



Alternative Opportunities for Small Farms: Forestry Production Review¹

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Due to the projected increase in the demand for forest products, there are several state and federal programs which make forestry investments economically attractive. As with any investment where taxes are involved, the degree of "profit" is influenced heavily by the owner's other incomes and tax bracket.

There are no minimum or maximum acreage requirements associated with a profitable forestry investment. Small acreages may be as profitable as large tracts if located within a reasonable distance from a mill; located in close proximity to other large tracts and harvested at the same time as the large tract; readily accessible during wet weather; supports high-quality products; and finally, the owner realizes the significance in treating it like a business which means marketing the products rather than just selling them.

MARKETING SITUATION

Wood products of the managed forest are numerous. They may include posts, pulpwood, chip-n-saw, sawtimber, veneer and poles -- all from one managed area. The form that the final raw wood product takes depends on the landowners financial status, market demands, quality of standing trees, species planted and risks -- all relating to how long the landowner decides to invest in the crop. The variety of wood products as well as the numerous

"non-wood" products that are generated from the managed forest make blanket production projections virtually impossible and economic analyses complex. Even with the assistance of professional foresters economic predictions regarding forestry investments may be no more than educated guesses. The landowner should keep this in mind when comparing returns from forestry investments to annual crops.

It stands to reason if the pulp and paper mills are located in the northern and western regions of Florida the northern regions of Florida will have the best marketing opportunities. If projections about increasing fiber demands are valid, and if Florida continues to lose 600,000 acres of commercial forest land as it did between 1970 and 1980, then forestry investments in north Florida may show higher profits from better markets.

LABOR AND CAPITAL

Preparing the site and planting the seedlings are the major activities that are necessary to begin a forestry investment. The landowner generally contracts vendors to do the work. Depending on the previous land-use site preparation may be as little as \$4 per acre (on recently abandoned agriculture land, for example) or as much as \$200 per acre (land that had a lot of low valued vegetation). Planting may be by hand or machine. Machine planting is generally contracted out and in 1984 dollars may be around

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\$25-\$40 per acre. This price would include the price of the seedlings.

Managed pine plantations do not require heavy expenses or management activities while they are being grown to economic maturity. Maintenance of firelines, conducted at cost by the Florida Division of Forestry, and occasional prescribed fires are generally the only expenses involved. These would not occur every year, but the average annual costs devoted to these and any other management activities would generally be less than \$6 per acre in 1984 dollars. Other intermediate activities would depend on the product that is being grown. While such activities as chemical weed control and fertilization may be considered, they are not always necessary nor economical. Thinnings, which would be needed for long rotation products such as sawtimber, of course would generate periodic income.

Considering the current tax incentives and the role these savings play in an economic analysis, most landowners would probably reap the greatest profits from investing no more than \$10,000 annually. The acreage planted under this plan would then be a function of the planting and site preparation costs.

SUITABILITY AND PLANTING SITUATION

Slash pine grows on the wetter sandy soils in Florida. Tree seedlings bred for rapid, straight growth, and fusiform resistance are available. Slash pine is especially suited to the flatwoods -- land supporting saw palmetto, gallberry and wiregrass. Longleaf pine grows on a wide variety of sites but grows best on moderately wet to moderately dry sites. Its use has been limited by difficulty in nursery production, planting, and delayed early growth while it is in the "grass stage." Research and development efforts promise to solve many of these problems.

Loblolly pine grows especially well on loamy soils that either occur in drainages or land suitable for agriculture. Abandoned crop lands that were once producers of good field crops usually grow loblolly pine well. Sand pine grows best on droughty sandy

soils that never get saturated with water. Of the two races recognized, the Choctawhatchee race is usually preferred over the Ocala race. A woodland dominated by turkey oak and sparse longleaf pine will usually grow sand pine rapidly. Sand pine also shows potential for Christmas trees as well as for pulp products.

Planting stock for Florida is generally supplied from two state-owned and six industry-owned nurseries. Many of the seedlings were germinated from genetically superior and disease resistant seed stock. Seedlings are generally planted in the late fall-early winter; therefore, seedling orders must be placed with the Florida Division of Forestry by June or July prior to planting season. Seedling order forms may be obtained through the county forester's office.

CULTURAL PROGRAM

Losses due to insect attacks on young pine seedlings often necessitate fallowing of the land, a practice that costs approximately \$1 million per year in Florida. The fusiform rust disease of young pines is our worst disease problem, causing many millions of dollars loss each year. Older stands can suffer significant impact from annosus root rot and pitch canker dieback. Pitch canker occurs periodically in devastating outbreaks. Bark beetles attack sawtimber trees and certain root diseases cause losses of up to \$2.5 million each year. The frequency and severity of many of these pest-related losses are affected by soil and climatic factors and forest management practices. These pest-related losses frequently can offset gains made in genetic improvement efforts and investments in intensive management practices.

Any long term investment inherently has risks, and forestry is no exception. Over 7,000 fires burned more than 135,000 acres during 1980. Although data have not been totaled, perhaps 10,000 fires burned over 200,000 acres during 1981. Prescribed burning to help prevent wildfires is common and is carried out by the Division of Forestry for a fee or by industrial and private foresters under permits issued by the state.