

**Mississippi's
Non-Industrial Private Landowners
Reforestation Programs**

by

1) Everard Baker

Abstract: As we enter the decade of the 1990's, the demand for reforestation will be ever increasing. The increase in timber harvest activities complete with dramatic changes in utilization and development of new products places the biggest burden on adequate timber supplies. On Mississippi's private non-industrial lands regeneration totals 1,224,608 acres over the last ten years, while harvest of all merchantable timber took places on 202,000 acres annually. The demand for cost-share incentives totals 6 - 7 million dollars annually. There is a definite need to look at changes in present-day programs in order to not lose the interest of the private non-industrial landowner in Mississippi.

Reforestation has always been a tremendous concern to landowners and the general public in the State of Mississippi. From as far back as the 1930's when forest industry completely denuded nearly the entire state, major reforestation efforts dating back to 1940 began to be a major management need of landowners. To give you a little background on our State, out of a total of 30 million acres; commercial forest land encompasses 16.9 million acres. The private forest landowners has title to 66% or 11.1 million acres. In comparison to states like Georgia and Alabama, these figures are relatively small but our reforestation efforts have always been large.

1) State Private Lands Forester; Mississippi. Forestry
Commission, Forest Management Division

Mississippi's forestland is comprised of many species and species combinations. We have some of the most productive pine and hardwood sites in the South. We save 8.2 million acres that are classified as suitable for pine production and hardwoods are the desired species on some 3.1 million acres. While the remaining acreage is desirable for hardwood primarily there are sites in the state where pine/hardwood mixtures are highly productive. I will relate to this later in this presentation. These type sites total 5.6 million acres.

Our emphasis and concern for reforestation began to take shape in the late 1940's with the implementation of the Yazoo-Little Tallahatchie Project in 19 counties in North Mississippi. Even though this was a federal project sponsored by the U.S. Forest Service, it was aimed at the private non-industrial landowners in that area. By the end of this project, pine tree planting was accomplished on over 500,000 acres. Of this total nearly 250,000 acres of woodlands were regenerated. The primary objective of this project was not timber production as one might imagine, but was to stabilize the eroding hillsides in this area of the state. This in turn protected site productivity and prevented devastating floods that plague the area after the original stands were removed prior to World War II. This project was finally closed in 1975.

Even though timber production was not the primary concern at that time, it has turned out that since 1980 there have been 3 major industries and several smaller ones located here to take advantage of this resource.

Next came the years of the Soil Bank Program. During the late 1950's and early 1960's, Mississippi's regeneration efforts statewide stepped up significantly. As a result of this program 715,000 acres were planted under this program, all of which were pine. As these stands began to mature, they also lured major industrial concerns to this state. Some of these original stands still make up our forestland base acreage today.

From roughly 1965 to 1974 there were virtually no incentive programs as we know them today. Tree planting totaling 323,000 acres were accomplished according to U.S. Forest Service records for private non-industrial landowners in this State. While I can find no evidence of a major influencing factor in these accomplishments for this period, I imagine that this was done either with Agricultural Conservation Program funds or without any cost-share assistance. I consider the later (without assistance) being the better part of these accomplishments during this period.

This brings us to the mid 1970's and the incentive programs as we know them today. As you may recall, the U.S. Congress led by Senator John Stennis was instrumental in passing funding for the Forest Incentive Program in 1974.

This was done out of concern in the South for the lack of regeneration of cut-over land primarily owned by the small private non-industrial landowner. Very little was accomplished in the first few years of this program; however, since 1976 landowners in Mississippi have regenerated 344,000 acres, through 1990 planting season.

Our cost-share rates, for the Forest Incentive Program have varied from as high as 75% to a low of 50% of the actual cost of individual practices. Our maximum rates paid to landowners are among the lowest in the nation. During the same period 1976 to present a total of \$14,170,049 of federal cost-share funds have been paid to forest landowners in this State. This has resulted in Mississippi having the most cost-efficient program in the nation, with our average cost per acre for regeneration being \$41.00 per acre.

Another program that has been instrumental in reforestation in Mississippi is the Agricultural Conservation Program. I mentioned this program earlier as having been used in some earlier regeneration efforts. I do think it played a very small part. It is specifically designed as a conservation practice and is used very little. However, when you look at our records since 1984, we have regenerated 53,584 acres to pine at a cost of \$2,533,317 in federal cost-share assistance. It is only used on small tracts of 20 acres or less and its cost-share rate is set at 75% of the actual cost.

To complete our federal programs, Mississippi implemented the second largest Conservation Reserve Program under the 1985 Farm Bill. Originally, this program was geared toward pine regeneration; out of which, Mississippi contributed some 410,000 acres converted from marginal, highly erodible cropland to pine production. This program, as you may or may not know, like others in the past is not oriented toward timber production, but is designed to be a conservation measure. However, these acreages that have been planted will greatly enhance the timber resource of this state.

That brings us to our State Incentive Program called the Forest Resource Development Program enacted by the Mississippi Legislature in July 1974. This was one of the first cost-share incentive programs initiated by an individual state. This program is entirely financed by severance tax collected by the State Tax Commission. Eighty percent (80%) of all tax collections go toward cost share funds for regeneration and release work for landowners in the State. Like other Forest Incentive Programs over the years the percentage amounts paid have ranged from 75% in the early years to its current 50% rate. This is a result of the increased demand for funding for regeneration of private non-industrial lands. As with other programs there are maximum limits paid on individual practices, ours is currently standing at \$8,000 per year per applicant.

Since 1981, there have been several unique practices designed for cost-share assistance under this program. In each case, Mississippi was the first to design practices such as these for incentive programs. These special practices are as follows:

- 1) Silvicultural Prescribed Burning which is used for hardwood understory control in pine stands. This may not directly relate to regeneration, but it is designed to maintain productivity of the site.
- 2) Direct Seeding of Hardwood. This practice is used on desirable sites as a low cost alternative to planting bareroot stock, it also lessens the stress of nurseries to produce expensive hardwood seedlings.
- 3) Natural Regeneration of Hardwoods. This practice is used where the most desirable method for an even-age stand of hardwood is coppice regeneration.
- 4) Mixed-Stand Regeneration. This practice is used where desirable species of both pine and hardwood can occupy the site. Planting can be done with pine and/or with hardwood stock to enhance or establish stocking levels of either species.

In order to put all this in prospective; in the last 2 decades we have established 1,622,118 acres of primarily pine plantation on private non-industrial lands in this state.

Since 1974 when the incentive programs began to make an impact, our efforts have resulted in roughly 1,400,000 acres or 90% of the regeneration work have been done under these programs.

Now, where will the next decade and the year 2000 lead us and how do we need to adapt to the upcoming changes and concerns.

First, let us take a look at current timber demands. There is more timber being harvested than ever before and the current level of utilization is probably higher than its ever been. This is due to changes in technology in pulp and paper and wood products markets. Also, the overseas markets are influencing timber demand as it never has before. Mississippi's ten-year average from 1979-1989 commercial harvest was 202,000 acres on private non-industrial lands. This past year, I am sure that average will be broken as our best estimate of commercial harvest will exceed 300,000 acres. This is resulting in an increased demand for assistance in regeneration, at a level that we cannot fund. Annually our requests have exceeded 6 million dollars but we currently fund around 4 million dollars in cost-share funds. As you can see we are continually playing **"catchup"**. **Now is the time to consider other alternatives such as site specific management. Plant hardwoods where they will grow and stop trying to convert sites from an economical and emotional need.**

Another factor and a very costly one from a nursery standpoint is the demand for hardwoods. Quality hardwood stands are diminishing and indirect relation, the environment impact for desirable wildlife species is on the upsurge. Today, we are on the threshold of beginning to reestablish hardwood stands with supplemental planting of bareroot stock and acorns, with other light seeded species becoming established naturally. This is a result in the abandonment of lands, normally considered agricultural, but due to loss of rural population, changes in age class of ownership and slumping agricultural economy.

This current interest in the wildlife aspect of forest management and the concern for wetlands enhancement and protection will gain ground as overall concerns for the environment grow.

The Conservation Reserve Program alone will bring 20,000 acres back into hardwood production in Mississippi. In the drafting of the 1990 Farm Bill, wetlands reestablishment will be a major factor in the bill. Along with the 1990 Farm Bill, there are countless bills concerning wetlands before Congress today, with a major portion containing reestablishment provisions.