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The Land Utilization Program 1934 to 1964

ORIGIN, DEVELOPMENT,
AND PRESENT STATUS

U.S. DEPARTMENT OF AGRICULTURE • ECONOMIC RESEARCH SERVICE

SANDHILLS WILDLIFE MANAGEMENT AREA ²²

The Sandhills Project (LU-NC-3) in North Carolina illustrates developments undertaken in the naturally forested eastern part of the United States.

For the most part, the 113,000 acres purchased in the Sandhills area was unsuited to successful cultivated crop production and more adapted to upland game on the hills and fish in the streams, ponds, and lakes.

Forest stand improvement at first was a leading job. Because of the need for forest-tree stock to restore this sandy area to forest cover, a forest-tree nursery was one of the first things to be developed on the Sandhills project. During the year 1937, 13 million forest-tree seedlings were produced and used on the project and other nearby projects where similar conditions prevailed.

Wildlife development also received high priority on the Sandhills project. A fish hatchery was established to provide fish for restocking streams, lakes, and ponds in the project area and in other projects in the Southeast. Protective cover for upland game and food crops for game birds were planted. Recreational facilities on this project included development of an artificial lake, and the building of cabins, trails, camping areas, and picnic grounds for the use of the large number of visitors.

Game farms were developed for production of quail, turkey, and small game animals. Construction of impounding dams as

sources of water for many fish breeding pools, fishing sites, and other water needs in the area was completed at an early stage of project development. Lakes on the project are now available for public fishing.

Game raised on the game farms was released on the designated game refuges, and surplus game distributed to other public projects, including forest, recreational, and wildlife areas. Public hunting is allowed under supervision and control. The overflow of deer from nearby public forests and private areas in uplands and swamps served to establish an increase in the supply of deer on the project. Hunting and fishing privileges are in demand, since the Sandhills Region is an attractive fall and winter resort area near centers of considerable population.

The purchase and development of land unsuited to farming gave the owners and operators an opportunity to dispose of submarginal farms and to move to better land, and has kept the submarginal land from being used for farming. The practical forestry development by fire protection, tree planting, and management; wildlife production and conservation; and development of fishing, hunting, and recreational facilities has served to demonstrate ways to use poor farm lands in the Sandhills Region for wild game and recreation, to the greater benefit of the people of nearby States and of the public generally.

CLEMSON FOREST ²³

Historical Background

The land in Clemson Forest (Clemson University Land Utilization Project, South Carolina (SC-3)) was acquired during the period 1934-39. The purchase included 206 separate tracts varying in size from 9.8 to 1,054 acres. During the preceding 175 years or so, the land was in private ownership and used in varying degrees of intensity by 1,000 or more farm families that occupied the land in regular and irregular succession.

Clemson University began supervising the land in December 1939, under a cooperative agreement with the Federal Government. Administration of the land was set up under

the direction of President Robert F. Poole, and in 1946 and 1947 two foresters, N. B. Goebel and Dr. K. Lehotsky, were employed to manage the forest and to establish a basic curriculum in forestry.

Two notable events have occurred since then: (1) The land use area, comprising 27,469 acres, was deeded to the university in 1954 and (2) the Hartwell Dam, that would take 7,667 acres of college land for its reservoir, including 5,626 acres in forest, was begun in 1956. University timber salvage operations began in the basin in May 1956.

Records on the timber harvest from the forest show that 33.3 million board feet of timber were harvested and sold in the 15

²²Bibliography reference (155) was used in preparing this section.

²³Bibliography references used in preparing this section are (19, 92, and 131).

years 1944-59. Included in this harvest were 16.1 million board feet cut from the 5,626 acres absorbed by the Hartwell Reservoir. Timber sales 1959-62 averaged \$50,000 annually. Approximately 1 million board feet of sawtimber and 5,000 cords of pulpwood were cut each year.

Timber Inventories, 1936-58

In 1936 the U.S. Government made a cruise of the timber in the land utilization project area. The area classed as forestland in this cruise totalled 17,644 acres. The cruise gave a total of 37,368,000 board feet, or an average of 2,118 board feet per acre.

To obtain more recent data regarding the condition of the Clemson Forest as a guide to management, a systematic reconnaissance inventory was made during the summer of 1958, in which 232 point samples were taken. The following tabulation compares the inventories:

Date of inventory	Total forest acreage	Total volume	Av. volume per acre
	<u>Acres</u>	<u>Board ft.</u>	<u>Board ft.</u>
1936.....	17,644	37,368,000	2,115
1958.....	16,000	72,000,000	4,500

In round figures, the inventory showed 127,000 cords of pine pulpwood, 77,000 cords of hardwoods, 30 million board feet of pine sawtimber, and 42 million board feet of hardwood sawtimber. This gives a total growing stock of 204,000 cords of wood plus 72 million board feet of sawtimber.

Coordination of Forest Management with Research, Teaching, and Demonstration

It is the objective of the forest management staff to so coordinate the management activities that they will serve the needs of teaching, research, and demonstration. Accordingly, the following suggestions were offered by the forester in a report in 1959:

1. Proceed with the program of stand delineation, and prepare prescriptions for the trouble spots, i.e., salvage and sanitation areas, etc.
2. Review the plan of operations for the forest with a committee of five representing teaching, research, and demonstration.
3. Operate the forest as recommended by the committee and approved by the Head, Department of Forestry.
4. Budget the timber sale receipts to carry on the development of the forest.

It is estimated that through salvage and sanitation cuttings there can be an annual cutting budget of around 1,500,000 board feet during the first cutting cycle. This would result in an annual income of \$30,000. The pine and hardwood pulpwood market would take 5,000 cords, 50 percent of which would be pine. This would amount to \$15,000. On the basis of these estimates, an annual income of around \$45,000 would be realized from timber sales.

Through the coordinated efforts of the committee, as proposed in items 2 and 3 above, a forest can be developed that will meet the needs of research, teaching, and demonstration, and incidentally provide the income to finance the major operations.

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