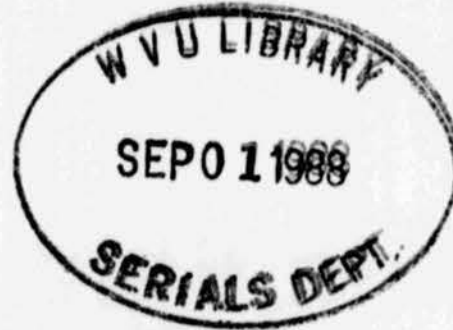


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Summer Board Meeting — Troubled Water on the Greenbrier

Two issues, related to the Greenbrier River, dominated the WVHC Summer Board meeting: the construction of a power plant at Caldwell and the construction of a wood treatment plant at Glenray.

Members of the Concerned Citizens of Alderson-Glenray addressed the WVHC Board and asked for assistance in stopping the construction of a wood treatment plant near the Greenbrier River outside Alderson in Glenray. Wood Guard Lumber, Incorporated, the builders of the plant, will use approximately 3,000 gallons a month of chromated copper arsenate, a wood preservative. Chromated copper arsenate is also fatal in concentrated form. The company would be using only a 2% solution of the chemical, but it will arrive at the plant and be stored in 50% solution. Families who live

in the area of the plant are worried about the contamination of their wells and contamination of the Greenbrier River.

The Concerned Citizens feel that not enough is known about water seepage patterns in their area, and that as long as there is a chance of any danger, the State Department of Natural Resources should not grant a permit. The group noted that construction of the plant has already started. The WVHC Board members present voted to support the Concerned Citizens protest. (For more details on the wood treatment problem, see the article by Tom Kelch on page 3.)

The Board also heard from citizens from the Lewisburg area who are concerned about a proposed power plant on the Greenbrier River in Caldwell, three miles east of

Lewisburg. United Supply of Homestead, Pennsylvania, wants to erect a 300-megawatt plant, which would be among the largest in the state. United Power hopes to sell its energy to Virginia Power, which recently called for 3,600 additional megawatts of capacity. Virginia Power has not yet awarded any contracts.

The plant would need to use as much as 4,000 gallons of water per minute from the Greenbrier River. The Board members, meeting on the back porch of a cabin only 10 yards from the Greenbrier, noted that the flow wasn't even close to 4,000 gallons per minute. Concerns were expressed over whether a dam would be needed to pond water for the plant and whether the interference would affect the flow of the river and

cause problems for those downstream of Caldwell who use the Greenbrier for their water supply.

Before the plant can be built, the Greenbrier County Planning Commission would have to approve several zoning variances, including the construction of a 450-foot smokestack. At the moment, no building higher than 35 feet can be built in Greenbrier County. Board members felt that the potential threat to the air and water quality of the area far outweighed the economic benefits touted by United Supply. Skip Deegans agreed to be the spokesman for the WVHC at the Greenbrier County Planning Commission meeting. (The Planning Commission met July 27, but postponed making a decision. They will meet again August 17.)



Senator Rockefeller, shown here testifying before a senate subcommittee hearing on the Rivers Bill last April, is the sponsor of the senate version of the WV Rivers Bill.

Rivers Bill Bobs Along

The U.S. Senate Energy and Natural Resources Committee unanimously adopted Senate Bill 1720 which recommends federal status for three rivers in Southern West Virginia. S. 1720, sponsored by Senator Jay Rockefeller, would establish a portion of the Gauley River as a national recreation area, and would designate the lower portions of the Meadow and Bluestone rivers as the state's first wild and scenic rivers. The bill also provides for boundary modifications in the New River Gorge National River.

The Senate version of the West Virginia Rivers Bill is similar to the house bill (HR 900) introduced by Congressman Nick

Rahall and passed by the U.S. House of Representatives in May 1987. Rockefeller's bill does not seek federal designation for the Greenbrier River. Before introducing his version in the Senate, Rockefeller held public meetings in Pocahontas and Greenbrier counties where participants indicated strong opposition to including the Greenbrier.

In a news release from his office, Rockefeller said, "Each year 700,000 tourists visit the New River Gorge National River. National recognition of the Gauley, Meadow and Bluestone rivers would encourage thousands of tourists to visit these pristine rivers as well."

Let's Protect Canaan Valley Now

by Linda Cooper Elkinton
Chair Canaan Valley Committee

(The following article is from a letter to Congressman Harley O. Staggers urging him to support protective measures for Canaan.)

Approximately 7,000 acres of wetlands exist in the Canaan Valley. It is the largest wetland complex in West Virginia and the largest of its kind in the Eastern U.S. The blend of wetland and upland habitats in the Valley support a unique assemblage of fish and wildlife found nowhere else in the State and many of the rare plants of West Virginia occur there. The wetlands of the Valley serve essential functions in water purification, flood protection and erosion control. In addition, the recreational opportunities and aesthetic beauty of the Valley, including the wetlands, are drawing over one

million visitors annually as well as an ever-increasing number of second-home owners to the area. But, the uncontrolled activity of developers, motorized vehicle recreationists, and the proposed Davis Power Project threaten the very resources visitors come to the Valley to enjoy.

Two measures that will insure the protection and wise management of the unique resources of the Canaan Valley are already fully developed. The first is a plan by the U.S. Environmental Protection Agency to carry to completion a proposed 404(c) action in the Valley and adjacent wetlands. The second is the U.S. Fish and Wildlife Service's plan to acquire a large portion of the Valley for the purpose of creating West Virginia's first and only National Wildlife Refuge.

For many years, the West Virginia Highlands Conservancy, the WV Wildlife Federation, Trout Unlimited, the League of Women Voters and numerous other local, state and national conservation/citizens organizations have supported efforts by the Fish and Wildlife Service to create a National Wildlife Refuge in Canaan Valley. The Service considered developing a Canaan Valley Refuge as early as 1961 and completed a Final Environmental Impact Statement toward that end in 1979.

Refuge Alternative C, as proposed in the FEIS, would protect some 20,000 acres of wetland and upland habitats and impose reasonable and use limitations in the Valley without the taking of existing private homes and businesses.

(continued on page 3)

— Mountain View —

by John Purbaugh

(Gasp!) ZONING?

In recent months I have received one or two calls a week from someone in a struggling new community group concerned about a proposed landfill, industrial facility or quarry somewhere in West Virginia. Many of these have no direct impact on the Highlands, but the Conservancy has become one resource for such groups when looking for basic advice and startup funding. I usually give my standard rap on development of community leadership, selection of an issue within the group's ability to win, how to obtain government file information, and more. Occasionally the issue is so important that the board of the Conservancy votes to join the group in their fight, but most often we help by putting them in touch with members who give them technical, legal or media assistance.

All too often, many of the issues of concern to the community are not "environmental" in the sense that they don't involve a resource protected by the alphabet soup of regulatory statutes. Rather, the issues at stake are often ones of community disruption, loss of property value, dust, noise, traffic congestion and fear of an unknowable change in community life. When concerned citizens express their views on these issues to the state regulators, they are told "those aren't things we can consider," the citizens get angry because their government won't listen to them, and lots of unproductive pain and anguish follow. Very occasionally, an agency bureaucrat, looking for relief from the hordes of angry citizens, will complain, "Don't they know these are things they can control through zoning?"

"Zoning" (called land use planning by those fearful of being red-baited) is a theoretical possibility everywhere in West Virginia, but is actually exercised only in the big cities and in a few eastern counties. State law provides for the creation of county land use planning commissions, which create a plan for the future land use decisions in the county. Under such a plan, for example, certain areas would be planned to be used for light industrial, waste disposal, and other facilities while others would be designated for residential, commercial, or recreational purposes. Actual implementation of a plan by county or part of the county ordinance must be approved by voters.

When bureaucrats tell concerned citizens only that "your problem is one which can be addressed only by zoning" they have diagnosed the illness without identifying the necessary treatment. County government, beset by a host of responsibilities, new and old, simply lacks the funds and expertise to develop or implement land use planning, and desperately needs a helping hand. A program offering technical assistance and modest planning grants to counties could get the planning process started, and at the same time citizens concerned about the latest landfill proposal could be included in the process by county commissioners desperate to do something to address the current unresolvable situation.

Zoning can be part of the answer to the current controversies surrounding landfill and other proposals, but only if after identifying it as such, we go the next step to help it become a reality. The old conventional political wisdom on zoning in West Virginia was that even uttering the word could get you defeated; perhaps the emerging wisdom is that the politician who doesn't articulate a sensible solution to community fears about landfills will be ignored by people rushing to support the first one who does.

New Editor Needed

WVHC is seeking a new editor for **The Highlands Voice**. The newspaper is an 8-page tabloid which has been published monthly since 1967 and has a circulation of approximately 900.

The position is compensated at \$125 per month plus expenses. The editor holds full editorial and supervisory responsibility for the **Voice**, coordinates volunteers in submission of copy and supervises commercial layout and printing. Applicants should have substantial writing experience and a knowledge of West Virginia natural resources issues.

Under the Conservancy By-laws, the Editor is appointed by the President and serves as an ex-officio member of the Conservancy Board of Directors. The Editor is expected to attend quarterly Board meetings which are normally held in eastern West Virginia.

For more information contact John Purbaugh or Gary Worthington at the addresses listed in the roster.

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Notice of Annual Membership Meeting and Election

In accord with the bylaws of the West Virginia Highlands Conservancy, Inc., NOTICE is hereby given to members, by publication in the August and September 1988 editions of the Highlands Voice newspaper mailed to all WVHC members, of the upcoming annual membership meeting and of the election of officers and board members.

The annual membership meeting, open to all WVHC members and interested members of the public, will be held at 9:00 a.m. on October 22, 1988, at Watoga State Park in Pocahontas County, WV, in conjunction with the conservancy's Fall Review weekend. Business required to be conducted at the annual membership meeting includes the election of officers and members of the board of directors.

A nominating committee consisting of Linda Elkinton (chair), Ron Shipley, Gary Worthington and Jim VanGundy has been appointed and will present a slate of persons to be nominated for each vacancy. Members interested in suggesting someone (including themselves)

for any vacancy are encouraged to contact Linda Elkinton by mail (Rt. 5, Box 228-A, Morgantown, WV 26505) or phone (304-296-0565). Nominations for any vacancy may also be made from the floor at the annual meeting.

Vacancies for office to be filled at the annual meeting are:

- President
- Senior Vice President (assists president and presides in his absence)
- VP for State Affairs (state legislative and agency matters)
- VP for Federal Affairs (congressional contacts and federal agency matters)
- Secretary
- Treasurer
- 5 Directors at Large, for two year terms expiring in October of 1990.

Wood Treatment Plants: Are They Safe For WV?

by Tom Kelch

Three companies proposing to use chromated copper arsenate compounds in the processing of pressure-treated lumber have applied for permits from the state's Department of Natural Resources, Division of Water Resources. As of this writing, two such permits have been issued by DNR for plants in Jefferson County. A third facility in the Alderson area (actually in Glen Ray, Monroe County) has yet to receive a permit.

Historically, the wood treatment has had (even by the most conservative standards) a rather negative track record, so far as environmental considerations are concerned. A case in point is the disproportionately high rate of incidence of the appearance of such facilities on EPA's National Priorities List for "Superfund" cleanup activity, when considered in relation to the size of the industry proper. That fact, considered in view of the relatively small contribution of the industry in general to the Gross National Product in Manufacturing, can allow only a view of a rather small industry making a rather large mess, a mess which has required and which continues to require enormous expenditures of time, energy and money by responsible state and federal entities. The rate of voluntary participation in environmental cleanup by industry itself falls within the 20%-25% range. Further, the industry as a whole, has a weak record of self-monitoring/self-regulation.

Permit requirements stated in the first permit issued by DNR to a wood treatment

facility allowed for self-monitoring of groundwater at the site, as well as self-analysis of samples. The results were to be submitted quarterly to DNR. EPA intervention has resulted in "improved" monitoring requirements for such facilities, as promulgated by DNR.

Effects on human health and environmental risks related to chromated arsenicals are well-documented. Arsenic is a metal that is present in the environment as a constituent of both organic and inorganic compounds; it also occurs in a number of valence states. Arsenic is considered to be generally mobile in the environment, with the degree of mobility dependent on its chemical form and the properties of the surrounding medium. Arsenic is a known human carcinogen; it causes skin tumors when it is injected and lung tumors when it is inhaled. EPA classifies arsenic as a Class A carcinogen (evidence of human carcinogenicity). Arsenic compounds are also teratogenic and have adverse reproductive effects in animals. Chronic exposure to arsenic is associated with skin lesions and polyneuropathy. It is considered acutely toxic to some early life stages of aquatic organisms at levels as low as 40 ug/liter.

Chromium is a heavy metal that generally exists in either a trivalent or hexavalent oxidation state. Hexavalent chromium is rather soluble and is quite mobile in groundwater and surface water. In the presence of reduc-

ing agents, it is rapidly converted to trivalent form which is strongly absorbed by soil components and, consequently, is much less mobile. A number of salts of chromium have been found to be carcinogenic, according to EPA-required animal studies. In addition, an increased incidence of lung cancer has been documented among workers occupationally exposed to chromium. Hexavalent chromium also causes kidney damage in animals and humans. Trivalent chromium is considered less toxic than the hexavalent form; its main effect is contact dermatitis in sensitive individuals.

Copper is among the more mobile metals in the environment. It is toxic to humans at high levels; it causes irritation following acute exposure and anemia following chronic exposure. Some animals are quite susceptible to copper toxicosis, as are many aquatic organisms.

An EPA document "Guidance for the Registration of Wood Preservative Pesticide Products Containing Chromated and Non-chromated Arsenicals as the Active Ingredient" (1986) provides specific, well-documented information on risks from both occupational and environmental exposure to such compounds. For example, this document classifies both inorganic arsenic and hexavalent chromium compounds as Class A carcinogens. Studies cited in the document demonstrate, as well, that both arsenic and chromium have a significant potential to produce teratogenic/fetotoxic effects. Studies of reference in the document demon-

strate that EPA has required of industry further metabolic studies to more completely assess bioavailability of such chemicals. The agency has also required more studies on both the ecological effects and the environmental fate of chromated arsenicals.

EPA has stated that, "... the majority of arsenical/chromate wood preservation wastes including most treated wood drippage, wastewaters, treated wood itself and most sludges."

It is abundantly clear that chromated copper arsenate compounds are not "fun" chemicals. Even under the best of circumstances, such compounds post a significant potential for harm to human beings and to the environment in which they live. It is the considered view of those citizens from the Alderson area and from Jefferson County who have voiced concerns about the three present/proposed wood treatment facilities in West Virginia, that none of these facilities come even close to falling within the "best of circumstances" category.

Alderson-Glen Ray Area, Monroe County

Some months ago Wood Guard Incorporated submitted a permit application to DNR. As of early July, no Public Hearing had been held (or even scheduled, in spite of what was apparently a large number of requests). No permit had been issued, yet, DNR has since scheduled, finally, a Public Hearing. DNR has since scheduled, finally, a Public Hearing. (continued on page 7)

Protect Canaan Now (continued from page 1)

Although technically not related, Fish and Wildlife Service action on the Refuge plan has been delayed pending the resolution of lawsuits regarding the Davis Power Project. That project, if ever completed, would inundate over 4,000 acres of the Valley's northern wetlands included in the proposed refuge boundary. In 1978, the U.S. Corps of Engineers denied the Section 404 permit requested by the Allegheny Power System (Monongahela power's parent company) to place fill in wetlands for the purpose of creating the dam for the project. Litigation (including a U.S. Supreme Court ruling and the recent (July 25) District Court decision) has to date upheld the Corps' jurisdiction to deny APS's permit request, but, unfortunately, additional

legal issues continue to be raised.

The Environmental Protection Agency is currently considering a proposal to invoke its authority under Section 404(c) of the Clean Water Act for Canaan Valley and some of the surrounding area. Regulations state that Section 404(c) action is initiated when the Administrator of the Environmental Protection Agency determines that the discharge of dredged or fill material will have an unacceptable adverse effect on municipal water supplies, important fishery areas, wildlife or recreational areas. Enactment of Section 404(c) will prohibit the issuance of permits by the Corps to place dredged or fill material in wetlands within the proposed 30,000 acre Valley boundary.

I view the proposed 404(c) action as a very positive and necessary immediate step to reduce impacts to the wetland complex from not only the Davis Power Project but also developers in the southern end of the Valley.

The delay of both of these actions has already allowed substantial development and an irrevocable loss of resources in the southern end of the Valley. More delay will allow on-going development to continue to expand throughout the Valley until the very characteristics that draw people there—its unique resources, diverse wildlife and plants and aesthetic beauty—are lost. Please, let's not allow this to happen.

Canaan Valley Woodcock Protection Asked

By Bill Schultz

ATLANTA (AP)—West Virginia's Canaan Valley must be a key part of any program to protect the Eastern woodcock, a small but magnificent game bird whose populations have declined every year for the past two decades, according to the U.S. Fish and Wildlife Service.

The figures are based on annual breeding ground surveys. No similar data exists for the Midwestern population.

The woodcock exists in forested regions of the country east of the tier of states from the Dakotas to Texas. But in the Eastern half of its range its numbers have dropped more than a third since 1968.

Just at dusk or dawn the males gather in clearings called "singing grounds," and make a series of twanging cries. Then they spiral hundreds of feet to earth, then dip and dive back, landing near the takeoff point, trying to attract females with their antics.

Sportsmen, who spend legions of days in the field seeking woodcock, especially enjoy the sport because the birds are found in thick, lowland cover in the fall and hold

well to pointing dogs.

Bursting from cover, they are often tougher to hit than quail.

What has hit the birds harder than anything else is changes in the habitats that the birds need at different times of each year, according to the Fish and Wildlife Service's management plan for the birds.

The woodcock needs early successional habitats, such as abandoned farmlands or fields being overgrown with brush and young trees beginning to form a new forest.

These areas, the plan notes, provide good feeding areas for birds which live primarily on earthworms, as well as singing grounds and nesting locations. But they change quickly into mature forests which no longer meet all the bird's needs.

In addition, brushlands are not as well protected as mature forests and frequently are developed into subdivisions and shopping centers.

As the bird migrates South for the winter, Eastern birds tend to congregate in three primary areas, Cape May, N.J.

Cape Charles, Va.; and the Canaan Valley.

While there is some protection in New Jersey and Virginia, the habitats at Canaan Valley "are not protected and under increasing development pressure," the management plan says. Those areas must be protected.

If there are similar congregating areas in the Midwest, they aren't known.

The birds winter along the Southern coastal plain through Georgia and along the Gulf Coast to Louisiana.

The plan recommends habitat management practices and protection of the key staging areas, adding protection in Virginia and New Jersey and starting protection for habitats in the Canaan Valley.

It suggests financial incentives to timber companies and other large landowners to manage lands for woodcock.

While the plan says improve measures of the annual woodcock harvest are needed, it does not recommend any cutbacks in the annual season limits "as long as populations are above minimum levels."

From the *Gazette-Mail*, July 24, 1988

MARY INGLES TRAIL



Drawing by Juanita Akers, Fayetteville, WV



In October and November 1987, Eleanor Lahr of Bloomington, Indiana, hiked from Big Bone Lick, Kentucky, to Radford, Virginia, following as Mary Ingles did, the Ohio, Kanawha, and New rivers. She was accompanied by several friends who hiked all or part of the nearly 400-mile route with her.

Back To The New River Gorge

by Eleanor Lahr

From the moment I received Doug Wood's announcement of a three-day backpack hike from Cunard to Wolf Creek anticipation kept building. This "Mary Ingles Hike" was just one of series of historical hikes through history he planned for 1988. I was going back to the New River Gorge! Last fall several friends and I had hiked through the Gorge retracing Mary Ingles route.

Doug planned three days to cover what I walked in one. Slow. Relaxed. No pressure. Time to stop and smell the flowers and listen to the birds.

The first day and a half I saw familiar sights and felt a sense of *deja vu*. The dirt road, pine forest, briars and powerline were reassuring sights. We camped at a wide place in the trail that appeared covered with coal. Was this where we saw the bear track last year? No need to worry. Any self respecting bear who heard sixteen people setting up camp would run for his life.

Doug is a delightful guide. He is a living, breathing encyclopedia for plant and animal

identification. To illustrate the prehistoric, geological and political forces that led to Mary Ingles capture he drew a huge 9 x 12 foot map of North America on the ground—with his foot! He literally walked us through the St. Lawrence Seaway, the Finger Lakes area, the Ohio River and, of course, the New River Gorge. Also the French, British and Indian battles.

Sitting by the evening campfire as he "called in" an owl was, for me, a time of enchantment. Saturday evening's highlight was Doug in a gobbling conversation with a roosting tom turkey while a rain storm threatened.

The last third of the hike was a wide, grass covered, lane that felt like a six lane highway. It left me with mixed emotions. Hiking is easy. It opens the gorge to more people. However, for me, the feeling of the wilderness was lost.

We could hear the rafters far below and look over the edge of a cliff to see the pink splash of rhododendron. Ajuca hung in a tangled mass. Most pleasing to the soul was

the sun streaming through a towering wall of lush trees and vines with ferns, violets and sparkling streams carpeting the floor. But always the eyes returned to the wide green path that seemed to shout, "civilization!" The Kaymoor mine buildings are now surrounded by chain-link fences. Vandals have already cut gaping access holes.

As I walked through Kaymoor I remembered what it was before. First a wilderness, next a bustling town, then back to wilderness. Today, many people are returning to enjoy the views and, perhaps, walk through their own family history. Everything has a season and a reason.

I admit to a sadness at the changes. But that's life. Now I have new memories: Drifting off to sleep to the same sounds the New River made when Mary lay down at night; laying on the soft green grass to take a nap in the warm sun; eating cooked poke and drinking sassafras tea, and breaking camp "so no one can tell we'd been there."

Cunard to Wolf Creek seems to have something for everyone. See it for yourself.

Hiking Through History: The Mary Ingles Trail

by Doug Wood

On May 20-22, sixteen participants in the West Virginia Scenic Trails Association Hikes Through History backpacked from Cunard to Wolf Creek in Fayette County, West Virginia, on both completed and proposed portions of the Mary Draper Ingles Trail. The hike totaled no more than 9 miles, so we were able to walk at a leisurely pace and enjoy the details of nature seldom seen by hurried hikers.

Virginia waterleaf, spiderwort, phlox, and wild geranium brightened the path with purple while the scarlet blooms of fire pink (catchfly) boldly stood out against the dark forest background. Lousewort added a touch of yellow with its multi-flowered twisted inflorescence. Flowering crabapple scented the air with a sweet fragrance in contrast to the putrid odor which carrion flower exuded. Fortunately the carrion flower's scent is borne by heavier molecules than those which bear the crabapple's fragrance, so that we had to put our noses very close to carrion flower's bloom to detect the scent while we could get a whiff of crabapple at some distance from the source.

A goodly number of the birds entertained us with song and color. Male scarlet tanagers and indigo buntings added their lovely colors to the beautiful new green growth of the tree tops. Several warblers were seen and heard: Kentucky, black and white, black-throated green, cerulean, yellow-throated, chestnut-sided, hooded, ovenbird, and American redstart. One night, a barred owl hooted until another answered, and another evening we were treated to the frantic gobbling of a tom turkey going to roost. Snakes seen were garter, black rat, rough green and copperhead.

On a night hike we listened to the rapid-fire clicking of mountain chorus frogs before we were able to catch one for closer observation. These frogs are abundant in the puddles and small ponds scattered along the trail during springs. Pickerel frogs are numerous also, and several northern dusky salamanders were found by our group in the small brooks which tumble down into the gorge. The amphibian we saw most often was the good old American toad. Small toads were underfoot everywhere. On this easily-hiked section of the Mary Draper Ingles Trail, the greatest hazard seemed to be the possibility of accidentally squashing one of these harmless little critter.

Our group was participating in one of the Hikes Through History conducted by WVSTA in celebration of the Kanawha

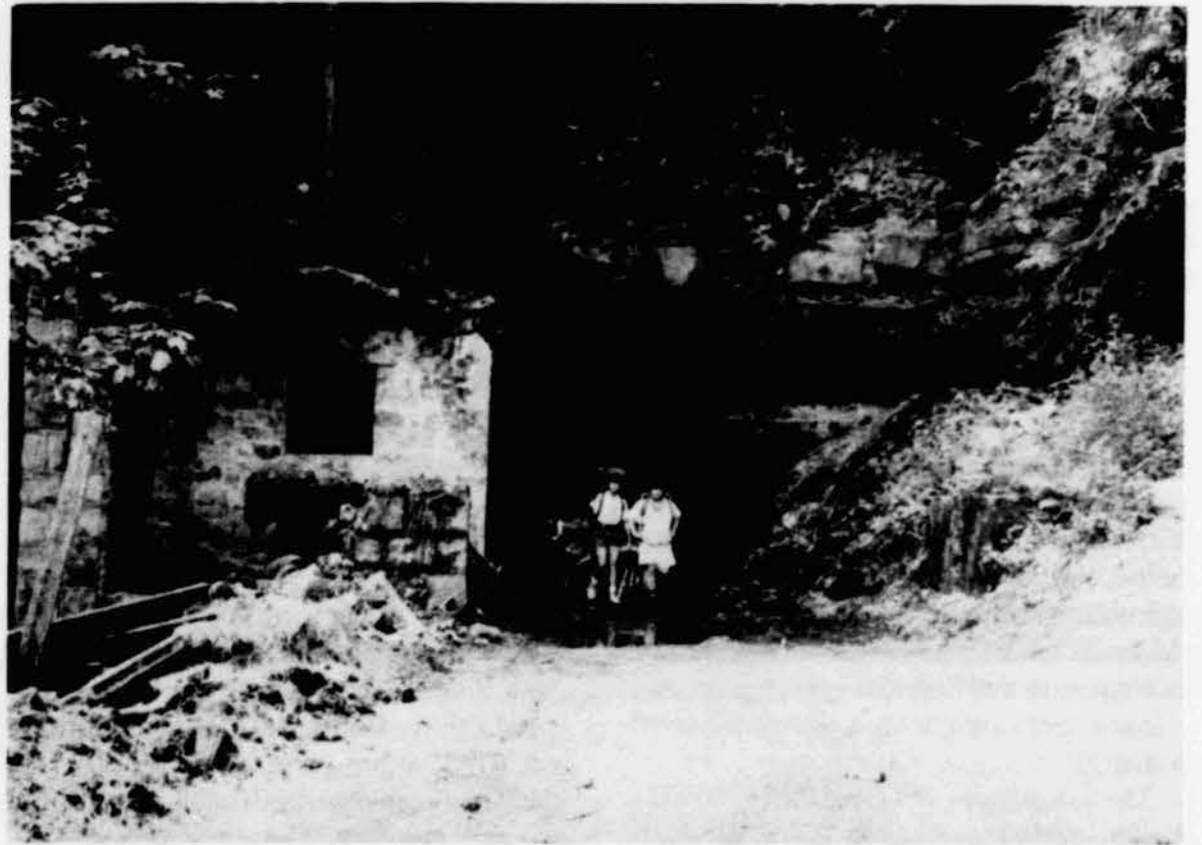
County bicentennial. In addition to admiring the flora and fauna of the area, we were hiking in the New River Gorge to gain some insight into the history of the New and Kanawha Rivers and their valleys. Two previous hikes focused on the geological history of the area and the human history from the first occupation by native Americans up to about the time of Christ.

On this, the third hike, we reviewed some of the more recent historical events. We marvelled at the incredible feat of Mary Draper Ingles, a Virginia pioneer who in 1755 was captured by the Shawnees and taken from her home near Blackburg, Virginia, to near present day Big Bone Lick State Park in Kentucky. Mary Ingles, along with another captive, escaped and found her way home through more than 300 miles of wilderness by following the Ohio, Kanawha, and New Rivers.

We also discussed the importance of the New and Kanawha River valleys as transportation corridors for plants, animals, and humans. Trails along these corridors have been vital to the development of the region. Transformation of the trails into highways and railroads led to the suppression of a once vast wilderness. Now a portion of this once great corridor which cuts deep into the rugged terrain of the Allegheny Mountains has returned to a semi-wild state. Nature has reinstated its claim on the canyon walls of the New River Gorge. The National Park Service is seeking to preserve this historically rich land within the boundaries of the New River Gorge National River.

On NPS-owned land only 5 miles of trails are open to the public at present, but "Unofficial" trails are found throughout the gorge and have been used by local residents since the early coal-boom days. With assistance from local members of the Mary Ingles Chapter of WVSTA, we found our way on one of these trails from Cunard to Wolf Creek near Fayette Station.

While foot trails no longer are vital links in the Mountain State's trade network, they still play an important role in the well being of our citizens by providing numerous opportunities to commune with nature and to recreate outdoors. WVSTA is memorializing Mary Ingles' incredible feat of stamina through the establishment of the Mary Draper Ingles Trail. If you would like to help in this effort contact me at P. O. Box 24, Nitro, WV 25143. I hope you will join WVSTA in its efforts to build hiking trails in West Virginia.



Hikers stop for a peek into one of the mine shafts along the Mary Ingles Trail at Kaymoor. The Office of Surface Mining has closed the entrances with a metal grate which keeps people out but allows bats in.



The crumbling buildings of the town of Kaymoor, abandoned in 1963, give hikers a keen sense of change.

WVIT Students Work On Mary Ingles Trail

by John Giacalone

One of the hikers, said, "The reason why the Outing Club has channeled their efforts in this project is obviously realized here at the top. It is simply and unselfishly to provide access to the views which await the explorer and curious upon Tech Mountain and to apply their educational interests to the real world."

Club members with engineering and outdoor interests are given the opportunity to display their talents in this outdoor laboratory in the "backyard" of Tech's campus. Among other problems, building a trail involves figuring the steepness of the slopes, dealing with water drainage, and recording the flora of the area so as not to disturb rare plants.

WV Tech Outing Club members can gain

experience and a sense of self accomplishment through their trail work and ultimately the public will benefit from having a safe and well-maintained trail. This unique service, which WV Tech has allowed to develop, should be continued for the mutual benefit of the students and the public.

The Kanawha Trail Club members first visited the Tech Trails in October 1987, and on the spring trip, several commented on the improvements that the Outing Club had accomplished in the six months between visits. Obstacles had been removed from the trails, tread work had been improved, and the routes had been signed. Obviously many individual hours had gone into making the trails safe places to hike. The Kanawha Trail Club is already planning additional outings to the Tech Trails.



Members of the Kanawha Trail Club bravely attack "Heart Attack Hill," part of the West Virginia Tech Trail system.

The West Virginia Scenic Trails Association is organizing the construction of the Mary Draper Ingles Trail along the Kanawha and New Rivers. Recently, Outing Club members of the West Virginia Institute of Technology, located near the Kanawha River in Montgomery, worked on adding a section of the Mary Ingles Trail in the hills above the Tech campus. Outing Club members improved the existing series of trails on the campus and found a way to tie Tech Trails to the long-distance Mary Ingles Trail.

This spring, 22 hikers from the Kanawha Trail Club hiked the 1,000-foot climb from the WV Tech campus to the ridge top where the proposed route of the Mary Ingles Trail is located. The ridge top offers magnificent views of the Kanawha River and Wheeler Islands.

Wood Treatment Plants (continued from page 3)

Hearing in the Alderson area to receive citizens' comments on that application.

In early July, one might have viewed the proposed Wood Guard site and had visions of a "foregone conclusion." Excavation and actual construction at the site had already proceeded. Monitoring wells were obviously in place. Excavation in the area of the processing plant had, for all practical purposes, been completed. Site drainage patterns had been established, and the main drainage trunk apparently extended to the banks of the Greenbrier River. Foundations for the physical plant and the "drip pad" were in place.

This six-acre site has a layer of highly permeable, sandy silt-loam soils underlain by bedrock limestone. More than thirty homes immediately down stream from the site utilize wells as their water source. The Alderson Livestock Market, a major source of commerce and livestock exchange serving a four-county area, is immediately adjacent to the site.

The integrity of the Greenbrier River is well-known. Because of its rare qualities, it has been considered for protection through both state and federal legislation. Portions of the Greenbrier are presently protected under the state's Natural Streams Protection Act:

... it is hereby declared to be the public policy of this state to secure for the citizens of West Virginia of present and future generations the benefits of an enduring resource of free-flowing streams possessing outstanding scenic, recreational, geological, fish and wildlife, botanical, historical, archaeological, or other scientific or cultural values.

The Department of Natural Resources' Division of Water Resources owns the responsibility for carrying out the mandates of that act. The citizens of the Alderson area value the integrity of the Greenbrier with a great deal of personal and communal pride.

Ranson Area, Jefferson County

Universal Forest Products, (an affiliate of Rentokil, Incorporated at the Ranson facility), apparently made its first contacts in Jefferson County in late 1986-early 1987.

At that time, Universal was attempting to obtain a Conditional Use Permit for a proposed wood treatment facility in King George County, Virginia. A Public Hearing was held in March of 1987. In April of 1987, the King George County Board of Supervisors denied Universal's permit, with these comments: "Motion . . . carried unanimously to deny the request . . . by Universal Forest Products, Inc. . . . there appears to be sufficient potential harm to the health, safety and of the residents. Enough potential problems continue to prevail in the operation to leave fears and doubts as to the safety of the facility. . . . the company has not convinced the citizens of the county that the facility would be safe."

Meanwhile, back in Jefferson County, the local development authority was seeking funding to provide an access road to the proposed Universal facility. An early request for \$80,303 with a supplement from state funds in the amount of \$19,602 eventually grew to \$204,480 granted from Appalachian Regional Commission funds, with an additional \$51,120 provided from state funds. Universal decided to locate in Jefferson County.

Universal submitted a permit application to DNR on July 8, 1987, and submitted

additional "revised" information to DNR on the 27th and the 30th of July, 1987. The Universal permit was promptly issued by DNR on September 21, 1987.

The Universal site is immediately northwest of the Ranson town limits, within close proximity to several homes and small manufacturing. There are numerous residential wells in the area. Groundwater contours in that area indicate a down-gradient movement of such waters toward the towns of Ranson and Charles Town, who share a common boundary. The drainage basin in which the facility is located runs within the boundaries of both Ranson and Charles Town. Traditionally, the natural drainage for the area where the plant subsequently located ran through what is now the plant yard and disappeared into a swallet, or sinkhole, immediately south of the plant site and within thirty feet of the access road to the site. DNR-approved site drainage plans for the facility direct surface runoff from the site to that same area. The entire area (in fact, 80% of the county) is underlain by carbonate rock, or limestone, which is described as being highly fractured and faulted locally. The particular vulnerability of carbonate aquifers to contamination from chemical pollution is well-documented, scientifically. The soils of the area are generally thinly mantled and are moderately to highly permeable.

The United States Geological Survey is currently conducting a groundwater study in Jefferson County. A part of that study has involved groundwater dye tracings. Dye was injected into a sinkhole immediately south of the Universal site. Dye recovery data from that injection describes a pluming pattern of groundwater movement which fairly encompasses the towns of Ranson and Charles Town. Dye traces from that same injection were recovered at the intake wells of the Charles Town water supply and at the wells of the Charles Town Race Track — the county's largest employer, the site of thousands of visitors daily and the temporary home for typically 1500-2000 horses daily.

Prior to the opening of the Universal facility, water samples were taken at the site and from nearby wells. Nitrates, cyanide and chromium were found in those samples, at levels below federal water quality standards for those chemicals — but were found, nonetheless. A spill of any magnitude at this site would certainly exacerbate an already-existing problem and would have the potential to cause significant harm to several thousand people and animals in the area.

Universal Forest Products, Incorporated, has a history of spills in its thirty-five year corporate history. The spills are documented in the records of King George County, Virginia, and elsewhere. Rentokil, Incorporated, Universal's plant/systems designer and provider of technical expertise, owns a wood treatment facility in Richmond, Virginia, which was proposed for inclusion on EPA's National Priorities List in January of 1987. Rentokil, Incorporated, is considered to be a leader in the industry.

As of this writing, Universal has been in operation at the Ranson site for nearly two months.

Rippon area, Jefferson County

Shenadoah Wood Preservers, Incorporated, submitted a permit application to DNR in late 1987. Appropriate notice of that application was published. Based on citizens' response to that notice, a Public Hearing was scheduled for January 27, 1988. The overwhelming sentiment expressed during that hearing — from ordinary citizens, wildlife enthusiasts, geologists, professional planners, hydrologists, soils experts, environmentalists, toxicologists, farmers, elected officials — was a well-based opposition to the issuance of such a permit to Shenadoah. DNR subsequently issued the permit in April of 1988. Citizens' groups have appealed the issuance of the Shenadoah permit with the state's Water Resources Board. A hearing on that appeal is to be held in mid-August.

Rippon is a small rural community in the southern part of Jefferson County. The proposed Shenadoah site is located immediately west of that community in an area that has traditionally been used for agriculture. A band of alluvial soils bisects the site and serves as the bed for an intermittent stream which flows through the property during periods of heavy rain. As that stream flows through the residential area of Rippon, its flow is impeded by inadequately-sized drainage culverts under a primary highway which passes through the area. A lake forms. The allowable flow passes through the culvert, meanders in a stream less than one-half mile to a sinkhole, where it disappears. The area between the proposed site and the above-noted residential area is said to be constantly saturated to the point where it is impossible to drive a tractor through for farming. This area is believed to be a primary recharge area for the local aquifer and is believed to be the water source for sizeable springs which emerge to the east and southeast of this site. Flows from these and other springs in the area merge to form Long Marsh Run. There are no known streams in the immediate area of the site.

Within a few miles and to the north of Rippon, there is a cluster of caves, including the second largest cave in the county. There is also a known losing stream in that immediate area. From that area toward the south, through Rippon and on down into Clark County, Virginia, there is a high concentration of sinkholes. Farm ponds have been lost in this area overnight. Land subsidence seems to be a continuing process in this area and a regular problem for farmers.

The USGS groundwater study has focused some activity in the Rippon area. A dye tracing injection site was located near Rippon where dye was injected February 19, 1988. As of March 11, 1988, no dye had been recovered at monitoring sites. Of the 146 sinkholes mapped and described thus far in the county, eighty (or 55%) are in the general vicinity of Rippon. A total of 90 (or 64%) are located in the drainage basin of which Rippon is a part. The known karstic features of the area and USGS data, present and past, suggest complex patterns of groundwater movements in the area. Contamination by chemicals in such a complex area obviously has the potential to cause widespread problems.

The sole water sources in the Rippon area are wells and springs. Wells are typically 150 feet deep, though some wells within close proximity to the proposed site are forty to sixty feet deep.

Given the history of the landscape in the Rippon area, the siting of a facility requiring constant withdrawals of large amounts of water could exacerbate existing problems in the area and could cause and/or contribute to additional problems in a number of ways. It is well established that carbonate aquifers which are subject to large water withdrawals are also prone to developmental subsidence problems. It follows, then, that large withdrawals in an area with already-existing problems would contribute to same. As the water table is lowered, some of the more shallow wells in the area (believed to be "perched" wells) could be threatened. Land subsidence, particularly in the immediate area of the facility, could cause structural damage to the physical plant itself. Shenadoah has acknowledged that such incidents are not uncommon and do require repair.

There can be no doubt that the Rippon site is as ill-suited and as vulnerable as the other two sites.

The general view is that, in each instance, there are characteristics of the sites which make them particularly vulnerable to the potential for pollution. The history of the industry as it relates to environmental considerations, particularly with problems related to groundwater contamination, are not exactly reassuring to the citizens of Alderson, Ranson-Charles Town, and Rippon.

The fact that the primary hydrogeologic influence in each location is directly related to the nature of the underlying carbonate rock is well documented. The inability to assess the exact subsurface flow paths and storage conditions within carbonate aquifers is equally well known.

Carbonate aquifers are considered to be particularly vulnerable to contamination for a number of reasons. Flow patterns are hard to predict and monitoring wells may not intercept the main pathways of groundwater movement. Flow velocities tend to be thousands of feet per year, and may vary considerably for a variety of uncontrollable reasons; so tracking and early warning of contamination is difficult. Soil cover is often thin, and the underlying bedrock is highly permeable. Contaminant flow may be down into the aquifer without any surface expression of the problem. The relatively "open" nature of the main flow paths in carbonate aquifers provide little filtering or opportunity for biodegradation or attenuation of the contaminant. Most surface stream flows in areas underlain by carbonate rocks are derived from groundwater discharge; thus surface water may be contaminated by contaminated groundwater.

Experts agree that the best means of protecting carbonate aquifers is to eliminate the presence of potentially hazardous substances from the areas where carbonates are the predominant hydrogeologic influence. In each instance, the siting of the three wood treatment facilities in West Virginia fairly flies in the face of such a proposal and, in the process, presents a significant potential for harm to several thousand human beings and to the environment in which they lead their lives.

Many believe that various matters related to the recent issuance of three permits to wood treatment facilities in this state are symptomatic of an attitude which sometimes poses as policy—an attitude which is generally insensitive to environmental considerations. Carried to its logical extreme, such an attitude virtually insures the further degradation of our most valued resources.

NEWS BRIEFS

Lincoln Strip Mine Project Granted Permit

After months of arguments, public hearings and congressional investigations, the Department of Energy gave Black Gold of West Virginia a strip mine permit. The mine is a joint venture owned by Sandra Perry of Indiana and Michael Letson of Shelby, Mont. They can now begin mining 125 acres near Branchland in Lincoln County.

Lawyer Robert Shostak said that he plans to sue Black Gold in federal court. Shostak of Athens, Ohio, and Josh Barrett of Charleston represent John Salstrom and other Lincoln County landowners who oppose Black Gold's mine.

Black Gold, which prospected for coal on 13 different sites without DOE's permission, "has demonstrated a pattern of willful violation of law," Shostak wrote in a July 19 letter announcing his intention to sue DOE and the U.S. Office of Surface Mining if the Black Gold permit was issued.

In his letter, Shostak listed 17 deficiencies in the Black Gold application. He argues they should have convinced DOE to deny the permit.

"They didn't list the names of all the people behind this deal, all the shareholders," Shostak said. "If any of them were involved in surface mining activities in the past, we have a right to know that. Joint ventures are generally an investment program. We would like to know who the investors are."

"Who will operate the mines? In the application, Sandra Perry and Michael Letson say the permittee will be the operator," Shostak said. "But Perry told a House Interior subcommittee [in Logan] that Black Gold plans to hire a contract miner."

"Is the contract miner a scofflaw with a pattern of violations? We'd like to know. The purpose of the federal law is to protect the environment from unscrupulous operators. Some people get a permit in a bishop's name, then hire the worst blackleg to operate it," Shostak said.

Charleston Gazette, July 29, 1988

Group Seeks Park Along Elk River

CHARLESTON (AP)—A group interested in protecting what it claims is the state's longest river has petitioned Congress to designate areas along the Elk River for development of a national recreational park, a state senator said.

The Elk River Development Corp., saying it was "recognizing that West Virginia's natural beauty is a strong lure for tourism" passed a resolution asking for federal assistance for the stream.

"The ERDC has worked together very effectively in drawing up this resolution which encourages the speedy conversion of this scenic river area into a national recreational area," state senator Robert Holliday said.

"Since our state's economic development program is geared toward promoting tourism, the service industries that could grow from such a transformation of the area could be an economic boon to this portion of central West Virginia while the pristine splendor of the land could be maintained effectively."

The resolution seeks a broad recreational development plan designed to create employment, access roads and forest development options, a news release said.

"We'd like to see a central lodge supporting an area that offers boating, hiking, camping, horseback riding, canoeing, fishing and other outdoor activities," Holliday was quoted in the release.

"Additionally, the area has a history of Civil War skirmishes, as well as folklore of early Indians which affords the possibility of outdoor theater productions."

Holliday said the federal government has the resources needed to develop the area.

The resolution went to the state's congressional delegation, President Reagan, and the U.S. Department of the Interior.

The Register-Herald, Wednesday, July 27, 1988

Wilderness Areas Degraded By Sloppy Campers, Acid Rain

WASHINGTON (AP)—U.S. Forest Service officials said they can't keep pace with the degradation being done to once pristine wilderness areas by forces ranging from sloppy campers to acid rain.

Americans looking for a wilderness experience instead are finding dangerous trails needing repair, dirty and overcrowded campsites, unsanitary water, vegetation overgrazed by pack animals, intrusion by motorized vehicles and manmade pollution, the officials said.

"We're falling behind," George Leonard, associate USFS chief, told a House hearing that was billed as first-ever congressional review of the condition of wilderness areas protected from development under a landmark 1964 law.

Leonard and rangers from six western areas said more attention and money are needed for the service's 32 million acres of wilderness, which represent one-sixth of the land under forest service control.

Rep. Bruce Vento, D-Minn., chairman of the Interior public lands subcommittee, agreed, saying that only 32 cents a year is being spent on each wilderness acre, compared with \$6.39 per acre for general forest service lands.

Since 1984, Congress has doubled the number of wilderness areas to 352. It also has doubled the wilderness budget to about \$15 million. Leonard said, however, that this "doesn't give us the resources to get ahead."

"Wilderness areas are now literally being loved to death" by growing numbers of backpackers, said Greg Hansen, a ranger from the Superstition Wilderness in Arizona's Tonto National Forest.

Hansen and his colleagues from the field continually emphasized one point: beyond one headquarters job in Washington, there are no fulltime jobs as wilderness rangers and no forest service career track in wilderness management.

The Register-Herald, July 27, 1988

Abandoned Mines' Effects On River To Be Studied

West Virginia, Maryland and the federal Office of Surface Mining have agreed to study the problems that abandoned coal mines have caused to the Potomac River's North Branch.

A 30-month, \$373,000-study has been commissioned to develop a plan to abate acid mine drainage in the North Branch watershed, and to set priorities on which feeder streams should be treated first, according to the Interstate Commission on the Potomac River Basin. Some streams in the watershed are nearly devoid of any forms of life.

About 400 sources of mine pollution have been identified in the study area, which includes Grant and Mineral counties in West Virginia and Garrett and Allegany counties in Maryland, but the study will focus on only 100, because of financial considerations.

While current coal mining practices require the reclamation of mined land, hundreds of old, abandoned mines and gob piles continue to leach harmful materials into water sources. The study will focus on pollution in the North Branch drainage area upstream from Jennings Randolph Reservoir on the West Virginia-Maryland border.

In 1977, the Army Corps of Engineers estimated that a complete mine drainage cleanup of the area would cost about \$75 million. About \$26 million is now available for abandoned mine cleanup for all of Maryland and West Virginia, according to the commission's newsletter, the Potomac Basin Reporter.

Charleston Gazette, July 29, 1988

Agreement Reached To Buy CSX Rail Line In Tucker County

WASHINGTON—West Virginia's two senators announced that the Trust for Public Land has reached an agreement with CSX Corp. to facilitate the purchase of the rail line needed to operate the proposed Blackwater Canyon Scenic Railroad in Tucker County, W. Va.

Sens. Robert C. Byrd and Jay Rockefeller said that CSX and the trust, a non-profit organization which acts to acquire land in the public interest, completed their negotiations on the final day that CSX agreed to suspend its track removal operations pending the outcome of the negotiations.

Under the terms of the agreement, the trust holds the right to purchase the property for 19 months at a price of \$800,000.

The Tucker County Development Authority is seeking Economic Development Administration backing to develop the scenic railroad. The project, to be operated as a joint public-private venture, calls for the development of a 10-mile railroad between Hendricks and Thomas.

Charleston Gazette, July 20, 1988

Gypsy Moths Ravage Forests

Ravenous gypsy moths have defoliated 72,000 acres of forest in the Eastern Panhandle, with Berkeley and Morgan counties suffering the most damage, aerial surveys show.

The moths defoliated 28,360 acres of forest in Berkeley County and 23,783 acres in Morgan County. They also defoliated 13,362 acres in Hampshire County, 3,685 acres in Jefferson County, 2,795 acres in Hardy County and 15 acres in Mineral County, said Alan Miller, forest entomologist with the state Department of Agriculture.

Miller said 24,373 acres of Eastern Panhandle forest suffered heavy damages of between 61 percent and 100 percent defoliation. Another 24,877 acres were moderately defoliated (31 percent to 60 percent) and 12,750 acres suffered light defoliation (0 percent to 30 percent).

The heaviest defoliation occurred on the southern end and western slope of Sleepy Creek Mountain, the western slope of North Mountain and the top and western slope of Cacapon Mountain.

Miller said there was "considerable mortality" in oak trees located on the three mountains, which also were ravaged by gypsy moths in 1986 and 1987.

With the exception of 3,050 acres, the total acreage damaged represented areas that were not treated in May for gypsy moths. At that time, forestry officials sprayed Dimilin on 139,124 acres of forest.

Damage in the treated areas, at the top of Cacapon Mountain and around Capon Springs, was believed to have occurred due to sparse foliage and 4 inches of rain that fell two days after the Dimilin was sprayed, Miller said.

Charleston Gazette, July 28, 1988

Blue Whales Apparently Making A Comeback

OLSO, Norway (UPI)—Blue whales, which were hunted almost to extinction, appear to be making a comeback in icy waters off Norway's coast thanks in part to campaigns to save the world's largest mammal, environmentalists said. Whale specialist Niels Oeyen said 11 of the 100-foot-long animals were spotted in Norwegian waters in an annual whale count.

The sightings appeared to confirm the belief that the world's largest mammal had returned and was breeding successfully after vanishing from the region decades ago. "We are not entirely sure whether this means the blue whale population in the world is on the increase or whether the animals have simply changed their migratory patterns, but it is promising," Oeyen said in Oslo.

Greenpeace, the environmentalist organization which began as a campaign to save whales, said the number of blue whales spotted in this year's count was an encouraging sign. "It is good to see these graceful animals back in our waters. Perhaps we introduced our total ban on hunting these whales in time," said Michael Gylling Nielsen, a Greenpeace spokesman in Copenhagen. "But we mustn't give up the fight."

Intensive Soviet and Norwegian whaling led to the gradual disappearance of the blue whale from the Norwegian and Barents Seas in the early part of this century.

Charleston Gazette, August 3, 1988

—Announcements—

Call for Papers— Eighth Annual New River Symposium

The New River Gorge National River and the New River State Park in North Carolina are again co-sponsoring the New River Symposium. The eighth annual three-day symposium, scheduled for April 20-22, 1989, will be held in Radford, Virginia.

The Symposium is open to all with a professional or avocational interest in the New River. Papers for the Symposium are being requested in natural and/or cultural history, folklore, archaeology, geography, other natural, physical and social sciences, and the humanities. All papers should share these common themes or the interrelationships of the natural, physical, and/or human environments.

Proposals must be received no later than December 1, 1988, and include a 250-400 word abstract which will be reviewed by a panel of professionals. All proposals should be sent to the Chief of Interpretation, National Park Service, New River Gorge National River, P. O. Box 1189, Oak Hill, West Virginia 25901. Questions can be answered by calling Park Headquarters at (304) 465-0508.

Proceedings for all previous Symposia are available by mail at \$12.50 each from Eastern National Park and Monument Association at the above address. Proceedings of the 1988 Symposium will also be published and available for purchase in the summer of 1989.

Seminars On Wellhead Protection

Seminars on Wellhead Protection will be held this fall in Wood County at the Parkersburg Community College from 9:00 a.m. to 4:00 p.m., on October 25 and in Logan County at the Vocational-Technical School from 4:00 p.m. to 9:00 p.m. on October 19.

The seminars are designed to instruct the audience on the Wellhead Protection Program and solicit from those attending their ideas on how West Virginia should plan its program.

The Wellhead Protection Program is a part of the Safe Drinking Water Act Amendments of 1986. Its purpose is to protect public water supply wells from pollution. Each state will devise its own program to meet broad federal guidelines.

Because public participation in the planning process was written into the law, EPA asked the League of Women Voters to plan and organize these seminars. Agencies co-operating in the seminars include the USEPA, WVDNR's Division of Water Resources, and WV Health Department's Environmental Engineering Division. Those attending the seminars should come from many constituencies, including those with economic interests, planners, agency personnel, public officials, water providers, environmentalists, and the general public.

For more information contact Helen Gibbins, 6128 Gideon Rd., Huntington, WV; phone: 304/736-3287.

Canoe the Tygart

Don Gasper is leading a canoe trip on the Tygart River on Saturday, September 10. Don says to expect a few small riffles, a lot of bedrock and boulders and flat water, but the section he has in mind is always boatable, no matter how low the flow. Meet at the junction of Routes 250 and 33 about 10 miles west of Elkins at 11 a.m. Expect to be through by 3 p.m. Don says, "If it is really raining, we can do it the following Saturday." Call Don at 472-5647 for more information.

New District Forest Rangers

Two new district rangers have been appointed to supervise activities in the Monongahela National Forest's Cheat and Greenbrier ranger districts.

Parkersburg native Bill Woodland will assume supervisory duties at the Cheat Ranger District headquartered in Parsons. Woodland, who holds bachelor's and master's degrees from West Virginia University, has worked with the U.S. Forest Service in Pennsylvania, North Carolina and California.

Former New Englander Quentin Mack will supervise the Greenbrier Ranger District headquartered in Bartow. A 24-year Forest Service veteran, Mack was recently assigned to the White Mountain National Forest in New Hampshire.

First Eastern Big Wilderness Conference

September 17 & 18
at James Madison University
Chandler Hall, Harrisonburg, Va.

Sponsored By
Virginians for Wilderness and Katuah
Big Wilderness in the East
A Deep Ecology Perspective
Featuring philosophic, scientific,
and poetic perspectives of big wilderness

The program will include: Barbara Dugelby, Texas Earth First, militant advocate of wilderness everywhere. Dave Foreman, of Earth First, who comes east to promote Big Wilderness in his own inimitable way. Gary Lawless, Poet of eastern wilderness. Reed Noss of Florida Earth First, on preserving landscapes and scientific basis for wilderness recovery. Jamie Sayen of PAW (Preserve Appalachian Wilderness) on wilderness restoration and preservation in New England and the Appalachians. David Wheeler, co-editor of the Katuah journal, bioregional publication of the Southern Appalachians, on the wildest heart. Virginians for Wilderness, workshops on Appalachian wilderness, ecological preserves and global perspective. And More.

Pre-registration — Fee: \$10.00 (at the door \$15.00). Make checks payable to Virginians for Wilderness and send to R.F. Mueller, Route 1, Box 250, Staunton, VA 24401, (703) 885-6983.

Monongahela National Forest Hiking Guide Now Out

Edition 5 of the WVHC **Monongahela National Forest Hiking Guide** is now available. This edition is bigger and better than ever, with 320 pages, 60 maps, 39 photographs, descriptions of 164 trails totalling 780 miles, a new section on ski-touring, and a full-color cover. The authors are Allen de Hart and Bruce Sundquist. Allen has hiked all the trails of the Monogahela N.F. over the past few years. Bruce edited Editions 1-4. The hiking community and the U.S. Forest Service provided the authors with trail reports and photographs.

In the U.S. Forest Service's planning process that led to

the 1986 Land and Resource Management Plan, over 35,000 comments were received from the public. The gist of these comments is that the Monongahela is a "Special Place." And indeed it is. The hiking and backpacking 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. This guide will help you get to know

these and other special places in the forest.

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 **Monongahela National Forest Hiking Guide**, send \$9.95 plus 5% sales tax for WV residents (6% after June 30), plus \$1.25 postage (book rate) to West Virginia Highlands Conservancy, Suite 201, 1206 Virginia Street E., Charleston, WV 25301.

Reasons to join WVHC

The West Virginia Highlands Conservancy is a private, non-profit environmental organization started in 1967. Its objectives are "to promote, encourage, and work for the conservation - including both preservation and wise use - and appreciation of the scenic, historic, open space, wilderness, and outdoor recreation resources of an related to West Virginia, and especially the Highlands Region . . ."

Members include people and organizations diverse in their personal interests and professions but united by a common interest. Most WVHC members are West Virginians but many live outside the state.

The **Highlands Voice**, a monthly 8-page

newspaper, is sent to all Conservancy members. It is filled with environmental news on topics of interest and concern to members as well as articles about trips and outings.

The Conservancy sponsors two special weekends each year. These are usually at some scenic spot in the highlands and feature speakers, outings and board meetings.

Your contribution to WVHC is tax deductible and joining is as simple as filling out this form and returning it to the office in Charleston.

Join today and become part of an active organization dedicated to preserving West Virginia's natural resources.

WVHC Membership Categories (Circle One)

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: _____ Phone: _____

Address: _____

City/State/Zip _____

Make checks payable to: West Virginia Highlands Conservancy
Mail to: Suite 201, 1206 Virginia St., E., Charleston, WV 25301

Membership Benefits

- 1-year subscription to **The Highlands Voice**
- Special meetings with workshops and speakers
- representation through WVHC's efforts to monitor legislative activity.

The West Virginia Highlands Conservancy is a non-profit organization. Your contribution is tax-deductible. Please keep this for your records.

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