

A SURVEY TO IDENTIFY AND DESCRIBE
THE AGRICULTURAL CHARACTERISTICS AND PRACTICES
OF SIX SELECTED COUNTIES IN CENTRAL EAST TEXAS

A Dissertation
Presented to
the Graduate Faculty of the
College of Education
The University of Houston

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Norman K. Quarles

August, 1954

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The purpose of this study was to make a survey of the agricultural characteristics and practices of six selected counties in Central East Texas which would serve as a guide for curriculum revision in the high school. The counties selected for this study were Angelina, Cherokee, Nacogdoches, Rusk, San Augustine, and Shelby.

The ultimate objective was to make available data that would merit the continued study and consideration of present and future needs for high school students of vocational agriculture, out-of-school youths, young farmers, and adult farmers.

Most of the data on major land use changes were secured from the Texas Almanac, 1952-53, and the United States Census of Agriculture, 1945 and 1950. The 1953 statistics were secured by first calling on the teachers of vocational agriculture in the county seats of the six specified counties and using these teachers as guides in locating offices and key personnel of the agencies used to furnish the information.

The data used from the supervised farming records of vocational agriculture students were obtained from the Agricultural Education Service, Division of Vocational Instruction Services, Texas Education Agency, Austin, Texas.

This study revealed that the soils, climate, people, and agricultural enterprises differ very little in the six counties surveyed. However, the agricultural enterprises did vary in importance in the various counties. The principle agricultural enterprises ranked according to the gross income received by all farmers in 1953 are poultry, dairying, cotton, beef cattle, corn, watermelons, farm forest products, tomatoes, cowpeas, and peanuts.

An analysis of the supervised farming programs of 520 vocational agriculture students in twelve selected high schools, two from each county showed their productive enterprises ranked in importance were beef cattle, poultry, corn, swine, dairy cattle, cotton, hay and roughage, melons, vegetable gardens, pastures, tomatoes, sweet potatoes, peas and beans, fruits, rabbits, peanuts, forestry, vegetable plants, bees, and pheasants. The improvement projects and supplementary farm practices completed by the students in 1953 were also listed in order of importance.

Based upon the findings of this survey, the writer suggests that the material be used by all teachers in the six-county area as a guide in revising the curriculum in vocational agriculture; however, the individual teacher must decide how much emphasis to put on each problem, according to his individual community needs, and he must also decide what other materials are to be taught and what methods to use in teaching for the best results.

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Acknowledgement is made to Associate Professor Harper Fulton Beaty, Chairman of my dissertation committee, whose constructive guidance, helpful counsel, and professional inspiration have been invaluable in carrying this study to completion; and to Professor A. L. Kerbow, and Associate Professors William Yost, J. C. Cochran, and J. S. Williams, members of my committee, whose valuable suggestions, kindly criticisms, and active encouragement have contributed so largely to the growth and development of this thesis.

Further expression of appreciation is due the teachers of vocational agriculture; county agricultural agents; office managers, Agricultural Stabilization and Conservation Committees; and to all other personnel who cooperated so willingly and freely in furnishing the data on which this study is based.

Special recognition is given to the faithful assistance rendered by Beeman Bentley, Adon Duncan, R. R. Rollins, Arminta Routt, and W. A. Lanagan in preparing this material, and to all others who have assisted in any way with the preliminary tabulations and typing.

Finally, sincere appreciation is extended my wife, Nell, and to my two sons, Dana and Tom, for their inspiration and helpfulness while this study was in progress.

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CHAPTER I

INTRODUCTION

One of the chief aims of education is to develop abilities within an individual which will help him to solve the problems, both social and economic, which he may meet in life, and to prepare him for complete living. This preparation should result in desirable changes in the learner through the development of effective abilities, attitudes, understandings, appreciations, ideals, and habit formations.¹

Some of the aims of education that relate to the fundamental activities of present-day life have been stated as follows:

1. To develop the individual as completely as possible. The individual should understand his capacities, limitations, and abilities, and his relationship to other individuals, home, and society. He must be concerned about his vocation, business affairs and personal development.

2. To promote personal-group relationships with emphasis upon home and family life as fundamental to the individual growth and to the public welfare.

3. To make individuals and groups responsive to the needs of other individuals and groups, of communities, of governments, and of other desirable social agencies.

¹G. C. Cook, Handbook on Teaching Vocational Agriculture (Danville: Interstate Printing Company, 1947), p. 3.

4. To train present and prospective workers for proficiency in their respective fields.²

A primary function of all teachers lies in the formulation of ways and means of developing student abilities which will contribute to the accomplishment of these goals.

Vocational education is one phase of education which has played an important part in our present day education program. Its worth to our country was proved beyond a doubt during World War II when there was such great demand for food, fiber, and machinery for war.

In discussing the meaning of vocational training, Prosser and Allen³ state that education is the result of experience whereby we become more or less able to adjust ourselves to the demands of the particular form of society in which we work and live. These authors further suggest that vocational education becomes that part of the experiences of an individual whereby he learns successfully to carry on any gainful occupation. Training in vocational education includes agriculture, trades and industries, home economics, and distributive.

²Educational Objectives in Vocational Agriculture (Washington, D. C.; United States Office of Education, Vocational Division Monograph, No. 21, 1940), p. 1.

³Charles A. Prosser and Charles R. Allen, Vocational Education in a Democracy (New York; The Century Company, 1925), pp.3-18.

Vocational education in agriculture was first established in the United States in 1917. This course is recognized and developed as an integral part of public secondary school education and contributes to the general objectives and philosophy of such education. The instruction provides many opportunities for the development of abilities essential to the Seven Cardinal Principles of an education as indicated in the following statements:

1. Vocational agriculture provides for many activities through individual farming programs, the Future farmers of America, New Farmers of America, field trips, and numerous other outdoor activities which contribute to the health of the student.

2. Vocational agriculture instruction develops abilities in constructive thinking and problem-solving which enables the student to have a better command of the fundamental processes.

3. Vocational agriculture provides for a vocation by affording the student an opportunity to become established in farming and to apply through his farming program the knowledge and skills taught at school. To learn by doing.

4. Vocational agriculture provides desirable training for worthy home membership in that the instruction includes many problems closely related to the home and farm-family living.

5. Vocational agriculture provides for many activities through the Future Farmers of America, New Farmers of America, and individual farming programs to develop abilities essential to desirable citizenship.

6. Vocational agriculture through the activities of the Future Farmers of America, and New Farmers of America, provides for the development of many abilities essential to worthy use of leisure time.

7. Vocational agriculture contributes to the development of an ethical character through the pattern set by the teacher who spends considerable time with the students in many activities such as those in leadership, cooperation, savings, recreation, character development, worthy use of leisure time and individual supervised farming programs.⁴

Instruction in vocational agriculture is given by qualified teachers who are employed on a twelve-month basis so that they may be able to follow up their instruction throughout the year by supervising the farming operations of high school students, out-of-school youths, young farmers, and adult farmers on their home farms.

Instruction in agriculture under the original Smith-Hughes Act is intended to be of a type which will train present and prospective farmers for proficiency in farming. The farmer must cope with many complex problems. He must be able to form judgments, carefully evaluate and arrive proper conclusions and decisions in solving problems to meet his situation. Consequently, the present and prospective farmers must be trained to solve their problems effectively.

⁴Cook, op. cit., p. 5.

PURPOSE OF THE STUDY

The purpose of this study is to make a survey of the agricultural characteristics and practices of six selected counties in Central East Texas which will serve as a guide for curriculum revision in the high school. The counties selected for this study are Angelina, Cherokee, Nacogdoches, Rusk, San Augustine, and Shelby.

The primary objective of this study is to secure data from reliable sources which will help to describe and identify the agricultural characteristics and practices of those six counties.

The secondary objective is to group and arrange these data in such a way that they may be easily interpreted by teachers of vocational agriculture, administrators, supervisors, and others who are charged with the success of the vocational agriculture program in the community.

The ultimate objectives are to make available data that would merit the continued study and consideration of present and future needs for high school students of vocational agriculture, out-of-school youths, young farmers, and adult farmers. The data of this study are to be made available to all interested school personnel so that it can be used as a guide in constructing a curriculum to meet the

needs and interests of the four above mentioned agricultural groups.

These data should not only prove helpful to school personnel but also to civic clubs, chambers of commerce, community groups and other agricultural agencies who are interested in the development of agricultural education in the community.

DEFINITION OF TERMS

In making this study a clarification of the technical vocabulary peculiar to this study is essential. Vocational Agriculture is a course of systematic instruction in agriculture and farm mechanics of less than college grade conducted in public schools or classes for those persons over fourteen years of age who have entered upon, or who are preparing to enter upon, the work of the farm, or of the farm home, under a plan of cooperation between State Boards for Vocational Education and the U. S. Office of Education.

A teacher of vocational agriculture is a college graduate with training in technical agriculture, qualified to teach under the laws of the state of Texas.

A farm is all the land on which some agricultural operations are performed by one person, either by his own labor alone or with the assistance of members of his household, or hired employees.

The Agricultural Stabilization and Conservation Committee is a branch of the United States Department of Agriculture which gives farmers advice and financial assistance in the production and marketing of farm products, and also aid in the conservation of soil and water resources.

The Soil Conservation District is a subdivision of the state government which assists farmers, upon request, with conservation of soil and water.

The Extension Service is an educational service for farmers operated by cooperation of the United States Department of Agriculture, the State Agricultural College, and the County Commissioners Court.

The County Agricultural Agent is the county representative of the Extension Service.

A Supervised Farming Program is a farming program carried on at home by the student under the supervision of the teacher of vocational agriculture and the parent.

A productive enterprise is a business venture for experience and profit which as a minimum usually covers a period of time represented by a production cycle of a farm enterprise.

An improvement project is an undertaking which improves the real estate value of the farm, the efficiency

of the farm business or of a farm enterprise, or the living condition of the farm family.

Supplementary farm practices are jobs outside of those already included as normal parts of a students productive and improvement projects, which are undertaken by him for additional experience or skill or for improving the efficiency of the home farm.

A farm operator is a person who operates a farm, either performing the labor himself or directly supervising it.

Full-owners are farmers who own all the land they operate.

Part-owners are farmers who own a part and rent from others the remaining part of the land they operate.

Managers are farmers who operate farms for others and are paid wages or salaries for their services. Persons acting as caretakers or hired as laborers are not classified as managers.

Tenants are farmers who operate hired or rented land only. Cash tenants pay a cash rental. Share-cash tenants pay a part of their rental in cash and part as a share of crop or livestock production. Share tenants pay a share of either the crop or livestock production or both. Croppers are share tenants to whom their landlords

furnish all the work animals or tractor power in lieu of work animals. Other and unspecified tenants include those whose rental agreement was not agreed upon beforehand and those who could not be included in one of the other subclasses.

PROCEDURE USED IN SECURING DATA

Most of the data used in Chapter III on major land use changes were secured from the Texas Almanac, 1952-53, and the United States Census of Agriculture, 1945 and 1950. However, the data for 1953 were extremely difficult to find. Therefore, it took numerous trips into the county seats of the six specified counties in order to secure the needed information.

The 1953 statistics were secured by first calling on the teachers of vocational agriculture in the central locations and using these teachers as guides in locating offices and key personnel of the agencies used to furnish the information.

Individuals and agencies called upon to furnish 1953 statistics in agriculture were the County Office Manager of the Agricultural Stabilization and Conservation Committee, the Manager of the County Chamber of Commerce, the County Agricultural Agent, the Superintendents of the Texas

Agricultural Experiment Substations at Nacogdoches, Lufkin, and Jacksonville, the Coordinator of the County Veterans Vocational Agricultural School, the Soil Conservation District, the Texas Forest Service, Agriculture Departments of commercial banks, Agriculture Department at Stephen F. Austin State College, Texas Power and Light Company, Southwestern Bell Telephone Company, and County Commissioners Court.

The data used in Chapter IV on supervised farming records of vocational agriculture students were obtained from the Agricultural Education Service, Division of Vocational Instruction Services, Texas Education Agency, Austin, Texas. This agency has on file an annual final report on productive farming enterprises and other supervised practices of students of vocational agriculture for the last year that a vocational agriculture department had been in operation. The records of two schools were selected at random from each of the six counties in order to supply the information needed for this study.

LIMITATIONS OF THE STUDY

This study is limited to the making of an analysis of the agricultural enterprises, incomes, and interests of the farmers of six counties in Central East Texas. It was

necessary to limit the area to six counties because of the tremendous amount of time and materials needed for this type of study, also because the area selected is nearly homogeneous in agricultural and economic characteristics. The material was limited to that which was considered of primary importance in determining curriculum content in agricultural education for secondary public schools of that particular area.

No effort was made to set up a detailed curriculum in vocational agriculture, because that would be a problem of the individual teacher for each school and community; however, it is believed that the findings of this study can greatly aid these teachers of the six counties by furnishing them with data that is always necessary before an adequate curriculum can be planned.

Most teachers of vocational agriculture have very little time for detailed scientific surveys. They are usually busy in conducting all-day classes, Future Farmers of America, adult classes, and doing community service. Therefore, it was necessary to limit this study to a task that could be accomplished by the writer and also be of most benefit to teachers of vocational agriculture and other interested people who do not ordinarily have the time or cash to make this type of study.

CHAPTER II

REVIEW OF THE LITERATURE

Although most agricultural teachers agree that some type of survey is necessary in order to have a better understanding of the agricultural characteristics and activities of a farming area, very little has been written on how to undertake the task. There is also a difference of opinion among writers as to the exact information that is needed. A brief summary of the work of writers on problems very closely related to the one at hand will be given.

Hamlin¹ states that there has been recognition almost from the beginning of agricultural-education endeavors that each locality must be systematically studied in order that a program of agricultural education "tailor made" for that region may be developed. He goes on to state that at no point in the entire program of agricultural education is there a more nearly complete break-down of a function deemed necessary. The principal difficulty seems to have been that people have relied upon

¹H. M. Hamlin, Agricultural Education in Community Schools (Danville: The Interstate Printing Company, 1949), p. 40.

the teachers of agriculture to do, or cause to be done, all of the survey work that has been accomplished. Hamlin² suggests that teachers of vocational agriculture carry on an educational program to make people aware of the need for agricultural survey work and to teach procedures for people and agencies to use in making these studies. He suggests using service clubs, students, farmers, veterinarians, bankers, merchants, officials of farm organizations, and service men who work with farmers to make agricultural surveys. Hamlin³ says the first task is to assemble, interpret, and put before the people all information that is already available from census reports, school records, county records, and other similar sources.

Cook⁴ says that in determining the objectives and the activities to be included in a long-time plan for vocational agriculture in any given locality it is important that a thorough study of that locality be made. He believes that the securing of basic data and their effective interpretation is highly essential in developing a sound

²Ibid., p. 41.

³Ibid., p. 42.

⁴Cook, op. cit., pp. 128-130.

and well-balanced educational program in vocational agriculture. The following is a list of some of the sources for and ways of securing basic data in agriculture as suggested by Cook:

1. United States Farm Census (secure from Department of Commerce, Bureau of Census, Washington, D. C.).
2. Local surveys including farm mechanics, activities of home farms of students, and others.
3. Farm Management data from the agricultural college.
4. Visit homes of prospective students, consult parents and students and compile a list of possible activities to include in farming program.
5. Conferences with farmers, county agent, local advisory council and other interested persons.
6. Make a list of needed approved practices necessary for proficiency in farming and to achieve desired efficiency factors of production.
7. Personal observations through home visits of these farms and others in that area.
8. Aerial maps of individual farms. Consult the soil conservation district office and/or P. M. A. office.
9. County agricultural council, county land use committees and soil conservation office.

10. County soil survey maps available for some counties by the soil department of the agricultural college.⁵

Cook⁶ states that after the basic data have been collected, they must be summarized and properly interpreted. For example, the survey may show that very few sheep are in a county. This may mean that more sheep are needed, or it may indicate that the county is not adapted to sheep raising. The farmers may not be practicing hog lot sanitation, but this may be the very thing that they should be doing. For these reasons, he believes that care must be exercised in interpreting agricultural data. He thinks the teacher should ask the advisory council to assist him in interpreting the data and to make recommendations for the farm enterprises, other areas of instruction, and activities to be included in the long-time plan.

Flegel⁷ made a farm survey of upper Dorchester County, Maryland, in 1950, to determine certain personal characteristics of the people and the amount and kind

⁵Ibid., p. 128-130.

⁶Ibid., p. 130.

⁷Perry S. Flegel, "A Farm Survey of Upper Dorchester County, Maryland, 1950," (unpublished nonthesis study, The University of Maryland, College Park, 1950), 218 pp.

of agriculture in that area in order that more definite course content might be developed. A survey form was developed and completed by one hundred and seventy seven high school students, successful farmers, and veterans. Rather complete information was secured in this study, but in some parts it appears to be in too great detail and to contain some material not essential to the success of teaching vocational agriculture in most counties of Central East Texas.

Hibbs⁸ made a study similar to that of Flegel. The purpose of his study was to develop a sound long-time program for the teaching of vocational agriculture at Ravenswood High School. The study was based on the surveys of sixty-four farms on which veterans and/or all-day students lived. Census data, as well as other data, were also collected concerning the county. The study revealed that many improvements and changes were needed. Hibbs proceeded to develop a long-time program which indicated problems for the course of study for vocational agriculture at Ravenswood High School.

⁸Clyde W. Hibbs, "Long-time Program for Ravenswood Vocational Agriculture Department Based on Findings in an Agricultural Survey of Jackson County in 1948," (unpublished Master's thesis, West Virginia University, Morgantown, 1949), 181 pp.

Mills⁹ undertook the task of preparing a course of study in vocational agriculture that would lead definitely to the establishment of pupils in farming. Farm surveys, records of trainees in the institutional on-farm training program, records of former students, census reports, and land-use survey reports were used in preparing a course of study. This survey work revealed that the course of study then in use did not cover many of the needed skills and decisions necessary for establishment in farming. He did a creditable piece of work, as a result of the surveys, in preparing a suggested four-year course of study which, if followed, should better meet the needs of prospective farmers who are trying to become established.

Another valuable work was done by Townsend¹⁰ when he did extensive survey work in agriculture to determine a course of study for use in the Red River Parish,

⁹B. R. Mills, "A Teaching Program in Vocational Agriculture for Suwanne County," (unpublished Master's thesis, The University of Florida, Gainesville, 1949), 100 pp.

¹⁰Homer Lee Townsend, "A Prepared Course of Study in Vocational Agriculture for the Converse High School," (unpublished Master's thesis, Louisiana State University, Baton Rouge, 1949), 141 pp.

Louisiana. The data collected from the surveys were tabulated and summarized in order to determine (1) the types of farming, (2) enterprises undertaken, (3) practices carried on, and (4) available facilities on the farms in that parish. These findings were used in the selection of the course content which would more nearly meet the needs, interests, ideals, abilities, attitudes, and experiences in development of student abilities essential to proficiency and success in farming.

Robertson¹¹ made a survey of the farms of the El Reno community to determine the principal enterprises, occupational placement opportunities, and agricultural problems of the area. He ranked the major enterprises of Canadian County according to their importances, so that he would know better how to divide his time in teaching. He also discussed some other problems which vitally affect agriculture of any given area. Some of these problems were (1) the tenant problem, (2) average age of farmers, (3) amount of capital needed to become established in the business of farming in Canadian County, (4) other sources of income and how this income compares with farm income, and (5) the major problems of the county, which were soil

¹¹M. J. Robertson, "A Long-time Vocational Agriculture Teaching Program in El Reno High School," (Unpublished nonthesis study, Agricultural and Mechanical College of Oklahoma, Stillwater, 1950), 188 pp.

conservation, livestock quality, and the correlation between livestock and crop production.

The Department of Agricultural Education at the Agricultural and Mechanical College of Texas¹² puts great emphasis upon the need for a teacher to study carefully the farming situation in his community before he attempts to prepare a teaching plan. The bulletin points out that the teacher needs to determine, among other things, the overall characteristics of farming in the community, together with significant variations in the prevailing types of farm organization. The farm problems that exist should be the basis for the annual teaching plans. Furthermore, the article points out that the teacher should apply to all possible problems a three-fold test: importance, frequency, and suitability. Problems that meet this three-fold test should be made the basis of the course. The Department of Agricultural Education recommends, along with other means, that an advisory council be used in securing data and making long-time plans.

The Department of Agricultural Education of the Agricultural and Mechanical College of Texas in another

¹²"Guide for Building a Three-Year Program in Vocational Agriculture with Teaching Plans for Teachers of Vocational Agriculture," Special Helps Bulletin No. 1 (Agricultural and Mechanical College of Texas, College Station, 1945), pp. 3-5.

more recent but undated publication has the following statement to make in regard to the studying of the farming situation of the community:

The community has a great wealth of information that is available to the person who is seeking facts, and the resources for information are available for the asking. Some of the ways a teacher may secure information about his community are by talking to farmers; visiting their farms; studying their farming activities, types of soil, degree and kind of erosion, soil and water conservation practices in operation, pastures, types and kind of livestock, mechanization, insect and pest control measures used, crops grown, rotation in operation, etc. Bankers, businessmen, ginners, grain elevator men, agricultural workers, and many others are already available and have much valuable information concerning the community; they are always glad to help the teacher plan a good program of work for the school and community. Records and data are available from the Production and Marketing Association, Experiment Station, Soil Conservation Service, Farm and Home Administration, and other agricultural agencies. The teacher should study agricultural practices very carefully, observing those farmers who are outstanding and determining reasons for their success. He should study the strong points as well as the weak points in an agriculture program. There is usually a reason for the farmer's decision or action; often it is a good reason, a valid reason. The teacher should incorporate the strong points in his plans and try to strengthen the weak points in the existing agricultural practices. The successful agriculture teacher never considers his knowledge of the community complete. He checks his impressions and revises his information and opinions in light of new facts and developments.¹³

¹³"Guide for Building a Program of Vocational Education in Agriculture with Annual Plans," (unpublished paper prepared by the Department of Agricultural Education, Agricultural and Mechanical College of Texas, College Station, n. d.), pp. 1-6.

The advice given by the Department of Agricultural Education is very good for teachers and prospective teachers of vocational agriculture of a given community; however, farm survey information would be needed from a much larger area if it were to serve supervisors, coordinators of Veteran Farm Training, and high schools operating on a county basis. There seems to be a definite need for agricultural data on a county level, and occasionally, even on an area, state, and national level.

Bristol¹⁴ made a rather broad survey when he made a study of the practices used by one hundred and ninety two superior farmers in sixteen communities in producing beef cattle, dairy cattle, wheat, and cotton. These were the four major enterprises of the State of Oklahoma. Four factors were considered in determining which improved practices to teach in vocational agriculture classes in Oklahoma. These factors were: practices followed by fifty per cent or more of the superior farmers, practices followed by one-third or more of the superior farmers, practices rated as satisfactory or highly satisfactory by fifty per cent or more of the superior farmers, and practices rated as satisfactory or highly satisfactory by one-third or more

¹⁴Benton K. Bristol, "Procedures for Determining Improved Practices to Teach in Vocational Agriculture Classes in Oklahoma," (unpublished nonthesis study, Agricultural and Mechanical College of Oklahoma, Stillwater, 1950), 111 pp.

of the superior farmers. Bristol suggested that the procedures used in his study for determining improved practices to teach in vocational agriculture classes be used as a guide by teachers in making studies for their communities. It was believed that such studies would greatly assist these teachers in improving the content of instruction for all-day students, as well as for young farmer and adult farmer groups.

CHAPTER III

MAJOR LAND USE CHANGES IN SIX CENTRAL EAST TEXAS COUNTIES

This chapter is devoted to a study of the land use changes in Angelina, Cherokee, Nacogdoches, Rusk, San Augustine, and Shelby counties since 1944. An analysis of these land use changes since World War II assisted greatly in determining how the farmers of this area earn a livelihood. This, in turn, also helped to understand the interests and problems of these same farmers.

The agricultural data were recorded on a county basis for each of the individual counties. Most of the data were recorded in table form with an explanation preceeding each table. A summary is found at the end of the chapter.

Not all livestock and crop enterprises are covered in this chapter, only those considered to have a direct effect on the economy of the county. Soil building practices, land values, farm tenancy, and farm power and equipment are also discussed.

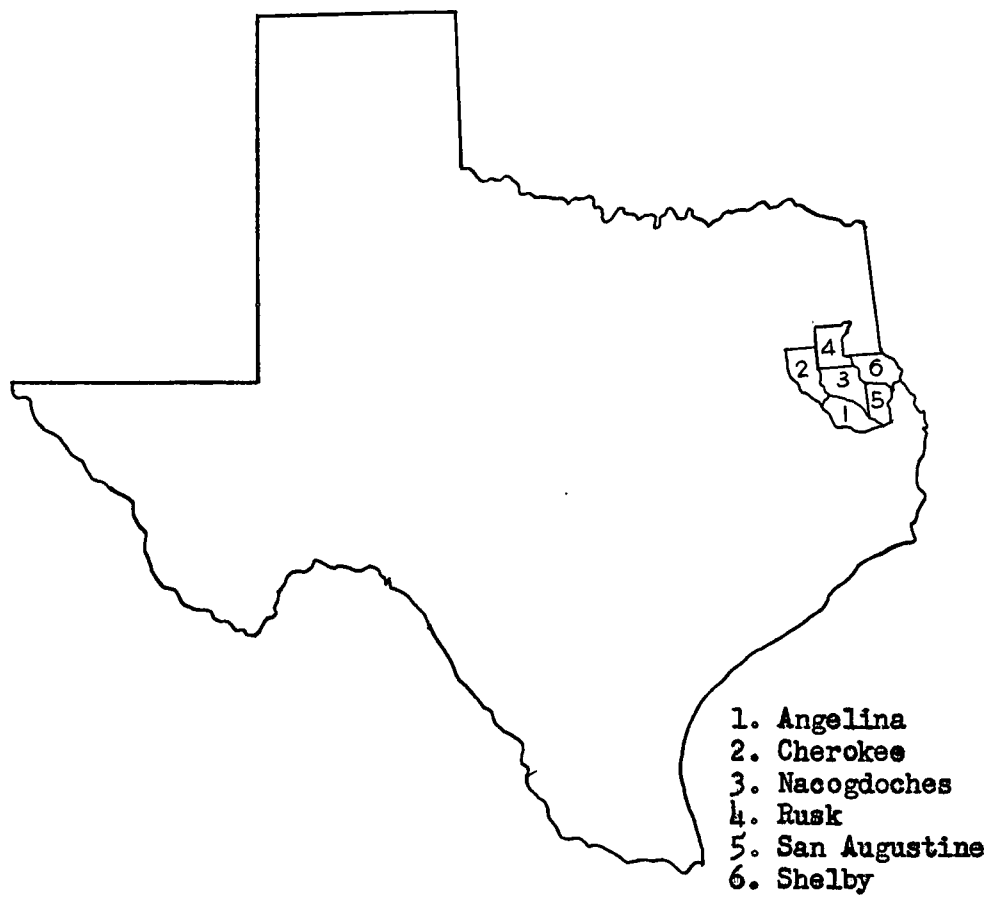


FIGURE 1.—MAP OF TEXAS SHOWING THE SIX COUNTIES STUDIED

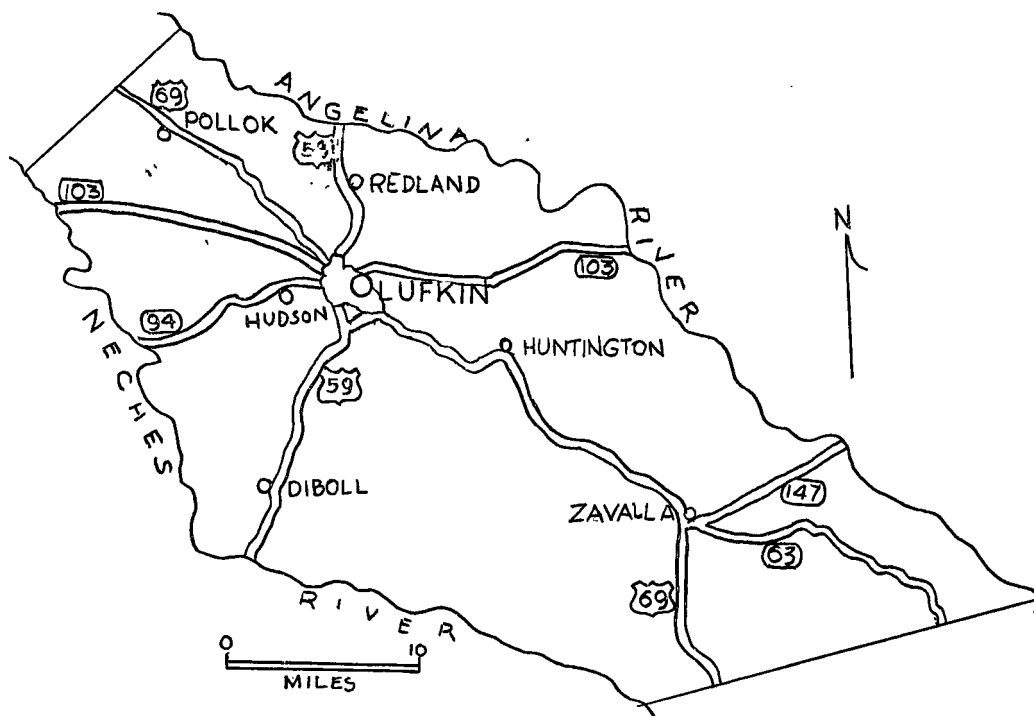


FIGURE 2.—MAP OF ANGELINA COUNTY^a

^aReproduced from "Texas Almanac and State Industrial Guide, 1952-53," Counties and Cities of Texas (Dallas: A. H. Bello Corporation, 1951), p. 512.

Angelina County

Introduction and General Description

Angelina County is located in the heart of the East Texas Pine Belt. This county has one of the best diversified urban-rural economies in the state. Though of only a little more than average population, Angelina ranks eleventh among counties in value of annual manufactured products.¹ A large variety of crops, livestock products, and forest products are also important in the economy. The native population is about half rural.² Angelina has a large Negro population.

The county's unique industrial progress comes from the fact that several families, gaining early industrial experience in lumbering and implement manufacture, "plowed their earnings back under" in the local field, developing extensive lumber, oil-field equipment, machinery, and foundry products and notably the first manufacture of newsprint from southern pine.

¹"Texas Almanac and State Industrial Guide, 1952-53," Counties and Cities of Texas (Dallas: A. H. Belo Corporation, 1951), p. 512.

²Ibid.

Angelina County was created from Nacogdoches County in 1846 and organized the same year.³ The county was named for the Angelina River which marks the boundary line on the north. The topography is rolling to hilly and is heavily forested. Drainage is to the Angelina and Neches Rivers on the northeast and southwest. The altitude is 200 to 300 feet; the average annual rainfall is 45.93 inches; and the temperature averages are: January 50 degrees, July 84 degrees, with a mean annual temperature of 67 degrees.⁴ There is excellent game cover in the forests with hunting and fishing providing wholesome recreation as well as contributing to the economy of the county.

The soils on the uplands are sandy-clay with alluvials in the bottoms. The predominant trees are shortleaf pine, longleaf pine, cypress, hickory, oak, and magnolia. The commercial timbers are largely in the southern part of the county. Large lumber and pulpwood production are furnished by the pines and hardwoods. The Angelina National Forest covers part of the county.

³Ibid.

⁴Ibid.

The growing season for Angelina County is 235 days.⁵ Cotton, farm forestry, corn, peanuts, poultry, and dairying are the major agricultural enterprises.

Farm Forestry

Angelina County is one of the leading counties of Texas in the production of timber. In 1950, there were thirty-two active mills producing 8,735,000 board feet of lumber monthly.⁶ There are 460,723 acres in timber of which about one-fifth is farm forestry, the remainder belonging to commercial companies and others.⁷ The value of all timber in the county, according to a survey made by the East Texas Chamber of Commerce in 1946, is \$16,384,000.

Table I points out that there has been a 13.7 per cent decrease in the number of farms with woodland and a 12 per cent decrease in the number of farms selling forest products; however, there has been an equal increase in the number of acres of farm woodland during that same time. The increase in acres of farm woodland was brought about primarily by a campaign in recent years to reforest cut-over

⁵Ibid.

⁶Ibid.

⁷Ibid.

TABLE I

FARM FORESTRY PRODUCTION AND SALES
IN ANGELINA COUNTY, 1944-53.

Date	Number of farms with woodland	Acres of farm woodland	Number of farms selling forest products	Value of products sold
1944	1,498 ^a	81,165 ^a	166 ^b	\$48,342.00 ^b
1949	1,378 ^c	111,768 ^c	154 ^d	52,474.00 ^d
1953	1,293 ^e	93,842 ^e	146 ^e	50,612.00 ^e

^aUnited States Bureau of the Census. United States Census of Agriculture: 1945. Volume I, Statistics by counties, Part 26 (Washington, D. C.: United States Government Printing Office, 1946), p. 18.

^bIbid., 1945, p. 321

^cUnited States Bureau of the Census. United States Census of Agriculture: 1950. Volume I, Counties and State Economic Areas, Part 26 (Washington, D. C.: United States Government Printing Office, 1952), p. 62.

^dIbid., 1950, p. 277.

^eChester W. Davis, "Annual Narrative Report of County Extension Agents," E. S. 21 (unpublished annual report of the Angelina County Agricultural Agent made to Agricultural and Mechanical College of Texas, College Station, Texas, January 1, 1954).

areas and farm cropland that is too steep and badly eroded for further cultivation. The Angelina County Agricultural Stabilization and Conservation Committee has accepted planting, inter-planting, or replanting pine trees on farmland, in farm woodlots or woodlands for erosion control, watershed protection, or forestry purposes as one of their approved practices for which government subsidy can be paid.

The Texas Forest Products Laboratory of the State Forest Service and the Texas National Forests headquarters are located in Angelina County at Lufkin. The South's first paper mill to make newsprint from southern pine, the Southland Paper Mill, Incorporated, at Lufkin, began operation early in 1940. All of these firms and agencies, along with schools and extension services have helped Angelina County farmers to become more forest conscious.

Table I shows very little change in the value of products sold from farm forests since 1944. There is usually a long period between the time of reforestation and an increase in income to the farm family.

Dairying

Dairying has made rapid progress in Angelina County since 1949, as shown by Table II. From 1944 to 1949 there seemed to be a decrease in the dairy industry except for the increase in number of Grade A dairies which jumped from five to seventeen, or 240 per cent. Prices of feed had increased to where farmers were no longer able to sell Grade C milk, so from 1944 to 1949 was the changeover period. It was also during this time that Land O' Pines built a milk receiving plant in Lufkin, which was a great asset to the farmers of the county.

According to Table II, although there were 321 less cows milked in 1953 than in 1944, there were 225,358 more gallons of milk produced; this provided an additional income from the sale of whole milk of over a quarter million dollars. Improved feeding and breeding practices, along with improved quality of milk, and the establishment of the new whole milk receiving plant have done much to improve dairying in Angelina County. Pasture improvement has provided cheaper feed.

With only twenty-six Grade A dairies in 1953, it is doubtful if Angelina County will ever be a great dairy center, but it will provide a good source of revenue for

TABLE II

DAIRY CATTLE PRODUCTION AND WHOLE MILK
SALES IN ANGELINA COUNTY, 1944-53

Date	Cows milked	Gallons of milk produced	Number of Grade A dairies	Gallons of whole milk sold	Value of whole milk sold
1944	3,326 ^a	1,550,506 ^a	5 ^e	245,817 ^a	\$144,687.00 ^a
1949	2,225 ^b	1,395,395 ^b	17 ^d	196,234 ^b	113,049.00 ^b
1953	3,005 ^c	1,775,864 ^c	26 ^e	665,000 ^c	399,000.00 ^c

^aUnited States Bureau of the Census 1945, op. cit., p. 268.

^bIbid., 1950, p. 133.

^cDavis, op. cit., 1954.

^dIbid., 1950.

^eIbid., 1945.

those farmers who need a steady income throughout the year. Some farmers seem to think that the scarcity of pasture land and the increase in industrial expansion will hinder future rapid expansion since approximately 150 acres are needed for a family-size dairy.

Poultry

The poultry industry has grown very rapidly in Angelina County during the past ten years. The expansion of broiler production has been the chief factor in this growth. Table III shows that in 1944 less than 100,000 broilers were sold for \$79,986.60; practically all of these were yard chickens with none of them being grown in 3,000-capacity houses which are the popular type today throughout East Texas.

By 1949, there were only 807 farms selling poultry or poultry products, which was forty-six per cent less than five years earlier; however, there were ten commercial broiler houses with an average capacity of 3,000 chicks each and with sales from broilers amounting to over twenty per cent more than in 1944.

In 1953, the industry was still becoming more commercialized with over 230 broiler houses in operation. The number of farms selling poultry or poultry products

TABLE III

POULTRY PRODUCTION AND SALES IN ANGELINA COUNTY, 1944-53

Date	Number of farms selling poultry or poultry products	Value of poultry and poultry pro- ducts sold	Number of 3000-capacity broiler houses	Number of broilers sold	Value of broilers sold
1944	1,498 ^a	\$146,095.00 ^a	0 ^e	99,987 ^e	\$79,989.60 ^e
1949	807 ^b	127,293.00 ^b	10 ^d	120,475 ^d	96,380.00 ^d
1953	613 ^c	2,075,638.32 ^c	230 ^c	2,550,000 ^c	2,040,000.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 268.

^bIbid., 1950, p. 153.

^cDavis, op. cit., 1954.

^dIbid., 1950.

^eIbid., 1945.

had decreased to 613 yard broilers. At the end of 1953 the broiler industry was bringing in over two million dollars to farmers of Angelina County. The production of other types of poultry and poultry products varied very little.

Today broiler growers are able to produce a three-pound broiler at nine weeks old; in 1944, it took twelve weeks to get the same size broiler. Improved housing, breeding, sanitation, management, and feeding have contributed to a much improved broiler. Antibiotics in the feed have increased gains and helped to control diseases.

Broiler production in Angelina County shows great promise. Very little land is needed for this operation, and it furnishes a profitable sideline for general farmers and part-time farmers who have other means of employment.

Cotton

A few years ago, cotton was the chief money crop throughout East Texas. Angelina County was no exception. When World War II came along, those tenants who did not go into military service found profitable employment in factories, shipyards, and other types of defense work. Farmers who managed to grow cotton during and after the war found it almost impossible to get it harvested. The

TABLE IV
COTTON ACREAGE, YIELDS, AND VALUES
IN ANGELINA COUNTY, 1944-53

Date	Number of farms	Number of acres	Number of bales	Value of cotton and seed produced
1944	415 ^a	3,819 ^a	1,430 ^a	\$184,756.00 ^a
1949	410 ^b	6,583 ^b	3,507 ^b	571,641.00 ^b
1953	182 ^c	5,006 ^c	2,110 ^c	422,120.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 164.

^bIbid., 1950, p. 211.

^cDavis, op. cit., 1954.

only thing to do was to greatly reduce the acreage and depend on fewer acres producing more profit; with improved seed and fertilizers, this was logical reasoning.

Table IV reveals that in 1944 only 415 farms were growing cotton. This number has gradually decreased until, in 1953, only 182, or 9.4 per cent, of the farms were growing this crop. The yield and value of cotton and seed have increased since 1944, but this has been due largely to improved production practices and relatively good prices.

As long as factory work remains attractive to laborers, cotton has little chance for a strong comeback. In spite of modern machinery, cotton production still demands a tremendous amount of man-hours. Automatic cotton pickers have proven profitable in some sections of Texas but not in the small cotton patches and on the rough terrain of Angelina County.

Corn

Corn production has made rapid progress in Angelina County since 1944. Table V shows that the number of farms that produce corn have remained relatively the same in number, and the acreage has decreased by 26.7 per cent, but the great improvement has been yields and values.

TABLE V

CORN ACREAGE, YIELDS, AND VALUES
IN ANGELINA COUNTY, 1944-53

Date	Number of farms	Number of acres	Bushels of harvested grain	Value of harvested grain
1944	848 ^a	8,193 ^a	60,896 ^a	\$ 85,192.00 ^a
1949	815 ^b	5,903 ^b	85,411 ^b	120,197.00 ^b
1953	802 ^c	5,998 ^c	119,960 ^c	179,940.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 112.

^bIbid., 1950, p. 173.

^cDavis, op. cit., 1954.

From 1944 to 1949 the yield of corn in Angelina County had increased 40.2 per cent. By 1953 the increase in yield was up another 56 per cent, which gave an increase of 96.2 per cent in a nine-year period.

Although corn prices remained fairly stable throughout this nine-year period, the value of harvested grain more than doubled itself.

These things did not happen accidentally. Farmers began to use the best hybrid seed, namely Texas Hybrids 26, 28, and 30. Soil tests were made on many farms to determine the needs of the soil. Better cultivation practices were also used. Table V again reveals the average yield per acre in 1944 was approximately 7.5 bushels; in 1949, 14.4 bushels; and in 1953, it was approximately 20 bushels per acre in spite of the very dry weather.

Cattle

The most popular breeds of beef cattle in Angelina County are Herefords, Brahmas, and Abedeen-Angus. Much work has been done at the Texas Agricultural Experiment Substation near Lufkin on cross breeding Herefords and Brahmas. The three-fourth Hereford-one-half Brahma cows out of Hereford bulls and one-half Hereford-one-half Brahma cows have made the most rapid and least expensive gains.

TABLE VI

CATTLE PRODUCTION, VALUES,
AND SALES IN ANGELINA COUNTY, 1944-53

Date	Number of farms	Number of cattle on farms over 3 months old	Value of cattle over 3 months old	Value of all cattle sold
1944	2,381 ^a	19,799 ^a	\$830,128.00 ^a	\$243,394.00 ^a
1949	1,739 ^b	16,371 ^b	1,552,172.00 ^b	448,612.00 ^c
1953	1,852 ^d	18,333 ^d	1,099,980.00 ^d	405,205.00 ^d

^aUnited States Bureau of the Census, 1945, op. cit., p. 268.

^bIbid., 1950, p. 133.

^cIbid., 1950, p. 153.

^dDavis, op. cit., 1954.

Table VI shows that a large majority of farms in the county have beef cattle. In 1949, there were fewer cattle on farms because this was a period of high sales and high prices. The value of all cattle sold was 84.2 per cent greater in 1949 than in 1944. By 1953, even though there were more cattle on the farms, the value of all cattle sold was 9.7 per cent less because of the break in cattle prices. The high cost of feed and severe droughts for the last three summers, along with the break in prices, has caused the cattleman much trouble. In spite of the hardships and recent uncertainties, beef cattle provide Angelina County farmers a yearly income of nearly half a million dollars.

Swine

Swine production has decreased in importance during the past ten years in Angelina County. A few years ago, farmers grew hogs for home-cured meat and lard, but with increased cash income, improved refrigeration, and better transportation, This is no longer true.

Table VII shows that there was a 33.8 per cent decrease in the number of farms growing swine from 1944 to 1949. There was a further decrease of 11.4 per cent from 1949 to 1953. The number of hogs and pigs on farms in Angelina County decreased 30.1 per cent over a five-year

TABLE VII
SWINE PRODUCTION AND VALUES
IN ANGELINA COUNTY, 1944-53

Date	Number of farms	Number of hogs and pigs	Value of hogs and pigs
1944	1,372 ^a	11,911 ^a	\$159,806.00 ^a
1949	908 ^b	8,323 ^b	110,169.00 ^b
1953	804 ^c	4,003 ^c	80,060.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 268.

^bIbid., 1950, p. 133.

^cDavis, op. cit., 1954.

period from 1944 to 1949, and then decreased by 52.0 per cent from 1949 to 1953.

The average value of hogs and pigs per head (Table VII) was \$13.41 in 1944, \$13.24 in 1949, and \$20.00 in 1953. With the top market prices being approximately twenty-seven cents per pound in 1953, farmers were able to realize a better profit on each hog raised.

Watermelons

Watermelons provide relatively little income to farmers in Angelina County. The best shipping watermelon is the Black Diamond which grows to a large size, has an attractive color, and a thick rind. Other varieties grown are the Stone Mountain, Dixie Queen, and Tom Watson.

Table VIII shows that in 1944 there were only fifty-three farms in Angelina County growing watermelons. In 1949, there were only twenty-five farms growing watermelons, which was a 52.8 per cent decrease over the five-year period. There was a decrease of 60 per cent from 1949 to 1953.

The acres of watermelons harvested decreased 70.7 per cent from 1944 to 1949, but it increased again 103.7 per cent from 1949 to 1953. The value of watermelons harvested did not vary much per acre from 1944 to 1953 because watermelon prices and yields per acre were very similar for those years.

TABLE VIII
WATERMELON ACREAGE AND VALUES
IN ANGELINA COUNTY, 1944-53

Date	Number of farms	Acres of watermelons harvested	Value of watermelons harvested
1944	53 ^a	92 ^a	\$9,330.00 ^a
1949	25 ^b	27 ^b	3,341.00 ^d
1953	10 ^c	55 ^c	5,701.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 216.

^bIbid., 1950, p. 231.

^cDavis, op. cit., 1954.

^dIbid., 1950.

^eIbid., 1945.

Tomatoes

Tomato production, like watermelon production, is a minor crop in Angelina County. But, unlike watermelons, tomatoes have steadily increased in the number of farms producing them, acres harvested, and value sold since 1944 (Table IX).

From 1944 to 1949 there was a 59 per cent increase in the number of farms growing tomatoes; from 1949 to 1953 there was a 12.9 per cent increase. The acres of tomatoes harvested showed an increase of 72.5 per cent by 1949 and 6.8 per cent from 1949 to 1953.

The value of tomatoes sold averaged slightly over \$100.00 per acre for each of the years shown. The price per pound in 1953 was exceedingly high, often being from twenty to thirty-five cents; however, the production per acre was much less than in the previous years cited, due to severe weather conditions in April and May.

The most popular varieties grown were Rutgers, Stokesdale, Prichard, and Marglobe. All of these are excellent for shipping.

TABLE IX
TOMATO ACREAGE AND SALES
IN ANGELINA COUNTY, 1944-53

Date	Number of farms	Acres of tomatoes harvested	Value of tomatoes sold
1944	39 ^a	51 ^a	\$4,468.00 ^e
1949	62 ^b	88 ^b	8,975.00 ^d
1953	70 ^c	94 ^c	9,852.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 216.

^bIbid., 1950, p. 231.

^cDavis, op. cit., 1954.

^dIbid., 1950.

^eIbid., 1945.

Cowpeas

Cowpeas are not grown by many farmers in Angelina County. A few farmers grow peas commercially, but most peas are grown for home consumption.

In 1944, (Table X) there were 208 farms growing cowpeas in Angelina County. By 1949, this number had increased to 354, which showed an increase of 70.2 per cent. From 1949 to 1953 there was a 4 per cent decrease.

The number of acres grown increased 21.7 per cent from 1944 to 1949 and then decreased 1.5 per cent from 1949 to 1953.

The bushels of harvested peas increased 70 per cent during the first period; the value of harvested peas increased 34.6 per cent. During the second period the bushels of harvested peas decreased 17.5 per cent, but the value of peas harvested increased 8.4 per cent.

The 1949 year was the best year for cowpea production; 1953 furnished the best prices.

Peanuts

Peanut production has shown a rapid decline since World War II in Angelina County. During the war years there was a great shortage of oils and greases. The United States Government appealed to all farmers to increase their peanut acreage.

TABLE X
COWPEA ACREAGE, PRODUCTION,
AND VALUES IN ANGELINA COUNTY, 1944-53

Date	Number of farms	Number of acres	Bushels of peas harvested	Value of peas harvested
1944	208 ^a	1,167 ^a	3,773 ^a	\$11,319.00 ^a
1949	354 ^b	1,420 ^b	6,408 ^b	15,233.00 ^b
1953	340 ^c	1,398 ^c	5,284 ^c	16,512.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 164.

^bIbid., 1950, p. 193.

^cDavis, op. cit., 1954.

TABLE XI
PEANUT ACREAGE, PRODUCTION,
AND VALUES IN ANGELINA COUNTY, 1944-53

Date	Number of farms	Number of acres	Pounds of peanuts	Tons of hay	Total value
1944	596 ^a	2,978 ^a	240,513 ^a	503 ^a	\$27,355.00 ^a
1949	273 ^b	677 ^b	44,233 ^b	305 ^b	10,950.00 ^b
1953	251 ^c	609 ^c	39,711 ^c	302 ^c	8,936.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 164.

^bIbid., 1950, p. 193.

^cDavis, op. cit., 1954.

In 1953, there were less than half as many farms producing peanuts as in 1944; the acreage was approximately one-fifth what it had been in 1944; the pounds of peanuts produced were about one-sixth what it had been near the close of the war. The total value of peanuts sold was about one-third of what it had been in 1944.

The greatest period of decline in production was from 1944 to 1949, but the drop continued until 1953. The hay saved from peanuts is not considered a major item even though it is a good legume hay. The Spanish and Improved Spanish are the most important varieties grown.

Soil Building

During the year of 1944, there were 695 farms that received \$35,866.63 from the United States Government for soil building practices (Table XII). The four largest payments were for reseeding pastures, using superphosphate, using limestone, and fertilizing with 0-14-7 fertilizer.

There were 653 farms participating in the soil building practices in 1949. The total payments for all practices was \$58,881.99. The four largest payments were for reseeding pastures, putting out superphosphate, fertilizing with 0-14-7 fertilizer, and planting Sericea Lespedeza.

TABLE XII

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN ANGELINA COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Standard terraces			1	\$ 53.75		
Earthen tanks and dams			2	234.10	36	\$4,654.00
Mowing pastures	46	\$ 1,409.00				
Contour listing cropland						
Reseeding pastures	372	10,391.62	485	23,174.37	375	14,183.74
Winter legumes and rye	122	1,368.88		2,008.03	65	1,838.40

TABLE XII (Continued)

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN ANGELINA COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Superphosphate	400	\$19,596.18	469	\$17,324.48	65	\$2,324.86
Limestone	50	1,565.00	60	2,802.80	45	2,962.50
Potash			7	94.88	14	118.56
Planting forest trees			2	375.00	9	2,640.00
Improving forest trees					1	225.00
Mixed fertilizer					47	4,788.54
Sericea Lespedeza			42	2,544.00		

TABLE XII (Continued)

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN ANGELINA COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
O-14-7 fertilizer	28	1,535.95	181	10,970.92	229	5,503.14
Rock phosphate					1	64.00
TOTAL	695	\$35,866.63	653	\$58,881.99	517	\$41,092.74

^aM. E. Borders, "Farm Statistical Listing Sheet," Form A. C. P. 220, (unpublished annual report of the Angelina County Agricultural Stabilization and Conservation Committee, Lufkin, 1945).

^bIbid., 1950.

^cIbid., 1954.

In 1953, there were 517 farms participating in the program. The total of all payments to these farmers was \$41,092.74, excluding the increase in small payments. The four practices for which the largest payments were received were reseeding pastures, building earthen tanks and dams, using mixed fertilizer, and using 0-14-7 fertilizer. The largest payment was \$14,183.74 for reseeding pastures; this was more than one-third of all payments made.

Land Values

Farm land in Angelina County has increased rapidly in value since 1944. Excellent post-war prices for farm products and veteran land buying have played an important part in forcing land prices to new heights. High cattle prices had their influence.

Table XIII shows that there were 555 less farms in 1949 than in 1944, or a decrease of 21.4 per cent. While the farms were decreasing rapidly in number, the average size increased from 66.8 acres to 92.4 acres, or 38.3 per cent. The value per acre increased from \$40.02 to \$63.71; this was a percentage increase of 59.2 per cent. This points out the fact that farmers were desperately grabbing for more land and bidding up the prices to get what they needed. Many of the small farms were added to larger farms or subdivided into lots for home sites.

TABLE XIII
NUMBER, SIZE, AND VALUE PER ACRE
OF FARMS IN ANGELINA COUNTY, 1944-53

Date	Number of farms in county	Average size of farm	Value per acre of farmland
1944	2,592 ^a	66.80 ^a	\$40.02 ^a
1949	2,037 ^b	92.40 ^b	63.71 ^b
1953	1,935 ^c	97.02 ^c	65.50 ^c

^aUnited States Bureau of the Census, 1945, op. cit.,
p. 18.

^bIbid., 1950, p. 62.

^cDavis, op. cit., 1954.

Table XIII again reveals that by 1953 there was a leveling off of land prices. From 1949 to 1953 the number of farms had decreased only 5 per cent; the average size farm had increased 5 per cent; and the value per acre of farm land had increased \$1.79 or 2.8 per cent.

There is some indication that 1954 may bring a slight decrease in farm land prices. The decrease in farm income and tightening of credit may prevent further land inflation.

Farm Tenancy

Angelina County has had a rapid decrease in farm tenants in the post-war years (Table XIV). There were 196 less farm owners in 1953 than in 1944, but this is an indication of rapid progress in farm ownership since there were 657 less farms in 1953 than in 1944 (Table XIII). There were 1935 farms in 1953; there were 1735 full-owners and 120 part-owners.

During the 1944-49 period, (Table XIV) full farm ownership decreased 15.7 per cent; part-ownership increased 237.5 per cent; managers increased 66.7 per cent; cash tenants decreased 64.8 per cent; share-cash tenants and croppers decreased 25.5 per cent; other tenants decreased 49.5 per cent.

During the 1949-53 period, (Table XIV) full farm ownership increased 6.5 per cent. Part-owners and managers

TABLE XIV

FULL-OWNERS, PART-OWNERS, MANAGERS
AND TENANTS IN ANGELINA COUNTY, 1944-53

Date	Full-owners	Part-owners	Managers	Cash tenants	Share-cash tenants	Share-tenants and croppers	Other tenants
1944	1,931 ^a	32 ^a	3 ^a	307 ^a	1 ^a	110 ^a	208 ^a
1949	1,628 ^b	108 ^b	5 ^b	108 ^b	1 ^b	82 ^b	105 ^b
1953	1,735 ^c	120 ^c	7 ^c	54 ^c	1 ^c	25 ^c	20 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 347.

^bIbid., 1950, p. 90.

^cDavis, op. cit., 1954.

also showed an increase of 11.1 per cent and 40.0 per cent respectively. Farm tenancy again showed a big drop. The number of cash tenants decreased 50 per cent; share-cash tenants remained the same; share-tenants and croppers decreased 69.5 per cent; other tenants showed a very large decrease of 80.9 per cent.

Most tenants are not satisfied during periods of prosperity. They usually try to become farm owners or go into other types of work which can offer them a better standard of living.

Farm Power and Equipment

Horses and mules are still found on small farms in Angelina County (Table XV); they were valued at \$214,496. By 1949, the number of horses and mules had decreased 26.4 per cent while the value of these animals had decreased 57.4 per cent. Checking again in 1953, we find another decrease of 27.8 per cent in the number of horses and mules and 73.1 per cent decrease in their value. The demand for horses and mules diminished rapidly.

While horses and mules were losing in popularity, farm tractors gaining favor very rapidly. In 1944, there were only ninety-eight tractors on farms in Angelina County; 1949 showed an increase of 162.2 per cent or a total of

TABLE XV

HORSES, TRACTORS, AND EQUIPMENT ON FARMS
IN ANGELINA COUNTY, 1944-53

Date	Number of horses and mules	Value of horses and mules	Number of tractors	Value of farm equipment
1944	3,166 ^a	\$214,496.00 ^a	98 ^b	\$ 377,132.00 ^c
1949	2,331 ^d	91,329.00 ^d	257 ^e	942,830.00 ^g
1953	1,684 ^f	24,613.00 ^f	355 ^f	1,319,962.00 ^g

^aUnited States Bureau of the Census, 1945, op. cit., p. 268.

^bIbid., 1945, p. 70.

^cIbid., 1945, p. 18.

^dIbid., 1950, p. 133.

^eIbid., 1950, p. 116.

^fDavis, op. cit., 1954.

^gIbid., 1950.

257 tractors; 1953 showed another 38.1 per cent increase or a total of 355 tractors.

The value of farm machinery and equipment was closely correlated to the number of tractors on farms.

Roads and Utilities

An automobile is a necessity of every farm, and most farmers have one. In 1945, (Table XVI) only 45.5 per cent of the farms in Angelina County had automobiles. By 1950, 52.6 per cent had automobiles, and in 1953, the percentage had reached 80.1 per cent. This is remarkable progress, yet, there are others who are still waiting for the day when they can afford to buy a car or truck.

Slow progress has been made by telephone companies in extending lines to rural people. In 1953, (Table XVI) less than one-third of the farms had telephones. This was an improvement over 1945 when only about one-eighth of the farms had telephones and 1950 when approximately one-sixth had them.

Lack of electricity is no longer a problem. In 1945, only 38.3 per cent of the farms had electricity; 1950 shows 78.2 per cent, and 1953 shows 98.0 per cent of the farms with electricity. The greatest problems seem to be how to use this electricity to the best advantage.

Farm roads are in good condition in Angelina County. Only thirty farms are not on all-weather roads (Table XVI). There were, in 1953, 210.9 miles of roads paved and maintained by the State; thirty-five miles of paved roads are maintained by the county.⁸

⁸C. T. Curry, "Oral Report to Teachers of Vocational Agriculture," (unpublished report of the District Office of the Texas Highway Department, Lufkin, Texas, January, 1954).

TABLE XVI

THE NUMBER OF FARMS WITH AUTOMOBILES, TELEPHONES,
ELECTRICITY, AND ALL-WEATHER ROADS IN ANGELINA COUNTY,
1945-53

Date	Number of farms with automobiles	Number of farms with telephones	Number of farms with electricity	Number of farms on all-weather roads
1945	1,206 ^a	342 ^a	994 ^a	1,880 ^a
1950	1,072 ^b	357 ^b	1,593 ^b	1,982 ^b
1953	1,550 ^c	597 ^c	1,896 ^c	1,905 ^c

^aUnited States Bureau of the Census, 1945, op. cit.,
p. 70.

^bIbid., 1950, p. 116.

^cDavis, op. cit., 1954.

Cherokee County

Introduction and General Description

Cherokee County is located in the East Texas Piney Woods. The economy of the county is basically agricultural. There is a stable, largely rural, population with a considerable portion of Negroes. Cherokee County was created and organized from Nacogdoches County in 1846 and was named for the Cherokee Indians who lived in that area until the Cherokee War in 1839.⁹

The topography is rolling to hilly with heavily timbered areas which provide many picturesque points, notably Love's Lookout which is north of Jacksonville. There is excellent game cover throughout the county. Many lakes afford good fishing places. The altitude is 250 - 450 feet.¹⁰ The annual rainfall is 45.29 inches.¹¹ The temperature averages are: January 48 degrees, July 82 degrees, with a mean annual temperature of 65 degrees.¹²

⁹"Texas Almanac and State Industrial Guide, 1952-53," op. cit., p. 527.

¹⁰Ibid.

¹¹Ibid.

¹²Ibid.

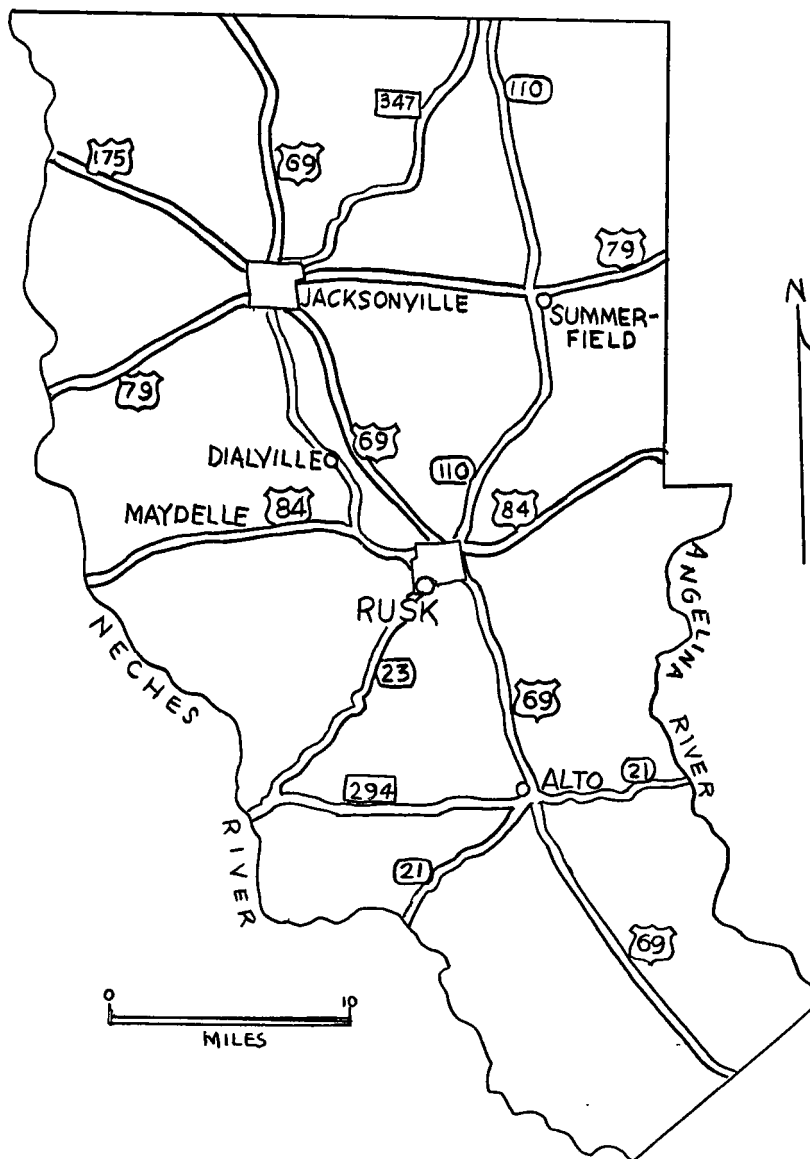


FIGURE 3.—MAP OF CHEROKEE COUNTY^a

^aReproduced from "Texas Almanac and State Industrial Guide, 1952-53," Counties and Cities of Texas (Dallas: A. H. Bello Corporation, 1951), p. 527.

The upland soils are light sandy clay and red soils with alluvials in the bottoms. The soils are well adapted to diversified crops. There is a large income from forests. The principle trees are pine, gum, walnut, post oak, and birch. There are numerous sawmills in operation.

The growing season in Cherokee County is 243 days.¹³ Truck crops are very important with tomatoes being one of the leading crops, the commercial crop in Texas having originated there.

Farm Forestry

Farm Forestry has expanded rapidly in Cherokee County in recent years. During the 1944-49 period the number of farms with woodland increased in number 27.6 per cent (Table XVII). The acres of farm woodland also showed an increase of 12.8 per cent. More farms were selling forest products as indicated by a 13.7 per cent increase in sales which brought a 69.2 per cent increase in value of products sold.

The 1953 figures (Table XVII) show a 43.8 per cent increase over 1949 in the number of farms with woodland. The acres of farm woodland increased 3.4 per cent; the number of farms selling forest products increased an

¹³Ibid.

TABLE XVII

FARM FORESTRY PRODUCTION AND SALES
IN CHEROKEE COUNTY, 1944-53

Date	Number of farms with woodland	Acres of farm woodland	Number of farms selling forest products	Value of products sold
1944	1,963 ^a	174,886 ^a	262 ^b	\$81,618.00 ^b
1949	2,505 ^c	197,334 ^c	298 ^d	138,130.00 ^d
1953	3,602 ^e	204,202 ^e	1,392 ^e	175,404.00 ^e

^aUnited States Bureau of the Census, 1945, op. cit., p. 25.

^bIbid., 1945, p. 324.

^cIbid., 1950, p. 65.

^dIbid., 1950, p. 279.

^eMetz Held, "Annual Narrative Report of County Extension Agents," E. S. 21 (unpublished annual report of the Cherokee County Agricultural Agent made to Agricultural and Mechanical College of Texas, College Station, Texas, January 1, 1954.)

Amazing 367.1 per cent; the value of products sold increased 27 per cent.

According to the statistics of Table XVII, timber is becoming an important crop in Cherokee County. Farmers are becoming conscious of the fact that additional income can be easily had by setting out seedlings, controlling hardwood, thinning, and following other improved practices that will encourage growth of timber.

Dairying

Dairying, in 1953, was over a million dollar industry in Cherokee County (Table XVIII). This makes dairying rank fourth among the farm enterprises in the county. There were only ten Grade A dairies in 1944; by 1949, this number had increased to 62, and in 1953, there were 69 dairies selling Grade A milk.

The income from dairying increased 161.3 per cent from 1949 to 1953. This increase in income was not due to price increases; there were over twice as many cows being milked as in 1949, and there were 1,635,285 additional gallons of milk being produced.

TABLE XVIII

DAIRY CATTLE PRODUCTION AND WHOLE MILK
SALES IN CHEROKEE COUNTY, 1944-53

Date	Cows milked	Gallons of milk produced	Number of Grade A dairies	Gallons of whole milk sold	Value of whole milk sold
1944	7,935 ^a	2,447,612 ^a	10 ^e	567,688 ^a	\$215,595.00 ^a
1949	4,515 ^b	2,865,615 ^b	62 ^d	707,923 ^b	386,628.00 ^b
1953	10,002 ^c	4,500,900 ^c	69 ^c	1,683,300 ^c	1,010,000.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 275.

^bIbid., 1950, p. 136.

^cHeld, op. cit., 1954.

^dIbid., 1950.

^eIbid., 1945.

Poultry

Poultry provides more gross income to farmers of Cherokee County than any other farm enterprise. The greatest part of this income comes from the sale of broilers. In 1953, the value of broilers sold was nearly five million dollars (Table XIX). A relatively small amount was realized from the sale of other poultry and poultry products.

In 1944, there were no commercial broiler houses in Cherokee County (Table XIX). By 1949, broiler growers had 186 commercial houses with a gross income over a million dollars. In 1953, there were 612 broiler houses producing over six million broilers; this provided nearly five million dollars in gross income.

In addition to the large broiler industry, in 1953, there were 150 farmers selling eggs commercially.¹⁴ There were 5,200 hens in cages during the first year of trial, and over 2,000 hens were producing hatching eggs.¹⁵ These laying hens show indications of becoming a profitable source of income in future years through the use of more cage layers.

¹⁴Held, op. cit. n. p.

¹⁵Ibid.

TABLE XIX

POULTRY PRODUCTION AND SALES IN CHEROKEE COUNTY, 1944-53

Date	Number of farms selling poultry or poultry products	Value of poultry and poultry pro- ducts sold	Number of 3000-capacity broiler houses	Number of broilers sold	Value of broilers sold
1944	1,498 ^a	\$301,218.00 ^a	0 ^a	248,500 ^e	\$ 198,800.00 ^e
1949	1,564 ^b	1,588,237.00 ^b	186 ^d	1,715,400 ^d	1,372,320.00 ^d
1953	1,282 ^c	5,031,675.00 ^c	612 ^c	6,102,000 ^c	4,881,600.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 275.

^bIbid., 1950, p. 156.

^cHeld, op. cit., 1954

^dIbid., 1950.

^eIbid., 1945.

Cotton

Cotton was grown on only 822 farms in Cherokee County in 1953; yet, it is still one of the chief cash crops of the county (Table XX). There was an upsurge in acreage and production in 1949. There were 63.1 per cent more acres in 1949 than in 1944; this gave 221.5 per cent more cotton and an increase in gross income of 306.5 per cent.

After 1949 there was a general recession in cotton production and sales (Table XX). The number of farms growing cotton dropped 56.2 per cent. The number of acres grown showed a similar decline of 53.5 per cent. The number of bales produced also showed a drop of 53.6 per cent. The income from cotton and seed was 43.1 per cent lower in 1953 than in 1949.

Most of the 822 farms now growing cotton are either large farms with tenants to furnish hand labor or farm owners with large families. At the present cost of labor, few farmers can afford to hire cotton chopping and picking.

Corn

Corn production is the most important crop enterprise in Cherokee County. Since 1944 there has been a

TABLE XX

COTTON ACREAGES, YIELDS, AND VALUES
IN CHEROKEE COUNTY, 1944-53

Date	Number of farms	Number of acres	Number of bales	Value of cotton and seed produced
1944	1,615 ^a	16,207 ^a	4,167 ^a	\$ 537,126.00 ^a
1949	1,878 ^b	26,440 ^b	13,396 ^b	2,183,548.00 ^b
1953	822 ^c	12,280 ^c	6,212 ^c	1,242,400.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 171.

^bIbid., 1950, p. 214.

^cHeld, op. cit., 1954.

slight increase in the number of farms growing corn and also in acreage, but the big change has come in production per acre (Table XXI).

According to the United States Bureau of the Census, as shown in Table XXI, there were only 6.4 bushels of corn per acre harvested for grain in 1944. In 1949, the average yield of corn per acre in Cherokee County had jumped to 18.4 bushels per acre, an increase of nearly 200 per cent. The 1953 figures show an average yield per acre of 37.2 bushels, more than twice that of 1949.

Farmers have been able to raise the yield of corn to this extent because of improved seed, proper soil treatment, and more intensive cultivation. Yet, there is much room for improvement. Some 4H Club boys and Future Farmers of America have produced over 100 bushels per acre on some of the same land when using it as demonstration plots.

Cattle

The breeds of beef cattle in Cherokee County are about the same as those discussed in Angelina County. According to Table XXII, the most significant changes in the cattle industry during the last few years is in price changes. In 1953, there were 1,675 more cattle on farms in the county than in 1949, but the value of all cattle on

TABLE XXI

CORN ACREAGE, YIELDS, AND VALUES

Date	Number of farms	Number of acres	Bushels of harvested grain	Value of harvested grain
1944	2,858 ^a	29,174 ^a	185,721 ^a	\$ 258,718.00 ^a
1949	2,574 ^b	24,240 ^b	445,941 ^b	515,895.00 ^b
1953	3,175 ^c	32,014 ^c	1,190,921 ^c	1,786,381.20 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 119.

^bIbid., 1950, p. 176.

^cHeld, op. cit., 1954.

TABLE XXII

CATTLE PRODUCTION, VALUES,
AND SALES IN CHEROKEE COUNTY, 1944-53

Date	Number of farms	Number of cattle on farms over 3 months old	Value of cattle over 3 months old	Value of all cattle sold
1944	3,615 ^a	37,317 ^a	\$1,580,878.00 ^a	\$ 667,337.00 ^a
1949	3,043 ^b	33,650 ^b	3,188,053.00 ^b	1,008,641.00 ^c
1953	3,510 ^d	35,325 ^d	2,190,150.00 ^d	881,223.00 ^d

^aUnited States Bureau of the Census, 1945, op. cit., p. 275.

^bIbid., 1950, p. 136.

^cIbid., 1950, p. 156.

^dHeld, op. cit., 1954.

farms had dropped nearly a million dollars. Many cattlemen that bought large herds when prices were extremely high have since been forced out of the cattle business.

The value of all cattle sold (Table XXII) increased 51.1 per cent in 1949 over what it had been in 1944, but 1953 showed a drop in sales of 12.6 per cent from 1949, even though there were many more cattle sold. Cattle still provide an important income to farmers of Cherokee County, but the days of easy money from cattle appear to be gone.

Swine

Swine production has decreased very rapidly in Cherokee County since 1944. During World War II, when meat was rationed and lard was scarce, farmers were requested to do everything they could to produce more meat and lard. After the war, meat became plentiful, and the corn-hog ratio was undesirable for pork production, so farmers began to produce less pork.

In 1949, there were 16.6 per cent less farms producing pork than in 1944 (Table XXIII). There were 18.3 per cent less hogs and pigs on farms, and there was a decrease in value of hogs and pigs on farms of 30.8 per cent.

In 1953, the number of farms growing swine had changed very little, but the number of head had dropped

TABLE XXIII
SWINE PRODUCTION AND VALUES
IN ANGELINA COUNTY, 1944-53

Date	Number of farms	Number of hogs and pigs	Value of hogs and pigs
1944	1,763 ^a	7,642 ^a	\$113,710.00 ^a
1949	1,470 ^b	6,245 ^b	78,737.00 ^b
1953	1,498 ^c	3,111 ^c	46,550.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 275.

^bIbid., 1950, p. 136.

^cHeld, op. cit., 1954.

50.2 per cent from what it was in 1949 (Table XXIII). The value of all hogs and pigs on farms in Cherokee County had dropped 70 per cent. The price per pound, on the average, was better in 1953 than in 1949, so there is an indication that the hogs and pigs in 1953 were much younger and lighter in weight.

The principle breed being used are Duroc Jerseys, Ohio Improved Chesters, and Poland Chinas. All of these breeds are of the lard type, but they are not over-fattened now like they were a few years ago. The trend now is to put on weight more economically and to discriminate against excessively fat hogs.

Watermelons

Less farms were growing watermelons in 1953 than in 1944, but the number of acres grown and the value of watermelons harvested were much greater (Table XXIV). This proves that watermelon production is becoming more highly commercialized than previously.

According to Table XXIV, 1949 was a poor year for watermelon production. There were 63.6 per cent less farms growing watermelons; the acreage was 9.5 per cent less, and the value of watermelons harvested was 17.3 per cent less than in 1944.

TABLE XXIV
WATERMELON ACREAGE AND VALUES
IN CHEROKEE COUNTY, 1944-53

Date	Number of farms	Acres of watermelons harvested	Value of watermelons harvested
1944	1,431 ^a	3,833 ^a	\$410,396.00 ^e
1949	521 ^b	3,470 ^b	339,218.00 ^d
1953	612 ^c	6,075 ^c	610,250.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 223.

^bIbid., 1950, p. 233.

^cHeld, op. cit., 1954.

^dIbid., 1950.

^eIbid., 1945.

By 1953, there was a swing toward an increase in production. There were 17.5 per cent more farms growing watermelons than in 1949; the acres of harvested watermelons increased 75.1 per cent, and the value of harvested watermelons increased 80.0 per cent. The income in 1953 was \$610,250.00; this amount provides a good supplemental income to many farm families during the summer months of the year.

Tomatoes

Cherokee County is the heart of the tomato industry in East Texas. There were 534, or 22.7 per cent less farms growing tomatoes in 1953 than in 1944, but there were 829, or 17.8 per cent, more acres in 1953, and the income from tomatoes sold was 22.8 per cent higher in 1953.

The poorest of the three tomato seasons cited in Table XXV was 1949, from the standpoint of number of farms, acres harvested, and value of tomatoes sold.

Cherokee County is fortunate to have Dr. P. A. Young who is superintendent of the Texas Agricultural Experiment Sub-station in Jacksonville. He has done extensive experiments for many years on tomato production and is one of the most recognized authorities in his field.

TABLE XXV
TOMATO ACREAGE AND SALES
IN CHEROKEE COUNTY, 1944-53

Date	Number of farms	Acres of tomatoes harvested	Value of tomatoes sold
1944	2,354 ^a	4,655 ^a	\$498,398.00 ^e
1949	1,659 ^b	3,883 ^b	396,625.00 ^d
1953	1,820 ^c	5,484 ^c	612,217.00 ^e

^aUnited States Bureau of the Census, 1945, op. cit., p. 223.

^bIbid., 1950, p. 233.

^cHeld, op. cit., 1954.

^dIbid., 1950.

^eIbid., 1945.

Cowpeas

Cowpea production has decreased in importance in Cherokee County since 1944. Most of the 916 farms that grew peas in 1953 grew them for home use only (Table XXVI). During 1953 there was only an average of 3.8 acres of peas on those farms that grew them.

In 1949, there were 23.1 per cent less farms growing peas, 46.8 per cent less acreage, 4.5 per cent more bushels harvested, and 17.9 per cent less value of harvested peas than in 1944.

In 1953, the same trend was in control. The number of farms growing peas was 22.3 per cent less, the acreage 9.8 per cent less, the bushels of peas harvested 0.3 per cent less, and the value of peas harvested 6.6 per cent less than in 1949.

The 1953 gross income from peas harvested was \$44,303.00 (Table XXVI). The principle varieties grown were Blackeyes, Purple Hulls, and Cream Peas. Home canning is still very popular.

Peanuts

The number of farms growing peanuts has decreased rapidly during recent years (Table XXVII). In 1944, there were 955 farms in Cherokee County growing peanuts; in 1949, there were only 236. This was a decrease of 75.3 per cent.

TABLE XXVI

COWPEA ACREAGE, PRODUCTION,
AND VALUES IN ANGELINA COUNTY, 1944-53

Date	Number of farms	Number of acres	Bushels of peas harvested	Value of peas harvested
1944	1,534 ^a	7,250 ^a	19,217 ^a	\$57,651.00 ^a
1949	1,179 ^b	3,856 ^b	20,081 ^b	47,436.00 ^b
1953	916 ^c	3,480 ^c	20,021 ^c	44,303.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 171.

^bIbid., 1950, p. 195.

^cHeld, op. cit., 1954.

In 1953, only ninety farms were growing peanuts; this was 61.9 per cent less than in 1949.

The number of acres of peanuts also showed a rapid change. In 1949, there were 81 per cent less acres than in 1944. However, in 1953, there was a 50 per cent increase in acres over 1949.

The pounds of peanuts produced were 54.8 per cent less in 1949 than in 1944. The pounds produced were 59.5 per cent greater in 1953 than in 1949. Table XXVII points out that with 5,647 less acres in 1953 farmers were producing 221,099 pounds more of peanuts; this indicates a great improvement in management and cultural practices.

Peanut hay production was off sharply in 1949, but it was making gains rapidly by 1953.

The total value of peanuts and hay grown in 1949 showed a decrease of 19.5 per cent from 1944. The value in 1953 showed an increase in value of 205.4 per cent in 1953.

Soil Building

During the year 1944, there were 1,734 farms that received \$105,863.35 from the United States Government for soil building practices (Table XXVIII). The four largest payments were for reseeding pastures, using superphosphate,

TABLE XXVII

PEANUT ACREAGE, PRODUCTION,
AND VALUES IN CHEROKEE COUNTY, 1944-53

Date	Number of farms	Number of acres	Pounds of peanuts	Tons of hay	Total value
1944	955 ^a	7,907 ^a	2,036,901 ^a	3,860 ^a	\$124,071.00 ^a
1949	236 ^b	1,506 ^b	919,949 ^b	365 ^b	99,806.00 ^b
1953	90 ^c	2,260 ^c	2,258,000 ^c	1,498 ^c	304,830.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 171.

^bIbid., 1950, p. 195.

^cHeld, op. cit., 1954, pp. 8-9.

TABLE XXVIII

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN CHEROKEE COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Diversion terraces			2	\$ 46.10		
Standard terraces	2	\$ 175.60	16	1,236.08	15	\$ 1,873.09
Earthen tanks and dams	16	1,846.90	40	3,954.58	89	11,464.50
Eliminating underbrush	5	272.20	49	2,336.50		
Mowing pastures	109	4,375.25	123	2,567.75		
Reseeding pastures	844	50,080.39	1,021	55,654.51	364	18,411.06
Winter legumes and rye	320	9,568.90	231	7,226.04	444	17,791.95

TABLE XXVIII (Continued)

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN CHEROKEE COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Superphosphate	357	\$ 22,431.40	231	\$ 30,449.51	16	\$ 491.60
Limestone	78	5,259.37	26	2,271.75	20	1,462.50
Summer legumes	21	356.40	2	24.57		
Kudzu	4	55.00	88	3,594.40		
Potash	2	164.99	4	25.33	13	244.88
Planting forest trees			22	1,005.00	14	855.00
Improving forest trees			3	921.50	28	8,068.00
Mixed fertilizer	3	802.50	298	15,534.28		

TABLE XXVIII (Continued)

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN CHEROKEE COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Sericea Lespedeza	205	\$ 9,945.25				
0-14-7 fertilizer					183	\$ 7,337.48
Rock phosphate	357	529.20	1	64.80	1	96.00
TOTAL	1,734	\$105,863.35	2,550	\$126,912.70	801	\$ 68,096.06

^aBob Persons, "Farm Statistical Listing Sheet," Form A. C. P. 220, (Unpublished annual report of the Cherokee County Agricultural Stabilization and Conservation Committee, Rusk, 1945), p. 19.

^bIbid., 1950, p. 19.

^cIbid., 1954, p. 19.

planting Sericea Lespedeza, and planting winter legumes and rye grass.

There were 2,550 farms participating in the soil building practices in 1949. The total payment for all practices was \$126,912.70. The four largest payments were for reseeding pastures, using superphosphate, fertilizing with mixed fertilizer, and planting winter legumes and rye grass.

In 1953, there were 801 farms participating in the program. The total of all payments to these farmers was \$68,096.06, excluding the increase in small payments. The four practices for which the largest payments were received were reseeding pastures, planting winter legumes and rye grass, building earthen tanks and dams, and improving forest trees. The largest payment was \$18,411.06 for reseeding pastures; this was more than one-fourth of all payments made in 1953.

Land Values

Farms in Cherokee County have gradually decreased in number and gradually increased in size in recent years (Table XXIX). The decrease in number of farms from 1944 to 1949 was 6 per cent; the decrease from 1949 to 1953 was 3.5 per cent. The average size of farms increased 10 per cent from 1944 to 1949 and 1.4 per cent from 1949 to 1953.

TABLE XXIX

NUMBER, SIZE, AND VALUE PER ACRE
OF FARMS IN CHEROKEE COUNTY, 1944-53

Date	Number of farms in county	Average size of farm	Value per acre of farmland
1944	4,409 ^a	108.8 ^a	\$26.19 ^a
1949	4,147 ^b	119.3 ^b	44.80 ^b
1953	4,003 ^c	121.0 ^c	43.50 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 25.

^bIbid., 1950, p. 65.

^cHeld, op. cit., 1954, p. 3.

Post-war inflationary prices in land reached its peak in 1949. During this year land prices were 71 per cent higher than in 1944. After 1949, there was a general leveling of prices with land being worth \$1.30, or 2.8 per cent, less in 1953 than in 1949.

Farm Tenancy

Full farm ownership has increased 5 per cent since 1949 (Table XXX). From 1944 to 1949 there was very little change. Part-ownership increased 82 per cent from 1944 to 1949 and 5 per cent from 1949 to 1953. There was also a substantial increase in the number of farm managers for both periods.

As farm ownership has increased since 1944, there has been a gradual decrease in the number of farm tenants. In 1944, there were 1,804 tenants of all kinds; in 1949, this number had decreased to 1,226; in 1953, there were 1,167, or 35.3 per cent less than in 1944.

Farm Power and Equipment

Horses and mules are being replaced by tractors as a source of farm power. During the 1944-49 period there was a decrease of 22.3 per cent in the number of horses and mules in Cherokee County (Table XXXI). The value of horses

TABLE XXX

FULL-OWNERS, PART-OWNERS, MANAGERS
AND TENANTS IN CHEROKEE COUNTY, 1944-53

Date	Full-owners	Part-owners	Managers	Cash tenants	Share-cash tenants	Share-tenants and croppers	Other tenants
1944	2,212 ^a	387 ^a	6 ^a	411 ^a	9 ^a	1,261 ^a	123 ^a
1949	2,210 ^b	703 ^b	8 ^b	344 ^b	28 ^b	653 ^b	201 ^b
1953	2,320 ^c	738 ^c	10 ^c	327 ^c	26 ^c	624 ^c	190 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 348.

^bIbid., 1950, p. 92.

^cHeld, op. cit., 1954, p. 3.

TABLE XXXI

HORSES, TRACTORS, AND EQUIPMENT ON FARMS
IN CHEROKEE COUNTY, 1944-53

Date	Number of horses and mules	Value of horses and mules	Number of tractors	Value of farm equipment
1944	7,722 ^a	\$532,400.00 ^a	360 ^b	\$1,417,157.00 ^c
1949	5,998 ^d	244,207.00 ^d	754 ^e	2,762,342.00 ^g
1953	4,993 ^f	50,868.00 ^f	1,890 ^f	8,502,942.00 ^f

^aUnited States Bureau of the Census, 1945, op. cit., p. 275.

^bIbid., 1945, p. 76.

^cIbid., 1945, p. 25.

^dIbid., 1950, p. 136.

^eIbid., 1950, p. 118.

^fHeld, op. cit., 1954, p. 3.

^gIbid., 1950, p. 3.

and mules on farms during this same period decreased 54.4 per cent. The number of tractors increased 109.4 per cent, and the value of farm implements and machinery increased 95 per cent.

During the 1949-53 period, the number of horses and mules decreased further by 16.8 per cent. The value of horses and mules took a tremendous drop of 79.3 per cent, a little over \$10.00 per head. The number of tractors increased from 754 to 1,890, or 151 per cent. The value of farm implements and machinery increased 208 per cent.

Roads and Utilities

In 1945, there were only 1,428 or slightly less than one-third of the farms in Cherokee County with automobiles (Table XXXII). This was the last year of World War II, automobiles were scarce, and much of the farm profits were going into United States Government Bonds. After the war ended and cars became available, many farmers began to buy them. Where there had been only a 10.2 per cent increase in the number of farms with automobiles from 1945 to 1950, there was a 126.5 per cent from 1950 to 1953.

Although there was a 6.4 per cent increase in the number of farms with telephones from 1945 to 1950, there was a 42.4 per cent decrease from 1950 to 1953. This was because

many of the small rural telephone exchanges were discontinued by Southwestern States Telephone Company before 1953.

Rural electrification has had a tremendous expansion since 1945. In 1950, there were 114 per cent more farms with electricity than in 1945. In 1953, there were 34.8 per cent more than in 1950. With electricity on 3,610 of the 4,003 farms (Table XXIX) this shows that over 90 per cent of the farms in Cherokee County had electricity in 1953.

Practically all the farms are on all-weather roads; only 56 of the 4,003 are not listed as such. The road system in the county, as a whole, is very good.

TABLE XXXII

THE NUMBER OF FARMS WITH AUTOMOBILES, TELEPHONES,
ELECTRICITY, AND ALL-WEATHER ROADS IN CHEROKEE COUNTY,
1945-53

Date	Number of farms with automobiles	Number of farms with telephones	Number of farms with electricity	Number of farms on all-weather roads
1945	1,428 ^a	467 ^a	1,252 ^a	2,865 ^a
1950	1,574 ^b	497 ^b	2,679 ^b	3,878 ^b
1953	3,565 ^c	287 ^c	3,610 ^c	3,947 ^c

^aUnited States Bureau of the Census, 1945, op. cit.,
p. 76.

^bIbid., 1950, p. 118.

^cHeld, op. cit., 1954, p. 3.

Nacogdoches County

Introduction and General Description

Nacogdoches County is one of the oldest counties in Texas. It was one of the original counties, created in 1836 and organized in 1837.¹⁶ Nacogdoches received its name from the Nacogdoches Indians.

The county is located in the Shortleaf Pine Belt of East Texas. The terrain is generally broken with hills and hollows, stretches of level plateaus, and smooth land in the valleys. The county is drained by the Angelina and Attoyac rivers and their tributaries. The altitude is 200 to 600 feet with an annual rainfall of 47.02 inches.¹⁷ The temperature averages for January is 48 degrees, the July average is 82 degrees.¹⁸ The mean annual temperature is 64 degrees, and the growing season is 234 days.¹⁹

¹⁶"Texas Almanac and State Industrial Guide, 1952-53," op. cit., p. 527.

¹⁷Ibid.

¹⁸Ibid.

¹⁹Ibid.

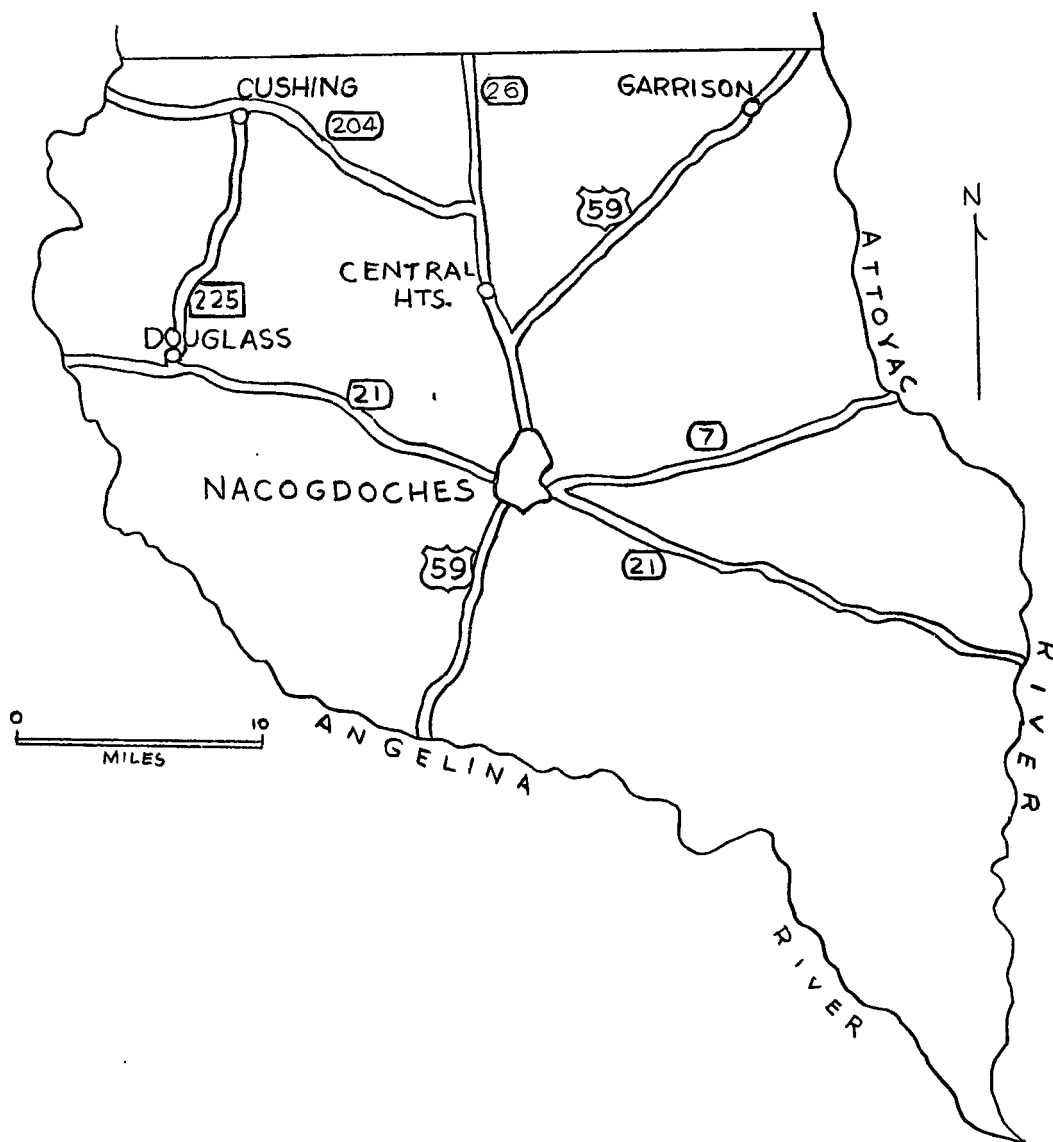


FIGURE 4.—MAP OF NACOGDOCHES COUNTY^a

^aReproduced from "Texas Almanac and State Industrial Guide, 1952-53," Counties and Cities of Texas (Dallas: A. H. Bello Corporation, 1951), p. 586.

The soils, considerably varied, include gray sandy, red sandy, and red clays on uplands; in the valleys are rich, dark sandy alluvial and some red loam.

The economy of the county is predominantly agricultural with timber, dairying, and poultry being the most important enterprises.

Farm Forestry

Only a small part of the timberland of Nacogdoches County is owned by farmers, yet it provides a good income to farmers who have maintained a forest plot on their farms. The number of farms with woodland has increased substantially during recent years (Table XXXIII). There were 17.6 per cent more farms with woodland in 1949 than in 1944. In 1953, there were 4 per cent more than in 1949.

The acres of farm woodland have increased quite rapidly since 1944. The 1949 figure shows 42 per cent more acres than in 1944, and the 1953 figure shows a 17.6 per cent increase over 1949. More farmers seem to recognize timber as being a valuable crop; however, most farmers are slow about setting out pine seedlings (Table XLIV) because it takes several years to realize any return.

The number of farms selling forest products increased 45 per cent from 1944 to 1949 and then another 21 per cent

TABLE XXXIII

FARM FORESTRY PRODUCTION AND SALES
IN NACOGDOCHES COUNTY, 1944-53

Date	Number of farms with woodland	Acres of farm woodland	Number of farms selling forest products	Value of products sold
1944	1,654 ^a	109,203 ^a	352 ^b	\$ 75,451.00 ^b
1949	1,845 ^c	155,346 ^c	510 ^d	127,498.00 ^d
1953	1,920 ^e	182,530 ^e	617 ^e	160,188.00 ^e

^aUnited States Bureau of the Census, 1945, op. cit., p. 53.

^bIbid., 1945, p. 337.

^cIbid., 1950, p. 75.

^dIbid., 1950, p. 284.

^eB. F. Gray, "Annual Narrative Report of County Extension Agents," E. S. 21 (unpublished annual report of the Nacogdoches County Agricultural Agent made to Agricultural and Mechanical College of Texas, College Station, Texas, January 1, 1954), pp. 14-15.

from 1949 to 1953. Many farmers in this county were guilty of wasteful cutting in order to pick up a few extra dollars from pulpwood which was sold to the Southland Paper Mill at Lufkin, Texas.

Forest products continued to bring good prices. The value of products sold in 1949 were 69.3 per cent more than in 1944. The 1953 sales showed a 25.6 per cent increase over 1949.

Dairying

Dairying is one of the top agricultural enterprises of Nacogdoches County. The number of cows being milked increased 21.8 per cent in 1949 over 1944 and another 95 per cent in 1953 over 1949 (Table XXXIV). There were approximately 10,000 more cows milked in 1953 than in 1944.

As a result of better feeding, breeding, and management practices, the gallons of milk produced has risen much faster than the number of cows produced. The gallons of milk produced in 1949 was 147.7 per cent greater than in 1944, whereas, the 1953 production was 146.2 per cent greater than in 1949.

The quality of milk produced was much better in 1953 than previously. All milk produced in Grade A dairies is supervised by regular paid inspectors. The number of

TABLE XXXIV

DAIRY CATTLE PRODUCTION AND WHOLE MILK
SALES IN NACOGDOCHES COUNTY, 1944-53

Date	Cows milked	Gallons of milk produced	Number of Grade A dairies	Gallons of whole milk sold	Value of whole milk sold
1944	6,759 ^a	2,399,384 ^a	48 ^e	1,131,798 ^a	\$ 363,760.00 ^a
1949	8,235 ^b	5,941,835 ^b	296 ^d	3,266,473 ^b	1,657,492.00 ^b
1953	16,048 ^c	14,598,911 ^c	310 ^c	12,854,206 ^c	7,712,523.60 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 302.

^bIbid., 1950, p. 146.

^cGray, op. cit., 1954, pp. 10-11.

^dIbid., 1950, pp. 10-11.

^eIbid., 1945, pp. 10-11.

Grade A dairies increased from 48 to 296, or 517 per cent, during the 1944-49 period. By 1953, the number had increased to 310, showing a 4.7 per cent increase over 1949.

The number of gallons of whole milk sold was over ten times greater in 1953 than it had been nine years previously; 1949 showed an increase of 191 per cent over 1944, and 1953 showed an increase of 293 per cent over 1949. The value of whole milk sold has shown even a greater increase. The income from whole milk grew from less than a half million dollars in 1944 to over seven and one-half million dollars in 1953.

Poultry

The poultry industry is second in importance in providing income to farmers in Nacogdoches County. Table XXXIV shows a drop in the number of farms selling poultry or poultry products, but this is because the industry has become more commercialized.

There were only three 3000-capacity broiler houses in the county during 1944. By 1949, this number had increased to 25 houses, or by 734 per cent. About 1949, when farmers really began to see possibilities in the broiler industry and financing became easy, the industry began to grow like wildfire. In 1953, there were 700 houses with more still being built; this was a 2,700 per cent increase over 1949.

TABLE XXXV

POULTRY PRODUCTION AND SALES IN NACOGDOCHES COUNTY, 1944-53

Date	Number of farms selling poultry or poultry products	Value of poultry and poultry pro- ducts sold	Number of 3000-capacity broiler houses	Number of broilers sold	Value of broilers sold
1944	1,399 ^a	\$ 182,181.00 ^a	3 ^e	152,000 ^e	\$ 133,298.14 ^e
1949	1,142 ^b	334,198.00 ^b	25 ^d	275,367 ^d	220,293.60 ^d
1953	1,036 ^c	7,218,213.80 ^c	700 ^c	8,864,230 ^c	7,001,066.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 303.

^bIbid., 1950, p. 166.

^cGray, op. cit., pp. 10-11.

^dIbid., 1950, pp. 10-11.

^eIbid., 1945, pp. 10-11.

The number of broilers sold was 81.3 per cent greater in 1949 than in 1944; the number increased 3,119 per cent in 1953 over 1949. Each farmer was growing three to four groups of broilers to each house annually. The quality of chick and the quality of feed also played a prominent part in this big expansion. Much work was done on disease control, but that is still one of the big problems facing farmers in Nacogdoches County.

The value of broilers sold in 1953 was over seven million dollars. This accounted for all the income received from all poultry or poultry products except \$217,147.00 which came from the sale of eggs, hens, and other products.

Cotton

A few years ago, before World War II, cotton was the major agricultural enterprise in Nacogdoches County. Table XXXVI reveals that cotton is still an important enterprise, but it is no longer the leader. The number of farms growing cotton decreased 26 per cent from 1944 to 1949 and another 45.8 per cent from 1949 to 1953.

Nacogdoches County grew 14,396 acres of cotton in 1944, but by 1949, this acreage had dropped to 11,945, or 17 per cent. In 1953, only 6,814 acres were planted; this was a 43 per cent decrease from 1949.

TABLE XXXVI
COTTON ACREAGE, YIELDS, AND VALUES
IN NACOGDOCHES COUNTY, 1944-53

Date	Number of farms	Number of acres	Number of bales	Value of cotton and seed produced
1944	1,282 ^a	14,396 ^a	4,392 ^a	\$ 566,568.00 ^a
1949	949 ^b	11,945 ^b	6,617 ^b	1,078,571.00 ^b
1953	515 ^c	6,814 ^c	2,695 ^c	512,050.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 199.

^bIbid., 1950, p. 224.

^cGray, op. cit., 1954, pp. 8-9.

Due to a great decrease in cotton acreage, the number of bales of cotton grown also shows a decrease. There were 50.4 per cent more bales in 1949 than 1944, but there was a 59.5 per cent decrease in 1953 compared to 1949. The value of cotton and seed produced stayed fairly well in line with the number of bales produced. In 1953, the value of all cotton and seed produced was over a half million dollars.

Corn

The value of corn grown was about the same as the value of cotton and seed produced in 1953. Fewer farms are growing corn, and the number of acres are greatly reduced over other recent years, but production and income is better than ever (Table XXXVII).

The number of farms growing corn decreased 21.8 per cent during the 1944-49 period and 20.9 per cent during the 1949-53 period. The decrease in acres was 37.2 per cent in 1949 and 2.4 per cent in 1953. In spite of the decrease in acreage, there were 66 per cent and 43 per cent increases, respectively, in the production of harvested grain.

The value of harvested grain from all farms in Nacogdoches County showed a 34.3 per cent increase in 1949 over 1944 and another 67.8 per cent increase in 1953 over 1949.

TABLE XXXVII

CORN ACREAGE, YIELDS, AND VALUES
IN NACOGDOCHES COUNTY, 1944-53

Date	Number of farms	Number of acres	Bushels of harvested grain	Value of harvested grain
1944	1,956 ^a	22,357 ^a	151,387 ^a	\$221,656.00 ^a
1949	1,530 ^b	14,054 ^b	251,375 ^b	297,517.00 ^b
1953	1,210 ^a	14,400 ^c	360,000 ^c	504,000.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 147.

^bIbid., 1950, p. 186.

^cGray, op. cit., 1954, pp. 8-9.

This was primarily a result of increased production because corn prices changed very little. With corn production being a half-million-dollar enterprise in 1953, it is one of the most important field crops grown.

Cattle

The number of farms growing beef cattle has decreased slightly during the past nine years (Table XXXVIII). The number of cattle on farms that are over three months old increased 20 per cent from 1949 to 1953, but the value of these cattle was 11.7 per cent less due to low cattle prices.

The 1944-49 period was a period of inflationary prices in cattle. Although there were 3.1 per cent less cattle on farms in 1949 than in 1944, the value of these cattle was 114.3 per cent greater.

The value of all cattle sold was greater by 69.2 per cent in 1949 than in 1944. There was also a 1.2 per cent greater income in 1953 than 1949, but that was because many more cattle were offered for sale. Many cattlemen reduced their herds when prices broke in 1953. The value of all cattle sold in 1953 was nearly a million dollars.

TABLE XXXVIII

CATTLE PRODUCTION, VALUES,
AND SALES IN NACOGDOCHES COUNTY, 1944-53

Date	Number of farms	Number of cattle on farms over 3 months old	Value of cattle over 3 months old	Value of all cattle sold
1944	2,551 ^a	39,419 ^a	\$1,685,502.00 ^a	\$511,110.00 ^a
1949	2,337 ^b	38,189 ^b	3,635,501.00 ^b	864,449.00 ^c
1953	2,312 ^d	45,827 ^d	3,207,890.00 ^d	875,222.00 ^d

^aUnited States Bureau of the Census, 1945, op. cit., p. 303.

^bIbid., 1950, p. 146.

^cIbid., 1950, p. 166.

^dGray, op. cit., 1954, pp. 10-11.

Swine

Swine production has gradually decreased in importance in Nacogdoches County. The number of farms growing swine decreased 19.9 per cent from 1944 to 1949. During this same period, the number of hogs and pigs on farms in the county decreased 26.6 per cent, and the value of all swine in the county showed a 28 per cent decrease (Table XXXIX).

During the 1949-53 period the swine situation was even worse except for prices. The number of farms raising swine decreased 38.4 per cent. The number of hogs and pigs on farms in the county showed a 48.2 per cent decrease, but due to high pork prices, the value of all swine increased 2.9 per cent.

The average hog was valued at slightly over \$13.00 in 1944; in 1949, this had changed very little; in 1953, the average value per head was approximately \$25.00. Prices are generally considered good when choice hogs bring twenty-five to twenty-seven cents per pound as they did in 1953.

Watermelons

Watermelons have provided a good supplemental income to farmers in Nacogdoches County for two decades or more. They provide a seasonal income when it is very badly needed,

TABLE XXXIX

SWINE PRODUCTION AND VALUES
IN NACOGDOCHES COUNTY, 1944-53

Date	Number of farms	Number of hogs and pigs	Value of hogs and pigs
1944	1,420 ^a	7,366 ^a	\$94,760.00 ^a
1949	1,138 ^b	5,409 ^b	68,253.00 ^b
1953	702 ^c	2,810 ^c	70,250.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 303.

^bIbid., 1950, p. 146.

^cGray, op. cit., 1954, pp. 10-11.

TABLE XL

WATERMELON ACREAGE AND VALUES
IN NACOGDOCHES COUNTY, 1944-53

Date	Number of farms	Acres of watermelons harvested	Value of watermelons harvested
1944	876 ^a	3,936 ^a	\$175,666.00 ^e
1949	313 ^b	3,275 ^b	167,348.10 ^d
1953	260 ^c	2,500 ^c	187,500.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 251.

^bIbid., 1950, p. 243.

^cGray, op. cit., 1954, pp. 8-9.

^dIbid., 1950, pp. 8-9.

^eIbid., 1945, pp. 8-9.

after tomato harvest and before the harvest of cotton and corn.

During the 1944-49 period, the number of farms growing watermelons decreased 64.4 per cent (Table XL). The acreage decreased only 16.8 per cent during this same period; this indicates that many of the farmers who grew only small patches had quit altogether. The value of watermelons harvested decreased only 5.3 per cent.

From 1949 to 1953, the number of farms growing watermelons decreased 16.9 per cent, whereas, the acres watermelons harvested was reduced 23.6 per cent. The value of watermelons harvested increased 10.7 per cent. This gave a much better income per acre in 1953 than either of the other years cited in Table XL.

Tomatoes

Tomato production has set a very similar pattern to watermelon production in Nacogdoches County. During the 1944-49 period the number of farms growing tomatoes decreased 43.4 per cent; the acres of tomatoes harvested dropped 47.5 per cent; and the value of tomatoes sold was 25.2 per cent less (Table XLI).

From 1949 to 1953 there was a 46.8 per cent decrease in the number of acres of tomatoes harvested. However, the

TABLE XLI
TOMATO ACREAGE AND SALES
IN NACOGDOCHES COUNTY, 1944-53

Date	Number of farms	Acres of tomatoes harvested	Value of tomatoes sold
1944	414 ^a	602 ^a	\$90,300.00 ^e
1949	235 ^b	317 ^b	67,540.00 ^d
1953	125 ^c	180 ^c	126,110.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 251.

^bIbid., 1950, p. 243.

^cGray, op. cit., 1954, pp. 8-9.

^dIbid., 1950, pp. 8-9.

^eIbid., 1945, pp. 8-9.

value of tomatoes sold showed an increase of 86.8 per cent. In 1953, the market was excellent, but it was not a good crop year for tomatoes.

Cowpeas

Many farms have discontinued the production of cowpeas. From 1944 to 1949, there was a decrease in the number of farms raising cowpeas to the extent of 38.4 per cent, the reduction in acreage was 45.1 per cent; and the bushels of peas harvested was 9.1 per cent less. The value of peas harvested was 15.4 per cent less (Table XLII).

The changes from 1949 to 1953 were a little less severe. The number of farms raising cowpeas decreased 10.8 per cent; the number of acres grown decreased 4.6 per cent; the bushels of peas harvested increased 15.7 per cent; and the value of peas harvested increased 5 per cent.

With the value of peas harvested in 1953 being only \$33,324.00, cowpeas could not be considered a major crop in Nacogdoches County; yet, they do have a definite place on farms that are following a diversified cropping system.

Peanuts

As diversified farming has gradually declined in Nacogdoches County, peanut production has lost its importance.

TABLE XLII

COWPEA ACREAGE, PRODUCTION,
AND VALUES IN NACOGDOCHES COUNTY, 1944-53

Date	Number of farms	Number of acres	Bushels of peas harvested	Value of peas harvested
1944	1,219 ^a	4,414 ^a	12,526 ^a	\$37,528.00 ^a
1949	751 ^b	2,422 ^b	13,661 ^b	31,748.00 ^b
1953	670 ^c	2,310 ^c	15,801 ^c	33,324.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 199.

^bIbid., 1950, p. 205.

^cGray, op. cit., 1954, pp. 8-9.

TABLE XLIII

PEANUT ACREAGE, PRODUCTION,
AND VALUES IN NACOGDOCHES COUNTY, 1944-53

Date	Number of farms	Number of acres	Pounds of peanuts	Tons of hay	Total value
1944	754 ^a	3,026 ^a	307,537 ^a	1,449 ^a	\$49,674.00 ^a
1949	198 ^b	432 ^b	78,948 ^b	203 ^b	12,239.00 ^b
1953	5 ^c	32.5 ^c	12,500 ^c	200 ^c	1,312.50 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 199.

^bIbid., 1950, p. 204.

^cGray, op. cit., 1954, pp. 8-9.

From 1944 to 1949, the number of farms growing peanuts decreased 73.8 per cent; the acres of peanuts grown dropped 86.5 per cent; the pounds of peanuts produced decreased 74.7 per cent; the tons of hay produced was 86.2 per cent less; and the total value of peanuts harvested was 75.5 per cent less.

The changes were even greater from 1949 to 1953 than they had been during the first period. There was a 97.5 per cent decrease in the number of farms growing peanuts, a 92.5 per cent decrease in acreage, an 84.4 per cent decrease in pounds of peanuts harvested, a 1.5 per cent decrease in tons of hay, and an 89.5 per cent decrease in the total value of peanuts harvested.

In 1953, only five farms grew a total of 32.5 acres of peanuts which had a total value of \$1,312.50.

Soil Building

During the year of 1944, there were 1,874 farms that received \$76,695.20 from the United States Government for soil building practices (Table XLIV). The four largest payments were for building earthen tanks and dams, eliminating underbrush, mowing pastures, and contour farming cropland.

TABLE XLIV

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN NACOGDOCHES COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Diversion terraces	1	\$ 10.26	1	\$ 33.50		
Standard terraces	7	416.76	7	533.81	5	\$ 365.74
Earthen tanks and dams	129	13,264.45	72	11,926.18	20	2,094.20
Eliminating underbrush	346	13,010.25				
Mowing pastures	497	11,581.85	224	2,468.00		
Contour listing cropland	1,001	6,818.52				
Contour farming cropland	1,200	13,854.30				
Sodding with bermuda	5	1,638.00				

TABLE XLIV (Continued)

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN NACOGDOCHES COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Reseeding pastures	5	\$ 158.20	495	\$21,785.33	680	\$27,205.17
Winter legumes and rye grass	52	2,486.50	248	7,920.38	45	980.40
Superphosphate	161	3,839.68	601	36,204.80	83	3,936.83
Limestone			86	5,033.26	17	1,376.25
Summer legumes	1,229	6,322.70	1	10.00		
Small grain winter cover crop	190	3,050.70				
Deferred grazing	2	142.03				
Mixed fertilizer					133	4,643.65
Water well			1	390.00		
Kudzu			1	30.00		

TABLE XLIV (Continued)

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN NACOGDOCHES COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Potash			10	\$ 49.07	20	\$310.63
Planting forest trees			10	450.00	21	2,951.25
Improving forest trees			13	1,040.50	4	420.00
Subsoiling			1	60.00		
Sericea Lespedeza			149	5,461.80		
0-14-7 fertilizer			64	3,302.57	206	7,027.24
Rock phosphate			68	6,112.26		
TOTAL	1,874	\$76,695.20	962	\$102,831.46	706	\$51,311.36

^aC. K. Holcomb, "Farm Statistical Listing Sheet," Form ACP 220, (unpublished annual report of the Nacogdoches County Agricultural Stabilization and Conservation Committee, Nacogdoches, 1945), p. 19.

^bIbid., 1950, p. 19.

^cIbid., 1954, p. 19.

Quite a few changes had taken place in soil building payments by 1949. During that year, the four largest payments were for building earthen tanks and dams, reseeding pastures, fertilizing pastures with superphosphate, and fertilizing pastures with rock phosphate. There were 962 farms that received \$102,831.46 in payments.

In 1953, the four largest payments were for reseeding pastures, using 0-14-7 fertilizer, using mixed fertilizer, and using superphosphate. There were 706 farms participating in the practices, and a total of \$51,311.36 was paid to these farmers, excluding the increase in small payments for farms receiving under \$200.00. The largest single payment in 1953 was \$27,205.17 for the reseeding of pastures; this payment amounted to over half the money paid during that year.

Land Values

The number of farms in Nacogdoches County have gradually decreased, but the size and value per acre has shown an increase (Table XLV).

From 1944 to 1949, the number of farms in the county decreased 3.9 per cent. The average size of farms in the county during this period increased from 118.7 to 134.0 acres, or 12.9 per cent. The value per acre of farmland rose rapidly from \$27.23 to \$43.05 per acre or 58.2 per cent.

TABLE XLV

NUMBER, SIZE, AND VALUE PER ACRE
OF FARMS IN NACOGDOCHES COUNTY, 1944-53

Date	Number of farms in county	Average size of farm	Value per acre of farmland
1944	2,854 ^a	118.7 ^a	\$27.23 ^a
1949	2,743 ^b	134.0 ^b	43.05 ^b
1953	2,662 ^c	146.8 ^c	45.12 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 53.

^bIbid., 1950, p. 75.

^cGray, op. cit., 1954, p. 3.

The changes from 1949 to 1953 were not quite as rapid as during the five previous years. The number of farms in the county declined by 3 per cent, and the average size farm increased from 134.0 to 146.8 acres, or 9.5 per cent. The value of farmland per acre increased from \$43.05 to \$45.12, or 4.8 per cent.

In 1953, there were 2,662 farms in Nacogdoches County with an average size of 146.8 acres and a value per acre of \$45.12. A large percentage of the farm land belongs to a few individual business men who live in the City of Nacogdoches. This presents a great problem to young farmers and others who need to buy land for farming as a means of a livelihood.

Farm Tenancy

Post-war years and prosperity have meant fewer tenants and more owners on farms in Nacogdoches County. Most farmers are proud to be owners and are better able to improve the conditions of the farmstead when outright ownership is possible.

There were 15.2 per cent more farmers who were full owners or part owners in 1953 than in 1944 (Table XLVI). There were 423, or 48 per cent, less tenants of all kinds than in 1944. Farm managers increased from 7 to 22, or 214 per cent.

TABLE XLVI

FULL-OWNERS, PART-OWNERS, MANAGERS
AND TENANTS IN NACOGDOCHES COUNTY, 1944-53

Date	Full-owners	Part-owners	Managers	Cash tenants	Share-cash tenants	Share-tenants and croppers	Other tenants
1944	1,855 ^a	110 ^a	7 ^a	177 ^a	25 ^a	580 ^a	100 ^a
1949	1,822 ^b	342 ^b	15 ^b	132 ^b	5 ^b	277 ^b	150 ^b
1953	1,913 ^c	350 ^c	22 ^c	99 ^c	4 ^c	220 ^c	136 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 355.

^bIbid., 1950, p. 101.

^cGray, op. cit., 1954, p. 3.

Farm Power and Equipment

Horses and mules are rapidly declining in importance on the farm. From 1944 to 1949 there was a decrease of 10.2 per cent in the number of horses and mules on farms in Nacogdoches County (Table XLVII). The value of horses and mules dropped 60.5 per cent during this same period.

From 1949 to 1953, the number of horses and mules decreased 66.2 per cent, and the value of these animals decreased 83.5 per cent. Horses and mules seem to be needed very little except for riding pleasure and best-of-burden on farms too small for economic tractor operation.

In 1944, there were only 204 tractors on farms in Nacogdoches County. This same year the value of farm implements and machinery was \$684,690.00. By 1949, there were 606 tractors, an increase of 197 per cent, and \$1,711,725. worth of farm implements and machinery, an increase in value of 150 per cent.

In 1953, there were 917 tractors which gave a 51 per cent increase over 1949. The value of farm implements and machinery had increased to over two and one-half million dollars, or 50 per cent.

TABLE XLVII

HORSES, TRACTORS, AND EQUIPMENT ON FARMS
IN NACOGDOCHES COUNTY, 1944-53

Date	Number of horses and mules	Value of horses and mules	Number of tractors	Value of farm equipment
1944	5,380 ^a	\$392,228.00 ^a	204 ^b	\$ 684,690.00 ^c
1949	3,832 ^d	155,488.00 ^d	606 ^e	1,711,725.00 ^g
1953	1,298 ^f	25,960.00 ^f	917 ^f	2,567,587.00 ^f

^aUnited States Bureau of the Census, 1945, op. cit., p. 303.

^bIbid., 1945, p. 99.

^cIbid., 1945, p. 52.

^dIbid., 1950, p. 146.

^eIbid., 1950, p. 127.

^fGray, op. cit., 1954, p. 3.

^gIbid., 1950, p. 3.

Roads and Utilities

The automobile situation has become much better on farms in Nacogdoches County since 1945. During that year there were only 899 automobiles, and most of those were old models, having been made in pre-war years. In 1950, cars were still scarce, but the number had increased to 1,013, or 12.7 percent. Cars became plentiful after 1950, so in 1953, there were 1,920 automobiles on farms in Nacogdoches County; this was 89 per cent more than in 1950 (Table XLVIII).

The telephone expansion to rural areas developed very slowly. There was no increase in the number of rural phones between 1945 and 1950, but from 1950 to 1953 there was a good expansion program, the number of rural phones expanding from 252 to 846, or 236 per cent. The dial system was installed in 1953, and there was also a substantial increase in phone rates.

Soon after the war, the rural electrification system expanded rapidly. There were only 670 farms with electricity in 1945, but by 1950, this number had increased to 1868, which was 179 per cent more. In 1953, there were 2,055 farms with electricity, another 10 per cent increase.

Nearly all the farms are on all-weather roads. With the extension of State Highway 7, the repair of State

Highway 21, and the addition of several farm-to-market roads since 1945, the roads are considered very good. There are still a few dirt roads which are very rough during bad weather.

TABLE XLVIII

THE NUMBER OF FARMS WITH AUTOMOBILES, TELEPHONES,
ELECTRICITY, AND ALL-WEATHER ROADS IN NACOGDOCHES COUNTY,
1945-53

Date	Number of farms with automobiles	Number of farms with telephones	Number of farms with electricity	Number of farms on all-weather roads
1945	899 ^a	254 ^a	670 ^a	1,744 ^a
1950	1,013 ^b	252 ^b	1,868 ^b	2,473 ^b
1953	1,920 ^c	846 ^c	2,055 ^c	2,550 ^c

^aUnited States Bureau of the Census, 1945, op. cit.;
p. 99.

^bIbid., 1950, p. 127.

^cGray, op. cit., 1954, p. 3.

Rusk County

Introduction and General Description

Rusk County is one of the older East Texas counties which has been revolutionized in the last twenty years by the discovery of the great East Texas oil field which covers the northwest section. The population is native-white with a considerable Negro minority. The economy is based on oil, industry, and agriculture. Rusk County was created from Nacogdoches County in 1843 and organized the same year.²⁰ The county was named for Thomas J. Rusk, who fought at San Jacinto, was Secretary of War in the Texas Republic and later United States Senator from Texas.²¹

The topography is rolling with a considerable covering of timber. The area is dissected by streams and valleys, being on a divide between the Sabine and Angelina rivers. The altitude is 300 - 750 feet; the annual rainfall is 44.32 inches; the mean annual temperature is 66 degrees.²²

The soils are alluvials in the valleys. Gray, red, and chocolate sands and sandy loams are found on the

²⁰Ibid., p. 597.

²¹Ibid.

²²Ibid.

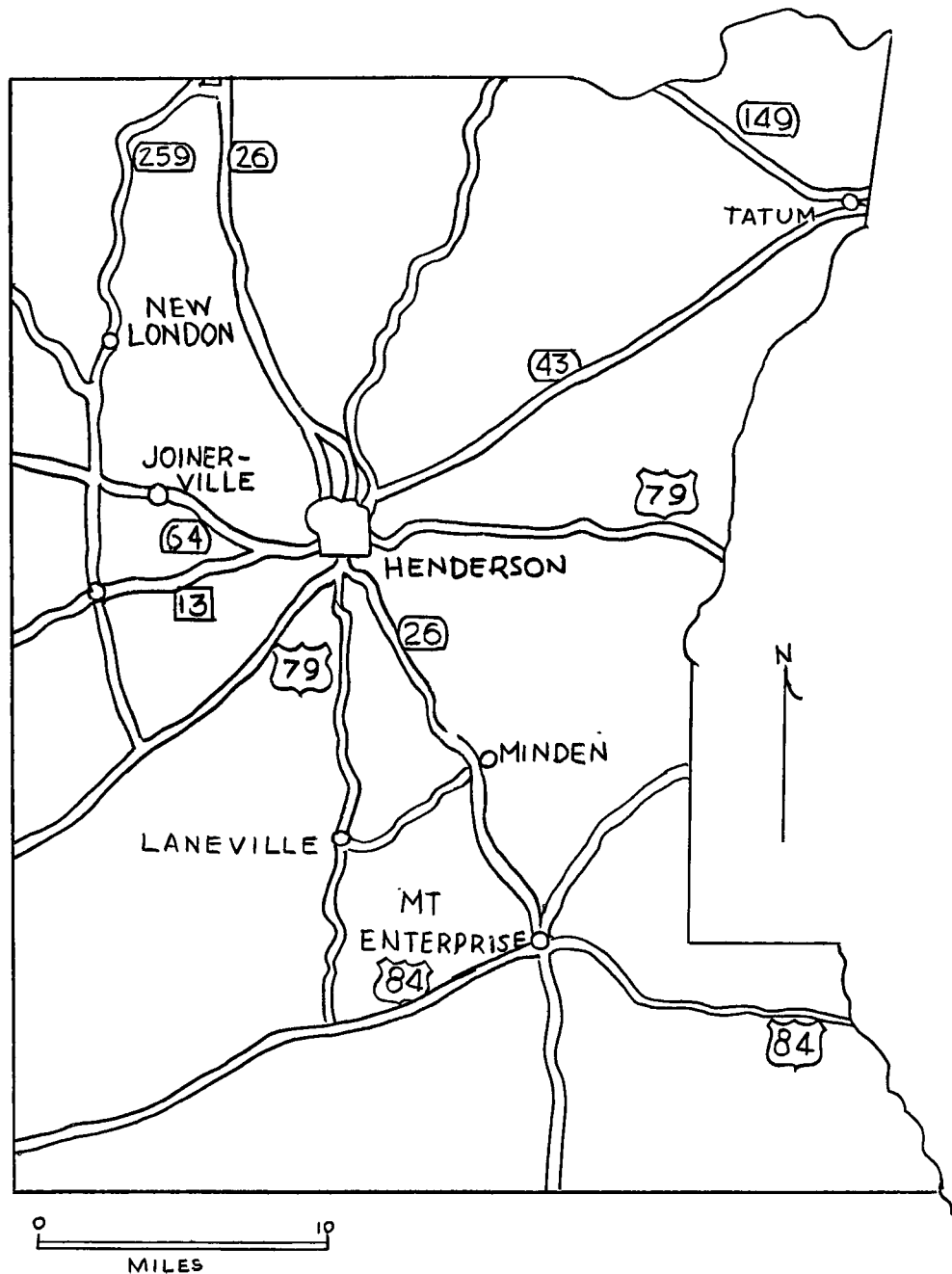


FIGURE 5.—MAP OF RUSK COUNTY^a

^aReproduced from "Texas Almanac and State Industrial Guide, 1952-53," Counties and Cities of Texas (Dallas: A. H. Belle Corporation, 1951), p. 597.

uplands. Pine, pin oak, post oak, red oak, and cypress are the predominant trees. There is large lumber and other timber products production. Squirrels, doves, and miscellaneous small game are plentiful. Numerous running streams and lakes afford excellent fishing.

The growing season is 243 days.²³ Important crops are cotton, corn, tomatoes, watermelons, hay, and truck crops. Farm forestry provides a good income. Dairying, beef cattle production, and broiler production have made rapid progress during the last few years.

Farm Forestry

Rusk County farmers have found that it pays to keep a woodlot on the farm. The number of farms with woodland rose 29.9 per cent from 1944 to 1949 (Table XLIX). There was a slight decrease of 3.4 per cent from 1949 to 1953, but, nevertheless, in 1953, 60.5 per cent of the farms of the county had woodland.

The number of acres of farm woodland has shown rapid increases in recent years. In 1944, there were 84,317 acres of woodland on farms in the county; by 1949, there were a

²³Ibid.

TABLE XLIX

FARM FORESTRY PRODUCTION AND SALES
IN RUSK COUNTY, 1944-53

Date	Number of farms with woodland	Acres of farm woodland	Number of farms selling forest products	Value of products sold
1944	1,840 ^a	84,317 ^a	173 ^b	\$ 55,219.00 ^b
1949	2,354 ^c	146,626 ^c	897 ^d	104,571.00 ^d
1953	2,275 ^e	161,212 ^e	1,452 ^e	199,701.00 ^e

^aUnited States Bureau of the Census, 1945, op. cit., p. 58.

^bIbid., 1945, p. 341.

^cIbid., 1950, p. 77.

^dIbid., 1950, p. 284.

^eF. J. Burton, "Annual Narrative Report of County Extension Agents," E. S. 21 (unpublished annual report of the Rusk County Agricultural Agent made to Agricultural and Mechanical College of Texas, College Station, Texas, January 1, 1954), pp. 14-15.

a total of 146,626 acres, or an increase of 74 per cent in acreage. The increase from 1949 to 1953 was 10.1 per cent.

More farmers are looking to forest products as a source of income. In 1944, there were only 173 farms which sold forest products at a total value of \$55,219.00. In 1949, there were 897, or 418 per cent, more farms selling forest products than in 1944 and with an increase in value of 89.5 per cent. In 1953, there were 1,452 farms selling forest products, an increase of 62 per cent over 1949, for a total value of \$199,701, an increase of 91 per cent over 1949.

Dairying

Dairying provides a good source of income to farmers of Rusk County, but, according to Table L, the industry is becoming less important than it was in 1949, which seemed to be the peak year. From 1944 to 1949, there was a 33.9 per cent decrease in the number of cows milked, but there was a 4.4 per cent increase in the gallons of milk produced. The number of Grade A dairies increased from 15 to 55, or 266.7 per cent. There were 4.4 per cent less gallons of whole milk sold, but this milk was sold for 37.9 per cent more money than in 1944.

TABLE L

DAIRY CATTLE PRODUCTION AND WHOLE MILK
SALES IN RUSK COUNTY, 1944-53

Date	Cows milked	Gallons of milk produced	Number of Grade A dairies	Gallons of whole milk sold	Value of whole milk sold
1944	7,109 ^a	2,697,453 ^a	15 ^a	662,353 ^a	\$247,347.00 ^a
1949	4,702 ^b	2,816,705 ^b	55 ^d	633,218 ^b	340,872.00 ^b
1953	3,750 ^c	2,200,000 ^c	40 ^c	551,306 ^c	331,211.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 308.

^bIbid., 1950, p. 148.

^cBurton, op. cit., 1954, pp. 10-11.

^dIbid., 1950, pp. 10-11.

^eIbid., 1945, pp. 10-11.

In 1953, there were 20.2 per cent less cows milked, 21.9 per cent less milk produced, 27.3 per cent less Grade A dairies, 12.9 per cent less whole milk sold, and 2.8 per cent less money for whole milk sold than in 1949. With a gross income of \$331,211.00 from the sale of whole milk in 1953, the dairy industry still maintains an important place in the agricultural economy of the county.

Poultry

Poultry production leads all other agricultural enterprises in gross cash income in Rusk County. Broiler growers receive the major portion of the income from poultry (Table LI).

In 1944, there were 1,726 farms selling poultry or poultry products. Money received for these poultry amounted to only \$113,647.00. There were no commercial broiler houses, and only 87,214 broilers were sold for \$68,619.00.

In 1949, the number of farms selling poultry or poultry products had decreased to 1,363 which was 21 per cent less than in 1944. The value of poultry and poultry products sold showed an increase of 102 per cent, amounting to \$229,741.00. There was only one large commercial broiler house, 3000-capacity or more, but the number of broilers sold had

TABLE LI

POULTRY PRODUCTION AND SALES IN RUSK COUNTY, 1944-53

Date	Number of farms selling poultry or poultry products	Value of poultry and poultry pro- ducts sold	Number of 3000-capacity broiler houses	Number of broilers sold	Value of broilers sold
1944	1,726 ^a	\$ 113,647.00 ^a	0 ^e	87,215 ^e	\$ 68,619.00 ^e
1949	1,363 ^b	229,741.00 ^b	1 ^d	171,800 ^d	142,213.00 ^d
1953	1,284 ^c	3,110,985.00 ^c	275 ^c	3,751,000 ^c	3,000,100.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 308.

^bIbid., 1950, p. 168.

^cBurton, op. cit., 1954, pp. 10-11.

^dIbid., 1950, pp. 10-11.

^eIbid., 1945, pp. 10-11.

increased 97.5 per cent, and the value of broilers sold was up 107 per cent over 1944.

The expansion from 1949 to 1953 broke all previous records. There were a few less farms selling poultry or poultry products, but the value of those sold brought over three million dollars, an increase of 1,255 per cent over 1949. The number of large commercial broiler houses had increased from one to two hundred seventy five, or 27,400 per cent. The number of broilers sold increased 2,080 per cent, and the value of broilers sold increased 2,000 per cent over 1949.

Cotton

Cotton provides more gross income to farmers in Rusk County than any other field crop grown. Fewer farms and less acres are being used to produce cotton, but the value of cotton and seed produced has continued to show an increase (Table LII).

From 1944 to 1949, the number of farms growing cotton decreased 31 per cent, and the acreage decreased 5.4 per cent, but the number of bales produced increased 47.7 per cent with an increase in value of cotton and seed produced of 89 per cent.

TABLE LII
COTTON ACREAGE, YIELDS, AND VALUES
IN RUSK COUNTY, 1944-53

Date	Number of farms	Number of acres	Number of bales	Value of cotton and seed produced
1944	2,614 ^a	33,178 ^a	8,735 ^a	\$1,113,713.00 ^a
1949	1,804 ^b	31,387 ^b	12,894 ^b	2,101,722.00 ^b
1953	1,132 ^c	16,060 ^c	9,998 ^c	2,150,086.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 204.

^bIbid., 1950, p. 226.

^cBurton, op. cit., 1954, pp. 8-9.

In 1953, only 1,132, or less than one-third of the farms in the county grew cotton; this was 37.3 per cent less than in 1949. The number of acres of cotton decreased 49 per cent, but production dropped only 22.4 per cent. The value of cotton and seed actually increased 2.3 per cent in spite of the 49 per cent decrease in acreage. The cotton crop produced in 1953 was worth \$2,150,086.00.

Corn

Corn is grown on nearly two-thirds of the farms in the county (Table LIII). The number of farms growing corn decreased 36.9 per cent from 1944 to 1949, but it increased 10.6 per cent again by 1953.

The number of acres grown dropped 49.4 per cent from 1944 to 1949, but an increase of 7.9 per cent were the results by 1953.

The bushels of harvested grain showed a 17.7 per cent increase in 1949 over 1944 but a decrease in value of 8.6 per cent. From 1949 to 1953 production had decreased 7 per cent with an increase in value of 11.1 per cent.

The corn situation seems to be rather stable; the fluctuations in production and value are generally due to weather and economic conditions.

TABLE LIII

CORN ACREAGE, YIELDS, AND VALUES
IN RUSK COUNTY, 1944-53

Date	Number of farms	Number of acres	Bushels of harvested grain	Value of harvested grain
1944	3,354 ^a	37,164 ^a	288.307 ^a	\$434,350.00 ^a
1949	2,087 ^b	18,916 ^b	338.665 ^b	396,844.00 ^b
1953	2,301 ^c	20,414 ^c	315,040 ^c	441,056.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 152.

^bIbid., 1950, p. 188.

^cBurton, op. cit., 1954, pp. 8-9.

Cattle

Beef cattle are very popular on farms in Nacogdoches County. More than eight out of every ten farms have cattle, according to Table LIV and Table LXI.

The main changes in the cattle situation were a 98.8 per cent increase in the value of cattle over three months old between 1944 and 1949 when there were 10.5 per cent less cattle, and then there was an 8.6 per cent decrease in value by 1953 when there were 21.4 per cent more cattle on the farm (Table LIV).

The value of all cattle sold continued to increase through 1953 because of many more cattle being sold even though prices received were much lower than in 1949. Cattle brought Rusk County farmers \$910,868.00 through sales in 1953.

Swine

Swine production has been a declining enterprise in every way except value since 1944. The high prices of swine in 1953 caused the value of hogs and pigs to actually increase.

In 1944, there were 2,347 farms growing 11,945 hogs and pigs with a value of \$145,385.00 (Table LV). In 1949, there were only 1,736 farms with hogs, a decrease of 26 per

TABLE LIV

CATTLE PRODUCTION, VALUES,
AND SALES IN RUSK COUNTY, 1944-53

Date	Number of farms	Number of cattle on farms over 3 months old	Value of cattle over 3 months old	Value of all cattle sold
1944	3,657 ^a	41,495 ^a	\$1,738,646.00 ^a	\$671,544.00 ^a
1949	3,025 ^b	37,152 ^b	3,455,756.00 ^b	845,487.00 ^c
1953	3,175 ^d	45,114 ^d	3,157,980.00 ^d	910,868.00 ^d

^aUnited States Bureau of the Census, 1945, op. cit., p. 308.

^bIbid., 1950, p. 148.

^cIbid., 1950, p. 168.

^dBurton, op. cit., 1954, pp. 10-11.

TABLE LV
SWINE PRODUCTION AND VALUES
IN RUSK COUNTY, 1944-53

Date	Number of farms	Number of hogs and pigs	Value of hogs and pigs
1944	2,347 ^a	11,945 ^a	\$145,385.00 ^a
1949	1,736 ^b	7,630 ^b	97,654.00 ^b
1953	1,724 ^c	7,411 ^c	185,275.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 308.

^bIbid., 1950, p. 148.

^cBurton, op. cit., 1954, pp. 10-11.

cent. There were 7,630 hogs and pigs, a decrease in production of 36 per cent; the value was off 32.8 percent.

In 1953, there were twelve less farms growing hogs, a decrease of .69 per cent from 1949. There were 7,411 hogs and pigs on farms, showing a decrease of 2.9 per cent. Prices were so good that even though there were 2.9 per cent less hogs than in 1949 the value increased 89.7 per cent. The value of all hogs and pigs on farms in Rusk County in 1953 was \$185,275.00.

Watermelons

Watermelon production is a major crop enterprise in Rusk County. There has been continual growth since 1944 in both acreage and value in spite of the fact that fewer farms are producing them. In 1944, there were 613 farms producing 2,353 acres of watermelons with a value of \$176,475.00 (Table LVI).

By 1949, there were only 287, or 53.3 per cent less farms growing watermelons, but there were 3,308 acres, 40.7 per cent more than 1944. The value of all watermelons harvested was \$248,100.00, an increase of 40.6 per cent.

In 1953, 320 farms were growing watermelons; this was an increase of 11.5 per cent over 1949. There was an extra large acreage, a total of 5,490, an increase of 66.2

TABLE LVI
WATERMELON ACREAGE AND VALUES
IN RUSK COUNTY, 1944-53

Date	Number of farms	Acres of watermelons harvested	Value of watermelons harvested
1944	613 ^a	2,353 ^a	\$176,475.00 ^e
1949	287 ^b	3,308 ^b	248,100.00 ^d
1953	320 ^c	5,490 ^c	411,750.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 256.

^bIbid., 1950, p. 245.

^cBurton, op. cit., 1954, pp. 8-9.

^dIbid., 1950, pp. 8-9.

^eIbid., 1945, pp. 8-9.

per cent, and the value of all watermelons harvested was \$411,750.00, an increase of 66.1 per cent.

Watermelons can be grown on deep sand that is not well adapted to cotton and corn. The yield in pounds per acre is also usually high. This provides a good supplemental income for Rusk County farmers.

Tomatoes

Tomato production has decreased rapidly in importance since World War II. In 1944, 808 farms produced 1,219 acres of tomatoes which sold for \$274,275.00 (Table LVII). In 1949, only 357, or 57.5 per cent less, farms grew 551 acres of tomatoes; this was a 55 per cent reduction in acreage, and they sold for \$123,975.00 which was 54.8 per cent less than in 1944.

Additional reduction in the number of farms producing tomatoes was noted in 1953 when only 351 farms, 1.7 per cent less than 1949, grew tomatoes. The acreage dropped another 20 per cent to 340 acres, but due to very high tomato prices in 1953, the tomatoes brought 92.5 per cent more money than the 1949 crop. The value of tomatoes sold in 1953 was \$238,310.00. Due to a short crop over the state, tomatoes sold for as much as thirty-five cents per pound.

TABLE LVII
TOMATO ACREAGE AND SALES
IN RUSK COUNTY, 1944-53

Date	Number of farms	Acres of tomatoes harvested	Value of tomatoes sold
1944	808 ^a	1,219 ^a	\$274,275.00 ^c
1949	357 ^b	551 ^b	123,975.00 ^c
1953	351 ^c	340 ^c	238,310.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 256.

^bIbid., 1950, p. 245.

^cBurton, op. cit., 1954, pp. 8-9.

Cowpeas

Cowpea production suffered a big drop from 1944 to 1949 but made a fairly strong comeback in 1953. With an income of less than \$100,000.00 in 1953, it is considered a minor crop in Rusk County (Table LVIII).

During the 1944-49 period, the number of farms growing cowpeas decreased .2 per cent, or three farms, but the acreage dropped 59.3 per cent. The bushels of harvested peas showed a 38.5 per cent decline, and the value of these harvested peas was reduced 54.3 per cent.

In 1953, the number of farms growing cowpeas was 1,301, .8 per cent less than 1949; the acreage showed an increase of 12 per cent, bringing the number of acres grown to 5,690. There were 23.2 per cent more bushels of peas harvested than in 1949, and they were valued at 26 per cent more.

Peanuts

Peanuts have decreased in importance as a crop for several years in Rusk County. In 1944, there were 1,119 farms producing 5,187 acres of peanuts (Table LIX). This gave a yield of 667,513 pounds of peanuts and 3,001 tons of hay with a total value of \$102,746.00.

TABLE LVIII

COWPEA ACREAGE, PRODUCTION,
AND VALUES IN RUSK COUNTY, 1944-53

Date	Number of farms	Number of acres	Bushels of peas harvested	Value of peas harvested
1944	1,315 ^a	12,466 ^a	54,650 ^a	\$163,950.00 ^a
1949	1,312 ^b	5,086 ^b	33,638 ^b	74,827.00 ^b
1953	1,301 ^c	5,690 ^c	41,439 ^c	94,277.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 204.

^bIbid., 1950, p. 207.

^cBurton, op. cit., 1954, pp. 8-9.

TABLE LIX

PEANUT ACREAGE, PRODUCTION,
AND VALUES IN RUSK COUNTY, 1944-53

Date	Number of farms	Number of acres	Pounds of peanuts	Tons of hay	Total value
1944	1,119 ^a	5,187 ^a	667,513 ^a	3,001 ^a	\$102,746.00 ^a
1949	289 ^b	705 ^b	277,248 ^b	223 ^b	32,497.00 ^b
1953	297 ^c	804 ^c	280,105 ^c	2,053 ^c	28,512.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit.,
p. 204.

^bIbid., 1950, p. 207.

^cBurton, op. cit., 1954, pp. 8-9.

In 1949, we find a 74.3 per cent decrease in the number of farms growing peanuts with an 86.5 per cent reduction in acreage from the 1944 crop. There were 58.5 per cent less peanuts produced and 92.7 per cent less hay with a total loss in value of 68.3 per cent.

The number of farms growing peanuts showed a 2.7 per cent increase in 1953 over what it had been in 1949, and there were 14.1 per cent more acres of peanuts grown. The pounds of peanuts produced increased 1 per cent; the tons of hay produced increased 826 per cent; however, the total value of peanuts and hay produced amounted to only \$28,512.00, 12.3 per cent less than in 1949.

Soil Building

During the year of 1944, there were 1,549 farms that received \$101,569.33 from the United States Government for soil building practices (Table LX). The four largest payments were for reseeding pastures, using superphosphate, planting *Sericea Lespedeza*, and planting winter legumes.

There were 1,260 farms participating in the soil building practices in 1949. The total payment for all practices was \$127,147.32. The four largest payments were for reseeding pastures, fertilizing with superphosphate, building earthen tanks and dams, and planting winter legumes.

TABLE LX

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN RUSK COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Diversion terraces	1	\$ 9.50	4	\$ 108.83		
Standard terraces			40	3,123.57		
Earthen tanks and dams	40	3,370.36	102	9,704.46	37	\$ 356.10
Eliminating underbrush	3	160.00	93	5,960.12		
Mowing pastures	46	1,340.50				
Reseeding pastures	1,203	57,230.83	887	39,928.03	564	27,784.58
Winter legumes	514	11,907.26	376	8,064.29	292	8,139.93
Superphosphate	917	25,761.60	692	33,771.92	44	1,751.81

TABLE LX (Continued)

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN RUSK COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Limestone	32	\$ 956.25	85	\$ 5,272.80	76	\$ 7,231.87
Summer legumes	28	432.00	4	37.44		
Rye Grass	25	604.11	6	86.25		
Kudzu			1	24.00		
Potash			25	749.99	1	3.36
Planting forest trees	1	72.50	6	360.00	6	705.00
Improving forest trees			14	3,395.00	9	1,150.00
Mixed fertilizer	1	49.07	4	140.80	179	8,012.63
Sericea Lespedeza	152	6,682.56	110	4,840.00		

TABLE LX (Continued)

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN RUSK COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
O-14-7 fertilizer			103	\$ 4,713.57	478	\$22,037.40
Rock phosphate			1	216.00	4	835.58
Springs			1	42.42		
TOTAL	1,549	\$101,569.33	1,260	\$127,147.32	894	\$79,998.54

^aB. A. Dinwiddie, "Farm Statistical Listing Sheet," Form ACP 220, (unpublished annual report of the Rusk County Agricultural Stabilization and Conservation Committee, Henderson, 1945), p. 19.

^bIbid., 1950, p. 19.

^cIbid., 1954, p. 19.

In 1953, there were 894 farms participating in the program. The total of all payments to these farmers was \$79,998.54, excluding the increase in small payments. The four practices for which the largest payments were received were reseeding pastures, fertilizing with 0-14-7 fertilizer, fertilizing with mixed fertilizers, and planting winter legumes. The largest payment was \$27,784.58 for reseeding pastures; this was more than one-third of all payments made.

Land Values

During 1944, there were 4,294 farms in Rusk County with an average size of 97.4 acres per farm (Table LXI). The value per acre placed on farm land at that time was \$26.02. This was before the post-war rush for land.

In 1949, there were only 3,866 farms, a decrease of 10 per cent from 1944. The average size farm was 112 acres, a 15 per cent increase, and the value per acre was \$47.00; this was a 77.4 per cent increase in value during the five-year period.

The number of farms in the county were 2.6 per cent less by 1953 than they had been in 1949; there were 3,766. The average size had increased to 115 acres, or 2.7 per cent, and the value per acre was up to \$49.00, or 4.3 per cent.

TABLE LXI

NUMBER, SIZE, AND VALUE PER ACRE
OF FARMS IN RUSK COUNTY, 1944-53

Date	Number of farms in county	Average size of farm	Value per acre of farmland
1944	4,294 ^a	97.4 ^a	\$26.02 ^a
1949	3,866 ^b	112.0 ^b	47.00 ^b
1953	3,766 ^c	115.0 ^c	49.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit.,
p. 58.

^bIbid., 1950, p. 77.

^cBurton, op. cit., p. 3.

With a recession in farm prices, there was a leveling period of land prices.

Farm Tenancy

There has been a gradual decrease in farm tenancy and a gradual increase in farm ownership since 1944 according to Table LXII.

In 1944, there were 2,253 full-owners, 342 part-owners, two managers, and 1,697 tenants of all kinds. By 1949, there were .8 per cent less full-owners, but there were 82.8 per cent more part-owners. The number of tenants had decreased to 1,000, 41 per cent less than in 1944.

In 1953, full-ownership had increased 5.3 per cent, giving a total of 2,347. Part-owners increased in 1953 to 656, a 5 per cent rise; managers were up to eight, 33.3 per cent higher; and all tenants numbered 856, which was 14.4 per cent less.

Farm Power and Equipment

Horses and mules have decreased very rapidly on farms in Rusk County since World War II. In 1944, there were 8,477 horses and mules with a total value of \$624,295. (Table LXIII). There were only 293 tractors, and the value of farm implements and machinery was only \$1,071,555.00.

TABLE LXII

FULL-OWNERS, PART-OWNERS, MANAGERS
AND TENANTS IN RUSK COUNTY, 1944-53

Date	Full-owners	Part-owners	Managers	Cash tenants	Share-cash tenants	Share-tenants and croppers	Other tenants
1944	2,253 ^a	342 ^a	2 ^a	258 ^a	0 ^a	1,306 ^a	133 ^a
1949	2,235 ^b	625 ^b	6 ^b	222 ^b	14 ^b	454 ^b	310 ^b
1953	2,347 ^c	656 ^c	8 ^c	201 ^c	15 ^c	406 ^c	234 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 356.

^bIbid., 1950, p. 103.

^cBurton, op. cit., 1954, p. 3.

TABLE LXIII

HORSES, TRACTORS, AND EQUIPMENT ON FARMS
IN RUSK COUNTY, 1944-53

Date	Number of horses and mules	Value of horses and mules	Number of tractors	Value of farm equipment
1944	8,477 ^a	\$624,295.00 ^a	293 ^b	\$1,071,555.00 ^c
1949	6,084 ^d	252,261.00 ^d	638 ^e	2,149,892.00 ^g
1953	5,010 ^f	104,113.00 ^e	749 ^f	3,224,838.00 ^f

^aUnited States Bureau of the Census, 1945, op. cit., p. 308.

^bIbid., 1945, p. 103.

^cIbid., 1945, p. 58.

^dIbid., 1950, p. 148.

^eIbid., 1950, p. 129.

^fBurton, op. cit., 1954, p. 3.

^gIbid., 1950, p. 3.

In 1949, the number of horses and mules on farms in Rusk County had dropped 28.3 per cent from 1944, and the value of these horses and mules had decreased 59.7 per cent. There were 638 tractors, an increase of 152 per cent, and the value of farm implements and machinery was 100 per cent higher.

The number of horses and mules showed a 17.9 per cent drop from 1949 to 1953; this left only 5,010 horses and mules on all farms in the county, which was an average of 1.3 per farm. The value of these 5,010 horses and mules was \$104,113.00, a 59 per cent drop from 1949. The number of tractors had increased to 638, a 17.4 per cent increase. The value of farm implements and machinery was up 50 per cent higher than 1949.

Roads and Utilities

The automobile situation has improved considerably since 1945 when there were only 1,736 automobiles on 4,294 farms, or an average of four cars to every ten farms (Tables LXIV and LXI). In 1950, there were 1,867 automobiles, an average of approximately five out of ten farms. In 1953, there were 2,823 farms with automobiles, an average of seven and one-half automobiles for every ten farms, or 75 per cent.

The number of farms with telephones decreased 37 per cent from 1945 to 1950, but there was an increase of 169 per cent from 1950 to 1953. Approximately one-fourth of the farms in Rusk County had telephones in 1953.

The Rural Electrification Administration has been able to put electricity in nearly all rural homes not served by private companies. There were only 1,387 farms with electricity in 1945, but by 1950, there were 2,782, an increase of 100.6 per cent. In 1953, there were 3,151 farms with electricity, an increase of 13.3 per cent over 1950. This made a total of 83.5 per cent of the farms with electricity.

In 1953, only forty-one farms were not on all-weather roads; this was approximately 1 per cent.

TABLE LXIV

THE NUMBER OF FARMS WITH AUTOMOBILES, TELEPHONES,
ELECTRICITY, AND ALL-WEATHER ROADS IN RUSK COUNTY
1945-53

Date	Number of farms with automobiles	Number of farms with telephones	Number of farms with electricity	Number of farms on all-weather roads
1945	1,726 ^a	403 ^a	1,387 ^a	3,782 ^a
1950	1,867 ^b	355 ^b	2,782 ^b	3,697 ^b
1953	2,823 ^c	955 ^c	3,151 ^c	3,725 ^c

^aUnited States Bureau of the Census, 1945, op. cit.,
p. 103.

^bIbid., 1950, p. 129.

^cBurton, op. cit., 1954, p. 3.

San Augustine County

Introduction and General Description

San Augustine, located in the pine forest region, is one of the earliest settled counties. The population, largely rural and stable, contains a large Negro element. The economy is dependent upon agriculture and forest products. The county was created in 1836 and organized in 1837, being named for the original municipality.²⁴

The terrain is rolling to hilly and is covered with pine and hardwoods. The county is drained by the Angelina and Attoyac rivers. The altitude is 100 to 400 feet.²⁵ The average annual rainfall is 46.5 inches.²⁶ The mean annual temperature is 65 degrees.²⁷

The upland soils are sandy, gray sandy, and chocolate loam, while the bottoms are black alluvial. A four mile wide strip of redland runs north-south through the county. Shortleaf, longleaf, loblolly pine, white oak, post oak, red

²⁴Ibid., p. 598.

²⁵Ibid.

²⁶Ibid.

²⁷Ibid.

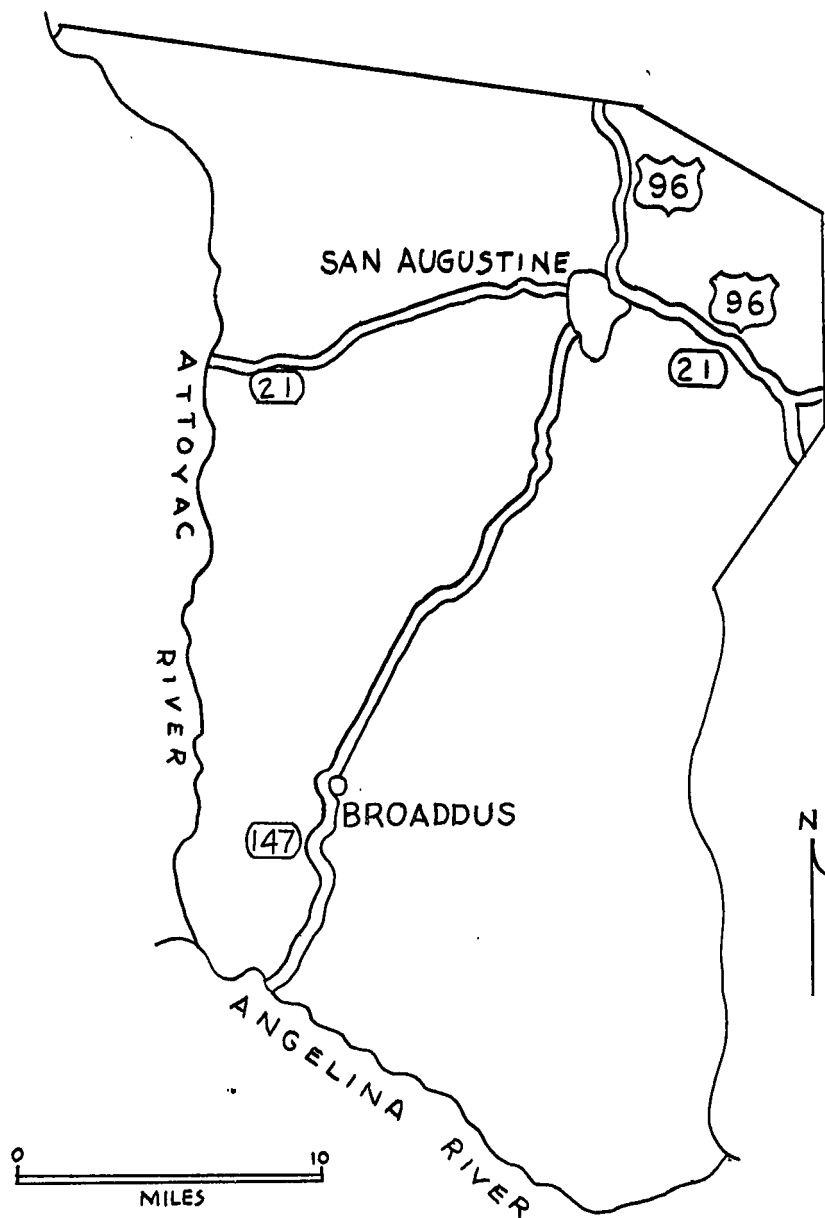


FIGURE 6.—MAP OF SAN AUGUSTINE COUNTY^a

^aReproduced from "Texas Almanac and State Industrial Guide, 1952-53," Counties and Cities of Texas (Dallas: A. H. Belle Corporation, 1951), p. 598.

oak, pecan, beech, gum, and magnolia trees are found abundantly. Lumbering is a very important industry. Part of the county is in the Angelina National Forest. There is an excellent game range for deer, squirrel, and migratory waterfowl. Fishing is good in the rivers and numerous bayous and lakes.

The growing season is 236 days.²⁸ Cotton, tomatoes, watermelons, and other diversified truck crops are the most important. Cattle raising, dairying, swine, and poultry have increased in importance. Livestock improvement and the development of pastures have been the major objectives recently.

Farm Forestry

Most of the timberland of San Augustine County is owned by large corporations and the United States Government, but there are still many farms that have woodland as shown in Table LXV.

From 1944 to 1949 there was a 43.6 per cent decrease in the number of farms with woodland; however, there were 43.5 per cent less farms in the county according to Table LXXVII, so actually there was no loss for those farms that

²⁸
Ibid.

TABLE LXV

FARM FORESTRY PRODUCTION AND SALES
IN SAN AUGUSTINE COUNTY, 1944-53

Date	Number of farms with woodland	Acres of farm woodland	Number of farms selling forest products	Value of products sold
1944	1,075 ^a	46,069 ^a	254 ^b	\$44,459.00 ^b
1949	606 ^c	43,734 ^c	246 ^d	17,011.00 ^d
1953	580 ^e	43,071 ^e	263 ^e	18,286.00 ^e

^aUnited States Bureau of the Census, 1945, op. cit., p. 58.

^bIbid., 1945, p. 341.

^cIbid., 1950, p. 77.

^dIbid., 1950, p. 285.

^eO. B. Clifton, "Annual Narrative Report of County Extension Agents," E. S. 21 (unpublished annual report of the San Augustine County Agricultural Agent made to Agricultural and Mechanical College of Texas, College Station, Texas, January 1, 1954), pp. 14-15.

remained. During this same period the acres of farm woodland decreased only 5.1 per cent, and the number of farms selling forest products decreased 3.1 per cent. The value of products sold dropped 61.8 per cent.

In 1953, the number of farms with woodland had decreased 4.3 per cent from 1949, and the acres of farm woodland showed a 1.5 per cent drop. The number of farms selling forest products increased 6.9 per cent over 1949 with an increase in value of products sold of 7.5 per cent. In 1953, there was an income of \$18,286.00 from the sale of forest products for farmers in San Augustine County.

Dairying

Although there were more Grade A dairies in San Augustine County in 1953 than ever before (Table LXVI) and the quality of milk has greatly increased, the milk sales have greatly decreased since 1944.

In 1949, there were 41.7 per cent less cows milked than in 1944 and 31.7 per cent less milk produced. The number of Grade A dairies increased from two to four, a 100 per cent increase. There were 44.5 per cent less gallons of whole milk sold, and the value of this milk was 42.4 per cent less.

TABLE LXVI

DAIRY CATTLE PRODUCTION AND WHOLE MILK
SALES IN SAN AUGUSTINE COUNTY, 1944-53

Date	Cows milked	Gallons of milk produced	Number of Grade A dairies	Gallons of whole milk sold	Value of whole milk sold
1944	2,498 ^a	1,245,847 ^a	2 ^e	428,367 ^a	\$214,716.00 ^a
1949	1,491 ^b	849,720 ^b	4 ^d	238,052 ^b	110,299.00 ^b
1953	1,868 ^c	907,804 ^c	11 ^c	192,000 ^c	96,510.00 ^c

^aUnited States Bureau of Census, 1945, op. cit.,
p. 308.

^bIbid., 1950, p. 149.

^cClifton, op. cit., 1954, pp. 10-11.

^dIbid., 1950, pp. 10-11.

^eIbid., 1945, pp. 10-11.

In 1953, there were 25.3 per cent more cows being milked than in 1949 with a 6.4 per cent increase in production. The number of Grade A dairies increased from four to eleven, or 175 per cent. The gallons of whole milk sold decreased 19.3 per cent, and the value decreased 12.5 per cent.

When the buying of Grade C milk was discontinued, the farmers of San Augustine County were almost without a market because there were very few equipped to operate a Grade A dairy.

Poultry

Poultry and poultry products provide a good source of income to farmers in San Augustine County with this enterprise ranking second only to cotton in gross income for 1953 (Table LXVII).

From 1944 to 1949, it looked as if poultry production would no longer be a major enterprise. The number of farms selling poultry or poultry products dropped 77 per cent, and the value of these products was off 78.7 per cent. There were only two commercial broiler houses in 1949. The number of broilers sold had decreased 78.2 per cent with an equal decrease in value. This was a very dark picture for 1949.

In 1953, the poultry industry was booming. There were 4.4 per cent less farms selling poultry or poultry

TABLE LXVII

POULTRY PRODUCTION AND SALES IN SAN AUGUSTINE COUNTY, 1944-53

Date	Number of farms selling poultry or poultry products	Value of poultry and poultry pro- ducts sold	Number of 3000-capacity broiler houses	Number of broilers sold	Value of broilers sold
1944	758 ^a	\$118,053.00 ^a	0 ^e	75,314 ^e	\$60,025.00 ^e
1949	275 ^b	25,319.00 ^b	2 ^d	16,466 ^d	13,172.80 ^d
1953	263 ^c	501,316.00 ^c	61 ^c	601,134 ^c	479,857.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 308.

^bIbid., 1950, p. 169.

^cClifton, op. cit., 1954, pp. 10-11.

^dIbid., 1950, pp. 10-11.

^eIbid., 1945, pp. 10-11.

products than in 1949, but the value of the products sold exceeded one-half million dollars, giving an increase of 1,880 per cent. There were sixty-one commercial broiler houses which gave an increase of 2,950 per cent. The number of broilers sold increased 3,600 per cent, and the value of these broilers was up 3,540 per cent over 1949.

Cotton

The sale of cotton and cotton seed provides more gross income to farmers in San Augustine County than any other agricultural enterprise (Table LXVIII). One of the better years for cotton production was 1949. That year the yield was over one-half bale per acre and the total income was nearing the million dollar mark. That year there were 30 per cent less farms growing cotton than in 1944, but there was a 2.6 per cent increase in acreage. The number of bales produced was 73 per cent more; the value of cotton and seed produced was 123.5 per cent more.

In 1953, cotton production was not as favorable even though there were more acres planted than in 1949. The number of farms growing cotton increased 21.3 per cent, and the number of acres increased by the same amount. The number of bales produced was 32.1 per cent less than in 1949, and the value of cotton and seed produced was 17.7 per cent less.

TABLE LXVIII

COTTON ACREAGE, YIELDS, AND VALUES
IN SAN AUGUSTINE COUNTY, 1944-53

Date	Number of farms	Number of acres	Number of bales	Value of cotton and seed produced
1944	820 ^a	8,862 ^a	2,896 ^a	\$365,475.00 ^a
1949	574 ^b	9,096 ^b	5,011 ^b	816,793.00 ^b
1953	696 ^c	11,030 ^c	3,410 ^c	672,551.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 204.

^bIbid., 1950, p. 227.

^cClifton, op. cit., 1954, pp. 8-9.

Corn

Corn production is the second most important crop in San Augustine County and the third ranking agricultural enterprise (Table LXIX). The production per acre is still low with an average of approximately twenty bushels per acre in 1953.

During the 1944-49 period, there was a 60.4 per cent decrease in the number of farms growing corn, and the number of acres grown decreased 67.2 per cent. There was a decrease of 56.2 per cent in bushels of harvested grain, and the value of this grain was off 9.7 per cent. The year 1949 was one of the weaker crop years for corn.

From 1949 to 1953, corn production gained in importance. There were 19.6 per cent fewer farms growing corn, but there were 66.8 per cent more acres planted. The 1953 crop produced 174 per cent more harvested grain with an increase in value of 212.3 per cent. The value of harvested grain in 1953 was \$281,988.00.

Cattle

Cattle production increased steadily in importance until 1949, but the big break in prices came before the end of 1953; therefore, 1953 shows less income from cattle sold

TABLE LXIX

CORN ACREAGE, YIELDS, AND VALUES
IN SAN AUGUSTINE COUNTY, 1944-53

Date	Number of farms	Number of acres	Bushels of harvested grain	Value of harvested grain
1944	1,720 ^a	18,306 ^a	175,805 ^a	\$100,431.00 ^a
1949	684 ^b	6,022 ^b	77,178 ^b	90,671.00 ^b
1953	550 ^c	10,071 ^c	201,420 ^c	281,988.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 152.

^bIbid., 1950, p. 189.

^cClifton, op. cit., 1954, pp. 8-9.

(Table LXX). Most of the beef cattle of the county are inferior quality, usually the open range type with a large number of inferior bulls being used. Mr. J. C. Benedum, owner of Fairway Farms, has set a fine example for the farmers of San Augustine County by demonstration what better breeding and feeding practices can do.

In 1949, there were 46.8 per cent fewer farms growing cattle than in 1944, and there were 37.3 per cent less cattle on farms in the county. But cattle prices were excellent, the value of cattle on the farm being up 36.4 per cent and sales up 47.3 per cent.

In 1953, there were 1.4 per cent more farms with cattle, and there were 25.7 per cent more cattle on farms than in 1949. The value of cattle on farms in the county was 22.3 per cent less, and sales were off 15.1 per cent.

Swine

Swine production has rapidly decreased in importance since World War II. The hogs that are produced are usually inferior in quality and conformation. Open-range wood hogs have been the most common type for a large number of years. A few pure-bred animals have been introduced by members of the Future Farmers of America and the 4-H Club.

TABLE LXI

CATTLE PRODUCTION, VALUES,
AND SALES IN SAN AUGUSTINE COUNTY, 1944-53

Date	Number of farms	Number of cattle on farms over 3 months old	Value of cattle over 3 months old	Value of all cattle sold
1944	1,686 ^a	16,863 ^a	\$753,480.00 ^a	\$127,068.00 ^a
1949	897 ^b	10,577 ^b	1,027,277.00 ^b	188,004.00 ^c
1953	910 ^d	13,296 ^d	797,760.00 ^d	159,552.00 ^d

^aUnited States Bureau of the Census, 1945, op. cit., p. 308.

^bIbid., 1950, p. 149.

^cIbid., 1950, p. 169.

^dClifton, op. cit., 1954, pp. 10-11.

TABLE LXXI

SWINE PRODUCTION AND VALUES
IN SAN AUGUSTINE COUNTY, 1944-53

Date	Number of farms	Number of hogs and pigs	Value of hogs and pigs
1944	1,350 ^a	9,998 ^a	\$125,854.00 ^a
1949	610 ^b	3,424 ^b	44,797.00 ^b
1953	511 ^c	2,692 ^c	67,500.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 308.

^bIbid., 1950, p. 149.

^cClifton, op. cit., 1954, pp. 10-11.

In 1944, there were 1,350 farms with 9,998 hogs and pigs valued at \$125,854.00 (Table LXXI). By 1949, only 610 farms were producing swine, a decrease of 51.9 per cent. The number of hogs and pigs had decreased 65.8 per cent, and the value had dropped 64.4 per cent.

In 1953, there were 511 farms with swine, a decrease of 16.2 per cent from 1949. The number of hogs and pigs were 21.4 per cent less, but due to high prices, the value was 50.8 per cent more. With top hog prices being approximately \$26.00 to \$27.00 per hundred weight, fewer hogs were worth more money than in 1949.

Watermelons

Watermelons are more important as a cash crop in San Augustine County than they have been previously; yet, little money is derived from this agricultural enterprise.

Fourteen farms produced twenty acres of harvested watermelons valued at \$1,975.00 in 1944. By 1949, there were twenty-two farms, or 57.2 per cent more, growing watermelons. The acreage had increased to thirty-three, or 65 per cent, and the value of watermelons harvested was 60 per cent more.

In 1953, there were twenty-five farms producing fifty-one acres of harvested watermelons at a total value of

TABLE LXXII

WATERMELON ACREAGE AND VALUES
IN SAN AUGUSTINE COUNTY, 1944-53

Date	Number of farms	Acres of watermelons harvested	Value of watermelons harvested
1944	14 ^a	20 ^a	\$1,975.00 ^e
1949	22 ^b	33 ^b	3,160.00 ^d
1953	25 ^c	51 ^c	3,825.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 256.

^bIbid., 1950, p. 245.

^cClifton, op. cit., 1954, pp. 8-9.

^dIbid., 1950, pp. 8-9.

^eIbid., 1945, pp. 8-9.

\$3,825.00. This was a 13.6 per cent increase in number of farms, 54.7 per cent increase in acreage, and 21 per cent increase in value over 1949.

Tomatoes

Tomatoes are grown by very few farmers in San Augustine County, but they usually provide a good supplemental income at a time during the year when it is badly needed. Most of the sales are during the first two weeks in June.

In 1949, the number of farms growing tomatoes had decreased from forty-eight to twenty-nine, a drop of 39.7 per cent from 1944 (Table LXXIII). The acreage had increased from fifty-six to sixty-five, or 16.1 per cent. The value of tomatoes sold was up 7.5 per cent over 1944.

In 1953, there were twenty-six farms growing tomatoes, 10.3 per cent less than in 1949. The number of acres harvested were fifty, 23.1 per cent less, but the value of tomatoes sold was \$34,682.00, an increase of 156 per cent over 1949. The increase in value of tomatoes sold was due to an excellent market situation in which tomatoes often sold for twenty to thirty-five cents per pound.

TABLE LXXIII

TOMATO ACREAGE AND SALES
IN SAN AUGUSTINE COUNTY, 1944-53

Date	Number of farms	Acres of tomatoes harvested	Value of tomatoes sold
1944	48 ^a	56 ^a	\$12,600.00 ^e
1949	29 ^b	65 ^b	13,551.00 ^d
1953	26 ^c	50 ^c	34,682.00 ^e

^aUnited States Bureau of the Census, 1945, op. cit., p. 256.

^bIbid., 1950, p. 245.

^cClifton, op. cit., 1954, pp. 8-9.

^dIbid., 1950, pp. 8-9.

^eIbid., 1945, pp. 8-9.

Cowpeas

Cowpea production has increased in importance in recent years. From 1944 to 1949, there was an increase of 61.7 per cent in the number of farms growing cowpeas (Table LXXIV). The acreage also decreased 37.5 per cent, but there was an increase of 375 per cent in production and 301 per cent in value over 1944.

The number of farms growing cowpeas decreased 8.6 per cent from 1949 to 1953. The acreage increased 3.6 per cent. The bushels of harvested peas were 10.4 per cent more than in 1949.

Peanuts

Table LXXV shows that peanuts are a minor crop in San Augustine County. The number of farms growing peanuts have decreased in number to such an extent that only 126 were listed in 1953. The number of acres and production were slightly more than in 1949 but much less than in 1944. The total value of peanuts and peanut hay grown has remained between \$5,620.00 and \$10,316.00 for the past nine years.

In 1953, there were 126 farms growing 254 acres of peanuts with a yield of 21,748 pounds. Two hundred ten

TABLE LXXIV

COWPEA ACREAGE, PRODUCTION,
AND VALUES IN SAN AUGUSTINE COUNTY, 1944-53

Date	Number of farms	Number of acres	Bushels of peas harvested	Value of peas harvested
1944	201 ^a	1,866 ^a	1,932 ^a	\$5,796.00 ^a
1949	324 ^b	1,162 ^b	9,185 ^b	23,235.00 ^b
1953	296 ^c	1,204 ^c	10,143 ^c	25,653.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 204.

^bIbid., 1950, p. 207.

^cClifton, op. cit., 1954, pp. 8-9.

TABLE LXXV

PEANUT ACREAGE, PRODUCTION,
AND VALUES IN SAN AUGUSTINE COUNTY, 1944-53

Date	Number of farms	Number of acres	Pounds of peanuts	Tons of hay	Total value
1944	623 ^a	1,561 ^a	37,266 ^a	422 ^a	\$10,316.00 ^a
1949	138 ^b	242 ^b	19,821 ^b	170 ^b	5,620.00 ^b
1953	126 ^c	254 ^c	21,748 ^c	210 ^c	8,998.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit.,
p. 204.

^bIbid., 1950, p. 207.

^cClifton, op. cit., 1954, pp. 8-9.

tons of hay plus the pounds of peanuts produced gave a total value of \$8,998.00 for the 1953 crop.

Soil Building

During the year of 1944, there were 432 farms that received \$29,325.23 from the United States Government for soil building practices (Table LXXVI). The four largest payments were for reseeding pastures, using 0-14-7 fertilizer, planting winter legumes and rye grass, planting Sericea Lespedeza, and using superphosphate.

There were 357 farms participating in the soil building practices in 1949. The total payment for all practices was \$29,808.76. The four largest payments were for reseeding pastures, building earthen tanks and dams, planting winter legumes and rye grass, using superphosphate, and using 0-14-7 fertilizer.

In 1953, there were 282 farms participating in the program. The total of all payments to these farmers was \$15,618.93, excluding the increase in small payments. The four practices for which the largest payments were received were reseeding pastures, planting winter legumes and rye grass, using 0-14-7 fertilizer, building earthen tanks and dams, and using superphosphate. The largest payment was

TABLE LXXVI

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN SAN AUGUSTINE COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Diversion terraces	2	\$ 102.24	6	\$ 144.55		
Standard terraces	2	44.50	14	947.65	5	\$ 328.32
Earthen tanks and dams	8	618.14	38	6,436.06	19	1,294.40
Mowing pastures	38	1,290.60	49	1,687.00		
Reseeding pastures	290	13,481.21	146	6,656.15	100	4,563.92
Winter legumes and rye grass	139	2,812.53	115	3,799.66	233	5,399.64
Superphosphate	43	1,301.50	78	2,900.62	33	1,044.11
Limestone			20	707.40	1	41.60

TABLE LXXVI (Continued)

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN SAN AUGUSTINE COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Summer legumes	8	\$ 93.60	7	\$92.05		
Rye grass	60	1,253.31				
Kudzu	5	30.00	5	120.00		
Potash			11	439.84		
Planting forest trees			4	213.75	2	\$132.75
Improving forest trees					5	365.00
Mixed fertilizer					1	153.45

TABLE LXXVI (Continued)

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN SAN AUGUSTINE COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Sericea Lespedeza	56	\$2,890.00	17	\$ 884.40		
O-14-7 fertilizer	243	5,407.60	137	4,071.15	120	\$2,295.74
Rock phosphate			20	708.48		
TOTAL	432	\$29,325.23	357	\$29,808.76	282	\$15,618.93

^aE. D. Ward, "Farm Statistical Listing Sheet," Form ACP 220, (unpublished annual report of the San Augustine County Agricultural Stabilization and Conservation Committee, San Augustine, 1945), p. 19.

^bIbid., 1950, p. 19.

^cIbid., 1954, p. 19.

\$5,399.64 for planting winter legumes and rye grass; this was more than one-third of all payments made in 1953.

Land Values

In 1944, there were 1,860 farms in San Augustine County with an average size of 69.5 acres and a value per acre of \$29.61. Big changes took place by 1949 during which time the number of farms dropped to 1,064, a 43.5 per cent decrease. The average size farm increased to 101.3 acres, 45.8 per cent larger than in 1944, and the value per acre was \$44.49, an increase of 50.4 per cent in five years.

In 1953, there were 1,049 farms in the county, a decrease of 1.4 per cent from 1949. The average size farm was 103 acres, 1.7 per cent larger, and the value per acre was \$42.50 which was a decrease of 4.5 per cent from 1949.

Farm Tenancy

Although there were 49.3 per cent less full-owners of farms in 1949 than in 1944 and 5.8 per cent more in 1953 than 1949, actually there was very little change in relation to the number of farms available and full-ownership of them (Table LXXVIII). In 1944, there were 1,860 farms with 1,284 full-owners for a percentage of 69 per cent. In 1949, 61 per cent of the farms were owned by full-owners,

TABLE LXXVII

NUMBER, SIZE, AND VALUE PER ACRE
OF FARMS IN SAN AUGUSTINE COUNTY, 1944-53

Date	Number of farms in county	Average size of farms	Value per acre of farmland
1944	1,860 ^a	69.5 ^a	\$ 29.61 ^a
1949	1,064 ^b	101.3 ^b	44.49 ^b
1953	1,049 ^c	103.0 ^c	42.50 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 58.

^bIbid., 1950, p. 77.

^cClifton, op. cit., 1954, p. 3.

TABLE LXXVIII

FULL-OWNERS, PART-OWNERS, MANAGERS
AND TENANTS IN SAN AUGUSTINE COUNTY, 1944-53

Date	Full-owners	Part-owners	Managers	Cash tenants	Share-cash tenants	Share-tenants and croppers	Other tenants
1944	1,284 ^a	9a	0a	366a	0a	89a	112a
1949	651 ^b	125 ^b	2 ^b	43 ^b	9 ^b	177 ^b	57 ^b
1953	684 ^c	131 ^c	3 ^c	40 ^c	8 ^c	160 ^c	38 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 357.

^bIbid., 1950, p. 103.

^cClifton, op. cit., 1954, p. 3.

and in 1953, 65 per cent of the 1,049 farms were owned by full-owners (Table LXXVIII and LXXVII). Part-owners and managers showed a substantial increase in number.

The number of tenants of all types decreased in number. In 1944, there were 567 tenants of all types, but in 1949, there were only 286, and in 1953, there were 246. The number of tenants decreased at about the same rate as the number of farms decreased.

Farm Power and Equipment

Horses and mules are declining in importance in San Augustine County. In 1944, there were 3,140 horses and mules valued at \$228,460.00 (Table LXXIX). There were only sixty-four tractors, and the value of farm machinery and equipment in the county was \$334,796.00.

In 1949, there were 42.7 per cent fewer horses and mules, and their value was down 67.2 per cent. There were 195 tractors, 205 per cent more than in 1944, and the value of farm implements and machinery was up 199.9 per cent.

The number of horses and mules took another drop by 1953, being 10.7 fewer than in 1949. The value of horses and mules was down another 57 per cent, the average being approximately \$20.00 per head. There were 250 tractors in

TABLE LXXIX

HORSES, TRACTORS, AND EQUIPMENT ON FARMS
IN SAN AUGUSTINE COUNTY, 1944-53

Date	Number of horses and mules	Value of horses and mules	Number of tractors	Value of farm equipment
1944	3,140 ^a	\$228,460.00 ^a	64 ^b	\$ 334,796.00 ^c
1949	1,803 ^d	74,862.00 ^d	195 ^e	1,002,388.00 ^e
1953	1,610 ^f	32,200.00 ^f	250 ^f	1,239,184.00 ^f

^aUnited States Bureau of the Census, 1945, op. cit., p. 308.

^bIbid., 1945, p. 104.

^cIbid., 1945, p. 58.

^dIbid., 1950, p. 149.

^eIbid., 1950, p. 129.

^fClifton, op. cit., 1954, p. 3.

^gIbid., 1950, p. 3.

1953, 28.2 per cent more than in 1949, and the value of farm implements and machinery was up another 23.8 per cent.

Roads and Utilities

The number of farms with automobiles decreased 50.7 per cent from 1945 to 1950 (Table LXXX). This was during the post-war years when new cars could not be bought easily because of a short supply, and many of the pre-war cars were no longer useful. By 1953, there were 705 automobiles on the farms, an increase of 161 per cent over 1950. This meant that approximately two-thirds of the farms had automobiles in 1953.

The telephone situation has remained bad for years but has shown some improvement. In 1945, there were 156 farms with telephones (Table LXXX), but in 1950, there were only fifty, a decrease of 68 per cent. By 1953, the rural phone lines were being extended rapidly, and there were 225 farms with telephones. Approximately one-fourth of the farms had telephones in 1953.

Rural electrification has expanded at a rapid rate. From 1945 to 1950, there was an increase of 59.8 per cent in the number of farms with electricity, and by 1953, there was 81 per cent more than in 1950; this gave electricity to approximately nine out of ten farmers in 1953.

Practically all farms in San Augustine County are on all-weather roads, but many of these roads are in bad repair and need to be hard surfaced at the earliest possible date.

TABLE LXXX

THE NUMBER OF FARMS WITH AUTOMOBILES, TELEPHONES,
ELECTRICITY, AND ALL-WEATHER ROADS IN SAN AUGUSTINE COUNTY,
1945-53

Date	Number of farms with automobiles	Number of farms with telephones	Number of farms with electricity	Number of farms on all-weather roads
1945	547 ^a	156 ^a	310 ^a	698 ^a
1950	270 ^b	50 ^b	495 ^b	1,030 ^b
1953	705 ^c	225 ^c	903 ^c	1,036 ^c

^aUnited States Bureau of the Census, 1945, op. cit.,
p. 104.

^bIbid., 1940, p. 129.

^cClifton, op. cit., 1954, p. 3.

Shelby County

Introduction and General Description

Shelby County is located in deep East Texas on the Louisiana line. Primarily a lumbering county until recently, it has developed rapidly as a poultry, dairying, beef-cattle, and crop farming area. The population is largely rural with a large Negro minority. Named for Isaac Shelby, officer in the Continental Army during the American Revolution, the county was created in 1836 and organized in 1837.²⁹

In the Piney Woods of East Texas, Shelby County is drained by the Attoyac and Sabine rivers which form west and east boundary lines. The terrain is rolling to hilly with an altitude of 200 to 400 feet.³⁰ The annual rainfall is 45 inches, and the mean annual temperature is 65 degrees.³¹

The soils are alluvial in the bottoms with sandy and sandy clay soils found on the uplands. Pine, gu, oak, hickory, cypress, elm, ash, magnolia, and sycamore are of commercial value. Lumber is the leading industry. The

²⁹Ibid., p. 601.

³⁰Ibid.,

³¹Ibid.

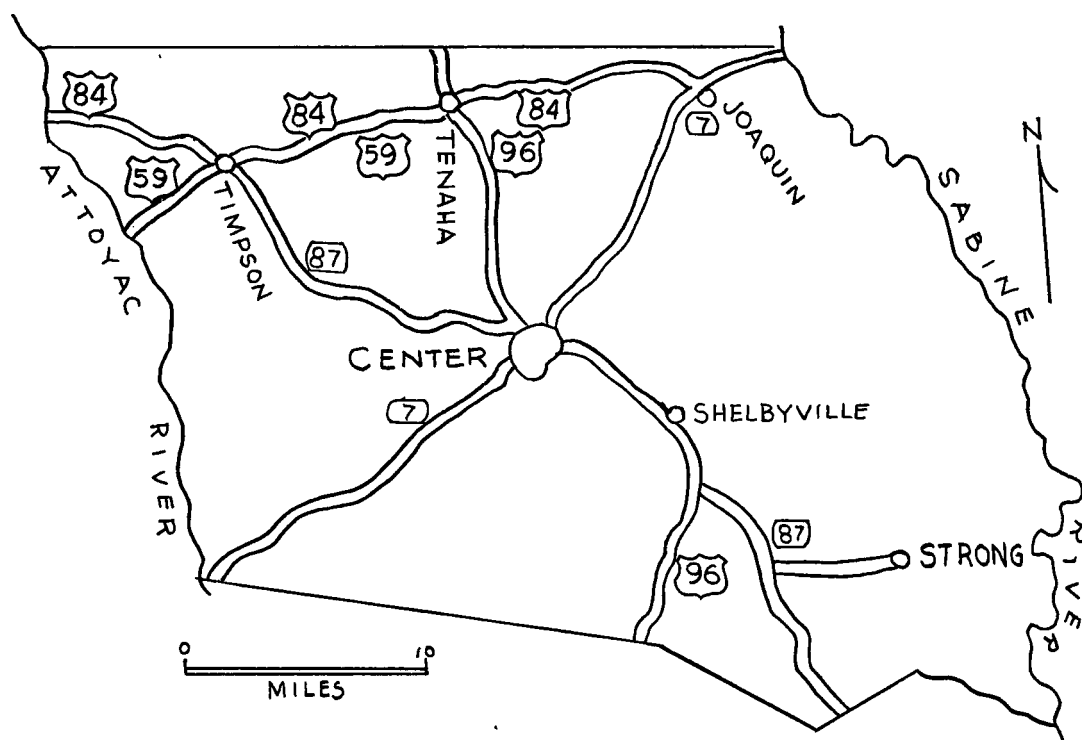


FIGURE 7.—MAP OF SHELBY COUNTY^a

^a Reproduced from "Texas Almanac and State Industrial Guide, 1952-53," Counties and Cities of Texas (Dallas: A. H. Belle Corporation, 1951), p. 601.

Sabine National Forest covers 67,000 acres in this county with a good recreation center provided.³² There is excellent game cover for deer, squirrels, doves, and waterfowl. Fishing is furnished by the Sabine and many smaller streams.

The growing season is 233 days.³³ The leading crops are cotton, tomatoes, watermelons, corn, forage, and truck crops. Broiler production, dairying and cattle raising have progressed rapidly the last few years. Soil conservation, timber management, and pasture development greatly emphasized throughout the county.

Farm Forestry

The farm forestry situation in Shelby County has shown gradual but steady improvement since 1944 (Table LXXXI). In 1949, there were 5.7 per cent fewer farms with woodland than in 1944, but there were 21.5 per cent more acres than before. There were also 29.4 per cent more farms selling forest products for 28.4 per cent more money.

³²Ibid.

³³Ibid.

TABLE LXXXI

FARM FORESTRY PRODUCTION AND SALES
IN SHELBY COUNTY, 1944-53

Date	Number of farms with woodland	Acres of farm woodland	Number of farms selling forest products	Value of products sold
1944	2,206 ^a	93,953 ^a	551 ^b	\$122,032.00 ^b
1949	2,080 ^c	114,147 ^c	713 ^d	156,714.00 ^d
1953	2,118 ^e	115,220 ^e	903 ^e	182,301.00 ^e

^aUnited States Bureau of the Census, 1945, op. cit., p. 60.

^bIbid., 1945, p. 341.

^cIbid., 1950, p. 77.

^dIbid., 1950, p. 285.

^eJ. O. Moosberg, "Annual Narrative Report of County Extension Agents," E. S. 21 (unpublished annual report of the Shelby County Agricultural Agent made to Agricultural and Mechanical College of Texas, College Station, Texas, January 1, 1954), pp. 14-15.

In 1953, there were 1.8 per cent more farms with woodland than in 1949, and the acreage showed to be .9 per cent greater. The number of farms selling forest products increased 26.7 per cent; the value of forest products sold increased 16.3 per cent. The income for forest products sold in 1953 was \$182,301.00.

Dairying

Dairying provides an income of over a half-million dollars to Shelby County farmers annually (Table LXXXII). The industry has shown great progress since World War II, most of this progress being made from 1944 to 1949.

In 1949, there were 31.2 per cent less cows being milked than in 1944, but there was a 10 per cent increase in the gallons of milk produced. The number of Grade A dairies increased from none to fifty-two. The number of gallons of whole milk sold increased 102 per cent, and the value of whole milk sold increased 105 per cent over 1944.

In 1953, there were 2.9 per cent fewer cows being milked than in 1949, and there were 9.4 per cent less milk produced. The number of Grade A dairies remained the same, fifty-two. The gallons of whole milk sold amounted to 43.3 per cent more, and the value received was 81.8 per cent

TABLE LXXXII

DAIRY CATTLE PRODUCTION AND WHOLE MILK
SALES IN SHELBY COUNTY, 1944-53

Date	Cows milked	Gallons of milk produced	Number of Grade A dairies	Gallons of whole milk sold	Value of whole milk sold
1944	6,741 ^a	2,633,780 ^a	0 ^a	316,151 ^a	\$151,065.00 ^a
1949	4,644 ^b	2,896,275 ^b	52 ^d	638,035 ^b	309,636.00 ^b
1953	4,510 ^c	2,625,000 ^c	52 ^c	1,125,000 ^c	562,500.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 310.

^bIbid., 1950, p. 149.

^cMoosberg, op. cit., 1954, pp. 10-11.

^dIbid., 1950, pp. 10-11.

^eIbid., 1945, pp. 10-11.

more than in 1949. The income received from the sale of whole milk in Shelby County in 1953 was \$562,500.00.

Poultry

The poultry industry has made unbelievable growth in Shelby County since 1944, and most of this extra-ordinary growth has been during the last four years. Broilers account for this enterprise being, by far, the most important agricultural enterprise in the county (Table LXXXIII).

From 1944 to 1949, there was a 50.3 per cent reduction in the number of farms selling poultry or poultry products. The tendency was toward specialization and commercial production. The value of poultry and poultry products sold increased 99.5 per cent over 1944. The number of commercial broiler houses increased from five to fifty-four, or 980 per cent; the number of broilers sold increased 107 per cent; and the value of broilers sold increased 107 per cent.

From 1949 to 1953 came the real boom in the poultry industry. The number of farms selling poultry or poultry products increased to 1,480, or 14.7 per cent over 1949. The value of poultry and poultry products sold amounted to \$9,945,007.00, which was 1,524 per cent more than four years previously. The number of broiler houses on farms in the county totaled 1,200, an increase of 2,130 per cent.

TABLE LXXXIII

POULTRY PRODUCTION AND SALES IN SHELBY COUNTY, 1944-53

Date	Number of farms selling poultry or poultry products	Value of poultry and poultry pro- ducts sold	Number of 3000-capacity broiler houses	Number of broilers sold	Value of broilers sold
1944	2,592 ^a	\$ 307,284.00 ^a	5 ^e	249,400 ^e	\$ 199,520.00 ^e
1949	1,291 ^b	613,097.00 ^b	54 ^d	516,410 ^d	413,128.00 ^d
1953	1,480 ^c	9,945,007.00 ^c	1,200 ^c	11,999,500 ^c	9,596,773.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 310.

^bIbid., 1950, p. 169.

^cMoosberg, op. cit., 1954, pp. 10-11.

^dIbid., 1950, pp. 10-11.

^eIbid., 1945, pp. 10-11.

There were nearly twelve million broilers sold in 1953 for an income of over nine and one-half million dollars, an increase of 2,223 per cent over 1949.

Broiler houses were being constructed so fast in Shelby County in 1953 that it was exceedingly difficult to keep count from one week to the next on how many were in operation.

Cotton

Cotton was still the chief cash crop in Shelby County in 1953, bringing the farmers a gross income of over one million dollars (Table LXXXIV).

The number of farms growing cotton increased 2.4 per cent from 1944 to 1949. The number of acres increased 30.3 per cent, and the number of bales were 124.8 per cent more, giving an increase in income from cotton and cotton seed to the amount of 183 per cent.

In 1953, cotton was grown on 1,408 farms, a decrease of 14.1 per cent over 1949. There were 54.8 per cent less acres planted and 56.7 per cent fewer bales produced. The value of cotton and seed produced was \$1,002,200.00, but this was 46.7 per cent less than in 1949.

TABLE LXXXIV

COTTON ACREAGE, YIELDS, AND VALUES
IN SHELBY COUNTY, 1944-53

Date	Number of farms	Number of acres	Number of bales	Value of cotton and seed produced
1944	1,602 ^a	15,405 ^a	5,129 ^a	\$ 664,718.00 ^a
1949	1,640 ^b	20,073 ^b	11,532 ^b	1,879,716.00 ^b
1953	1,408 ^c	9,081 ^c	5,011 ^c	1,002,200.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 206.

^bIbid., 1950, p. 227.

^cMoosberg, op. cit., 1954, pp. 8-9.

Corn

Corn was grown on over half the farms in Shelby County in 1953 (Tables LXXXV and XCIII). Corn has always been a popular crop and has remained relatively stable in providing income to farmers. The primary changes that have taken place have been a much better yield on less acres and on fewer farms.

In 1949, there were 14.5 per cent fewer farms growing corn than in 1944 according to Table LXXXV. There were 31.4 per cent fewer acres grown in 1949, but there were 31.5 per cent more bushels of grain harvested, and the value of the harvested grain was 2.4 per cent more.

In 1953, there were 1,498 farms growing corn, a decrease of 18.6 per cent from 1949. There were 22.4 per cent less acres, and the yield of harvested grain was 14.2 per cent less; however, the value of harvested grain was 4.2 per cent more.

Cattle

Cattle were found on 88.3 per cent of all farms in Shelby County in 1953, and they provided a gross income of over three-fourths of a million dollars (Tables LXXXVI and XCIII). The number of cattle have gradually increased as

TABLE LXXXV

CORN ACREAGE, YIELDS, AND VALUES
IN SHELBY COUNTY, 1944-53

Date	Number of farms	Number of acres	Bushels of harvested grain	Value of harvested grain
1944	2,153 ^a	18,985 ^a	179,209 ^a	\$265,028.00 ^a
1949	1,841 ^b	13,020 ^b	235,566 ^b	271,513.00 ^b
1953	1,498 ^c	10,100 ^c	202,011 ^c	282,815.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 154.

^bIbid., 1950, p. 189.

^cMoosberg, op. cit., 1954, pp. 8-9.

cropland has decreased and pasture land has been improved (Table XCII).

In 1949, there were 27.6 per cent fewer farms growing cattle than in 1944, and there were 12.2 per cent fewer cattle, but the value of these cattle had increased 89.7, and the value of all cattle sold increased 76.5 per cent. There was inflation in the cattle market, and this caused a large income in relation to the number of cattle on farms.

In 1953, there were 2.8 per cent less farms growing cattle than in 1949. The number of cattle on farms had increased 16.5 per cent, but due to poorer prices, the value of these cattle had decreased 6.3 per cent. Cattle sales showed an increase in income of 6.2 per cent, but that was because there were many more cattle in 1953 than in 1949.

Swine

There has been a rapid decline in swine production in Shelby County during recent years (Table LXXXVII). In 1953, there were swine on only 40.8 per cent of the farms in the county, and these farms averaged only 4.16 head each (Tables LXXXVII and XCIII).

The number of farms growing swine were 38.1 per cent fewer in 1949 than in 1944. The number of hogs and pigs

TABLE LXXXVI

CATTLE PRODUCTION, VALUES,
AND SALES IN SHELBY COUNTY, 1944-53

Date	No. of farms	Number of cattle on farms over 3 months old	Value of cattle over 3 months old	Value of all cattle sold
1944	3,697 ^a	39,078 ^a	\$1,692,678.00 ^a	\$419,222.00 ^a
1949	2,680 ^b	34,310 ^b	3,208,520.00 ^b	739,422.00 ^c
1953	2,605 ^d	39,985 ^d	2,998,875.00 ^d	785,206.00 ^d

^aUnited States Bureau of the Census, 1945, op. cit., p. 310.

^bIbid., 1950, p. 149.

^cIbid., 1950, p. 169.

^dMoosberg, op. cit., 1954, pp. 10-11.

TABLE LXXXVII
SWINE PRODUCTION AND VALUES
IN SHELBY COUNTY, 1944-53

Date	Number of farms	Number of hogs and pigs	Value of hogs and pigs
1944	2,029 ^a	8,674 ^a	\$100,720.00 ^a
1949	1,256 ^b	5,090 ^b	63,508.00 ^b
1953	1,205 ^c	4,998 ^c	149,950.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 310.

^bIbid., 1950, p. 149.

^cMoosberg, op. cit., 1954, pp. 10-11.

on farms were 41.3 per cent less, and the value of hogs and pigs was off 37.2 per cent.

In 1953, there were 4.1 per cent fewer farms growing swine than in 1949. The number of hogs and pigs were down 1.8 per cent, but the value of hogs and pigs was 136 per cent higher, due to inflation in the 1953 hog market.

Watermelons

The production and sale of watermelons has decreased rapidly in Shelby County in recent years. In 1949, there were 44.3 per cent less farms growing watermelons than in 1944 (Table LXXXVIII). There were also 8.6 per cent fewer acres planted, and the value of watermelons harvested were 8 per cent less than in 1944.

In 1953, there were only seventy-five farms growing watermelons, 75 per cent less than in 1949. There were 55.6 per cent fewer acres harvested, and the value was 55.7 per cent less than in 1949. The farmers of Shelby County harvested 710 acres which were valued at \$53,250.00 in 1953.

Tomatoes

Tomato production has decreased rapidly in importance as a crop in Shelby County. Except for the very high prices received in 1953 for those tomatoes produced, the growing

TABLE LXXXVIII
WATERMELON ACREAGE AND VALUES
IN SHELBY COUNTY, 1944-53

Date	Number of farms	Acres of watermelons harvested	Value of watermelons harvested
1944	534 ^a	1,738 ^a	\$130,324.00 ^e
1949	298 ^b	1,598 ^b	119,850.00 ^d
1953	75 ^c	710 ^c	53,250.00 ^e

^aUnited States Bureau of the Census, 1945, op. cit., p. 258.

^bIbid., 1950, p. 245.

^cMoosberg, op. cit., 1954, pp. 8-9.

^dIbid., 1950, pp. 8-9.

^eIbid., 1945, pp. 8-9.

TABLE LXXXIX

TOMATO ACREAGE AND SALES
IN SHELBY COUNTY, 1944-53

Date	Number of farms	Acres of tomatoes harvested	Value of tomatoes sold
1944	572 ^a	893 ^a	\$188,600.00 ^e
1949	448 ^b	673 ^b	134,653.00 ^d
1953	205 ^c	516 ^c	351,118.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 258.

^bIbid., 1950, p. 245.

^cMoosberg, op. cit., 1954, pp. 8-9.

^dIbid., 1950, pp. 8-9.

^eIbid., 1945, pp. 8-9.

of tomatoes has been a declining enterprise (Table LXXXIX). The number of farms growing tomatoes in 1949 was 21.7 per cent fewer than in 1944. The acres of tomatoes harvested were 24.7 per cent less, and the value of tomatoes sold was 28.6 per cent less than in 1944.

In 1953, there were 205 farms that grew 516 acres of tomatoes which were sold for \$351,118.00. This was 54.3 per cent less farms, 23.4 per cent less acres, but 160.7 per cent more money than in 1949.

Cowpeas

The primary change that has taken place in the production of cowpeas since 1944 is that from 1944 to 1949 there was a decrease of 68 per cent in the number of acres planted to cowpeas, but production even showed an increase (Table XC). Prices were not as good in either 1949 or 1953 as they were during 1944.

In 1953, there were 1,124 farms growing 3,240 acres of cowpeas. The production for that year was 34,767 bushels which were valued at \$83,982.00.

Peanuts

Peanut production is a minor enterprise in Shelby County (Table XCI). From 1944 to 1949, there was a decrease

TABLE XC

COWPEA ACREAGE, PRODUCTION,
AND VALUES IN SHELBY COUNTY, 1944-53

Date	Number of farms	Number of acres	Bushels of peas harvested	Value of peas harvested
1944	1,008 ^a	10,620 ^a	31,445 ^a	\$94,335.00 ^a
1949	1,091 ^b	3,398 ^b	35,879 ^b	71,377.00 ^b
1953	1,124 ^c	3,240 ^c	34,767 ^c	83,982.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit.,
p. 206.

^bIbid., 1950, p. 207.

^cMoosberg, op. cit., 1954, pp. 8-9.

TABLE XCI

PEANUT ACREAGE, PRODUCTION,
AND VALUES IN SHELBY COUNTY, 1944-53

Date	Number of farms	Number of acres	Pounds of peanuts	Tons of hay	Total value
1944	795 ^a	2,062 ^a	226,087 ^a	494 ^a	\$25,396.00 ^a
1949	232 ^b	360 ^b	30,729 ^b	176 ^b	6,839.00 ^b
1953	56 ^c	35 ^c	3,866 ^c	18 ^c	1,120.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 206.

^bIbid., 1950, p. 207.

^cMoosberg, op. cit., 1954, pp. 8-9.

of 71 per cent in the number of farms growing peanuts. The number of acres dropped 82.5 per cent; the pounds of peanuts produced were 86.4 per cent less; the tons of hay were 64.5 per cent less; and the total value of peanuts and hay was off 73.2 per cent.

The trend downward continued into 1953. There were only fifty-six farms growing peanuts, 76 per cent less than in 1949. There was a 90.5 per cent reduction in acreage, and approximately 90 per cent less peanuts and hay. The income from peanuts and hay was only \$1,120.00 in 1953, 83.8 per cent less than in 1949.

Soil Building

During the year 1944, there were 2,386 farms that received \$119,393.67 from the United States Government for soil building practices (Table XCII). The four largest payments were for eliminating underbrush, contour farming cropland, planting summer legumes, and using superphosphate.

There were 1,013 farms participating in the soil building practices in 1949. The total payment for all practices was \$93,346.58. The four largest payments were for reseeding pastures, using superphosphate, fertilizing with 0-14-7 fertilizer, and building earthen tanks and dams.

TABLE XCII

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED
IN SHELBY COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Diversion terraces	8	\$ 382.80	13	\$ 140.20		
Standard terraces	45	4,976.17	24	1,464.49		
Earthen tanks and dams	63	7,985.55	53	8,851.60	42	\$5,251.20
Eliminating underbrush	402	40,843.50				
Mowing pastures	85	1,725.35				
Contour listing cropland	1,675	11,127.15				
Contour farming cropland	1,711	18,771.75				
Reseeding pastures	10	1,197.85	784	38,704.45	568	15,587.12

TABLE XCII (Continued)

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED IN SHELBY
COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Winter legumes and rye grass	165	\$4,037.75	301	\$7,336.71	238	\$4,559.08
Superphosphate	293	11,689.20	408	18,726.89	19	311.46
Limestone			82	4,238.00	39	2,565.50
Summer legumes	2,028	16,647.60	6	7.80		
Rye			2	12.75		
Kudzu			3	108.00		
Potash			10	210.60	9	37.89
Planting forest trees			9	1,215.00	6	747.00
Mixed fertilizer					241	7,140.80

TABLE XCII (Continued)

SOIL BUILDING PRACTICES FOR WHICH GOVERNMENT PAYMENTS WERE RECEIVED IN SHELBY
COUNTY, 1944-53

Practice	1944 ^a		1949 ^b		1953 ^c	
	No. of farms	Amount	No. of farms	Amount	No. of farms	Amount
Improving forest trees			5	\$ 275.00	16	\$3,685.00
Sericea Lespedeza			60	2,258.00		
0-14-7 fertilizer			255	9,019.19	88	2,144.03
Rock phosphate			10	885.60	7	479.23
TOTAL	2,386	\$119,393.67	1,013	\$93,346.58	975	\$42,508.31

^aJohn A. Kimmerly, "Farm Statistical Listing Sheet," Form ACP 220, (unpublished annual report of the Shelby County Agricultural Stabilization and Conservation Committee, Center, 1945), p. 19.

^bIbid., 1950, p. 19.

^cIbid., 1954, p. 19.

In 1953, there were 975 farms participating in the program. The total of all payments to these farmers was \$42,508.31, excluding the increase in small payments. The four practices for which the largest payments were received were reseeding pastures, using mixed fertilizers, building earthen tanks and dams, and planting winter legumes and rye grass. The largest payment was \$15,587.12 for reseeding pastures; this was more than one-third of all payments made in 1953.

Land Values

Shelby County has seen a boom in land prices during the post-war period. In 1944, there were 3,997 farms in the county with an average size of 79.6 acres and a value of \$27.75 per acre (Table XCIII). By 1949, the number of farms had decreased 21.2 per cent, and the average size had increased 19.1 per cent; the value per acre had increased to \$51.66, or 86.2 per cent.

In 1953, there were 2,952 farms, 6.2 per cent less than in 1949. The average size farm in the county was 98.0 acres, and the value per acre was \$55.00. This was an increase of 3.4 per cent in size and 6.5 per cent in value over 1949.

TABLE XCIII

NUMBER, SIZE, AND VALUE PER ACRE
OF FARMS IN SHELBY COUNTY, 1944-53

Date	Number of farms in county	Average size of farms	Value per acre of farmland
1944	3,997 ^a	79.6 ^a	\$27.75 ^a
1949	3,148 ^b	94.8 ^b	51.66 ^b
1953	2,952 ^c	98.0 ^c	55.00 ^c

^aUnited States Bureau of the Census, 1945, op. cit.,
p. 60.

^bIbid., 1950, p. 77.

^cMoosberg, op. cit., 1954, p. 3.

Farm Tenancy

On the 2,952 farms in Shelby County in 1953, there were 75.2 per cent of the farmers who were full-owners (Table XCIV). The number of tenants have gradually decreased since 1944.

In 1949, there were 28.9 per cent less full-owners than there had been in 1944, but there were 33.5 per cent less tenants. There were 323 per cent more part-owners and 100 per cent more managers.

In 1953, the number of full-owners had increased 20 per cent over 1949. The number of tenants had decreased 46.7 per cent. The number of part-owners had increased 11.5 per cent, and the number of managers had increased 150 per cent.

Farm Power and Equipment

Horses and mules are becoming less important on farms in Shelby County. In 1949 there were 22.3 per cent less than in 1944 (Table XCV). There were 127 per cent more tractors, and the value of farm implements and machinery was 110 per cent more than in 1944.

In 1953, there were 22.5 per cent less horses and mules, and they were valued at 62.5 per cent less than in

TABLE XCIV

FULL-OWNERS, PART-OWNERS, MANAGERS
AND TENANTS IN SHELBY COUNTY, 1944-53

Date	Full- owners	Part- owners	Managers	Cash tenants	Share-cash tenants	Share-tenants and croppers	Other tenants
1944	2,603 ^a	103 ^a	2 ^a	451 ^a	5 ^a	558 ^a	275 ^a
1949	1,850 ^b	436 ^b	4 ^b	184 ^b	37 ^b	471 ^b	166 ^b
1953	2,220 ^c	486 ^c	10 ^c	158	30 ^c	221 ^c	49 ^c

^aUnited States Bureau of the Census, 1945, op. cit., p. 357.

^bIbid., 1950, p. 103.

^cMoosberg, op. cit., 1954.

TABLE XCV

HORSES, TRACTORS, AND EQUIPMENT ON FARMS
IN ANGELINA COUNTY, 1944-53

Date	Number of horses and mules	Value of horses and mules	Number of tractors	Value of farm equipment
1944	6,268 ^a	\$478,800.00 ^a	188 ^b	\$ 951,628.00 ^c
1949	4,871 ^d	200,549.00 ^d	420 ^e	1,998,418.00 ^e
1953	3,775 ^f	75,500.00 ^f	814 ^f	3,996,837.00 ^f

^aUnited States Bureau of the Census, 1945, op. cit., p. 310.

^bIbid., 1945, p. 105.

^cIbid., 1945, p. 60.

^dIbid., 1950, p. 149.

^eIbid., 1950, p. 120.

^fMoosberg, op. cit., 1954, p. 3.

^gIbid., 1950, p. 3.

1949. There were 93.8 per cent more tractors and farm machinery and implements were valued at 100 per cent more than in 1949. In 1953, there were 814 tractors in the county.

Roads and Utilities

The number of farms with automobiles decreased 21.7 per cent from 1945 to 1950, but by 1953, there was an increase of 149.5 per cent over 1950 (Table XCVI). In 1953, 80 per cent of the farms in the county had automobiles on them.

In 1950, there were 80 per cent more farms with telephones than in 1945. In 1953, there were 1,181 farms with telephones, an increase of 37 per cent over 1950.

Electrification lines have had a rapid expansion during the last few years. There was an increase of 106 per cent in the number of farms with electricity from 1945 to 1950, and then there was another 27.9 increase from 1950 to 1953.

During the 1945-50 period, there was an increase of 118 per cent of farms on all-weather roads. The number decreased 5 per cent from 1950 to 1953. Nearly 100 per cent, all except twelve, of the farms in Shelby County were on all-weather roads in 1953.

TABLE XCVI

THE NUMBER OF FARMS WITH AUTOMOBILES, TELEPHONES,
ELECTRICITY, AND ALL-WEATHER ROADS IN SHELBY COUNTY,
1945-53

Date	Number of farms with automobiles	Number of farms with telephones	Number of farms with electricity	Number of farms on all-weather roads
1945	1,208 ^a	479 ^a	1,051 ^a	1,419 ^a
1950	947 ^b	862 ^b	2,193 ^b	3,093 ^b
1953	2,361 ^c	1,181 ^c	2,804 ^c	2,940 ^c

^aUnited States Bureau of the Census, 1945, op. cit.,
p. 105.

^bIbid., 1950, p. 129.

^cMoosberg, op. cit., 1954, p. 3.

Summary

Land use changes in the six counties included in this study have been very similar during the last nine years, 1944 through 1953. All the counties are located in the pine forest region of East Texas. The terrain is rolling to hilly, and the rainfall, temperature, and altitude is approximately the same. The soils are very similar in color, structure, being mostly alluvials in the bottoms and sand and red clays on the uplands. The agricultural enterprises are basically the same; however, they do vary in importance from one county to another. These differences and similarities will be discussed in this summary.

Timber production is important in all six counties. The four larger counties, Cherokee, Nacogdoches, Rusk, and Shelby showed substantial increases in the value of forest products sold from 1944 to 1953, the range being from \$160,188.00 to \$199,701.00 in 1953. Angelina County sold only \$50,612.00 worth of forest products in 1953, which was a very little increase over 1944. San Augustine County sold only \$18,286.00 worth of forest products in 1953, much less than in 1944.

Dairying has shown rapid progress in all the counties except San Augustine County, where there were only eleven

Grade A dairies in 1953, and the value of whole milk sold was only \$96,510.00. The outstanding dairy county is Nacogdoches County with 310 Grade A dairies in 1953 and an income of over seven million dollars from the sale of whole milk. The other counties showed incomes of from approximately one-third to one million dollars in 1953.

Poultry production has grown like wildfire in all six of the counties. Shelby County is the leader with 1,200 broiler houses and an income of nearly ten million dollars from poultry and poultry products sold in 1953. San Augustine County had the smallest operation with an income of over one-half million dollars and sixty-one broiler houses in 1953. The other counties had incomes from poultry and poultry products in 1953 ranging from approximately two to seven million dollars. There were a total of eight commercial broiler houses in the six counties in 1944; there were 3,078 commercial houses in 1953. Poultry production is, by far, the major enterprise of the region included in this study.

Cotton is the most important crop grown in the six-county region covered in this study. As a general rule, the number of farms growing cotton and the acreages have greatly decreased, but the number of bales and the value of cotton and seed produced have shown a strong increase.

The value of cotton and seed produced ranged from \$422,120.00 in Angelina County to \$2,150,086.00 in Rusk County in 1953. The latest trend is to grow more cotton on less acres.

Cherokee County is the leading county in the production of corn, with an increase in the number of farms growing corn, acreage, and value of harvested grain since 1944. All the other counties showed an increase in production but a decrease in the number of farms and acreage. The value of harvested grain in Cherokee County was over one and three-quarter million dollars in 1953. Angelina was the low county with only \$179,940.00. The other counties ranged from approximately one-fourth to one-half million dollars as the value of harvested grain in 1953.

Beef cattle occupy an important place in the economy of all six counties. Fewer farms were producing more cattle which were bringing farmers more money in 1953 than in 1944. The 1953 price was not as good as in 1949, so more cattle had to be sold to bring as much money. Nacogdoches and Rusk counties were the leaders in 1953 with over 45,000 head of cattle each and an income from cattle sales amounting to nearly a million dollars each. The other counties had from 13,296 to 39,985 head of cattle and an income of from \$159,552.00 to \$881,223.00 in 1953. San Augustine was the low county.

Swine production is relatively unimportant as a source of income in any of the counties studied. Although there are no figures presented on the value of hogs and pigs sold, we do find that they have greatly decreased in number in all six counties. The value of all hogs and pigs on farms in most of the counties was higher in 1953 than in 1949, but this was because of the high prices being paid in 1953. Rusk County was the leader with 7,411 hogs and pigs valued at \$185,275.00. Cherokee County had 3,111 hogs and pigs compared to 2,692 for San Augustine County, but the value placed on them was \$46,550.00, whereas, the value of all hogs and pigs in San Augustine County was \$67,500.00. The other counties were in the range between Rusk and Cherokee counties.

Fewer farms are producing watermelons in all six of the counties, but only three counties showed a reduction in acreage, these counties being Shelby, Nacogdoches, and Angelina. Cherokee County was the leader with over a half-million dollar income from watermelons in 1953 from 6.075 acres. San Augustine County had only fifty-one acres with an income of \$3,825.00.

Cherokee County is the leader in the production of tomatoes, having 5,484 acres and an income of \$612,217.00 in 1953. Angelina County was low with only ninety-four

acres and an income of \$9,852.00. Tomatoes, like watermelons, are a good cash crop and provide an early income in the summer months when it is badly needed by most farmers.

Cowpeas are considered a minor crop in all six of the counties studied. They have decreased in importance as a source of income in all counties except two, Angelina and San Augustine. The value of peas harvested ranged from a low of \$16,512.00 in Angelina County to \$94,277.00 in Rusk County.

Peanuts furnish enough income to be considered a major crop in only one county, Cherokee. There were 2,260 acres of peanuts grown in that county in 1953 with a total value of \$304,830.00. The total value of the peanut crop produced in the other counties ranged from a low of thirty-five acres and \$1,120.00 for Shelby County to a high of 804 acres and \$28,512.00 for Rusk County.

There was very little difference in the way farmers of the various counties received government subsidy for soil building through the Agricultural Stabilization and Conservation Committees. Some of the larger payments in 1944 were for eliminating underbrush, contour farming, mowing pastures, and building earthen tanks and dams. In 1953, most of the payments centered around reseeding pastures, fertilizing pastures, and planting winter legumes.

The number, size, and value of farms followed the same pattern in all six counties. The number of farms decreased in number as they increased in size from 1944 to 1953. The value per acre greatly increased in every county during this period. Farms averaged in size during 1953 from a low of 97.02 for Angelina County to a high of 146.8 for Nacogdoches County. The value of farm land per acre in San Augustine was lowest at \$42.50 and highest in Angelina County at \$65.50.

The number of farm tenants have decreased about equally in each of the counties studied. Part-owners and farm managers have increased in number since 1944 in all counties. The number of full-owners have increased in all counties in proportion to the number of farms in the county. Some counties show less full-owners, but that is because there were less farms in the county in 1953 than in 1944.

Horses and mules have become less numerous and less valuable in every county since 1944. Tractors have gradually taken their places. Each of the six counties that show a decrease in the number and value of horses and mules also show an increase in the number of tractors and value of farm implements and machinery on farms in the county. In 1953, San Augustine County had the least number of tractors, 250, and Cherokee County had the most, 1890.

All six counties have made very rapid progress in securing more automobiles on farms and more houses with electricity. Practically all farms in each are on all-weather roads. Slow progress has been made in getting rural telephones. Cherokee County has less telephones in 1953 than in 1945 because several of the small exchanges have been discontinued. Shelby County had the most farms with telephones in 1953, a total of 1,181. Cherokee County had the least number, 287.

CHAPTER IV

SUPERVISED FARMING RECORDS OF HIGH SCHOOL
VOCATIONAL AGRICULTURE STUDENTS IN
1953

Introduction

Supervised farming was a specification in the original Smith-Hughes act as passed by the 64th Congress. Since that time it has been considered a very important part of the training program in vocational agriculture. Because a student is allowed to set up plans for his own program according to his interests and needs, the records of his completed program can be used very well to determine the choice of agricultural enterprises by the student. This chapter is devoted to an analysis of the productive enterprises, improvement projects, and supplementary farm practices of the students in all six counties included in this study.

All of the statistics on supervised farming records in this chapter were secured from annual report forms that were made by teachers of vocational agriculture and submitted to the Texas Education Agency in December, 1953. These reports were made by the teachers from summaries taken from individual record books in schools of all six counties. There are thirty-six vocational agriculture departments found in Angelina, Cherokee, Nacogdoches, Rusk, San Augustine,

and Shelby counties. Materials were used from only two departments in each of the six counties; the departments were selected at random. The total number of departments were limited to twelve for the sake of brevity. Only 1953 records were used because the older records were not available.

The type of programs carried on by students in each school were discussed briefly in this chapter in order to get a cross-section of the interests and needs of students throughout the six-county area.

Angelina County

There were seven high schools with vocational agriculture departments in Angelina County in 1953. These schools were Central Consolidated, Diboll, Hudson, Huntington, Lufkin, Redland, and Zavalla. The records of Diboll and Hudson were used in this study.

Diboll High School

Students of Diboll High School completed records on nine kinds of productive enterprises in 1953 (Table XCVII). The principle enterprises were beef cattle, swine, poultry, rabbits, sweet potatoes, and gardens. More members produced home gardens than any other enterprise, and over 50 per cent of the total labor income was from gardening.

TABLE XCVII

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY FORTY-TWO HIGH SCHOOL
VOCATIONAL AGRICULTURE STUDENTS IN DIBOLL HIGH SCHOOL, ANGELINA COUNTY,
1952-53^a

Productive enterprises	No. of enterprises	Size	Total income	Total expense	Net income	Value of self labor	Labor income
Feeding for beef	3	7 head	\$746.00	\$627.42	\$118.58	\$20.00	\$138.58
Breeding beef cows	2	6 "	425.60	410.40	15.20	15.00	30.20
Feeding for pork	4	10 "	320.00	260.00	60.00	22.50	82.50
Brood sows	3	3 "	295.14	165.00	130.14	28.00	158.14
Broilers or fryers	5	600 "	526.14	493.68	32.46	20.00	52.46
Hens for eggs	2	200 "	150.16	118.20	31.96	10.00	41.96
Rabbits	2	16 "	16.00	18.40	-2.40	5.00	2.60
Sweet potatoes	1	1 acre	86.45	61.40	25.05	15.00	40.05
Home garden	17	9 "	750.00	166.40	583.60	50.00	633.60
TOTAL	39		\$3,315.49	\$2,320.90	\$994.59	\$185.50	\$1,180.09

^aBobby G. McCurry, "Final Report of Productive Enterprises and other Supervised Practice," VAG-004 (unpublished annual report of the Diboll High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953), p. 1.

The second largest labor income was from swine, and the third largest was from beef cattle. Rabbits provided the least income.

Improvement projects that were completed in 1953 consisted of constructing farm buildings, constructing farm equipment, constructing fences, landscaping home grounds, installing home conveniences, improving pasture, and improving forest. The most popular of the improvement projects (Table XCVIII) was the landscaping of home grounds in which thirty eight of the forty-two students, or 90.5 per cent, participated. The next two projects in which the largest number of students participated were the construction of fences and the construction of farm equipment.

An analysis of the supplementary farm practices that were completed in 1953 reveals that the forty-two students completed eighteen different kinds of practices (Table XCIX). The three most popular practices were vaccinating, controlling plant insects, and controlling animal parasites. The practices seem to be fairly evenly divided between crop and livestock enterprises.

Hudson High School

There were eighty-six productive enterprises completed by students of the Hudson High School in 1953

TABLE XCVIII

AN ANALYSIS OF THE IMPROVEMENT PROJECTS COMPLETED BY
 FORTY-TWO HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS
 IN DIBOLL HIGH SCHOOL, ANGELINA COUNTY, 1952-53^a

Improvement projects	No. of projects	Size
Farm buildings constructed	2	2 buildings
Farm equipment constructed	7	11 pieces
Fences constructed	8	1,400 yards
Landscaping home grounds	38	40 homes
Installing Home conveniences	2	2 conveniences
Pasture improvement	1	10 acres
Forest improvement	1	5 acres
TOTAL	59	

^aIbid., p. 2.

TABLE XCIX

AN ANALYSIS OF THE SUPPLEMENTARY FARM PRACTICES COMPLETED
BY FORTY-TWO HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS
IN DIBOLL HIGH SCHOOL, ANGELINA COUNTY, 1952-53^a

Supplementary farm practices	No. of practices	Size
Farm buildings repaired	4	4 buildings
Farm equipment repaired	8	9 pieces
Fences repaired	9	1,200 yards
Castrating	9	21 head
Vaccinating	17	43 "
Dehorning	1	1 "
Culling poultry	11	376 "
Controlling animal parasites	15	26 "
Controlling animal diseases	4	6 "
Butchering	3	3 "
Curing meat	3	500 pounds
Controlling plant insects	17	9 acres
Controlling rodents	10	100 "
Mowing pasture	8	170 "
Seeding pastures	2	20 "
Pruning	6	850 trees
Budding and grafting	2	6 trees
Fertilizing farm ponds	3	3 ponds
TOTAL	132	

^aIbid., p. 2.

(Table C). This included sixteen different types of enterprises. The principle enterprises were beef cattle, dairy cattle, swine, poultry, cotton, corn, hay and roughage, peanuts, vegetable plants, and forestry. More members produced broilers than any other enterprise, but there were five other enterprises that produced a larger labor income. The largest labor income was received from corn, and the second largest income was from hens. Beef cattle was the least profitable; they actually lost money for the boys in 1953.

Improvement projects that were completed in 1953 consisted of constructing farm buildings, constructing farm equipment, installing home conveniences, improving pastures, and improving forest (Table CI). The most popular of the improvement projects was the improving of pastures in which 40 per cent of the students participated in improving 250 acres. The next two projects in which the largest number of students participated were the installing of home conveniences and the construction of farm buildings and equipment.

An analysis of the supplementary farm practices that were completed in 1953 reveals that fifty students completed 177 practices, twelve of which were of a different nature (Table CII). The three most popular practices were vaccinating, dehorning, and castrating. Nearly all of the practices were related to livestock and poultry enterprises.

TABLE C

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY FIFTY HIGH SCHOOL VOCATIONAL
AGRICULTURE STUDENTS IN HUDSON HIGH SCHOOL, ANGELINA COUNTY, 1952-53^a

Productive enterprises	No. of enterprises	Size	Total income	Total expenses	Net income	Value of self labor	Labor income
Feeding for beef	11	18 head	\$1,187.26	\$1,401.69	\$-214.43	\$116.75	\$-97.68
Breeding beef cows	8	23 "	2,378.75	3,150.88	-772.13	191.00	-581.13
Breeding beef bulls	3	3 "	244.15	205.52	38.63	26.50	65.13
Dairy cows	3	3 "	765.30	567.50	197.80	67.00	264.80
Dairy bulls	2	7 "	1,364.13	1,272.04	92.09	67.00	115.09
Feeding for pork	11	13 "	683.43	664.29	19.14	142.00	161.14
Gilts	3	3 "	205.70	192.90	12.80	80.00	92.80
Brood sows	5	6 "	665.80	667.85	-2.05	111.50	109.45
Broilers or fryers	16	1,060 "	823.61	794.09	29.52	178.25	207.77

TABLE C (Continued)

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY FIFTY HIGH SCHOOL VOCATIONAL
AGRICULTURE STUDENTS IN HUDSON HIGH SCHOOL, ANGELINA COUNTY, 1952-53^a

Productive enterprises	No. of enterprises	Size	Total income	Total expenses	Net income	Value of self labor	Labor income
Hens for egg production	9	317 head	\$1,445.61	\$1,344.25	\$101.36	\$179.25	\$280.61
Cotton	1	1 acre	178.00	63.50	114.50	40.50	155.00
Corn	7	12.5 "	899.95	393.94	506.01	62.50	568.51
Hay and roughage	3	14.5 "	512.00	325.65	186.35	21.50	207.85
Peanuts	1	1 "	120.00	43.50	76.50	8.00	84.50
Vegetable plants	2	12.5 "	62.40	21.15	41.25	10.50	51.75
Forestry	1	10 "	635.00	481.50	153.50	61.00	214.50
TOTAL	86		\$12,171.09	\$11,590.25	\$580.84	\$1,363.25	\$1,944.09

^aJames Horton, "Final Report of Productive Enterprises and other Supervised Practice," VAG-004 (unpublished annual report of the Hudson High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953), p. 2.

TABLE CI

AN ANALYSIS OF THE IMPROVEMENT PROJECTS COMPLETED BY FIFTY
HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN HUDSON HIGH
SCHOOL, ANGELINA COUNTY, 1952-53^a

Improvement projects	No. of projects	Size
Farm buildings constructed	5	5 buildings
Farm equipment constructed	5	5 pieces
Installing home conveniences	10	10 conveniences
Pasture improvement	20	250 acres
Forest improvement	1	20 acres
TOTAL	41	

^aIbid., p. 2.

TABLE CII

AN ANALYSIS OF THE SUPPLEMENTARY FARM PRACTICES COMPLETED
BY FIFTY HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN
HUDSON HIGH SCHOOL, ANGELINA COUNTY, 1952-53^a

Supplementary farm practices	No. of practices	Size
Fences repaired	8	410 yards
Castrating	23	220 head
Vaccinating	40	200 "
Dehorning	30	150 "
Culling poultry	7	250 "
Controlling animal parasites	2	10 "
Controlling animal diseases	19	150 "
Butchering	4	8 "
Controlling plant insects	5	20 acres
Pruning	1	12 trees
Branding cattle	16	40 head
Running terrace lines	22	400 yards
TOTAL	177	

^aIbid., p. 2.

Cherokee County

There were eight high schools with vocational agriculture departments in Cherokee County in 1953. These schools were Alto, Dialville, Gallatin, Jacksonville, Maydelle, New Summerfield, Rusk, and Wells. The records of Alto and Rusk were used in this study.

Alto High School

There were sixty-eight productive enterprises completed by forty-three students in Alto High School in 1953 (Table CIII). These enterprises were made up of twelve different kinds, the principal ones being beef cattle, dairy cattle, swine, poultry, cotton, corn, tomatoes, and melons. More students were engaged in the production of corn and tomatoes than in any other enterprises. Broilers provided the best labor income with tomatoes running a close second.

Improvement projects that were completed in 1953 consisted of constructing farm buildings, constructing farm equipment, constructing fences, landscaping home grounds, installing home conveniences, improving pastures, and improving forest (Table CIV). The most popular of the improvement projects was the constructing of fences in which 70 per cent of the students participated. The next two projects in which the largest number of students participated

TABLE CIII

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY FORTY-THREE HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN ALTO HIGH SCHOOL, CHEROKEE COUNTY, 1952-53^a

Productive enterprise	No. of enterprises	Size	Total income	Total expenses	Net income	Value of self labor	Labor income
Feeding for beef	9	15 head	\$ 881.90	\$ 741.84	\$140.06	\$ 280.76	\$ 420.82
Breeding beef cows	6	21 "	1,898.50	1,822.81	75.69	347.14	422.83
Breeding beef heifers	3	5 "	750.00	265.00	485.00	85.00	570.00
Dairy cows	3	6 "	986.35	565.25	421.10	135.50	556.60
Feeding for pork	10	11 "	765.00	416.00	349.00	76.00	425.00
Brood sows	5	5 "	590.00	366.93	223.07	98.00	321.07
Broilers or fryers	3	10,000 "	7,500.00	5,700.00	1,800.10	165.75	1,965.75
Hens for egg production	1	30 "	78.00	76.43	1.57	27.00	28.57

TABLE CIII (Continued)

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY FORTY-THREE HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN ALTO HIGH SCHOOL, CHEROKEE COUNTY, 1952-53^a

Productive enterprise	No. of enterprises	Size	Total income	Total expenses	Net income	Value of self labor	Labor income
Cotton	4	18 acres	\$ 1,260.91	\$ 876.50	\$ 384.41	\$ 120.00	\$ 504.41
Corn	11	36 "	1,162.48	850.75	311.73	149.75	461.48
Tomatoes	11	10 "	2,565.02	1,027.55	1,537.47	341.00	1,878.47
Melons	2	2 "	465.00	147.25	317.75	56.25	374.00
TOTAL	68		\$18,903.16	\$12,856.31	\$6,046.85	\$1,882.15	\$7,929.00

^aT. E. Cummings, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004 (unpublished annual report of the Alto High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953), p. 1.

TABLE CIV

AN ANALYSIS OF THE IMPROVEMENT PROJECTS COMPLETED BY FORTY-
THREE HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN ALTO
HIGH SCHOOL, CHEROKEE COUNTY, 1952-53^a

Improvement projects	No. of projects	Size
Farm buildings constructed	5	5 buildings
Farm equipment constructed	11	15 pieces
Fences constructed	30	8,560 yards
Landscaping home grounds	22	22 homes
Installing home conveniences	18	54 conveniences
Pasture improvement	6	60 acres
Forest improvement	3	25 "
TOTAL	95	

^aIbid., p. 2.

TABLE CV

AN ANALYSIS OF THE SUPPLEMENTARY FARM PRACTICES COMPLETED
BY FORTY-THREE HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS
IN ALTO HIGH SCHOOL, CHEROKEE COUNTY, 1952-53^a

Supplementary farm practices	No. of practices	Size
Farm buildings repaired	25	25 buildings
Farm equipment repaired	30	46 pieces
Fences repaired	10	5,265 yards
Castrating	16	80 head
Vaccinating	16	80 head
Dehorning	3	18 head
Culling poultry	26	260 head
Controlling animal parasites	10	16 head
Controlling animal diseases	10	16 head
Butchering	10	11 head
Curing meat	10	1,636 pounds
Testing milk for butterfat	2	3 head
Controlling plant insects	16	30 acres
Mowing pasture	8	400 acres
Seeding pasture	8	400 acres
TOTAL	216	

^aIbid., p. 2.

were the landscaping of home grounds and the installing of home conveniences.

There were 216 supplementary farm practices that were completed by students of Alto High School in 1953 (Table CV). Of the sixteen different kinds of practices, the three most popular were repairing farm equipment, culling poultry, and repairing farm buildings. The rest of the practices were well divided between livestock and crop enterprises.

Rusk High School

Students of Rusk High School completed records on fifty productive enterprises in 1953 (Table CVI). These enterprises were of ten different kinds; the principle kinds were beef cattle, swine, poultry, cotton, corn, tomatoes, and sweet potatoes. More students were interested in beef cattle than any other type of enterprise even though the labor income was much lower for beef cattle than for some of the other enterprises. The best labor income was from cotton, followed by corn and tomatoes. Only one boy grew sweet potatoes, but he had a better income than the combined income of the six boys that grew broilers.

The improvement projects that were completed in 1953 consisted of constructing farm buildings, constructing farm equipment, constructing fences, landscaping home grounds,

TABLE CVI

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY FORTY-SIX HIGH SCHOOL VOCATIONAL
AGRICULTURE STUDENTS IN RUSK HIGH SCHOOL, CHEROKEE COUNTY, 1952-53^a

Productive enterprises	No. of enterprises	Size	Total income	Total expenses	Net income	Value of self labor	Labor income
Feeding for beef	3	4 head	\$ 144.48	\$ 109.75	\$ 34.73	\$ 56.75	\$ 91.48
Breeding beef cows	19	19 "	1,343.00	1,638.70	-295.70	285.88	-9.82
Breeding beef heifers	2	2 "	150.00	129.40	20.60	77.20	97.80
Gilts	3	3 "	153.00	143.00	10.00	54.25	64.25
Brood sows	2	2 "	166.65	150.50	16.15	42.75	58.90
Broilers or fryers	6	145 "	122.72	104.11	18.61	38.22	56.83
Cotton	2	8.5 acres	691.42	349.02	342.40	70.25	412.65
Corn	10	14.5 "	285.15	188.46	96.69	113.75	210.44
Tomatoes	2	2.5 "	175.33	89.26	86.07	28.00	114.07
Sweet potatoes	1	1 "	112.50	44.00	68.50	20.25	88.75
TOTAL	50		\$3,344.25	\$2,946.20	\$398.05	\$787.30	\$1,185.35

^aAdon Duncan, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004 (unpublished annual report of the Rusk High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953), p. 1.

TABLE CVII

AN ANALYSIS OF THE IMPROVEMENT PROJECTS COMPLETED BY FORTY-
SIX HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN RUSK
HIGH SCHOOL, CHEROKEE COUNTY, 1952-53^a

Improvement projects	No. of projects	Size
Farm buildings constructed	11	11 buildings
Farm equipment constructed	25	25 pieces
Fences constructed	20	4,910 yards
Landscaping home grounds	11	11 homes
Installing home conveniences	6	6 conveniences
Pasture improvement	2	13 acres
Forest improvement	3	17 acres
TOTALS	78	

^aIbid., p. 2.

TABLE CVIII

AN ANALYSIS OF THE SUPPLEMENTARY FARM PRACTICES COMPLETED BY
 FORTY-SIX HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN
 RUSK HIGH SCHOOL, CHEROKEE COUNTY, 1952-53^a

Supplementary farm practices	No. of practices	Size
Farm buildings repaired	16	18 buildings
Farm equipment repaired	5	6 pieces
Fences repaired	15	10,680 yards
Castrating	30	88 head
Vaccinating	25	51 "
Dehorning	15	20 "
Culling poultry	5	240 "
Controlling animal parasites	21	21 "
Controlling animal diseases	1	21 "
Butchering	3	3 "
Curing meat	1	500 pounds
Controlling plant insects	10	25 acres
Controlling plant diseases	32	560 "
Controlling rodents	10	25 "
Seeding pastures	6	22 "
Pruning	3	10 "
Rope making	46	8,040 feet
TOTAL	244	

^aIbid., p. 2.

installing home conveniences, improving pastures, and improving forests (Table CVII).

Students of vocational agriculture in Rusk High School completed seventeen different kinds of supplementary farm practices for a total of 244 during the 1952-53 school year (Table CVIII). The three practices which most students completed were rope making, controlling plant diseases, and castrating. The other practices were fairly well distributed

Nacogdoches County

There were five high schools with vocational agriculture departments in Nacogdoches County in 1953. These schools were Central Heights, Cushing, Douglass, Garrison, and Nacogdoches. The records of Central Heights and Cushing were used in this study.

Central Heights High School

Students of Central Heights High School completed forty-seven productive enterprises in 1953 (Table CIX). These enterprises were of ten different kinds, the principle divisions being beef cattle, dairy cattle, swine, poultry, corn, and gardens. More students were engaged in producing home gardens than in any other single enterprise, but the combination of dairy cows, bulls, and heifers, pushed the

dairy enterprises well out in front from the standpoint of number of students and labor income.

Improvement projects that were completed in 1953 consisted of constructing fences, landscaping home grounds, installing home conveniences, improving pastures, and improving forests (Table CX). Since dairying was the leading productive enterprise of the community, pasture improvement proved to be the leading improvement project. The next two most popular improvement projects were forest improvement and landscaping home grounds.

An analysis of the supplementary farm practices completed in 1953 reveals that thirty-one students completed ten different kinds of practices for a total of 136 completed practices (Table CXI). The three most popular practices were controlling animal parasites, vaccinating, and mowing pastures. Practically all of the other practices were on livestock and poultry.

Cushing High School

Students of Cushing High School completed records on fourteen different kinds of productive enterprises for a total of sixty-eight completed (Table CXII). The enterprises may be classed in these divisions, namely, dairy cattle, beef cattle, swine, poultry, corn, hay and roughage, tomatoes, home gardens, and fruits. More members were

TABLE CIX

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY THIRTY-ONE HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN CENTRAL HEIGHTS HIGH SCHOOL, NACOGDOCHES COUNTY, 1952-53^a

Productive Enterprises	No. of enterprises	Size	Total income	Total expenses	Net income	Value of self labor	Labor income
Feeding for beef	3	7 head	\$ 647.50	\$ 577.37	\$ 70.13	\$ 62.80	\$ 132.93
Breeding beef cows	2	8 "	397.24	380.60	16.64	39.82	56.46
Dairy cows	9	9 "	2,265.87	1,753.92	611.95	450.02	1,061.97
Dairy bulls	1	1 "	254.61	216.87	37.74	9.90	47.46
Dairy heifers	6	8 "	641.50	532.71	108.79	135.60	244.39
Feeding for pork	3	3 "	110.64	80.36	30.28	18.02	48.30
Gilts	4	4 "	814.65	582.16	232.49	62.40	294.89
Broilers or fryers	4	850 "	871.43	786.23	85.20	46.50	131.70
Corn	3	12 acres	740.00	340.09	399.91	67.32	467.23
Home garden	12	6 "	920.22	761.83	158.39	565.96	724.35
TOTAL	47		\$7,663.66	\$5,912.14	\$1,751.52	\$1,458.34	\$3,209.86

^aJoe B. Strong, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004 (unpublished annual report of the Central Heights High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953), p. 1.

TABLE CX

AN ANALYSIS OF THE IMPROVEMENT PROJECTS COMPLETED BY THIRTY-
ONE HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN CENTRAL
HEIGHTS HIGH SCHOOL, NACOGDOCHES COUNTY, 1952-53^a

Improvement projects	No. of projects	Size
Fences constructed	7	9,620 yards
Landscaping home grounds	8	8 homes
Installing home conveniences	2	2 conveniences
Pasture improvement	16	189 acres
Forest improvement	14	40 acres
TOTAL	47	

^aIbid., p. 2.

TABLE CXI

AN ANALYSIS OF THE SUPPLEMENTARY FARM PRACTICES COMPLETED BY
THIRTY-ONE HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN
CENTRAL HEIGHTS HIGH SCHOOL, NACOGDOCHES COUNTY, 1952-53^a

Supplementary farm practices	No. of practices	Size
Fences repaired	9	10,400 yards
Castrating	15	75 head
Vaccinating	19	95 "
Dehorning	6	135 "
Culling poultry	8	35 "
Controlling animal parasites	32	162 "
Testing milk for butterfat	8	8 "
Controlling plant insects	14	18 acres
Mowing pasture	16	90 acres
Pruning	9	40 trees
TOTAL	136	

^aIbid., p. 2.

engaged in feeding for pork than any other single enterprise but a larger labor income was received from dairy cows and broilers than from pork production. Dairying and poultry production together brought in approximately fifty per cent of the total labor income.

Improvement projects that were completed in 1953 consisted of constructing farm buildings, constructing farm equipment, constructing fences, landscaping home grounds, installing home conveniences, improving pastures, and improving forests (Table CXIII). More boys were engaged in pasture improvement than any other improvement project, with installing home conveniences and constructing farm equipment next in importance.

Supplementary farm practices completed by the forty-three students of Cushing High School numbered 363 (Table CXIV). There were eighteen different types of practices involved. Castrating, vaccinating, and repairing farm equipment were the practices most frequently instituted. Repairing fence, dehorning, and controlling animal parasites were also very popular practices.

Rusk County

There were eight high schools with vocational agriculture departments in Rusk County in 1953. These

TABLE CXII

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY FORTY-THREE HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN CUSHING HIGH SCHOOL, NACOGDOCHES COUNTY, 1952-53^a

Productive enterprises	No. of enterprises	Size	Total income	Total expenses	Net income	Value of self labor	Labor income
Feeding for beef	8	18 head	\$1,431.75	\$1,428.11	\$ 3.64	\$ 66.90	\$ 70.54
Breeding beef cows	11	13 "	1,443.62	1,571.90	-128.38	205.23	76.85
Breeding beef heifers	4	4 "	313.00	380.45	-67.45	54.95	-12.50
Dairy cows	3	6 "	985.68	513.54	472.14	57.50	529.64
Dairy heifers	1	2 "	420.00	401.88	18.12	25.00	43.12
Feeding for pork	16	27 "	790.88	622.70	168.18	157.85	326.03
Gilts	2	2 "	49.64	49.10	.54	14.25	14.79
Brood sows	4	4 "	553.40	537.05	16.35	118.80	135.15
Broilers or fryers	5	4,307 "	3,401.76	3,170.83	230.93	228.92	459.85
Corn	7	15 acres	473.60	281.93	191.67	69.65	261.32

TABLE CXII (Continued)

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY FORTY-THREE HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN CUSHING HIGH SCHOOL, NACOGDOCHES COUNTY, 1952-53^a

Productive enterprises	No. of enterprises	Size	Total income	Total expenses	Net income	Value of self labor	Labor income
Hay and roughage	1	5 acres	100.00	57.10	42.90	4.40	47.30
Tomatoes	3	3.5 "	283.60	264.01	19.59	66.38	85.97
Home garden	2	1.5 "	71.75	31.70	40.05	15.25	55.30
Fruits	1	1 "	48.00	31.35	16.65	1.35	18.00
TOTAL	68		\$10,366.68	\$9,341.65	\$1,025.03	\$1,086.43	\$2,111.46

^aAllen McCrary, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004 (unpublished annual report of the Cushing High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953), p. 1.

TABLE CXIII

AN ANALYSIS OF THE IMPROVEMENT PROJECTS COMPLETED BY FORTY-
THREE HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN CUSHING
HIGH SCHOOL, NACOGDOCHES COUNTY, 1952-53^a

Improvement projects	No. of projects	Size
Farm buildings constructed	4	4 buildings
Farm equipment constructed	15	18 pieces
Fences constructed	8	8,600 yards
Landscaping home grounds	12	60 homes
Installing home conveniences	18	26 conveniences
Pasture improvement	25	390 acres
Forest improvement	5	45 acres
TOTAL	87	

^aIbid., p. 2.

TABLE CXIV

AN ANALYSIS OF THE SUPPLEMENTARY FARM PRACTICES COMPLETED
BY FORTY-THREE HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS
IN CUSHING HIGH SCHOOL, NACOGDOCHES COUNTY, 1952-53^a

Supplementary farm practices	No. of practices	Size
Farm buildings repaired	20	20 buildings
Farm equipment repaired	38	315 pieces
Fences repaired	36	14,200 yards
Castrating	40	390 head
Vaccinating	40	685 "
Dehorning	36	560 "
Culling poultry	21	368 "
Controlling animal parasites	36	884 "
Controlling animal diseases	15	19 "
Butchering	6	11 "
Curing meat	5	925 "
Controlling plant insects	6	285 "
Controlling plant diseases	8	115 "
Controlling rodents	11	65 "
Mowing pasture	13	395 "
Building terraces	2	4,820 yards
Seeding pastures	9	385 acres
Pruning	21	460 trees
TOTAL	363	

^aIbid., p. 2.

Minden, Mount Enterprise, New London, and Tatum. The records of Henderson and Mount Enterprise were used in this study.

Students of Henderson High School completed records on thirteen kinds of productive enterprises in 1953 (Table CXV). There were a total of forty-one enterprises completed by forty-one students. The principle groups of enterprises were beef cattle, dairy cattle, swine, cotton, corn, peanuts, poultry, melons, gardens, and fruit. More members were engaged in beef cattle production than in any other enterprise. The largest labor income was from fruit production, and the second largest was from corn. The seine enterprises showed a loss in 1953.

Improvement projects consisted of constructing farm buildings, constructing fences, landscaping home grounds, installing home conveniences, pasture improvement, and forest improvement (Table CXVI). A total of thirty-six improvement projects were completed. The improvement of pasture and construction of fence were the two projects most commonly completed.

The Henderson High School vocational agriculture students completed a total of 295 supplementary farm practices for an average of 7.2 completed practices per boy (Table CXVII). There were twenty kinds of practices completed. The most popular ones ranked in order of student

TABLE CXV

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY FORTY-ONE HIGH SCHOOL VOCATIONAL
AGRICULTURE STUDENTS IN HENDERSON HIGH SCHOOL, RUSK COUNTY, 1952-53^a

Productive enterprises	No. of enterprises	Size	Total income	Total expenses	Net income	Value of self labor	Labor income
Breeding beef cows	17	94 head	\$10,572.12	\$10,860.53	\$-288.41	\$238.60	\$ -49.81
Breeding beef heifers	4	4 "	570.95	550.12	20.83	36.30	57.13
Dairy bulls	1	1 "	200.00	127.80	72.20	16.40	88.60
Feeding for pork	3	3 "	49.50	111.75	-62.25	20.70	-41.55
Gilts	1	1 "	40.00	49.50	-9.50	5.60	-3.90
Brood sows	1	1 "	100.00	125.35	-25.35	10.60	-14.75
Broilers or fryers	3	275 "	252.80	155.20	97.60	26.20	123.80
Cotton	2	4 acres	400.00	232.80	167.20	10.80	178.00
Corn	4	18 "	619.00	354.70	264.30	92.80	357.10
Peanuts	1	.25 "	18.75	17.70	1.05	15.20	16.25
Melons	2	5 "	175.00	62.20	112.80	18.90	131.70
Home garden	1	.5 "	128.32	21.68	106.64	4.80	101.84
Fruits	1	3 "	734.00	85.60	648.40	8.40	656.80
TOTALS .	41		\$13,860.44	\$12,754.93	\$1,105.51	\$505.30	\$1,610.81

^aAllen Gatlin, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004 (unpublished annual report of the Henderson High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953), p. 1.

TABLE CXVI

AN ANALYSIS OF THE IMPROVEMENT PROJECTS COMPLETED BY FORTY-
ONE HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN HENDERSON
HIGH SCHOOL, RUSK COUNTY, 1952-53^a

Improvement projects	No. of projects	Size
Farm buildings constructed	3	3 buildings
Fences constructed	12	2,000 yards
Landscaping home grounds	3	3 homes
Installing home conveniences	2	2 conveniences
Pasture improvement	13	420 acres
Forest improvement	3	5 acres
TOTAL	36	

^aIbid., p. 2.

TABLE CXVII

AN ANALYSIS OF THE SUPPLEMENTARY FARM PRACTICES COMPLETED BY
 FORTY-ONE HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN
 HENDERSON HIGH SCHOOL, RUSK COUNTY, 1952-53^a

Supplementary farm practices	No. of practices	size
Farm buildings repaired	5	5 buildings
Farm equipment repaired	8	8 pieces
Fences repaired	15	3,000 yards
Castrating	20	75 head
Vaccinating	23	150 "
Dehorning	41	350 "
Culling poultry	21	500 "
Controlling animal parasites	30	300 "
Controlling animal diseases	2	12 "
Butchering	8	12 "
Curing meat	8	2,800 pounds
Testing milk for butterfat	3	28 head
Controlling plant insects	12	65 acres
Controlling rodents	25	800 "
Mowing pastures	15	600 "
Sodding terrace outlets	5	18 outlets
Building terraces	5	2,200 yards
Seeding pastures	5	64 acres
Pruning	22	200 trees
Fertilizing farm ponds	22	22 pounds
TOTAL	295	

^aIbid., p. 2.

participation are dehorning, controlling animal parasites, controlling rodents, and vaccinating. These practices were primarily connected with livestock enterprises, but the less popular practices were fairly evenly divided between livestock and crops.

Mount Enterprise High School

The thirty-two vocational agriculture students of Mount Enterprise High School completed forty productive enterprises in 1953 (Table CXVIII). These enterprises consisted of seven different varieties which could be grouped into beef cattle, dairy cattle, swine, poultry, and pasture enterprises. Beef cattle were the choices of the most students with pasture and poultry being the next two in importance. There was only one swine enterprise with very little income derived from it. The enterprises showing the best labor income ranked according to the amount of money received are broilers, dairy heifers, breeding beef cows, and hens for egg production.

There were twenty-one improvement projects completed in 1953 (Table CXIX). These were of three different types, namely, pasture improvement, forest improvement, and renovating home orchards. The largest percentage, 57 per cent, of this work was done by twelve members in improving 500 acres of pasture. There were four forest improvement

TABLE CXVIII

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY THIRTY-TWO HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN MOUNT ENTERPRISE HIGH SCHOOL, RUSK COUNTY, 1925-53^a

Productive enterprises	No. of enterprises	Size	Total income	Total expenses	Net income	Value of self labor	Labor income
Feeding for beef	6	12 head	\$ 2,160.00	\$ 2,008.00	\$ 152.00	\$120.00	\$ 272.00
Breeding beef cows	12	34 "	2,000.00	890.00	1,110.00	50.00	1,160.00
Dairy heifers	2	6 "	2,160.00	1,030.00	1,130.00	50.00	1,180.00
Gilts	1	1 "	35.00	30.00	5.00	4.00	9.00
Broilers or fryers	5	20,000 "	13,000.00	12,000.00	1,000.00	250.00	1,250.00
Hens for egg production	6	850 "	1,600.00	664.00	936.00	100.00	1,036.00
Pasture	8	300 acres	1,500.00	1,400.00	100.00	100.00	200.00
TOTAL	40		\$22,455.00	\$18,022.00	\$4,433.00	\$674.00	\$5,107.00

^aB. W. Jackson, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004 (unpublished annual report of the Mount Enterprise High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953), p. 1.

TABLE CXIX

AN ANALYSIS OF THE IMPROVEMENT PROJECTS COMPLETED BY THIRTY-TWO HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN MOUNT ENTERPRISE HIGH SCHOOL, RUSK COUNTY, 1952-53^a

Improvement projects	No. of projects	Size
Pasture improvement	12	500 acres
Forest improvement	4	10 "
Renovating home orchard	5	10 "
TOTAL	21	

^aIbid., p. 2.

TABLE CXX

AN ANALYSIS OF THE SUPPLEMENTARY FARM PRACTICES COMPLETED
BY THIRTY-TWO HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS
IN MOUNT ENTERPRISE HIGH SCHOOL, RUSK COUNTY, 1952-53^a

Supplementary farm practices	No. of practices	Size
Farm equipment repaired	12	20 pieces
Castrating	20	40 head
Vaccinating	20	80 "
Controlling animal parasites	10	20 "
Controlling animal diseases	12	12 "
Butchering	10	10 "
Controlling plant insects	8	200 acres
Controlling plant diseases	8	200 "
Mowing pasture	8	300 "
Building terraces	4	2,000 yards
Concrete construction	14	10 "
TOTAL	126	

^aIbid., p. 2.

projects which totaled ten acres in size, and there were five home orchard renovating projects consisting of a total of ten acres.

The thirty-two vocational agriculture students completed 126 supplementary farm practices in 1953 (Table CXX). There were eleven different kinds of practices involved, of which, castrating, vaccinating, concrete construction, repairing of farm equipment, and controlling animal diseases were the most commonly instituted.

San Augustine County

There were only two schools with high school vocational agriculture departments in San Augustine County in 1953. These schools were Broaddus and San Augustine. The records of both of these schools are used in this study.

Broaddus High School

The thirty vocational agriculture students of Broaddus High School completed thirty productive enterprises in 1953. There were seven different types of enterprises involved. The major groupings were beef cattle, swine, poultry, corn, and bees. There were more students with beef cattle and swine enterprises than any other kind. The labor income from swine was best with beef cattle being second highest. The other enterprises brought relatively little income (Table CXXI).

Improvement projects completed totaled twenty-nine (Table CXXII). These consisted of constructing fences, landscaping home grounds, improving pasture, and improving forests. Fence construction was the most popular project with 55 per cent of the projects being in this division.

An analysis of the supplementary farm practices completed by the thirty high school vocational agriculture students shows that there were nine different types completed for a total of sixty-five (Table CXXIII). The practices ranked according to the number completed are repairing fences, castrating, vaccinating, mowing pastures, controlling plant insects, repairing farm buildings, building farm ponds, and stocking ponds with fish.

San Augustine High School

The forty-eight vocational agriculture students in San Augustine High School completed twenty different types of productive enterprises in 1953 (Table CXXIV). The total productive enterprises completed were 101. The enterprises undertaken by the students may be grouped as beef cattle, dairy cattle, swine, poultry, rabbits, cotton, corn, hay and roughage, sweet potatoes, home gardens, fruits, pheasants, peas, and beans. More students showed interest in beef cattle and swine than any of the other enterprises. The

TABLE CXXI

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY THIRTY HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN BROADDUS HIGH SCHOOL, SAN AUGUSTINE COUNTY, 1952-53^a

Productive enterprises	No. of enterprises	Size	Total income	Total expenses	Net income	Value of self labor	Labor income
Feeding for beef	11	22 head	\$ 853.20	\$ 720.75	\$369.11	\$64.25	\$196.70
Breeding beef cows	3	3 "	347.75	385.00	-37.25	28.25	-9.00
Feeding for pork	10	12 "	619.61	493.35	126.26	82.30	208.56
Gilts	3	3 "	420.00	353.07	66.93	66.62	133.55
Broilers or fryers	1	100 "	90.00	73.10	16.90	13.45	30.35
Corn	1	2 acres	63.00	25.70	37.30	8.00	45.30
Bees	1	5 hives	37.25	10.73	26.52	.73	27.25
TOTAL	30		\$2,430.81	\$2,061.70	\$369.11	\$263.60	\$632.71

^aErnest G. Collins, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004 (unpublished annual report of the Broadus High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953), p. 1.

TABLE CXXII

AN ANALYSIS OF THE IMPROVEMENT PROJECTS COMPLETED BY THIRTY
HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN BROADDUS
HIGH SCHOOL, SAN AUGUSTINE COUNTY, 1952-53^a

Improvement projects	No. of projects	Size
Fences constructed	16	1,620 yards
Landscaping home grounds	1	1 home
Pasture improvement	8	95 acres
Forest improvement	4	27 "
TOTAL	29	

^aIbid., p. 2.

TABLE CXXIII

AN ANALYSIS OF THE SUPPLEMENTARY FARM PRACTICES COMPLETED
 BY THIRTY HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS
 IN BROADDUS HIGH SCHOOL, SAN AUGUSTINE COUNTY, 1952-53^a

Supplementary Farm Practices	No. of practices	Size
Farm buildings repaired	4	4 buildings
Fences repaired	8	2,020 yards
Castrating	11	35 head
Vaccinating	11	63 "
Butchering	4	2 "
Controlling plant insects	6	2.5 acres
Mowing pasture	7	53 "
Building farm pond	2	2 ponds
Stock pond with fish	2	2 "
TOTAL	65	

best labor incomes were from cotton, beef cattle, and corn. Pheasants were raised by only one boy who received a labor income of \$1.52 from this enterprise.

There were five types of improvement projects completed by the San Augustine students (Table CXXV). The total number completed was sixty-two. These improvement projects were constructing farm equipment, constructing fences, landscaping home grounds, pasture improvement, and forest improvement; there were more landscaping projects completed than any other type.

The supplementary farm practices were of sixteen types and totaled seventy-seven in number (Table CXXVI). The practice most commonly used was fence repair, with butchering, castrating, rodent control, and running contour lines following in that order. The remaining practices were well distributed between livestock and crops.

Shelby County

There were six high schools with vocational agriculture departments in Shelby County in 1953. These schools were Center, Joaquin, Shelbyville, Strong, Tenaha, and Timpson. The records of Center and Joaquin were used in this study.

TABLE CXXIV

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY FORTY-EIGHT HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN SAN AUGUSTINE HIGH SCHOOL, SAN AUGUSTINE COUNTY, 1952-53^a

Productive enterprises	No. of enterprises	Size	Total income	Total expense	Net income	Value of self labor	Labor income
Feeding for beef	15	15 head	\$1,112.95	\$ 775.30	\$ 337.65	\$227.28	\$ 564.93
Breeding beef cows	13	17 "	1,464.60	1,378.27	86.33	238.76	325.09
Dairy cows	2	2 "	346.50	413.40	-66.90	54.60	-12.30
Dairy bulls	1	1 "	300.00	176.00	124.00	5.00	129.00
Feeding for pork	15	20 "	690.96	525.65	165.31	235.95	401.26
Brood sows	9	14 "	565.60	457.35	108.25	80.30	188.55
Boars	1	1 "	60.00	55.00	5.00	30.00	35.00
Broilers of fryers	5	225 "	342.90	252.46	90.44	118.50	208.94
Hens for egg production	2	99 "	88.55	60.55	28.00	15.20	43.20
Rabbits	3	30 "	161.56	104.21	57.35	38.61	95.96
Turkeys for beef	1	15 "	75.00	35.00	40.00	15.50	55.50
Cotton	10	33.5 A.	2,349.69	710.52	1,639.17	218.60	1,857.77
Corn	8	31 "	865.00	356.20	508.80	144.85	653.65
Hay and roughage	1	1.5 "	100.00	39.90	60.10	17.00	77.10
Sweet potatoes	3	2.5 "	194.75	36.75	158.00	17.00	175.00
Home garden	4	2 "	255.03	144.65	110.38	41.25	151.63
Fruits	1	.5 "	18.53	8.75	9.78	1.35	11.13

TABLE CXXIV (Continued)

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY FORTY-EIGHT HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN SAN AUGUSTINE HIGH SCHOOL, SAN AUGUSTINE COUNTY, 1952-53^a

Productive enterprises	No. of enterprises	Size	Total income	Total expense	Net income	Value of self labor	Labor income
Pheasants	1	5 head	\$ 20.00	\$ 21.33	\$-1.33	\$ 2.85	\$ 1.52
Peas	4	11.1 A.	336.77	105.22	231.55	85.76	317.31
Beans	2	2 "	187.21	52.28	134.93	9.50	144.43
TOTAL	101		\$9,535.60	\$5,708.79	\$3,826.81	\$1,597.86	\$5,424.67

^aRobert R. Hogan, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004 (unpublished annual report of the San Augustine High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953), p. 1

TABLE CXXV

AN ANALYSIS OF THE IMPROVEMENT PROJECTS COMPLETED BY FORTY-
EIGHT HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN SAN
AUGUSTINE HIGH SCHOOL, SAN AUGUSTINE COUNTY, 1952-53^a

Improvement projects	No. of projects	Size
Farm equipment constructed	16	26 pieces
Fences constructed	14	14 miles
Landscaping home grounds	21	21 homes
Pasture improvement	10	245 acres
Forest improvement	1	2 acres
TOTAL	62	

^aIbid., p. 2.

TABLE CXXVI

AN ANALYSIS OF THE SUPPLEMENTARY FARM PRACTICES COMPLETED
BY FORTY-EIGHT HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS
IN SAN AUGUSTINE HIGH SCHOOL, SAN AUGUSTINE COUNTY, 1952-53^a

Supplementary farm practices	No. of practices	Size
Farm buildings repaired	1	1 building
Farm equipment repaired	1	2 pieces
Fences repaired	15	16 miles
Castrating	8	40 head
Vaccinating	3	42 "
Dehorning	2	104 "
Culling poultry	1	30 "
Controlling animal parasites	5	147 "
Controlling animal diseases	4	56 "
Butchering	10	54 "
Curing meat	5	900 pounds
Controlling plant insects	1	200 acres
Controlling rodents	8	80 "
Contour lines run	8	1,400 "
Seeding pastures	3	60 "
Fertilizing farm ponds	2	2 ponds
TOTAL	77	

^a Ibid., p. 2.

Center High School

The students of Center High School completed sixteen types of productive enterprises for a total of 166 in 1953 (Table CXXVII). The principle groups of enterprises were beef cattle, dairy cattle, swine, poultry, cotton, corn, hay and roughage, sweet potatoes, and melons. The three groups of enterprises in which most of the students participated were beef cattle, swine, and corn. Poultry provided the best labor income with broilers accounting for \$7,362.92, or forty-three per cent of the total labor income for all enterprises. Corn and melons provided sizeable incomes.

The seventy-two high school vocational agriculture students completed eighty-four improvement projects in 1953 (Table CXXVIII). There were three types of improvement projects completed; these were landscaping home grounds, installing home conveniences, and pasture improvement. The latter two were the most frequently done.

There were 157 supplementary farm practices completed by the vocational agriculture students of Center High School in 1953 (Table CXXIX). These practices were divided into six different types with fence repair, plant insect control, and grafting being the practices most frequently used. The other three practices were controlling animal parasites, mowing pastures, and seeding pastures.

TABLE CXXVII

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY SEVENTY-TWO HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN CENTER HIGH SCHOOL, SHELBY COUNTY, 1952-53^a

Productive enterprises	No. of enterprises	Size	Total income	Total expenses	Net income	Value of self labor	Labor income
Feeding for beef	23	40 head	\$ 3,551.98	\$ 3,489.62	\$ 62.36	\$ 62.00	\$124.36
Breeding beef cows	23	32 "	2,365.32	1,978.21	387.11	294.00	681.11
Breeding beef bulls	2	2 "	587.92	498.40	89.52	35.50	125.02
Breeding beef heifers	3	6 "	622.80	537.95	84.85	38.50	123.35
Dairy cows	3	3 "	984.60	692.21	292.39	198.50	490.89
Feeding for pork	20	43 "	2,689.47	2,194.23	495.24	178.50	673.74
Dairy heifers	1	1 "	126.50	87.92	38.58	21.50	60.08
Gilts	13	13 "	1,212.25	823.11	389.14	114.50	503.64
Brood sows	7	7 "	792.80	536.40	256.40	87.50	343.90
Broilers or fryers	20	48,000 "	38,405.84	32,164.42	6,241.42	1,121.50	7,362.92
Hens for egg production	7	355 "	1,345.64	757.35	588.30	175.50	663.80
Cotton	6	19 acres	1,586.27	1,251.15	335.12	617.50	952.62
Corn	27	73 "	4,381.50	3,216.40	1,165.10	1,277.50	2,442.60
Hay and roughage	1	1 "	65.80	31.20	34.60	8.50	43.10
Sweet potatoes	2	4 "	248.62	102.20	146.42	26.50	172.92
Melons	8	18 "	3,927.85	2,116.65	1,811.20	405.00	2,216.20
TOTAL	166		\$62,892.17	\$50,477.42	\$12,414.75	\$4,662.50	\$17,077.25

^aR. J. Eddins, "Final Report of Productive Enterprises and Other Supervised Practices," VAG-004 9unpublished annual report of the Center High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953), p. 1.

TABLE CXXVIII

AN ANALYSIS OF THE IMPROVEMENT PROJECTS COMPLETED BY SEVENTY-
TWO HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN CENTER
HIGH SCHOOL, SHELBY COUNTY, 1952-53^a

Improvement projects	No. of projects	Size
Landscaping home grounds	14	10 homes
Installing home conveniences	35	141 conveniences
Pasture improvement	35	160 acres
TOTAL	84	

^aIbid., p. 2.

TABLE CXXIX

AN ANALYSIS OF THE SUPPLEMENTARY FARM PRACTICES COMPLETED
BY SEVENTY-TWO HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS
IN CENTER HIGH SCHOOL, SHELBY COUNTY, 1952-53^a

Supplementary farm practices	No. of practices	Size
Fences repaired	35	2,500 yards
Controlling animal parasites	21	85 head
Controlling plant insects	35	75 acres
Mowing pasture	17	25 "
Seeding pastures	17	350 "
Grafting	32	55 trees
TOTAL	157	

^aIbid., p. 2.

Joaquin High School

There were forty-two high school vocational agriculture students in Joaquin High School in 1953 (Table CXXI). These students completed a total of 216 productive enterprises with a total labor income of \$18,433.05. The enterprise groups in which the students participated were pasture, melons, hay and roughage, corn, cotton, poultry, swine dairy cattle, and beef cattle. The enterprises most frequently undertaken were beef cattle, swine, hay and roughage, and pasture. The four enterprises with a labor income of over \$2,000.00 were beef cattle, cotton, corn, and hay and roughage.

Improvement projects that were completed in 1953 consisted of constructing farm buildings, constructing farm equipment, constructing fences, landscaping home grounds, installing home conveniences, improving pasture, and improving forests (Table CXXXI). The total number of improvement projects completed by the forty-two students was 143. The construction of farm equipment was the project which most students completed. Only one person installed home conveniences.

The forty-two high school vocational agriculture students in Joaquin High School completed 578 supplementary farm practices (Table CXXXII).

TABLE CXXX

AN ANALYSIS OF THE PRODUCTIVE ENTERPRISES COMPLETED BY FORTY-TWO HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN JOAQUIN HIGH SCHOOL, SHELBY COUNTY, 1952-53^a

Productive enterprises	No. of enterprises	Size	Total income	Total expenses	Net income	Value of self labor	Labor income
Feeding for beef	26	64 head	\$ 9,650.00	\$ 6,420.00	\$ 3,230.00	\$ 200.00	\$ 3,430.00
Breeding beef cows	24	94 "	9,475.50	7,416.98	2,058.52	100.00	2,158.52
Breeding beef bulls	2	2 "	410.00	200.00	210.00	10.00	220.00
Dairy cows	4	10 "	2,000.00	1,584.90	415.10	468.32	883.42
Dairy heifers	2	4 "	425.60	369.95	55.65	58.00	113.65
Feeding for pork	31	98 "	4,900.70	4,112.20	788.50	490.00	1,278.50
Hens for egg production	10	1,100 "	8,250.60	6,845.15	1,405.45	550.36	1,955.81
Cotton	10	100 acres	6,850.00	5,594.11	1,255.89	991.53	2,247.42
Corn	22	198 "	5,940.00	4,440.30	1,499.70	1,323.98	2,823.68
Hay and roughage	30	299 "	7,450.00	5,223.50	2,223.50	215.00	2,438.50
Melons	15	15 "	1,510.25	1,116.80	393.45	250.00	643.45
Pasture	42	475 "	501.50	436.40	65.10	175.00	240.10
TOTAL	216		\$57,364.15	\$43,763.29	\$13,600.86	\$4,832.19	\$18,433.05

^aArnold Hooper, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004 (unpublished annual report of the Joaquin High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953), p. 1.

TABLE CXXI

AN ANALYSIS OF THE IMPROVEMENT PROJECTS COMPLETED BY FORTY-TWO HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS IN JOAQUIN HIGH SCHOOL, SHELBY COUNTY, 1952-53^a

Improvement projects	No. of projects	Size
Farm buildings constructed	26	26 buildings
Farm equipment constructed	42	106 pieces
Fences constructed	30	1,000 yards
Landscaping home grounds	2	2 homes
Installing home conveniences	1	1 convenience
Pasture improvement	25	150 acres
Forest improvement	17	205 "
TOTAL	143	

^aIbid., p. 2.

TABLE CXXXII

AN ANALYSIS OF THE SUPPLEMENTARY FARM PRACTICES COMPLETED
BY FORTY-TWO HIGH SCHOOL VOCATIONAL AGRICULTURE STUDENTS
IN JOAQUIN HIGH SCHOOL, SHELBY COUNTY, 1952-53^a

Supplementary farm practices	No. of practices	Size
Farm buildings repaired	2	2 buildings
Farm equipment repaired	16	16 pieces
Fences repaired	17	4,000 yards
Castrating	42	500 head
Vaccinating	42	500 "
Dehorning	42	400 "
Culling poultry	42	200 "
Controlling animal parasites	42	100 "
Controlling animal diseases	42	200 "
Butchering	6	10 "
Curing meat	4	600 pounds
Controlling plant insects	42	5 acres
Controlling plant diseases	42	5 "
Controlling rodents	42	4 "
Mowing pasture	42	1,500 "
Sodding terrace outlets	42	1 outlet
Seeding pastures	25	250 acres
Pruning	42	100 trees
Budding and grafting	4	200 "
TOTAL	578	

^a Ibid., p. 2.

SUMMARY

An analysis of the productive enterprises, improvement projects, and supplementary farm practices of the twelve schools left little doubt as to what enterprises and practices in which most students are interested. Furthermore, this information gave a complete story on which productive enterprises brought the best cash returns in 1953.

Below, the productive enterprises are ranked according to student participation in the six-county area.

Rank	Enterprise	Number of enterprises
1.	Beef cattle -----	281
2.	Swine -----	190
3.	Poultry -----	111
4.	Corn -----	100
5.	Pasture -----	50
6.	Dairy cattle -----	44
7.	Gardens -----	36
	Hay and roughage ----	36
9.	Cotton -----	35
10.	Melons -----	27
11.	Tomatoes -----	16
12.	Sweet potatoes -----	7
13.	Peas and beans -----	6
14.	Rabbits -----	5
15.	Fruits -----	3
16.	Peanuts -----	2
	Vegetable plants ----	2
18.	Forestry -----	1
	Bees -----	1
	Pheasants -----	1
	TOTAL-----	954

The amount of money made from a productive enterprise is of vital importance to a student since one of his main objectives is to expand his farming operations each year in order to become established as a full-time farmer after leaving school. A summary of the labor income of the students of twelve schools from the six-county area is as follows:

Rank	Enterprise	Labor Income
1.	Poultry -----	\$16,000.32
2.	Beef cattle -----	10,851.81
3.	Corn -----	8,291.31
4.	Cotton -----	6,105.66
5.	Swine -----	6,007.91
6.	Dairy cattle -----	5,796.59
7.	Melons -----	3,365.35
8.	Hay and roughage -----	2,813.85
9.	Tomatoes -----	2,078.51
10.	Gardens -----	1,666.72
11.	Fruits -----	685.93
12.	Sweet potatoes -----	476.72
13.	Peas and beans -----	461.74
14.	Pasture -----	440.10
15.	Forestry -----	214.50
16.	Peanuts -----	100.75
17.	Rabbits -----	98.56
18.	Vegetable plants -----	51.75
19.	Bees -----	27.25
20.	Pheasants -----	1.52
	TOTAL -----	\$65,536.85

Improvement projects completed by the same group of students are listed according to their frequency as follows:

Rank	Enterprise	Number of projects
1.	Pastures improved -----	173
2.	Fences constructed -----	145
3.	Home grounds landscaped -	132
4.	Farm equipment constructed -----	121
5.	Home conveniences installed -----	94
6.	Farm buildings constructed -----	56
7.	Forests improved -----	56
8.	Home orchards renovated -	5
	TOTAL -----	782

The supplementary farm practices are also listed according to their frequency of completion as follows:

Rank	Name of Practice	No. Practices
1.	Vaccinating -----	256
2.	Castrating -----	234
3.	Controlling animal parasites --	224
4.	Repairing fences -----	187
5.	Dehorning -----	176

6.	Controlling plant insects -----	172
7.	Culling poultry -----	142
8.	Mowing pastures -----	134
9.	Repairing farm equipment -----	118
10.	Controlling animal diseases ---	109
11.	Controlling plant diseases ----	106
12.	Controlling rodents -----	106
13.	Pruning -----	104
14.	Repairing farm buildings -----	77
15.	Seeding pastures -----	75
16.	Butchering -----	64
17.	Sodding terrace outlets -----	47
18.	Making rope -----	46
19.	Budding and grafting -----	38
20.	Curing meat -----	36
21.	Strip crop, terrace, or contour lines run -----	30
22.	Fertilizing farm ponds -----	27
23.	Branding cattle -----	16
24.	Constructing concrete -----	14
25.	Testing milk for butterfat ----	13
26.	Building terraces -----	11
27.	Building farm ponds -----	2
	Stocking ponds with fish -----	2
	TOTAL-----	2,566

The summary information provided in this chapter on the supervised farming programs of 520 vocational agriculture students of six counties should provide vital information to anyone interested in the agricultural activities and interests of those groups.

CHAPTER V

SUMMARY, CONCLUSIONS, AND LIMITATIONS

SUMMARY

This study is a survey of the agricultural characteristics and practices of six selected counties in central east Texas. These counties are Angelina, Cherokee, Nacogdoches, Rusk, San Augustine, and Shelby. The data were selected from the most reliable sources available and arranged so that they could be easily interpreted by anyone who is charged with the success of a vocational agriculture program in the community. The data were intended as a guide in constructing a curriculum to meet the needs and interests of high school students of vocational agriculture, out-of-school youths, young farmers, and adult farmers.

Although many agencies, groups, and individuals were called upon to furnish information, the best and most complete information was secured from the Texas Almanac, 1952-53, United States Census of Agriculture, 1945 and 1950, Agricultural Stabilization and Conservation Committee, County Agricultural Agent, and the Texas Education Agency.

The materials used in this study were limited to those which were considered of primary importance in determining curriculum content in agricultural education for secondary

public schools of the six-county area. No attempt was made to set up a detailed curriculum because that would be a problem of the individual teacher for each school and community.

Several studies of this type have been made in other areas of the United States, but this is the first survey of the agricultural characteristics and activities of this particular area of East Texas. All writers agree that a good survey of a given area is necessary in order to discover the problems and needs of the locality.

Chapter III was devoted to a study of land use changes in all six counties during the 1944-53 post-war period. The data showed that all of the six counties, located in the pine forest region of East Texas, have a terrain that is rolling to hilly, and the rainfall, temperature, and altitude is approximately the same. The soils are very similar in color and structure, being mostly alluvials in the bottoms and sand and red clays on the uplands. The agricultural enterprises are basically the same; however, they do vary in importance from one county to another.

The agricultural enterprises of the six-county area may be divided into three groups according to the gross income the farmers received in 1953. These groups are as follows:

GROUP I

Poultry (Broilers) -----	\$26,999,414.00
Dairying (whole milk sales) -----	10,111,744.00
Cotton (lint and seed) -----	6,001,407.00

GROUP II

Cattle (beef) -----	\$4,017,276.00
Corn (grain) -----	2,866,180.00
Watermelons -----	1,272,276.00

GROUP III

Farm and forest products -----	\$786,492.00
Tomatoes -----	372,289.00
Cowpeas -----	298,051.00

Peanuts and swine were of less importance. The total value of all peanuts produced in the area in 1953 was only \$83,708.50. No figures are available on the gross income of swine, but the value of all swine on farms in this selected region was only \$599,585.00.

There were many other minor enterprises which could not be included in this study; some of these were vegetable gardens, fruits, sheep, goats, rabbits, oats, grain sorghums, hay and roughage, Irish potatoes, sweet potatoes, vegetable plants, wildlife, and bees.

The most rapid changes since 1944 have been in the poultry business. Broiler production has grown from a relatively small enterprise into the leading enterprise in 1953. Dairying developed very rapidly in all counties except San Augustine County. Cotton is the most important crop grown with corn being second. The changes in the cattle business have been principally in price per pound, having reached a post-war low in 1953.

The value of farm equipment and machinery on farms in the six-county area had increased to \$20,851,350.00 by 1953. Tractors and other power machines were replacing horses and mules. The value of farm land was also high, ranging from an average of \$65.50 per acre in Angelina County to a low of \$42.50 per acre in San Augustine County.

Farm tenants are gradually decreasing in all the counties as more and more people become part-owners, full-owners, or managers. Roads are much better than in 1944, so are automobiles and tractors more numerous. Very few farms are without electricity.

An analysis of the supervised farming programs of 520 vocational agriculture students in twelve selected high schools, two from each county, was reported in Chapter IV. The productive enterprises completed in 1953 were ranked in importance according to student participation (number of enterprises) and also according to the labor income received.

A combination of the two, counting the number of enterprises and labor income of equal value is shown below:

Rank Enterprise

1. Beef cattle
2. Poultry
3. Corn
4. Swine
5. Dairy cattle
6. Cotton
7. Hay and roughage
8. Melons
9. Gardens
10. Pastures
11. Tomatoes
12. Sweet potatoes
13. Peas and beans
14. Fruits
15. Rabbits
16. Peanuts
17. Forestry
18. Vegetable plants
19. Bees
20. Pheasants

The improvement projects completed by the same group of students are listed according to their frequency as follows:

Rank	Enterprise
1.	Pastures improved
2.	Fences constructed
3.	Home grounds landscaped
4.	Farm equipment constructed
5.	Home conveniences installed
6.	Farm buildings constructed
7.	Forests improved
8.	Home orchards renovated

The supplementary farm practices are also listed according to their frequency of completion as follows:

Rank	Name of Practice
1.	Vaccinating
2.	Castrating
3.	Controlling animal parasites
4.	Repairing fences
5.	Dehorning
6.	Controlling plant insects
7.	Culling poultry
8.	Mowing pastures
9.	Repairing farm equipment

10. Controlling animal diseases
11. Controlling plant diseases
12. Controlling rodents
13. Pruning
14. Repairing farm buildings
15. Seeding pastures
16. Butchering
17. Sodding terrace outlets
18. Making rope
19. Budding and grafting
20. Curing meat
21. Strip crop, terrace, or contour lines run
22. Fertilizing farm ponds
23. Branding cattle
24. Constructing concrete
25. Testing milk for butterfat
26. Building terraces
27. Building farm ponds
28. Stocking ponds with fish

CONCLUSIONS

After a careful study of the agricultural characteristics and practices of adult farmers and high school vocational agriculture students of Angelina, Cherokee,

Nacogdoches, Rusk, San Augustine, and Shelby Counties, it is clearly evident as to what farm enterprises and practices these people depend on for a livelihood. Therefore, the writer feels safe in recommending some of the technical items to be included in the curriculum of high school vocational agriculture departments of this six-county area in central East Texas. The suggestions follow:

I. Improving livestock and poultry

a. Poultry

1. Determining the possibilities with poultry
2. Selecting the type, breed, and variety
3. Culling the flock for increased efficiency of production
4. Housing the laying flock
5. Providing poultry-house equipment
6. Feeding and managing for egg production
7. Using artificial lights in poultry houses
8. Controlling poultry diseases
9. Controlling poultry parasites and other pests
10. Exhibiting and judging poultry and poultry products
11. Marketing eggs and breeding stock
12. Selecting, caring for, and improving breeding stock

13. Securing baby chicks.
14. Brooding chicks
15. Feeding and managing growing pullets
16. Feeding and managing for broiler production
17. Keeping financial accounts and other records
18. Raising, feeding, and marketing turkeys

B. Beef cattle

1. History and development of the beef cattle industry
2. Distribution, adaptation, and the future of the beef cattle industry
3. Types and breeds of beef cattle
4. Establishing the herd; selecting and judging beef cattle
5. Systems of beef production
6. Breeding beef cattle
7. Feeding beef cattle
8. Beef cattle management
9. Buildings and equipment for beef cattle
10. Beef cattle health, disease prevention and parasite control
11. Methods of marketing beef cattle
12. Slaughtering and preserving
13. Selecting, fitting, and showing beef cattle

C. Dairy cattle

1. The importance of dairying in East Texas
2. Producing milk and dairy products for home use
3. Composition testing and value of milk
4. Value of milk in the diet
5. General breeding problems and practices
6. Selecting and managing the herd sire
7. Caring for the cow and calf
8. Judging dairy cows
9. Selecting the dairy breed
10. Feeding dairy cattle
11. Pastures for dairy cattle
12. Feeding silage
13. Dairy buildings and equipment
14. Producing quality dairy products
15. Marketing dairy products
16. Common diseases and parasites of dairy cattle
17. Fitting and showing dairy cattle

D. Swine

1. Providing proper housing and equipment
2. Foundation stock selection
3. Feeding and management
4. Controlling insects and parasites
5. Prevention and treatment of disease

6. Marketing

7. Killing and curing pork

E. Rabbits

1. Selecting a breed

2. Selecting the foundation stock

3. Housing and equipment

4. Care and management

5. Slaughter and preparation

6. Disease and pest control

7. Making good use of rabbit manure

II. Improving crops

A. Corn

1. The importance of corn

2. The nature of the corn plant

3. Kinds and varieties of corn

4. Hybrid corn

5. Selecting seed

6. Preparing the land for planting corn

7. Planting and cultivating corn

8. Fertilizing

9. Controlling insect pests and diseases of corn

10. Harvesting, marketing, and utilizing corn

B. Cotton

1. World production

2. Developments in foreign production

3. Consumption
4. United States exports
5. Government allotments and control
6. Varieties of cotton
7. Breeding and improvement
8. Cotton planting and culture
9. Fertilizing
10. Controlling insects and diseases
11. Cotton harvesting and ginning
12. Grading and marketing cotton

C. Melons

1. Selecting a variety
2. Selecting the proper location and soil
3. Selecting seed and fertilizer
4. Planting
5. Cultivation
6. Pruning
7. Insect and disease control
8. Harvesting and marketing

D. Hay and roughage (sorghums, small grains, and forage crops)

1. Uses
2. Kinds and varieties
3. Planting and fertilizing

4. Cultivation
5. Insects and disease
6. Harvesting and marketing

E. Tomatoes

1. Selecting a variety
2. Treating seed
3. Planting a hot bed
4. Care in cold frame
5. Transferring to field
6. Fertilizing and cultivating
7. Controlling insects and diseases
8. Sticking and tying
9. Pruning
10. Harvesting and marketing

F. Gardens

1. Selection of site
2. Making garden plans
3. Choosing tools and equipment
4. Using hotbeds or cold frames to start early
vegetables
5. Preparing and improving the soil
6. Planting the vegetables
7. Cultivation and care
8. Controlling insects and diseases

9. Harvesting and marketing
10. Canning, freezing, and drying

G. Fruit production

1. Choosing the location for a home orchard
2. Selecting adapted varieties
3. Buying from a reliable nurseryman
4. Fertilizing
5. Transferring and planting
6. Intercropping
7. Pruning
8. Cultivation
9. Controlling insects and diseases
10. Budding and grafting
11. Renovating orchards

E. Sweet potatoes

1. Importance of the sweet potato crop
2. Soils adapted to sweet potatoes
3. Use of fertilizers
4. Propagating plants
5. Pulling the plants
6. Preparing the land
7. Setting plants in field
8. Cultivation
9. Disease and insect control
10. Harvesting, storing, grading, and marketing

F. Peas and beans

1. Selecting kinds and varieties to fit the need
2. Rate of seeding
3. Inoculation of seed
4. Cultivation
5. Insect and disease control
6. Harvesting and utilization

G. Peanuts

1. Uses of peanuts
2. Selecting the land
3. Varieties
4. Planting, fertilizing and cultivation
5. Insect and disease control
6. Harvesting, grading, and marketing
7. Curing and bailing hay

III. Establishing and improving pastures**A. Permanent pastures**

1. Selecting pasture plants
2. Selecting desirable land for pastures
3. Preparing the land
4. Pasture fertilization
5. Selecting a seed mixture
6. Establishing the pasture plants
7. Mowing

8. Controlling grazing
9. Building and maintaining fences
10. Controlling rodents

B. Temporary pastures

1. Supplemental crops for winter grazing
2. Summer crops for drouth relief

IV. Forestry

A. The farm woodlot

1. Importance to farmers
2. Identification of trees
3. Growth and reproduction of trees
4. Forest measurements
5. Silvical factors
6. Tree and forest classifications
7. Immediate cuttings, pruning, and harvest
cuttings
8. Artificial reforestation
9. Forest management and economics
10. Wood identification and uses
11. Harvesting, manufacturing, and marketing
forest products
12. Wood preservation
13. Protection from fire
14. Protection from forest enemies

- B. Timber production by the United States Government,
the State of Texas, and commercial companies

V. Wildlife

A. Bees

- 1. Economic use
- 2. Kinds and varieties
- 3. Feeding, care, and management

B. Fish

- 1. Building ponds
- 2. Stocking ponds with fish
- 3. Fertilizing ponds

C. Pheasants and other game birds

- 1. Propagation
- 2. Feeding, care, and management

VI. Landscaping

- A. Identification of shrubs, flowers, and grasses
- B. Planning the landscape
- c. Transplanting
- D. Fertilizing
- E. Pruning shrubbery
- F. Controlling insects and diseases
- G. Cultivating
- H. Building walks and drives
- I. Screening

VII. Soil and water conservation

- A. The extent and effect of soil erosion
- B. How erosion takes place
- C. Rates of erosion and runoff
- D. Effects of climate and rainfall
- E. Government agencies helping to conserve soil
and water
- F. Use of vegetation in soil and water conservation
- G. Contouring and terracing.
- H. Building channels and outlets
- I. Gulley control
- J. Small dams for water storage

VIII. Farm shop

- A. Woodwork
- B. Painting, finishing, glazing
- C. Rope work
- D. Belt work
- E. Making concrete
- F. Working with sheet metal
- G. Doing farm forge work
- H. Installing home conveniences and practicing
sanitation
- I. Repairing farm motors and farm machinery
- J. Installing electricity and maintaining the system
- K. Road and bridge building

LIMITATIONS

Although the technical material for a course in vocational agriculture in the high schools of the six-county area of Central East Texas is set up as a guide for teachers to use in curriculum development, there are certain limitations which must be observed. The following questions are still left unanswered:

1. Which year in high school should each of the problems be taught?
2. How many classroom hours should be devoted to the teaching of each problem?
3. What other problems, such as Future Farmer of America activities, should be taught during class time?
4. What are the best methods to use in teaching these problems?
5. What other types of livestock or crops could be introduced successfully into central East Texas?

Many of the above mentioned problems must be answered by the teacher of vocational agriculture and others of each local community. It has been proven in this study that there are variations of incomes and interests in the

different schools and communities even though the whole area under study had many problems in common. The agricultural characteristics and activities of the six counties have been explored.

BIBLIOGRAPHY

A. BOOKS, BULLETINS, AND PUBLISHED MONOGRAPHS

Agricultural Education Organization and Administration.
United States Office of Education, Vocational Division
Bulletin No. 13. Washington, D. C.: United States
Government Printing Office, 1939. 50 pp.

Cook, Gene C., Handbook on Teaching Vocational Agriculture.
Danville: Interstate Printing Company, 1947. 812 pp.

Deyoe, George P., Supervised Farming in Vocational Agriculture.
Danville: Interstate Printing Company, 1947.
502 pp.

Educational Objectives in Vocational Agriculture. United
States Office of Education, Vocational Division Mono-
graph No. 21. Washington, D. C.: United States Gov-
ernment Printing Office, 1940. 14 pp.

"Guide for Building a Three-Year Program in Vocational
Agriculture with Teaching Plans for Teachers of Voc-
ational Agriculture," Special Helps Bulletin No. 1.
Agricultural and Mechanical College of Texas, College
Station, 1945. 16 pp.

Hamblin, Herbert M., Agricultural Education in Community
Schools. Danville: The Interstate Printing Company,
1949. 487 pp.

Monroe, Walter S., Encyclopedia of Educational Research.
New York; The Macmillan Company, 1952. 1520 pp.

Prosser, Charles A., and Charles R. Allen, Vocational Edu-
cation in a Democracy. New York; The Century Company,

Summaries of Studies in Agricultural Education. Washing-
ton, D. C.: United States Office of Education, Voc-
ational Division Bulletin No. 246, 1951. 48 pp.

Summaries of Studies in Agricultural Education. Washing-
ton, D. C.: United States Office of Education,
Vocational Division Bulletin No. 248, 1952. 62 pp.

Texas Almanac and State Industrial Guide, 1952-53," Counties and Cities of Texas. Dallas: A. H. Belo Corporation, 1951. 672 pp.

The Advisory Council For A Department of Vocational Agriculture. United States Office of Education, Vocational Division Bulletin No. 243. Washington, D. C.: United States Government Printing Office, 1951. 28 pp.

United States Department of Agriculture. Science in Farming. Yearbook of Agriculture, 1943-47. Washington, D. C.: United States Government Printing Office, 1947. 944 pp.

United States Bureau of the Census. United States Census of Agriculture: 1945. Volume I, Statistics by Counties, Part 26. Washington, D. C.: United States Government Printing Office, 1946. 504 pp.

United States Bureau of the Census. United States Census of Agriculture: 1950. Volume I, Counties and State Economic Areas, Part 26. Washington, D. C.: United States Government Printing Office, 1952. 632 pp.

Whitney, Frederick L., The Elements of Research. New York: Prentice-Hall, Inc., 1950. 539 pp.

B. UNPUBLISHED MATERIALS

Borders, M. E., "Farms Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the Angelina County Agricultural Stabilization and Conservation Committee, Lufkin, 1945. 19 pp.

Borders, M. E., "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the Angelina County Agricultural Stabilization and Conservation Committee, Lufkin, 1950. 19 pp.

Borders, M. E., "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the Angelina County Agricultural Stabilization and Conservation Committee, Lufkin, 1954. 19 pp.

- Bristol, Benton K., "Procedures for Determining Improved Practices to Teach in Vocational Agriculture Classes in Oklahoma." Unpublished nonthesis study, Agricultural and Mechanical College of Oklahoma, Stillwater, 1950. 111 pp.
- Burton, Felix J., "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the Rusk County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1945. 32 pp.
- Burton, Felix J., "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the Rusk County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1950. 32 pp.
- Burton, Felix J., "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the Rusk County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1954. 32 pp.
- Clifton, O. B., "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the San Augustine County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1945. 32 pp.
- Clifton, O. B., "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the San Augustine County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1950. 32 pp.
- Clifton, O. B., "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the San Augustine County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1954. 32 pp.
- Collins, Ernest G., "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004. Unpublished annual report of the Broadus High School Vocational Agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953. 2 pp.

- Cummings, T. E., "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004. Unpublished annual report of the Alto High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953. 2 pp.
- Curry, C. T., "Oral Report to Teachers of Vocational Agriculture," Unpublished report of the District Office of the Texas Highway Department, Lufkin, Texas, January, 1954.
- Davis, Chester W., "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the Angelina County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1945. 32 pp.
- Davis, Chester W., "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the Angelina County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1950. 32 pp.
- Davis, Chester W., "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the Angelina County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1954. 32 pp.
- Dinwiddie, B. A., "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the Rusk County Agricultural Stabilization and Conservation Committee, Henderson, 1945. 19 pp.
- Dinwiddie, B. A., "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the Rusk County Agricultural Stabilization and Conservation Committee, Henderson, 1950. 19 pp.
- Dinwiddie, B. A., "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the Rusk County Agricultural Stabilization and Conservation Committee, Henderson, 1954. 19 pp.
- Duncan, Adon, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004. Unpublished annual report of the Rusk High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953. 2 pp.

Eddins, Robert J., "Final Report of Productive Enterprises and other Supervised Practice," VAG-004. Unpublished annual report of the Center High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953. 2 pp.

Flegel, Perry S., "A Farm Survey of Upper Dorchester County, Maryland, 1950." Unpublished nonthesis study, The University of Maryland, College Park, 1950. 218 pp.

Gatlin, Allen, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004. Unpublished annual report of the Henderson High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953. 2 pp.

Gray, Benny F., "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the Nacogdoches County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1945. 32 pp.

Gray, Benny F., "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the Nacogdoches County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1950. 32 pp.

Gray, Benny F., "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the Nacogdoches County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1954. 32 pp.

"Guide for Building a Program of Vocational Education in Agriculture With Annual Plans." Unpublished paper prepared by the Department of Agricultural Education, Agricultural and Mechanical College of Texas, College Station, n. d. 49 pp.

Held, Metz, "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the Cherokee County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1945. 32 pp.

- Held, Metz, "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the Cherokee County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1950. 32 pp.
- Held, Metz, "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the Cherokee County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1954. 32 pp.
- Hibbs, Clyde W., "Longtime Program for Ravenswood Vocational Agriculture Department Based on Findings in an Agricultural Survey of Jackson County in 1948," Unpublished Master's thesis, West Virginia University, Morgantown, 1949. 181 pp.
- Hogan, Robert R., "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004. Unpublished annual report of the San Augustine High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953. 2 pp.
- Holcomb, C.K., "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the Nacogdoches County Agricultural Stabilization and Conservation Committee, Nacogdoches, 1945. 19 pp.
- Holcomb, C. K., "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report on the Nacogdoches County Agricultural Stabilization and Conservation Committee, Nacogdoches, 1950. 19 pp.
- Holcomb, C. K., "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report on the Nacogdoches County Agricultural Stabilization and Conservation Committee, Nacogdoches, 1954. 19 pp.
- Hooper, Arnold, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004. Unpublished annual report of the Joaquin High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953. 2 pp.
- Horton, James, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004. Unpublished annual report of the Hudson High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953. 2 pp.

Jackson, B. W., "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004. Unpublished annual report of the Mount Enterprise High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953. 2 pp.

Kimmery, John A., "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the Shelby County Agricultural Stabilization and Conservation Committee, Center, 1945. 19 pp.

Kimmery, John A., "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the Shelby County Agricultural Stabilization and Conservation Committee, Center, 1950. 19 pp.

Mills, B. R., "A Teaching Program in Vocational Agriculture For Survanne County." Unpublished Master's thesis, The University of Florida, Gainesville, 1949. 100 pp.

Moosberg, John O., "Annual Narrative Report of County Agriculture Agents," E. S. 21. Unpublished annual report of the Shelby County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1945. 32 pp.

Moosberg, John O., "Annual Narrative Report of County Extension Agents," E. S. 21. Unpublished annual report of the Shelby County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1950. 32 pp.

Moosberg, John O., "Annual Narrative Report of the County Extension Agents," E. S. 21. Unpublished annual report of the Shelby County Agricultural Agent made to the Agricultural and Mechanical College of Texas, College Station, January 1, 1954. 32 pp.

McCrary, Allen, "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004. Unpublished annual report of the Cushing High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953. 2 pp.

McCurry, Bobby G., "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004. Unpublished annual report of the Diboll High School Vocational Agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953. 2pp.

Persons, Bob, "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the Cherokee County Agricultural Stabilization and Conservation Committee, Rusk, 1945. 19 pp.

Persons, Bob, "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the Cherokee County Agricultural Stabilization and Conservation Committee, Rusk, 1950. 19 pp.

Persons, Bob, "Farm Statistical Listing Sheet," Form A. C. P. 220. Unpublished annual report of the Cherokee County Agricultural Stabilization and Conservation Committee, Rusk, 1954. 19 pp.

Robertson, M. J., "A Longtime Vocational Agriculture Teaching Program in El Reno High School." Unpublished non-thesis study, Agricultural and Mechanical College of Oklahoma, Stillwater, 1950. 188 pp.

Strong, Joe B., "Final Report of Productive Enterprises and Other Supervised Practice," VAG-004. Unpublished annual report of the Central Heights High School vocational agriculture teacher to the Texas Education Agency, Austin, Texas, December 1, 1953. 2pp.

Townsend, Homer L., "A Prepared Course of Study in Vocational Agriculture for the Converse High School." Unpublished Master's thesis, Louisiana State University, Baton Rouge, 1949. 141 pp.

Ward, E. D. "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the San Augustine County Agricultural Stabilization and Conservation Committee, San Augustine, 1945, 19 pp.

Ward, E. D. "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the San Augustine County Agricultural Stabilization and Conservation Committee, San Augustine, 1950. 19 pp.

Ward, E. D., "Farm Statistical Listing Sheet," Form A.C.P. 220. Unpublished annual report of the San Augustine County Agricultural Stabilization and Conservation Committee, San Augustine, 1954. 19 pp.