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 was 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 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.)

### 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 Eklinton**  
Chair Canaan Valley Committee

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 1964 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 re-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 personnel to develop and implement land use plans, 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.

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 (304-296-0655). 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.

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(Term expires October 1988)
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ORGANIZATIONAL DIRECTORS
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For more information contact John Purbaugh or Gary Worthington at the addresses listed in the roster.
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 and the Alderson area (actually in Glen Ray, Monroe County); there has been no 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 arsenates 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 terratogenic 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 µg/liter.

Chromium is a heavy metal that generally exists in either a trivalent or hexavalent oxidation state. Hexavalent chromium is rather soluble and in quite mobile in groundwater and surface water. In the presence of reducing 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 noted 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 anaemia following chronic exposure. Some animals are quite susceptible to copper toxicosis, as are many aquatic organisms.

As EPA document "Guidance for the Registration of Wood Preservative Products Containing Chromium 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 demonstrate 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 and environmental fate of chromated arsenicals.

EPA has stated that, "...the majority of arsenial/chromated wood preservation wastewaters, 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 pose 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 DNR has since scheduled, finally, a Public Hearing (continued on page 7)

Protect Canaan Now

Although technically not related, Fish and Wildlife Service action on the Refuge plan has been pending beyond 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(c) 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. The company (in U.S. Supreme Court and the 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 fill or 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 fill or dump fill in wetlands within the proposed 30,000 acre Valley boundary.

I viewed 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, it 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

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 are not 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 breeding 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 setbacks in the annual season limits "as long as populations are above minimum levels.

From the Gazette-Mail, July 24, 1988

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 populations.

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 in 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 songs that are hoarse and droning. A third of the U.S. population is estimated to breed in the Valley.

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.

The areas, these plans note, provide the nesting 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 birds' needs.

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

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

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From the Gazette-Mail, July 24, 1988
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.

From the moment I received Doug Wood's announcement of a three-day back-pack 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, briar 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.

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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 sassafrass 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 Canard 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 hikers.

Virginia segregationist, spiderwort, phlox, and wild geranium brightened the path with purple while the scarlet blooms of fire pink (cachytt) boldly stood out against the dark forest background. Loosnown 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 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 heard: Kentucky, black and white, chestnut-sided, hooded, and American redstart.

One night, a barred owl hooted until another answered, and another heard: Kentucky, black and white, chestnut-sided, hooded, and American redstart.

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 keeping 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 "Uncivilized" 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 Cumnard 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 Ingels 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.

WVIT Students Work On Mary Ingles Trail

by John Giacalone

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 sections of the Mary Ingles Trail in the hils 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 northern portion of the Mary Ingles Trail is located. The ridge top offers magnificent views of the Kanawha River and Wheeler Islands.

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.
Hearing in the Alderson area to receive citizens' comments on that application. In early July, one might have viewed the proponents' proclamations of a "foregone conclusion." Excavation and actual construction at the site had already proceeded. Monitoring wells were obviously in place by July. The proposed processing plant had, for all practical purposes, been completed. Site drainage patterns had been established. The large trunk apparently extended to the banks of the Greenbrier River. Foundations for the physical plant and the "driveway" were in place.

This six-acre site has a layer of highly permeable, sandy 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 industrial 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 already protected under the state's Natural Streams Protection Act: . . . 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 has 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 Ranson Incorporated and the proposed 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 evidence for public health, safety and the residents. Enough potential problems continue to prevail in the operation to leave fear 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 $80,503 with a supplement from state funds in the amount of $50,000 was made. A grant of $148,480 from Appalachian Regional commission funds, with an additional $51,120 provided from state funds. Unsuccessful decided to locate in Jefferson County.

Universal submitted a permitting application to DNR on July 8, 1987, and submitted additional "reviewed" 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 tax limits, within close proximity to several homes and small manu­factories. There are numerous residential wells in the area. Groundwater contours in that area indicate a downslope gradient of movement of water towards 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 the bank of the Ranson River. The entire area (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 thickly 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 largest emphasis was placed on the number 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. Nitrate, 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-year corporate history. The spills are documented in the records of King George County, Virginia. Rentokil, Incorporated, Universal's plant/systems designer and pro­vider of technical expertise, owns a wood treatment facility in Richmond, Virginia. Rentokil 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.

Given the history of the landscape in the Rippon area, the siting of a facility requiring constant withdrawal of large amounts of water by the facility, the nature of the area and could cause and/or contribute to additional problems in a number of ways. It is known that established that carbonate aquifers which are subject to large water withdrawals are also prone to development subsidence problems. It follows, then, that large with­drawal from the groundwater problems would contribute to same. As the water table is lowered, some of the more shallow wells in the area (believed to be "protected") would certainly become un­protected. Land subsidence, particularly in the immediate area of the facility, could cause structural damage. It is time for the department to decide on a final location for this facility.

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 considerable­ly for a variety of uncontrollable rea­sons; so tracking and early warning of contamina­tion is difficult. Soil cover is often thin, and the karstic nature of the rock provides many unique problems.

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 live.

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.
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 mine has 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 barely 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 removal of 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 basin 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 to 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 Dimlin 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 Dimlin was sprayed, Miller said.

Charleston Gazette, July 28, 1988

Blue Whales Apparently Making A Comeback
OSLO, 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 Oyen said 11 of the 180 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 exciting," Oyen 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
**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, 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 1199, 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 1989 Symposium will also be published and available for purchase in the summer of 1989.

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**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.

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**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.

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**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 skitouring, and a full-color cover. The authors are Allen de Hart and Bruce Sandquist. Allen has hiked all the trails of the Monongahela 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.