



Jocassee Journal

Information and News about the Jocassee Gorges



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The Jocassee Gorges brook trout project investigated habitat conditions in the region's streams for the past two years, and two streams will be chosen for brook trout restoration later in 2012. A similar project in two Oconee County streams has proven extremely successful in bringing brook trout back. (DNR photo by Greg Lucas)

Jocassee Gorges brook trout project underway

Coalition working to restore brookies to their rightful place along Blue Ridge Escarpment streams

When Dan Rankin, regional fisheries biologist with the S.C. Department of Natural Resources, looked at a map of existing brook trout streams along the Blue Ridge Escarpment, a large blank spot along the Jocassee Gorges section was pretty conspicuous.

"There is a large hole there," Rankin said, "where brook trout should be, but they're not."

Rankin thinks that forest management practices of the early 1900s, when timber companies did not abide by Best Management Practices that are now in place to protect water and soil, contributed to the absence of brook trout in the region. But whatever the cause, Rankin and a

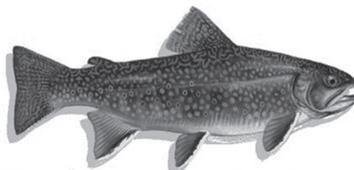
coalition of government agencies and private conservation organizations are working to bring the Eastern brook trout back to the mountain streams that it historically inhabited in the Jocassee Gorges.

The Jocassee Gorges brook trout project began in 2009 when a \$50,000 grant proposal was submitted to the Eastern Brook Trout Joint Venture, a diverse group

of partners, including state fish and wildlife agencies, federal resources agencies, academic institutions and private-sector conservation organizations working to conserve Eastern brook trout and their habitats. The U.S.

Forest Service received an additional \$50,000 Partnership Grant, and both grants were matched by the S.C. Department of Natural Resources (DNR) and Duke Energy.

Duke Energy is a major partner in this work by providing funding to DNR through the Bad Creek Hydro Project Fisheries Memorandum of Understanding.



Eastern Brook Trout
JOINT VENTURE

A Fish Habitat Partnership

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Legendary game warden retires
Long-time conservation officer Mack Erwin has retired from the S.C. Department of Natural Resources. Affectionately known in the mountain region as "Hound Dawg," Erwin learned under the guidance of another legendary game warden, Franklin Gravely, who passed away in 2000. Erwin is shown here at Gravely's gravesite while talking to a Jocassee Gorges class from Clemson University. (DNR photo by Greg Lucas)

Jocassee brook trout restoration may begin in 2012

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Another important partner is Trout Unlimited, which applied for and received a Trout Unlimited National Embrace-a-Stream Grant to support the brook trout project. Trout Unlimited funds have purchased many of the monitoring supplies, and Trout Unlimited also took the lead in developing an informational brochure about conserving brook trout in South Carolina as part of this project.

Primary objectives for the brook trout project are:

- 1) To conduct an assessment of Jocassee Gorges streams and set priorities for which ones were best suited for restoration of Southern Appalachian brook trout. The assessment phase included looking at stream habitat, water quality and what fish species already existed in streams that would be candidates for restoration.
- 2) Restoration phase, to include restoring brook trout in two Jocassee Gorges streams.

The assessment phase of the Jocassee Gorges brook trout project is nearly complete, after two years of looking at many factors in the streams, including water chemistry, water temperatures and the amount of sediment. Restoration of two streams could begin in fall or winter of 2012.

This formula has already proven spectacularly successful with two Oconee County streams, King Creek and Crane Creek, both in the U.S. Forest Service's Andrew Pickens District. Restoration in King Creek was completed in 2005, 2006 in Crane Creek, and both of

those creeks now have healthy and sustainable brook trout populations.

Three fisheries technicians from DNR's Freshwater Fisheries Section are the main drivers of the brook trout project. Amy Breedlove is the keeper of the data for the project and is conducting most of the analyses for habitat and temperature monitoring. Jon Davis and Bob Miller have traversed practically every inch of every stream—some of them incredibly rugged—in Jocassee Gorges during the assessment phase, expected to be complete in summer 2012.

One of the missing habitat elements in the Oconee County streams may also play an important role in restoring Jocassee Gorges streams, according to Rankin. Missing from the Oconee County streams was pool habitat, important places for brook trout to hide, rest and search for food. Another missing habitat element, apparently related to the lack of pool habitat, was large woody debris in the stream. Without large trees falling in the stream, the pool habitat that brook trout need was not being created. So what did fisheries' biologists and technicians do? They strategically chainsawed and dropped trees in the streams, many of them Eastern hemlocks, which were already succumbing to the hemlock woolly adelgid anyway.

Adding woody debris to the streams dramatically increased pool habitat in the Oconee County streams, and the brook trout that were reintroduced there have flourished. Rankin said they will likely try the same solution in Jocassee Gorges streams. ❁

UNC-Wilmington students relish Foothills Trail hike

Two groups of students from the university's outdoor recreation program hiked more than 30 miles through the Jocassee region during their 2011 spring break

By Haley McArtor

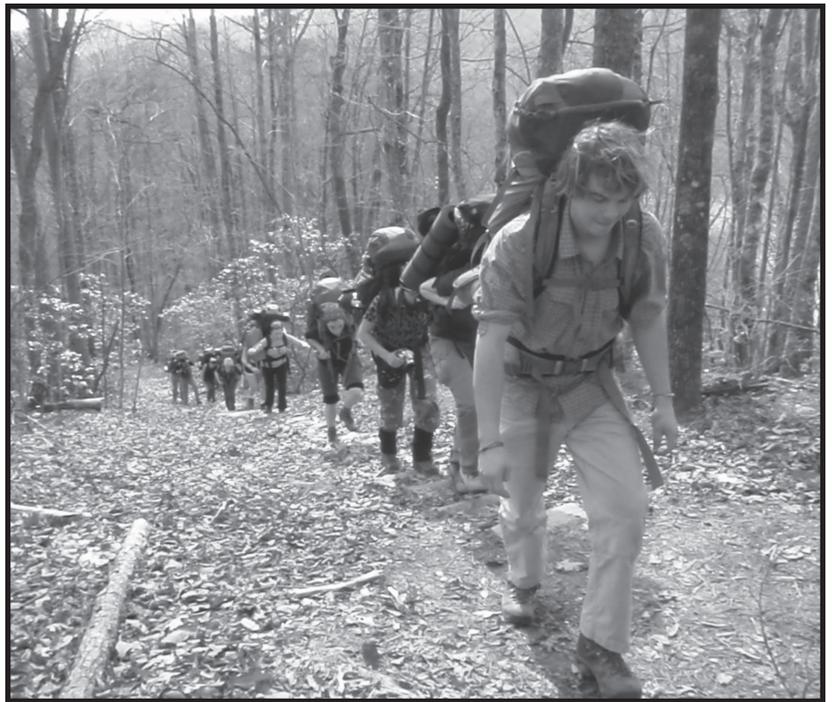
Facilitators Haley McArtor, Christian Diepholz and Ali Scott began planning the trip to Foothills Trail in early February 2011. After promoting around campus to recruit participants, we received an incredible amount of interest about the trip so a second trip with additional facilitators and participant positions was added. Natalie Fisher and James Masters signed up to lead the second group, and with the appropriate amount of participants signed up, we began our intense research of the trip details. With the help of Greg Lucas from the S.C. Department of Natural Resources and the Foothills Trail Conference website and references, we planned an exciting week-long backpacking trip to the area.

We decided to stay at Keowee-Toxaway State Natural Area for the first and last night because of its ideal location near the trail, attractive sites and exceptional facilities. We arrived on March 12 and were assisted by the helpful park rangers, Kevin Blanton and Ray Felton. We enjoyed using this park as the base for the first and last night of the trip.

On the morning of March 13, our two groups bid our farewells and split ways to different parts of the trail, to meet at the halfway destination later. The first group went to the Laurel Valley access, and the other group went to the Bad Creek access.

Both groups got to enjoy the same pleasures of this diverse trail, just at different times! From cool flowing streams, to rushing rapids, to cascading waterfalls, we traversed up and down all types of mountainous terrain. Yet, one part of the trail that amazed us all was the Lake Jocassee region. The contrast of the stark mountain and vast lake scene painted such a picturesque image that we often had to stop hiking to take in the beautiful sights of the area.

Although our groups had some easy-going times, we did go through some experiences that were a test of character, to say the least. We learned quickly that the trail was sometimes very strenuous and required us to



A long pull uphill is sometimes the price one pays on the Foothills Trail for the rewards of flowing streams, rushing rapids and cascading waterfalls. These were just a few of the joys experienced by students from the University of North Carolina at Wilmington during their spring break hike.

push our minds and bodies to the limits. We also realized the weather did not always cooperate. One day it rained so much we wondered if it would ever stop and if we would make it to our campsite. Yet no matter what we made it through the crucial times and it was these very times that only made us stronger people. Through the good times and the bad, our groups created memories that bonded us closer to each other and to the trail.

Before we knew it, it was our last day on our trail and only a few more miles to go before we reached our van. Although we were all excited to complete our journey, we were sad that this irreplaceable experience was coming to an end. Despite our desire to return to the comfortable entities of civilization, we all knew that we had acquired something on the trail that we could not find in regular society, and that was a connection with the great outdoors.

Although our trip is completed and we have all gone our separate ways, we will always remember our trip together to the Foothills Trail. We came to this adventure from all different parts of the world, including the United States of America, Finland, Netherlands, Sweden, Brazil, Scotland and more, but for one week, we all became part of the Foothills Trail.

(Haley McArtor was one of the lead facilitators for UNC-Wilmington's Discover Outdoor Program during its trip on the Foothills Trail. She is currently in an exchange program with California State University at Monterey Bay.) ❁

Jocassee gets a facelift

Timber harvests, prescribed fire and drum-chopping improving wildlife habitat

Outdoor enthusiasts will find some new looks in the Jocassee Gorges when they visit this fall, especially if they go in through the Shooting Tree entrance in the Eastatoee Valley off Cleo Chapman Highway. Wildlife openings have been treated with a heavy metal drum, or drum chopper, the Cane Creek dove field has been planted and most of the pine woodlands in the Shooting Tree section were burned with controlled fires this past winter. The most apparent changes, however, will be in the pine timber stands along the Shooting Tree and Cane Creek roads, where timber has been selectively harvested.

The S.C. Department of Natural Resources (DNR) sold timber, mostly pine, on about 300 acres across the Jocassee Gorges in spring 2011. The timber sold is located in about 25 different stands of woodlands from higher elevations up near Sassafras Mountain down to the lower elevations near Cane Creek. The timber was thinned to remove tree species that were planted on incorrect sites, favor appropriate tree species and improve wildlife habitat.

King Logging Inc. of Liberty purchased the timber in a competitive bid process and began the timber harvest in the Cane Creek area. King hopes to finish up the operation by fall 2011. King has abided strictly to South Carolina's Best Management Practices (BMPs) for forestry to protect soil and water quality and other environmental values. Jocassee Project Manager Mark Hall said: "King goes above and beyond the call of duty with respect to BMPs. They are good loggers and spend extra time to seed disturbed soil and establish wildlife-friendly vegetation." The woodlands will heal quickly, according to Hall, a registered forester, and the timber harvest will hardly be noticeable in a year or two. He expects substantial habitat improvements for songbirds and black bear to occur in the woods.

The popular Cane Creek Dove Field was planted this past summer with funding from the Pickens County Legislative Delegation. Browntop millet will attract doves



Doves, songbirds and bears will benefit from the drum-chopping operation in the wildlife openings in the Shooting Tree Ridge area. (DNR photo by Mark Hall)

for hunters who wish to venture out on Wednesday afternoons. In 2009, the field provided some great gunning for dove hunters. Last year, the field lay fallow due to personnel and budget constraints.

Doves, songbirds and bears will also benefit from the drum-chopping operation in the wildlife openings in the Shooting Tree area. DNR hired a local contractor to use a large bulldozer to roll-pull a giant, bladed drum chopper across the wildlife openings to sustain herbaceous vegetation and fruit-bearing shrubs in those areas. This treatment will discourage red maple and yellow-poplar trees while encouraging a profusion of wild sumac, blackberry, broomsedge, blueberries, partridge pea and other legumes. Hall even expects that bobwhite quail will soon return to those areas, which already harbor a fairly good population of cotton-tailed rabbits.

The pine woodlands in the Shooting Tree area have been burned with controlled fire three times in the past 10 years and are beginning to look like a wildlife paradise, according to Hall. A second thinning of the loblolly pines is planned for the near future, where the tree density will be reduced to enhance tree growth and improve habitat. "It is critical to get the right amount of sunlight on the forest floor for wildlife habitat improvement," Hall said. "I'd be surprised if we don't have a few coveys of wild quail in the area after we get through this next timber thinning. It will look a little rough for a while, but you have to break the eggs to make the cake!"

Visitors are encouraged to examine the "cake" when they travel through Jocassee Gorges this fall. It won't be long before it is topped with the "icing" that people and wild animals both appreciate. 🌸



Garden Club students from Holly Springs Elementary School in northern Pickens County stand on the North Carolina side of the mountain during their field trip to Sassafras Mountain.

Holly Springs Elementary Garden Club visits Sassafras

Students learned about birds, wildlife,
plant communities, and watersheds

By Pam Jones and Ann Bowen

In May 2011 the Holly Springs Elementary School Garden Club enjoyed a wonderful field trip to Sassafras Mountain in northern Pickens County. Under the direction of Greg Lucas, 36 students and 15 adults learned about birds, animals, plants and watersheds.

Even though the view from the overlook was a little hazy, the students were amazed at the surrounding vista. First, the students sat quietly in the morning sun on the overlook as they listened for bird calls and marked on a map from which direction the calls were coming. It was interesting to hear the many sounds without even seeing the birds. We heard the indigo bunting, the ovenbird, black-throated green warbler, Northern cardinal and junco. Another treat for the students was learning about more wildlife in the area while holding snakes and animal skins. In addition, Mr. Lucas had two live alligators and an albino snake.



Holly Springs
Elementary

Students next learned about watersheds and did leaf rubbings using a sassafras tree leaf to help them understand the drainage in a watershed. After a picnic, students took a walk along the Foothills Trail while collecting items for a scavenger hunt. At one point students had the opportunity to venture into North Carolina from South Carolina by taking a couple of steps. Along the way a variety of plants were pointed out including an indigobush and galax, which were blooming. After some hiking the students sat on a huge boulder in the forest surrounded with ferns and shared the items they collected in plastic bags.

We all learned to have a deeper appreciation for the plants and animals in our community. What an interesting environment we have right at our own back door. Thank you Greg Lucas for an outstanding field trip! Both parents and students are still talking about the opportunity they had for an educational walk in the woods.

(Pam Jones and Ann Bowen are second grade teachers at Holly Springs who sponsor the Garden Club. They are also involved in implementing grants that encourage growing healthy foods for students.) ❁

Camp Jocassee for Girls a magic

Nephew remembers 'Miss Sarah,' 'Miss Ludy,' and their camp along the Whitewater River

By Cash Godbold Jr.

My childhood memories are heavily weighted with Jocassee Valley where my Aunt Sarah (Godbold) had a camp for girls. She allowed our Godbold clan to vacation there and to participate in the camp activities. I remember it as one of the best vacation spots I have ever experienced. The Whitewater River sang me to sleep at night and the cool valley was a wonderful alternative to the summer heat in Columbia.

Aunt Sarah was authoritarian and required that we nephews obey.

One day my cousin and I were riding in the back seat of Aunt Sarah's car when we started bickering about who would sit where. Our mothers were present also but it was Aunt Sarah who warned us that we'd have to stop bickering or she would put us out and make us walk the mountain road back to camp. Boys being innately inclined toward "king-on-the-mountain," our bickering continued. Stopping the car, Aunt Sarah ordered us out.

Slowly, she drove on back to camp, these two little boys, now considerably sobered, walking behind—our mothers still in the car...weeping.

"Miss Sarah" was the camp director. Her sister and therefore also my aunt was athletic director. ("Miss Ludy" was the aunt who won the gold medal in shot put at the Paris Olympics the first year that women were allowed to compete.) There were also Mattie, swimming instructor, and Johnny the horseback riding instructor. As a teen I was hired to do maintenance and take care of the horses. Can you imagine what a glorious thing it was for a teenaged guy to work at a full camp of about 100 girls of all ages and from



Winners of the Hiking Emblem at Camp Jocassee had hiker, hike a distance of 90 miles during the season and down without stopping. A teenage Cash Godbold, au

as far away as New Orleans and Miami? I can still remember some faces of girls like Joan St. Jock from Miami, and that was 60 years ago!

Aunt Sarah had very good relations with the people of the valley and she spoke of them often and fondly. She stimulated the economy of Jocassee by using local products and people as much as possible. Her generosity was also known among the families there. One year that I worked there some men who had perhaps had a little moonshine came to the other side of the bridge and fired a few shots. Miss Sarah was well aware of her responsibility to protect her girls. She got the camp doctor with his rifle and us three teenage boys and we all walked over the bridge to engage the problem (just like in the old westerns). A tall woman, very athletic and imposing, my aunt conversationally convinced the men to leave her little corner of the world in safety. She ran a tight ship and everything seemed to work well.

The camp was originally a church camp and when Miss Sarah rented it, the founder asked that she continue to teach Biblical morals to the girls, which she did. She even drove girls of different backgrounds to worship services in a



Campers enjoyed the beach and swimming hole on the Whitewater River at the Camp Jocassee for Girls.



al place along Whitewater River

OF HIKING EMBLEM



l to do three things to earn this award: Be a cheerful
and pass the endurance test of eight miles up hill and
author of this article, is shown in the back row at far right.

nearby town. Each day closed at camp with the singing of:

*"If I have wounded any soul today,
If I have caused one foot to go astray,
If I have walked in my own wilful way,
Dear Lord, forgive."*

It seems this was the credo of the camp.

College over, I proposed marriage. After my fiancée and I set the date, I could think of nowhere more romantic than Jocassee Valley for our honeymoon. Ann Mickle (at one time her father was Sarah's and Ludy's dentist) had visited camp very briefly when Caroline Taylor, also of Columbia, worked there. Therefore it was not unknown territory to Ann.

After our wedding in Columbia we made our way to Jocassee, arriving the next afternoon. My bride and I camped on the same sand beach the campers had used. My wife remembers the following: "In anticipation of our honeymoon camping, Cash had borrowed a tent and sleeping gear, a Coleman pressure lantern, and had bought air mattresses. When we arrived at our riverside beach he gathered rounded stones from the river and constructed a "stove" for me. As I recall our supper menu was canned English peas and fried eggs. A split second after I broke the

eggs into the hot frying pan, I realized we had forgotten to bring an egg turner. Cash shifted into overdrive immediately, rummaged in the trash for the lid from the peas and grabbed his pliers. He angled up a small portion of edge and, using the pliers as the handle, I had my egg turner just in time. This speedy heroism was more confirmation that the Lord had given me a wonderful man to live life with in a third world country."

Under the stars we slept to the best music in the world—the Whitewater River. By day we floated down the river on our air mattresses and enjoyed the beauty of God's creation. On Sunday we attended the church up on the hill with the people of the valley. That honeymoon in 1958 takes its place as a highlight of many awesome experiences in our 53 years of married life. I left a part of my heart in that splendid valley and when the valley was flooded it was hard for me to come to grips with the fact that some of my fondest memories are 300 feet underwater.



MISS SARAH GODBOLD, Director
1416 Hampton St.
COLUMBIA, S. C.

Sarah Godbold, camp director

Many years later (1977) I took my wife and children to the headwaters of the Whitewater River, near Whitewater Falls, where we used to do an all-day hike with the girls from Camp Jocassee. I gazed down the valley where the river runs into the present lake and knew that my children would never know the pristine life I had lived in the Jocassee Valley. Frank Calcott, a high school friend who also worked at camp, recently gave me the book "Jocassee Valley," by Claudia Hembree. Reading and perusing it sent me back to many fond memories as if visiting a family photo album.

(Cash and Ann Godbold worked as missionaries over a period of 49 years on the Sahara Desert, as well as brief times in Romania, Albania and El Salvador. Cash found his work with the horses at Camp Jocassee useful in Africa as he had his own horse and camel. The Godbolds now live in Sarasota, Fla., and would love to hear from other campers of Camp Jocassee at cashann@juno.com.) ❁

Jocassee falcons are jewels of the Upstate

Peregrine falcon pair at Jumping-Off Rock fledges two birds for fourth year in a row

In 2008, a pair of peregrine falcons chose Jumping-Off Rock within the Jocassee Gorges as their new nest site. The S.C. Department of Natural Resources (DNR) was ecstatic about the addition, which felt like a jewel in the crown of the upstate. Amazingly, the peregrines have fledged two juveniles for four years in a row now.

“Their presence and success is a testament to the biological integrity and importance of wild areas in the Upstate,” said Jocassee Project Manager Mark Hall, Jocassee Gorges was acquired in 1998 to ensure that wild places would exist for future generations. Jocassee was a key property in the chain of conservation lands in the Upstate and it was the base for outdoor recreation. Naturalists had long recognized Jocassee for its biological diversity in the mountains. When the falcons appeared, it was confirmation of that.

When the falcons appeared in early 2008, DNR closed the entire nesting area to public use to make sure the second known pair of nesting peregrines in the state had plenty of breathing room. Biologists wanted to be extra safe, rather than sorry. Human disturbances can impact animals, especially a new pair of breeding raptors.

“Obviously, some peregrine falcons reside in cities, on skyscrapers and such,” Hall said, “but we could not afford to take any chances with this situation.” In subsequent years, DNR re-instated public access through the area and the peregrines not only held their ground, but contributed to the population for the next three years in a row. A new overlook was created nearby to allow visitors virtually the same incredible view of Lake Jocassee and the mountains. It was strategically placed about 300 yards from the nest site to offer visitors a glimpse of the falcons, too.

Typically, the falcons appear about mid-winter and start their mating ritual. Courting and nesting activities have taken place from February to May each year. Fledglings are usually first observed between late May and June. DNR was extremely fortunate to enroll the assistance of Denise Crawford of Easley to monitor the falcons over the past three years. Crawford is an amateur ornithologist and is dedicated to the falcons of Jocassee. Every summer she has spent countless hours sitting on the rocks waiting



Jocassee peregrines will be part of the public television show “Expeditions with Patrick McMillan” in fall 2011. Filming at Jumping-Off Rock, Clemson University videographers captured some high-definition shots of steep, diving swoops, “feinting” actions between juvenile and adult and several hand-offs of small prey. (DNR photo by Mark Hall)

for activity. She recorded detailed observations of mating behavior, nesting success and movement of the raptors. Long, boring hours of waiting were rewarded with once-in-a-lifetime, spectacular aerial acrobatic shows and as well as prey hand-offs from male-to-female or adult-to-juvenile. Her detailed observations remain part of the permanent DNR record for biological activity on the property. During a crucial time of short budgets and minimal staff, she contributed hundreds of hours of work that would have otherwise gone undone.

Hall rappelled down the cliffs in 2009 with assistance from Brevard College professors who are experts in wilderness rescue and survival. They determined the precise nest site “or eyrie,” which was nearly impossible to discern without scrambling down the sheer rock. The nest site was a mere flat spot under a rock overhang, sporting only a few grains of sand and pebbles. “They are pretty low-maintenance, especially when you compare their home to the multi-million dollar mansions that have appeared in the surrounding areas in the past decade or so,” Hall said. “A humble comparison.”

The peregrines of Jocassee will be part of the public television show “Expeditions with Patrick McMillan” in fall 2011. In mid-summer 2011, Hall spent time at the cliffs with Clemson University videographers. The video crew was very lucky to get high-definition shots of steep, diving swoops, “feinting” actions between juvenile and adult and several hand-offs of either birds or small mammalian prey. The crew was excited about their accomplishments and feel they might have some of the best peregrine falcon footage on record. ❁

Southern Appalachian heritage taught at Table Rock arts and music camp

Young Appalachian Musicians learn about mountain music and culture

The third annual Traditional Arts & Music Day Camp for Young Appalachian Musicians was held recently at Table Rock State Park with 60 youngsters from all over the Carolinas learning and enjoying many traditional arts activities.

The Traditional Arts & Music Camp for Young Appalachian Musicians (TAM YAM) provides youngsters instruction playing traditional mountain music with string instruments. But more importantly, the heritage of the Southern Appalachian Mountains is being passed down to another generation. Poll Knowland, Table Rock State Park manager, welcomed campers in the third through eighth grades to the park and talked about the importance of passing along mountain heritage. "The camp preserves and promotes the musical and cultural heritage of the Upcountry of South Carolina by introducing another generation to Blue Ridge traditions," said Knowland.



Guitarist Danielle Yother (right) helps camper Gracie Dellinger with her playing at the third annual Traditional Arts & Music Day Camp for Young Appalachian Musicians held at Table Rock State Park. (Photo by Jeff Catlin)

Betty McDaniel, founder of the Young Appalachian Musician program, is the TAM YAM camp director. "The goals of the camp are to expose these children to traditional arts and music, enrich their lives, and inspire them to cherish and carry on Appalachian traditions," McDaniel said. Among the activities are lessons in traditional acoustic music and

Appalachian dance; singing mountain ballads and traditional songs; Southern Appalachian cooking, and the primitive practices of Native Americans.

Like the popular Young Appalachian Musician (YAM) program, TAM YAM Day Camp is sponsored by Preserving Our Southern Appalachian Music Inc. (POSAM), a charitable non-profit organization, and all contributions are tax deductible. For more information on the YAM program, visit www.YAMupstate.org.

To join the booster club YESIYAM, or otherwise contribute to the program, donations may be sent to: POSAM, c/o Betty McDaniel, 792 Holly Springs School Road, Pickens, SC 29671. For further information call (864) 878-4257 or e-mail mcdanibw@bellsouth.net. ❁

Volunteers converge to clean Lake Jocassee

Lake Jocassee sparkled a bit cleaner the evening of July 30 after more than 350 volunteers pitched in for the largest organized clean-up effort in the lake's history. They gathered about 28 cubic yards of trash and debris, fueled by more than 700 hot dogs and 2,600 bottles of water.

The dive community and local law enforcement were instrumental in the day's activities, involving more than 140 registered scuba divers and nearly 100 emergency responders. Devils Fork State Park served as host, providing locations for registration tents and boat launching points for work teams dispatched to clean the lake above and below the surface. Two Cub Scout troops built and installed 36 bird houses for the park and forged a quarter-mile section of new trail. Three Boy Scout troops were represented, as well as one Eagle Scout

candidate participating for an Eagle Scout project. A variety of local dive shops, local businesses, environmental groups and others joined to sponsor and organize the day, including Duke Energy, Waste Management, Sunrift Adventures, Subway and South Carolina State Parks. The level of interest in this year's event leaves the organizing team already making plans for hosting a clean-up annually.

"We were really impressed with the community support we received and the number of volunteers who came out despite the heat," said Allan Boggs, Duke Energy Hydro regulatory and compliance supervisor for Keowee-Toxaway and Nantahala areas. "It demonstrates how much people value this lake and what it has to offer the Upstate." ❁

Jocassee Gorges vegetation study will help guide land managers

Clemson University researcher looked at young and middle-age forests

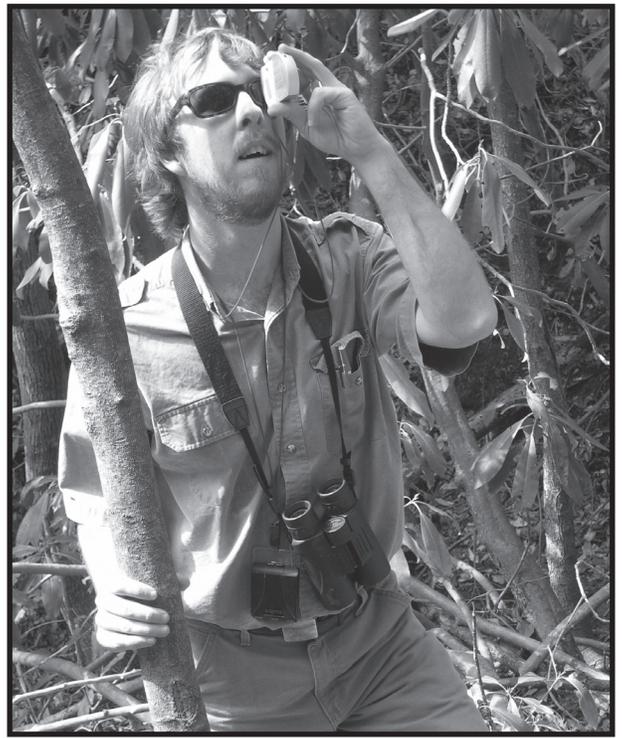
by Dr. Forbes Boyle

Wilderness areas of the large, contiguous variety are lacking in the eastern United States. This makes it difficult for scientists to study large-scale ecological patterns and processes, including distribution of plants in response to changes in environment or disturbance. The large size of Jocassee Gorges, its complex mosaic of topography and geology, and its well-documented land-use history make it an ideal place to overcome these regional limitations.

About 10 years ago, Clemson University Forestry and Natural Resources professors Vic Shelburne and Drew Lanham initiated a study to document the distribution of vegetation, environment and bird diversity within Jocassee Gorges. In 2002, Shelburne and his graduate student, Scott Abella, published the first landscape-scale description of late successional forest ecosystems within the Jocassee property. Their research identified five different ecosystem types: xeric oak/blueberry, xeric chestnut oak/mountain laurel, submesic oak/mixed flora, mesic hardwoods/bloodroot and mesic hemlock/rhododendron. While this study described the spatial distribution of types across the landscape, it did not account for differences in vegetation composition brought about by century-long timber harvests. Because the majority of Jocassee Gorges represents early and middle successional age-classes, it is critical for managers to be aware of the vegetation and environmental characteristics of these younger forests, and how these characteristics relate to late successional ecosystem types.

I studied the early and middle successional ecosystems of Jocassee Gorges during the spring-summer of 2003 and 2004. Using a standardized sampling technique developed by Abella and Shelburne, I collected vegetation, soil and topography data from 63 plots, each roughly 0.25 acres in size. Plots were grouped into one of five previously described ecosystem types and one of three age-classes (10-25 years, 26-50 years and 51-75 years). Age-classes of sites were identified through stand records provided by Crescent Resources (previous owner prior to the State of South Carolina) and I verified this digitized information by coring several on-site trees.

Vegetation and environmental patterns of successional communities were examined using quantitative methods, and specific results can be found in my



Scientist Forbes Boyle takes a measurement during his ecosystem classification research in Jocassee Gorges. Boyle completed his doctorate at Clemson University and is now with the University of North Carolina at Chapel Hill. (DNR photo by Greg Lucas)

dissertation, “Successional Vegetation in the Jocassee Gorges, South Carolina.” Furthermore, these results were presented at the S.C. Department of Natural Resources (DNR) Clemson office in spring 2011.

Early successional sites within Jocassee Gorges support a diversity of plants associated with both sunny, open habitats (like bracken fern, hill cane, yellow-poplar and several species of goldenrod and sunflower) and mature, closed canopy forests (like galax, huckleberry, Eastern hemlock, scarlet oak and chestnut oak). Like most upland sites within the southern Appalachian Mountains, forest ecosystems of Jocassee Gorges are resilient to disturbance and have responded positively in the face of long-term timber practices. Overall, this study concluded that timber harvesting procedures have not had a severe effect on ecological processes within Jocassee Gorges, based on the stability of vegetation composition across age-classes of all ecosystem types.

However, use of harvesting techniques that minimize soil compaction and erosion should continue to be favored over intense techniques that may result in unrecoverable ecosystem degradation. This will preserve the biological integrity of forest ecosystems within Jocassee Gorges and ensure future generations the ability to enjoy a large contiguous forested area with wilderness character in Upstate South Carolina. ❁

(Forbes Boyle, who completed his doctorate at Clemson University, is now project manager of the Carolina Vegetation Survey at the University of North Carolina, Chapel Hill.)

Foothills Trail hike filled with adventure

Trek of three years included broken leg, beautiful scenery, but no bear sighting!

By Odell Suttle

Hiking the Foothills Trail is exciting, therapeutic, great exercise, fun, educational, intriguing and satisfying.

I completed the Foothills Trail June 17, 2011, and it was one of my proudest moments, right behind the day I married Sadie.

It started as a simple day hike from Sassafras Mountain, the highest peak in South Carolina at 3,553 feet, to Table Rock State Park in the summer of 2006.

That first trip, I saw the remains of the John L. Cantrell home site and made a note to tell Sadie about it because she is a history buff. I went through Hickorynut Mountain Gap and crossed Emory Gap Toll Road, supposedly the first road out of Pickens, S.C., to cross the mountains.

At Bald Rock, I sat down to look out over SC Highway 11 and have a snack and water.

Down there somewhere is Dennis Chastain, a mountain man if there has ever been one. Chastain fascinates me and tells me stories of the mountain people. Chastain writes for hunting magazines, *The Greenville News*, takes children on mountain tours and leads search parties when people get lost in the mountains.

When I got back to Cabin 15 at Table Rock, there were so many stories to tell Sadie and none were exaggerated.

Chastain told me the Jocassee Outdoor Center would take me across Lake Jocassee if I decided to hike that part of the Foothills Trail.

I retired at the age of 62 in 2007 and suddenly there was lots of time to do things. On April 17, 1992, I had the aortic valve replaced in my heart so that is a special date for me. Every year I try to do something on that day to be sure I still can.

Sadie said I couldn't go on the Foothills Trail without the approval of Dr. Morris Williams, my cardiologist and the man who saved my life in 1992. Dr. Williams said hiking the Foothills Trail would be the best thing I could do

for myself.

I contacted the Foothills Trail Conference and asked for advice about the trail. That set up a meeting with Les Storm. Storm would become my trail advisor every step of the way to the end.

In the morning hours of April 17, 2008, the Jocassee Outdoor Center took Sadie and me across Lake Jocassee to the Laurel Fork access point of the Foothills Trail. The driver and Sadie went back across the lake and I started the hike to Laurel Valley, near US Highway 178. Along the way, I didn't pay attention and got off the trail (lost), an experience that added an extra mile to the hike. From that point on, I looked carefully for the white blazes marking the Foothills Trail. I'm happy to say that over the entire 77 miles I was only lost one other time.

Two or three miles from Laurel Valley, my foot slipped, I fell and broke the fibula bone in my left leg and

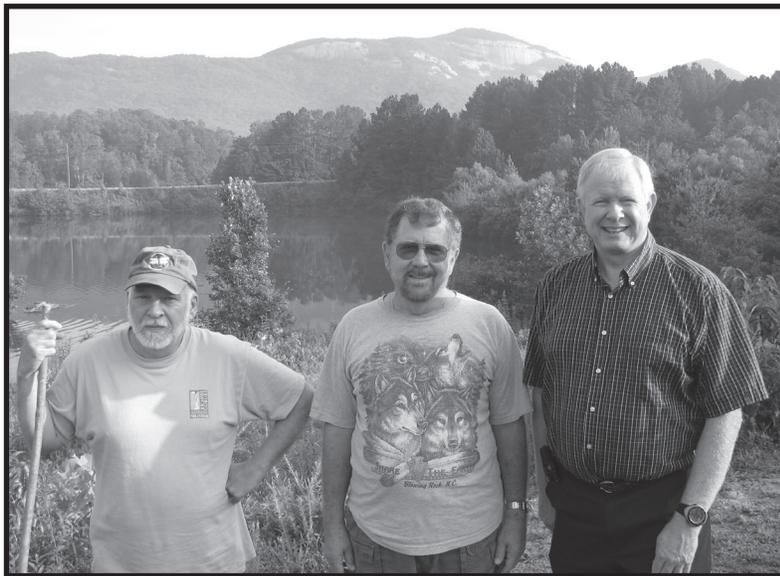
sprained the ankle. I didn't know it was broken only that it hurt big time and that I had to get off the mountain. I had not seen another person all day so the only way to get to Laurel Valley was to start walking. Every step would bring a sharp pain and I stopped often but had to keep moving.

Finally got to the Laurel Valley parking area where Sadie was waiting. I must add here that Sadie is a nurse and when we got to the car she told me to keep my shoe on and tied until we got to Cabin 15 at Table Rock. I did what she said.

The next day we returned to Fountain Inn and Dr. Gretchen Johnson said the leg was broken and the ankle severely sprained.

It would be four months before I could hike again but something else had happened on that section—I developed an obsession to complete the 77-mile Foothills Trail. Storm and Chastain were about to start working overtime giving me tips and advice. ❁

(Odell Suttle was born, raised and still lives near Fountain Inn. A Vietnam veteran, he says hiking in the mountains takes the Nam memories away. Suttle is a sports reporter for the Greenville News and Tribune-Times and writes feature articles for Late Model Racer, a Virginia magazine. Of his wife Sadie, he says, "Without her none of this would have been possible." Suttle's story will continue in the Spring-Summer 2012 issue of Jocassee Journal.)



Surrounded by his mentors in front of Table Rock Mountain, hiker and writer Odell Suttle (center) is shown with Dennis Chastain (left), naturalist and writer, and Les Storm, board member with the Foothills Trail Conference. (DNR photo by Greg Lucas)



Jocassee Journal

Information and News about the Jocassee Gorges

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Duke Energy funds Jocassee program, Foothills Trail guidebook

Duke Energy recently made separate grants of \$10,000 each to the Jocassee Gorges education and recreation program and to the Foothills Trail Conference for printing its new edition of the trail guidebook.

“Supporting programs for youth and adults to experience the natural lands of the Upstate is important to us,” said Duke Energy District Manager Mike Wilson. “Many organizations partner to help maintain and advance these recreational opportunities, and Duke Energy is pleased to be among them.”

The grant to the Jocassee Gorges education and recreation program, which has operated as part of the Clemson S.C. Department of Natural Resources office since 2002, will essentially help fund four programs:

- 1) The Jocassee Gorges class presented by the Osher Lifelong Learning Institute (OLLI) at Clemson University;
- 2) DNR’s participation in helping coordinate the Upstate Master Naturalist program;

- 3) DNR’s role in the Foothills Trail Conference and its associated board and recreational outings. The 77-mile Foothills Trail traverses lands owned and managed by both DNR and Duke Energy; and,
- 4) Jocassee Gorges educational programs for schools, churches, conservation and other groups. Duke Energy’s grant of \$10,000 to the Foothills Trail Conference helped print the recently updated version of the Foothills Trail guidebook.

“Duke Energy has been a strong supporter and partner of the Foothills Trail Conference for the past 37 years,” said John Park, Foothills Trail Conference board chairman. “Without Duke’s support, many projects on and off the trail would not be possible.



We are grateful for Duke Energy’s ongoing support.”

Foothills Trail guidebooks are available on the Foothills Trail website at www.foothillstrail.org and from local outdoor retailers in South Carolina and North Carolina. ❁