



The Chattooga Quarterly

Summer/Fall ♦♦♦ 2000

\$1

Fire, Smoke and Mirrors



I n s i d e

Director's Page.....	2	Chattooga Watershed Restoration Project.....	9
Rattlesnakes in the Chattooga Watershed.....	3	Chattooga Land Trust.....	12
Commercial Logging and Wildfire Prevention.....	5	Watershed Spotlight.....	13
Please...Don't Pick the Wildflowers—Dammit!.....	7	Member's Page.....	14

Director's Page

Buzz Williams

I am preaching revolution these days—not violent revolution—but revolution nonetheless. By this I mean we need an “assertedly momentous change” in our government at all levels, particularly at the state level. Momentous reform will come about only if two elements are in place: a reason, and a way to bring reform about.

Why do we need to reform state government? The facts are that in Georgia, our air and water are among the dirtiest in the nation. Sixty percent of the state's waters are not suitable for swimming or drinking. Air pollution from too many cars and coal-fired power plants is so bad in Atlanta that the Feds have cut off funds for highway projects. But the most telling evidence is what you can see with your own eyes. I experienced this reality shock this summer during a traditional celebration. For the last twenty-three years we have had an annual pig roast near the Chattooga River. We shovel hot coals for two days, slowly barbecuing meat and preparing a great table of delicacies. The two or three of us who are keepers of the flame get pretty hot and tired while chopping wood and shoveling coals, and after many hours we head to the river for a refreshing swim. This year, for the first time during this annual ritual I couldn't even walk to the water's edge without slipping on the algae-covered rocks. Heavy fertilizers, development, golf course runoff and pesticide residue are apparent from just walking into the river!

I am very determined to keep attacking these problems. How do we do it? It will not be easy, because our foes are rich and wield much power in state legislatures. Here are a few examples of woefully inadequate state laws, which we must change.

First, North Carolina: A recent ruling by a brave judge revealed a vast contradiction in water quality protection laws. As they now exist, the laws provide two different standards to protect streams. One law says that turbidity standards must not exceed a specific quantifiable number. But on the other hand, another law says that if a developer follows BMPs (Best Management Practices), they can exceed this numerical standard. Contrary to state propaganda, Best Management Practices are not enforceable for the following reasons. One, they are voluntary, not mandatory. Two, if BMPs *were* mandatory, they could hardly be enforced because the state's allocated funds for monitoring and enforcement are extremely small. And three, positive incentives and educational programs for erosion and sedimentation control are low priority. The net result is that massive ground disturbing activities are not

policed, and our rivers and streams get polluted.

In South Carolina, forests that have just begun to recover from the massive timber harvesting binge at the turn of the century are again under assault from huge timber companies moving back South, to reap the harvest with mass production technology. Landowners who have timberland and wish to manage it for income often consult the state's certified foresters, many of whom are trained to recommend harvest techniques such as large scale clearcutting to feed the growing boom and bust forest industry in South Carolina. Meanwhile, state law restricts any forester from practicing forestry unless they are certified by a state board that is dominated by industry foresters. For instance, the last question on the state exam is “justify clearcutting.” I

have personal knowledge of this scam because I recently received a “Cease and Desist” order from the state, for simply *introducing* myself as a “forester” during a presentation at the University of SC in Columbia. Even though I have a Bachelor of Science degree in Forest Management, they maintained that I violated Department of Labor laws for calling myself a forester, because I was not state-certified. Meanwhile, the burgeoning chip mill industry in South Carolina continues to gobble up forests faster than they can grow back, and is fueled by state foresters who recommend to private landowners that their forest be clearcut.

In Georgia, the Southern Company is constructing a massive electric power line system throughout the state.

Georgia Transmission Corporation (GTC), the “non-profit” arm of Southern Company, is well on its way to plowing through communities and public lands in Georgia with high voltage transmission lines to prepare for deregulation. I believe their obvious intent is to establish transmission systems for marketing Georgia's dirty, unregulated power when the free-for-all ensues. In addition to poor air quality from power plant emissions, Georgia stands out as one of the only states in the nation granting the power of eminent domain to power line transmission ventures, with no oversight over where the lines go or what they destroy.

These are just three examples of why so many of our streams are dirty, and our air is fouled. We need to begin “radical” reformation of our state legislatures, which are allowing unrestricted industrial development run roughshod over our Southern states. Citizens know what to do: VOTE for good stewards of the land in November, not polluting industry lackies.

Citizens know
what to do:
VOTE
for good stewards
of the land
in November,
not polluting
industry lackies.

Rattlesnakes in the Chattooga Watershed

W.S. Lesan

photo and illustration by W.S. Lesan

The Chattooga River area has one species of rattlesnake, *Crotalus horridus*, the timber rattlesnake. Many researchers divide this one species into a number of subspecies or races. Two of these races occur in our area; the timber rattler, *Crotalus horridus horridus*, and the canebrake rattler, *Crotalus horridus*

atricaudatus. The timber is an upland form found in drier, more rocky habitats, while the canebrake occurs in the lowlands and prefers wetter locations. Both races have the same pattern: dark chevron markings on a lighter background color. The canebrake most often has a gray or pinkish background color, a rust colored stripe down the middle of its back and a dark line from the eye to the angle of the jaw. The timber usually has a yellow or straw colored background, an unmarked head, and the mid-dorsal stripe is usually faint or absent. Timbers are sometimes solid black or very dark in color; this is called the black phase. When one has a bright yellow background color, it is called the yellow phase.

The timber rattler is aptly named, for it has a definite preference for forested areas. Although credited with living in just about every habitat in the eastern United States, the most commonly listed habitat is oak lands. This should be expected since oak forests support the greatest quantity of animal life, especially mammals.

All snakes are carnivores; they only eat animals, not plants. Timber rattlers eat small mammals, consisting mostly of mice, rats, squirrels and chipmunks, and some birds. Young snakes have been known to eat frogs, toads and salamanders. They actively pursue them into their burrows or nesting places, or lie in wait along trails where they strike the prey as it passes. When an animal has been bitten it

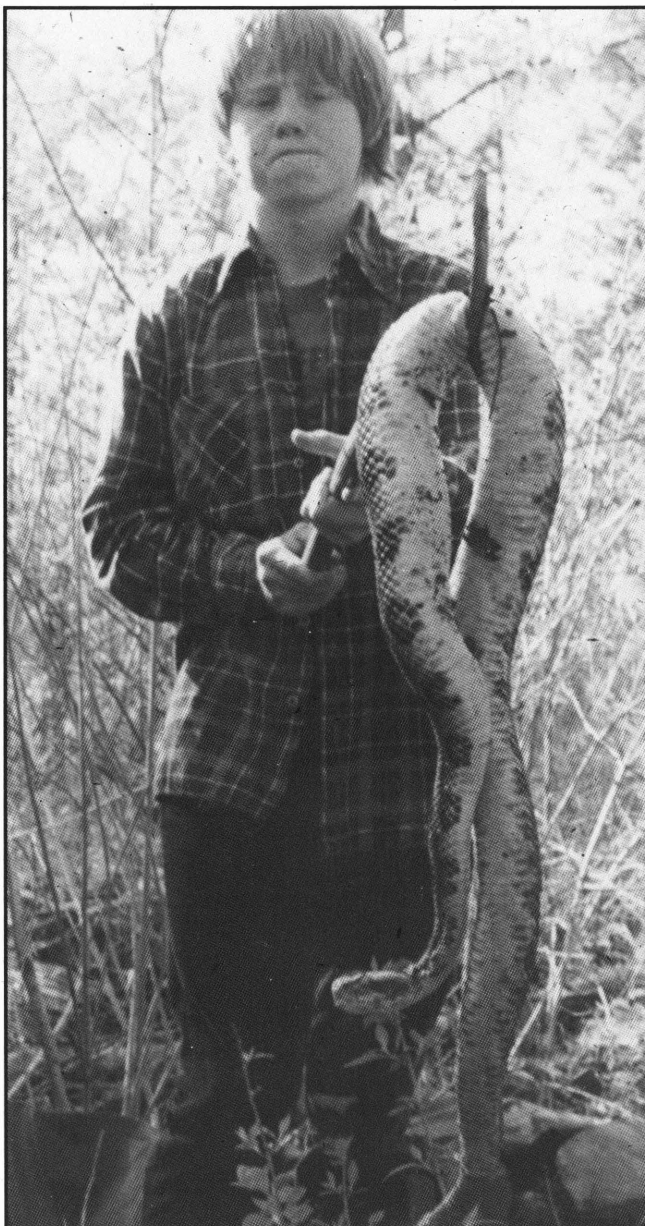
usually dies a short distance away. The snake follows the scent, locates and then swallows the animal whole.

The timber rattler's record length is 6 feet 2½ inches, but most timbers rarely reach 4 feet in length. Adults usually weigh only 2 or 3 pounds, and have a girth about the size of a man's wrist. Newborn snakes are about 8 to 12 inches

long with a girth similar to a man's ring finger. They can live 30 to 40 years and continue to grow throughout their lives. Captive specimens regularly live 20 or more years. Although large snakes are fairly free of predation, a long life span would make a fatal encounter with a human or automobile more probable. With an increasing human population and an ever expanding roadway system, large snakes are becoming more uncommon.

The number of segments in the snake's rattle is sometimes useful in determining its age. When a rattler is born it has what is called a pre-button. This is a flattened shell, shaped somewhat like an M&M candy. This comes off when the snake sheds its first skin, usually within a week after birth. So, if a snake has a pre-button it is only a few days old and has never shed. When the pre-button is shed, a terminal segment remains. This is called a button. It is similar to a pre-button but with a constriction in the middle. A new rattle segment is added at the base of the rattle each time a rattler sheds. Each segment is about the same width as the tail. During the life of a rattler it will usually shed once or twice a year, and sometimes three or four times a year.

Although rattlers grow throughout their lives, growth slows as they age. A rattle that is tapered, and especially if it still has a button, would indicate this is a younger fast-growing snake. An incomplete rattle, one that has been broken off and isn't tapered, would indicate that this is an older, slow-growing snake.



The canebrake rattlesnake, *Crotalus horridus atricaudatus* occurs in the lowlands and prefers wetter locations.

Rattlesnakes

There is no doubt the timber rattlesnake can be a very dangerous animal and is capable of causing death in humans. Rattlers have always aroused fear, especially among those unfamiliar with its way of life. Let's look at some statistics. In the United States there are an estimated 7,000 to 8,000 poisonous snake bites annually, resulting in 5 to 10 deaths. More than 80% of the bites occur when handling the snake or trying to kill the snake, and over 50% of the bites are believed to be alcohol related. As a contrast, dog attacks account for 10,000 hospitalizations annually and 10 to 20 reported deaths, at a cost in medical care of up to \$30 million.

Humans, through the destruction of our great eastern forests, have been the major factor in the extinction and reduction of rattlers. As forests are destroyed or converted to pine farms, the ranges of many of our wildlife species becomes severely fragmented. Many rattlers are killed on our roads and highways, and in the past man has declared war on not only rattlers, but snakes in general. Numerous animals regularly prey on rattlers, although mostly on young snakes. These predators include hogs, dogs, coyotes, raccoons, opossums, foxes, domestic cats, bobcats, king snakes and black racers. The red-tailed hawk is especially fond of snakes, including rattlers. Bald eagles, wild turkeys, blue herons and owls have also been known to kill and eat rattlers. The large-mouth bass will no doubt eat young rattlers if they are found swimming. Rodents, including rats, mice and woodchucks have been known to kill rattlers. Deer have long been known for killing rattlers; they leap repeatedly onto the snake with all four feet. It is also known that cattle kill many snakes by inadvertently stepping on them. Many researchers believe that freezing weather may be one of the biggest killers of rattlers. Young snakes born in the fall can be caught out in the cold, or fail to find a safe place to hibernate for the winter.

Like many animals, rattlers of the temperate zones must hibernate through the cold winters. Places where rattlers congregate to spend the winter are called dens. Because they are cold-blooded and can't generate their own body heat, they must find a hole or cavity that isn't subject to flooding and is deep enough to be below the frost line. Most all den sites are on southern slopes, and a den may have only a few snakes or several hundred. In the spring when the snakes emerge from the den or in the fall when they gather at the den, populations are concentrated in this area. If someone happens onto one of these areas it gives a false impression of the overall rattler densities. Rattlers will wander as much as 6 miles away from the den sites during the summer months. Throughout the United States various areas are renowned for their rattlesnake dens. In the past there have been campaigns to destroy the snakes at these dens or the dens themselves have been destroyed with dynamite.

Many people think making noise as you walk through the woods will scare any snakes away. However, snakes are deaf, and cannot hear airborne noise. A good rule to follow,

no matter where you are, is to always watch where you step or put your hands. Rattlers usually react to humans in three ways. They often become motionless; they freeze. This is a common defense against birds such as hawks. It is difficult for birds to see camouflaged animals unless the animal moves. Sometimes, if startled, rattlers will become very excited, form a coil, puff up their bodies and buzz (rattle) continuously. Lastly, and most often, they will flee. Rattlers almost always retreat from an encounter with humans. If you come upon a rattler in the wild, simply step back and watch. The rattler will do you no harm and it might even let you take a picture or two. The chances of getting bit by a snake are very remote even if you stumble blindly through the woods.

If you are bitten by a rattlesnake, first take a look at the bite itself. Many times it can be a dry bite.

That is, the snake didn't inject venom, it struck with its mouth closed or the snake wasn't poisonous. Let's consider the signs and symptoms of a rattlesnake bite.

Signs & Symptoms of a Rattlesnake Bite

- Immediate and severe burning pain and swelling around the fang marks
- Purplish discoloration around the bite
- Numbness and blistering around the bite
- Nausea and vomiting
- Tachycardia, hypotension, syncope, generalized paresis and diaphoresis
- Fever and chills, dimmed vision, headache
- Muscular twitching and convulsions.

If you are bitten, the first rule is to DO NO HARM. There is no statistical difference in the clinical course between patients who did and did not receive first aid prior to coming to the hospital for treatment.

Rattlers play an important role in the development and maintenance of our forests and other natural areas. Much credit has been given hawks and owls for their role in controlling rodents.

They prey on rodents that are moving about on the surface of the forest floor. Rattlers not only prey on the rodents that are on the surface, but go right into their nests and underground burrows. In turn, rattlers are preyed upon by other animals.

Treatment for a Rattlesnake Bite

- Do not incise the fang marks
- Do not use oral suction
- Do not apply ice
- Do not give alcohol or non-steroidal anti-inflammatory drugs
- Do not apply a tourniquet
- Do not use an electric shock gun
- Move away from the snake
- Lie down and stay quiet
- Maintain life support: airway, breathing and circulation
- Keep bitten extremity below heart level
- Remove all rings, bracelets or other jewelry
- Clean the wound gently with alcohol, soap and water or hydrogen peroxide
- Transport the victim without delay.

Commercial Logging and Wildfire Prevention

Timothy Ingalsbee, PhD., Western Fire Ecology Center

The notion that commercial logging can prevent wildfires has its believers and loud proponents, but this belief does not match up with the scientific evidence or history of federal management practices. In fact, it is widely recognized that past commercial logging, road building, livestock grazing and aggressive firefighting are the sources for "forest health" problems such as increased insect infestations, disease outbreaks, and severe wildfires.

How can the sources of these problems also be their solution? This internal contradiction needs more than propaganda to be resolved. It is time for the timber industry and their supporters to heed the facts, not fantasies, and develop forest management policies based on science, not politics. For example:

Fact: Commercial logging removes the least flammable portion of trees—their main stems or trunks—while leaving behind their most flammable portions—their needles and limbs—directly on the ground. Untreated logging slash can adversely affect fire behavior for up to 30 years following the logging operations.

Fact: Commercial logging reduces the "over story" tree canopy, which moderates the "microclimate" of the forest floor. This reduction of the tree canopy exposes the forest floor to increased sun and wind, causing increased surface temperatures and decreased relative humidity. This in turn causes surface fuels to be hotter and drier, resulting in faster rates of fire spread, greater flame lengths and fire-line intensities, and more erratic shifts in the speed and direction of fires.

Fact: Small diameter surface fuels are the primary carriers of fire. Current fire-spread models such as the BEHAVE program do not even consider fuels greater than three inches in diameter, because it is mainly the fine-sized surface fuels that allow the fire to spread. Commercial logging operations remove large diameter fuels, which are naturally fire resistant, and leave behind an increased amount of fire-

prone small diameter fuels.

Fact: Timber plantations comprised of densely-stocked, even-aged stands of young conifers are extremely flammable and vulnerable to catastrophic fire effects. When plantations burn they normally result in 100% mortality of trees, yet have no native seed sources to naturally regenerate the stands. Thus, burned plantations require expensive and repeated management inputs to achieve successful reforestation.

Fact: Commercial logging spreads invasive weeds and stimulates the growth of brush that is much more flammable than the original forest cover. Once the commodity timber outputs have been removed, federal agencies have no economic incentives to manage the vegetation that colonizes the sites disturbed by logging operations; thus, fires will continue to burn through logged areas.

Fact: Watersheds that have experienced extensive logging and road building also experience greater fire severity than unlogged and unroaded watersheds.



Wildfire in Montana, September 2000

What the Government's Own Scientists Say About Logging and Wildfires

"Timber harvesting, through its effects on forest structure, local microclimate and fuels accumulation, has increased fire severity more than any other recent human activity." *Sierra Nevada Ecosystem Project, 1996, Final Report to Congress.*

"Logged areas generally showed a strong association with increased rate of fire spread and flame length, thereby suggesting that tree harvesting could affect the potential fire behavior within landscapes. In general, rate of spread and flame length were positively correlated with the proportion of area logged in the sample watersheds." *Historical and Current Forest Landscapes in Eastern Oregon and Washington; Part II: Linking Vegetation Characteristics to Potential Fire Behavior and Related Smoke Production.*

Commercial Logging and Fire

"As a by-product of clearcutting, thinning and other tree-removal activities, residual fuels create both short and long term fire hazards to ecosystems. The potential rate of spread and intensity of fires associated with recently cut logging residues is high, especially the first year or two as the material decays. High fire-behavior hazards associated with the residues can extend, however, for many years depending on the tree. Even though these hazards diminish, their influence on fire behavior can linger for up to 30 years in the dry forest ecosystems of eastern Washington and Oregon." *Historical and Current Forest Landscapes in Eastern Oregon and Washington; Part II.*

"Fire severity has generally increased and fire frequency has generally decreased over the last 200 years. The primary causative factors behind fire regime changes are effective fire prevention and suppression strategies, selection and regeneration cutting, domestic livestock grazing, and the introduction of exotic plants." *Integrated Scientific Assessment for Ecosystem Management in the Interior Columbia Basin.*

"The high rate of human-caused fires has generally been associated with high recreational use in areas of higher road densities." *Assessment of Ecosystem Components in the Interior Columbia Basin and Portions of the Klamath and Great Basins; Volume II.*

"Mechanically removing fuels (through commercial timber harvesting and other means) can also have adverse effects on wildlife habitat and water quality in many areas. Officials told the General Accounting Office (GAO) that, because of these effects, a large-scale expansion of commercial timber harvesting alone for removing materials would not be feasible. However, because the Forest Service relies on the timber program for funding many of its activities, including reducing fuels, it has often used this program to address the wildfire problem. The difficulty with such an approach, however, is that the lands with commercially valuable timber are often not those with the greatest wildfire hazards." (Note: Interestingly enough, the same 1999 GAO report determined that "most of the trees that need to be removed to reduce accumulated fuels are small in diameter and have little or no commercial value," thereby raising further questions as to the intentions of the timber industry and their supporters.) *GAO report, "Western National Forests: A Cohesive Strategy is Needed to Address Catastrophic Wildfire Threats."*

Finally, Former Forest Service Chief Jack Ward Thomas, in testimony before a Senate subcommittee on August 29, 1994, acknowledged that: 1) the Forest Service logs in insect infested stands **not** to protect the ecology of the area, but to remove trees before their timber commodity value is reduced by the insects; and, 2) that the Forest Service fights fires to maintain high timber commodity value of stands, **not** to protect forest ecosystems.

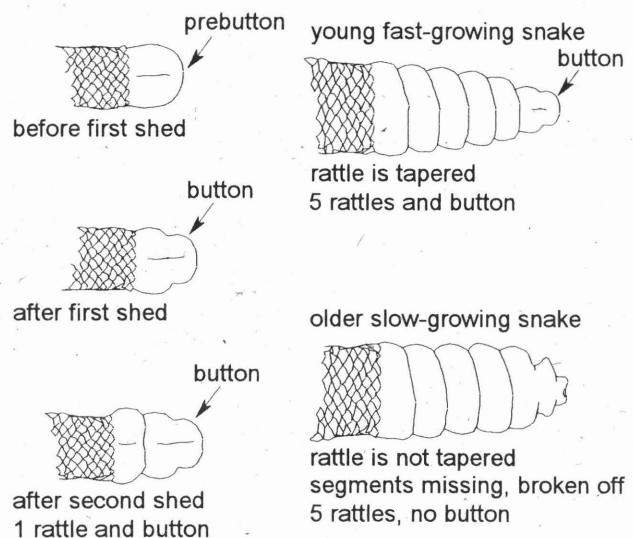
Rattlesnakes

continued from page 4

Rattlesnakes are an integral part of our American forests; that's where they belong, and that's where they need to be.

Many states have realized the importance of their native plants and animals and have passed laws protecting a number of different species. In 1983, New York was the first state to protect the timber rattler. States that followed include Wisconsin, New Jersey, Connecticut and Massachusetts. Many of the western states have, since the 1970's, protected their various species of rattlesnakes. Some conservation groups are pushing for protection of the timber rattler. A number of state and local laws have been enacted to protect den sites. It is against the law to kill any wildlife (plant or animal) within national forests without the proper permit.

The Rattlesnake's Rattle



The number of segments in the snake's rattle is sometimes useful in determining its age.

Further Reading

- Behler, John L. and F. Wayne King. (1979). *The Audubon Society Field Guide to North American Reptiles and Amphibians*. A. A. Knopf.
- Brown, William S. (1987). "Hidden Life of the Timber Rattler" *National Geographic*. July 1987.
- Conant, Roger and Joseph T. Collins. (1998). *A Field Guide to Reptiles and Amphibians of Eastern and Central North America*. Peterson Field Guide, Third Edition Expanded. Houghton Mifflin Company.
- Kauffeld, Carl. (1957). *Snakes and Snake Hunting*. Hanover House, Garden City, New York.
- Klauber, Laurence M. (1972). *Rattlesnakes. Their Habits, Life Histories, and Influence on Mankind, Volumes I & II*. U. of California Press.
- Martof, Bernard S., William M. Palmer, Joseph R. Bailey, Julian R. Harrison III and Jack Dermid. (1980). *Amphibians and Reptiles of the Carolinas and Virginia*. U. of North Carolina Press, Chapel Hill.
- Wright, Albert Hazen and Anna Allen Wright. (1957). *Handbook of Snakes of the United States and Canada, Volumes I & II*. Comstock.

Please...Don't Pick the Wildflowers—Dammit!

Robert and Glenda Zahner

When I was seven years old, a wonderful thing happened. It was during our annual family picnic at a state park on Long Island. While aunts, uncles, and cousins were playing ball, rowing around the lake, or barbecuing hamburgers, my Dad and I took a hike on the perimeter trail that circled the picnic area.

Part way around, on land adjacent to the park, we came upon a breath-taking sight: acres of daisies, as far as the eye (of a four-foot tall child) could see. We walked into the field to get a better look at them. We saw little spiders in the center of some. Bees and butterflies were everywhere.

Perhaps to a country kid a field of flowers would be no big deal. But this little girl lived in a row house in Brooklyn, and her experience of "nature" was limited to Dad's small, fenced backyard garden. This field of daisies under a clear blue sky was the most beautiful scene I had experienced in my life.

Since they were abundant, Dad allowed me to pick a big bunch, and Mom back at the picnic area put them in a jar of water. The next day I took half of them to school and gave them to my second grade teacher, who set them on her desk for the whole class to enjoy.

Glenda

On a recent hike along one of our favorite trails high above the Chattooga River, we passed a woman with an armful of freshly picked wildflowers. We recognized in her bouquet many of our favorites: hare bell, fire pink, angelica, starry campion, and even the rare Michaux's saxifrage. Annoyed, we asked sarcastically whether she left any for other hikers to enjoy, and she replied, "Oh, there's lots."

On returning to the trailhead parking area, we saw this same armful of flowers, now wilted, discarded by the side of the road. For a few minutes of selfish pleasure this woman had denied the rest of us the thrill of glimpsing groups of these beautiful flowers blooming in their natural habitat. For there were not "lots" left along the trail. We could see where she had plucked these plants from their roots, often pulling up roots before breaking off the stems.

This incident occurred on the Whiteside Mountain National



Resist the temptation to pick wild beauties like the rare Pinkshell azalea, Rhododendron vaseyi.

Recreation Trail. Thousands of people hike this trail every summer to enjoy the full range of nature's wonders there, not only the spectacular views from the summit, but also the birds and plants of the forest and ridge top habitats. The plants on Whiteside are not the common field daisies and Queen Anne's lace. The names of Whiteside's plants reflect their rarity: Blue Ridge St. John's wort, granite dome goldenrod, pale corydalis, Appalachian bluets, granite dome locust, wretched sedge, poke milkweed, pinkshell azalea, Blue Ridge dwarf dandelion, as well as the flowers mentioned above.

Don't Pick the Wildflowers

There is a deep, and wonderful, impulse in every child, especially little girls, to reach out and pick a flower, be it in a garden or alongside a wooded trail. This impulse remains within many of us adults, and often it takes great will power to hold back a hand that wants to pluck a wildflower from a public nature trail. In the case of the woman cited above, the parking area at the Whiteside Mountain trailhead was full of cars, and the woman had obviously passed numerous hikers. If only a small fraction of these visitors each picked a few flowers, soon there would be none for the rest of us to enjoy. It should not require a sign to remind visitors of this.

The habitats on this mountain, and on other mountains surrounding the Chattooga basin, are fragile. Many of the plants and animals there are isolated relics of ancient times, and their struggle for survival is difficult enough without interference from humans. Sometimes a little ecological knowledge of such things can help hold back that hand that reaches out to pick a pretty wildflower.

Our annoyance on seeing the armful of picked flowers was worsened by the knowledge that this careless woman had set in motion a whole chain of events that will echo through their little habitat for years to come. First, what are their pollinators to do? Many insects depend for their life support on the nectar and pollen of these flowers. And the health and vigor of the meager seed crop of the few remaining flowers will be impaired by the loss of cross-fertilization from the flowers that were picked.

Even though the plants that had their flowers removed are all perennials, and most will flower again next year, the loss of the seed crop will reduce the number of seedlings necessary to keep the population healthy in the future. We have observed that the populations of some wildflowers have dwindled over the years—a few all the way to zero—by the zealous picking of unthinking people.

The impacts go beyond pollinators. Small birds and rodents that depend for their life support on the abundant seeds from wildflowers always suffer over the dormant season when they have not stocked up on this source of concentrated high energy.

Well, you can say, can't the butterflies and other pollinators find their nectar and pollen elsewhere? Can't the birds and the rodents find their high-energy food source farther down the ridge? No, they can't. Similar niches in the habitats farther down the ridge are already occupied by other insects and birds and rodents. Some animals, even the most mobile, always die when a local food supply is destroyed.

Thus, to the insects and birds and small animals in a tiny wildflower ecosystem, the loss of the flowers is analogous to the impact on larger animals of the clearcutting of a forest. The animals that occupied the cut forest cannot just move into the intact forest next door, because this forest is already

occupied to its full food-supplying capacity.

On a global scale, or even on a local landscape, all this fuss over a few wildflowers may seem trivial. But as we all know, a single minuscule event repeated many times, over many years, can bring profound changes. And anyway, even if you don't buy all this ecology stuff, leave the flowers for other people to enjoy.

*Would not the world suffer
by the banishment of a single flower?*

John Muir, 1864

More than 200 species of vascular plants are found on Whiteside Mountain. The following is a partial list of interesting trees, shrubs and herbaceous plants occurring along the trail.

E = endemic to the Blue Ridge; R = Rare; VR = very rare

Alum Root (E), *Heuchera villosa*
Azalea Pinkshell (E, VR), *Rhododendron vaseyi*
Bee-balm (E), *Monarda didyma*
Bluet, Granite Dome (E, R) *Houstonia longifolia* var. *glabra*
Buckberry (E), *Gaylussacia ursina*
Bush-Honeysuckle (E), *Diervilla sessilifolia*
Chokeberry, Red (R), *Aronia arbutifolia*
Corydalis, Pale (E, R), *Corydalis sempervirens*
Dandelion, Blue Ridge Dwarf (E), *Krigia montana*
Fetterbush, Mountain (E), *Leucothoe recurva*
Galax (E), *Galax urceolata*
Goldenrod, Granite Dome (E, R), *Solidago simulans*
Hazel Nut, Beaked (R), *Corylus cornuta*
Hemlock, Carolina (E), *Tsuga caroliniana*
Leather Flower, Northern (R), *Clematis viorna*
Lily, Turk's Cap (R), *Lilium superbum*
Locust, Granite Dome (E, VR), *Robinia hartwigii*
Magnolia, Fraser (E), *Magnolia fraseri*
Milkweed, Poke (E, R), *Asclepias exaltata*
Minnie Bush (E), *Menziesia pilosa*
Pepperbush, Mountain (E), *Clethra acuminata*
Possumhaw (E), *Viburnum cassinoides*
Rhododendron, Carolina (E), *Rhododendron minus*
Sarsaparilla, Wild (E), *Aralia nudicaulis*
Saxifrage, Michaux's (E), *Saxifraga michauxii*
Sedge, Wretched (E, VR), *Carex misera*
Twisted-stalk (E), *Streptopus roseus*
Umbrella Leaf (E, R) *Diphylleia cymosa*

Chattooga River Watershed Restoration Project

Tom Cromartie

On January 25th a meeting was held in Atlanta to generate discussion among potential partners in the development of business plans for a national Watershed Restoration Initiative. The business plans were to describe a five-year strategy for restoration activities, with the primary purpose of reducing sedimentation from Forest Service developments, campsites and roads. Consultants Giff Pinchot, the grandson of America's famed forester, and associate David Carmichel were present to facilitate the planning meeting through group exercises culminating in a presentation outlining present and "desired future conditions" for the various watersheds.

The individuals present represented government and non-government organizations that have interests in the watersheds of the South Platte River, the Lower Mississippi River Valley, the Conasauga River, and the Chattooga River. Elsewhere in the nation, two similar meetings were held to discuss business plans for the eight other watersheds funded. The individual watershed groups focused on issues relevant to their watershed; for instance, the Upper South Platte River group was concerned with watershed conditions following multiple wildfires in the Denver metropolitan watershed. Because the 600,000-acre watershed is in the wildland-urban interface, great concern was expressed over the safety of encroaching development. The rangers from the Chattooga River watershed cited increased recreation and impacts from private land as their greatest concern.

The Washington Office of the Forest Service arranged the business plan meetings to broaden planning criteria and public participation for this unique initiative. The business plan format is familiar to the private sector, and the Forest Service has recently adopted this approach—that they have products to market to the American public. In order to do so, many relationships are slated to change. Taxpayers have become "customers." The agency's Recreation Fee Demonstration program makes this relationship apparent. The fee program, which is a charge in excess of individual federal income tax for use of public lands, was to last one year but has been extended for three years. Forest Service employees are no longer just public servants but are now twice publicly funded entrepreneurs managing a vast public resource. Traditional partners are now investors. This

transition is occurring because of the direction from the office of Forest Service Chief Mike Dombeck. Chief Dombeck has been applauded by many for changing the program emphasis of the Forest Service from resource extraction to recreation and forest health. This is known as the "Chief's Agenda," and features recreation, watershed health and restoration, a long-term road policy, and sustainable forest management. It is not entirely clear whether or not this is cause for jubilation.

BUSINESS AS USUAL PLAN

At the time of the Atlanta meeting, the district rangers from the three forests in the Chattooga watershed had a complete list of projects that they had proposed to be funded by the Watershed Restoration initiative. This list remains

essentially unchanged despite the fact that some projects were rejected at the level of funding within the Forest Service. The projects, with first year funding at \$2.1 million, range in magnitude from simple maintenance of campsites to paving the entire length of Burrell's Ford Road. In addition, there are 6,700 acres of prescribed burns at a quarter of a million dollars' price tag, and plans to incorporate an amendment to the watershed's Forest Plans to allow prescribed burning within the Chattooga's Wild & Scenic Corridor. For an initiative termed "restoration," a disproportionate number of projects—conservatively about 28%—involve new development or construction of new facilities.

This situation arises from the fact

that most projects were already "on the books" prior to the official public announcement of the Watershed Restoration initiative. In essence, projects that had not received funding in the past were "categorically included."

The recreation development projects include building a 10 mile mountain bike trail in the Bull Pen area, construction of 27 campsites at Sarah's Creek, and the pending construction of an 18 mile equestrian trail in the Blue Valley Experimental Forest. These projects are unnecessary and excessive, because similar sites in those areas and elsewhere are clearly in need of restoration work. For example, the foot trail following the Chattooga River above Bull Pen Bridge resembles the gullied horse trails of the Smokies. Restoration of this trail should be a priority because of its close proximity to the river (5 feet in places), and because it accesses one of the most unique places in the watershed. Development of 27 sites at Sarah's Creek for the cost of

For an initiative termed "restoration," a disproportionate number of projects involve new development or construction of new facilities.

Chattooga Watershed Restoration Project

\$435,000 is unnecessary because of the campsite areas already there. Camping in the woods, or at the KOA?—that is the question. Horse trails are a valuable resource in the watershed but it seems that money would be better spent on refurbishing and constantly maintaining the ones that already exist. These projects are, as noted above, obviously developing recreation infrastructure, and there are more insidious projects that were not even included in the 28% estimate that total about \$1.7 million.

For instance, far too many projects qualify as restorative measures at present but seem to allow future actions that are contrary to the intent of the initiative. The rehabilitation of a breached dam on Big Creek includes the construction of a low water crossing to access timber on the other side of the creek. A similar initiative can be found on Sutton's Hole Road off of Highway 76 near Southeastern Expeditions. This road leads to an old log deck in a sensitive area right outside of the Chattooga's Wild & Scenic Corridor. For many years the road has been a popular mud hole, and was never closed because it provides access for outfitter campsites on the riverbank above Woodall Shoals. Now, with Watershed Restoration funds the road has been widened, drained and graveled, and a gate has been placed at the entrance. An outfitter at this point has exclusive access to this road, but will soon be joined by logging trucks and equipment if the Tallulah District has its way.

Sutton's Hole Road accesses several timber stands in the Compartment 59 Timber Sale that are presently under litigation. At present, the Forest Service is attempting to circumvent the court's decision in *Sierra Club v. Martin* through Amendments 18 and 19 to the Chattahoochee Forest Plan (see also page 13 for more information). If these measures are successful, timber will be harvested throughout the area along Sutton's Hole Road and "temporary roads" will be built. If the timber harvest resumes, the road's condition will most certainly be as bad or worse than it was in the beginning. (The District maintains that as a condition of any sale timber contractors are responsible for improving the roads affected as part of the sale, yet the fact that a high clearance, four-wheel drive vehicle is required to access recently cut stands is a good indication that this is not likely.) The money used for this and similar projects would have had a more restorative effect if used to not only decommission but to obliterate certain roads in the watershed. The business plan clearly states road obliteration as a goal, but no such action is planned as of yet.

HALF SPEAK

Could it be a bureaucratic quandary? Let's critique the following excerpts from a critical resource used to develop the business plan for the Chattooga River Watershed Restoration Plan.

- "...Contains some of the best trout fisheries and white

water rafting in the Southeastern United States."

Yes, the Chattooga has fine artificial trout habitat. The fisheries responsible served the valuable purpose of restoring trout habitat following the devastating logging practices of the early 1900's. However, it seems that the recovery of native brook trout habitat would be the best measure of watershed restoration. The funding for such an effort: \$0. Admittedly, the Chattooga is a fine rafting experience. But by placing the primary recreational emphasis on this commercial use of the Chattooga the Forest Service discounts individual private use of the river. The business plan commits far too many resources to developing additional recreation facilities.

- *"The ecosystem of the Chattooga River watershed was heavily impacted by activities occurring in the 1800's and early 1900's."*

And the 30's, 50's, 70's, 80's and 90's. These devastating activities were commercial logging and the subsequent uncontrolled burning of slash. These abusive practices were not confined to the turn of the century, but have continued to the present. For restoration work to be effective the fact must be recognized that most of the problems that exist in the watershed are a result of past timber management practices. Forest Service personnel must be trained to see outside of the ever-decreasing length of timber harvest rotations.

- *"There is a tremendous impact on the watershed due to the demands made upon the forest to provide clean water, recreational opportunities, productive soils and forest products."*

Exactly what is the impact on the watershed to provide clean water and productive soils? These are the products of a protected watershed composed of intact forest. The extraction of forest products usually excludes the availability of productive soils and clean water. By removing large amounts of biomass, you are left with poor soils that are highly erodible. Admittedly the impact from recreation is a real concern, and the fact remains that the current business plan explicitly contributes to those impacts.

According to the printed version of the Watershed Restoration project's business plan, the Chattooga River Ecosystem Management Demonstration Project (CREMDP) of 1993 to '95 was an important body of research considered during the development process. The specific conclusions of that analysis were "that sediment and fecal concentrations were a concern, that timber harvest had decreased 30% in the past decade, that 5-9% of the watershed is in old growth and that vegetation in the Warwoman sub-watershed was historically 25% pine and is now 60% pine." Out of thousands of pages of documents that include an ecological classification system, an amphibian and reptile survey, a vegetation history of the northern Chattooga basin and a

Chattooga Watershed Restoration Project

natural disturbance history, these conclusions seem to reach for extractive solutions to restoration. Take for instance the Tuckaluge Timber Sale, which is presently under litigation. The sale as originally proposed was to extract an unprecedented amount of timber from an area within the Warwoman sub-watershed, and to build an additional 9 miles of roads through this area in the name of "ecosystem management." Chattahoochee Forest Plan Amendments 18 and 19, which seek to circumvent the court decision that postponed the sale, would allow Forest managers to continue that sale in the name of "forest health." The very District that relied on data from the CREMDP to justify this pine extraction from the Tuckaluge area chose to disregard that body of research in another decision concerning timber extraction in Compartment 32. Instead, the District chose to use outdated field data ("CISC" Data) that classified an area as predominantly pine, but which was classified as 85% hardwood in the Ecological Classification System developed under the CREMDP. As handled by the Districts and continuing this maligned logic, the conclusions used in the formulation of the business plan reach for the foregone conclusion that more management means restoration.

THE MOUNTAIN AT THE END OF THE ROAD

If some of these conclusions seem speculative, go to Whiteside Mountain after a heavy rain to see first hand how project funds are being managed. The road that once made the top of Whiteside a roadside spectacle was closed in the early 1960's, and the scar had become a boulder studded path climbing through a dense array of maturing trees. A project was proposed by the Highlands Ranger District to "replace and improve failed drainage structures, improve access for emergency personnel, and improve safety on the trail." Now, a trail at least 20 feet wide in places exists. Now, erosion and

sedimentation from this project far exceeds the levels caused by the few trouble spots mentioned in the scoping notice. Although hand tools were the method of removing brush as stated in the Forest Service's scoping notice, it is evident that the bulldozer responsible for re-creating the road was responsible for felling many excellent trees along the way. When looking at the trail, one has the impression that the contractor was told to build a two-lane road to the top of the mountain. The intimate experience that once existed here is gone. Most agree that Whiteside Mountain is one the most spectacular places in the watershed. The original road to the top of the mountain was an affront to the beauty of this place, and the new road is an affront to a project named Watershed Restoration. It is not encouraging to see a visible landmark such as Whiteside handled in such an irresponsible manner when many other projects are to be completed in relatively

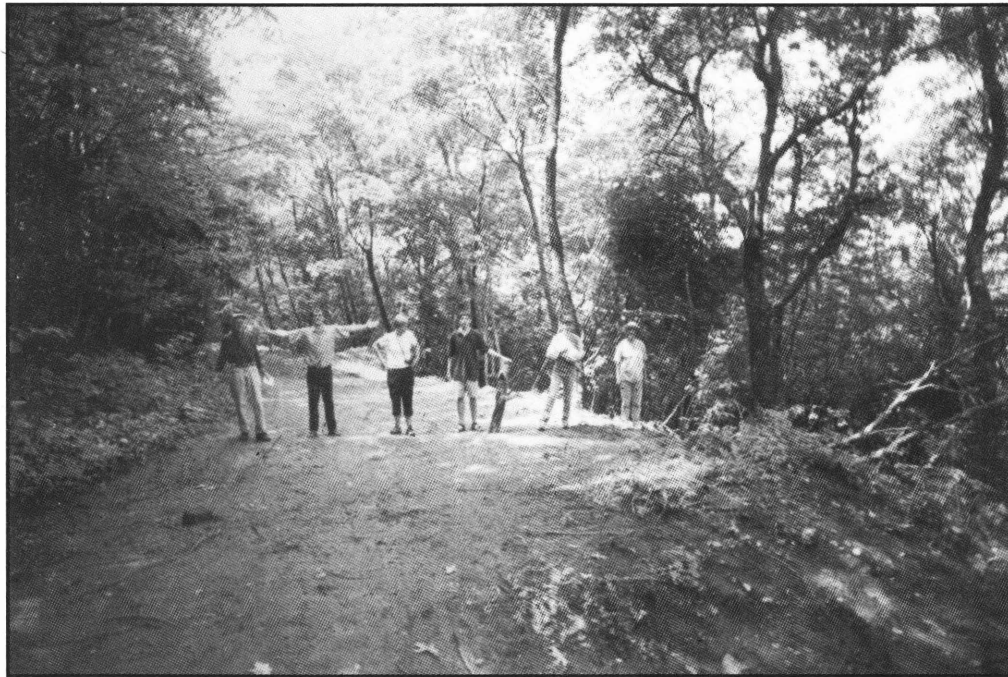
isolated locations.

THE ROAD AHEAD

Assuming that necessary support for the nation wide initiative continues, the Chattooga River Watershed Restoration Project is to be funded for the next two years. Some valuable projects have been completed to this point, and we hope more will reach the implementation stage.

Although it is

most certain that projects have been prioritized for the years to come, the Forest Service should be challenged to do projects that contribute to repairing the native ecosystem of the Chattooga River watershed. As one of the first Wild & Scenic River designated in the United States, the Chattooga River watershed should be managed for the extraordinary qualities that have been jeopardized by ill informed management and abuse in the past. The Chattooga River Watershed Restoration Project can be a new beginning or simply a repetition of the past. We believe that the challenge can be met.



Before the 1940's, the Kelsey Trail provided access from Highlands to Whiteside Mountain through the Primeval Forest. That "giant cathedral" was needlessly cut in the 1940's. In the 50's a roadway was blasted into Whiteside making the once wilderness journey a roadside attraction. Closed for thirty or so years, the road had become an intimate trail. As can be seen above, this road was recently rebuilt. Two steps back.

Chattooga Land Trust

Tom Cromartie

In the past decade, several large land trusts have been responsible for protecting over 1,000 acres in the Chattooga River watershed. The Trust for Public Land, The Nature Conservancy and The Conservation Fund collectively transferred to public ownership the Garland and Burson tracts in South Carolina, and the Fodderstack Mountains tract in North Carolina. The transfer of the West Fork tract in Georgia is currently underway. These purchases have prevented developments that would have resulted in considerable impacts on the watershed. For those who value the Chattooga River and its environs, appreciation is certainly due to these land trusts. However, there remains a niche for a land trust focused on the conservation needs of the communities within the watershed. For that reason, the Board of Directors of the Chattooga Conservancy decided at its December 1999 meeting to support the formation of a locally based land trust.

In March of this year, a group of prospective board members (including five from the Conservancy's Board) decided that the land trust would be organized as a "satellite" organization of the Chattooga Conservancy, and named the Chattooga Land Trust. That group of individuals now composes the Chattooga Land Trust's Board of Directors, and since that time the Conservancy has helped with the preliminary steps necessary to establish the land trust.

These include some administrative tasks, and attendance at several educational seminars and workshops designed to inform land trust staff, board members, volunteers and professionals in relevant fields about present trends occurring around the nation in the land conservation movement.

With aggressive development occurring in every corner of the watershed, the Chattooga Land Trust serves the Conservancy's goal "to educate and empower communities to practice good stewardship on private lands." Since establishing a rapport with conservation minded landowners is an essential element of land trust work, in the coming months we will have a variety of seasoned land trust professionals come to the community and inform landowners about the possible benefits of voluntary land conservation. We are also compiling literature that outlines different conservation methods available. Through these efforts, we hope to establish a dialogue in the community about voluntary land conservation that translates into direct

and long lasting protection for areas currently at jeopardy.

Although a strong land ethic exists among many property owners in the watershed, far too much land is subjected to high taxes and/or may be liquidated in order to pay the large estate taxes that come with the transfer of agricultural and forested landscapes. Removing land from this cycle through establishing conservation easements is one of the primary goals we have set for the Chattooga Land Trust's program for the coming years.

A contiguous landscape of fields and forests exists throughout the Chattooga River watershed. These rural lands are critical because they buffer the national forest and neighbor other, larger tracts of private land. Altogether, this matrix of public and private property contains the biological diversity for which the Chattooga River watershed is renown. We are working to establish a robust program

offering landowners the means and methods of protecting relatively small parcels of land. Our efforts shall concentrate on these properties in order to create a network of conservation lands linked through diverse private ownership.

In addition to the wishes of the landowner, the land trust will rely on the Chattooga Conservation Plan as a guide for determining the focus of individual conservation plans to be developed for

properties in the watershed. We hope to encourage landowners to continue land use practices consistent with those recommendations and when possible, to adopt land use practices which increase resource protection. Well maintained drives and roads, adequate stream buffers and selective logging, if any, would be an integral part of any conservation plan drafted by this organization. Because the private land that we are dealing with is often a working landscape, we will further encourage landowners to employ measures to ensure that those uses are consistent with the goals of ecosystem protection. Such measures may also be eligible for funding through federal and state stewardship incentive programs.

We anticipate that the establishment of a land trust with a local emphasis will have a measurable, positive impact on the landscape of the Chattooga River watershed. Please come by our office at 49 East Savannah Street in Clayton and learn about the role that the Chattooga Land Trust can play in the protection of private lands and the enhancement of our sustainable local economy.



Watershed Spotlight

Cashiers Sewage Treatment Plant

PROPOSED EXPANSION

A group of private investors is lobbying the Tuckasegee Sewer and Water Authority (TSWA) to *double* the capacity of the Cashiers sewage treatment plant, which discharges its effluent into the headwaters of the Chattooga River in North Carolina. Currently the town's sewage treatment plant is operating at capacity, processing 100,000 gallons per day. Developers have proposed purchasing a used sewage plant and reserving 80% of the expanded capacity for their exclusive use, to produce a total of 200,000 gallons per day of treated sewage into the Chattooga's headwaters. TSWA and some Cashiers Chamber of Commerce members have expressed interest in this proposition. However, residents near the Cashiers plant complain of foul odors, and the plant's records show regular discharges of fecal coliform far in excess of the permitted amount. Curiously, the sewage plant's most current operating records have been misplaced. At a recent public hearing, Cashiers residents appeared in force in opposition to the proposed sewage plant expansion, citing: concerns about the availability of water; the undesirable qualities of promoting speculative development in the area; and, the legality of dedicating a portion of the proposed expansion to private developers. Stay tuned, as action on this matter is imminent.



A tractor convoy through downtown Clayton displayed solidarity against GTC's proposed 115 kilovolt transmission line through Rabun County.

Rabun County Power Line Controversy

HEATS UP

On August 31st a convoy of 20 or so tractors criss-crossed the streets of downtown Clayton, carrying protest signs and displaying solidarity against a proposed high voltage power line through the Rabun County countryside. The convoy was followed by a spirited rally at the civic center prior to Georgia Transmission Corporation's (GTC) public meeting. Over 300 Rabun County citizens showed up to hear GTC's pitch about why the 115 kilovolt power line was "needed," and to voice their concerns and outright opposition to the project. Many whose homes and farms lie in the "least cost electrical alternative" corridor passionately oppose the potential taking of their property, the visual blight of power line towers, and possible adverse health effects of constant exposure to powerful electromagnetic fields. Other citizens question the need for such a major increase in transmission line capacity for a county that contains only 30% private land. Many feel that GTC has designs on using the power line to access the

Tennessee Valley Authority's electrical grid, thus gaining a market advantage and greater profit margin in the advent of the industry's deregulation. The Chattooga Conservancy is working as a member of Citizens For Rabun's Heritage to offer other alternatives for meeting the county's power needs. The group is also working with statehouse representatives to introduce legislation that would provide oversight for the siting of high voltage power lines.

Chattahoochee Forest Plan Amendment 18

CHALLENGED

The Chattahoochee National Forest's intensive timber harvesting program has been stalled for over a year, due to a ruling by the 11th Circuit Court of Appeals that determined the Forest Service was not abiding by their Forest Plan. Now, the agency's latest maneuver is to try to eliminate the grounds of the court's decision by changing the rules contained in the Chattahoochee Forest Plan. If successful, the Plan

amendment would rewrite and weaken species monitoring requirements, thus allowing a host of intensive timber sales to move forward. The Chattooga Conservancy is a plaintiff in the current appeal that would prevent the agency from changing the Forest Plan. This appeal is being forwarded by the Southern Environmental Law Center, and we aim to prevail and prevent

the agency from sidestepping their charge to abide by federal law, which in this case is the National Forest Management Act. This law does not prevent the Forest Service from cutting trees, as long it can be shown that populations of the other plants and animals in the ecosystem are able to survive.

Georgia's Natural Waters

NOT FIT TO SWIM IN

"A number of states claim to meet water quality standards by simply redefining standards to a lower threshold." For example, despite Clean Water Act goals of "swimmable and fishable" waters, Georgia classifies only a small fraction of its streams and lakes as fit for recreation. At a September hearing in the town of Commerce, Alan Hallum, Chief of the State's Water Protection Branch, in response to a question about whether pollution permits were written to protect waters for swimming, explained: "It is the policy of the state of Georgia that we do not recommend swimming in natural waters." (From Spring 2000 *PEER* review)

Member's Page

MANY THANKS

to all who recently renewed their membership and/or joined the Chattooga Conservancy.

Frank Bachelder

Kenneth Baer

Johnny Bailey

Nancy Bowden

Susie Brenner

Grace Brigham

Alfred Brown

Kathleen & Alvin Burrell-

Maloney

Emily B. Calhoun

Paul Carlson

James Cashin

Jeanene Cheek

W.H. & Maralyne

Christoffersen

R. Cooper

Jimmy & Rebecca Cothran

Mollie & Russ Dobbins

Tom Dunken

Prescott Eaton

Leslie Eisenberger

William B. Farley

Carroll Garren Beele

Patricia Gilsdorf

George & Joan Goldman

Anne F. Goldthwaite

Gene Goodwyn

Norwood Griffin

Laurie Gurley

Jack Guthrie

Robert Henry

Travers Hill

Mary Katherine Hodgson

Rich Hoffman

Frank & Anne Holleman

Dr. & Mrs. Frank Ingrish

Charles Jackson

Roger & Jean Johnson

Russell & Kathleen

Johnson

Ibby Kenna

Norma & Ken Langley

Jim Ledvinka

Eleanor Legg

WS Lesan

Nick & Karen Linscott

Lamar Marshall

William & Eleanor Majure

Richard S. McAdams

Gene Merritt

John Murray

Michael Myers

Mark Neisler

Ed Nicholson

The Noel Family

Hugh & Carol Norse

Merrill Palmer

Mr. & Mrs. Jan Phillips

Tony Presley

Van Price

Steve Provost

Tony Ragan

Stephen & Carol Raeber

Mary Robertson

Brett Salter

Cathy Sanders

Donald Sanders

Donald Sanders, Jr.

Nathalie Sato

Herman Senter

Violet Smith

Kathy Meredith

Fred Smith

Linda Stratham

Pauline Stevenson

Richard Melvin

Johnny Stowe

Robert & Patricia Stowell

Marge & Bob Striggow

Walter Stults

Lindsay Taylor

Tarkenton Thompson

George F. Thomson, Jr.

Charlee Tisdale

Jeffrey Tryen

Michael & Joanne Tuohy

John & Anne Tuohy

Janice Ward

David Wheeler & Judith

Hallock

Joe Wheeler

Dr. Randall White

J. Wilkinson

Robert Williams

Robert & Glenda Zahner

Chattooga Conservancy

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

Richard Cain
Don Bundrick
Dave Barstow

Lew Dorn
Don Sanders
Dr. Robert Zahner
Dr. Randall White
Dr. Ed Speir

Newsletter

Editors, Buzz Williams
& Nicole Hayler

Production and Layout,
CRWC Staff

Printing,
Gap Graphics

Endorsing Organizations

Friends of the Mountains
GA Forest Watch
Western NC Alliance
SC Forest Watch
South Carolina Sierra Club
The Wilderness Society
Association of Forest Service
Employees for Environmental Ethics
Foothills Canoe Club
Atlanta Whitewater Club
Georgia Canoeing Association
Higgins Hardwood Gear
A. F. Clewell, Inc.

National Wildlife Federation
Action for a Clean Environment
Georgia Botanical Society
Georgia Ornithological Society
Columbia Audubon Society
The Georgia Conservancy
Southern Environmental Law Center
Central Georgia River Runners
Lunatic Apparel
Arkansas Canoe Club

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/Fall 2000

Join the CC and help protect the Chattooga River watershed

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

Send to: **Chattooga Conservancy, Inc.**
P.O. Box 2006
Clayton, Georgia 30525

Individual: \$14 ☐ Group: \$27 ☐
Donation: Sponsor: \$49 ☐

My check is enclosed ☐ Please charge my credit card: ☐ Visa ☐ Mastercard ☐ Discover ☐ Amer. Express

Name as it appears on the card: _____

Address card is billed to: _____

Card number: _____ Expiration date: _____

Signature: _____

Chattooga Conservancy, Inc.

PO Box 2006

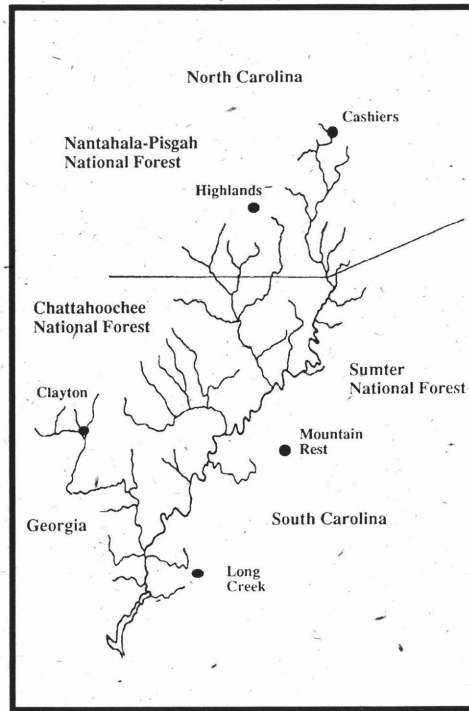
Clayton GA 30525

(706) 782-6097 tel. * (706) 782-6098 fax * crwc@rabun.net Email * www.chattoogariver.com

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:

CC Members and Volunteers
Lyndhurst Foundation
Frances Allison Close
Merck Family Fund
Turner Foundation
Town Creek Foundation
Norcross Wildlife Foundation
Smithsonian Institution CTSP
Katherine John Murphy Foundation
Environmental Systems Research Institute
Patagonia, Inc.



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 Conservancy
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