



COURTESY / JOHN PAUL

Superintendent's Message

Welcome to Congaree National Park. This edition of the *Boardwalk Talk* will help you get the most out of your summertime visit to the park. See inside for program schedules, articles on Leave No Trace principles, and animal adaptations. We hope you find the information useful to you as you enjoy the park. We invite you to take the paper home with you to share with others when you head to your next destination, but if you choose to leave it behind, we'd be happy to re-use or recycle it for you!

With the comfortable mornings and warm evenings of a southern summer, there can also be high heat and humidity throughout the day. Be sure everyone in your group (even pets) has access to enough water. A fountain is available 24 hours a day in the breezeway at the Harry Hampton Visitor Center. If you are camping, visitor center staff can also provide you with access to potable water for filling larger containers to take back to your

Intense daytime temperatures and high relative humidity often provide the environment in which spectacular summer storms may be experienced. These storms frequently pop up in the late afternoon and can include high winds and drenching rains, often disappearing as quickly as they appear. The spectacle of a summer storm is a sight to behold, but remember to check the weather forecast at the front desk before hitting the trails or roads and plan accordingly so you aren't caught off-guard!

We appreciate you making Congaree National Park a destination during your busy summer and as always we appreciate any feedback you'd like to provide on how we can improve the park experience for visitors in the future.



Tracy Swartout, Park Superintendent

Save the Date for Campfire Chronicles

Lauren Gurniewicz, Chief of Interpretation

Each fall, Congaree National Park staff and volunteers gather together to celebrate the park's rich cultural history by sharing the stories of the people who came to Congaree in the past.

During this free family friendly event, park rangers will guide visitors along a one-mile trek into the forest and through centuries of history to see costumed interpreters portray the relationship

between people and the land that is now Congaree National Park in a series of scenes set along the boardwalk. The walk ends with s'mores and a campfire with park staff.

Join us November 2-3, 2012 for the 4th Annual Congaree Campfire Chronicles. Guided tours will take place November 2 from 6:00-8:00 pm and November 3, 2:00-4:00 pm and 6:00-8:00 pm.

Happy Trails,



Tracy Swartout



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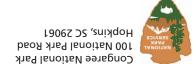


Canoe Tour Reservations

Reservations for canoe tours in the 4th quarter of 2012 (Oct. 1- Dec. 31) open September 15. Call 803-776-4396 to make a reservation. See pages four and five for information.

Emergencies

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

Chief of Interpretation

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Operating Hours

Congaree National Park is open 24 hours a day, 7 days a week. The Harry Hampton Visitor Center hours vary by season. Please call before visiting. The visitor center is closed on Thanksgiving, Christmas Day, and New Year's Day.

Admission and all programs are free.

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

There are two developed primitive campgrounds in the park. 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 has no toilet facilities but provides picnic tables and fire rings and is ideal for groups of up to thirty individuals. 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 free 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,



Paddling the Congaree River Blue Trail

otters, turtles, snakes, and raccoons. In addition to adventures on Cedar Creek, opportunities are also available on the Congaree and Wateree River Blue Trails. Please check with rangers for maps and current conditions.

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 near the Harry Hampton Visitor Center.

Safety First

Jared Gurtler, Law Enforcement Park Ranger

What should you do if a thunderstormstorm hits while you are in the park? This is an excellent question and one that both visitors and rangers can learn from. The best way to safely hike, camp or paddle in Congaree National Park is to properly plan your trip. This includes packing appropriate gear, knowing how long your visit will take, and checking weather conditions. However, as they say, "even the best laid plans of mice and men go astray." No matter how well you plan your trips, you should always expect the unexpected. This is especially true when hiking, camping, or paddling in the floodplain. Afternoon thunderstorms are common throughout summer at Congaree National Park.

Following a few basic tips if caught in a thunderstorm will help you stay safe. While these tips do not cover every scenario, they do provide a starting point for the basic course of action when caught in a thunderstorm. When disaster strikes, the human psychological process tends to break down and panic may set in. To avoid panic, remember the following tips and your chances of safely weathering the storm will increase exponentially.

SEEK SHELTER

If possible, move into a building or available vehicle. Roll up the vehicle windows and avoid touching metal parts.

STAY LOW

While hiking or camping during a storm, you should avoid high (elevated) areas,

while being aware of water levels that may rise quickly. Also avoid open fields or trails, and areas near tall isolated trees. Lightning has the tendency to strike objects that are closest to the cloud where it developed. Even if there is no audible thunder or visible flashes of light, you will reduce the chances of getting struck by lightning by taking the following precautions: 1.) Stay away from tall, isolated trees. Instead look for a dense, low growing group of trees or shrubs to stay under. 2.) If hiking or camping near a ridge (higher elevation), look for a lower area to stay during the storm. 3.) Make yourself small by squatting on the ground with your knees to your chest. Keep your head tucked in with your hands protecting your ears.

GET OFF THE WATER

If you are canoeing or kayaking, make your way to land and retreat inland, moving away from the edge of the water. Look for a low area or a low stand of trees to stay under.

SPREAD OUT

If you are with a group of people, spread out with several yards between each of you. If one person gets hit by lightning, a person sitting next to him may also receive injury. By spreading out, the chances of everyone getting hit are lower, and there will be someone to respond if there is a victim. If someone in your group gets struck by lightning, provide CPR (when safe to do so) and call for additional medical help.

BEWARE OF DEAD TREES

Since dead trees are more likely to fall than living trees, avoid areas with dead trees. Look for and stay away from dead or injured trees that have no foliage, are missing bark or show signs of rotting.

RESUME ACTIVITY ONLY WHEN CONDI-**TIONS ARE SAFE**

A thunderstorm may last anywhere from 30 minutes to two hours. Even when the storm appears to have subsided, lightning may still linger. If possible, avoid open fields or trails, and areas near tall, isolated trees while retreating to safety or resuming camping, hiking, or paddling activities.

Firearms in the Park

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 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.

mazing Adaptations

John Galbary, Park Volunteer

Over time, animals have adjusted to their environments in amazing ways through adaptations that may be behavioral or physical, instinctive or learned, or combinations of these. Behavioral and physical adaptations contribute to survival, growth, and reproduction.

Behavioral adaptations involve what an animal does daily to successfully meet its basic needs. Physical adaptations involve changes modifying aspects of the animal's physiology and anatomy to make it a more successful carnivore, herbivore, or omnivore and to fulfill its niche and pass on its genes.

Natural selection tweaks these changes, enhancing the animal's fitness to survive and thrive. The fittest reproduce, and slowly the population is altered, incorporating minute changes modified by environmental conditions. Natural selection shapes the animal slowly through more successful approximations to the desired result, including reproductive success. The goal is to be better than a rival. Adaptive changes facilitate greater success in the struggle for existence.

Behavioral adaptations can be as simple as a green anole (*Anolis carolinensis*) moving in and out of the sun to regulate its body temperature, or an eastern gray squirrel (Sciurus carolinensis) building an airy summer nest and a more insulated and secure winter nest. Behavior can be

more complex as with a male anole successfully controlling his territory and the females within, while keeping out the competition. Behavioral displays may involve posturing and color changes, head bobbing and body pumping, rearing back and inflating his colorful dewlap. The male who postures, displays, and bumps away his rivals wins the day and passes on his genes. The eastern gray squirrel that gathers and caches enough seeds and nuts in the fall is best suited to survive the lean winter months and will have a higher degree of reproductive success in the spring.



Green Anole

Physical changes can happen over vast time or within the span of a few decades. According to Jonathan Weiner's book, The Beak of the Finch, scientists have been studying populations of Galapagos

finches over the past two decades and have observed and documented changes in beak size, shape, form and function due to environmental pressures brought about with climate change. Changes in rain patterns and plant growth have effected physical changes in the finches' beaks on different islands within a relatively short time span. Environmental pressures affect proteins within the bird that govern the expression of genes. As environmental pressures select for these proteins, they in turn act as switches to turn on or off genes shaping beak patterns within the populations of finches. The bird's genetic heritage is modified to enhance fitness for survival and reproductive success. The different species of finches originated from a common mainland ancestor. All carry a common genetic inheritance that can be tweaked by environmental pressures upon the protein switches governing genetic expression. If Charles Darwin had stayed on the islands long enough, he could have seen beak size and shape altered.

Animals adapt to their environments over time. Changes in camouflage patterns, silent wings for nocturnal predators, tail-vibrating in snakes, binocular vision for carnivores, better peripheral vision for their prey, puffing up of body parts to intimidate and bluff are all adaptations in an animal's behavioral repertoire and/or physiology that enhance its chances for success. Successful populations go on. The unsuccessful die out. Next time you observe an animal at Congaree National Park, ask yourself, "What about it makes it successful day by day?" "What is it doing to meet its basic needs?" Amazing animal adaptations are all around us.

Campbell, Neil A. (2007). Biology. Saddle River, NJ: Pearson Prentice Hall.

Carroll, Sean B. (2005). Endless Forms Most Beautiful. New York, NY: W. W. Norton & Com-

Isham, Steven B. (2007). Anoles: Those Florida Yard Lizards. Orlando, FL: Commahawk Publishing, LLC.

Kricher, John & Morrison, Gordon. (1998). Eastern Forests. Boston, MA: Houghton Mifflin Harcourt.

Miller, Kenneth R. & Levine, Joseph S. (2006). Biology. Saddle River, NJ: Pearson Prentice Hall.

Shanor, Karen & Kanwal, Jagmeet. (2009). Bats Sing, Mice Giggle. London, UK: Icon Books.

Weiner, Jonathan. (1994). The Beak of the Finch. New York, NY: Vintage Books.

Williams, Ernest H. Jr. (2005). The Nature Handbook. New York, NY: Oxford University Press,

Managing Exotics Maggie Wilder, Erin Redding, Emily Jablonski, SCA Interns

Congaree National Park is a very fortunate place. This is not only because of the beautiful forest, diverse wildlife, century-old trees and the very knowledgeable and dedicated staff, but also because it is home to the Southeast Coast Exotic Plant Management Team (SEC-EPMT). The SEC-EPMT is one of 16 teams who serve throughout the United States to preserve native plant ecosystems in national park units. The SEC-EPMT travels to 12 national parks, monuments, seashores, and battlefields throughout the Carolinas, Alabama, and Georgia, but always returns to Congaree National Park. The team consists of two to four Student Conservation Association (SCA) interns, the field crew leader, Amorita Brackett, and our new liaison, Lauren Serra. Team members work three to six months with much of the team's time spent battling invasive plants throughout the region. The team has also tackled several invasive plant species here at Congaree. These projects include Chinese wisteria (Wisteria sinensis), Japanese climbing fern (Lygodium japonium), and Chinese privet (Ligustrum sinense).

The Chinese wisteria eradication project took place in October of 2011, although this project began years ago when park staff prepared for a prescribed fire. A large infestation was discovered at an old home site. In 2011, after several previous treatments, the team went back through the area and sprayed small re-sprouts with herbicide. The area that was once overgrown with wisteria is now returning to its natural state with native plants reappearing.



Japanese climbing fern is a small, easilyrecognizable fern that thrives in several ecosystems throughout Congaree National Park. The team treated large and small infestations of Japanese climbing fern along Weston Lake Loop Trail and the Kingsnake Trail in December of 2011 and January of 2012. These areas were treated and the plants with spores were removed. Because of the long life and mobile character of Japanese climbing fern spores, it was important that they be collected and properly disposed of to prevent it spreading to new areas. Several more follow-up treatments will be needed in infested areas to effectively control the population.

The last big project of the SEC-EPMT at Conagree National Park is the treatment of Chinese privet along the western boundary of the park. Because of the large size of this infestation and range of plant ages, several treatment methods were needed. For larger trees, a cut stump treatment was used, for smaller saplings and shrubs, a foliar spray was used. The crew worked the entire way along the western boundary from the Congaree River to the northern boundary of park. Chinese privet is one of the most prominent invasive species in Conagree National Park and in the southern United States. The SEC-EPMT has begun the long, slow process of controlling the Chinese privet population.

All of these plants and many more were introduced to the United States by gardeners who enjoy their lovely appearance and easy maintenance. Unfortunately, outside of their native ecosystems, these plants have few natural controls. They spread rapidly from gardens into native woodlands, smothering native plants, and reducing biodiversity and overall forest health. The team monitors invasions, maps exotic populations, physically removes specimens, and utilizes targeted spraying.

Citizens can assist the park mission of preserving the country's unique native ecosystems. Visit the Harry Hampton Visitor Center to learn how you can help in the fight against invasive species.

July 2012						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
10:00a Ranger Choice	2	3 10:00a Ranger Choice	4 Independence Day 10:00 Tree Trek	5	9:00a Public Canoe Tour 12:30p Public Canoe Tour	9:30a Nature Discovery 10:00 a Ranger Choice
8 10:00a Tree Trek	9	10	11	12	9:00a Group Canoe Tour 11:00a Tree Trek 12:30p Group Canoe Tour	9:00a Public Canoe Tour 11:00a Tree Trek 12:30p Group Canoe Tour
15 10:00 a Tree Trek	16	17	18	19	20 12:30p Group Canoe Tour 5:30p Public Canoe Tour	9:00a Public Canoe Tour 9:30a Nature Discovery 10:00a Junior Ranger to Activity Day 2:00p 12:30p Group Canoe Tour
10:00a Tree Trek	23	24 10:00a Tree Trek	25 10:00a Tree Trek	26	5:30p Public Canoe Tour	9:00a Public Canoe Tour 10:00a Junior Ranger to Activity Day 2:00p 12:30p Group Canoe Tour
9:00a Public Canoe Tour 10:00a Tree Trek 12:30p Public Canoe Tour	30	31				
August 20 SUNDAY	012 monday	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 10:00a Tree Trek	2	5:30p Public Canoe Tour	9:00a Public Canoe Tour 9:30a Nature Discovery 10:00a Loblolly Hike 12:30p Group Canoe Tour
5 10:00a Tree Trek	6	7	8	9	10	9:00a Public Canoe Tour 12:30p Group Canoe Tour
12 10:00a Tree Trek	13	14	15	16	17	9:30a Nature Discovery
19 10:00a Tree Trek	20	21	22	23	24	9:00a Public Canoe Tour 12:30p Group Canoe Tour
26	27	28	29	30	31	
Septembe	er 2012					
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY 1 9:30a Nature Discovery
2 10:00a Birds & Branches	3 Labor Day 10:00a Tree Trek	4	5	6	7 2:00p Gaps & Saps	8 9:30a Nature Discovery
9 10:00a Birds & Branches	10	11	12	13	14 2:00p Gaps &Saps	9:00a Public Canoe Tour 9:30a Nature Discovery 12:30p Group Canoe Tour
16	17	18	19	20	21 2:00p Gaps & Saps	9:00a Public Canoe Tour 9:30a Nature Discovery 12:30p Group Canoe Tour
10:00a Birds & Branches	24	25	26	27	28 2:00p Gaps & Saps	9:00a Public Canoe Tour 9:30a Nature Discovery 12:30p Group Canoe Tour
30						

Program Descriptions

RIRDS & RRANCHES

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.

CANOE TOURS

Enjoy the ambiance of this old-growth forest while paddling under bald cypress and tupelo trees. Bring water, a snack, sturdy shoes and a change of clothes. *Reservations required*. See reservation policy on this page.

GAPS & SAPS

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

JUNIOR RANGER ACTIVITY DAY

Join park rangers and our Junior Ranger Ambassador for a day of fun-filled activities. All participants will earn an official Congaree Junior Ranger Badge.

LOBLOLLY HIK

Bigger really is better! Take a hike with a ranger to see the national champion loblolly pine up close.

NATURE DISCOVERY HIKE

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

RANGER CHOICE

Variety is the spice of life! Meet at the Harry Hampton Visitor Center to explore the park's rich natural and cultural stories with a ranger. Rangers may present one of the programs listed here or surprise you with a new walk of their choice.

TREE TREK

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

Attending 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

Required for Public and Group Canoe Tours. Please call 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

The park offers free ranger-guided canoe tours on a limited basis throughout the year. Public and group canoe tours are one of the most popular ways to experience Congaree National Park. *Reservations are required.*

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 canoes, paddles, and personal flotation devices. The schedule of canoe tours is available on page four of this publication.

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

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

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 heat index exceeds 103 degrees, if the water level on Cedar Creek is above ten feet, or if winds exceed 30 miles per hour.

For additional information, call 803-776-4396.

Public Tours

- Reservations taken quarterly by calling 803-776-4396. For the 4th quarter of 2012 (October 1-December 31), reservations open September 15. For the 1st quarter of 2013 (January 1-March 31), reservations open December 15. Reservations will close when filled to capacity.
- 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.

Group Tours

- Reservations taken on a continuous basis throughout the year. Call 803-647-3969 or email Lauren_Gurniewicz@ nps.gov.
- Group size must be between 10 and 16 people and be members of an organized group, club, or common affiliation.



Visitors identify leaves during a ranger-guided program



Visitor enjoying a big tree

Leave No Trace

Lindsay Compton, Park Ranger

Last year, Congaree National Park hosted approximately 5,500 campers, of which twenty percent were in the backcountry. For some campers, the idea of camping in the backcountry may be unfamiliar and even frightening. Almost all of the remaining campers were in the Longleaf or Bluff primitive campgrounds. Backcountry regulations are different from campsite camping, also referred to as frontcountry camping.

One of the most important aspects of backcountry camping, aside from having fun and enjoying the natural world, is to keep human impact on the land minimal, leaving the land in a better state than it was when you arrived. There is an organization called Leave No Trace Center for Outdoor Ethics whose primary goal is to teach a set of seven principles to a wide array of diverse groups around North America. Their intent is to help encourage people of all ages to become good stewards of the earth.

Regardless of what type of camping you're participating in at Congaree Na-

tional Park, or if you're just hiking for the day, some wisdom can be gained from these seven simple principles:

PLAN AHEAD AND PREPARE

Know the rules and regulations of an area before visiting. At Congaree National Park, glass bottles are prohibited from entering the park and pets must be on a leash at all times. Prepare for South Carolina weather; it can change instantly. Plan to bring enough water for the heat and humidity in summer, and always be prepared for rain and afternoon thunderstorms.

TRAVEL AND CAMP ON DURABLE SURFACES.

If you're backcountry camping, you must be at least 200 feet from trails and water (creeks, lakes, streams) and at least 500 feet from the boardwalk or park infrastructure.

MINIMIZE CAMPFIRE IMPACTS.

Campfires should stay in designated fire rings located in campgrounds. Use the DDD rule for collecting fire wood. That means DOWN, DEAD, DINKY.

Keep fires small and use sticks that can be broken by hand. To prevent the spread of invasive insects, bringing wood from external sources is prohibited in Congaree National Park. Campfires are not allowed in the backcountry, but camp stoves are permitted.

RESPECT WILDLIFE

Keep your distance from wildlife. Do not follow or approach animals. Never feed animals; this can be very detrimental to their health. Feeding animals can change their natural behavior and eventually habituate them to human food. To discourage wildlife from eating human food, please store food securely while camping and put trash in the proper receptacles. Also remember to keep your pet on a leash at all times and do not leave him/her unattended.

BE CONSIDERATE OF OTHER VISITORS

Quiet hours in the Longleaf and Bluff campgrounds are from 10:00 pm to 6:00 am. Please respect other visitors and protect the quality of their experience. Yield to other hikers on trails. Avoid loud noises and voices.

DISPOSE OF WASTE PROPERLY

Pack it in, pack it out. Check your campsite before leaving to ensure all trash and food waste leave with you. Deposit solid human waste in catholes dug six to eight inches deep and at least 200 feet from water, camp, and trails. Cover with dirt and leaf litter to disguise the cathole when finished.

LEAVE WHAT YOU FIND

Help your national park preserve the past by leaving cultural and historic artifacts where you find them. Please leave trees, plants, animal remains and anything else naturally occurring in the park. The best way to preserve natural and cultural resources for future generations is to take a photograph of what you find beautiful!

For more information about regulations at Congaree National Park, please visit www.nps.gov/cong or call 803-776-4396.

The member-driven Leave No Trace Center for Outdoor Ethics teaches people how to enjoy the outdoors responsibly. This copyrighted information has been reprinted with permission from the Leave No Trace Center for Outdoor Ethics: www.LNT.org

on walks before, and we were not as

A Wild Adventure

Karen Brown, Teacher-Ranger-Teacher

What kind of person takes 305 four-yearold children on a field trip to a national park? A Teacher-Ranger-Teacher (TRT)! As part of Congaree National Park's outreach program to schools, TRTs are asked to share their knowledge of the park with their students. I decided the best way to do this with 4-year-olds was to let them experience Congaree National Park through a field trip. Field trips are an integral part of our program for at-risk students in Child Development at Richland School District Two. The field trips provide students with experiences that they may never have otherwise. Students have the opportunity to develop background knowledge and build language necessary for future learning. We take our students many different places including the downtown airport, a farm, a restaurant, the circus, and a movie. Taking them to the forest seemed like an obvious way to teach them about the natural wonder located within a 30-minute drive from their homes and school.

Preparing for this field trip included coordinating with 17 different teachers from 17 different child development classes. I had to ensure that students were engaged and involved throughout the entire trip, so I was going to have to provide them with a few activities to keep the attention and interest of 4-and 5-year olds. A puppet show presented with another ranger seemed like a good way to introduce them to the park. I took pictures of



TRT Karen Brown with students

plants and animals along the boardwalk to create a slide show for the children to view before the walk. Through this, students would know what to look for in the park.

We divided the group up and took them to the park on three different days within the same week. I was responsible for leading the groups each day. The first day, my own class of 20 pre-kindergarten students went on their field trip. I met the classes on the bus when they arrived. The first thing they said was, "Hi, Ms. Brown!" Quickly another student turned to them and said, "It is not Ms. Brown. It is Ranger Brown." They did not know much about my experiences as a park ranger, but they did understand that I had another job. That job is to teach people about the forest and how to keep it safe, including the animals and plants that live there. As long as I was wearing the uniform and flat hat, I was Ranger Brown.

To start off our adventure, I performed the puppet show and showed them the slide show with assistance from another ranger.

Before we began our walk, I told them that they would see lots of big trees and that it was a magical place where many animals live. I reminded them that they needed to be quiet if they wanted to see any animals because the noise might scare animals away. They needed to look very carefully for the animals because many of them were hidden from sight for protection. We only walked along the boardwalk to stop number three, but on that short walk we saw many things. I have taken adults

fortunate as that group of students. The students would say, "Hey Ranger Brown! Look what I see!" Of course I pointed out the large trees to them and the standing dead trees or fallen dead trees. I told them about how the dead trees were homes for different animals. We talked about the large amounts of water on the ground and the Doravan Muck. I put my hand down in the muck and pulled some out for them to smell. Naturally, they yelled, "Eww!" We spotted dung beetles, squirrels, and a salamander. We saw many spiders with beautiful webs, along with three different snakes including one that was going back into a hole in the ground. We found the exoskeleton from a dragonfly nymph. We heard the calls of pileated woodpeckers and songbirds. There were many signs of animals in the park, including snail "trails" on the boardwalk, snag trees that had been bored by beetles and dead trees that had been pecked by woodpeckers.

As adults we often forget to look for the small things. If not told to look for specific things children can sometimes be awestruck by the big picture. Yet, children can often see things we miss. I was amazed at the sightings their young eyes found. It was truly a wild adventure for these budding naturalists!

6 Congaree Boardwalk Talk

Butterfly Count Terri Hogan, Chief of Resource Managment & Corinne Fenner, Park Ranger

On June 9, park staff and volunteers, including members of the Carolina Butterfly Society's Midlands Chapter participated in the North American Butterfly Association's (NABA) annual 4th of July Butterfly Count. The goals of this count are to gather data on butterfly populations for monitoring, provide opportunities for butterfliers to socialize, and to raise public awareness about butterflies.

The park hosted a training prior to the count to familiarize participants with the variety of species that have a home at Congaree. According to Jaret C. Daniels' book, Butterflies of the Carolinas, there are over 725 species of butterflies in North America, north of Mexico, with over 150 species identified in the Carolinas.

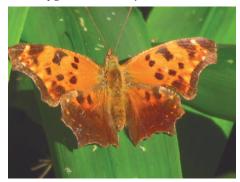
Butterflies provide an important function in the food web, as they pollinate many plants and are a source of food for birds, frogs, spiders and lizards. According to the on-line version of the Encyclopedia of Arkansas History and Culture, butterflies are an indicator species. They are sensitive to pollution, and changes in butterfly populations can indicate the health of an ecosystem.

Congaree National Park will hold another count in September. A butterfly identification training session will be conducted on Saturday, September 8, and the count will be held the following Saturday, September 15. No experience is necessary. To sign up, call (803) 776-4396.

RESULTS OF NABA BUTTERFLY COUNT JUNE 9, 2012

- American Lady, Vanessa virginiensis, 8
- American Snout, Libytheana carinenta, 31
- Appalachain Brown, Satryodes appalachia, 30
- Black Swallowtail,

- Papilio polyxenes, 2
- Cabbage White, Pieris rapae, 1
- Carolina Satyr, Hermeuptychia sosybius, 268
- Checkered Skipper, Pyrgus communis, 3
- Checkered White, Pontia protodice, 1
- Clouded Skipper, Lerema accius, 4
- Cloudless Sulphur, Phoebis sennae eubule, 16
- Common Buckeye, Junonia coenia coenia, 39
- Common Wood Nymph, Cercyonis pegala, 1
- Creole Pearly-Eye, Enodia creola, 1
- Crossline Skipper, Polites origenes, 1
- Dun Skipper, Euphyes vestris, 80
- Duskywing spp., Erynnis spp., 2
- Eastern Comma, Polygonia comma, 7



Eastern Comma COURTESY / RON AHLE



Volunteers spot a butterfly flying towards the canopy

- Eastern Tiger Swallowtail, Papilio glaucus, 6
- Eastern-tailed Blue, Everes comyntas, 6
- Eufala Skipper, Lerodea eufala, 1
- Fiery Skipper, Hylephila phyleus, 61
- Gemmed Satyr, Cyllopsis gemma, 7
- Gray Hairstreak, Strymon melinus, 4
- Gulf Fritillary, Agraulis vanillae, 2
- Hackberry Emperor, Asterocampa celtis, 16
- Horace's Duskywing, Erynnis horatius, 20
- Lace-Winged Roadside Skipper, Amblyscirtes aesculapius, 19
- Least Skipper, Ancyloxypha numitor, 3
- Little Wood Satyr, Megisto cymela, 1
- Little Yellow, Eurema lisa, 2
- Long-Tailed Skipper, Urbanus proteus, 1
- Ocala Skipper, Panoquina ocola, 1
- Painted Lady, Vanessa cardui, 1
- Pearl Crescent, Phyciodes tharos, 214
- Pearly Eye spp., Enodia spp., 1
- Pipevine Swallowtail, Battus philenor, 8
- Question Mark, Polygonia interrogationis, 3
- Red Admiral, Vanessa atalanta atalanta, 6
- Red-Banded Hairstreak, Calycopis cecrops, 16
- Red-spotted Purple, Limenitis arthemis astyanax, 16
- Sachem, Atalopedes campestris, 9

- Silver-spotted Skipper, Epargyreus clarus, 2
- Silvery Checkerspot, Chlosyne nycteis, 1
- Sleepy Orange, Eurema nicippe, 21
- Southern Skipperling, Copaeodes minimus, 20
- Spicebush Swallowtail, Papilio troilus, 6
- Spring Azure, Celastrina ladon, 6
- Summer Azure, Celastrina neglecta, 1
- Swallowtail species, Papilio spp, 3
- Tawny Emperor, Asterocampa clyton, 1
- Variegated Fritillary, Euptoieta claudia, 32
- Viceroy, Limenitis archippus, 2
- White Checkered-Skipper, Pyrgus albescens, 40
- Yehl Skipper, Poanes yehl, 1
- Zabulon Skipper, Poanes zabulon, 72



Zabulon Skippe COURTESY / RON AHLE

- Zarucco Duskywing Skipper, Erynnis zarucco, 3
- Zebra Swallowtail, Eurytides marcellus, 22

Total individuals per program, 1155

Total species per program, 58

