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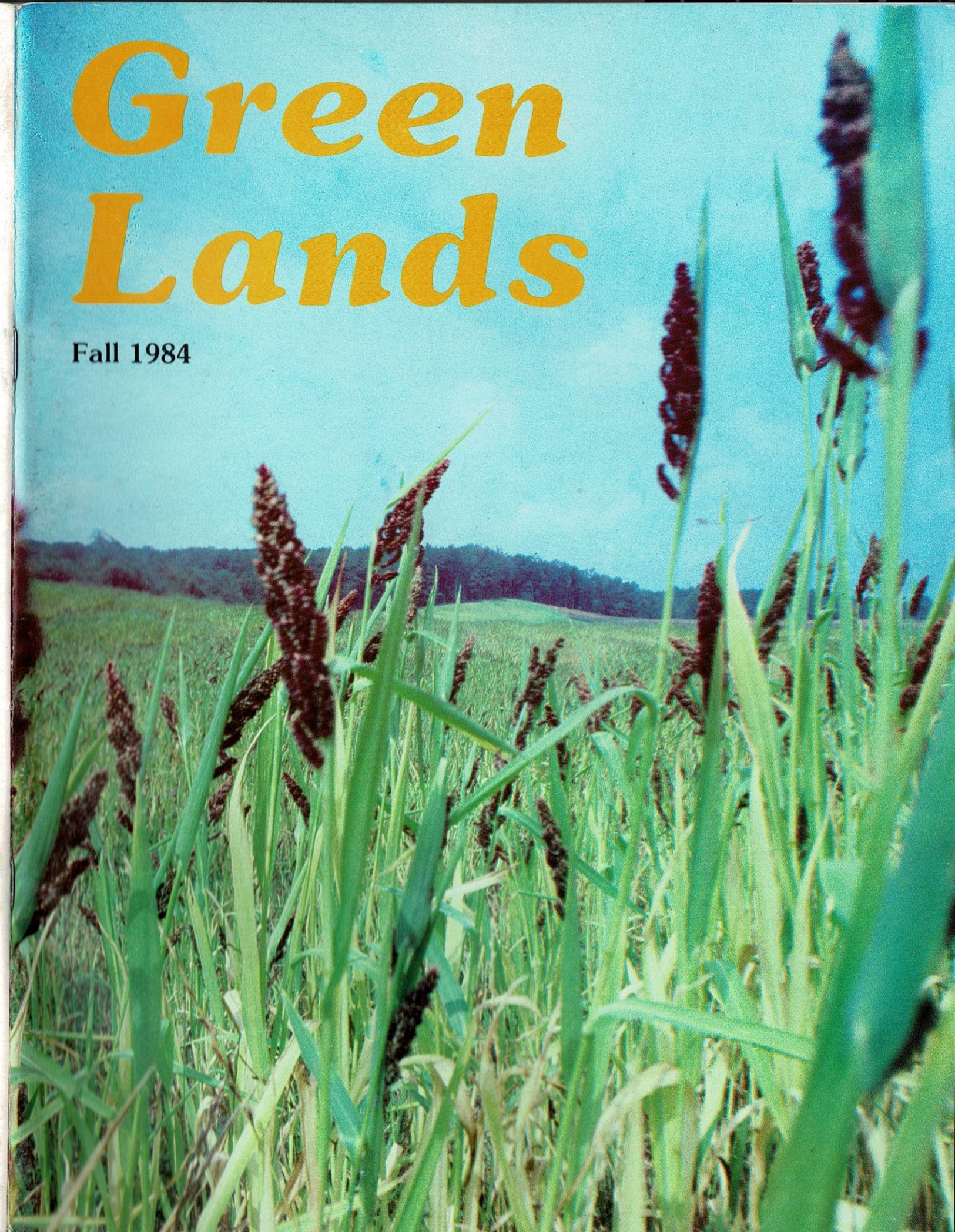


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**Our Cover** — The 1984 DNR Tour was blessed with beautiful weather, matched only by the quality of the operations visited by the caravan. None surpass the work done by Davis Trucking Co., shown on our fall cover. For more of the Tour, see page 14.

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## An Open Letter

# To the Winning Candidates

Congratulations on your recent electoral victory! In the course of wooing West Virginia voters, you have looked with favor on the needs and means of revitalizing the state's crippled coal industry.

This, of course, is not unique. Politicians at every level have campaigned across the nation this year and, depending on locale, have spoken in favor of Florida oranges, Georgia cotton, Wisconsin milk, North Carolina tobacco, Washington timber, Idaho potatoes, Texas oil, Minnesota iron, Pennsylvania steel, Michigan automobiles, California microchips, and yes, of West Virginia coal.

In the West Virginia electoral process, it was indeed gratifying to note, not only the prominence of coal, but the noncontroversial nature of coal as an issue. Gone is the talk of abolishing the surface mining industry, and of regulating underground mines out of existence. The only divisive point among the candidates was how best to help the industry. Coal's importance to West Virginia was universally accepted among those seeking office.

Surely now, as the candidates-elect prepare to assume the duties of office, those thousands who earn their livelihood from the production of West Virginia coal can rest, assured that their government, at every level, will do its level best to boost the recovery of this state's most important industry.

As a representative of the people with a renewed mandate from your constituents to address and surmount the obstacles to a healthy coal industry, it seems natural that you would benefit from a little input from those who have

experienced these problems firsthand. In that spirit, we offer the following for your consideration.

**Regulation**--Every officeholder wants to "get the government off the backs of the people." We're people too, and we welcome your help. If you have listened to your coal constituents, you already know that their perceived need is not for a return to the days of no regulation, but rather even handed enforcement, further streamlining of the overlapping jurisdiction from agency to agency, a retreat from the cookbook approach to regulation, which dictates methodology as well as results, and a general philosophy of "regulation as necessary, but no more than is necessary."

**Taxation**--As the state's most important industry, coal should likewise be its most important tax base, and it certainly is. But here we are in danger of the classic "killing the golden egg goose." Why is the Business and Occupation tax based on gross sales, as opposed to net profits? This is especially harmful to small, undiversified businesses, both in and out of the coal industry. And why do B&O tax rates vary from industry to industry? Coal pays up to FOUR TIMES the rate of other industries. You have spoken of the need for tax equity. Where is the equity in this system? How much longer will the state derive income from a business paying tax on its red ink?

**Transportation** -- The general philosophy of government rate regulation in this country has been one

of combatting the obvious problems of defacto monopolies, or situations where monopoly was the practical way to go, notably utilities. Railroads, recently deregulated, now operate in a defacto monopoly situation in most coalfields. Then too, major railroad acquisitions of other forms of industrial transportation have created a more general, "creeping monopoly." These two factors have contributed heavily to the absurd reality that many foreign coal producers can ship to this country at a price which undercuts domestic production. Aren't we doing something wrong here? Can't you help correct this?

**Markets** -- You say that West Virginia, and America need coal production, and obviously coal production requires markets, and just as obviously many markets have slipped away from us in recent years. Doesn't it make sense that government would step up its efforts to market coal. This is a concept that is taken for granted in most other countries, and in many other American industries. But it's still in its infancy in West Virginia. On a national basis, it can hardly be said to exist. And that brings up one or two other areas where we've fallen behind the world community.

**Synfuels**--Never mind that South Africa has been at it for thirty years. Forget that plans for a West Virginia synfuels plant were shelved shortly after the state landed on the wrong side of the ballot in 1980. Now is now, and let's do what we can in this area in the coming years. Synfuels provides a market for coal and produces energy



that decreases our dependence on the capricious supply of foreign oil. What are we waiting for?

**Coal conversion**--Apparently, we make a national error with the post World War II shift from coal to oil. America's coal reserve base outstrips its oil potential by centuries. The sooner we made a national error with the post will be. If we can live all these years with an oil depletion allowance, why not a "coal abundance allowance," in the form of tax incentives for manufacturing and utilities to convert to coal-fired energy?

**Energy policy**--This country and this state need an energy policy that cuts across party lines and carries a continuity from administration to administration. Coal benefitted from synfuels and conversion pushes in 1979-80, and from regulatory reform in 1981-82. Unfortunately, these periods came under two different administrations, and the two concepts were never integrated. The recovery of the coal industry is not a process which can be fitted into any one term of office. Each branch of government, at each level of government, should endeavor to build on what is. We simply cannot

start over in a different direction every two, four, or six years.

**Acid rain**--The temptation is to offer a simple piece of advice, "Don't go off half-cocked." But, on reflection, this is not enough. Those who profess a kinship with West Virginia coal must realize that there is a growing number of officeholders who will do just that. There are great numbers of West Virginia citizens, members of Congress, and national opinion makers who are shockingly misinformed on the subject of "acid rain." Given the deep division of theory among the scientific community, it is evident that, as a society, we are greatly underinformed on this subject. Coal advocates must quit negotiating how much penal action should be taken, and stand on the notion that anti-industry "citizens groups," and knee jerk editorialists, have neither the expertise or the authority to dictate policy on this national issue.

**Right-to-work**--This was not among your campaign promises. Union officials and media people have trained you to think that it is "political suicide" to advocate a right-to-work law in West Virginia. Even if you favor it,

your instincts and experience tell you that it just won't fly in union-dominated West Virginia. Actually, we shouldn't even need a right-to-work law. The section of federal law which makes it an issue is blatantly unfair and probably unconstitutional. Think about the legal situation in the absence of "right to work." An American citizen cannot hold a job in a company where the union has been elected to represent employees, unless he or she joins that union. Put away your Labor Day speech and remember what you said on the 4th of July. You remember, about freedom. Someday, right-to-work will again be a part of American law, as it has always been a part of American conscience. If you help to bring that day about, it's something you'll be proud to tell your grandchildren.

It was a long campaign, and hard, but now the real work begins. Most folks don't have to be voted into their jobs, or worry about being voted out again. It's a hard way to go.

But for now, you have a fresh start, and all things are possible. We have heard you speak of the importance of coal, we appreciate your concern over the tribulations of coal, and we enthusiastically await your promised help.



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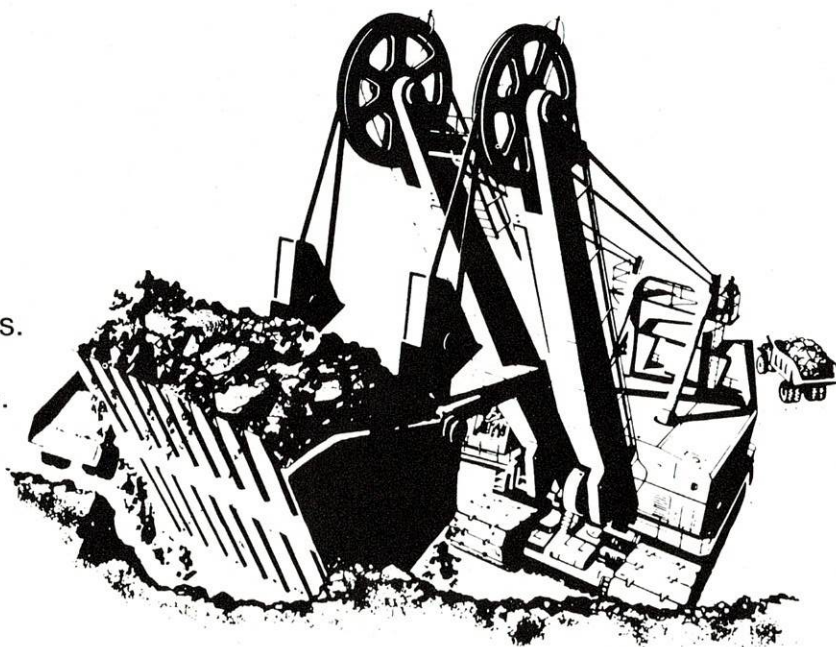
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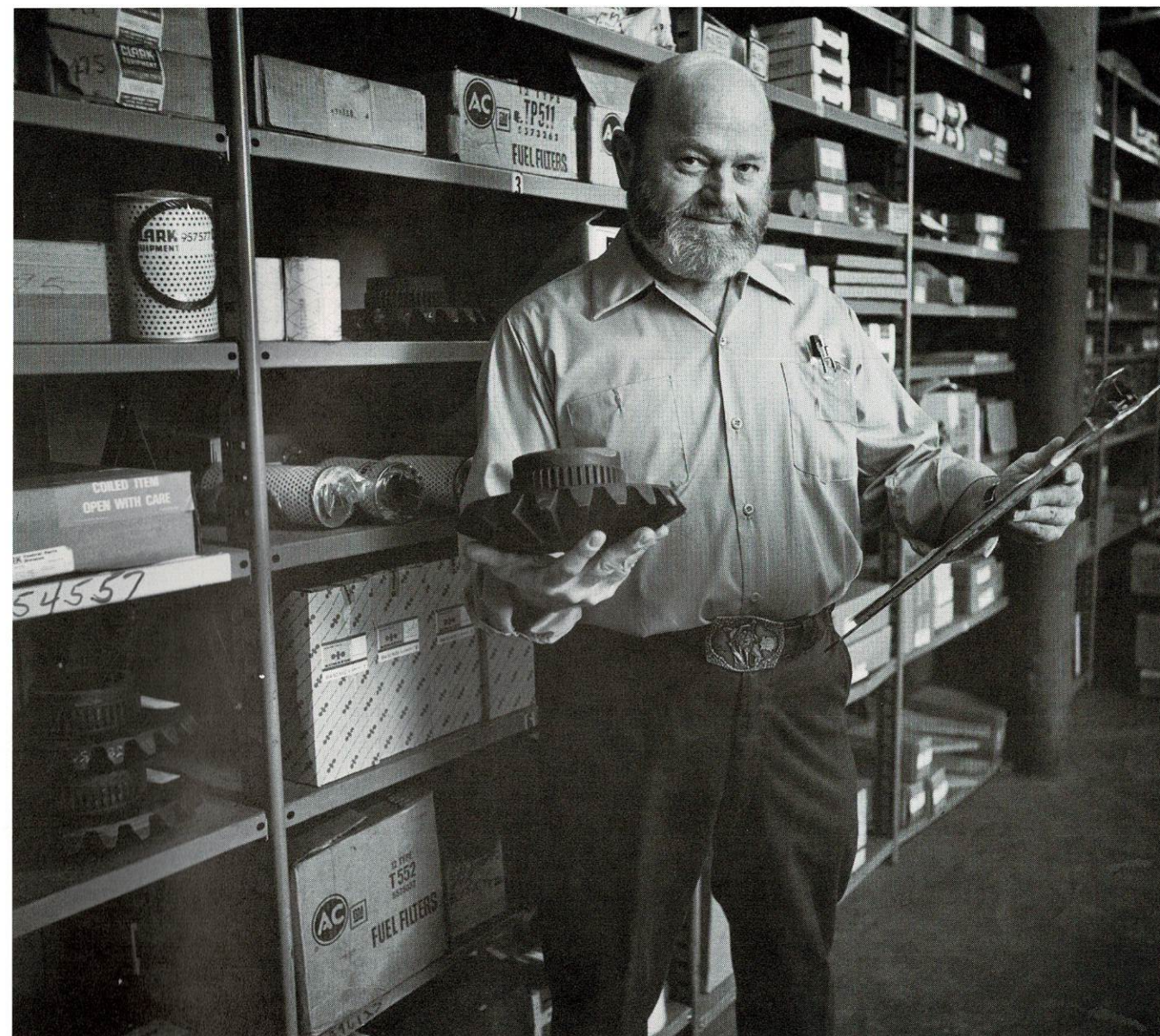
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GREEN LANDS 7



# Bethlehem announces major West Virginia investment

Bethlehem Steel Corp. has announced the formation of BethEnergy, a marketing organization that will sell coal and coke here and abroad.

BethEnergy, established by Bethlehem's natural resources group, will market metallurgical coal nationally and internationally. Primary markets for steam and stoker coal will be the eastern United States and Canada. Coke for steelmaking operations will be sold in the Great Lakes Region.

In making the announcement, Robert M. McCann, Bethlehem's vice president, natural resources, said, "BethEnergy was created to market the increased tonnages of coal that we will have available for sale to both the domestic and international markets over the long term.

"As evidence of our commitment to the developing low-sulfur steam coal market, we have begun construction of a \$79 million mining complex known as High Power Mountain in West Virginia.

Bethlehem has ranked either sixth or seventh in terms of coal production in Appalachia from 1970 to 1983. Its mining facilities include 12 coal mines and 10 coal preparation plants in four divisions located in Pennsylvania, West Virginia and Kentucky, requiring some 4,100 employees. HPM, located in Nicholas and Clay counties, will become part of Bethlehem's West

Virginia Division, which is managed by Theodore J. Brisky.

McCann, who also heads BethEnergy, announced the following appointments to the new organization: Daniel J. Crossen Jr., director of marketing and sales; David A. Sparks, operations manager, coal; W. Thomas Birmingham, operations manager, coke, and Richard J. Fisher, operations controller, coal and coke.

Other key members of BethEnergy include Dr. Richard R. Thompson, manager, domestic metallurgical coal and coke sales; Russell B. Rawlings, manager, domestic steam coal sales, and Bernard F. Mulligan, manager of market research.

McCann noted that Bethlehem's steel plant restructuring program, which has reduced raw steelmaking capacity, has also reduced demand for metallurgical coal for coking by the company's steel group. This reduction, coupled with an agreement between BethEnergy and Bethlehem's steel group to supply specified metallurgical coal tonnages per year for steelmaking operations--gives assurance that significant amounts of coal will be available for sale to domestic and international markets. Bethlehem's metallurgical coal has high-quality coking characteristics.

"The fact that Bethlehem's coal mines will no longer be captive

operations subordinated to the cyclical nature of steel production is a key factor in the creation of BethEnergy," McCann said.

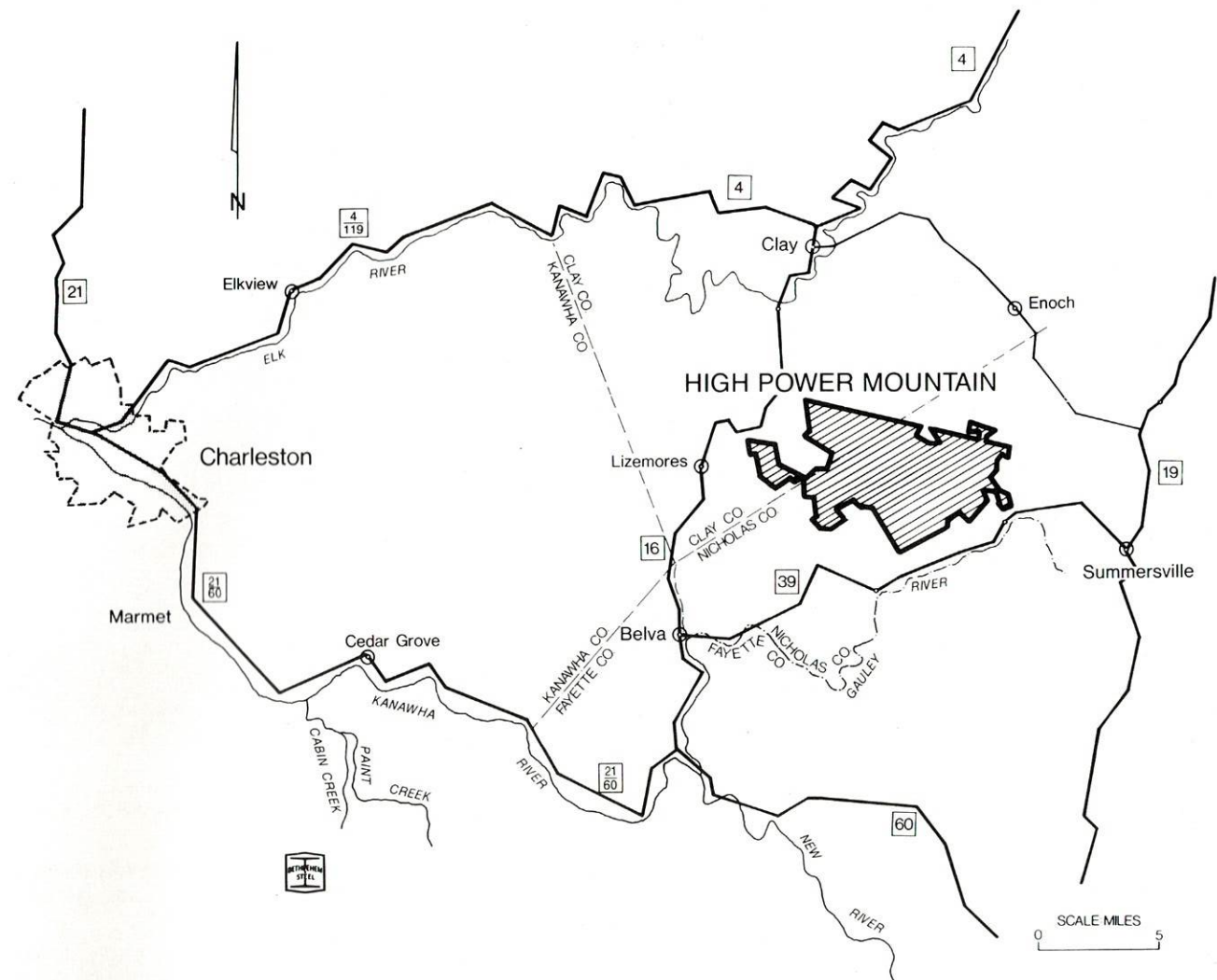
"With the reduction of Bethlehem's steelmaking capacity, the agreement to furnish the steel group less than 100 percent of its metallurgical coal requirements, the addition of brokerage capability and increased coal mining capacity, we're positioning ourselves to become a major competitor in the marketplace."

BethEnergy will include brokerage services to supplement its reserves of metallurgical and steam coal for the commercial market.

As to the commercial sale of high-quality coke for steelmaking purposes, McCann indicated that BethEnergy will market the 1.4-million-ton-per-year production capacity of the coke oven batteries at Lackawanna, N.Y. BethEnergy also will sell surplus coke from Bethlehem's other integrated steel operations. Coke sales are expected to reach approximately 1.5-million tons in 1985.

McCann added that BethEnergy will market stoker coal to large industrial companies, including utilities, from HPM as well as from its mines in eastern Kentucky.

Located 65 miles east of Charleston, the new mine site is in the early stages of development. The low-



Bethlehem Steel Corporation's High Power Mountain coal mining property is located 65 miles east of Charleston. The 20,000-acre site located in both Nicholas and Clay counties contains 250 million tons of low-sulfur steam coal.

sulfur content of steam coal from HPM is what utilities require for reduced sulfur emissions from coal-fired electric power generating stations.

When in full production in 1988, HPM will produce two million tons of steam coal per year with a potential for four million tons by the early 1990's. Bethlehem's other mines currently have almost four million tons of steam coal capacity.

The Bethlehem vice president also announced that the initial customer for the HPM low-sulfur steam coal is Detroit Edison Company which has signed a long-term contract for approximately

one million tons per year. It will receive the coal shipments by unit trains operated by Conrail.

Bethlehem is investing approximately \$39 million in development of HPM.

The new construction will include a preparation plant, loadout facilities, 2.2 miles of main haulage road to the mine and a railroad loop system to handle large unit trains. There will also be a \$30 million investment by the joint venture of High Power Energy Mining, Inc., which will surface mine the coal for Bethlehem, utilizing its own workforce and equipment. The joint venture con-

sists of Pratt Mining Company, Hansford, and Geupel Construction Company, Inc., Columbus, Ohio.

Also, another \$10 million investment will be required by Conrail for the extension of its existing line to the Bethlehem mining property. Engineering work has already begun for the installation of several miles of track and the construction of a railroad bridge.

McCann said that Bethlehem's current coal production capacity of approximately 12.4 million tons is expected to increase to more than 15 million tons by 1990.



## High Power Mountain – Seven seams, 250 million tons.

The High Power Mountain (HPM) mining project, located in the middle of West Virginia, will provide a major source of steam coal for Bethlehem Steel Corporation's newly formed BethEnergy organization.

Created to develop markets and sell metallurgical and steam coal, as well as coke, BethEnergy's resources will include 250 million tons of low-sulfur steam coal from HPM which is currently under development.

HPM's reserves, coupled with those from Bethlehem's 12 other coal mines, gives the organization over one billion tons of coal available for long-term commitments.

Approximately 200 construction workers will be involved at various times during the HPM mine development program. During the initial coal production phase, about 150 persons will be permanently employed. This includes Bethlehem employees who will operate the coal cleaning plant and contracting personnel who will mine the coal.

Recognizing coal as the fuel for the future, Bethlehem purchased the 20,000 acres of property which make up HPM during the 1950's. It is located near Drennen, 65 miles east of Charleston.

High on the mountain tops, there are seven seams which make up the project: They are the Upper Kittanning, Middle Kittanning, Five Block (Lower Kittanning), Clarion, Stockton "A," Stockton, and Coalburg seams.

Extensive exploration and development drilling over the

past several years has delineated 70 million tons of high-quality, low-sulfur steam coal in the eastern portion of the property. In the western portion of HPM, there is an identified reserve of 180 million tons of similar high-quality steam coal.

An analysis of the coal obtained from the exploration phase of the project shows very little variability in sulfur, ultimate analysis of ash, ash fusion, volatile matter and hardness of the coal. Various combinations of mining, blending, and cleaning can produce low sulfur coals to meet critical boiler specifications.

HPM will be mined by a modern, environmentally sound surface mining method using up-to-date mining technology. Initial operations will be accomplished by front-end loaders and trucks to bring the project on stream quickly and efficiently.

As production levels increase, shovels and draglines will supplement the front-end loaders as the prime earthmoving equipment.

The reserve base of 250 million tons will sustain production levels greater than four million tons per year as future demand for low-sulfur coal grows.

The HPM property was formerly referred to as Twenty-Mile Creek--the name of the creek that runs through the middle of the property.



Aerial view of Bethlehem Steel Corporation's High Power Mountain (HPM) coal mining complex shows a portion of the 2.2-mile-long haul road which will serve as the main access to the property for personnel and supplies.



Front-end loader clearing the main access roadway.



Backhoe excavating for a drainage control pond in Sugarcamp Hollow.



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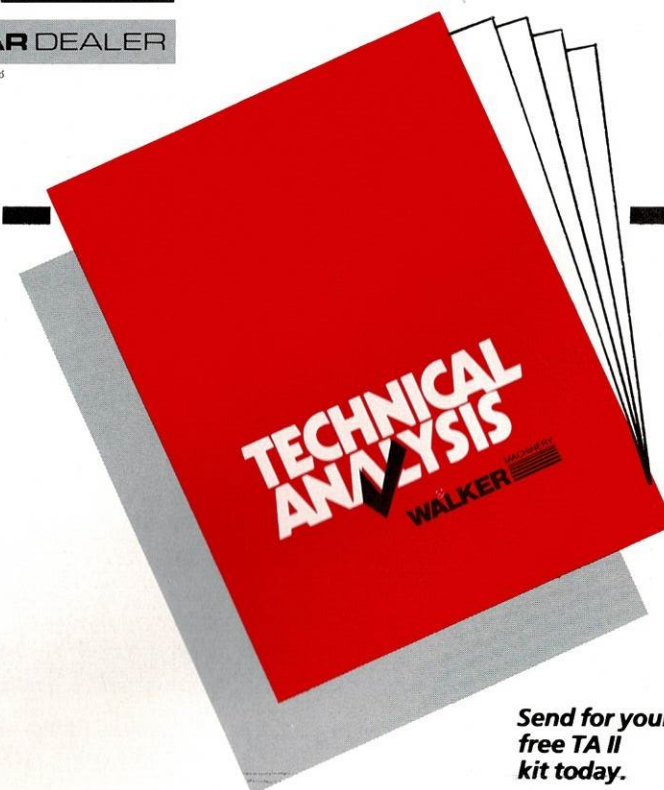
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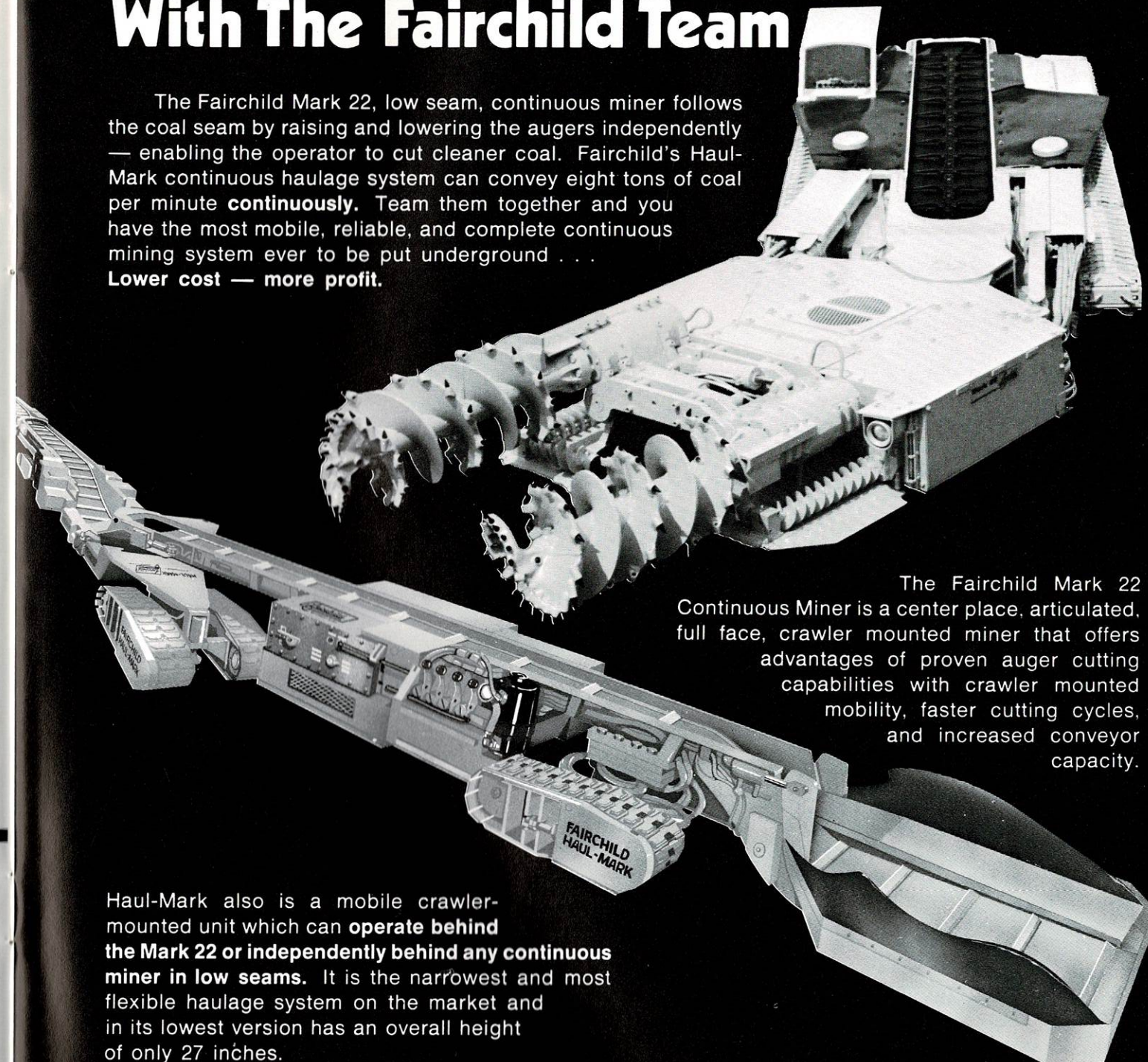
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Cherry River Coal & Coke Company  
Permit S-28-79  
67 acres in the Tioga and Widen Quadrangles, near Calvin in Nicholas County

## Blue skies and green grass

A change in schedule brought blue skies and moderate temperatures to the 16th Annual "Interagency Evaluation Tour of Surface Mining and Reclamation in West Virginia."

"The Tour," as it is more widely known, is normally run in early August. This year, the dates were pushed into mid September to take better advantage of West Virginia's most beautiful weather. Whoever had that idea came up a winner, as the 100 plus inspectors, scholars, technicians, and just plain "tourists" stayed cool and dry while enjoying a close up look at the state of the arts in West Virginia mining and reclamation.

As in recent years, the tour was geographically condensed, headquar-

tering in one location each for the northern and southern portions of the state. Still, the caravan covered more than 400 miles, viewing operations in six counties, and passing through several others.

The tour, sponsored and run by the West Virginia Department of Natural Resources, began in 1969 with a handful of officials from relevant government agencies. The first of its kind in the country, the tour annually draws participants from virtually every eastern mining state and reinforces West Virginia's position as the leader and prime innovator in surface mining and reclamation technology.

Since federal legislation brought reclamation to the deep mining industry

in 1977, that phase of West Virginia mining has also played a role in the tour, as beautifully represented by Leckie Smokeless Coal Co.

As for surface mining, the operations this year were different, but the two major impressions were the same. In the south, modern technology facilitates steep slope reclamation to the point where a break in the tree line often provides the only clue that mining has taken place. In the north, where mining tends more toward farm land, West Virginia style reclamation leaves hardly any hint of mining at all.

These two points should be amply demonstrated on the following pages.



Davis Trucking Company  
Permits S-169-74 & S-74-76  
Total of 176 acres in the Lead Mine, Davis, Blackwater, and Mazart Mountain Quadrangles, near Thomas in Tucker County.





Allegheny Mining Corporation  
Permit S-11-83  
220 acres in the Gorman Quadrangle, near Mt. Storm in  
Grant County.





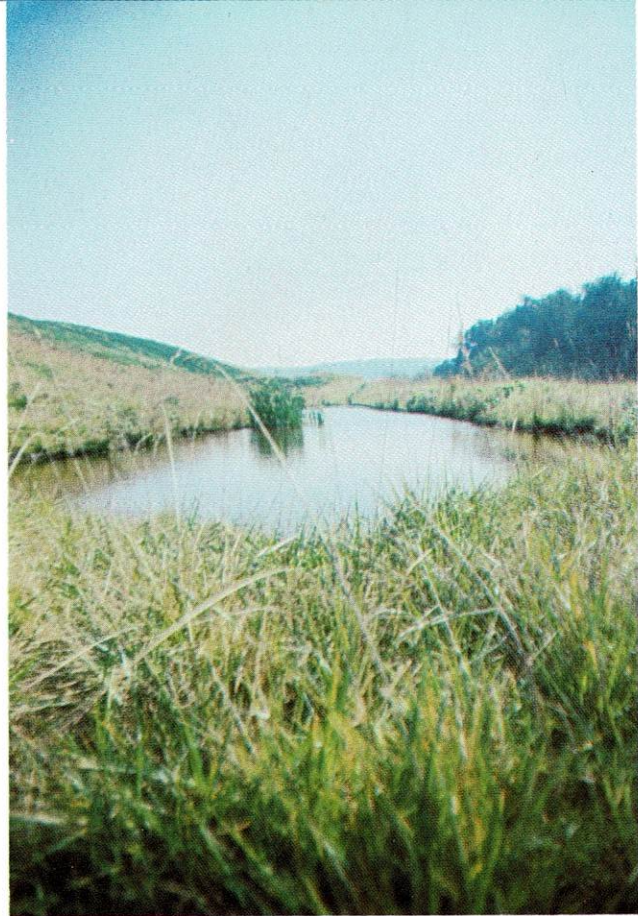


D&L Coal Company  
Permit S-3-76  
191 acres in the Mt. Storm Quadrangle, near Elk Garden in  
Mineral County.



Ford Coal Company  
Permit S-58-79  
81 acres in the Widen Quadrangle, near Summersville, in  
Nicholas County





Leckie Smokeless Coal Company  
Permit S-10-80  
302 acres in the Duo Quadrangle, near Rupert, in Greenbrier  
County

Leckie Smokeless Coal Company  
Permit D-32-81  
6 acres in the Duo Quadrangle near Rupert, in Greenbrier  
County



Leckie Smokeless Coal Company  
Permit S-81-79  
214 acres in the Quinwood Quadrangle, near Rupert, in  
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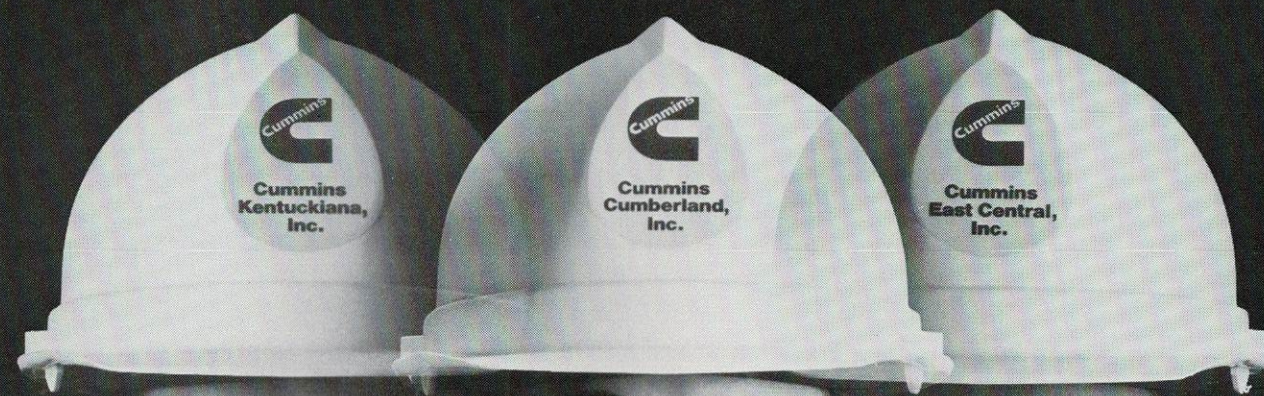
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Last fall, in the middle of the third consecutive 9-3 football season for the West Virginia Mountaineers, **Green Lands** carried a feature on "Mountaineer Mania," that special pride in the Mountaineers that shows up in blue and gold on everything from baby bottles to mining machines.

A year later the Mountaineers have streaked to their fourth consecutive bowl appearance, and "Mountaineer Mania" continues unabated.

Our story last year showed the colors on drag lines, trucks, stickers, drills and mine doors. As you can see on these pages, loyal Mountaineer miners haven't run out of places to show what team is number one in their hearts.



All tipples have to be some color, and when Carl DeSignore of Buffalo Coal Co. decided to build a new cleaning plant, he had no doubt of what the color scheme should be. To our best knowledge, Buffalo now holds the record for the most blue and gold paint expended in pursuit of "Mountaineer Mania."





# FINAL REPORT

## Coal Group of the 98th Congress

### TRANSPORTATION

**Rail Transportation:** One of the major issues which preoccupied the Coal Group's attention during the 98th Congress were matters pertaining to the ICC's implementation of the Staggers Rail Act of 1980. In response to a number of ICC decisions, particularly in its Coal Rate Guidelines Nationwide, several members proposed legislative remedies.

The Coal Group on June 29, 1983, held a coal transportation seminar at which time ICC Chairman Reese Taylor discussed the Commission's decisions on the export coal exemption and in the Coal Rate Guidelines Nationwide.

Members of the Coal Group were also successful in obtaining from the Subcommittee on Commerce, Transportation and Tourism, chaired by

Rep. Florio, the first oversight hearing on the Staggers Rail Act of 1980 which was held on July 27, 1983. At this hearing, Reps. Bevill, Rogers, Boucher and Rahall presented testimony in support of H.R. 2584. In addition, due to efforts of Rep. Richardson, the subcommittee held a field hearing in New Mexico.

**1. H.R. 2584, introduced by Rep. Rahall.** The goal of this legislation is to reinforce provisions of the Staggers Rail Act of 1980 aimed at protecting captive shippers. The bill proposes critical changes in rail ratemaking in the areas of market dominance, revenue adequacy considerations and cost of service. (No action).

**2. H. Con. Res. 219, introduced by Rep. Marlenee.** Expresses disapproval with the manner in which the ICC is implementing the Staggers Rail Act of 1980. (No. action).

**3. H.R. 3678 and H.R. 4439, introduced by Rep. Florio.** One provision of H.R. 2584, to reauthorize the Railroad Accounting Principles Board (RAPB), was reintroduced by Rep. Florio as part of his Amtrak reauthorization measure, H.R. 3678. This measure passed the House on February 7, 1984, and was amended by Rep. Rahall on the House floor to include a provision which prohibits the ICC from implementing its Uniform Rail Costing System (URCS) until the RAPB had a chance to review it.

In addition, Rep. Florio also introduced a bill to reauthorize the RAPB in the form of H.R. 4439 which passed the House on March 6, 1984. Since it did not appear that the Senate would act upon these measures in an expeditious manner, Coal Group members promoted the reauthorization and funding of the RAPB in the context of

the Legislative Appropriation for FY85. This legislation was approved on July 17, 1984, (P.L. 98-367).

The purpose of the RAPB is to develop sound and reasonable railroad accounting principles necessary to determine the accuracy of railroad costs. The ICC has proven to be extremely inept in developing its own system and a great deal of concern has been raised over its proposed URCS which has the tendency to raise variable costs and as such, reduce the number of rates which could fall under the Commission's jurisdiction. It is hoped that the RAPB, being an independent entity under the auspices of the GAO, will be able to fulfill its Congressional mandate.

**Water Transportation:** Substantive legislative activity occurred with respect to authorizations and appropriations for projects which facilitate the transportation of coal in the inland waterways and through ocean ports.

By 1984, water resource development to benefit commercial navigation was at a standstill as no new major U.S. Army Corps of Engineers' water projects had been authorized for eight years and no new start construction funding had been appropriated for five years. The House in October 1983 passed H.R. 3958, the Water Resources Development Appropriation Bill, which provided nearly \$119 million in new start money for 43 water projects, 20 of which had not been authorized. In late June 1984, the House passed H.R. 3678, an \$18 billion omnibus water resources authorization bill. Both measures provided for a number of critical coal projects on the inland waterway system and at deep water ports.

These measures set the stage for House action on the Continuing Appropriation for FY85, H.J. Res. 648. During House consideration of the bill—which already contained the funding provisions of H.R. 3958—the entire text of the omnibus water resources bill, H.R. 3678, was added as an amendment.

However, due to a threat of a presidential veto, all water projects were

stripped from the Continuing Appropriations for FY85 in Conference, which was approved by the Congress on October 10, 1984.

**1. H.R. 3958, introduced by Rep. Bevill.** New start funds provided in this House-passed measure included harbor and channel improvements at Baltimore, Mobile and Norfolk and replacement locks at Gallipolis, Nos. 7&8 and at Oliver in addition to a second lock at No. 26. (Not enacted).

**2. H.R. 3678, introduced by Rep. Roe.** Authorizations for project improvements provided by this House-passed measure included: Oliver Lock and Dam on the Black Warrior River; Gallipolis Locks and Dam on the Ohio River; Winfield Lock and Dam on the Kanawha River; Locks and Dams No. 7 & 8 on the Monongahela River; and, a second lock at Lock and Dam 26 on the Mississippi River. Two-thirds of the construction costs of these projects would come from general revenues and one-third through the existing barge fuel tax.

Port dredging projects in the bill included: Norfolk Harbor in Virginia; Mobile Harbor in Alabama; Mississippi Ship Channel in Louisiana; New York Harbor in New York and New Jersey; and, Los Angeles/Long Beach Harbors in California. Non Federal interests would pay for 50% of new construction costs and 50% for incremental operation and maintenance costs. (Not enacted).

**Coal Slurry:** The House on September 27, 1983, defeated legislation, H.R. 1010, the Coal Pipeline Act, by a vote of 235 to 182. The vast majority of coal-state Representatives voted against the bill.

### ENVIRONMENT

**Acid Rain:** Control legislation, H.R. 3400 (Waxman/Sikorski), was defeated during markup in the Subcommittee on Health and the Environment. Meanwhile, a major alternative was introduced in the form of the Udall/Cheney bill, H.R. 5370, which would achieve sulfur dioxide emission

reductions without mandating a technological solution such as smokestack scrubbers.

The Coal Group had the opportunity to meet with EPA Administrator William Ruckelshaus on August 4, 1983, to express its concern over an EPA proposal to single-out several midwestern states in which to implement an acid rain control program. After the meeting, the EPA backed-off from its proposal.

**1. H.R. 1405, introduced by Rep. Rahall.** This legislation provides for an accelerated understanding of the causes and effects of acid deposition and would authorize a mitigation program at aquatic sites impacted by acidity. (No action).

**Clean Water:** The House passed in late June 1984 a reauthorization of the Clean Water Act, H.R. 3282, which contained two provisions affecting coal in particular. (Not enacted).

**1. Mitigation of Lake and Stream Acidity.** H.R. 3282 provides for \$25 million per year in state grants to fund measures which reduce acidity in lakes and streams. In addition, the bill authorizes a \$25 million federal lake liming demonstration program.

**2. H.R. 3282** also contains a provision sponsored by Rep. Rahall to provide an incentive to coal industry to remine abandoned coal mine sites. The provision would allow the states to waive the national BAT standards for the coal industry at such sites and tailor water quality standards to the situation found at each individual site.

**Abandoned Mine Reclamation:** Efforts continued to increase the level of state grant awards from the Abandoned Mine Reclamation Fund. The Continuing Appropriations for the FY85 appropriated an all-time high of \$257.7 million in AML state-sharing funding, an increase from the \$193.9 million appropriated in FY84.

**RCRA Reauthorization** The Conference report on H.R. 2867, the Hazardous and Solid Waste Amendments of 1984, was approved by the



House on October 3, 1984, and the Senate on October 5, 1984. The Solid Waste Disposal Act Amendments of 1980 deferred RCRA regulation of mining wastes and by-products from the combustion of coal until completion of EPA "special studies." These studies have yet to be completed.

Section 209 of H.R. 2867 states that if these "special study" wastes become subject to regulation under RCRA, the EPA Administrator is authorized to modify the requirements of the Solid Waste Disposal Act in the case of landfills and surface impoundments receiving such wastes. Due to their special characteristics, it may not be appropriate to subject these wastes to the same requirements applicable to other hazardous wastes. However, the modified requirements must still protect the human health and environment.

**H.R. 5640, Superfund Expansion and Protection Act of 1984:** This bill, which passed the House on August 10, 1984, exempted from Superfund taxes any of the "special study" wastes described above. (Not enacted).

## COAL EXPORTS — IMPORTS

The Coal Group was active during the 98th Congress with respect to the U.S. — Japan coal trade. A great deal of concern was expressed over the decline in U.S. coal exports to Japan at the same time as the trade imbalance grew between the two nations.

The Coal Group held a meeting with senior Japanese coal buyers on May 15, 1984, to warn them of growing protectionist sentiments in the Congress and to urge increased use of U.S. coal.

The Coal Group also held a hearing on September 25, 1984, with representatives of the Japanese Embassy, the Administration and the coal

industry on the implementation of the Reagan-Nakasone Joint Policy Statement on Energy Cooperation.

**1. H.R. 4635, Coal Export Enhancement Act,** introduced by Rep. Rahall. This bill would establish a 30-member Federal Coal Export Commission under the auspices of the Secretary of Commerce for the purpose of considering initiatives to increase the U.S. share of the world coal market. (No action).

**2. Defense Appropriation.** The FY84 Defense Appropriation (and the Continuing Appropriations for FY85) continued the Buy America provisions, sponsored by Reps. McDade and Murtha, for coal used by military installations in Europe.

**3. Continuing Appropriations for FY85.** The resolution contains a provision sponsored by Rep. Rogers which directs the Secretary of Commerce in conjunction with the Secretary of Energy to conduct a study on the impact of domestic coal employment and American coal exports of increased coal imports, most notably from Columbia.

## COKE

**H.R. 5516, introduced by Rep. Rahall.** This bill, in an effort to prevent a shortfall of domestic coke capacity, would add coke to the National Defense Stockpile. The bill would require that a three-year supply of coke be maintained. Such a requirement would provide an incentive to domestic coke producers—who are also largely steelmakers—to modernize and construct new coke plants. Moreover, a coke stockpiling requirement would increase the demand for metallurgical coal.

## FUEL COMPETITION

**H.R. 4277, Natural Gas Market Policy Act of 1984:** The natural gas

bill reported by the Committee on Energy and Commerce, while never considered on the House floor, would have repealed Title II of the Powerplant and Industrial Fuel Use Act of 1978. This title prohibits the construction of new natural gas electric utility boilers and effectively promotes the use of coal as the primary source of electrical generation for new powerplants. Rep. Rahall announced that if H.R. 4277 was considered on the House floor, he would offer an amendment to delete the provision which would repeal Title II of the Fuel Use Act.

## RESEARCH AND DEVELOPMENT

The Coal Group early during the 98th Congress met with DOE Secretary Don Hodel on March 1, 1983, to discuss the imbalance between nuclear and coal research and development programs.

As support grew to rescind funds from the Synthetic Fuels Corporation (\$2 billion was rescinded by the Tax Reform Act and the House voted to rescind an additional \$5 billion during consideration of the Interior Appropriation for FY85), efforts intensified to provide more funds for coal research and development programs.

The Continuing Appropriation for FY85, J.J. Res. 648, as approved by the Congress on October 10, 1984, contained a \$5.375 billion SFC rescission. However, \$750 million of the amount would be set-aside in a Clean Coal Technology Reserve to support on a multi-year basis small-scale coal technology demonstration projects. As part of this program, the Secretary of Energy would solicit statements of interest from the private sector for projects employing coal technologies and submit his findings to Congress by April 15, 1985.

The Continuing Appropriations for

FY 85 also funds the DOE coal research and development program at \$256.9 million.

In addition, the Continuing Appropriations for FY85 provides \$6.6 million for coal mining technology and \$33.9 million for mine health and safety technology at the Bureau of Mines. It also appropriates \$30.2 million for energy surveys (which includes the coal investigations program) and \$8.7 million for energy hydrology (which includes the coal hydrology program) at the U.S.G.S.

**1. H.R. 4182, National Coal Science, Technology and Engineering Development Act, introduced by Rep. Rahall.** Under a five-year \$775 million program, the goal of this bill is to bring to the commercialization stage new technologies which can utilize coal in a more efficient and environmentally sound manner. (No action).

**2. H.R. 5044, introduced by Rep. Walgren.** Relatively the same as H.R. 4182 except with some different demonstration projects. (No Action).

**H.R. 5593, introduced by Rep. Lloyd.** Relatively the same as the above bills except in its funding mechanism which would utilize monies from the Synthetic Fuels Corporation. (No Action)

**4. H.R. 5238, Mining Extension Service Act, introduced by Rep. Mollohan.** This bill would create a national mining extension service pilot program for the purpose of distributing mining information reports, organizing seminars and workshops and to work with federal and state agencies to solve health and safety problems. (No action).

## COAL LEASING

A ban on federal coal leasing instituted through Interior Appropriation legislation was not included in the FY85 Interior Appropriation as approved by the Continuing Appropriations for FY85 due to Interior Secretary William Clark's promise to implement changes to the Department's leasing program as proposed by the Linowes Commission.

**1. H.R. 1530, introduced by Rep. Kogovsek.** Would repeal Section 3 of the FCLAA which prohibits a company holding a federal coal lease for more than 10 years, but has not reached commercial production, from acquiring additional federal mineral leases. (No. action).

## BLACK LUNG

**H.R. 4014, introduced by Rep. Mollohan.** This bill seeks to reduce the backlog of black lung cases pending before the Benefits Review Board by expanding the number of administrative law judges from three to five on the Board. This provision was incorporated into S.38, the Longshoremen's and Harbor Worker's Compensation Act. This legislation was approved on September 28, 1984. (P.L. 98-426).

## TAXATION

**H.R. 4170 Tax Reform Act/Deficit Reduction Act of 1984.** Two provisions in particular affected the coal industry in this year's tax legislation which was approved on July 18, 1984. (P.L. 98-369).

**1. Mine Reclamation.** Federal and state laws require the reclamation of surface coal mines and many operators wish to use the accrual-basis to deduct anticipated expenses. The tax bill allows operators to estimate their reclamation expenses for certain purposes under a uniform method. Rep. Flippo sponsored such a provision in the House in the form of H.R. 3342.

**2. Capital Gains Treatment of Coal Royalties.** The tax bill changed the rules under which coal royalties qualify for capital gains treatment. Under the new law, such treatment does not apply to any disposal of coal to a related party. An exception is made for coal sold under a fixed contract in effect on June 15, 1984.

## COAL GROUP MEMBERS

**Alabama:** Tom Beville, Richard Shelby, Ronnie Flippo and Ben Erdreich. **Alaska:** Don Young. **Arkan-**

**sas:** John Paul Hammerschmidt. **Colorado:** Ray Kogovsek and Hank Brown. **Illinois:** Paul Simon, Melvin Price, Dan Crane, Lane Evans and Richard Durbin. **Indiana:** John Myers, Lee Hamilton and Frank McCloskey. **Kentucky:** Carroll Hubbard and Harold Rogers. **Maryland:** Beverly Byron. **Minnesota:** Bill Frenzel. **Missouri:** Harold Volkmer, Robert Young and Ike Skelton. **Montana:** Ron Marlenee. **New Jersey:** Robert Roe and James Florio. **New Mexico:** Joe Skeen and Bill Richardson. **Ohio:** Doug Applegate, Clarence Miller, Tom Luken and John Kasich. **Pennsylvania:** John Murtha, Austin Murphy, William Clinger, Joe McDade, Bud Schuster, Gus Yatron, William Coyne, Doug Walgren, Joe Gaydos, Bob Edgar, Peter Kosmayer, Joseph Kolter, Tom Ridge and Frank Harrison. **Tennessee:** Marilyn Lloyd. **Utah:** Dan Marriott and Howard Nielson. **Virginia:** Tom Bliley and Rick Boucher. **West Virginia:** Bob Wise, Alan Mollohan, Harley Staggers and Nick Rahall, chairman.

Mr. Rahall wishes to express his appreciation to the following members for their consistent attendance at Coal Group meetings: Frank McCloskey, Alan Mollohan, Rick Boucher and Hal Rogers.

The Coal Group wishes to recognize leadership of the late **Representative Carl Perkins of Kentucky.** His tireless efforts to enhance the health and safety of the Nation's coal labor force through black lung and mine safety legislation sets a lofty goal for all coal state congressmen.

The Coal Group also wishes to honor **Senator Jennings Randolph of West Virginia,** first elected to the House of Representatives in 1932, who is retiring from public office with the adjournment of the 98th Congress. His vision for synthetic fuels and constant efforts on behalf of increased coal use have made him the recognized leader of all those in Congress with a concern for energy security.



# Cost Imbalances in Revegetating Mined-Land to Various Post-Mining Land Uses

T.W. Richards and D.H. Graves

The cost of revegetating mined land varies considerably depending on the designated post-mining land use. Hayland-pasture, forest land, and wildlife habitat are very similar in comparative costs for grading and other work preceding revegetation. However, substantial cost differences between these land-use alternatives arise from material and labor required to meet revegetation standards.

One important reason for these dissimilar costs is the general requirement that all mined areas be revegetated with "a diverse, effective and permanent vegetative cover... the first normal period for favorable planting conditions after final preparation." This requirement applies to all land-use designations except prime farmland. Compliance usually means that tall fescue and various other grasses and legumes are seeded the spring or fall after final grading. For a land-use designation of hayland-pasture, this cover alone is sufficient to meet revegetation standards. For a designation of forest land or wildlife habitat, this cover is only the first step in the revegetation process.

Additional steps including herbicide applications and tree planting are time consuming and expensive.

The following samples of cost summaries for hayland-pasture and forest land designations emphasizes the cost imbalance between these two land-use alternatives. These costs may vary by job, region, and terrain, but the basic fact that cost imbalances exist remains true. Land-use alternatives which require the planting of woody species after grass establishment are always much more expensive than land-uses requiring grass only.

## REVEGETATION COSTS FOR HAYLAND-PASTURE AND FOREST LAND DESIGNATION

HAYLAND-PASTURE	
Grass-Legume Establishment	Cost/Acre
Fertilizer: \$210/ton, 16-32-8 at 300 lb./ac.	\$31.50
Seed: 25 lb tall fescue at \$0.31/lb.	7.75
1/2 bu. winter rye at \$5.50/bu.	2.75
3 lb. redtop at \$1.70/lb.	5.10
12 lb. yellow sweetclover at \$0.32/lb.	3.84
4 lb. birdsfoot trefoil at \$1.75/lb.	7.00
Labor: 1/2 hr./ac., 3 laborers at \$10.00/hr.	15.00
Machinery: 1/2 hr./ac. at \$50.00/hr.	25.00
TOTAL	\$97.94

FOREST LAND	
Grass-Legume Establishment:	97.94
Herbicide & Hand Application: (per 1000 seedlings)	177.00
Seedlings: 1000 trees/ac. at \$40.00/1000	40.00
Hand Planting: 100 trees/man-hour at \$10.000/hr.	100.00
TOTAL	\$414.94

The difference in revegetation costs in this example amounts to over \$300 per acre. This difference becomes even more impressive when viewed from the perspective of a 100 acre permit that must be returned to trees, and the possibility that seedling mortality may require additional planting. From this perspective, the total difference in cost over that of a hayland-pasture designation becomes \$30,000 plus.

Such differences in revegetation costs produce an obvious bias in designating post-mining land usage. Given the opportunity to choose between land-use options, a company would be foolish to designate the post-mining land use as anything other than hayland-pasture. And yet, the intent of the federal surface mining act, Public Law 95-87, and the resulting federal and state mining regulations seem to be aimed at restoring mined-land to a reasonable land use rather than to a land-use dictated by establishment costs.

A number of possibilities exist for reducing economic imbalance between revegetation alternatives. Many of the practices that are considered to be static cost factors for all plantings could be altered to both improve establishment and balance cost. Grading, fertilization, and herbaceous cover establishment are three factors that could vary with land use designation and result in cost savings.

**GRADING.** Final-grading mined land to smooth rolling surfaces is aesthetically pleasing and is important if land is to be moved, but rough, uneven, and rocky surfaces are no detriment in a forest environment. Rough surfaces increase micro-relief that can benefit tree survival and growth, and can retain runoff for better water infiltration and less erosion. Rough graded surfaces produce shaded niches where seedlings are less exposed and they are potentially less compacted which benefits root penetration. Cost savings would thus result from keeping present grading standards for grass areas while lessening grading standards for designated tree areas.

**FERTILIZATION.** Fertilization is an important factor in successfully establishing grass cover on mined land. Fertilizers can also benefit tree growth, but trees do not generally need fertilizer additions. In combined grass and tree plantings, fertilization is actually detrimental to the trees, because it encourages vigorous herbaceous growth causing increased competition and resulting in high tree mortality. Reducing

fertilizer levels for forest land should improve tree survival and wil reduce cost.

**HERBACEOUS COVER.** The worst time to establish trees in a mixed grass-tree planting is soon after grass establishment. Grass at this stage is lush and vigorous due to the abundance of nitrogen, phosphorus, and potassium added when sites are seeded. This peak in herbaceous growth produces strong competition for light, water and space. Young trees are less able to compete with the grass under these conditions and often die. Herbicides are commonly needed when grass and trees are planted together to reduce this competition.

Herbaceous cover is planted with trees as an erosion-control measure. Trees are not able to control erosion well until they produce a complete canopy which can take many years. Steep ground and other areas with high erosion potentials need a grass cover to hold the site while trees are developing, but areas with low erosion potential should be given other control options. Strip plantings, alternating grass and trees in wide bands, could be a possibility for gently sloping land. Block planting with grass buffers is another potential option that would allow tree establishment without grass competition while still maintaining site stability. Eliminating grass establishment costs and the need for herbicides for tree areas would be a significant savings.

**SPECIES SELECTION.** Cost savings can also be gained by using proper species selection when planting an area to trees. Most mined land is marginal or suboptimal for planting Black Walnut, Yellow Poplar, and White Oak. These species require high quality sites for survival and growth and they are not adapted to the temperature and moisture extremes encountered on many mined areas. Native species that are more likely to survive under these harsh conditions and which are available from state nurseries include Virginia and short-leaf pine, Black Locust, Cottonwood, Sycamore and White Ash. Avoidance of species not adapted to mined land can save the cost of replanting.

**BLACK LOCUST.** Black Locust is a native hardwood and is found as an invading or colonizing species in fence rows, old fields, and clear-cut forest land. Among tree species commonly used in surface-mine revegetation, Black Locust is unique in its ability to establish and outgrow grass competition. Besides being the most successful tree species used in mine planting, Black Locust may also be more valuable. Its value does not come from its commercial uses, but rather from its ability to improve the site conditions and build soil. Black Locust is a nitrogen-fixing legume which increases soil nitrogen. Its roots grow deep and reduce compaction while opening channels for water movement. Above the surface, the leaf canopy stops the impact of raindrops and reduces erosion. At the surface, the canopy shades the ground, reducing surface temperatures and evaporation while leaf and twig litter increases soil organic matter content. Planted in thick stands, Black Locust is more susceptible to insect damage from leaf miners and stem and twig borers which reduce stand vigor, but this in itself can be an advantage by

increasing its value as a nursecrop. Planted or naturally-invading seedlings of other tree species in the understory benefit from reduced temperature and moisture extremes and higher nutrient levels. Reduced vigor and increased mortality of the Black Locust allow these young seedlings to grow through the canopy and eventually dominate the site.

Past practices of planting Black Locust with a persistent ground cover were not conducive to reforestation. Ground cover species, such as tall fescue, crown vetch, and sericea lespedeza completely dominate the understory in mixed plantings. They allow little or no opportunity for natural invasion and succession toward a forest ecosystem.

A possible alternative to this may be mixed plantings using Black Locust and less persistent herbaceous plants such as ryegrass, lovegrass, redtop, kobe and Korean lespedeza, sweetclover and clovers. When planted in mixture with Black Locust these would rapidly produce a stabilizing ground cover which would then decline and eventually die under the increasing shade of the Black Locust canopy as it develops. This would keep a cover on the site, but would result in a relatively rapid change from ground cover to tree cover. The benefit of losing the planted ground cover once the tree cover is in place is that the resulting open understory is then available for the invasion of other native forest plants. Such mixed seedings in close proximity to undisturbed forest land would have a good seed source present which should contribute to more rapid succession to a diverse, native forest cover.

Revegetation standards would have to change before such a system could be implemented. The seedling of Black Locust as a one-step reforestation effort would produce a forest environment that would encourage natural succession to a diverse native cover. It would also put the forest land designation option in more favorable economic balance with the grassland alternative.

**LAND-USE DESIGNATION.** It is conceivable that within a permit boundary two or more land-use designations would be appropriate. Steep slopes and remote areas may be best suited to a forest land designation, while level to gently rolling land may be considered for hayland-pasture, and pond areas and drainage ways may be utilized best as wildlife habitat. Although the practice of designating a permit to only one land use is generally followed, most mined areas vary enough in topographic relief, soil conditions, and accessibility to warrant subdividing permit areas into different land use areas. If encouraged, this practice could bring post-mining land uses into reasonable and realistic balance with land capabilities.

**SUMMARY.** Under current reclamation practices, designation of post-mining land use for forest cover is almost prohibited due to cost imbalances. Changes aimed at reducing or eliminating these economic imbalances are needed to make post-mining land use designation a rational decision based on reasonable future use rather than on the short-term cost of initial establishment of vegetative cover as currently practiced.



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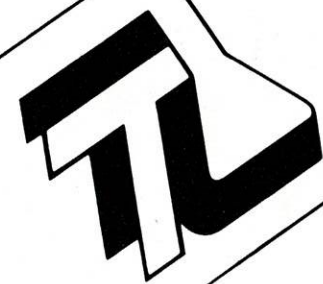
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