

MINE RECLAMATION IN ARKANSAS

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Open cut mine land reclamation laws have only been effective since 1971 in Arkansas. Since that time all land affected by mining had to be reclaimed. To guarantee reclamation, the first law required a \$500 per acre surety bond be posted with the Arkansas Department of Pollution Control and Ecology. The Arkansas Open Cut Land Reclamation Act of 1977 changed the bonding requirements to the estimated cost of reclamation. Even so, there were no specific guidelines setting forth required species of grass, legumes, or trees to be used in reclamation. Consequently, the trend was to revegetate with grasses or legumes for pasture.

Mining in Arkansas is done on relatively small tracts which are mostly unforested; therefore not many forested acres have been disturbed. For example just over 300 acres were considered reclaimed during the period July 1979 through July 1980. With the advent of the Surface Mining Enforcement and Reclamation Act of 1977 (Public Law 95-87) requirements are more stringent, and coal mine operators are being encouraged to plant tree seedlings as part of their reclamation efforts.

Pre-law mine spoils have revegetated naturally to mixed hardwoods and some softwoods. To effect reclamation of these lands, would, in some instances, probably do more harm than good because of destruction to established cover, notwithstanding the loss of wildlife habitat.

It is expected that in the near future, strip mining activities, especially lignite, will increase significantly. One lignite

producer alone intends to disturb 1,000 acres per year. Lignite mining will be concentrated in heavily forested areas in which forest industries own significant acreages. Therefore, it is anticipated that much of this land will be reforested mostly with softwood species with some hardwoods.

The Arkansas Forestry Commission, in cooperation with the Arkansas Department of Pollution Control and Ecology, Bureau of Mining, Soil Conservation Service and other agencies, have made plans to install tests to determine which species of trees are best adapted to grow on various strip mined spoils in Arkansas. These tests are to be established on old pre-law spoils owned by the Corps of Engineers near Russellville, Arkansas, which is to be reclaimed under a research and development project financed by the Abandoned Mined Lands Program of the Office of Surface Mining. This research project should give us much needed information on appropriate species of trees to recommend for revegetation of surface mined areas.

Currently, species are recommended based on other state's research plus local tree species appearing adaptable. Arkansas Forestry Commission nurseries are presently producing limited quantities of various species of hardwood seedlings. Both regular and genetically improved loblolly and shortleaf pine are also being grown for sale to private landowners throughout the state. Special efforts can and will be made to procure from other nurseries appropriate seedlings for revegetation for reclaimed areas until such time that Arkansas Forestry Commission nurseries can produce sufficient

quantities of seedlings necessary for reclamation efforts. Arkansas Forestry Commission nurseries will produce required seedlings as these are determined.

By working closely with the Department of Pollution Control and Ecology, the Arkansas Forestry Commission will be kept informed of the reclamation plans of various companies and individuals. This will give us advance information as to the species and amount of seedlings required so that the nurseries can plan accordingly.

In the event that a surface mined area has been reclaimed in grass and the landowner decides that he wants to grow trees, he can get additional financial assistance through the Forestry Incentives Program (FIP) and technical assistance from Arkansas Forestry Commission field foresters. These measures should encourage additional landowners to revegetate more reclaimed areas with tree seedlings.