



Boardwalk Talk

Summer 2011



Superintendent's Message

Welcome to Congaree National Park! This summer edition of the *Boardwalk Talk* is full of great information to help you make the most of your visit to Congaree. As summer gets underway, the park is buzzing with activity. There are several new ranger-guided programs being offered, as well as many familiar ones—so check the schedule for one that interests you. Summer in South Carolina may mean heat and humidity, but it also means wonderfully pleasant mornings and evenings, and the chance to witness the return of the synchronized fireflies! Ask rangers for more information on this natural phenomenon.

With the intense daytime heat comes frequent spectacular afternoon thunderstorms, so always be sure to stop by the Harry Hampton Visitor Center and check weather forecasts before you hike, paddle, or camp in the park. With proper planning, the summer is a great time to get out and enjoy hiking or paddling in Congaree's Wilderness. In fact, one of our most popular guided programs is the free ranger-guided canoe tour.

We are conducting several children's camps this summer, so don't be surprised if you encounter our Congaree Ecology Campers while you are out in the park! In addition, we have quite a few summer interns and seasonal employees working in all park divisions. They are working to assist with camp, clear park trails, lead guided walks and talks, remove exotic plants, and photograph summer activities. It is my hope if you return to the park in a couple of years you will find some of these talented people working permanently here at Congaree!

Enjoy your visit, and as always please feel free to share with me your experiences at Congaree by leaving a message for me at the Harry Hampton Visitor Center. If you are interested in becoming a park volunteer, please ask for more information from one of the Congaree rangers.

Safe travels,

Tracy Swartout



Tracy Swartout, Park Superintendent

September Birding Programs

Kathleen O'Grady, Park Ranger

Throughout the year, park staff, researchers and citizen scientists collect information on bird species found in Congaree National Park. Join us on Saturday, September 10, at 8:30 a. m. for the Big Bird Hike to look for migrating birds making their way to their winter homes. On Sunday, September 18, join us at 8:30 a.m. to participate in the Fall North American Migration Count (NAMC). This count gives scientists a "snapshot" of migrating birds that are present during the fall season. Established in 1992, this bird census takes place in both September and May, which are peak migration times.



Summer Tanager

The goals for NAMC, according to the Cornell Lab of Ornithology, are, "to get a picture of the progress of migration, obtain data and distribution of each species, provide an opportunity for birders and non-birders to get outside and most of all to have fun!" If you are interested in participating in the Big Bird Hike or the North American Migration Count, please sign up by calling (803) 776-4396.

EXPERIENCE YOUR AMERICA™

To:

Congaree National Park
100 National Park Road
Hopkins, SC 29061



Emergencies

Call 911 or contact a park ranger. Be aware that cell phone service is patchy throughout the park.



National Park Service
U.S. Department of the Interior

Congaree National Park

The *Boardwalk Talk* is a publication of the National Park Service for the orientation and education of visitors to Congaree National Park.

The National Park Service was established on August 25, 1916, "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for future generations." In 1976, Congaree became part of the National Park Service as Congaree Swamp National Monument to preserve the largest remaining tract of old-growth bottomland hardwood forest in the United States. It was re-designated as Congaree National Park in 2003.

Superintendent

Tracy Swartout

Mailing Address

Congaree National Park
100 National Park Rd.
Hopkins, SC 29061

Phone

(803) 776-4396

Website

www.nps.gov/cong

Email

cosw_information@nps.gov

Operating Hours

Congaree National Park is open 24 hours a day, 7 days a week. The Harry Hampton Visitor Center is open from 8:30 a.m. to 5:00 p.m. and open until 7:00 p.m. on Fridays, Saturdays and Sundays during Daylight Savings Time. The visitor center is closed on December 25th.

Fees

Congaree National Park does not charge an admission fee and all programs are free of charge.

Climate

Winter: low 30s to high 60s
Spring: low 50s to high 80s
Summer: low 60s to high 90s (& humid)
Fall: low 50s to high 80s

Eastern National



Eastern National, a non-profit cooperating association with the National Park Service, supports the mission of the National Park Service by producing educational materials, and has provided the generous funds for this publication.

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Things To Do

CAMPING

The Longleaf Campground has fire rings, portable toilets, and picnic tables. Eight sites are available on a first-come, first-served basis. Each site is limited to eight campers. The Bluff Campground provides picnic tables and fire rings and is ideal for group camping.

Camping is also permitted by hiking or canoeing into the backcountry. To minimize human impact in this designated Wilderness Area, campfires are *prohibited* in the backcountry. All campers are required to obtain a camping permit and a list of regulations at the Harry Hampton Visitor Center prior to camping.

CANOEING/KAYAKING

Traveling by canoe or kayak is a great way to enjoy this primeval Wilderness while floating past some of the tallest trees in eastern North America. Paddling is also a thrilling way to encounter the diverse wildlife of the park including deer, otters, turtles, snakes, and raccoons. In addition to adventures on Cedar Creek, opportunities are also available on the



Barred Owl

Congaree and Wateree River Blue Trails. Please check with rangers for maps and current conditions.

FISHING

All waterways except Weston Lake are open to fishing with a valid South Carolina fishing license. Please do not use the Boardwalk to access waterways if you are carrying fishing gear. Anglers may

obtain a complete list of fishing regulations from the Harry Hampton Visitor Center or online at www.nps.gov/cong.

WALKS AND TALKS

Rangers provide a variety of guided walks, talks, campfire programs, and canoe tours. For a complete list of ranger guided interpretive programs, see pages four and five. Listen and learn as rangers give talks on various topics or take you on a hike through the old-growth forest.

BIRDING

Congaree National Park is designated as a Globally Important Bird Area by the American Bird Conservancy. Many migratory birds can be found during the spring and fall migrations. Bring binoculars and ask rangers for a list of documented species within the park.

PICKNICKING

A picnic shelter with trash and recycling receptacles and grills is available on a first-come, first-served basis at the Harry Hampton Visitor Center.

Beware of Poison Ivy

Kate Hartley, Park Ranger

Poison ivy (*Toxicodendron radicans*) is a woody vine that can cause an irritating skin rash, and can be found throughout the forest in Congaree National Park. It is important to know how to identify and avoid contact with all parts of the plant. Here are some of the most frequently asked questions and answers about poison ivy:

WHAT DOES IT LOOK LIKE?

Learning to identify poison ivy is the best way to avoid contact. It has shiny green compound leaves that grow in groups of three leaflets. The leaflets vary from toothed to wavy, lobed or smooth. Remember: "Leaflets three, let it be." Vines on the forest floor will have small leaflets, while large mature vines with large leaflets can be found clinging onto tree trunks with many small aerial roots, giving the vine a dark, "hairy" appearance. Remember: "If it's hairy, it's scary."

HOW CAN I GET POISON IVY?

Urushiol oil contained in the plant can cause a rash on skin. You can get poison ivy by touching the plant or by coming in contact with something that has touched it, including your clothing and pets. The leaves, vines, roots, berries, and sap of the poison ivy plant all contain the oil that causes the itchy rash.

ARE SOME PEOPLE REALLY IMMUNE TO POISON IVY?

While some people may appear to be immune, it is important to remember that you can gain or lose immunity over time. Do not assume immunity based on past experience.

WHAT HAPPENS WHEN EXPOSED TO POISON IVY?

Most people develop a red, itchy rash that may be localized or may develop as huge red sores all over the body. Even when the rash is small it can cause intense itching. The American Academy of Dermatology recommends seeing a doctor if the rash covers a large portion of your body, you have large blisters, or are unable to sleep.



Leaflets of three and berries on poison ivy

WHAT SHOULD I DO IF I HAVE BEEN EXPOSED?

If you come in contact with poison ivy, avoid rubbing your eyes and other parts of your body and wash your skin with warm soapy water as soon as possible. Avoid touching objects that may have come in contact with the plant including backpacks, clothing, and pets.

DOES THE PARK REMOVE POISON IVY?

Poison ivy is not removed from the park because it is native to South Carolina and is a valuable part of the ecosystem. During spring you will see small white flowers on the vine, and by summer you will see clusters of white berries. The berries are an important food source for songbirds who have a home in Congaree, and for those passing through on their migration journeys.

Please enjoy your visit to Congaree National Park and don't go home with a rash. Beware of poison ivy. For more information visit the American Academy of Dermatology website at <http://www.aad.org>

Firearms in the Park

A new federal law allows people who can legally possess firearms under applicable federal, state, and local laws, to legally possess firearms in this Park. However, firearms are prohibited in federal buildings. It is the responsibility of visitors to understand and comply with all applicable state, local, and federal firearms laws before entering this park. As a starting point, please visit our state's website at www.sled.sc.gov/SC-StateGunLaws1.aspx?MenuID=CWP to become familiar with the state gun laws in South Carolina.

While this law affects a person's ability to possess a firearm in the park, using firearms within Congaree National Park is still prohibited by law.

Invasive Plants: A Problem for All of Us

Terri Hogan, Ecologist

What is an “invasive” plant species? On Feb. 3, 1999, Executive Order 13112 was signed, establishing the National Invasive Species Council (NISC). The Order’s purpose is to “prevent the introduction of invasive species and provide for their control, and to minimize the economic, ecological and human health impacts that invasive species cause. . . .” As part of that Executive Order, definitions for both “alien” and “invasive” species were codified. Alien species means, “with respect to a particular ecosystem, any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem.” Invasive species means, “an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health.”

Why should we care about invasive and alien plants? These species affect all of us in one way or another. Invasive plants, many of which were brought here intentionally because of desirable traits like beauty, often end up spreading unchecked over time, causing economic and environmental harm, threatening agriculture, reducing recreational opportunities, affecting wildlife and diminishing the natural heritage we pass on to future generations.

Invasive plants have a substantial economic impact. They are found on land, in lakes, rivers, streams and in the oceans surrounding us. These species know no boundaries. They occupy federal, state and private lands. It is estimated that invasive plants occupy approximately

seven million acres in the United States. This represents billions of dollars in lost recreational opportunities and crop and timber production, along with costs associated with controlling these species. According to a 2004 Cornell University study, in U. S. agriculture alone, introduced plant species reduce crop yields by approximately 8% representing 24 billion dollars in lost crop production.



Volunteers removing invasive plants

Invasive plants reduce our recreational opportunities. There are a host of species that invade waterways and wetlands hindering the pursuit of activities such as boating, fishing, and hunting. Species like hydrilla (*Hydrilla verticillata*) and Brazilian elodea (*Egeria densa*) can clog motors and impede navigation. Invasive wetland species such as common reed (*Phragmites australis*) reduce habitat for waterfowl and shorebirds by reducing

available food sources and nesting sites. These invasive aquatic and wetland species crowd out native wetland plants that provide habitat for aquatic insects that birds and fish feed on and that provide egg laying sites for fish. On land, dense impenetrable thickets of invasive species such as Chinese privet (*Ligustrum sinense*), thorny olive (*Elaeagnus pungens*), multiflora rose (*Rosa multiflora*) and

into native plant communities, displace native vegetation, threaten native species biodiversity, and degrade our natural heritage.

We are not helpless in the face of this problem. There are small steps that each of us can take to address the threat posed by invasive plants including learning how to identify invasive plants, reporting their presence to land management agencies and by controlling them on our own properties. Learn more about them from organizations such as the South Carolina Exotic Pest Plant Council (<http://www.se-epc.org/southcarolina/>).

While not all plants brought here from other places cause problems, many do because of invasive characteristics that are no longer held in check by their natural predators. These species reduce our ability to live, work and recreate in the places we love. They reduce the native diversity that surrounds us and degrade the natural heritage we pass on to future generations. It is important for us to learn to recognize these species, educate ourselves and others about the impact they have on the lands we love and work together to reduce that impact.



Forest World

John Galbary, Park Volunteer

Plants are alive! Trees and all the forest’s flora are amazing living things. Plants give us so much including wood products, fuel, oxygen, food, animal habitats, greenery for our homes, nurseries for new life, medicines, soil stabilization, natural history, and recreation. Forests are places where we can escape from the stress of fast-paced lives and re-create ourselves anew.

A rich supply of sunlight from a star 93 million miles away nourishes the diverse organisms of Congaree National Park. Through the process of photosynthesis, leaves, the food factories of plants, give us oxygen and create the carbohydrate base of food chains. There is a spatial division of light and energy in the forest.

The seven layers of the forest unveil their wonders all around. In this stratification, the first level of the forest includes subsurface and surface flora such as algae and mosses, producers and decomposers.



Sunlight filtering through the forest

In the second layer are grasses, sedges, ferns and herbs. Shrubs, such as dog hobble are the third layer, then the fourth layer are understory trees such as red bay. Subcanopy trees including American holly make up the fifth layer. The sixth layer, the canopy, includes trees such as water tupelo and bald cypress. Finally, the seventh layer, emerging above the canopy are the loblolly pines towering above all. A wave of green spreads from the forest floor upward. Over time, plants and other organisms have adapted to living and working at different levels in each niche.

There is also a natural time sharing. Beginning in spring, the forest floor blooms, gathering photons, followed by the shrubs, then the understory leafs out, and next the subcanopy trees. Finally, the canopy trees and emergents spread their leaves anew, absorbing the energy of life. Living this way, each species awakens

and unfolds on its own schedule, without depriving one another of the energy resources of light, water, raw materials and space. Their basic needs can be met.

From above to below, nature’s floral adaptations and arrangements create both spatial and temporal divisions in this amazing vertical habitat.

Floodplain Safety Message

Congaree National Park is a floodplain forest. Water levels on Cedar Creek and the Congaree River fluctuate and changing water levels may make hiking, camping, and canoeing difficult. Please be aware of current water level conditions before you begin exploring. For current conditions visit or call the Harry Hampton Visitor Center at (803) 776-4396.

July 2011

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|---|--|--|--|---|--|---|
| | | | | | 1 1:30p Amazing Adaptations 8:00p Owl Prowl | 2 9:00a Guided Canoe Tour 9:30a Nature Discovery 11:00a Gaps & Saps 1:30p Tree Trek |
| 3 9:00a Guided Canoe Tour 1:30p Tree Trek | 4 9:00a Guided Canoe Tour 1:30p Amazing Adaptations | 5 1:30p Tree Trek | 6 1:30p Nature Discovery | 7 1:30p Weston Lake Wilderness Hike | 8 1:30p Skins & Bones 8:00p Owl Prowl | 9 9:00a Guided Canoe Tour 11:00a Gaps & Saps 1:30p Birds & Branches |
| 10 9:00a Guided Canoe Tour 1:30p Tree Trek | 11 1:30p Flat Hat Chat | 12 1:30p Who Came Before | 13 1:30p Junior Ranger Program | 14 1:30p Amazing Adaptations | 15 1:30p Tree Trek 5:00p Guided Canoe Tour | 16 9:00a Guided Canoe Tour 9:30a Nature Discovery 11:00a Gaps & Saps 1:30p Amazing Adaptations |
| 17 9:00a Guided Canoe Tour 1:30p Tree Trek | 18 1:30p Nature Discovery | 19 | 20 1:30p Amazing Adaptations | 21 | 22 1:30p Tree Trek 5:00p Guided Canoe Tour | 23 9:00a Guided Canoe Tour 9:30a Nature Discovery 11:00a Gaps & Saps 1:30p Tree Trek |
| 24 9:00a Guided Canoe Tour 1:30p Tree Trek | 25 1:30p Amazing Adaptations | 26 1:30p Junior Ranger Program | 27 | 28 1:30p Amazing Adaptations | 29 1:30p Tree Trek 5:00p Guided Canoe Tour | 30 9:00a Guided Canoe Tour 1:30p Nature Discovery 5:00p Guided Canoe Tour |
| 31 9:00a Guided Canoe Tour 1:30p Tree Trek | | | | | | |

August 2011

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|--|---|---|--|------------------------------|---|---|
| | 1 1:30p Amazing Adaptations | 2 1:30p Junior Ranger Program | 3 1:30p Tree Trek | 4 1:30p Tree Trek | 5 1:30p Weston Lake Wilderness Hike 5:00p Guided Canoe Tour 8:00p Owl Prowl | 6 9:00a Guided Canoe Tour 9:30a Nature Discovery 1:30p Amazing Adaptations 5:00p Guided Canoe Tour |
| 7 9:00a Guided Canoe Tour 1:30p Tree Trek | 8 1:30p Weston Lake Wilderness Hike | 9 1:30p Amazing Adaptations | 10 1:30p Tree Trek | 11 1:30p Tree Trek | 12 1:30p Tree Trek | 13 9:00a Guided Canoe Tour 1:30p Birds & Branches |
| 14 9:00a Guided Canoe Tour 1:30p Birds & Branches | 15 1:30p Tree Trek | 16 | 17 | 18 | 19 1:30p Tree Trek | 20 9:00a Guided Canoe Tour 9:30a Nature Discovery 11:00a Gaps & Saps 1:30p Weston Lake Wilderness Hike |
| 21 9:00a Guided Canoe Tour 1:30p Tree Trek | 22 | 23 | 24 | 25 1:30p Tree Trek | 26 1:30p Tree Trek | 27 9:00a Guided Canoe Tour 1:30p Birds & Branches |
| 28 9:00a Guided Canoe Tour 1:30p Tree Trek | 29 1:30p Tree Trek | 30 | 31 1:30p Amazing Adaptations | | | |

September 2011

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|--|--|-----------|-----------|------------------------------|---|---|
| | | | | 1 | 2 1:30p Skins & Bones 8:00p Owl Prowl | 3 9:00a Guided Canoe Tour 9:30a Nature Discovery 9:00a Big Tree Hike 11:00a Gaps & Saps 1:30p Tree Trek |
| 4 9:00a Guided Canoe Tour 1:30p Skins & Bones | 5 1:30p Birds & Branches | 6 | 7 | 8 1:30p Tree Trek | 9 1:30p Flat Hat Chat 8:00p Owl Prowl | 10 8:30a Big Bird Hike 9:00a Guided Canoe Tour 9:30a Nature Discovery 1:30p Amazing Adaptations |
| 11 9:00a Guided Canoe Tour 1:30p Tree Trek | 12 | 13 | 14 | 15 1:30p Tree Trek | 16 1:30p Who Came Before | 17 9:00a Guided Canoe Tour 9:30a Nature Discovery 11:00a Gaps & Saps 1:30p Tree Trek |
| 18 8:30a N. A. Migration Day Count 9:00a Guided Canoe Tour 1:30p Tree Trek | 19 1:30p Amazing Adaptations | 20 | 21 | 22 1:30p Tree Trek | 23 1:30p Weston Lake Wilderness Hike 8:00p Owl Prowl | 24 9:00a Guided Canoe Tour 1:30p Skins & Bones |
| 25 9:00a Guided Canoe Tour 1:30p Tree Trek | 26 | 27 | 28 | 29 | 30 1:30p Weston Lake Wilderness Hike | |

Program Descriptions

AMAZING ADAPTATIONS

Stroll around the 2.4 mile Boardwalk and become familiar with some of the amazing adaptations that allow plants and animals to survive here.

BIG BIRD HIKE

Come out for a forest field trip. We will explore several different trails as we look for migrating birds moving through Congaree National Park on their way back to their winter homes. Reservations required. Call (803)-776-4396.

BIG TREE HIKE

Join a ranger for a five (5) mile off-trail hike in an ancient forest and hunt for record trees. Reservations required. Call (803)-776-4396.

BIRDS AND BRANCHES

Fly into the visitor center and meet a ranger for a guided hike. Bring your binoculars and search out who may be currently residing in the forest.

FLAT HAT CHAT

Listen and learn as rangers give 15 minute talks on different topics including Congaree history, fire, the creation of the park, and owls.

GAPS & SAPS-SUCCESSION IN THE FOREST

Walk through the forest, see change in action and learn some of nature's secrets.

GUIDED CANOE TOUR

Enjoy the ambiance of this old-growth forest while paddling under bald cypress and tupelo trees. Bring water, a snack, and a change of clothes. Reservations required; Reservations for 3rd quarter of 2011 open June 15th. Call (803) 776-4396.

JUNIOR RANGER PROGRAM

Investigate the mysteries of Congaree through fun and educational activities.

NATURE DISCOVERY HIKE

Discover the floodplain on this guided Boardwalk hike. We'll explore the forest, looking and listening for animals.

NORTH AMERICAN MIGRATION DAY COUNT

Join rangers and volunteers to help collect real scientific data as part of this nationwide bird count. Reservations required. Call (803)-776-4396.

OWL PROWL

Explore the world of owls on this guided night hike in the forest. We almost always hear the owls asking, "Who cooks for you, who cooks for you, who cooks for y'all?" Reservations for 3rd quarter open June 15th. Call (803) 776-4396.

SKINS & BONES

For kids of all ages! Have you ever wondered what animals are wearing under and over their skin? Join a ranger for a look at some of the skulls and furs of the Congaree mammals.

TREE TREK

Discover Congaree National Park's primeval forested floodplain. Experience the extraordinarily diverse wildlife while walking among the towering trees.

WESTON LAKE WILDERNESS HIKE

Take a hike! Immerse yourself in the Congaree backcountry during this 4.5 mile guided hike.

WHO CAME BEFORE

Join a ranger on a hike through time. Learn about the people who ventured into Congaree before it became a park.



Enjoying a ranger-guided canoe tour

Attending Ranger Guided Programs

MEET THE RANGER

All programs meet at the Harry Hampton Visitor Center unless noted otherwise.

BE PREPARED

Wear weather appropriate clothing, sturdy walking shoes, and bring water.

RESERVATIONS

Certain programs require reservations by calling (803) 776-4396.

CANCELLATIONS

Programs may be cancelled for inclement weather and/or park emergencies.

PETS

Pets are not permitted to attend ranger-guided programs.

Guided Canoe Tours: Reservation Policy

Free ranger-guided canoe tours are one of the most popular ways to experience Congaree National Park. Note that the reservation system has changed.

During a ranger-guided canoe tour, rangers provide instruction and interpretation as you paddle a park provided canoe along Cedar Creek. Congaree National Park provides seven canoes, paddles and PFDs (Personal Flotation Devices). The schedule of canoe tours is available on page four of this publication, and at www.nps.gov/cong.

Reservations can be made via telephone ONLY. Requests via voicemail will NOT be accepted. Please do NOT leave a voicemail for reservations.

Children must be at least five years of age to attend.

Because of the risk of hypothermia during cold weather, extra clothes in a dry bag are required during 1st quarter (January 1-March 31) tours; water and insect repellent are recommended throughout the year, along with sturdy shoes that attach to your feet and can get muddy.

Tours will be cancelled in the event of lightning, if air temperature is below 45 degrees at the time of the tour, if the water level on Cedar Creek is above ten feet, or if winds exceed 30 miles per hour.

If you have any questions, please call (803)776-4396.

Individual tours

- Reservations taken quarterly. For the 3rd quarter of 2011 (July 1-September 30), reservations open June 15th and will close when filled to capacity. For the 4th quarter (October 1-December 31), reservations will open on September 15, 2011.
- Each individual caller may reserve up to two canoes for up to six seats per tour. Each individual may make only one reservation per quarter.

Organized groups

- Reservations taken quarterly. For the 3rd quarter of 2011, (July 1- September 30) , reservations are closed. For the 4th quarter of 2011, (October 1-December 31) reservations for groups will open July 1 and close August 15.
- Group size must be between 10 and 18 people, and be members of an organized group, club, or common affiliation.

Common Snakes of Congaree

William Privett, Park Ranger

Now that summer has arrived at Congaree National Park, it is time to keep an eye out for our cold-blooded friends among the floodplain. Snakes play a vital role in the forest food chain and many of them call this forest home. It is important to remember that snakes rarely pose a threat to humans, unless they are provoked. Their natural instinct is to avoid people. The old saying “snakes are more afraid of you than you are of them” is very true. Here is a helpful guide to identifying some of the common snakes of Congaree National Park:

RACER (*COLUBER CONSTRUCTOR*)

A long, slender snake, the racer is completely black, except for a white spot found on the chin. The racer is usually found on the bluff and along the elevated Boardwalk though it can be found along the floodplain. It is known for being able to move at great speeds and will eat a large variety of living things. Racers are nonvenomous.

RAT SNAKE (*ELOPHE OBSOLETA*)

The rat snake is a black snake with a light-colored underbelly that can grow up to seven feet long. It is an excellent climber and will often be

seen up in trees at the park. It will feed on birds, eggs and rodents and is nonvenomous.



Rat snake sunning in a dead tree

BROWN WATER SNAKE (*NERODIA TAXISPILOTA*)

The brown water snake has a light brown body with dark brown patches on its sides and back. It is a thick-bodied snake and is typically three to five feet long. It can be seen sunning on branches overhanging Cedar Creek. It mainly feeds on fish. The brown water snake is nonvenomous but will bite if provoked.

RED-BELLIED WATER SNAKE (*NERODIA ERYTHROGASTER*)

The red-bellied water snake can be easily identified by its solid brown back and red to red-orange belly. A juvenile is gray with dark bands across its back. While the red-bellied water snake is associated with water, it is commonly seen on dry land as well. It is a nonvenomous snake and feeds primarily on amphibians.



Red-bellied water snake

COTTONMOUTH OR WATER MOCCASIN (*AGKISTRODON PISCIVORUS*)

The cottonmouth is a thick-bodied snake with variable wide dark bands across its back. It can be distinguished from the brown water snake by its diamond shaped head, white

mouth and black tail. The cottonmouth is known to stand its ground if provoked. It is a venomous snake and will eat most other animals smaller than itself.



Cottonmouth swimming in Cedar Creek

CANEBRAKE RATTLESNAKE OR TIMBER RATTLESNAKE (*CROTALUS HORRIDUS*)

The canebrake rattlesnake is a dark colored snake with V-shaped crossbands along its back. It has a diamond shaped head, though its most unique feature is the rattle on the end of its tail that it uses to warn off would-be attackers. The canebrake is typically passive and can be found along the bluff. It eats various types of mammals and is venomous.

Source: Gibbons, Whit & West, Patricia J. *Snakes of Georgia & South Carolina*, Birmingham, AL: Lowry Printing, Inc., 2000.

Paddling the Congaree Blue Trail

Corinne Fenner, Park Ranger

“You’re not going to make it tonight,” said a man relaxing on his river deck as we floated down the Congaree River. We were prepared to camp for two nights, starting at the Thomas Newman/Cayce Landing Sunday morning. We landed on the sandbar near the River Trail in Congaree National Park on Sunday evening and were greeted by large flies and a great blue heron. We set up camp, enjoyed a beautiful pink and blue sunset over the river, and spent hours staring in awe at the fireflies blanketing the forest from the floor to the tree tops.

Monday morning we applied sunscreen, ate breakfast, took a dip and paddled for a few hours. Within the first few minutes of leaving the sandbar, two bald eagles soared above our canoe. One landed in a nearby snag and we enjoyed a perfect view of this magnificent bird!

We floated through a beautiful section of the Congaree just below the Laurel Oak Campsite and spotted a sandy beach with shade, a perfect place for an afternoon rest. Along the sunny edge of the bank we watched fluttering red-spotted purples, snouts, zebra swallowtails, and crescent butterflies. We also observed a fisherman catching a fish with every single cast!

After resting, we continued floating in the river and holding onto the canoe for

a few more hours observing turkeys, a white tailed deer, green herons, prothonotary warblers and belted kingfishers. We floated along and spotted an eight foot alligator floating in the current beside us. Luckily, at that time, we were in the canoe, not the water.

On our second night, we paddled into the evening as the temperature dropped slightly and found a small sandbar to spend the night. The barred owls called as we drifted off to sleep. The next morning we were able to enjoy shade while we packed up and drank water.

We didn’t see any other canoers or kayakers out in the 100- degree sun. Although it was hot, frequent dips in the river and large amounts of drinking water kept us cool on our journey.

We knew we were approaching Bates Bridge when we began hearing the sound of logging trucks on highway 601. Our soundscape included everything from human voices to a variety of songbirds and cicadas as we paddled the Congaree River Blue Trail.

Three types of trails were designated under the National Trails System Act of 1968, including national scenic trails (Appalachian National Scenic Trail), national recreation trails (Congaree River Blue Trail) and national historic trails (Nat-



Sunset on the Congaree River

chez Trace Parkway). National scenic and historic trails require an act of Congress for designation. National recreation trails (NRTs) require only the signature of the Secretary of the Interior.

On June 3, 2008, former Secretary of the Interior Dirk Kempthorne designated the Congaree River Blue Trail as a national recreation trail. Similar to many NRTs, the Congaree River Blue Trail is located nearby an urban area, and provides an

escape from buildings and concrete. NRTs span over public lands, private lands and waterways.

For more information on national trails visit <http://www.nps.gov/nts>. Maps of the Congaree River Blue Trail, camping permits, and information on water levels are available at the Harry Hampton Visitor Center at Congaree National Park.

SCA Plant Corps Team

Megan Tacey, SCA Exotic Plant Team Member

Founded in 1957, The Student Conservation Association (SCA) is America's oldest and largest provider of national and community conservation service opportunities, outdoor education, and career training programs. The SCA wears its logo loud by making it known that, "conservation begins here," with young adults as its spokespersons.

As SCA members, we not only wear our logo, but live by it every day through our mission statement: "To build the next generation of conservation leaders and inspire lifelong stewardship of our environment and communities by engaging young people in hands-on service to the land." This is precisely what we are doing in Congaree National Park as part of the Southeast Coast Exotic Plant Management Team (SEC-EPMT). We work to control invasive plant species in hopes of regenerating new, native growth.

We came to Congaree from the SCA's Native Plant Corps program, which is designed to engage students of all ages in meaningful service learning opportunities that support resource managers in the restoration of native plant communi-



2011 Southeast Coast Exotic Plant Management Team

ties. Native Plant Corps focuses on many different aspects of plant management including: inventory & monitoring, invasive plant control, seed collection, propagation, re-vegetation, herbaria and public outreach.

Our traveling team of four individual corps members, together with a project leader, began a six-month internship in March of this year.

Tori Bohlen hails from Cleveland, Ohio and, as a recent graduate of Ohio State University, is looking to expand her knowledge of plants and the National Park Service. Rob D'Andrea is from Queens, New York and recently graduated from SUNY Geneseo where his interest was piqued in natural and cultural resource management and conservation. Joe Neumann is from Chicago, Illinois. He has been doing restoration work for the past three years and joined the Native Plant Corps to broaden his knowledge of southeastern ecosystems. Megan Tacey is from Saint Joseph, Michigan. She is a recent graduate of Western Michigan University. She found the SCA through her love of environmental education and plants. Stephanie Orlando, the project leader who fearlessly guides our way, is from Milwaukee, Wisconsin and has been with the SCA for five seasons. She graduated from the University of Tampa where she studied Biology. She brings a wide array of knowledge and experience to the team. If you would like to know more about us or the SCA, you can find us on the web at <http://thesca.org/serve/conservation-corps#plants>. Look for us around Congaree as well.

Preserving and Protecting

Joe Neumann, SCA Exotic Plant Team Member

Whether it's acting as a steward of the country's most magical natural places or preserving the nation's most important historic landmarks, the National Park Service is always combating exotic pests. In the Southeast, invasive plant species like kudzu and Japanese honeysuckle strangle native pine forests, while garlic mustard and Chinese privet compromise the land's memory of the battles that shaped the country. These aggressive invaders gained a spot in the landscape when, in the past or present, they were planted to decorate gardens, control erosion, or just by mistake. Land managers of all kinds, from preservationists to farmers, now go to great expense to eliminate the pantheon of pests. The National Park Service deploys exotic plant management teams, or EPMTs, to fight back these forest killers.

Five members of Congaree National Park's Southeast Coast Exotic Plant Management Team (SEC-EPMT) come from the Student Conservation Association, by whom they are assembled and trained. Congaree Resource Management staff also provided training for this team. The team works from March through August. They use Congaree as a home base, but venture out to many of the parks that dot the Southeast. They battle invasive species in places set aside for their natural wonder, like Congaree's

old-growth forest, or their historical significance, such as the battlefields of Kennesaw Mountain in Georgia and Horseshoe Bend in Alabama. The team also serves Chattahoochee River National Recreation Area, Ocmulgee National



SCA team removing invasive plants

Monument, Fort Pulaski National Monument, Fort Frederica National Monument, Cumberland Island National Seashore, Fort Sumter National Monument, Charles Pinckney National Historic Site, Moores Creek National Battlefield, Cape Lookout National Seashore, Cape Hatteras National Seashore, Fort Raleigh National Historic Site, and Wright Brothers National Memorial.

Each park identifies infestations that regular staff cannot tackle alone. The SEC-EPMT was recently dispatched to

one such case in Kennesaw Mountain National Battlefield where Golden Bamboo, left unchecked for decades, grew densely up to heights of 40 feet. This species thrived just beneath the crowns of native loblolly pines and shaded out the would-be next generation of native plants. These greedy giants restricted woodland biodiversity, shielding light from the understory and allowing only invasive Chinese privet to emerge on the fringes of the forest.

The quintet went to work toppling the bamboo, one stalk at a time. The smaller plants could be cut with hand saws, the larger stalks were felled with chain saws. The stumps were then treated with her-

bicide to kill the roots and sunlight once again reached the ground. After several days of felling the bamboo, much of it still remained, but in the competition between native and invasive plants, the playing field was tipped in favor of the loblolly pines, the American holly, and the formerly struggling native flora.

The problem, unfortunately, does not get solved with a week or two of hard work. The park will continue to cut down the remaining bamboo and other weeds as time and funding become available. Each site must be carefully monitored for years to track progress and catch new infestations.

The SEC-EPMT will keep moving to new parks with similar problems, and with the help of park staff and invaluable volunteers, continue their campaign against invasive plant species that mar our land.

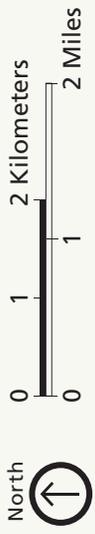
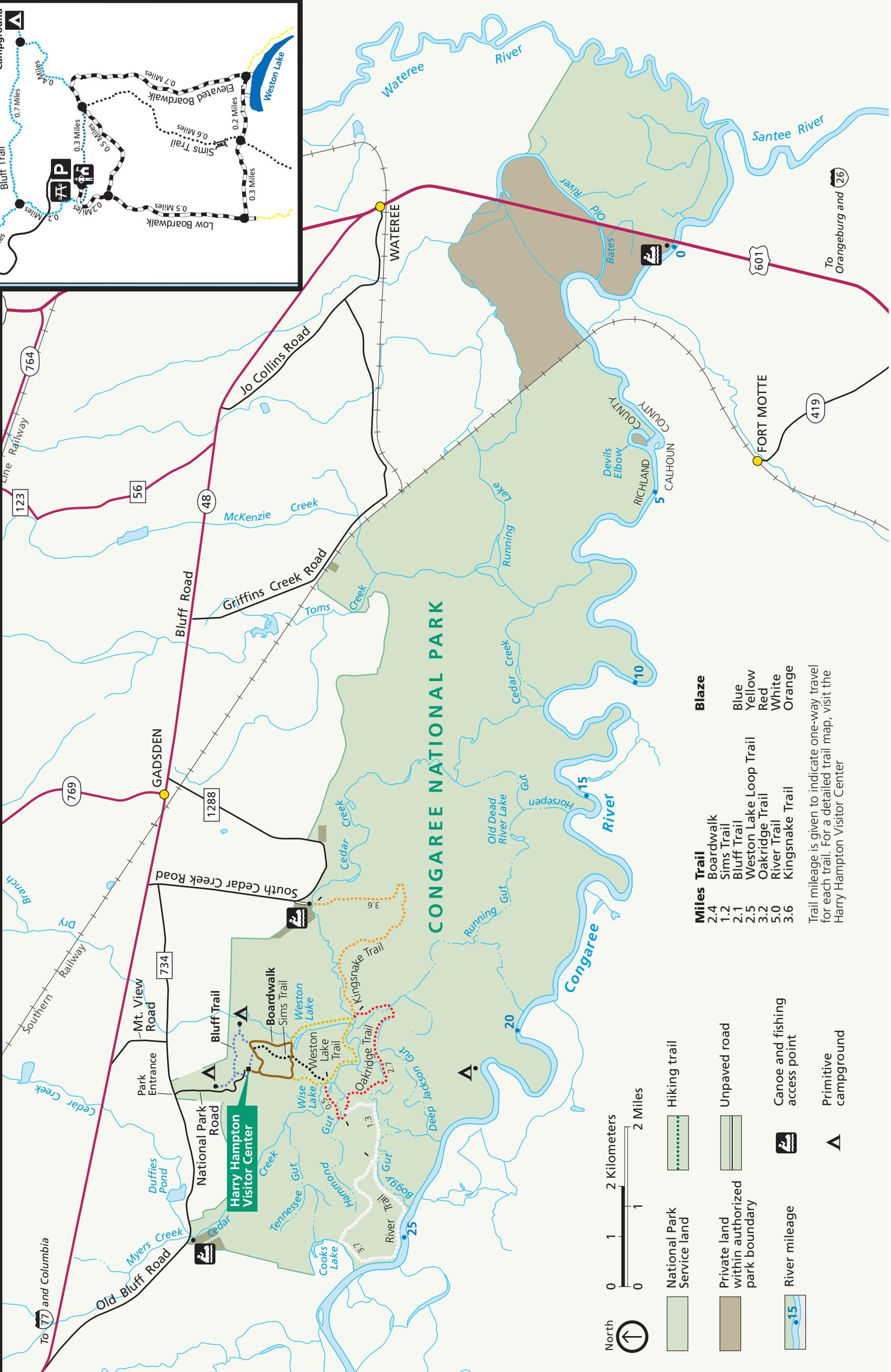
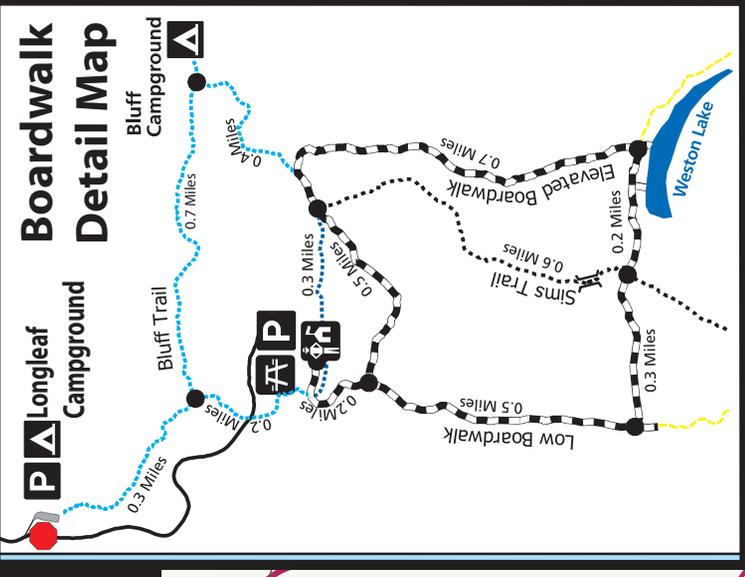


Please Remember

Feeding wildlife, along with the removal, disturbance, destruction, or disfigurement of any park resource, is unlawful. If everyone took just one piece of Spanish moss, or any other plant, our national heritage would soon be gone. Thank you for helping to protect your national park.

Congaree National Park

National Park Service
U.S. Department of the Interior



- National Park Service land
- Private land within authorized park boundary
- River mileage
- Hiking trail
- Unpaved road
- Canoe and fishing access point
- Primitive campground

- | Miles Trail | Blaze |
|----------------------------|--------|
| 2.4 Boardwalk | Blue |
| 1.2 Sims Trail | Yellow |
| 2.1 Bluff Trail | Red |
| 2.5 Weston Lake Loop Trail | White |
| 3.2 Oakridge Trail | Orange |
| 5.0 River Trail | |
| 3.6 Kingsnake Trail | |
- Trail mileage is given to indicate one-way travel for each trail. For a detailed trail map, visit the Harry Hampton Visitor Center