Green Lands
West Virginia Mining
and Reclamation Association
1624 Kanawha Blvd., East
Charleston, WV 25311

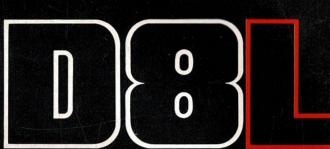
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more productive than its conventionally designed

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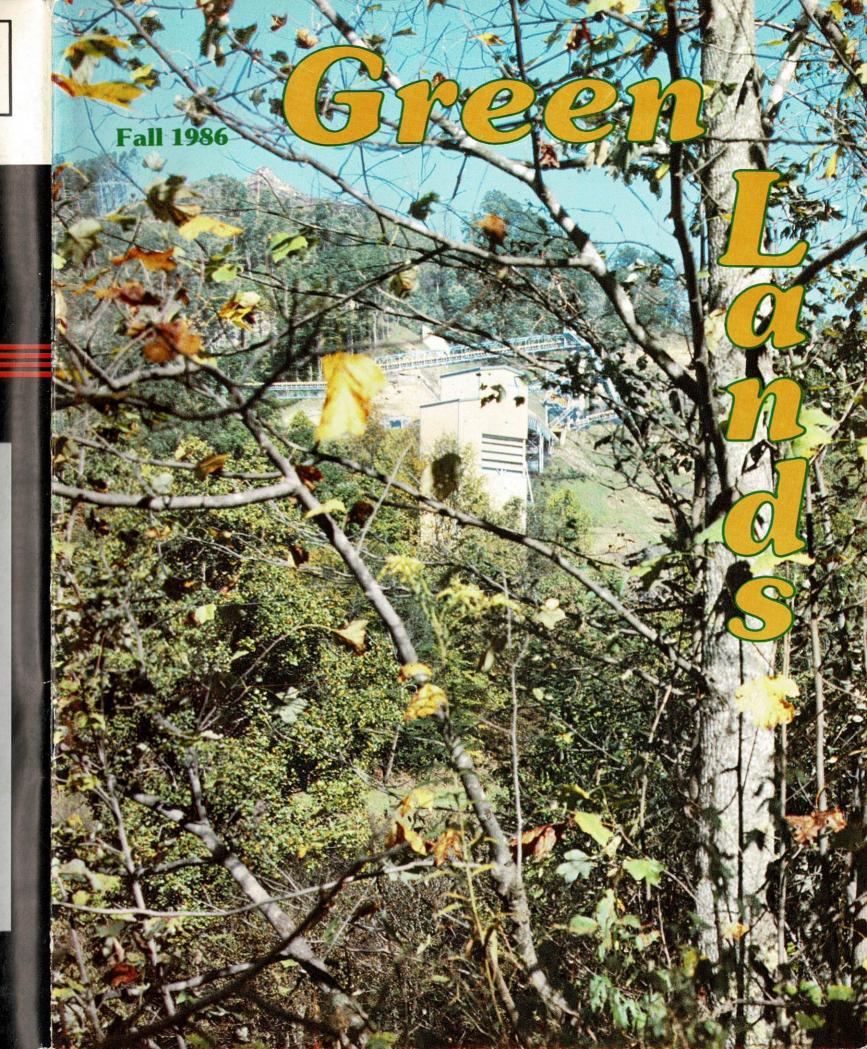


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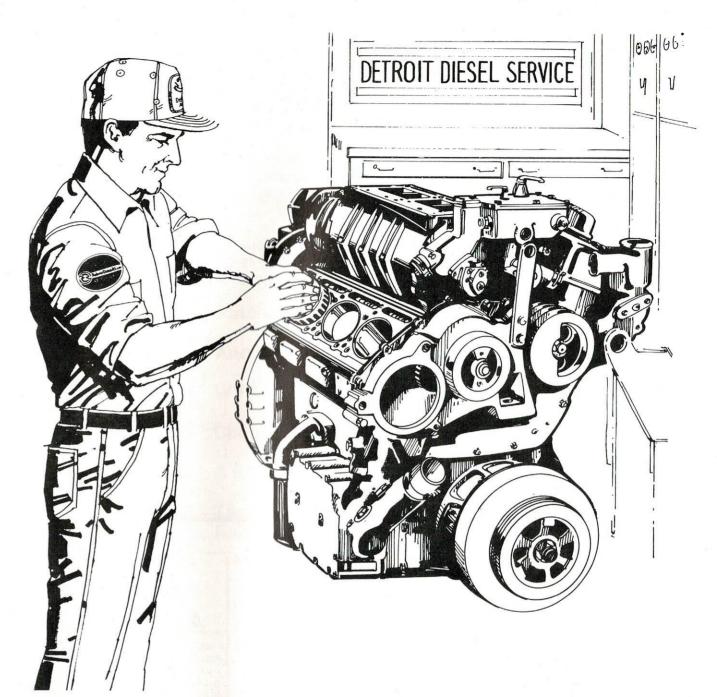
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# Green Lands

#### Volume 16 Number 2

- Put the Power on High
- And Now We are 20
- WVMRA Welcomes 42 New Members
- **Choosing the Right Financial Consultant**
- A Renewed Interest in White Pine
- The Use of Legumes in Mined Land Reclamation

Our Cover - High Power Energy combines many elements of the ideal mining situtation. modern equipment, low sulphur reserves, and a contract market. One year after the first coal was shippped, HPE has made the most of its opportunity. See our cover story beginning on page 6.



#### Editor

R. Daniel Miller

#### **Business**

Mary Ann Steele

#### Green Lands is a quarterly publication of the West Virginia Mining and Reclamation

Association with offices at 1624 Kanawha Boulevard East Charleston, West Virginia 25311 Telephone (304) 346-5318

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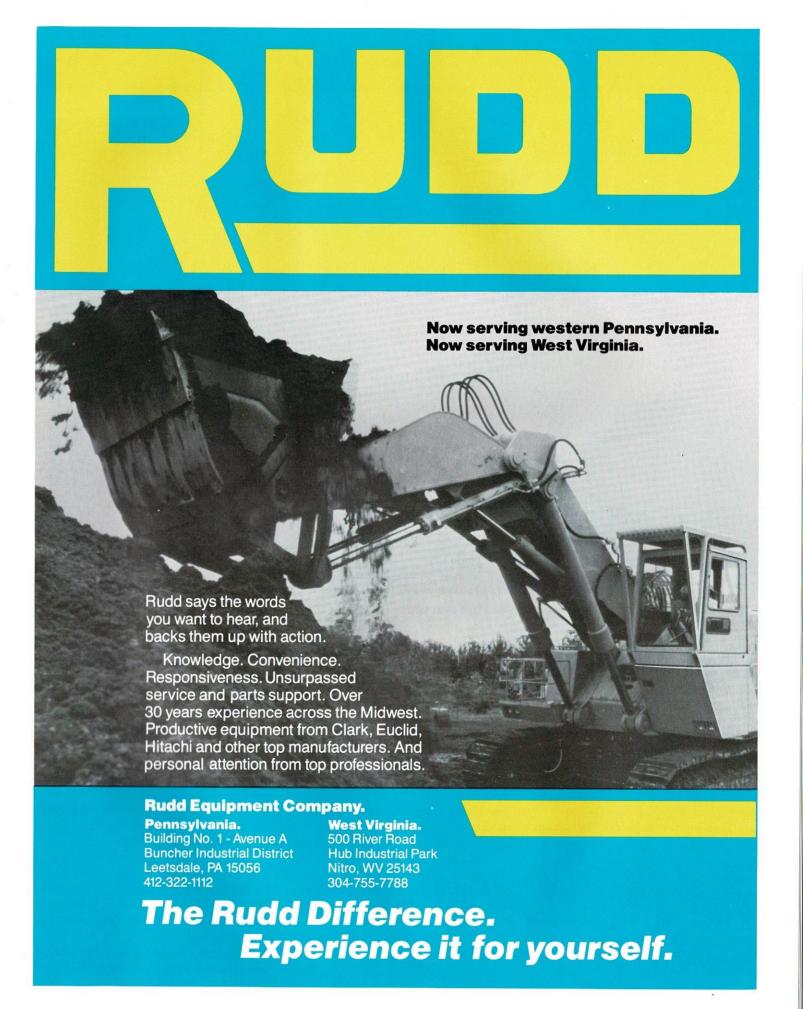
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High Power ships two train loads of coal to Michigan each week.

# Put the Power on High

The coal business is, among other factors, one of foresight, guess work, risk taking, and luck. Being in the right place at the right time has a lot to do with success. Owning the mineral rights doesn't hurt any either.

Back in the mid 1950's, Bethlehem Steel acquired a piece of property in south central West Virginia known locally as Twenty Mile Creek. The name is misleading. Twenty Mile Creek is properly a mountain.

Its new name is more appropriate. High Power Mountain, on the border of Clay and Nicholas Counties, is now turning on the lights in Detroit, Mich., thanks to a combination of all the factors cited above.

The purchase was made in 1954. And there the story ends for 30 years, right through the major environmental thrust of the late 60's, the oil shortage/coalboom of the early 70's, and the technological advances in mining and reclamation of the last 15 years.

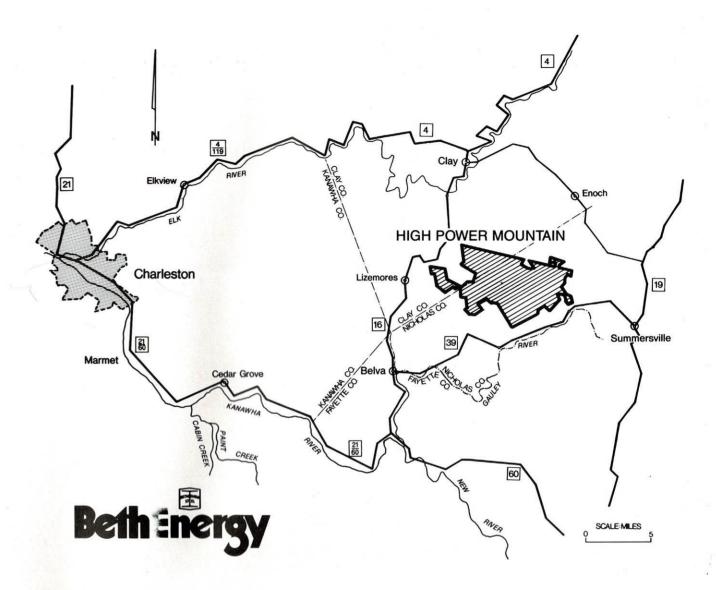
Three years ago, events began to unfold which would hasten the conversion of Twenty Mile Creek into High Power Mountain.

Changes in Michigan law required Detroit Edison to burn coal averaging no more than 1% sulfur content. Detroit Edison, the major utility in the metropolitan area, was forced to seek out a new coal supply. As the major coal transporter for southeastern Michigan, the Consolidated Rail Corp. (Conrail) also has a major stake in the changeover to low sulphur coal.

Meanwhile, Bethlehem Steel announced the creation of BethEnergy, as a marketing arm of the company's natural resources group.

The agreement reached in the fall of 1984 represented an ideal marriage of mine and market.

Detroit Edison signed a ten year transportation contract with Conrail and



# Mine plus market equals a match made in almost heaven

a corresponding commitment with BethEnergy for a minimum of 1 million tons a year.

The High Power complex won out over 160 competitive bidders for the Michigan utility business.

Securing investment partners in the form of Geupel Construction Co. of Columbus, O., and West Virginia companies Pratt Mining and Hansford Coal, Bethlehem committed \$70 million to the project.

Conrail invested an additional \$10 million in the project for construction of a two mile branch line and railroad bridge into the property.

Other construction included a preparation plant, loadout facilities, 2.2 miles of main haulage road, and a railroad loop system to handle large unit trains.

The transformation was accomplished in one short year. The appropriate contracts were signed in October of 1984 and the first coal shipped out in October of 1985.

By September of this year, High Power Mountain had shipped its first million tons of coal. Despite the quick rise to mining maturity, High Power has only scratched the surface of its vast potential. The company controls 10,500 acres, of which 1500 are currently under permit. Reserves are estimated at 250 million tons, all of it with a sulphur content of less than 1%.

Production totals for the near future are projected at 1.4 million tons annually. There's more room for growth however. In an expanding market, High Power production could boom to 4 million annual tons, which would make it the largest surface mine in the state.

But for now, High Power devotes most of its attention, and coal, to Conrail and Detroit Edison.



High power has built a complete layout of mining, processing, storage, loading, and shipping while disturbing a relatively small portion of the permit area.

High Power's operation utilizes the haulback method on a limited basis, but relies primarily on mountaintop removal process. A total of seven seams are involved, including the Upper Kittanning, Middel Kittanning, Five Block (Lower Kittanning), Clarion, Stockton "a", Stockton and Coalburg.

Due to the extensive reserves and projected mine life, the preparation plant was built on the mountaintop to minimize haulage distance. The mineral loaded into one of three raw coal receiving tubes, processed, then stored

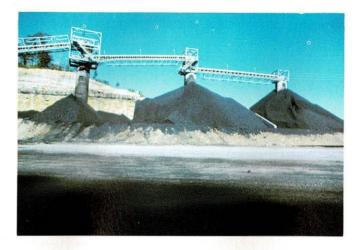
in one of three clean coal piles adjacent to the plant. It is then trucked a short distance to a dump bin which carries it part way down the mountainside into one of three "live" storage areas, each with a capacity of 18,000 tons.

From there, it is fed onto train cars by a unit train loading facility, which operates at 4000 tons per hour. Most weeks two trains make the run to Detroit Edison, each with 100 cars, each car holding about 100 tons of coal. Such a train is loaded in about 3 and ½ hours.

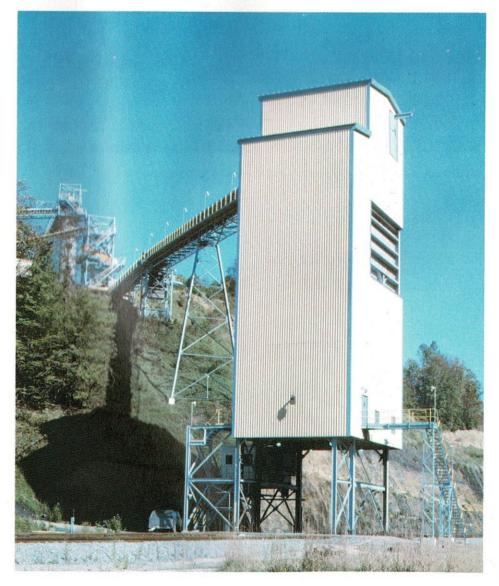
Applying a little math to those numbers reveals that the Detroit Edison contract will burn only about 5% of High Power's low sulphur reserves.

Whether by accident or design, the decision of 32 years ago to invest in a south central West Virginia mountain named after a creek looks pretty good.

With state-of-the-art facilities, a contract market, low sulphur coal, and decades of reserves, High Power Mountain seems like a recipe for modern mining success.







Coal is trucked from storage piles to dump bins which carry it downhill to 18,000 tons "live" storage areas, from where it is fed into the loadout.



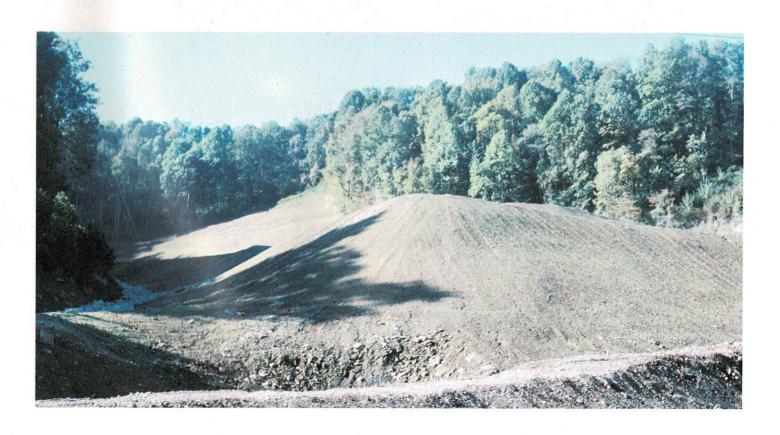
The railroad loop enables the coal train to move through the loadout facility efficiently.

The train moves continuously through the loadout facility, receiving clean coal at the rate of 4000 tons per hour.





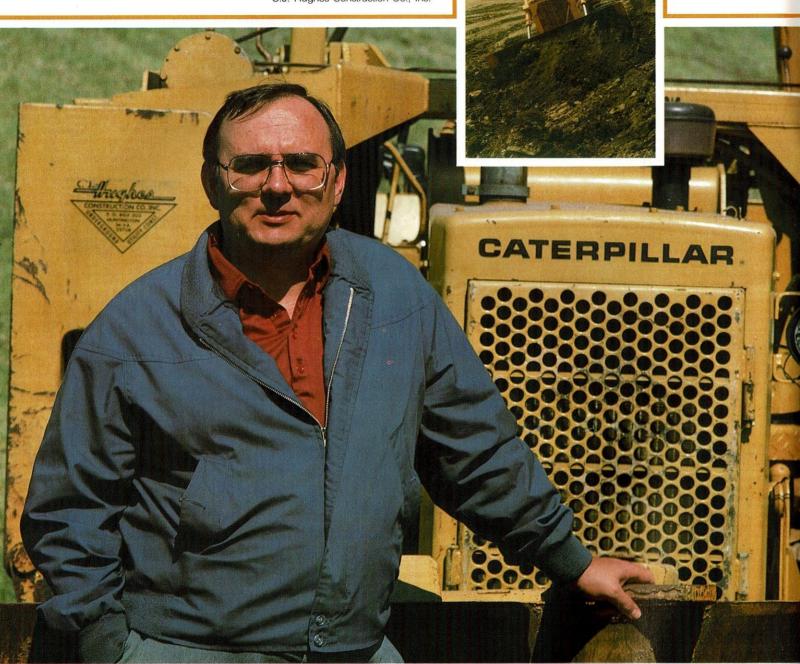
The reclamation plan, just now getting into full swing, calls for a return to original contour.



10 GREEN LANDS 11

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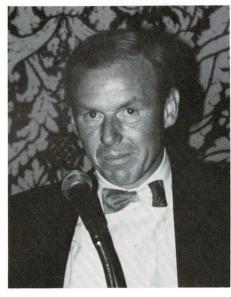
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Governor Arch Moore addresses the 20th Anniversary banquet.



**Outgoing Chairman Dwight Keating** 



Newly elected Chairman Ted Brisky

# And Now We Are 20

Intermittent showers did little to dampen the enthusiasm of more than 400 members and guests as the Association officially celebrated its 20th Anniversary August 7-10 at the Greenbrier Hotel in White Sulphur Springs.

Outgoing Chairman Dwight Keating and newly elected Ted Brisky presided over a full schedule of recreational activities, surrounding the annual membership meeting, the election of officers for the coming year, and a truly outstanding technical program.

West Virginia Governor Arch Moore provided a fitting highlight to the Anniversary Meeting, with a stirring speech at the closing banquet. The Governor commended the pioneers of the Association for their fighting spirit, and cast the light of new hope for the future of West Virginia and its coal industry. He cited the implementation of the new Department of Energy, under former Association member Ken Faerber, the influx of new business, and legislation to reform compensation laws as some of the factors which have the state on the move again.

The evening's events also included a 12 minute video tape, produced by Association Vice Preident Bill Raney. Appropriately titled, "Nobody Does It Better," the tape presented a pictorial history of WVMRA, complete with early day pictures of familiar faces.

Special tribute was paid to veteran staff members Patty Bruce, who, with Dick Vande Linde, formed the original staff 20 years ago, and Mary Ann Steele, who has now served the organization for 15 years.

Early on Saturday, the membership sat in on what Association President Ben Greene calls "one of our finest technical programs ever."

Public Service Commissioner Charlotte Lane discussed West Virginia's new "trackage rights" law, and the suit that it has generated fromthe American Association of Railroads. This message was particularly appropriate in that the Board of Directors had, two days earlier, voted to attempt to intervene in the suit. The AAR seeks to preempt the law as being in conflict with Interstate Commerce regulations. Ms. Lane predicts a lengthy, but

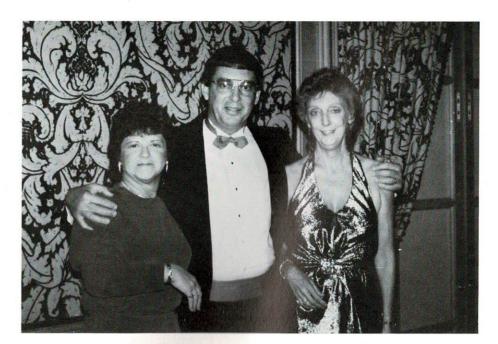
ultimately successful court case.

Seth Schwartz of Energy Ventures Analysis, Inc., Arlington, Va., spoke on a subject near and dear to everyone's heart, the "Outlook for West Virginia Coal in the Utility Markets." Schwartz's message was also encouraging, as he projected an increased demand for West Virginia coal, particularly for that in the southern field.

Carl L. Valdiserri, executive vice president of Weirton Steel Corp., rounded out the program with a report on his company's new "K.R." process for steel making. Any good news for American steel has got to be good news for West Virginia coal as well, thus Valdiserri's message was enthusiastically received.

The combination of timely topics, knowledgeable speakers and encouraging messages made this year's technical session one of our most successful ever.

**Theodore J. Brisky** of Charleston is the new chairman of the Board of Directors. Ted is the manager of the Southern Division of BethEnergy Mines, Inc. A native West Virginian, he



Association President Ben Greene with longtime staff members Mary Ann Steele and Patty Bruce. Mary Ann (I) has been with WVMRA for 15 years, while Patty (r) is an original staff member from 1966.

has been with Bethlehem Mines Corp. since 1954, when he graduated from WVU with a degree in mining engineering.

He spent six years as general mine foreman and assistant mine superintendent in Bethlehem's open pit iron ore operation in Venzuela, followed by six years with the company's coal operations in Johnstown, Pa.

Ted has been back home in West Virginia for the past four years, during which time he has served the Association as treasurer and vice chairman. As chairman, he succeeds **Dwight M. Keating** of Barbour Coal Co., Clarksburg.

Our new 1st vice chairman is James W. "Bill" Anderson of Anderson & Anderson Contractors, Inc., Princeton. Bill is the brother of Jack Anderson, one of the early day chairmen, and their company is a charter member of the Association.

Roy G. "Chick" Lockard of Kelly Coal Co., Clarksburg is the 2nd vice chairman. Chick is a longtime member who founded Kelly Coal in 1977 and brought it into the Association at that time.

Reelected to the post of Associate Division chairman was **Frank Vigneault**, the popular vice president for sales of Cecil I. Walker Machinery Co., Charleston.

The new secretary is **Paul F. Hutchins**, who is the president of Freeman Branch Mining, Columbus, O.

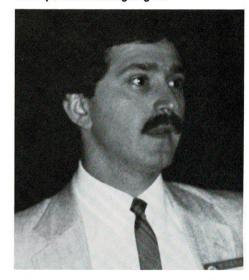
Former Chairman and Treasurer William C.M. Butler, III will serve as treasurer. Bill, who did a two year turn as treasurer from 1977-1979, is president of Princess Susan Coal Co., Inc., Charleston.

Six other members of the board were re-elected to three year terms, including **R. Donald Cussins** of Buffalo Coal Co., Bayard; **Richard Delatore** of West Virginia Energy, Inc., Wintersville, O.; **Donald R. Donell** of Starvaggi Industries, Inc., Weirton; **James H. "Buck" Harless** of Lynn Land Co., Gilbert; **Lawrence A. Streets** of Allegheny Mining Corp., Mt. Storm; and **John F. Yanik, Jr.** of Marrowbone Development Co., Naugatuck.

Three men were newly elected to three year terms including **Terry L. Dotson** of Worldwide Equipment, Inc., Prestonsburg, Ky.; **Edward F. Surgeon** of Cummins Cumberland, Inc., Louisville, Ky.; and **Richard N. Welch** of Beckwith Machinery Co., Bridgeport.



Commissioner Charlotte Lane of the West Virginia Public Service Commission, who spoke on trackage rights.

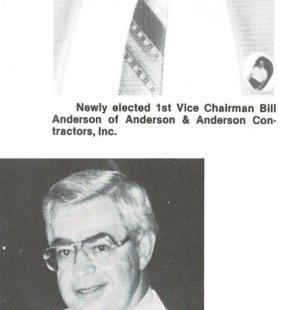


Seth Schwartz of Energy Ventures Analysis, whose topic was "Outlook for West Virginia Coal in the Utility Markets."



Carl L. Valdiserri of Weirton Steel, updating the membership on the K-R process in steel making.

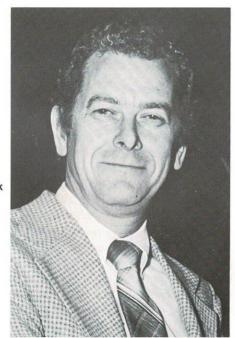




Associate Division Chairman Frank Vigneault of Cecil I. Walker Machinery Co.



New 2nd Vice Chairman Chick Lockhard of Kelly Coal Co., Inc.



Secretary Paul Hutchins of Freeman Branch Mining.



Treasurer Bill Butler of Princess Susan Coal Co.



# Company Pride

The Company Pride competition brought dozens of members to the Coal Miner's Party rigged out in all types of clothing reflecting the pride of employment. For the first time, there was a tie for first place. Nell Jean Enterprises, Inc., above, and Colony Bay Coal Co., below, will share the bronze lunch bucket for the coming year.

# Award Winners



# SAME BIT SEAL DESANTOWN IN

The Laskodys of Mt. State Bit Service nearly walked off with the company pride award singlehandedly. That's mom Debbie in the back with, (I-r) Skeeter, Jessica, and Chad.

# **Company Pride**



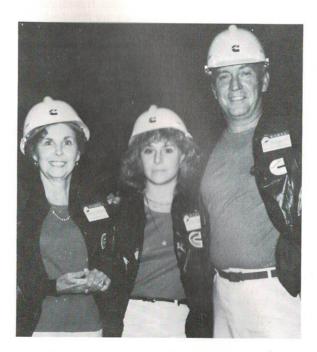
Dupont company pride, (I-r) Bill Cullen, Carol Robbe, Bill Gower, Margie Cullen, and Jule Robbe.



Walker Machinery Co. made a good run at the top award with this group. (I-r) Dean Moore, Nancy Moore, Dick Walker, Cathy Walker, Mary Alice Vigneault, Charlotte Lane, Steve Walker, Dianne Walker, and Frank Vigneault.



Last year's Company Pride Winners, High Power Energy, had to surrender the traveling lunch bucket, but did receive a plaque commemorating their 1985 achievement. Left to right are Ted Brisky, Sue Brisky, Paul Hutchins, Ann Hutchins, Barbara Ford, Lawson Hamilton, Gary Ford, Donice Wooster, and Chuck Wooster.



Cummins company pride, (I-r) Arlou, Alison, and Ed Surgeon of Cummins Cumberland.



Zenas and Jackie Campbell, with Pauline and Wendell Kennedy, express their pride in Ford Coal Co.

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By Mike Majcher

eckwith Machinery Company, one of the nation's first and largest Caterpillar Tractor dealers, now performs Caterpillar Certified Rebuild.



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Of Beckwith's 750 full-time employees, over 200 are mechanics who have an average of 15 years service with the company—a major factor in Beckwith's rebuilding capability. In fact, these same skilled Beckwith personnel continue to rebuild all types



of Caterpillar equipment. This capability has been a vital factor in maintaining Caterpillar equipment in this area for years.

Now, however, Beckwith provides Caterpillar owners with a choice of rebuilding programs. And, with the extensive new Caterpillar Certified Rebuild, they get:

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- Ownership at a fraction of new machine cost And a Like-New warranty,

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tool

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A firm price quotation with a guaranteed turnaround time is supplied at this point.

\*Not all machines qualify for the program. Some may require too many parts or too much labor to economically restore them to Caterpillar's rebuild standards. Others may be in too good a condition to warrant virtual "remanufacturing." At present, Caterpillar Certified Rebuild is available for qualified D8K, D9H, D9L, and D10 tractors. However, additional machine models are being anticipated as the program continues

Usually the same Beckwith

they'll know your tractor better than anyone! And they are Beckwith Beckwith strips your tractor

And, Beckwith mechanics will check and recheck all critical torques, clearances and pressure settings to make sure your rebuilt Caterpillar tractor will perform with the like-new production capability you can expect from a Caterpillar

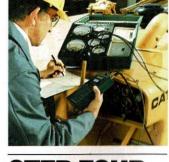


Instruments and controls are removed, inspected and replaced upon requirement. Worn linkage and pins are replaced so that controls operate with precision.

## **STEP THREE**

Reassembly by experienced mechanics using special tools.

team that disassembled a machine will be the one to reassemble it. Not only do these mechanics have the know-how, ability and the special tools to do the job right,



## **STEP FOUR**

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Inspections and tests made during reassembly and afterward are now verified as meeting Caterpillar standards and specifications. Then extensive testing is conducted with machine attachments in place to verify the absence of leaks, proper turbocharger boost, throttle response and proper transmission and steering clutch pressures.

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and offering a new I.D. and like-new warranty. These programs are a testimony to the value inherent in new Caterpillar equipment—the

same value that Beckwith has been selling for the past 61 years! In either case, Beckwith offers owners the real eco-

nomical advantage of their built-to-be-rebuilt Caterpillar tractor's quality and design.

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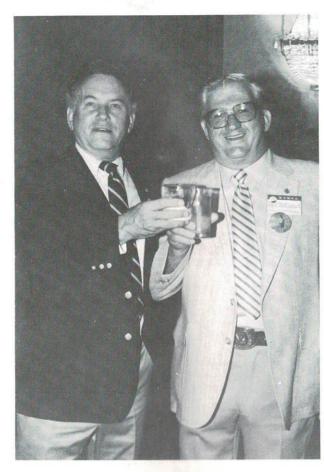




Dick Welch of Beckwith Machinery and Chick Lockard of Kelly Coal toast the Association's 20th Anniversary.

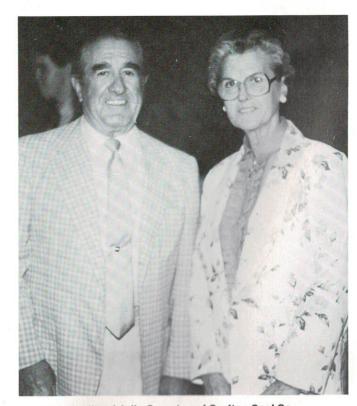


Former Chairmen Lawson Hamilton and Tracy Hylton meet in the registration lobby.





Lawrence Streets of Allegheny Mining Corp. was the winner of the first phase of the Association's membership drive, recruiting six new members.



C.E. "Jim" and Julia Campton of Grafton Coal Co.



Margo and Andy Teeter of McDonough Caperton Insurance Group.



Leo Vecellio, Jr. and Katie Vecellio of Vecellio & Grogan.



Judy and Terry Dotson of Worldwide Equipment.

handy with firearms.



Balloons were part of the celebration for Jeff and Becky Compton and daughters Kelly and Jaimee.



Ted and Donna Vargo of Ingersoll-Rand Co., Jenny and Larry Roberts of Penn Line Service.



Bob and Susan Bliss of Call Detroit Diesel Allison.



John and Carol Faltis with daughter Kelley and friend Becky.



John and Betty Rader of Union Carbide Corp.



Don and Barbara Cussins of Buffalo Coal Co.



John and Carol Skidmore of Barbour Coal Co.



Ladonna and Richard Delatore of West Virginia Energy.

# WVMRA welcomes

During the 20th Anniversary meeting last month, we welcomed 42 companies into our membership. This was the largest single increase in membership ever for WVMRA.

Following is a profile of the newest members, listing name, location, WV-MRA representative, founding date, and a brief description of the company's business and area of operation.

Atha Trucking — Bridgeport — Larry L. Atha — Founded 1948 - Coal hauling services throughout West Virginia.

Callaghan & Associates, Inc. — Charleston — David C. Callaghan — Founded 1984 — Consulting to coal industry on acquisition and disposal of properties, and environmental matters, in W. Va. and eastern Ky.

Industrial Resources, Inc. – Fairmont — Donald L. Hoylman — Founded 1946, design, engineering, manufacture, and construction of preparation plants and other material handling facilities in W. Va., Md., Pa., Ohio, Ky., and Va., sales office in Beckley and Fairmont.

**Miami Coal Co., Inc.** – Fairmont — William E. Konya — Founded 1954, underground mining in Harrison County.

Fairfax Fuel, Inc. — Kingwood — David Maynard — Founded 1985, wholly owned subsidiary of Mabo Coal Co., Richlands, Va., contract miner for Patriot Mining Co., Inc., Morgantown.

**Kajon Materials, Inc.** — Erie, Pa. — F. Donald Clark — Brokering of coal in western Pa., and northern W.Va.

**Drennen Enterprises, Inc.** — Princeton — Jim Anderson — Founded 1983, contract miner for Kent Coal Co., Inc., Lewisburg.

A. DeProspero & Sons, Inc. —
Masontown — Anna DeProspero —
Founded 1920 — distributor of Austin
powder in northern W.Va.

LeTourneau Sales & Service, Inc. — Memphis, Tenn. — Russell J. Fleming — Founded 1971 — Distributor for LeTourneau off-highway trucks and loaders, continental U.S., branches in Allen, Ky., and Cadiz, O., branch planned for Huntington-Charleston area.

Rudd Equipment Co. — Charleston — Roger D. Fitch — Founded 1950 — Distributor for Clark-Michigan loaders, Euclid off-highway trucks and other mining and construction equipment in multi-state area, branches in Charleston and Bridgeport.

**Del-Mar Hydraulic Service, Inc.** — West Logan — Teddy J. Nelson — Founded 1972, repair and parts for all types of hydraulic equipment in W. Va., Ky., and southeast Ohio.

Gress Equipment Co. — Nitro — John C. Grow — Branch purchased in 1984 by Gress Equipment Co., Marietta, O., sales, service and parts distributor for John Deere Equipment, in southern W. Va., southeast Ohio, and parts of east Ky.

Atlas Gas Products, Inc. — Steubenville, O. — Joseph C. Glaub — Founded 1950, independent sales distributor of compressed gas in northeast Ohio, western Pa., and northern panhandle of W. Va.

Credit Alliance Corp. — Pittsburgh, Pa. — Thomas A. Janci — Founded 1963, non-bank subsidiary of 1st Interstate Bank, Los Angeles, Cal., financing and leasing of mining and construction equipment, U.S. and Canada.

National Lubricating Products

Co. — Brilliant, O. — Donald Orbovich

— Founded 1954, distributor of petroleum products, primarily Mobil, in northeast Ohio, and northern panhandle of W. Va.

Quality Coal Co. — Cheshire, O. — Mike Haskins — Founded 1971 — surface mining in Vinton County, O.

Rebuild, Inc. — Dennison, O. — Joe Zalesky — Founded 1977, engine and component rebuild for Caterpillar and other surface mining equipment in Ohio, northern West Virginia, and western/central Pa.

Vern Allen Tire Co. — Morristown, O. — Vern Allen, Founded 1981, distributor of off-highway tires, Yokohama and General, in Ohio, western Pa., and northern W. Va.

Blair Motor Supply Co. — Clarksburg — James P. Blair — Founded 1919 — wholesale sales of components for off-highway equipment, and rebuild of starters and alternators, central W. Va.

Bruffey Trucking Inc. — Walkersville — Joel H. Bruffey — Founded 1985 — Coal hauling in central W. Va.

D.H. Warren Oil Co. — Beckley
— Danny Warren — Founded 1964 —
Distributor of Exxon products and Pen-

# 42 new members

nzoil industrial products for southern W Va

Drilco Industrial — Belle — William R. Martin — Founded 1949 — Division of Smith International, Inc., headquarters in Midland, Tex., manufacturer of drilling equipment and accessories for mining, construction industries, regional sales and warehouse headquartered in Belle serving eastern U.S.

General Tire — Bluefield — Walter E. Sudderth — Founded 1964 — Retail and wholesale outlet for Gencorp, Akron, O., manufacturers of General Tire products, outlet specializes in mining and construction of highway equipment in southern W. Va., southern Va., and eastern Ky.

Hildebrand Hauling, Inc. — Oak Hill — Gerald Hildebrand — Founded 1983 — Equipment transport service throughout W. Va.

Mabscott Supply Co. — Beckley — M.C. Massinople — Founded 1944 — Welding supplies and machine tools for the mining industry in southern W. Va.

Mountaineer Mine Safety & Training, Inc. — Beckley — Burge Lee Speilman — Founded 1985 — Dust, noise monitoring, safety training and related services, northcentral and southern W. Va.

Roblee Coal Co. — Buckhannon — Robert R. Jeran — Founded 1983 — underground mining in Barbour and Upshur Counties.

**Lester and Simpson Coal's, Inc.** — North Tazewell, Va. — Homer

Simpson — Founded 1976 — contract miners for Bluestone Coal Corp., with underground mines in McDowell County.

Howell & Paterno — Charleston — Michael Kalinyak — Founded 1934 — Certified Public Accountant, service throughout West Virginia.

Terry Eagle Coal Co. — Summersville — Tim A. Salvati — Founded 1939 — subsidiary of M.A. Hanna Coal Co., Cleveland, O., underground mining in Nicholas and Clay Counties.

C. & F. Trucking Co., Inc. — Delbarton — Tom B. Farley — Founded 1951 — coal hauling and equipment transport in W. Va., Va., Ky., and Ohio.

Central Hydraulic Service, Inc.

— Logan — James D. Trent — Founded 1958 — Repair of hydraulic mining equipment and sale of hydraulic pumps in southern W. Va., eastern Ky., and southwestern Va., branch facility in Partridge, Ky.

Edwards-Warren Tire Co. — Harper — C. Mack Estep — Founded 1954 — Earth mover tire and retread sales, Authorized dealer for Firestone, Bridgestone and Michelin, home office in Conyers, Ga., sales center in Charleston.

Appalachian Explosives — Romney — Charles H. Parsons, Jr. — Founded 1984 — manufacturer and distribution of explosives in Maryland, and parts of Pa., W. Va., and Ga.

Frank E. Cober & Sons, Inc. –
Somerset, Pa. – Ronald E. Long –
Founded 1954 – Authorized dealer for

Cummins Diesel Engines, western Pa., western Md., and northern W. Va.

Glotfelty Enterprises — Oakland, Md, — Gene H. Glotfelty — Founded 1956 — Tire dealer for Michelin, General, and Goodyear, western Md., western Pa., and northeast W. Va.

Johnny's Radiator Repair, Inc.

— Clarksburg — John P. Thomas — Founded 1943 — Repair of radiators, heaters, and related equipment in central W. Va.

**Keplinger Lime Co., Inc.** — Maysville, O. Vernon Keplinger — Sale of agriculture lime and crushed limestone in western Md., and eastern panhandle of W. Va.

Paul L. Bird Explosives, Inc. — Berlin, Pa. — Paul L. Bird, Jr. — Founded 1952 — Distributor of Ireco products, western Md., southeast Pa., and northeast W. Va.

**Reichdrill, Inc.** — Philipsburg, Pa. — Robert F. Valli — manufacture, sales and service of drilling equipment in Pennsylvania, western Md., and northeast W. Va.

Industrial Fuels Corp. — Troy, Mich. — Bruce V. Work — Founded 1949 — Underground and surface mining in eastern Ky. and southeast Ohio, also coal brokering in eastern Ky.

Phillips Machine Service, Inc.

— Beckley — Hersie Phillips — Founded 1976, rebuild and repair all types of mining machinery, primarily underground, with sales people in W. Va., Va., Pa. and Ky.

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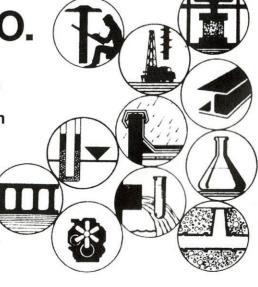
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28 GREEN LANDS

# Choosing Financial Planner

By Robert O'Dell CFP
Partner — Lanham, O'Dell and Constantino, Inc.

The month of August saw the crumbling of one of the oldest, most profound pieces of legislation in the history of the country. President Reagan has signed the most sweeping revision of the nation's tax code in 73 years. The bill will bring about a scoioeconomic change which will affect every sector of this country. This historic rewrite of the tax code does a lot more than determine how much in taxes individuals and businessess will have to pay in years to come.

By fundamentally changing the rules by which we spend, save, borrow and invest, it will affect the course of the entire economy. Whether the influence ultimately is positive or negative continues to be the question.

In addition, since many tax breaks will vanish after 1986, it is imperative to take full advantage of the old and new rules before January 1, 1987. This cloud of confusion spurs the need for Financial Planning. No doubt, over the next several weeks, many successful people will either seek the advice or be contacted by a "Financial Planner."

Making the choice with whom to work could prove to be a difficult decision if one is not well informed about this relatively young profession.

The term "Financial Planner" is used freely today by many people in the financial services industry, but few selfproclaimed planners are actually qualified to perform this service.

Stock brokers, life insurance agents, tax shelter promoters, accountants, bankers and lawyers all may approach the consumer with "financial planning services." Although these people are specialists in their field, they may not have the skills to coordinate a successful "comprehensive" financial plan.

A successful comprehensive financial plan requires the skills of a planner who understands the overview and knows how to coordinate various resources to accomplish the client's goal.

A comprehensive financial planner does not replace an attorney or accountant but works with them to help the client keep more of his wealth to pass on to his heirs and use a tax strategy that will work to help him increase his net worth.

Because so many people call themselves financial planners, it is difficult to distinquish between those who perform comprehensive financial planning, taking into account your personal, business and estate goals by looking at your total situation, and those who concentrate on one certain area. A number of important questions should be asked of a prospective financial planner.

The first question concerns the financial planner's credentials. There are currently two educational institutions offering designations in financial planning. One is the College of

Financial Planning, an independent, non-profit oriented institution that offers a Certified Financial Planner (CFP) designation. The other institution is the insurance industry's American College, which offers a Chartered Financial Consultant (ChFC) designation.

It should also be mentioned that many major universities are now offering four year degree programs in financial planning. Bringham Young University was one of the first to do so beginning in 1978.

In addition to the two designations which may be obtained, there are two primary associations within the financial planning profession. The Institute of Certified Financial Planners (ICFP) has a current membership in excess of 17,000; the International Association for Financial Planners (IAFP) has a membership of more than 20,000.

Another important question that will give insight into the financial planners's credentials is whether he has been admitted to The Registry of Financial Planning Practitioners which was created in 1983 and has over 550 members.

Members of The Registry are professionals which may have met the requirements in education, experience, practice methods and knowledge. They must maintain at least 60 hours of continuing education every two years. They also must have practiced the "total financial planning process" for at least

# Requires Careful Thought

three years and must pass the Practical Knowledge Examination, which is a written examination accessing the knowledge of a financial planning practitioner who has practiced financial planning for three years or more following the six-step planning method. Also a review is performed by a national committee of a sample plan of the work performed by the planner with five client references being contacted regarding the planner's work.

The "total financial planning process," which the planner must have practiced for at least three years, involves six distinct steps.

The first step involves the planner assisting the client to focus on his present position by gathering and analyzing his assets, liabilities, tax returns, pensions, securities transactions, insurance policies, will, etc.

In the second step, the financial planner assists his client in identifying financial goals, both personal and business. For example, these may include retirement needs or educational needs of the client's children.

Involved in the third step is identification of barriers to the client's financial independence. Two examples of this could be an excessive tax burden or inflation outreaching investment return.

In the fourth step, the financial planner prepares written recommendations designed to help the client solve problems and assist in his reaching his financial goals.

The financial planner, in the fifth step, implements or coordinates the implementation of the right strategy to assure the client reaches his goals. A financial plan is only helpful if the recommendations are carried through.

A sixth step involves a periodic review and, if necessary, revision of the client's plan to assure the achievement of goals. This is usually done on an annual basis to account for changes that may have occured in the interim.

Selection of a financial planner is an important task, and there are additional questions that may assist you in your choice.

Ask the planner for references and take the time to speak with these people.

Find ouf if you will be working the the planner or with an associate. If you will be working with an associate, ask to meet the associate and ask for his credentials.

Ask if the individual or the firm is a Registered Investment Advisor under the Investment Advisor Act of 1940.

Ask if the planner does planning in house or if the information is sent to a computer center for analysis.

Ask about the staffing of his office, the credentials of those in the planning process and the individual continuing education requirements of the firm.

Ask about outside advisiors. Verify that the planner has a close working

relationship with accountants, attorneys and other competent professionals. As stated earlier, the planner should be working with those professionals in the implementation process of the plan.

Discuss compensation for the service. Financial planners are compensated one of three ways: fee only, fee and commission or comission only. The is no one best way; you must select a planner whose method of compensation makes you the most comfortable, combined with other qualities.

Ask to see a sample financial plan. An actual client's plan is held in strict confidence, however, the financial planner's sample plan should include all the steps involved in the "total financial planning process."

Ask to see the financial planner's service contract and a copy of the ADV Agreement, Part II, required under the Investment Advisers Act of 1940.

The prospective client shoud be comfortable with the planner's answers and contract, fully understand what the planner will be doing, and be comfortable with the individual planner and the firm he represents.

If the client is satisfied with all these things, he can look forward to a profitable future as he prepares and implements his financial plan.

# A Renewed Interest In White Pine

By Walter H. Davidson, Principal Silviculturist Northeastern Forest Experiment Station, Princeton, WV

#### INTRODUCTION

Eastern white pine (Pinus strobus) is native to much of the Appalachian and Northern Interior coal fields. The current status and future value of white pine was the theme of a recent symposium at the University of New Hampshire1. Several of the papers presented at the symposium contained information that should encourage planting white pine for reclamation in the Appalachian Mountains. It has many characteristics that make it a desirable reclamation species. Good-quality sawtimber is always in demand and new markets are developing for lower quality timber. A review of some of the symposium papers and examples of white pine performance on surface mines indicate that this species should receive strong consideration when planning reclamation for forestry.

#### **REVIEW**

The opening paper of the symposium stated that "Growing white pine for quality is a growth market niche in which existing assets and opportunities are undervalued. This creates attractive opportunities for the aggressive, but patient land manager" (Irland 1985). What does this mean to a surface miner? Simply stated it means that growing white pine under proper management is profitable. Fleming and Martin (1985), reported stumpage values in the Southern Appalachians of \$50 to \$90 per M bf with an average of \$65. Compared to other local species, white pine is more valuable than yellowpoplar and many other hardwoods and

<sup>1</sup>Eastern White Pine: Today and Tomorrow, a Symposium. University fo New Hampshire, Durham 03824, June 12-14, 1985.

about equal in value to some oaks. Market demand for high-quality white pine logs and lumber is strong and predicted to remain stable (Howard 1985). Locally, Zinn and Jones (1985) reported that the demand for softwoods in West Virginia exceeds available supplies and should continue to outpace any increases in softwood volumes.

Markets for small-size white pine sawlogs are improving. Sims (1985) reported that demand for relatively small logs with sound knots has strengthened in recent years, especially in the furniture industry. A new market for pine pulpwood is developing in south-central Ohio. A larger paper company is planning to start producing pine pulp. This will have a major impact on pine resources in the region. Future mill requirements are estimated to be 250,000 tons of pine pulpwood annually (Smith 1985). Old fields and upland hardwood sites will be converted into white pine. Minesoils also could be well utilized for pine plantations.

#### **EXPERIENCE ON MINE SITES**

The use of white pine as a reclamation species has been declining in the past few years. This decline is due in part to the slow growth of the seedlings and in part to a lack of knowledge of the value of mature trees. Rapid juvenile growth, after the seedlings become established, more than compensates for the slow initial growth.

A USDA Soil Conservation Service report (1978), rated white pine performance as good or excellent on 9 of 12 site classes on which it was evaluated. Two site classes where it failed or had poor performance were very acid (a pH less than 4.0). A comparison of two

USDA Forest Service test plantings on sites with pH 3.6 and 5.9 in Armstrong County, Pennsylvania, shows that initial survival on both sites was about 60 percent. At age 5, average height on both sites was 1.4 feet. By age 10, average growth on the pH 5.9 site was slightly above the pH 3.6 site, 5.2 vs. 5.0 feet. The advantage of the better site was even more evident at age 23. Average dominants on the pH 5.9 site were 8.0 inches d.b.h. and 40 feet tall compared to 5.0 inches d.b.h. and 30 feet tall on the poorer site. At about age 35, trees on the better site will be small sawlog size.

In Raleigh County, West Virginia, the best white pine in a 10-year-reclamation planting measured 18.5 feet tall (Fig. 1). Several other trees in the planting were 15 to 18 feet tall. These trees will make small sawlogs by age 25.

#### PLANTATION CULTURE

White pine is well adapted to a variety of soil types and climatic conditions. It performs best on moderately well-drained to well-drained soils at pH levels above 4.0. It is not recommended for poorly drained soils or soils below pH 4.0 because growth rates will be reduced severely. The use of genetically improved seedlings is recommended as these seedlings are capable of rapid, early growth. This will reduce mortality to competing vegetation. A spacing of 8x8 feet (680 seedlings per acre) is recommended unless white pine weevil is prevalent in the surrounding area. If there is a potential for weevil damage, closer spacing, 6x6 feet, is recommended. Complete coverage of an area at this spacing requires 1,210 seedlings per acre. The number of seedlings can

be reduced if a strip planting technique is used. For example, plant six rows of seedlings at 6x6 feet; then leave a 24-foot unplanted strip and repeat with six rows of seedlings. This technique requires about 800 seedlings per acre and provides the closer spacing needed to counteract weevil damage. The white pine plantation will need pruning and thinning in the future to produced high-quality timber.

#### **SUMMARY**

There is a renewed interest in managing eastern white pine for timber

production. Demand for high-grade white pine exceeds supply throughout the Northeast and Appalachian Regions. New markets are developing for smaller size and lower grade logs. In addition to its potential for future timber, it is an excellent reclamation species. White pine survives and grows well over a wide range of site and climatic conditions. It is aesthetically pleasing, provides wildlife food and cover, and is a preferred Christmas tree in some parts of the region.

Therefore, land managers and reclamations should seriously consider white pine as a species for reclamation

and for planting abandoned mined lands.

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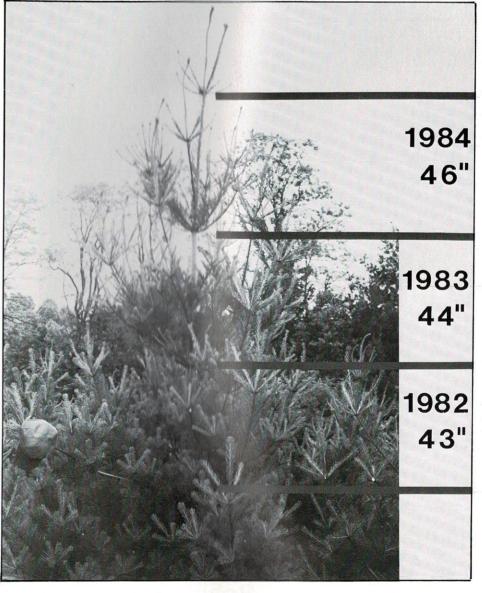
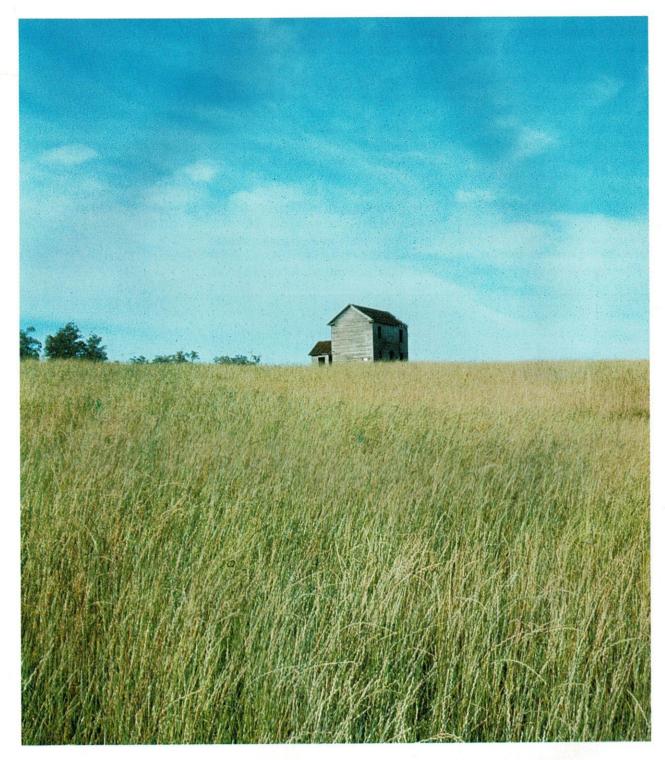


Figure 1. A 10-year-old white pine growing on West Virginia minesoil showing annual growth increments for 1982, 1983, and 1984.



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Examples of legume roots infected by Rhizobium bacteria. The nodules are the site of bacterial proliferation and nitrogen fixation.

# The Use of Legumes in Mined Land Reclamation

By Dr. Jeff Skousen
Extension Specialist
Land Reclamation
West Virginia University

Current West Virginia surface mining regulations state that during revegetation:

1. "Each operator shall establish a permanent vegetation cover that support an approved postmining land use and is capable of stabilizing the soil from erosion; and

 vegetation cover should consist of a mixture of species of equal or superior utility for the approved postmining land use and must include at least one herbaceous legume species."

Why is "at least one herbaceous legume species" specified in the regulations? What do legumes provide that other plants do not?

The family of plants termed legumes (Leguminosae) make up a large group comprising approximately

20,000 species. Legumes are important because the majority of them form a symbiotic association with bacteria. Bacteria of the genus Rhizobium infect the roots of legumes to form nodules. The nodules are the site of bacterial growth and proliferation. Once the nodules are formed, the bacteria produce an enzyme called nitrogenase which can fix nitrogen gas from the atmosphere into a form that can be incorporated into proteins that the plant utilizes for growth and development. The plant, in turn, supplies the bacteria in the nodule with energy and carbohydrate for continued proliferation

**GREEN LANDS 35** 



Grass-legume mixture on Davis Trucking site in Tucker County.

and nitrogen fixation. The association is beneficial for both organisms. It is for this reason that legumes are important to mined land vegetation. They have the potential to grow in soils which contain little or no nitrogen and the potential to rehabilitate the soil by adding fixed atmospheric nitrogen to the soil for use by other plants.

Most minesoils are devoid of nitrogen and other plant nutrients. Therefore, the potential of legumes as colonizers of infertile minesoils is great. However, minesoils typically have a low pH. As a group, legumes do not grow well in soils of low pH, and if they do tolerate the acidic conditions, the nitrogen-fixing capability is often reduced. Rhizobia prefer neutral to slightly alkaline conditions. There are

several forage legumes which have been grown and evaluated on minesoils for many years. Experience with these legumes have demonstrated pH limits which these legumes can tolerate (Table 1). Care must be taken when selecting legumes for seeding. Liming to proper minesoil pH will enhance the ability of the seeded legume to establish, grow, and fix nitrogen.

Researchers agree that too much nitrogen in the soil can also inhibit nodule formation, development, and nitrogen fixation by legumes. The amount of nitrogen in the soil that inhibits nitrogen fixation varies among legumes, but generally ranges from 50 to 100 pounds of nitrogen per acre. At these high nitrogen rates in the soil, nodules may be formed but the effec-

tiveness and efficiency of nitrogen fixation are decreased. During later years with reduced fertilization on mined sites the nodules can become effective and can fix nitrogen for the plant.

Minesoils are also devoid of rhizobia. Therefore during seeding, it is important to innoculate legume seeds with the appropriate strain of *Rhizobium* so that infection and nodule production will occur on legume roots. The genus, *Rhizobium* has 7 strains based on the species of legume they infect. Table 2 shows the different strains of *Rhizobium* and the leguminous plants they infect. Rhizobia of one strain generally do not infect legumes outside of their infection group. Legume seed inoculation with the appropriate rhizobia strain is

paramount if nitrogen fixation is to occur. If more than one legume is being seeded, be sure the right strain of rhizobia is present for each legume.

Inoculation is the practice of adding effective bacteria to legume seed before planting to assure adequate nodulation and promote nitrogen fixation. It is traditionally and most effectively done by coating the seed just before planting with a water-based slurry consisting of a commercial preparation of bacteria mixed with a peat carrier. The carrier is enriched with sugars, gums, and polysaccharides to provide nutrition and protection to the bacteria, and to promote adhesion to the seeds. Several methods of inoculation are available from different sources. Questions concerning the most effective system for your seeding operation can be directed to the author or to the inoculum supplier.

Peat based inoculum has a limited shelf life and should not be used after the expiration date due to the reduction in bacteria numbers. Inoculum should be kept cool and dry during storage. After opening the sealed inoculum package, the inoculum should not be exposed to direct sunlight and should be kept in a cool place.

Because rhizobia are very sensitive to hot and dry conditions, inoculation should occur just before planting (within an hour) to decrease the length of time the inoculated seed is exposed to air and sunlight. There is a sharp decrease in rhizobia numbers on seed as the time between inoculation and planting increases. It is also beneficial to plant into moist soil.

If hydroseeding is used, double the amount of inoculum that is normally used to coat the seed. Mix the seed and inoculum after the hydromulch, fertilizer, and water have been added to the hydroseeder tank and just prior to seeding. Because rhizobia are also intolerant of acid conditions, a small amount of lime may be added to the mixture to assure that non-acid conditions exist in the tank.

Table 1. Common Legumes Used in Revegetation and Their Soil pH Requiremen-Requirements.

Common Name	Scientific Name	pH Requirement	Comments
Alfalfa	Medicago sativa	6.5 - 7.5	Intolerant of acidity
Birdsfoot Trefoil	Lotus corniculatus	5.0 - 7.5	Found on minesoils with pH 3.5
Sericea Lespedeza	Lespedeza cuneata	4.5 - 7.0	Grows well in acid soils but chokes out other vegetation.
Crownvetch	Coronilla varia	5.5 - 7.5	Found on minesoils with pH 4.5
Hairy vetch	Vicia Villosa	5.5 - 7.5	www.pr. no
Crimson Clover	Trifolium incarnatum	5.0 - 7.5	
Red Clover	Trifolium pratense	5.0 - 7.0	Found on minesoils of pH 4.5
Sweet Clover	Melilotus spp.	6.0 - 7.5	
White Clover	Trifolium repens	5.5 - 7.0	Some strains have lower pH tolerance

Table 2: Straing of Rhizobium and the legumes they infect

Strain	Legumes - Common Name (Genus)		
Rhizobium mililoti Rhizobium tribolii Rhizobium leguminosarum Rhizobium phaseoli rhizobium japonicum Rhizobium loti Rhizobium "cowpea miscellany"	Alfalfa (Medicago), sweet clover (Melilotus) Clovers (Trifolium) Field Pea (Pisum), Vetch (Vicia), Flat Pea (Lathyrus Beans (Phaseolus) Soybean (Glycine) Lupine (Lupinus), Trefoil (Lotus) Cowpea (Vigna), Peanut Arachis), Lespedeza (Lespedeza), Crownvetch (Coronilla), Indigo (Indigofera)		

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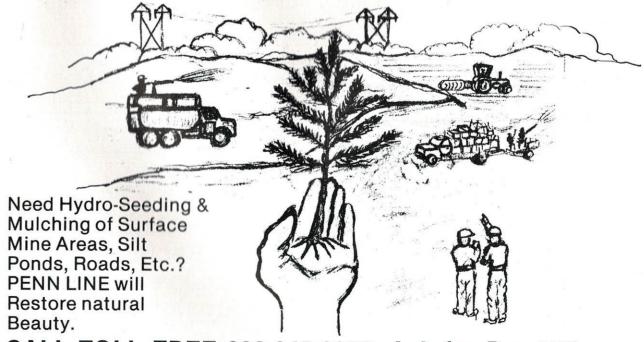
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