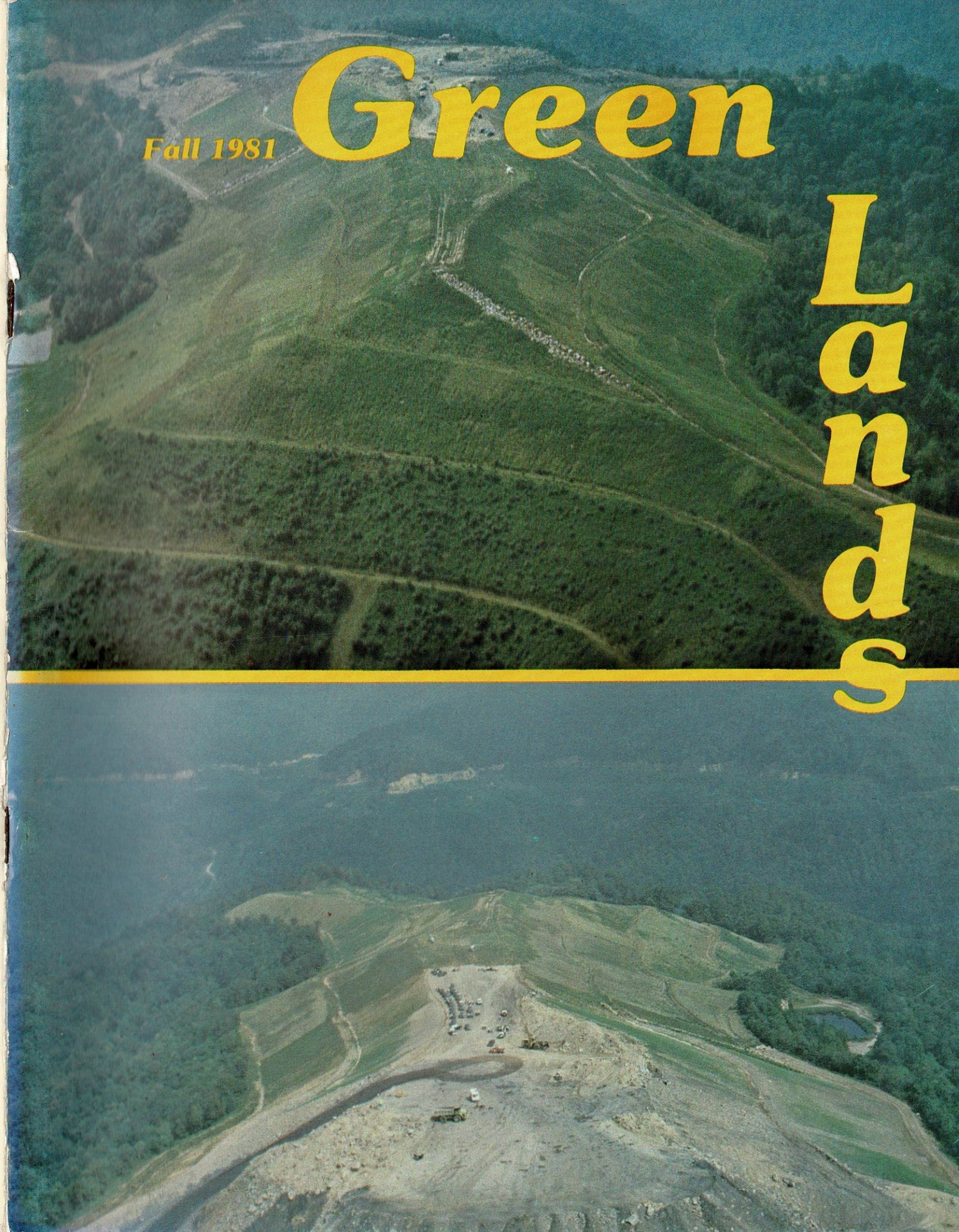


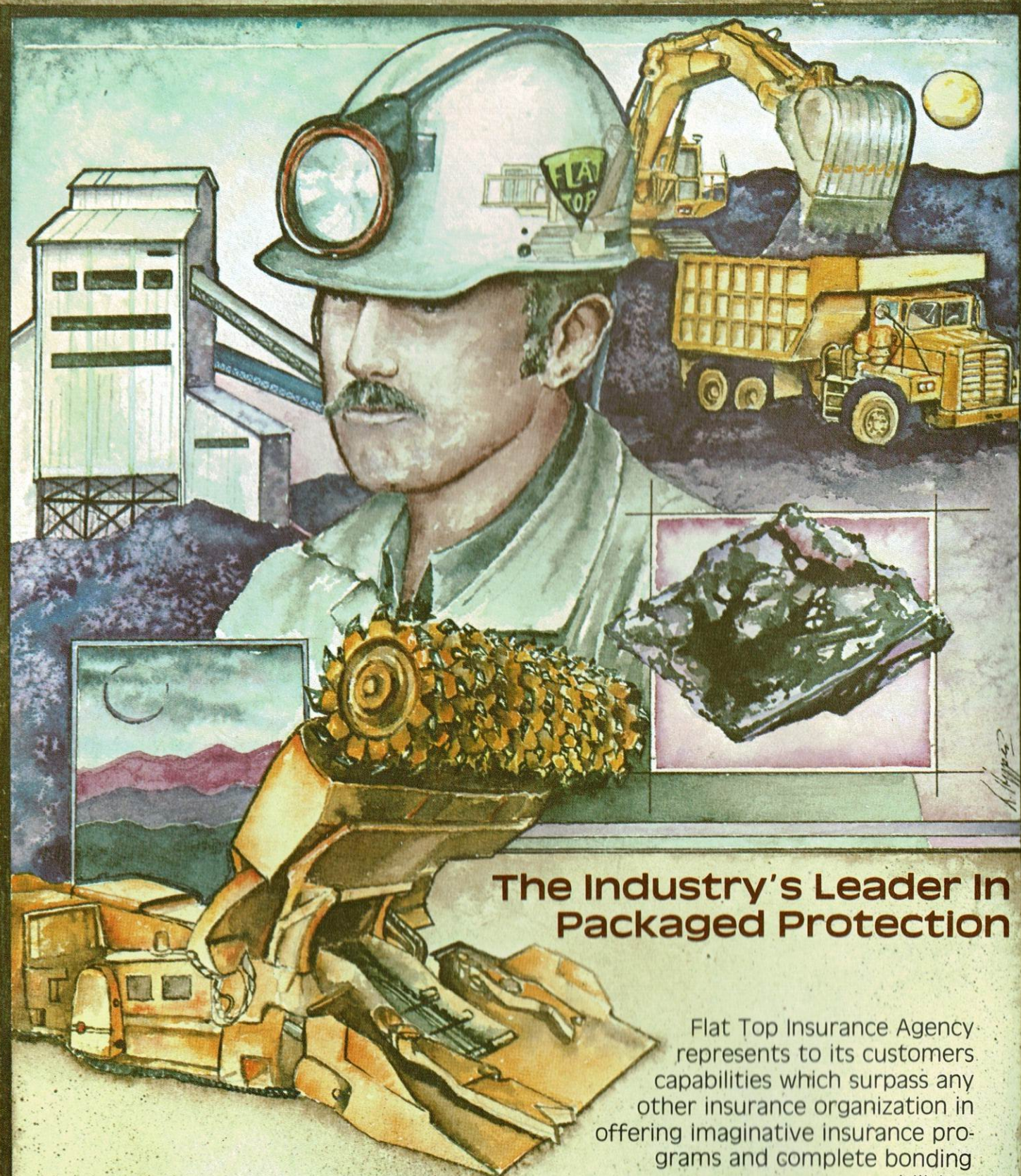


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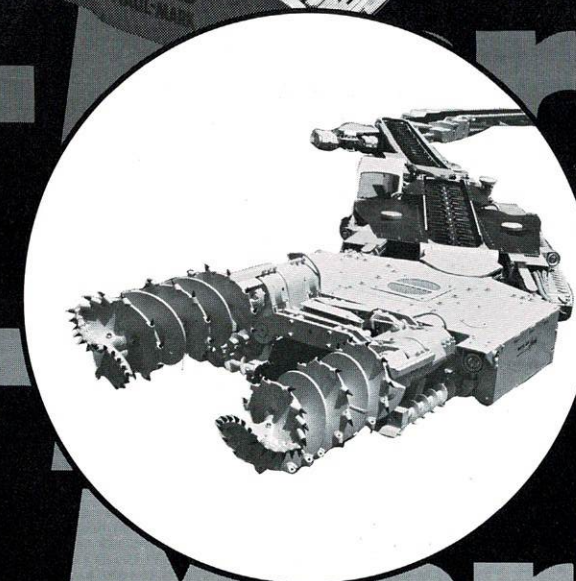
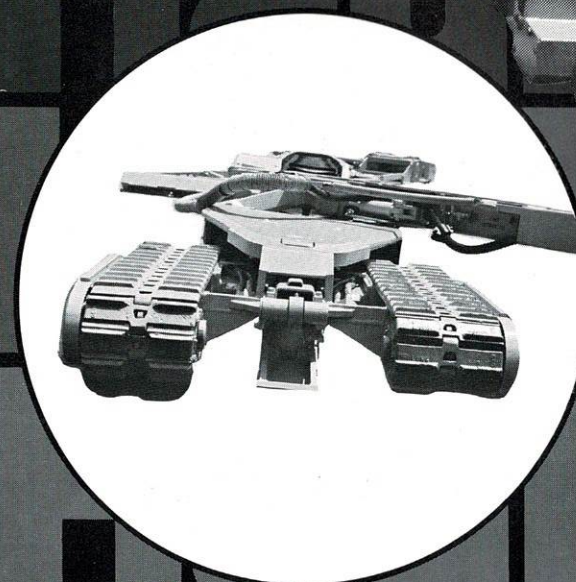
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Green Lands

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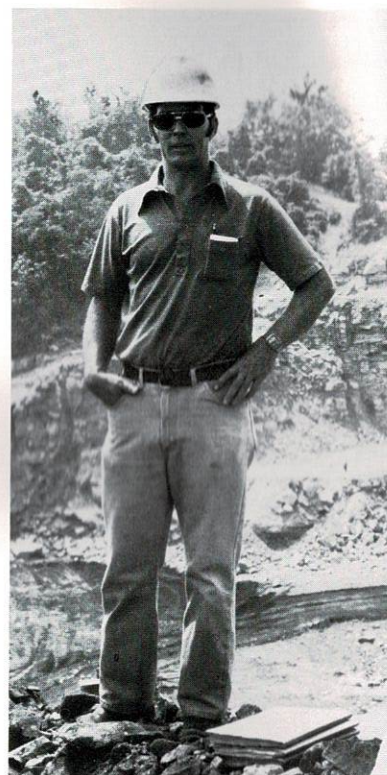
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Richard Lindsey (l) and Jim Justice (c) welcome DNR Reclamation Chief Pete Pitsenbarger to their Bluestone Coal operation.



Doug Thornton explains Freeman Branch mountaintop removal job.

14th DNR tour includes new OSM director

A visit from new Office of Surface Mining Director James R. "Dick" Harris highlighted the 14th Annual Interagency Evaluation Tour.

Sponsored and run by West Virginia's Department of Natural Resources Reclamation Division, the tour brings together technical experts from various specific fields relating to surface mine reclamation.

Traveling caravan style in fourwheel drive vehicles, the group makes it way across the Mountain State, devoting an entire week to visiting a variety of mine sites in an attempt to pool expertise for the improvement of reclamation techniques.

In addition to technical experts the tour annually attracts a full complement of press people, environmentalists, public officials, students, and other interested parties. This year, more than 150 people were present for some part of the week long trek from McDowell County in southern West Virginia to

Grant County on the Maryland border.

The appearance of Harris only days after his Senate confirmation as OSM Director added extra interest this year. Speaking to the gathered participants from the mountaintop removal site in McDowell County, Harris indicated the change of direction for his federal agency. Questioned closely about OSM's past relationship with the states and industry, Harris commented, "Obviously, I feel that the industry has been overregulated, or we wouldn't be rewriting our program. Every regulation adds to the cost of mining coal, and every dime we add to the cost ricochets through the economy in the form of increased inflation. It's important that we ensure that regulations are necessary and of some benefit before we inflict them on the coal industry. I think this is consistent with the overall approach of this (the Reagan) administration."

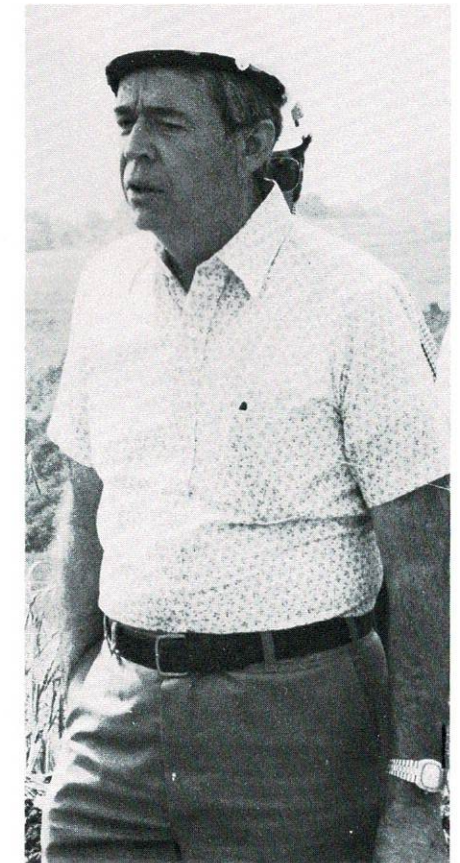
Concerning OSM's diminished role under Reagan rule, Harris stated, "it

was always intended that OSM would revert to an oversight role once the State programs started to fall into place. We aren't going to disappear by any means. We intend to write regulations that can survive over the years and which will give operators a consistent set of standards to work under over a long period of time. We will also be there to make sure that no state sluffs off its regulatory role in order to give its industry a competitive advantage.

Harris' Monday appearance was followed by a Tuesday visit from West Virginia Governor Jay Rockefeller. Although of a different political stripe, Rockefeller's comments were consistent with those of the OSM Director. The Governor emphasized the need for regulatory balance, commenting, "We have confidence in West Virginia that we're doing reclamation responsibly, but there needs to be an equal emphasis on the ability to sell coal."



Gov. Jay Rockefeller (r) confers with DNR Director Dave Callaghan.



Office of Surface Mining Director Dick Harris addresses tour participants.



DNR Director Dave Callaghan, OSM Director Dick Harris, operator Tracy Hylton, WVSMRA President Ben Greene.



Bluestone Coal's McDowell County operation provided an impressive beginning for the tour.



Tour participants were particularly impressed by Davis Trucking's innovative approach to the problem of installing a haul road over a stream bed.



Freeman Branch Mining, whose mountaintop operation is shown here and on our cover, served as the host company for a visit from West Virginia Governor Jay Rockefeller.



Allegheny Mining, a repeat site for the tour, provided a good example of northern style reclamation, despite inclement weather.



Wolf Creek, a relatively new operation in Braxton County, demonstrated proper disposal of refuse material.

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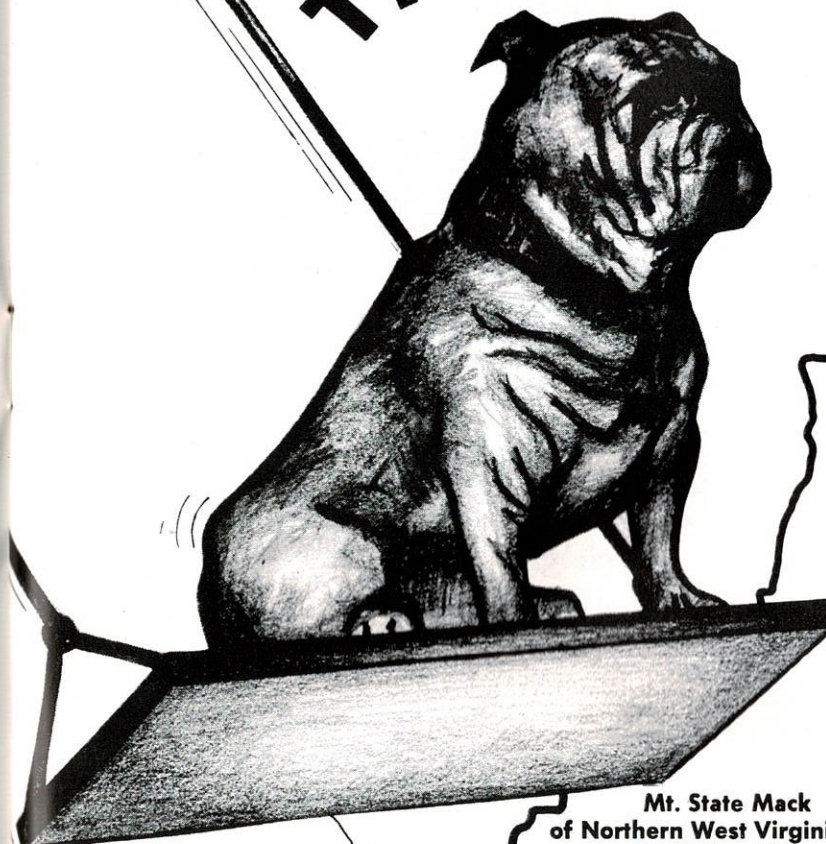


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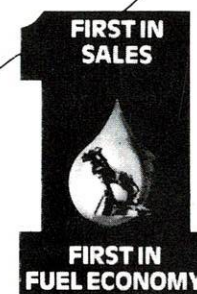
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Since June 1978, employee v. employer suits have been filed and awards have been made in excess of \$100,000.

A Boone County case involved a settlement of

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Land ownership profile

Who owns West Virginia?

by Dale Colyer

Division of Resource Management
College of Agriculture & Forestry
West Virginia University
May 1981

The ownership and control of land in West Virginia has been a controversial matter for many years, but especially since Tom Miller and his colleagues published a series on "Who Owns West Virginia" in the *Huntington papers* in 1974¹. Their findings that land ownership was highly concentrated in many of the State's counties has led to conclusions that control of the State and its people is in the hands of large corporations, especially out-of-state corporations. This has led, in turn, to charges of neo-colonialism, exploitation, and related indictments of the system.

To adequately understand the situation it is essential, first, to obtain and evaluate the facts about ownership and control to the extent possible. The situation, however, is complicated because legally "land" ownership is complex. Land is a bundle of rights and people may own various portions of that bundle. In West Virginia, the division of the bundle between owners is most notable by the separation of surface rights and mineral rights, especially the ownership of coal rights. This separation, in part,

has caused some misconceptions about the concentration of land ownership.

In developing the profile of land ownership in West Virginia, a general profile for the State will be developed and then county data will be examined to provide a more complete and meaningful set of information on land ownership. The State profile is based primarily on data from a 1978 national survey of land ownership conducted by the U.S. Department of Agriculture². This was done using a sampling procedure which should be accurate for the State but which is not meaningful for counties due to the low number of sample points used.

State Land Ownership

Land ownership can be examined from various viewpoints or classifications. Concentration, type of owner, occupation, age, residence, and education classifications will be used to indicate some of the dimensions of ownership, with bar graphs used to illustrate the percentage of land in each category. West Virginia and U.S. data

are included for comparison and to give perspective to the data.

Concentration

The proportions of land owned by the largest five percent of landowners and largest one percent are indicators of the degree of concentration. For all land in the State, five percent of the landowners own 67 percent of the land, while one percent own 41 percent (Figure 1). For the U.S., the comparable figures are 75 and 48 percent. Thus, it appears that ownership is less concentrated in the State than for the Nation. When only farm and ranchlands are included, the concentration is reduced (Figure 2). Some 37 percent of the State's farmland is owned by five percent of the owners, while only 16 percent is owned by one percent of the larger land owners.

Residence

Place of residence of the owner can be an important dimension of ownership since non-resident owners may be a factor in the way land is used or controlled. Well over 60 percent of the State's land is owned by persons who live in the

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Figure 1. Concentration of Land Ownership
All Land in West Virginia, 1978

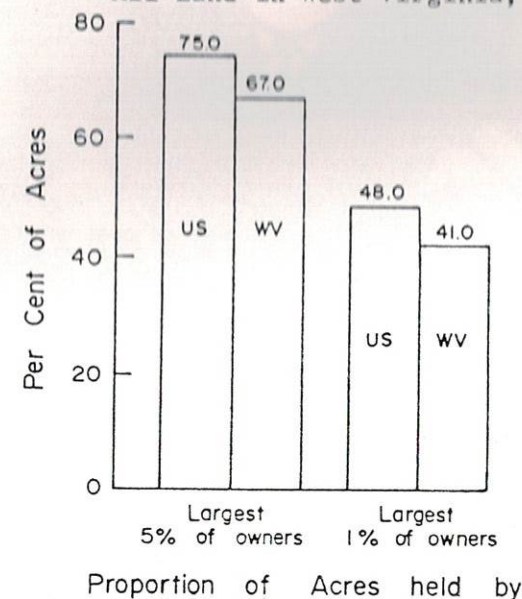
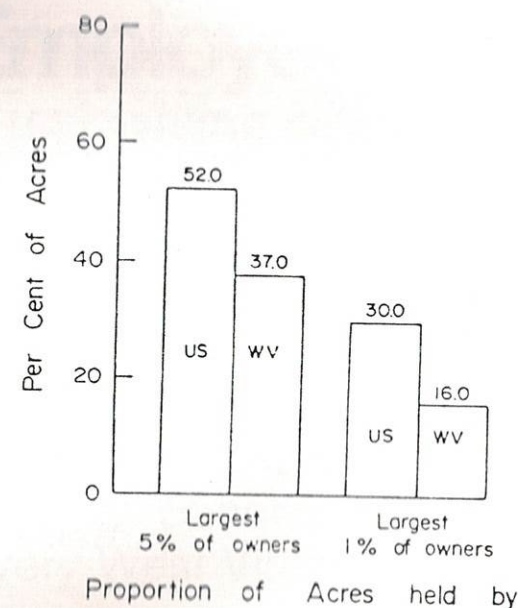


Figure 2. Concentration of Land Ownership
Farmland in West Virginia, 1978



county where the land is located and over 3/4 is owned by State residents (Figure 3). Only 11 percent of the land is owned by out-of-state residents. However, responses about residence were not obtained for 11 percent of the land and this could affect the pattern if a large proportion of the non-responses are for non-residents. However, there was no information reported which would enable a judgement about who the non-residents were.

The proportion of land owned by non-residents is larger for West Virginia than for the U.S., 11 compared with 7.9 percent. There also were more non-responses for the State. Thus, it would appear that relatively more of the land in West Virginia is owned by non-residents than is typical for the Nation.

Type of Owner

The distribution of land by "type of owner" is shown in Figure 4. Most land is owned by either one individual or by married couples — about 30 percent for each category in the State which is slightly less than for the U.S. (Figure 4). Family partnerships account for some land (7.4 for W. Va. and 10.6 for the U.S.) while non-family partnerships

and family corporations are of some importance. Family partnerships and family corporations are more important for the U.S. than for W. Va., probably due to their use in commercial farming areas.

Non-family corporations own nearly twice as much of the land in West Virginia as in the U.S., 21.6 percent versus 11.2 percent. This tends to conform to a generally held view that corporate land ownership is an important factor in West Virginia. Most of the land owned by non-family corporations is not farmland. Less than five percent of the farmland in the state is owned by non-family corporations.

Occupation

Nearly half of all land nationally is owned by farmers but in West Virginia only 18.3 percent of the land is farmer owned (Figure 5). White collar, blue collar, and retired persons all own relatively more land in West Virginia than in the U.S. The largest difference, however, is for blue collar workers who own 21.7 percent in West Virginia compared with only 9.1 for the U.S. This is a reflection of the tendency for miners, factory workers, and other workers to

live in rural areas and to carry out part-time farming operations. In many cases these were family farms but many others are lands purchased by workers for these purposes.

Age of Owner

Land tends to be owned by older persons in West Virginia than in the U.S. although the differences are relatively slight (Figure 6). Persons over 55 own 56.5 percent of the land in the State compared with 51.7 for the country. Persons in the 35-55 age categories own a smaller portion of the land in West Virginia but those under 25 own slightly more — 5.9 versus 5.4 percent. The lower rate for the intermediate age groups probably is a reflection of the out-migration for the State that occurred in the 1950's and 1960's. With populations, especially rural populations, now increasing, ownership of land by younger persons apparently is again increasing.

Education

The primary difference in land ownership by level of education is that in West Virginia a much higher proportion of the land is owned by persons

with 8 or fewer years of schooling (Figure 7). In West Virginia they own 30.1 percent of the land compared to 17.6 percent for the U.S. In the State, the general level of education is lower than for the country so that the result is in part a reflection of that situation. It also is partially the result of the relatively low level of commercial farming in the State. Ownership of farmland in other areas has tended to shift to larger farms operated by more highly educated persons while farming in West Virginia is more of a small and part-time operation, frequently carried on by relatively older, less educated, blue collar workers.

Foreign Ownership

A concern arising in recent years has

been the acquisition of land in the U.S. by foreigners. Despite some notable purchases, however, it appears that foreign ownership of West Virginia land is very small. A 1979 USDA study indicates that only about 6,200 acres were owned by foreigners on February 1, 1979 (4). However, over 2000 acres were purchased in 1979. There also appears to be increased activities by foreign nationals and corporations in coal, oil, and gas activities.

County Data on Ownership

While data for the State results in many useful insights into the land ownership, this average data tends to hide some important factors about ownership. The ownership pattern varies considerably from county to county.

Ownership in some counties is considerably more concentrated than for the State and it is this concentrated ownership that has caused many individuals to be concerned about ownership and control of land.

Tom Miller (see footnote 1) reported that in "27 counties more than half the non-public land is controlled by about 24 large companies. In another six counties, 25 to 50 percent of the non-public land is similarly owned". The counties involved are shown in Figure 8, a map produced by use of the data reported by Miller. A major problem exists in the ownership data used by Miller, apparently because of the mixing together of the ownership of the land (surface) and the minerals (subsur-

Figure 3. Ownership of Land in West Virginia
by Place of Residence, 1978

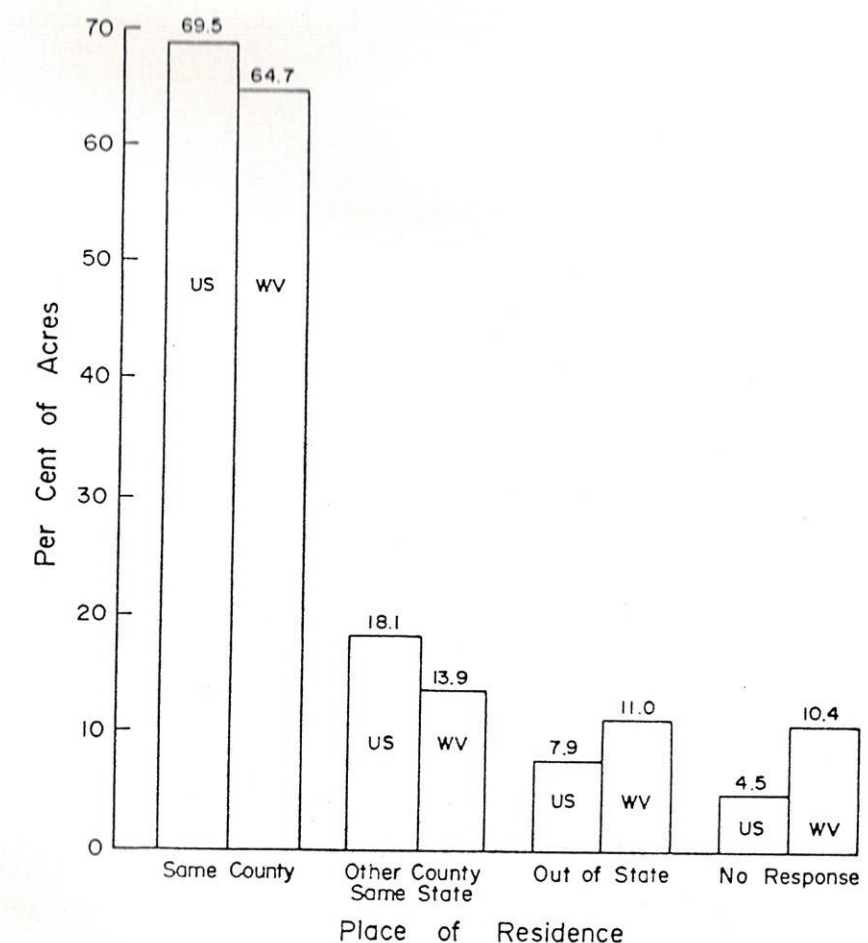


Figure 4. Ownership of Land in West Virginia by Type of Owner, 1978

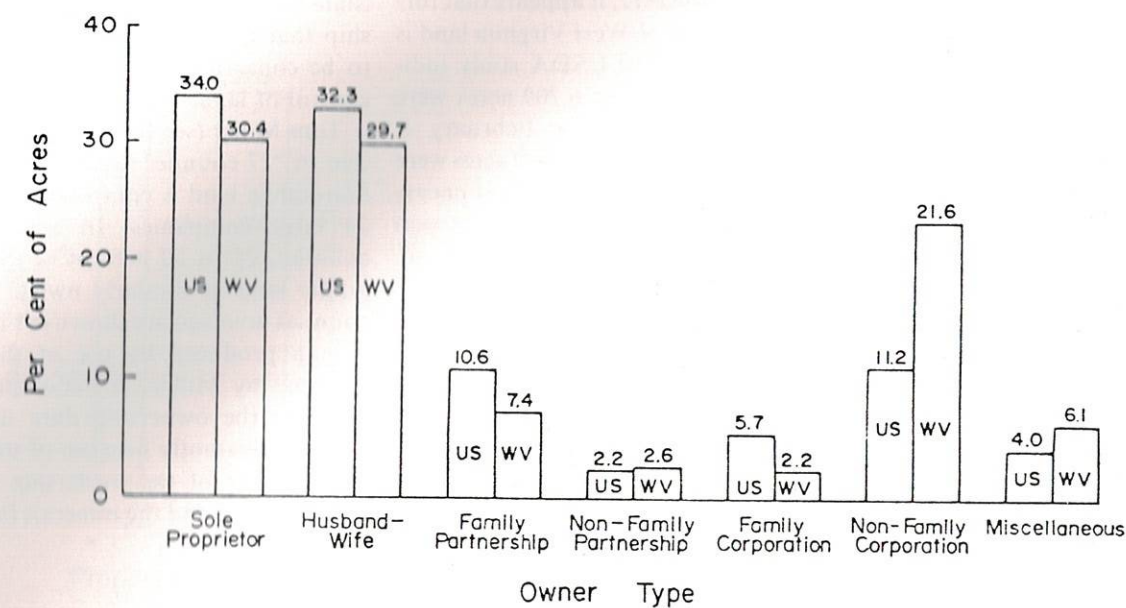


Figure 5. Ownership of Land In West Virginia by Occupation, 1978

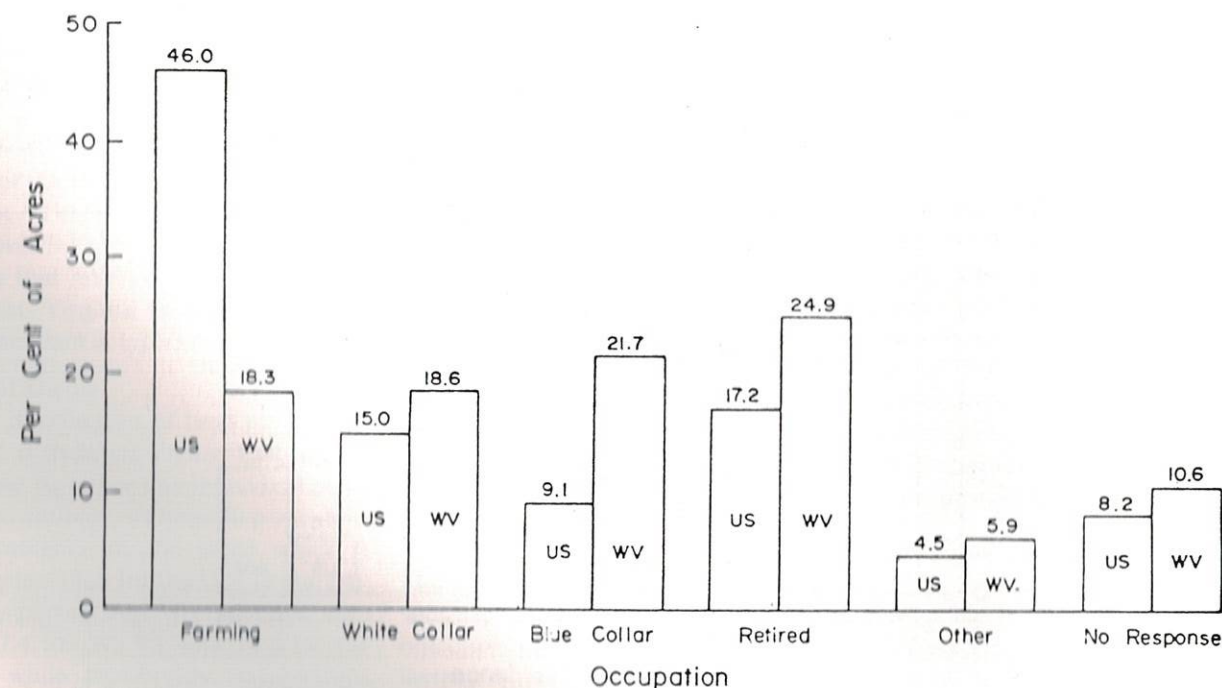
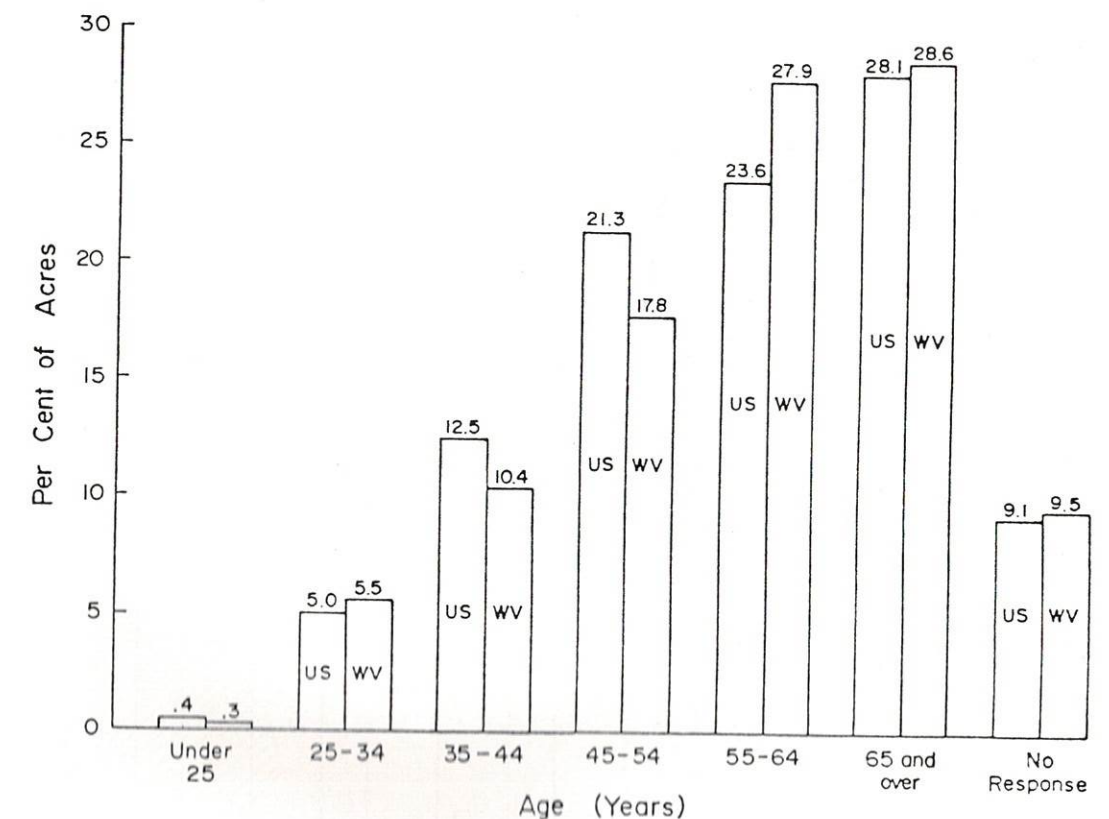


Figure 6. Ownership of Land in West Virginia by Age Group, 1978



face). It was stated, for example, in the Miller report (page 5) that for Monongalia County "— 236,044 acres. Four companies control 180,183 acres." It would appear from that statement that the four companies control 76.2 percent of the land in the county which is not the situation.

Another study, by J. Davitt McAteer, reported on land ownership in selected West Virginia counties⁵. He studied the concentration of ownership for three different sets of bundles of rights: 1) fee simple ownership, 2) surface ownership, and 3) mineral/timber rights. For Monongalia County, McAteer reported that the three largest owners controlled 122 acres in fee, 14,074 acres in surface rights, 163,998 in mineral/timber rights and a total of 142,210 acres⁶. While the McAteer data were for a different time period than Miller's both were taken from County Land (Tax Assessment) Books.

A study by Shamsudin has shown that the acreage assessed in a county often exceeds the total surface area of the county⁷. In Barbour County, for example, adding together all of the "acreages" for which assessed values were made resulted in a total of 571,718 acres, which is over two and a half times the surface area of the county.

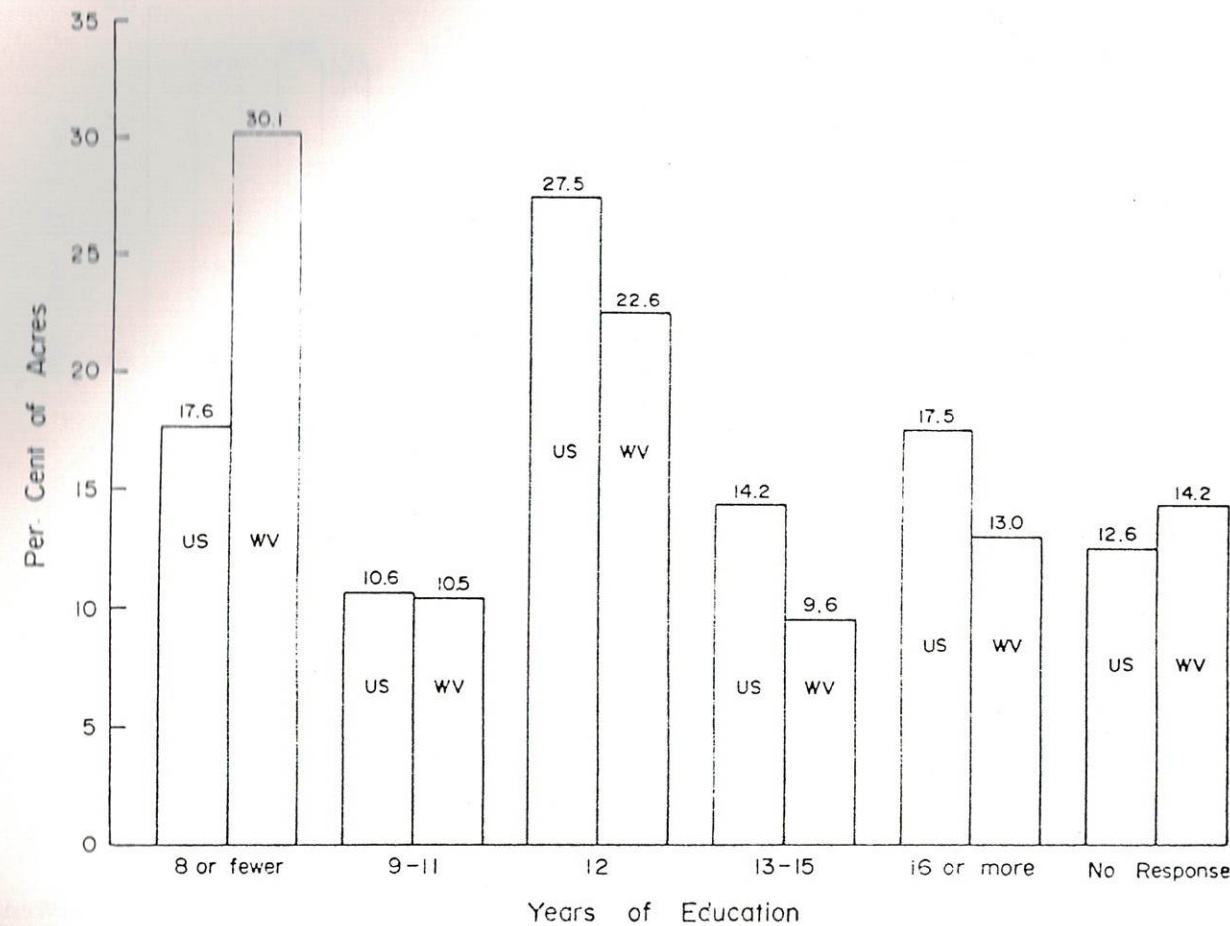
Summary data for the counties analyzed by McAteer are reported in Table 1. Of the 14 counties included, only two had over 50 percent of their surface area owned by the large corporations he studied. However, 11 of the 14 counties were ones where Miller had stated over 50 percent of the land was controlled by large companies. While ownership of the mineral rights beneath the land does allow the companies certain rights, i.e., the right to mine coal, it does not give them control of the land in the strictest sense of the use of that word. Thus, it must be concluded that many of the

statements about "who owns West Virginia" must be reconsidered.

Despite the above conclusions it must be recognized that the ownership of land in several counties is highly concentrated. Surface (and fee simple) ownership is highly concentrated in several of the southern, coal producing counties, with up to 65 percent of the land owned by a handful of companies in some counties. Furthermore, the mineral (coal) rights have been separated from the surface rights over large areas of the State and ownership of the mineral rights also tends to be concentrated. Caudall has adequately described the process by which these rights were acquired in his stimulating book "Night Comes to the Cumberlands"⁸.

Since the development of the energy crisis there has been a resumption of interest in coal, oil, gas and substantial areas of mineral rights have been leased or purchased by energy producing com-

Figure 7. Ownership of Land in West Virginia by Level of Education, 1978



panies, especially in the central area of the State where previous activity had been limited. Thus, the concentration of mineral rights appears to be continuing.

A recent study by the Appalachian Land Ownership Task Force examined land ownership in 15 selected counties⁹. This group used the County Land Books (for 1980) and divided land into "surface" and "minerals". The ownership of mineral rights is complicated since several seams of coal may be beneath a particular surface area and frequently these are separated in ownership records. This has led to ownership of more than "100 percent" of the minerals since the total surface land area was used to determine the percentage owned by various groups. For the study all individual holdings of over 250 acres and government and corporate holdings of over 20 acres were enumerated.

Using these definitions it was found

that about 2.3 of 4.5 million acres (51 percent) of the surface land area, were owned by 1) individuals with large holdings (13 percent), 2) U.S. government (8 percent), and 3) corporate interests (30 percent). The larger 25 percent of the owners possessed about 43 percent of the surface rights. The ownership of land by all larger units varied from a low of 11 percent in Wayne County to 84 percent in McDowell County (Table 2). The larger 25 percent of the ownerships had from 8 percent of the land in Wayne County to 74 percent in McDowell County. The larger owners were the U.S. Government with 283,195 acres, Georgia-Pacific Corporation with 121,360 acres and Pocahontas Land Company with 115,833 acres. The Government's land was primarily in National Forests, but also consisted of some land for reservoirs.

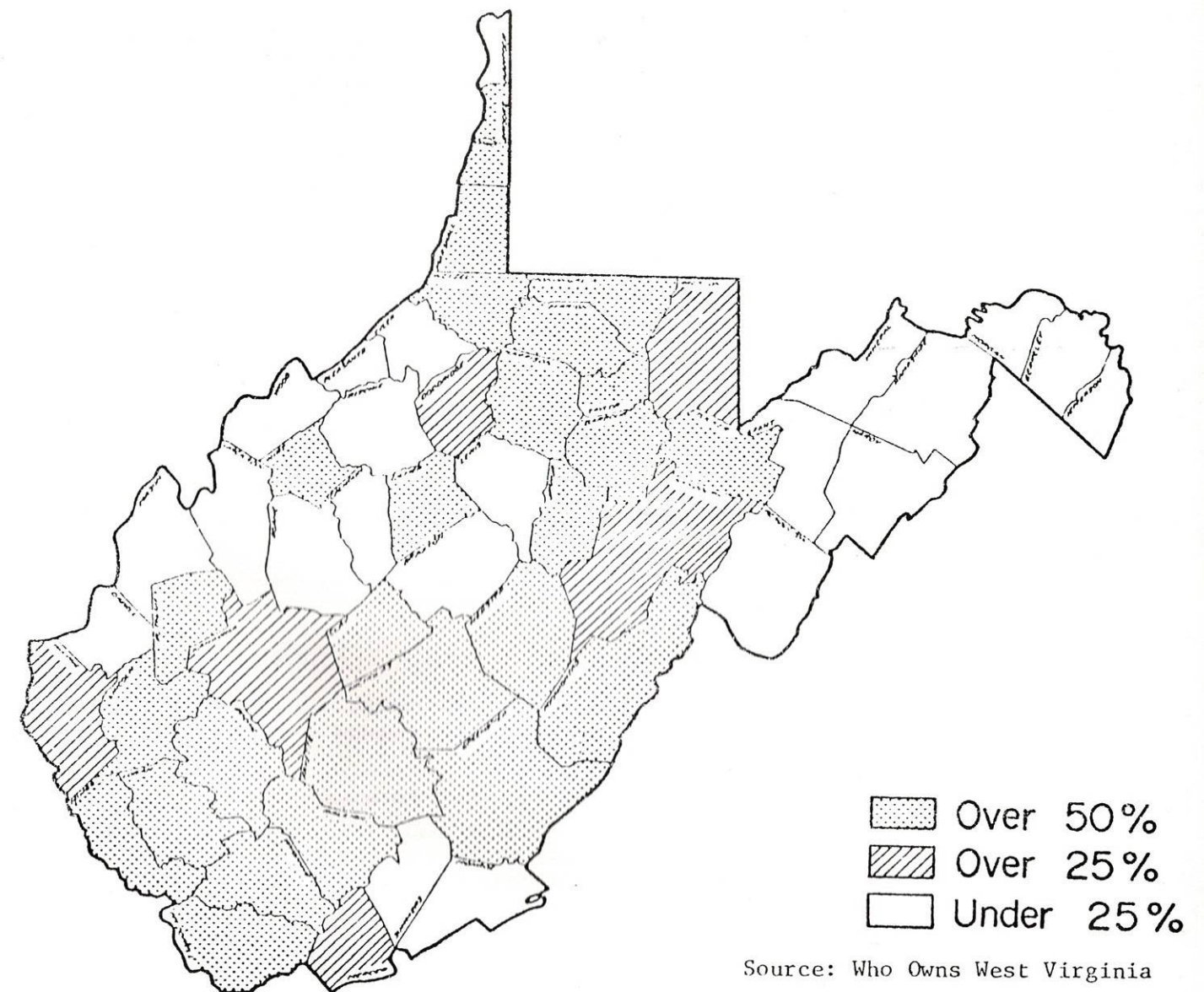
Mineral ownership appears to be

even more concentrated than surface ownership, although the method of calculating percentages owned complicates this determination. According to the Appalachian Land Ownership Task Force, 72 percent of the minerals are owned by individuals with large holdings, government, and corporations with percentages ranging from 0 in Jefferson County (see footnote 10) to 131 in Lincoln County (Table 2). These are percentages of the surface areas of the county and are not realistic because of double counting due to separation of coal rights by seam in some counties where more than one person may own some of the coal rights beneath a given surface area. A more useful approach would be to determine the percentages of coal reserves owned by interests with relatively large holdings.

Summary and Conclusions

Despite State-wide data that indi-

Figure 8. Concentration of Land Ownership in West Virginia



cates land ownership to be no more or less concentrated than for the U.S., ownership is relatively very concentrated in a number of West Virginia Counties. Even if ownership by government and the private ownership of larger tracts is not included, ownership is relatively concentrated in most of the counties in the Southern coal producing areas. The land is owned by land holding, timber, rail, and energy corporations.

The ownership of mineral rights appears to be even more concentrated

than that of the surface. Many owners of large tracts of land own the mineral rights as well as the surface, i.e. own the land in fee simple. In addition, coal rights or other minerals have been purchased in counties in all parts of the State. This has resulted in concentrated ownership of coal in both the Northern and Southern coal fields. Acquisition of coal rights was resumed after the energy crisis, especially in the central counties where private ownership had prevailed. Oil and gas leasing and production also is relatively concentrated in a number of

counties, further affecting the pattern of ownership for minerals.

Another important factor is absentee ownership. Much West Virginia land is owned by non-residents, both corporations and individuals. There appears to be more of this than for the Nation. It is increasing in the eastern part of the State due to its proximity to the Washington, D.C. area. Foreign (non-U.S.) ownership is extremely low but has been increasing.

The impacts of the concentration of ownership, while undoubtedly substan-

TABLE 1. Concentration of Land Ownership in West Virginia Counties.

County	No. Owners	Fee	Surface	% Fee & Surface	Mineral	Total	Total Acreage in County
McDowell	7	86,250	122,676	61.2	137,882	239,337	341,230
Marion	6	511	6,367	3.4	149,871	154,180	200,960
Logan	9	118,622	3,115	41.7	48,117	169,855	291,840
Harrison	6	2,042	4,300	2.3	99,588	105,930	267,520
Nicholas	11	120,489	2,967	29.3	39,408	165,674	420,480
Mercer	2	221	25,927	9.6	37,570	37,794	271,360
Preston	2	2,055		0.4	30,768	32,823	418,560
Wyoming	10	93,675	115,780	64.5	154,320	279,057	324,480
Kanawha	2	53,667	6,900	10.3	18,058	72,100	584,320
Boone	13	119,718	6,030	38.8	14,443	140,181	323,840*
Fayette	8	100,815	7,400	25.3	57,559	165,804	426,880
Mingo	6	69,839	48,993	43.7	76,298	190,879	271,360
Raleigh	10	129,770	16,331	37.4	72,811	211,275	390,400
Monongalia	3	122	14,074	6.0	163,998	142,210	236,160

Source: J. Davitt McAteer, Coal Mine Health and Safety, pp. 165-171.

Table 2.
Land Ownership by Large Individual, Government,
and Corporate Holdings in 15 Selected West Virginia Counties — 1979.

County	Acres in County	Surface		Minerals	
		Acres Owned	Percentage Owned	Acres Owned*	Percentage Owned*
Braxton	327,040	143,170	44	232,638	71
Jefferson	135,040	48,280	36	0	0
Kanawha	580,480	267,493	46	66,180	46
Lincoln	280,320	62,010	22	367,522	131
Logan	291,840	211,872	73	333,195	114
Marion	199,040	28,717	14	214,751	108
Marshall	194,560	50,616	26	152,502	78
McDowell	341,120	288,013	84	415,384	121
Mineral	211,200	102,422	51	41,514	20
Mingo	270,720	204,956	76	262,609	97
Ohio	67,840	13,453	20	58,619	86
Raleigh	387,200	271,495	70	38,287	98
Randolph	663,040	458,769	69	385,981	58
Summer	224,000	121,453	54	22,543	10
Wayne	328,320	37,200	11	94,789	29
Totals	4,501,760	2,142,981	48	3,260,742	72

Source: Appalachian Land Ownership Study, Vol. VII, West Virginia.

* Amount may exceed 100 percent due to ownership of separate coal seams, or other double counting relative to the surface.

tial have not been well documented. In most counties where ownership is concentrated average incomes, taxes and public services tend to be low. Most of these counties are relatively resource poor, except for minerals and timber. The land is steeply sloped with only narrow valleys and relatively little good quality land. If coal production is not profitable there are few other economic opportunities, since mechanized agriculture is not feasible and therefore most farming activities are either subsistence or part time. Hardwood timber production is a long term, low value (on a per acre basis) industry. Few industrial opportunities exist because of the topography and transportation problems, although interstate and develop-

ment highway construction has improved the transportation network. Because of its importance, substantial research on economic development and related topics is needed.

Most of the studies of land ownership are flawed in various ways. The USDA study of state-wide land ownership was based on a relatively restricted sample from the Soil Conservation Service's conservation needs study. A mail survey was used and follow-up studies made, but problems still exist due to some non-responses and to the survey techniques. The other studies used County Land Books as the data sources. These are supposed to provide complete listings of all land in a county but their use is both costly and time consuming as

well as causing problems in interpretation. The separation of surface from mineral rights can cause problems in determining ownership patterns, especially if the assessors throughout the years have not been meticulous in their record keeping. These also are problems of multiple ownership since several owners of a single property may be listed with each paying a share of the taxes and being listed as a partial owner of all the land. Agents, lawyers, trustees or others may be listed in the land books and appear to be owners when they are not. Finally, land ownership is dynamic, changing constantly. Thus, while several studies have contributed to our knowledge none have been definitive and none can be final.

FOOTNOTES

¹ WHO OWNS WEST VIRGINIA, reprinted from The Herald Advertiser and The Herald-Dispatch, Huntington, West Virginia, December 1974.

² Douglas G. Lewis, "Who Owns the Land? A Preliminary Report for the Southern States", ESCS Staff report NRED 80-10, NRE, ESCS, U.S. Dept. of Agr., Washington, August 1980.

³ WHO OWNS WEST VIRGINIA, op. cit. p. 1.

⁴ J. Peter DeBraal, FOREIGN OWNERSHIP OF U.S. AGRICULTURAL LAND, Agr. Information Bull. 440, ESCS, U.S. Dept. Agr., Washington, Nov. 1980.

⁵ J. Davitt McAteer, COAL MINE HEALTH AND SAFETY: THE CARE OF WEST VIRGINIA, Praeger Publication, New York, 1970.

⁶ The total is less than the acreage of mineral/timber rights because of ownership of overlapping coal seams which were assessed separately in Monongalia County. McAteer eliminated the overlap in reporting the total.

⁷ Mohd. Noor Bin Shamsudin, THE IMPACTS OF THE REAPPRAISAL PROGRAM FOR MINERAL RIGHTS ASSESSMENTS IN WEST VIRGINIA, Unpublished M.S. Thesis, West Virginia University, 1979. See also Shamsudin and Colyer, MINERAL RIGHTS AND PROPERTY TAXATION IN WEST VIRGINIA, R.M. No. 74, Div. Resource Mgmt. West Virginia University, July 1979.

⁸ Harry M. Caudall, NIGHT COMES TO THE CUMBERLANDS. Little, Brown & Co., Boston, 1962.

⁹ Appalachian Land Ownership Task Force, APPALACHIAN LAND OWNERSHIP, VOL. VII, WEST VIRGINIA, Submitted to the Appalachian Regional Commission, November 1980.

¹⁰ Since the Task Force study, oil and gas interest had developed in Jefferson County and substantial areas have been leased for those products.



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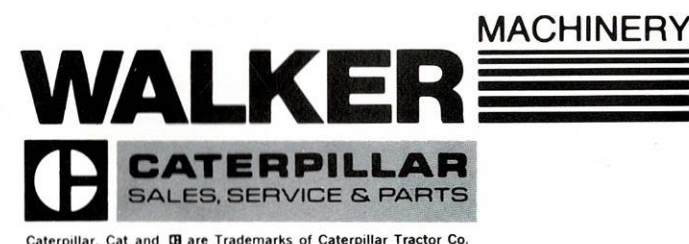
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ton, Eastwide Surface Mine Specialist, Forestry Sciences Laboratory, Rt. 2, Highway 21 East, Berea, Ky., 40403, tel (606) 986-8431.

Japanese Larch

L. Leptolepis

European Larch

L. decidua

Hybrids

L. eurolepis



Species Description. Larch is one of the few conifers that completely lose their foliage. The needles usually turn golden-yellow before they fall. Occasionally an early autumn frost will catch rapid-growing individuals and turn the needles red-brown. Larch may reach 90 to 100 feet in height and 2 or more feet in diameter. In the open, they develop wide-spreading, conical crowns. Mature, forest-grown stems are often branch-free for much of their length. Shaded limbs soon die, and ice and snow often break off brittle branches. Between these whorls many fine twigs may sprout and persist from small rosette buds or spur shoots. Twig color

is one of the best means of identifying larch species, especially in winter. The Europeans typically exhibit straw-yellow twigs; Japanese larch are copper-red, with an initial waxy purplish cast.

Flowers and Seed. Larches flower in March or April before needles emerge from the winter buds. Both male and female flowers appear on the same tree, and often on the same branch. Cones ripen from late August to October of the year flowers appear. Seeds and cones may be present on trees 10 to 15 years old, but substantial crops rarely occur before age 20 to 25. Good seed years occur at irregular intervals, though usually not more than twice in any decade.

These are the smallest and most difficult larch cones to collect. European larch cones are ovoid, between 1 to 1½ inches long with 40 to 50 cone scales. European larch cones open only partially upon drying, so complete seed extraction may be difficult in this species. Japanese larch cones range from ¾ to 1½ inches long, are nearly as round as they are long, and have 30 to 40 cone scales. The tips of these cone scales are curved back like the petals of a fresh rose. Hybrid larch cones often combine characteristics of both parents.

Site Requirements. Larch grow well on most deep, well-drained soils. This species will rapidly occupy disturbed

sites. The roots respond strongly to soil moisture. Where soils are deep, larch roots quickly grow down and out, providing stability. Only our native eastern larch tolerates wet or swampy ground. On these sites eastern larch develops shallow, surface roots. Europeans seem best able to tolerate droughts, while the more heavily foliated Japanese larch suffer most if lack of precipitation is intensified by shallow, excessively drained soils. European and JapXEuropean hybrids should be favored over pure Japanese larch on such shallow, excessively drained, or shaly outcrop soil areas.

Tolerance. All larch are intolerant of shade. Even under partial shade, young seedlings soon lack vigor and die within a few years.

Silver Maple

Acer saccharinum L.



Species Description. Silver maple is a deciduous tree with a rounded spreading crown. It can reach heights of 120 feet and diameters of 4 feet. The bark is silver gray on young branches, and turns darker and shaggy on old parts. Twigs are reddish-brown and smooth. Leaves are simple five-lobed, pale green on top and silvery-white below.

Flowers and Seed. The male and female flowers are borne separately on the same tree during early spring, before the leaves appear. The fruit comes in pairs and is composed of a curved wing with a seed at the base. Seed crops, which mature in late spring, are heavy almost every year.

Site Requirements. Silver maple

Major Pests. Larches are susceptible to a number of pests, but only the larch sawfly is presently serious enough to cause death or greatly reduce growth.

Value for Reclamation. These species tolerate extremely acid mine spoils of pH 3.3 to 3.5 with little reduction of growth or initial survival. Where rainfall is adequate (15 to 20 inches during the growing season), larch develop rapidly, deposit a light mulch of needles, and quickly protect the site.

Products and Uses. Larch has dense wood, with thick-walled fibers and high pulp yields. Harvested products also include posts, poles, and piling. Larch makes an attractive veneer and can be sawn into durable, radial-cut flooring.

grows well on a variety of soils. It tolerates extremely wet and dry sites, but does best on well-drained alluvial soils. A low pH of 4.0 can be tolerated but 5.0 to 7.0 would be optimum. Elevations of more than 2500 feet and dry sandy sites should be avoided.

Tolerance. Silver maple ranges from moderately tolerant to very tolerant

depending on site quality and location. Over much of its range, it is considered tolerant on good sites and intolerant on poor sites.

Culture. Only 1-year-old seedlings are used for reforestation. Direct seeding has been successful if adequate moisture is available and fresh seed is used. Seedlings generally develop multi-

ple stems, with one large central stem.

Major Pests. No insect pests are considered major. Although silver maple is susceptible to heart rots of many varieties, no major diseases are in evidence. Fire kills silver maple very easily. Temporary flooding can be tolerated, but prolonged flooding cannot.

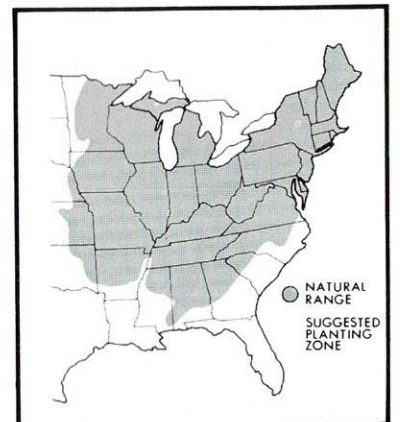
Value for Reclamation. Silver maple

is well-suited for reclamation. It grows on a variety of soils but does poorly on steep slopes. It is a fast-growing tree with a good survival rate.

Products and Uses. Silver maple is used for pulpwood, boxes, millwork, dimension stock, firewood, pallets, and as a street tree.

Northern Red Oak

Quercus rubra



Species Description. Northern red oak is a native deciduous tree reaching an average height of 80 or more feet at maturity. Red oak is the most widely distributed oak in the U.S. The trunk is generally straight and contains flat, shiny plates. The twigs are reddish-brown with the leaf scars clustered near the tip. The leaves are up to 10 inches long, simple, with bristle-tipped lobes. They are dark green on top and paler underneath.

Flowers and Seeds. Red oak bears female flowers and catkin-like male flowers in the spring before the leaves come out. The acorns mature in two

years and ripen in September and October. Red oak begins to fruit at 25 years. Germination occurs in the spring.

Site Requirements. Northern red oak grows best on north and east slopes. Sandy loam soils provide optimum growth, but red oak will grow on shallow soils and heavy clays if moisture is available and the pH is at least 4.0.

Tolerance. Northern red oak is intermediate in its tolerance to shade. It competes more readily with weeds than does white oak.

Culture. One-year-old seedlings are the best for planting. Some direct seeding has been done with stratified acorns

in the early spring. Red oak benefits from chemical control of competing weeds.

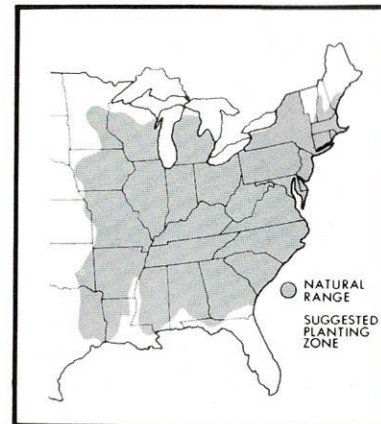
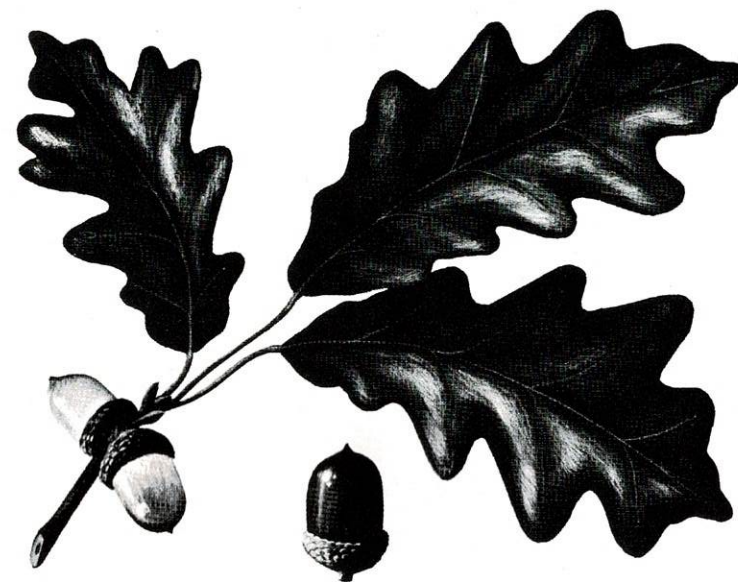
Major Pest. Oak wilt is the major disease of red oak. Normally this is a problem of the forest and not the plantation. The gypsy moth and the eastern forest tent caterpillar are major insect pests.

Value for Reclamation. Success in establishing red oak is good. Once established they help to protect watersheds, provide aesthetic enhancement, and supply food for wildlife.

Products and Uses. Common uses include furniture, veneer, moldings, handles, fuelwood, and shade.

White Oak

Quercus alba



Species Description. The leaves of the white oak are 5 to 9 inches long, deeply lobed, green, and smooth below. The twigs are moderately stout and purplish-grey to greenish-red. The tree reaches a maximum height of 150 feet and may live for 600 years.

Flowers and Seed. White flowers appear in the spring at the same time that the leaves appear. The fruit matures in 6 to 8 months and is an acorn $\frac{3}{4}$ inches long and oblong in shape. The cap is bowl-like with warty scales. The bark is light grey and varies in texture. The seed germinates immediately in the fall with the extension of a tap root; then in the spring, the top sprouts.

Site Requirements. White oak grows well on all but the driest sites or swampy areas. A pH of 5.0 or above is sufficient for good growth.

Tolerance. White oak has intermediate tolerance to light. Even in heavy shade, seedlings can persist for years and then grow vigorously if the shade is removed.

Culture. Plant as 1-year-old seedlings; older seedlings are difficult to transplant successfully. Acorns can be direct-seeded if sown immediately after they drop from the tree, before the radical becomes extended.

Major Pests. White oak is very susceptible to gypsy moth; it cannot toler-

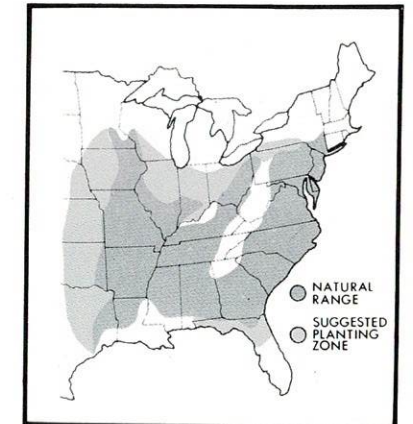
ate repeated defoliations. Anthracnose attacks white oak but normally is not a major problem. Oakwilt can kill white oak, but this species is not as susceptible as the red oak group.

Value for Reclamation. White oak produces acorns that are an excellent wildlife food. Survival is often a problem, so it should be planted in mixtures with other hardwoods.

Products and Uses. White oak is used for tight cooperage, furniture veneer, fuelwood, pallets, and flooring. In recent years the stumpage price has risen to just below that of walnut.

River Birch

Betula nigra



Species Description. River birch (red birch) is the only birch native to the southern United States. It is a medium to large deciduous tree that grows naturally on stream banks and moist, low elevation sites. Average sizes at maturity are 50 to 90 feet in height with diameters of 2 to 3 feet. Mature trees commonly have a short trunk that divides into a large, irregular crown. The bark of mature trees is dark red-brown to dark gray with thick, irregular scales. Younger trees have cinnamon-colored exfoliating bark. Leaves are alternate and ovate with double-toothed serrations. River birch is a comparatively short-lived species.

Flowers and Seed. River birch is the only birch species which flowers and produces mature fruit in the spring.

Cylindrical seed-producing catkins disperse ripe seed in May and June. The small, winged seed are disseminated by wind and water.

Site Requirements. In nature this species occurs along stream banks and swampy forest land which is often flooded during spring run-off. It will survive and grow well on fair to poorly drained acid mine soils. The lower pH limit is 4.0. Successful establishment is reduced at elevations above 2,000 feet.

Tolerance. As with other species of birch, river birch is intolerant to shade. Young seedlings grow fast, but growth and development will be severely restricted by shade.

Culture. One-year-old seedlings should be planted early in the spring. Pure plantings are not recommended

unless site conditions are too poor for other hardwood species.

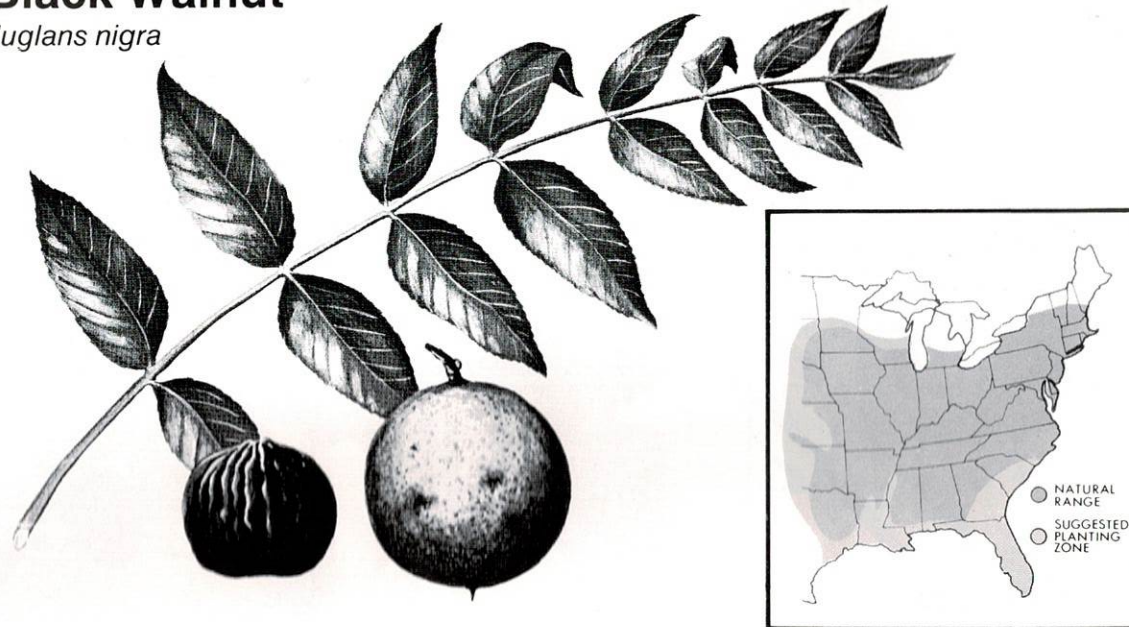
Major Pest. River birch is relatively free of insect and disease problems. Leaf miners may cause some defoliation with resulting reduction in growth. However, this is seldom fatal.

Value for Reclamation. This species is best suited for poorly drained, acid sites. Yellow fall foliage provides aesthetic qualities. It is browsed by deer and provides cover for other wildlife species.

Products and Uses. River birch usually have poor form, which limits their use for forest products. If harvestable timber is obtained, it is made into wood turnings, furniture, crates, and baskets.

Black Walnut

Juglans nigra



Species Description. Black walnut is a large deciduous tree native to most of the eastern United States, except for areas along the Gulf Coast and Florida. Black walnut can be as tall as 130 feet with a diameter of 6 feet. On good sites 2 to 3 feet of growth per year is possible. The leaves are compound with nine to 23 lance-shaped leaflets. The twigs are dark brown with a chambered pith (central strand). The bark is dark reddish-brown and deeply furrowed.

Flowers and Seed. Both male and female flowers appear in late spring, and the fruit ripens in the fall. The edible nut is approximately 1 inch in diameter with a husk and a very hard hull.

Site Requirements. Black walnut

grows best in soils of 6.0 to 7.5 pH. Deep, moist, well-drained lower slope sites are good walnut habitat. Poorly drained and droughty sites should be avoided.

Tolerance. This species is intolerant of shade. The best growth occurs in wide-spaced, weed-free plantations. Walnut should not be planted with pine as it secretes a toxic substance that can kill pine trees.

Culture. Black walnut can be established by using 1-year-old seedlings or by planting stratified nuts in the spring. Nuts should be avoided if there is a squirrel population at the planting site. An area of at least 3 feet should be kept free of weeds around the seedling for at least three years. Seed should originate 100

to 150 miles south of the planting site.

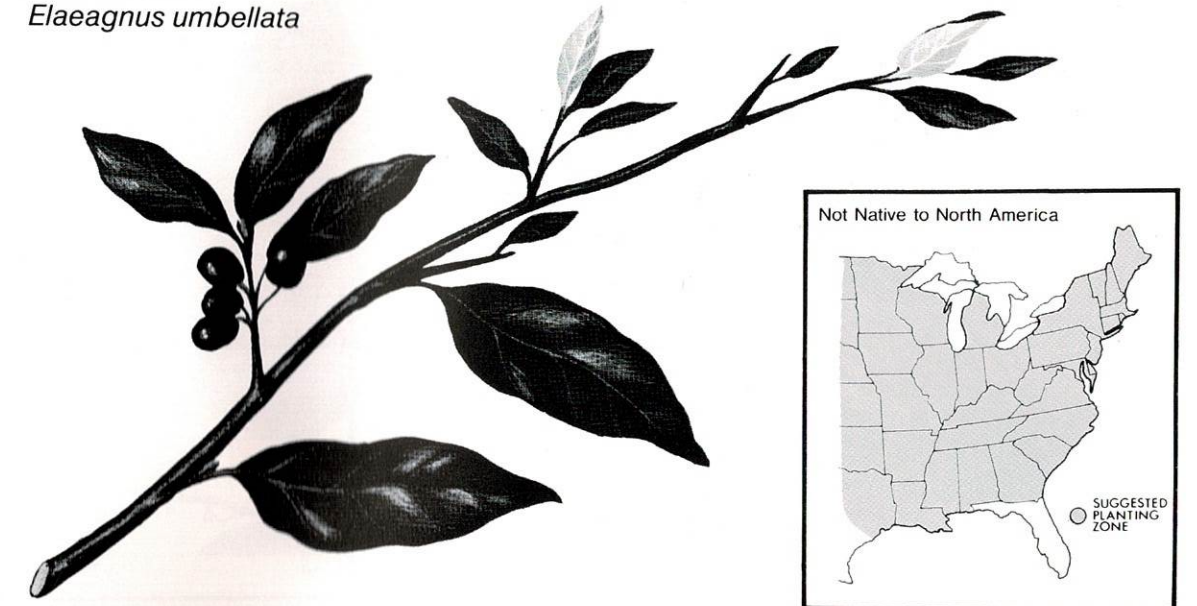
Major Pests. Anthracnose, a fungus disease of the leaves, twigs, and fruit is the major problem with walnut. Walnut tent caterpillar is the major insect pest. Normally neither of these pest causes significant problems.

Value for Reclamation. Black walnut grows well on moist, well-drained spoil. It provides the most valued timber crop presently available for reclamation. This is a good species to mix with black locust, autumn olive, and/or European black alder.

Products and Uses. The wood is used for veneer, furniture, gunstocks and novelties. Nuts are salable in some areas.

Autumn Olive

Elaeagnus umbellata



Species Description. Autumn olive is a shrub or small tree that grows up to 20 feet in height. The leaves are 1 inch to 4 inches long, elliptical with wavy margins. The leaves are dark green on the top surface and pale yellow-green on the underside. Occasionally a dull thorn is found on the silvery twigs.

Flowers and Seed. Autumn olive flowers in the spring. The blossoms are yellow in color and very small. The fruit is a red berry that appears in the early fall. It is an excellent wildlife food. The seed is very soft, so much so that it is crushed in the system of the animal or bird that eats it. Care must be taken when cleaning the berries for seed, since crushed seed will not germinate.

Site Requirements. This species is well-adapted to a large variety of spoil conditions. A pH of 4.0 is generally the lowest limit for pH, however, survival has been reported on pH's as low as 3.2. The olive is a nitrogen fixer and assists in building the soil.

Tolerance. A successional species, autumn olive does best in full sunlight, but also competes well with herbaceous material.

Culture. Plant as 1-year-old seedlings in the spring. The seedlings can be interplanted to train other species and shade out lower limbs of oak, walnut, and ash.

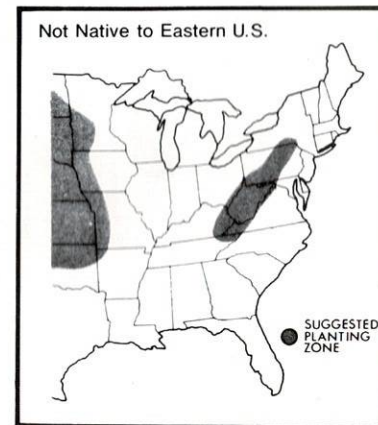
Major Pests. No major pests are reported at this time.

Value for Reclamation. An excellent plant for reclamation, autumn olive fixes nitrogen in the soil and therefore serves well in mixed plantings. The berries are a good wildlife food, and the leaves provide cover for animals well into the winter. Autumn olive grows rapidly, often reaching 4 feet the first year after planting.

Products and Uses. The berries can be used to make wine and jelly. Undamaged, extracted seed from autumn olive are welcomed by nurserymen. Because of its nitrogen-fixing propensity, autumn olive is a good plant to mix with black walnut, red oak, white oak, and ash.

Ponderosa Pine

Pinus ponderosa



Species Description. Ponderosa pine is the most widely distributed conifer in North America. Its natural range extends from British Columbia to Mexico and most states west of central Nebraska. It is a long-lived tree, often reaching ages of 300 to 600 years or more. Mature trees with diameters over 100 inches and heights in excess of 200 feet have been recorded. Diameters of 30 to 50 inches and heights of 90 to 130 feet are common. Bark of young trees is dark brown to nearly black. As the trees mature, the bark becomes cinnamon-brown to orange-yellow and develops a platelike texture. The needles, 5 to 10 inches long, occur in clusters of two or three. The root system is characterized by a deep, penetrating taproot.

Flowers and Seed. Seed production may start as early as age 16, but the best quality seed comes from trees 60 to 160 years old. The cones ripen in mid to late summer of the second year. Some seed is produced each year with good seed crops occurring at about 8-year intervals.

Site Requirements. In its natural range, best growth occurs on deep, well-drained, loamy soils having a pH near neutral. Test plantings of ponderosa pine in Pennsylvania have shown that acid soils down to pH 4.0 do not markedly affect survival or growth. Severely compacted spoils may reduce the success of plantations.

Tolerance. Ponderosa pine is considered an intolerant species; seedlings can withstand overstory shade, but growth rate will be reduced.

Culture. Two-year-old seedlings should be planted in early spring. Direct seeding has potential, but is not a proven technique at this time. In the Pennsylvania study it was shown that seed source had a significant effect on survival and early growth. It is suggested that seedlings from southeastern Montana, northwestern South Dakota, or eastern South Dakota be used for eastern United States reclamation plantings.

Major Pests. Several insects and dis-

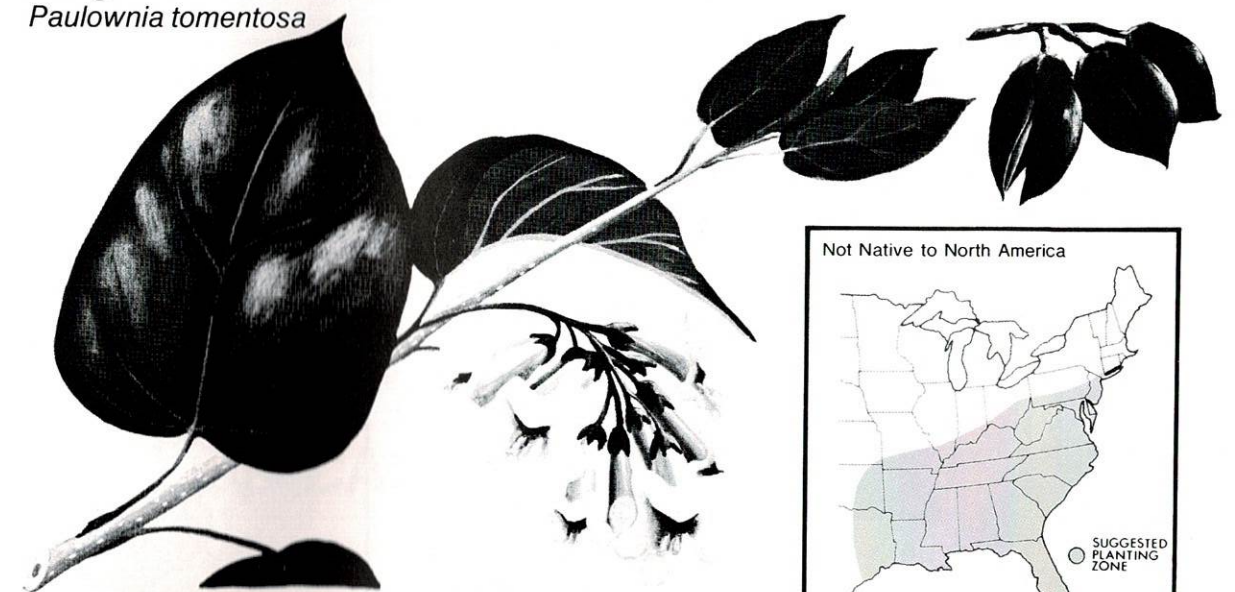
eases are a problem in its natural range. Our limited experience in the east suggests that the same insects and diseases that affect our native hard pines may also affect ponderosa pine. Some of the more common insects and diseases that could cause problems are: pine sawflies, shoot moths, fomes annosus, scleroderis canker, and needle cast diseases.

Value for Reclamation. Limited field testing in the east suggests that ponderosa pine can be used as an alternate for species such as pitch pine, Virginia pine, or red pine. It has excellent drought resistance and can withstand relatively low pH's. Growth rates are comparable to other reclamation species. The dense foliage and evergreen characteristics make it a good species for aesthetic purposes such as screens. Wildlife value is primarily to provide cover.

Products and Uses. The wood is widely used in general construction, and for interior finished woods, boxes, and crates. It is not durable in contact with soil unless treated with preservatives.

Royal Paulownia

Paulownia tomentosa



Species Description. The royal Paulownia is a native of China and is naturalized since 1844 in the U.S. It presently ranges from Long Island in southern New York; west through West Virginia and southern Ohio, Indiana, Illinois and Missouri; south into Texas; and east to Florida. Paulownia is a long-lived and fast-growing tree if it is not in competition with other trees. The leaves are heart-shaped and covered with a mass of hairs (tomentose) on the underside. Juvenile leaves are often 3 feet long. Individual trees may reach 6 feet in diameter and 105 feet in height. The twigs are brown and dotted with white lenticles. The bark has shallow fissures and is tan to light grey in color.

Flowers and Seed. The tree flowers in the spring just before the leaves appear. The flowers are lavender and grow in upright spikes somewhat like lilac. The fruit is a cluster of thin-walled pods, each about 1 inch in diameter, coming from a single axis. The seeds are very

small (170,000 per ounce) and are enclosed in a translucent wing.

Site Requirements. Paulownia grows best on moist, well-drained soils, often on south-facing, steep, disturbed slopes or open valleys.

Tolerance. This species is intolerant and cannot grow in the shade.

Culture. Seedlings can be used for propagation as 1-year-old plants. Seedlings should be no more than 12 inches high and well-hardened before outplanting. Young trees should be kept free of weeds. A 4 x 4 or 6 x 6 foot spacing is recommended to produce high quality straight trees. Paulownia can also be produced from vegetative root cuttings. Lateral or secondary root cuttings from 1-year-old seedlings can be planted directly in the field in early spring. This is the preferred method of propagation, since improved trees may be selected.

Major Pests. Paulownia is subject to the Comstock mealy bug, an insect of

no particular importance. No major diseases attack Paulownia; root rots are known to occur but do not affect the vast majority of trees.

Value for Reclamation. The Paulownia is well-adapted for reclamation in much of the southerly portion of the surface-mining ranges. It can tolerate dry, south-facing slopes. After the first year of outplanting, seedlings may be cut off during the dormant season and the small stumps covered with straw or wood ash. All but two of the new sprouts should then be removed. The remaining sprouts will grow twice as fast as the original seedling.

Products and Uses. In the Orient, Paulownia is used for rice pots, bowls, wooden spoons, musical instruments, boxes, and religious furniture. The wood is very light, but extremely strong and will not split even under rapid kiln drying. Stumpage prices are often comparable to those of walnut.

Gray Birch

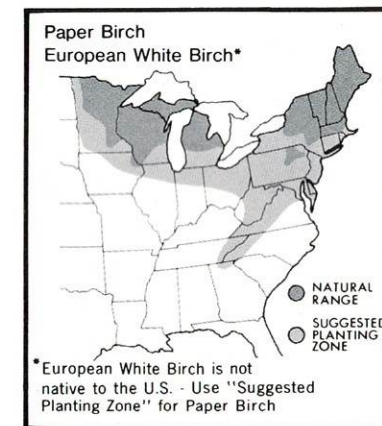
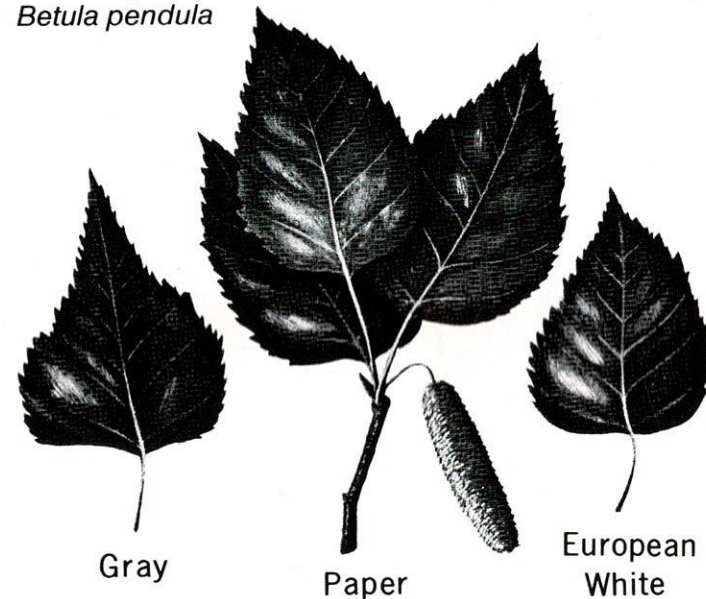
Betula populifolia

Paper Birch

Betula papyrifera

European White Birch

Betula pendula



Species Description. Gray birch is a small deciduous tree native to northeastern North America. Paper birch, native to northern North America, and European white birch, introduced here during colonial times, are both medium-size trees. The root system of these species is shallow and spreading. All have white bark, but gray and European white birch tend to have triangular black markings. Gray birch is a short-lived tree. Natural stands often begin decline at about 30 years of age. Paper birch is somewhat longer-lived, with natural stands maturing in 60 to 75 years; occasionally, trees live to be 200 years old. European white birch has a life span intermediate to gray and paper birch. All three species are characterized by rapid growth rates. After initial establishment, height growth of 3 to 4 feet per year is not uncommon. Gray birch rarely exceeds 30 to 40 feet in height. At maturity, paper birch can average 10 inches in diameter and 70 feet in height on good sites. European

white birch will be similar to or slightly smaller than paper birch.

Flowers and Seed. Flowering occurs in early spring with both male and female catkins occurring on the same tree. The seeds mature in summer and are dispersed in fall and early winter. Seed production starts at about age 15 for paper birch, and between 5 and 10 years of age for gray and European white birch.

Site Requirements. All three species tolerate acid site conditions and a variety of soil types. They grow best on well-drained sandy loams having a pH of 4.0 or higher. Satisfactory survival and growth have been recorded on spoils having a pH of 3.3. These are northern species and should be planted above 2000 feet in the southerly portions of the recommended planting range.

Culture. Early spring planting using 1-0 seedlings is recommended. Direct seeding and hydroseeding have been tested experimentally, but cannot be

recommended at this time.

Major Pests. Paper birch is the most hardy of the white birches. If planted too far south of its natural range, it may be affected by a dieback disease. All three species may be defoliated by gypsy moths in regions having large moth populations. Both gray and European white birch are attacked by bronze birch borer, and leaf miners can be a problem on gray birch.

Value for Reclamation. The white bark of these trees gives them an aesthetic quality different from other reclamation species. The potential for insect problems should be considered before planting gray or European white birch. Within the recommended range, paper birch offers the best potential for reclamation planting.

Products and Uses. Due to its size, the primary uses of gray birch are pulp or fuel. European white and paper birch are suitable for veneer, turnery stock, pulp, or fuel.

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Patty Bruce (c) is honored for 15 years of service to the Association.



Mary Anne Steele comes forward to accept a memento of her ten years with the Association.

WVSMRA is 15 years old

The West Virginia Surface Mining and Reclamation Association celebrated its 15th anniversary with its Annual Meeting at the Greenbrier Hotel in White Sulphur Springs.

Over 400 members and guests attended the annual affair, which featured the election of new officers, committee and technical meetings, as well as a variety of social and recreational activities.

The primary order of business was the election of new officers. William C. M. Butler, III, of Princess Susan Coal Co., Inc. Charleston, was chosen Chairman of the Board Directors for the year 1981-82.

Other newly elected officers include First Vice Chairman Donald R. Donell

of Starvaggi Industries, Inc., Weirton, Second Vice Chairman Tracy W. Hylton of Whitesville A & S Coal Co., Inc., Beckley; Secretary/Treasurer Charles T. Jones of Amherst Coal Co., Charleston; and Associate Division Chairman Frank W. Vigneault of Cecil I. Walker Machinery Co., of Charleston.

Vigneault and John J. Faltis of Anker Mining & Development Co., Inc., Pittsburgh, were newly elected to the Board.

In addition to Hylton, seven men were reelected to their positions on the Board, including C. E. Compton, Grafton Coal Co., Clarksburg; Lawson W. Hamilton, Jr., Ford Coal Co., Hansford; Gerald Hartley, Cedar Coal Co., Lancaster, Ohio; Robert H. Jeran, Bethlehem Mines Corp., Bridgeport;

Dwight M. Keating, Barbour Coal Co., Clarksburg; and Bill W. Harvey, Rish Equipment Co., Bluefield.

William J. Forbes of Big Mountain Coals, Inc., Charleston, was appointed to fill a two-year unexpired term on the Board.

The Association also welcomed nine new members into its ranks, including the following:

General Division: Alia-Ohio Valley Coals, Inc., Capitol Energy Group, Harvey Energy Corp., and Round Mountain Coal Corp.

Associate Division: Clarksburg Iron and Steel, Earth Sciences Consultants, Inc., Ensign Bickford Co., Enviro Energy, Inc., and Greenhorne & O'Mara, Inc.



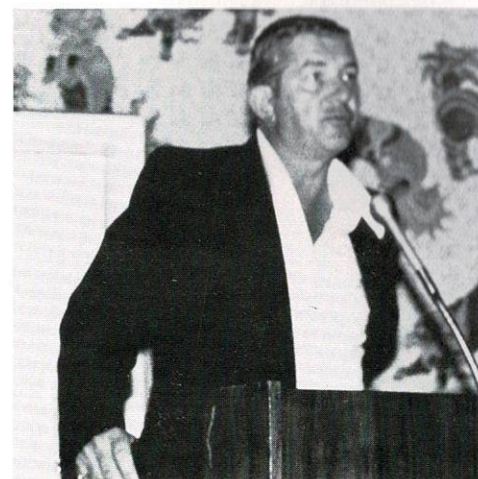
New Chairman of the Board William C. M. Butler III.



Buck Harless (l) with former State Senator J. D. Hinkle, Jr.



Jim Poindexter, retired West Virginia Hillbilly Editor Jim Comstock, outgoing Board Chairman Lawrence Streets.



Jerry E. Gobrecht, the Chessie System.

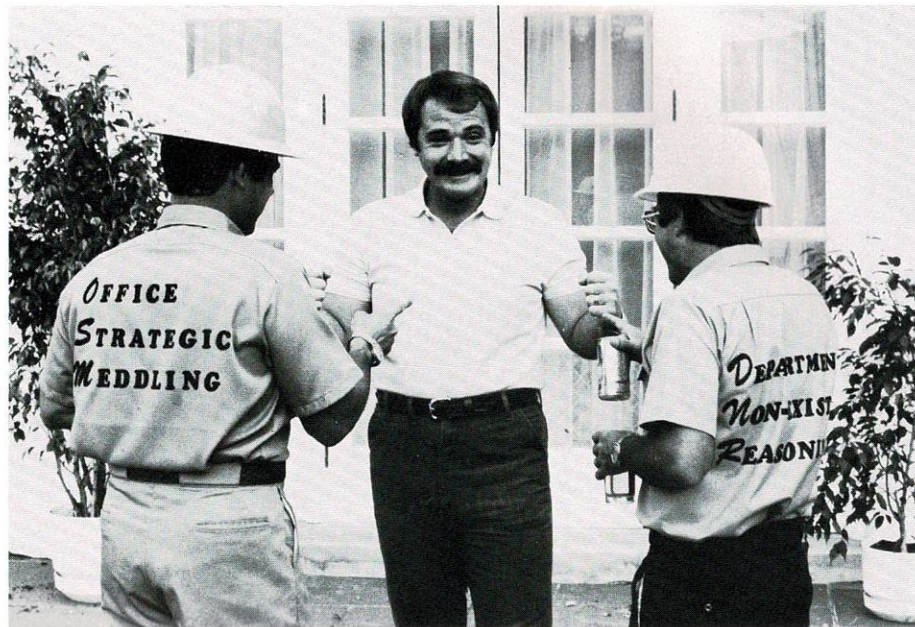


H. Herchiel Sims, Jr., Employers Service Corp.



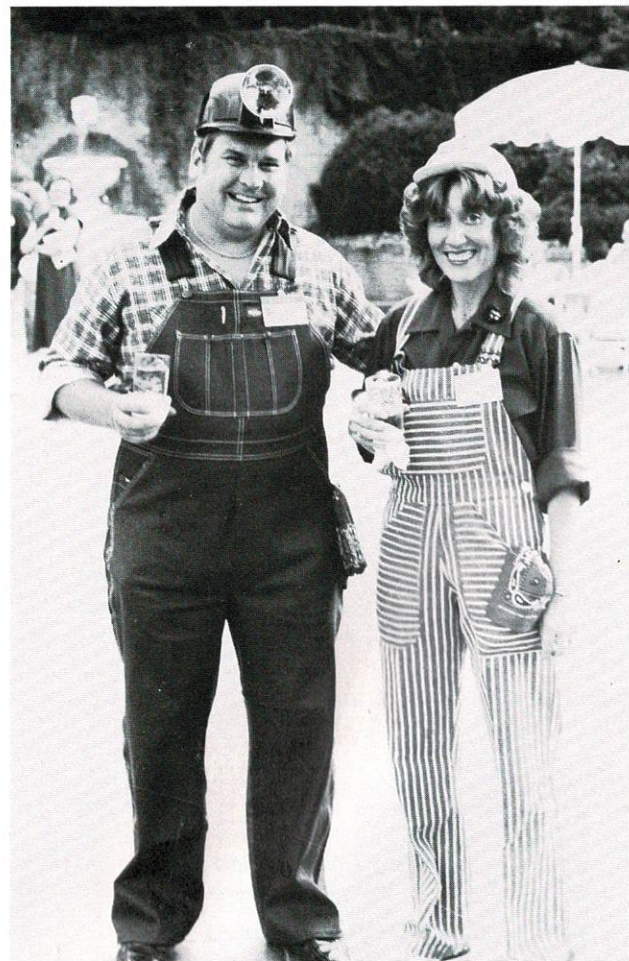
Humorist Cotten Ivy, shown here with Patty Bruce, added some down home humor to the coal miners' party.

Former Board Chairman Charley Jones with Kelly Carr, Miss West Virginia-USA. That's Charley on the right.



Even at the Greenbrier, Charlie Miller must deal with "inspectors." Here he confronts John Sturm and John Freeman, who have chosen to interpret government initials in their own way.

Rogers and Charlene Stevens went for authenticity at the miners' party. They succeeded.



These gentlemen were honored for past service on the Board of Directors. Left to right Lawson Hamilton, Tracy Hylton, Dwight Keating, Jim Compton, Lawrence Streets, Dick Welch, Bob Jeran, Gerald Hartley, Bill Harvey.



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Prize winners — Men's Golf



Prize winners — Skeet Shooting



Prize winners — Tennis

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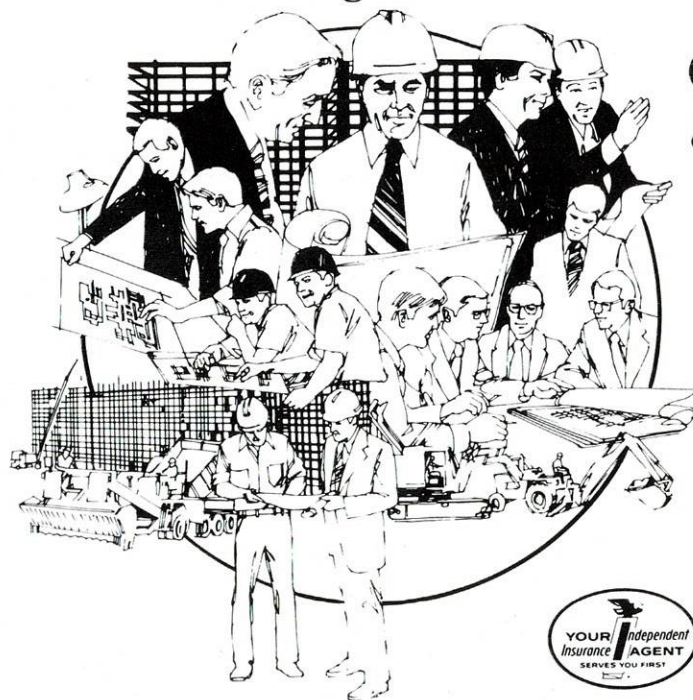
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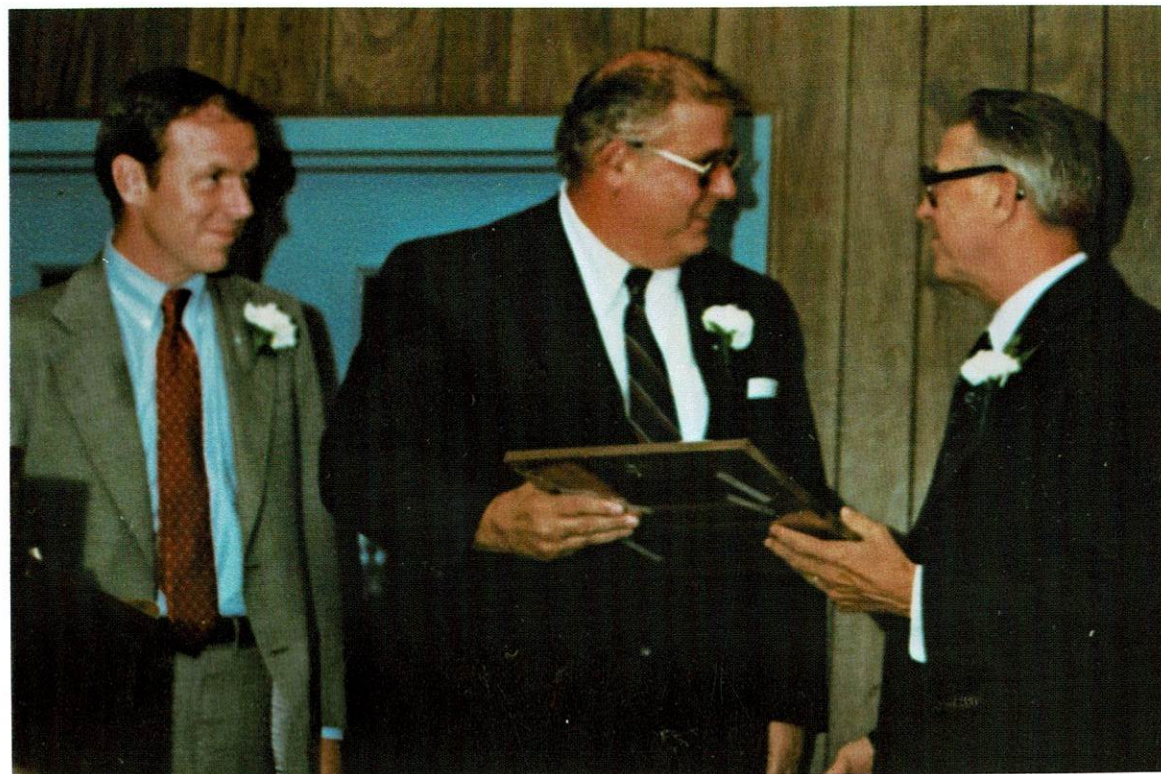
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Bernard Folio accepts the 1981 Supplier of the Year award from WVU president Harry B. Heflin. At left is Dwight Keating, who made the introduction.



Tracy Hylton responds to his selection as 1981 Surface Miner of the Year.



Ray Holbrook (c), shown here with WVU Assistant Athletic Director Paul Miller and President Heflin, is the Deep Miner of the Year for 1981.

Coal Men of the Year

Another group of three outstanding individuals was honored this past August as Coal Men of the Year.

The "Coal men" idea was originated six years ago by the WWSMRA. It is now sponsored by West Virginia University and has been expanded to recognize exceptional achievement in each of the three major segments of West Virginia's coal industry, deep mining, surface mining, and supply.

Recipients are honored at the Annual Coal Men of the Year Dinner at the Lakeview Inn and Country Club, near Morgantown. This year's affair was once delayed by the coal strike, but went off without a hitch August 27.

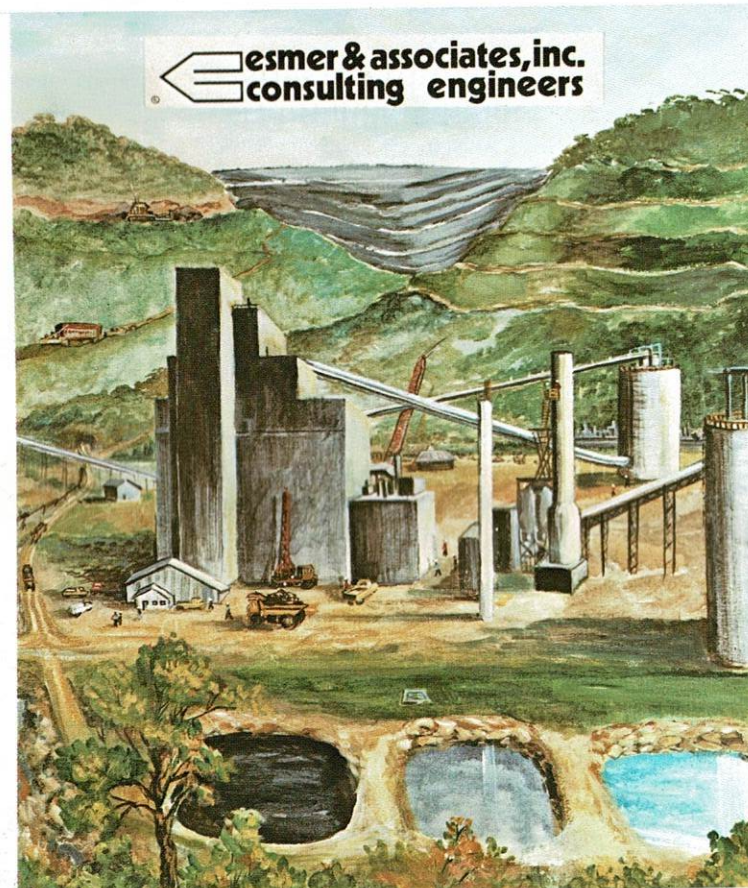
Coal Men of the Year for 1981 were as follows:

Deep Miner—Charles Ray Holbrook, president of Omar Mining.

Surface Miner—Tracy W. Hylton, former state senator, WWSMRA board member, and president of Whitesville A&S Coal Co., Inc. and Perry & Hylton, Inc.

Supplier—Bernard J. Folio, former WWSMRA Associate Division chairman, and president of Explosives, Inc.

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House testimony by OSM director James R. Harris

Statement of James R. Harris Director, Office of Surface Mining Before The House Interior and Insular Affairs Committee

Mr. Chairman and Distinguished Members of the Committee.

I am Dick Harris, the recently confirmed Director of the Office of Surface Mining Reclamation and Enforcement. I am here, at the call of this Committee to provide you with any and all information, regarding the office, required by you in the performance of your duties relating to oversight.

Some have commented that this hearing is, in fact, my House confirmation hearing. I would hope that it proves to be positive and productive.

Mr. Chairman, I would like to mention that, as a former State legislator, I have attended and been a part of many hearings similar to this at that level of government. During a good part of that period, I was sitting as a committee chairman. From my point of vantage today, I perceive such hearings to be a little tougher from this side of the dais.

I would hasten to point out to the Committee that my best recollections of those hearings indicates that I was always most kind to those giving testimony.

Sincerely, I consider it a real opportunity to appear before you today in an effort to acquaint you with some of my observations and my philosophy relating to the proper administration of the statutory and regulatory duties of OSM.

Unfortunately, rumor, innuendo and outright fabrication concerning the present and future activities of this office have been rampant during the period after the change of administration and prior to my confirmation and availability to this committee.

The professions and livelihoods of some depend upon creating and maintaining controversy. Veritable fountains of fiction have flowed forth

making all manner of charges and accusations concerning the activities and goals of the administration regarding the operation of the Office of Surface Mining. Chief among these allegations have been that we have set upon a course of action intended to "gut the regulations" and "circumvent the Act." Nothing could be more misleading. The truth of the matter is that we are attempting to review the regulations, rewrite those portions that have been identified as having been particularly troublesome and over burdening without corresponding positive impact, and to plug certain loopholes that have allowed circumvention of the intent of portions of the Act.

My hope, and I believe it to be that of the staff is to improve the regulations to the point that they can survive administration changes in the future, thus giving the States, the mine operators and OSM, for the first time, understandable, reasonable and workable regulations, upholding every Provision of the Act and the spirit and intent of the Act.

The drafts of a number of proposed changes in regulations are now out for comment. The comment period for the so called "state window" regulation was extended by agreement by Secretary Watt to your requests, Mr. Chairman. We have furnished your staffs with drafts of all of the rule changes that have been proposed by the agency and will continue to keep you current on all additional proposals.

Another allegation has been that the adoption of the "state window" regulation will amount to the adoption of S. 1403 by regulation. This, again, is fiction. The Secretary's regulations will remain as the Benchmark against which all State programs will be measured. Some question the "as effective as" provision and question why it is not stated as "as stringent as." I submit that the measure of a good rule is not its stringency but its effectiveness.

I firmly believe that the proposed "state window" regulation is not unlike

the interpretation given in at least one letter issued by the previous administration, written by then Deputy Director Paul Reeves to a Mr. Christie of Grafton Coal Company which I quote, in part, "However the present language does not preclude adoption of alternative provisions that are equally effective as long as they are no less stringent than the Federal provision. Generally, "no less stringent means "equivalent, that is, equally effective." Another section of that letter states, "in conclusion, we believe that the existing regulations proved the flexibility that is necessary to allow States to develop programs that reflect local conditions while meeting the purposes of the Act."

Mr. Chairman, I submit that that unannounced policy of the previous administration, which, had it been properly aired, could have solved many of the problems encountered by the States in the submission of their programs.

I further maintain that the proposed "as effective as" "state window" regulation goes no further in allowing flexibility in the approval of state programs than did the policy statement of the previous administration which failed to receive proper circulation. We, on the other hand, have proposed to state that policy in the form of regulation, available to all who are attempting to work with the regulations.

If this Nation is to regain a strong economic and industrial base, it is absolutely essential that we produce coal at the lowest possible cost, in keeping with sound environmental practices. Every increase in the cost of coal, as the principal fuel for the generation of electric power ricochets through the economy causing additional inflation. Since coal will be the principal feedstock in our synthetic fuel production efforts, every increase in coal prices delays the day when synfuels can become economically feasible fuel alternatives.

Despite the States' frustrations to achieve primacy and the burdensome

regulations that they and coal operators have had to live with, progress has been made. The states and industry are adjusting to the fact that the mining mistakes of the past can and must be avoided.

On Monday of this week, I had the privilege of being a part of an annual reclamation tour sponsored by the West Virginia Department of Natural Resources. I visited three mine sites on the ground and spent four or five hours in a helicopter doing close up observation of an additional 20 to 25 minesites.

If you gentlemen would like to see first class mining and reclamation practices and be able to contrast those with the remnants remaining from unregulated steep slope and mountain top removal surface mining, take a few hours to see what I observed on Monday in West Virginia. Mr. Chairman, your many years of work in steering this act through the Congress have not gone unrewarded.

Additionally, if you question the ability of a state to enforce the Act and the Regulations, talk to the people in the states, and they will tell you, as they have told me, that as long as they have the Act and the Secretary's Regulations, coupled with good Federal oversight, they will have few problems in enforcing their programs. We intend to give the states the backing they need.

The OSM has provided grants to the states totaling in excess of \$50 million dollars in aid to setting up their programs, and recruiting and training personnel to implement their programs. The only question at this point is "Do you trust the states?" Our answer is Yes.

Under the new proposal, additional flexibility will be provided to the State to account for the diversity of terrain, climate, biologic, chemical and other conditions within the State. State laws and regulations will not be required to parallel word for word the Federal law and regulations. Rather, the State provisions will be required to be "as effective as" the Federal provisions. That is, the State program must provide equivalent assurance of compliance with the requirements of the Act. The standards for judging the effectiveness of the State proposals will continue to be the appropriate Federal regulations. This proposed rule modification was pub-

lished in the Federal Register on July 1, 1981, for public review and comment. In accordance with your request Mr. Chairman, we are currently in the process of extending this public comment period until August 12, 1981.

Under my direction, State primacy will be a central theme guiding the direction of the OSM over the next four years. We must acknowledge, that it is the States that will be working with the public and mine operators on a direct day-to-day basis and it is through their administration and enforcement of the program that meaningful reclamation in the field will be provided.

Notwithstanding, the Office of Surface Mining will continue to have an important role in assuring the protection of the Nation's environmental resources. We will provide regulations, guidelines and handbooks establishing minimum national standards and good engineering practices for mined land reclamation. We will work with the States in improving their administration and enforcement programs through direct technical assistance, through grants in aid, and through management and policy direction and advice. We will conduct a vigorous oversight program, geared toward working cooperatively with the State regulatory authorities to assure that they have the capabilities, and are in fact carrying out the mandate and responsibilities of the program.

This approach recognized the basic framework, established under SMCRA. A framework that consists of an interim regulatory program with dual State and Federal enforcement and a permanent regulatory program with primary jurisdiction resting with the States. I support this approach and we will work toward the goal of making the surface coal mining regulatory program a model of how the States and the Federal Government can work together to accomplish a mutual goal. I believe it makes programmatic and economic sense to plan now to effectively administer the program over the long term.

The first major step in this direction is the reorganization of the Office of Surface Mining. Over the past several years the States and industry have voiced concern over the burdensome and redundant structural policy making in the Office of Surface Mining and the diffi-

culty in obtaining coordinated policy decisions. Under the reorganization, we will increase our capability for carrying out our responsibilities under the permanent program in two regards: First, we will increase our direct responsiveness to State needs through the creation of thirteen State liaison offices and six field offices with responsibility for dealing directly with the States in inspection oversight, grants-in-aid and grants for reclamation of abandoned mined land; and, second we will create two technical centers to respond to the States technical needs, provide assistance to small operators, carry out Federal reclamation projects on abandoned mined land, and oversee the process of premining review. While major policy direction and decisions will continue to be made out of the Washington Headquarters office, the new organization will give us a better ability to respond to our day-to-day programmatic responsibilities and develop the sophisticated technical expertise necessary to handle persistent problems with mined land reclamation.

I understand the apprehensions generated over the reorganization. Mr. Chairman, we are honoring your request to delay reduction in force procedures for 30 to 60 days in our Denver and Kansas City offices to show our spirit of cooperation. However, I am concerned that the continuing debate and uncertainty merely aggravates these apprehensions. For the sake of the employees and the program, I hope that further debate on this issue can be resolved as quickly as possible.

A second important area of concern is OSM's regulations for surface coal mining and reclamation. I support the efforts of the President and the Secretary to bring forth a reform of the overburdensome Federal regulatory structure that plagues the Nation's economy. In speaking with the coal industry and the States, I am convinced that they are not opposed to the objectives of the regulatory program, rather, it is the non-cost effective means of achieving those results that are frequently dictated by regulation and the absurdities in site-specific application of those standards that is costing the program its credibility and effectiveness.

Under my direction, the OSM's regu-

latory reform effort, will acknowledge the broad goals of (1) increasing the State's role and responsibility in the regulation of surface coal mining and reclamation operations; (2) providing a framework for increased coal production to maintain the Nation's energy supply, and (3) performing the agency's responsibility to provide a national framework for the protection of the environment from the adverse effects of coal mining.

Several methods will be utilized concurrently to achieve the overall objectives of the regulatory program:

- We will provide a set of nationally uniform minimum standards for surface coal mining and reclamation;
- we will provide technical guidelines and handbooks on the application of the national standards to conditions encountered in the coal fields;
- and we will establish meaningful support to the States and oversight of their execution of the requirements of the program.

In reviewing and rewriting the agency's regulations, I recognize that the "meat axe" approach is not the answer. I want the regulations to be examined carefully, with full input from this Committee, the public and the States.

Considerable publicity has been generated by the debate over the issue of performance versus design standards. Let me assure you that in no case will detailed design standards be deleted from the regulatory program without providing an alternative effective means of assuring environmental protection.

However, it is my opinion that in today's surface mining operations competent engineers, hydrologists, agronomists and other professionals, are better able to design an operation and achieve equal or better reclamation and environmental results through the application of performance standards, than through general design standards that must be capable of application at all mining operations throughout the United States.

We in Washington do not have a corner on mining and reclamation technology and we cannot afford to tie the industry to design standards so rigid that the industry is precluded from building that "better mousetrap." If flexibility in design is not allowed, we

forever tie the industry in the "Model T" era of reclamation while it should be an improving art.

It was, in fact, a miner who called a State official one day, saying "I've got the answer to contour mining reclamation." Thus was born what we call the "haul back" method which has proved to be the best and least expensive steep slope reclamation method.

The rock drains in wide use today in valley fill and head of hollow fills were not the ideas of OSM but those of State officials working with operators.

It must be remembered that design standards do not account for site specific conditions and, therefore, frequently result in absurdities in application and/or excessive and costly over-or-under design. Thus, they are rarely a cost-effective means or an environmentally sound method of providing environmental protection. Unlike design standards, performance standards emphasize results; that is, actual reclamation and environmental protection. The difference is not one of specificity or enforceability; rather, it is the point of application. I anticipate that under certain circumstances selected design standards will be retained in the regulations. This will occur particularly in those circumstances where a performance standard cannot be developed in a manner that will meet the objectives of the Act. In other circumstances, it is reasonable to anticipate that performance standards will be fashioned to provide the national regulatory framework within which the States must structure their programs.

Another area of major importance to me is the reclamation of abandoned mined lands. This country resolved four years ago to reclaim as much of the preexisting problems as possible and to prevent similar problems from developing in the future. Yet, we still have \$461 million sitting in the treasury while we debate overburdensome Federal regulations and State primacy. Actual reclamation efforts have lagged and it is my goal to assure that these is meaningful progress made over the next several years toward executing a coordinated program to reclaim these abandoned mined lands.

As I previously mentioned, each State can achieve primacy within the

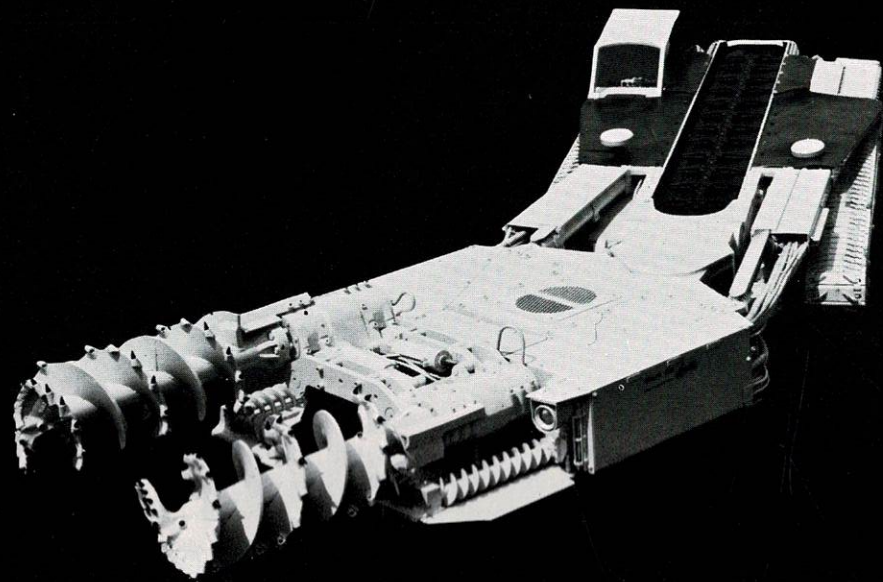
next six months. This will allow us to begin to transfer more abandoned mine land reclamation funds to the States to carry out State reclamation programs. These States were prepared and are in fact anxious to accept this responsibility.

Over the past few years we have seen numerous stop gap efforts to fill the void created by confusion and delays in implementation of this program. Some positive strides have been made, but for the most part the effort has been disjointed and marginally effective. We are just in the process of completing three major steps in the development of a nationally coordinated AML response effort: First, as noted, we are working with the States to get State programs approved so that those individuals closest to the problems can set their priorities and assure the cost effectiveness of reclamation under the program. Second, we are in the process of finalizing a series of handbooks and manuals giving detailed technical guidance to the States, the industry, and others in the art of abandoned mined land reclamation. Finally, we are in the process of completing a national inventory of abandoned mine lands which will allow us, in working with the States, to set priorities for reclamation projects and to assure that the more significant problems receive first consideration. Working from this framework, the OSM will be able to assure the greatest benefit for each tax dollar spent on mined land reclamation and minimize the development of abandoned mined land emergencies.

As I stated at the outset Mr. Chairman, I appreciate this opportunity to appear before your Committee and I am very positive about OSM's future role. I believe we can and must resolve the immediate issues facing us and get on with the job of mining coal and reclaiming mined land in an environmentally acceptable and an economically competitive manner. I stand prepared to work with you and this Committee over the weeks and months ahead and look forward to establishing a relationship of mutual respect and consultation.

I hope to be back with you tomorrow to make a closing statement and to answer any remaining unanswered questions.

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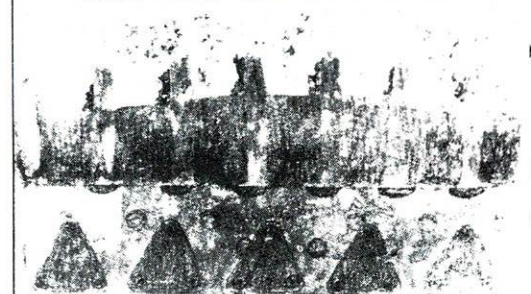
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James W. "Bill" Anderson at the dedication ceremony of Anderson Field.

Anderson Field

One of the Association's charter members was honored last summer by Concord College, in Athens.

James W. "Bill" Anderson, of Anderson & Anderson Contractors, Inc. was a

major contributor in the drive to construct a new baseball facility at the southern West Virginia college. His generosity was recognized with the dedication of "Anderson Field".

Semi Annual Meeting

Time is running out for Association members to make reservations to attend the Semi-Annual Meeting, scheduled for January 14-17 in Boca Raton, Fla. Hotel reservations must be made

directly with the hotel, and should be mailed as soon as possible. For additional reservation forms, or further information, contact Patty Bruce at the Association office (304) 346-5318.

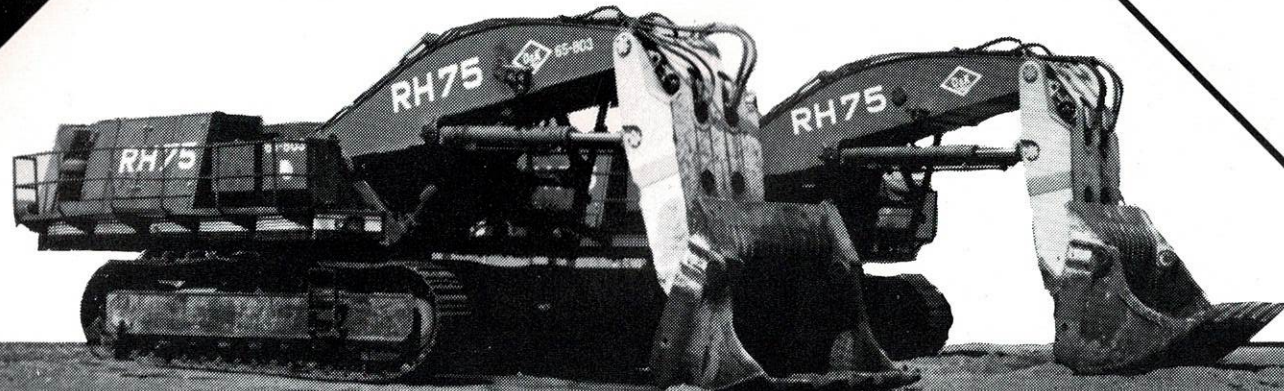
Symposium

Members should also make plans for January 27-28, the dates for the annual Surface Mining Symposium, once again scheduled for the Charleston House Holiday Inn, Charleston.

As always, the day and a half program will be filled with relevant speak-

ers and timely topics, and highlighted by the luncheon presentation of the annual Reclamation Awards, jointly sponsored by the Association and the West Virginia Department of Natural Resources.

Another release from James Bay



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| 39 Crawler tractors: Komatsu D 155 AST (8), M.F. 700C (4), Terex 82-20 (6), Terex 82-50 (12), F.A. 21B & C (7), HD 31 (2) | 16 Air track drills: Joy MS-7 (4), MS-4E (5), I.R. ECM 350 (5), A.C. (2) |
| 2 Crawler loaders CAT 983 | 3 Marion 13 C.Y. diesel elec. shovels |
| 9 Compactors: I.R., SP 60, SP 54DD (4), TAMPO VC400 (5) | 4 Hydraulic backhoes: 3 C.Y. (1), 7/8 C.Y. (3) |
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