



# The Highlands Voice

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## The Battle of Evermore

### Kumbrabow, Part 3

by bill raquette'

Our story thus far.

Long time users of the Kumbrabow State Forest were very upset about a recent timber clearcut by the WV Division of Forestry along a favorite hiking trail and hunting area in the Forest. Upon finding out about the DOF's new proposal to cut giant Oaks, Cherries and Hickories on a 150 acre tract adjacent to the clearcut they became enraged and mortified. They started getting the word out. The WVHC worked with local activists on a letter/telephone campaign, asking Governor Caperton not to approve the sale, at least until the public had a chance to become involved and had the chance to comment on the proposal. The governor's response was to have the DOF's new chief and several foresters, as well as representatives of Parks and Tourism to meet

with interested citizens.

The meeting with over 35 activists produced few results. A citizen's advisory committee was promised with one environmentalist member (the DOF already has hundreds of 'citizens' on dozens of advisory committees). One unexpected outcome was that several long time Kumbrabow users (as well as the Mountaineer Chapter of Trout Unlimited) were so insulted by the arrogance of the DOF that they filed suit in Kanawha Circuit Court to stop the sale.

*The story continues.*

The plaintiffs contested that the timber being sold at Kumbrabow was real estate belonging to the state. Timber has been declared real estate in numerous court decisions. According to WV statute, the Public Lands Corporation must review (with public hearing) any sales of publicly owned real estate. Since the DOF failed to get approval of

the Public Lands Corporation, the sale failed to meet state law and therefore was invalid. The WVHC decided to join in the lawsuit to open up the timber sale process to public input by donating \$1,000.

Several of the plaintiffs felt that the other uses of the Kumbrabow were not adequately considered. The harvesting of timber was destroying the use of part of the forest for other legislated uses. But the Public Lands Corporation seemed to be the soundest legal approach to allowing the public some input into these timber sale decisions.

On September 8, Kanawha Circuit Judge Herman Canady listened to arguments for and against an injunction to stop all activity on this sale until a full hearing could be held. The small courtroom was filled. The WVDOF reportedly had 8 witnesses to attest to the necessity and soundness of the 'sale'. Delegate Joe Martin also showed up. In order to save

time, both sides presented one witness. The Division of Forestry called forth a Dr. Carvel, retired WVU professor of forestry. The friends of Kumbrabow called on Chris Hansroft, Superintendent of Kumbrabow State Forest.

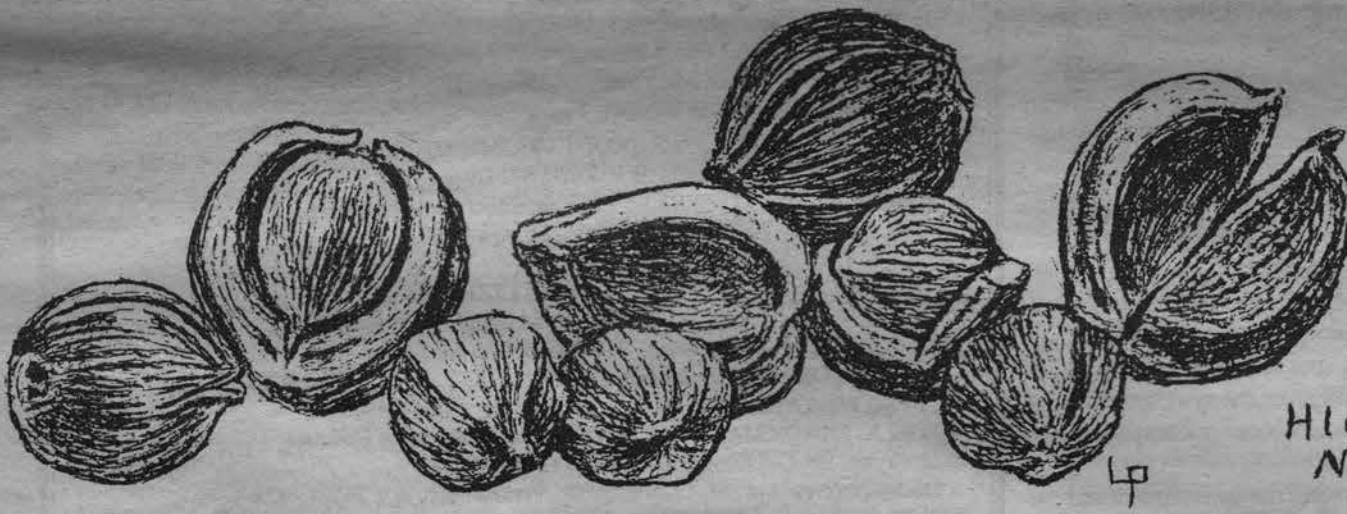
Dr. Carvel testified that the giant trees were damaged by fire in the 40's. He said that many of these giants were hollow with open trunks, just like canoes and that the bottom 20' of most of them were worthless for timber. He thought that the most of these trees would be falling in the near future.

Chris testified that the clearcut had upset many users, and had interfered with the recreational use of the forest. He said that despite the promise by the DOF not to cut within 50' of trails, all the large trees near the trail were marked for cutting.

Rather than have the hearing drag for days the Judge asked the lawyers if they would allow him to rule on points of law after reading the lawyers' briefs and having listened to the two witnesses. Both lawyers agreed. John McFerrin, counsel for the plaintiffs asked that a decision be made soon for fear that the DOF would try to further rush the sale and award the contract before Canady made his decision. The Judge promised to decide within a week, and officials of the DOF said they would refrain from rushing the sale.

The Judge did decide to grant the injunction. When the initial injunction expired he renewed it. In late October the renewal also expired without any hearing on the actual case. Under no legal restraint, the DOF proceeded to award the contract to Coastal Lumber and sent the contract off to the Attorney General for final signature.

Although it appears that the AG's office originally approved the contact, (see page 7)



HICKORY NUTS

## Old Growth in the East - A Survey

About five years ago the Earth First! journal carried a four part series by Mary Davis on Old Growth in the East. I faithfully saved all the issues, and have used them in the following years to locate and enjoy some of these mostly small remnants of the ancient forest that once covered all of the east. Over the years Mary has worked to locate 'new' and verify known tracts.

The Cenozoic Society has just published the fruition of her work "Old Growth in the East; a Survey". I for one am really excited about the new book, not only because of all the new information, but also because the old journals were getting a bit ragged. The survey is available from Wild Earth, POB 455, Richmond, VT 05477 for \$20 postpaid.

Just this morning I was talking to a logger about a job he was working on this week. He said the trees coming off the job were impressive and that the butt of one of the red

oaks would have been too wide to fit in the back of his full-sized pickup.

Here follows the chapter on West Virginia, one of the 34 states Mary Davis has surveyed for us.

West Virginia has more forest today than it did at the turn of the century, but most of it is second growth. The state's forests were clearcut on a massive scale between 1880 and 1920. Today's logging operations look small, compared with those early ventures. Old farms have grown over, and in some places the forest itself has come back. More than 90% of the state is now forested, yet some species have not recovered. For example, West Virginia once had over 500,000 acres of Red Spruce. Today there may be 50,000 to 70,000 acres. Only 3 known stands of Red Spruce are virgin. Paul Harmon of the West Virginia Natural Heritage Program reports that the Program has added no old growth sites to its database since he

furnished us with information in 1990.

Nevertheless, Bill Raquette', a West Virginia Conservationist who read this chapter wrote, "I believe that there is a lot more 'old growth' in West Virginia than we know about. Along the ridges/farm boundaries all over the state are 'old growth' trees. One whose rings I counted after they timbered a nearby farm was 250 years old. Several people have told me about tracts that had never been cut, but I haven't followed up on them yet." Robert Mueller and Steven Stephenson have told us of the existence of undocumented old growth on ridges and in ravines in the Central Appalachians.

Small, documented old-growth sites include Hungry Beech (Roane County); a 107-acre preserve of the Nature Conservancy that includes a probably uncut 14-acre tract, mainly beech-oak with Northern Red Oak predominant; and the Horner State Game Refuge

(Lewis County): 12 to 15 acres of virgin oak, including large White Oak and Chestnut Oak, through which the owners, the US Army Corps of Engineers, built a road. (see page 6)

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## ---from the heart of the mountains---

by Cindy Rank

### NO SENSE

Who can make sense of today's crazy pace of life?

So many people I talk to anymore are being swept away in so much busy-ness of one kind or another that they have little time to think about what they're doing or what's going on around them.

I don't mean to idealize the past, but despite any number of hardships and restraints that accompanied that more confined and orderly age, there also seemed to be a certain abundance of time and common sense, a sense of reasonableness that often escapes us in the flurry of freedoms and fantasies of our own current age of convenience and haste.

I must admit that there are times (like last weekend when nine inches of snow covered the ground for Halloween) when I'm tempted to think today's whirlwind existence might be due to some major shift in the earth's axis. But, memory of other surprising weather events quickly brings me back to reality.

No, Mother Nature's quirks, though unpredictable, are to be expected from time to time. To use her moods as an excuse for our new found craziness would be folly. ...No, what we're about is of our own making, and what we are making is very distressing.

Even relatively innocuous examples like the way trappings of Christmas overflow store shelves well before the ghosts of Halloween have gone to their rest are evidence of our apparent penchant for speed and greed that propels us mercilessly into a world of expensive non-sense, into a future full of cents but lacking in any real sense.

However, among the many possible scenarios, visions of snow-buried pumpkins and mountains of slick-paper holiday catalogues are somewhat easy to accept. More disturbing are many of the scenes of battle surrounding environmental protection efforts that take place in the wake of the lightening fast express we call life.

Aboard this speeding bullet of a train people who try to address problems are often derailed in the dizzying blurr of misleading influences that force, fool or cajole them into skirmishes of distraction while the real wars go on elsewhere.

In these instances, the focus of debate/struggle is often limited to a few of the most immediate and understandable aspects of a bigger problem. The most readily available solutions are then often accepted, leaving the root cause of the overall problem unheeded, untouched and thriving. We end up treating the symptoms but ignoring the cause...like taking an aspirin for a headache while bone cancer spreads.

Nowhere is this more evident than in matters that involve the environment and finances in the state of West Virginia.

In this arena skirmishes too frequently focus on reducing requirements imposed on individuals, while unfair advantages for larger, more powerful entities are allowed to fester.

Take for example W.V. residents who are irate because the W.V. Groundwater Protection Act may require a one-time \$30 fee to be added to the purchase price of any new septic tank. Why couldn't such anger and outrage be directed at strengthening those sections of the Act that basically excuse the state's biggest groundwater polluters (i.e. coal, gas & oil) from the same standards septic tank owners are bound by? Where is the outrage as these industries strive to reduce their responsibilities even further?

Look also at farmers who are growing increasingly fearful that they may have to begin fencing their cattle out of streams. Why is there not an equal amount of upset and effort put forth to challenge proposals that allow the oil and gas industry to discharge salt brine wastes into those same streams?

And what of the taxpayers groups who are concerned (and rightly so) about rising taxes, school bonds and a state budget dependent on income from sources as inane as a regressive food tax and the lottery. Why is the outcry (see page 8)

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# Announcements, Alerts and Sad Facts

## Nongame Funding

by Sue Perry

As you may know, permanent funding for the Nongame/Natural Heritage programs in the WV Division of Natural Resources was not passed in the 1993 state legislative session. The land transfer fee legislation was not passed for the second time (largely because of opposition from the real estate industry). A new bill was introduced to provide civil administrative penalties. This funding would provide an estimated \$260,000 and came close to passing last year. The Nongame/Natural Heritage Committee has recommended reintroduction of the land transfer fee bill and the Civil Administrative Penalties bill. \$1.5 million per year is needed to fund all Nongame/natural heritage programs. Governor Caperton's office appears to support funding for the Nongame program this year, he plans to declare November as 'Nongame Month'.

Letters are needed to the governor and legislators asking for permanent, adequate funding for Nongame wildlife programs. Points to make in your letters have been suggested by the Nongame/Natural Heritage Committee and include the following. The state of West Virginia is currently losing economic, educational, and conservation opportunities because there is no adequate and stable funding for the Nongame Wildlife Programs. Without adequate funding, these programs have been crippled in their ability to provide services and information that are critical to the economy, environment, and quality of life in West Virginia AND required by federal law. The loss of these programs will make West Virginia the only state unable to meet these obligations.

If properly funded, our Nongame Wildlife Programs will clearly increase tourism spending and enhance economic growth. Projects hoped for with proper funding include development of Watchable Wildlife areas with written guides (now proving successful in at least 12 other states) and establishment of a statewide system of natural areas.

\*\$66,000,000 is spent annually by West Virginia residents who enjoy Nongame-wildlife associated recreation (i.e. hiking, nature study, bird watching, wildlife photography, feeding and

observing wildlife).

\*An estimated 267,000 non-residents spend 1.1 million visitor days annually in WV pursuing Nongame-related activities, generating \$110,000,000 in tourism dollars.

West Virginia's Natural Heritage Program maintains the only state data base of information about specific locations of rare, threatened, and endangered animals and plants. These programs provide information that is currently mandated by the federal government for the Surface Mining and Reclamation act, Section 404 of the Clean water Act, and the Endangered Species Act, at a fraction of the cost charged by private consultants. Federally-required natural resource data are now being provided by the Natural Heritage employees (also at a fraction of the cost charged by probate consultants), to the Division of Environmental Protection, the Division of Highways, all private mineral and mining activities, oil and gas exploration, and all federally-funded private development projects (about 800 requests annually).

Conservation of West Virginia's high biological diversity will ensure that future generations enjoy these valuable resources. The Natural Heritage Programs personnel can monitor and protect species before they are federally mandated for recovery, at costs ranging in the millions of dollars. With proper funding, West Virginia will become eligible for federal matching funds from the US. Fish and Wildlife Service, US. Forest Service, National Park Service, Partnership for Wildlife Act, and the national Fish and Wildlife Foundation, effectively multiplying benefits to our state's environment and citizens.

When properly funded, our Nongame Programs will again be able to act as a resource for educators, and youth and conservation organizations across the state, by producing materials that help instill a sense of pride and responsibility for our diverse ecosystems. Resources include books, videos, and other classroom materials on native West Virginian wildlife and plant life, teacher workshops, and the hands-on learning opportunities offered through the popular annual Nongame Wildlife Weekend.

## Coal Futures Conference

Morgantown, West Virginia January 15, 1994

The Mountaineer Policy Institute, the Citizen's Coal Council, and the WVU Environmental Law Society are sponsoring this conference to address a wide range of questions and issues related to the future of coal mining, from a critical perspective. John Alexander Williams, distinguished Appalachian Studies historian, will give a keynote address on "What Coal's Past Can Teach Us About Coal's Future" at 11 am. A diverse group from fifteen coal field states is expected to attend - among them activists, governmental mining regulators, coalfield journalists, economists, attorneys, coal producers, planners, historians....

All sessions will be held at the WVU Mountainlair Student Center in Morgantown. Conference registration is free. For more information contact the Mountaineer Policy Institute, 264 High St., Morgantown, WV 26505. (304) 296-8963.

enough to wear cool shirts and talk the talk. Write this letter. For more info contact Save America's Forests, 4 Library Court, SE, Washington, DC 20003 (202) 544 9219.

## National Forests - Friends in Need - Ohio

A recent decision in federal appeals court in Washington DC granted an Ohio Company the rights to strip mine 1,800 acres in the Wayne National Forest. According to US Representative Nick Rahall's environmental aide Jim Zoia the government really screwed up on this one failing to further appeal the decision within the allotted time period. Representative Rahall has been very helpful in the effort to keep our national forests free from the ravages of strip mining. A strip mining permit application for 80 of these 1800 acres is currently being reviewed by the Ohio DNR. The comment period is over and the permit will most likely be approved by Christmas. Activists are looking into administrative and judicial appeal, a media campaign and civil disobedience. For more info call Joe Hazelbaker 614-459-0675. A demonstration to protest the ravaging of our forest lands will be held at the state capitol in Columbus on November 18.

## Virginia.

GWNF Supervisor signed the decision notice to clearcut a 25 acre stand of "183 yr. old Chestnut Oak." The trees are designated 'unit 1' of the Stillhouse timber sale. Dr. Mueller of Virginians for Wilderness counted over 300 annual growth rings on a pine stump in the area. The Forest Service said that although the stand of trees was an 'old-age stand', because it was only an isolated stand of 25 acres surrounded by recent clearcuts it had little value as an old growth ecosystem. In the Monongahela National Forest, almost all stands set aside for old growth are less than 25 acres, and all are less than 183 years old. Because the GW National Forest lies to the east of the Allegheny Ridge it lies in a 'rain shadow', a low rainfall area. Forests in these areas tend to grow more slowly than in high rainfall areas like the Monongahela National Forest. A local forest activist appealed the decision, but the appeal was denied.



A 200 year old tree and friend in the 'Stillhouse Unit #1'

## West Virginia - Backbone Mountain - Cheat Ranger District.

Rare habitat to be destroyed. In the early part of March 1993 a windstorm resulted in the windthrow of timber within an area covering approximately 65 acres south of the Mill Run drainage. The Forest service proposes to harvest this downed and/or damaged timber as soon as possible in 1994 before the quality and value of the wood in the downed and damaged trees is lost. The Ranger for the district wants to hear your concerns before November 23. Here are my comments to the district ranger Bill Woodland-I hope the Environmental Assessment for this 'proposal' considers the extreme scarcity of this type of habitat. What species are favored by windthrow habitat? What micro habitats will be eliminated if logs are removed? The Forest Service has supposedly begun to manage these common forests ecologically. What is the justification for the destruction of this unique extirpated habitat? Specifically, what mushrooms/fungi would have grown on or under the rotting windthrows? You can write the ranger at Cheat Ranger District, MNF, PO Box 368 Parsons, WV 26287

## Holcomb Opportunity Area - Richwood Ranger District

The USFS has published the decision notice for the Holcomb Opportunity Area in the Richwood District of the Monongahela National Forest. The 'Holcomb OA' lies between the Cherry and Cranberry Rivers just southeast of the Gauley River. The Forest Service proposes to 'timber harvest' "over approximately 1,137 acres." They also plan to build 4.4 miles of road. Forest Service decision's may be appealed within 45 days of signing. The appeal period for this decision is November 15. Although many folks commented for and against the creation of an OHV (off highway vehicle) trail in the area, no trails dedicated to OHV's are included in the decision notice. OHV's are not banned from the new 4.4 miles of road. The Decision Notices reads, "Many comments were received indicating considerable public interest, both for and against, possible OHV trails in this vicinity. We have kept this in mind as we evaluated this area to help determine if there is a viable opportunity over a somewhat larger landbase. It is possible that at some future date a proposal to develop an OHV trail network may be analyzed. If so, the public will be given an opportunity to participate." But you won't know about it unless you are on the mailing list of the Ranger Districts. You can receive all mailings from the Gauley (or just those you are interested in) by writing to the Gauley District Ranger, PO Box 110, Richwood, WV 26261.

## Letters needed to Rahall and Wise in support of H.R. 1164.

Also known as the Forest Biodiversity and Clearcutting Prohibition Act. H.R. 1164 is the only comprehensive bill in Congress that addresses National Forest Management problems across the country. Under the Act the Forest Service will be required to restore all the original native plants and animals that originally existed on that site before human intervention, either by active restoration projects or by letting natural succession. The bill further bans clearcutting and 'even aged' logging on all federal lands. The Act will allow selection logging. The bill prevents construction of logging roads in approximately 60 million acres of presently roadless areas as defined in RARE II. After its first hearing on October 28, the number of sponsors jumped from 75 to 90. Nick Rahall appears to be moving towards becoming a co-sponsor. Bob Wise has been totally out of it, refusing to return calls from Save America's Forests - one of the main lobbyists for the bill. Both representatives need to hear how strongly you feel about the bill. This is your chance to help nature return to our National Forests. Its not

# Harmonic Mean Flow- What does it all Mean?

*About the Author: Frank Young is a small automotive business owner near Ripley, WV, in Jackson County. He is a native West Virginian, having lived all his life in Kanawha and Jackson counties. He has no direct links to any enterprise that may be directly affected by a proposed change in critical stream flow for determining amounts of carcinogens an industry can legally dump into the waters of West Virginia.*

*Author's note: This commentary on Harmonic Mean Flow and its effects is not intended to be a 'technical' paper. But it is an effort at a 'common sense' look at a subject that is sometimes misrepresented as too technical a subject for some average folks to think about or comment upon. This author's interest in the Harmonic Mean Flow proposal is piqued by a perception of extreme secrecy surrounding the issue and by similar perceptions about what is behind the drive for the proposed water quality changes. This commentary deals with some of the perceived social consequences of water quality changes.*

## 'Harmonic Mean Flow- What does it all Mean?'

The debate over a proposal by the WV Water Resource Board to institute Harmonic Mean Flow in place of 7Q10 is simply to ask "How do we measure how much water is in our streams and rivers?" Strictly speaking, the relative definitions of various methods of measuring the amounts of water in streams can be easily understood by most anyone who realizes that rivers and streams sometimes run high, sometimes run low, but usually run somewhere in between. Most people already know this.

But the relative simplicity is soon lost when the reason for needing to determine this measurement is so that we can determine how much, if any, cancer-causing waste should be dumped into a receiving stream.

Regulations relating to pollution permit levels into streams allow releases of the toxins in amounts measured in 'parts per million', 'parts per trillion', or sometimes 'parts per quadrillion' of units of toxins per units of water present in the stream. But that's only half of the pollution permitting equation. Determining amounts of water available for dilution of pollution is the other half. Amounts of water in a stream are usually expressed as numbers of cubic feet of water flowing per second past a particular point of the stream. Due to the differing amounts of water present in a particular stream throughout the year and within certain 'wet' or 'dry' seasons and periods, it is not always easy to know how much water is available in a stream for dilution of pollution.

So then, how do we define what, if any, is a 'safe' level of discharge of carcinogens (cancer-causing agents) into a particular stream? One way is to assume that a fixed amount of water is available, even though the amount of water actually available varies widely from time to time. How do we determine what this assumed amount of water should be? That is the crux of the 7Q10 versus Harmonic Mean Flow argument. For 23 years the state of West Virginia has calculated amounts of water available by a method called 7Q10. 7Q10 is defined as the lowest average consecutive 7-day flow of a stream with an average recurrence of once in ten years.

An alternate method, called Harmonic Mean Flow (HMF), is being proposed. Harmonic Mean Flow is defined by the EPA as

a long term mean flow value calculated by retrieving several years of daily flow records, taking the reciprocal of each value, calculating the average, then taking the reciprocal of the average.

Harmonic Mean Flow then, represents an 'average' flow estimate, while 7Q10 represents a low flow estimate. Permitted discharges of toxins into a stream with a 7Q10 calculated flow of water would be in lesser amounts than permitted discharges into the same stream using Harmonic Mean Flow as the flow of water calculation.



Just how much more carcinogenic toxics are discharged using HMF rather than 7Q10? The EPA has determined that in all of the 60 streams analyzed, the HMF is more than 2 times the 7Q10 flow, and that in 40 of the 60 streams HMFs are equal to greater than 3.5 times the 7Q10 flow. In other words, in 40 of the sixty analyzed streams, amounts of toxics in excess of 3.5 times permitted under the existing 7Q10 calculation method used in West Virginia could be permitted using HMF as the

flow calculation. In several West Virginia streams, the HMF versus 7Q10 variance is even greater. On the Ohio River at Huntington, the Kanawha River at Charleston and the Greenbrier River at Hillsdale the Harmonic Mean Flow as a multiple of 7Q10 flow is 7.4, 5.4, and 7.8 respectively (1). On these rivers then, an HMF calculation would produce up to 7.8 times more in carcinogenic discharges than would a 7Q10 flow calculation. These increased discharges would result in increased cancer risks (1), the magnitude of which is subject to debate.

estimated to be perhaps a pound or more at a time, amounting to perhaps 40 or 50 pounds or more per year, ten times the EPA estimate of consumption.

EPA's recommendation for using HMF for carcinogens is based on the fact that adverse impacts of carcinogenic pollutants are estimated in terms of human lifetime intakes of such pollutants. This rationale is developed into a linear lifetime exposure model. In a linear model, the risk of cancer attributable to a particular material is assumed to be directly proportional to the total lifetime dose of the material. There are, however, a number of circumstances in which the linear model may not be appropriate in that it may under-estimate actual risk (2).

At the risk of sounding somewhat technical in a non-technical commentary, I offer a summary of a 27 page essay by Dr. Daniel A. Goldstein, MD., a Medical Toxicologist at the University of Colorado, on the subject of linear lifetime exposure to environmental carcinogens. This essay, titled LOW-DOSE CARCINOGENESIS: REGULATORY SIGNIFICANCE OF NON - LINEAR EFFECTS, challenges assumptions by the EPA that the linear lifetime exposure model is correct for all cancer causing substances and all individuals.

Dr. Goldstein concludes in part, in his summary: (a) Overall, for all carcinogenic materials on the average, the use of a linear model for regulatory purposes is probably conservative. (b) Given a linear model, a change from 7Q10 to HMF will produce an over all increase in environmental cancer risk of 5 to 8 fold. (c) For individual chemical entities, the effects of non-linearity on risk assessment may be substantial. The effects of greatest concern based upon available data are those effects most likely to produce supra-linear behavior in real situations. This includes dose-rate dependent effects as well as non-linearities in absorption, excretion, etc. which cause risk to increase sharply at low doses and less sharply at higher doses, i.e. a concave down, dose response curve. For environmental exposures demonstrating this type of behavior, the actual risk entailed by changing to Harmonic Mean Flow may increase by far more the 8 fold (2).

Dr. Goldstein concludes, "As there is no fundamental scientific answer to what constitutes acceptable risk, the regulatory agencies and legislators of West Virginia must ultimately decide whether the additional risk entailed in the issue of HMF is merited in view of present risk assessment methodology (2).

## PART 2

The first part of this commentary dealt with establishing some understanding of 7Q10 and Harmonic Mean Flow (HMF) concepts. It also touched briefly on the technical aspects of the EPA rationale for determining the appropriateness of using HMF as a critical stream flow for carcinogens. Part 2 is about the author's perception of the generic and specific politics of the Harmonic Mean Flow proposals.

What's really behind the political drive to adopt Harmonic Mean Flow? West Virginia Commerce Secretary John Ranson says that never has he had a boss who felt so strongly about and issue as Governor Caperton does about HMF. But when Caperton appeared on a 'talk' radio program recently to discuss issues, he appeared to have only vague concepts of what HMF is about. He talked generally about economic development that would surround HMF. He talked vaguely about a pulp and

Human health criteria for carcinogens are based on an assumed long-term exposure of 70 years. In the case of stream water, this is based on the assumption of an average consumption of 2 liters of water and 6 grams of fish per day (approximately 5 pounds per year) from the stream. This EPA assumption of 5 pounds of fish per year per individual strikes this writer as amazingly low. There are people near my home in Jackson County who routinely eat their catch of fish from a stream. This is

paper mill rumored to be in the works in Mason County.

But Caperton appeared to have no thoughts on chlorine-free pulp bleaching processes, processes that may not require lowering of water quality standards at all. Again, the rumor is that a pulp and paper company which proposes to build possibly the largest pulp and paper mill in North America is the driving force behind the proposal to change water flow calculations from 7Q10 to the riskier HMF.

And what about this rumored pulp and paper mill? What does it offer West Virginia? Why is it such a hush-hush project? State officials don't talk much about it. Exactly what do the mill's developers ask of state government? They admit that they want something, but they don't tell the public what they want.

In the spring of this year, Kim Baker, Vice President of the West Virginia Environmental Council, asked Parsons and Whittemore, Inc. (P&W), the rumored developers of the pulp mill project, perhaps to attend a public meeting with residents of Mason County and the Ohio valley area. The residents wanted to hear from the developers about the project and its possible impact on their community.

A short response from P&W Vice-President C. Kenneth Goddard showed little desire for a public meeting. Goddard wrote Baker, "...I suggest it is premature to arrange the meeting that you suggest until we have an opportunity to design a project based on the rules and regulations yet to be promulgated by West Virginia. At the moment, the specific requirements have not been adopted and we await the results of the further analyses and action by the Legislature." (3)

But what are the "requirements" Mr. Goddard speaks of? Why can these "requirements" not be made public? Do they involve environmental blackmail of the state? Do the requirements involve tax credits, which WV already floats to the tune of more than \$100 million annually? What kind of economic development would the pulp and paper mill bring? Minimum wage jobs? \$5.00 and hour jobs? Prevailing wage jobs?

One may wonder how a commentary about Harmonic Mean Flow gets into such questions as taxes and wages for a proposed

industrial facility. But I believe that it is legitimate to ask ourselves what kind(s) of businesses we are inviting to the state with a lowering of water quality standards.

One may at times frequent a bar without much personal reservation. But that same individual could reasonably ask what kinds of people might appear in their home community in the event of zoning changes permitting a bar to open next door to one's residence. I believe the people of the Ohio Valley can reasonably ask what kinds of enterprises might appear in their communities with these proposed water quality degradation's.

I share the view that West Virginia has too often been used by unscrupulous entrepreneurs who demand too much in the way of environmental and economic concessions from state government and the state's citizens.

Is the Harmonic Mean Flow proposal another door for more of the same. It smacks of the same old pattern. Promise jobs. (How many is it now 500 or 2000?) Demand concessions. (What does P&W VP Goddard mean by requirements?) Slop money into politicians' coffers. (How is it that an attorney from New Jersey, and a Chairman and a 'housewife' from Connecticut, all identified as representatives of Parsons and Whittemore, dumped \$6,000 collectively into West Virginia's incumbent governor's 1992 re-election campaign? (For source, see acknowledgment #4)

What do they get for their campaign contributions? More secrecy concerning the issue of Harmonic Mean Flow? A decision of decisions made behind closed doors rather than a full airing of the issues with the affected public?

Parsons and Whittemore, Inc. may well be a good corporate citizen. But a familiar pattern is developing. Make promises, demand 'requirements', give money to politicians, keep the public in the dark until 'requirements' are met.

Water quality standards can be used to help keep rivers and streams cleaner. They also can be used to help keep state government cleaner. The 'requirements' Mr. Goddard speaks of should be the state's requirements of Parsons and Whittemore, not Mr. Goddard's requirements of state government.

I have herein referred to 'rumors' about

a proposed pulp and paper mill. Why? Because neither the company nor state officials are sufficiently forthcoming that the public can ascertain what is really being proposed. But we do have the rumors which no one denies and that appear to drive the issue.

Harmonic Mean Flow appears to welcome possibly the largest pulp and paper mill in North America with no public debate on the serious compromises the state is being asked to make to accommodate such an enterprise. Cancer causing discharges were discussed in part 1 of this commentary.

Chlorine bleaching versus non-chlorine bleaching is another important issue that is not being openly discussed.

Another serious public issue is the matter of the harvesting of raw materials (trees) necessary to feed such a gigantic facility. All these issues need to be debated openly.

How many thousands of acres of trees are required annually to feed such a facility? What will be the environmental consequences of such a baring of the hills and mountains in counties surrounding such a mill?

Virtually no tree extraction protections with supporting regulations for enforcement exist in West Virginia. Such results as soil erosion, stream siltation and acid soil exposure are not addressed in the charge of the state Division of Forestry. Is it not advisable to have in place adequate environmental safeguards against devastation likely to result in the wake of such a large extraction and manufacturing facility as what appears to be proposed? Should such protection not be in place before such a facility is permitted?

West Virginia history is full of examples where industrial facilities precede environmental devastation. Coal, oil, gas, chemical and many other manufacturing facilities were born in West Virginia without benefit of legitimate regulatory parentage. Proper environmental oversight was and is an afterthought in each of these industries. The state of West Virginia expends vast sums in trying to only partially overcome the pollution and degradation caused by the decades of environmental rape and plunder in the name of 'economic development'.

Effort for damage prevention oversight of the offending industries was and is stymied in

defense of maintaining a 'good economic climate'. But the economic costs of pollution and ecological disregard are demonstrably high and climbing. The total social costs are much higher.

Is the pulp and paper industry to be born here within and equally illegitimate marriage of development and regulatory oversight? The current direction of events would lead one to that conclusion.

Another, and perhaps the biggest problem, is that the politics of enforcement is chronically corrupted into the politics of non-regulation and non-enforcement. Therefore, at this time, I believe that resisting the pressures to institute Harmonic Mean Flow as the critical flow measurement of rivers and streams in West Virginia is prudent. By not instituting HMF, and therefore not inviting a new round of political, economic, environmental and social blackmail, we can have some breathing room left in which to assess our environmental realities and develop comprehensive policy on social and economic expectations.

#### Acknowledgments-

(1) Carpenter Environmental Services, Inc. "Study of Proposed Rule 8.2.C of West Virginia's "Requirements Governing Water Quality Standards" CEA # 91095 in communication with client dated June 25, 1991

(2) Dr. Daniel A Goldstein, MD, Medical Toxicologist; Adjunct Professor of Environmental Sciences and Engineering Ecology, Colorado School of Mines; Assistant Clinical Professor of Pediatrics, University of Colorado, School of Medicine; "LOW-DOSE CARCINOGENESIS: REGULATORY SIGNIFICANCE OF NON - LINEAR EFFECTS" - Unpublished essay, dated February 3, 1993.

(3) Letter - from C. Kenneth Goddard, Vice-President of Parsons & Whittemore, Inc., 4 International Drive, Rye Brook, New York 10573, to Kim Baker with the Ohio Valley Environmental Coalition, PO Box 970, Proctorsville, Ohio 45669; dated May 4, 1993.

(4) Report Titled "Invested Interests: Money and Politics in the 1992 West Virginia Gubernatorial Election", by Common Cause of West Virginia, a public interest group, report dated March 1993.

## De-Intellectualize Biodiversity - Its the Canary Stupid!

by Norman Steenstra

The Federal Endangered Species Act is up for re authorization in the coming months. This federal law has been used both tactically and strategically by the environmental movement. Tactically its been employed to stop specific threats. The snail darter vs. TVA is perhaps the classic example. On a strategic level the Act has been used to argue for the preservation of intact ecosystems, bioregions and the connection of all living things to the whole ball of wax.

No doubt about it, the Act is one of the most important FIRST STEPS in protecting biodiversity. The reauthorization debate will be a critical and caustic examination of the Act's effects on development and the environment. The wise use movement and particularly the right wing "taking" groups will mount a major effort to weaken the new bill.

The failing of enviro movement has been that we've done a poor job of enlightening the public on the concept of biodiversity. We have

intellectualized bio-diversity too much. We can't explain bio-diversity to the person on the street. He or she really doesn't get it. The concept is just not part of the knowledge or value system of the average citizen.

The Idaho environmental movement is currently faced with one of those tough, awful, dilemmas that seem to cling to this movement. A particular snail is in danger of extinction. This snail is about the size of a ball point pen point. It lives in a few localized wetlands created by springs.

Fifty nine working farms are dependent upon groundwater feeding the springs that enable the tiny snails to survive. Serious groundwater depletion from irrigation is occurring as the farms draw-down ever increasing amounts of water. The wetlands are shrinking at an alarming rate.

Idaho environmentalists believe that they can successfully sue to stop further groundwater loss based on the Endangered Species Act. They are reluctant to do so. With the reauthori-

zation of the Act soon to be debated they are hesitant to add fuel to the fire of the controversy. They cringe at potential headlines such as "Pinhead Snail Wipes out 59 Businesses." They ponder the wisdom of saving this snail at the risk of losing good national policy. Its a tough problem and rational people can argue both sides.

It struck me that this poser strikes at the very core of the bio-diversity concept. The snail, perhaps only marginally important in the local ecosystem is in fact an indicator species. It indicates a problem. It is an indicator species for 59 farms. If water draw down goes unchecked the snails will go. Yet, in a surprisingly short time the farms will also share the snail's fate. Whoa, maybe there's only room for 32 farms and the snail. The message is rather simple - water is being used at a rate that is significantly greater than it is being replenished.

Using terms like 'indicator species' is not de-intellectualizing the idea of bio-

diversity. We need to find a more commonly understandable way of describing what we mean to the Public.

Nearly every West Virginian understands the role of a canary in an old fashioned coal mine. If the canary sings, mine coal; if the canary drops dead, seriously consider altering your local. the Idaho snail has a similar role. The Endangered Species Act provides us with at least a minimum warning that problems exist. Its our most effective wake up call.

#### 1994 WVHC meetings

Winter Board Meeting - January 8, WV Rivers Coalition Office, Buchannon

SPRING REVIEW - April 29 - May 1

Summer Board Meeting - July 6

FALL REVIEW - Oct 14-16.

# Old Growth Characteristics

*This piece is from the Forward to Old Growth in the East, written by Robert Leverett. Due to space constraints I can't reprint the whole section on Old Growth Characteristics. Other sections of the Forward include 'Demise of the Original Eastern Forests', 'How Much Old-Growth is left in the Eastern USA', 'Recognizing Old Growth Trees', 'The Value of Eastern Old Growth Forests'.*

**ADVANCED AGE OF TREES.** There must be advanced age in a sizable percentage of the mature trees in a forest for it to be old growth. However, this qualitative criterion leaves endless room for debating numbers. Descriptions of forests thought to be virgin, provided by eyewitnesses during colonial times, speak of open park-like conditions with as few as 5 large, mature trees per acre. A person could ride through these 'virgin forests' on horseback at a full gallop without being impeded by underbrush. These fanciful accounts of what were then thought to be primeval forests are now generally believed to describe areas artificially maintained by Native Americans. We can only speculate on the reasons, but ease of travel and ample deer browse have a ring of authenticity. Much research must be done before we can understand the extent to which Native Americans influenced the vegetation of eastern North America.

Uniform age distributions within timber stands can be troublesome to ecologists trying to verify old-growth, since it is well understood that many random disturbances over long time periods lead to uneven age distributions. Ideally, an old-growth stand will exhibit a wide range of ages for the trees, but there will be small patches that exhibit age uniformity due to past localized disturbances. The older trees may be either thickly or sparsely distributed. The number of older trees per acre can vary greatly even within the same general area. On steep slopes with a disturbance history, thickly populated even-aged stands can develop and

persist for several centuries. Red Spruce and Eastern Hemlock commonly produce such patterns. Densities of 40 to 60 old trees per acre are not unusual.

Several age profiles have been proposed for Eastern old-growth forests. Ideally, 50 per cent of the mature specimens of several species would have reached at least half the maximum age for those species. A few trees would approach the maximum ages attainable for the represented species. A drawback of this latter criterion is that age maxima are highly site specific and local maxima might be extremely difficult to determine. At least two Eastern Hemlock stands in Pennsylvania have had trees age dated to over 900 years. However, 350 to 450 years is a more common age maximum for the Eastern Hemlock in most of the old-growth stands that have been extensively studied. Applying the absolute maximum longevity would disqualify many currently designated old-growth hemlock. In addition, there are uncut stands that have suffered major natural disturbance in which well over 50 percent of the mature trees may be under 50 percent of the assumed maximum age for the species and none may have reached the maximum.

How old do the trees in a stand have to be to be considered old-growth? Forest ecologist Charles Cogbill of Vermont describes original growth stands of Red Spruce with average ages around 180 years. Red Spruce can exceed 400 years in age. Disease and weather-related damage, however, may keep an exposed stand thinned of truly old trees. Should we apply the criteria that the average age of mature trees be a least 200 years with some over 400, these stands could not be called old-growth. **DOWNED LOGS.** There should be a highly conspicuous component of down woody debris in and old-growth forest. Downed logs in all stages of decay should be clearly visible, frequently in crisscrossing patterns. Such distributions indicate a variety and essentially random pattern of disturbances that leave their

signature over time. This is the visible result of 'management' by Nature. However, the amount of downed material varies with the type of forest. Downed logs may be more numerous in a coniferous forest than a deciduous one due to slower rates of decay of the conifers - which typically grow in highly acidic soil that deters decomposition.

**STANDING SNAGS....**

**UNEVEN-AGED STRUCTURE OF CANOPY SPECIES.** Eastern old-growth forests are typically comprised of trees of all ages. Over time, mature trees succumb to the forces of Nature and fall. Blowdowns occur. These natural events open gaps and allow younger trees to receive concentrated sunlight, and spurt towards the canopy. The mixture of larger,

older emergent trees with smaller, younger ones gives the forest canopy a heavily textured appearance when seen from a distance. This 'shaggy look' represents sculpting of the canopy by many small random disturbances over the centuries. But there are exceptions to the uneven canopy. Wind sculpted forest such as those growing on exposed ridges may have a relatively uniform canopy, as seen from a distance. They can be confused with a younger, even-aged forest. A large-scale blowdown may result in canopy trees in a large area of a forest being relatively even-aged for decades. This even-agedness does not exclude an area from being old-growth.

**SINGLE AND MULTIPLE TREE FALL GAPS....(continued on page 8)**



Above drawing from The Northern Forest Forum, Lancaster, NH. Drawings on page one and four by Liz Plazo of Lincoln County, WV

## Old Growth in the East

(from page 1)

**MONONGAHELA NATIONAL FOREST**, in eastern West Virginia.

As are many other National Forests, Monongahela is in the process of conducting ecosystem analyses to select land to set aside to become old growth. Only 5% of the land in specific areas will be so designated; but, since the Forest contains 5 Wildernesses and 16 areas under 6.2 management prescription, where logging cannot take place (this 6.2 designation is less than secure and may be changed during plan revisions - editor's note), at least one-fourth of the 900,000 acres in the Forest will eventually have old-growth characteristics.

Meanwhile, the known old growth is limited to: - **Gaudineer Scenic Area on Cheat Mountain** (Pocahontas County). A 140-acre, of which about 50 acres are virgin Red Spruce-northern hardwood forest. Coring has shown that some trees are about 350 years old (Stephenson). "The remaining 90 acres has had some cutting, mainly salvage of blow-down, with most of the original growth still standing" (Foss). What was preserved by an old surveying error is, however, suffering from contemporary pollution. In recent years a large percentage of the old-growth Red Spruce have died or shown signs of dying, apparently due to acid deposition, as in many other high elevation stands in the Appalachians. As a result of the death of the older spruce, the dominant canopy

is becoming mixed hardwoods. Yellow Birch, Red Maple, Sugar Maple, and beech are among the hardwoods. Young spruce seem "healthy and vigorous" and form a "thick and strong" understory (Goodrich). Rare, sensitive, or endangered species are *Carex aestivalis*, *Plethodon nettingi*, and *Ilex collina* (Harmon).

**Shaver's Mountain Spruce-Hemlock Stand**, in Otter Creek Wilderness (Randolph County). Approximately 60 acres of virgin Red Spruce -Eastern Hemlock. Dispute over ownership of the land apparently prevented the tract's being cut. Much of the hemlock and older spruce are in decline here as in the better known Gaudineer Scenic Area (Goodrich).

**Fanny Bennett Hemlock Grove** (Pendleton County). A 15 to 20-acre grove of "old, mature and large" Eastern Hemlock and White Oak, within a 70-acre area. The stand appears to have been selectively logged. As of 1974, the understory and herbaceous layer were generally "very sparse" (Goodrich, Clovis)

**Clark tract** (Greenbrier County). Nine acres of large white Pine associated with White Oak and Chestnut Oak. The stand was once considered to be virgin, but is now thought to have been cut (Harmon). Pawelczyk posits light thinning in the thirties or forties.

**Turkey Run on Shavers Mountain** (Tucker County) Probably no more than 10 acres of virgin Red Spruce. Great Rhododendron is the most important shrub (Stephenson and Adams)

**Murphy Preserve**, in western West Virginia (Ritchie County). Approximately 100 acres of old growth on the larger of two tracts that make up The Nature Conservancy's 276 acre Murphy Preserve. The forest is mixed mesophytic with large Cucumber Trees. Apparently it was selectively logged (Harmon and Hill).

**Cathedral State Park**, in North-central West Virginia (Preston County). Virgin Hemlock and hemlock-hardwood forest covering much of a 133-acre park. The park contains several trails and a picnic area. The largest known Eastern Hemlock in West Virginia is here (80 inches dbh), plus large oaks and maples, and two species rare in the state: the Northeastern Aster and the Virginia Big-eared bat (Harmon and Robinowitz). Conservationist Mark Robinowitz writes that the park is "Extremely beautiful, but...surrounded by road and cow pastures"

**North Fork Red Pine Stand**, east-central West Virginia (Pendleton County). An indigenous population of Red Pine at its southern-most limit. The stand, which faces north to northwest, stretches along the ridge at the top of North Fork Mountain. Buell estimated in 1938 that the stand covered 50 acres. According to Stephenson, the area appears to have undergone some logging, but Harmon of the WV Natural Heritage Program characterizes the Red Pine themselves as

"virgin" and has pointed out that foresters describe the stand as uncut. Most of the acreage belongs to various private individuals, but a part is in the Monongahela National Forest. Red Pine dominates the area. A few White Pine, Pitch Pine, Northern red oak, Eastern Hemlock and Sugar Maple are also present. The maximum age of the Red Pine cored in 1984 was 107 years. The pine are successfully reproducing (Stephenson). Rare, sensitive, or endangered species, in addition to the Red Pine, are *Paronychia argyrocoma*, *Potentilla tridentata*, *Juncus trifidus caroliniana* and *Heuchera alba* (Harmon).

**Helmick Rock on South Branch Mountain** (Hardy County) is the site of a second indigenous population of Red Pine. This stand, the only other indigenous population identified in West Virginia, is privately owned. Like the North Fork stand, the smaller stand faces north to northwest and is on a relatively steep slope. Again the logging history is unclear. the importance value of the Red Pine at Helmick Rock is only 68.5 %, and more additional tree species are present. The maximum age in 1984 was 132 years. As at North Fork, the trees are reproducing (Harmon and Stephenson). Foresters who have used Red Pine extensively for reforestation learned that seeds from West Virginia stands grow much better in West Virginia than do seeds from Maine (Buell).

# PUBLIC ACCESS AND RIPARIAN RIGHTS IN WEST VIRGINIA STREAMS

*What follows is the original text of an article that appeared in the Summer 1993 issue of the CACAPON. It is reprinted here with permission of the author and the Pine Run Ecological Laboratory, publishers of CACAPON.*

by Larry W. George, Attorney-at-Law

West Virginians have historically enjoyed unqualified access to the state's rivers and streams for fishing, hunting, boating and other outdoor recreational activities. Such use is premised on the common belief that the state's streambeds are public property. Instead, 18th century land grants have conveyed portions of many rivers and streams to riparian landowners, those whose surface estate adjoin a stream, leaving both landowner rights and public access uncertain.

Conflicts between riparian landowners and recreational users are increasing in the southern Appalachians with the growth of outdoor recreation, tourism and recreational property development. In recent years, riparian landowners in Virginia have increasingly asserted control over rivers and streams by claiming title to streambeds under the provisions of colonial and early commonwealth land grants.

In the most celebrated situation, landowners along the Jackson River have caused fishermen, canoeists and commercial rafters to be cited for trespassing. Virginia courts have upheld the right of riparian landowners, under certain land grants, to post streams against trespassing. Both the rights of riparian landowners and the public's opportunities to enjoy many Virginia streams are in disarray.

Virginia and West Virginia share a common heritage of real property law and land grants which confront our state with similar prospects. Isolated stream ownership conflicts have already occurred in the eastern Panhandle. For reasons detailed below, the best solution would be new legislation which establishes uniform standards of stream access for recreational use and clarifies the respective rights of riparian landowners and the public.

Prior to 1776, land grants were issued by the King of England or the Colonial Council of Virginia and typically conveyed ownership of the "land and rivers, waters and water courses." After independence, the Commonwealth of Virginia Land Office was established in 1779 to market public lands and encourage settlement of western Virginia. Through the 1780's, the Land Office conveyed such lands

with "senior patents" which continued the colonial practice of passing title to streambeds.

By the early 1790's, Virginia was reviewing the issue of streambed titles due to growing concerns for free navigation and fishing. The Land Office increasingly reserved public ownership of rivers when issuing patents. In 1792, the Virginia General Assembly reserved all streams remaining in public ownership east of the Allegheny Front - encompassing today's Eastern Panhandle. In 1802, the General Assembly prohibited all further conveyances of the "beds of the rivers and creeks in the western part of this commonwealth." But by this time nearly all the lands - and frequently the rivers and streams - in what today comprises West Virginia had been conveyed to private owners.

The next half century saw most western Virginia lands forfeited due to unpaid property taxes and title disputes. The Virginia Land Office again conveyed these lands with "junior patents" which reserved public ownership of all waters. Little public land remained when West Virginia was created in 1863.

This heritage left our state a complex mosaic of over 45,000 King's grants, colonial grants and commonwealth senior and junior patents ranging from a few dozen to tens of thousands of acres. A significant number of these grants and patents convey streambed ownership to contemporary riparian landowners. The public streambeds are administered by the Public Land Corporation, a unit of the West Virginia Division of Natural Resources, which is governed by a five member Board chaired by the DNR Director.

Both federal and state court decisions provide public access to certain rivers suitable for navigation, regardless of ownership, under the "navigational servitude" derived from the commerce clause of the U.S. Constitution. These court decisions cite 19th century log drives and seasonal use by frontier barges as adequate evidence such waters are "navigable-in-fact" and therefore open to public use. Several West Virginia Supreme Court decisions also affirm that original grants or patents determine ownership of non-navigable streams but do not resolve questions of riparian rights or public access.

The riparian landowner holds title to those lands above the "low water mark" where streambeds are in public ownership. The West Virginia supreme Court has defined this boundary as that point to which a stream recedes at its lowest normal level. However, along navigable rivers, the Court has held that

the navigational servitude creates a public easement across riparian lands up to the "ordinary high water mark." This easement boundary is defined as that level on a stream bank where the presence of water is so common as to cause distinctive vegetation and soil conditions.

The legal status quo leaves the relative rights of riparian landowners and the public uncertain due to the vague delineation of navigable rivers and the undetermined ownership of most non-navigable streams. The waters in question provide much of the state's fishing, non-motorized boating, whitewater sports and other recreational opportunities. Such streams are also subject to expanding recreational property development and the implicit expectations of privacy and dominion.

Determining streambed ownership on the basis of ancient land grants may be technically correct but it is also quite problematic. West Virginia's erratic patterns of public/private streambed ownership mean that public access and riparian rights will vary greatly depending on the facts in each situation.

The typical title examination or abstract offers little insight into such questions. Instead, the grant or patent which is the source of title must be carefully examined in the

context of Virginia statutes, judicial decisions in both states and the administrative practices of the Colonial Council or Land Office at the time of the original conveyance. A reliable determination of streambed title can be a burdensome task and loss of pertinent public records can even make such determinations impossible. Further, West Virginia's trespassing and posting laws do not expressly incorporate rivers and streams. Restricting access or obtaining trespassing warrants may subject a riparian landowner to legal action for injunctive relief or even civil liability for damages for false arrest.

How to resolve the problem? Historically, the courts have given substantial deference to the actions of the executive or legislative branches in questions of riparian and public rights in water resources. The most effective approach appears to be the adoption of a uniform policy by the West Virginia Public Land Corporation (PLC) to delineate public property rights in small streams. Such a uniform policy could define the upper limits of public ownership as a function of average annual streamflow or some other qualitative or quantitative criteria. A reasoned and informed decision by the PLC would require substantial research and a comprehensive review of the administrative records of the Virginia Land Office, the legislative records of the relevant enactments of the Virginia General Assembly

## 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 \$11.45 (this includes \$1.50 shipping and handling) to

West Virginia Highlands Conservancy  
PO Box 306  
Charleston, WV 25321

West Virginia residents must add \$.60 sales tax. (total of \$12.05)

I have included a \_\_\_ check or \_\_\_ money order for the amount of \$ \_\_\_ to WVHC for \_\_\_ copies of the Monongahela National Forest Hiking Guide.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

## Kumbrabow (from page one)

last week Assistant Attorney General Dawn Maxfield notified William Maxey, the state forester, that the contract was being held up pending a lawsuit challenging the timbering in Kumbrabow. Judge Canady has scheduled a status conference for November 16.

### Damaged timber or wildlife habitat?

I got pretty upset listening to Dr. Carvel's testimony. His statement that the forest was in imminent danger of falling seemed absurd. I expect most of the trees to be standing when the doctor is moldering in his grave, when all of us are long gone. I saw only one or two trees that were openly rotten. I couldn't believe he really toured the same area we looked at. But supposing it was true, then the trees would be much more valuable as denning trees than they ever would be as timber. Timber is plentiful in the state. Large

hollow trees are rare.

### What next?

The DOF chief's advisory committee is going nowhere. I accepted a seat on the board over 6 weeks ago, and haven't had any response. The lawsuit will hold up the sale for a while now that the Attorney General's office has requested the DOF not to proceed with the sale until the litigation is settled. The plaintiff's seem interested in pursuing all options under the law. The West Virginia Environmental Council passed a resolution at its annual meeting to ban all timbering on state forests and will introduce a bill to that effect during the next legislative session. This is where you all come in again. Letters and more will certainly be needed to help get this visionary legislation moving in those marbled halls.

Stay tuned for the further adventures of Kumbrabow.

## above otter creek

by Robert Stough

first day of the season,  
the trailhead stuffed full  
of big shiny pickups,  
'Love it or Leave it',  
says a chromium bumper,  
NRA stickers glaring  
from the rear-view mirror.  
up on Turkey Run trail,  
no need for blazes today,  
pop-bottles and sausage cans,  
beef-jerky and cigarette packs  
light the way.  
i rested by an old spruce,  
its thick mossy roots sunk deep  
in a thousand years of earth;  
as with elephantine stealth,  
in full-dress camo,  
cradling his walkie-talkie,  
a fat happy young man  
stalks the wild turkey.

packed up my junk  
and hiked all the way down  
into the deep, wild canyon,  
rock-hopped across the creek,  
now low and autumn-clear,  
wavelight rippling the sunken leaves,  
and headed back up again,  
winding around on an old railroad grade  
to the far ridge-top,  
no roads for miles around,  
gathered water at a small spring  
among dense rhododendrons,  
then had a hard pull  
across the high plateau  
to a soft nest  
under a windswept hemlock  
just off the jagged rocks  
on the edge of the gorge.

eating plain simple food,  
drinking pure sweet water,  
i watch the sun set  
through the old forest  
over on Black Bear Mountain,  
golden sun-rays slanting  
between tall spruce and hemlock,

huge birch and crimson maples,  
bronze-leafed beech  
and dark shaggy cherries,  
then the sunlight glowing  
on a cloud of acrid haze  
from the charcoal briquet factory  
in the farther valley,  
the employer of hundreds,  
pillar of the community  
that incinerates trees,  
'Prime Appalachian hardwoods',  
for the sake of barbecued chicken,  
for MONEY IN THE BANK,  
hallowed be its name,  
where everybody knows  
a balanced self-supporting  
waste-recycling ecological economy  
is 'no way to run a railroad'.  
read our TV Guide, friends,  
the play's the thing.

down by the creek  
the mad dogs run,  
they slaver and howl,  
drive him up a tree,  
the drunken men come hooting along  
with savage, eager faces, gunfire  
cracks through the wilderness,  
and a young raccoon  
thumps to the ground,  
blown to pieces  
for the sport of the gods.

i light my pipe,  
fill my lungs with sweet poison,  
i curse in the firelight  
for what they've done,  
for what you and I have done  
to our mother Gaia,  
seed of innumerable wonders,  
and walk out  
on the rough quartzstone rock  
of this old, wise mountain.  
the coon-hunters have roared away,  
back into town.  
deep night.  
just a whisper from the creek,  
i play my sad flute with the river of stars.

## Old Growth Characteristics

(from page 6) **UNDISTURBED SOILS....**  
**ABUNDANT UNDERSTORY SPECIES.** Old-growth forests are richer in fungi, lichens, and mosses than are young forests. In addition moss species will be found growing near to one another. The mosaic produced by fungi, lichens, and mosses can be visually striking and contrasts markedly with the sparser distributions typical of younger forests. This description of an old-growth forest floor conflicts with descriptions that picture a sterile floor. True, some old-growth stands exhibit little understory vegetation and a rather barren floor. The canopies of Red Spruce-Balsam fir stands can be so dense and the soil so acid that ground vegetation is limited to a few species. Even then, though, in true old-growth spruce-fir stands what does grow on the forest floor is often luxuriant.  
**PIT AND MOUND TOPOGRAPHY.** Old-growth stands exhibit a characteristic rolling topography produced by windthrow mounds in varying stages of erosion. a sufficient distribution of windthrow mounds, fresh to barely discernible, is an important indication that a forested area has not been significantly impacted by human use for a long time period. Uprooted trees can produce cradles that persist for several hundred years; however, even partial logging opens an area up to erosion, particularly if the logged area is on a hillside. Relatively flat sites that have been logged in the recent past may retain vestiges of the former topography, but in a subdued form. Logging and pasturing smooth out windthrow mounds, though highly selective logging of a single species may not show any signs of the removal of that species after 100 or more years.  
**REPRESENTATIVE SPECIES DISTRIBUTION.**  
**ABSENCE OF HUMAN INTERVENTION....**

## from the heart of the mountains (from page 2)

for FEWER taxes and not for FAIRER taxes for EVERYONE ???

Reducing taxes for some individuals may help temporarily with one or two headaches. But, fair taxes for all would cut to the quick and begin to treat the underlying disease by increasing taxes on those who currently pay less than their fair share.

The list is endless, but worthwhile efforts such as health care, school building, workers benefits and strong environmental protection would all benefit from our making more sense of the confusing maze of financial figures and formulas that allow shell game corporations and in-or-out-of-state large land and mineral owners to bask in the protective bowels of the financial abyss.

Until coal properties purchased in Webster County for \$30 million dollars are taxed at that value rather than at some miniscule amount arrived at by unfair and outdated formulas, until large mineral owners are prevented from gobbling up thousands of additional acres of land and resources while being shielded from fair taxation by well-meaning taxpayers groups, until debilitating tax breaks like the infamous super tax credits are eliminated, the state of West Virginia will flounder.

Until we make better sense of the cents at hand; until we address the deeply rooted financial infections that paralyze our state, environmental protection efforts in West Virginia will do little more than dole out bandaids while poisons like acid and dioxin fill our lungs and flow freely in our watery veins.

## Riparian rights

(from page 7) and other historical data. To date, no such information resource has been established and this would be a logical first step by the PLC.

A uniform small stream policy would make a substantial contribution to resolving questions of public and riparian rights and recreational access. However, it is likely that site specific conflicts would continue to arise when riparian surface owners asserted title to a given streambed. In such instances, the PLC could develop procedures to resolve conflicts in legal title and recreational use through negotiation and/or administrative declaratory rulings based on available real property records and historical information. The PLC already has the legal authority to adopt a uniform small stream policy and procedures to resolve conflicts between public and private interests.

After years of controversy, the Virginia General Assembly is considering legislative options such as enacting a statutory definition of navigability for public access. Such action would be premature in West Virginia since the PLC has not yet developed an adequate information base to evaluate the extent of conflicting public and private interests. Unlike Virginia, our state has the opportunity to carefully consider the issues and establish a process to resolve the conflicts before our citizens experience the same disarray in recreational access and public and private rights.

Larry W. George practices environmental, real estate and business law in Charleston, West Virginia. He was formerly Commissioner of the West Virginia Division of Energy and Deputy Director of the Division of Natural Resources. Readers of the VOICE will also recognize him as former President of the W.V. Highlands Conservancy.

### Join the West Virginia Highlands Conservancy

| Category       | Individual | Family | Organization |
|----------------|------------|--------|--------------|
| Senior/Student | \$ 12      | —      | —            |
| Regular        | 15         | \$ 25  | \$ 50        |
| Associate      | 30         | 50     | 100          |
| Sustaining     | 50         | 100    | 200          |
| Patron         | 100        | 200    | 400          |
| Mountaineer    | 200        | 300    | 600          |

Name: \_\_\_\_\_

Address: \_\_\_\_\_

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Make checks payable to: West Virginia Highlands Conservancy  
Mail to: P.O. Box 306, Charleston, WV 25321

### Membership Benefits

\* 1 year subscription to the Highlands Voice

\* Special meetings with workshops and speakers

\* Representation through WVHC efforts to monitor legislative and agency activity

The WVHC, at age 26, is the oldest environmental group in West Virginia. The Conservancy has been influential in protecting and preserving WV's natural heritage. Your support will help WVHC to continue its efforts.