

Published Quarterly by the West Virginia Surface Mining and Reclamation Association, 1033 Quarrier St., Charleston, W. Va.

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West Virginia Surface Mining & Reclamation Assn.

Green Lands

Fall-1971

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About the Cover: This issue's cover was photographed by Ben Lusk, editor of GLQ and assistant director of the West Virginia Surface Mining Association. The view is of Whitesville A&S Coal Company's reclamation site in Greenbrier County. The picture, depicting total elimination of the highwall and revegetation by hydroseeding, was taken only 3½ weeks after seeding.





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The Greening of West Virginia...

by Rodney R. Krause Field Representative National Coal Association

Editor's Note: Mr. Krause's article, The Greening of West Virginia, is reprinted from the August, 1971 issue of Mined-Land Conservation, with the permission of the National Coal Association.

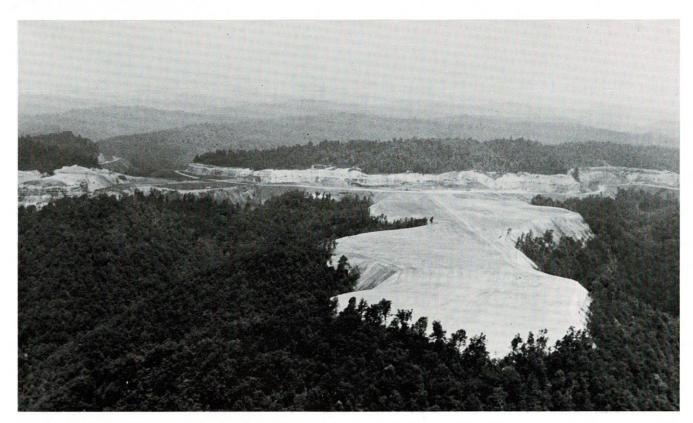
Drive through West Virginia and you'll see how the lay of the land varies—steep valleys in the mountainous Appalachian region along the state's eastern and southern borders, rolling hills in the north central part of the state and gentler topography in the northeastern corner.

Under most of West Virginia's tilted terrain lies coal, the state's No. 1 crop—and when strip mined, its No. 1 controversy. About 18 per cent of West Virginia's coal is produced by strip mining.

Where's the coal mine? Three seams have been strip mined in this scene at The Pittston Co.'s Buffalo Mining Co. subsidiary near Lorado, but reclamation has healed the scars. One seam is marked by a

slight break in the trees just above the creek at right; another is barely visible one-third the way up the hill; the third is invisible. (Photo, National Coal Association, July, 1971)





East of Charleston, Cannelton Coal Co. is using the "valley fill method" to recover all the coal in a mountaintop seam, instead of taking only a part of the coal and leaving a highwall. The result is large

areas of level ground, suitable for crops, housing or community developments—a rarity in the West Virginia mountains.

(Photo, National Coal Association, July, 1971)

But the land is growing green after stripping, faster and more reliably, thanks to experiments by West Virginia operators in sophisticated mining and reclamation methods.

Reclaimers used to argue that reclamation could be performed almost anywhere as long as people were willing to put up with a necessary time lag. Almost all land can still go back into productive use, but happily the time from mining to rehabilitation is getting shorter. It used to be that it could take up to three to five years before the public could begin to notice the effects of reclamation. Now, because of research in mining methods, plantings, fertilizers and equipment, West Virginia hills can, in some cases, be green within one year's time.

Because the terrain differs from one portion of the state to another, the methods of strip mining vary too. Operators use area and sometimes contour mining to recover the coal in the northeast section around Kingwood. Farther west and south, where the land gives way to rolling, then steeper hills, coal companies use a combination of contour stripping and augering. Recently, innovations such as area mining of mountain tops and the "head of the hollow" method have added a new dimension to the mining scene.

Paul Morton, president of Cannelton Coal

Co., a subsidiary of Canada-based Algoma Steel, is one of the operators with vision who regards the necessity of reclaiming his stripped land as an opportunity. One year ago Mr. Morton tried out the new head of the hollow method that some operators are now using to remove coal from the steep, slide-prone areas of Appalachia. The idea is to remove the dirt from a mountaintop covering a coal seam. The overburden is then used to fill heads of hollows which cut into the mountain: the result is a wide acreage of flat land on top of the mountain.

Critics of the system see the valley fill method as destroying the ancient hills that have long been the pride of West Virginia. They have a point, but there are advantages: reclamation-defeating slides are obviated, all the coal in a seam can be recovered, there is no highwall and the flat area can be used for cattle grazing, crop growing and other purposes.

At the moment, Paul Morton is using the land his company mined four years ago to provide pasture for a small herd of mixed Angus and Charolais cattle. After the area had been mined and graded, it was planted to fescue, orchard grass, red clover, wheat and lespedeza. After two months the land began to green up and one year later the cattle began grazing on what was once a steep mountainside.



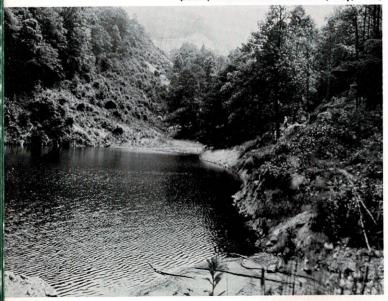
The Kanawha Valley is an area of pronounced hills and gullies, and flat land is at a premium. That's why the Cannelton mine site would provide an ideal location for developing a planned town. The people now scattered in the several small communities along the Kanawha River could find new homes on the leveled hilltop site which would be built to include housing for all income levels. Because of the small, fragmented communities now serving the area, local public services, such as street and highway systems, were generally designed for a bygone era. The proposed New Town would offer a centralized government, new highways, schools, hospitals, libraries and recreation centers. Planners visualize an industrial park complex for the bottom land thus providing nearby

The way the visionaries at Cannelton and West Virginia Tech see it, the town could be developed in three stages as completed mine operations make land available. The first phase, involving 900 acres could accomodate approximately 10,000 people and would take about 12 years to complete. Phase two, with 600 acres, would make room for an additional 6,500 inhabitants, and the third and final phase would add yet another 600 acres and 6,500 people. The total figures—2,100 acres, 23,000 people and 32 years to completion.

Right now the concept is still in the planning stages, but students from West Virginia Tech are already taking core drillings and making land use studies of the area. Meanwhile the col-

One of a series of sediment holding basins to contain erosion runoff until revegetation has stabilized current reclamation operations in background. Scene is at Rowland mine of Consolidation Coal Co. in McDowell County, W. Va.

(Photo, National Coal Association, July, 1971)



lege and coal company officials are seeking funds from HUD to get the planning stages underway. And even if the town concept does not materialize, the land is already back into productive use providing a home for those cattle.

While Cannelton's New Town concept is still in the pre-drawing board phase, there are other places in West Virginia where researchers are working with the nitty-gritty, here-and-now problems of how to improve standard reclamation techniques. At White Oak Mountain, southeast of Beckley, members of a U.S. Agricultural Research Service team are experimenting on various mine sites to find ways of vegetating acid soils.

The soil scientists working on the project are approaching the problem in two ways. First, they are looking for plants that can tolerate high acidity. Some of the plants, they've discovered, not only withstand the acid soil, but actually help raise the pH content through their root structure and help neutralize the soil for further plantings. Secondly, the ARS team uses fertilizers, such as rock phosphate, which act upon the acid and creates soluble phosphorous which helps sweeten the soil. The test plots also receive nitrogen and potassium treatments.

In the first year of plantings on White Oak Mountain the researchers obtained their best results from weeping love grass and Tufcote bermuda grass. Unfortunately, the Tufcote didn't withstand the rigors of the West Virginia winter, but the love grass is still flourishing. A recent test harvest produced 2.2 tons per acre of the dried grass grown on plots that had received rock phosphate supplements.

Mulching also plays an important part in reclaiming certain West Virginia lands. Commercial mulches or straw, such as the ARS used at White Oak, protect new seeds and help keep the soil moist so young plants can penetrate the surface. White Oak researchers found that the plots with mulch produced successful stands of vegetation, whereas those without didn't. Last fall the ARS experimented with growing their own mulches by planting wheat, barley and rye, hoping that the stalks would provide soil coverings in the spring.

West Virginia winters are harsh and the ARS is experimenting with plantings that will survive the cold and altitude. They were encouraged, then, when last fall's seedings of orchard grass, alfalfa, clover and other grasses made it through the severe months. All became established, with hairy vetch making the best early development.

For critics who complain that reclamation takes too long, a visit to the Wesgin mine north of Clarksburg could be encouraging. In 1969 the dozers and draglines were still at work. The next year the land was seeded by conventional drilling methods to birdsfoot trefoil and other legumes. Today the old mine site is better than knee high with forage.

But the best and long term benefits of good reclamation still require patience on the part of both the reclaimer and the public. In the Kingwood area, for instance, Jim Wilkinson with Kingwood Mining Co. harvests corn and buckwheat (no Injun batter), grazes cattle, and has developed several homesites. In addition his reclaimed land includes a well-stocked trout pond. Mr. Wilkinson's reclamation is a success and the fact that it is is no happenstance. Planning, ingenuity and time went into making the once acid spoils left after mining into a lush, productive acreage. For one thing, in mining the shovel operator piles the overburden above the cut on a hill and then puts it back into the cut once the coal is removed. Additionally he knows which layer of overburden is best for growing and knows what to do with it during the mining process.

Critics of strip mining—in West Virginia and elsewhere—claim that even though coal may be necessary to power the nation, the desecration of the land is too great a price to pay. What they see are the scars left on the hills. What they do not see, or refuse to acknowledge, are the hundreds of acres that look so much like good old West Virginia ought to look that they don't even know it's reclaimed land.

No one would dispute the fact that some coal lands are more difficult to green up than others. And West Virginia has areas where reclamation—like its slopes—leans toward the difficult. But no one has ever said reclamation would be easy. On the other hand, it's not impossible. It does take a lot of work, money and the best knowhow in the field. The fact is, however, we need what comes out of the ground, just as we need to put that ground back into productive use.

Conscientious coal operators in West Virginia are proving that in a state of varied geography and weather conditions we can have our coal and reclaimed land too.

(Photo, National Coal Association)

Land mined by Wesgin one year after revegetation. Land was mined in 1969, planted to forage in 1970, and photographed in May, 1971.



About the Association



Atchinson Hired As New Reclamation Chief

The West Virginia Surface Mining and Reclamation Association has announced the hiring of David R. Atchinson as the Reclamation Supervisor for the northern half of the state.

Atchinson, 33, served for the past four years as district supervisor for the Water Resources Division of the Department of Natural Resources in Fairmont. As supervisor of the Fairmont Region, which is the largest in the state, he was responsible for 13 counties and the entire Monongahela drainage basin.

Association President Gil Frederick said, "Dave represents the calibre personnel that we feel is essential to our industry, in a continuing effort to render the best technical assistance to our operators."

Atchinson was graduated from the School of Forestry of West Virginia University in 1964, where he worked in the Plant Pathology Department. He also attended Marshall University and is a graduate of Huntington High School.

He is presently a board member of the Fairmont Jaycees and his portfolio is Environmental Welfare. He is a member of the Water Pollution Control Federation and the West Virginia Wild Water Association, and also worked for two and a half years as an inspector for the State Road Commission.

"I believe that my position with the West Virginia Surface Mining and Reclamation Association will help to facilitate an understanding of how this industry can be compatible with our environmental needs," Atchinson said.

Open Door Policy Initiated by Frederick

The WVSMRA, in a continuing effort to better educate the people about the industry, is expanding its new "open door policy" according to Association President Gil Frederick.

"These various programs have been established in an honest and open attempt to show our side of an overly emotional issue," he said. "We want to show the public that reclamation can be and is being done responsibly."

He announced that several surface mine operators

around the state will soon be conducting open houses on their jobs to "let the local operators show the local citizens their reclamation."

Frederick also explained that the Association will organize bus tours for any recognized civic, educational or church group in West Virginia, that is interested in viewing a reclaimed surface mine.

"We are initiating these new programs to compliment our speaker's bureau, which has been extremely successful," he said. "We like to tell the people what we're doing, then take them out to see the work first hand."

"We feel the abolitionists, in their attempt to disprove reclamation, are continually showing only the extreme cases that are the exception to the rule," Frederick said. "We don't deny the mistakes of the past, but we are doing a tremendous amount of good reclamation that is completely overlooked by the abolitionists. They say it doesn't exist—we'll prove that it does."

Speakers Bureau Started

The Association has also initiated a new program to help educate the people about the industry.

"We have set up a speakers bureau and are contacting every civic group, college and high school in the state for speaking engagements," Frederick said. "We want to get the straight, unemotional facts about surface mining out to as many people as possible."

"We want this chance to talk to the people because we have never told our story before; few people have ever asked to hear our side," he said.

He emphasized, "Our speakers will be the operators themselves, from the different areas of the state. It will be the local operators talking to the local citizens about local situations."

"We're tired of the constant bickering between our organization and the ecology people, by way of the news medium, because nothing is ever solved. We think it's time to get these problems out in the open where they can be discussed publicly and rationally," Frederick said.

For any further information on the programs listed above, contact the Association, at 1033 Quarrier Street, Charleston, West Virginia.

Surface Mining in the News

A big increase in production from surface mines pulled the nation through a coal crisis in recent months, National Coal Association President Carl E. Bagge said in a speech to Philadelphia coal, railroad and electric utility officials.

Recently available data shows an increase in strip and auger mining was chiefly responsible for the increase in coal production which averted a fuel shortage last winter and has now built electric utility stockpiles to the highest level in history, Mr. Bagge said.

"About ten months ago, electric utilities were desperate, because their coal stockpiles were dangerously low," Bagge said. "There are many reasons for this, but it is now apparent that one cause was the drop in the daily output of the average underground miner because of the requirements of the Federal Coal Mine Health and Safety Act. For the first time in two decades, the productivity of the underground coal miner declined in 1970."

"However, the much maligned process of strip and auger mining in Appalachia could be expanded quickly in order to meet the soaring demand for coal. This was done—not under government regulation, but the workings of the free market—and a temporary coal shortage was not allowed to develop into a full-blown crisis."

Mr. Bagge said the increase in surface mining activity would be followed by an increase in the number of acres of disturbed land reclaimed under various state laws.

Eastern Associated Coal Corp. has announced awarding three college engineering scholarships in a new program for children of its employees. The awards are for \$750. a year while the recipient is an undergraduate in a college or university school of engineering.

EACC said the scholarships went to Timothy Dragovich, of Keystone, W. Va., whose father is a boom man at Keystone No. 1 mine; Louis A. Briguglio, Beckley, W. Va., son of a shop electrician at the Keystone No. 4 mine; and Carlos A. Riva, whose father is a research engineer at the EACC research laboratory in Everett, Mass.

From FOREIGN NEWS NOTES, a publication of the National Coal Association, we learned that coal production in the U.S.S.R. is expected to reach an estimated 1.3 billion net tons in 1980, of which 689 million tons or 52% will be strip-mined, according to the U.S. Bureau of Mines. In 1969 coal production from strip mines in the Soviet Union rose to almost 25% of the more than 660 million tons produced.

Abolition of strip mining in West Virginia would cripple the state's deep mining industry and put as many as 100,000 people out of work, according to an article in the September issue of the WEST VIRGINIA

ILLUSTRATED.

One portion of the story reads, "A miscalculation on the part of environmentalists could not only ignite the fuse that is certain to blow a gaping hole in West Virginia's booming coal industry, but it could also set off a chain reaction that might eventually wreck the economy of the state."

Jack Henry, executive director of the Proud West

Virginians, is quoted in the story, "If surface mining is abolished, some 8,000 to 10,000 deep miners in UMW Districts 17 and 29, will also be put out of work. He quotes UMW District 17 President Joe Ellis and mine operators to support his figures.

Henry claims abolition of surface mining would force this cutback in the state's deep mining industry because operators would no longer have stripping operations to develop roads to remote deep mine sites and because they would no longer have low-cost surface mine coal to blend with the more expensive deep mine coal.

The controversial court battle over Laural Run has apparently come to an end. On Friday, September 10, the court denied a request for a permanent injunction against the permit. The hearing, presided over by Circuit Court Judge D. M. Cuppett, was called to hear arguments on a temporary restraining order issued earlier to halt strip mining by the H. L. Kennedy Co.

. . .

In Salt Lake City, a top official of Continental Oil Company warned that future consumers may not be able to shop freely among abundant supplies of fuel.

"There isn't an energy super-market in our future,"
C. Howard Hardesty Jr., former West Virginia tax commissioner, said at the annual meeting of the Utah Petroleum Council.

He said that without the surface mining industry, electric utilities would have faced serious shortages last year and would experience extreme shortages in the future.

Although costs and problems in strip mine reclamation remain "big and serious" Hardesty said, they "deserve more than the simplest solution of those who have decided that the problem is to make it illegal."

. .

Just in case any of you missed it, the following is a full-page ad that appeared in the Clarksburg Exponent a few days after the Citizens To Abolish Strip Mining protested Permit No. 171-71, in Lewis County. IS THE "CITIZENS TO ABOLISH STRIP MINING" OR ITS PRESIDENT, GERALD SIZEMORE READY AND ABLE TO PAY TO THE OWNERS OF COAL AND SURFACE RIGHTS IN THE HACKERS CREEK DISTRICT, LEWIS COUNTY, WEST VIRGINIA A HALF MILLION DOLLARS LOST ROYALTY IF THE SURFACE MINING PERMIT NO. 171-71 IS REVOKED? AD PAID FOR BY R. N. WHITE CONTRACTING CO.



Here's an interesting note from the editorial page of the Parkersburg News:

When prices rise in a period of inflation, there is always a hunt for scapegoats. Thus, merely because a number of oil companies have diversified into other energy producing fields, such as coal, they have become the prime targets of the scapegoat hunters.

The head of one such company, which now produces both oil and coal, comments that "inflationary pressures upon the mining industry are very real—not imaginary." He cited specific price boosting factors such as increased costs associated with labor, supplies, machinery and construction. In addition, he called attention to the effects of federal and state mine health and safety regulations, environmental needs and more rigid reclamation requirements—all of which add to the prices paid by fuel consumers. Increased costs of production in the energy business mean higher prices—it's as simple as that.

The Lighter Side... Stripping and other Stuff

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This page is to be devoted to the lighter side of surface mining and should in no way reflect the opinions of the West Virginia Surface Mining Association, its officers, members of the Charleston Gazette. Any rebroadcast, reprinting or reciting of any portion of GLQ without the expressed written consent of the Secretary of States Office is strictly permitted.



As many of you already know, 1972 is an election year, and it promises to be one of the most exciting in West Virginia history. The race for Governor is of great concern to many in the industry and is already shaping up as the biggest battle this state has experienced since the Civil War.

Up until recently, no one really knew who was going to run for what, and everybody has been kept in the dark. At the request of GREEN LANDS QUARTERLY, a distinguished group of political scientists met in Charleston last month to study the situation.

Before deciding on the political future of the state, the committee took into consideration the following assumptions:

1. That Moore is the strongest and most logical Republican candidate for governor.

2. That Rockefeller thinks he's the strongest and most logical candidate for either party.

3. That Kenna is extremely influential and well known and could be a strong Democratic Candidate

4. That Bryant has been getting a lot of support and a lot of notoriety as a strong Democratic Candidate.

5. That Sprouse might give it another shot.

6. That Smith wants it back.

7. That Heckler will take anything he can get.

8. That Senator Randolph might retire.

9. That Neeley is going to run for Senator.

10. That Jay might run for Senator.11. That Arch might run also.

12. That Underwood might run for something.

13. That Byrd might be a Vice-Presidential candidate and mess up everyone's plans.

Taking all this into consideration, our panel of experts after weeks of deliberation, predicts that the race for Governor in West Virginia will be between **Ben Greene** of the Department of Natural Resources and **Mary Walton** of the Gazette. The panel also predicts that Walton will win in a "landslide." (If so, Greene will be fined for causing a slip).



The abolitionists had a meeting last week at one of the state parks and debated the strip mining issue. After debating each other for the better part of the day, the abolitionists decided that abolition was the only solution to solving the ecological problems of our industries (much to the surprise of the free world).

Thinking that conferences were the thing to do, our intrepid leader GIL FREDERICK and DICK VANDE LINDE got their heads together and decided to have one of their own. They invited JIM JUSTICE, FIL NUTER,

A. S. CAPPELLARI, DICK WHITE and an operator from Bridgeport who wishes to remain anonymous, to participate in a debate at the Daniel Boone Coffee Shop in Charleston.

After 17½ hours of continual debate, the seven member board concluded that "Surface mining in West Virginia is essential to the state, and should be increased, not abolished." The statement received support by a 5-2 margin.

. . .

Rumor has it that **Sheriff Given** is going to team up with **David Brinkley** on a new nationwide television show called BACKSTAGE 71. The show will be designed to discuss anything of political and non political import and "unimport". **Chet Huntley** will replace the Sheriff on his old show, it was reported.



The Latimer Distinguished Service Award for Reclamation "Above and Beyond the Requirements of the Law" goes to **Tracy Hylton** for painting an old tipple near Beckley bright "lespidezia green." One of Tracy's future relamation projects will be painting both Beckley newspapers yellow.



In a surprise decision by our judges, the "Stripper of the Month Award" goes, not to a surface miner, but to the road crew doing the work on the state's Corridor E Project near Laurel Run.



There has been a three-way-tie for this month's Chilton Award for "Objectivity and the Ability to Present Both Sides of an Issue." The tie is between the editors of the Fairmont West Virginian, the Beckley Post Herald and the R. N. White Construction Co.



There is absolutely no truth to the rumor that Association President GIL FREDERICK is selling his coal company to go into the peach growing business. There is also no truth to the rumor that the extra large peaches Gil gave away at a recent Civitan meeting in Charleston later were 'amazingly' used by club members in their annual father-son softball game.

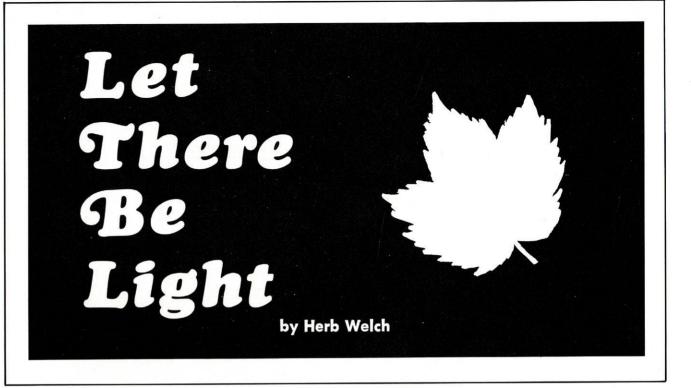


This month's On-Again, Off-Again Award has been presented to DICK VANDE LINDE, for his on-again, off again training sessions . . . right on . . .



It was announced today, that the "JOHN D. ROCKE-FELLER IV Award" for political expertise, ecological excellence, keen intelligence, radiant personality and all-around greatness, which is presented each year by John D. Rockefeller IV. has been awarded to John D. Rockefeller IV for the fourth straight year, for his political expertise, ecological excellence, keen intelligence, radiant personality and all-around greatness . . . way to go Jay . . .

THE GREEN LANDS QUARTERLY Award, which is presented to the outstanding surface mining publication in West Virginia each year, and is selected by the editors of GREEN LANDS QUARTERLY, has been presented to GREEN LANDS QUARTERLY, for the first in a series of years.



Editors Note—Herb Welch is editor of the Buckhannon Republican Delta and the following article was printed with his permission.

The West Virginia Surface Mining Association has announced plans for a state-wide tour of strip-mining operations later this month for representatives of the press, radio and television media. It's to be hoped that the managements of the newspapers and radio and to stations will be represented in numbers.

Perhaps no subject is more complicated or more controversial than the issue of strip mining. It's an area where there has been more heat than light.

Goodness knows, there's no shortage of self-appointed "experts," and these include writers and commentators as well as Jay Rockefeller and his very vocal chorus of supporters.

AS A RESULT, the political columnist for the newspaper suddenly wraps himself in the mantle of a mining engineer and expounds and expounds.

Often he proceeds upon the assumption that everyone who applies for a strip-mining permit is bent upon pollution and upon committing mayhem to our forests and wildlife. The applicant, in other words, is guilty until proved innocent.

And the writer has plenty of company in other selfappointed critics of the surface mining industry who, like the political columnist, arm themselves with enough facts and technical jargon to sound knowledgeable in their pronouncements.

One such group, for instance, has offered a reward for information leading to the revocation of stripmining permits. The crusade appears to have the same zeal and respect for the rights of others as the code of the vigilantes of another era.

The surface mine operator is guilty; hang him and get it over with.

IGNORE THE FACT that the legislature has provided the stiffest set of regulations for strip mining in the state's history; ignore the fact that the Department of Natural Resources, a government agency with trained personnel on its payroll, is enforcing the regulations as never before.

Ignore the fact that the surface mining industry is risking millions of dollars in an attempt to meet a nation-wide energy crisis which already is marked by enforced blackouts in many parts of the country.

Ignore the fact that hundreds of West Virginians and their families are receiving their livelihoods as they recover coal deposits which could be reached in no other way.

Ignore all the facts, if you ever knew them, and hang the surface mine operator to the nearest tree. It's the ecological thing to do.

GRANTED, there are surface mine operators who have little or no respect for the regulations. Granted also, there have been other offenders in the past when there were neither adequate regulations nor adequate enforcement procedures.

That's why the state, now armed with the regulation it needs, is cracking down as never before.

The West Virginia Surface Mining Association, according to its executive vice president who spoke in Buckhannon a short time ago, welcomes the stiffer regulations and the stiffer enforcement procedures.

It is as anxious as anyone that the regulations be enforced uniformly across the board. Unless they are, it is the least conscientious who hold the advantage over the others who comply with the law.

If the projected tour of the strip-mining operations later this month does nothing more than to give the people of the media better background information, it will have been worthwhile.

At least the political columnist who distorts information deliberately, slanting it to make every surface mining operator a rascal, will be aware of his bias.

The JayCees at Cannelton

1 When invited to tour "reclamation" the chapter presidents and the Executive Board of the West Virginia JayCees turned out in force. Nearly 50 JayCees from all over the state saw the work being done by Perry & Hylton Inc., for the Cannelton Coal Co. at Montgomery. The helicopter in the background provided every member of

in the background provided every member of the tour with a birds-eye view of the area.

Paul Morton, President of Cannelton Coal, and overseer of the huge project, tells several Jay-Cees about a "New City" that may one day be built on the 2,000 acres of level ground that will be left after the coal is gone. Plans for the city are now being explored by the West Virginia Tech Foundation.

Sen. Tracy Hylton, of Perry & Hylton explained some of the economics that are involved in this highwall elimination job in southern West Virginia. Hylton's company has been contracted to mine the surface coal from the area, a job that may take 8 years.

may take 8 years.

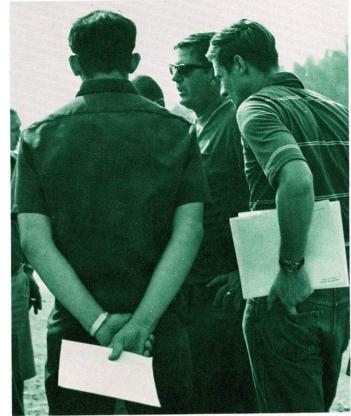
Three JayCees look over some of the plans for the project, along with pictures provided by Paul Morton that document its progress. The reclaimed

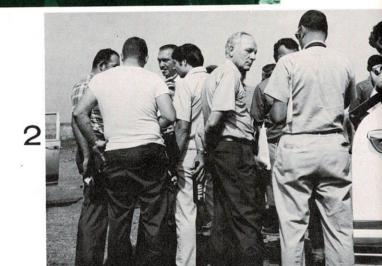
Morton that document its progress. The reclaimed area in the background covers about 85 acres, and was seeded in late spring.

5-6 The Associate members of the Association were well represented by Ken Hawley, of Walker Machinery, and Ed Surgeon of Cummins Engines. Speaking from the view-point of a service industrials into the

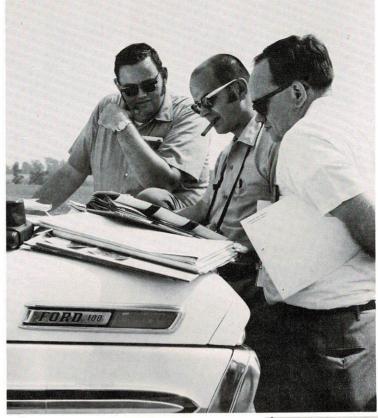
Speaking from the view-point of a service industry, they gave the JayCees good insight into the far reaching economic impact of surface mining in West Virginia.

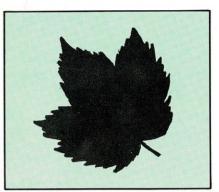
7 Grazing in the grass. Sen. Hylton jokes with an interested group while standing on an area that was seeded only a few months ago. The tour was designed to inform the JayCees about surface mining and prove to them that reclamation can be done.

















Notes from the Director

GREEN LANDS QUARTERLY will serve as the official publication of the West Virginia Surface Mining and Reclamation Association. The purpose is to better inform its readers of the various happenings within the Association and the surface mining and reclamation industry.

The four issues of the magazine will be published every December, February, June and September. If you have any suggestions, criticisms and/or news items, they should be directed to, Editor, GREEN LANDS QUARTERLY, Suite 704, 1033 Quarrier St., Charleston. Letters to the editor will be printed if space permits.

CAMPING ANYONE? If you are interesed in camping, you already know there are many great campgrounds in West Virginia. But if you are traveling, out of state, we thought you might be interested in pitching your tent on a reclaimed surface mine.

The following list was put together by Rodney Krause of the National Coal Associaton for 1971 summer edition of MINED-LAND CONSERVATION.

ILLINOIS

Dresden Lakes Recreation Area, Grundy County. 230 acres. Fishing and picnicking. For information write to Dresden Lakes Recreation Area Morris, III.

Goose Lake Recreation Area, Grundy County. 3 250 acres. For information write to Goose Lake Recreation Area, Morris, III.

Kickapoo State Park, Vermilion County, near Danville. 1,578 acres. Bridle paths, picnicking, concession stand and fishing. For information write to the Illinois Information Service, Capitol, Springfield, III. 62706.

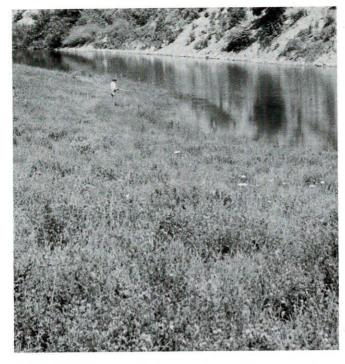
Pyramid State Park, Perry County, 2,000 acres. Fishing, boating and picnicking. Nature trails and upland game hunting. For information write to the Illinois Information Service, Capitol, Springfield, III. 62706.

Sugar Knolls Recreation Area, Fulton County. Fishing. For information write to Sugar Knolls Recreation Area, Canton, III.

INDIANA

Dietz Lake, Clay County. 200 acres. Facilities for trailers, rental cottages, swimming, grocery, cafeteria, dancing, movies, church, fishing, horseback riding and tennis. For information write to Dietz Lake, Center Point, Ind. Greene-Sullivan State Forest, Greene and Sullivan Counties. 5,455 acres. Primitive camping with sanitary facilities and drinking water. Fishing. For information write to Sullivan Chamber of Commerce, Sullivan, Ind., or Linton Chamber of Commerce, Linton, Ind.

Lynnville, Park, Warrick County, 1,100 acres. Fishing, picnicking, horseback trails and boating. Yearly or daily family permits. For information write to Lynnville Bank, Lynnville, Ind. Patoka State Fish and Game Area, Pike County, 6,800 acres. Fishing, hunting, boating and picnicking. For information write to the Tourist Information Center, County Agriculture Agent, Court House, Petersburg, Ind.





MISSOURI

Calhoun Lake, northwest of Calhoun. 200 acre lake. Primitive camping, Fishing, boat rentals, bait and tackle shop. For information write to Calhoun Lake, Calhoun, Mo.

Haysler Poague Wildlife Area, near Clinton. 870 acres. Boating and picnicking. For information write to Missouri Dept. of Conservation, Jefferson City, Mo.

Montrose Wildlife Area, near Clinton. 15,000 acre lake. Primitive camping, fishing, boat rentals and picnicking. For information write Missouri Dept. of Conservation, Jefferson

Peabody Wildlife Area, near Rich Hill. 295 acres. Boating and picnicking. For information write to Missouri Dept. of Conservation, Jefferson City, Mo.

Haute, Ind. 47808. KANSAS

Sticks, Coal City, Ind.

Cherokee County Sportsman's Club, Columbus, Kansas. 150 acres. For information write to Cherokee County Sportsman's Club, Columbus, Kansas.

The Sticks, Clay County. 160 acres. Camping

facilities. Fishing, swimming, horseback riding

and picnicking. For information write to The

Thousand Island, Greene County. 1,020 acres.

Hunting and fishing. For information write to

Fowler Park, Vigo County. 160 acres. Primi-

tive camping. For information write to the

Chamber of Commerce, P. O. Box 689, Terre

Linton Chamber of Commerce, Linton, Ind.

Crawford County State Park, Crawford County. Fishing, boating and restaurant. For information write to S.E.K.O.R.A., c/o Girard Chamber of Commerce, 2031/2 S. Summit St., Girard, Kansas 66743.

Kansas Forestry, Fish and Game Commission, Pratt, Kansas. 3,000 acres. Primitive camping. For information write to the Kansas Forestry, Fish and Game Commission, Box 1028, Pratt, Kansas.

In addition to the parks listed here, there are many strip pit lakes open to campers in the southeast Kansas area. For information on these sites write to any of the following Chambers of Commerce in Kansas: Girard, Pittsburg, Parsons, Coffeyville, Oswego, Columbus, Chetopa and Baxter Springs.

Windy Hollow Recreation Area, Daviess County. 1,500 acres. Swimming, fishing, picnicking, restaurant, speedway, boating, horseback riding, grocery, cabins and tractor train rides. For information write to Tom & Hal Miller, RR5. Owensboro, Ky. 42301.

OHIO

Harrison County Reclamation Area, Cadiz. 1,300 acres. Fishing.

Jefferson County Reclamation Area, Bloomingdale, 2,300 acres, Fishing,

Ohio Power Recreation Area, near Zanesville. 20,000 acres. Fishing, hunting and picnicking. Free permits required. For information and permits write to Ohio Power Company, P. O. Box 328, McConnelsville, Ohio 43756.

Sallie Buffalo Park, near Cadiz. 408 acres. Fishing and picnicking.

For information on Ohio campsites other than the Ohio Power Recreation Area, write to Larry Cook, Ohio Reclamation Association, 88 Broad St., Columbus, Ohio 43215.

PENNSYLVANIA

Meadowcroft Village, Avella, Pa. 800 acres. Reconstruction of early Pennsylvania village with nature center and shower rooms. For information contact Albert and Delvin Miller, Avella, Pa.

VIRGINIA

Hagy Wildlife Preservation. Primitive camping. For information write to William F. Shupe, Westmoreland Coal Co., Stonega Division, Big Stone Gap, Va. 24219.

AS A SERVICE to the membership, we are printing a list of all the publications of the Strip Mined Area Restoration Project, concerning reclamation research. It was compiled by the United States Department of Agriculture Forest Service, and free copies can be obtained by writing the Northeastern Forest Experiment Station, 204 Center Street, Berea, Kentucky, 40403. Publications available for distribution are numbered. The unnumbered publications at the end are not available for distribution, but are included for your information.



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The Pennsylvania State Forestry School Res. Paper No. 32.

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9. MAY, ROBERT F. 1963. Predicting outslopes of spoil banks. U.S. Forest Serv. Res. Note CS-15, Central States Forest Expt. Sta., Columbus, Ohio,

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10. MAY, ROBERT F. 1964. Surface-mine reclamation: Continuing research chal-

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11. WEIGLE, WELDON K. 1965. Designing coal-haul roads for good drainage.

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22. PLASS, WILLIAM T. & JAMES D. BURTON. 1967. Pulpwood production potential on strip-mined land in the South. J. Soil & Water Conserv.

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TO: Northeastern Forest Experiment Station 204 Center Street Berea, Kentucky 40403 FROM-Name of requester Address Address Please send me the following publications: Publication nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39. 1P. 2P. 3P. Retain on mailing list: Yes



A Message From The President

Dear Member:

In a continuing effort to better communicate the most advanced methods of reclamation technology to our membership, we feel that our new GREEN LANDS QUARTERLY will give each and every member a new insight regarding the pertinent and up-to-date facts and information on reclamation.

Reclamation has become an integral and totally comprehensive aspect of surface mining, and in order to put it into its proper perspective, we urge you to read and enjoy your new GREEN LANDS QUARTERLY.

Think green,

G. B. Frederick





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