



# The Highlands Voice

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PERMIT NO. 2831  
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Published by the West Virginia Highlands Conservancy

Vol. 28, No. 1- January 1995

## Much Ado About the Middle Fork

*Mining Matters — Reports from the Mining Committee - by Cindy Rank*

In August of '92, WV Governor Caperton launched an initiative to treat and restore West Virginia rivers and streams impacted by acid mine drainage (AMD). The program was to "address those streams in the state where money is not available for reclamation work."

A Steering Committee was named with the usual suspects involved, i.e. representatives from state and federal agencies, the coal industry, and environmental organizations (including WVHC, Sierra-Club, Mountain Stream Monitors, Trout Unlimited and the WV Rivers Coalition). The Stream Restoration Committee (SRC) was to provide "public input in determining which watersheds should receive priority funding."

Water quality data is being collected from existing sources and ongoing monitoring is being done on several watersheds throughout the West Virginia, many of them in the more acid prone north and north central area of the state.

As the first major focus of the SRC, the Blackwater River now sports a rotary lime drum station at the old dam in Tucker County near Davis just upstream from Beaver Creek. The six drum facility was dedicated in late September 1994 and is similar to other stations on the Cranberry and Otter Creek that were installed to mitigate the effects of acid rain in areas where AMD is not a factor.

THE MIDDLE FORK  
Now that the lime drum

station is completed and a number of reclamation efforts are underway in the Blackwater drainage, the Committee has focused its attention on the Middle Fork River in Randolph, Upshur and Barbour counties.

The AMD laden Middle Fork has, over the past ten years, received multi agency attention, and was the subject of a citizen complaint by WVHC in 1991. Various alternative approaches to "fixing" the AMD problems in the Middle Fork have been hot items of discussion at several meetings of the SRC since day one back in August of '92.

Despite arguments in favor of on-site/out-of-stream abatement measures at those meetings, off-site/in-stream abatement measures appear to be the order of the day for the Middle Fork as far as the powers that be are concerned. An Alternatives document dated 11/14/94 was given to the SRC to review at its December meeting. The document suggests in-stream Limestone drums and swedish lime slurry dosers in 6 of the 7 proposed alternatives and the application of limestone fines at twenty sites throughout the Middle Fork as the seventh.

Although WVHC's position has been made clear during previous discussions, given the flavor and direction of the proposed alternatives, a written memo was submitted to the Committee at the December meeting stating some of the assumptions, beliefs and concerns that underlie WVHC reservations about the proposed abatement alternatives.

WVHC and other conservation groups have engaged in numerous administrative and legal procedures over the past several years to address the ravages of AMD, to identify companies who might be responsible for treating abandoned sources of AMD and to resolve the statutory and regulatory deficiencies that allow the problem to persist at new, current, forfeited and abandoned mine sites.

As part of these efforts, WVHC filed a citizen complaint RE: the Kittle Flats mine site in the Middle Fork in December 1991. That complaint resulted in a cessation order by OSM which was upheld by an Administrative Law Judge (ALJ) decision in 12/93, and which maintains the former coal operator at



Kittle Flats is responsible for abating AMD at the site (clearly the major source of AMD in the Middle Fork River watershed).

In light of these efforts, especially given the current status of the WVHC complaint, it is distressing to note that the 11/14/94 Middle Fork abatement alternatives document lacked any consideration of these actions. WVHC can not support the alternatives offered in the document.

In voicing WVHC objections, the memo assured the committee that our primary objective has been, and remains - first and foremost - the restoration of the Middle Fork River. However, any cleanup must include the utilization of appropriate technologies, applied in appropriate locations and funded with appropriate sources of moneys. The current proposals fall short of these requirements.

CASSITY FORK - Historical data from WV Water Resources and WV Fish and Wildlife agencies, the Sturm Report of 1990, and the April 1992 report on a *Federal and State Cooperative Effort to Reduce Acid Mine Drainage in the Middle Fork River Watershed* indicate that the major AMD loading in the Middle

Fork River (nearly 95% according to the April 1992 report) comes from two distinct sources (i.e. the Kittle and Whitman Flats mine sites) that drain into Cassity Fork, and that Kittle Flats is the most significant of the two.

It is, therefore, reasonable to expect that any attempts to abate AMD in the Middle Fork, 1) must focus on Cassity Fork and Kittle Flats in particular, 2) must take into account the legal responsibilities of persons known to be liable for cleaning up acid discharges before those waters enter Cassity Fork, and 3) must take into consideration the water quality of the Middle Fork as it is affected by the required on-site

cleanup at Kittle Flats. **KITTLE FLATS** - Unless and until the responsibilities and resources of LaRosa Fuels (the responsible operator) and/or Westvaco (the current landowner) are utilized and discharge limits met at Kittle Flats, other efforts to mitigate AMD in the Middle Fork - especially any off-site/in-stream/active treatment proposals for Cassity and the main stem - are premature and without foundation.

-In December 1993, under the authority of the Federal Surface Mine Act (SMCRA), Administrative Law Judge David Torbett ruled that the 1984 WV release of LaRosa Fuels from liability at Kittle Flats was improper and that OSM (see page 7)

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Mark Your Calendars -  
WVHC Spring Review at  
Kumbrabow State Forest -  
May 12-14.

Call Richard diPretoro 296-8963 to reserve limited  
cabin space.

Winter Board Meeting January 14 in  
Charleston. All Are Welcome



*---from the heart of the mountains---*

by John McFerrin

## Apple Grove

The Conservancy has never taken a formal position on the pulp mill proposed for Apple Grove in Mason County. Although we have never taken a formal stand on the pulp mill itself, there are certain basic principles that apply to the pulp mill or any other proposed project.

The first of these is respect for the original intent of the Federal Clean Water Act.

Before the Clean Water Act, our rivers and streams were the dumping ground for our mines, factories, and other industries. The Clean Water Act was designed to eliminate that. Passed during the Nixon administration, it set as its goal the elimination of polluting discharges into the waters of the United States.

It did not set as a goal the reduction of pollution of our waters or learning to live with that pollution. The goal was not to reach the point where there was just a little pollution flowing into our waters. It set as a goal the elimination of those polluting discharges.

The Act does, of course, contain procedures that would allow companies to fall short of this goal if absolutely necessary. The idea was, however, that we were always to be working toward that goal. As the technology for controlling pollution improved, we could move closer and closer to that goal.

So how does this apply to the proposed pulp mill?

It applies to the proposed pulp mill because the pulp mill represents a halt in our decades long march toward eliminating polluting discharges into our waterways.

The march has always been a technological one. As new methods of eliminating pollution were invented, companies installed them in their new plants. While older plants were often allowed to live out their lives using older technology, new plants had to have the most effective technology.

The pulp mill proposed for Mason County reverses this trend. That mill proposes a new plant with old technology. The old technology uses a chlorine based product to bleach the paper. This process produces dioxin as a byproduct.

The newer technology uses a different process, one that does not produce dioxin. Given this choice, the pulp mill company has chosen the older technology. In making this choice, it has chosen to abruptly halt the long march toward the Clean Water Act's goal of elimination of the discharge of pollution into the nation's waters.

The company does not, of course, choose the older technology just for the pure joy of dumping dioxin into the river. It simply says that the newer technology is not proven. This is simply not true. The newer technology is widely used in Europe and the United States. It is not figment of the fevered imagination of some overly enthusiastic research chemist. It is a real process used by real companies to make real paper in the real world. If the company chooses not to use a dioxin free process, it is not because no process exists. The process exists, the company has chosen not to use it.

The company's stated reasons for not using a dioxin free process raise a second principle which the Conservancy has always believed should be a part of any debate, honest discussion. The company's record and the record of the State of West Virginia on this score have been less than stellar.

One of the first rounds in the long debate over the pulp mill was the proposal to relax the state's water pollution regulations so as to accommodate the pulp mill. During that debate, both the company and the State said, implied, or both that such a relaxation was necessary for the project to go ahead. *(see page 7)*

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*The Highlands Voice* is published by the West Virginia Highlands Conservancy, P.O. Box 306, Charleston, WV 25321. Articles, letters to the editor and other information for publication should be sent to the editor via fax, modem, disk or even hard copy via the US mail.

*The Highlands Voice* is always printed on Recycled Paper. Our printer uses 100% post consumer recycled paper when available.



## North Fork Dam Subject of Lawsuit

The West Virginia Rivers Coalition (WVRC) has joined a civil action lawsuit to forestall Soil Conservation Service (SCS) construction of a \$40 million dollar dam on the free-flowing North Fork of the Hughes River in Ritchie County.

WVRC, with the Hughes River Conservancy, the West Virginia Chapter of Sierra Club and several local landowners, has taken legal action against the federal agency because of its seriously flawed environment impact statement for the project.

"The SCS has failed to adequately justify the need for spending \$40 million of taxpayers' money to dam a free-flowing river and flood acres of valuable farmland," said WVRC Executive Director Roger Harrison. "Alternative measures have just not been explored."

The SCS is the lead agency in the proposed construction of a 79-foot high, \$4 million dam to be built on the North Fork of the Hughes River (a tributary of the Little Kanawha River) upstream of North Bend State Park. The 300-acre "lake" will be about 100 yards wide and 8 miles long.

The purposes of the project, as described in the SCS environmental impact statement include recreation (56.4%), water supply (33.4%) and flood protection (11.2%). However, according to state and federal officials, the merits of the project are highly suspect.

Dam proponents justify the need for the dam, in large part, to increase recreation in the region. One of the main recreational drawing cards touted is swimming. However officials with the State Department of Environmental Protection have said they will not approve the lake for that use because of poor water quality -- the result of contamination from untreated sewage. Project sponsors plan to solve this problem by more spending -- to construct a swimming pool adjacent to the lake.

Several federal agencies have expressed reservations about the construction of the dam. In late August, Peter Kostmayer, Regional Administrator for the U.S. Environmental Protection Agency, met with local residents and state environmental leaders in Ritchie County to discuss EPA's concerns.

"We feel the SCS environmental impact statement has serious technical flaws," said Kostmayer.

EPA has given the dam an extremely low rating for all aspects of the project including recreational, economic, and environmental impacts, Kostmayer noted.

The EPA regional director also suggested that several violations of the National Environmental Policy Act may have occurred, including failure to conduct a meeting after issuance of a draft environmental impact statement and acquiring land prior to a record of decision on the proposed dam.

Officials from the U.S. Fish and Wildlife Service and the National Park Service were highly critical of the draft EIS document in written correspondence to the Soil Conservation Service.

The agencies expressed concern about removal of portions of the North Fork of the Hughes River from the Nationwide Rivers Inventory and the river's status as a potential candidate for inclusion in the National Wild and Scenic Rivers System. Federal agencies are supposed to avoid or mitigate adverse effects on rivers identified in the Inventory.

Construction of the dam was scheduled to begin in early October. *Adapted from the WV Rivers Coalition Newsletter.* ♦

## Appalachian States Work on Air Quality

from the Charleston Gazette, December 7, 1994

ATLANTA (AP) - West Virginia and seven other states are working together to improve air quality and reduce pollution in the southern Appalachian mountains. "We need to figure out why those problems exist, what the sources are and what states are contributing to those problems," Georgia's environmental chief, Harold Reheis, said this week.

The Southern Appalachia Mountain Initiative began a two day meeting Monday. The group is looking at the effects of air quality on visibility, water, soil, plants and animals in the southern Appalachians.

The group is made up state and federal agencies, business, industry and environmental organizations from West Virginia, Alabama, Georgia, Kentucky, North Carolina, South Carolina, Tennessee and Virginia.

"There are all different viewpoints, so nothing will be overlooked," said Reheis, who heads the Georgia Environmental Protection Division.

Within three years, the group plans to recommend to the states some strategies for protecting the natural resources of the area. It will prepare an interim report in November 1995 and a final report in May 1997, said Steven Levitas, vice

chairman of the group and a deputy secretary of the North Carolina department of Environment, Health and Natural Resources.

The eight-state group was established in 1992 with \$400,000 from Congress. It receives an annual \$225,000 grant from the U.S. Environmental Protection Agency and also receives contributions from the eight states, said Levitas.

Levitas said \$2 million to \$5-million will be needed to implement the three year plan and "do it right."

"That's a token amount when you think of what's at stake," he said. "There could be billions of dollars of impact on the region."

Reheis said Georgia hopes to learn how much control will be necessary to protect fragile resources in its mountains. I don't know that Georgia is contributing significantly to the problems that are being found on trees and vegetation in the higher elevations of the southern Appalachians," he said. "That's one of the things the study is going to do."

"It might simply be that vegetation and streams in higher elevations of the mountains are more sensitive than what we see in lower elevations. They may need extra protection. If they do, then we've got to be able to show that from a scientific standpoint. That's what this program is trying to do."

*WVHC Board Member, Don Garvin, is a member of this Initiative.*

## Here's your final chance to Just Say "No" to Corridor H!

Clip and mail the form below to let the WV Division of Highways know just how you feel about Corridor H, an unnecessary, billion dollar plus, 4-5 land truck route, proposed for routing through the scenic mountains and communities in the Potomac Highlands of WV, between Elkins, WV and Strasburg, VA. Whether or not you've told them before, NOW IS THE TIME THAT REALLY COUNTS! Make your message clear and simple. Tell them only how you feel about Corridor H.

Don't introduce any other issues or your comment may be misinterpreted.

"NO BUILD". Not here, and not there. Not now and not ever!

Must be received by Jan. 23, 1995 for your comment to be part of the final decision

Clip out or Copy and mail today

Mail to: Mr. Randolph Epperly, Jr.  
Director, Roadway Design Division  
WVDOT - Div. of Highways  
Capitol Complex, Bldg. 5, Rm. A416  
Charleston, WV 25305

Here's why I urge the "no Build" alternative for Corridor H:

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Name Address City State Zip



## Reinvention of the Soil Conservation Service to the Natural Resources Conservation Service

The new Natural Resources Conservation Service has been holding public forums to get ideas for reforming the Service (These are the people who are trying to bring you the North Fork Dam on the Hughes River) This is your chance to provide ideas on assistance desired from NRCS in the years ahead. People interested in natural resource conservation are invited to fill out a survey form for comments. The survey form is available from any NRCS (formerly Soil Conservation Service) office. ♦

## 1995 PAW Central Activist Conference

March 24-26  
Clifton, Virginia

Calling all Forest Activists in the Central Appalachian Region:

Preserve Appalachian Wilderness will be hosting a regional forest activist conference on March 24 - 26 at the Hemlock Outdoor Recreation Center in Clifton, VA to discuss and organize against threats to the Central Appalachian bioregion. Activists in the area are currently fighting major highway construction, powerlines, ski resort expansion, chip mills, Forest Service abuses on the Monongahela, Jefferson, and George Washington, Allegheny and Wayne National Forests,

state forest cutting increases, and mining, gas and oil development. A better coordination of efforts is needed to fight the barrage of threats facing these mountains and an all-embracing proactive, protection strategy must be developed and put into action. This conference will focus on organizing a stronger network in the region and the development of legal, legislative and public strategies.

Any group or individual interested in attending, preserving or co-sponsoring should contact Karen Tuerk @ Preserve Appalachian Wilderness: 917 Church Street, Indiana, PA 15701. 412-349-5936. ♦



# Window On Bird Politics



*It's been almost year now since I first asked George Constantz about reprinting some chapters from my favorite appalachian-ecology-evolution book, *Hollows, Peepers, and Highlanders*. He recommended using this chapter - *Window on Bird Politics* - partly because it was apropos for the winter season, maybe because the state legislature was going into session.*

*Well George knows about politics, having run for state senate, and he knows about birds, being the author of this book. If you want it all, you can order it for \$14 from Pine Run Ecological Lab, Rt. 1, Box 469, High View, WV 26808.*

bill r

Busy birds come and go, helter-skelter, about the pile of sunflower seeds. One comes to expect this when birds have been conditioned by easy calories. When I watch casually, this is all I see. But when I really examine the scene, I discover that my bird feeder serves as a window into a subtle world of dictators, parasites, and liars. Read this chapter on a cold winter day, feet propped up and hot chocolate within reach, overlooking a stocked bird feeder. You may find that your backyard birds reveal some intriguing politics.

In the winter, my feeder attracts single-species flocks of northern junco, American goldfinches, evening grosbeaks, and purple finches, and mixed-species flocks featuring black-capped chickadees, tufted titmice, white-breasted nuthatches, and occasionally downy woodpeckers and brown creepers. A mixed-species flock includes individuals of two or more species. Although pairs of cardinals and of rufous-sided Towhees occasionally feed here, flocks bring most of my customers. The two reasons birds flock-for greater protection against predators and higher feeding efficiency-provide insight into the scene at our feeders. Let us take a look at each.

Many of us have seen on television a film in which a lioness fixates on and then attacks an isolated zebra, the one that strayed from the herd or behaved differently. The pruning of marginal individuals favors the evolution of centripetal instincts, the tendency to move inward. For this reason, flocks of small birds tighten in the presence of a raptor. This point was driven home not long ago when I saw a flock of starlings flying in a highly synchronized formation. Based on their tightness, I thought a predator might be nearby. Sure enough, a few seconds later, a sharp-shinned hawk glided into view. Under my breath, I hoped a stray would trigger a stoop, but on that day the squadron was disciplined.

In many bird species, when one member of a flock sees an aerial predator, it gives a special alarm. Chickadees and titmice respond to the alarm by diving into bushes and remaining quiet for several minutes, downy woodpeckers simply freeze on the tree trunk. Regardless of the type of response,

alarm calls present us with a difficult evolutionary problem. Some flocks include both genetically related and unrelated members of the same species. In such flocks, alarm calls ring out not only to kin, which would make them explainable by kin selection, but also to unrelated members of the same species. Thus, the warning caller could increase the fitness of unrelated flock mates. This would represent genetic altruism, reproductive selflessness, a phenomenon unexplainable by natural selection. How do we account for alarm calls?

Perhaps the individual that sees the hawk and gives the warning is manipulating its flock mates into heading for cover even though the responders do not know the predator's position. Then the caller heads for the far side of the flock. Thus, straightforward natural selection may have favored a gene for calling because the caller increases its own chance of survival the detriment of its flock mates.

On the other hand, we know that some flocks reflect the action of kin selection. During winter, black-capped chickadees and tufted titmice, the nucleus of natural mixed-species flocks, forage with their mates and offspring. The high pitched alarm calls of chickadees and titmice are ventriloquistic, making their source hard to locate. These observations suggest that chickadees and titmice may experience the benefits of helping genetic kin.

Flocking also improves the odds of finding food. Look at the northern junco, which normally feeds on the ground below a feeder. Snowbirds, as they are also called, feed in large winter flocks. They peck and scratch, and deplete a spot before searching elsewhere. Chase-offs by other juncos are common: a bird might deplete its own feeding spot, observe a neighbor feeding, make a quick approach to chase it off, and then feed at the conquered spot. If the site proves empty, the bird will make another approach-attack. Dominant displacers tend to be large, dark males.

The individual members of a junco flock conform to a stable peck order. Within this society, subordinate individuals are at a disadvantage. They carry less body fat and thereby have less fuel for winter than dominant birds, they possess larger adrenal glands (an indication of a high level of stress), they feed at the periphery of the flock where they are more vulnerable to predators, and they burn more energy avoiding other birds. The dominant birds' great fat stores and favorable surface-to-volume ratio give them an edge in surviving the winter.

Apparently, juncos find it more profitable to chase off subordinates and conquer feeding spots than to search for food independently. Most of the encounters below a feeder are of this parasitic type. Dominant juncos serve as parasitic shepherds and subordinates as food-finding sheep. From the low-ranking bird's point of view, the food-finding ability of the flock reduc-

es the probability of outright starvation-seeds are clustered, and groups seem to find them more efficiently than individual birds do. Regardless of a bird's standing, then, the advantages of flocking seem to outweigh the disadvantages.

Flock size also improves an individual's feeding efficiency. As flock size of the yellow-eyed junco, a western relative of our northern junco, increases, individuals spend less time scanning for predators, which in turn allows more food pecks. Even though individuals spend more time in aggressive interactions as flock size grows, the mean rate of food pecks still increases with flock size.

The behavior of the white-throated sparrow, which breeds in Canada and overwinters in Appalachia, reflects this trade-off between feeding efficiency and predation risk. Like juncos, white-throated sparrows form loose winter foraging flocks with dominance hierarchies. In one experiment, when birds of known rank were provided food at varying distances from dense shrubbery, individuals preferred to feed near the cover rather than in open areas. They would nearly exhaust the food in secure areas before moving farther into the open. Dominant birds fed nearer to shelter than subordinates since their high rank allowed them access to preferred sites. Subordinate white-throated sparrows enjoyed high foraging efficiency but were relegated to more exposed sites where they faced high odds of falling prey.

The make-up of winter foraging flocks varies among species. The black-capped chickadee and tufted titmouse make an interesting contrast. During spring and summer, black-capped chickadees live as monogamous pairs and defend breeding territories that provide a rotten stump for a nest and enough caterpillars and other foods for both the adults and chicks. In September, the molting adults and their fledged young gather into flocks and repel other chickadee flocks from their communal territory, an area two to three times larger than the breeding territory. In winter, each individual chickadee takes on one of two possible behavioral modes. It either becomes a flock regular and spends its entire winter in a single flock, or it behaves as a floater that moves among three or four flocks. About 80 percent of the members of a flock are regulars, with an average of ten regulars per flock. Future mates pair when the flock forms in the fall, so it is a safe bet that a flock with ten regulars contains five mat-

ed pairs. Floaters, though reproductively mature, are prevented from breeding by dominant individuals.

Within a chickadee flock of regulars and floaters there exists a clear-cut linear peck order, meaning that each member of the flock is consistently either dominant or subordinate to each flock mate. Chickadee pecking orders, like those of the northern junco, are the same at or away from feeders. Within a flock, floaters rank below regulars of their sex. However, should the male at the top of the pecking order disappear, the highest ranking floating male takes over as the dominant male of the flock. Likewise, should a high ranking female vanish, the dominant female floater assumes the regular spot. Surprisingly, each replacement acquires the mate of the bird it replaced. Vacancies are not filled by the next highest regular, apparently because regulars are locked into their status by the rank of their mate.

Floaters do not fill every vacancy, however. If the mate of a newly inserted floater dies, a second floater will not pair with the first. Instead, the first reverts to floating. It seems that floaters only insert when a high-ranking bird of the same sex dies. Thus, regular, low-ranking widows and widowers remain mateless for the rest of the winter. Because only the top two or three pairs in a flock will gain a territory and breed, and because the fastest route to high-rank is via insertion as a floater, floating is actually more desirable than a low-ranking, regular position.

To reproduce successfully a chickadee should emerge from winter as a high-ranked regular. The positions offering the best chances of gaining a breeding territory, from highest to lowest, are high-ranked regular, high-ranked floater, low-ranked regular, and low-ranked floater. It (see page 6)



From *Hollows, Peepers and Highlanders* - Drawing by Peggy Kochanoff



# Acer Rubrum



by Robert Leverett

Reprinted from the Winter 94/95 Issue of Wild Earth

Thanks to Dennis Hendricks for sending us Wild Earths

**Introduction** In the fall 1992 issue of Wild Earth I wrote an article entitled Sugar Maple: Most Northern of Hardwoods. I chose the Sugar Maple instead of the Red Maple, believing most people prefer the former as the symbol to which they can better relate. Though it didn't occur to me at the time, my perception of "what people think" was inordinately influenced by old-time New Englanders, particularly landowners, and resource managers. Members of these groups often possess above average knowledge of trees, in a wood products sense. They typically rate the Sugar Maple superior to the Red Maple in just about every category, e.g., sweeter sap for syrup production, greater lumber value, more desirable for landscaping.

Though the Sugar Maple will always be a favorite tree of mine, I have been suffering from pangs of conscience. It is now time to pay due respect to *Acer rubrum*, the Red Maple. For not only is the Red Maple a noble tree, it provides us a portal through which to view the past, present, and possible future of our Eastern forests.

## CLASSIFICATION

*Acer rubrum* is the state tree of Rhode Island. Common names for the species include Red Maple, Scarlet Maple, Swamp Maple, Soft Maple, and Water Maple. The Onondaga Indians (one of the nations of the Iroquois Confederation) of New York call the Red Maple "Ab-wah-hot-kwah" - the red flower.

Over the past 100 years, due in part to variant leaf shapes, sub-species of the Red Maple have been declared. However, apparently none of the forms have shown sufficient stability to warrant botanists permanently classifying them as distinct.

## PHYSICAL DESCRIPTION

The wood of the Red Maple is rather soft for hardwoods, considerably softer than Sugar Maple. By most descriptions, Red Maple wood is not very strong. Some descriptions of the species emphasize these weaknesses. In A Sierra Club Naturalist's Guide: Southern New England, Neil Jorgensen describes Red Maple as: "relatively short-lived, its wood is subject to rot, mice attack, and ice storm damage." Jorgensen's description is supported in Elbert Peets's Practical Tree Repair, in which he states: "The red maple, as has been said, is subject to frost cracks." Peets further points out that "The red maple often shows long shallow wounds in the upper limbs, the result of the tearing out of minor branches."

At 38 pounds per cubic foot, Red Maple wood is moderately heavy, midway between the density of Silver Maple at 32 pounds per cubic foot and 43 for the Sugar Maple. The Red Maple's wood is described as somewhat elastic,

making it suitable for special uses like boat oars. Similar to other maples, the arrangement of the Red Maple's woody fibers can lead to something called curled and birds-eye varieties.

The bark of the Red Maple is smooth and gray on young trees, brown-er and furrowed on older trees, and shaggy with a characteristic upward curl on the oldest trees. Leaves are pale to dark green above, whitish-green beneath, 3 to 5 lobed, unevenly toothed, and commonly from 3 to 4 inches in length. However, leaf lengths can vary from 2 to 8 inches. The Red Maple exhibits a wide variety of leaf forms, even on the same tree even on the same branch.

Leaf stems are 1 to 3 inches long. The twigs and buds are reddish. The bisexual flowers are red (yellow on occasion) and come in short clusters. On some trees male and female clusters are separate. On other trees clusters are restricted to a single sex. They appear during the spring from March through May depending on the climate. The small reddish fruits are about an inch long. The wings diverge at an angle of 50 to 60 degrees. The fruits appear from the period of May to July, again depending on the climate. The Red Maple is one of the few northern hardwoods that produces its seeds in the spring or early summer.

With reddish twigs, buds, and fruits, red flowers and brilliant red fall foliage, it is easy to understand why the tree's common names, Red or Scarlet Maple, are apt.

## SIZE AND AGE

The Red Maple is described in most tree books as a medium sized tree 40 to 60 feet tall and on occasion 75 to 80. Height limits are usually placed at near 100 feet with such numbers achieved on only the most favorable growing sites. However, Volume III of *The New Nature Library on Trees, Mosses and Lichens* by Julia Ellen Rogers lists the Red Maple as capable of reaching 120 feet. Trunk diameters are commonly listed as 1-2 feet and occasionally up to 5 feet. Today, few people see Red Maples of large dimension; but in truth, all the above statistics understate the capabilities of the species.

Some sources of silvicultural data list the life expectancy of the Red Maple as between 150 and 200 years with a maximum of 350. Other sources indicate that the species is short-lived. In *The Complete Trees of North America: A Field Guide and Natural History*, Thomas Elias states that the Red Maple may live 75 to 100 years.

## RANGE AND ADAPTABILITY

The range of *Acer rubrum* is remarkably broad. It inhabits a wider range of soils than its sister species. It is commonly listed as ranging north-east to Nova Scotia, northwest to Minnesota (and even the Dakotas according to one source), southeast to Florida, and southwest to eastern Texas. It climbs up the mountains of Vermont, New Hampshire, and Maine to 3000 feet. It grows up to 6000 feet in the

southern Appalachians. So broad is the range of the Red Maple that it cannot be used effectively as an indicator species for forest types, with the possible exception of Red Maple swamps in the Northeast.

In current day New England, the Red Maple commonly populates wet areas near streams, but can be found sprouting prolifically in what until recently were old fields. *Acer rubrum*, is equally adapted to moderately moist uplands. In fact it hard to find areas in the East where Red Maples don't grow. In the Northeast, Red Maple is often a minor component of hemlock-spruce and hemlock-white pine forest communities.

The Red Maple's wide adaptability and large niche in the Eastern forest ecosystem stands in contradistinction to most people's perception of it. In the Northeast, people often think of it as a wetlands species, but its propensity to repopulate disturbed areas, including old fields, and even to thrive on dry upland sites is testament to its adaptability.

Red Maple regeneration after logging can be prolific. Unsightly stump sprouts characterize areas of regrowth. Multiple stemmed trunks often signal land that has been cutover many times. Sprouts are thickest on smaller stumps, diminishing in number with increased diameter. Studies in the white Mountains of New Hampshire indicate that sprouting is most prolific on stumps 8 to 10 inches in diameter. The coppicing pleases some tanbark harvesters. They see extra board feet in the multiple stems, but dense stump sprouting often produces stem that are individually inferior, more subject to early rotting.

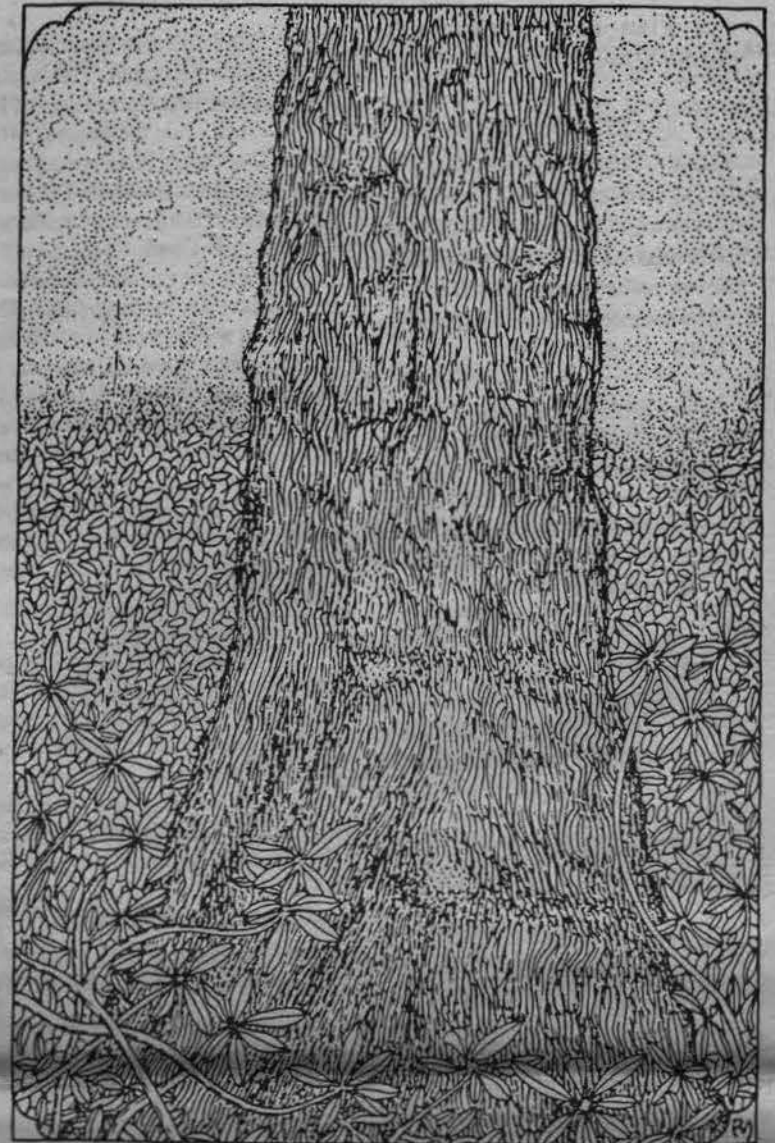
## USES

The Red Maple has a long history of use. The wood is used in various kinds of construction and is considered a fairly good fuel. However, as a timber tree, Red Maple has been judged inferior to many other species.

The birds-eye variety of Red Maple is particularly valued for interior furnishing of rooms. In her excellent book, *Our Native Trees*, Harriet Keeler mentions that birds eye maple was prized for railway-cars and even steamship saloons. These uses were in vogue during the time Keeler wrote her book. Native American uses for Red Maple paralleled those for Sugar Maple. Though the sap of the Red Maple is not as sweet as that of the Sugar Maple, the former was tapped in colonial times in some parts of the Northeast.

## RED MAPLE'S EMOTIONAL IMPACT

Notwithstanding the Red Maple's less than perfect score as a lumber species (lessened further by over-cutting), few trees can evoke deeper passion in bonafide tree lovers. Because of its early flowering in spring and brilliant foliage early in the fall, it has prompted much verse. In *The Tree Book: A Popular Guide to a Knowledge of the Trees of North America and Their Uses and Cultivation*, Julia



• Red Maple - *Acer rubrum*

Ellen Rogers includes an excerpt from a poem by Lowell about the maple. In her words, "who shall know the Red Maple better than this poet of New England?" References to the Red Maple can be found in the writings of such personages as Henry David Thoreau and Ralph Waldo Emerson. In *Our Friends the Trees*, Dr. P.G. Cross effusively praises the Red Maple: "Another important maple is the red flowering, or Scarlet Maple (*Acer rubrum*), of all maples, the most gorgeous, for both in early spring and in early autumn, this noble tree emblazons the landscape with its bloodred foliage and flowers."

The emotional impact of a tree's size and beauty is predictable, but a tree can have a psychological influence on us in ways of which we are unaware. In his thought-provoking book, *The Power of Trees: The Reforesting of the South*, psychologist and archetypal ecologist Michael Penman explores "deep rooted relationships" that have existed between people and trees for untold centuries.

## RED MAPLE AS A COMPONENT OF OLD GROWTH FOREST

Those who know the Red Maple as a small to medium size tree will be surprised to learn that the Red Maple can reach huge proportions when left to grow on favorable sites for long time periods. *Acer rubrum* can grow into an in-forest giant worthy of our highest admiration. In *Trees, Shrubs, and Woody Vines of the Great Smoky*

*Mountains National Park*, Arthur Stupka cited what at the time he believed to be the largest specimen in the Park. The tree's trunk measures 17 feet 3 inches in circumference, Stupka's tree is not an oddity. Several years ago I measured a Red Maple on the Maddron Bald trail in Smoky Mountain National Park that stretched the tape to a full 17 feet, the largest I'd ever seen. With moss-covered buttressing roots and an arrow straight trunk, it stood in striking contrast to its troubled relatives growing on cut-over, marginally productive lands outside the Park—a living testament to how we have compromised the species by cutting the best of the originals and overcutting the regeneration.

Two years later, while perusing the latest release of the National Big Tree Register, I came across the entry for the national champion Red Maple, growing in Michigan. The tree's dimensions are extraordinary: girth-18 feet 6 inches, height a wildly improbable 179 feet (equivalent to a 17 story building), and a crown spread of an equally improbable 120 feet. The measurements were submitted by renowned big tree hunter Paul Thompson and produced a remarkable total of 431 points on the big tree formula.

This splendid national champion Red Maple surpassed its counterpart Sugar Maple by a whopping 86 points and the champion Black Maple (*Acer nigrum*) by 83! Among eastern maples *Acer rubrum* (see page 12)



# Greenbrier State Forest



## The Plan soon available for public Review

The first part of this article is adapted from the working draft plan for the Greenbrier State Forest. It is supposed to be a model for the other eight Forest plans to follow the adoption of this one. It may be ready for public review this spring. - bill r

Greenbrier State Forest is located in southeastern Greenbrier County, two miles west of White Sulphur Springs off US 60 or I64. If you are traveling there some foggy morning or in the dark for the first time pay attention as you go under the railroad bridge or you'll end up in the creek.

The Forest lies within the system of topography known as the Ridge and Valley Province. Elevation varies from 3,280 feet on Kate's Mountain in the center of the Forest to 1,826 feet where Hart's Run leaves the Forest at its boundary.

The Ridge and Valley Province consists of several parallel mountain ridges of resistant rocks, alternating with parallel valleys formed by the erosion of less resistant rocks. The valleys in this system are broad and rise in a series of steeply rounded hills to the main ridge - in this case, Kate's Mountain.

Much of eastern Greenbrier county is composed of Devonian age rocks. On the Forest, the valley and hillsides of Hart's Run are of Devonian Chemung and Portage Series conglomerate, while heavily folded sandstone and shale make up the parent material underlying the forest.

This 5,133 acre forest is bisected by Kate's Mountain. The western slope drains into Hart's Run of Howard's Creek while the eastern portion drains into Quarry Hollow and Laurel Branch of Tuckahoe Run. The northwest corner of the forest drains directly into Howard's Creek.

The temperature variation on the forest is considerable, ranging from -30 f. during the winter, to 100 f in the summer. However these extremes are infrequent and of short duration. The nights, even during the hottest weather, are usually cool. The mean annual rainfall is about 39 inches a year, well distributed throughout the year with heaviest rainfall in the spring and summer. Average snowfall is 31 inches.

### Tree Associations - Mixed Oak Association-

Although Oaks and Pines predominate over much of the forest many other species occur. On poor ridges white, scarlet, black, chestnut oak and hickory are present. Associated species are pitch virginia and table mountain pines. Yellow poplar, blackgum, sugar and red maples, white ash, basswood, cucumber magnolia, white pine and eastern hemlock are present in the moist bottoms.

**Chestnut/Scarlet Oak Association** This cover type is found on the upper slopes and ridge tops. Eighteen per cent of the forest is made up of this type. Other species (tree that is) include northern red and white oak, sourwood, hickory (sp.?), white, pitch and table mountain pines.

**Pine/Mixed Oak associations** comprise about 20% of the forest. The hard pine type (with table, pitch and virginia pines) is found on the driest ridges, while the soft pine/mixed oak association is found below 2200' in the Hart's Run watershed.

**Rare Plants** - There are four known rare plant species which occur on the Greenbrier, *Clintonia alleghaniensis* (Harned's swamp clintonia), *Phlox buckleyi* (Swordleaf Phlox), *Smilacina stellata* (Starflower False Solomon's Seal), and *Taenidia montana* (Mountain Pimpernel). An additional twenty three rare species are found in Greenbrier County and may occur on the Forest. Two federally listed Threatened and Endangered species also grow on the forest - Running Buffalo Clover and Virginia Spirea.

Well that's about it for the informative part of the working draft of the Plan. To me the rest is mostly propaganda for excuses to "harvest" trees on the Greenbrier. The plan is full of ironies. When Gypsy moths threaten to move in and defoliate certain stands the plan says that the sun will scorch the forest floor, which will dry up and be a fire hazard. Another section of the plan states that thinning and selective harvesting is good for the forest because it allows sunlight onto the forest floor. The plan states that defoliated areas are aesthetically unappealing, but makes no mention of the aesthetics of

timber cuts (except that they are beneficial to recreation).

In two different sections we are reminded that the state parks were created to preserve scenic, aesthetic, scientific, cultural, recreational values. Hunting timber harvesting and mineral extraction are forbidden there. It makes it look as if only state forests are available for cutting, hunting and mineral extraction, while the 70,000 acres of State Parks have all been set aside for Wilderness.

See how good 'harvesting' is for the forest. The plan states that "Pre-



*Smilacina stellata*

## Bird Politics

(from page 4) makes sense, then, that this happens to be the order in which the slots of the flock fill as young birds arrive in the fall.

Contrast chickadee society with that of the tufted titmouse. Tufted titmice also form winter flocks in the fall, but their flock size ranges from only two to five individuals. Almost half of all titmouse flocks consist of only one adult male and one adult female. Further, since titmice do not floss, the membership of a titmouse flock remains stable throughout the winter. The average territory of a titmouse flock covers 13 acres and, like the chickadee's, its boundaries are stable and delineated early in the flocking season. On or near their territorial boundaries, the birds engage in inter-flock aggression - jeering loudly, displaying erect crests, and flitting about with quick, spastic movements. Like juncos and chickadees, titmice exhibit linear dominance hierarchies within their flocks. Mates dominate females, and seniority on the flock territory determines dominance within a sex. Again, titmouse ranks assigned away from feeders hold at the feeders as well.

When a winter titmouse flock disbands in March, the dominant male and female, which are mates, establish a breeding territory within the winter

scribed harvesting of trees contributes to habitat diversity. Canopy openings stimulate the growth of herbs, shrubs, seedlings and increase vertical layering. The harvesting of different stands of the forest at various times, creates a mosaic of habitats." The plan fails to inform us, though, that the natural disturbance regimes (in an old growth forest) do this also and also manage to build soil humus, depth and nutrients and increase wildlife habitat in the hollow trees and decaying "large woody debris" on the forest floor.

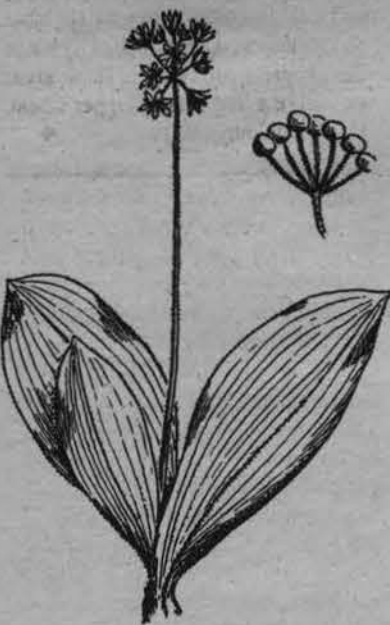
The plan further tells us that "With current knowledge, it is not desirable to have every acre of this forest covered with mature trees..." It sure is good to know that man has finally arrived on the scene to show nature how a forest should best be managed.

**Roads** - Here are a few quotes about how valuable roads are for recreation. "Currently hiking, hunting, and nature enjoyment are the primary recreational pursuits on the forest. A road system will help to enhance both of these activities and by serving as access trails to remote areas." Are areas still remote when a road takes you to them??? And "Managed forests contain road systems which enable better protection from fire and increase chances of detecting insect and disease problems. These roads provide linear habitat important to some species of wildlife. Road systems can enhance recreational potential for an area such as hiking, biking and horse enthusi-

asts." Here we are talking about more roads than we already have. These are the roads left over from timber sales. It all fits together so perfectly.

Why am I so critical of all this management in our state forests? What's wrong with managing our State Forests Scientifically? Shouldn't we maintain our Forests in the Healthiest state possible? The problem is that our state forests are not first and foremost Tree Farms that can incidentally increase game availability. And this is the way they have been managed. It seems each of the other 'uses' of our State Forests - wildlife, biodiversity, recreation, watershed protection - has taken a back seat to timber production. Our land managers will disagree with this, but I am skeptical of how well the plan claims that all the other uses are enhanced by timber cutting.

The main stumbling block between the two views of State Forests is the concept of Forest Health. I believe that our managers (completely surrounded by the timber mentality) see forest health as a forest with lots of healthy trees. Trees that are free from disease, pests and will produce lots of board feet (and of course wildlife food and habitat diversity and anything else). I see that idea as neglecting nature, as fighting against nature. To me forest health depends on the health of the soil. All the management that takes organic matter out of the woods (timber harvesting) will in the long run delay the return or diminish the health of the soil and therefore the forest. ♦



*Clintonia alleghaniensis*  
(all four Greenbrier Forest rare plants from *Flora of West Virginia*)

Mississippi rocks of the Pocono series form the ridges of Kate's Mountain and are sandstone and shale strata.

flock range. This pair will most likely be the only titmouse couple to breed within the flock range.

Chickadees and titmice sometimes forage together in mixed-species flocks during winter. Flocks composed of black-capped chickadees, tufted titmice, and several follower species, such as downy woodpeckers, hairy woodpeckers, and white-breasted nuthatches, are common in Appalachia. Birds form mixed-species flocks for the same reasons that members of the same species flock together. Feeding in mixed-species flocks proves profitable for sponging individuals. For example, white-throated sparrows chase off juncos, providing an interspecific example of the shepherd-sheep relationship. Reducing the risk of being caught by a predator works the same for birds that look similar, regardless of whether they are members of the same species. Chickadees, titmice, and nuthatches are gray above, white below, and about the same size. Presumably, individuals of these three species look enough alike that birds hiding behind each other do not betray an odd size or color.

All five species-chickadees, titmice, the two woodpeckers, and nuthatches-fall prey to raptors and respond to each others' alarm calls. Within these flocks, chickadees and titmice give most of the alarm calls. When

downy woodpeckers forage with chickadee-titmouse flocks, the woodpeckers spend less time being vigilant and thereby eat more. The core species seem to get nothing in return from the woodpeckers.

I invite you to view new intrigue by critically exploring the action at your bird feeder. You may notice that winter-flocking birds are slow to visit a newly stocked station, but then descend in droves after that first visit. Even this simple observation allows two inferences. First, winter-flocking birds often overlook good food in new places, possibly because their natural food is patchily distributed among known locations. Second, that first visit by a single bird assures a visit by the entire flock, thereby demonstrating one of the big advantages of group living, namely that birds learn from each other where the food is. Do not underestimate the power of simple, local scenes to illuminate the Appalachian play.







# Much Ado

(from page 1) is correct in holding LaRosa Fuels responsible for taking all measures necessary to meet effluent limits from Kittle Flats and thereby restoring the hydrologic balance downstream, i.e. in Cassity Fork as well as in the main stem of the Middle Fork. (A front page article - JUDGE RULES LAROSA MUST TREAT WATER AT KITTLE FLATS in the February 1994 issue of the VOICE related details of that decision.)

-The Federal Clean Water Act may also require EPA to hold the landowner responsible for meeting effluent limits on site. As the landowner at both Kittle and Whitman Flats, West vaco may be liable for water treatment at these two sites that clearly are contributing the largest amounts of AMD to the Middle Fork River.

**FUNDING** Public moneys ought not be spent to address problems where private sources are liable, nor should any other funds that might be restricted to use where no private parties are liable.

The WVHC memo recommended that before pursuing further funding from any such sources for use at Kittle Flats (i.e. Clean Water Act money, Abandoned Mine Land funds, Bond moneys, etc.), the committee should 1) obtain written legal opinions from each agency involved confirming that the specific funds can be used even where other private entities are liable; 2) obtain written legal opinions from the agencies indicating that any expenditures from such funds can be reimbursed by other legally responsible parties, and 3) obtain a signed agreement(s) from LaRosa Fuels and/or Westvaco that commits to funding any and all abatement required on site and that commits portions of those funds to reimburse whatever funding sources have been utilized to date at Kittle Flats. (The agreement(s) should also define a payment schedule.)

## ON-SITE ABATEMENT & ACTIVE TREATMENT

It has been our understanding that on-site abatement is the preferred alternative of many members of the Committee, and that evaluation of such options were to be given full and fair consideration. WVHC continues to believe that these strategies must be considered before adopting off-site, in-stream, active treatment like the drums, dosers and fines proposed in November. (On going efforts at passive treatments measures have begun to deal with a mere 8 percent of the AMD at Kittle - hardly enough to warrant off-site efforts at this time).

-RE: Cassity. Due to the outstanding cessation order, any evaluation of the Middle Fork River must take into account the effect of on-site abatement, including active treatment, at Kittle Flats and what impact meeting effluent limits at Kittle has on the overall quality of water and biological health of Cassity Fork and the main stem of Middle Fork. To install treatment devices in Cassity or its tributaries or the main stem of Middle Fork

would only mask the legal responsibilities of the operator and landowner and would be premature and inappropriate.

-RE: Other tributaries. Legal questions at Kittle Flats aside, the alternatives document of 11/14/94 does not contain an evaluation of on-site abatement, including active treatment, at any of the other known sources of AMD (i.e. Whitman, White Oak, Hell or Devil). The impact of such abatement measures on the water quality, the biological and physical integrity, etc. of the various tributary streams as well as the main stem of Middle Fork must be a basic part of the committee's evaluation.

## LIME DRUM AND DAM

Especially in light of the legal responsibilities that exist for on-site abatement of the AMD problem at Kittle Flats, WVHC can not accept damming the Middle Fork as an acceptable abatement alternative. But, even apart from the legal issues at Kittle Flats, the construction of lime drum facilities present other specific questions that must be addressed.

-Assuming that the four drum lime station proposed in several of the alternatives will require damming the Middle Fork (a reasonable assumption



Phlox buckleyi

given the fact that diversion of water is necessary to operate the station), there must be assurances from all permitting agencies, (e.g. the ACOE, US F&W, US EPA, etc.) and the public - especially residents of the surrounding communities, canoeists who visit during high water times, and other users of the Middle Fork - that a dam is acceptable.

-Any long term effects of Lime Drum Stations in AMD laden water are not yet documented. The Blackwater station (though not dealing with the higher metal concentrations that are present in Cassity Fork) will offer some limited information on the subject, but

has only been in operation since the end of September 1994, some six weeks prior to the mailing of the alternatives document. Older stations such as those on the Cranberry, Dogway and Otter Creek are located in streams unaffected by AMD. More data on seasonal fluctuations, etc. need to be assessed before planning for lime drum stations in the Middle Fork or any other AMD affected stream. And any assessment must include biological and physical as well as chemical impacts. -The metal sludge byproduct of neutralizing metal laden AMD affected waters is of particular concern in that evaluation. If treatment occurs in-stream (either in Cassity or in the Middle Fork) metals will precipitate out in the stream itself, resulting in situations similar to the iron delta phenomenon noted in DEP files for the DLM-Tennile area of the Buckhannon River. Allowing in-stream settling of sludge, the possible resuspension of metals at some point on downstream and the ultimate movement of those sludges downstream to Audra, the Tygart Lake, and eventually into Pennsylvania, etc. cannot be acceptable if other options are available. Treatment on-site would include provisions for disposal of any sludge before the treated water enters the receiving stream.

## LIMESTONE FINES

The seventh proposed alternative is the only one that does not include dosers or drum stations. However, the option to apply limestone sand fines at twenty locations throughout the Middle Fork watershed presents the same set of legal, financial and scientific questions that have already been discussed.

In addition, the specific sites have not been mapped, nor have the impacts of site preparation (i.e. access roads, turn-arounds, etc.) been evaluated. This information must be available before the committee can make a fair and adequate assessment of the limestone fines option.

## "RESTORATION"

Understandably, various members of the Stream Restoration Committee come to the table with differing perspectives on what "restoration" is/should be/can be in the Middle Fork and elsewhere. And surely different watersheds may require a variety of approaches, but one of the fundamental guiding principles of the committee must be to make an honest attempt to define the APPROPRIATE solutions based on the certain set of circumstances that exist in each of the specific watersheds.

For example, the Blackwater allowed for a different set of solutions than does the Middle Fork.

WVHC agreed to the installation of the Rotary Limestone Drum station on the Blackwater in part because there were any number of diffuse sources of AMD in the area, in part because there were no known responsible operators, in part because a dam was already in place and could allow for testing the drum technology in AMD

affected streams with relatively less impact than in areas with more severe acid problems and where no dams exist, etc.

But the Middle Fork is a horse of a different color. Two distinct sources account for nearly 95% of the AMD in the Middle Fork; private parties with financial resources have been identified as being responsible on at least one of those sites (the worst offender) for treatment of AMD on-site; there is currently no dam on the Middle Fork, or on Cassity, etc., etc.,

Hence, the proposed abatement



Virginia Spirea

alternatives for the Middle Fork are neither appropriate nor acceptable.

"Restoration" can't be based merely on the assumption that "anything is better than what's out there now". While that may hold true in some

## Free Advice

(from page 9) often can help you cheaper and better than a lawyer. To repeat the mantra, your power ultimately lies in you and your cause, not in a lawyer or in experts. Lime your best fields first! You are considering paying a lawyer \$100.00 for one hour of what seems like endless days of mumbo-jumbo. Why are you not willing to spend the same amount to hire a part-time typist to do a summer's worth of press releases and newsletters? For what many lawyers charge for two days in court, you could hire a rising high school senior for a summer, to visit citizens and drum up support for your cause. You could pay for beautiful posters to put up in every store in your area. Don't be penny-wise and pound-foolish. Truth, creativity and courage, combined with money, can be a powerful recipe. Note that large numbers of people are not a necessary ingredient in

instances, there are other times when choosing the "quick fix" may cause more harm than good. The suggested abatement measures for the Middle Fork are just that kind of a quick fix. Any one or all of the proposals may "restore" a fishery in the Middle Fork from Cassity to Audra by adjusting pH levels so that it is possible to stock fish, but they do little to "restore" the underlying integrity of Cassity and the Middle Fork.

**The committee is now viewing a selection of different shades of makeup to cover a jaundiced body.** The more appropriate action would be to treat the cause and not the symptoms.

Right now, in the Middle Fork that means: -supporting OSM and EPA in their legal duties to hold the operator and/or landowner responsible for meeting effluent limits and restoring the hydrologic balance in Panther, Cassity and hence the Middle Fork; -clarifying the legal requirements of the various funding sources and utilizing those that are appropriate at Kittle and elsewhere and solidifying a commitment from LaRosa Fuels and/or Westvaco to reimburse funding sources used at Kittle Flats so that those moneys can be used again elsewhere; -acknowledging that these actions represent significant progress even if they are only a first giant step in the effort to clean up the Middle Fork; -monitoring the effects and impact the completed on-site abatement measures have on the Middle Fork watershed; -monitoring and evaluating the biological, chemical and physical effects of the Blackwater drum station; -revisiting other off-site/in-stream alternatives only after the on-site/out-of-stream/active treatment alternatives are in place, operational and their impacts adequately evaluated; -and finally, **MOVING ON** to other watersheds on the SRC's priority list so that progress can begin in those areas as well (e.g. Big Sandy, Upper Cheat, Paint, Dunloup, .....)

this recipe, but of course they add even more of a kick.

I Forget Number Nine, the last eight took so much out of me. Did you notice how these remarks almost all seem to dwell on money? Let's make an appointment for next week. Before you go, have you paid the court reporter's bill yet? He keeps calling me.

And the last thing I repeatedly find myself saying to citizens' groups about lawyers: "Good Luck and Good Hunting!"

Thomas Rodd Rte 1, Box 78 Moatsville, West Virginia 26405 Phone and Fax: 304-265-0018 (Tom Rodd was formerly in private practice emphasizing environmental law, where he garnered the experience that led to these words of advice. He is currently a Deputy Attorney General for the State of West Virginia).



# FACING THE WALLS

by Robert Stough

How do we get from where we are to where we need to be? This is the most salient question being asked today by Wild Forest activists, regardless of their individual visions for the future. Few would disagree with the premise that where we are now regarding Forest preservation is not where we want to be. In spite of some minor legislative and bureaucratic victories in the last decade or so the subsidized exploitation of public lands continues virtually unabated. Certainly those who regard 'public' forests as existing to provide jobs and profit for private interests have a clear understanding of what they want, which is more of the same. Likewise the Forest Service, in spite of their sometimes ambiguous public-relations pronouncements, have not significantly wavered in their dogmatic commitment to multiple-use. As for the general public, what limited knowledge they have of forest issues comes largely from what they are fed by the for-profit media, virtually guaranteeing they will have a paucity of interest in the real issues, which are seldom if ever elucidated.

The first step in getting to where one wants to go is, of course, defining the destination or the goal. This is something that Forest activists have in essence already done, by putting forth detailed proposals to establish wilderness preserves throughout the Appalachians, so as to eventually achieve a partial restoration of the original Great Forest in its most vital and stable form, that of old growth. Although this effort is primarily motivated by doing what is right by the Earth and freeing at least some of the land from slavery to humans, it is also crucial to human culture that we find ways to harmonize our lives with the natural world. Preserving the highly diverse yet ecologically fragile and economically untenable Mountain forests must be one of the first steps in that process. While these precepts may be axiomatic to most activists they still bear frequent repeating, not only for our own edification but to help as many people as possible to understand where we are headed. So saying these things over and over again to anyone who will listen is itself an important part of the journey.

There should be no doubt that freeing the Forests is something that can only happen as a populist movement, so that the wild Appalachians are preserved from exploitation because that is what a lot of people want. It is probably true, owing to insidious political machinations, that even a 'tree-roots' movement is not likely to be sufficient to gain full protection for the Forest, but without it there is no hope at all. To activists this necessity of gaining more support among the general populace can present a grim outlook when viewed from the proper perspective of preserving wilderness simply for the sake of the wild beings who live there. Fortunately though we do not need to convert large masses of people

into friends of the wilderness, only to raise their ecological consciousness sufficiently that they begin to understand that Forest preservation is intrinsic with their own economic, cultural and even spiritual preservation. This still represents a formidable task but one at least that can be approached from many different tangents.

Those who now exploit the forests (and public lands in general) are extremely vulnerable to attacks on the economic viability of their activities. The extent to which they have gone to deceive the public and purchase congressional votes is clear evidence that

the current governmental management of public land.

Considering the fact that government money is likely to be sharply reduced or eliminated for many non-entitlement subsidies sometime in the foreseeable future we may well have a window of opportunity whereby Forest exploitation can be greatly curtailed, especially in the mountain wilderness areas. This would represent a major victory for Forest preservation, at least in the short-term, by stopping the flow of timber from large areas that cannot be profitably exploited without welfare handouts from the Forest Service.



Eastern woodrat  
*Neotoma floridana*

they realize just how rotten the foundations are on which they've built their consumptive empires. The wood-products industry (in collusion with the Forest Service) has shown in the past that they will say and do literally anything that is necessary to preserve their own profits and influence. Although it is true that they have largely up to now been successful in their efforts there is a putrid underbelly here that would not be able to withstand the light of expanded public scrutiny for long without creating an awful stench. While the recent election results can hardly be called good news for the Forest there is going to be a great deal of debate concerning reducing government spending, and we need to do anything that we can think of to help focus some of that debate on corporate welfare, and specifically on the cost to the taxpayers of

For this to be a possibility however, it is incumbent upon us to consider what such basic changes will do to local economies, and how any negative impacts can be mitigated. Although we can hardly expect that local loggers will ever lend us much support, we still must ourselves support the development of programs that will help the logging industry to break their addiction to government subsidies and continue to provide jobs and taxes for local residents. This would need to involve some sort of transition period whereby local communities would not simply be forced to withdraw cold turkey from all subsidies. Although it has been speculated that even direct payments to local residents and schools without cutting down the trees would ultimately cost less than current logging subsidies, this obviously is not a viable

solution. What might perhaps be a workable alternative is to re-direct those subsidies, in slowly decreasing amounts, in ways that will help the local loggers to continue timber cutting exclusively on private land. Some of those transition subsidies could also be used for developing locally-based employment opportunities so that local timber is converted to finished products right here in the bioregion and not simply trucked away as raw lumber. Other monies will need to be used to continue subsidizing school districts with large public-land acreage's but such payments need to be doled out by some formula involving strictly the percentage of public land in a district, and not based on the amount of timber harvested from such land. The current linking of school subsidies to welfare logging is an especially pernicious addiction, based as it is on the belief that the destruction of the Forest is necessary for the proper education of children.

With or without budget cuts, most activists would agree that major changes need to occur within the Forest Service. A substantial reduction in funding could have, paradoxically, a vitalizing effect upon the agency in the sense that they could no longer concentrate on spending, harvesting, managing, etc., but would have to begin thinking in terms of saving and conserving. Those who have dealt with the FS over the past several decades know all too well what a major change this would be for an institution that has all but sold its soul to the logging companies and worshipped at the altar of multiple-use, regardless of how destructive those uses may be. Since the FS has long couched its exploitative activities with, at least to them scientific justifications, it is likely that our best hope for influencing the agency philosophically in the continued application of modern conservation biology, which is very clear in its advocacy of old-growth preserves. No matter how logical our arguments for conservation may be though, as long as the FS continues to receive massive amounts of government money to cut down the trees that is obviously what they will continue to do. Since both the amount of money the FS gets and its general application are largely dictated by congress, there is a quandary here for activists that is going to be a tough nut to crack. Even if the FS budget is reduced, with the Republicans in control, it is highly likely that they will want to direct whatever money is parceled out to those purposes which encourage fragmentation and exploitation especially road building, and will do everything that they can to protect and serve their corporate masters. This kind of hypocrisy may be obvious to activists (that those who call themselves 'conservatives' are the most wasteful despoilers of public land) but it is far less so to the general public, and this is yet another area that we need to work on through the media.

Wild Forest preservation is like most environmental issues in that it is

interwoven with many other problems. The primary question is of course what is the 'highest and best' purpose of public lands, which should be an issue that is properly addressed from scientific, moral and spiritual perspectives, and only secondarily from an economic one. Even from a purely economic focus it ought to be obvious that we must have a truly conservative policy towards all public lands, especially in the east where such lands represent only a small percentage of the total land area yet make up almost all of the remaining wilderness. We already know with certainty that we cannot continue to exceed the carrying capacities of the bioregions where we live without eventually having to pay a terrible cost in human misery. The lessons of history are very clear about this, and in few areas more clear than the logging and mining industries, which have ravaged both the land and the people wherever they have gone.

While the radical exploitation agenda supported by chamber of commerce and wise-use types must continue to be vigorously challenged by environmentalists we are still going to have to find some common ground with local businesses and landowners. Even considering that their usual standard for interest in conserving something is what they will get out of it for themselves we cannot ignore their concerns without also hardening their resolve against us. Because personal gain and loss seems to play such a major role in our so-called civilized society all too many environmental issues have come to be seen in the negative sense, and many people have come to believe that ecological protection must entail substantial sacrifices on their part, which they are unwilling to make without a clear accounting of what they will receive in return. This perception, however short sighted that may be, has become a festering cancer underlying all environmental issues, and is being greedily fed by corporate interests, who have never been able to see farther than their own bottom line.

Although those who fight against Forest preservation and promote exploitation have deep pockets and loud, strident voices they also have shallow, sickly roots. If we could break down some of the gilded walls they surround themselves with, then these unnatural mutations might be toppled by the winds of change, for there is no doubt that the populace is angry with business as usual, and seemingly ripe for new ways of doing things. Nevertheless those walls are not going to come down by beating on them with dire prophecies and pedantic lectures, which clearly have not worked in the past, but rather with the welcoming light of simple truths. To wit: no logging company need go out of business or any logger lose their jobs because of Forest preservation because even if every acre of public land in the central Appalachians were protected there would still be a vastly greater amount of private forest land. This would also increase the





# Free Advice



## Top Ten Remarks I Find Myself Making Repeatedly about using lawyers in citizens' environmental struggles. copyright 1994 by Tom Rodd

If you want to exercise power, the right time to talk with a good lawyer is yesterday, because lawyers are specialists in power (and, incidentally, in suffering). Lawyers are experienced and trained in the law, a critical arena of power. Many lawyers know a lot about other arenas of power, such as politics, public opinion, religion, and community life. Lawyers can develop subtle and powerful skills - in psychology, public relations, art, deception, strategy, organization, rhetoric, analysis and persuasion. It's great to have these skills on your side as soon as possible in a struggle. Early on in a situation, a lawyer can often see opportunities, paths, and pitfalls that a non-lawyer will not recognize until it's too late.

The right lawyer for the situation is the best one you can afford. The best one is the one who can most likely help you get the results you want. The lawyers you ordinarily would rate as less desirable include:

ones who claim they can work both sides of the street - that is, lawyers who say they can represent citizens in one case, and in another case represent would-be polluters. I think these lawyers have a hard time serving citizens' interests well.

ones who don't have experience in your area of concern. Being experienced means you've made your share of mistakes, and hopefully learned from them. A beginner makes some of their mistakes (hopefully not big ones) on

your case, and on your nickel, and may not be cut out for the job. On the other hand, you need more lawyers on your side, inexperienced lawyers may be more available or cheaper and the most experienced have to start somewhere. A combination of experienced and inexperienced can make good sense.

ones who aren't recommended by people who are on your side, because others who have had experience in your area of concern almost always have the best advice. You don't have the resources for reinventing the wheel if you can avoid it.

It helps a lawyer (and you) enormously to know as concretely as possible what your goals are. A lawyer can help you develop and articulate your goals, including your uncertainties. Here are some ways of describing results you may want:

Do you only want to stop the action - that is, to wholly prevent the challenged activity? If so, there is little room for compromise, and the other side is more likely to fight hard and long, making the fight much more costly. If stopping everything is your only viable option, it's less likely that you'll end up getting money from the other side to help pay your attorney's fees, although attorney fee awards are a possibility in some cases.

Will you consider at some point modifying the action - that is, withdrawing some or all of your objections, if the challenged activity is changed to better protect your side? If so, there is a much greater possibility of settlement, which may include funds for your attorney's fees.

Will you consider a piece of the action? If your goals include possibly obtaining money, for example for damages caused by the challenged activity, a portion of the money can go for an attorney's fees.

A lawyer is a businessperson - but a lawyer is not a bank. If you need to fundraise over time to pay your lawyer's fees, borrow the money to pay the fees as incurred, and then fund-raise to pay the lender back. If your attorney takes the case on a deferred-payment or contingent-fee basis, have a clear understanding about your fee arrangements, and don't expect priority and time-intensive service if you are not paying up-front. Like the big tipper in a restaurant seating line who gets the first open table, the files that naturally rise to the top of an attorney's work pile are the ones with bundles of hundred dollar bills clipped to them.

Don't get caught in The Tender Trap. Courts and the law have not served many citizens' groups well. Being distracted or lulled into inaction by the legal arena is often a greater danger than direct defeat in legal combat. Just being "right" often means very little. A good lawyer tells you you'd be a fool to rely on the law, and your opponents surely know this. You need the law, and every other instrument of power available. "Fighting in the streets" will rarely hurt your legal case, and almost always will help.

Develop a budget with a lawyer early in your relationship. A lawyer wants to know what resources you have to devote to the arenas you want the lawyer to be a player in. You need to know the lawyer's estimates of the cost of various strategies. Then you can plan, negotiate, and agree about fees, expenses and costs. An experienced lawyer has been in fights like yours before, and can give a rough guess of what different strategies will cost. Your budget should identify tasks, options, and assign rough times and costs, but remember that estimates are usually low, compared to reality. A budget can begin as a few sentences or a few lines



on a page, but it ought to become an evolving document that you review regularly.

Don't be a "cheapskate". In the law as in life, "cheapskates" often get their butts kicked unnecessarily. My experience is that people who are willing to spend a good bit of money get much better results, compared to people who can't or won't spend very much money. Here's one of many ways money talks: the other side can usually easily outspend you, regardless of how deep you dig. But even relatively low expenditures by you, compared to theirs, can impose unacceptable costs on the other side. Result: you develop power. A very-low-budget operation has a much harder time imposing these costs. Consider the cost of questioning your legal opponents under oath, called depositions. They run over \$500.00 a day for a court reporter, not to mention your lawyer's time, including preparation.

Depositions can be a dry hole and waste of money, except when they are necessary insurance. They are a harassment tool for many defense efforts. But depositions can also be one of a citizens' group's most powerful tools, because they can expose ignorance and lies, which helps enormously - not just in court, but in other arenas like politics and the press. For another example, money can pay for valuable expertise and human labor. Honest, hard-working people with or without special skills are invaluable resources, in carrying out the work of generating power. Donated expertise and labor is very limited. In some cases, not hiring help means you're fighting with one \_\_\_\_\_ tied behind your \_\_\_\_\_ (fill in as you like). Being cheap can hurt your cause.

First things first. Apply your cheapskate tendencies to prioritizing your expenditures. Non-lawyer experts in social change and power (see pg 7)

value of those private lands and therefore also increase the potential profits for private landowners. Everyone in the growing tourist related industries would benefit from Forest preservation both now and in the future because of the concomitant preservation of the sublime beauty of the wild mountains, which would of course continue to be enhanced as the Forest evolves towards old growth and becomes that much more of a tourist attraction. Everyone in the local economic base would benefit from a redirection of timber cutting subsidies into local finished products industries and everyone in the country would benefit from their eventual reduction and elimination. Everyone everywhere would benefit from the preservation of mountain wilderness areas which would result in cleaner air, purer water, deeper topsoil and greater biological diversity, and that in turn would greatly benefit, and indeed mean the difference between life and death for many wild beings who cannot survive without free wild land to live in. All this is easier said than done, unfor-

tunately, because there are many power brokers who fear the light of truth and reason, and that is why we have to find new ways of communicating and illuminating the precepts of Forest preservation, which is probably going to entail that we adapt some of the methods of exploiters for our own purposes.

To that end, throughout this article, and many times in the past I have used terms such as 'freeing' the Forest, 'welfare logging' and 'addiction' to subsidies. Although I do believe that these terms are essentially correct, I have chosen them also for their potential emotional impact. To be succinct, they make good sound bites, and if we want to try and raise the level of interest and concern for Forest issues among the populace we are going to have to communicate with them on their own terms, and that often means whether we like it or not, the use of short, simple phrases consisting of familiar and unambiguous words. I personally find this trend towards boob-tube illiteracy appalling but since it isn't likely to change, we need to be cognizant of the fact that

even many people, who might be supportive of Forest preservation are not going to listen to detailed arguments one way or the other. Corporations and politicians know this very well, since they helped create it, and they have been careful to couch their attacks on preservation proposals with phrases such as 'permanent job loss', 'locking up' the land, 'denying' property rights and so on. It really doesn't matter to them that these are falsehoods, only that they get the listener/reader to swallow the hook. While this kind of cynical manipulation of public perceptions has no place in Forest preservation efforts we should not shirk from using some of the exploiters own weapons against them, so long as the ammunition is the truth.

While it is certain that we must find some ways of reaching out towards the general public, no one should construe such an effort as advocating any compromise of the basic principles of Forest preservation. Appalachian forests have already been so severely compromised that there is virtually nothing

left of them but bits and pieces of, what were once highly diverse and vibrantly healthy ecosystems. To pretend that these forests can be multiple used any more can only serve to perpetuate patterns of behavior which are not only destructive to the Forest but to human cultures as well. One way or another, whether we finally come to our collective senses and start treating the Forest with dignity and respect, or widespread Eco systemic breakdowns destroy our economic base and cripple our spirits, we are going to have to change. While it is true that there are powerful economic incentives to deny the present realities and ignore future consequences, there is still also a strong desire in the human consciousness to be somehow connected to the Earth, and that primeval need is what we must somehow tap into and inspire. Such an effort is going to require a lot of perseverance, and we are going to have to reach out in new directions, blazing trails and cutting through some of the fetid overgrown dogmas that are stifling the forests.

It is also going to require a lot of

hope, which is something of an endangered species these days, what with the sordid state of our politics and government, the continuing rapaciousness of giant corporations and the human population explosion hanging over everything like the grim reaper. But I believe it is still possible to have hope, and there is ample justification for doing so. The Great Forest of the Appalachians was not so long ago almost utterly destroyed, defiled and ravaged to an extent then unprecedented in human history, and since that time it has been set upon by plagues of exotic fungi and insects, contagions of clearcuts, hordes of road-hogs, bitter baths of acid rain and the mangling excesses of multi-(ab)use. And yet the Forest Lives, though still in bits and pieces, and Life still pours forth from the ancient mountains like a clear, sweet spring, it's source an eternal mystery. We can dam it, divert it and pollute it, but the flow of Life goes on, seeking any course open to it, accepting any way it finds. That is where the hope is, and the energy and wisdom we need for the long trail home. ♦



# WV Rivers - Why Wild and Scenic?



In January 1995 we expect to finally take a look at, and provide comments for, the long-awaited Wild and Scenic suitability study (in the form of a Draft Environmental Impact Statement - DEIS) for 12 select streams in the Monongahela National Forest (MNF).

To help prepare for this, I would like to provide a brief summary of what wild & scenic is and why the environmental community would be interested in supporting this cause.

As you may already know, "seeking the conservation and restoration of West Virginia's exceptional rivers and streams" is the mission of the West Virginia Rivers Coalition. One of the greatest tasks at hand is pursuing the permanent protection for 13 of the vital headwater streams that flow freely out of our spectacular and diverse Appalachian Mountain terrain, with the goal of getting them designated as Wild and Scenic Rivers.

Created in 1968, the Wild & Scenic Rivers Act was intended to preserve for all time some of America's finest rivers in their free-flowing condition, and to protect and enhance the "outstandingly remarkable" values which caused them to be designated. These values might include for example, scenery, recreation, fish & wildlife, history, archaeology and/or geology.

With passage of the Act, 8 rivers were placed into the Wild & Scenic Rivers System. As of November 1992, the number of river segments in the system was up to 152 (300 counting tributaries) for a total of 10,516 miles. This may look impressive, but it includes less than 1% of our nation's rivers.

Wild & Scenic rivers are given one of three classifications - wild, scenic or recreational - which correspond to the degree of preexisting development. Size or length are not a consideration. Also, different segments of the same river may be given different classifications dependent upon the degree of human intrusion and natural qualities.

The 13 river segments in the MNF being considered for inclusion in the Wild & Scenic Rivers System are: the Shavers Fork, Dry Fork, Glady Fork, Laurel Fork, Otter Creek, Red Creek, Red Creek, South Branch of the Potomac, North Fork of the South Branch of the Potomac, Seneca Creek, Williams, North Fork of Cherry, Cranberry and the Blackwater. Please note that the Cranberry River was found eligible by a previous Forest Service study, but has not been designated. Hence the discrepancy between 12/13 when discussing the numbers of river segments.

West Virginia is home to over 29,000 miles of significant rivers and streams. The total of these proposed Wild & Scenic river segments is 260 miles. If all the eligible W & S segments were protected, it would be less than 1% of the rivers in our state!

Sections of all of these rivers were found eligible for designation by the MNF in June 1991. In determining eligibility, the basic consideration was if these rivers indeed had outstandingly remarkable values. Now with the upcoming suitability study, what we need to consider is, 'is their protection in the public interest?' I guess I don't need to expound on the WVRC's answer here. Instead, what will follow is a list of what the Wild & Scenic Rivers Act/protection does and does not do.

What does Wild & Scenic protection provide?

- \* permanent protection from dams and other water projects including hydropower projects (thus eliminating one of the most destructive threats to a river)
- \* permanent direction to protect the river values such as fish & wildlife, water quality and scenery
- \* an opportunity to keep the rivers the way they are while maintaining traditional land uses
- \* national recognition for some of W.Va.'s most outstanding natural resources, long term benefits to the tourism industry and increased ability of the state to attract business
- \* positive impact on land values
- \* potential federal funding for acid impacted streams in order to restore productivity

What Wild & Scenic does not do.

- \* does not preserve an area and return it to its natural condition as in a Wilderness or National Park designation
- \* does not provide ecosystem protection
- \* does not prohibit hunting and fishing
- \* does not limit development on private land. Development in the half-mile wide W & S corridor is limited only on Federal land.
- \* does not force landowners to sell private land
- \* does not allow trespassing on private property. Landowners remain free to post their land as they see fit. The public has no rights to cross private property as a result of designation.

This list of do's and don'ts is not the recipe for complete protection of these headwater streams in the MNF. But with continued opposition to any reasonable protection measure by the West Virginia Farm Bureau and other "wise use" groups, it is a litmus test as to the sweet ideas of preservation or the sourness of unregulated development.

The U.S. Army Corps of Engineers is starting a study of the Cheat and Tygart watersheds with an eye to possible flood control measures. Is this a warning sign of possible dams in the future?

The water quality of the Mon mountain streams are already suffering from too much acid precipitation and sedimentation.

They lie unprotected and vulnerable to these and other sources of non-point source pollution. We must take the lead and show that reasonable protection measures such as the Wild & Scenic Rivers Act will have positive environmental and social benefits without being the economic and cultural poison that the "wise users" claim it to be.

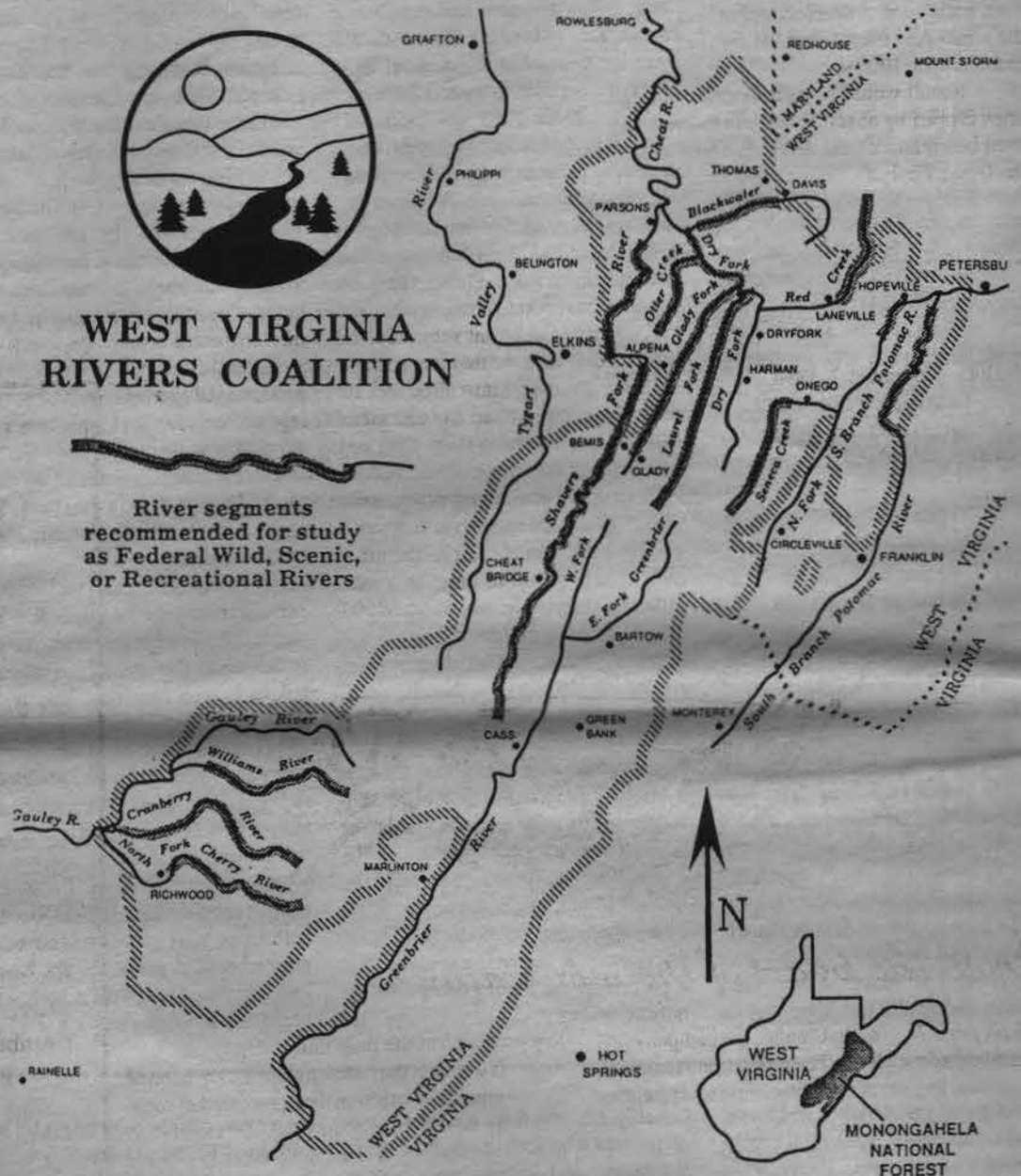
Come January, we need your help/participation in letting the Forest Service, local governments, press and our Senators and Representatives in Washington know that we like and care about the future of our free-flowing rivers in the MNF. Please write and take part in the MNF W & S DEIS public comment period and help pro-

tect and keep our rivers free-flowing! If you want to take a more active role, we are also putting together a task force of activists on the MNF streams. To be a part of this effort or to obtain more information, please contact Pam Merritt, WVRC Conservation Director, P.O. Box 606, Buckhannon, WV 26201 or call (304) 472-0025. ♦



## WEST VIRGINIA RIVERS COALITION

River segments recommended for study as Federal Wild, Scenic, or Recreational Rivers



## Monongahela Forest News



### White Sulphur Springs Ranger District

#### Buckley Mountain OA

Cynthia Schiffer has just announced that the Environmental Assessment for the Buckley Mountain projects is available for public review. The Buckley Mountain Area lies north of Watoga State Park. Comments must be received by January 23, 1995. Copies of the EA may be obtained by calling her at 304-536-2144.

The proposed alternative will consist of -  
 clearcuts and its variants 336 acres  
 Thinning 'harvest' 334 acres  
 This alternative will disturb the

most land and take the most timber of all alternatives considered.

It will also use herbicide on 175 acres, create 51 acres of wildlife openings (read clearcuts), construct 7.6 miles of road. This alternative also has the most miles of road construction and will cost \$379,423. The dollars derived from the timber harvest will most likely not cover expenses. Plus we will lose lots of trees and habitat.

### Potomac Ranger District

#### Strader Run Grazing Allotment Environmental Assessment

The Forest Service wants your comments on cattle grazing in the

Spruce Knob/Seneca Rocks National Recreation Area. The area lies a few miles west of Seneca Rocks. Comments must be received by January 23, 1995. Copies of the EA may be obtained by calling Nancy Feakes at 304-257-4488.

The wide range of alternatives (a total of two) both continue the current grazing in the recreation area. The proposed alternative allows 30 yearling cattle to graze on and off, the other alternative allows 22 to be grazed continuously during May 5 to October 15.

If you have been down the Judy Springs trail you'll see the damage cattle can do. Although this is a different grazing allotment, they both lie in the recreation area. ♦



# Windmills on the Mon? - View From Afar

Bill;

Nick Zvegintzov was an active WVHC board member for years, years ago. In email to another Rodman, he included an account of looking over a Kenetech windmill farm in California. He saw issues not raised in recent Board meetings when we discussed their windmill proposals for WV.

The things are expensive, and so are fenced and guarded more rigorously than West Virginians expect from anything rural.

They'd be closely spaced along ridgelines, with trees cleared off where they'd slow the wind. Any useful installation has LOTS of them, maybe 1000's.

Result would be endless miles of ridgelines capped by absolute barriers to everyone, even bearhunters (and deer and bears?); like the Great Wall of China. Could we agitate for pass-thru points at intervals?

Sincerely;

Sayre Rodman

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Hi Bill! December 7, 1994

I am a silent but appreciative reader of The Highlands Voice. When I read your excellent and alarming coverage of the Kenetech windmills, I made a side-trip to Altamont and wrote the following account to my buddy Ron L., who lives in Hampton VA but was born Duo WV (see center of your windmill map).

I was coming up the east side of San Francisco Bay with a buddy of mine and we stopped off at Altamont Pass to look at the Kenetech windmills. Altamont Pass is a pass through the coastal mountains over into the central valley. (It is also the venue of the notorious Altamont Rolling Stones concert.)

There are windmills of various design all over the ridge. The ridge itself is grassland with cattle, without trees, so the windmills - thousands of them - stick up in a sort of punk rocker cockade pattern visible 20 miles away.

We pulled off Freeway 580 East at the foot of the ridge at the Altamont Pass Road exit sign, and shortly found ourselves lost in a desolate new industrial park. Pulled into the bicycle lane (read, curb) - and then my buddy hailed a jogger, mid-thirties, satin shorts and a European T-shirt. Did he know how to get up to the windmills?

Yes he did, he said, and besides that he owns the patent on one of the designs... He works for Kenetech whose engineering offices are in that very industrial park. His patent is on a tower that has a single pipe-shaped tower that splay into three feet 20' of so above the ground (to spread the considerable lateral force that the towers undergo). Basically the plan is to build the towers larger and larger, lighter and lighter, with larger rotors, and to build MANY of them. "People write in to our company and ask if they can buy one - we just laugh." The company is into building thousands of them in a year, at (did he say this?) \$100,000 per tower.

Each tower is computer-controlled - the computer judges the wind, and sets the rotor speed, the direction of the rotor, and the feather of the blades.

We finally got in among the towers on an old road. At Altamont they are set in cow pastures. The pastures have radio-controlled gates from the road. It's lucky we didn't think of trespassing, because, though the area looked completely deserted, a remarkable number of trucks came out of the sites while we watched.

The windmills are pretty awesome up close (even not real close). There wasn't much wind, and just a few of them were flailing around at the time we were there. They are BIG, and faintly frightening. Didn't hear any noise.

With respect to the woods above Duo, you must envisage: (1) Surely they would cut all the trees on the ridge-lines. (2) They would fence in all the ridge-lines. (3) Expect thousands of towers. They seem to be maybe 100' apart. (4) I expect the Westvaco land is a prime prospective site because it is exactly south of a

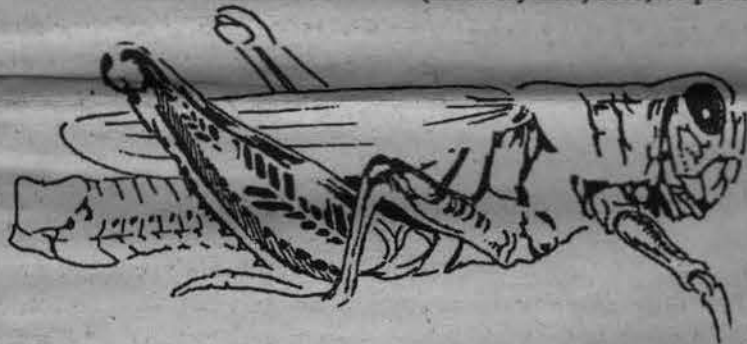
huge tract that is the "proclamation boundary" of the Monongahela National Forest, and even though the NF does not actually own everything within the boundary, they (and conservationists like my friends) might be expected to make more trouble if the proposed wind farm was "inside the NF". (5) If these towers cost even \$50,000 each, expect a lot of protective paranoia.

They would surely make a total mess of bear-hunting, but they wouldn't cause coal dust or erosion, and presumably not radiation or electro-magnetic pollution...

If I hear anything more, I will let you know.

Sayre was gracious enough to comment: "The windmill issue has been raised repeatedly at WVHC board meetings, but nobody was bright enough to see that it implies miles of ridgeline physically lawnmowed, then walled off from ANY public access, even bearhunters, like Chinese great walls." What do you think?

Nicholas Zvegintzov



## from the heart of the mountains

(from page 2) In that round, the company and the State agency lost. The regulations remained the same. In spite of this, the company is plunging ahead with the project. Whatever the company and the State agency had said about the relaxation being necessary must not have been true.

The company is free, of course, to make any statements it wishes about the necessity of the changes in the regulations before the project can go ahead. Making such statements does, however, have a price. Making such statements in the last debate cost the company (and its handmaiden the State agency) the credibility it needs for this debate. Now it must charge into the present debate, waving its tattered credibility, and try to convince West Virginians that it cannot use the latest technology because that technology is not proven.

Perhaps it is being candid this time. Perhaps using the old technology is necessary for the project to go ahead. In evaluating this statement, however, we need to consider what it said about the necessity of relaxed regulations as a condition of the project going ahead.

The West Virginia Division of Environmental Protection has suffered some serious blows to its credibility as well. Although these result from sloth more than any actual dishonesty, the result is the same. We can't rely upon the Division of Environmental Protection to protect us from

any problems at the pulp mill.

If we grant the company and the Division of Environmental Protection their premise that some discharge of dioxin into the river was inevitable, then the Division still has to calculate how much can be discharged. It does this based upon how much is already in the river.

With the proposed pulp mill, the Division made its calculations based upon the assumption that there was no dioxin in the river. It had no basis for this assumption. What data it did have available would indicate that there is already some amount of dioxin in the river although the data are too sketchy to reliably conclude how much. The Division of Environmental Protection did not find out how much dioxin level was in the river, it simply assumed that there was none.

So what does the West Virginia Highlands Conservancy want for Apple Grove? We want the same thing we want everywhere. We want an honest debate. We want state agencies we can rely upon. We want to keep moving toward the Clean Water Act's goal of no pollution being discharged into the waters of the United States. We have never directly addressed the specific question of whether the proposed pulp mill meets those requirements. Unless it does, however, the Conservancy's basic principles would require us to oppose it.

## Monongahela National Forest Hiking Guide Now Out

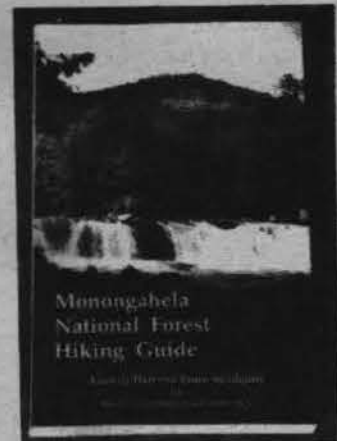
Edition 6 of Monongahela National Forest Hiking Guide is now available. This edition is bigger and better than ever, with 368 pages, 96 pages of maps, 49 photographs, 177 trails totalling 812 miles, and a new full color cover. West Virginia Highlands Conservancy is the publisher. Authors are Allen de Hart and Bruce Sundquist (same as edition 5). Allen has hiked all the trails of the Monongahela N.F. over the past few years. Bruce was the editor for the first four editions. The hiking community and the U.S. Forest Service provided trail reports and photographs. Edition 6, like edition 5, also provides information for ski-touring and backpacking.

The growing throngs of visitors and the public at large regard the Monongahela National Forest as a 'Special Place'. And indeed it is. The hiking, backpacking, and ski-touring opportunities it provides are among the best in the eastern U.S. The more outstanding areas are becoming known far and wide - Otter Creek Wilderness, Dolly Sods Wilderness, Flatrock Plains, Roaring Plains, Blackwater Canyon, Spruce Knob, North Fork Mountain, Shaver's Mountain, Laurel Fork Wilderness, Cranberry Back Country, Cranberry Wilderness, among others.

Profits from the sale of these guides support a wide variety of worthy environmental projects in the West Virginia Highlands Conservancy.

To order your copy of Edition 6 of Monongahela National Forest Hiking Guide, send \$12.85 (this includes \$2.90 first class shipping) to

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# Voices From the past.....from past VOICES

**15 YEARS AGO - January 1980 (the old) W.VA. RIVERS COALITION FORMED** Somewhat modelled after the well known Kentucky Rivers Coalition, the new organization has as its overall purpose the development of a rational and comprehensive statewide water policy. To achieve this end, the coalition agreed to work for the local citizen input at all pre-planning and planning stages of water projects, the improvement and maintenance of high water quality standards, the

preservation of free flowing streams and rivers where possible, and for the continued use of agricultural lands for agricultural purposes.  
**SHAVERS FORK THREATENED**  
 For those concerned with the environment of the Shavers Fork, the Environmental Protection Agency appears to offer the best and last hope ask that an environmental impact statement be completed.  
**CALLAGHAN GETS MORE LAND FOR STONEWALL**  
 At the request of State

Department of Natural Resources Director David Callaghan, the Army Corps of Engineers has received approval to expand the controversial Stonewall Jackson dam project by 789 acres. Kenneth Parker, leader of the opponents of the Lewis County project, characterized Callaghan as "playing fast and loose with our money and our land."  
**10 YEARS AGO - January 1985 DISASTER SPOTLIGHTS REGULATORY FAILURE**  
 Bhopal Brings Toxics Problem

Home Perry Bryant for WV CAG and WVHC at Congressional hearing in Charleston WV: "... It is indeed depressing and unfortunate that we are here today because of the tragedy that occurred in Bhopal, India. It is also unfortunate that it took the death of well over 2,000 human beings in a foreign country to bring us here to ask questions about the toxic chemicals stored in our valley and routinely discharged into our air."  
**WVHC OPPOSES EXPORT OF WATER BY PROPOSED COAL**

**SLURRY PIPELINE**  
 The 400 mile Baltimore Gas and Electric Company pipeline would transport coal from Mingo, Boone and Nicholas Counties, crossing northeast to a final loading point at Westernport, Maryland, before pushing east to the port of Baltimore. The pipeline would withdraw substantial amounts of water, free of charge, from three W.V. rivers - the Guyandotte, Little Coal and Gauley. BG&E proposes to sell the water to consumers in the Baltimore area after dewatering the transported coal. ♦

## Acer Rubrum

(from pg 5) is exceeded only by the national champion Silver Maple (*Acer saccharin* am). Moreover, the Red Maple champ loses this bout due to the unfortunate way the big tree formula is constructed. Since girth is measured in inches and height in feet, the formula weights girth 12 times over height. I have not seen the Silver Maple and mean it no disrespect, but at a dumpy 61 feet tall, I have a feeling that the Silver Maple is multi-stemmed. Given the extraordinary height of the champion Red Maple, if the current Silver Maple champion is like its awkward looking, multi-stemmed predecessor, which I have seen, then the Michigan Red Maple is by far the more impressive tree.

The big tree saga continues. In October 1993, I received a report from Rob Messick of the Western North Carolina Alliance on an improbable Red Maple, that had just been discovered by scientist Will Blozan of Smoky Mountain National Park. Will was studying the Park's old-growth forest (Will's amazing big tree discoveries will be the subject of a future Wild Earth article). From Rob's description, it was a foregone conclusion that I had to see the tree.

In July 1994 Will took Rob, myself, and an exceptionally dedicated group to see the tree. It poured on us all day, which made getting to the great maple something of a feat. We crawled 100 yards through a massive Rhododen-

dron slick and over moss covered logs. It was a rainforest environment in every detail. Though Rob Messick had told me the tree's girth, I was not prepared for the emotional impact of actually seeing this hulking giant. The measurements were incredible; girth 23 feet 4 inches, height 135 feet, crown spread 88 feet. I looked up a straight bole free of branches for at least 60 feet. It was humbling.

We re-measured the Smoky Mountain colossus. On the big tree formula, the result came to 437 points, making the tree the new, unofficial national champion.

Back on the trail, we encountered more amazing Red Maples. One measured 11 feet 7 inches around and reached 143 feet in height. Its straight trunk soared 70 feet to the first branch. Another tortuous crawl through the rhododendron brought us to a Red Maple that measured 12.5 feet. Finally, Will mentioned another Red Maple that he had found growing in a different area of the Park measuring over 17 feet around.

In the Great Smoky Mountain National Park, I had seen trees that equal or surpass, in both girth and height the trees in some of the Northeast's most impressive stands of White Pine. The genetics of the Red Maple permit greater ages and sizes to be attained than those in field guide descriptions and those in cut-over forests for which silvicultural data are accu-

mulated. As part of my continuing research on old-growth Red Maples, I reviewed data gathered by Harvard Forest researchers during their 1929-30 study of old-growth within New Hampshire's Pisgah Mountain area. Of 13 species of trees inventoried, on average only 5 achieved greater size than the Red Maple.

As the final chapter, this past August, I was exploring a patch of mature forest in the Mohawk Trail State Forest in Massachusetts. In the middle of the patch stood, proud and tall, a straight trunked old-growth Red Maple measuring a full 10 feet in circumference. Today it stands in sharp contrast to the nearby stump-sprouting specimens at the top of the ridge where continuous logging has led to the nowadays more familiar profiles. This big maple was the final proof I needed that Mother Nature had designed a magnificent tree and the degraded form we observe today bespeaks the wide gulf between nature's timeless wisdom and our ephemeral, technological meddling.  
**RED MAPLE'S FUTURE**

The plight of our natural forests has been described by noted big tree hunter and photographer Whit Bronsaugh. In his article, "Ambassadors of the Past" in the January/February 1994 edition of *American Forests*, Bronsaugh writes; "each of us creates standards of comparison based on the conditions in which we grew up. Too often we ask;

get a little worse? Thinking like a champion tree, the answer is: of course not, it's already alot worse." The Red Maple is a good indicator not only of that worsened condition, but of our abominable ignorance of the current pace of that worsening.

Bronaugh reveals one of the biggest reasons for public acceptance of the degraded condition of our forests when he writes: "With 90 percent of our virgin forests gone before most of us were born, our concept of a forest is often set by the standard of second-growth. This perception is perpetuated by timber harvesters who talk of re-growing a forest in 60 to 100 years where trees 300 to 1000 years old have been clear-cut. That's like plowing a prairie planting wheat, and calling it a grassland."

As for all species with any commercial value, the fate of the Red Maple in tomorrow's forests, or whatever substitutes for them, will probably be driven by economics. The species will likely be promoted locally as a source of firewood and be exploited regionally as a quick growing tree that can be harvested every 30 to 40 years for pulp. Wide-scale exploitation will perpetuate degraded forms and deepen our anesthetization to the decline of natural forests. Mother Nature will have few opportunities to reconstruct her original work, unimpeded by human interference.

Were it not for our surviving ancient forests, an increasingly alienated populace could not know that another species is in decline; that another design perfected over millennia is be-



ing compromised. Thankfully, a few of her original creations still grow in our ancient forest preserves, patiently waiting to tell their story. To stand dwarfed beside their immense trunks, to be sheltered beneath their great spreading limbs, to gaze into their foliage 100 feet above is to receive the meaning of that story. It is to experience the undiluted power of the species. It is also to understand what is being lost to our progeny. These sobering lessons can only be experienced where human intrusions have not left their marks: in our irreplaceable Eastern old growth forests.

*Bob Leverett is the East's greatest old-growth evangelist. He has saved almost as many people as he has trees, by converting them to the old-growth gospel. Those interested in attending an old-growth forest revival can reach Bob at 52 Fairfield Ave., Holyoke, MA 01040*

*For your own copy of Wild Earth write to The Cenozoic Society, POB 455, Richmond, VT 05477* ♦

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what is environmental quality like now, and can we afford to allow it to

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