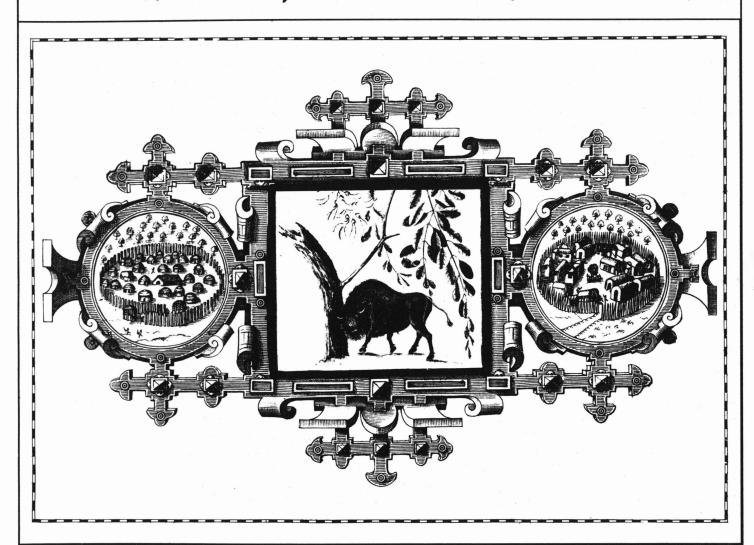


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# Picking Up the Pieces Restoring Our Native Forest



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## **Director's Page**

#### **Buzz Williams, CRWC Executive Director**

We've heard a lot about "Zero-Cut" lately. The most notable addition to the cacophony was the Sierra Club's April '96 announcement that their "...membership has voted to put our organization on record as advocating an end to all commercial logging on publicly-owned lands in the United States" (66% in favor, 34% opposed). The Native Forest Council in Eugene, Oregon, is the acknowledged leader in the Zero-Cut campaign and has been beating this drum for the past five years. In 1995 a large, regional organization called the Oregon Natural Resources Council followed suit. Recently and a bit closer to the Chattooga River watershed, the Western North Carolina Alliance put the Zero-Cut question before their membership, and debate is ongoing as we go to press. But seldom do advocates elaborate on the details of Zero-Cut,

nor do they articulate a strategy for its implementation. Without these key ingredients, an idea whose time may have come could very well wind up in the trash can -- along with past, failed attempts at natural resource management reform.

I remember the RARE II debacle of the late seventies. This Roadless Area Review and Evaluation (RARE) under the Carter Administration was the Forest Service's second assessment of lands that were eligible for wilderness status.

Although this assessment focused on eligibility of certain areas for wilderness, the inventory also helped to make a case for other types of protection, thus creating options for gaining protective status for large blocks of undisturbed native forest. Then, this process degenerated into a fight over the oversimplified issue of wilderness versus non-wilderness. The ensuing debate polarized local communities against what they perceived to be a bunch of "city slicker eco-hippies" from Atlanta trying to "lock up" their old stomping grounds. Oftentimes it's the messenger, not the message.

We need to learn a few lessons from the past to ensure that this new initiative for reform doesn't backfire. First, let's define Zero-Cut. Read the fine print! Nobody is advocating a true no-cut policy on public lands. Case-in-point is the Sierra Club, who made such a show of their in-house debate which pitted veteran board members David Brower (renown author) for Zero-Cut, in opposition to Dave Forman (formerly of EarthFirst!) against Zero-Cut, to debate the issues for the membership. The official Sierra Club press release tells the story: "Ending commercial logging does not mean that all tree cutting will be halted on all public lands. Non-commercial logging of domestic firewood or to reduce the hazard of forest fires or to restore

a more natural forest ecosystem would still be permitted. This ballot measure simply commits the Sierra Club to support federal legislation that bans all commercial logging on public lands, when it is introduced". This appears to be a glaringly obvious disclaimer. Under these Sierra Club guidelines, even the Forest Service could claim credit for a Zero-Cut policy, which would be consistent with Chief of the Forest Service Jack Ward Thomas's decree to "Tell the truth, obey the law and implement ecosystem management." Many weasel words later, it is still unclear exactly what proponents of Zero-Cut really mean by "commercial" logging. This definition lies at the heart of the Zero-Cut proposal. Meanwhile, timber targets still drive the process no matter what definition is used. Folks, it's what gets implemented that will make a difference. Nonetheless, my hat is off to the idealistic John Muir Sierrans; however, Zero-Cut is meaningless until there is a

> united conservation community willing to present a real proposal before the citizens who own our public lands.

> Then, assume we in the conservation community do eventually "get it together" and stop playing games and agree to say what we mean, and mean what we say. The most important issue next is: How to present Zero-Cut to the rest of the public? Keep in mind that our true

obstacle is a strong, private timber industry lobby, and many misinformed and often polarized voters. Most of us seated in the choir realize that much of our strength traditionally has come from urban residents who recreate on rural public lands. Often the cultural cross-currents are strong and opposing at the interface between city-dwellers and those who live within or near the national forests. This time around we should cultivate local leaders to present common sense conservation policies to the people in their communities and consequently win their support, not resentment.

Finally, our messages should be focused on the real issues such as: Eliminating "timber targets" in national forest management decisions; working with smaller-scale, local loggers while switching to restoration forestry; promoting economically viable and scientifically defensible conservation plans like the Chattooga Conservation Plan; delivering facts to citizens who can elect responsible representatives to strengthen laws which protect ecosystems; restore the Land and Water Conservation Fund; and above all, stop playing games. This grassroots approach stands a much better

chance of obtaining real reform.

"Folks,
it's what
gets implemented
that will make
a difference"

## Picking Up the Pieces: A Historical Perspective

#### **Buzz Williams**

"So twice five miles of fertile ground
With walls and towers were girdled round;
And here were gardens bright with sinuous rills,
Where blossomed many an incense-bearing tree,
And here were forest ancient as the hills,
Enfolding sunny spots of greenery."
-Kubla Khan by Samuel Taylor Colridge

Around 1794 a promising, young English poet named Samuel Taylor Colridge read a copy of Travels of William Bartram. Literary pundits agree that this work greatly influenced Colridge when later he penned some of the most "endearing and melodious poems in English literature". Bartram's book was a fanciful vet scientific account of the still-wild southeastern portion of North America, and it fanned the flames of European fascination with this new and often strange land. But by the time Bartram wrote eloquently of this beautiful country, demand for the bounties of America already had taken a heavy toll on both the native peoples and the intricate tapestry of life which existed in this unspoiled natural landscape. The Spanish had introduced the peach, the pig, the horse and smallpox to the land of the Cherokee. Native American populations were reduced by up to 50% due to disease. On the other

hand, native ecosystems were feeling the effects of the fur trade. Many large animals at the top of the food chain were

greatly reduced in numbers. This notwithstanding, the landscape that Bartram and other early explorers, hunters, scientists and soldiers described during the ensuing colonization of America was still an "Eden"; one that now is but a distant fantasy long since rent apart by unbridled exploitation. Fortunately, there is a growing movement to restore native ecosystems that provide habitat for all creatures which once inhabited the Southern Appalachian Mountains. The writings of these early explorers and settlers inevitably will play a great role in restoring our native forests. These windows into the past can help us reconstruct an accurate image of the plants and animals that evolved here and which once lived together in balance with climate, soils, natural disturbances, and each other.

Though the catastrophic result of European settlement and exploitation did the most to alter the native ecosystems of the Southern Appalachian mountains, Native Americans also changed this landscape. As far back as the end of Pleistocene geological period (10-70,000 years ago) nomadic hunters of the Ice Age, or Paleo-Indians, helped nature eradicate the Mastodon. Natural climate change also has caused the ebb and flow of species of plants and animals here, which originated from both the tropical and

P. 152.

Illustrations from Lawson's New Voyage

boreal ecosystems. Later, when the Cherokee arrived (possibly as late as just 500 years ago) their more agrarian way of life took a measured toll on the landscape. As soils became infertile from overuse. the Cherokee simply moved into an adjacent valley, girdled the trees and planted their crops in the new ground, with the sun streaming through the canopies of dead trees. Fire was also a tool used by the Cherokee to burn off the forest understory during the fall, exposing the bountiful chestnut harvest. They also used fire to drive game for hunting. Evidence of the Native American's use of fire is contained in the journal of Andrew Ellicott, whose famous survey to settle a line dispute between North Carolina and Georgia in 1811 relates the following account: "While at this position our observations were much impeded by clouds

forming about the tops of mountains and ridges but the greatest inconvenience we experienced arose

from smoke occasioned by the annual custom of the Indians in burning the woods. Those fires scattered over a vast extent of country made a beautiful and brilliant appearance at night, particularly when ascending the sides of mountains". Indian woods-burning and agriculture created grassy clearings mostly around their villages and trails; however, evidence is strong that there were also extensive tracts of contiguous forest, undisturbed by the presence of humans. There is little doubt that large populations of deer, elk, and the other ungulates such as bison that inhabited this land helped to maintain these grassy, open areas. Thus when we read Bartram's account of "...swelling turfy ridges, varied with groves of stately forest trees" we begin to piece together a landscape altered

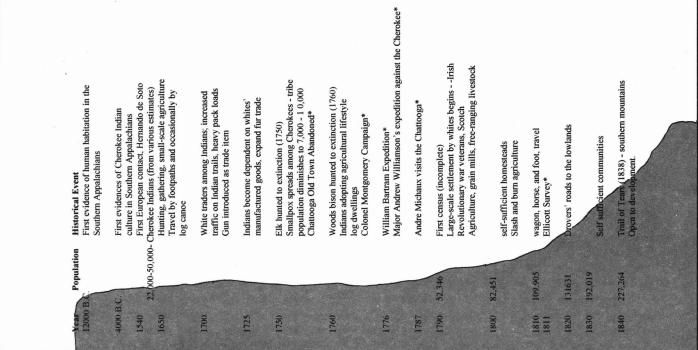
## Pieces continued

by humans and maintained in a somewhat open, park-like condition at least along the frequently traveled trails between Indian villages, but nonetheless a very natural landscape. From animals like bear, otter and cougar at the top of the food chain down to the intricate balance of decomposers living in soil such as fungi, and plant root systems -- all shared a place in the forest and meadows.

By the 17th century greater forces were coming to bear on native ecosystems. Early European invaders were ravenously exploiting the landscape to reap its natural resources for themselves, as well as to meet the demand for New World products in Europe. Of particular interest were products from America which could be touched and felt. Carrol's "Historical Collections of South Carolina" (which begins with data that was collected as early as 1680) relates an account of the early traders' curious use of hummingbirds. Traders would "...skin these little birds, filling them with sand and perfuming their feathers. They are sent into Europe as pretty delicacies for ladies who hang them at their breast or girdles". In this historical

and that later "...their moss-covered bones and deep worn trails, leading to favorite ranges and licks, were seen marking the country in every direction". One of these old "wallows" is still talked about to this day by old-timers in the Big Creek area of the Chattooga River watershed.

In 1788 Andre Michaux was sent to Chattooga country by the French government to collect plants and seeds for gardens in the Park of Rambouillet. Michaux is remembered, of course, for discovering the Oconee Bell, which is a rare endemic of the Blue Ridge escarpment. In 1797 Indian agent Benjamin Hawkins traveled through the Chattooga basin. The following passage from his journal is evidence of a changing landscape: "I met two Indian women on horseback, driving ten very fat cattle to the station for a market....There passed me this day from Etowwah, ten horses loaded with skins, this making thirty-one wagon loads that have been brought down this path this season". Though the Indians had already ceded most of their lands in South Carolina at the signing of the Treaty of Hopewell (in 1785) which was presided over by the



account Carrol also references the 1731 Commercial Report of Charlestown which states that "...three hundred casks of deer skins, containing eight or nine hundred each, were exported; and further, by reference to another report of 1747, we find that two hundred pounds of beaver, and seven hundred and twenty hogshead of deer hides were exported". In Logan's History of Upper South Carolina, reference is made to the quick extermination of the buffalo, which were hunted for their skins and tongues. Logan maintains that by some reports buffalo populations in the upstate of South Carolina numbered one hundred per acre,

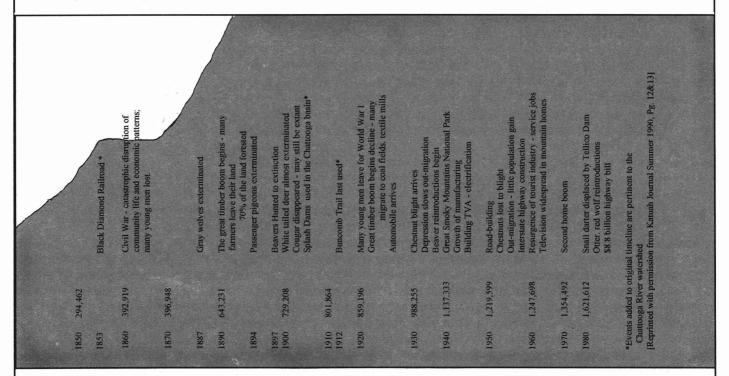
famous Indian-fighter General Andrew Pickens, the Chattooga River valley remained Indian hunting grounds. Nevertheless, Hawkins reported that "...hunting parties after bear and deer were going daily over on Indian lands". Hawkins also revealed evidence of land-burning techniques used by the Indians to improve hunting. He states: "The grass at this season was very thick and eight inches high; this meadow was burnt the last of November" (believed to be near Whetstone valley in the Chattooga River watershed). For the Cherokee, the "old way" of living off the land was forever altered by their new found

## **Pieces**

dependence on European systems of commerce and trade. Now, they were dependent on gunpowder and other goods which could only be obtained from the invaders.

By the early 1800's the Indians of the Chattooga River Basin had been almost completely displaced by settlers, and the wild game was dwindling fast. This next wave of settlers would go a step further in altering the landscape by destroying habitats. Immigrants -- mostly Scotch-Irish, Irish, German and English -- poured into the territory. They brought many of their agricultural practices, such as slash-and-burn planting cycles, and freeranging livestock. Drover roads began to appear from the mountains to the piedmont and on to Charleston, where settlers herded thousands of cattle, hogs and geese to market. Grazing also took a toll on the land. Michaux wrote: "Of all domestic animals, hogs are the most numerous; they are kept by all the inhabitants; several of them feed a hundred and fifty or two hundred. These animals never leave the woods, where they always find a sufficiency of food, especially in autumn and winter. They would further alter our native forest. Between 1880 and 1920 one of the most disastrous and lasting practices came to the Chattooga: Industrial-scale clearcut logging! Erosion from over-harvesting, the use of splash dams to transport logs down the river, and wildfires which consumed the massive fuel-loads of built-up logging slash all combined to devastate native habitats. This ensuing destruction did not go unnoticed by the public. Consequently, President Theodore Roosevelt issued a message to Congress transmitting a report from Secretary of Agriculture James Wilson, urging Congress to establish the creation of a forest reserve system in the Southern Appalachians. This report states: "These are the heaviest and most beautiful hard-wood forests of the continent. In them species from east to west, and from north to south, mingle in a growth of unparalleled richness and variety. They contain many species of the first commercial value. and furnish important supplies which cannot be obtained from any other region".

Yet before these conservation efforts could work



grow extremely wild, and generally go in herds.... Every inhabitant recognizes those that belong to him by a particular manner in which their ears are cut. They stray sometimes in the forest, and do not make their appearance again for several months; they accustom them, notwithstanding, to return every now and then to the plantation, by throwing them Indian corn once or twice a week". Wild hogs are still a part of the Chattooga ecosystem today, albeit introduced.

Next came the even more serious events that

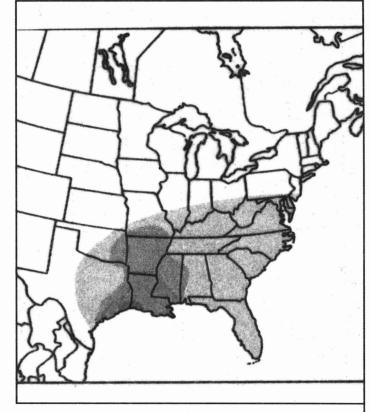
to heal the land, another major catastrophe came to the forest. The Chestnut Blight of the early 1900's eliminated the most important wildlife food tree in the forest. By the 1950's, the mighty Chestnut tree clung to life, literally by immune root systems (which still survive today), and a ghostly forest of dead snags littered the land. Fortunately, the Forest Service managed the forest reserve system (later the national forest system) wisely until the 1950's. Many plants and animals returned here or were restored to the forest. Empty niches left by the Chestnut Blight and the extinction of certain species were filled with other species

## Pieces continued

of similar character by natural processes.

Finally, during our time, the return of big industry to the recovering forests here once again threatens timely conservation efforts. The slow-down of logging in the Pacific Northwest has brought new pressures to bear on the forests of the South. On the bright side, the sciences of conservation biology and landscape ecology have given us new tools for work to restore the native forest of the Chattooga River watershed to its rightful glory.

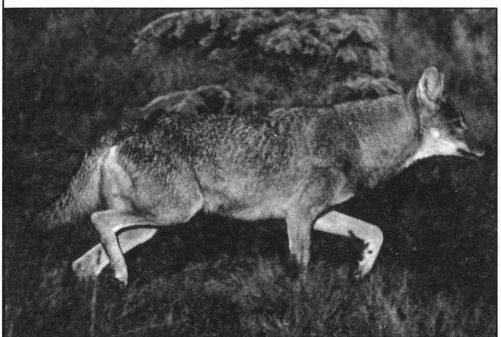
The Chattooga River Watershed Coalition (CRWC) has collaborated with The Conservation Fund, the Southern Appalachian Forest Coalition and Clemson University to craft a economically viable and scientifically defensible Conservation Plan for restoring the native forest of the Chattooga drainage. This plan will be offered as a Citizen's Alternative in the Forest Plan revision process now underway for the national forests of this watershed. Thanks to the keen observations of early writers and explorers, we have a fairly accurate picture of the flora and fauna of the native forest here. Our goal is to work with public land management agencies, citizens and private landowners to forge a new conservation ethic for the Chattooga River watershed. The resulting land management plans then can be linked to similar efforts in the adjacent lands of the Blue Ridge escarpment, to restore the largest contiguous block of native forest east of the Rocky Mountains. It is entirely possible that with the support of an informed and educated citizenry, we can



Original range of the Red Wolf

experience and bequeath to our children the thrill of the

distant cry of the wolf, or a rare glimpse of a mountain lion hunting silently beneath a canopy of mighty chestnut trees.



For more information, please contact the CRWC and learn how you can become involved in supporting the Chattooga Conservation Plan.

Red Wolf
Its original range included the Chattooga watershed



## The American Chestnut Story

[The following article is reprinted with permission from the American Chestnut Foundation]

#### "Where there be mountains, there be chestnuts"

- a member of DeSoto's expedition, 1520.

Those who know the story can never forget it, but the tragedy happened long enough ago that many, now,

have never heard of the tree's demise. The American chestnut was once one of the most important trees in our Eastern hardwood forests. It grew from Maine to Georgia, and west to the prairies of Indiana and Illinois. It grew mixed with other species, often making up 25 percent of the forest. In the Appalachian Mountains, the ridges were often pure chestnut. In early summer, when the trees were covered with their long, creamy flowers, the mountains looked as if their crests were covered with snow. In the virgin forests, where large chestnuts were commonplace, mature trees could be 600 years old, and average 4-5 feet in diameter and 80-100 feet tall. Many specimens 8-10 feet in diameter were recorded, and there are rumors of trees bigger still.

The nuts were acknowledged to be the finestflavored of all chestnuts and though not as large as their

European or Oriental cousins, demand for them was high. Railroad cars full of chestnuts were shipped to the big

cities for the holidays, where street vendors sold them fresh-roasted, and they were essential to the traditional stuffings for roast goose and turkey. Unlike other nut trees, the chestnuts usually produced heavy crops every year, and the nuts were a major cash crop for many families in Appalachia. Wildlife depended extensively on the nuts, too -- bear, deer, wild turkey, squirrels (of course) and once, the huge flocks of Passenger Pigeons -- all waxed fat for the winter in the chestnut forests.

The tree was also one of the best for timber. It grew straight and tall, often branch-free for 50 feet. Loggers tell of loading entire railroad cars with boards cut from just one tree. Straight-grained, lighter in weight than oak and more easily worked, it was as rot-resistant as redwood. It was used for virtually everything -- telegraph poles, railroad ties, heavy construction, shingles, paneling, fine furniture, musical instruments, even pulp and plywood. The chestnut was also the country's major source of tannin for tanning leather.

The Chinese chestnut trees sold by nurseries today can be healthy producers of good nuts, but they cannot

> The Chinese tree is an orchard tree, while the American chestnut created huge tracts of big timber.



discovered infecting trees in fungus was probably imported earlier from the Orient, on nursery stock brought in before the passage of plant quarantine laws. The blight rampaged through the forests, spreading 20-50 miles per year, killing virtually every chestnut in its path. It was many times more destructive than the Dutch elm disease. By 1950, the American Chestnut was essentially eliminated as a forest tree. Since the root system is unaffected by the blight, some survive,

mostly as shrubs, where giants once stood. There is no significant wild reproduction.



American Chestnut trees during the late 1800's

### We can have this precious tree back.

Advances in our understanding of genetics make a transfer of the resistance in the Chinese species to the American possible. But good research, and breeding trees, takes time and money. Recent developments in genetics and plant pathology promise new hope that this magnificent tree will again become part of our natural heritage.

To make this promise a reality, a group of prominent scientists established The American Chestnut Foundation (ACF) in 1983 as a non-profit organization. It

### Chestnut continued

has only one goal -- to put the American chestnut, king of the Eastern forests, back on its throne.

The American Chestnut Foundation advocates a multiple attack on the fungus, encouraging research in biological control and actively breeding trees for disease resistance. Norman Borlaug, Nobel Prize winning plant breeder and ACF Board member, is confident the breeding effort will succeed. "The Foundation's breeding program builds on past research successes and failures, and uses a breeding technique never before applied to the chestnut."

Chestnut projects now being undertaken are receiving only minimal government support and the breeding work relies totally on private support.

Won't you help bring back this old historic friend?

## CRWC Proposes a Joint Project with the American Chestnut Foundation

The Chattooga River Watershed Coalition and the American Chestnut Foundation (ACF) have outlined a proposal to establish a research program, in concert with the U.S. Forest Service, to restore the American Chestnut.

The Coalition recently proposed to the Forest Service to utilize a recently acquired, 300+ acre tract as an experimental breeding plot for chestnut trees. The tract was formally an apple orchard in South Carolina, and was purchased with public monies via the Land and Water Conservation Fund. Although the ACF has a research farm in Meadows, Virginia, it has very little growing stock from the south end of the range, in what was formerly prime chestnut country.

We hope to train volunteers to identify the American Chestnut, in order to locate surviving sprouts which can then be used for breeding. Since chestnuts do not self-pollinate, we aim to find at least two chestnut trees which have survived to bloom and bear nuts, and which are at least two hundred yards apart.

The restoration of the Chestnut is an obtainable goal! The American Chestnut Foundation already has 8000 trees in the ground. They estimate that in 25 years, a near-pure strain of chestnut that has been crossed with the Chinese Chestnut to produce a resistant strain will be ready to re-introduce.

The Chattooga River Watershed Coalition plans to be a part of this effort.

You can help, volunteer today!





American Chestnut in bloom

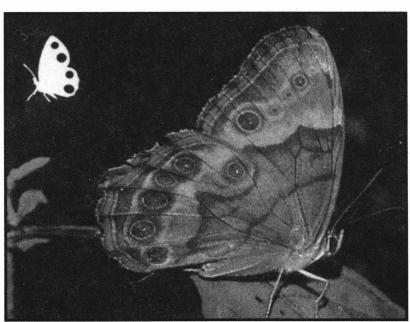
#### "Butterflies of Xanadu"

#### Stephen P. Hall

This article is an abridged version of an article that originally appeared in <u>American Butterflies</u>, a quarterly magazine published by the North American Butterfly Association, 4 Delaware Rd., Morristown, NJ 07960.

The landscapes of the American Southeast that William Bartram described more than 200 years ago seemed fantastic to contemporary Europeans -- a number

of Bartram's scenes made their way into Samuel Taylor Coleridge's narcotic dreams of Xanadu. Today, given the enormous losses of natural habitats that have taken place since Bartram's time, they are just as hallucinatory. Particularly striking are the references Bartram made throughout his travels to endless savannas, impenetrable canebrakes, and high forests of Longleaf Pine, all of which are now among the most threatened natural communities in the Coastal Plain from North Carolina to Texas.



Pearly Eye Butterfly

Some of the most Xanadu-like elements in these landscapes (although undreamt by Coleridge) were the vast expanses dominated by Switch Cane (*Arundinaria tecta*) and Giant Cane (*A. gigantea*) the two species of bamboo native to the Southeast. From Florida to Louisiana, and from Georgia northward into the Carolinas, Bartram encountered mile after mile of cane swamps and open cane meadows, both referred to more generically as canebrakes. Although he encountered these habitats day in and day out, Bartram describes them with amazement throughout his journey: Canebrakes extending outward like the ocean, with no boundary except the sky; cane so thick that it could not be penetrated except where roads had been laboriously cut through; groves of giant cane standing 30 to 40 feet tall and with stems as thick as a man's arm.

Today, in sharp contrast, cane occurs primarily as meager fringes along edges of woods or as isolated clumps within bottomland forests. The vast canebrakes described by Bartram (or even by B.W. Wells in the first half of this century) are apparently a thing of the past, the victims of

overgrazing by livestock, the drowning of southern river floodplains by immense impoundments, and the conversion of most of the remaining forested wetlands to agriculture and pine plantations.

A particularly important factor in the loss of canebrakes has been suppression of the fires that once swept over large parts of the Coastal Plain nearly every year. As described with awe by most European travelers in this region, canebrake fires were spectacular phenomena.

Flames would often reach heights over 40 feet or more in these habitats, and with the hollow joints of cane exploding as they burned, they produced sounds that could be easily mistaken for vast exchanges of musket-fire between opposing infantries.

Although such fires seem catastrophic, they are crucial in maintaining many of the most characteristic features of the Coastal Plain landscape. Fire is actually the main arbiter -- as Bartram was one of the first to recognize -- controlling the competitive balance

between open pine- and herb- dominated communities (which can be stretched to include the canebrakes, if cane is thought of as a grass) and communities dominated by evergreen hardwoods. In the absence of frequent fire, most of the sites once occupied by canebrakes and savannas -- where not converted to human uses -- now support hardwood forests with dense understories of hollies, bays, and other evergreen shrubs.

Although no pandas or other large bamboomunching vertebrates evolved in the Southeastern canebrakes, this habitat does support a particularly interesting community of endemic animals, several members of which now appear to be uncommon to rare, due to loss of habitat. One species, Bachman's Warbler, may, in fact be now extinct because of the demise of the large bottomland canebrakes it apparently required for nesting and foraging. The most diverse group of these canebrake species are the lepidoptera: close to 20 species of moths and butterflies have now been identified as feeding on cane as caterpillars, probably exclusively so (although the majority of these species can be found on

## Butterflies continued

both Giant Cane and Switch Cane). In contrast to these cane-limited lepidoptera, only one native vertebrate, the "Cane-cutter", or Swamp Rabbit, and just a few other insect species include cane as a major component of their diets.

Thirteen of these cane-feeding lepidoptera are moths, belonging to at least three different families. As discovered by Eric Quinter of the American Museum of Natural History (who is preparing a major report on his findings), this group contains a treasure trove of undescribed genera. Even the few species in this group that have long been described (such as Argillophora furcilla and Franclemontia interrogans) were previously known from only a few specimens and were not recognized as canebrake species until fairly recently.

While not nearly as obscure as the moths, the six species of butterflies associated with cane also have a number of interesting features. In contrast to the moths. which belong to groups that feed on a wide variety of plants, the canebrake butterflies all come from groups that feed almost exclusively on grasses and sedges, of which the canes and other bamboo are just peculiarly large and woody variants.

One group of the cane butterflies is represented by Southern Pearly-eye and Creole Pearly-eye, which along with

alligators, cottonmouths, tuliptrees, sweetgums, and the canes themselves, have strong links with species in eastern Asia. Several of the Asian relatives of the pearly-eyes, in fact, also feed on bamboo (shades of Xanadu, maybe Coleridge was right in mixing together scenes from the Southeast and Orient!) The other group, however, is represented by grass-skippers in the roadside-skipper group and the genus Poanes, both of which have their centers of distribution in the grasslands and marshes of North America.

Although these butterflies can all be found together in the same patch of cane, the two groups have markedly contrasting ecological requirements as adult butterflies. This appears to be reflected in their ability to use different types of habitats.

The pearly-eyes, like virtually all satyrs, do not require nectar as adults; they feed instead on sap flows, fallen fruit, carrion, and dung. This allows them to inhabit deeply shaded swamps and woodlands that support only a

small variety of wildflowers. Probably for this reason, Southern Pearly-eyes are the most commonly encountered canebrake butterflies in North Carolina, occurring in habitats as different as the maritime forests of the Outer Banks; the vast peatland communities of Pond Pine (pinus serotina), pocosin and cane of the outer Coastal Plain; and the narrow alluvial forests of the piedmont and mountains. Creole Pearly-eyes are likewise found throughout North Carolina, but are far scarcer and they appear to be restricted to broader tracts of cane.

The skippers, in contrast to the two pearly-eyes, are avid nectar seekers and must move out into adjoining habitats to find their source of fuel (the canebrakes themselves can be virtually flowerless monocultures). Although all of the cane-associated skippers can be found

perching on their caterpillar easily found in neighboring savannas or beaver-created marshes, nectaring at blazing star, Pickerelweed, or other species of wildflowers. Possibly because of this need for two distinctly different natural communities, the canebrake skippers are all far more local in their occurrence than the pearly-eyes.

Reversed Roadside-Skippers, in particular, are almost always found in cane meadows embedded in extensive savanna or sandhills habitats, or along the caney

ecotones between these open types of habitats and the more densely wooded pocosins or swamp forests.

foodplants, they are often more

(However, there are at least occasional exceptions to this rule. On a particularly hot day in August, I found a mating pair of this species deep within the shade of a small stringer of swamp forest running through a savanna.) The other members of this group -- Lace-winged Roadside-Skipper, Carolina Roadside Skipper, and Yehl Skipper -are somewhat more shade-tolerant (particularly Lacewinged Roadside Skipper), but are still usually found along ecotonal areas within relatively open, moist woodlands.

A great deal remains to be learned about the ecological relationships of the canebrake lepidoptera. Right now, it is difficult to be sure that these species are even holding their own in the marginalized, though still abundant cane of present day habitats or are declining in the absence of expansive canebrakes. Eric Quinter, for one (pers.comm.), believes that several of the canebrake moths



Remnant patch of native cane

continued on page 23

### Land and Water Conservation Fund:

A Vision for Conservation in the Past, Now a Means of Deficit Reduction

#### Cindy Berrier

Thirty years ago our U.S. Congress had a wonderful vision for the future of our nation's land and water resources, a future where the natural beauty of these resources would be protected, and plant and wildlife habitats would be prolific. Legislators saw the need to provide places for people to go for outdoor recreation. places to renew the spirit, and places to learn from and

gain respect for the land. This vision prompted the Land and Water Conservation Fund Act of 1965 (herein referred to as the LWCF). The LWCF would provide monies for the acquisition of land to be added to the federal public lands system, and also provide grants to individual states for the development of parks and recreation facilities, open spaces, and for ecosystems protection. The Fund was seen as a mechanism to give something back to our country for present and future generations, in return for the continued exploitation of our nation's natural resources, primarily from oil and gas drilling in the Outer Continental Shelf.

The LWCF provided federal funds to

four agencies: the National Park Service (NPS), the Forest Service (FS), the Fish and Wildlife Service (FWS) and the Bureau of Land Management (BLM). Funds were used for planning, land acquisition, and for the development of needed facilities consistent with the purpose of the Fund. Monies to individual states were released in "block grants" to be used in the same manner and for the same purpose.

The LWCF was designed to be self-supporting, with income sources from surplus government property sales, motorboat fuel taxes, and recreation user fees. If those sources were not sufficient to meet the mandated level of funding, then royalties from the Outer Continental Shelf Lands Act would be added to make up the difference; historically, that is the situation. The mandated LWCF levels stayed relatively stable at \$200-300 million from 1966 through 1977. However, an amendment to the law in 1976 increased the funding level to \$600 million for 1978,

\$750 million for 1979, and \$900 million for the years of 1980 through 1989. The law was amended again in 1987 to continue a yearly funding level of \$900 million per year until the year 2015. In that same year (1987) another amendment would take away the receipts gained from recreation user fees during the period from 1991 through the present and put these receipts into a "special account" for the Department of the Interior. These fees are now being used for the Interior Department's administration

> costs. Still another amendment from the Deficit Reduction Act of 1984 would reduce the amount of motor boat fuel tax funds deposited into the Fund to only \$1 million per year.

In its early years, "creative accounting" during with very few appropriations allowed for land acquisition. The Fund continued to receive the legally mandated

the LWCF was self supporting. This was true up until 1978; however, during the next twelve years, the LWCF was used as a source of funding for other Federal agencies -- particularly the Department of Defense -and for reduction of the Federal deficit. Even though the Fund's monies were earmarked specifically for land and water acquisitions for recreation, through the Reagan Administration years the funds were diverted

funding level of \$900 million yearly; however, appropriations for its intended purposes were very small and the Fund continued to grow only on paper, accumulating \$8.4 billion by fiscal year 1993. In fiscal year 1993 the Bush Administration labeled these monies as "unavailable collections," yet the LWCF continues to grow on paper with a present balance of \$11,120,803,303! However, the money is just ink on a piece of paper! The difference between the LWCF's mandatory funding requirements and the appropriations per fiscal year is the amount that has actually been diverted to the Treasury Department's General Fund for other budgetary uses, and an "I.O.U." per say represents the figure in the LWCF balance.

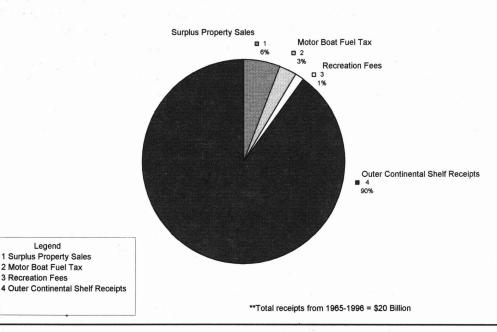
While the LWCF continues to be raided for purposes other than its intended use, critical pieces of land coming on the market are slipping away -- unprotected --

#### **LWCF Purpose Statement**

16 U.S.C. 4601-(4) Sec 1(b): "The purposes of this Act are to assist in preserving, developing, and assuring accessibility to all citizens of the United States of America of present and future generations and visitors who are lawfully present within the boundaries of the United States of America such quality and quantity of outdoor recreation resources as may be available and are necessary and desirable for individual active participation in such recreation, and to strengthen the health and vitality of the citizens of the United States by (1) providing funds for and authorizing federal assistance to the states in planning, acquisition, and development of needed land and water areas and facilities and (2) providing funds for the federal acquisition and development of certain land and other areas".

## Land and Water Conservation Fund continued





created by Cindy Berrier

because of a lack of appropriated funds.

Legend 1 Surplus Property Sales 2 Motor Boat Fuel Tax

Here in the Chattooga River watershed there are several tracts of land currently being offered for sale which contain unique, important and relatively undisturbed ecosystems. These tracts have been offered to the U.S. Forest Service from willing sellers, yet that agency has been unable to obtain the needed funds from the LWCF because of Congress's insufficient appropriations. A critical piece of private property currently available are the Fodderstack Mountains in Highlands, North Carolina. This tract contains unique wetland bog communities on the mountain's granite outcroppings, and rare dwarf oldgrowth pitch pine stands that are reported to be over 400 years old. The property lies within the boundary of the Nantahala National Forest, and at this time is under contract with an Atlanta developer. The US Forest Service (FS) has been approached for the possible acquisition of most of this tract; however, the agency's ability to obtain a contract for the property through what was once called "Contract Authority" has been rescinded by our present Congress. In addition to inadequate appropriations, now the USFS cannot even be a player in negotiations. A third party -- generally a land trust -- then will become involved, and in this case it is The Nature Conservancy. The Nature Conservancy intends to hold most of the Fodderstack Mountains tract in trust, until funds become available from either the US Forest Service or a State Natural Heritage agency. However, the longer length of time necessary to

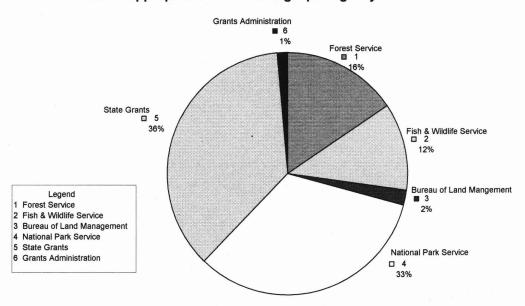
hold properties until appropriated funds are available oftentimes decreases the opportunities for acquisition, and increases the cost to the agencies involved -- a situation that could lead to non-participation of third parties.

Also in the North Carolina portion of the Chattooga watershed, there are other tracts of land equally important as the Fodderstacks that may be available for acquisition: the 191 acre Calanoe tract, and a 60 acre parcel near Brushy Mountain and adjacent to the Ellicott Rock Wilderness Area. In the Georgia portion of the watershed, available land includes two areas on the West Fork of the Chattooga River called the Centerpiece (230 acres) and Hedden (150 acres) tracts. In South Carolina, the Beatty and Bedenbaugh tracts are inholdings within the Sumter National Forest's land in the Chattooga River watershed. All of these tracts hold important additions to the public lands system in the watershed in terms of ecosystems protection, and effective implementation of the Land and Resource Management Plans of the national forests. The Forest Service has "options" on several of these tracts; however, the uncertainty of adequate congressional appropriations could result in the loss of these options and subsequently, the land being sold for commercial development.

In light of the continued dilemma of inadequate monies to acquire these properties, one has to wonder why our Congress has not been held accountable for re-directing the resources of the Land and Water Conservation Fund? All of us need to impress upon our Congressional Representatives that the time has come to start paying attention to the future, by preserving and protecting our

## Land and Water Conservation Fund

#### LWCF Appropriations\* Percentage per Agency



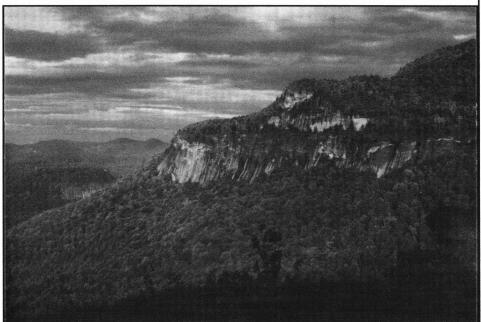
\*Total Appropriations from 1965-1996 = 8 Billion

created By Cindy Berrier

rich and unique natural resources. The President and Congress are responsible for re-directing these funds back to their intended purposes, which would restore the options and rights of present and future generations to enjoy and experience our natural heritage.

Currently in Congress,
Representative Tom Campbell (R-CA) is sponsoring a bill to put the
Land and Water Conservation Funds
"off budget" and to direct these funds
back to their intended purpose.
Representative Campbell is working
to obtain more co-sponsors for this
bill (a copy of his request appears on
page 14).

Now is the time to tell your Representatives to support this long over due legislation!



Devil's Courthouse in the Chattooga River watershed's Nantahala National Forest was purchased with LWCF monies



## Dear Colleague: A Plea for the Land and Water Conservation Fund

TOM CAMPBELL
15th District, CALIFORNIA
COMMITTEE ON BANKING
AND FINANCIAL SERVICES
SUBCOMMITTES:
FINANCIAL INSTITUTIONS
AND CONSUMER CREDIT
DOMESTIC AND INTERNATIONAL
MONISTRAY POLICY

COMMITTEE ON
INTERNATIONAL RELATIONS
SUBCOMMITTEES:
INTERNATIONAL ECONOMIC POLICY
AND TRADE
AFRICA



## Congress of the United States House of Representatives

June 12, 1996

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KARIN MIRANDA PIPKIN
CHIEF OF STAFE

## STOP LETTING CONGRESS RAID THE LAND AND WATER CONSERVATION FUND!

Dear Colleague,

In 1964, Congress created the Land and Water Conservation Fund with a simple idea: collect a tax on one of America's depleting natural resources - oil - and use the money to preserve another - public lands. Although the Fund takes in \$900 million a year from offshore oil drilling royalties, over the past decades Congress has raided this obscure pot of money and taken three of every four dollars intended for parks and spent the money on other things.

This year, Congress voted to spend only \$138 million from the Land and Water Conservation Fund on parks, the smallest amount since 1974. The rest of the \$900 million earmarked for parks went into the nation's general fund.

Over the past 32 years, the Fund has helped preserve 5 million acres -- among them are some of the most popular parks in the nation, from Redwood National Park in California to Cape Cod National Seashore, the Everglades, and Martin Luther King Jr.'s boyhood home site in Atlanta. The Fund helped complete the Appalachian Trail, bought out old mining claims within Alaska's Denali National Park, and has bought private tracts in some of America's most beautiful parks - Yosemite, Yellowstone, Olympic and the Grand Canyon.

This mis-appropriation is why I am sponsoring a bill that would take the Land and Water Conservation Fund off-budget. It is a crime that most of the money generated from this fund is diverted each year and spent on things other than the acquisition of public lands. Since the start of the Fund, it has taken in \$20 billion, yet it has paid out only \$9 billion! The \$11 billion surplus exists only on paper, and it is very doubtful it will ever be repaid.

If you would like to be a co-sponsor of this bill, please call Edward Siebert in my office (x5-2631).

Sincerely,

Tom Campbell Member of Congress

PRINTED ON RECYCLED PAPER

## The 104th Congress: Sending our Natural Resources a "Death Sentence" While Granting Industry "Immunity"

#### **Cindy Berrier**

As our 104th Congress and the current administration continue on their mission of deficit reduction and balancing the budget, the deficit continues to grow and the budget continues to rise. While funding to preserve and protect our natural resources dwindles, programs to reward and cater to industry continue to swell. One begins to see the powerful influence that certain corporate lobbyists have on our elected representatives.

This attack on the environment has been brewing for some time. Just as our country's environmental laws of the past twenty five years finally have begun to make industry responsible for their adverse effects on our environment, the 104th Congress has continued what the 103rd Congress started: Dismantling the laws which safeguard our public lands and waterbodies. What is even more distressing is that during the budgetary process, many of our representatives introduce and pass legislation in the form of riders, amendments and/or bills which provide compensation for or avoidance of having to comply with environmental laws. At the same time these riders, etc., reduce funding to key departments, agencies, and programs that would enhance and protect our natural resources for present and future generations. This is akin to rewarding the criminal who breaks the law, and punishing the enforcer

For example, consider the timber, agricultural, and minerals industries, which will be receiving huge Federal tax breaks from hidden entitlements that amount to over \$1.5 BILLION per year for the next 6 years. In some states, the timber industry will receive additional property tax cuts, because the industry has devalued their land by 90% due to the extraction of all the old growth timber.

Next, take the Animal Damage Control **Program**. This program is under the jurisdiction of the Department of Agriculture, which has been assigned the task of "eradication, suppression, and to bring under control...mountain lions, wolves, covotes, bobcats, prairie dogs, gophers, ground squirrels, jack rabbits, and other animals" deemed injurious to agriculture and other human activities. These animals are usually killed in anticipation of POTENTIAL livestock losses, not in response to actual losses. The program continues even in light of evidence which shows that killing this wildlife is ineffective in reducing livestock losses. However, instead of cutting this program in half as proposed by Representative Peter Defazio (D-OR), Congress increased funding for the Animal Damage Control Program by \$200,000. more than last year, giving this program a budget of \$26.8 MILLION.

Let's consider another noteworthy piece of "pork barrel" legislation, this one labeled as "disaster relief" funds -- which total \$110 million. This money will go directly to the municipalities of southeast Alaska with no regulatory strings attached, in order to compensate Alaskan communities suffering from forest-based (logging) job losses that total 1,470 jobs lost from 1990 to the present. It has been estimated that this program will cost taxpayers \$75,000 for each one of the 1,470 jobs lost. In addition, one of the timber industry's big employers in Alaska is the Ketchican Pulp Mill (a subsidiary of the Louisiana Pacific Company), and Alaskan Representative Frank Murkowski has presented a bill to the Senate to extend for another 15 years the existing contract between the Forest Service and the Ketchican Pulp Mill in Alaska's Tongass National Forest.

Yet another example of the abuse of our public lands are the nominal fees charged to large private corporations for leasing these lands. For instance, the U.S. Forest Service charges only a fraction of the "going rate" to utilities companies -- not even close to "fair market value" as required by law. The typical lease nets the Federal Treasury 10 cents on the dollar of the market rate on non-federal lands. Another law known as the Mining Act of 1872 allows mining companies to obtain a lease for mineral rights for just \$2.50 an acre, while these private corporations reap huge profits from the mineral extraction that occurs on these public lands. The Government Accounting Office (GAO) has made recommendations on several occasions to Congress and Federal agencies that these programs be modified or discontinued, along with other below-cost programs that are adding to the Federal deficit. The antiquated Mining Act of 1872 has been challenged several times, but Congress just doesn't seem to want to give up this subsidy to private corporations, even though our country continues to grapple with budgetary shortfalls.

While Congress "gives away the bank" to private industry, they are tightening the budgets for our land and wildlife management agencies, land acquisitions, and other wildlife programs such as the Endangered Species Act (ESA). The ESA and land acquisitions were cut 10% and 42% respectively. The Department of Interior has stated that these cuts in their budget will result in "deep and permanent damage" to National Park units, public lands, endangered species and science programs.

If just the few items mentioned above were eliminated, there would be more than enough funds for preservation of our precious natural resources.

## Score Card: Your Representatives at Work

Just as the 103rd Congress last year brought us the Timber Salvage Rider and the moratorium on Endangered Species listing, the 104th Congress has continued to gut the programs and agencies which conserve and protect our natural resources. Now, the majority in the 104th Congress is working to make deep cuts in funding and appropriations for our natural resource management agencies, because it is very difficult to follow through with these programs without adequate funding!

Please contact your Members of Congress and the President and advise them that you do not support antienvironmental legislation, or cutting funding for important conservation programs and agencies.

In the House		Key	votes		conservation score	In the Senate	Key votes		es	conservation score
Representatives	1.	2	3	4		Senators	1	2	3	
Nathan Deal (R-GA)					= 0%	Sam Nunn (D-GA) Paul Coverdell (R-GA)				= 0 % = 0 %
Charles Taylor (R-NC)					= 0 %	Lauch Faircloth (R-NC) Jesse Helms (R-NC)				= 0 % = 0 %
Lindsey Graham (R-SC)					= 0 %	Ernest Hollings (D-SC) Strom Thurmond (R-SC)	+	+	+	= 100 % = 0 %

#### **House Legislation**

- 1. Animal Damage Control Program An attempt to cut the funding to this fiscally wasteful and environmentally damaging program by 50% was defeated in the House by a vote of 139-279. Instead, the House voted to increase funding by \$200,000. See also p. 15 of this issue.
- 2. Kennedy Amendment An amendment offered by seven House members to eliminate the wasteful funding in fiscal year '97 for 550 miles of new Forest Service logging roads. The bill would have prompted budget savings of \$48 million. The amendment was approved by a vote of 211-210; however, Speaker Gingrich forced a re-vote and the measure was defeated by a 211-211 vote, which failed to gain the majority.
- 3. Furse/Porter Amendment A bill to repeal and/or modify the destructive 1995 Timber Salvage Rider was defeated by a close vote of 209-211. However, the margin of defeat was slim, perhaps indicating that our representatives are beginning to see the truth about the salvage rider.
- 4. Walker Amendment This bill would increase funding for the National Park Service by \$62 million, as well as for the Bureau of Indian Affairs by \$55 million. These increases would be offset by cutting \$137 million from the Department of Energy's Fossil Research and Development Program. However, the bill was defeated by a 196-224 vote.

#### **Senate Legislation**

- 1. Kerry Amendment This amendment to restore \$7.3 billion in funding for the Environmental Protection Agency, the National Park Service and the National Oceanic and Atmospheric Administration, as per the President's request for the 1997 Budget Resolution, was defeated by a vote of 55-45. This funding would have helped efforts to clean pollutants from our waterways, air and drinking water.
- 2. Forest Health Bill (Craig Bill S.391) This bill aims to permanently install the Timber Salvage Rider (which is scheduled to expire this December) in the name of "forest health". "Forest health" continues to be a source of great controversy, as Senator Craig attempts to disregard mounting scientific evidence that shows there is no "crisis". The only "forest health crisis" is the one prompted by excessive timber extraction, road building and fire supression, all of which are part of this bill.
- 3. Domenici Grazing Bill S.1459 This bill will promote fiscally irresponsible and environmentally damaging policies on selected public lands, making grazing the dominant use of those lands, and foreclosing public participation in rangeland decisions. This is another subsidy from our public resources for private profit.

"It is time to stop commonizing all of the costs and privatizing all of the profits"

-Garrett Hardin

## In the Name of "Salvage"

#### **Cindy Berrier**

The Timber Salvage Rider which was attached last year to the 1995 Rescissions (budget) Bill is one of the worst pieces of legislation that our country has endured in a long time. The Timber Salvage Rider has enabled the US Forest Service to give the timber industry license to enter old growth forests and critical habitat for fish and wildlife in order to harvest trees, and to build roads into roadless areas. This is allowed because the Rider has suspended all environmental laws, as well as citizen's rights to file appeals on these actions.

E-mail bulletins at the Chattooga River Watershed Coalition office report daily of the flagrant abuses that the Salvage Rider has prompted, which includes logging of ancient, 800-year-old trees in the Umpqua National Forest of the Pacific Northwest, increased timber sales volumes, and even cases of arson, which would allow salvage logging of the scorched trees. Consider the following examples, which clearly illustrate the results of the 1995 Timber Salvage Rider.

#### Example #1:

"Salvage Sale" triples volumes in Grant's Pass, Oregon, from a rather large beginning figure of 4.0 million board feet to an astronomical 11.7 million board feet of "salvage". This sale is in an area where large trees are growing on steep slopes. The logging of these trees will devastate sensitive water bodies which are the habitat for coho, chinook and steelhead salmon (of those, several species are to be listed as "endangered") -Logging Without Laws Bulletin #69. Western Ancient Forest Campaign (WAFC).

Normally these types of timber sales could be challenged and appealed by the public, environmental and other groups; however, due to the Timber Salvage Rider these sales are immune from environmental laws and citizen oversight and appeals. It seems that the US Forest Service is taking advantage of this immunity to increase the timber sales volumes to benefit the timber industry, or to placate those in Congress who have worked to increase the mandated level of timber extraction from our public forests.

#### Example #2:

South Manti Sale nominated to go on the nationwide list of the 200 worst salvage logging rider sales. The sale will log 71 million board feet of dead and LIVE Englemann spruce from the Wasatch Plateau in the Manti-La Sal National Forest in Utah. "This sale is the largest in Utah's history, is exempt from appeals, and will rob Utah families of their natural heritage while bloating the Federal deficit," says Nina Doughty, Conservation Chair of the Utah Chapter of the Sierra Club. -Logging Without Laws Bulletin #89, WAFC.

One would have to question the legitimacy of the this sale, and ask: Is most of that volume coming from the LIVE trees?

#### Examples #3 & #4:

Two of the more noteworthy cases of abuse involve <u>arson</u> fires in the Gila National Forest in New Mexico, and in the Warner Creek area of the Willamette National Forest in Oregon. It is interesting to note that in the case of the Gila National Forest, the persons under investigation for the arson are US Forest Service employees. Some of these fires were ignited the very day that the Timber Salvage Rider became effective, and the language of the rider allows for the easing or total suspension of all applicable environmental laws in the burned areas.

The question here is: Does the Salvage Rider encourage "arson for profit"?

#### Example #5:

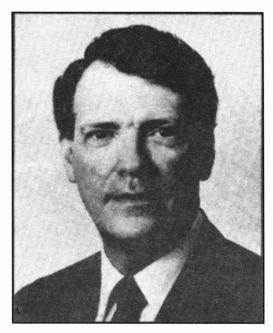
In the Chattooga River watershed, a stand of pine trees damaged by the Southern Pine Beetle recently were offered in a salvage sale. CRWC staff decided to visit the site on the very same day the U.S. Forest Service notified the public of the project, because the site appeared to be located inside an area of old growth trees (documented by a Forest Service study). We observed that 100-plus year old healthy "green trees" were being cut down along with the diseased trees. According to

## Salvage continued

the Chattooga River watershed's North Carolina Representative Mr. Charles Taylor (who first introduced the Timber Salvage Rider to the House last year), green trees were not to be harvested under the auspices of the salvage rider. Representative Taylor has even gone so far as to state to other Members of Congress on the House Floor the following:

"I will pay \$1,000 cash today if anyone can bring me evidence of any green trees that have been cut under the salvage bill".

Rep.Charles Taylor



The Honorable Charles Taylor Representative for North Carolina

Representative Taylor has subsequently dodged all requests to "ante-up" from those who have the evidence that healthy, green trees are being felled.

These are just a few examples of the daily influx of information that documents the abuses and outright destruction that this law has prompted on our national forests. At the same time, many Members of Congress deny that this is happening. While some of our representatives are trying desperately to repeal the Timber Salvage Rider, the majority in Congress have rejected all of these attempts, and the destruction goes on!



Healthy live tree felled during a salvage operation in the Sumter National Forest -- "Pay-Up Charlie!"



## The Blue Ridge Railroad

#### Rutherford "Ruddy" Ellis

Atlanta Chapter, National Railway Historical Society

Deep in the forests of Rabun County and across the backyards of it's residents lie a series of monuments. Monuments to perhaps 2000 men who struggled to build a first class iron highway over which to transport people and goods from the midwest to the seaport of Charleston, SC. For some four years they toiled, using only hand tools, black powder and carts drawn by animals. When money

ran out in 1859, they had completed some 60% of the work.

The monuments begin just west of the Chattooga River below Dick's Creek falls. There is no real evidence of the planned high viaduct across the river, but a quarry along side Sandy Ford Road close to the Chattooga River Trail appears to be where stonemasons were cutting the huge stone blocks for the bridge piers and the two visible box culverts,

one on each side of Sandy Ford Road near the eastern most ford

unnecessary curves.

of Dick's Creek. Anyone hiking the Bartram Trail or Chattooga River Trail should take time out to see the quality of the box culverts, often over 100 feet long; some silted in, but many still carrying the waters of the creeks after 135 years. Whereas most railroads bridged creeks and other low spots with rather flimsy wooden trestles, the Blue Ridge Railroad was being built to last forever. All creeks were channeled through stone culverts and the low spots filled in with massive embankments. Most of the rock and dirt for these fills came from the deep cuts dug through any intervening hills. Rather than go around the spur of a mountain, the

Leaving the west bank of the Chattooga River, the railroad grading followed the south bank of Dick's Creek until it reached a ridge of solid rock known as Wall Mountain. The men started hacking and blasting through this obstacle, creating a fourteen foot by twenty foot tunnel 2,421 feet long. Using no machinery, they amazingly completed 60% of the Dick's Creek Tunnel -- 1390 feet on the west end and 59 feet on the east end.

men had to dig straight through; the railroad wanted no

After passing through Wall Mountain, the grading reached the first crossing of Warwoman Creek. Here the stone masons started on two abutments to support a viaduct across the creek. One almost finished abutment is a mustsee for anyone exploring the Chattooga River watershed. There is nothing visible at the second, longer, crossing of Warwoman Creek and, anyway, it is surrounded by private property. After returning to the West side of Warwoman Creek, the road bed continued to climb up the south bank of the creek, paralleling the Bartram Trail, until another barrier, Saddle Gap, was reached. West of Saddle Gap are many unfinished cuts, fills and culverts, all on private property. The last culvert is on Stekoa Creek at the same

point that the Tallulah Falls Railroad built a trestle in 1905. The long, low embankment still visible across a pasture north of Mountain City was built by the Blue Ridge Railroad, then later used by the Tallulah Falls Railroad.

A trip to Warwoman Dell is another must. Drive to the end of the Dell and take time to read the information sign on the old roadbed. Then walk west past the big picnic pavilion, across the bridge and up the nature trail as far

as you can. At the end of the trail is the entrance to Warwoman Tunnel, now covered by dirt and not apparent to the un-informed. This tunnel was to have been 1945 feet long, but no one knows how much was completed. What is apparent is the huge amounts of spoil piled in the Dell from the tunnel and its approach. Walk back and take another look at the pavilion. It rests on a large pile of spoil. If you look closely, you can see other piles of spoil between there and

Under the roadbed in the Dell are three stone culverts. Walk east along the grade and look for them. Finding the third one requires you to follow the grade on a narrow trail past some unfinished grading to the steep end of an unfinished embankment. At the bottom of this fill is one of the 100 foot-plus culverts.

Everyone interested in the Chattooga River watershed should see these monuments and join in any efforts to preserve them. Some volunteers are clearing obstructions on the grade in Warwoman Dell, and hope to erect additional signs pointing out the items of interest. These same volunteers are researching the construction of the railroad and the several attempts to resume construction after the Civil War. These attempts continued until at least 1905.



Box culvert off of the Sandy Ford Road near the Chattooga River

the tunnel.

## **CHATTOOGA** the Dangerous River

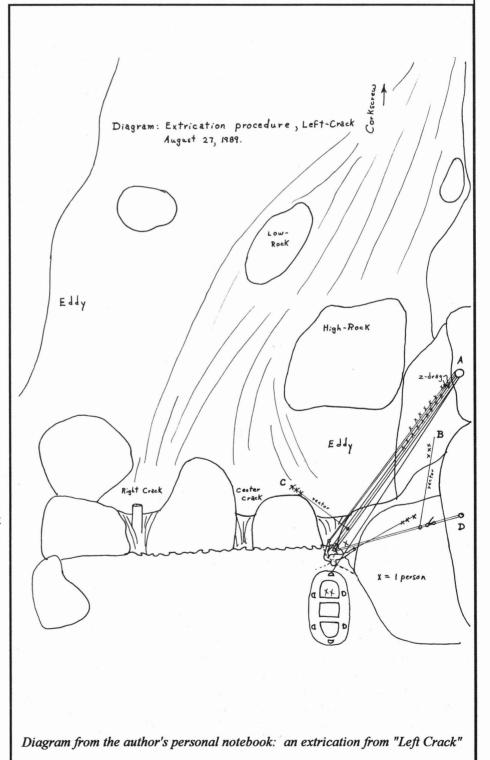
#### Buzz Williams

One of the most profound effects of the movie *Deliverance* was the ensuing, cavalier attitude of many of the un-informed who were compelled to try to imitate portions of the story's adventure, hence the "Deliverance Syndrome": Nineteen people died on the Chattooga River during the four-year period after the movie was released in

1972. By the same token, many who today come to experience the river's challenge and solitude lack the necessary knowledge and skills, and thus also are vulnerable to the dangers inherent in the river's wildness. The most recent loss of life occurred this vear on June 13th: A young kayaker made the tragic and fatal mistake of intentionally trying to swim to a point just above a very dangerous rapid called Left Crack. He was swept downstream into the rapid and pinned underwater. The Chattooga is a potentially dangerous river; come to understand this river, and recognize that caution must accompany the opportunity for discovery. Also, knowledge of her dangers is necessary for a safe Chattooga River experience.

The rapid named Left Crack in the area known as the Five Falls of the Chattooga's Section IV can be, under certain conditions, one of the most dangerous rapids that I have ever seen. Although the "keeper" hydraulic at the top of Woodall Shoals is probably the most infamous spot on the Chattooga, there are many other places with undercut rocks and strainers (downed trees in strong current), all of equal or greater danger than Woodall Shoals. Of all these hazardous spots, Left Crack is outstanding as possibly the single most dangerous spot on the Chattooga, depending on the river's water level. This is my conclusion after paddling rivers in New Zealand, Costa Rica, Canada and the United States. I also worked a guide on the Chattooga from 1976 to 1987, and for the last seven of those years as head guide for Nantahala Outdoor Center, where my responsibilities included training new river guides. In my mind, training to handle and/or avoid emergency situations was absolutely essential.

Training exercises at Left Crack occurred at low water levels, in order for guides to see the rock formations at the base of this 5-foot falls. Here the water flushes down through a very narrow crevice between a large boulder on the right, and the left hand side of the river which at that point is a smoooth, bare granite ledge. Left Crack is one of three ways (at most water levels) that water can descend through the line of boulders across the river at Crack in the



## Chattooga continued

Rock Rapid; the other two options are called Center or Middle Crack, and Right Crack. Commercial raft trips run Right Crack at certain water levels, squeezing past a vertical log jammed in the falls, then punching through the hydraulic at the bottom of the falls. At water levels above two feet (measured on the water gauge at the highway 76 bridge), commercial raft trips portage Crack in the Rock altogether: the backwashh at the bottom of Right Crack is too dangerous. However, the medium to lower water levels at Crack in the Rock have proved to be even more

dangerous, particularly between the levels of 1.4 - 1.9 feet. During guide training sessions at low water, we examined Left Crack's rock formations to gain an understanding of how and where a body could become hopelessly trapped there. We discovered that the rocks that form Left Crack narrow to a virtual death trap at the base of the powerful, cascading sluice through the rocks. We impressed upon new guides the importance of keeping people away from Left Crack, and also showed them around the area, in the event of an

Author demonstrates body entrapment in Left Crack at a very low water level (.6 at the Hwy. 76 gauge)

emergency situation. Should they have to extricate someone who became wedged in the crevice at the base of the falls, they would have the knowledge to do so safely.

The following is a true account of a tragic ending to a young man's quest for adventure on the Chattooga River. We offer this account as a means by which to educate and prepare those who come to experience the river. The Chattooga River is wild, spiritual, fun and challenging, and it also can be very dangerous place.

On August 27, 1989 at about 15:08 PM a drowning occurred in Left Crack at Crack in the Rock Rapid. By then, I had given up raft-guiding for a job with the US Forest Service as a River Ranger on the Chattooga. One of my responsibilities was to coordinate search and rescue operations on the Chattooga on behalf of the Forest Service. Earlier that day, another ranger informed me of an encounter that she had had earlier that morning. This ranger had warned a seemingly ill-prepared group of inexperienced rafters of the dangers of Section IV;

however, they had decided to continue downstream. These rafters were in compliance with basic requirements: they had two crafts, approved safety gear, and had ffilled out the permit which registers a float plan. The ranger spoke with the group again at another point downstream, but was unable to convince them to hook up with more experienced rafters. I assured her that she had gone above and beyond her responsibilities as a river ranger. Later, we learned that the victim was a member of this party.

At 16:15 PM I received a call from the Andrew Pickens District Ranger relaying a message from the County (Oconee, SC) of a missing person and possible drowning on Section IV. I was given a contact's name and the telephone number of the river guide who had

reported the incident. I radioed for a backup, and requested that the Forest Service Law Enforcement Officer (LEO) meet me at the nearest commercial outfitter's headquarters. I arrived there at 16:20 PM where we spoke with the guide. He told us that at about 15:00 PM he and his private float trip were just below Jawbone Rapid (the next rapid in the Five Falls, immediately after Crack in the Rock) when eight people came running down the river bank to ask if he or any of his group had seen a person swim through Jawbone. He had not.. They told him that one of their rafts had overturned in Corkscrew Rapid, just above Crack in the Rock. All swimmers had made it to shore -- except the missing person. This individual was last seen by one member of the group who had flushed through the rapid between the boulders which form Center Crack. He reported last seeing the missing person immediately above Left Crack. The group went back up to the point where the victim was last seen and searched, to no avail. After approximately fifteen minutes, the contact departed to get help, and the Oconee County Sheriff's office called the Forest Service. After gathering this information from the witness, I requested assistance from

## Chattooga continued

the managers of the outfitters. I asked for two crews of experienced guides, one to go to the scene by raft with ropes and rescue gear, and the other to go to the lake with a motor boat, below the terminus of the free-flowing river. They responded immediately.

At 16:30 PM the LEO and I asked the River manager to go to one of the other outfitters to get more help. Some of the guides who responded were ones I had trained. On the way to set up an incident command post at the lake, the LEO gave me a good radio and I began the two mile hike to Left Crack. On the way in I heard on the radio that the local rescue squads had been notified, and were on the way as well.

I arrived at Left Crack at about 17:20 PM. We

found a long stick and began probing at the base of the falls for the victim. Soon crews began to arrive. What we found with the stick felt like a body, and others thought they saw something "red" just under the water's

surface. The radio was working in the gorge (where communications

are often difficult), and I radioed that all efforts would be concentrated in the Left Crack area.

Soon one of the more experienced guides joined me in attempting to get a "tag line" under the body. He jumped to the boulder between Left and Center Crack, making absolutely sure to jump below the danger point. The tag line consisted of a bag filled with rocks and attached to two ropes. I threw him a line, and we worked from opposite sides of the sluice, stretching the tag line across and below the drop, attempting to get the rope under the victim. The water's current was too strong, and this attempt failed. One of the outfitters had just arrived with the raft, which we began to rig with ropes. Meanwhile, we made a second attempt with the tag line, which was successful in snagging the body. At 17:35 PM we secured the raft in a position directly below Left Crack with volunteers pulling the raft upstream with ropes, from a safe location on shore above the drop. Working from the front of the raft I reached down, shoulder deep, into the water. The victim's hand, swept by the heavy current to and fro, met my own hand and I grabbed it. This is something I

will never forget: the sadness, the coming together of years of training, the compassion, and above all the realization of the danger of this place.

Several ropes were attached around the victim's torso. Rope-and-pulley systems known as "Z-drags" were also used to pull the body up through the strong current, but the water's force was too great. Finally, the angles of the haul lines were adjusted through a "vector pull", to change the angle on the load lines. This effort freed the body, which was propelled out of the water with much force. The victim fell into the eddy above the falls. Everyone simultaneously turned their heads away. Several guides trained as Emergency Medical Technicians placed the victim in a body bag, and it was transported to the

> command post at the lake where the victim was pronounced dead at 19:45 PM.

The following day the District Ranger approached me with a grim task. The victim's conference room and wanted to the drowning. I told them that everyone had done

everything they could do for their son, and tried to comfort them as much as possible.

parents were in the know the details of

Then came the dreaded question: Is there anything we can do tto prevent this from happening again; maybe altering the rapid so it would be less dangerous? I explained to the best of my ability that the intent of the Wild and Scenic Rivers Act is to preserve places where risk would be accepted as a part of the wildness of the place. After a very uncomfortable pause, the father looked me in the eye and said "I think my son would have said: Leave it wild". I was very touched by these words, in light of the family's terrible loss.

Subsequently, proposals have been made to alter the river bed to eliminate the danger. Fortunately, wiser minds have prevailed. Where would this alteration end? The river must remain wild. Our real obligation is to preserve the river, the beauty and wildness and even the danger. Another part of this obligation lies with educating the public. The river is not an amusement park ride. The Chattooga can be a dangerous river, and this is an integral part of its wild beauty. Learn about the Chattooga River, respect it, and enjoy it.



River guides exploring the rock formations at Left Crack at very low water

### Butterflies continued from page 10

require vigorous growths of mature cane and, with the continued loss of true canebrakes, may be headed along the same road to extinction as Bachman's Warbler.

Some of the information needed to make

conservation recommendations is being obtained from the biological surveys conducted by the state Natural Heritage Programs. The Natural Heritage Program uses the information provided by these inventories to determine the conservation needs of both individual species and the entire natural communities to

which they belong. Currently, we consider four species of cane-feeding butterflies and moths as being of

conservation concern (three other species are on our watch list, requiring more information before we can judge their status). In several of the natural areas where we have conducted inventories, our attention was drawn to the needs of canebrake habitats mainly on the basis of the discovery of large populations of these lepidoptera (these habitats have been frequently overlooked by both botanists and vertebrate zoologists, since they include few species of any interest, Bachman's Warbler now having vanished).

Currently, the sole butterfly on our list of rare canebrake species is Reversed Roadside-Skipper, which we regard as moderately rare in North Carolina—we have identified approximately a dozen populations of this butterfly in both the Sandhills and the outer Coastal Plain. Although fairly widespread, most colonies appear to be highly localized, and nowhere does this butterfly appear to be as common as the occurrence of cane would seem to suggest. Unlike the other cane-feeding butterflies, which can be found in a variety of habitats containing cane, Reversed Roadside Skipper appears to occur nearly exclusively in high-quality habitats maintained by frequent fire.

Although we are unlikely ever to see the return of the vast canebrakes and savannas described by Bartram, the advances we are making in using controlled burns may at least allow us to restore some of these communities within protected nature preserves. Prescribed burning is now used regularly in the North Carolina Coastal Plain to maintain and restore the naturally open communities dominated by Longleaf Pine.

Our initial interest in inventorying the insects of

these habitats was directly related to this use of fire. The first insect surveys we conducted (in collaboration with Dale Schweitzer of The Nature Conservancy) were at the request of the North Carolina office of The Nature Conservancy, which wanted to know whether their prescribed burning programs were negatively affecting the invertebrates native to their preserves.

Several

extremely rare species were, in fact, discovered during the course of this work, and the Conservancy's burn

plans have subsequently been modified to provide better protection for this group of highly interesting species. As has been recommended for prairie preserves, our primary suggestions were first, to leave large blocks of habitat unburned during any one burn, thus ensuring sources of recolonization for the areas that are consumed, and second, to allow enough time between burns to allow colonization to be effective.

The same recommendations would, of course, apply where canebrakes are burned in order to restore them to a more natural state; few species are likely to survive a canebrake fire and recolonization is probably the only way insects can cope with living in these extremely flammable habitats. In contrast to the burning programs established for the Longleaf Pine ecosystems, however, the use of fire to restore canebrakes is still largely in the exploratory stage in North Carolina.

Try to imagine yourself back to Bartram's time, when the cane and savannas stretched on for miles and canebrake butterflies (and moths) were among the commonest of species in the landscape. In our modern, greatly diminished landscape, this is one of the closest approaches you can still make to Xanadu.



Laced winged Roadside Skipper

## Mountain Lion Book Review

#### **Buzz Williams**

Mountain Lion, An unnatural history of pumas and people by Chris Bolgiano, is an in-depth account of the history of America's most powerful and mysterious native feline. This multifaceted book covers scientific inquiry, as well as the effect that this fascinating yet often feared creature has had on our collective consciousness. Every chapter is unique yet woven into a complete work by Bolgiano's eloquent and poetic writing style. Two things make this book exceptional: extensive personal research and great story-telling. For anyone who has ever dreamed of a day when we as a people can learn to live together

with wildness, this book is "must" reading. In short, this book is not just about the cougar, it is about us.

The first chapter, "Native Americans and American Lions", explores both past and present Native American communities' physical and spiritual relationship to the mountain lion, mainly from the perspective of the American Southwest. The Pueblo people ranked the killing of a cougar equal with killing an enemy, and worthy of "...admit[ing] a Pueblo man into the Warrior Society". But even though Native Americans often considered the cougar as an enemy, the animal was revered and worshipped for its power and prowess. Native American cultures from the Great Lakes to the

Southeast worshipped the "Underwater Panther", an often malevolent creature which possessed the power of both good and evil. In the final analysis Native Americans believe now as their ancestors did: lions are worthy of the greatest respect and therefore should be "left alone".

Entitled the "European Impact Statement", chapter two traces the often "dichotomous qualities" of the Old World lion anthropomorphized into early settler's image of the American cougar. Bolgiano's discussion includes cave drawings which date from 25,000 years BC and Aristotle's pronouncement that the lion was both very cruel yet at times proud, courageous and even gentle. The lion has been associated with the devil and at the same time with nobility; thus, "the king of beasts". Consequently, this confusion and mystery translated into fear and subsequently the near extermination of the American cougar.

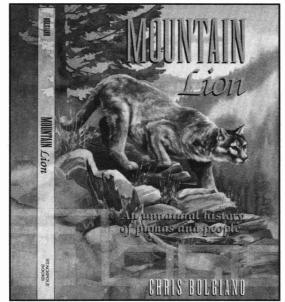
Much of the next chapter on "Lion Hunting in America" reflects this fear of the cougar. Hunting was

often the answer, and the history of lion hunting sheds some interesting light on this subject. For example, we learn that despite the cougar's ability to elude humans, they are surprisingly easy to tree with dogs. Bolgiano delves deeply into the hunting of cougars, including personally contracting a hunt -- with cameras.

In "Lion Science: A Paper" the author places scientific "fact" in it's proper perspective: "Cougars in the abstract summon disturbing ambivalent forces in the human mind. Scientific method counters these forces with its own definition of objective reality. But just like every other science, lion studies depend, ultimately, upon the

human eye, brain, and heart." Right on target!

"Texas Varmints and California Dreamers" is a wonderful juxtaposition of the way two states identify with the cougar. In Texas, there are "[N]o laws governing the killing of cougars" whereas in 1990, California passed a referendum banning lion trophy hunting. Fueling the debate is the reported increase in cougar attacks on humans. Bolgiano gives us the facts: Between 1890 and 1990 there were 10 people killed in the United States and Canada by unprovoked attacks. Putting this in perspective, there are two dozen people killed every year by dogs. Only in America!



Mountain Lion, published in 1995 by Stackpole Books

One of my favorite chapters is "The Florida Panther People". This chapter is packed with in-depth facts about the amazing case history of the effort to restore the Florida panther to the wild, from the brink of an "extinction vortex". Bolgiano does not shy away from telling the whole story. Here, we learn why the US Fish and Wildlife Service is known as the "sick man" of interagency negotiations.

Who has not heard a friend swear they have seen a panther in the wild? If you are like me, you have learned not to dispute this. The book's final chapter on "The Spiritual Challenge of the Eastern Panther" explains why. I won't spoil it.

I give this book my highest recommendation. Not since reading the work of Rachel Carson have I been as affected by a book. Begin reading, and I guarantee you will not want to put it down. Better yet, Mountain Lion will give you hope, and spur you to action for restoration of native ecosystems.

## Chattooga Watershed Action Update

#### Forest Plan Revisions Are Underway

The Land and Resource Management Plans (LRMP) for South Carolina's Sumter National Forest and Georgia's Chattahoochee National Forest are being revised. Both of the Forest Plans are in excess of ten years old, and designate *intensive timber management* as the primary use of our public lands. During the revision process, citizens can provide input on how they want their national forests managed. This is your chance to help change the Forest Plan's bias -- from timber extraction -- to recreation and conservation of the natural resources on our public land. These resources include clean air and water, and intact ecosystems which support our native plants and animals.

You Can Get Involved! Join the Chattooga River Watershed Coalition — we can provide information and support. Also, get on the Forest Service's mailing list, and let them hear your voice. Here are the addresses:

USDA Forest Service Sumter National Forest 4931 Broad River Road Colummbia, SC 29210 USDA Forest Service Chattahoochee NF 508 Oak Street Gainesville, GA 30501

#### **Chattooga Conservation Plan**

We intend to promote the Chattooga Conservation Plan as a "citizen's alternative" for the new Forest Plans. This conservation plan was developed during the past year, utilizing contemporary scientific and economic data to outline a scientifically defensible and economically viable plan to conserve and restore our unique natural resources inn the Chattooga River watershed. The Chattooga Conservation Plan was summarized in the winter '95-'96 Chattooga Quarterly, and the entire Chattooga Conservation Plan text is now being published as well as an attractive color poster which presents the plan's land zoning suggestions. Please contact the CRWC if you would like a copy of the Chattooga Conservation Plan text and poster.

#### **Brushy Mountain Right-of-Way Request**

A private corporation has applied for two lengthy easements across public land to access an isolated 140 acre inholding adjacent to the Ellicott Rock Wilderness Area in the North Carolina portion of the Chattooga River watershed. Responding to concerned citizens, the CRWC has become involved in this issue, because of the proposed easements' potential to result in significant adverse environmental impacts. While the CRWC understands that inholder owners have a statutory right of access under certain conditions, we are working with local citizens and the Southern Environmental Law Center to ensure that all reasonable alternatives are explored, all significant environmental impacts are disclosed, and all legal requirements are met before the issuance of any easement across public lands. Consequently, the Forest Service withdrew their original decision to "fast track" approval of

the proposed easement with a non-appealable Decision Memo, and now will be analyzing the easement request by way of a detailed Environmental Assessment, which is also subject to citizen input and appeal. If you would like a copy of our "scoping" comments, please contact the CRWC office.

#### **Fodderstack Mountains**

Efforts to preserve the environmentally sensitive Fodderstack Mountains, which lie in an undeveloped 340 acre tract in the Chattooga River's North Carolina headwaters, met with partial success. The Atlanta realtor currently holding the option on the property has agreed to limit development to 116 acres, and to work with The Nature Conservancy to hold the remaining 220 acres in trust. This would allow for the remaining 220 acres to be added to our public lands through acquisition by the Forest Service. However, Federal funds available for public land acquisitions are being re-routed by our present Congress: please refer to articles in this issue on pages 11-14. Please ask your Member of Congress to support Congressman Campbell's (R-CA) Bill, called HR 3619, which would restore the Land & Water Conservation Fund to its intended use, by taking it "off-budget".

#### "Enchanted Mountain" Theme Park Proposal

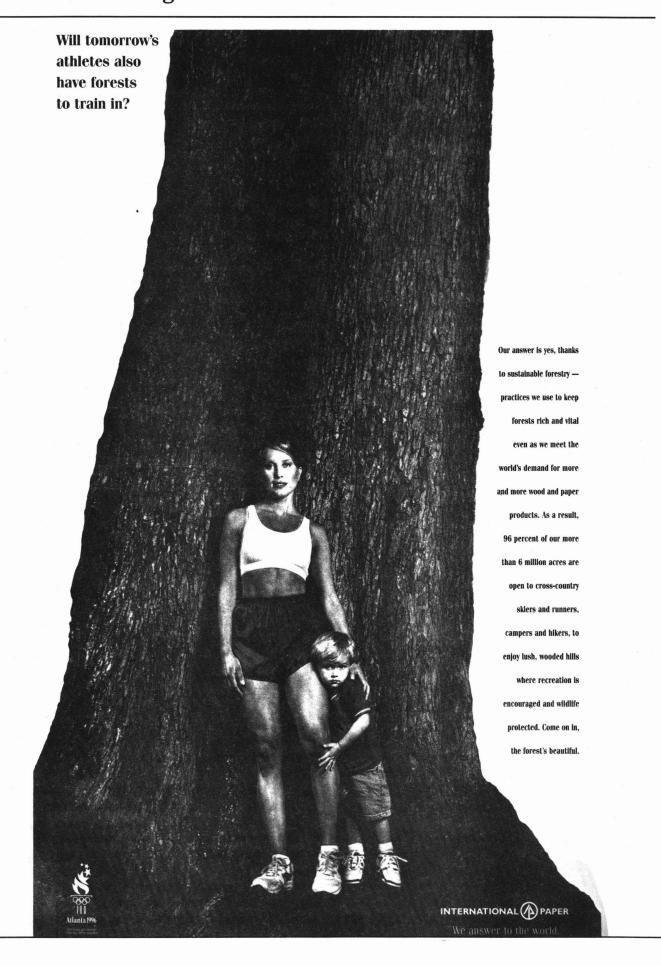
A private corporation has applied to the Rabun County (Georgia) Planning Commission and Zoning Board to amend the existing zoning for a 50 acre tract that lies at the headwaters of Stekoa Creek, which is a major and "impaired" (polluted) tributary of the Wild and Scenic Chattooga River. Re-zoning this land for commercial development would allow the corporation to proceed with its plans to build a "theme park" on this tract, which would include water slides, putt-putt golf, go-go carts,, electronic arcades, etc., and would require sewage treatment and/or other septic disposal arrangements. At the request of concerned citizens, the CRWC reviewed the proposed theme park's initial plans. We have serious doubts that Stekoa Creek, in its present status of consistently violating State and Federal Clean Water statutes, can handle any more sediment and sewage loads. In addition, this tract is located adjacent to the local high school and private residences. A public meeting is scheduled at the Rabun County Court House on August 26 at 6 PM.

#### Timber Sales, Road Construction & Salvage

Though the Coalition's efforts have helped to conserve some areas of our national forest, intensive timber management and extraction activities continue in many areas of our public lands in the watershed. Please contact the CRWC if you would like to help monitor the environmental impacts of these activities.



## Green-Wash = Hog-Wash



## Chattooga River Watershed Coalition

Staff:

organization incorporated in Georgia.

Newsletter:

**Executive Director Buzz Williams** 

**Board of Directors:** 

We are a 501C3 non-profit

Editors, Buzz Williams & Nicole Hayler

Development Director Nicole Hayler

Friends of the Mountains GA Forest Watch

Production and Layout, CRWC Staff

Administration Cindy Berrier

Western North Carolina Alliance SC Forest Watch Sierra Club The Wilderness Society Association of Forest Service Employees for Environmental

**Ethics** 

Printing, J&M Printing

## **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 The Beamery Columbia Audubon Society The Georgia Conservancy Southern Environmental Law Center Three Forks Country Store

Georgia Environmental Organization, Inc. Timber Framers Guild of North America Carolina Bird Club Government Accountability Project Turpin's Custom Sawmill Dagger, Inc. Lunatic Apparel

## Membership

Join the Coalition and help protect the Chattooga Watershed!

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

NameAddressPhone number		Send to: Chattooga River Watershed Coalition P.O. Box 2006 Clayton, Georgia 30525					
Individual: \$7.00	Group: \$14.00	Sustaining: \$45.00	Donation:				
Renewal		Thank You!					

## Chattooga River Watershed Coalition

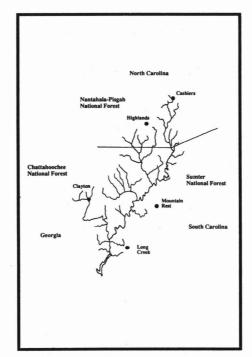
P0 Box 2006 Clayton GA 30525 (706) 782-6097 (706) 782-6098 fax crwc@igc.apc.org Email

#### Our 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."

#### Our Work Made Possible By:

The Grassroots and Volunteers
Turner Foundation, Inc.
The Moriah Fund
Norcross Wildlife Foundation
Lyndhurst Foundation
Patagonia, Inc.
Town Creek Foundation
Merck Family Fund



#### **Our 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

