, flier, golden shiner, warmouth, and yellow bullhead were other common

species that increased in abundance after flooding. Conversely, redbreast sunfish, sailfin shiner, eastern mudminnow, creek chubsucker, and margined madtom were common species that apparently preferred the more stable conditions that existed prior to the flood and decreased in abundance.

Aquatic scientists will continue to explore life in the floodplain. The more we learn about the fish communities in the Park, the more we see how nuanced and dynamic those communities are. It is clear that flooding is a driving force that has not only shaped the landscape of the Park but also the diversity of fish. With the ever-changing conditions in the Park many fish have found their niche habitats expanding and contracting over time. These dynamics just add an extra dimension to how interesting and enjoyable a walk in the Park is for a biologist. I hope you enjoy it too.

### List of Species Found

Family Name	Scientific Name	Common Name
Lepisosteidae	<i>Lepisosteus osseus</i>	Longnose gar
Amiidae	<i>Amia calva</i>	Bowfin
Anguillidae	<i>Anguilla rostrata</i>	American eel
Clupeidae	<i>Dorosoma cepedianum</i>	Gizzard shad
	<i>Dorosoma petenense</i>	Threadfin shad
Umbridae	<i>Umbra pygmaea</i>	Eastern mudminnow
Esocidae	<i>Esox americanus</i>	Redfin pickerel
	<i>Esox niger</i>	Chain pickerel
Cyprinidae	<i>Cyprinella chloristius</i>	Greenfin shiner
	<i>Cyprinella nivea</i>	Whitefin shiner
	<i>Cyprinus carpio</i>	Common Carp
	<i>Hybognathus regius</i>	Eastern silvery minnow
	<i>Nocomis leptocephalus</i>	Bluehead chub
	<i>Notemigonus crysoleucas</i>	Golden shiner
	<i>Notropis cummingsae</i>	Dusky shiner
	<i>Notropis hudsonius</i>	Spottail shiner
	<i>Notropis maculatus</i>	Taillight shiner
	<i>Notropis petersoni</i>	Coastal shiner
	<i>Pteronotropis hypselopterus</i>	Sailfin shiner



A juvenile bowfin is released after being measured.

Catostomidae	<i>Erimyzon oblongus</i>	Creek chubsucker
	<i>Minytrema melanops</i>	Spotted sucker
	<i>Moxostoma macrolepidotum</i>	Shorthead redhorse
Ictaluridae	<i>Ameiurus brunneus</i>	Snail bullhead
	<i>Ameiurus natalis</i>	Yellow bullhead
	<i>Ameiurus nebulosus</i>	Brown bullhead
	<i>Ameiurus platycephalus</i>	Flat bullhead
	<i>Ictalurus punctatus</i>	Channel catfish
	<i>Noturus gyrinus</i>	Tadpole madtom
	<i>Noturus insignis</i>	Margined madtom
	<i>Pylodictis olivaris</i>	Flathead catfish
Amblyopsidae	<i>Chologaster cornuta</i>	Swampfish
Aphredoderidae	<i>Aphredoderus sayanus</i>	Pirate perch
Cyprinodontidae	<i>Fundulus lineolatus</i>	Lined topminnow
Poeciliidae	<i>Gambusia holbrooki</i>	Mosquitofish
Atherinidae	<i>Labidesthes sicculus</i>	Brook silverside
Percichthyidae	<i>Morone americana</i>	White perch
Centrarchidae	<i>Acantharchus pomotis</i>	Mud sunfish
	<i>Centrarchus macropterus</i>	Flier
	<i>Elassoma zonatum</i>	Banded pygmy sunfish
	<i>Enneacanthus chaetodon</i>	Blackbanded sunfish
	<i>Enneacanthus gloriosus</i>	Bluespotted sunfish
	<i>Lepomis auritus</i>	Redbreast sunfish
	<i>Lepomis cyanellus</i>	Green sunfish
	<i>Lepomis gibbosus</i>	Pumpkinseed
	<i>Lepomis gulosus</i>	Warmouth
	<i>Lepomis macrochirus</i>	Bluegill
	<i>Lepomis marginatus</i>	Dollar sunfish
	<i>Lepomis microlophus</i>	Redear sunfish
	<i>Lepomis punctatus</i>	Spotted sunfish
	<i>Micropterus salmoides</i>	Largemouth bass
<i>Pomoxis nigromaculatus</i>	Black crappie	
Percidae	<i>Etheostoma fusiforme</i>	Swamp darter
	<i>Etheostoma olmstedii</i>	Tessellated darter
	<i>Etheostoma serriferum</i>	Sawcheek darter
	<i>Perca flavescens</i>	Yellow perch
	<i>Percina crassa</i>	Piedmont darter

## *Friends*

### Receives \$1000 Memorial

**Ride down the streets of Gilbert and you're likely to see some of John Drury Murray's bluebird boxes.**

**Although Murray had retired on about two-and-a-half acres near the small Lexington County town, he couldn't put the boxes on his own property because it is wooded. Bluebirds like open fields and they're very territorial, explained his son, George. Murray did have owl boxes on his land, though, and he loved to show them off.**

**All the boxes are numbered and Murray kept careful records on the birds who inhabited them. He was recognized by the Audubon Society for his efforts.**

**Murray's love affair with birds started when he was 12 in his native England while he was attending Christ School at Canterbury Cathedral. But World War II intervened and Murray and his parents immigrated to the United States.**

**A mechanical engineer by trade, he worked in Tennessee and North Carolina before retiring to Gilbert in 1994. He died about two years ago, willing his bird books to his grandson, Will, and leaving the bird records to the woman who lived next door.**

**His son-in-law, Byron Brewer, recently donated \$1,000 to Friends of Congaree Swamp in Murray's memory.**

**"He was a big influence on his grandson and on me," Brewer, a Sierra Club member, said in the note accompanying the donation.**

**"He went on a lot of birding trips and he did enjoy the Congaree Swamp," George Murray said of his father.**



**Friends of  
Congaree  
Swamp**

Post Office Box 7746  
Columbia, SC 29202-7746

www.friendsofcongarree.org

Winter 2006

**Advocates for Congaree National Park  
and its unique environment.**

***Be a FRIEND: Get a Friend to Join 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

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  Renewal

Name(s): \_\_\_\_\_  
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 Hm Phone: (\_\_\_\_) \_\_\_\_\_ Wk Phone: (\_\_\_\_) \_\_\_\_\_  
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I would like to work on the following committee(s):

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

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: \_\_\_\_\_

I would like to order the following items (proceeds benefit FCS projects): \$ \_\_\_\_\_ enclosed.  
 copies of the beautifully detailed **"Map of Congaree National Park and Vicinity"** @ \$12.95 each/plus \$3.50 s/h  
 copies of **"Images of Congaree Swamp,"** a 64 page, full color, photographic book of the park @ \$10 each/plus \$2.50 s/h

**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.