



The Chattooga Quarterly

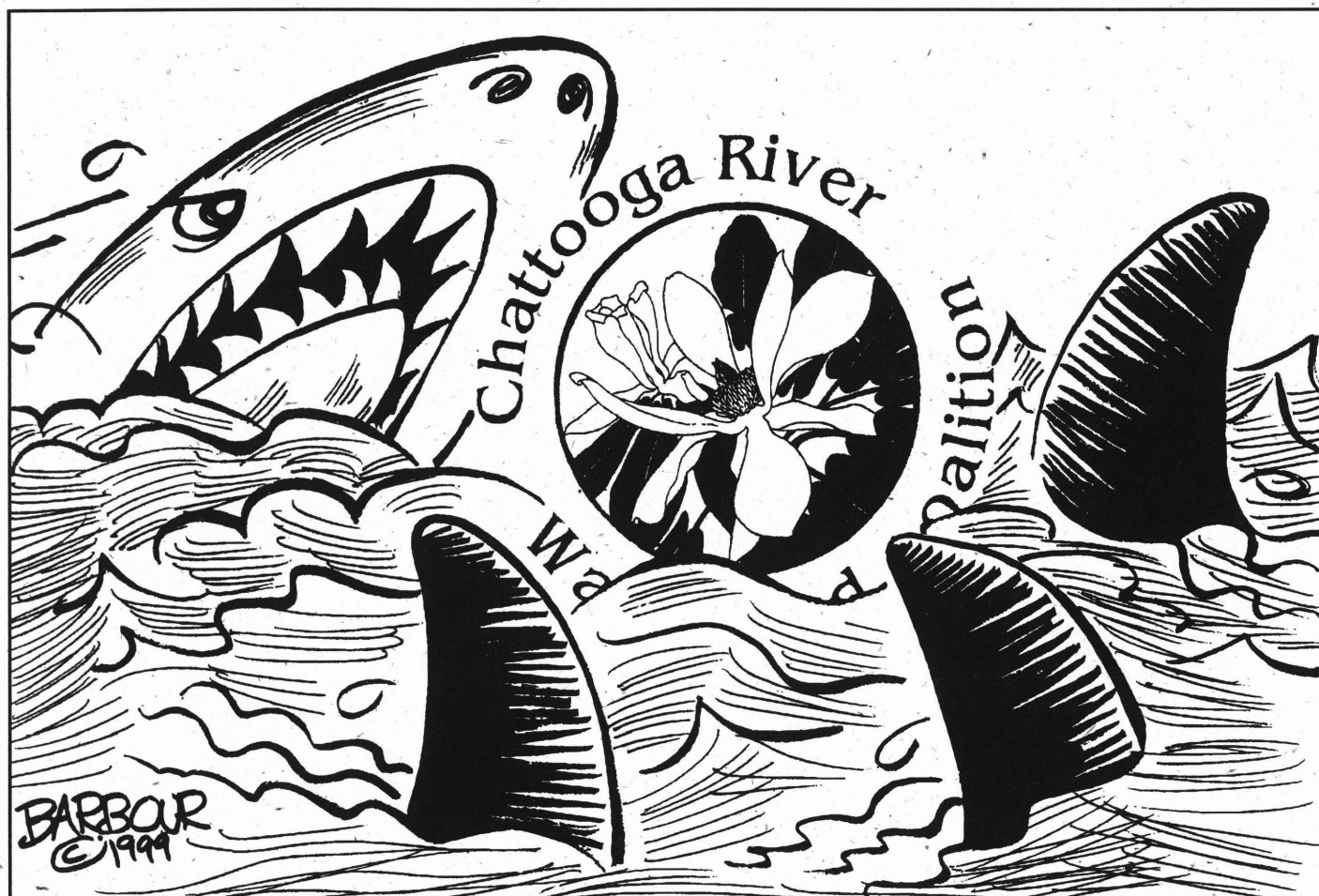
Summer/Fall



1999

\$1

Turbulent Times



I n s i d e

Director's Page.....	02
Plant Kingdoms' New Family Tree.....	03
Interview with Rep. Cynthia McKinney..	05
Recovery at Raven Chute.....	07

Watershed Update.....	14
Kingwood.....	16
Member's Page.....	18

Director's Page

Buzz Williams, Executive Director

First, I want to apologize for the late *Chattooga Quarterly*. Our goal is to publish another *Quarterly* soon, this fall. The reasons for our tardiness will be evident as you read this Summer/Fall edition. The subject of my editorial is specific to the three major issues that came unexpectedly through our door this summer like successive tidal waves. All three issues, which were the body recovery at Raven Chute, the lack of enforcement of erosion and sedimentation laws at the Kingwood golf course development, and the loss of the option to purchase the West Fork property, sapped our time and resources this summer. These problems are all symptoms of the same disease of apathy toward conservation issues. Until we treat this disease, we are destined to fight the same battles over and over again.

When we lost the West Fork (see p. 14), the reasons were the lack of political priority and an inept bureaucracy. Purchase of the West Fork property by the Forest Service would have essentially completed the acquisition of the designated Chattooga Wild and Scenic Rivers Corridor, thus

protecting a national treasure for posterity. But with the fight over the budget raging in Washington, the Forest Service saw the handwriting on the wall and sacrificed the West Fork for other priorities. This triage in high priority land acquisition is related to the ongoing raid of the 900 million dollars in federal Land and Water Conservation Fund to fund the federal deficit, and help pay for a proposed tax cut that would mainly benefit the wealthy. Evidence of this was the Forest Service's low appraisal of the property. Consequently, the land trust holding an option on the West Fork property with the intent to sell it to the Forest Service dropped the option, unable to absorb the difference in the asking price. Unless we work a miracle, this dwindling vestige of wild America will be subdivided, developed and lost forever.

In the case of the lack of enforcement of erosion and sedimentation laws at the Kingwood golf course (see p. 16), the problem was already weak law, unenforced for lack of political will and appropriations. Our monitoring of the sediment that was washed by rain into Chechero Creek, a tributary to the Chattooga River, totaled over 11,000 milligrams per liter of suspended solids. This data was

obtained through professional monitoring work done for us by Brewer and Associates, verified by a certified laboratory. When the state and federal bureaucrats were notified they were "alarmed," but took no action. As a result of numerous complaints by the CRWC the developer repaired the silt fences and rolled out buffer strips of sod; yet, the damage had been done. Chechero Creek, by the way, has been identified by the Environmental Protection Agency as an "impaired waterway" due to its excessive sedimentation. Scientists tell us that the additional sediment added to Chechero Creek will take hundreds of years to clear, and for all this time will be flushing down the Chattooga River. Meanwhile, the plan is to be playing golf by November.

When Senator Strom Thurmond and his staff charged in to "help" with the recovery of Rachel Trois' body from the Chattooga River (see p. 7), their political bravado and total disregard for appropriate conservation measures caused a "false" controversy, which was polarized by the media and hindered rescue workers, communications, and jeopardized safety. Worse yet, the policy of "no holes barred" rescue techniques has



set a dangerous precedent for future search and rescue operations. Yet through the human spirit, rescuers pulled together through it all to the finish, even though nearly all resources had been exhausted.

In my opinion, all three events were a product of one thing: political corruption perpetuated through a perverse system of campaign financing. An 82 year old woman who recently completed a walk across America to promote campaign finance reform said, "While wealth has always influenced our politics, what is new is the increasing concentration of wealth and the widening divide between the political interest of the common people and the political interest of the very wealthy who are now able to buy our willing leaders wholesale."

If we want protection for our streams' water quality, if we want congress to place a priority on conservation, if we want bureaucracies to do their jobs with the funding and incentive to perform, we need a "new" congress, one that responds to everyday people, not to special interest big money that sends them to Washington. We need campaign finance reform.

Plant Kingdoms' New Family Tree

c1999, *The Washington Post*. Reprinted with permission.

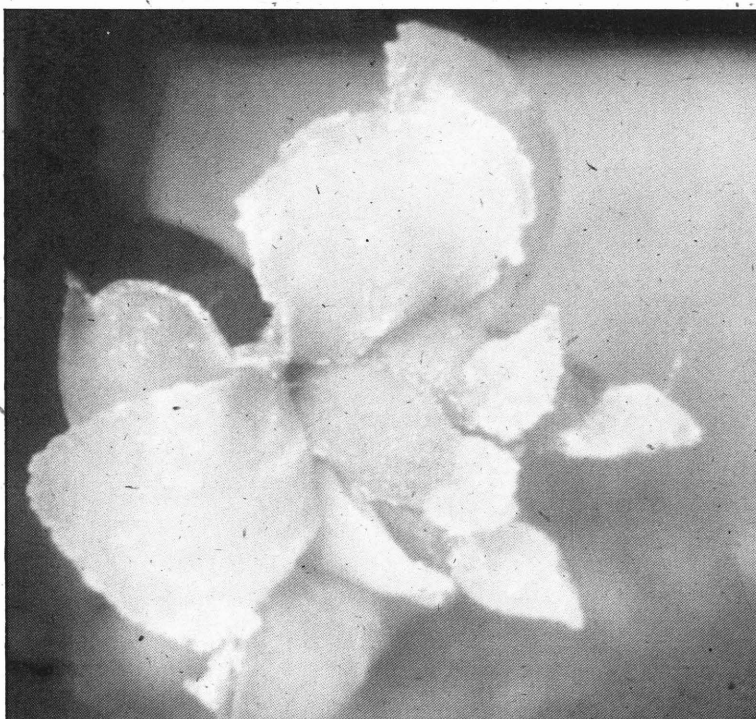
Project Explains Flowers, Identifies a Green "Eve"

Scientists yesterday released the most complete analysis yet of how the world's 1 million species of plants are related to one another, overturning long-standing theories about how the first single-celled algae advanced in size and complexity to become the showy trees and flowers that stand today at the pinnacle of plant evolution.

Perhaps most surprising, the five-year effort to map the entire family tree for all plants—involving more than 200 scientists in 12 countries—has determined that a rare and previously unheralded tropical flower is the closest living relative of the Earth's first flowering plant.

The unexpected discovery uproots both of the leading theories about what the first flower looked like, and apparently solves what Charles Darwin called the "abominable mystery" of how plants made the leap from primitive green monotony to full floral ebullience. That global makeover fueled an explosion in diversity among insects and other animals as well as plants.

The new analysis, presented at the 16th International Botanical Congress in St. Louis, also comes to the jarring conclusion that there are at least three separate plant kingdoms rather than one, as most high school students are taught today. It finds that plants invaded land not directly from the sea, as many scientists had thought, but from fresh water, where they spent millions of years preparing for the rigors of terrestrial existence. And it concludes that the many families of green plants living on land today descended not from separate evolutionary upstarts but from a single green "Eve," a near relative of which still lives today in pristine lakes as it did more than a billion years ago. The project also confirms a counterintuitive finding, first proposed six years ago, that fungi—including yeast and mushrooms—are more closely related to people than they are to plants.



Amborella, a rare and previously unheralded tropical flower, is the closest living relative of the Earth's first flowering plant.

"This is the first comprehensive, coordinated, large-scale attempt to reconstruct one of the major branches of life," said Brent Mishler, a professor of integrative biology at the University of California at Berkley and a spokesman for the federally funded "Deep Green" project.

Beyond the intellectual gratification that comes with understanding how the world's plants are related, the new findings could have practical benefits, said Peter Raven, director of the Missouri Botanical Garden, which is hosting

the week-long meeting of 4,000 botanists. For example, Raven said, it makes sense for botanists seeking new medicinal compounds to focus on plants closely related to those already known to have therapeutic properties. But that approach has been hampered by the lack of an accurate family tree.

Conversely, conservationists worried about accelerating plant extinctions want to preserve seeds and other genetic resources from a broad array of plants. But in order to decide where to concentrate their efforts, they need to know which plants represent the most disparate branches of the botanical family tree.

Weed control experts might be able to mount more effective attacks against newly invading species if they knew which species the new pests were related to and what kinds of weed killers work on those near relatives. "It's the ability to compare that gives meaning to everything in biology," Raven said.

The new work was made possible by recent advances in cladistics, a field in which scientists compare the most evolutionarily relevant traits among various organisms rather than the most obvious ones, as old-fashioned taxonomists did. By comparing key traits, such as water-conducting tissues or flower shape in different species, living and fossilized, scientists can determine when and where novel "branches"

Plant Kingdom

erupted from ever-diversifying family tree. Equally important have been advances in genomics, a field that tracks changes in gene arrangements over millennia, allowing molecular biologists to trace evolution's footsteps.

Mishler warned that biologists who specialize in evolutionary classification are notoriously argumentative and that the new picture of plant evolution presented is sure to change as fresh data arrive and other theories are proffered. But unlike previous efforts, he said, "these new family trees really indicate relationship, not just shallow similarity."

The new work sheds especially dramatic light on the emergence of flowering plants (believed to have arisen about 135 million years ago) from their non-flowering predecessors (which persist today as pine trees and related plants).

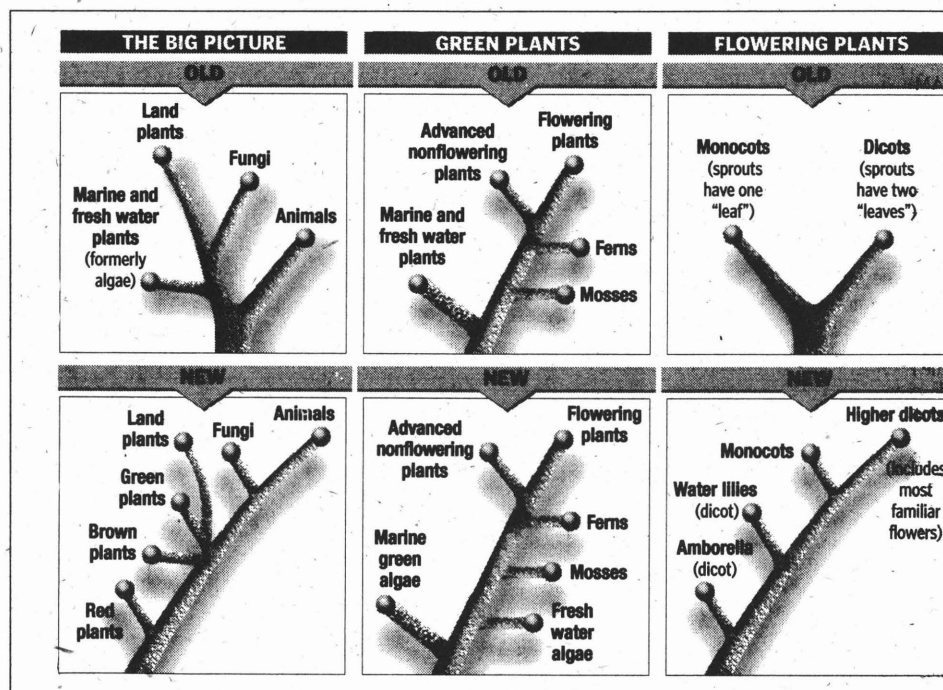
Until now, scientists had thought that the first flower closely resembled either today's magnolias or water lilies, both of which lack many of the specialized parts found in more modern flowers. No one had suspected that the debate between those two camps would be settled by the appearance of an even more primitive relative, a small, cream colored flower called Amborella, a single species of which lives on the South Pacific island of New Caledonia.

Four groups of scientists yesterday offered strong evidence that Amborella—probably pollinated at first by prehistoric beetles—belongs on the lowest branch of the flowering plant family tree, with other flowers appearing later in history and "higher" up in that tree. Flowering plants have an advantage over others because their seeds are protected inside fleshy fruit.

Other researchers presented data showing that green plants

(including all land plants), red plants and brown plants (mostly algae and seaweeds), evolved from three different one-celled plants, and so deserve to be considered individual kingdoms.

The fungi, including mushrooms and yeast, also constitute an independent kingdom. But under the new system, some former fungi (such as the so-called slime molds) have been moved to the brown plant kingdom. "The fungi are being trimmed down," Mishler said. "They are leaner and meaner."



New data are forcing scientists to rewrite the book on how the world's one million plant species are related to each other, and how primitive plants evolved into modern ones.

Researchers at the meeting also presented data indicating that primitive, single-celled green plants moved to fresh water before storming the land. In ponds they became multicellular, gaining the advantage of having cells that can specialize in specific tasks, including learning how to retain water, a crucial survival tactic for life on land.

Many assaults on the land may have been made, but only one plant line survived to diversity into every land plant known today. New data indicate that the mother of that line, the "Eve" of green plants, was something very similar to today's so-called coleochaetes, tiny green plants about the size of a pinhead and just one cell thick, which require fresh water that is completely free of pollutants.

Some practical benefits may come from a better understanding of how plants made the transition to land, Mishler said. The first plants to climb onto *terra firma*, the simple mosses, are exceedingly resistant to drying, even more so than are higher plants, which lost some of that ability later in evolution. Scientists are now trying to identify genes in mosses that might be bred into crops to make them more drought-resistant.



Interview with Rep. Cynthia McKinney

Cynthia McKinney is Georgia's first African-American Congresswoman, and the only woman serving in the state's congressional delegation. Rep. McKinney has emerged as one of the most prolific advocates for conservation in the US Congress. HR 1396, which she introduced, is the first bill that truly addresses the incentives which drive the Forest Service. Misinformation swirls around this bold new attempt at reform; to set the record straight, we interviewed Rep. McKinney on August 12, 1999 regarding HR 1396, the National Forest Protection and Restoration Act.

What inspired your interest in reforming the Forest Service?

I became involved with this issue by following the lead of my constituents. I am lucky to have a strong environmental constituency who I can rely to direct me to important issues. In my 1996 campaign I had very strong support from the environmental community, and my relation with those environmental constituencies fostered my sponsoring the National Forest Protection and Restoration Act (NFPR; HR 1396).

It is easy to hear from Fortune 500 companies (like some logging companies), that their industry doesn't have such a negative effect on the environment—that they tell me the whole story—but my experience leads me to believe otherwise. For example, one industry representative tried to tell me that pine trees were the source of Atlanta's air pollution. I am happy, and lucky, to have an informed constituency who understands the issues and can set the record straight.

The Sierra Club facilitated the educational process for me. They were the ones who started giving me information on the costs and effects of logging in our National Forests. Rene Voss and the Sierra Club were the ones who took me up in a plane ride over the Chattahoochee-Oconee National Forest to see the effects of logging and clear cuts in our state, and its effects on the Chattooga Wild and Scenic River corridor, and other treasures of our forests.



"I realize that this is a several year process, and that we may have to wait until we return to a Democrat-controlled Congress, or for Congress to mutate into one more friendly on environmental issues. That's OK though, I am not going anywhere."

—Representative Cynthia McKinney (D-GA).

How many co-sponsors do you have, and how many will be needed to pass the bill in the House?

There are currently 61 co-sponsors (and growing!), and we will need 218 votes, a majority, in order for this bill to pass the House.

The bill has often been called the "Zero-cut Bill." My reading of the bill indicates that some timber harvesting would be allowed. Is this true, and under what conditions would it occur? Has the "Zero-cut" label hurt your cause?

I am not aware that our efforts have been hampered by the name. I would believe, however, that some environmental groups, ones that are kind of middle-of-the-road, or ones who have mixed constituencies, might not support it. They may be fearful of such an extreme bill. I would be willing to help those interests push similar efforts—less extreme efforts—but I am not willing to compromise on our bill's provision.

There would be limited logging allowed, however. This would be to improve the original, natural landscape, for instance, or to improve the health of the forest, but there would not be any commercial logging—for profit—allowed in our National Forests.

How would the passage of HR 1396 affect local counties as per their income from the 25% fund?

The revenue sharing payments would continue at their 1996 level through 2003, except to Oregon, Washington and California counties, which are guaranteed payments through 2003 under existing federal law. If the money in the funds falls below \$380 million prior to 2003, the revenue sharing payments commitment to counties would be paid from the General Fund (of the US Treasury).

This would actually result in a greater amount of money going to Georgia's counties than they get now, since

Interview

lawsuits have halted all timber harvesting in the Chattahoochee-Oconee National Forests.

How will the Committee of Scientists, established to counsel the Forest Service on restoring the natural landscape for the national forests, be chosen so as to ensure non-biased science is utilized?

The most important thing, the thing to worry about now, is the passage of the bill. The issue of who science nominates, or what gets pushed, will be decided later. To answer the question though, I would like to see the Committee assembled by the National Science Foundation, or another (supposedly) non-biased science organization.

How long would it take to come up with new Forest Plans under the guidance of HR 1396, and what would guide national forest management in the interim?

It would be difficult to estimate how long it would take the Forest Service to establish new plans. This bill would, in effect, be an entire paradigm shift for the Forest Service. They would have to amend not only their current plans, but the bill would also force them to change the entire process of creating a forest management plan. In the past, the use of timber targets, or forecasting future timber harvests, was used to determine the forest management plan for a year, or other time period. After timber harvesting had been planned and accounted for, only then would recreation, restoration, and other mixed uses be considered. After passage of the NFPPRA, timber harvests will not be considered, and following forest restoration concerns, the myriad of other uses would be used to determine the forest management plan. The really important issue, though, is to get the Forest

Service off of the timber target system, end the mindset of "cut trees to get your budget, or we will find someone else who will," and begin the new age of considering ecology and science when determining the answers to where, when and what we do to our forests.

How can we convince the average man or woman at the grassroots level that this bill is good for them?

The GAO (General Accounting Office) said that the Forest Service, our Forest Service, lost \$2 billion during the period from 1992 to 1997. The best way to convince someone that something is good, in government at least, is through their wallets. A \$2 billion dollar loss—in any federal agency—is absurd, and cannot be allowed to continue. That fact alone certainly turns some heads.

While the financial benefits of this bill should be motivation enough to support the bill, the ecological impacts of logging on our streams, wildlife and the forests in general are often so bad, and so obvious, that anyone who understands or cares about our

environment will see the need to end this terrible practice.

What is your time frame for passing HR 1396, and are there sponsors ready to take up this bill in the Senate?

I think that it will take a couple of Congress' to get the sponsors necessary to pass the bill. I realize that this is a several year process, and that we may have to wait until we return to a Democrat-controlled Congress, or for Congress to mutate into one more friendly on environmental issues. That's OK though, I am not going anywhere.



*HR 1396 would allow logging, to restore and improve the native forest.
photograph by Kathryn Kolb*



Recovery at Raven Chute

Buzz Williams

She drowned in the Chattooga River at Raven Chute Rapid on Memorial Day 1999. Rachel Mae Trois was four days away from her 17th birthday when she slipped while wading above the rapid, and was swept down by the current into a chute in the heart of the torrent. The most likely scenario is that she was slammed by the river into a "strainer," a piece of wood lodged in the rocks in heavy current, and pinned against it by the rushing river, helpless to reach the surface. She drowned in a matter of minutes.

Rachel was the 35th death on the Chattooga River since the Forest Service began keeping records, which date back to 1970. Soon, I would know more about Rachel than any of the other victims who were on the Forest Service's list, with the possible exception of two fellow river guides. I learned from the *L. A. Times* that she wore a bright orange dress to her high school prom two days before the accident. Many friends in the little town of Leesport, Pennsylvania, where Rachel grew up, sent e-mail messages telling us about her and how much she was loved. They told us about Rachel's exploits as a star athlete, as catcher on the Schuylkill Valley girls softball team and on the high school field hockey team. They also let us know that they held us, the Chattooga River Watershed Coalition, and the Forest Service responsible for delaying the recovery of her body. One message read, "Let them retrieve their daughter from the icy grave you have her in now."

I strained my eyes while staring at a grainy fax of her photograph in a local newspaper, trying to see what she looked like. When I finally saw a good picture of Rachel, it was easy to understand the affection that so many people felt for the attractive young woman with the effervescent smile. But it was the unlimited love of a mother and father,

driven by an intense campaign to bring the body of their daughter home, which triggered a chain of events resulting in the largest and most controversial search and rescue/recovery operation in the history of the Chattooga River watershed. In itself, this obsession was only natural for parents; yet, it precipitated bureaucratic decisions and misguided political intervention that caused the huge controversy.

Approximately thirty minutes after Rachel disappeared at Raven Chute, Tom Cromartie, an intern with the Chattooga

River Watershed Coalition (CRWC) arrived at the scene. Tom likes to paddle in the evening, when most paddlers are already through for the day. He said that when he paddled up at around 6:45pm, two young men were running up the shore yelling, "There's a girl down there!" These young men were Chuck Yoder and his brother. Chuck was Rachel's boyfriend, a seaman with the



"Wrapped tightly around the driftwood was what appeared to be a bright green and blue print item of clothing. I used my river knife to cut the cloth from the strainer... and we decided to remove the strainer from the undercut rock."

U. S. Navy stationed at Charleston, South Carolina. The three of them, along with the Yoder boys' parents and a couple friends, had hiked to Raven Chute Rapid to play in the river and see the 120 foot precipice called Raven's Rock, which is 200 yards downstream of the rapid on the South Carolina side. Raven's Rock is a striking feature of the lower section of the Chattooga below the highway 76 bridge. Here, the Wild and Scenic River Corridor combined with the surrounding national forest lands in South Carolina and Georgia comprise enough acreage of remote land to be considered as a stand-alone wilderness area. On the South Carolina side, it was once known as the Long Creek Roadless Area. That was before the Forest Service hacked it up with a system of logging roads to get to the timber, back in the 1980's.

The ancient bedrock that forms Raven Chute is typical of

Recovery

the whole watershed. The gray, granite gneiss is patterned with parallel rippling streaks formed during a metamorphosis driven by tremendous heating, melting and cooling of the rock during multiple geologic events over millions of years. Many rocks are worn smooth, polished by eons of current to accent the various shades of gray and white streaks. Some rocks are undercut—overhanging and facing the current—and riddled with “potholes” drilled out over time by sand-laden waters. These potholes are of various sizes, with some tunneling completely through solid bedrock.

It is these undercut rocks and potholes that make the Chattooga so dangerous. Water level is also a big factor. The Chattooga is not impounded above Lake Tugaloo, and therefore its water level fluctuates with rainfall. Consequently, the Chattooga can change from a raging, flooded river to a creek-like mountain stream within a few weeks. It is the lower to medium water levels where most accidents occur since the undercuts, strainers and potholes lie close to the surface beneath the deceptively strong current. Often we hear the uninitiated say, “It doesn’t really look that dangerous.”

The water level on Memorial Day was at one of those low/medium levels that tempt disaster. The next day, which was a Sunday, the water level was still too high to reach into where Rachel’s body was believed to be trapped. By then, the “Swift Water Rescue Team” had been convened to attempt a recovery. This team was formed under the auspices of a Memorandum of Understanding (MOU) drawn up by the Forest Service. The group consisted of Rabun and Oconee County Rescue Squads, Sheriff’s Departments, coroners, the Forest Service and the commercial outfitters on the Chattooga. Forest Service guidelines require the agency to adhere to its Forest Plan, which clearly abrogates the ultimate authority for search and rescue to the local authorities.

Initially, the Swift Water Rescue Team tried to locate the body using Search and Rescue Dog Teams (SARDOG). These dogs are trained to detect airborne scents, and were taken as close as possible to the base of the rapid in a raft. The strong reaction from the dogs was interpreted to indicate that Rachel’s body was lodged in the rapid. The following day, a Tyrolean system was constructed across the river. This consisted of a cable stretched between two trees, from which a Forest Service River Ranger was lowered in a harness close to the suspected entrapment spot. From this position, he used a long aluminum pole to probe underwater. Later that day, rescuers used two pieces of plywood to attempt to divert some of the current away from the entrapment area. Both efforts failed to produce results. The following Saturday, an underwater camera mounted on the end of the pole was used from the front of a raft to scan the

rapid. In the images obtained from this camera work, rescuers believed they saw the image of a body lodged in the center of the rapid about eight feet below the surface, in heavy current. After these recovery efforts, the Swift Water Rescue Team made a pivotal decision to abandon any further attempts to recover Rachel’s body. The Trois family was informed that the rescuers had exhausted all means to recover her body. It seemed that Raven’s Rock Rapid would be Rachel’s final resting place.

The Trois family returned to Pennsylvania, but speculation continued about where Rachel’s body was and if there were any unexplored methods of recovery. Some felt that an incident a few years ago at a rapid called Left Crack was a factor in the decision to abandon recovery efforts. Left Crack is located at the third rapid in the Five Falls area of Section Four, and is a death trap at medium water levels. Swimmers in Corkscrew rapid, which is immediately upstream, risk being swept over the five foot falls and lodged in an hour glass shaped formation of rocks at the base of the falls, where the body is jammed tighter and tighter beneath the pummeling water. In the incident cited above, the victim was wedged so tightly that when rescuers tugged on the ropes attached to his body, it was pulled apart. One eye witness was so moved by the horrible scene that afterwards, he joined with the victim’s family in an unrelenting campaign to force the Forest Service to alter Left Crack by dropping a concrete plug into the rapid to prevent future drownings.

This proposal caused another huge controversy. Finally, the Forest Service sent out a scoping letter asking for public opinion on the matter. Overwhelmingly, the public opposed such measures. Their reasoning was that any action to alter the river would set a precedent leading to never-ending attempts to make the Chattooga “safe.” But the list of dangerous spots was essentially endless, including well known rapids such as Bull Sluice, Woodall Shoals and Sockem-Dog—all were places where one could argue that bedrock alteration might prevent future deaths. The Left Crack question had been put to rest by public opinion, but there was also another factor. In 1989, after the proposal to plug Left Crack, the Office of General Counsel ruled that alteration of bedrock in the Chattooga River would be a violation of the National Wild and Scenic Rivers Act. This Act mandates that these wild places must be left unaltered by the hand of mankind, and managed for an experience to include challenge, risk and adventure.

Joe Trois went back to Pennsylvania, but could not let go of his fervent desire to bring his daughter’s body home to rest. He searched on the Internet for resources to help, and found a company located in New Jersey called “Portadam.” The company representative offered his services for setting up a portable dam to divert the Chattooga, to facilitate recovery

Recovery

efforts. This was what Rachel's father needed to begin a campaign to revive recovery operations. Joe contacted his congressman, Representative Holden from Pennsylvania, who in turn contacted Senator Strom Thurmond of South Carolina. Senator Thurmond made a strong request on behalf of the Trois family that the Forest Service issue a permit to Portadam for installing a diversion device on the Chattooga.

I learned of these plans to bring in a portable dam on Tuesday June 22nd, and immediately met with the Forest

Service District Ranger in South Carolina to find out the status of the recovery efforts. This was not something I wanted to get involved with, as in my former professions as a river guide and a Forest Service River Ranger, I had had my fill of search and recovery operations. As Executive Director of CRWC, it was not my business, unless it involved violations of the Wild and Scenic Rivers Act and other conservation issues.

Soon, my fears about this operation were realized. The contract with Portadam included a clause allowing the use of a jackhammer to drill holes in the river bedrock, to secure the dam. The Ranger assured me that this would only be used as a last resort. I protested on the spot. Furthermore, the diagram for the dam seemed suspect, as it was attempting to divert the whole river counter to its natural flow. However, I thought that the dam was worth a try, but only if it could be installed with more benign methods to anchor the dam's frame, such as sandbags and devices often used by rock climbers called chocks and slings. I had anticipated that this plan would use a more reasonable approach; however, I learned later that the issues got very polarized during a planning meeting held by the Swift Water Rescue Team the night before. Here, a shouting match between some individuals had ensued over the use of the Portadam.

Back in the CRWC office on Wednesday, telephone lines were jammed by calls from people concerned about the issue of bringing in a jackhammer to drill holes in the bedrock of the Chattooga River. We decided to hold a public meeting on June 24th to air the facts. Here, the crowd of mostly river guides was adamantly opposed to the decision to permit Portadam. I explained our position that the CRWC was not opposed to the device per se; however, we were quite concerned about the precedent of permitting bedrock alteration. There were those who questioned our decision not to pursue litigation to stop the action by



In the first portadam attempt, the river rose behind the dam and breached over it in several places. The dam breached because it was set up to attempt diverting the whole river towards the Georgia side, against its natural flow. Nevertheless, a quick search ensued.

obtaining a temporary restraining order from a federal judge. I explained that this would have been virtually impossible, and that our most viable strategy was to work with the rescuers and offer assistance in setting up a diversion that would safely and effectively accomplish the task without drilling holes in the bedrock.

Early the next morning, I hiked to the river by way of an old logging road on the South Carolina side. Immediately upon arriving at Raven Chute, I was met by four river guides who told me that Portadam was running the show, and that the jackhammer was being brought down to the river. When asked if Portadam had considered other methods of anchoring the dam, they told me the rescue officials estimated there would be about 40 holes drilled to secure the device. Meanwhile, it was raining with no sign of clearing, and the water was rising. I borrowed a life jacket and swam across the river, where I met two old friends assisting the Swift Water Rescue Team whom I had worked with as a river guide. They were glad to see me, and we exchanged handshakes. However, I was there to protest the violation of the Wild and Scenic Rivers Act, and when I stated this to the nearest Forest Service Ranger, my friends turned away. They were a part of the operation, and did not want to break ranks. Later, I was told that turning over control of the recovery operation to Portadam was the biggest mistake made that day.

Recovery

The rain kept falling, and the jackhammer drilled more and more holes. The coffer-dam was assembled. When the fabric sheeting was rolled down over the frame to make the dam, we saw the water level drop behind the dam. However, this was a short-term effect, for soon the river rose behind the dam and breached over it in several places. The dam had failed and the river was rising. Nevertheless, a quick search ensued in the middle of the rapid for about 30 minutes. A raft was hauled upstream with a load line to a spot directly below the entrapment area, where rescue workers were able to probe for the body, but to no avail.

The dam breached because it was set up to attempt diverting the whole river towards the Georgia side, against its natural flow. When the dam failed, only a few hours were left to remove the structure from the water. With a rising river, there were several anxious moments as rescue workers struggled to keep from being swept toward the rapid. There was also the ever-present danger of the whole thing washing into the rapid, creating a steel strainer. Had it not been for the courageous rescuers who worked diligently to take the dam apart, disaster surely would have resulted.

Even the greenest river guide in training knows the uncertainty and threat of a rising river. One of the first things taught about rescue and recovery operations is to never endanger the lives of rescuers. Another principle in emergency situations is that the victim's family or acquaintances are always comforted and given a role in the rescue, but under no circumstances are they involved in decision-making. The emotional state of family members in such trying times is often clouded by the stress. In the case of the Portadam recovery attempt, all of these rules were violated. As I watched that rainy day at Raven Chute, I talked to some of the people I used to work with in search and rescue operations. Through these conversations, it became clear what caused this rescue to spin out of control. One of them said, "Look Buzz, when Strom says we should go, we go." In this case, the father of the victim enlisted the help of his congressman, who called Strom Thurmond, who used his influence to turn Portadam loose. In the process, the basic tenets of search and rescue were obscured.

In the aftermath, most people thought the recovery question was settled, and the river was going up and down like a yo-yo from occasional thunderstorms. While this weather pattern persisted, there was no doubt in the minds of reasonable people that recovery operations had to wait for the river to drop. However, the politicians did not view this scenario as an option. Almost a month had passed since Rachel drowned. Now, the Forest Service and members of the Swift Water Rescue Team were in Washington trying to explain to Representative Holden and Senator Thurmond why further attempts to recover Rachel Trois' body were on

hold. Senator Thurmond refused to yield; his position was that recovery attempts should press forward.

Within days of the Portadam attempt, the operation had attracted media from all over the country including inquiries from CBS Evening News, the Today Show and the *L. A. Times*. We even had one call from 60 Minutes in Australia. Federal and state agencies were consulted including the FBI, the Armed Forces Institute of Pathology, the National Guard, Navy Seals and the Army Corp of Engineers. Then, we learned that Portadam had written a letter to Mr. Trois stating that another attempt could be accomplished with a higher dam, and possibly even two dams.

On July 6th, the CRWC called another public meeting in Long Creek, South Carolina. This time, media came from everywhere. Two local television stations showed up with remote broadcasting vans, and there was also extensive coverage from radio and print media. Approximately 80 people from South Carolina and Georgia attended the meeting. The Forest Service sent representatives to explain their position, and Senator Thurmond faxed a letter stating his position. The Forest Service District Ranger stated that there should be no further attempts at recovery, until the water dropped. Senator Thurmond's letter was the shocker, where he stated, "If in fact we determine that this river is such a threat, I would be willing to introduce legislation to restrict access, particularly commercial rafting, thereby preventing additional tragedies." Most people held the opinion that the letter was an attempt by the Senator to flex his political muscle, under the false impression that the CRWC was connected to the outfitting and guiding industry. Still, it made no sense because the outfitters on the Chattooga River are some of the safest in the country; most deaths on the Chattooga have been from the private sector. Another irony was that while Thurmond was threatening to close off access, some in the search and rescue units were pushing for more access into remote places. A road had already been bulldozed inside of the Wild and Scenic river corridor in Georgia for the recovery attempts.

In the interim until the water dropped, several proposals were made for alternative methods of extraction. One from the South Carolina Forestry Commission proposed to divert the river through large pipes around the rapid. The CRWC weighed in with an offer of assistance, and proposed to install a smaller diversion immediately above the extraction spot, thus allowing the bulk of the river to flow around the area. We proposed that this device could be anchored with sandbags, and by utilizing natural rock features. Meanwhile, local rescue squad members generated a list of questions for Portadam. This letter included such statements as "Many are concerned that the dam attempted to divert the water in the opposite direction of the natural flow of the river," and "Things did not go as they were agreed, and as

Recovery

planned at the Monday night meeting."

On July 13th, the Chattooga surged to 1.9 feet, which normally is considered to be on the cusp of high water. On July 14th the *L. A. Times* reported, "USFS officials have not decided whether to construct another dam or wait until the water level falls naturally." By Sunday the 18th, the water had dropped to a low enough level to allow more underwater camera work from a raft. I joined the rescuers in the search. Extensive camera work was done to locate the body both from the closest rocks above the chute, and from a raft. It was during this exploration at Raven Chute that a diver with the Oconee County rescue squad made a heroic attempt to swim upstream into the base of the rapid. Here, he found a bone fragment. The Oconee County Coroner determined from visual inspection that the bone was from an animal.

This point in the recovery operations was the first time I met Joe Trois, and his wife Heather. When I offered my condolences, both parents stood stone-faced with no reply. I tried to put this out of my mind in working with the rescue teams. By the end of the day, Joe and I were at least working together coiling belay ropes. There seemed to be a subtle change in the attitude of all those involved with the recovery efforts that day. People were beginning to unite behind the common goal of doing the best we could to get Rachel out of the river. Once I became a part of the effort, I was more convinced than ever that this mission could be accomplished without the heavy-handed and destructive machinery used in the previous attempt. The key would be to convince Joe that we needed to implement the most effective plan, executed by a united effort. In effect, this would neutralize the politicians who were running the show, and who didn't understand appropriate search and rescue methods.

That night, I was invited by the Forest Service to a planning

meeting. Together with the Swift Water Rescue Team, we watched the underwater video taken at Raven Chute within days of the accident. Many rescuers believed this video contained images of Rachel trapped in the rapid about eight feet under the current. We compared this to the images taken on July 18th. This was my first opportunity to see the evidence used to determine where Rachael was in the rapid. As the image was described, I began to see the ear and hair believed to be Rachel's head. Later, I wondered if this was really Rachel. Was the hair just moss flowing in the current? However, the latest images contained no evidence of Rachel's body.



In the second attempt, the frames were placed in a horseshoe fashion, open end downstream, in a tight formation directly above the slot in the middle of the rapid.

On July 19th, officials issued a press release stating that they believed the body was not in Raven Chute anymore. Now, officials would focus the search downstream of the rapid utilizing dive teams from the South Carolina Department of Natural Resources, and Search and Rescue Dog teams. When these teams turned up no evidence

downstream, emphasis began to shift back to Raven Chute.

The next week was filled with activities in anticipation of the next move. Mr. Trois was extremely frustrated. He was about to make something happen, and he had powerful allies. On Tuesday July 20th, rescue officials, congressional delegation staffers, the Forest Service and the Trois family met at the rapid to weigh options. On Wednesday, I joined a group of rescuers to conduct additional camera work. The water had dropped, and we could wade fairly close to chute at the center of the rapid. Working from a raft anchored at the top of the rapid, we probed several unexplored places a little further up in the heart of the falls. We probed deep into the rapid, but there was still one spot we couldn't reach. That night, the Swift Water Rescue Team began reviewing proposals from Portadam and others for another attempt to divert the river.

Recovery

The following day we met representatives with the Strom Thurmond Institute at Raven Chute. Upon a request from the CRWC, the Institute agreed to donate time and equipment to survey and map the river bedrock, to assist in future rescue attempts. Above and in the rapid, high tech laser survey equipment was used to shoot readings on a survey pole positioned on 475 sample points throughout the river bedrock. The data was digitized to create a three dimensional image of the area. This survey work was very useful in learning where natural anchor points existed.

On Friday, the Forest Service issued their decision granting Portadam a permit for another attempt to divert the Chattooga at Raven Chute. The statement read, "Because the Swift Water Rescue Team believes this area is the most highly probable area for the body location, and because the area cannot be accessed with the

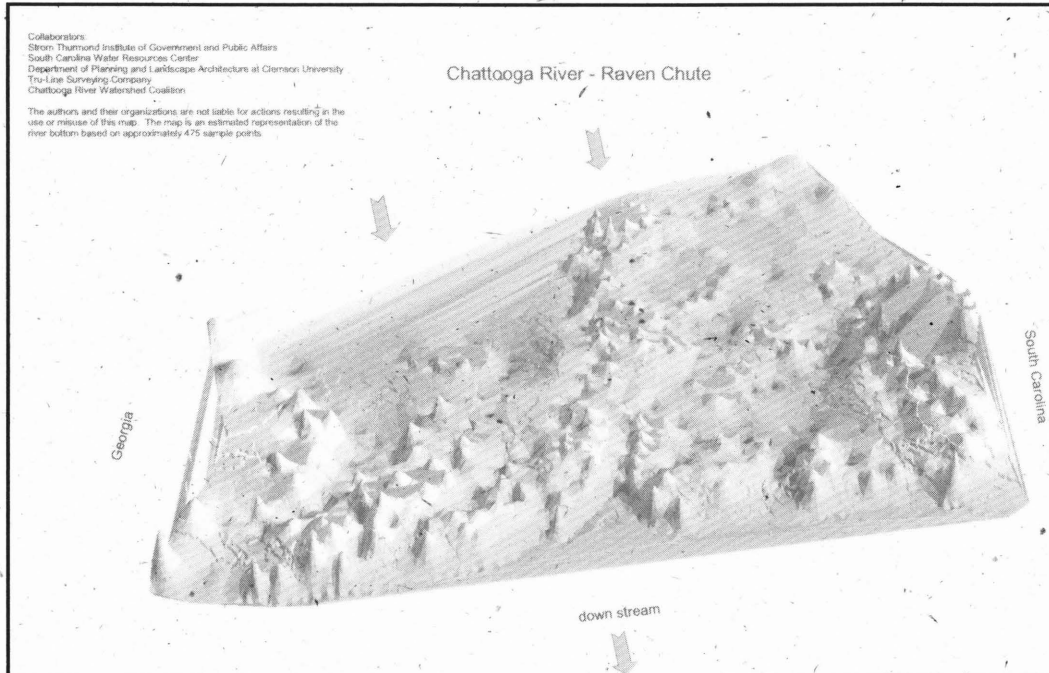
underwater camera and cannot be safely accessed by divers, some type of diversion structure is needed to conduct a thorough search of the rapid." Included in the permit was a clause that gave us the opportunity we had been waiting for: "Holes in the bedrock will only be drilled if there is no other safe alternative to anchor the steel Portadam frames. Back braces and sandbags will be considered before any holes are drilled. Buzz Williams, Executive Director, CRWC will work with Portadam Inc. representatives to consider alternative methods of anchoring the Portadam structure. However, the Portadam, Inc. representatives will make the decision regarding which device will ensure the stability of the structure, and therefore the safety of the recovery team."

This was the opening we needed. By the weekend, I had consulted with Portadam about the natural anchor points to be considered. We also secured approximately 5,000 sandbags from the Army Corps of Engineers. It looked like

the river would drop to within range of another attempt in a matter of days. On Saturday, I met with two Rabun County Rescue Squad members who had arranged to meet Chuck Yoder at the river, to interview him again about the point where Rachel had last been seen. Chuck confirmed that point to be in the area we suspected. By Monday, it was increasingly clear that an attempt would probably occur on Wednesday. The weather looked pretty good, and everyone was working well together and totally focused on the goal. On Tuesday, Tom and another CRWC intern, Jesse Steele,

carried in a few hundred sandbags and we experimented with a small diversion structure. It worked well, and I had to hold Jesse back. If it had been up to him, we would have constructed a complete diversion that day.

The recovery attempt was set for Wednesday, July 28th. We planned to sleep on a



Above and in the rapid, high tech laser survey equipment was used to shoot readings on a survey pole positioned on 475 sample points throughout the river bedrock. The data was digitized to create a three dimensional image of the area.

beach at the river on Tuesday night, not wanting to get caught up in the melee of media and rescue workers at the access points. There was a full moon, and Jesse had gone back to Southeastern Expeditions to borrow a raft to bring down a huge bundle of sandbags. Alone, I sat at Raven Chute, waiting on Jesse and studying the rapid. I was sure we could divert the river if we worked with it. The water was low now, and it was easy to wade out to just above the drop-off into the rapid. As I waded, I could feel little potholes where we could anchor back brace poles for the dam frame.

Tom woke me in the predawn darkness. We were prepared for the worst, but were ready to make our best effort. We hiked upstream to the rapid, and were the first to arrive. Soon, I saw a group of rescuers coming down the trail to the head of a skyline cable, which had been set up to transport the steel frames of the Portadam across to a drop point in the middle of the river. On the Georgia side, the last section of

Recovery

the steep trail leading to the river was worn to bare earth. It would have been so much easier to have dropped the frames in with a helicopter and long line, but this expense wasn't in the Forest Service budget.

I asked if anyone knew Bill Streit with the Portadam company. Someone pointed to a stocky, medium height man with dark hair. He was talking to a Forest Service Ranger, who was meticulously going over a list of materials. I introduced myself and we descended the hand line down the steep section of the trail, and out into the open by the river. Bill was easy to work with, and we waded out into the river above the rapid to decide where to put the steel frames that would bear the weight of the Chattooga.

Everyone worked together to place the frames in a horseshoe fashion, open end downstream, directly above the slot in the middle of the rapid. The triangular frames were seated with their tail ends jammed against protruding rocks. Back brace poles were anchored in the small potholes behind the frames. Sandbags were used to level the river bottom so the frames would be evenly seated, and easier to bolt together. Other sandbags were used to buttress the ends of the system, and to plug trough-like irregularities running under the frames. This would stop additional current from flowing under the frames.

About midmorning, someone said in a low voice over my shoulder, "I think the divers are finding something below." The dive teams had been sent in to search the eddies below the rapid before we completed the dam. This was because when we rolled the vinyl sheeting down over the dam frame to seal off the current, it would cause some turbidity and lower visibility in the water. Within an hour, bones presumed to be Rachel's remains were found in an eddy 15 yards downstream of the rapid. The Forest Service requested that the media turn off their cameras. We stopped working and silently watched as the divers completed their search. I tried not to look at the sloping rock under the hemlock bough where Joe and Heather lay holding each other, silently weeping.

The decision was made to finish installing the diversion structure, to determine if any more remains were in the rapid. When we rolled the sheeting down, the system held firm with no sign of weakness. We all peered over the top of the dam to see an almost eerie sight below. What had once been a rapid cascading through a deep trough was now exposed bedrock, covered with a carpet of lush green moss-like aquatic plants that were teaming with the larvae of mayflies, midges and stoneflies. On the rocks barren of vegetation were combs of egg cases cemented in clusters of various geometric patterns. The juxtaposition of the strange beauty behind the dam against the horrible scene of the body

bag on the rocks below was almost more than the senses could bear.

I crawled around the end of the dam on the Georgia side, where the safety officer was standing alone staring into the pools of still water behind the dam. "Is it safe?" I asked, and he nodded in approval. No one had gone into the area behind the dam. Some water was still flowing into the slot of the rock trough. Wedged across this chute was a short, thick piece of driftwood about 5 inches in diameter. Wrapped tightly around the driftwood was what appeared to be a bright green and blue print item of clothing. By that time, several others had slowly made their way into the area behind the dam. I used my river knife to cut the cloth from the strainer. We decided to remove the strainer from the undercut rock. I tied a bowline with a half hitch around the wood, and threw the rope to Jesse who, along with several others, pulled the end of the strainer free. It fell from the loop and into the pool below.

It was hard to believe, but the whole ordeal was coming to a close. I stayed until the last piece of the dam frame was out of the river. I waved goodbye to Joe as he was climbing up the hand line, but his eyes were downcast. I knew the media was waiting at the top of the trail. I had nothing to say. Quietly, I slipped away and swam down stream to the hidden trail around the bend.

Rachel went home with Joe and Heather. Yet, the questions about what sideboards should be articulated by the Forest Service to guide future search and rescue operations remain largely unanswered. The rescue squads spent thousands of hours and almost \$200,000, bankrupting their operating funds. The next week, I flew to Washington and met with Jim Furnish, Deputy Chief for the National Forest system. Jim told me he intended to work with the Regional Forester to draft better guidelines for search and rescue operations. He also agreed to consider a proposal I made, for funding search and rescue through designating a portion of the "special use" permit fees from outfitting and guiding operations on the Chattooga for that purpose.

In the end, there were some good things to point out. First, the cooperation was extraordinary between the Swift Water Rescue Team, the CRWC and other volunteers from the private sector. The Forest Service stepped up and did a good job of coordinating operations. On the negative side, Senator Thurmond and others who pushed too hard without knowing critical facts were detrimental to the recovery effort. Some of the media concentrated too much on the "controversy," and not enough on the human element of cooperation between people with opposing views in a time of tragedy. The final chapter in this story is yet to be written. People who have the courage and commitment to speak out for change will write that chapter.

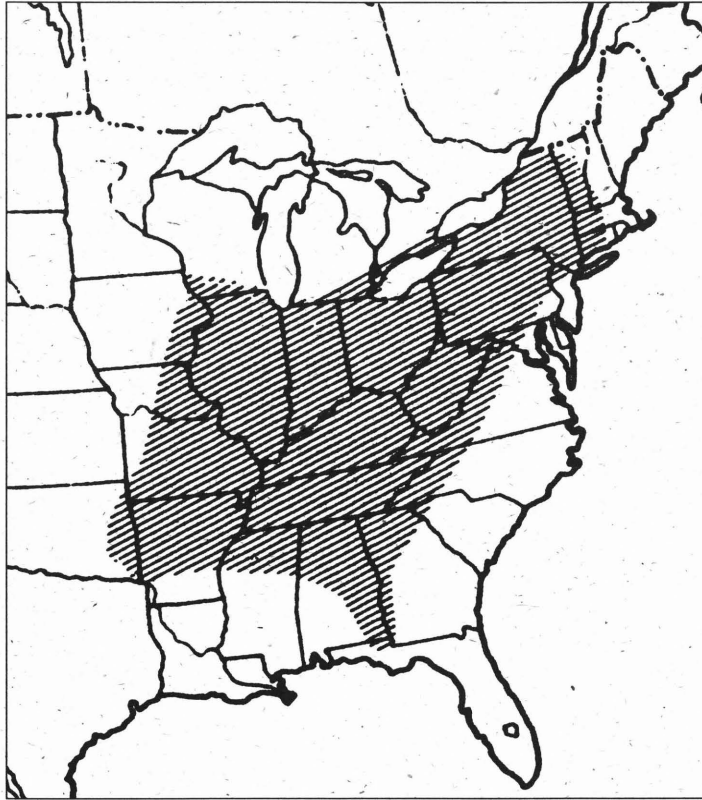


Watershed Update

CHATTAHOOCHEE NATIONAL FOREST, GA

West Fork A deal to acquire the 220-acre tract on the West Fork of the Chattooga River for the national forest system has fallen through. The Forest Service's most recent property appraisal for the tract was far short of the dollar amount needed. The Conservation Fund, a large land trust who held an option to purchase the tract, appraised its value at a figure considerably higher than the Forest Service's figure. Some semblance of agreement between the two would have allowed acquisition efforts to proceed; however, the Forest Service's appraisal was revealed only 24 hours before The Conservation Fund's option on the tract expired. Obviously, this left no time for further negotiations, and the Conservation Fund abandoned the deal. The CRWC has learned that an Atlanta developer currently holds a new option on this critical tract.

Sensitive Species An anti-environmental rider attached to the current Senate Interior Appropriations Bill allows federal land managers to bypass court-ordered surveys for rare species, and proceed with logging sales. Known as Sec. 329, this rider eliminates the requirement for federal land managers to adequately maintain species population data, and to use sound science in assessing the impacts of logging on sensitive, threatened, and endangered species. The rider was designed to negate a recent federal court decision applying to the Chattahoochee National Forest that has suspended Forest Service timber sales and harvests, because the agency failed to conduct adequate surveys as required by the 1976 National Forest Management Act. The rider is also aimed at a related court ruling that recently suspended 34 timber sales on federal land in the Pacific Northwest; because the Forest Service failed to fully implement requirements of the Northwest Forest Plan. Georgia Senator Max Cleland helped lead the fight to have the rider removed from the appropriations bill, which was unsuccessful.



Habitat range of Myotis Sodalis, the Indiana Bat, whose presence has temporarily suspended logging operations in portions of the national forest in North Carolina

NANTAHALA NATIONAL FOREST, NC

Endangered Species On August 3, 1999 the Forest Service announced a temporary halt to timber harvesting operations in portions of the Nantahala National Forest located in Macon, Graham, Swain and Cherokee Counties. While conducting surveys prior to logging, Forest Service biologists found 28 Indiana Bats, an endangered species strictly protected by federal law under the Endangered Species Act. This find caused a flurry of activity, including protests by loggers and private property rights groups, a request by Representative Charles Taylor (R-NC) for federal disaster relief, and a statement from one environmental organization that the group will file a suit under the Endangered Species Act, National Environmental Policy Act and Administrative Procedures Act to halt all proposed and ongoing logging in the Nantahala and Pisgah National Forests that might threaten the survival of endangered Indiana Bats. Meanwhile, by September 8th the Forest Service had conducted surveys that indicated no presence of the bats in five timber sales, and portions of seven other timber sales in Graham and Macon Counties.

RIDER MANIA, AGAIN

Once again, the Interior Appropriations Bill is laced with riders that undermine or under-fund critical environmental laws and programs! As of press time, a number of riders have been added to the appropriations bill, which will probably be brought to a vote in September. Debate in congress about the bill is intense, with the Republicans adding most of the riders and the Democrats working to remove them. If the rider battle causes the Interior Appropriations Bill to be folded into the Omnibus Spending Bill, removing the offensive legislation would be even more difficult as it is harder to delete line items from the Omnibus Bill.

The riders include:

Sec. 320, Delay National Forest Planning This rider would

Update

cut off the funding for revising many of our outdated National Forest Plans, most of which have been undergoing an extensive revision process for the past two years. This rider could push the Forest Service into constructing hasty, status quo Forest Plans promoting their old resource extraction agenda, rather than forwarding the agency's "new vision" of ecosystem restoration, water quality protection and high quality recreation.

Sec. 325, Divert Trail Fund for "Forest Health" Logging

This rider has the potential to divert large amounts of money from the Road and Trail Maintenance & Repair Fund to one where the funds are used for timber sales, under the guise of implementing "forest health measures." The rider would also open the door for another mismanaged slush fund for the Forest Service's timber program. Considering that the Forest Service has a \$10 billion backlog of system road maintenance and repair, this rider is inappropriate and potentially destructive.

Sec. 336, Weaken the 1872 Mining Law The rider allows mining companies operating on federal land to use as much of our public land as they need to dump their toxic mining waste. Sec. 336 would legislate a major change to an already terribly outdated mining law, which allows private companies to obtain "patent" applications to mine federal land for just \$2.50 to \$5.00 per acre.

Please take the time to contact your Members of Congress; let them know how you feel about this method of legislating anti-conservation actions. Also, please ask them to support or sponsor legislation that will stop this practice of back-door, special interest lawmaking. Enough is enough!!

LAND AND WATER CONSERVATION FUND

Currently in congress there are five different bills, in addition to the President's Land Legacy Program, pertaining to funding and dispensing the Land and Water Conservation Fund (LWCF), which provides federal funds for adding to our public lands system. These bills are: HR 701, introduced by Don Young (R-Alaska) and John Dingell (D-Michigan); S. 25, introduced by Frank Murkowski (R-Alaska) and Mary Landrieu (D-Louisiana); HR 798, introduced by George Miller (D-Calif.), with a companion bill in the senate, S. 446, introduced by Barbara Boxer (D-Calif.); and finally S. 532, introduced by Diane Feinstein (D-Calif.).

Although all of the bills seek to restore permanent annual funding to LWCF program, the percentages of funding and how it is allocated vary greatly. The Young, Murkowski and Landrieu bills all depend heavily on increasing the revenue from offshore oil drilling, which would be earmarked for use in the same state or geographical area that the oil revenue

was generated. Thus, these bills increase the incentive to allow off-shore oil drilling. The bills also further restrict the use of the funds for federal land acquisition, by requiring congressional approval for projects over \$1 million (HR 701) or \$5 million (S. 25). Also, in HR 701 funds must be spent east of the 100th meridian, and only for land in and around existing federal properties.

All bills incorporate a host of other programs in addition to the LWCF, concerning lands, parks, recreation, wildlife and coastal communities. The Miller, Boxer and Feinstein bills include funding for Endangered species recovery; historic preservation; lands restoration; farm, range and forest conservation; however, the Young, Murkowski and Landrieu bills do not include funds for these actions. Other differences between these bills are the overall dollar amount dedicated to the state side funding, versus the federal side.

These comparisons are only the high points of the bills. For a full explanation of all the differences between the bills, and to make an informed decision on which bill to support, side by side comparisons can be found on the internet at www.teaming.com. The bills can also be retrieved by bill number from www.thomas.loc.gov.

BONNIE RAITT CONCERT

In June of this year, popular blues/folk/rock singer Bonnie Raitt donated 100 tickets to the Chattooga River Watershed Coalition for her June 19th concert at the Peace Center in Greenville, SC. The special tickets included premium seating and a private reception with Bonnie after the show. All who attended were delighted with Bonnie's personal attention and her commitment to conservation and the environment. The funds raised were earmarked for helping raise public awareness of chip mills, and the devastating impact they have on Southeastern forests and communities.



CRWC staff thanks Bonnie for her generous donation.

photograph by Jan Scruggs

Kingwood

Tom Cromartie

After being abandoned for sixteen years, the Kingwood Country Club is being revitalized as an 18-hole golf course. A developer from Tallahassee, Florida named J. T. Williams has cleared large portions of the property to reestablish the course that was constructed in the early 1970's on an old dairy farm. Fundamental changes have been made to the old course, which required construction to encroach upon the 100-foot stream buffer that exists, by Georgia law, along designated trout streams. In order to accomplish this, Mr. Williams' company, Killearn, Inc., was required to apply for variances on the specific sites that would impact the 100-foot stream buffer. After a two-month process, the site plan was approved. The approved plan specifically stated six requirements upon which the permit for land disturbing activities was conditional. Those requirements were standard procedures and guidelines contained in state erosion and sedimentation laws.



A break in the silt fencing next to the creek was not allowed in the site plan.

On a clear day, where Stekoa Creek enters the "pristine" Chattooga River the scenic aspect of the place is diminished by a veil of grey water. The subtle transformation takes place in the long rapid below the confluence. As the waters of Stekoa dominate the smooth, moss covered slides on the right side of the river, the untainted waters of the Chattooga wind down through boulders on the opposite bank. The currents combine at the base of the rapid into a river, which is muted from the encounter. Although its entrance into the Chattooga is always fairly dramatic, during periods of heavy rain the sight becomes frightening. At these times, the grey waters of Stekoa give way to a raging torrent of diluted mud. The spectacle of cascades and waterfalls thrusting thick red waters into the Chattooga makes painfully clear the abuses, which go unchecked upstream.

In 1975, then Georgia Governor Busbee signed into law the Erosion and Sedimentation Act, acknowledging water pollution as the primary threat to the environment in the state of Georgia. The Act was considered unique at that

time because, unlike other state statutes, the Georgia erosion and sedimentation laws were to be implemented and enforced by local authorities. The Act requires that counties and municipalities adopt ordinances governing land disturbing activities within their boundaries, otherwise they would be subject to rules and regulations developed by the Environmental Protection Division (EPD) of the Georgia Department of Natural Resources. In addition, Georgia is divided into 40 Soil and Water Conservation Districts that are charged with the responsibility for oversight of local governments delegated

by the EPD as issuing authorities. Rabun County is located within the Blue Ridge Soil and Water Conservation District and has a comprehensive Soil and Erosion Control Ordinance, which is administered by the County Marshall.

The Field Manual for Erosion and Sediment Control in Georgia is the reference manual that was developed to assist in the implementation of the Erosion and Sedimentation Act.

The manual was intended for individuals involved in "non-exempt" land disturbing activities. The bulk of this manual is spent discussing Best Management Practices (BMP's), which are structural and vegetative measures designed to reduce erosion and the resulting sedimentation that occurs during land disturbing activities. BMP's include: down-drain structures, grade stabilization structures, sediment barriers (such as silt fences, hay bales and rip-rap), buffer zones and mulching. Among the various measures, the manual repeatedly mentions sensible planning and the immediate application of ground cover as the best methods to prevent sedimentation.

The beginning of this summer was marked by periods of moderate rainfall. While passing along highway 76 during this time, one could not help but notice the Kingwood grounds riddled with deep ditches eroding away the steep slopes that had been cleared several weeks before. In particular, one prominent hillside exhibited deep gullies rushing with fine clay materials unimpeded by

Kingwood

measures (BMP's) to arrest the erosion. Chechero Creek receives this burden when it crosses under highway 76 and passes through the bottomlands that will eventually become the forward greens of the development. Upon leaving the property, Chechero passes back under highway 76 to the east and winds its way toward Stekoa Creek. From there the sediment suspended in the creek flows into the Chattooga River and is carried down to Lake Tugaloo. During these periods of rain, citizens contacted the CRWC office to report mud-laden waters flowing into the Chattooga at its confluence with Stekoa Creek, stating it was "the worst" they had "ever seen."

The local issuing authority for Rabun County is the County Marshall, who was notified as soon as it became apparent that the golf course was depositing large amounts of sediment into Chechero Creek. Soil and Water Conservation officials and the EPD were contacted as well. These authorities' responses were varied. State

officials maintain that ultimately, the Rabun County Marshall is responsible for enforcing Rabun County's Erosion and Sedimentation Control Ordinance. In that regard, one EPD official remarked that sedimentation was not the top priority. This sort of attitude pervades the bureaucratic web that exists to administer the erosion and sedimentation laws of this state.

As a consequence of a recent complaint, a committee of officials from the various agencies concerned made a site visit. After walking the property and documenting "issues," they made recommendations to Messrs. Williams and Lovell. Curiously enough, these recommendations were in fact conditions of the permit from the beginning. In addition, having recognized the fact that much sediment had entered Chechero Creek, one of the remedies this group managed to contrive was to have the sediment in the creek "removed with shovels." If the agencies actually intended for that to be done, tee time at Kingwood would be delayed for decades as Mr. Williams and his crews labored to remove the tons of sediment which were placed in the various creeks, rivers and reservoirs downstream from the development.

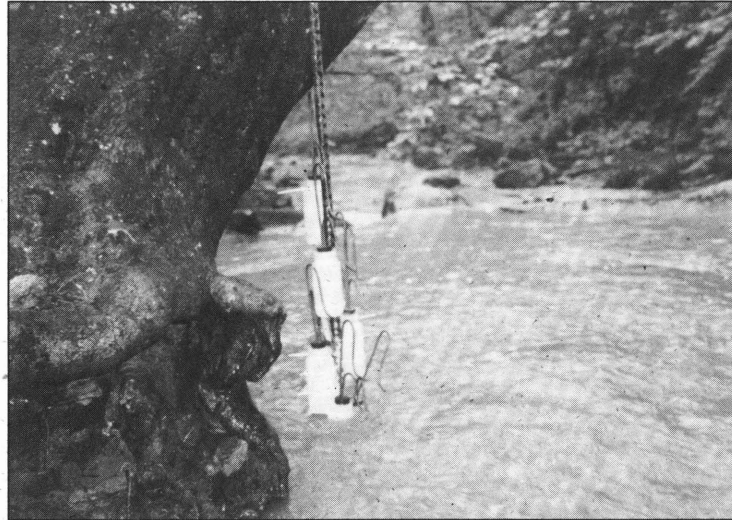
The most recent rain event this summer confirms the fact

that the erosion problems at Kingwood are continuing. An attorney from the Environmental Protection Agency (EPA) reacted with disbelief when confronted with the data we collected from Chechero Creek. At various stages throughout particular rain events, water samples were collected and analyzed by standardized and certified methods that measure the Total Suspended Solids (TSS) in the stream. The resulting data from these samples indicates that 70 to 90 percent of the sediment in the

stream came from the golf development. Later in the conversation with the EPA attorney, he asked if the figures for TSS were in the thousands of milligrams per liter (mg/l), an indication that a stream is heavily impaired. He was dismayed when we informed him that the figures were well over 10,000 mg/l at the peak of many rain events. On entering this property, Chechero Creek is by no means a virgin mountain stream, a fact that makes these figures even more staggering. All the bureaucrats from the state

and local agencies have maintained all along that the developer was not in violation of his site plan, but had only "made a few errors along the way." The concerned EPA attorney said what we had thought all along: "The site plan and variances are not the issue at all, the sediment in the waterways is."

Our quest to find a solution to the problems that the redevelopment of Kingwood have brought to the water quality of the Chattooga River began on June 28, 1999, when we filed an official complaint with the EPD. Countless phone calls and letters have been directed at every agency concerned with water quality on a state and federal level. For at least six weeks following our initial request for intervention from the EPD, the graded hillsides at Kingwood remained bare with little or no erosion prevention methods present. Since then, every site visit that occurred has prompted the appearance of more silt fences and sod; eventually, the site began to look much as it should have all along. In the end, our efforts did not result in the administrative enforcement that we had hoped for. The administrative compromise that resulted led to a weak application of the erosion and sedimentation laws, which will plague the waters of the Chattooga for decades to come.



Single stage monitor shown on Chechero Creek above the development



Member's Page

MANY THANKS to all who recently renewed their membership and/or joined the Chattooga River Watershed Coalition. Your generous contributions will help us continue to work on all of the conservation issues facing the watershed.

Doug and Eedee Adams
Walter Ahearn
Scott Anderson
Richard Anderson
William Anderson, Jr.
Rick Arflin
Nathaniel H. Axtell
Frank S. Bachelder
Kenneth Baer
Johnny Bailey
Alan Bailey
Lee Barnes
George Barrett
Randy Bigbee
Sam Booher
Norris Boone
Susie Brenner
Grace Brigham
Dr. Emerson D. Brooking
Patsy B. Brown
Arlo Brown
Brent Burkholder
Elmer Butler
Emily B. Calhoun
Paul Carlson
Jane C. and Will Carney
Donald J. Carter
Oliver P. Case
James Cashin
Barbara and Robert Chaille
Jeanene Cheek
Dr. Clifford H. Cole
Mark and Kathy Colwell
The Belk Company
Walter Cook
William J. Coscioni
Jimmy and Rebecca Cothran
Frank Crane
John R. Crane
J. Davis and E Zappa
Barbara Davis
Anna Davis

Janet Deloach
Ermee Irene Dixon
Mollie and Russ Dobbins
John DuBose
Prescott Eaton
R.L. Ellis, Jr.
Michael D. Faith
William B. Farley
David Finger
Bob and Lynn Gaar
Ms. Carroll Garren Beele
Neil Gasaway
Bettina and Don George
Joey Gillespie
Patricia Gilsdorf
George and Joan Goldman
Mr. & Mrs. Randall Goldthwaite
Gene Goodwyn
Mr. Kim Gruelle
Laurie Gurley
Kathleen Hall and James Hixon, MD
Jim Hamblen
Robert and Kelly Hayler
Evan Heckel
Joesph M. Heikoff
Mr. & Mrs. JG Henderson
William S. Henry
Robert Henry
Douglas Henry
Dick and Gillian Heywood
Mike Higgins
Steve Higgins
Travers Hill
Carolyn Hinderliter
Caroline Hoadley
Mary Katherine Hodgson
Dusty Hoefer
Rich Hoffman
Robin Holbrook
Frank and Anne Holleman
John W. Holman
Charles N. Hooper, SR
Henry Howell
Dr. and Mrs. Frank Ingrish
Mrs. Janet Italiano
Mr. Nelson Italiano
Charles Jackson
The Jarrío Family

Hazel and Archie Jellan
Roger and Jean Johnson
Miss Effie Lou Keaster
WR Keener
Mrs. Audrie Kelton
Ibby Kenna
Terry Ketterman
H.M. Klausman
Liz and Marty Kuemmerer
Patricia Kyritsi Howell
Christophoe and Jessica Kysar
Norma and Ken Langley
Sallie C. Lanier
Eric Larsen
WS Lesan
Mrs. Frank Lindeman
Nick and Karen Linscott
Mr. and Mrs. Roy E. Lowe
Bill and Cecilia Maher
Peter and Lisa Mallory
Frances Mallory
Lamar J. Marshall
David S. Martin
Phillip B. Mayer
Richard S. McAdams
Edward McDowell
Gene Merritt
Sam and Ethel Mitchell
Tom and Cat Monaghan
Dr. John Morse
John Murray
Michael M. Meyers
Jan and Clay Nash
Mark Neisler
The Noel Family
Mr. and Mrs. Albert Norman Jr.
Hugh and Carol Nourse
Tom and Sarah Olson
Hamilton Osborne
Merril Palmer
Thomas Partington
J.C. Patterson
Bill Payne
Craig Pendergrast
Barbara Persons
Mr. and Mrs. Jan Phillips
Tony Presley
Van Price
Tammy and Artie Provost
Steve Provost
Newton Quantz III

Charlie and Susan Read
Mary Robertson
J. Speed Rogers
Robert Rose
Brett Salter
Cielo Sand
Nathalie Sato
Herman Senter
Ruth A. Shults
Malcolm Skove
Judy Slade
Violet Smith
Dr. Thomas Smith
Andrew J. Smith
Mr. and Mrs. Ted Smith
Kembra L. Smith
Janeth Stepancic
Jim A. Stevenson
Pauline Stevenson and Richard Melvin
Betsy Stokey
Robert L. and Patricia Stowell
Walter Stults
Joyce Swaneurg
Bridgett Taylor
Claude E. Terry
Tarkenton Thompson
Timpson Creek Millworks
George F. Thompson, Jr.
Charlee Tisdale
Bob and Jackie Tolford
David W. Tonkyn
Roy A (Tony) Ragan
Jeffrey Tryen
Faith and Harry Turner
Russ Tyre
Anne F. Ulinski
Janice Ward and Tom Dunken
M.E. Warlick
Robin and Wallace Warren
Rany Wash
Tom and Laura West
Charles Wharton
David Wheeler and Judith Hallock
Joe Wheeler
Dr. Randall White
Robert Williams
Dorothy Wilson
Teresa and Megan Wilson
Larry Winslett
Sally Wyche-Coenen
Robert and Glenda Zahner

Chattooga River Watershed Coalition

We are a 501C3 non-profit organization incorporated in Georgia.

Staff

*Executive Director
Buzz Williams*

*Development Director
Nicole Hayler*

*Administration & GIS
Cindy Berrier*

*Program Assistant
Tom Cromartie*

Board of Directors:

*Friends of the Mountains
GA Forest Watch*

Western NC Alliance

SC Forest Watch

Sierra Club

*The Wilderness Society
Forest Service Employees for
Environmental Ethics*

Newsletter

*Editors, Buzz Williams &
Nicole Hayler*

*Production and Layout,
CRWC Staff*

*Printing,
Gap Graphics*

Endorsing Organizations

*Foothills Canoe Club
Atlanta Whitewater Club
Georgia Canoeing Association
Higgins Hardwood Gear
A. F. Clewell, Inc.
Atlanta Audubon Society
National Wildlife Federation
Action for a Clean Environment
Georgia Botanical Society
Georgia Ornithological Society
Columbia Audubon Society*

*The Georgia Conservancy
Southern Environmental Law
Center
Three Forks Country Store
Central Georgia River Runners
Green Salamander Cafe
Lunatic Apparel
Arkansas Canoe Club
Mountain Rest Clipper*

*Georgia Environmental
Organization, Inc.
Timber Framers Guild of North
America
Government Accountability
Project
Carolina Bird Club
Dagger, Inc.
Pothole Paddles
Turpin's Custom Sawmill
Two Dog Cafe*

Renewal ☐

MEMBERSHIP

Summer '99

Name

Address

Email

Tel. number

Individual: \$14

☐

Group: \$27

☐

Donation:

☐

Sponsor: \$49

☐

Join the CRWC and help protect the Chattooga River Watershed

Your contribution is greatly appreciated. Donations will be used to support the Coalition's work, and guarantee you delivery of the *Chattooga Quarterly*. We're a non-profit organization, and all contributions are tax-deductible.

THANK YOU!

Send to:

Chattooga River Watershed Coalition
P.O. Box 2006
Clayton, Georgia 30525

Chattooga River Watershed Coalition

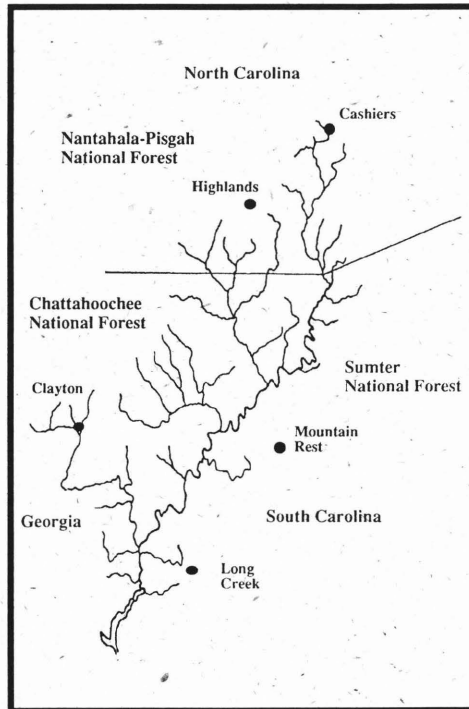
PO Box 2006
Clayton GA 30525
(706) 782-6097

(706) 782-6098 fax crwc@rabun.net Email

Purpose: "To protect, promote and restore the natural ecological integrity of the Chattooga River watershed ecosystem; to ensure the viability of native species in harmony with the need for a healthy human environment; and to educate and empower communities to practice good stewardship on public and private lands."

Made Possible By:

CRWC Members and Volunteers
Lyndhurst Foundation
Frances Allison Close
Merck Family Fund
Turner Foundation
Bonnie Raitt
Patagonia, Inc.
Guacamole Fund
Smithsonian Institution CTSP
Katherine John Murphy Foundation
Environmental Systems Research Institute



Goals:

Monitor the U.S. Forest Service's management of public forest lands in the watershed

Educate the public

Promote public choice based on credible scientific information

Promote public land acquisition by the Forest Service within the watershed

Protect remaining old growth and roadless areas

Work cooperatively with the Forest Service to develop a sound ecosystem initiative for the watershed

Chattooga River Watershed Coalition
PO Box 2006
Clayton, GA 30525

Non-Profit Organization
Bulk Rate Permit #33
Clayton, GA

Address Service Requested



Printed on recycled paper,
100% post-consumer waste