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# THE SOUTH'S THIRD FOREST

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THE SOUTH'S THIRD FOREST is a term that began to appear in print early in 1969. Chances are, it will become not only a figure of speech, but a way of life throughout the South. What will the Third Forest mean to this region and the nation, and what measures must be taken to make it a reality?

It all began several years ago when a group of forest industry representatives and private timberland owners became concerned about the future of the South's forest resource. They agreed that an in-depth analysis of southern forests should be undertaken as a basis for planning to meet the nation's needs in years ahead. Support for the study was solicited and obtained from private timberland owners and representatives of every phase of the wood-using industry.

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The study was sponsored by the Forest Farmers, Southern Pine, Southern Hardwood Lumber Manufacturers, and American Plywood Associations.

## **Southern Resource Analysis Committee**

Once this broad support for the project had been obtained, the Southern Resource Analysis Committee was formed to carry out the study. The Committee's objective was to determine how the South had achieved its currently improved timber position, and to recommend steps for maintaining and accelerating favorable trends.

For two years, many highly qualified and respected members of the forestry profession poured over volumes of material and studied thousands of bits of information and figures to piece together a picture of forestry in the South—past, present and future.

When completed early in 1969, the 100-page report was titled *The South's Third Forest*. It is a comprehensive study which provides this region with a valid basis for planning to meet future demands. Space does not permit discussion of the report in detail. However, its findings and recommendations are so important to the South and the nation, that it is worthwhile to review some of the highlights.

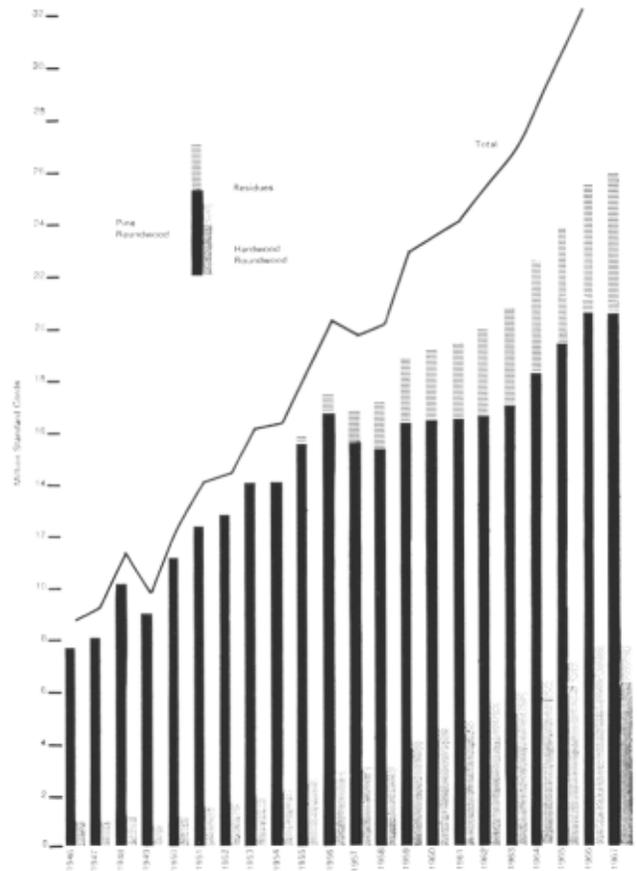
## The Three Forests

The report indicates there have been three distinct periods in the southern forest. The First Forest, the virgin forest which was a result of nature's own handiwork, was cut many years ago.

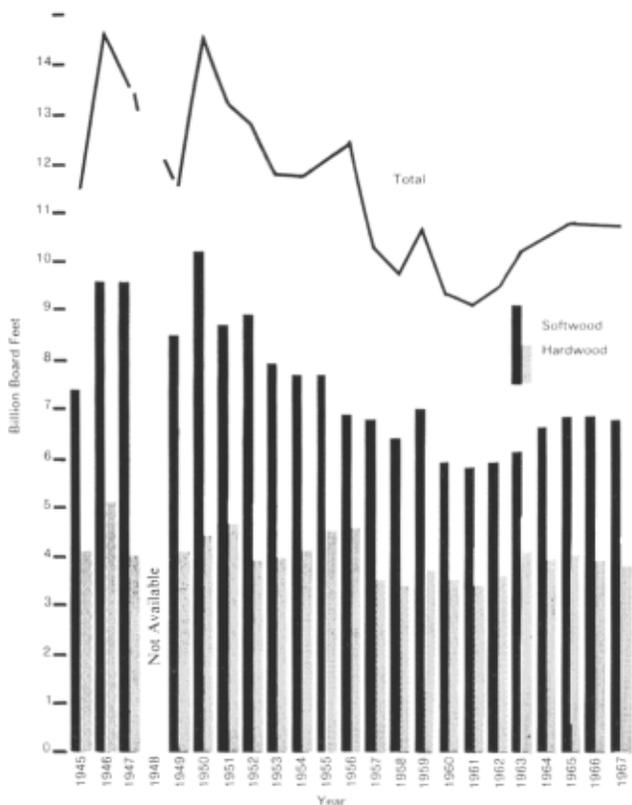
The Second Forest is the one we are presently managing and harvesting. It is the result of a number of factors: reduced harvesting during the depression; conversion of abandoned farms to timber-growing acreage; application of sound silvicultural practices on industrial holdings; creation of tax incentives for timber growers; and the joint efforts of industry, other private landowners, and state and federal governmental agencies.

The Second Forest is a result of man and nature working together, and, in many respects, has been more prolific than the First. It has been referred to as the "miracle in the southern forests." In 1935 these forests contained 120 billion cubic feet of wood. Since then, 169 billion cubic feet have been harvested. But these forests still contain more than 150 billion cubic feet! Twenty-five percent more inventory now than before that mammoth harvest!

The growth of the southern wood-using industry during this time has been tremendous. For example: since 1961, production of southern pine lumber has increased 25 percent; an entirely new industry, pine plywood, was born in 1963, and already 16 percent of



*Southern pulpwood production, pine and hardwood, roundwood and residues—1946 to 1967.*



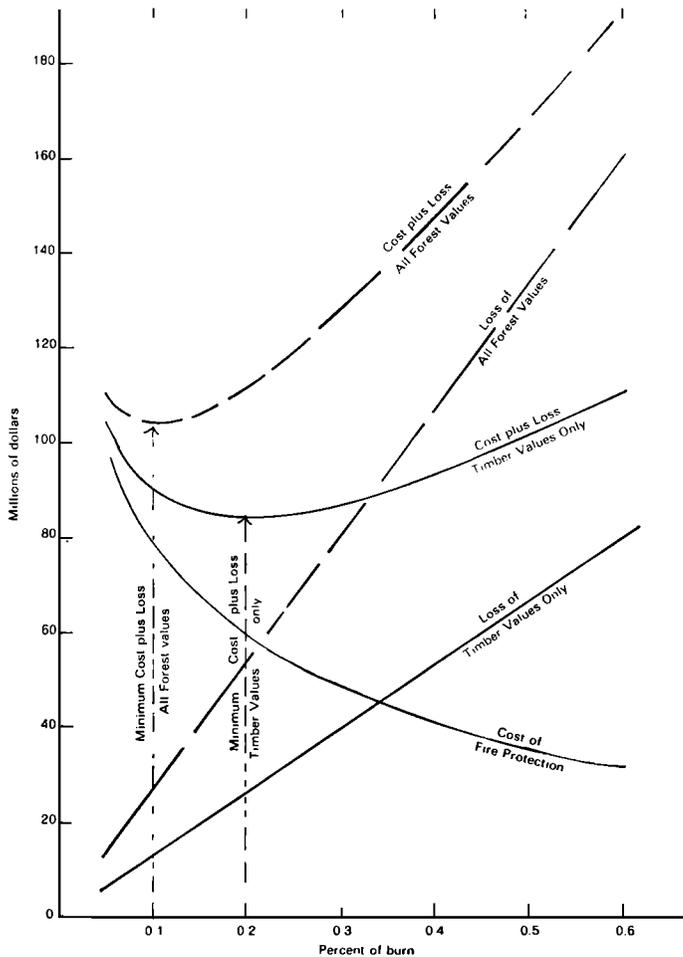
*Softwood and hardwood lumber production in the South 1946 to 1967.*

the nation's plywood is produced in the South. The region now produces 63 percent of the nation's pulpwood, over half of its hardwood lumber, nearly three-fourths of its hardwood veneer logs and bolts, and 85 percent of its pressure-treated poles.

In 1966 (the latest estimates available) the harvest, manufacture, remanufacture, transportation, and marketing of southern wood products added \$10 billion to the South's economy. Distribution to the North produced an additional \$4 billion, making a total contribution of \$14 billion to the nation's economy. Of equal importance, is the fact that the equivalent of more than a million full-time jobs was provided; a need for countless other services and goods was created; and *ad valorem*, income, and sales taxes were paid to support all levels of government. Directly or indirectly, the production of wood in the South touches every person in some manner.

But basking in the glory of past accomplishments will not guarantee we can continue this trend indefinitely unless dynamic measures are taken. We must develop a Third Forest—a forest capable of meeting the requirements of generations yet unborn.

The needs of future generations stagger the imagination. The report points out that with the anticipated housing boom predicted by the federal government, the demand for southern pine lumber could double in the next 10 years alone. It is estimated that by 1978



*Estimated cost of fire protection related to loss of timber values and all forest values, with cost plus loss, at 0.05 to 0.6 percent levels of burns, in the South.*

demand for southern plywood will increase 60 percent; and as consumption of paper and paper products increases, the South must double its present production of pulpwood by 1985. By the year 2000, the report estimates that the South will be expected to produce more than one-half of all the nation's wood products. To do this, the Third Forest must be at least 2.3 times more productive than today's southern forest.

Obviously, we will have to double the annual growth of timber in the South before year 2000. The challenge seems awesome, but not insurmountable because the odds are in our favor. The system to accomplish the job has been tried and proved. By working together, industry, state and federal government, and private landowners created the Second Forest. The Third Forest can be developed by using the same basic principles on a more massive scale.

### Changes

The report points out that in creating the Third Forest, our task will be complicated by a number of changes that have occurred since the formation of the Second Forest. There are now more people and less land, and this trend will surely continue. Also, we are dealing with an ever-changing pattern of landownership; where the owner once lived on and worked the

land, he now lives in the city and sees his land infrequently.

The following is a breakdown of forest land ownership in the South: 40 million acres are owned by the wood-using industry, 17 million acres are in public ownership, and 141 million acres, by far the vast majority, are owned by private individuals. Industry and public lands, for the most part, are well managed. The great bulk of the land, about 70 percent, is in private hands, and most of it is either poorly managed or not managed at all. Here is the land base which must be more effectively managed if we are to produce the additional forest products that will be needed.

One should not be too quick to criticize the private landowner for the current condition of these lands, however. According to the report, the private owner has had little incentive to spend the time, effort, and money to improve his forest. He is generally not motivated to embark on a program beyond his technical knowledge and financial means. He is confronted with high interest rates and a lack of immediate return on his investment. In many cases the size of his tract simply does not appear to justify the economics of the venture. In view of these adversities, how can the South create the Third Forest and continue to contribute to the needs of our region and nation? A plan of action in the form of 14 recommendations is presented by the Southern Forest Resource Analysis Committee in the report. Foremost, they call for a closely coordinated effort by government, industry, and private landowners to implement the 14 points.

### The Committee's Plan

To double the growth of our forests, and have the Third Forest in full production by the year 2000, these are the committee's recommendations:

1. *Planting, Regeneration, and Timber Stand Improvement*—The quality and quantity of growing stock must be increased on a huge area. At least 10 million additional acres should be planted with genetically improved seedlings by 1985. These are in addition to areas that will have to be planted after timber harvests. State forest service nurseries must be expanded so they will be capable of producing the additional planting stock. Over 20 million acres of low-quality upland hardwood should be converted to pine. In other areas thinning and timber stand improvement is needed to improve species composition and spacing. In all two-thirds of the southern forest lands require some treatment. To make improvements on private land economically justifiable, the report recommends consolidation of numbers of small tracts for professional timber management and marketing benefits.

2. *Protection from Wildfire, Insects, and Disease*—Wildfire continues to be the number one problem in the southern forest. Although the state forest services have done an excellent job in reducing forest fire losses over the years, this record must be improved. Past experience indicates that for each dollar invested in fire control, there is a four-fold return in timber values. Fire prevention does pay, and it reduces the outlay for fire control equipment. Additional efforts

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should be made to detect and control insects and disease.

3 & 4. *Utilization and Marketing*—Industry should make every effort to increase utilization of cull trees, as well as residues generated in the woods and mills, to reduce cutting pressures on inventory. More stable markets must be provided for primary forest products to reduce drastic fluctuations in raw material demand. Since most landowners prefer annual income from their forests, a cost-sharing land improvement program between landowner, government, and industry might be the solution. Under such a program, the owner could dedicate his land to timber production and pay a fraction of the development cost. The federal government could continue to pay a share of the cost of planting, stand improvement, and other practices through the Agricultural Conservation Program which has been in effect for a number of years. The state government could provide additional cooperative funds for the state forest service to plan and administer the program. The forest industry could then perhaps, justify an agreement to provide annual payments to the owner for developing timberlands for a future supply of wood. New ideas and alternatives, of course, will be found. It seems at this time, however, that it is best to channel all activities through the framework of existing organizations.

5. *Property Taxes*—Tax incentives are extremely important because tree growing is one of the longest range economic activities engaged in by man. Capital gains treatment for timber income recognizes this; therefore, it is essential that it be continued. The state and local tax situation is already showing signs of getting out of control in a number of areas across the South. For instance, the assessment ratio varies as much as 80 percent between some southern states. Private owners can be encouraged to grow timber only if state and local property taxes are equitable and related to actual growth capacities. Thus, a low capacity site should not be taxed to the same extent as a high capacity site.

6. *Minimizing Loss of Timber Lands*—The report estimates that some 10 million acres of forest land will be withdrawn for agriculture, urban expansion, rights-of-way, reservoirs, recreation, and other uses in the South by the end of this century. With the land base shrinking, it is imperative that governmental agencies exercise the power of eminent domain with prudence. Any large withdrawals of land from timber production should be regarded as major policy determinations, and handled at the highest legislative level.

7. *Recreation and Urban Development*—Most forest lands should not be withdrawn from production for a single use such as recreation. Many of the larger wood-using industries have proved on a massive scale that recreation and timber growing can be carried out simultaneously. It has been demonstrated there will be an abundance of game in the Third Forest. Deer, turkey, quail, and rabbits will be in greater numbers than when the Indians were here. Lakes will be stocked with genetically superior strains of fish, faster

growing and more aggressive. Nature trails will enable the bird watchers and wild flower enthusiasts to satisfy their desires. We won't have vast areas of wilderness, but the Third Forest will contribute immeasurably to the physical and spiritual needs of our people. The report does suggest, however, that there be a revision of state liability laws which discriminate against or unfairly penalize landowners who open their lands to the public.

8, 9, & 10. *Public Relations*—These three recommendations can be placed under the broad heading of public relations, since they concern communications. An effective communications program is essential because public understanding plays such a major role in any forest development program. The new urban-oriented public and their elected representatives should be informed of timber's contribution to the economy, and shown that a wisely used forest is essential to our society. There is also need to generate public support to continue treating income from timber as capital gain. Industry must continue to support programs that create favorable relations with government and people.

11. *Strengthening State Forestry Agencies, Associations, and Schools*—Some form of state forestry agency is the focal point for forest activities in each southern state. They have done more than any other public group to develop the Second Forest in spite of adversities such as low budgets, underpaid employees, and public apathy. The report suggests that efforts to develop the Third Forest should be directed through a single agent, such as the state forester. In view of this, state forest services must be adequately funded to help them meet these additional responsibilities. Schools of forestry also must be financed adequately if they are to train foresters who are qualified in modern business practices and scientific forest management techniques that will be required to develop the Third Forest. Broad public support for these expenditures can be achieved through effective, citizen-supported state forestry associations and organizations.

12. *Forest Research*—The report indicated that it was not possible to specify all research needs. It stressed, however, that research and development efforts should be increased in proportion to the contribution forestry and the forest industry make to the national economy. A vast amount of information previously not available is flowing from forest research centers as computers enable us to handle much more complex subjects and time is compressed from years into seconds. Some major areas where research must be intensified include: the use of fire as a management tool and the control of wildfires; control and eradication of insects and disease; development of advanced forest management techniques; development of strains of genetically superior trees; wildlife management and recreation; forest engineering, which includes mechanization of forestry operations from planting to harvesting.

13. *Responsibility Guidelines*—The report recommends that administrative responsibility for developing



*Preparing site for planting. At least 10 million acres in the South should be planted with genetically improved seed or seedlings by 1985.*

the Third Forest be handled through the framework of existing organizations, and cost for its development should be closely related to the distribution of economic benefits from timber values. For example, the South accounts for 38 percent of the value added to the nation's economy by timber; therefore, 38 percent of all federal appropriations for national forestry programs should be allocated to the South. A similar approach could be adopted within the South. For each dollar of stumpage, about \$16 is added to the region's economy. The benefit to the landowner from stumpage is 6 percent, 34 percent to the forest industry for harvesting and primary manufacturing, and 60 percent goes to all others for such things as secondary manufacture, transportation, and marketing. Using these ratios as a basis, the costs for forest development, stand conversion, and timber stand improvement could be shared accordingly.

Wildfire control costs, the report states, should be based on responsibility for fires. Statistics indicate the public is responsible for 86 percent of the acreage burned and the landowner only 14 percent. Assigning equal weight to the timber benefits received and his responsibility for fire, the public should bear 90 percent of the cost for fire prevention and control and the landowner 10 percent. Costs for other projects such as insect and disease control, research, and special programs could be financed on a similar cost-sharing basis by the landowner, industry, and government.

14. *Implementation*—The final recommendation was to establish a permanent Southern Forest Resource Council to implement the program. Composed of representatives from the organizations that sponsored the study, this Council has been formed and is now active. Other organizations are urged, and expected, to take part in this massive undertaking. The Southern Forest Institute has already joined the effort.

## Conclusions

This concludes the committee's 14 recommendations. It is fully realized that the Third Forest will not become a reality easily, and the job will require patience, perseverance, and persuasiveness. But the committee's objective to increase the southern forests production to meet needs in 2000 will be met. We know where the efforts must be concentrated—on the 72 million acres of average-or-better timber growing sites which belong to a great number of private owners. We need not be concerned with industry and public lands. They will continue to be improved by the two groups.

The cost will be high, but the returns indeed make the investment worthwhile. It is estimated that cost of developing the Third Forest will average about \$100 million a year, shared in the proportion of about \$6 million by the small landowner, \$34 million by forest industry, and \$60 million by all levels of government. In addition, annual cost of fire protection will be approximately \$58.2 million, to reach a goal of 0.2 percent average burn. It may cost \$78 million a year in the South to reduce the loss to 0.1 percent, a goal justified in recognition of all forest values—air, soil, water, game, and recreation—as well as timber.

Why should forest industry make a great effort to grow wood on other private lands? The answer lies in surely rising stumpage cost if inventories are not rapidly built up to levels that can produce the volume of wood required. The effect of pressure on wood cost is illustrated by the direct relation between national forest pine stumpage prices per cord in 1966 and the percent of pine inventory in each state cut for round pulpwood that year. Where the pressures were low—between 1 and 2 percent of inventory in West Gulf States—prices were \$3 or \$4 per cord. In Florida, with pressure more than 5 percent, pine stumpage price was more than \$9 per cord.

National forest prices are the only ones available regionwide. They include variation associated with distance to mills, volume sold, species, and the like. But the relationship portrays the considerable effect of pressure on price. As mills expand and new mills start up, the added pressure will increase price. Unless inventories can be raised concurrently, prices will rise disproportionately. A dollar spent by forest industry now can save five in 15 or 20 years. Cooperation of the highest degree will be required by government, industry, and private landowners. Time is of utmost importance—most of the work must be completed by 1985.

Even now, the Third Forest of the South is beginning to materialize. Over 15 million acres—an area about the combined size of New Hampshire, Connecticut, Delaware, and Maryland—have been planted in pines. Development of the Third Forest to provide necessities and pleasures for a growing population is not a matter of purely local or regional concern, but a national urgency. □

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