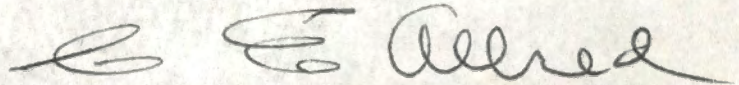


August 11, 1939

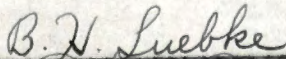
To the Committee on Graduate Study:

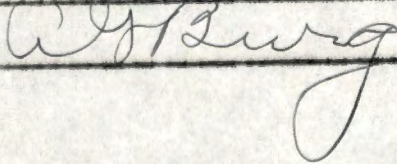
I am submitting to you a thesis written by Luther Beecher Bohanan entitled "Relation of Land Class to Land Utilization in Overton County, Tennessee". I recommend that it be accepted for eighteen quarter hours credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Agricultural Economics.



Major Professor

We have read this thesis
and recommend its acceptance:





Accepted for the Committee



Dean of the Graduate School

RELATION OF LAND CLASS TO LAND UTILIZATION IN
OVERTON COUNTY, TENNESSEE

A THESIS

Submitted to
the Committee on Graduate Study
of
The University of Tennessee
in
Partial Fulfillment of the Requirements
for the degree of
Master of Science

By

Luther Beecher Bohanan

August, 1939

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CHAPTER I

INTRODUCTION

Purpose of Study

The purpose of this study is to determine the relation of land class to land utilization in Overton County; to determine the influence that total acres per farm and acres of improved land per farm has on land utilization; to determine the relation of land class to number and kind of cattle; and on the basis of the findings point out some advantageous changes that may be applied to the agricultural program of the county and other similar areas.

Location of County

Overton County is located in the northeastern part of Middle Tennessee. It is bounded on the north by Clay and Pickett, on the east by Fentress, on the south by Putnam, and on the west by Jackson counties (Figure 1). The county is partly on the northeastern Highland Rim and partly on the Cumberland Plateau, most of the agricultural area of the county lying in Type-of-Farming Area 11. Livingston, the county seat, is located one hundred miles northeast of Nashville, one hundred twenty miles northwest of Knoxville, and one hundred thirty miles north of Chattanooga.

Topography

Overton County has two distinct topographical areas. The southeastern portion of the county is on the Cumberland Plateau, and comprises

Figure 1. Location of Overton County, Tennessee.

about one-third of the county. This region is characterized by mountainous topography ranging in altitude from 700 to 2,000 feet. West of this area is a gently rolling plain. This area belongs to the Highland Rim and ranges in altitude from 900 to 1,000 feet. On the Highland Rim in the southwestern fourth of the county the surface is characterized by level areas and rolling hills. Near the west line of the county, however, this plain has been dissected by the V-shaped valleys of Spring Creek and Roaring River. The bottoms of these valleys approach the level of the Central Basin, which lies farther west, and their escarpments are steep.

To the north of this area Mill Creek and Mitchell Creek and their tributaries have destroyed the characteristic features of the Highland Rim, leaving a series of broken ridges. The northeastern portion of the Highland Rim is cut by the valleys of Eagle Creek and the West Fork of Obey River and their tributaries. The drainage of the county is all toward the Cumberland River, which lies a few miles beyond the western boundary of the county.⁽¹⁾

Soils⁽²⁾

The soils found in Overton County, with the exception of the bottom lands, which are of limited extent, consist of residual material, resulting from the decomposition and disintegration of the underlying rocks. The rocks are sedimentary in origin and consist of limestones, sandstones, and shales.

(1) Ayrs, Orla L., and Hill, D. H., Soil Survey of Overton County, Tennessee, pp. 5-6.

(2) Ibid., pp. 12-13.

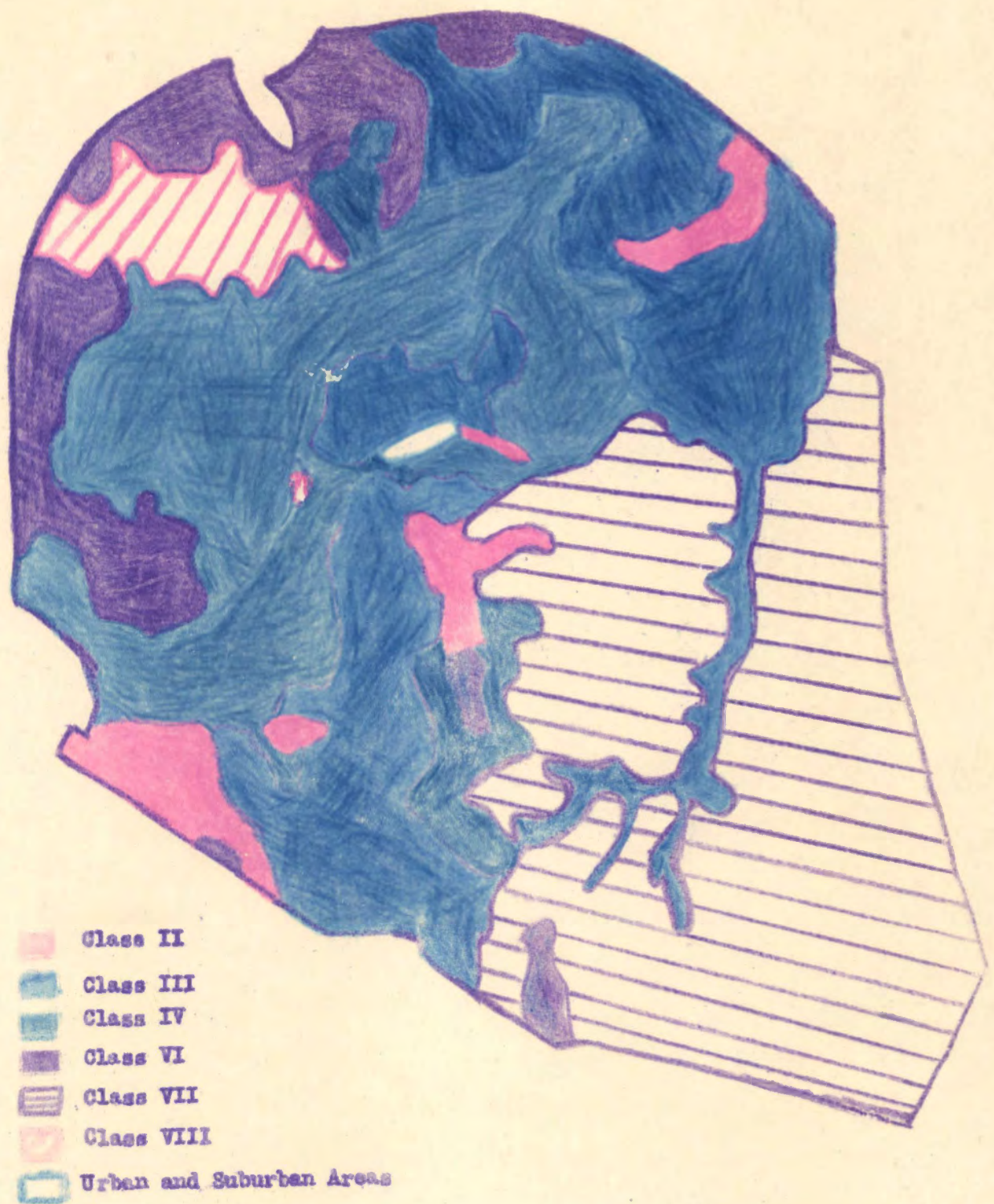


Figure 2. Distribution of Land Classes, Overton County, Tennessee

Source: Mason, John E., and Gruehn, Edward L. K., An Analysis of Pertinent Social and Economic Factors Affecting Land Use in Overton County, Tennessee, p. 71.

The Highland Rim and the valleys which intersect it are occupied mainly by limestone formations, some of which contain a great deal of chert and siliceous impurities. These have given rise to gray and red silty soils. The gray soils have been included in the Clarksville series and the red soils in the Decatur series. The formations exposed on the Cumberland Plateau and its escarpment consist of sandstone and shale. These give rise to soils having a gray color and characterized by a much greater percentage of sand than is found in the soils of the Highland Rim. These soils belong to the DeKalb series. At the bottom of the narrow valleys in the northwestern part of the county a brown, silty, stony loam has been formed. This type belongs in the Hagerstown series. In all, eleven types of soil have been recognized and mapped in Overton County, the extent of each being shown in Table I.

TABLE I. AREAS OF DIFFERENT SOILS, OVERTON COUNTY, 1908

Soil	Acres	Per Cent	Soil	Acres	Per Cent
Clarksville silt loam	78,272	28.2	Decatur loam	11,584	4.2
DeKalb stony loam	67,840	24.5	Meadow	4,672	1.7
Clarksville stony "	51,008	18.3	Hagerstown stony loam	1,344	.5
DeKalb silt loam	17,984	6.5	Guthrie silt loam	256	.1
Decatur stony loam	17,600	6.3			
DeKalb sandy loam	13,824	5.0	Total	277,312	100.0
Rough stony loam	12,928	4.7			

Source: Ayrs and Hill, Soil Survey of Overton County, Tennessee, p. 13.

Climate

The climate of this region is mild, seldom experiencing extremes of either heat or cold. Annual precipitation is usually between 50 and 60 inches. Rainfall is distributed throughout the year and, normally, is suf-

ficient for growth of most crops. The average length of growing season at the Byrdstown and Oak Hill weather stations is 191 days.⁽³⁾

Land Class

Recently the land of Overton County was classified by the Land Use Planning Section of the Resettlement Administration (now in Bureau of Agricultural Economics). Their classification was used in this study.

Several factors were used in classifying the land. Classification was based on a reconnaissance survey and supporting data of farm management records, living standards data, relief records, and soils.⁽⁴⁾ The reconnaissance survey took into consideration land use, crop land, pasture, forest, idle, or abandoned land, extent of erosion, and obstructions. From a soils point of view, the type of soil, slope, extent of erosion and obstructions were the factors that influenced the class of land most. Six classes of land were found in Overton County, on the basis of the above classification. With the exception of Classes VII and VIII they are distributed throughout the county (Figure 2). No Class I or V land was found.

The description of each class of land is as follows:⁽⁵⁾

Classes of Rural Land

Agricultural:

Class II Areas of good agricultural land, comparatively level land of good fertility, or undulating land of high fertility; moderately subject to erosion or slight

(continued)

(3) Allred, C. E., Atkins, S. W., and Outen, D. L., Inventory of Climate and Mineral Resources of Tennessee, Table V, p. 231.

(4) Mason, John E., and Gruehn, Edward L. K., An Analysis of Pertinent Social and Economic Factors Affecting Land Use in Overton County, Tennessee, p. 73.

(5) Ibid., p. 70.

- Class II (cont.) fertility problems. Suitable for general diversified farming, perhaps including a specialty such as tobacco; 75-125 acres needed to support a family; 3-4 year rotation.
- Class III Areas suitable only for an extensive type of agriculture because most of the cleared land is of low quality, hilly, or readily susceptible to erosion and requires longer rotation period than above; 50% or more of the average farm may be in forest; 125 to 200 acres required to support a family; 5-6 year rotation.
- Class IV Areas primarily adapted to grazing, either because the land is too hilly or infertile for cultivation or because it is peculiarly adapted to grass; stony, glady, or very shallow land, cold wet bottoms, steep land with poor fertility. Little or no tillable land. Some of the steeper slopes should be reforested. Generally 200-300 acres required to support a family.
- Non-Agricultural:
- Class VI Areas now predominantly forested but with scattered farms and clearings which are generally unsuited to agriculture, and which should be in forests.
- Class VII Areas now solidly or almost solidly forested and that should so remain.
- Class VIII Recreational areas (Standingstone Forest Project and Zollicoffer WPA Project).

Source of Data

In filling out the work sheet for the Agricultural Conservation Program, each participant in the program gave information concerning his farm (Figure 3). These work sheets were obtained for the years 1936-1938 inclusive, and show the land use for the preceding year. Thus the work sheet for 1936 shows the land use for 1935. Each work sheet is for the first year the participant took part in the Program.

SECTION I.—UTILIZATION OF LAND

CROP OR LAND USE	A. A. A. CONTRACT		Harvested 1936	Harvested 1937
	Acres (B)	Yield (C)	Acres (D)	Acres (E)
(A)				
1. Cotton				
2. Peanuts				
3. Tobacco— Kind				
4. SUBTOTAL (1-3)				
5. Corn				
6. Wheat				
7. Oats				
8. Potatoes (Irish) Sales				
Yield per acre				
9. Sweet sorghums				
10.				
11.				
12.				
13. Sweetpotatoes				
14. Truck and vegetable crops				
15. SUBTOTAL (5-14)				
16. Lespedeza on crop land				
17. Bluegrass on crop land				
18. Soybeans				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26. Orchards and vineyards (a)				
(Total Commercial) (b)				
27. SUBTOTAL (16-26)				
28. TOTAL CROP ACREAGE				
29. Buildings, roads, lanes, etc.				
30. Woods not pastured, waste, etc.				
31. Woods pastured				
32. Open pasture (noncrop land)				
(Pasture qualifying)				
33. Wild or marsh hay				
34. TOTAL ALL LAND				

SECTION II

Yield per acre principal soil-depleting crop other than cotton, tobacco, or peanuts:

(Name of crop) (Yield)

SECTION III

(Name of 1938 operator)

(Address)

(Name of owner, if other than operator)

(Address)

hereby submits information with respect to the land described below for consideration by the County Agricultural Conservation Association. Nothing contained herein shall place any obligation upon any person.

Date, 1938. (Signature of operator or owner)

SECTION IV

This land is known as the

farm and is located (Miles and direction) from

(City or town) on (Road)

in (Township, district, or precinct)

SECTION V

Number of other farms owned or operated in this county:

By owner By operator

SECTION VI

Record references (Cotton) (B. A.) (Tobacco)

(Peanuts)

SECTION VII.—BASE ACREAGE AND YIELD

Preliminary revision	County committee adjusted		Maximum acreage for which soil conserving payment can be made	Acreage which can be planted with maximum diversion
	Acres (A)	Yield (B)	Acres (C)	Yield (D)
1. Cotton				
2. Peanuts				
3. Tobacco				
4. Other soil-depleting crops				
5. All soil-depleting crops				

SECTION VIII

(Name of person assisting in filling out work sheet)

Reviewed by

(County committee)

Figure 3. Work Sheet, Agricultural Conservation Program

Data on the number and breed of cattle of each cattle owner in Overton County were obtained from the State Veterinarian's record.

Methods

In the fall of 1938 a list was made of all heads of rural families of Overton County, their occupations, and the owner of the homes at present and three years previous. The location of each was indicated on a map of the county by a number. All roads were traversed and by inquiring at strategic points several homes could often be identified by one interview. The land class on which each home was situated was then determined by superimposing a land classification map of the same scale on the other map. An alphabetical list was then made for owners showing in code number the land class on which the home was situated. A second list was made for occupants and their homes. The work sheets were then properly identified by land class from the above alphabetical lists.

In like manner the cattle data were associated with land class.

Insofar as possible all groupings of the data were made to conform to census usage, so the data could be compared with the latest census figures. This was rendered difficult in some instances because definitions were different and the data for different years. One difficulty was in getting the total crop acreage on the work sheets to conform to crop acres harvested in the census data. Several other differences will be discussed later.

All tabulations were made from Column D of the work sheet (Figure 3).

The acreages reported in this column are the acreages planted in the various crops the previous year.

A preliminary tabulation for the Third Civil District, by years, did not indicate that the difference from one year to the next was sufficient to warrant a separate tabulation by years (Table II).

As stated above, all work sheets were for the first year a participant was in the program. Records for the 1936 and 1938 programs were used. There were no new participants in the 1937 program in the Third Civil District. One difference noted was that the 1936 participants reported 54.5% of all land as improved land while 1938 participants reported 47.0% (Table II).

TABLE II. DISTRIBUTION OF MAJOR LAND USES, THIRD CIVIL DISTRICT, 1936 AND 1938

Year	Number of Farms	Total All Land (Acres)	Per Cent						Total
			Im-proved Land	Roads, Bldgs., Lanes	Woods Not Pas-tured	Woods Pas-tured	Open Pas-tures, Non-Crop Land	"Other" Land	
1936	166	17,102.0	54.5	2.3	29.0	5.0	8.6	0.6	100.0
1938	92	5,333.6	47.1	1.9	33.3	2.9	14.8		100.0
Both years comb.	258	22,435.6	52.2	2.3	30.2	4.6	10.2	0.5	100.0

Another difference is in open pasture on non-crop land. Here the 1938 farms had more pasture on non-crop land than did the 1936 farms. Further tabulation showed that 7.0% of the improved land on 1936 farms

was in pasture while only 0.3% of the improved land on 1938 farms was in rotation pasture. This probably accounts for the difference in open pasture.

TABLE III. PRINCIPAL USES OF IMPROVED LAND, THIRD CIVIL DISTRICT, 1936 AND 1938

Year	Number of Farms	Improved Land Acres	Per Cent				
			Or-chard	Idle	All * Pasture	Land Planted in Crops	Total
1936	166	9325.0	2.3	19.3	7.0	71.4	100.0
1938	92	2508.8	2.8	19.3	0.3	77.6	100.0
Both years comb.	258	11,833.8	2.4	19.3	5.7	72.6	100.0

* Does not include open pasture on non-crop land and woods pastured.

Still another difference between these two years is land planted in crops. There was 6.2% more improved land planted in crops in 1938 than 1936 (Table III). The use of land planted in crops did not show any great variation except for the amount planted in corn. The 1936 farms had 52.5% of their crop land in corn while 1938 farms had 56.1% or a difference of 3.6%. The data indicates that more of the larger farms entered the program in 1936, the smaller farms entering in 1938.

Limitations of Data

One limitation to the use of the data is the possible inaccuracy of the information on the work sheets. There may be some overstatement of the part of the participant, but this is at least partly corrected

when the acreage is measured and checked for compliance, by district.

In some instances the total acres reported by participants in the program are more than the acres reported in the census data for that district. This can be partially accounted for by changes in district lines. Probably the greatest cause of discrepancy is that participants do not know how many acres are in various fields. Most deeds to farms specify a number of acres, more or less. One instance is known where the deed specified 75 acres, more or less, and when the land was surveyed it contained 100 acres. Difference as much as this could influence the totals considerably.

Another limitation of the data is determining the use of some of the crops, especially of crops used for either hay or pasture.

On several of the work sheets the acres in pasture was entered as rotation pasture, while on other sheets it was entered as lespedeza pasture or red top pasture. This difference in reporting acres of the various crops is due largely to the committeemen who filled out the sheets. Inasmuch as it is not known which crops were used in establishing rotations, difficulty is experienced in forming adequate conclusions in regard to pasture.

Preliminary tabulations have been made by tenure and of yields of corn. List tabulations by tenure have shown that more data are needed concerning the status of the operator and owner before definite conclusions can be drawn. At present no conclusions are warranted by the findings in regard to yields.

Classification of the land is another limiting factor. Each class of land grades into preceding and succeeding classes. There is no sharp division where one class begins and another ends. The land was mapped in large areas, and it is possible for some land to be mapped in one class when it should have been in another class. This can be illustrated by land in the southeastern part of the county (Figure 2). All land in this area was classified as either Class III or Class VII. In considering such large areas it is difficult to determine the proper land class, but areas of Class IV and Class VI land were probably too small to warrant a separate classification of their own. Therefore they were included in either Class III or Class VII.

Definitions

Farm⁽⁶⁾ means all adjacent or nearby farm land under the same ownership which is operated by one person, including also

1. Any other adjacent or nearby farm land which is operated by the same person, as a part of the same unit with respect to rotation of crops and with workstock, farm machinery and labor, and

2. Any field - rented tract (whether operated by the same or another person) which, together with any other land included in the farm constitutes a unit with respect to rotation of crops.

Total Land means all the land in a farm.

Improved Land⁽⁷⁾ means farm land which is tilled annually or in

(6) United States Department of Agriculture, 1938, Agricultural Conservation Program - Tennessee, pp. 20-21.

(7) Ibid., p. 21.

a regular rotation excluding commercial orchards, but including any other land which has been planted since January 1, 1934, to permanent pasture or forest trees and which was classified as crop land by the 1937 Agricultural Conservation Program, and including also land planted to non-commercial orchards other than abandoned orchards.

Open Pasture Non-Crop Land. ⁽⁸⁾ means pasture land (other than rotation pasture land) on which the predominant growth is forage suitable for grazing, and on which the number of grouping of any trees or shrubs is such that the land could not fairly be considered as woodland.

Idle Land means all farm land that is lying out of cultivation and is not used as pasture.

Land Planted in Crops means the acres of improved land that is planted to corn, potatoes, truck and vegetable crops, sorghum, tobacco, small grain, and hay.

(8) United States Department of Agriculture, 1938, Agricultural Conservation Program - Tennessee, p. 21.

CHAPTER II

RELATION OF LAND CLASS TO LAND USE

Man has always been vitally dependent upon the land for his existence. Sometimes the land supplies an adequate living, while other times it supplies only the bare necessities. Many reasons have been given as the cause of this condition. In recent years, however, it has been recognized that there is a difference in the ability of land to supply man's needs. Some land is naturally good, while other land is inherently poor.

The manner in which man utilizes the resources of the land largely determines how the land in return will take care of his needs. When it is properly used it will often yield an abundant return, but when it is continuously mistreated it usually will not yield a good return. If land is subjected to the ravages of wind and water it soon becomes so eroded that it cannot properly support life. Thus it is of great economic importance how man utilizes the land. The class of land will determine to some extent how it should be used.

Class II Land.⁽¹⁾ All Class II land in Overton County is located on the Highland Rim. It is distributed over the county in isolated spots (Figure 2). The largest area is in the southwestern portion of the county in the 1st Civil District (Figure 4). The next largest area is in the

(1) Civil Districts 2, 3, 4, 7, 8, 9, 10, and 12 have no Class II land.

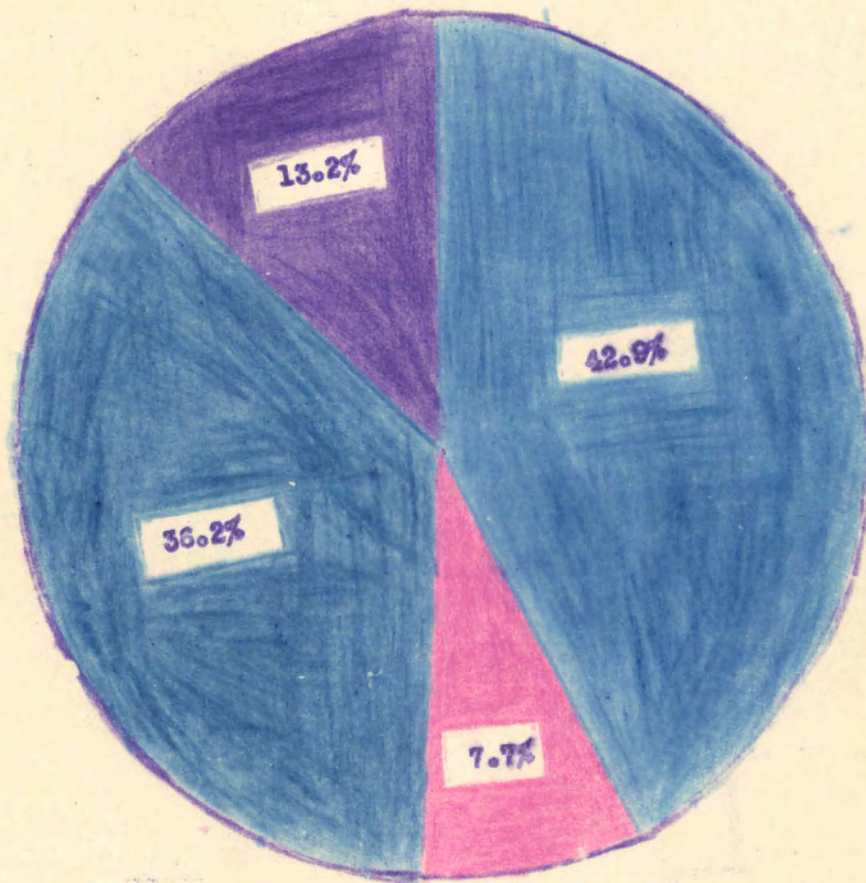
center of the county southeast of Livingston in the 5th and 6th Civil Districts. The other area of importance is in the northeastern part of the county in the 11th District. There are two other small areas of Class II land, one north of Rickman and the other just east of Livingston (Figure 2).

TABLE IV. NUMBER OF FARMS, AREA, AND DISTRIBUTION BY MAJOR LAND USES, CLASS II LAND, BY CIVIL DISTRICTS, OVERTON COUNTY

Items	Civil District				County
	1	5	6	11	
Number of farms	69	7	34	24	134
Total all land (acres)	5194.5	1059.0	4999.0	1816.0	13,788.5
Improved land (acres)	3939.0	410.0	2430.5	1146.0	7,925.5
Buildings, roads, etc.(acres)	132.3	19.0	84.0	22.5	257.8
Woods not pastured (acres)	864.2	489.0	1896.0	291.0	3,540.2
Woods pastured (acres)	314.0	30.0	238.5	237.5	820.0
Open pasture non-crop land (acres)	657.0	85.0	350.0	119.0	1,211.0
Other land (acres)	8.0	26.0	0	0	34.0

There were 134 farms participating with the Agricultural Conservation Program (Table IV). The largest number, sixty-nine, were located in the 1st Civil District. The next largest group was in the 6th Civil District. There were 24 and 7 farms in the 11th and 5th Districts, respectively. This gives a fairly well distributed sample by districts, except in the 5th District. Most of Class II land is in the 1st and 6th Districts (Figure 4).

The various uses to which the land was put are: (1) improved land; (2) land in buildings, roads, lanes, etc.; (3) woods not pastured; (4) woods



Sources: Table IV.



1st District



6th District



6th District



11th District

Figure 4. Distribution of Class II Land, by Civil Districts, Overton County

pastured; (5) open pasture, non-crop land; (6) other land, wild or marsh hay.

Fifty-seven per cent of Class II land is in improved land (Figure 5A). The next greatest use of the land is in woods not pastured, 25.7 per cent being used in this manner. Open pasture on non-crop land occupies 8.8 per cent, while 5.9 per cent is occupied by woods pastured. This leaves 1.9 per cent of the land used for roads, buildings, lanes, etc., and 0.2 per cent in wild or marsh hay (Figure 5B).

There is quite a significant difference in the way Class II land is used in the various districts. Sixty-six and six tenths per cent of this land is improved in the 1st district. The next greatest use of land in this district is in woods not pastured, which is 14.6 per cent. This is followed by 11.1 per cent in open pasture non-crop land. There is no significant difference in the use of Class II land for the county as a whole and in the 1st District, in regard to land occupied by woods, buildings, etc., and in woods pastured (Figure 5).

The picture is different in both the 5th and 6th Districts. Thirty eight and seven tenths per cent of such land is improved in the 5th District, while 46.2 per cent is used in woods not pastured. No other significant differences occur in other land uses in the 5th District.

Forty eight and six tenths per cent of all land in the 6th is improved. This varies considerably from the county average, and the other districts. Also there is 37.9 per cent of the land used in woods not pastured. The 11th District compares more closely with the 1st District in

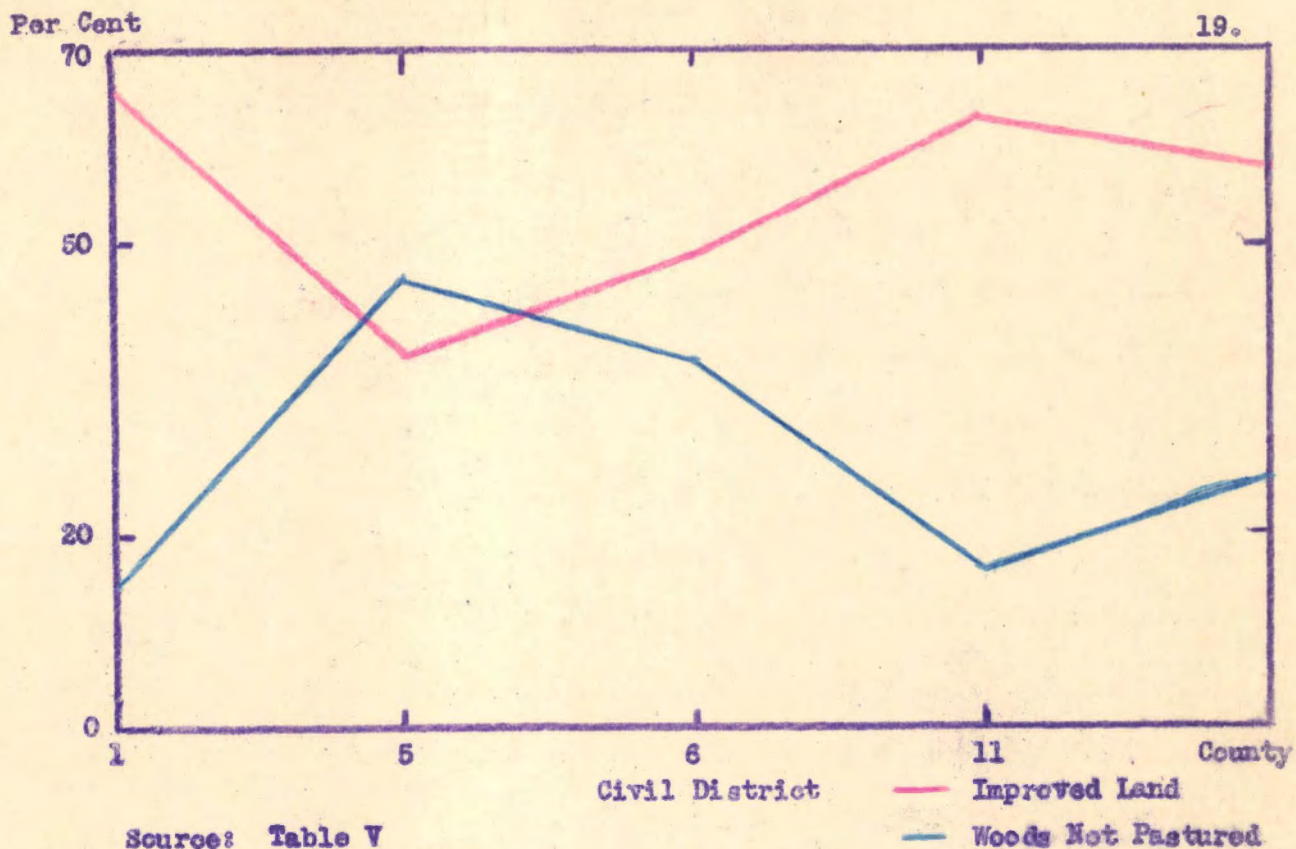


Figure 5A. Distribution of Improved Land and Woods Not Pastured, Class II Land, by Civil Districts, Overton County

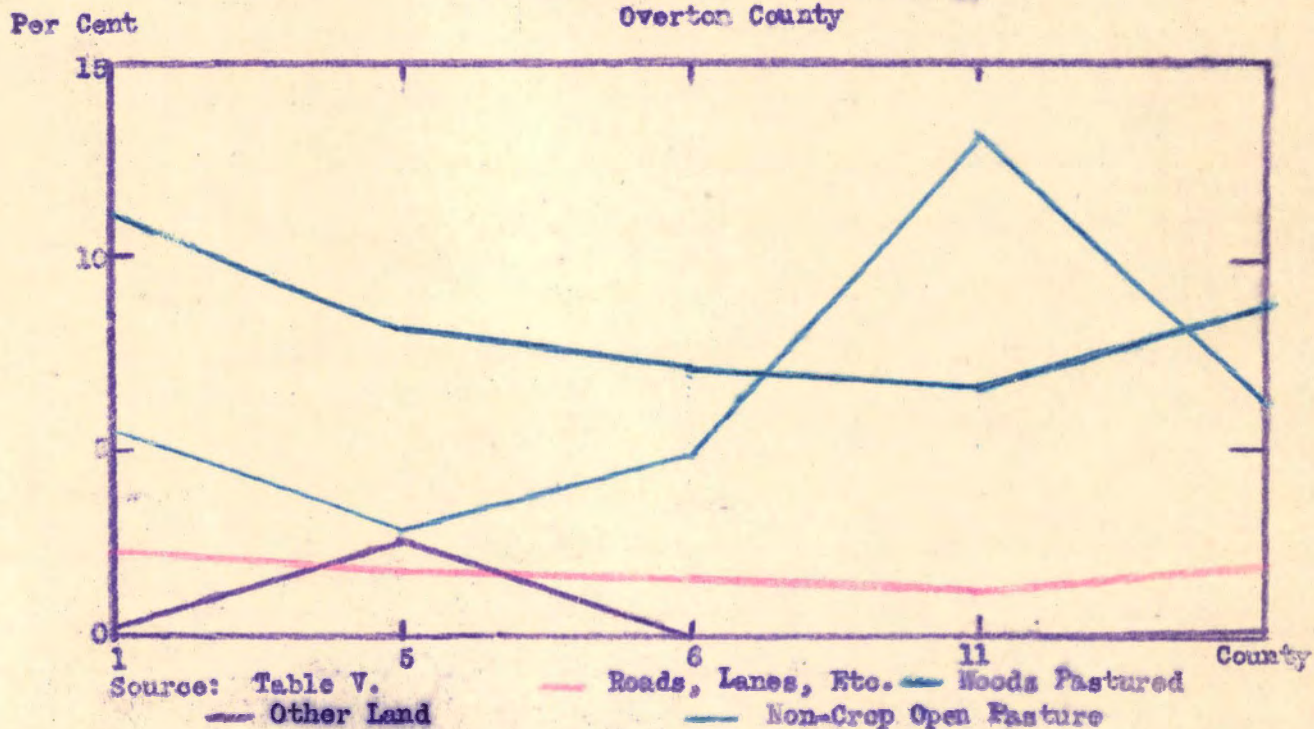


Figure 5B. Distribution of Major Land Uses, Class II Land, by Civil Districts, Overton County

the distribution of major land uses. Sixty-three and one-tenth per cent of the land is improved, while 16.0 per cent is in woods not pastured (Table V). The reverse is true, however, in the use of woods pastured and open pasture on non-crop land. Thirteen and one-tenth per cent of all land in the 11th District is devoted to woods pastured, while 6.6 per cent is in open pasture on non-crop land.

The differences in land use in the various districts is quite noticeable.

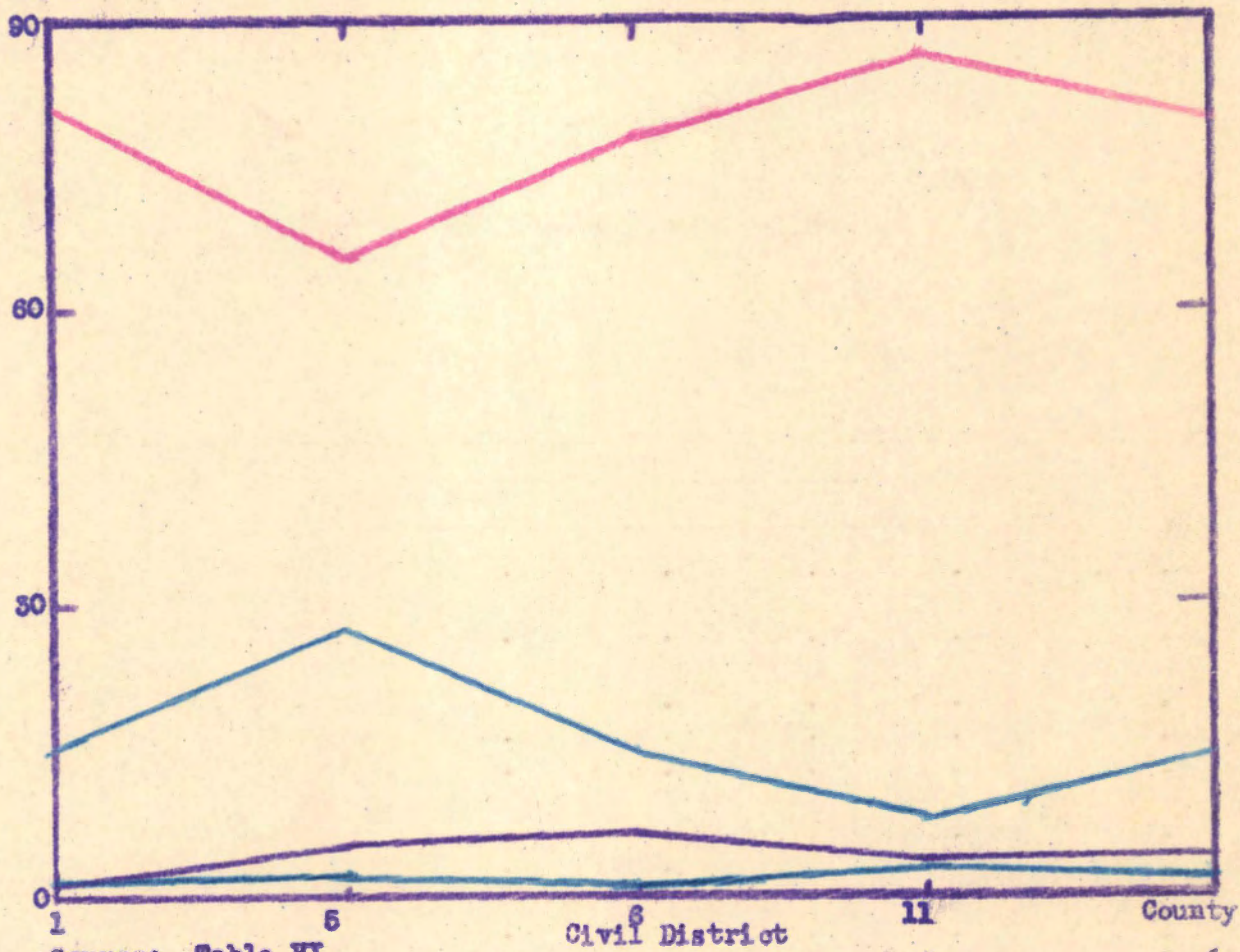
TABLE V. PER CENT OF TOTAL LAND IN MAJOR LAND USES, CLASS II LAND, BY CIVIL DISTRICTS, OVERTON COUNTY

Land Uses	Civil District				County Average
	1	5	6	11	
Total all land (acres)	5914.5	1059.0	4999.0	1816.0	13,788.5
Pct. improved land	66.6	38.7	48.6	63.1	57.5
" roads, buildings, lanes, etc.	2.2	1.8	1.7	1.2	1.9
" woods not pastured	14.6	46.2	37.9	16.0	25.7
" Woods pastured	5.3	2.8	4.8	13.1	5.9
" Open pasture non-crop land	11.1	8.0	7.0	6.6	8.8
" Other land	0.2	2.5	0	0	0.2
Total	100.0	100.0	100.0	100.0	100.0

This difference can be attributed to several factors. One is the availability of transportation facilities. Farms in the 1st District are more available to markets and consequently have a larger percentage of land improved. Another reason is the classing of the land itself. All land was classed according to the location of the house. In the 5th and 6th Districts

Per Cent

21.



Source: Table VI

Land Planted in Crops

Idle Land

Pasture

Orchard

Figure 6. Principal Uses of Improved Land, Class II Land, by Civil Districts, Overton County

there were several narrow coves that were Class II land on the bottoms. Farms extend across these coves. Consequently some of the poorer land would be classed as Class II land.

Another reason for this variation could be size of the farms. There is a great deal of difference in the size of farm in the different districts (Table VI).

TABLE VI. NUMBER OF ACRES PER FARM IN MAJOR USES, CLASS II LAND, BY CIVIL DISTRICTS, OVERTON COUNTY

Land Uses	Civil Districts				County Average
	1	5	6	11	
Number of farms	69	7	34	24	134
Total all land (acres)	85.7	151.3	147.0	75.6	102.9
Improved land (acres)	57.1	58.6	71.5	47.8	59.1
Buildings, roads, lanes, etc. (acres)	1.9	2.7	2.5	0.9	1.9
Woods not pastured (acres)	12.5	69.9	55.7	12.0	26.5
Woods pastured (acres)	4.6	4.3	7.0	9.9	6.1
Open pasture non-crop land (acres)	9.5	12.1	10.3	5.0	9.0
Other land (acres)	0.1	3.7	0	0	0.3

The average size of farms for all Class II land in the county is 102.9 acres. The average in the 1st and 11th Districts is 17.2 acres and 27.3 acres below the county average. On the other hand farms in the 5th and 6th Districts are 48.2 acres and 44.1 acres larger, respectively. This indicates that the smaller farms have a greater percentage of land improved than do the larger farms. On the other hand, the larger farms

have more land in woods not pastured. The next most important use of land is as open pasture non-crop land, except in the 11th District where more of the land is devoted to woods pastured.

TABLE VII. PRINCIPAL USES OF IMPROVED LAND, CLASS II LAND, BY CIVIL DISTRICTS, OVERTON COUNTY

Principal Land Uses	Civil District				County Average
	1	5	6	11	
Improved land (acres)	3939.0	410.0	2430.5	1146.0	7925.5
Per cent orchard	2.1	2.3	1.2	2.4	1.9
" " Idle	15.5	27.4	14.9	7.5	14.5
" " Pasture	1.9	5.1	6.1	3.5	3.9
" " Land planted in crops	80.5	65.2	77.8	86.6	79.7
Total	100.0	100.0	100.0	100.0	100.0

Next to land planted in crops the largest percentage of improved land is idle (Figure 6). The only difference of any importance between districts is in the 5th District, where idle land is greater and land planted in crops is less than in the other districts. This is probably due to the small sample in the 5th District. For the county as a whole, 80 per cent of the improved land is planted in crops, 14.5 per cent is idle, and 1.9 per cent and 3.6 per cent respectively in orchard and pasture (Figure 6). Pasture was broken down by kind of crop, and a tabulation for this is shown later. Differences between districts were not important.

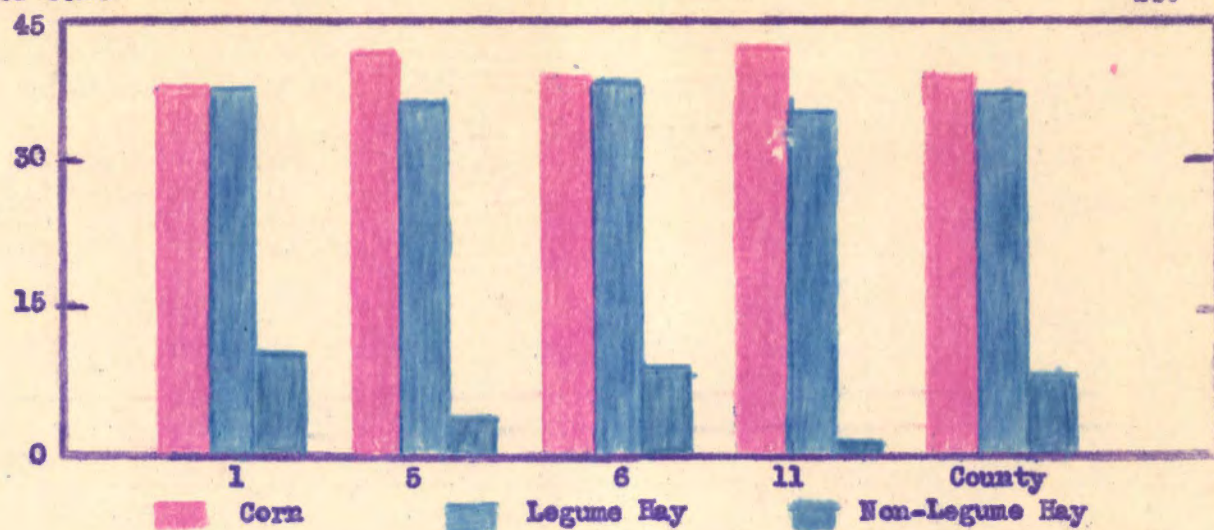
The most important crops are corn, hay and small grain. Corn occupies 39.1 per cent of the land in crops (Figure 7). Legume hay is next in

Figure 7. Distribution of Land Planted in Crops, Class II Land, by Civil Districts, Overton County

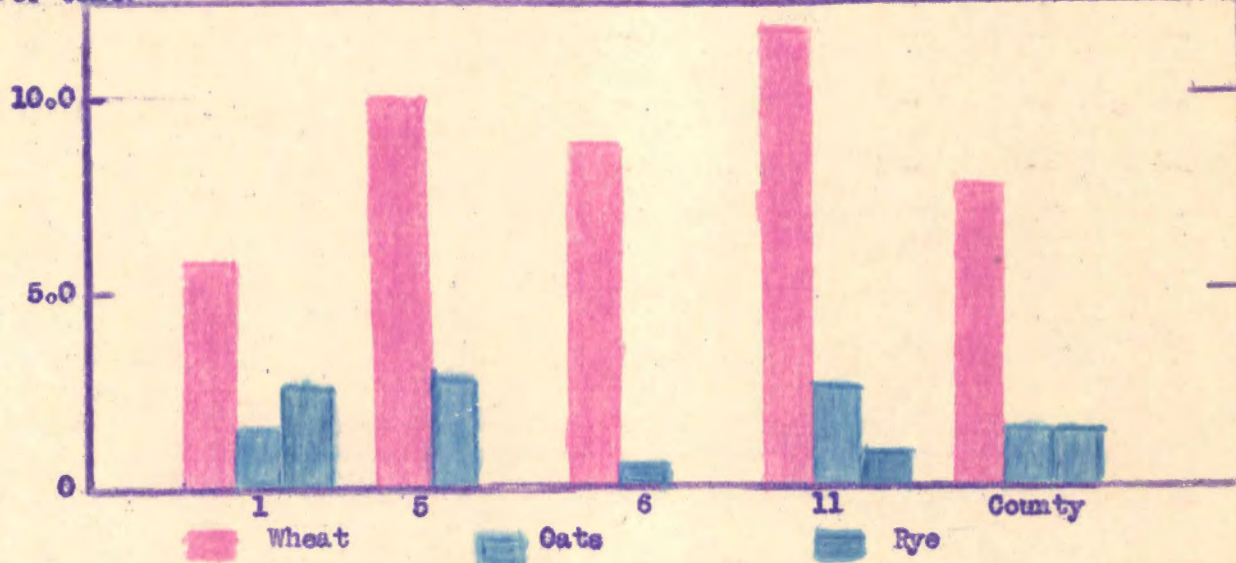
* Scale applies to all three parts of this figure.

Per Cent

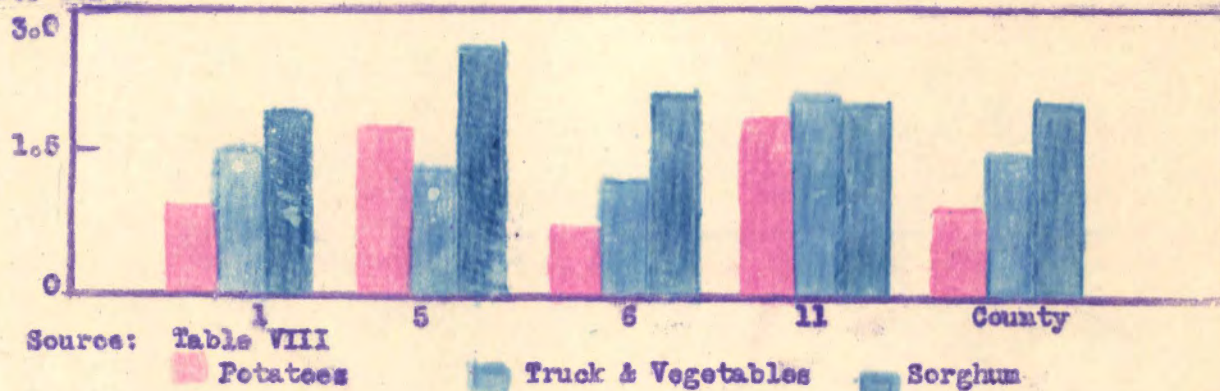
24.



Per Cent



Per Cent



Source: Table VIII

Potatoes

Truck & Vegetables

Sorghum

Figure 7. Distribution of Land Planted in Crops, Class II Land, by Civil Districts, Overton County

* Scale changes on all three parts of this figure.

TABLE VIII. DISTRIBUTION OF LAND PLANTED IN CROPS, CLASS II
LAND, BY CIVIL DISTRICTS, OVERTON COUNTY

Per Cent	Civil District				County
	1	5	6	11	
Land actually planted in crops (acres)	3170.9	267.5	1889.4	992.6	6320.4
Corn	38.0	41.5	39.1	42.1	39.1
Irish and sweet potatoes	0.9	1.7	0.7	1.8	0.9
Truck vegetable crops	1.5	1.3	1.2	2.1	1.5
Sorghum	1.9	2.6	2.1	2.0	2.0
Wheat	5.9	10.0	8.7	11.9	7.9
Oats	1.5	2.8	0.4	2.6	1.4
Rye	2.5	0	0	0.8	1.4
Hay: Legume	37.8	36.5	38.7	35.1	37.7
Non-legume	10.0	3.6	9.1	1.6	8.1
Total	100.0	100.0	100.0	100.0	100.0

importance. This is followed by non-legume hay, and then wheat (Figure 7). No significant differences occur between districts in this respect. Wheat is the most important small grain crop on Class II land (Figure 7). It occupies 7.9 per cent of land planted in crops for the county as a whole. There is no significant differences in oats and rye except in the 1st District where more rye was planted.

Of the minor soil-depleting crops sorghum ranks first (Figure 7). It is followed by truck and vegetable crops. Irish and sweet potatoes occupy less than any of the other soil-depleting crops.

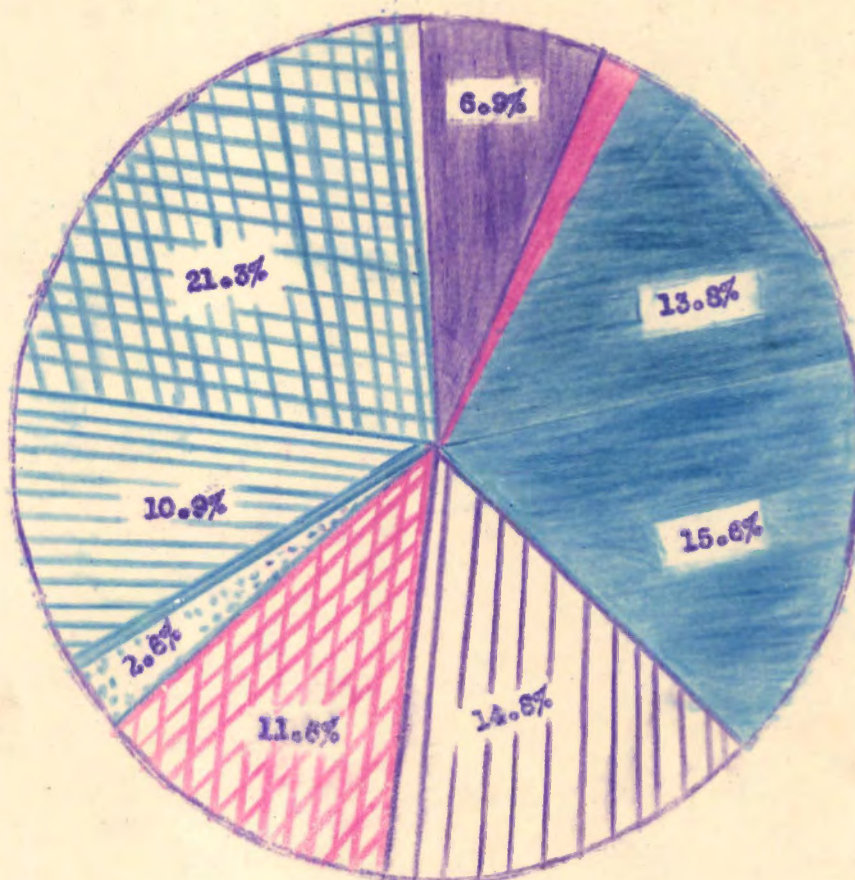
Class III Land. Land of this type is well distributed in the county. There is one large area in the central part, extending from the Putnam

County line northward to Livingston. Another large area lies along the northeastern boundary of the county. A few isolated areas of Class III land are found in the western portion. All of this land class is on the Highland Rim. A narrow strip is found along the course of one of the main tributaries of the Obey River in the eastern part of the county.

There were 675 farms on Class III land cooperating with the Agricultural Conservation Program. While some Class III land is found in all districts of the county, the number of cooperating farms is small in districts 2, 3, 4, and 12 (Table IX). The largest number of such farms is in the 11th District, followed by the 6th, 7th, 5th, 1st, 10th, 8th, and 9th, in the order named (Figure 8).

The most important use of Class III land is as improved land, which occupies 47.7 per cent of all land of this class (Figure 9). Some differences occur in the various districts as to the percentage of land that is improved. The 1st District ranks highest in this respect with 68.3 per cent of all land improved. The 4th District has the least, 28.4 per cent, in improved land. This is probably due to the small sample in that district. The proportion of all land that is improved is lowest in the 8th, 9th, and 10th Districts, the percentages being 32.6 per cent, 41.8 per cent, and 31.9 per cent respectively. Much of the area of these districts is located on the Cumberland Plateau, which largely accounts for the smaller percentage of improved land. With the exception of the 4th and 12th Districts, the 8th, 9th, and 10th are highest in woods not pastured and in woods pastured. The samples in the 4th and 12th Districts are

Only one per cent of Class III land was in districts 2, 3, and 12.

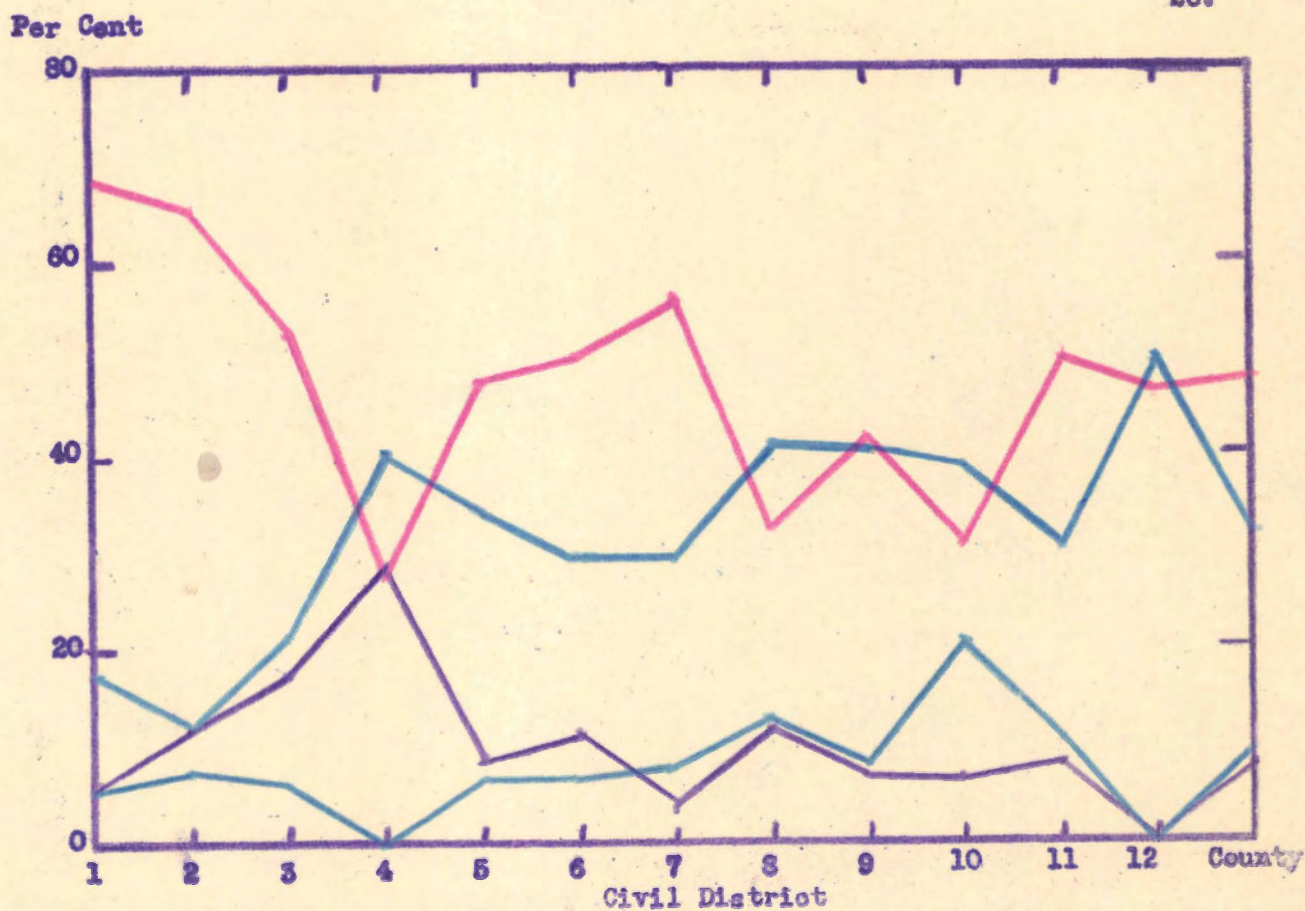


Source: Table VIII

- | | |
|--------------|-------------------------------|
| 1st District | 8th District |
| 2nd District | 9th District |
| 5th District | 10th District |
| 6th District | 11th District |
| 7th District | 3rd, 4th, and 12th Districts* |

Figure 8. Distribution of Class III Land, by Civil Districts, Overton County

*Only one per cent of Class III land was in Districts 3, 4, and 12.



Source: Table X.

— Improved Land

— Woods Pastured

— Woods Not Pastured

— Non-Crop Open Pasture

Figure 9. Distribution of Major Land Uses, Class III Land, By Civil Districts, Overton County

TABLE IX. NUMBER OF FARMS, AREA, AND DISTRIBUTION, BY MAJOR LAND USES, CLASS III LAND, BY CIVIL DISTRICTS, OVERTON COUNTY

Civil Dist.	Number of Farms	Total All Land (Acres)	Improved Land (Acres)	Bldgs., Roads, Lanes (Acres)	Woods Not Pastured (Acres)	Woods Pastured (Acres)	Open Pasture Non-Crop Land (Acres)	Other Land (Acres)
1	65	4,762.0	3,253.5	101.4	838.0	269.6	290.5	9.0
2	6	1,015.0	664.0	30.0	126.0	72.0	123.0	
3	6	417.0	218.5	9.0	90.5	26.0	73.0	
4	3	282.0	80.0	6.0	114.5	-	81.5	
5	78	9,539.7	4,544.0	206.5	3,257.2	645.5	840.5	46.0
6	127	10,788.9	5,423.5	202.4	3,230.9	725.5	1,164.6	42.0
7	119	10,234.0	5,729.5	209.5	3,063.0	780.2	451.8	
8	48	8,001.0	2,603.8	137.7	3,299.5	1,038.0	922.0	
9	20	1,787.7	747.2	32.0	727.0	151.0	130.5	
10	51	7,578.5	2,416.0	104.0	2,947.0	1,590.0	513.0	8.5
11	151	14,726.2	7,284.9	235.0	4,494.3	1,506.0	1,206.0	
12	1	30.0	14.0	1.0	15.0	-		
Total	675	69,162.0	32,978.9	1,274.5	22,202.9	6,803.8	5,796.4	105.5

TABLE X. DISTRIBUTION OF MAJOR LAND USES, CLASS III LAND, BY CIVIL DISTRICTS, OVERTON COUNTY

Civil Dist.	Total All Land (Acres)	Per Cent						Total
		Improved Land	Bldgs., Roads, Lanes	Woods Not Past.	Woods Pastured	Open Pasture Non-Crop Land	Other Land	
1	4,762.0	68.3	2.1	17.6	5.7	6.1	0.2	100.0
2	1,015.0	65.4	3.0	12.4	7.1	12.1		100.0
3	417.0	52.4	2.2	21.7	6.2	17.5		100.0
4	282.0	28.4	2.1	40.6	-	28.9		100.0
5	9,539.7	47.6	2.2	34.1	6.8	8.8	0.5	100.0
6	10,788.9	50.3	1.9	29.9	6.7	10.8	0.4	100.0
7	10,234.0	56.0	2.0	29.9	7.7	4.4		100.0
8	8,001.0	32.6	1.7	41.2	13.0	11.5		100.0
9	1,787.7	41.8	1.8	40.7	8.4	7.3		100.0
10	7,578.5	31.9	1.4	38.9	21.0	6.7	0.1	100.0
11	14,726.2	49.5	1.6	30.5	10.2	8.2		100.0
12	30.0	46.7	3.3	50.0	-	-		100.0
Total	69,162.0	47.7	1.8	32.1	9.8	8.4	0.2	100.0

probably too small to warrant conclusions in regard to major land uses. The 5th, 6th, 7th, and 11th Districts more nearly resemble the county average in the use of Class III land.

The second important use of Class III land is in woods not pastured (Figure 9). Thirty-two and one-tenth per cent of all the Class III land is in this category. In this respect the eastern districts rank highest with the exception of the 4th and 12th.

Woods pastured occupies 9.8 per cent of all Class III land and is the third in importance in this land class. There is some variation between the districts in this respect. The districts containing considerable woods pastured also contain a large amount of Plateau land, with the exception of the 11th.

There are wide differences in the percentage of land utilized by non-crop open pasture in the several districts, this use of land being fourth in importance. Districts that are highest in this respect are the 4th, 3rd, and 2nd. However the samples from these districts are probably inadequate.

Land occupied by buildings, roads, lanes, etc., take up 1.8 per cent of Class III land. It is practically the same for all districts. Land from which wild or marsh hay is taken is not significant from a land use point of view, only 0.2 per cent of Class III land being used for this purpose.

The size of farms probably influences the use of land and causes variation among districts. There is a tendency for the larger farms to

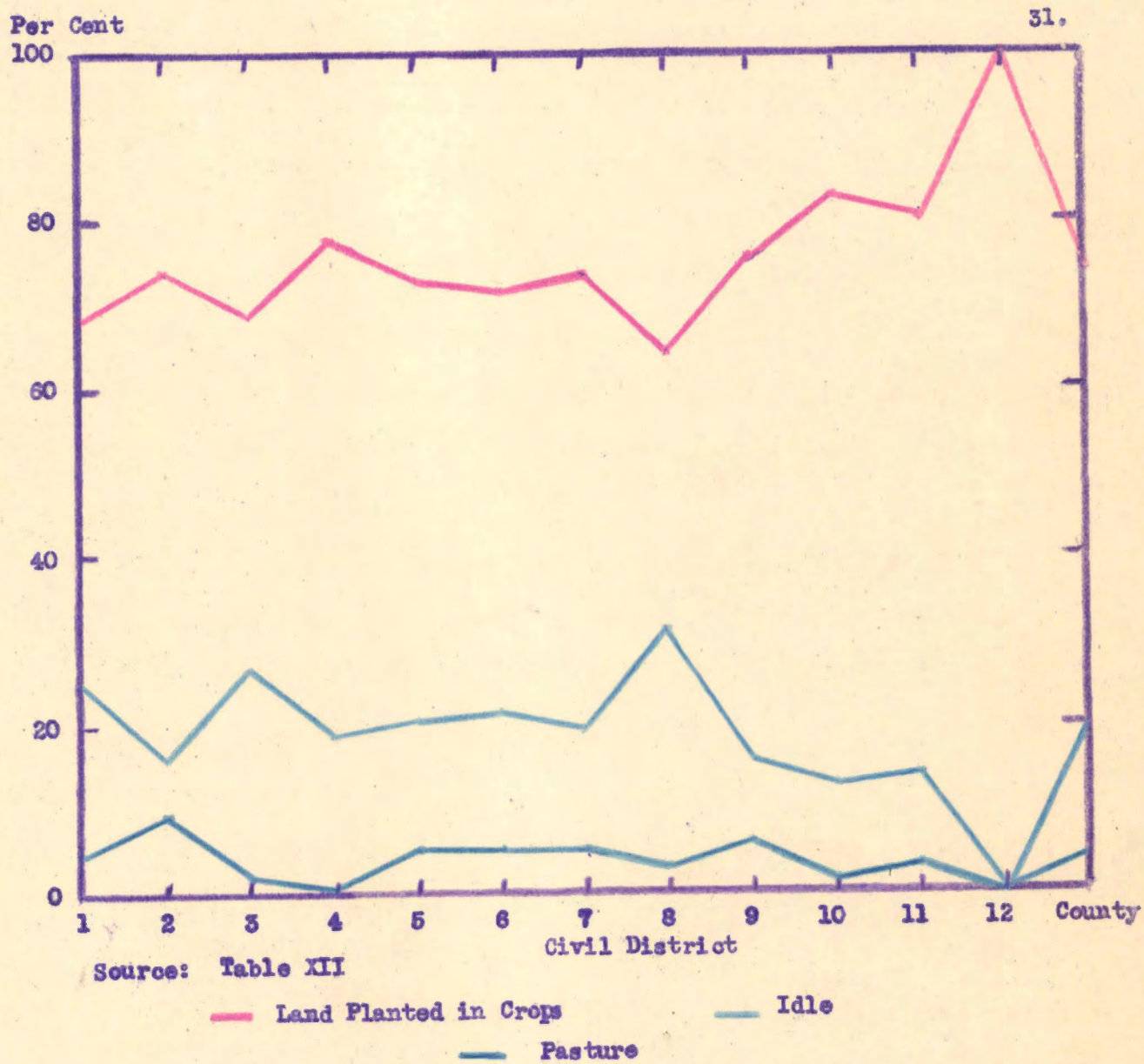


Figure 10. Principal Uses of Improved Land, Class III Land, by Civil Districts, Overton County

have a small percentage of their land improved (Table XI). Here again the small sample does not warrant definite conclusions for Districts 2, 3, 4, and 12.

TABLE XI. NUMBER FARMS, DISTRIBUTION OF TOTAL LAND, AND AVERAGE SIZE FARM WITH PER CENT IMPROVED LAND, CLASS III LAND, BY CIVIL DISTRICTS, OVERTON COUNTY

Civil District	Number Farms	Total All Land (Acres)	Average Size (Acres)	Per Cent Improved
1	65	4,762.0	73.3	68.3
2	6	1,015.0	169.1	65.4
3	6	417.0	69.5	52.4
4	3	282.0	94.0	28.4
5	78	9,539.7	122.3	47.6
6	127	10,788.9	84.9	50.3
7	119	10,234.0	86.0	56.0
8	48	8,001.0	166.7	32.6
9	20	1,787.7	89.4	41.8
10	51	7,578.5	148.6	31.9
11	151	14,726.2	97.5	49.6
12	1	30.0	30.0	46.7
County average	675	69,162.0	102.5	47.7

Availability to markets and transportation facilities probably have a tendency to increase the per cent of improved land in some districts. This would be true of the 1st, 5th, and 6th districts which are the districts ranking highest in improved land.

The principal use of improved land is land in crops (Figure 10). Considerable variation occurs among the several districts. The 8th District has the smallest percentage of improved land in crops, while the 10th ranks highest with 82.8 per cent (except in the 12th District, where the data are inadequate).

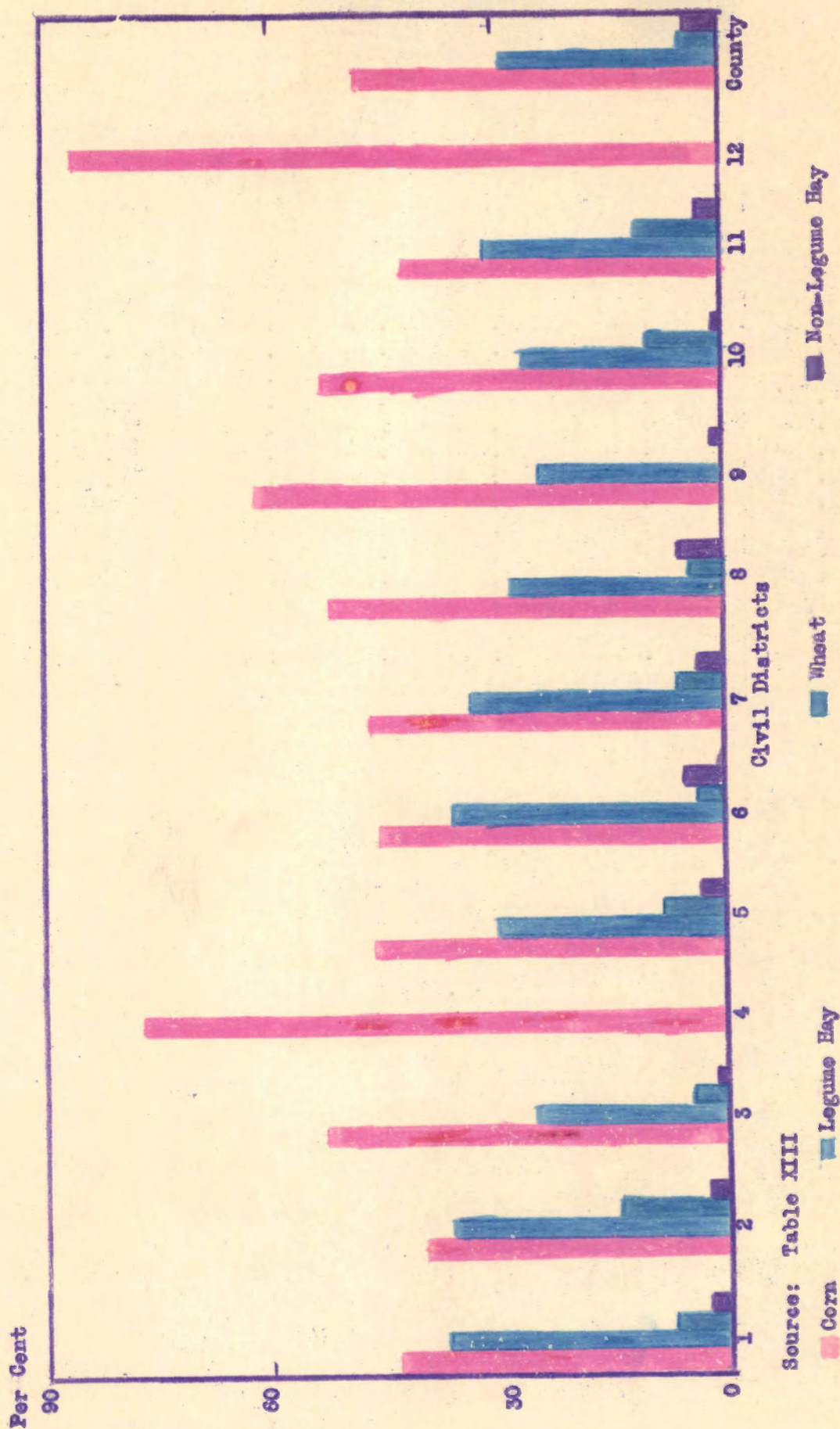
TABLE XII. PRINCIPAL USES OF IMPROVED LAND, CLASS III LAND,
BY CIVIL DISTRICTS, OVERTON COUNTY

Civil District	Improved Land	Per Cent				
		Orchard	Idle	Pasture	Land in Crops	Total
1	3,235.5	2.3	24.6	4.7	68.4	100.0
2	664.0	1.3	15.7	9.1	73.9	100.0
3	218.5	2.7	26.6	1.3	68.9	100.0
4	80.0	3.8	18.7	-	77.5	100.0
5	4,544.0	1.5	20.8	5.0	72.7	100.0
6	5,423.5	1.6	21.4	5.1	71.9	100.0
7	5,729.5	1.5	19.6	5.3	73.6	100.0
8	2,603.8	1.8	30.6	3.3	64.3	100.0
9	747.2	2.7	15.6	6.2	75.5	100.0
10	2,416.0	2.4	13.1	1.7	82.8	100.0
11	7,284.9	1.9	14.4	3.6	80.1	100.0
12	14.0	-	-	-	100.0	100.0
Total	32,978.9	1.8	19.7	4.4	74.1	100.0

The second largest use of improved land is as idle land. Districts that are lowest in improved land in crops are highest in improved land that is idle (Figure 10).

Pasture occupies only 4.4 per cent of improved land in Class III. There is no substantial difference in the various districts in this respect. Orchards occupy only 1.8 per cent of the improved land in Class III. This is practically the same for all districts. The variation among the districts in the uses of improved land can be partly explained by alternate uses. That is, a shift from land in crops to idle land or pasture.

Corn occupies more of the land planted in crops than any other crop, 48.2 per cent being planted to corn (Figure 11). The proportion of



Source: Table XIII

Figure 11. Important Uses of Land Planted in Crops, Class III Land, by Civil Districts, Overtown County

land in corn is fairly constant, except in districts for which the sample is inadequate. The 1st, 5th, 6th, 7th, and 11th Districts have about the same proportion of land in crops that is planted to corn, while the 8th, 9th, and 10th Districts are higher. Possibly this is due to a shift to legume hay. Districts 8, 9, and 10 have a smaller percentage of land in legumes.

TABLE XIII. DISTRIBUTION OF LAND PLANTED IN CROPS, CLASS III
LAND, BY CIVIL DISTRICTS, OVERTON COUNTY

Civil Dist.	Land Planted in Crops (Acres)	Per Cent					
		Corn	Irish & Sweet Potatoes	Truck and Garden	Sorghum	Tobacco	Cotton
1	2,225.1	43.8	2.9	2.3	2.5	0.1	-
2	491.0	39.9	1.5	1.9	4.9	-	-
3	150.6	52.9	2.9	3.2	7.3	-	-
4	62.0	77.4	3.2	8.1	4.8	-	-
5	3,304.2	46.8	1.7	2.0	3.6	0.3	-
6	3,898.7	46.3	1.7	2.4	3.2	-	0.1
7	4,211.8	47.1	1.6	1.8	2.1	-	-
8	1,673.4	52.6	2.0	2.2	1.1	0.7	-
9	563.7	62.6	3.3	3.0	3.2	-	-
10	1,999.1	53.0	2.7	2.7	1.3	-	-
11	5,837.9	43.4	1.9	2.4	1.9	-	-
12	14.0	85.7	7.1	3.6	3.6	-	-
Total	24,431.5	48.2	2.3	2.9	3.2	0.1	-

Civil Dist.	Per Cent						
	Wheat	Oats	Rye	Barley	Hay		Misc.
					Legume	Non-Legume	
1	6.8	2.2	1.1	0.4	36.3	1.6	-
2	13.4	0.4	-	-	36.0	2.0	-
3	4.6	3.3	-	-	24.8	1.0	-
4	-	6.5	-	-	-	-	-
5	8.1	2.4	1.5	-	29.7	3.8	0.1
6	2.8	1.9	0.2	-	36.2	4.9	0.3
7	6.3	2.0	2.4	0.2	33.0	3.5	-
8	4.4	2.3	-	-	28.5	5.7	-
9	-	2.5	-	-	24.2	1.2	-
10	9.3	2.4	0.7	-	26.9	1.0	-
11	11.3	2.8	1.4	0.2	31.4	3.3	-
12	-	-	-	-	-	-	-
Total	5.3	2.7	1.2	0.1	29.2	4.6	0.2

The second most important use of land planted in crops is legume hay, mostly lespedeza. For the county as a whole 29.2 per cent of all Class III land in crops is devoted to legumes for hay. Differences among the districts in this respect are influenced to some extent by livestock, which will be discussed later.

The next most important use of land planted to crops is land devoted to wheat. Practically all districts have a greater percentage of the land in wheat than the 8th, 9th, and 10th. The topography in these three districts is rougher than in the other districts, which may handicap the harvesting of wheat to some extent.

Land planted to non-legume hay is fourth in importance in uses of land by crops. This use is less than for each of the above crops in every district except the 6th and 8th, where it exceeds land planted to wheat (Figure 11). This is probably due to the presence of livestock in these districts. For the county as a whole 5.3 per cent and 4.6 per cent of all land in crops is devoted to wheat and non-legume hay, respectively.

Other uses of land in crops are 3.2 per cent in sorghum, 2.9 per cent in truck and vegetables, 2.7 per cent in oats, 2.3 per cent in Irish and sweet potatoes, 1.2 per cent in rye, 0.2 per cent miscellaneous, and 0.1 per cent each in tobacco and barley. There was no great variation among the districts in the proportion of land planted to the latter crops.

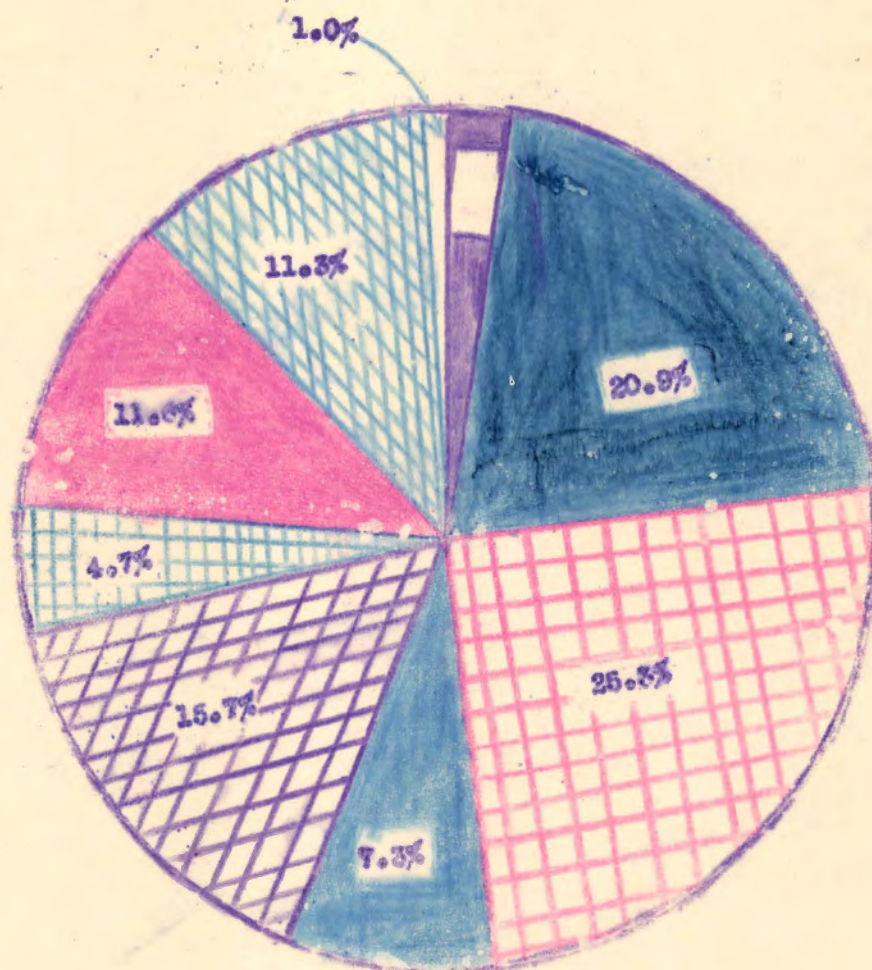
Class IV Land ⁽²⁾ is mostly located in the West Central and North Central portions of the county. There is a small narrow area in the south central portion, extending in a northerly and southerly direction. All of Land Class IV is located on the Highland Rim, the largest area being in the 2nd and 3rd districts, where 46.2 per cent of it is located (Figure 12). The 6th district has 15.7 per cent of this class and is third largest among the districts. Some of Class IV land is found in all districts except 9 and 10.

Six hundred and fifty-five of the farms cooperating with the Conservation Program were located on Land Class IV. These farms are fairly well distributed among the districts, except the 1st, 4th, 8th, 9th and 10th (Table XIV). The largest number, 180, are in the 3rd District, followed by 114 from the 2nd District. The numbers in the 4th and 8th Districts are too small for an adequate sample, there being only 2 and 1 farms, respectively, in those districts. There is a fair number from each of the other districts mentioned, except the 1st.

The sample of 18 farms in the 1st District may not give an adequate background for conclusions.

The largest use of Class IV land is as improved land. This is followed by woods not pastured (Figure 13). Non-crop open pasture is the third most important use of Class IV land, 12.1 per cent of the land being used in this manner. Woods not pastured occupies only 7.2 per cent

(2) There is no Class IV land in Civil Districts 9 and 10.

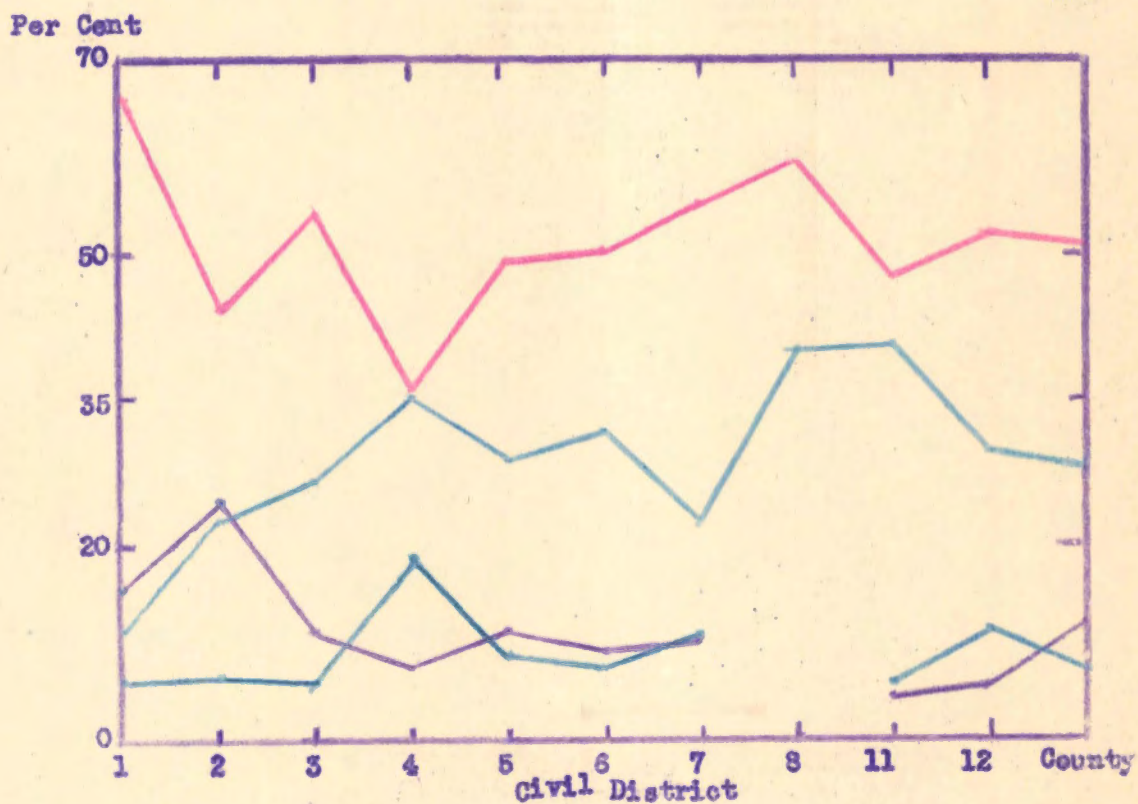


Source: Table XIV.

 1st District	 7th District
 2nd District	 11th District
 3rd District	 12th District
 5th District	 4th & 8th Districts
 6th District	

Figure 12. Distribution of Class IV Land, By Civil Districts, Overton County

* One per cent of Class IV land was in Districts 4 and 8.



Source: Table XV

Improved Land Woods Pastured
Woods Not Pastured Non-Crop Open Pasture

Figure 13. Distribution of Major Land Uses, Class IV Land, by Civil Districts, Overton County

of Class IV land. The per cent in roads, lands and buildings is 1.9.

TABLE XIV. NUMBER OF FARMS, AREA, AND DISTRIBUTION OF MAJOR LAND USES, CLASS IV LAND, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	No. of Farms	Total All Land (Acres)	Improved Land (Acres)	Buildings, Roads, Lanes (Acres)	Woods Not Pastured (Acres)	Woods Pastured (Acres)	Open Pasture Non-Crop Land (Acres)	Other Land (Acres)
1	18	1,381.0	910.5	25.0	158.0	77.0	210.5	
2	114	12,431.0	5,535.5	272.0	2,798.5	755.0	3,053.0	17.0
3	180	15,019.6	8,160.3	340.8	3,993.0	865.0	1,573.5	87.0
4	2	420.0	153.0	7.0	150.0	79.0	31.0	
5	45	4,343.2	2,157.9	72.7	1,254.8	386.0	461.8	10.0
6	99	9,324.5	4,670.3	161.2	2,951.6	685.5	847.9	8.0
7	35	2,808.5	1,545.0	53.5	633.0	296.0	281.0	
8	1	50.0	30.0		20.0			
11	68	6,857.0	3,268.0	74.0	2,801.0	378.0	324.0	12.0
12	93	6,723.5	3,486.7	121.2	1,999.1	736.0	374.5	6.0
Total	655	59,358.3	29,917.2	1,127.4	16,759.0	4,257.5	7,157.2	140.0

The proportion of Land Class IV that is improved ranges from 65.9 per cent in the 1st to 36.4 per cent in the 4th Districts. However the small sample may account for the low percentage in the 4th. The next lowest proportion is in the 2nd District, where 44.5 per cent is improved. This difference of 21.6 per cent between the 1st and 2nd Districts is probably due in part to difficulty in properly classifying the land. Of course, unintentional bias might cause some discrepancy. There is considerable non-crop open pasture in the 2nd District, and it is possible that this type of use may have been reported as improved land in the 1st District. This variation could also be caused to some extent by a misunderstanding

TABLE XV. DISTRIBUTION OF MAJOR LAND USES, CLASS IV LAND,
BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Total All Land (Acres)	Per Cent						Total
		Im- proved Land	Build- ings, Roads, Lanes	Woods Not Pas- tured	Woods Pas- tured	Open Pasture Non- Crop Land	Other Land	
1	1,381.0	65.9	1.8	11.4	5.6	15.3		100.0
2	12,431.0	44.5	2.2	22.5	6.1	24.6	0.1	100.0
3	15,019.6	54.3	2.3	26.6	5.8	10.5	0.5	100.0
4	420.0	36.4	1.7	35.7	18.8	7.4		100.0
5	4,343.2	49.7	1.7	28.9	8.9	10.6	0.2	100.0
6	9,324.5	50.1	1.7	31.7	7.4	9.0	0.1	100.0
7	2,808.5	55.1	1.9	22.5	10.5	10.0	-	100.0
8	50.0	60.0	-	40.0	-	-	-	100.0
11	6,857.0	47.7	1.1	40.8	5.5	4.7	0.2	100.0
12	6,723.5	51.9	1.8	29.7	10.9	5.6	0.1	100.0
County ave.	59,358.3	50.4	1.9	28.2	7.2	12.1	0.2	100.0

on the part of the committeemen who filled out the work sheets. Size of farm may also influence the proportion of land that is improved per farm, and in this manner cause variations in major land uses among the districts.

There is a difference of 29.4 per cent in the proportion of Class IV land used as woods not pastured, between the 1st and 11th Districts. The variation between districts is probably due to an enumeration of some acres in woods not pastured to woods pastured. Twenty-eight and two tenths per cent of Class IV land is in woods not pastured. Most of the districts along the western and northern border of the county have less land in woods not pastured than the districts in the central and southeastern portion (Table XV).

Non-crop open pasture is most important in the 2nd District, occupy-

ing 24.6 per cent of Class IV land. This is more than in woods not pastured, and is undoubtedly caused by acres in woods pastured being reported as non-crop open pasture. The 1st District ranks second in this respect, having 15.3 per cent non-crop open pasture, while the 11th is lowest with 4.7 per cent. The average for the county is 12.1 per cent.

Woods pastured are fourth in importance in use of Class IV land. Leaving out the 4th District, which has not an adequate sample, the variation among the districts is from 5.5 per cent in the 11th to 10.9 per cent in the 12th Districts, or a difference of 5.4 per cent.

The proportion of land used by buildings, roads, lanes, etc., is small, and there is no significant difference among the districts. An average of one and nine-tenth per cent is used in this manner. Land occupied by wild or marsh hay is reported in Districts 2, 3, 5, 6, 11, and 12. The percentage of land so used is the least important of all uses. It occupies 0.2 per cent of all Class IV land for the county as a whole.

The principal manner in which improved land is used is in planting to crops. For the county as a whole, 73.2 per cent is used in this manner (Figure 14). The 2nd District has 85.0 per cent of Class IV improved land used for crops. This is the largest proportion found in any district. The least amount, 47.0 per cent, is in the 4th District. Since the sample is small in the 4th, the data may not be dependable. The next lowest, 64.7 per cent, is in the 12th District. Variations among the

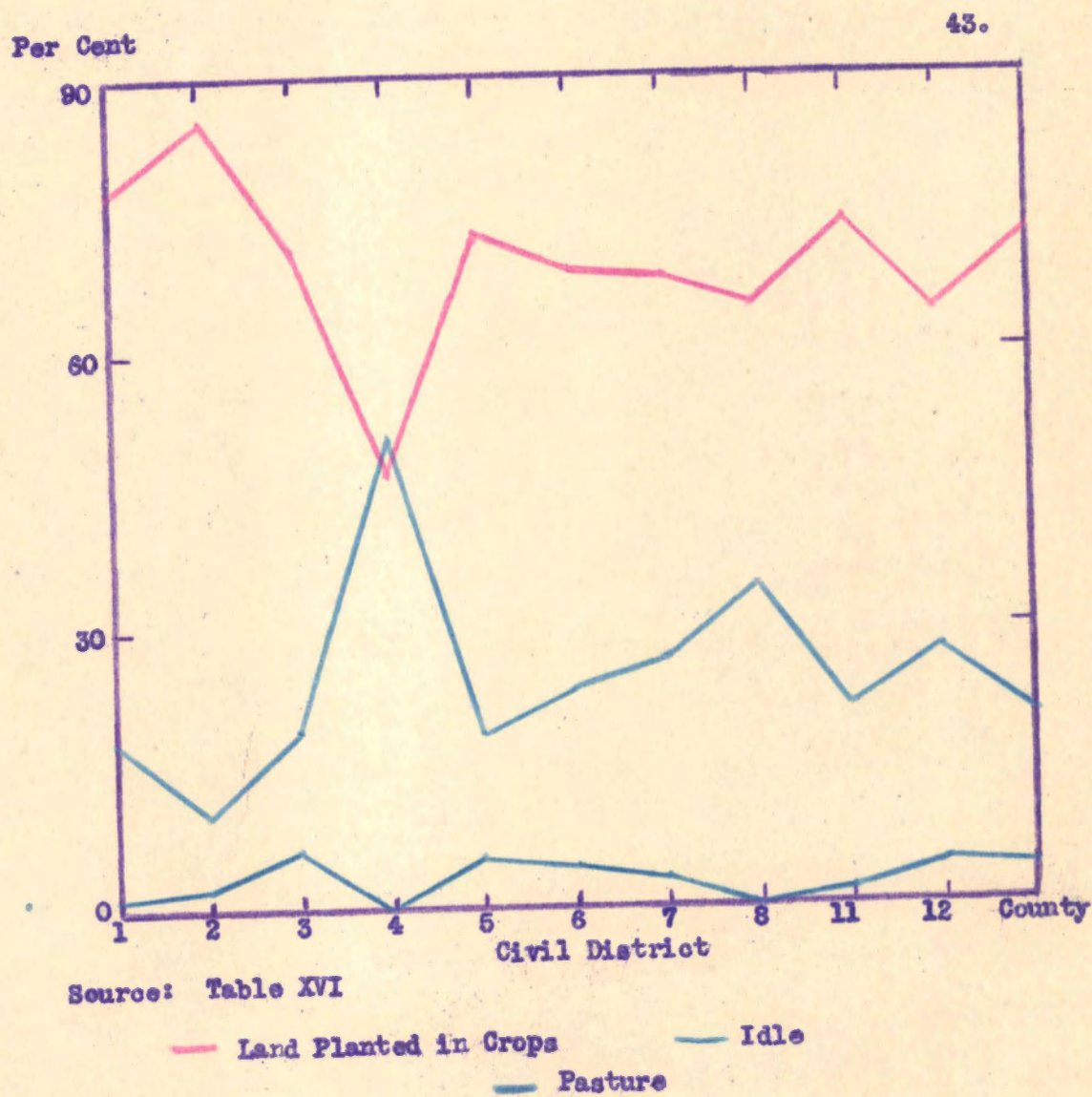


Figure 14. Principal Uses of Improved Land, Class IV Land, By Civil Districts, Overton County

districts in the proportion of improved land planted to crops may be caused by several factors. One is the tendency to "rest" the land. That is, a field is cultivated for one or more years, and then left idle one or more years. The amount of livestock also influences to some extent the way in which improved land is used.

TABLE XVI. PRINCIPAL USES OF IMPROVED LAND, CLASS IV LAND,
BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Improved Land	Per Cent				
		Orchard	Idle	Pasture	Land in Crops	Total
1	910.5	2.8	18.4	1.4	77.4	100.0
2	5,535.5	2.0	10.4	2.3	85.3	100.0
3	8,160.3	2.3	19.6	6.8	71.3	100.0
4	153.0	2.2	50.8	0	47.0	100.0
5	2,157.9	1.8	19.0	5.7	73.5	100.0
6	4,670.3	2.0	23.8	4.8	69.4	100.0
7	1,545.0	1.6	27.3	3.0	68.1	100.0
8	30.0	0	35.0	0	65.0	100.0
11	3,268.0	2.0	21.7	1.9	74.4	100.0
12	3,486.7	2.5	28.0	4.8	64.7	100.0
County ave.	59,358.3	2.2	20.2	4.4	73.2	100.0

Topography influences use to some extent. That is, the steeper land will have a smaller percentage planted in crops than will the more level land.

Idle land is the second largest use of improved land. Fields in this category occupy 20.2 per cent of improved Class IV land. The variation between districts is rather large. Much of this variation is probably due to a shift from land planted to crops to idle land in some areas.

All districts that have a larger proportion of land in crops have a smaller proportion that is idle.

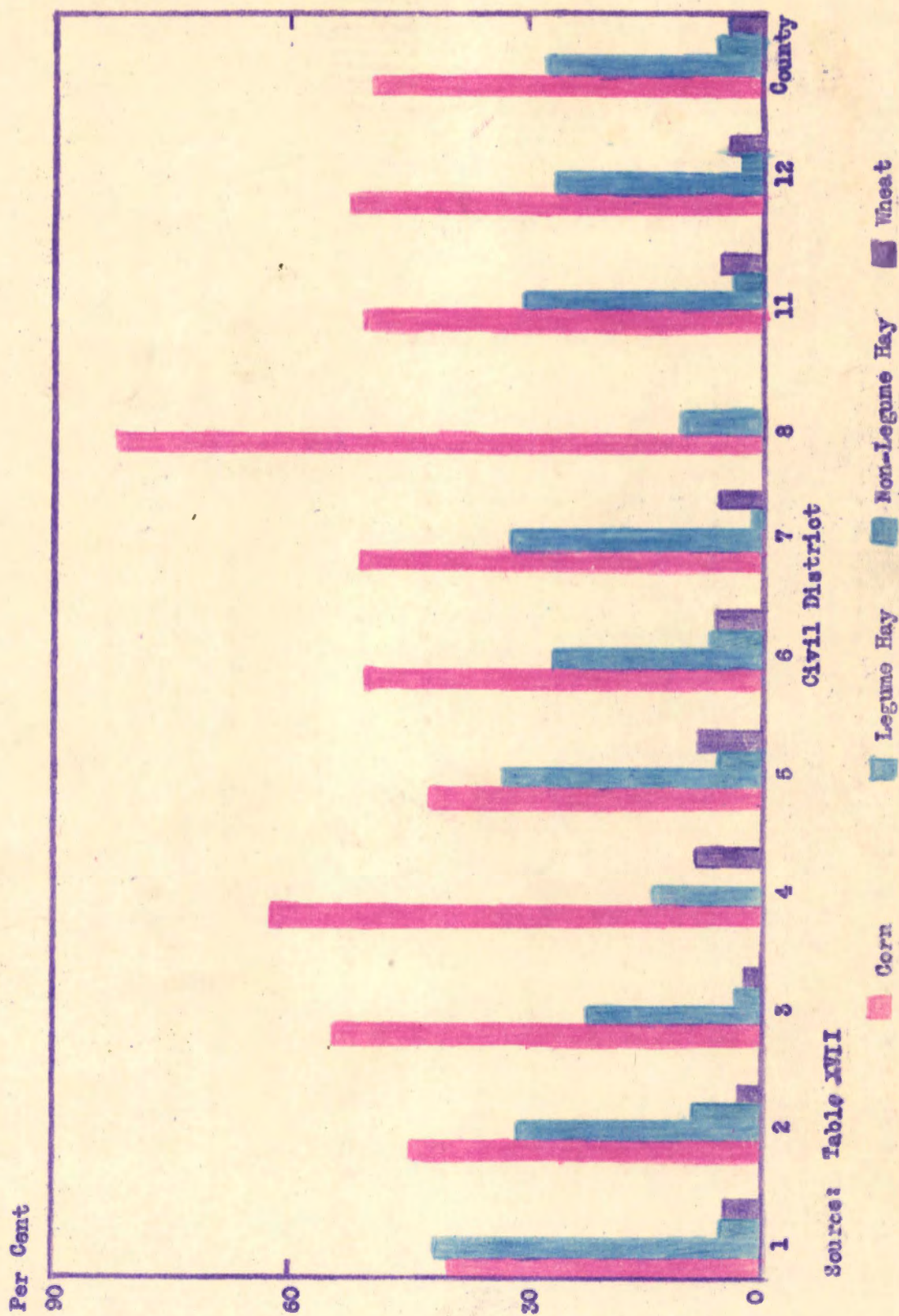
Pasture is the third principal use of improved Class IV land. However it occupies only 4.4 per cent of such land. The variation among

TABLE XVII. DISTRIBUTION OF LAND PLANTED IN CROPS, CLASS IV
LAND BY CIVIL DISTRICTS, OVERTON COUNTY

Civil Distr.	Land Planted in Crops (Acres)	Per Cent			
		Corn	Irish and Sweet Po- tatoes	Truck and Vegetables	Sorghum
1	704.3	39.7	1.6	2.5	2.7
2	4,724.4	44.8	2.4	4.7	3.9
3	5,819.2	54.6	2.8	3.7	5.8
4	72.0	62.5	0	2.1	3.5
5	1,585.4	43.3	2.0	1.7	3.0
6	3,239.4	50.1	1.4	2.3	3.1
7	1,048.4	50.9	1.8	2.2	2.8
8	19.5	82.2	2.3	1.6	0
11	2,432.5	50.9	1.6	2.7	2.8
12	2,258.9	52.5	2.8	2.9	2.5
County average	21,904.0	49.8	2.2	3.3	3.8

continued

Civil Distr.	Tobacco	Wheat	Oats	Rye	Legume Hay	Non- Legume Hay	Miscel- laneous	Total
1	0	4.8	0.6	1.4	41.7	5.0	0	100.0
2	0.1	2.8	1.0	0.7	30.9	8.7	0	100.0
3	0	2.4	2.6	1.9	22.4	3.1	0.7	100.0
4	1.4	8.3	8.3	0	13.9	0	0	100.0
5	0.5	8.4	2.0	0.5	32.9	5.7	0	100.0
6	0.3	5.9	2.1	1.6	26.5	6.5	0.2	100.0
7	0.2	5.6	3.3	0	32.0	1.2	0	100.0
8	3.6	0	0	0	10.3	0	0	100.0
11	0	5.1	3.0	1.1	29.2	3.6	0	100.0
12	0	4.1	4.1	1.8	26.3	2.6	0.4	100.0
County average	0.1	4.2	2.3	1.3	27.3	5.7	0	100.0



Source: Table XVII

Figure 15. Distribution of Land Planted in Crops, Class IV Land, by Civil Districts, Overton County

the districts is not great, probably being influenced to some extent by the number of livestock in the various districts.

There is not enough variation in the proportion of orchard land, among the districts, to be significant. This is due to the fact that there are few commercial orchards, and also because most farms report a small orchard for home use.

Corn is the most important crop on Class IV land. It occupies 49.8 per cent of all land planted to crops (Figure 15). The variation among districts is quite large. However in some cases the sample is probably inadequate, especially in the 4th and 8th Districts. There is not much variation in the 3rd, 6th, 7th, 11th, and 12th Districts (Figure 15), while the percentage is about the same in the 1st, 2nd and 5th Districts.

In the 1st District, however, legume hay occupies more land than corn. This may be due to the manner in which hay was reported, various committeemen who filled out sheets, as there was some difficulty in determining whether the crop was to be used for hay or pasture.

In most instances where the percentage of corn land is high the percentage of land in legume hay is correspondingly low. This variation may be due in part to differences in amount of livestock by districts. Legume hay is second to corn in importance on Class IV land. Twenty-seven and three per cent of the land in crops is occupied by legume hay.

Non-legume hay is third in importance for the county as a whole.

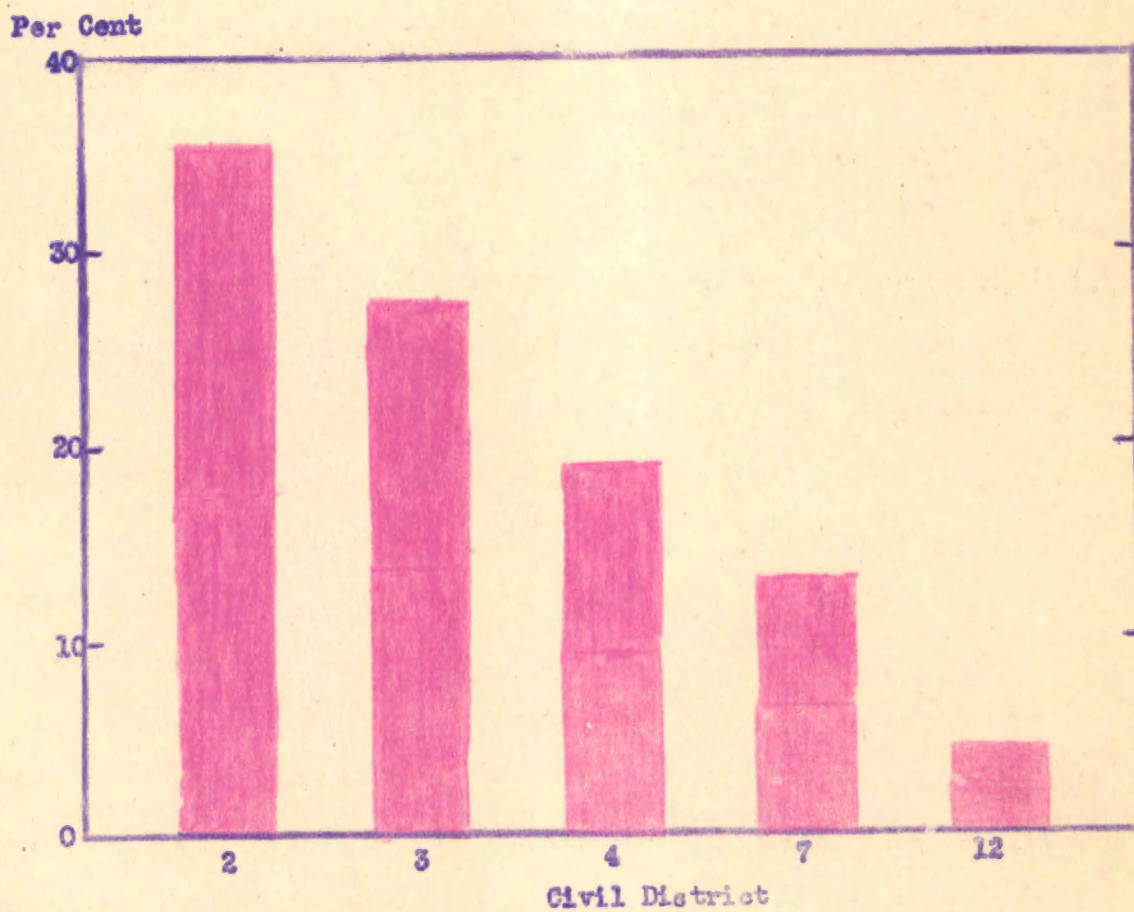
However it is exceeded by wheat in Districts 5, 7, 11 and 12 (Figure 15). Non-legume hay occupies 5.7 per cent and wheat 4.2 per cent of land planted in crops, for the county as a whole. Most variations between districts are due to shifting of the land from one of these crops to the other.

Of the minor crops, sorghum is most important. The largest percentage is reported in the 3rd District (Table XVII). Truck and vegetable crops rank next to sorghum, being planted on 3.3 per cent of all land in crops. There is no great variation in the districts in this respect. Oats, and Irish and sweet potatoes occupy 2.3 per cent and 2.2 per cent, respectively, of all land in crops. For the most part the differences between districts are small, and may be due to a change in cropping practice. There are small amounts of rye and tobacco reported on Class IV land, occupying 1.3 per cent and 0.1 per cent of all land planted to crops, respectively (Table XVII).

Class VI Land⁽³⁾ is all located along the western and northern borders of the county. Most of it borders on Class IV land, with the exception of the Standing Stone Forest area, and a small area in the northern part of the county which borders on Class III land.

The 2nd District has 35.5 per cent of all Class VI land in the county. This district is followed by the 3rd which has 27.5 per cent. The 4th and 7th Districts have 19.2 per cent and 13.4 per cent, respectively. The 12th has 4.4 per cent (Figure 16).

(3) The 1st, 5th, 6th, 8th, 9th, 10th, and 11th Civil Districts have no Class VI land.



Source: Table XVIII

Figure 16. Distribution of Class VI Land, by Civil Districts, Overton County

There were 186 farms located in Class VI land cooperating in the conservation program (Table XVIII). The 12th District has only 6 farms, but otherwise the distribution is fairly even among the districts mentioned. There were 56 farms in the 2nd; 51 farms in the 3rd; 27 farms in the 4th; and 41 farms in the 7th Districts.

Class VI land is land that is predominately forested but with scattered farms that are unsuited to agriculture. However the farms on this land class have 43.7 per cent of their area improved (Figure 17). The highest percentage is in the 12th District. As the sample in that

TABLE XVIII. NUMBER OF FARMS, AREA AND DISTRIBUTION OF MAJOR LAND USES, CLASS VI LAND BY CIVIL DISTRICTS, OVERTON COUNTY

Civil Distr.	Number of Acres	Total All Land Classes (Acres)	Improved Land (Acres)	Buildings, Roads, Lanes (Acres)	Woods Not Past. (Acres)	Woods Past. (Acres)	Open Pasture Non-Crop Land (Acres)	Other Land (Acres)
2	56	6346.0	2501.5	147.0	1779.0	342.0	1575.5	1.0
3	53	4910.0	2533.0	107.0	1693.0	83.0	479.0	15.0
4	27	3442.0	1273.3	58.0	1404.2	290.5	416.0	0
7	41	2391.5	1063.5	41.0	994.5	156.5	136.0	0
12	6	793.0	435.0	16.0	270.0	27.0	45.0	0
County	186	17882.5	7806.3	369.0	6140.7	899.0	2651.5	16.0

district is small it may not be representative of the district. The 4th and 2nd Districts have the least percentage of this land class improved, being 37.0 per cent and 39.4 per cent respectively. The 3rd District is highest with 52.1 per cent. Part of the variation among civil districts

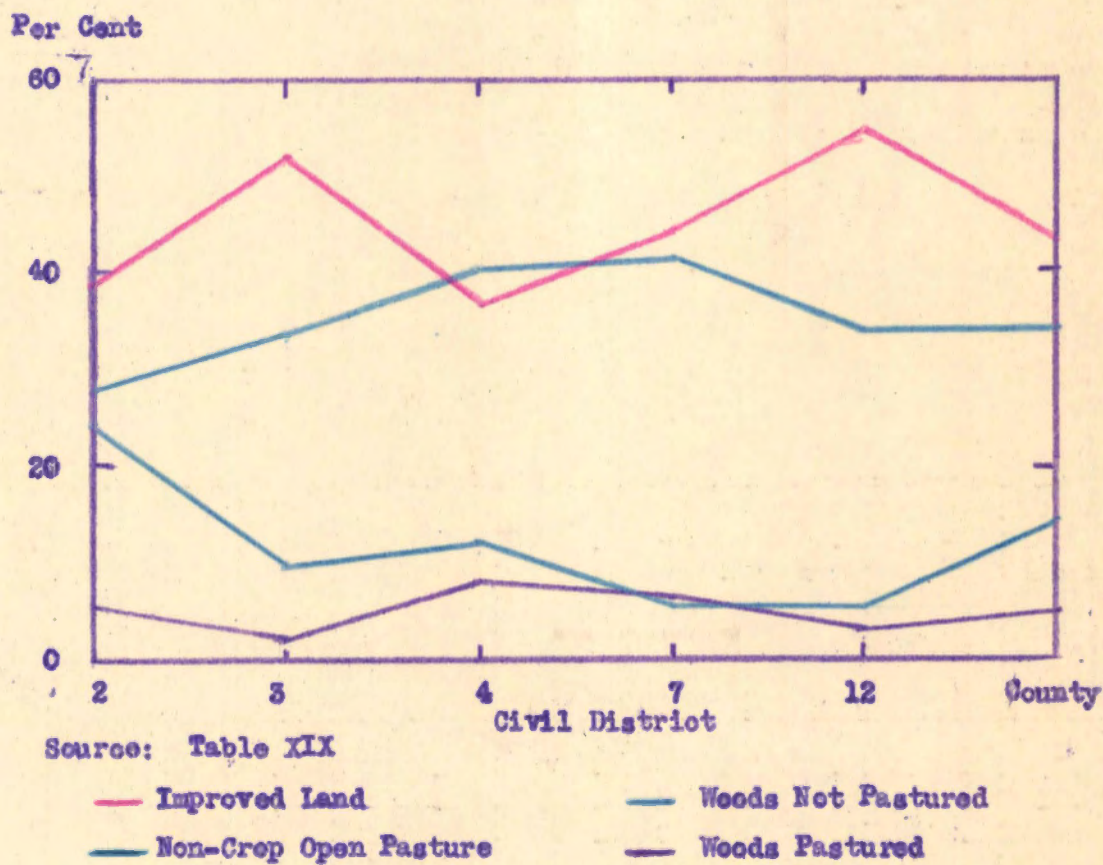


Figure 17. Distribution of Major Land Uses, Class VI Land, by Civil Districts, Overton County

may be due to difficulty in properly classifying large areas of land. The element of bias may also enter to some extent, as the data were recorded by various committeemen rather than by one individual.

The second most important use of Class VI land is in woodland not pastured (Figure 17). Thirty-four and three tenths per cent of all such land is used in that way.

TABLE XIX. DISTRIBUTION OF MAJOR LAND USES, CLASS VI LAND, BY CIVIL DISTRICTS, OVERTON COUNTY

Civil Distr.	Total All Land (Acres)	Per Cent						Total
		Improved Land (Acres)	Buildings, Roads, Lanes (Acres)	Woods Not Pastured (Acres)	Woods Pastured (Acres)	Open Pasture Non-Crop Land (Acres)	Other Land (Acres)	
2	6346.0	39.4	2.3	28.2	5.3	24.8		100.0
3	4910.0	52.1	2.2	33.6	1.8	10.0	0.3	100.0
4	3442.0	37.0	1.7	40.8	8.4	12.1		100.0
7	2391.5	44.5	1.7	41.6	6.5	5.7		100.0
12	793.0	54.9	2.0	34.0	3.4	5.7		100.0
County aver.	17882.5	43.7	2.1	34.3	5.0	14.8	0.1	100.0

The 7th District is highest in proportion of land in woods not pastured, being 41.6 per cent. The 4th is second with 40.8 per cent. Variations between districts are highest probably due to shifting from woods pastured and non-crop open pasture to woods pastured.

The third use of Class VI land is in non-crop open pasture. Twenty four and eight tenths per cent of the land in the 2nd District is used in this manner. This is followed by the 4th with 12.1 per cent, while the 3rd

has 10.0 per cent.

The fourth most important use of Class VI land is in woods pastured. The 3rd District is lowest in this respect, having only 1.8 per cent of the land used in this way. The variations among districts is not great, and is probably due to methods of reporting. Five per cent of Class VI land is devoted to woods pastured. Land that is occupied by buildings, roads, lanes, etc., use 2.1 per cent of the Class VI land. There is no great variation among districts. Other land is not significant on Class VI, there not being much marsh land from which to get wild hay.

The three principal uses of improved land are (1) land planted in crops, (2) idle land, (3) pasture. Land planted to crops is by far the most important use of improved land, 78.0 per cent of such land being used in that way. The 12th District reports the least proportion of improved land in crops, probably due to the inadequate sample. Variations between the other districts are likely due to shifting of land planted in crops to idle land. All districts that have a high percentage of improved land in crops have a corresponding low percentage that is idle (Figure 18).

The percentage of improved land that is devoted to pasture is 5 per cent for this land class for the county as a whole. With the exception of the 12th District (which has a small sample) the variation among the districts is only 0.8 per cent. Orchards occupy 2.3 per cent of all improved land, on Class VI. This does not vary greatly among districts.

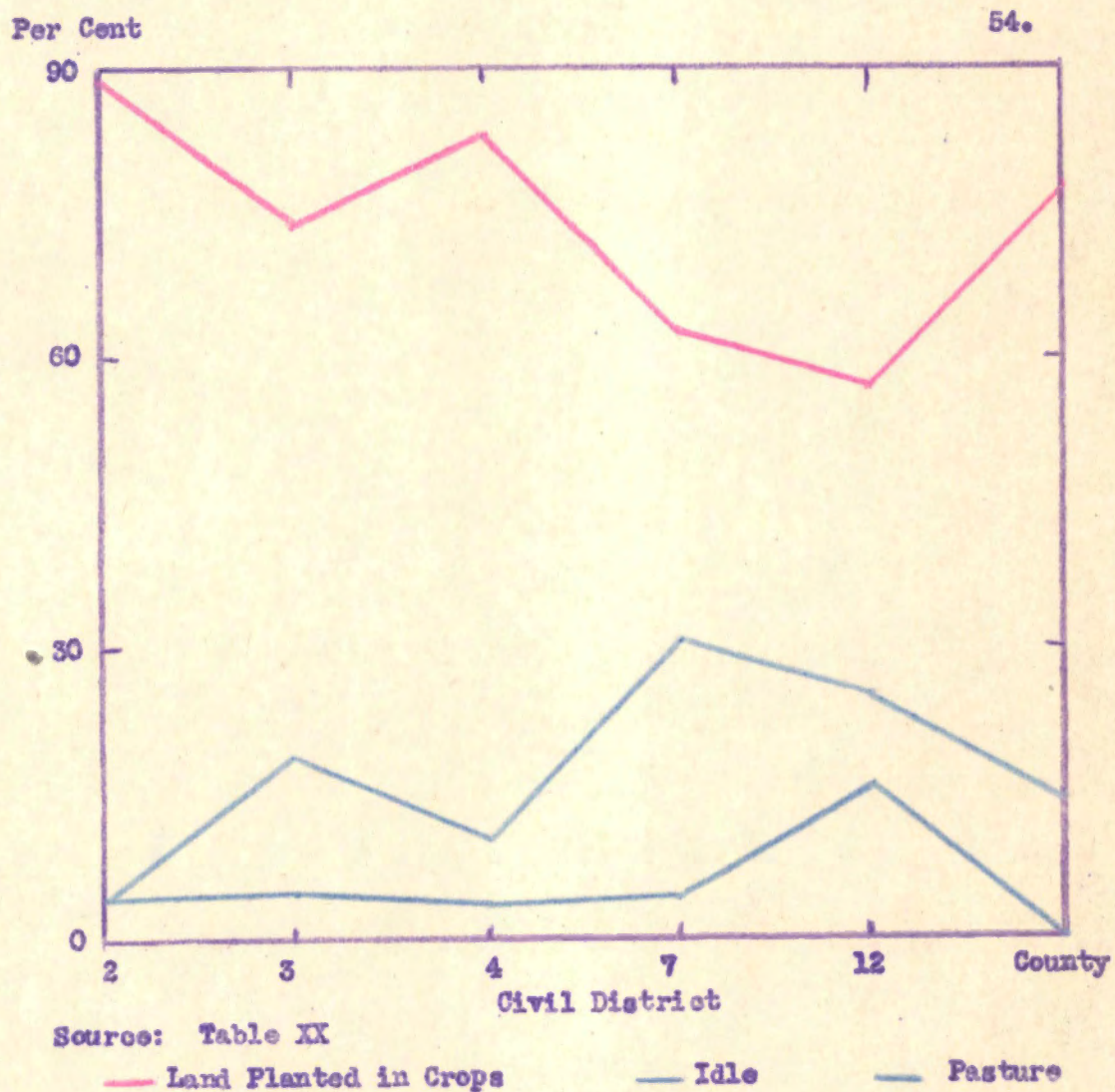


Figure 18. Principal Uses of Improved Land, Class VI Land, By Civil Districts, Overton County

TABLE XX. PRINCIPAL USES OF IMPROVED LAND, CLASS VI LAND,
BY CIVIL DISTRICTS, OVERTON COUNTY

Civil Distr.	Improved Land (Acres)	Per Cent				
		Orchard	Idle Land	Pasture	Land in Crops	Total
2	2,501.5	2.8	4.2	4.3	88.7	100.0
3	2,533.0	2.2	18.8	4.6	74.4	100.0
4	1,273.3	2.6	10.4	3.8	83.2	100.0
7	1,063.5	1.7	30.7	4.2	63.4	100.0
12	435.0	1.7	25.2	15.9	57.2	100.0
County aver.	7,806.3	2.3	14.7	5.0	78.0	100.0

Corn is the most important crop on Land Class VI. For the county as a whole it occupies 49.5 per cent of all land planted to crops (Figure 19). The 2nd District has the least proportion used in this manner, being 43.8 per cent. The 7th District has the most with 58.7 per cent. This is a difference of 14.9 per cent. The variation is probably due to the use of more legume hay in the 2nd District.

Legume hay is next to corn in importance. This use supplies 25.5 per cent of all land planted in crops.

The difference in proportion of the land planted to legume hay is not so great between the various districts as in the case of corn. The 12th District has the least proportion of crop-land used in this way, but the sample is small. Probably much of the variation between districts is due to changes to other crops in some areas.

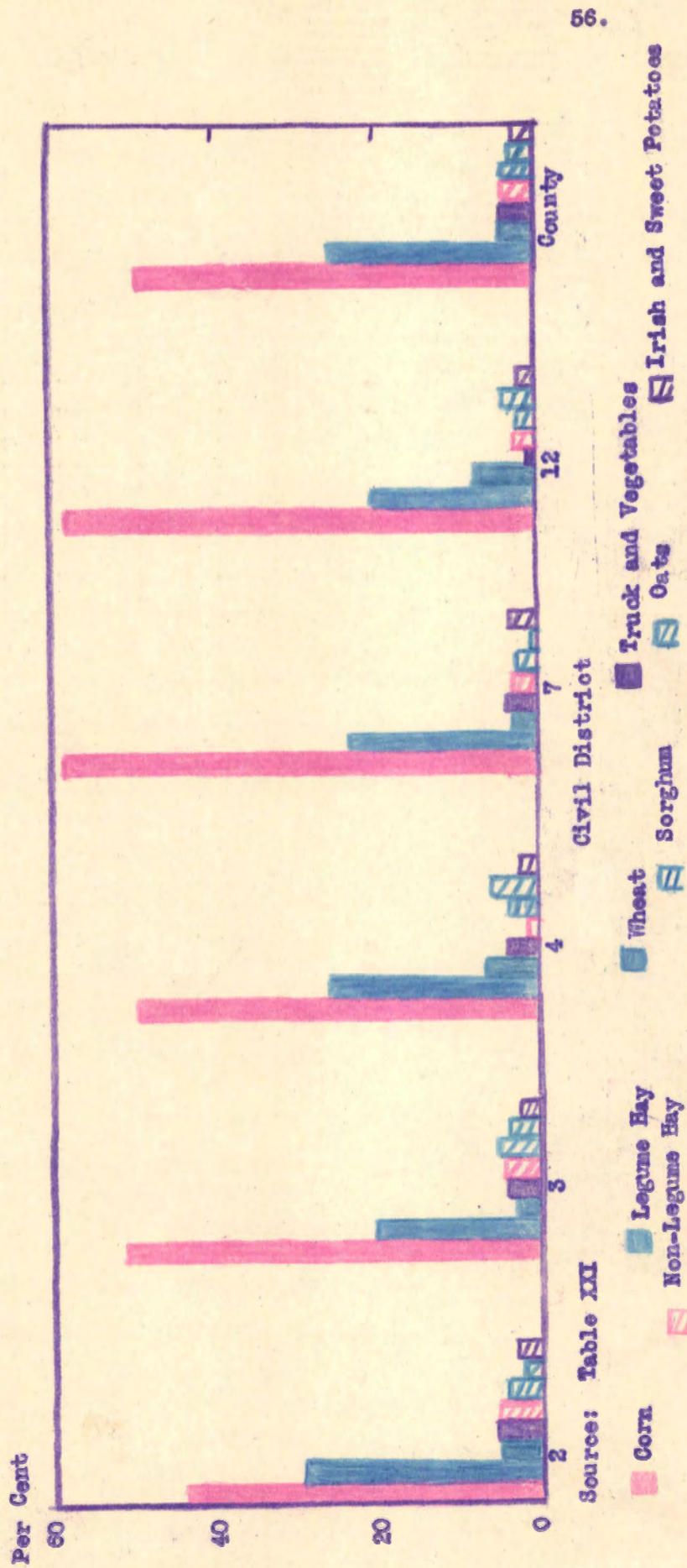


Figure 19. Distribution of Land Planted in Crops, Class VI Land, by Civil Districts, Overton County

TABLE XXI. DISTRIBUTION OF LAND PLANTED IN CROPS, CLASS VI
LAND BY CIVIL DISTRICTS, OVERTON COUNTY

Civil Distr.	Land Planted in Crops (Acres)	Per Cent			
		Corn	Irish and Sweet Potatoes	Truck and Vegetables	Sor- ghum
2	2,208.8	43.8	3.1	5.6	4.1
3	1,884.7	51.1	2.5	3.8	5.2
4	1,058.8	49.9	2.4	3.8	3.8
7	674.0	58.7	3.2	3.8	2.6
12	249.0	58.4	2.2	1.2	1.8
County aver.	5,925.3	49.5	2.7	4.3	4.0

(continued)

Civil Distr.	Per Cent						Total
	Wheat	Oats	Rye	Legume Hay	Non- Legume Hay	Miscel- lanecus	
2	5.0	2.0	1.3	29.8	5.3	0	100.0
3	2.9	3.9	2.0	20.6	4.5	3.5	100.0
4	6.4	5.8	0.2	25.8	1.4	0.5	100.0
7	3.0	0.7	1.7	23.4	2.9	0	100.0
12	7.6	4.8	2.0	19.2	2.8	0	100.0
County aver.	4.3	3.2	1.4	25.5	4.0	1.1	100.0

There are four other uses of crop land, all of which are about of equal importance in the county as a whole. They are wheat, truck and vegetables, non-legume hay, and sorghum. Wheat, and truck and vegetables occupy 4.3 per cent each, while non-legume hay and sorghum occupy 4 per cent each (Figure 19). No one crop is consistently high in all districts. The county is an area of largely self-sufficing farms, and variations

among the districts are due in part to changes made to supply crops most needed on the farm.

Oats, Irish and sweet potatoes, and rye are planted on 3.2 per cent, 2.7 per cent, and 1.4 per cent, respectively, of the land in crops. These are grown mostly for home use, hence small variations would be expected between districts.

Class VII Land⁽⁴⁾ is all found on the Cumberland Plateau. The farms on Class VIII land, which have been included with Class VII land, are found on the Highland Rim. Both areas are in one portion of the county, the Class VII land being in the southeast while Class VIII is in the northwest (Figure 2).

The greater portion of this Class VII land is in the 8th, 9th, and 10th Districts (Figure 20), more than 80 per cent being found in these three districts. The 6th District has the next largest amount of this land class. There is 5.3 per cent and 3.4 per cent in the 3rd and 5th Districts, respectively, with very small amounts in the remaining districts.

There were 417 farms located on these land classes, cooperating with the Conservation Program (Table XXII). Of this number only the 6th, 8th, 9th, and 10th Districts have enough to make an adequate sample.

(4) There were a few farms in the Standing Stone Project, which is Class VIII land, that have been included in the tabulation with Land Class VII. The conditions on these two land classes are so similar that it is thought it would not be necessary to make a separate tabulation for each. Class VII land is found in the 5th, 6th, 8th, 9th, 10th and 11th Districts, and Class VIII land in the 3rd, 4th, and 12th Districts. There was no land of either of these classes in the 1st, 2nd, and 7th Districts.

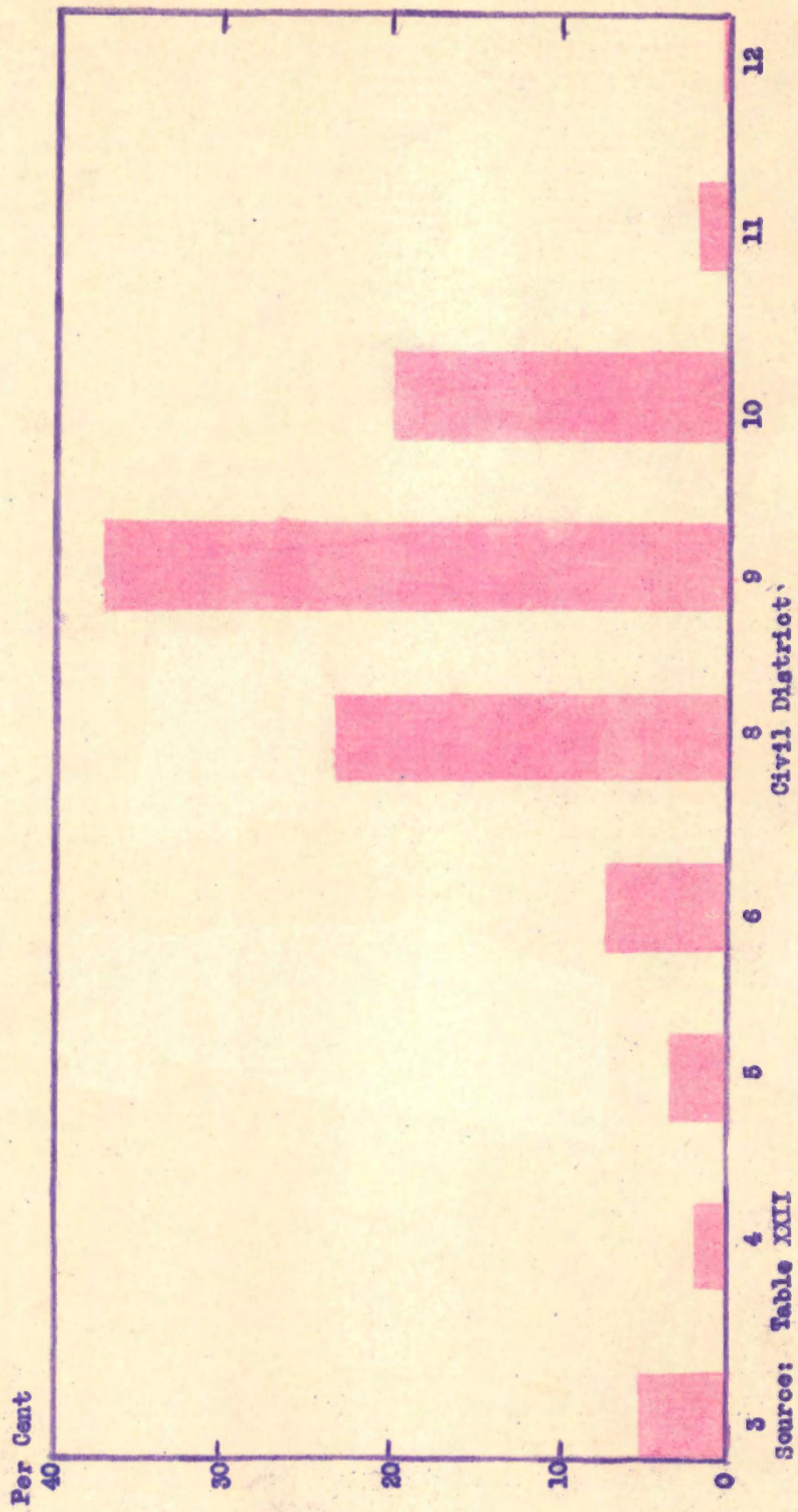


Figure 20. Distribution of Class VII Land by Civil Districts, Overton County

TABLE XXII. NUMBER OF FARMS, AREA AND DISTRIBUTION OF
MAJOR LAND USES, CLASS VII LAND BY CIVIL DISTRICTS

C.D.	No. of Farms	Total All Land Classes (Acres)	Improved Land (Acres)	Build- ings, Roads, Lanes (Acres)	Woods Not Pas- tured (Acres)	Woods Pas- tured (Acres)	Open Pas- ture Non- Crop Land (Acres)	Other Land (Acres)
3	18	2,089.0	923.0	34.0	968.5	24.0	139.5	0
4	5	753.0	244.2	11.0	534.0	96.8	67.0	0
5	14	1,349.2	503.7	21.0	641.5	29.0	134.0	20.0
6	32	2,718.5	1,219.5	49.0	1,059.5	182.5	208.0	0
8	67	9,146.2	2,499.5	119.0	4,825.0	1,067.7	630.0	5.0
9	217	14,492.3	6,399.6	341.3	6,423.4	676.0	636.0	16.0
10	59	7,783.0	1,495.7	99.2	5,253.0	449.0	478.1	8.0
11	3	707.0	235.5	3.0	33.5	325.0	110.0	0
12	2	82.0	50.0	3.0	29.0	0	0	0
County aver.	417	39,120.2	13,570.7	680.5	19,567.4	2,850.0	2,402.6	49.0

For the county as a whole, exactly 50 per cent of this Class VII land is being utilized by woods not pastured (Figure 21). However there is not so large a proportion in woods as might be expected on this land class, which is land that is now solidly forested or almost so and should remain that way.

The 10th District is probably more representative of Class VII land than any other district. Sixty-seven and five-tenths per cent of the district is in woods not pastured. The proportion of land in this use in the 3rd, 4th, 5th, 11th, and 12th is quite varied and is probably due to the small samples. However the variation in the remaining districts is as much as in the others. Several reasons may be the cause of this variation. The difference in the 6th and 8th Districts is due partly to difficulty in classifying the

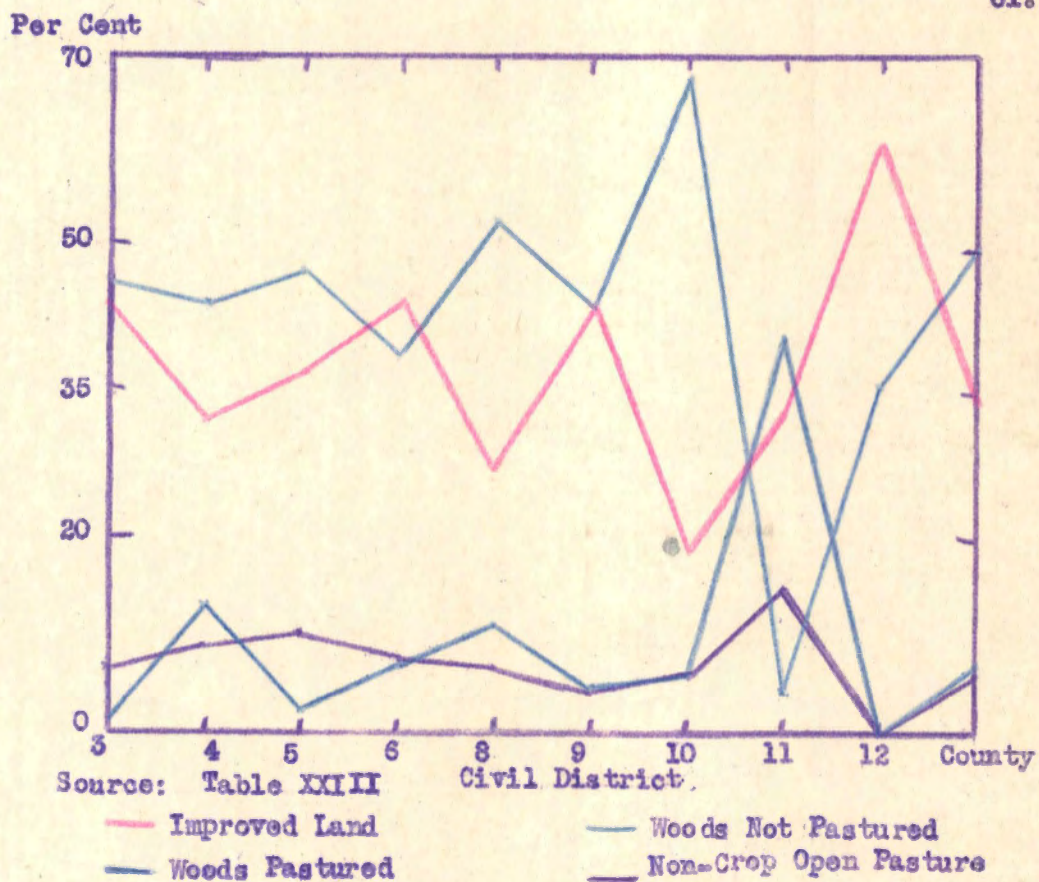


Figure 21. Distribution of Major Land Uses, Class VII Land, by Civil Districts, Overton County

land. The difference in the 9th District is probably due to size of the farm. Much of the land in the 9th District is held by a few coal companies. On the other hand, the amount of land in farms is small and a greater proportion of it is improved.

Land that is improved is the second major use of Class VII land. There again the variation in some of the districts is due to an inadequate

TABLE XXIII. DISTRIBUTION OF MAJOR LAND USES, CLASS VII LAND, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Total All Land Class (Acres)	Per Cent						Total
		Improved Land	Buildings, Roads, Lanes	Woods Not Pastured	Woods Pastured	Open Pasture Non-Crop Land	Other Land	
3	2,089.0	44.2	1.6	46.4	1.1	6.7	0	100.0
4	753.0	32.4	1.5	44.4	12.8	8.9	0	100.0
5	1,349.2	37.3	1.6	47.6	2.0	10.0	1.5	100.0
6	2,718.5	44.9	1.8	38.9	6.7	7.7	0	100.0
8	9,146.2	27.3	1.3	52.8	11.7	6.9	0	100.0
9	14,492.3	44.2	2.4	44.3	4.7	4.4	0	100.0
10	7,783.0	19.2	1.3	67.5	5.8	6.1	0.1	100.0
11	707.0	33.3	0.4	4.7	46.0	15.6	0	100.0
12	82.0	60.9	3.7	35.4	0	0	0	100.0
County aver.	39,120.2	34.7	1.7	50.0	7.3	6.2	0.1	100.0

sample. Probably the 10th District more nearly represents Class VII land as 19.2 per cent is improved (Figure 21). This is the least percentage for any of the districts. The 8th District has the next smallest amount, being 27.3 per cent. The 6th and 9th Districts have approximately the same proportion of the land that is improved. Probably causes of these variations

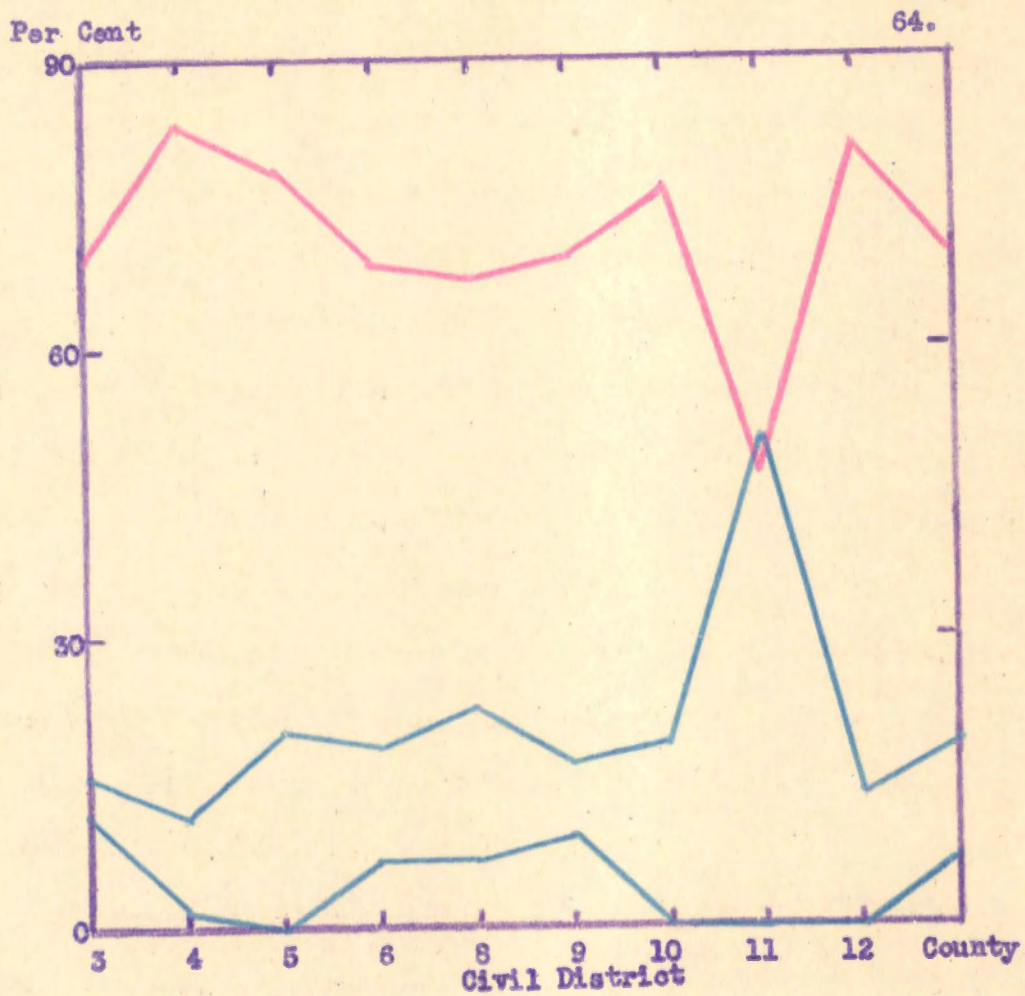
have been previously discussed.

There is only 1.1 per cent difference in the use of Class VII land when applied to woods pastured and non-crop open pasture. This difference is caused in part by a shift of land from one of these uses to the other. Of the districts that have an adequate number of farms the 8th District has the largest proportion of woods pastured (Figure 21). This is followed by the 6th District which has 6.7 per cent in woods pastured, leaving the 9th and 10th Districts which have 4.7 per cent and 5.8 per cent respectively. The 6th District ranks first in non-crop open pasture, having 7.7 per cent of the land in this category. The 8th District is the next highest, while the 9th District is the least, having only 4.4 per cent used in this manner.

The proportion of land that is occupied by buildings, roads, lanes, etc., is very small, being 1.7 per cent for the county on this land class. There is no significant variation among the districts in regard to the land used in this manner.

The principal use of improved land is planting it in crops (Figure 22). Some of the variation in the several districts is due in part to an inadequate sample. With the exception of the 10th District there is very little variation among the other districts. It is possible that the large proportion of land, 76.0 per cent, used in this manner in the 10th District is caused by the small amount of improved land. Another cause might be that the land is not devoted to other uses, such as pasture or left idle.

Idle land is the group second in importance in the use of improved



Source: Table XIV

— Land Planted in Crops — Idle — Pasture

Figure 22. Principal Uses of Improved Land, Class VII Land by Civil Districts, Overton County

land. No considerable variation is found among the districts that have a large number of farms in the sample. The 8th District with 22.9 per cent of the improved land used in this way ranks highest. The 9th District has the least.

TABLE XXIV. PRINCIPAL USES OF IMPROVED LAND, CLASS VII LAND
BY CIVIL DISTRICTS, OVERTON COUNTY

Civil Distr.	Improved Land (Acres)	Per Cent				
		Orchard	Idle	Pasture	Land in Crops	Total
3	923.0	3.2	15.8	11.7	69.3	100.0
4	244.2	3.3	11.5	2.0	83.2	100.0
5	503.7	2.7	20.1	0	77.2	100.0
6	1,219.5	5.6	18.9	7.0	68.5	100.0
8	2,499.5	2.7	22.9	7.2	67.2	100.0
9	6,399.6	3.9	17.3	9.6	69.2	100.0
10	1,495.7	4.6	19.3	0.1	76.0	100.0
11	235.5	2.5	50.1	0	47.4	100.0
12	50.0	6.0	14.0	0	80.0	100.0
County aver.	13,570.7	3.8	19.2	7.3	69.7	100.0

Pasture is the third principal use of improved land (Figure 22). No large variation is found among the districts that have an adequate sample except in the 10th where 0.1 per cent is listed as being used for pasture. The 9th District ranks first in this respect with 9.6 per cent of the improved land in pasture.

Orchards occupied 3.8 per cent of the improved land on Class VII. The 6th District was first in this respect having 5.6 per cent of the land in orchards. The 8th District was lowest.

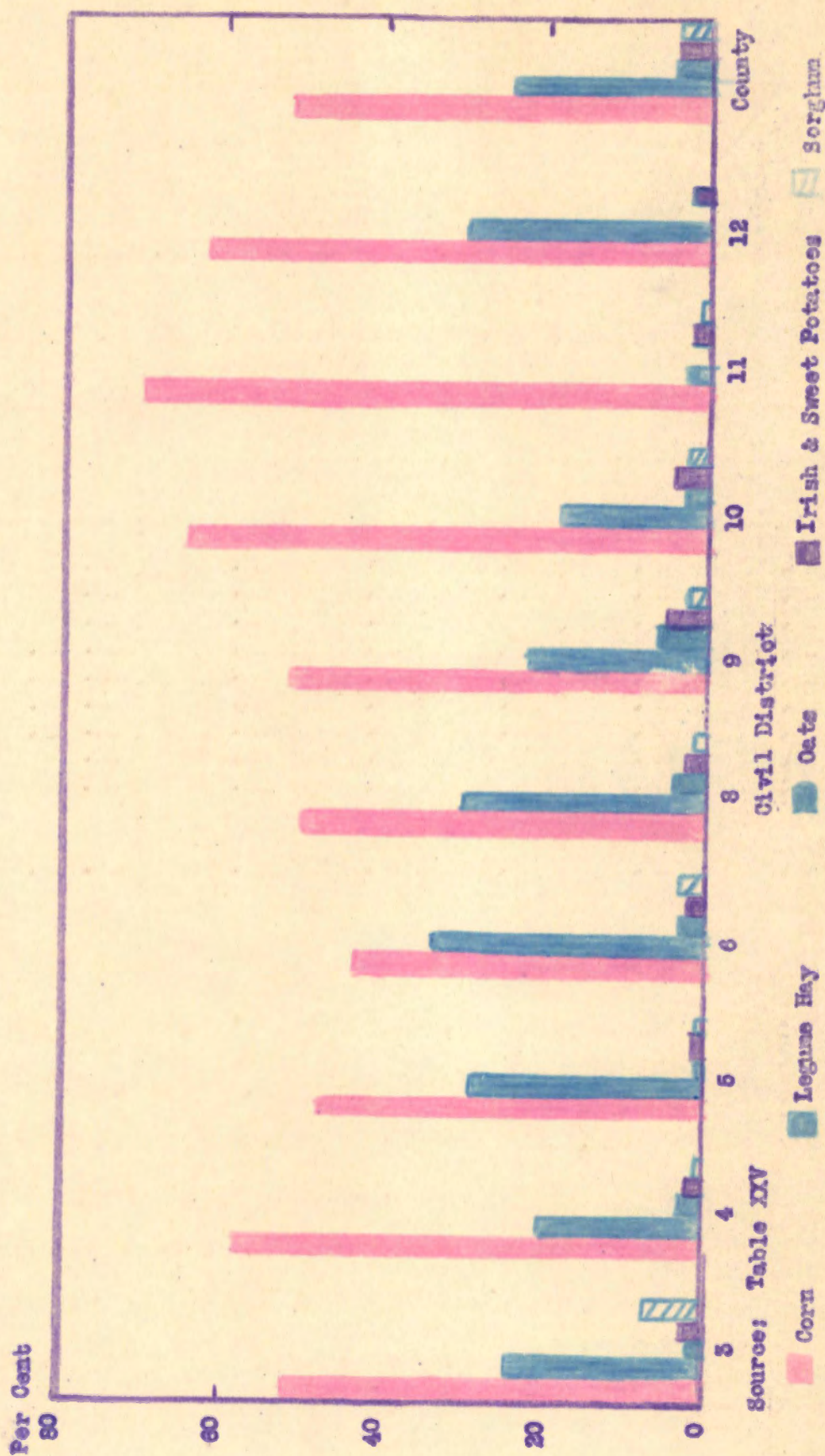


Figure 23. Distribution of Land Planted to Crops, Class VII Land, by Civil Districts, Overton County

The most important crop on Class VII lands is corn. It occupies 52.6 per cent of all the land planted in crops. The highest percentages of corn on the land is reported in the districts with inadequate samples. The 6th District has the least proportion of land in crops planted to corn, 43.6 per cent. The 10th District has the largest proportion of crop land planted in corn (Figure 23). This variation is probably due in part to the small percentage of land that is improved.

The second use of land planted in crops is legume hay. As the percentage of land in corn increases the proportion in legumes decreases. Twenty-four and five tenths per cent of the crop land is in legume hay. The 6th District ranks first in this respect while the 10th District is lowest.

Oats is the third most important crop on Class VII land. It occupies 6.7 per cent and 2.5 per cent of the land in crops in the 9th and 10th Districts, respectively. Class VII land is the only class of land that uses oats to any extent in the cropping system.

There is not much to choose between the next three uses of land in crops. Most all the farms on Class VII land are self-sufficing, and consequently have some land in these crops, namely Irish and sweet potatoes, sorghum, and truck and vegetables. The 9th District ranks highest in proportion of land in Irish and sweet potatoes, and in sorghum, among the districts that have an adequate sample. The variation among the other districts is partly due to adjustments in the various crops to meet their needs.

TABLE XXV. DISTRIBUTION OF LAND PLANTED IN CROPS, CLASS VII
LAND BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Land Planted in Crops (Acres)	Per Cent				
		Corn	Irish and Sweet Po- tatoes	Truck and Vege- tables	Sor- ghum	Tobacco
3	639.9	52.0	2.9	3.8	7.3	0
4	203.2	58.1	2.4	2.7	1.1	0.4
5	388.2	47.7	1.5	2.3	0.8	0
6	835.5	43.6	2.4	3.4	3.4	0.1
8	1,680.4	50.4	2.3	3.0	1.6	0.4
9	4,426.9	51.9	5.0	4.4	5.4	0
10	1,136.8	64.6	4.4	5.0	2.6	0
11	111.5	70.0	2.2	1.8	0.9	0
12	40.0	62.5	2.5	5.0	0	0
County aver.	9,462.4	52.6	4.0	3.9	4.0	0.1

(continued)

C.D.	Wheat	Oats	Rye	Legume Hay	Non-Legume Hay	Miscel- laneous	Total
3	0.3	1.9	7.3	24.5	0	0	100.0
4	5.9	2.9	1.9	20.8	3.8	0	100.0
5	4.6	1.0	0	29.5	12.6	0	100.0
6	6.3	3.6	0.1	33.5	3.6	0	100.0
8	3.0	4.2	0.6	30.0	3.4	0.6	100.0
9	0.9	6.7	0.9	22.3	2.2	0.3	100.0
10	1.0	2.5	0.9	18.5	0.5	0	100.0
11	0	0	0	2.7	22.4	0	100.0
12	0	0	0	30.0	0	0	100.0
County aver.	0.9	4.7	1.2	24.5	2.9	0.2	100.0

Non-legume hay occupies 2.9 per cent of the land in crops for the county as a whole. The districts with a small sample vary most from the county average. The 10th District has the least amount of non-legume hay, only 0.5 per cent.

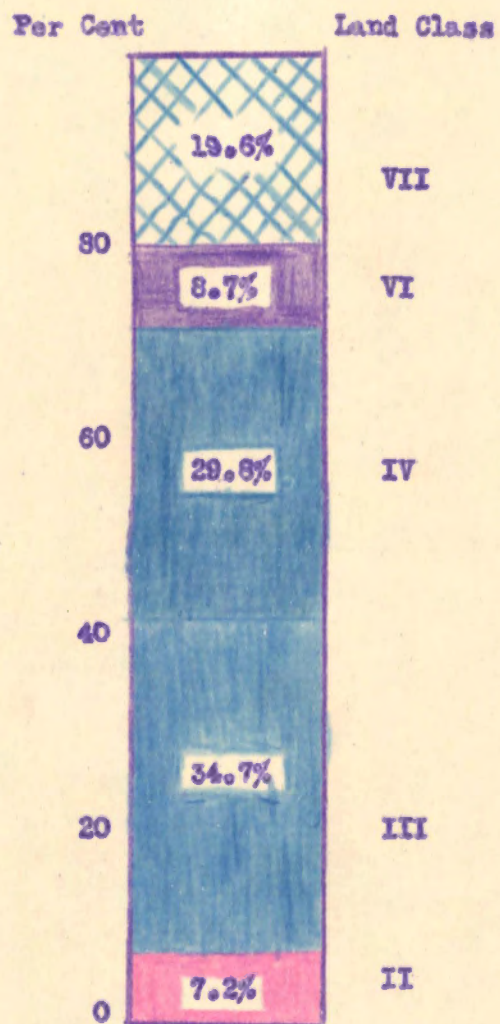
Wheat and rye are used on 1.9 per cent and 1.2 per cent of the land in crops. Most of these crops are in the 6th District. This is probably caused from the difficulty in properly classifying the land. It is interesting to note that 0.1 per cent of Class VII land in crops is planted to tobacco, most of which is in the 8th District. This is in all probability caused by error in classifying the land, as Class VII land is generally regarded as being too poor for profitable production of tobacco.

Summary. The previous discussion has been by land class, showing the relationship existing between districts.

In comparing land classes with each other it is well to keep in mind their distribution over the county. A total of 2,067 work sheets were tabulated. They represented a total of 199,311.5 acres cooperating in the Conservation Program (Table XXVI). The greater part of this acreage is in Land Class III and IV (Figure 24). Only 7.2 per cent of all

TABLE XXVI. NUMBER OF FARMS, AREA AND DISTRIBUTION OF MAJOR LAND USES BY LAND CLASS, OVERTON COUNTY

Land Class	Number of Farms	Total All Land (Acres)	Improved Land (Acres)	Buildings, Roads, Lanes (Acres)	Woods Not Pastured (Acres)	Woods Pastured (Acres)	Open Pasture Non-Crop Land (Acres)	Other Land (Acres)
II	134	13,788.5	7,925.5	257.8	3,540.2	820.0	1,211.0	34.0
III	675	69,162.0	32,978.9	1,274.5	22,202.9	6,803.8	5,796.4	105.5
IV	655	59,358.3	29,917.2	1,127.4	16,759.0	4,257.5	7,157.2	140.0
VI	186	17,882.5	7,806.3	369.0	6,140.7	899.0	2,651.5	16.0
VII	417	39,120.2	13,570.7	680.5	19,567.4	2,850.0	2,402.6	49.0
County	2067	199,311.5	92,198.6	3,709.2	68,210.2	15,630.3	19,218.7	344.5



Source: Table XXVI

Figure 24. Distribution of Land Classes, Overton County

of all the land on the farms cooperating were on Class II land. This handicaps the farmers somewhat, as they have little extra good land on which to farm.

TABLE XXVII. AVERAGE SIZE OF FARM, IN MAJOR LAND USES BY LAND CLASS, OVERTON COUNTY

Land Class	No. of Farms	Total All Land (Acres)	Average (Acres)						
			Total Land in Farms	Im-proved Land	Build-ings, Roads, etc.	Woods Not Pas-tured	Woods Pas-tured	Non-Crop Open Pasture	Other Land
II	134	13,788.5	102.9	59.1	1.9	26.5	6.1	9.0	0.3
III	675	69,162.0	102.5	48.9	1.9	32.9	10.1	8.6	0.1
IV	655	59,358.3	90.6	45.7	1.7	25.6	6.5	10.9	0.2
VI	186	17,882.5	94.6	41.7	2.0	31.6	4.7	14.4	0.1
VII	417	39,120.2	93.8	32.5	1.6	46.9	6.8	5.8	0.2
County	2067	199,311.5	96.4	44.6	1.7	33.0	7.6	9.3	0.2

Also the size of existing farms throws an additional burden upon the land (see Land Class, p. 7). According to the recommendations of the classifiers, Class II, to be adequate, requires a fair acreage (Table XXVIII). Class III and Class IV land should have 125 to 200 acres, and 200 to 300 acres, respectively. On this basis, the farms now on these land classes are inadequate in size to supply the needs of a family. This means that the land has to be cultivated oftener, and consequently is subject to greater erosion. In other words the resources of farms on Classes III, IV, VI, and VII land is subject to a constant drain.

Farms on all classes of land, except Class VII, have the greater proportion of the land improved (Figure 25). Class II land has 57.5 per cent, while Class VII has 34.7 per cent. The proportion of improved land

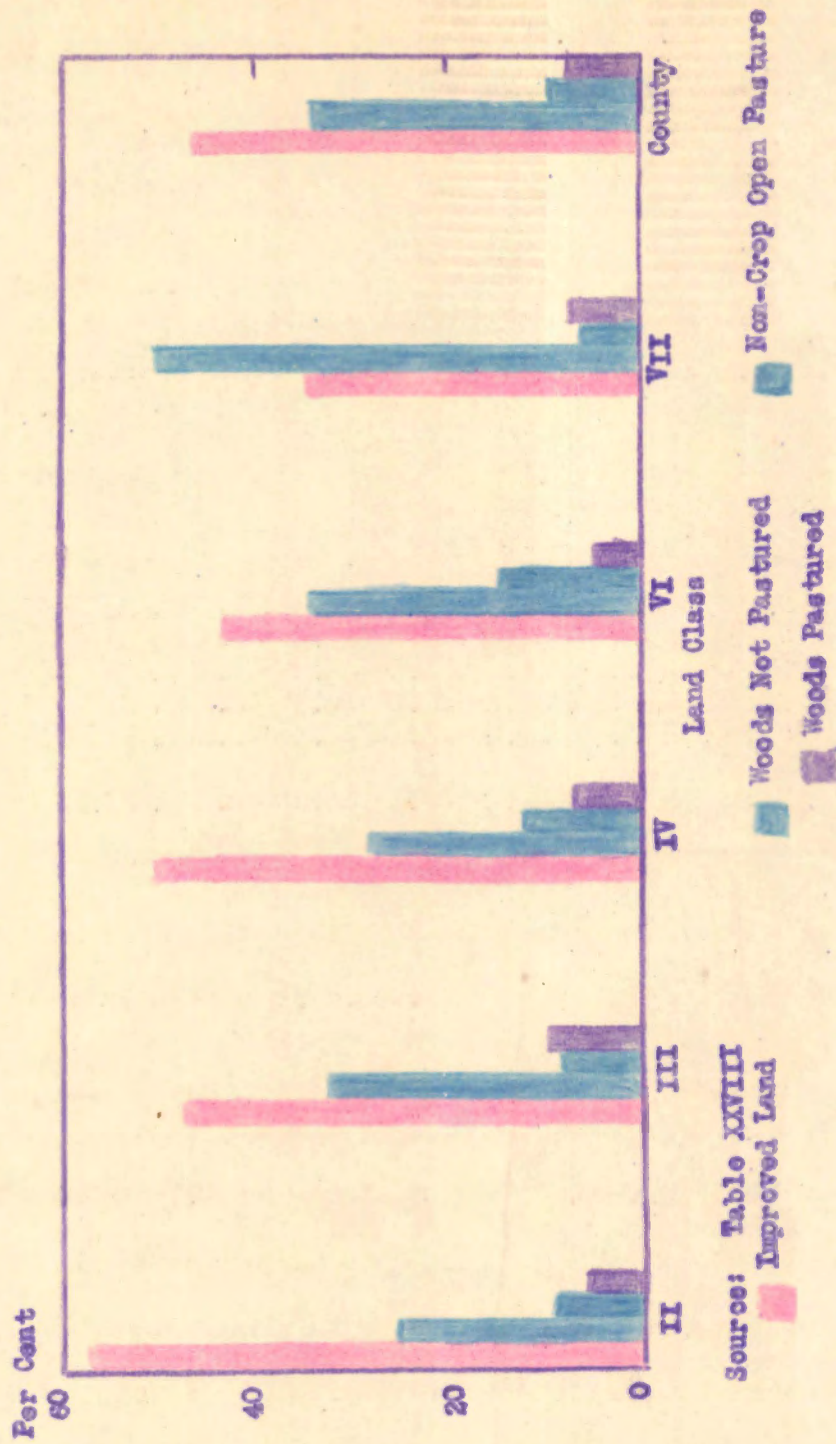


Figure 25. Distribution of Major Land Uses by Class, Overton County

on Class II is rather low, when it is considered that it is comparatively level and only moderately subject to erosion. On the other hand, Class VII has a high proportion improved for land that is supposed to be almost solidly forested, and should remain so. Probably the explanation is that as the land becomes partially exhausted the farmers are compelled to clear additional acres. Improved land decreases in importance on the poorer land classes. However, Class IV land has more improved land than Class III. This is probably due to difficulty in properly grouping the farms. The second most important use of the land is in woods not pastured. The poorer the land the greater the proportion in woods. This is as would be expected. However, it is not a constant increase, as Class III land has a larger proportion of land in this category than Class IV.

TABLE XXVIII. DISTRIBUTION OF MAJOR LAND USES BY LAND CLASS,
OVERTON COUNTY

Land Class	Total All Land (Acres)	Per Cent						Total
		Im- proved Land	Build- ings, Roads, Lanes	Woods Not Pas- tured	Woods Pas- tured	Open Pasture Non- Crop Land	Other Land	
II	13,788.5	57.5	1.9	25.7	5.9	8.8	0.2	100.0
III	69,162.0	47.7	1.8	32.1	9.8	8.4	0.2	100.0
IV	59,358.3	50.4	1.9	28.2	7.2	12.1	0.2	100.0
VI	17,882.5	43.7	2.1	34.3	5.0	14.8	0.1	100.0
VII	39,120.2	34.7	1.7	50.0	7.3	6.2	0.1	100.0
County	199,311.5	46.3	1.9	34.2	7.8	9.6	0.2	100.0

There is not much difference in the uses of woods pastured and open pasture on non-crop land. As a whole, non-crop open pasture occupies 1.8 per cent more land than woods pastured. The greatest differences in these uses occur between Class IV and VI (Figure 25).

The least important use of land is in buildings, roads, lanes, etc., in which there is no great difference between land classes. This means that farms on each class of land have approximately the same number of acres devoted to buildings, roads, etc.

The land on Class II is probably better distributed among the various use than on any of the other classes. On the poorer classes, too large a proportion is improved for best conservation of resources.

The principal use of improved land is planting in crops (Figure 26). The greatest difference in this respect, 10.5 per cent, is between Class II and VII. With the exception of Class VI, the proportion of improved land planted in crops decreases in the poorer land classes. This is to be expected as Class II land is better adapted to crop production.

Idle land ranks next to land planted in crops, in the use of improved land. There does not seem to be any relationship between class of land and the proportion of land that is idle. Class VI has the least proportion in this category while Class IV has the most, being 14.7 per cent and 20.2 per cent, respectively. The percentage of idle land is large for all land classes. Probably pasture would be a more productive use of the land than to leave it idle.

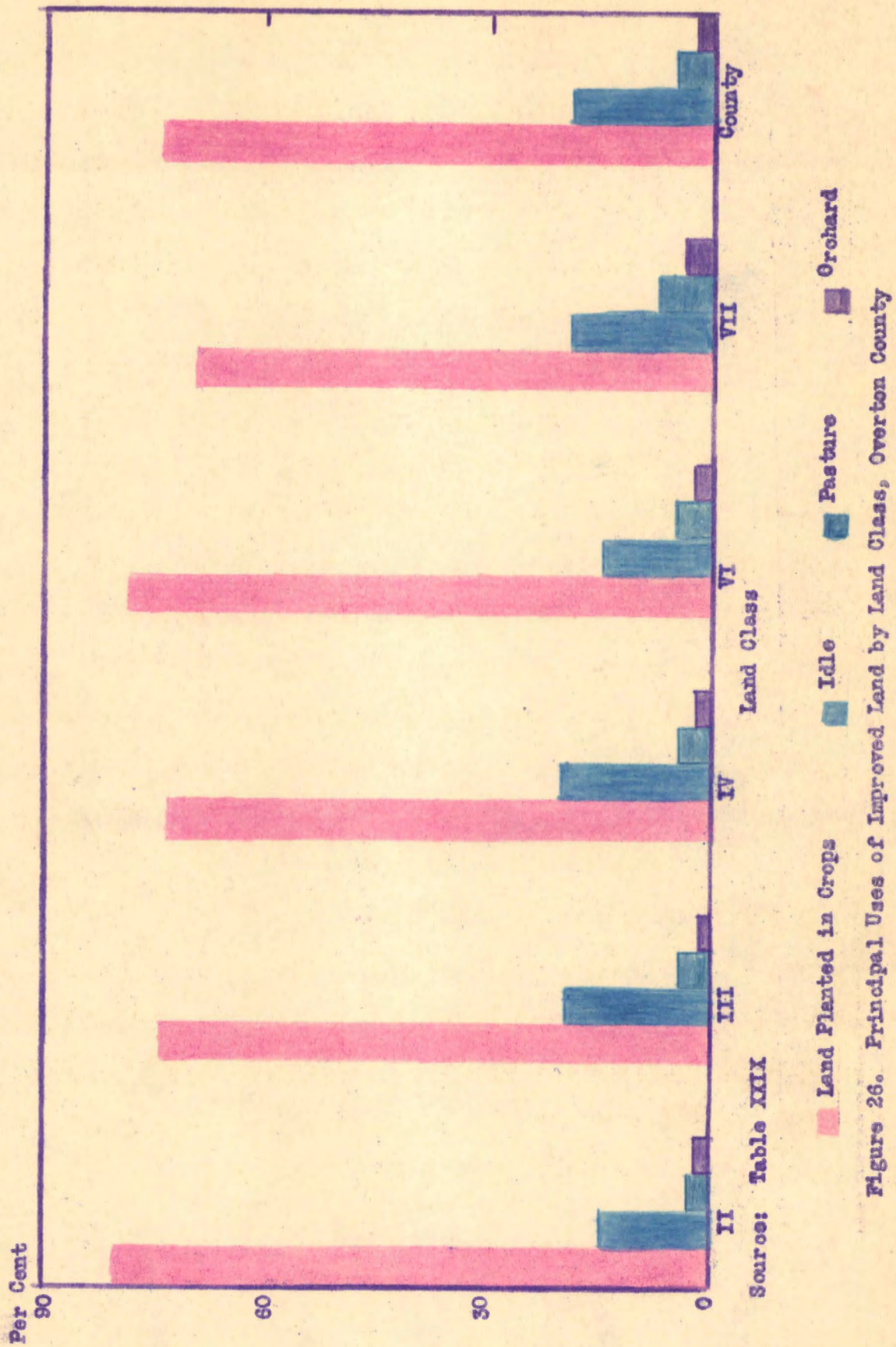


Figure 26. Principal Uses of Improved Land by Land Class, Overton County

TABLE XXIX. PRINCIPAL USES OF IMPROVED LAND BY LAND CLASS,
OVERTON COUNTY

Land Class	Improved Land (Acres)	Per Cent				Total
		Orchard	Idle	Pasture	Land Planted in Crops	
II	7,925.5	2.0	14.8	3.2	80.0	100.0
III	32,978.9	1.8	19.7	4.4	74.1	100.0
IV	29,917.2	2.1	20.2	4.5	73.2	100.0
VI	7,806.3	2.4	14.7	4.9	78.0	100.0
VII	13,570.7	3.8	19.2	7.3	69.7	100.0
County	92,198.6	2.2	18.9	4.9	74.0	100.0

Pasture occupies 4.9 per cent of the improved land for the county as a whole. There is a constant increase in the proportion of pasture as the class of land becomes poorer. Farms on Land Class II have 3.2 per cent of the improved land in pasture, while those on Class VII have 7.3 per cent. This is as would be expected as Classes IV, VI, and VII are better adapted to grazing than to the production of cultivated crops.

There were 4,447.1 acres of pasture on all classes of land in the county (Table XXX). The larger proportions were on Classes III, IV, and VII. The crop most used for pasture on all land classes was lespedeza. However, a larger proportion of the pasture was seeded to this crop on Class II land than on any other class (Figure 27). Mixed pasture (other than red top and lespedeza) was next in importance to lespedeza. Red top was the most important non-legume used for pasture. There was no consistency as to the land class using red top for pasture. However, in the case of blue grass, the second most important non-legume used as pasture, the situation is different. Blue grass occupied a greater proportion of

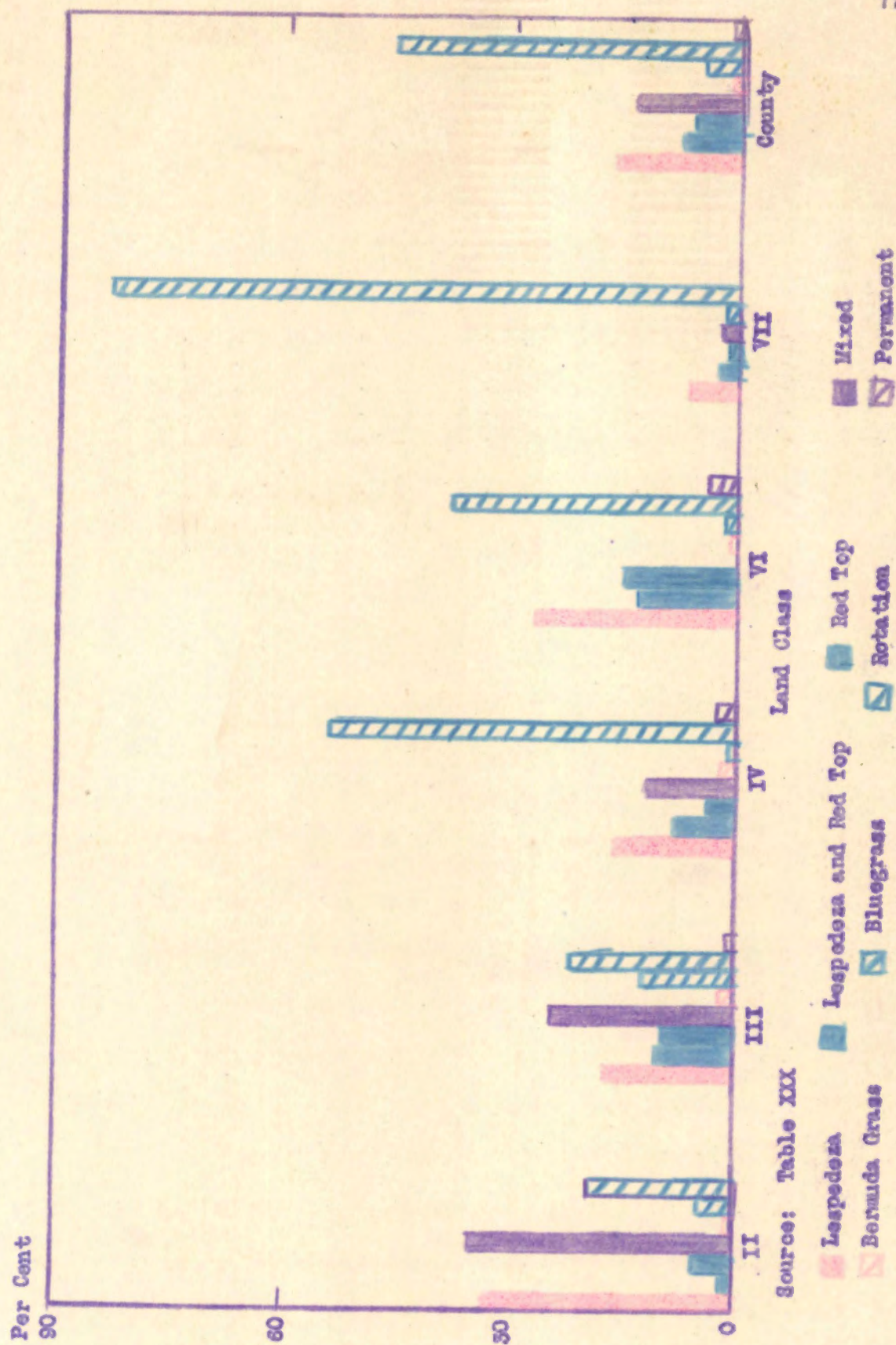


Figure 27. Distribution of Pasture by Land Class, Overton County

TABLE XXX. DISTRIBUTION OF PASTURE BY KIND AND LAND CLASS,
OVERTON COUNTY

Land Class	Total Pasture (Acres)	Per Cent								Total
		Leasp.	Leasp. and Red Top	Red Top	Mixed	Bermuda Grass	Blue Grass	Rotation	Permanent	
II	283.1	32.8	1.4	5.4	35.3	0.7	4.6	19.8	0	100.0
III	1461.5	17.4	10.4	9.6	24.4	2.1	12.7	22.4	1.0	100.0
IV	1315.9	16.3	8.2	3.5	11.8	2.3	1.3	53.9	2.7	100.0
VI	387.0	26.5	13.2	15.2	0	1.0	1.7	38.5	3.9	100.0
VII	999.6	7.8	3.0	1.6	2.6	0	1.8	83.2	0	100.0
County	4447.1	16.7	7.8	6.2	14.3	1.5	5.4	46.6	1.5	100.0

the pasture land on Classes II and III than on Classes IV, VI, and VII.

One limitation on the analysis of pasture data is that a number of the work sheets showed only rotation pasture, without indicating the type of crop. However the percentage of pasture reported in this manner is less on the better land classes than on the poorer ones. This indicates the possibility that farms on Class II and III land are in a better position to establish good pasture crops, whereas farms on the poorer class depend more upon volunteer crops for pasture.

There is considerable variation in the manner the land planted to crops is used. On the whole, farms on Land Class II make more use of conserving practices. There were 6,320.4 acres of land planted to crops on Class II, of which 39.1 per cent was planted to corn and 37.6 per cent to legume hay. This was a difference of only 1.5 per cent in the two most important crops. On none of the other land classes is this situation approached. The proportion of land planted to corn increases as the class

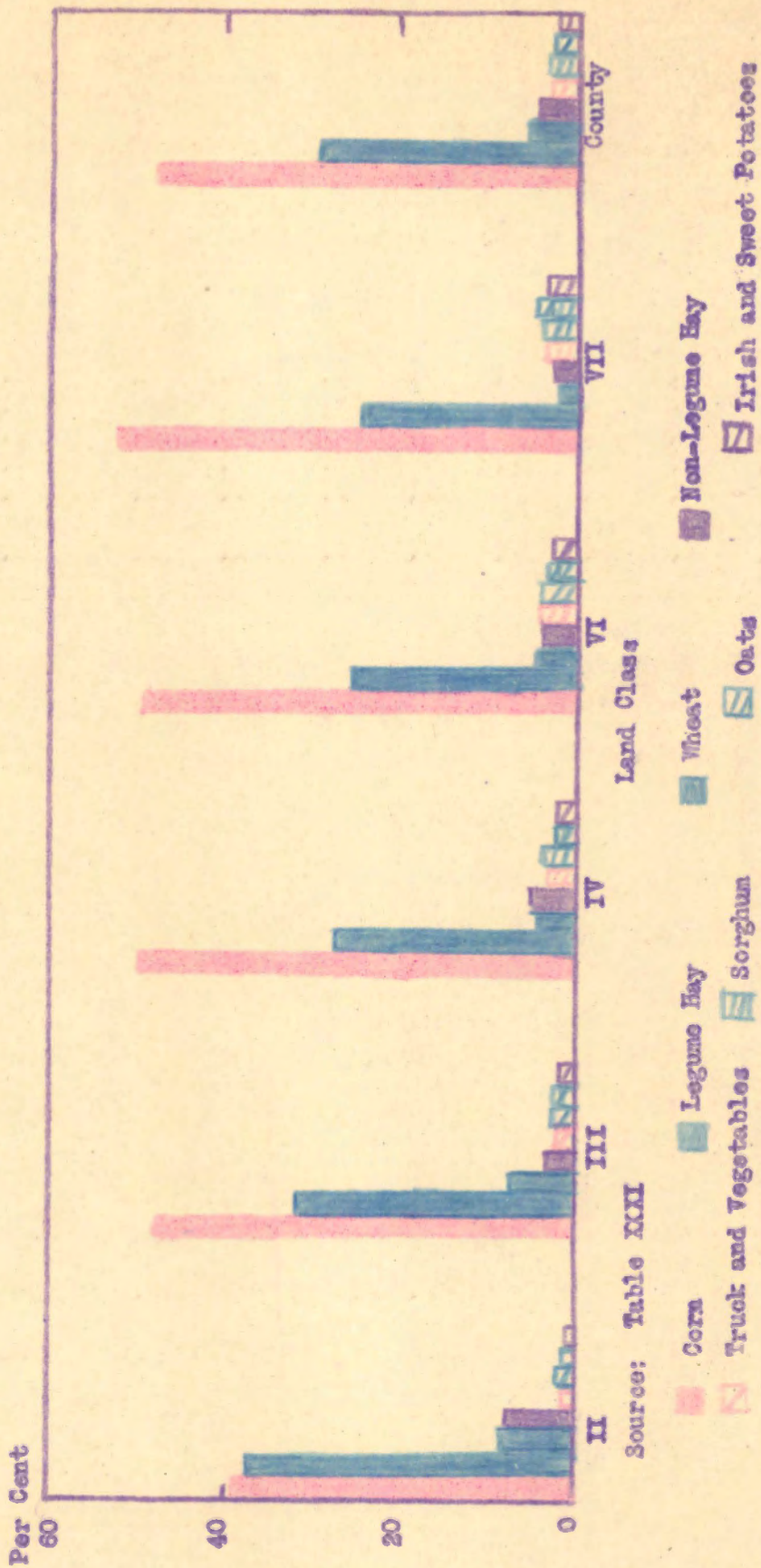


Figure 23. Distribution of Land Planted in Crops by Land Class, Overton County

of land becomes poorer, 52.6 per cent of Class VII land being planted to corn (Figure 28).

TABLE XXXI. DISTRIBUTION OF LAND PLANTED IN CROPS BY LAND CLASS, OVERTON COUNTY

Land Class	Land Planted in Crops (Acres)	Per Cent					
		Corn	Irish and Sweet Pots.	Truck and Garden	Sorghum	Tobacco	Wheat
II	6,320.4	39.1	0.9	1.5	2.0	0	8.0
III	24,432.0	47.0	2.0	2.3	2.5	0.1	7.3
IV	21,904.0	49.8	2.2	3.3	3.8	0.1	4.2
VI	6,084.3	49.5	2.7	4.3	4.0	-	4.3
VII	9,462.4	52.6	3.9	3.9	4.0	0.1	2.0
County aver.	68,203.1	48.2	2.3	3.0	3.2	0.1	5.4

(continued)

Land Class	Per Cent						
	Oats	Rye	Barley	Legumes	Non-Legumes	Misc.	Total
II	1.4	1.4	0	37.6	8.0	0.1	100.0
III	2.4	1.1	0.1	31.7	3.5	0	100.0
IV	2.3	1.3	0	27.4	5.4	0.2	100.0
VI	3.2	1.4	0.1	25.5	3.9	1.1	100.0
VII	4.7	1.1	0	24.6	2.9	0.2	100.0
County aver.	2.7	1.2	0.1	29.2	4.4	0.2	100.0

On the other land the percentage of legume hay decreases as the land becomes poorer.

Wheat is the third most important crop in the use of the land in crops. Most of the wheat is planted on Land Classes II and III, being 8.0 per cent and 7.3 per cent respectively. Only 2.0 per cent of Class VII crop land has any wheat on it. This is due in part to the fact that

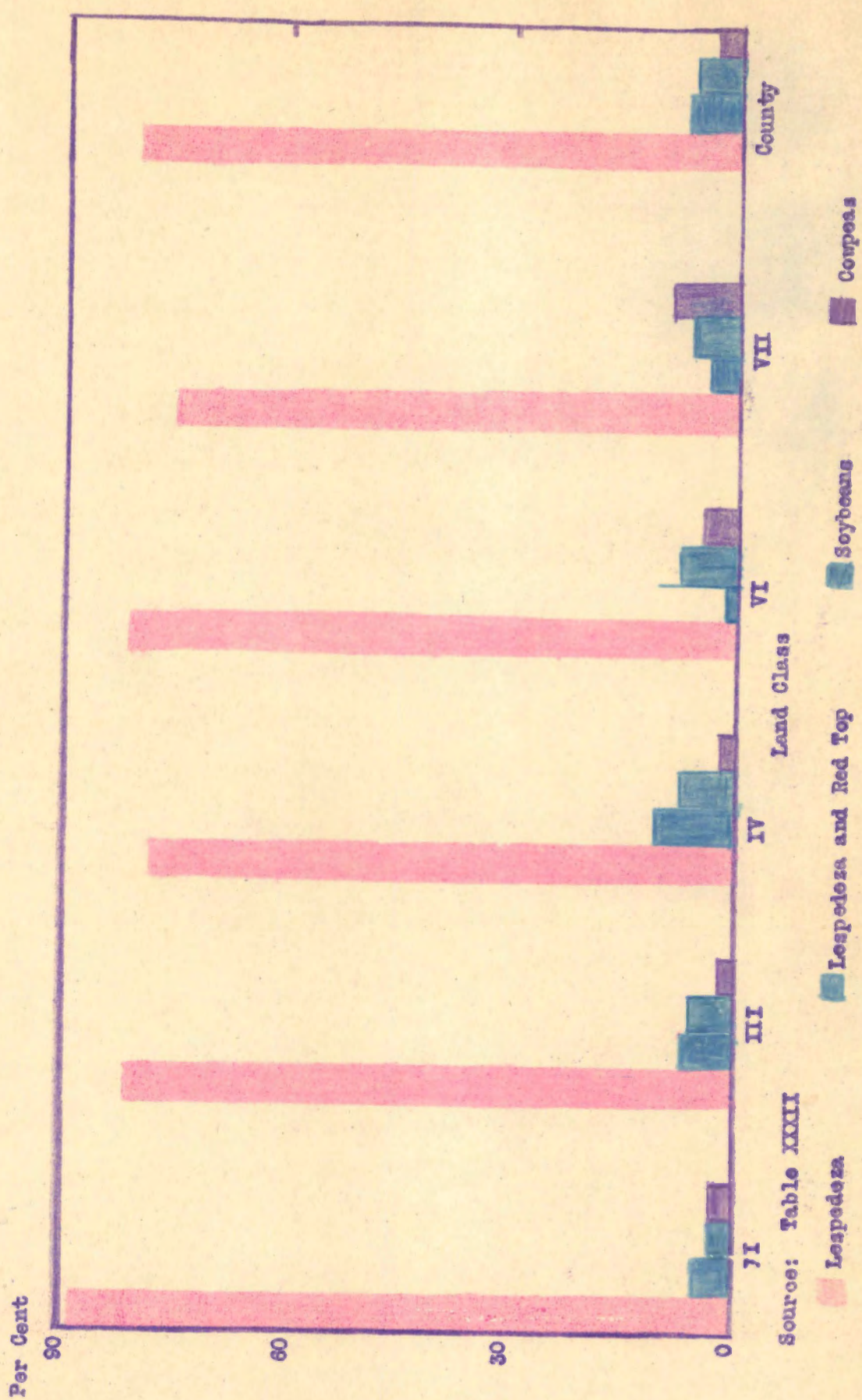
the topography of the poorer land classes is such that equipment for planting and harvesting wheat cannot as easily be driven over it.

With oats the situation is opposite. A larger proportion of the poorer crop land is planted to oats than on the better land. An additional reason is that wheat does not produce well on poor land. Probably one reason for this is the fact that oats can be sown broadcast and plowed or disked in the ground. About 4.7 per cent of the land planted in crops is devoted to oats on Class VII, but only 1.4 per cent on Class II. Oats are stronger feeders than wheat, and thus able to make a crop on poor land.

The fourth most important crop is non-legume hay. As with legume hay, a less proportion of the land in crops is shown to non-legumes on the poorer land. Apparently the farms on the poorer classes of land have to plant more land to corn because of the poor productivity of the land. Naturally there is less left to plant in soil-building and soil-conserving crops.

Differences occur in the proportion of land planted to Irish and sweet potatoes, truck and vegetables, and sorghum, on the various classes of land. In every instance the proportion of the crops increases as the land becomes poorer. This is to be expected as farms on Classes IV, VI, and VII are more self-sufficing than on Classes II and III. Consequently more land would have to be devoted to crops for home consumption.

Only a very small proportion of the land planted to crops is sown to rye, or barley. Rye is the more important of the two, being sown on 1.2 per cent of the crop land for the county as a whole, while barley is sown on only 0.1 per cent (Table XXXI). Tobacco is unimportant, being



planted on 0.1 per cent of the crop land in the county as a whole.

TABLE XXXII. DISTRIBUTION OF LEGUME HAY BY KIND AND LAND CLASS, OVERTON COUNTY

Land Class	Total Legume Hay (Acres)	Per Cent				
		Alfalfa	Red Clover	Timothy and Clover	Red Top and Clover	Lespedeza
II	2,375.9	0.2	0	0.3	0	88.3
III	7,768.5	0.8	0.1	0.2	0.3	80.6
IV	5,973.2	0.3	0.4	0	0	78.2
VI	1,547.4	0	0.3	2.3	1.6	80.9
VII	2,318.2	0	1.6	3.8	0.2	75.3
County	19,983.2	0.4	0.4	0.8	0.2	80.2

(continued)

Land Class	Per Cent							
	Lespedeza and Red Top	Sericea	Soy-beans	Cow-peas	Mung Beans	Blue Grass and Leasp.	Orchard Grass and Leasp.	Total
II	5.1	0	3.1	3.0	0	0	0	100.0
III	7.2	0.3	6.2	2.3	0	0.2	1.8	100.0
IV	10.9	0.3	7.7	2.0	0.2	0	0	100.0
VI	1.7	0.6	7.7	4.8	0.1	0	0	100.0
VII	3.5	0	6.5	9.1	0	0	0	100.0
County	7.2	0.2	6.4	3.3	0.1	0.1	0.7	100.0

There were 19,983.2 acres, on all classes of land, devoted to legumes hay (Table XXXII). Lespedeza was most important. On Class II land it occupied 88.3 per cent of all land planted to legume hay.

All the other land classes used a less proportion of the land for lespedeza, there being no significant differences between classes III, IV,

and VI in this respect. Class VII land, on the other hand, was less than any of the others, having 75.3 per cent used in this manner (Figure 29).

Lespedeza with red top was the second most important legume hay crop. The better classes of land had more land used in this category than the poorer classes. Class IV land had more acres planted in this way than any other class.

The great proportion of land devoted to lespedeza shows its popularity as a legume. Probably one of the main reasons for its use is its adaptability to all types of soil, and to the fact that it is very economical to establish.

Soybeans are third in importance among legumes for hay. For the county as a whole it occupies 6.4 per cent of the land planted to legume hay. As the land class becomes poorer an increasing proportion is occupied by this crop (Figure 29). This is opposite what might be expected, the expense involved in seed for this crop is more than for some other legumes.

Cowpeas are fourth in importance among the hay legumes. Class VII land ranks first in the proportion of land planted to this crop, being 9.1 per cent. There is not much difference in the other land classes. However Class VI has 4.8 per cent used in this manner, while Classes II, III, IV have 3.0 per cent, 2.3 per cent, and 2.0 per cent respectively.

There appears to be no relationship between land class and other legumes with the exception of alfalfa. This crop appears only on the better land. Some other legumes grown to a slight extent are red clover, sericea, mung beans, clover and timothy, and lespedeza with orchard grass.

Red top is the most important of the non-legumes for hay. There appears to be no relationship between land class and the proportion of land planted to red top (Figure 30). Class VI ranks first with 87.6 per cent. Class III is lowest with 54.7 per cent.

Millet is second among the non-legume hay crops. It occupies 13.8 per cent of the land devoted to non-legume hay, for the county as a whole. Class III land is first in this respect, having 18.3 per cent of its non-legume hay seeded to millet. Class VI land has only 2.9 per cent in millet.

TABLE XXXIII. DISTRIBUTION OF NON-LEGUME HAY BY KIND AND LAND CLASS, OVERTON COUNTY

Land Class	Total Non-Legume Hay (Acres)	Per Cent								Total
		Red Top	Timothy	Red Top and Timothy	Orchard Grass	Red Top and Orchard	Millet	Millet and Peas	Blue Grass and Red Top	
II	504.0	64.2	1.8	1.2	0	0.4	14.8	0.6	17.0	100.0
III	840.6	54.7	2.2	8.2	2.6	9.2	18.3	0	4.8	100.0
IV	1184.5	63.2	0.7	5.4	2.7	7.8	11.9	0.1	8.2	100.0
VI	242.3	87.6	0	2.9	0	4.1	2.9	0	2.5	100.0
VII	273.5	58.5	1.5	3.7	12.6	1.1	15.5	7.1	0	100.0
County	3044.9	62.6	1.3	5.1	2.9	6.0	13.8	0.8	7.5	100.0

Other important non-legumes seedings are combinations of timothy, orchard grass, or blue grass with red top. The most important of these combinations is red top and blue grass. Class II land has the largest proportion of land in hay seed to red top and blue grass. Class IV ranks lowest in this respect having 2.5 per cent. Other non-legumes do not show any definite relationship to land class.

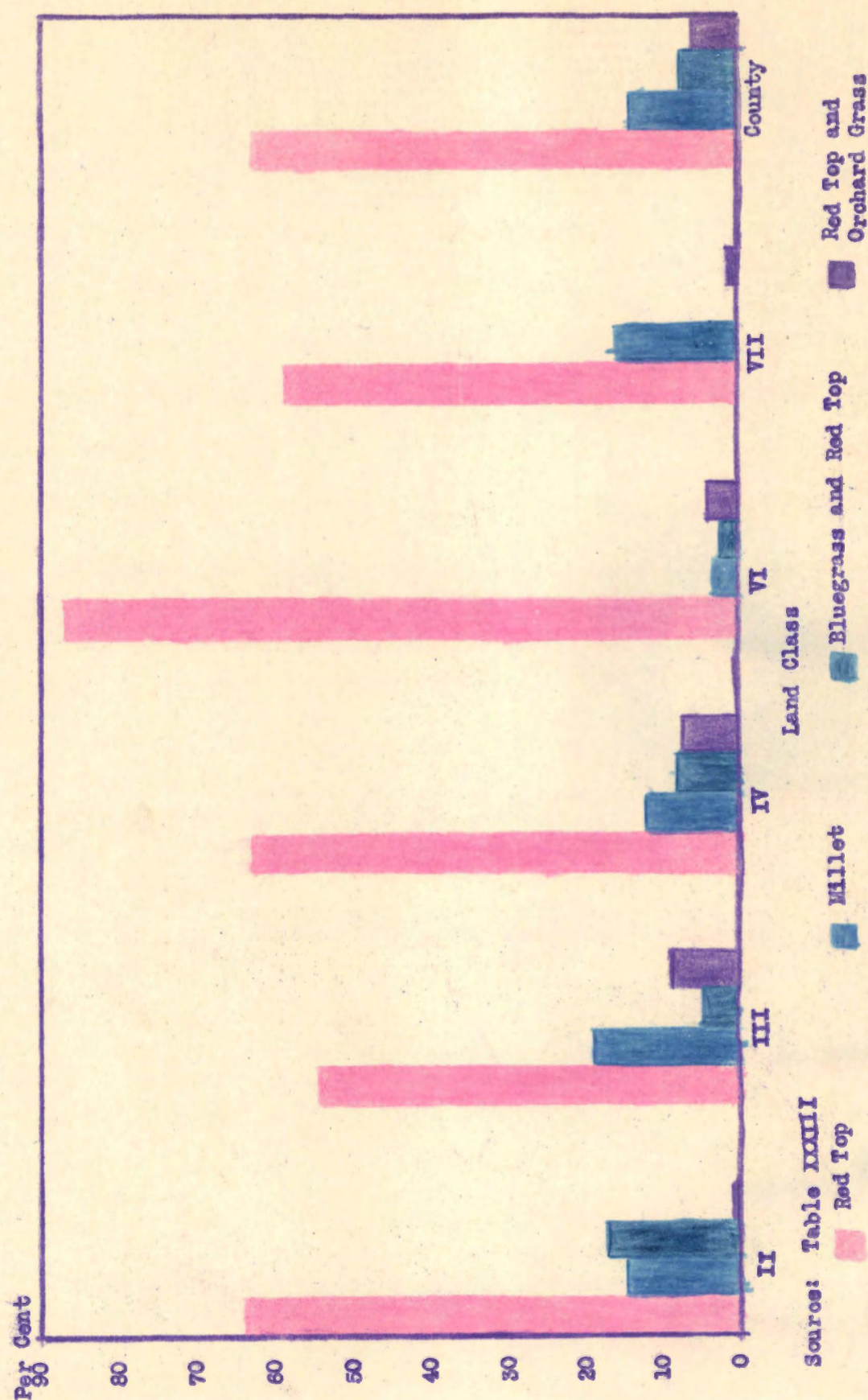


Figure 30. Distribution of Non-Legume Hay, by Land Class, Overton County

Several factors affect the situation so far as land planted to crops are concerned. For both legumes and non-legumes for hay, many of the samples were inadequate. Only a few farms are growing red clover or clover and timothy. Usually these are among the larger farms, and the acreages large enough to influence land use considerably, whereas these crops were unimportant on a majority of farms. Improper classification of the land is another limitation to keep in mind when studying the results. Since it is possible for any one farm to have land in either one or several land classes, it would be difficult to determine on which land class the crop was actually grown. Probably these conditions help explain the results obtained in regard to many of the legume and non-legume hay crops, in relation to land class.

CHAPTER III

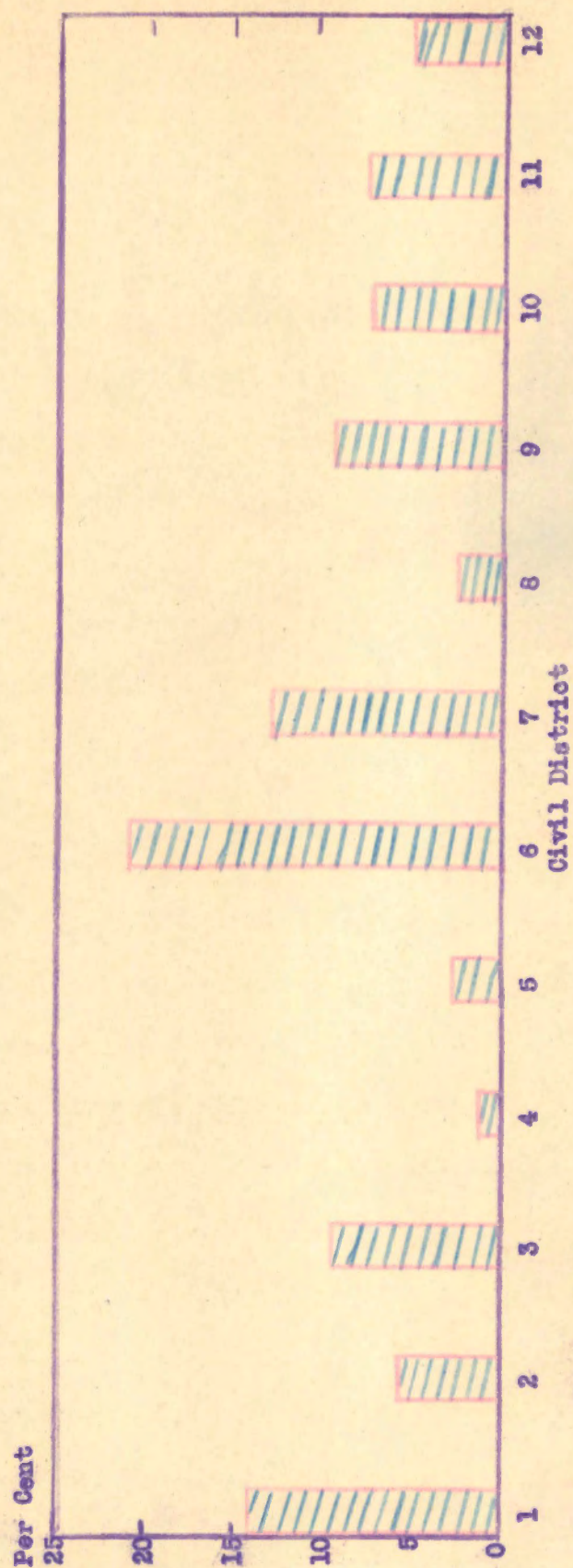
RELATION OF TOTAL LAND AREA PER FARM TO LAND USE

The size of a farm often has an important relation to its ability to supply a living for a family. If small, with poor soil, it cannot support a good standard of living so well as one of larger size. The resources of smaller farms are often used in a different manner from those of larger farms.

In making this analysis, by total land area per farm, groupings were made to parallel those found in the 1935 Agricultural Census. However, all farms with less than 20 acres have been tabulated together whereas the census divides them into three groups: (1) Under 3 acres; (2) 3 to 9 acres; (3) 10 to 19 acres.⁽¹⁾ Another exception is for farms over 140 acres. The census makes several groups above this size while in this study all farms of 140 acres and over have been tabulated together.

Farms of less than 20 acres were found in all civil districts (Table XXXIV). More than one-fifth of such land in the county is in the 6th District (Figure 31). The next highest districts, 1st and 7th, have 14 per cent and 13 per cent, respectively.

(1) U. S. Census of Agriculture, Volume II, 1935, p. 613.



Source: Table XXXIV

Figure 31. Distribution of Land, Farms of 20 Acres or Less, By Civil Districts, Overton County

TABLE XXXIV. NUMBER OF FARMS, AREA, AND DISTRIBUTION OF
MAJOR LAND USE ON FARMS OF LESS THAN 20 ACRES, BY
CIVIL DISTRICT, OVERTON COUNTY

C.D.	No. Farms	Farms by Land Class					Total All Land (Acres)	Improved Land (Acres)
		II	III	IV	VI	VII		
1	21	4	14	3			241.0	203.5
2	7			5	2		96.0	85.0
3	13			13			159.3	111.5
4	2				2		22.0	19.5
5	4		3	1			44.0	27.0
6	26		17	8		1	349.1	270.2
7	18		9	1	8		216.5	150.0
8	5		1			4	41.5	26.8
9	10					10	161.0	106.0
10	8		2			6	123.5	73.5
11	13	1	10	2			128.0	111.5
12	9			8		1	86.0	75.7
Co.	136	5	56	41	12	22	1667.7	1260.2

66

(continued)

C.D.	Buildings, Roads, Lanes (Acres)	Woods Not Pastured (Acres)	Woods Pas- tured (Acres)	Open Pasture Non- Crop Land (Acres)	Other Land (Acres)
1	19.0	3.5	6.0	9.0	0.0
2	5.0	0.0	1.0	5.0	0.0
3	9.3	11.5	8.0	19.0	0.0
4	1.0	1.5	0.0	0.0	0.0
5	2.0	5.0	5.0	5.0	0.0
6	17.2	25.0	4.0	32.7	0.0
7	6.0	43.5	12.0	5.0	0.0
8	1.5	11.0	1.0	1.0	0.0
9	9.0	22.5	12.0	11.5	0.0
10	4.5	29.5	0.0	16.0	0.0
11	6.0	2.0	4.0	4.5	0.0
12	2.5	7.0	1.0	0.0	0.0
Co.	82.8	162.0	54.0	108.7	0.0

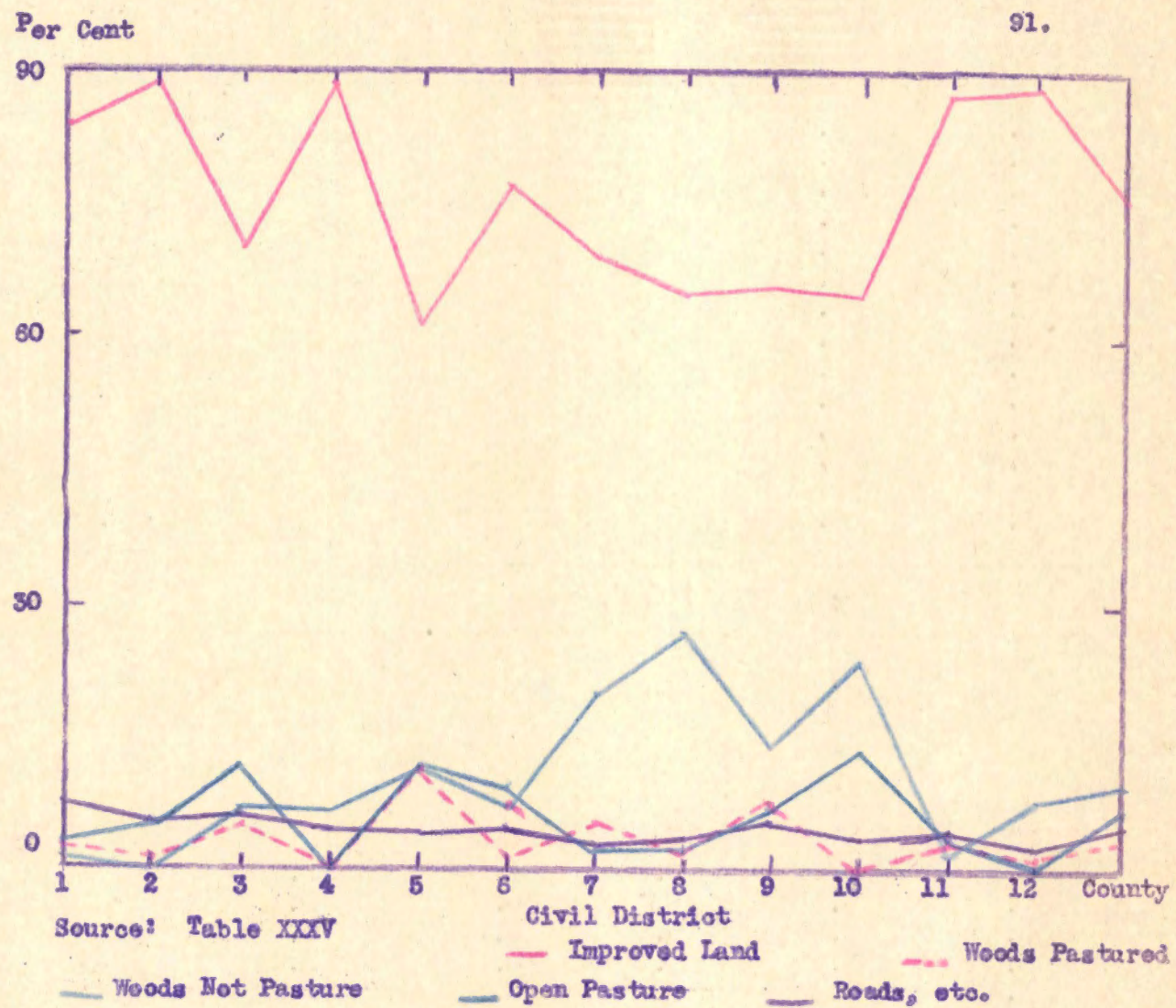


Figure 32. Distribution of Major Land Uses on Farms of Less than 20 Acres, by Civil Districts, Overton County

Only 136 farms of this size cooperated with the Agricultural Conservation Program (Table XXIV). The 1st, 6th, and 7th Districts are the only ones with an adequate number of farms for a sample.

The major use of land on farms in this group is as improved land, 75.6 per cent being used in this manner (Figure 32). Differences between districts are probably due in part to several causes. In the 1st and 6th Districts, proximity to town would tend to influence the proportion of land improved, as Livingston is in the 6th and the 1st is near Cookeville, in the adjoining county. The class of land on which the farms are located would possibly cause the lower percentage of land that is improved in the 7th District, compared with the 1st or 6th. Also the 1st and 6th Districts have better available transportation facilities which might influence the greater proportion of land improved.

The second major land use on farms of less than 20 acres is woods not pastured. The 7th District has a higher percentage used in this manner than the other two districts. The quality of land is probably the cause of this phenomenon, as eight of the eighteen farms in this district are located on Class VI land (Table XXIV). On the other hand, the 1st District has the least per cent of land used in this manner, a majority of the farms being on Classes II, III, and IV land.

Open pasture occupies 6.5 per cent of the land of farms of less than 20 acres, ranking third among the major land uses. The proportion of land used in this manner is highest in the 6th District, where more farms are on land of medium fertility, which probably explains in part the

higher percentage in this case.

Land occupied by buildings, roads, lanes, etc., is next in importance, accounting for 5 per cent of the land in this group. This is a rather high proportion. However, most of these farms are probably part-time farms and have a self-sufficing program that includes a cow or two, a few chickens, and a fattening hog. When buildings and lots have been provided to care for these proportionately more land is required on small farms than on larger ones.

TABLE XXXV. DISTRIBUTION OF MAJOR LAND USES ON FARMS WITH LESS THAN 20 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Total All Land (Acres)	Per Cent					Total
		Im- proved Land	Build- ings, Roads, Lanes, Etc.	Woods Not Pas- tured	Woods Pas- tured	Open Pas- ture	
1	241.0	84.4	7.9	1.5	2.5	3.7	100.0
2	96.0	88.6	5.2	0	1.0	5.2	100.0
3	159.3	70.0	5.9	7.2	5.0	11.9	100.0
4	22.0	88.6	4.6	6.8	0	0	100.0
5	44.0	62.3	4.5	11.4	11.4	11.4	100.0
6	349.1-	77.4	4.9	7.2	1.1	9.4	100.0
7	216.5	69.3	2.8	20.1	5.5	2.3	100.0
8	441.3	64.9	3.7	26.6	2.4	2.4	100.0
9	161.0	65.8	5.6	14.0	7.5	7.1	100.0
10	123.5	59.5	3.6	23.9	0	13.0	100.0
11	128.0	87.1	4.7	1.6	3.1	3.5	100.0
12	86.0	88.0	2.7	8.1	1.2	0	100.0
County	1667.7	75.6	5.0	9.7	3.2	6.5	100.0

The major portion of the improved land is planted to crops. The 1st District has the smallest percentage of improved land used in this manner, with 69.5 per cent. Both the 6th and 7th Districts are considerably

higher than this. The latter districts have more land in the poorer land classes, which probably accounts for the higher percentages in crops, as it takes more poor land to produce the same amount of food and feed.

Idle land is the second principal use of improved land. The 7th District has less idle land than Districts 1 or 6. Here again class of land probably is a contributing factor. Nearness to towns may also influence the high percentages in the 1st and 6th Districts. Farmers near Livingston and Cookeville may have a better opportunity to secure off-the-farm employment, and would thus have less time to cultivate their land. The difference in percentage of idle land in the 1st and 6th Districts is probably due to differences in proportion of land occupied by orchards. The 1st District has more than the 6th in this category. Land in orchards

TABLE XXXVI. PRINCIPAL USES OF IMPROVED LAND ON FARMS OF LESS THAN 20 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

Civil Distr.	Improved Land (Acres)	Per Cent				
		Orchard	Idle	Pasture	Land Planted in Crops	Total
1	203.5	5.9	21.7	2.9	69.5	100.0
2	85.0	4.7	0	0	95.3	100.0
3	111.5	5.8	16.5	2.7	75.0	100.0
4	19.5	0	0	15.4	84.6	100.0
5	27.0	5.6	0	0	94.4	100.0
6	270.2	2.4	22.8	1.9	72.9	100.0
7	150.0	0.7	12.0	5.3	82.0	100.0
8	26.8	9.3	0	0	90.7	100.0
9	106.0	6.9	8.2	0.9	84.0	100.0
10	73.5	4.1	24.9	0	71.0	100.0
11	111.5	3.6	1.8	4.0	90.6	100.0
12	75.7	0.7	31.6	0	67.7	100.0
County	1260.2	3.9	15.5	2.4	78.2	100.0

is the third principal use of improved land. This is probably due to the fact that most of the farms are self-sufficing and produce most of their fruit. Pasture occupies 2.4 per cent of the improved land on farms of less than 20 acres, being the fourth principal use of such land.

Per Cent

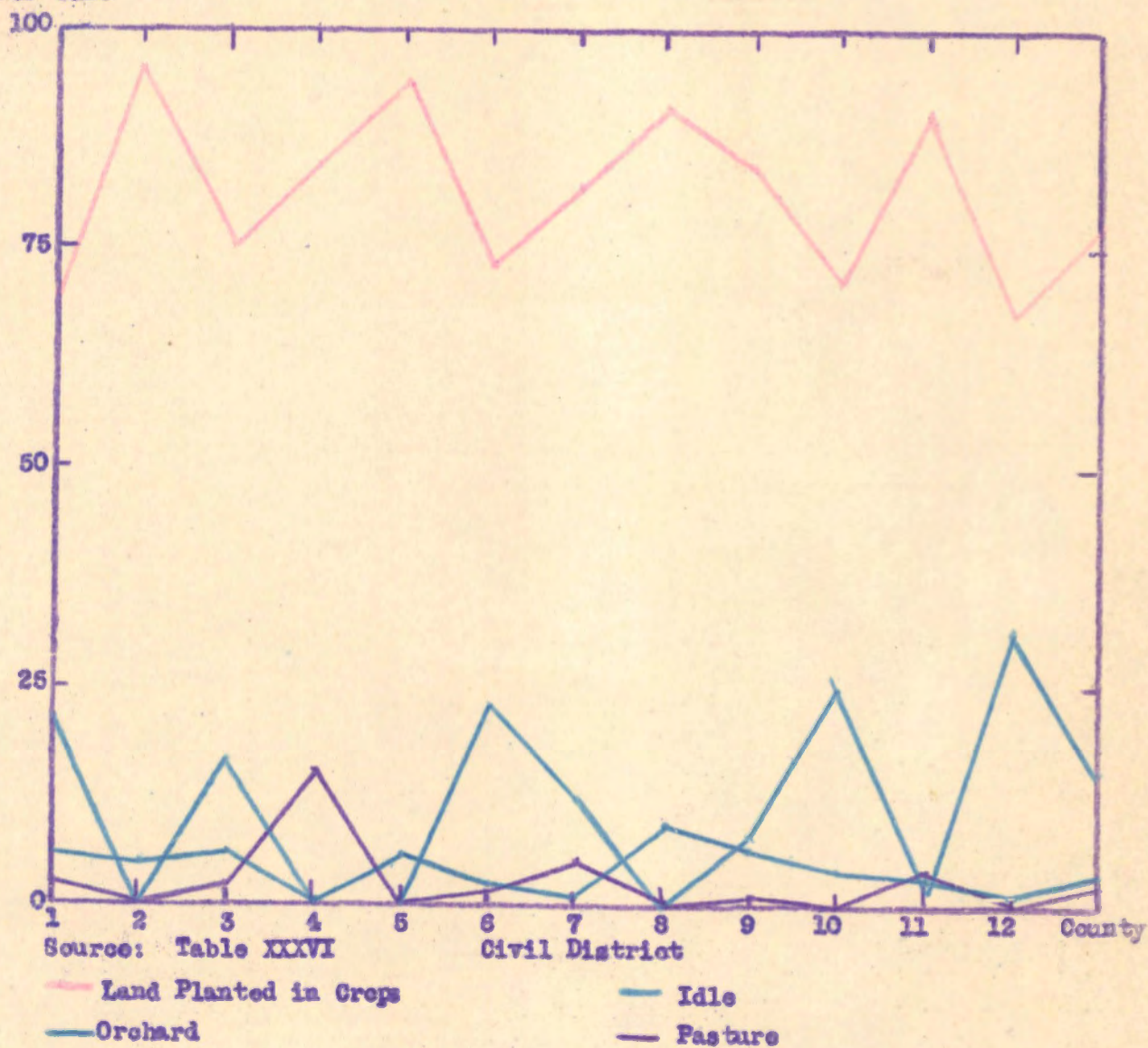


Figure 33. Principal Uses of Improved Land on Farms of Less Than 20 Acres, by Civil Districts, Overton County

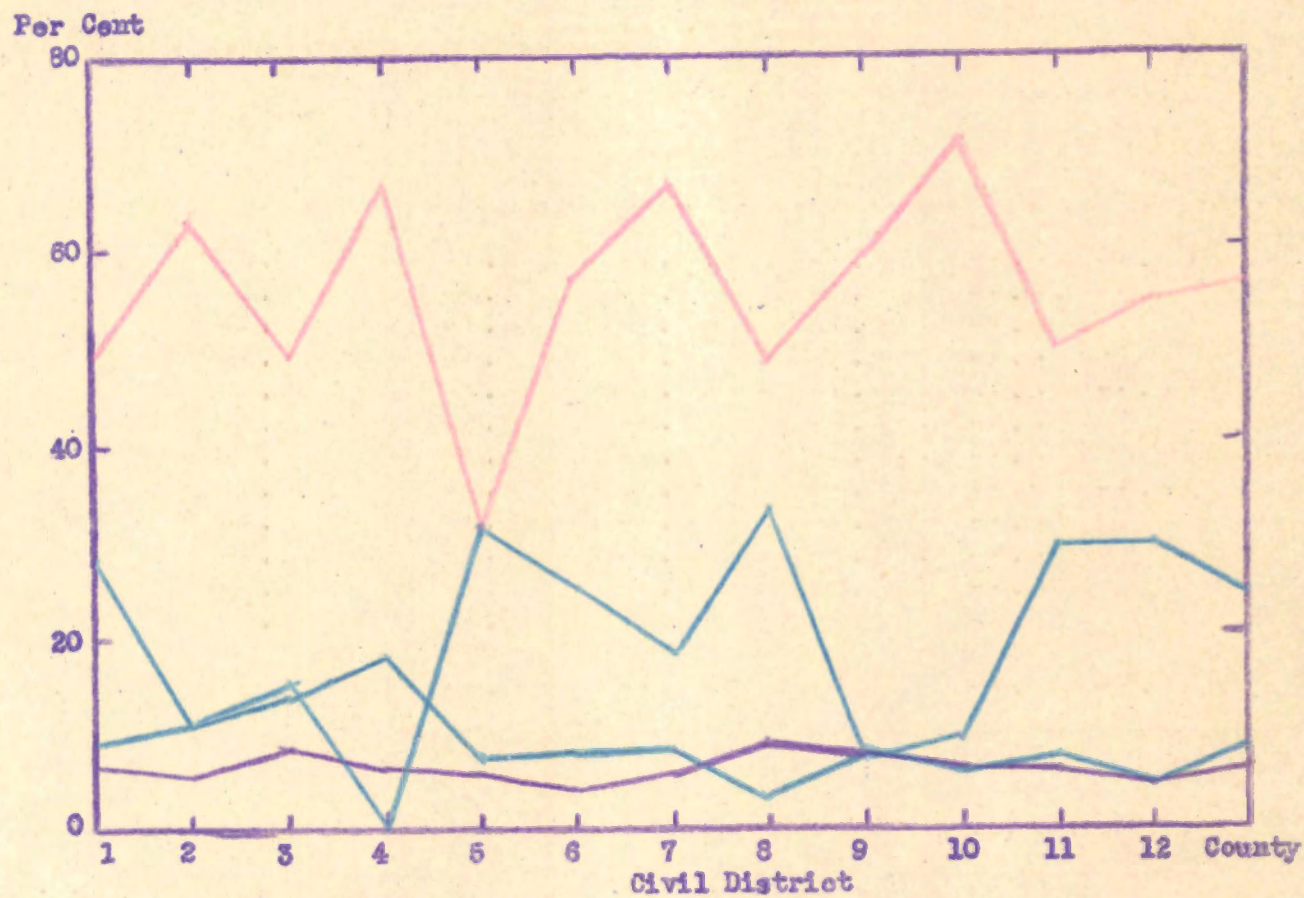
There is a great deal of variation between the districts in regard to the use of land planted to crops. Corn is the most important

TABLE XXXVII. DISTRIBUTION OF LAND PLANTED IN CROPS ON FARMS OF LESS THAN 20 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Land Planted in Crops (Acres)	Per Cent				
		Corn	Irish and Sweet Po- tatoes	Truck and Vegetables	Sorghum	Tobac- co
1	141.5	49.0	6.9	9.0	3.5	0.7
2	81.0	63.0	5.6	11.1	3.7	0.6
3	83.6	49.0	8.7	13.8	9.9	0
4	16.5	66.7	6.1	18.2	3.0	0
5	25.5	31.4	5.9	7.8	5.9	2.0
6	197.1	57.1	4.2	7.8	4.5	0
7	123.0	66.3	5.5	7.9	2.0	0
8	24.3	48.1	9.1	3.3	4.1	2.5
9	89.0	59.6	7.9	8.4	4.5	0
10	52.2	70.9	9.6	6.1	3.8	0
11	101.0	49.3	5.8	7.7	1.5	0
12	51.3	54.6	4.5	4.9	3.9	0
Co.	986.0	56.2	6.2	8.6	4.1	0.3

(continued)

C.D.	Per Cent						Total
	Wheat	Oats	Rye	Legume Hay	Non-Legume Hay	Miscel- laneous	
1	0	0	0	28.3	2.1	0.5	100.0
2	3.7	0	0	11.1	1.2	0	100.0
3	0	0	0	15.0	3.6	0	100.0
4	6.0	0	0	0	0	0	100.0
5	0	0	0	31.3	15.7	0	100.0
6	0	0	0	24.9	1.5	0	100.0
7	0	0	0	18.3	0	0	100.0
8	0	0	0	32.9	0	0	100.0
9	0.6	6.7	1.1	7.3	3.3	0.6	100.0
10	0	0	0	9.6	0	0	100.0
11	3.5	0	2.5	29.2	0	0	100.0
12	2.3	0	0	29.2	0	0	100.0
Co.	2.5	0.9	0.4	19.0	1.7	0.1	100.0



Source: Table XXXVII

— Corn
 — Legume Hay
 — Truck and Vegetables
 — Irish and Sweet Potatoes

Figure 34. Distribution of Land Planted in Crops on Farms of Less than 20 Acres, by Civil Districts, Overton County

crop (Figure 34). The factor that most influences the proportion of land planted to corn is probably land class. The 1st District has more of the better land than most of the other districts and a smaller percentage planted to corn.

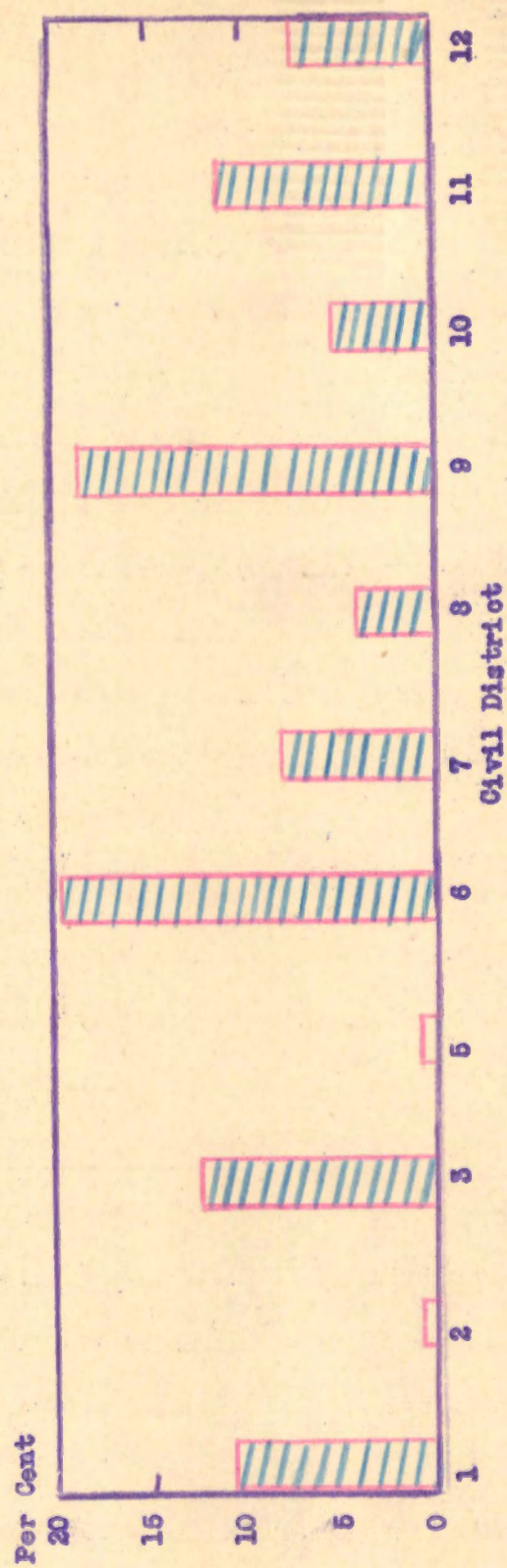
Legumes for hay is next in importance. It appears that farms on the better land classes tend to use more legumes for hay than those on poorer land. The 1st District ranks highest.

Truck and vegetable crops are the third most important use of land planted in crops, occupying 8.6 per cent of the land used in this manner. They are followed, in the order named, by Irish and sweet potatoes combined, and sorghum. The small farms are mostly self-sufficing, thus accounting in part for the proportion of land used in this way. There is no great variation between the three districts with respect to these crops. However the 1st and 6th tend to have a larger proportion of land devoted to truck crops. This is probably because of nearness to markets, at Livingston and Cookeville, where some surpluses may be more readily disposed of.

(2)

Farms of 20 to 29 Acres. There were 113 farms of this size cooperating with the Conservation Program (Table XXXVIII), with a total of 2,711.5 acres. The 6th and 9th Districts contain 19.9 per cent and 18.9 per cent respectively, of the total land in these farms (Figure 35). The samples from these two districts are the only ones that were adequate.

(2) No farms in this size group were found in the 4th Civil District.



Source: Table XXXVIII

Figure 35. Distribution of Land in Farms of 20 to 29 Acres, by Civil Districts, Overton County

TABLE XXXVIII. NUMBER OF FARMS, AREA, DISTRIBUTION OF MAJOR
LAND USES ON FARMS OF 20-29 ACRES, BY CIVIL DISTRICT,
OVERTON COUNTY

C.D.	No. of Farms	Farms by Land Class					Total All Land (Acres)	Improved Land (Acres)
		II	III	IV	VI	VII		
1	12	6	6				295.0	243.5
2	1			1			25.0	15.0
3	15			11	4		339.5	217.0
4	None							
5	1		1				25.0	13.5
6	22		13	7		2	532.0	376.3
7	9		2	2	5		219.5	126.0
8	5		2			3	114.0	75.0
9	21					21	513.0	284.3
10	6		3			3	146.0	71.8
11	13	2	6	5			308.5	258.5
12	8			8			194.0	158.0
Co.	113	8	33	34	9	29	2711.5	1838.9

(continued)

C.D.	Buildings, Roads, Lanes (Acres)	Woods Not Pastured (Acres)	Woods Pas- tured (Acres)	Open Pasture Non-Crop Land (Acres)	Other Land (Acres)
1	11.5	20.0	14.0	6.0	0.0
2	2.0	8.0	0.0	0.0	0.0
3	12.5	57.0	10.0	43.0	0.0
4					
5	1.0	4.5	0.0	6.0	0.0
6	29.0	54.4	20.5	51.8	0.0
7	3.5	63.5	17.5	9.0	0.0
8	2.5	0.0	23.0	13.5	0.0
9	20.0	161.7	3.0	44.0	0.0
10	5.7	40.0	5.0	23.5	0.0
11	4.0	11.0	12.0	23.0	0.0
12	8.0	19.0	3.0	6.0	0.0
Co.	99.7	439.1	108.0	225.8	0.0

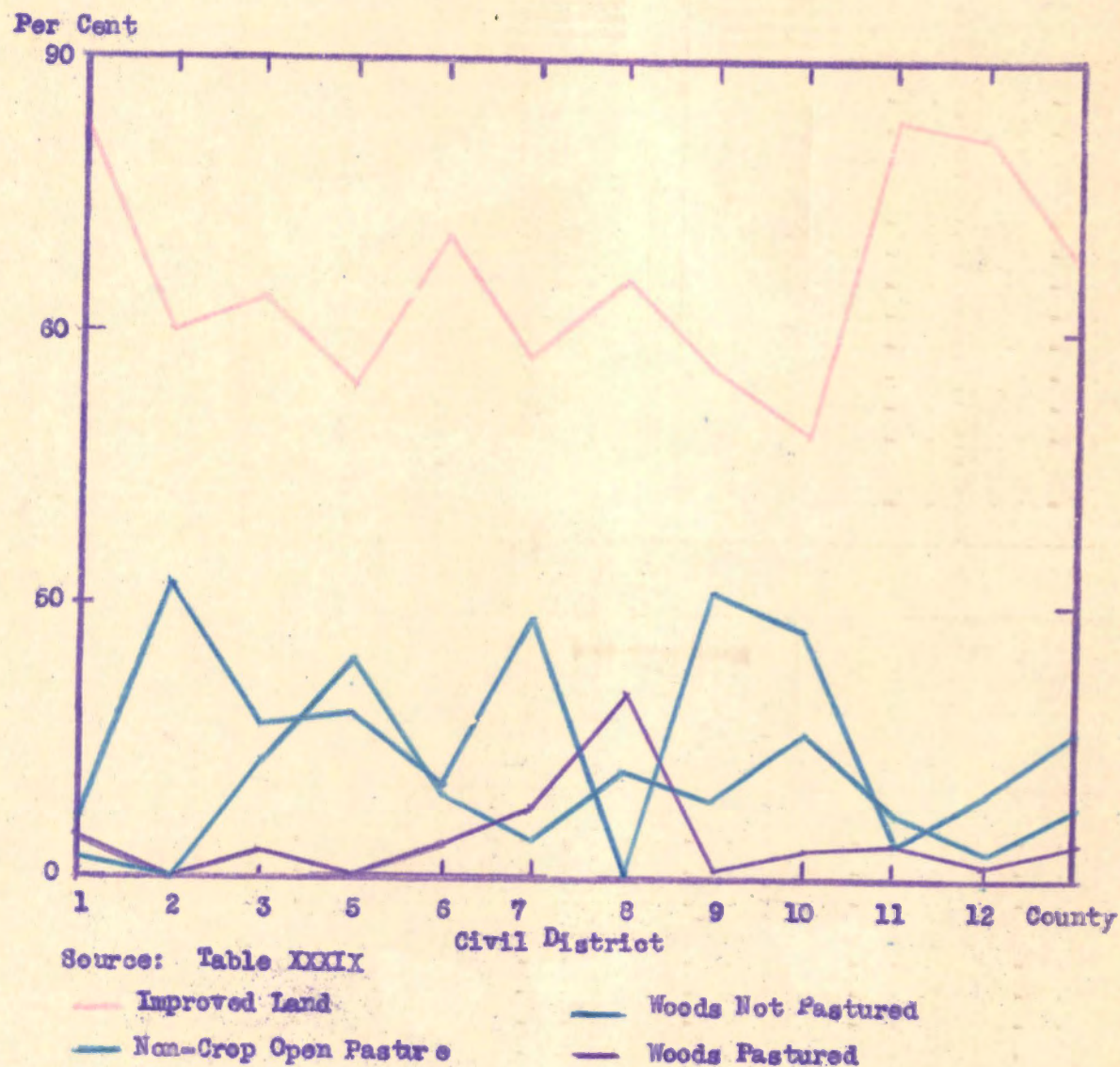


Figure 36. Distribution of Major Land Uses, on Farms of 20 to 29 Acres, by Civil Districts, Overton County

The major use of all land on farms of this size is as improved land (Figure 36). Sixty seven and eight-tenths per cent is improved. There is a great deal of difference between the 6th and 9th Districts in this respect. The 6th District has 70.7 per cent of the land improved while the 9th has 55.4.

Probably the most important factor causing the difference is class of land. All the farms in the 9th District are on Class VII land (Table XXXVIII). The majority of these in the 6th are on Classes III and IV land.

The next major use of land in this group is woods not pastured, which occupies 16.2 per cent. The 9th District is much higher than the 6th in this respect, which can be attributed to class of land. However, nearness to Livingston probably has some influence on the amount of improved land in the 6th District.

There is no great difference between these districts in other major uses of land.

For the county as a whole, 8.3 per cent of all the land is occupied by open pasture while 4.0 per cent is in woods pastured.

Buildings, roads, lanes, etc., occupy 5.5 per cent of the land in the 6th District to 3.9 per cent in the 9th. This difference is probably accountable for by the fact that roads are better developed in the 6th District, thus using a larger proportion of the land. There is also some indication that more land is used for buildings.

The largest proportion of improved land is used for crops (Figure 37). There is a difference of 6.4 per cent between the 6th and 9th Districts in

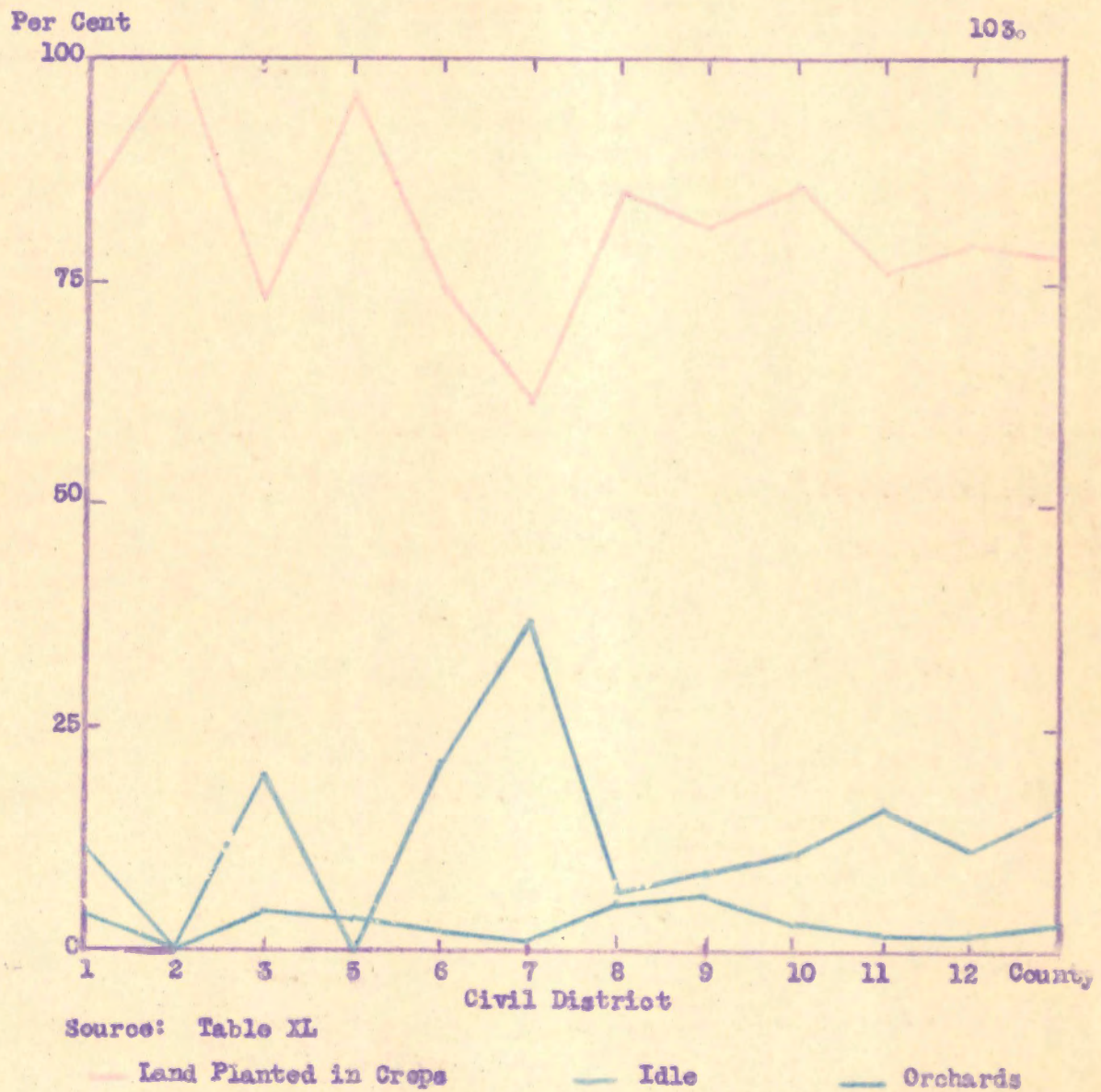


Figure 37. Principal Uses of Improved Land on Farms 20 to 29 Acres, by Civil Districts, Overton County

TABLE XXXIX. DISTRIBUTION OF MAJOR LAND USES ON FARMS OF
20 TO 29 ACRES, BY CIVIL DISTRICTS, OVERTON
COUNTY

C.D.	Total All Land (Acres)	Per Cent					Total
		Improved Land	Buildings, Roads, Lanes, Etc.	Woods Not Pas- tured	Woods Pas- tured	Open Pas- ture	
1	295.0	82.6	3.9	6.8	4.7	2.0	100.0
2	25.0	60.0	8.0	32.0	0	0	100.0
3	339.5	63.9	3.7	16.8	2.9	12.7	100.0
4							
5	25.0	54.0	4.0	18.0	0	24.0	100.0
6	532.0	70.7	5.5	10.2	3.9	9.7	100.0
7	219.5	57.4	1.6	28.9	8.0	4.1	100.0
8	114.0	65.8	2.2	0	20.2	11.8	100.0
9	513.0	55.4	3.9	31.5	0.6	8.6	100.0
10	146.0	49.2	3.9	27.4	3.4	16.1	100.0
11	308.5	83.8	1.3	3.6	3.9	7.4	100.0
12	194.0	81.5	4.1	9.8	1.5	3.1	100.0
Co.	2711.5	67.8	3.7	16.2	4.0	8.3	100.0

this respect, the 9th having more of its improved land planted to crops. Several factors may influence this, but probably the most important cause is the class of land.

While idle land is not nearly so important as land planted to crops it is the second principal use of improved land. The difference between the 6th and 9th Districts indicates that less land is left idle on the poorer classes of land. On farms of this size it would take more of the poor land to produce the same amount than would be required on better land. Farmers in the 6th District probably also have better opportunities for outside employment.

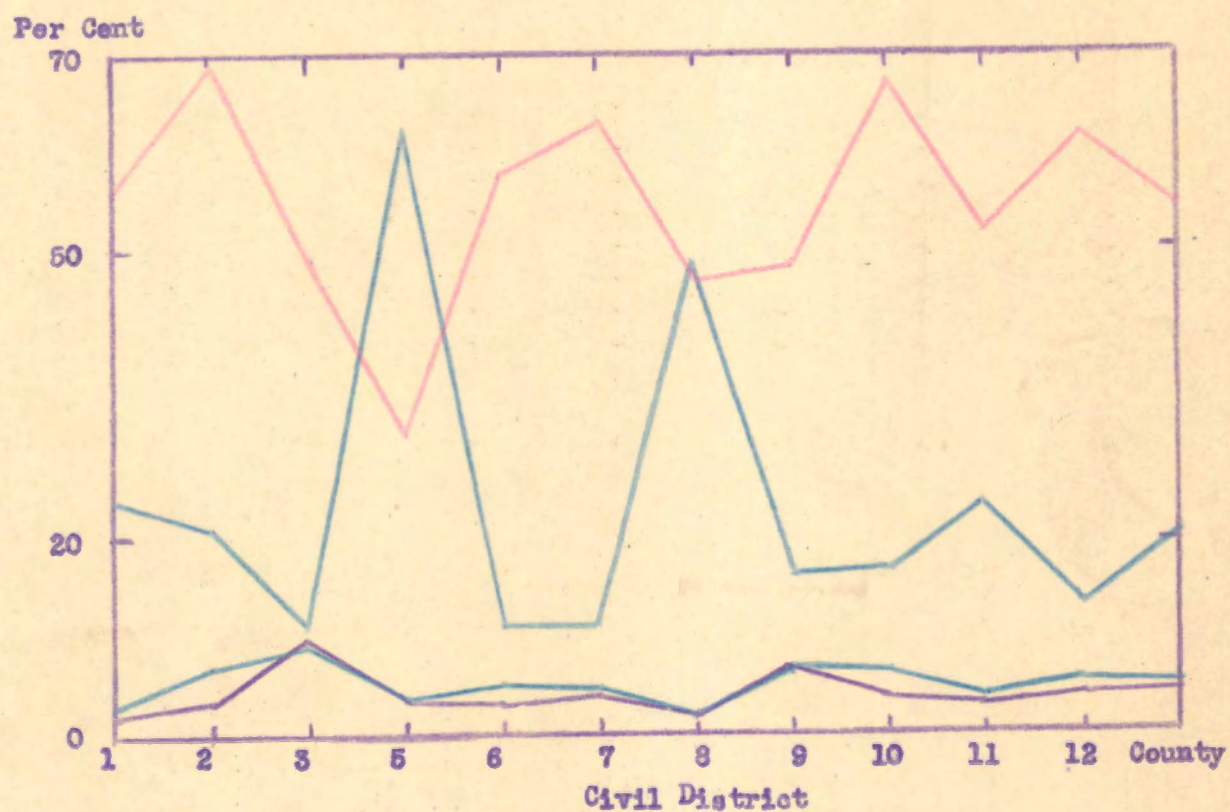
TABLE XL. DISTRIBUTION OF IMPROVED LAND ON FARMS OF 20 TO 29 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

Civil Distr.	Improved Land (Acres)	Per Cent				
		Orchard	Idle	Pasture	Land Planted in Crops	Total
1	243.5	4.1	11.1	0	84.8	100.0
2	15.0	0	0	0	100.0	100.0
3	217.0	4.6	19.8	2.1	73.5	100.0
4	None					
5	13.5	3.7	0	0	96.3	100.0
6	376.3	2.5	21.1	1.6	74.8	100.0
7	126.0	1.2	37.3	0	61.5	100.0
8	75.0	5.6	6.7	2.6	85.1	100.0
9	284.3	6.3	9.0	3.5	81.2	100.0
10	271.8	3.1	11.1	0	85.8	100.0
11	258.5	2.0	16.4	5.2	76.4	100.0
12	158.0	1.9	12.5	6.3	79.3	100.0
Co. aver.	1838.9	3.5	16.2	2.5	77.8	100.0

Orchards use a larger proportion of the land in the 9th than in the 6th District. There is a difference of 3.8 per cent in this respect. The land in the 9th District is probably better adapted to the production of fruit than in the 6th.

There is some difference, in the proportion of land used for pasture, between the two districts. Probably the reason for this difference is that land in the 9th District is better adapted to grazing than it is to crop production.

There are considerable differences in the proportion of land planted to various crops, in the respective districts. The most important crop in every case is corn (where the sample is adequate (Figure 38). However, corn



Source: Table XLI

— Corn

— Legume Hay

— Truck and Vegetables

— Irish and Sweet Potatoes

Figure 38. Distribution of Land Planted in Crops on Farms 20 to 29 Acres, by Civil Districts, Overton County

is used on a greater proportion of land in the 6th District than in the 9th. Inasmuch as the farms in the 9th District are more self-sufficing they would tend to have more of other crops that are used on

TABLE XLI. DISTRIBUTION OF LAND PLANTED IN CROPS ON FARMS OF 20 TO 29 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Land Planted in Crops (Acres)	Per Cent					
		Corn	Irish and Sweet Po- tatoes	Truck and Vegeta- bles	Sor- ghum	Wheat	Oats
1	206.5	56.2	2.0	3.1	1.5	1.8	0
2	14.5	69.0	3.4	6.9	0	0	0
3	159.5	49.2	9.7	9.1	5.0	3.1	0
4							
5	13.0	30.8	3.8	3.8	0	0	0
6	281.6	58.0	3.4	5.4	3.0	3.6	4.1
7	77.5	63.2	4.0	5.0	1.3	0	0
8	63.8	46.6	2.0	2.0	0	0.8	0
9	230.8	48.5	7.2	7.1	5.8	0	10.0
10	61.6	67.4	3.9	6.8	0	0	4.9
11	197.5	51.9	3.3	4.3	3.6	9.1	0
12	125.3	62.1	4.4	5.6	4.0	2.4	2.4
Co. aver.	1431.6	54.8	4.6	5.5	3.2	2.8	2.8

(continued)

C.D.	Rye	Legume Hay	Non-Legume Hay	Misc.	Total
1	0	24.2	11.2	0	100.0
2	0	20.7	0	0	100.0
3	7.5	10.7	5.7	0	100.0
4					
5	0	61.6	0	0	100.0
6	0.4	20.7	0	1.4	100.0
7	0	20.7	5.8	0	100.0
8	0	48.6	0	0	100.0
9	1.9	16.5	3.0	0	100.0
10	0	17.0	0	0	100.0
11	1.5	24.3	2.0	0	100.0
12	1.6	13.5	4.0	0	100.0
Co. aver.	1.6	20.8	3.6	0.3	100.0

the farm. This is especially true of Irish and sweet potatoes, truck and vegetables, and sorghum. The percentage in each of these crops is greater in the 9th District. Legume hay is the second most important crop on farms of this size (Figure 38). There is no significant difference in the proportion of this crop, where samples are adequate.

Wide differences occur in the proportion of the crop land planted to small grains. The 6th District has 3.6 per cent in wheat, 4.0 per cent in oats, and a small amount in rye. The 9th District has no wheat, but 10 per cent and 1.9 per cent respectively in oats and rye. This indicates that wheat is associated with better land. The thin soil of Class VII, which is found in the 9th District, is not adapted to wheat production.

Farms in the 9th District had 3.0 per cent of land in crops planted to non-legumes for hay, while these crops were not reported in the 6th District. This is explained in part by class of land, the better land using legume crops for hay.

Farms of 30-49 Acres. There was a total of 13,412.3 acres, on 347 farms, in this group cooperating in the Agricultural Conservation Program (Table XLII). While all districts are represented by some farms in this group, the 3rd, 6th, 7th, 9th, and 11th are the only ones with adequate samples. The 9th has the largest percentages of land in farms of this size (Figure 39). The 3rd District is second with 13 per cent, followed by the 6th and 11th with 11.2 per cent each, and 7th with 8.4 per cent (Figure 39).

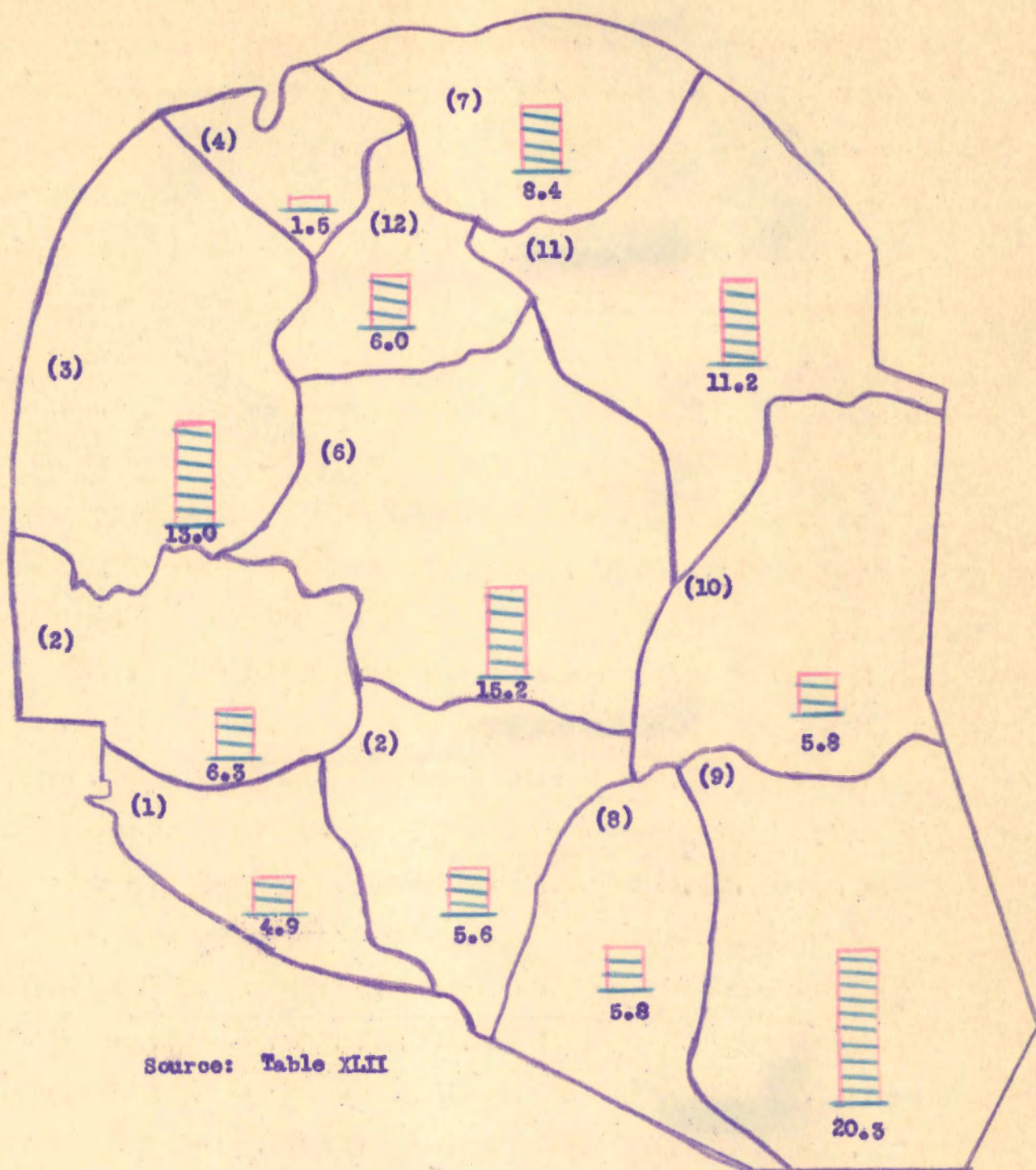


Figure 39. Distribution of land in Farms of 30 to 49 Acres, by Civil Districts, Overton County

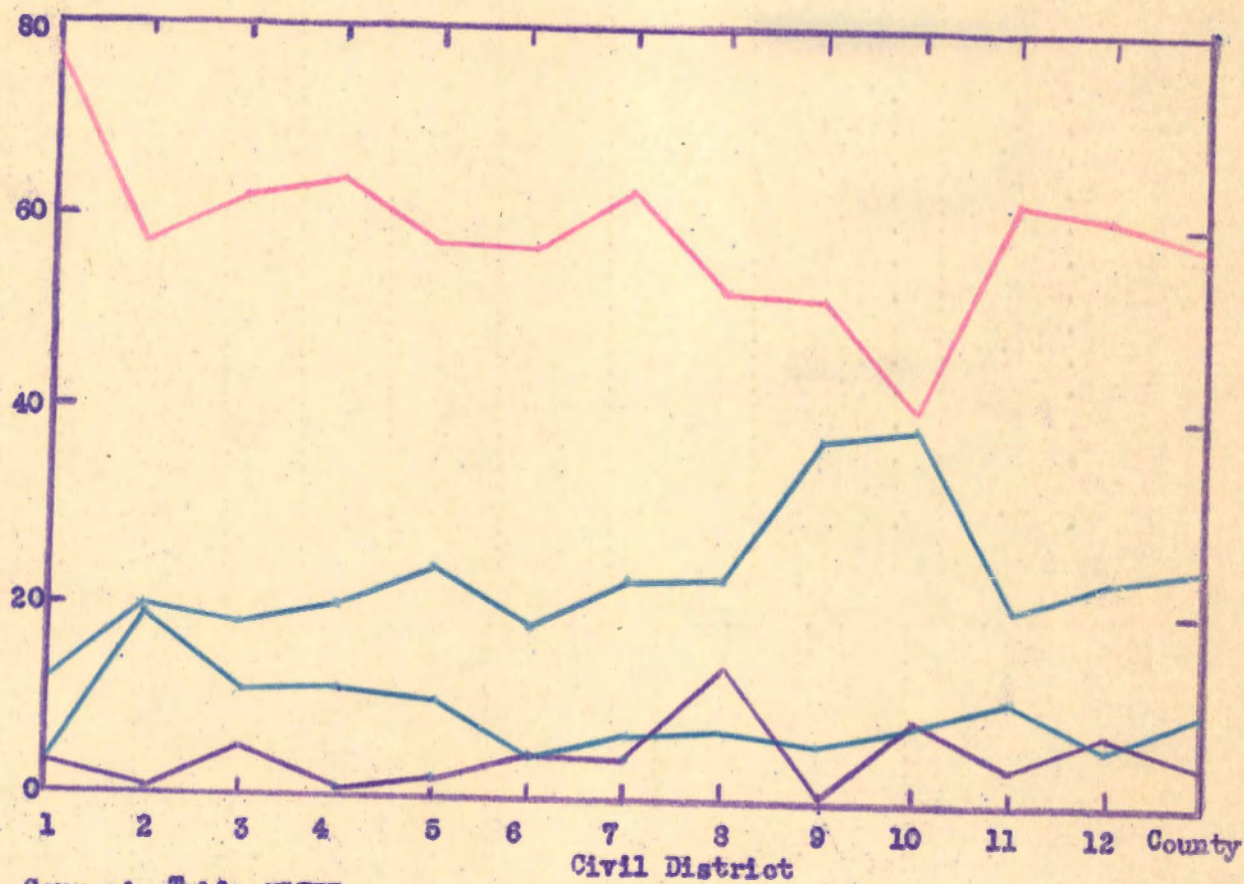
TABLE XLII. NUMBER OF FARMS, AREA, AND DISTRIBUTION OF MAJOR
LAND USES ON FARMS OF 30 TO 49 ACRES, BY CIVIL DISTRICTS,
OVERTON COUNTY

C.D.	No. of Farms	Farms by Land Class					Total All Land (Acres)	Improved Land (Acres)
		II	III	IV	VI	VII		
1	17	8	6	3			657.0	508.3
2	22			15	7		849.5	489.0
3	44		1	32	7	4	1747.5	1090.5
4	5				5		197.5	127.0
5	19		7	10		2	752.5	433.0
6	40	1	20	13		6	1505.7	861.7
7	30		20	6	4		1119.5	705.8
8	20		9			11	777.4	408.7
9	68		4			64	2717.7	1423.2
10	20		6			14	774.0	315.0
11	40	5	22	12		1	1506.0	942.0
12	22		1	21			808.0	492.1
Co.	347	14	96	112	23	102	13,412.3	7796.3

(continued)

C.D.	Buildings, Roads, Lanes (Acres)	Woods Not Pas- tured (Acres)	Woods Pas- tured (Acres)	Open Pas- ture Non- Crop Land (Acres)	Other Land (Acres)
1	24.7	80.0	20.0	24.0	0
2	24.0	168.5	4.5	163.5	0
3	56.0	320.0	90.5	190.5	0
4	7.0	39.5	2.0	22.0	0
5	17.7	183.8	15.5	78.5	24.0
6	41.5	258.5	74.5	269.5	0
7	26.5	261.7	51.5	74.0	0
8	24.0	130.5	107.2	57.0	0
9	86.5	1023.5	25.0	157.5	2.0
10	28.0	300.0	66.0	65.0	0
11	26.5	304.5	58.0	175.0	0
12	20.4	136.0	58.5	51.0	0
Co.	382.8	3306.5	573.2	1327.5	26.0

Per Cent



Source: Table XLIII

— Improved Land

— Non-Crop Open Pasture

— Woods Not Pastured

— Woods Pastured

Figure 40. Distribution of Major Land Uses on Farms of 30 to 49 Acres, by Civil Districts, Overton County

Improved land is the most important use of land on farms of this group, occupying 58.1 per cent of total farm area (Figure 40). The 9th District has the least proportion of land improved. There is no great difference between the other districts with adequate samples.

The main cause of the difference in the use of land in this group is probably quality of land. The majority of farms in the 9th District are on Class VII land, while the majority of those in the other districts are on Classes III and IV (Table XLII).

Land occupied by woods not pasture has a similar relation to class of land. This use is second in importance. The higher percentage of land in this category is on the poorer land classes. Thirty seven and seven tenths per cent of the land in the 9th District is used in this manner, the other districts having considerably less.

The proportion of land in open pasture and in woods pastured indicates that farms in the districts on the Highland Rim have a higher percentage in these categories than those on the Cumberland Plateau. To some extent these uses are associated with land class, but indications are that other factors such as nearness to towns or markets and transportation facilities may also have some influence.

The 6th District is highest in proportion of land devoted to open pasture while the 9th District is least, with 5.8 per cent (Figure 40). All the districts with larger proportions of their farms on the better land classes rank higher than the 9th. In some cases this difference is not very great. Woods pastured shows practically the same relationship. Thus, the class of land is probably the most important cause of variation

TABLE XLIII. DISTRIBUTION OF MAJOR LAND USES ON FARMS OF 30 TO 49 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Total All Land (Acres)	Per Cent						Total
		Im- proved Land	Build- ings, Roads, Lanes, Etc.	Woods Not Pas- tured	Woods Pas- tured	Open Pasture Non- Crop Land	Other Land	
1	657.0	77.4	3.7	12.2	3.0	3.7	0	100.0
2	849.5	57.6	2.8	19.8	0.5	19.3	0	100.0
3	1747.5	62.4	3.2	18.3	5.2	10.9	0	100.0
4	197.5	64.3	3.5	20.0	1.0	11.2	0	100.0
5	752.5	57.5	2.4	24.4	2.1	10.4	3.2	100.0
6	1505.7	57.2	2.8	17.2	4.9	17.9	0	100.0
7	1119.5	63.0	2.4	23.4	4.6	6.6	0	100.0
8	777.4	52.6	3.1	23.2	13.8	7.3	0	100.0
9	2717.7	52.4	3.2	37.7	0.9	5.8	0.07	100.0
10	774.0	40.7	3.6	38.8	8.5	8.4	0	100.0
11	1506.0	62.5	1.8	20.2	3.9	11.6	0	100.0
12	808.0	60.9	2.5	23.1	7.2	6.3	0	100.0
Co.	13412.3	58.1	2.8	24.7	4.3	9.9	0.2	100.0

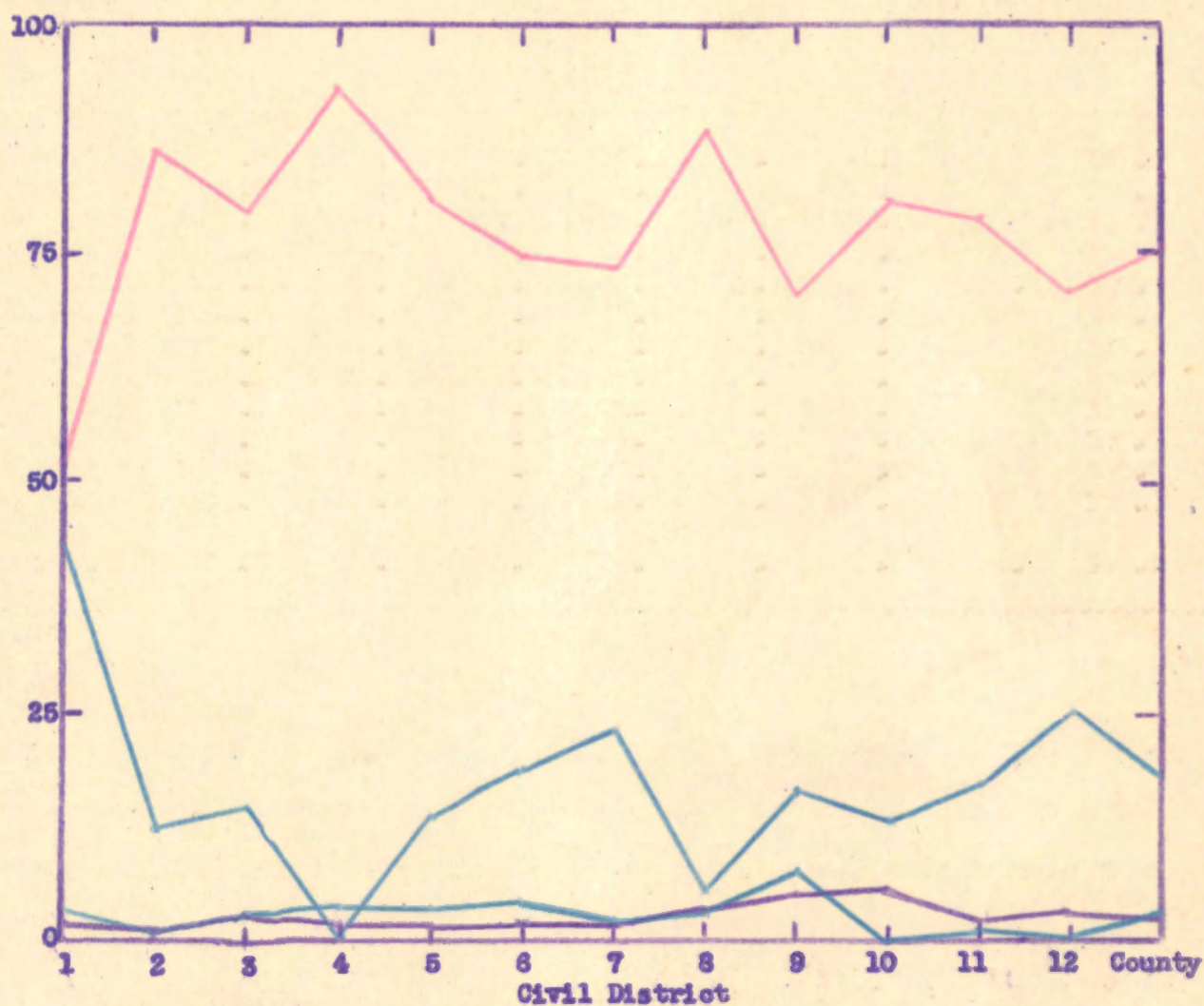
in these uses, among the districts.

Improved land is devoted mostly to the production of crops. Crops occupy 75.8 per cent of all improved land in the county. The next most important use is idle land, which occupies 17.8 per cent of improved land (Figure 41).

Districts with adequate samples, and located on the Highland Rim, are higher in proportion of land planted to crops. The 3rd and 11th are highest in this respect, each having approximately 79 per cent of improved land used in this manner (Figure 41).

The 9th District has 70.8 per cent of improved land in crops. On farms of this size group possibly a greater proportion of the land is planted in crops on the better land classes. There is no significant difference

Per Cent



Source: Table XLIV

— Land Planted in Crops
 — Pasture

— Idle
 — Orchard

Figure 41. Principal Uses of Improved Land on Farms of 30 to 49 Acres, by Civil Districts, Overton County.

TABLE XLIV. DISTRIBUTION OF IMPROVED LAND ON FARMS OF 30 TO 49 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

Civil Distr.	Improved Land (Acres)	Per Cent				Total
		Orchard	Idle	Pasture	Land Pastured in Crops	
1	508.3	2.0	42.8	3.1	52.1	100.0
2	489.0	1.4	11.7	0.6	86.3	100.0
3	1090.5	3.0	14.3	2.8	79.9	100.0
4	127.0	2.4	0	3.9	93.7	100.0
5	433.0	1.7	13.5	3.8	81.0	100.0
6	861.7	2.3	18.6	4.2	74.9	100.0
7	705.8	1.7	22.6	2.1	73.6	100.0
8	408.7	3.2	5.2	3.1	88.5	100.0
9	1423.2	5.2	16.2	7.8	70.8	100.0
10	315.0	5.7	13.3	0	81.0	100.0
11	942.0	2.4	17.2	1.4	79.0	100.0
112	492.1	3.1	25.1	0.4	71.4	100.0
County aver.	7796.3	3.0	17.3	3.4	75.8	100.0

in the proportion of idle land in districts with an adequate sample.

There is not much difference in the proportion of improved land occupied by orchards and pasture. Pasture occupies 0.4 per cent more land than orchards (Table XIV). The 9th District has a larger proportion of its improved land in pasture than the other districts. This indicates that farms on the better land classes tend to use woods and open pasture on non-crop land as the main source of pasture, thereby enabling them to devote more land to the production of crops.

In the use of land devoted to orchards the farms on the poorer land rank higher. However, the difference is not so great as in some of the other areas. The larger percentage of land in orchards on poor land is

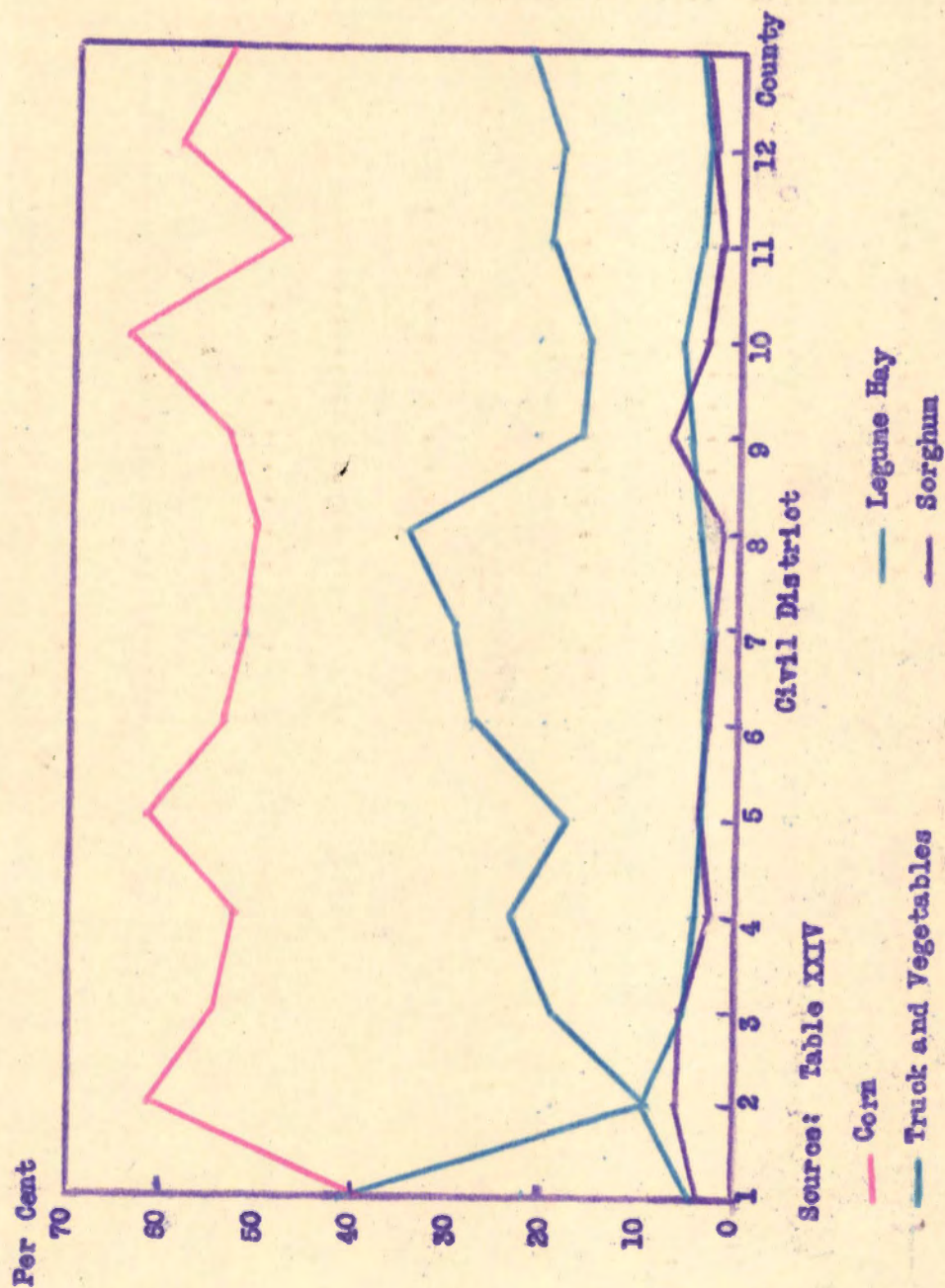


Figure 42. Distribution of Land Planted in Crops on Farms of 30 to 49 Acres, by Civil Districts, Overton County

probably caused by the type of farms, self-sufficing farms tending to produce most of their foodstuffs at home.

For the county as a whole, the distribution of land planted in crops show that corn is the most important crop on farms of this size group (Figure 42). Fifty-three and eight-tenths per cent of the land planted in crops is devoted to corn. Legumes for hay are second in importance, occupying 21.9 per cent of the improved land. Other crops are truck and vegetables, sorghum, Irish and sweet potatoes, wheat, oats, and non-legume hay, in the order named. There is not much difference in the proportion of land occupied by these crops (Figure 42).

Variations among districts in proportion of land planted to corn is not very significant (in districts with adequate samples). The 11th has the lowest proportion of land planted in corn. This is probably due to the fact that the larger proportion of land planted in crops is in wheat, in which the 11th District ranks first.

The 9th District has the least percentage of land in crops that is used for growing legume hay. This is associated with a larger proportion of land devoted to Irish and sweet potatoes, truck and vegetable crops, and sorghum, and is explained in part by class of land. The 9th District has most of its land in Class VII and most of the farms are self-sufficing. There is no significant difference between the other districts in proportion of crop land devoted to these crops.

There is a difference, however, in the use of land for small grains and non-legumes. The class of land is an important influence.

TABLE XLV. DISTRIBUTION OF LAND PLANTED TO CROPS ON FARMS
OF 30 TO 49 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Land Planted in Crops (Acres)	Per Cent				
		Corn	Irish and Sweet Potatoes	Truck and Vegetables	Sor- ghum	Tobacco
1	265.0	39.2	2.7	4.6	3.8	0
2	422.0	61.4	5.1	9.4	5.6	0
3	871.0	54.6	3.9	5.2	5.5	0
4	119.0	52.9	1.6	4.5	2.9	0
5	350.6	61.9	2.6	3.8	4.3	0.4
6	645.3	53.7	2.8	3.4	3.3	0
7	519.5	51.7	2.3	2.8	2.9	0
8	361.6	50.6	3.6	4.1	1.7	0.2
9	1006.9	53.5	6.2	5.4	7.5	0.1
10	255.2	64.3	5.7	6.1	3.9	0
11	743.8	47.8	2.8	4.3	2.3	0.1
12	351.4	59.0	4.2	3.7	3.3	0
County aver.	5911.3	53.8	3.9	4.8	4.3	0.1

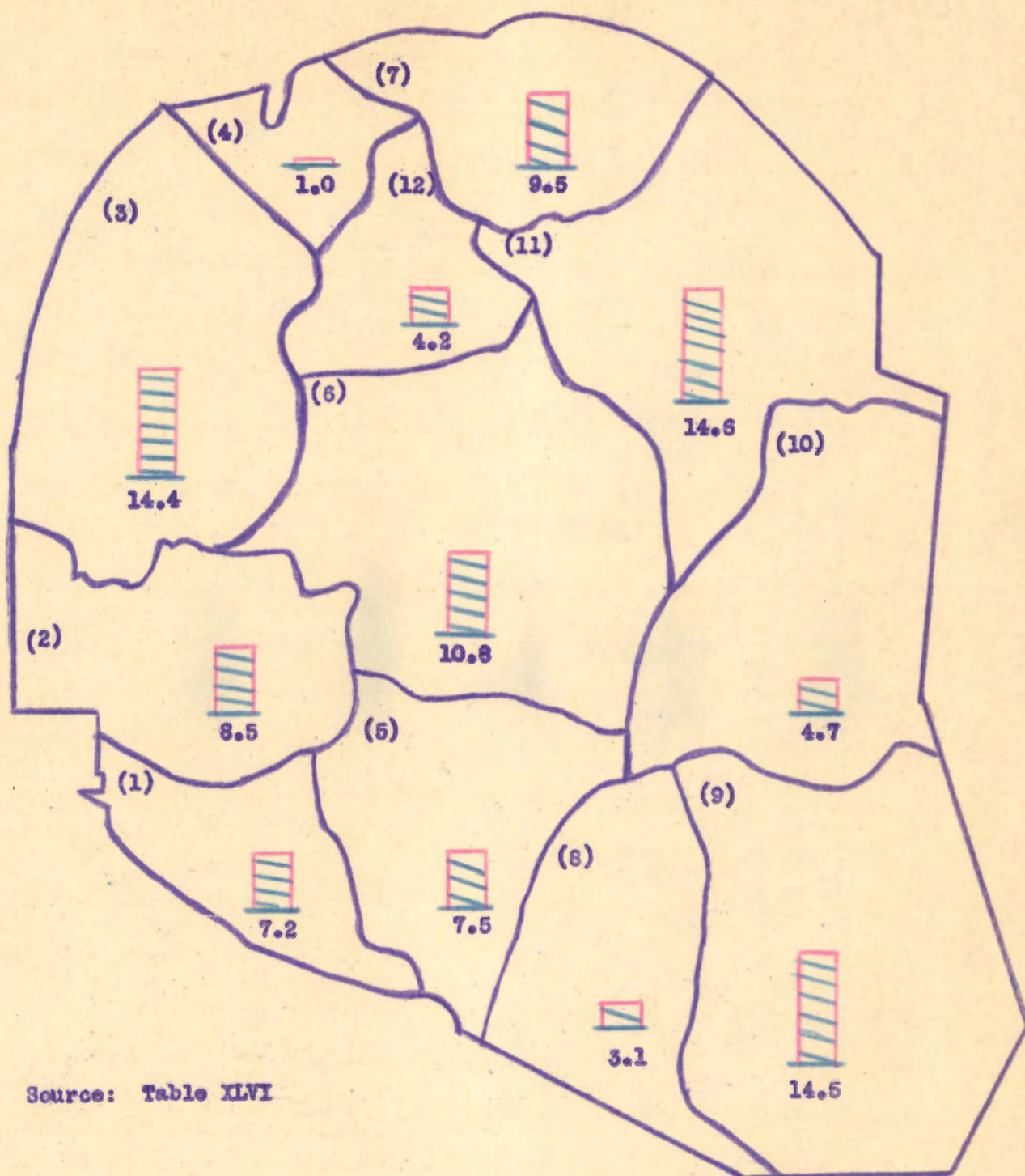
(continued)

C.D.	Per Cent							
	Wheat	Oats	Rye	Barley	Legume Hay	Non- Legume Hay	Misc.	Total
1	3.4	0.8	1.5	0	40.6	3.4	0	100.0
2	0.9	2.3	0.7	0	9.4	5.2	0	100.0
3	2.0	0.6	3.3	0	19.5	3.9	1.5	100.0
4	3.4	2.5	1.7	0	23.6	6.9	0	100.0
5	2.6	0.6	0.3	0	17.7	5.8	0	100.0
6	5.8	2.0	0.2	0	27.8	1.0	0	100.0
7	5.7	2.0	0.9	0	29.7	2.0	0	100.0
8	1.9	2.4	0	0	34.7	0.8	0	100.0
9	0.4	8.3	0.2	0	16.5	1.8	0.1	100.0
10	0.6	2.0	0	0	16.0	1.4	0	100.0
11	10.5	3.6	2.5	0	20.1	6.0	0	100.0
12	3.3	3.6	2.8	0	19.2	0.9	0	100.0
County aver.	3.6	3.1	1.3	0	21.9	3.0	0.2	100.0

Farms of 50 to 69 Acres. Farms of size group, 50 to 69 acres, are found in all districts of the county, with a total acreage of 23521.9 (Table XLVI). However the samples in the 4th, 8th, 10th, and 12th Districts are not adequate. The proportion of land in these districts is less than 5 per cent of all land in farms from 50 to 69 acres. Percentages in the other districts range from 7.2 per cent in the 1st to 14.6 per cent in the 11th.

Improved land is the major use of land on farms of this size in all districts with an adequate sample (Figure 44). The proportion improved is highest in the 1st District, being 71.3 per cent, and lowest in the 9th, where it occupies 47.8 per cent of all land. After the 1st District the 11th and 3rd rank highest in this regard. This is probably due to the number of farms on the better land classes in these districts (Table XLVI). Probably nearness to towns has some influence, especially the 6th and 1st Districts and to some extent in the 5th. On the other hand, the 9th and 2nd Districts have more farms on land Classes VII and IV, which probably accounts for the lower percentage improved.

Approximately one-fourth of the land, on farms of this size group, is occupied by woods not pastured, the second most important method of utilization (Figure 44). The proportion of land used for this purpose is highest in the 9th District, where more of the land is on a poorer land class. The proportion is smallest in the 1st and 2nd Districts. One cause may be the interpretation of the committeeman who filled out



Source: Table XLVI

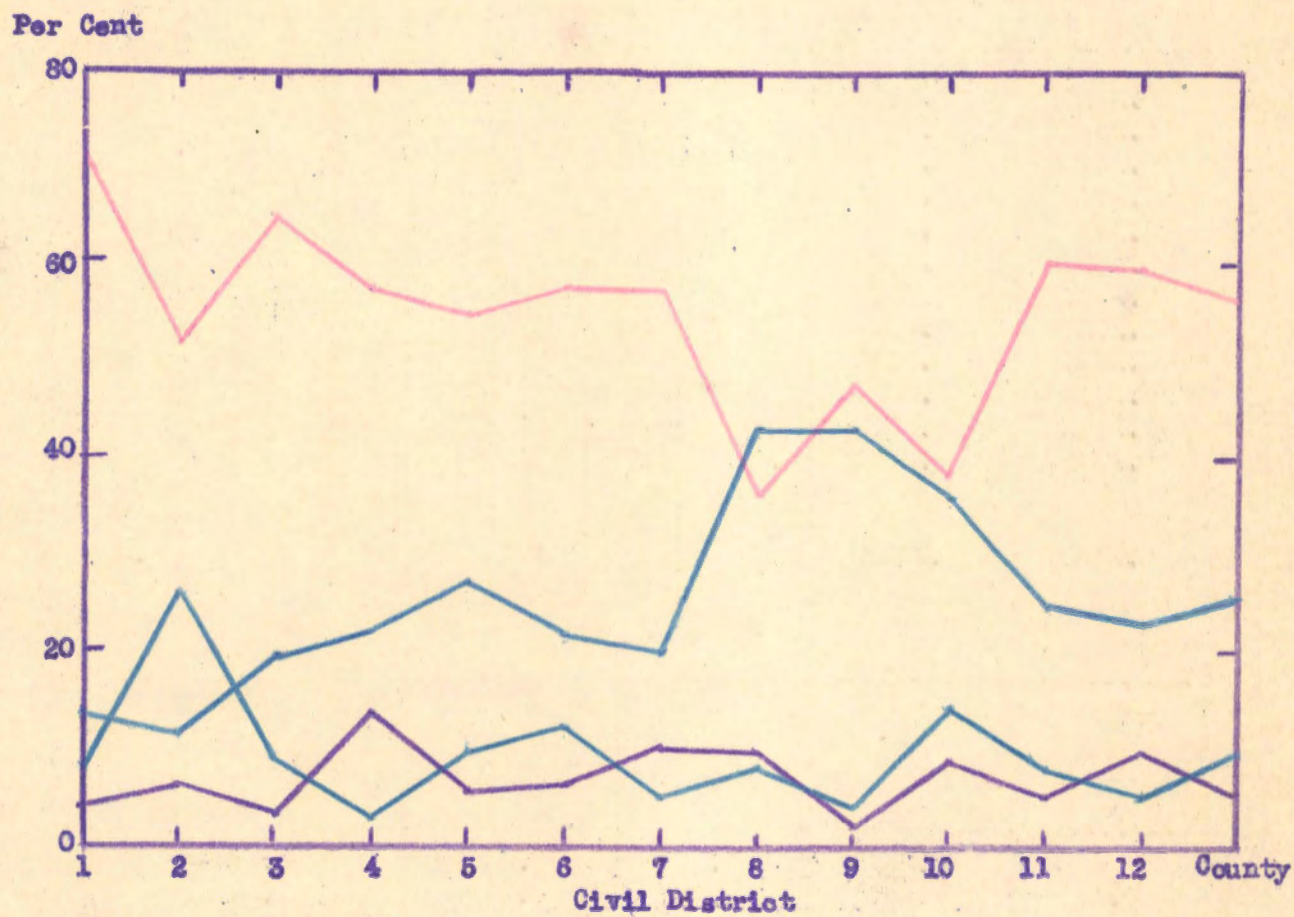
Figure 43. Distribution of Land in Farms of 50 to 69 Acres, by Civil Districts, Overton County

TABLE XLVI. NUMBER OF FARMS, AREA, DISTRIBUTION BY LAND CLASS AND OF MAJOR LAND USES ON FARMS OF 50 TO 69 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	No. of Farms	Farms by Land Class					Total All Land (Acres)	Improved Land (Acres)
		II	III	IV	VI	VII		
1	50	14	12	4			1682.5	1199.3
2	36	0	1	19	16		2004.0	1047.0
3	58		2	41	12	3	3388.5	2194.0
4	4				2	2	243.0	140.0
5	31	2	13	11		5	1771.9	971.9
6	44	7	13	17		7	2543.0	1468.8
7	39		23	6	10		2238.5	1284.7
8	13		5	1		7	720.0	261.5
9	58		4			54	3416.5	1633.5
10	19		9			10	1099.5	423.0
11	58	6	33	19			3426.5	2068.2
12	17			16	1	1	988.0	589.0
County aver.	407	29	115	134	40	89	23521.9	13285.9

(continued)

C.D.	Buildings, Roads, Lanes, Etc.	Woods Not Pastured (Acres)	Woods Pastured (Acres)	Open Pasture Non-Crop Land (Acres)	Other Land (Acres)
1	41.7	231.7	72.3	137.5	0
2	70.0	232.0	129.0	525.0	1.0
3	85.0	670.5	113.5	302.5	23.0
4	8.0	54.2	33.8	7.0	0
5	33.5	485.5	104.0	177.0	0
6	55.5	550.5	154.5	313.7	0
7	49.5	565.3	228.0	111.0	0
8	18.0	312.5	68.0	60.0	0
9	89.5	1469.5	75.0	148.0	1.0
10	20.5	392.0	97.0	162.0	0
11	50.0	853.8	174.5	280.0	0
12	21.5	228.0	96.0	51.5	2.0
County aver.	542.7	6045.5	1345.6	2275.2	27.0



Source: Table XLVII

Improved Land Woods Not Pastured
Non-Crop Open Pasture Woods Pastured

Figure 44. Distribution of Major Land Uses on Farms of 50 to 69 Acres, by Civil Districts, Overton County

the work sheets, inasmuch as 26.2 per cent of the land in the 2nd District is reported as being devoted to open pasture on non-crop land. Variation among the other districts is not great enough to be significant.

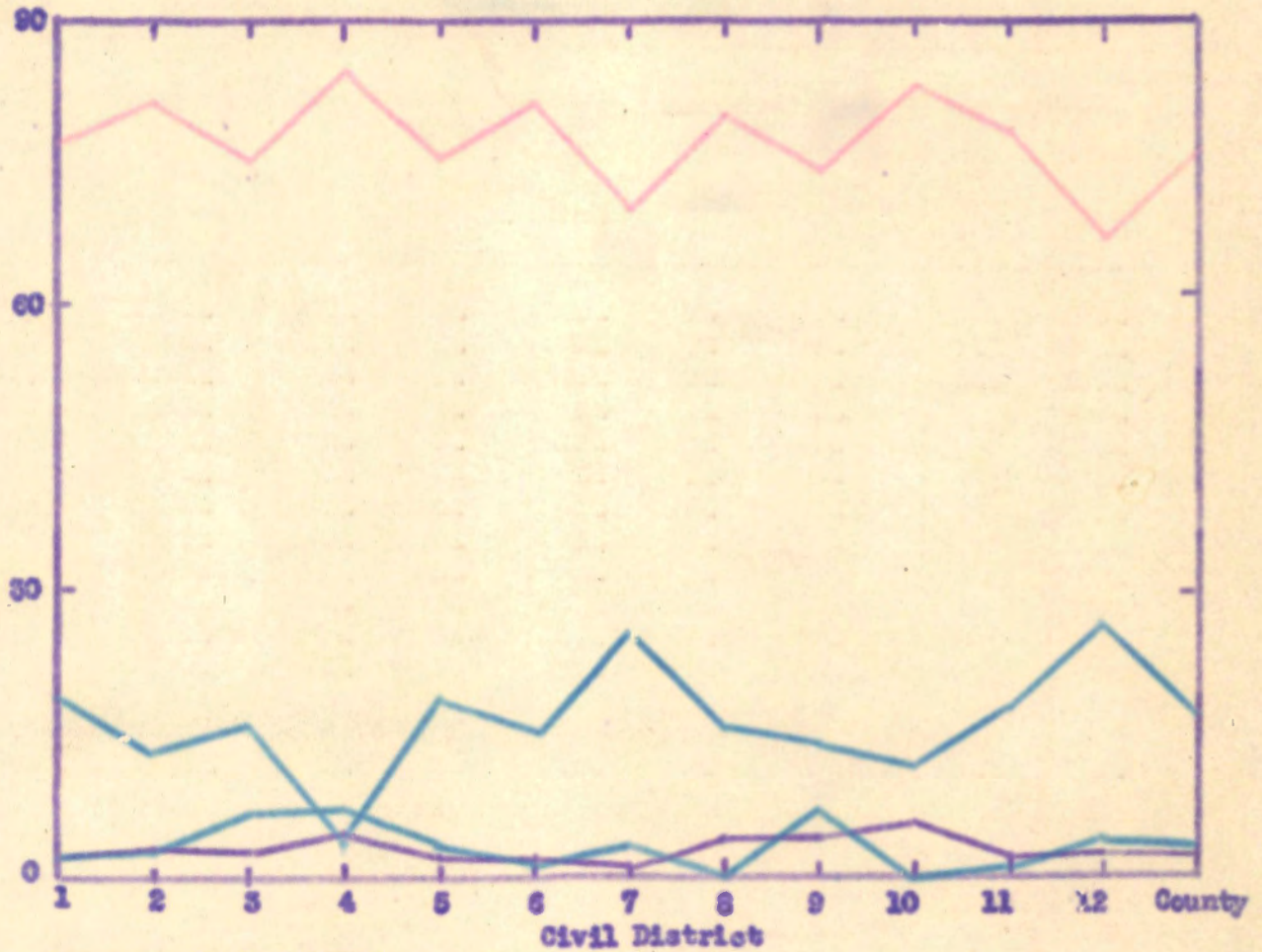
TABLE XLVII. DISTRIBUTION OF MAJOR LAND USES ON FARMS OF 50 TO 69 ACRES BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Total All Land (Acres)	Per Cent						Total
		Im- proved Land	Build- ings, Roads, Lanes, Etc.	Woods Not Pas- tured	Woods Pas- tured	Open Pasture Non- Crop Land	Other Land	
1	1682.5	71.3	2.5	13.8	4.3	8.1	0	100.0
2	2004.0	52.2	3.5	11.6	6.4	26.2	0.1	100.0
3	3388.5	64.8	2.5	19.8	3.4	8.9	0.6	100.0
4	243.0	57.6	3.3	22.3	13.9	2.9	0	100.0
5	1771.9	54.9	1.9	27.4	5.9	9.9	0	100.0
6	2543.0	57.8	2.2	21.6	6.1	12.3	0	100.0
7	2238.5	57.4	2.2	25.2	10.2	5.0	0	100.0
8	720.0	36.3	2.5	43.4	9.5	8.3	0	100.0
9	3417.0	47.8	2.6	43.0	2.2	4.4	0.03	100.0
10	1099.5	38.9	1.9	35.7	8.8	14.7	0	100.0
11	3426.5	60.4	1.4	24.9	5.1	8.2	0	100.0
12	988.0	59.6	2.2	23.1	9.7	5.2	0.2	100.0
County aver.	23521.9	56.5	2.3	25.7	5.7	9.7	0.1	100.0

Open pasture on non-crop land is the third most important use of land on farms of this size. In most cases the proportion of land in this use is greater in districts that have more farms on the better land classes, or are near population centers. The farms on better land tend to have a greater proportion of the land in woods used for pasture. However, these

Per Cent

124.



Source: Table XLVIII

Land Planted in Crops
Pasture

Idle
Orchard

Figure 45. Principal Uses of Improved Land on Farms with 50 to 69 Acres, by Civil Districts, Overton County

differences are not very great, and could be caused by differences on interpretation by various committeemen. Thus one committeeman might have a tendency to report more land in woods pastured while another might report more land in open pasture.

Proportion of land occupied by roads, buildings, and lanes is nearly the same in all districts. For the county as a whole, 2.3 per cent is devoted to this use.

Land in crops is the principal use of improved land, on farms of this size group (Figure 45). Considerable variation occurs among the districts in this respect, but with little apparent relation to land class. Districts that are high in the proportion of farms on good land have both high and low percentages of land planted in crops. This variation is explainable in part by other uses, such as pasture. In all cases the districts with a large percentage of farms on poorer land have a larger proportion of the improved land in pasture. Also the land occupied by orchards is greater in districts with a great deal of poorer land.

Idle land is second in importance in the use of improved land on farms of this size group. In the county as a whole 17.2 per cent of the improved land is idle. Most of the variation between districts is possibly due to some extent to other uses, such as orchards or pasture. As stated before, districts with more poorer land have a higher percentage of improved land occupied by orchards and pasture. However orchards and pasture are insignificant in the proportion of improved land they occupy,

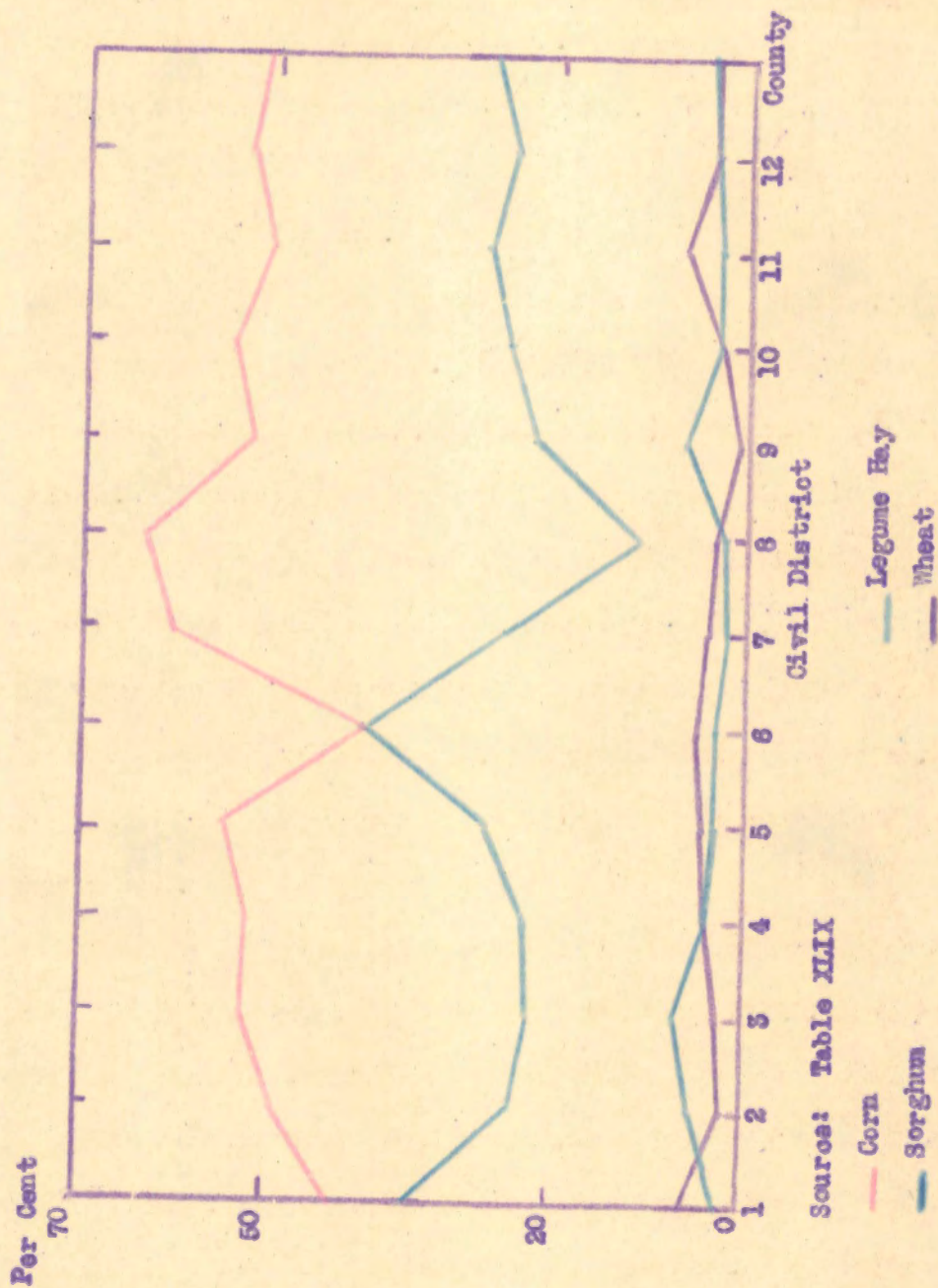


Figure 46. Distribution of Land Planted in Crops on Farms 50 to 69 Acres, By Civil Districts, Overton County

TABLE XLVIII. DISTRIBUTION OF IMPROVED LAND ON FARMS OF 50
TO 69 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Improved Land (Acres)	Per Cent				
		Orchard	Idle	Pasture	Land Planted in Crops	Total
1	1199.3	2.2	18.8	2.1	76.9	100.0
2	1047.0	2.9	13.0	2.8	81.3	100.0
3	2194.0	2.8	15.6	6.6	75.0	100.0
4	140.0	4.6	3.6	7.1	84.7	100.0
5	971.9	2.4	18.8	3.3	75.5	100.0
6	1468.8	2.2	15.3	1.2	81.3	100.0
7	1284.7	1.4	25.5	3.1	70.0	100.0
8	261.5	4.5	15.8	0	79.7	100.0
9	1633.5	4.5	14.1	7.1	74.3	100.0
10	428.0	5.7	11.7	0	82.6	100.0
11	2068.2	2.5	17.8	1.4	78.3	100.0
12	589.0	2.9	26.4	4.0	66.7	100.0
County aver.	13285.9	2.8	17.2	3.6	76.4	100.0

this being 2.8 per cent and 3.6 per cent respectively.

The most important use of crop land is planting to corn, followed by legume hay. Variations between districts in proportion of these crops is caused by several factors. The 1st and 6th Districts are lowest in percentage of land planted to corn, and are highest in land planted to legume hay (Figure 46). As these districts are nearer population centers, and have better transportation facilities, it is possible that these factors have some influence. There is no noticeable difference among the other districts with respect to these two crops.

Wheat is the third crop in proportion of land planted in crops. The 11th District ranks first in this respect with 7.2 per cent (Figure 46). It is followed by other districts ranking high in the proportion

of farms on good land. This explains the fact that these districts are high in wheat.

TABLE XLIX. DISTRIBUTION OF LAND PLANTED IN CROPS ON FARMS OF 50 TO 69 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Land Planted in Crops (Acres)	Per Cent				
		Corn	Irish and Sweet Po- tatoes	Truck and Garden	Sor- ghum	Tobacco
1	922.1	43.0	1.4	2.0	2.4	0.05
2	851.0	49.1	4.4	8.1	5.2	0.06
3	1646.0	52.6	3.0	4.3	6.8	0.04
4	118.5	52.3	2.8	3.4	3.8	0.6
5	733.3	54.8	2.1	2.2	3.3	0.1
6	1194.9	40.2	1.9	2.5	3.4	0.4
7	899.2	60.3	1.9	2.4	1.8	0
8	208.4	63.2	3.1	3.8	2.4	0.6
9	1213.2	52.4	4.5	4.4	6.5	0
10	353.7	54.2	5.0	4.1	2.8	0
11	1619.1	50.8	2.7	3.4	3.0	0
12	392.6	52.7	2.6	3.3	3.6	0
County	10152.0	50.8	2.9	3.7	4.0	0.1

(continued)

C.D.	Wheat	Oats	Rye	Barley	Legume Hay	Non- Legume Hay	Misc.	Total
1	5.8	2.8	2.6	0	35.3	4.7	0	100.0
2	1.8	1.8	0.7	0	24.3	4.6	0	100.0
3	2.9	2.6	2.7	0	22.1	2.2	0.8	100.0
4	4.2	3.4	0	0	22.7	6.8	0	100.0
5	4.5	0.9	0	0	27.2	4.9	0	100.0
6	5.1	1.7	1.7	0	40.1	2.4	0.6	100.0
7	4.0	0.3	1.4	0	25.4	2.5	0	100.0
8	3.4	6.2	0	0	11.0	6.3	0	100.0
9	0.6	7.2	0.9	0	22.4	0.6	0.5	100.0
10	2.7	4.5	0	0	25.0	1.7	0	100.0
11	7.2	1.2	1.2	0.1	27.5	2.9	0	100.0
12	3.9	3.8	0.4	0	24.9	4.8	0	100.0
County	4.1	2.6	1.4	0.01	27.1	3.0	0.3	100.0

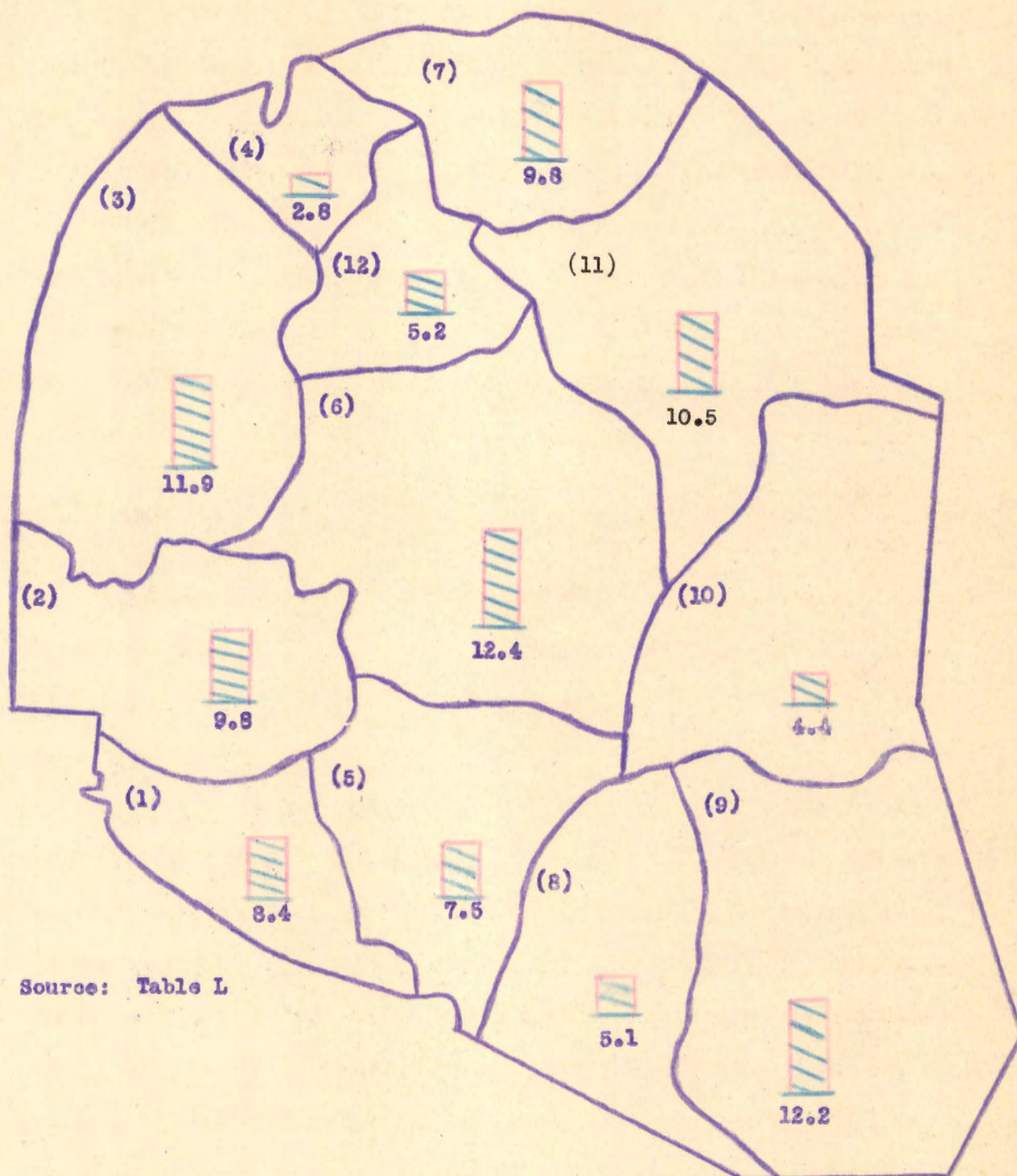
Percentage of crop land planted to sorghum is highest in districts with larger proportion of farms on Classes IV, VI, and VII land. The 3rd District ranks highest in this respect with 6.8 per cent, followed by the 2nd and 9th. Sorghum is most important on the poorer land classes.

Irish and sweet potatoes, and truck and vegetable crops show the same relationship as sorghum, which indicates that farms on poorer land tend to depend more upon the production of home grown foods for the family and less for the market. There appears to be no consistent relationship between land class and the production of non-legume hay.

As a rule more oats are grown in the districts that have the poorest land and are least accessible. On the other hand, the planting of rye is greatest in districts with a larger proportion of farms on better land. The 9th District is highest in proportion of land devoted to oats, and the 3rd District in the proportion planted to rye (Figure 46).

Farms 70 to 99 Acres in size are found in all districts in the county. Three hundred and seventy of the farms cooperating in the conservation program are in this group. The number of farms of this size is too small in the 4th, 5th, 8th, 10th, and 12th Districts for an adequate sample. The distribution of land is fairly even throughout districts with adequate samples. There is only a difference of 4.0 per cent between the 8th District, which is highest, and the 1st District which is lowest (Figure 47).

There were 29,913.7 acres on these farms, of which 15,699.1 acres or 52.5 per cent was improved (Figure 48). Improved land was the most



Source: Table L

Figure 47. Distribution of Land on Farms of 70 to 99 Acres, by Civil Districts, Overton County

important use in all districts in which the sample was adequate (Figure 48). However, the 2nd and 9th Districts have the least proportion of land improved. This is partly caused by the number of farms on the poorer land classes. Twenty seven farms out of 36 were located on Class IV land in the 2nd District, while 36 farms out of 44 were located on Land Class VII in the 9th (Table L).

The 1st District ranks highest in proportion of improved land, with 71.7 per cent of all land improved. Here again class of land plays a great part as 29 out of 31 farms in this district are located on Classes II and III land. The proportion of land that is improved is probably influenced more by class of land than any other factor. The proportion in the other districts does not differ greatly from the county average.

Woods not pastured are next to improved land in proportion of land occupied. This use is also closely associated with class of land, as the districts which have a higher proportion of land used in this way have more farms on the poorer land classes. The 1st District is lowest. Its nearness to population centers is also a probable cause of the smaller proportion of land devoted to this use.

Open pasture on non-crop land is more prevalent in districts with a large proportion of farms on the better land classes. This indicates that the farms use more land for the production of crops and depend upon non-crop land for pasture. The 9th District has the least

TABLE L. NUMBER OF FARMS, AREA, AND DISTRIBUTION OF
MAJOR LAND USES ON FARMS OF 70 TO 99 ACRES, BY
CIVIL DISTRICTS, OVERTON COUNTY

C.D.	No. of Farms	Farms by Land Class					Total All Land (Acres)	Improved Land (Acres)
		II	III	IV	VI	VII		
1	31	17	12	2			2521.0	1806.2
2	36			27	9		2927.5	1366.5
3	43		3	28	11	1	3550.0	2044.0
4	10		1		9		831.5	402.5
5	28		18	7		3	2246.7	1182.7
6	46	4	17	18		7	3703.5	2037.9
7	38		24	8	6		2939.0	1705.5
8	19		5			14	1524.0	465.8
9	44		8			36	3650.0	1751.5
10	16		6			10	1305.5	446.5
11	39	4	25	10			3139.5	1748.0
12	20			17	2	1	1575.5	742.0
County	370	25	119	117	37	72	29913.7	15699.1

(continued)

C.D.	Buildings, Roads, Lanes, Etc.	Woods Not Pastured (Acres)	Woods Pas- tured (Acres)	Open Pas- ture Non- Crop Land (Acres)	Other Land (Acres)
1	64.0	219.5	178.3	242.0	11.0
2	86.0	609.0	129.0	730.0	7.0
3	83.0	712.0	178.0	518.0	15.0
4	21.0	200.5	122.5	85.0	0
5	37.0	734.0	83.0	210.0	0
6	80.0	964.3	139.5	473.8	8.0
7	66.0	767.5	209.5	190.5	0
8	28.7	614.0	238.5	172.0	5.0
9	87.0	1406.5	216.0	184.0	5.0
10	23.0	476.5	151.0	192.0	16.5
11	40.5	842.5	255.0	241.5	12.0
12	34.0	426.0	317.5	52.0	4.0
County	650.2	7972.3	2217.8	3290.8	83.5

by Civil Districts, Overton County

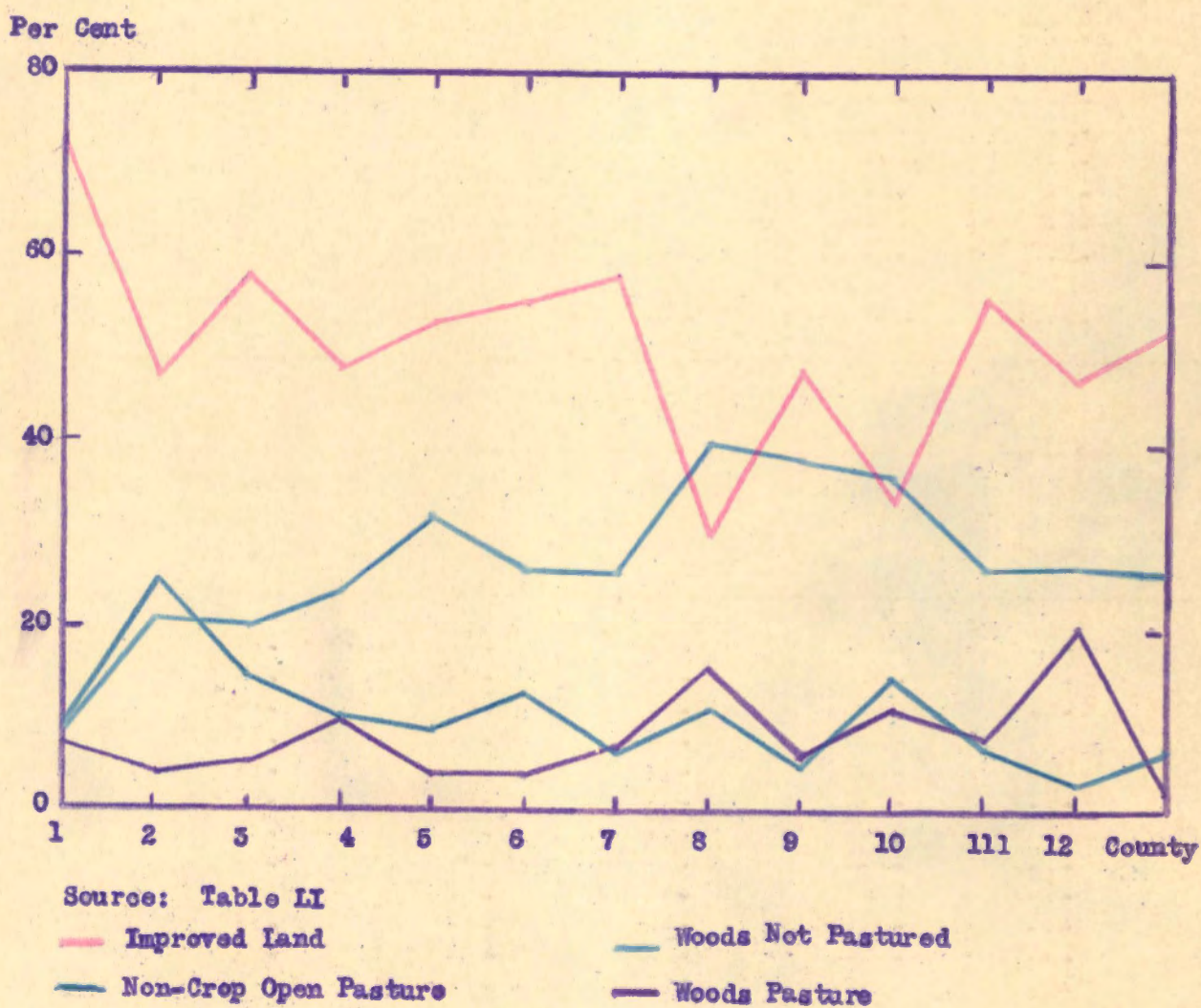


Figure 48. Distribution of Major Land Uses on Farms of 70 to 99 Acres, by Civil Districts, Overton County

proportion of land used in this manner.

Woods pastured shows about the same relation as open pasture on non-crop land. Approximately 7 per cent of the total land is used in this way. The 11th District ranks first in woods pastured, having 8.7 per cent of all land so used.

TABLE LI. DISTRIBUTION OF MAJOR LAND ON FARMS OF 70 TO 99 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Total All Land (Acres)	Per Cent						Total
		Improved Land	Buildings, Roads, Lanes, Etc.	Woods Not Pastured	Woods Pastured	Open Pasture Non-Crop Land	Other Land	
1	2521.0	71.7	2.5	8.7	7.1	9.6	0.4	100.0
2	2927.5	46.7	2.9	20.8	4.4	24.9	0.3	100.0
3	3550.0	57.6	2.3	20.1	5.0	14.6	0.4	100.0
4	831.5	48.4	2.5	24.1	14.8	10.2	0	100.0
5	2246.7	52.6	1.7	32.7	3.7	9.3	0	100.0
6	3703.5	55.0	2.2	26.0	3.8	12.8	0.2	100.0
7	2939.0	58.0	2.3	26.1	7.1	6.5	0	100.0
8	1524.0	30.6	1.9	40.3	15.6	11.3	0.3	100.0
9	3650.0	48.0	2.4	38.5	5.9	5.0	0.2	100.0
10	1305.5	34.2	1.8	36.5	11.6	14.7	1.2	100.0
11	3139.5	55.7	1.3	26.8	8.1	7.7	0.4	100.0
12	1575.5	47.1	2.2	27.0	20.2	3.3	0.2	100.0
County aver.	29913.7	52.5	2.2	26.6	7.4	11.0	0.3	100.0

There is very little variation among districts in the use of land for roads and buildings. Two and two-tenths per cent of the land in the county is used in this way.

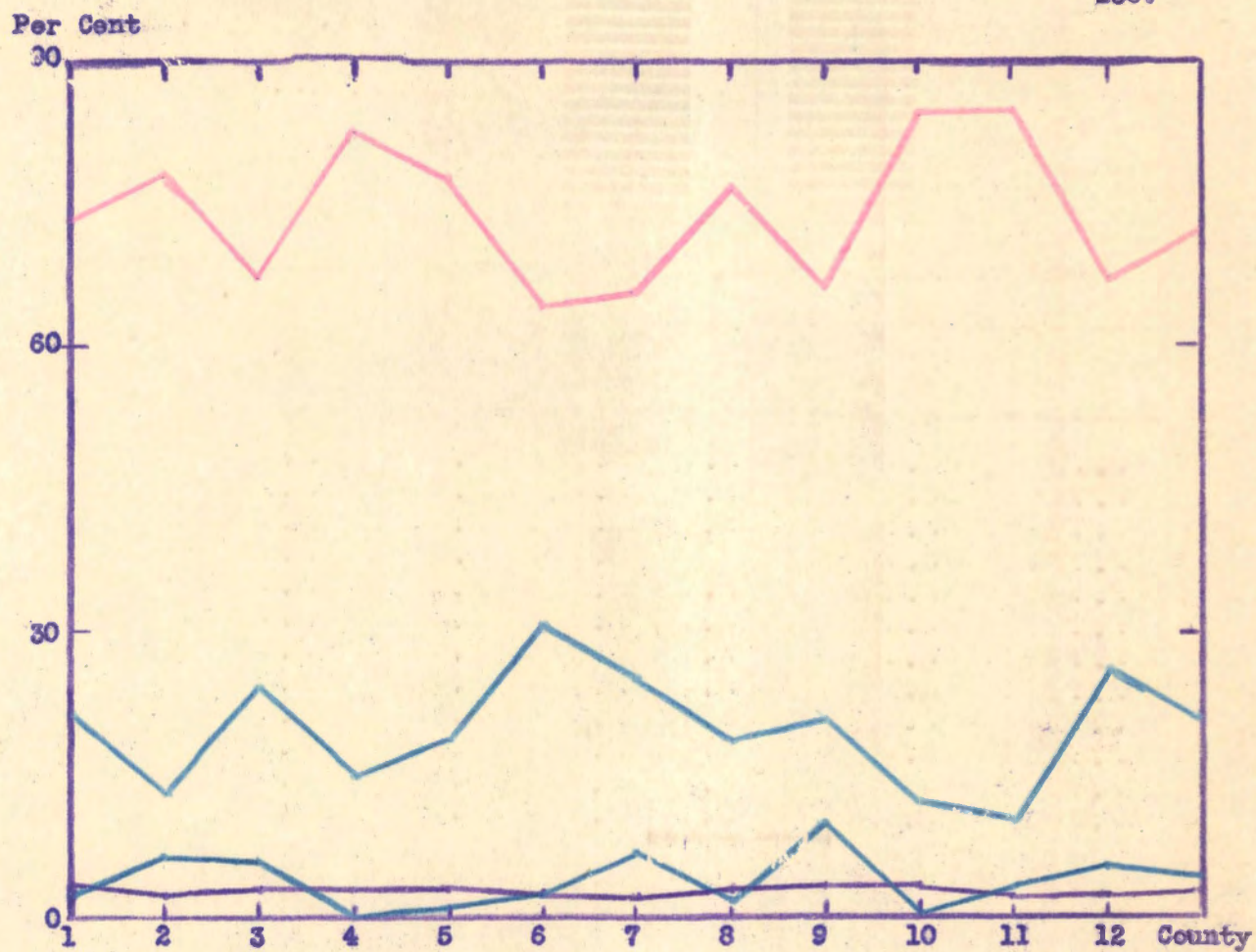
Land from which wild or marsh hay is taken is the least important use. Only 0.3 per cent of the land in this size group is used in this manner, for the county as a whole.

TABLE LII. DISTRIBUTION OF IMPROVED LAND ON FARMS OF 70 TO 99 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

Civil Distr.	Improved Land (Acres)	Per Cent				
		Orchard	Idle	Pasture	Land Planted in Crops	Total
1	1806.2	3.2	21.1	2.5	73.2	100.0
2	1366.5	2.3	13.1	6.5	78.1	100.0
3	2044.0	2.7	24.1	5.7	67.5	100.0
4	402.5	2.7	14.7	0	82.6	100.0
5	1182.7	2.8	18.6	0.8	77.8	100.0
6	2037.9	2.5	30.8	2.3	64.4	100.0
7	1705.5	2.0	25.4	6.7	65.9	100.0
8	465.8	2.9	18.5	1.7	76.9	100.0
9	1751.5	3.4	20.6	9.6	66.4	100.0
10	446.5	3.4	12.1	0	84.5	100.0
11	1748.0	1.8	10.3	3.2	84.7	100.0
12	742.0	2.2	26.4	5.1	66.3	100.0
County	15699.1	2.6	20.8	4.4	72.2	100.0

The most important use of improved land is in the production of crops (Figure 49). Eighty four and seven-tenths per cent of the improved land in the 11th District is in crops. At the other extreme is the 6th District with 64.4 per cent. Both of these districts have a large number of farms on the better classes of land. The 6th District is highest in proportion of idle land (Figure 49).

There is some indication that pasture on improved land occupies a greater proportion of the land in the poor districts. Poor land may



Source: Table LII

Land Planted in Crops
Pasture

Idle
Orchards

Figure 49. Principal Uses of Improved Land on Farms of 70 to 99 Acres,
by Civil Districts, Overton County

be better adapted to grazing than to production of crops.

There is not much difference in the use of improved land in orchards, etc., among the districts. Two and six-tenths per cent of the improved land is occupied in this manner, in the county as a whole.

TABLE LIII. DISTRIBUTION OF LAND PLANTED IN CROPS ON FARMS OF 70 TO 99 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Land Planted in Crops (Acres)	Per Cent				
		Corn	Irish and Sweet Potatoes	Truck and Vegetables	Sor- ghum	Tobacco
1	1321.9	38.4	1.0	1.6	1.5	0.1
2	1086.7	46.6	3.1	4.3	5.9	0
3	1379.3	51.8	2.8	3.6	6.4	0.02
4	332.5	48.4	2.4	4.3	3.3	4.8
5	919.7	48.9	2.3	2.3	2.6	0.4
6	1312.2	51.0	2.2	2.9	3.7	0.02
7	1123.6	53.5	1.9	2.2	2.5	0.1
8	358.3	58.3	2.7	3.2	1.5	0.1
9	1162.6	55.5	4.7	3.7	4.3	0.1
10	377.2	55.9	3.2	4.2	2.3	0
11	1480.2	41.8	1.9	2.4	2.1	0
12	492.3	55.6	3.0	2.7	2.2	0
County aver.	11326.5	49.1	2.5	3.0	3.4	0.1

(continued)

C.D.	Wheat	Oats	Rye	Barley	Legume Hay	Non-Legume Hay	Misc.	Total
1	7.6	2.7	3.5	0	38.3	4.8	0.5	100.0
2	5.1	0.5	0.6	0	29.2	4.7	0	100.0
3	2.2	4.8	2.0	0	22.9	2.4	1.1	100.0
4	6.3	0	0	1.5	27.8	1.2	0	100.0
5	8.2	1.1	0.3	0	23.9	9.7	0.3	100.0
6	3.9	1.4	0	0	27.9	7.0	0	100.0
7	5.0	1.6	2.6	0	29.3	1.3	0.04	100.0
8	2.1	1.9	0	0	15.1	15.1	0	100.0
9	0	4.2	0.6	0	24.2	2.4	0.3	100.0
10	5.6	0	0	0	28.8	0	0	100.0
11	7.0	3.0	0.7	0	37.4	3.7	0	100.0
12	3.4	1.0	1.6	0	26.9	3.6	0	100.0
County aver.	4.7	2.5	1.2	0.1	28.9	4.5	0	100.0

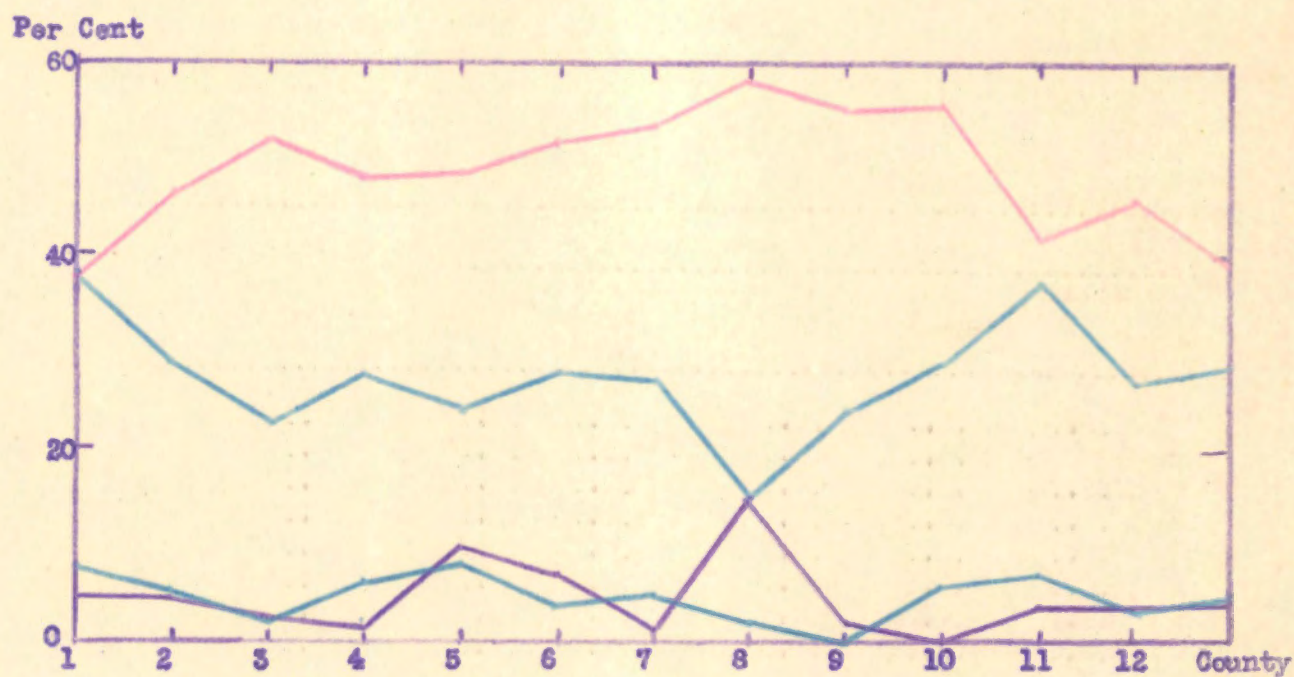


Figure 50. Distribution of Land Planted in Crops on Farms of 70 to 99 Acres, by Civil Districts, Overton County

Corn is the most important crop, being planted on 49.1 per cent of all land devoted to crops, in this size group. Legume hay is the next in importance. These two crops combined occupy 79.0 per cent of the crop land. Wheat and non-legume hay are next in importance. They occupy 4.7 per cent and 4.5 per cent, respectively, of the crop land (Figure 50).

There is some indication that farms on the better land classes have a greater proportion of the crop land occupied by wheat and legume hay than those on poorer land. The 1st and 11th Districts rank highest in proportion of land planted in legumes and wheat (Figure 50). The 1st has 38.3 per cent in legume hay and 7.6 per cent in wheat, while the 11th District has 37.4 per cent and 7.0 per cent respectively. These districts have a large number of farms on the better land classes.

The 9th District, and to some extent the 2nd and 3rd, have a large proportion of the farms on the poorer land classes. Sorghum, truck and vegetables, and Irish and sweet potatoes are highest in these districts. Probably farming in these districts tends to be more self-sufficing and grow more of these crops to supply home needs.

On farms with 70 to 99 acres, there seems to be a fairly close relation between class of land and the utilization of the land.

Farms of 100 to 139 Acres in size are found in every district in the county, but only the 2nd, 3rd, 6th, 7th, and 11th Districts have adequate samples. There are 318 farms in this group, with a total of 35,574.0 acres. The 6th District has 15.6 per cent of the total land

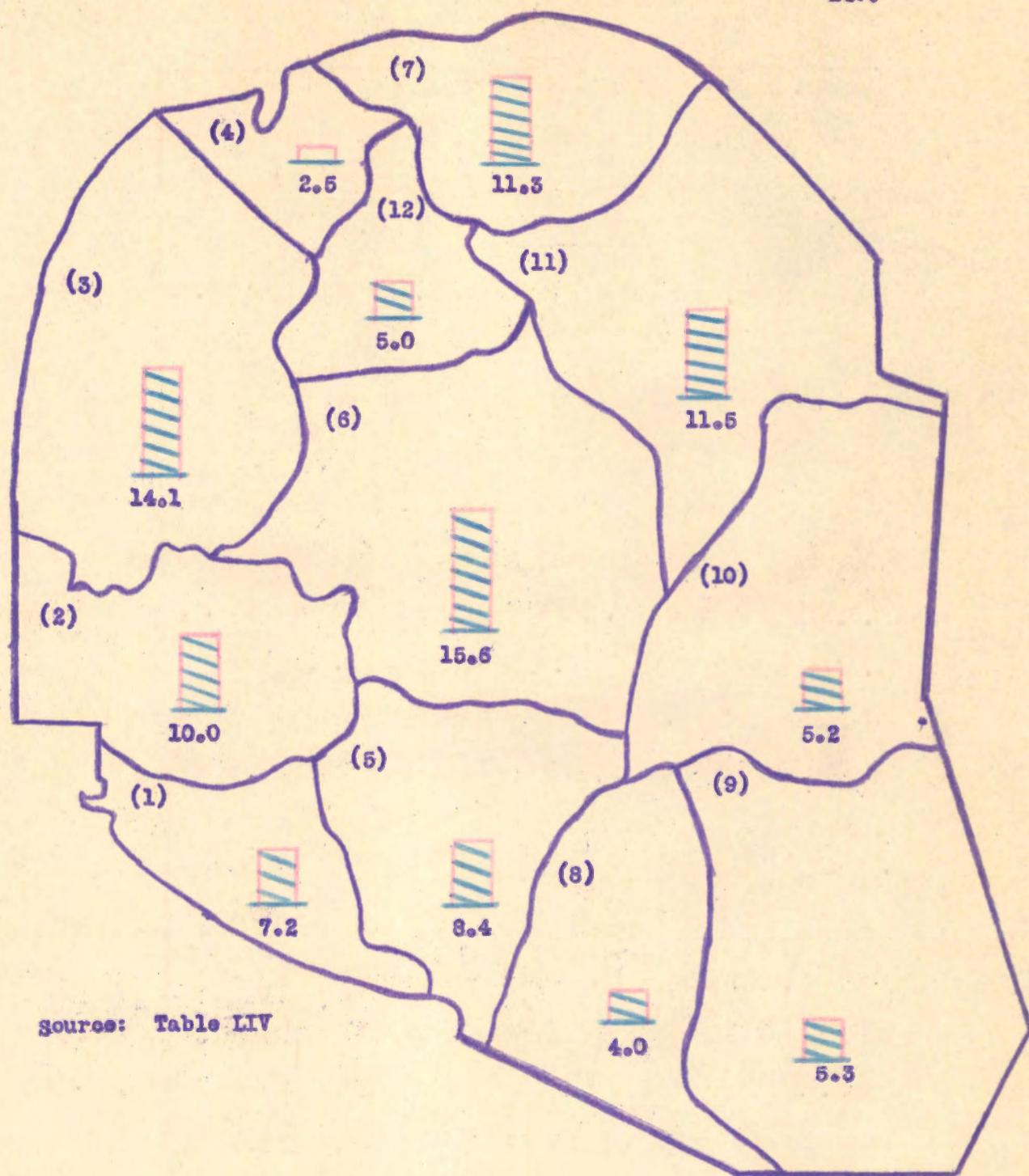


Figure 51. Distribution of Land in Farms of 100 to 139 Acres, by Civil Districts, Overton County

TABLE LIV. NUMBER OF FARMS, AREA, AND DISTRIBUTION
OF MAJOR LAND USES ON FARMS OF 100 TO 139 ACRES,
BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	No. of Farms	Farms by Land Class					Total All Land (Acres)	Improved Land (Acres)
		II	III	IV	VI	VII		
1	22	12	6	4			2577.0	1676.0
2	31			19	12		3557.0	1593.5
3	45	0		30	10	5	5025.3	2625.3
4	8		2		5	1	842.0	404.5
5	25		17	5		3	2969.5	1479.5
6	50	7	23	16		4	5556.2	2854.9
7	36		24	7	5		4030.0	2149.0
8	13		7			6	1426.0	414.0
9	17					17	1898.3	859.3
10	17		12			5	1852.0	846.9
11	38	5	22	10		1	4077.7	2323.2
12	16			13	3		1763.0	753.9
Co. aver.	318	24	113	104	35	42	35574.0	17981.2

(continued)

C.D.	Buildings, Roads, Lanes, Etc. (Acres)	Woods Not Pastured (Acres)	Woods Pastured (Acres)	Open Pas- ture Non- Crop Land (Acres)	Other Land (Acres)
1	47.3	351.0	153.5	348.5	0
2	78.0	660.0	214.0	1011.5	0
3	114.0	1592.5	204.0	477.0	12.0
4	13.0	271.0	21.0	132.5	0
5	50.0	1049.0	148.0	221.0	22.0
6	95.5	1779.8	470.0	354.0	2.0
7	79.5	1336.0	255.0	210.5	0
8	15.5	864.5	90.0	42.0	0
9	30.0	770.0	159.0	75.0	5.0
10	42.0	562.0	211.0	190.1	0
11	53.5	1124.0	365.0	212.0	0
12	29.0	830.1	47.0	103.0	0
Co. aver.	647.3	11189.9	2337.5	3377.1	41.0

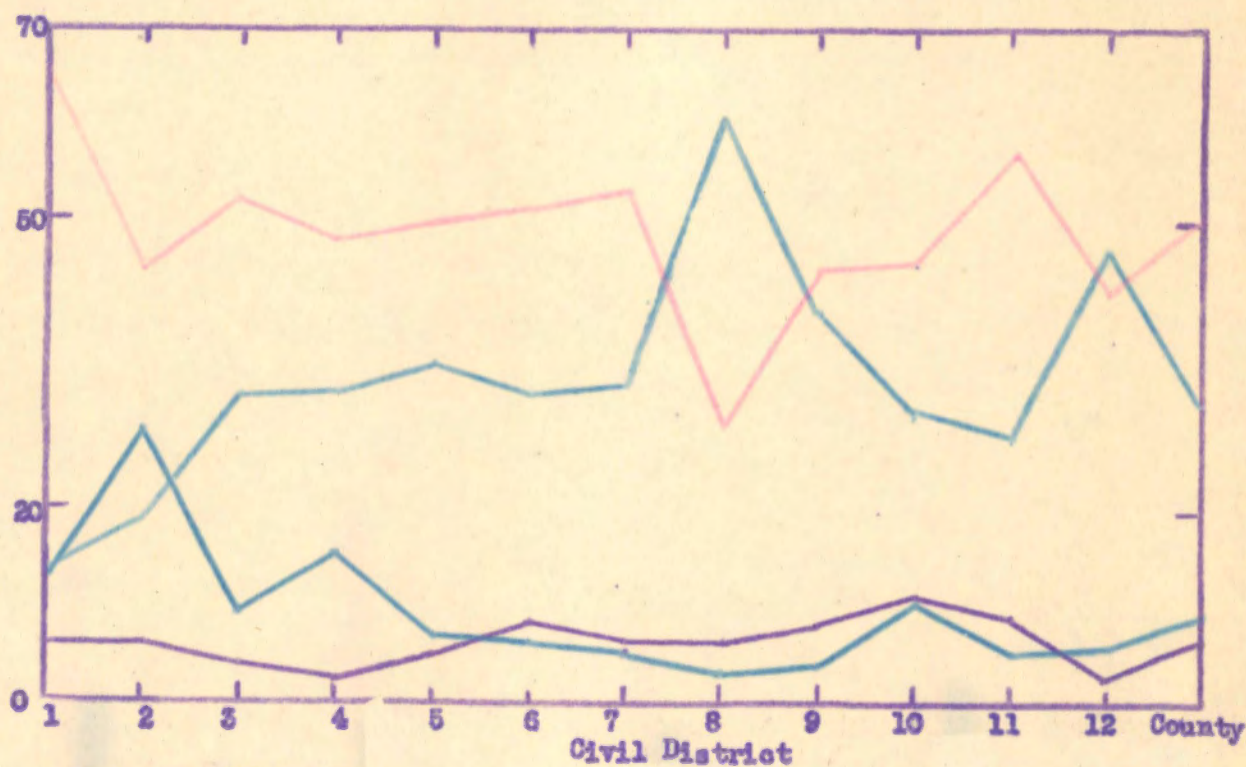
in these farms (Figure 51). Other districts with sufficient sample have from 10 per cent to 14.1 per cent, these figures being the proportion in the 2nd and 3rd respectively, while the 11th has 11.5 per cent and the 7th 11.3 per cent.

The major land use on farms of this group is as improved land, which is 50.5 per cent of the total. This use is followed by woods not pasture with 31.5 per cent. Open pasture on non-crop land is more important than woods pastured, the former occupying 9.5 per cent of the total and the latter 6.6 per cent (Figure 52).

The second district has the smallest percentage of improved, while the 11th is highest (Figure 52). The 11th District does not differ very much from several other districts but the 2nd shows considerable difference. Probably one factor causing this variation is the number of farms on the better land classes. All the farms in District 2 are located on Classes IV and VI land, while the larger number of those in the other districts are located on Class III, with a few on Class IV (Table LIV). However, District 2 does not have so much woodland not pastured as might be expected on these land classes. This is probably caused by a shift to open pasture, the 2nd District having 28.4 per cent of all land used in this manner (Figure 52). With the exception mentioned, there is not much variation among the districts either in the proportion of land occupied by non-crop open pasture or by woods pastured. The amount of land used by buildings and roads, etc., is small in all districts, and there is no great difference among them in this respect (Table LV).

Per Cent

143.



Source: Table LV

Improved Land
Non-Crop Open Pasture

Woods Not Pastured
Woods Pastured

Figure 52. Distribution of Major Land Uses on Farms of 100 to 139 Acres, by Civil Districts, Overton County

TABLE LV. DISTRIBUTION OF MAJOR LAND USES ON FARMS 100 TO 139
ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Total All Land (Acres)	Per Cent						
		Im- proved Land	Build- ings, Roads, Lanes, Etc.	Woods Not Pas- tured	Woods Pas- tured	Open Pas- ture Non- Crop Land	Other Land	Total
1	2577.0	65.1	1.8	13.6	6.0	13.5	0	100.0
2	3557.0	44.8	2.2	18.6	6.0	28.4	0	100.0
3	5025.3	52.3	2.3	31.7	4.0	9.5	0.2	100.0
4	842.0	48.1	1.5	32.2	2.5	15.7	0	100.0
5	2969.5	49.8	1.7	35.3	7.4	7.4	0.8	100.0
6	5556.2	51.4	1.7	32.0	8.5	6.4	0.5	100.0
7	4030.0	53.3	2.0	33.2	6.3	5.2	0	100.0
8	1426.0	29.0	1.1	60.6	6.3	3.0	0	100.0
9	1898.3	45.3	1.6	40.6	8.4	3.9	0.2	100.0
10	1852.0	45.7	2.3	30.3	11.4	10.3	0	100.0
11	4077.7	56.9	1.3	27.6	9.0	5.2	0	100.0
12	1763.0	42.8	1.6	47.1	2.7	5.8	0	100.0
County aver.	35574.0	50.5	1.8	31.5	6.6	9.5	0.1	100.0

Improved land in this group is used in a manner quite similar to that in the preceding groups. The most important use is as crop land, which occupies 73.9 per cent of all improved land (Figure 53). Idle land is next in importance, with 18.9 per cent. Pasture and orchards occupy the remainder of the improved land (Figure 53), with 5.1 per cent and 2.1 per cent respectively.

In general, the variations are associated with land class. The 2nd District has 82.4 per cent of improved land planted to crops, while districts 6, 7, and 11 have considerably less. Thus it appears that

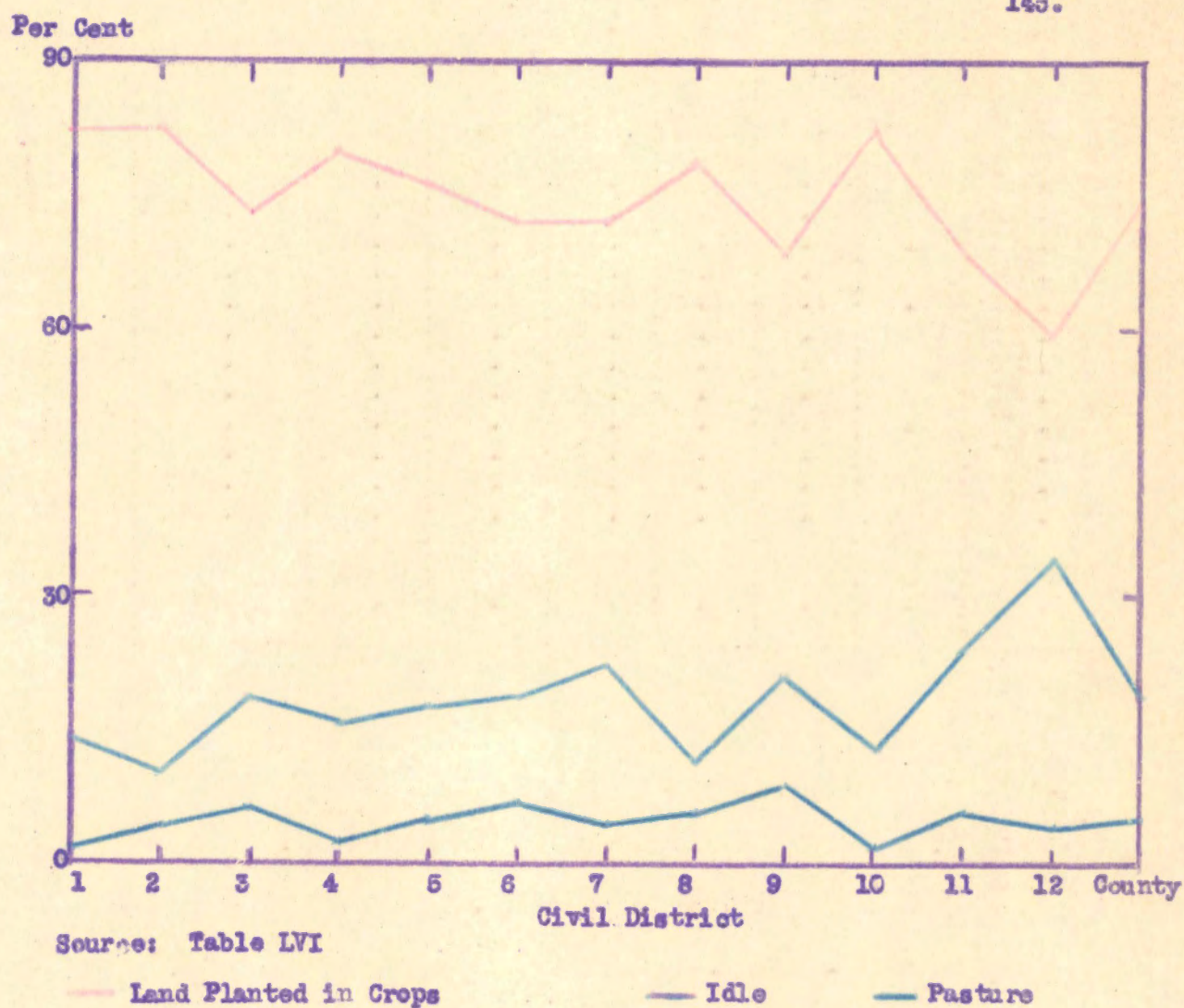


Figure 53. Principal Uses of Improved Land on Farms of 100 to 139 Acres, by Civil Districts, Overton County

more of the improved land is planted in crops on the poorer land than on better land. There is also a tendency toward less idle land in districts with poorer land.

TABLE LVI. DISTRIBUTION OF IMPROVED LAND ON FARMS OF 100 TO 139 ACRES, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Improved Land (Acres)	Per Cent				
		Orchard	Idle	Pasture	Land Planted in Crops	Total
1	1676.7	1.6	14.4	1.7	82.3	100.0
2	1593.5	3.0	10.4	4.2	82.4	100.0
3	2625.8	2.1	18.7	6.2	73.0	100.0
4	404.5	1.8	15.8	2.5	79.9	100.0
5	1479.5	1.2	17.8	5.0	76.0	100.0
6	2854.9	2.6	18.8	6.6	72.0	100.0
7	2149.0	1.5	22.1	4.5	71.9	100.0
8	414.0	4.4	11.2	5.6	78.8	100.0
9	859.3	1.6	21.1	8.8	68.5	100.0
10	846.9	2.8	13.3	1.8	82.1	100.0
11	2323.2	1.9	23.7	5.9	68.5	100.0
12	753.9	2.2	34.4	4.2	59.2	100.0
County aver.	17981.2	2.1	18.9	5.1	73.9	100.0

There is not much difference, in the use of land planted to crops, between this group of farms and those of the previous groups. Corn is by far the most important crop, occupying 47.4 per cent of all crop land. Legume hay is second, these with corn occupying 78.4 per cent of all crop land. Wheat is the third, followed by non-legume hay. Most of the other crops occupy only a small per cent of the crop land.

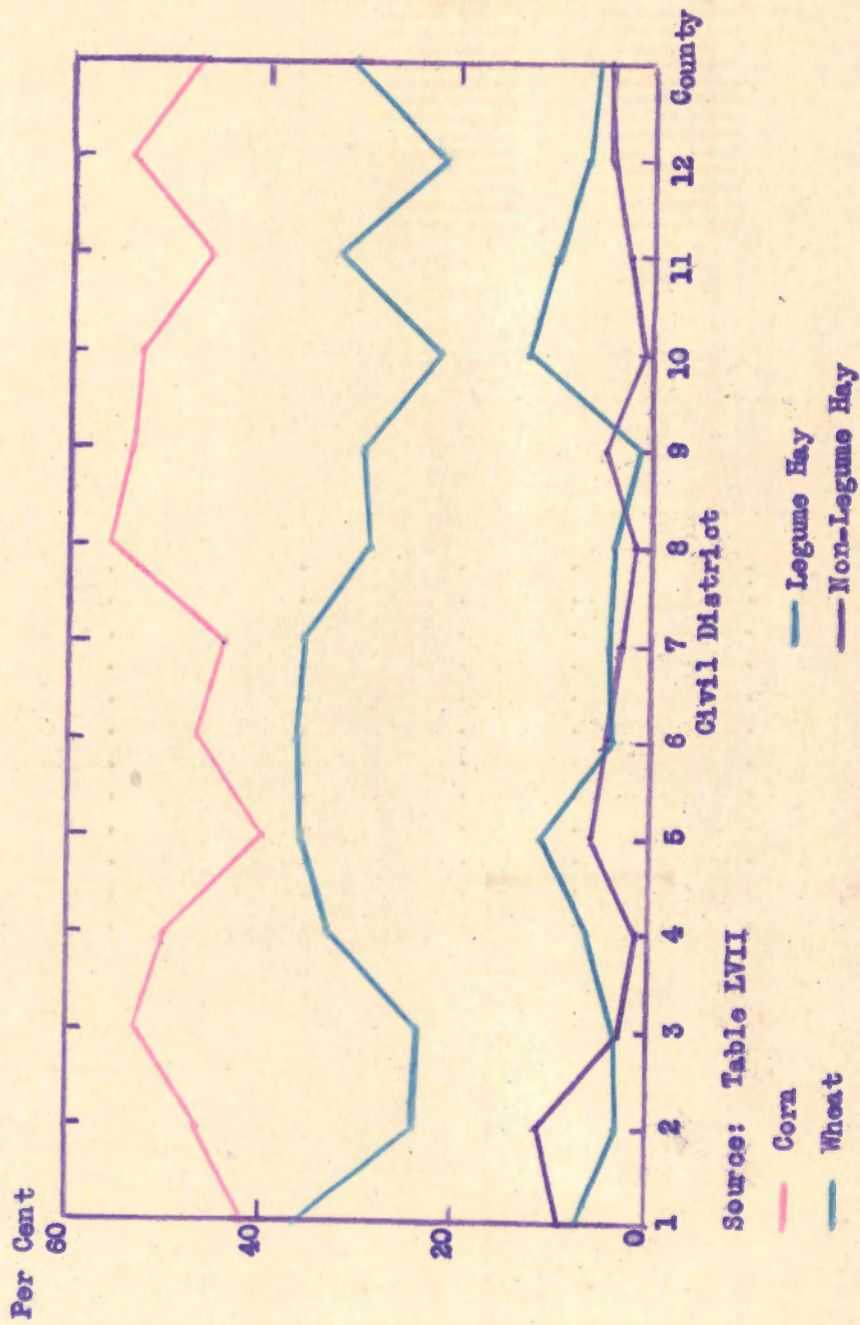


Figure 54. Distribution of Land Planted in Crops on Farms of 100 to 139 Acres, by Civil Districts, Overton County

TABLE LVII. DISTRIBUTION OF LAND PLANTED IN CROPS ON FARMS,
100 TO 139 ACRES BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Land Planted in Crops (Acres)	Per Cent				
		Corn	Irish and Sweet Po- tatoes	Truck and Garden	Sor- ghum	Tobacco
1	1381.1	41.6	0.9	1.0	2.6	0
2	1313.5	46.8	2.3	5.2	4.2	0
3	1918.1	53.3	2.3	3.2	5.9	0
4	323.0	50.0	1.6	2.4	2.0	0
5	1124.5	40.0	1.6	1.4	3.4	0.1
6	2055.1	46.9	1.3	1.7	3.3	0.04
7	1544.1	44.3	2.1	1.8	2.8	0.2
8	326.4	55.3	2.8	2.8	1.4	0.2
9	588.7	53.8	3.4	3.0	2.3	0.2
10	695.5	52.9	2.2	2.1	1.5	0
11	1590.3	46.6	1.6	2.2	2.6	0.02
12	446.3	54.3	0	3.0	2.1	1.8
County aver.	13306.6	47.4	1.8	2.4	3.3	0.1

(continued)

C.D.	Per Cent						
	Wheat	Oats	Rye	Barley	Legume Hay	Non-Legume Hay	Misc.
1	7.3	0.6	0.9	0	36.4	8.7	0
2	3.1	1.4	1.4	0	24.4	11.2	0
3	3.2	3.4	1.3	0	23.9	2.8	0.7
4	6.2	3.7	0	0	33.2	0.9	0
5	10.9	1.2	0.2	0	35.6	5.6	0
6	3.8	1.3	1.2	0	36.2	4.2	0.1
7	4.1	3.6	2.3	0.2	35.8	2.8	0
8	3.7	2.8	0	0	29.0	1.5	0
9	0.9	1.9	0	0	29.6	4.6	0.3
10	12.8	4.5	2.0	0	21.7	0.3	0
11	10.0	2.5	1.3	0	32.2	2.0	0
12	6.9	6.5	0	0	21.4	4.0	0
County aver.	5.9	2.4	1.1	0.02	31.0	4.5	0.1

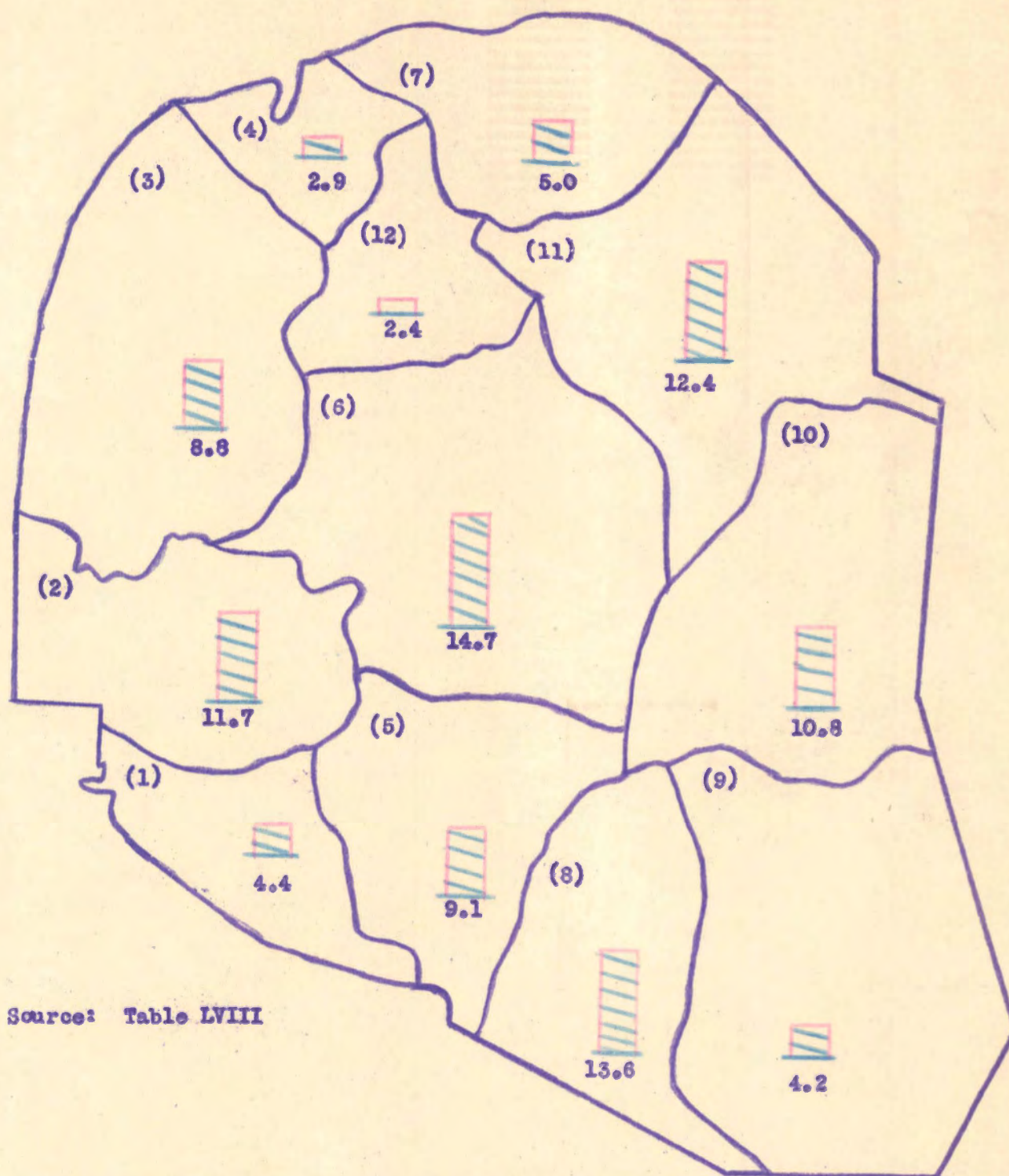
The 7th District has the least percentage of land planted in corn. The 6th District is highest in percentage in legume hay (Figure 54). The 3rd District is highest in proportion of land planted in corn, followed closely by the 2nd and 6th.

There is some relation between the per cent of land in corn and legumes and the number of farms on the better land class. The 3rd and 2nd Districts have the largest number of farms on the poorer land classes. They are highest in proportion of land in corn, and lowest in proportion in legume hay. The variation in the 6th District in regard to these crops may be due to nearness to Livingston.

As to wheat, more is grown in districts with a large proportion of farms on the better land classes. There are no important differences among the districts in the proportion of land occupied by other crops.

Farms of 140 Acres and Over are found in all districts of the county. There are 376 farms in this size group, with 92,501.4 acres. The 6th District contains the largest per cent of this land (Figure 55). Other districts with representative samples are the 2nd, 3rd, 5th, 8th, and 11th.

Several differences are noted in the use of land in this size group compared with the previous groups. The most important use is woods not pastured. This is followed by improved land (Figure 56). Difference in the proportion of improved land among the districts is caused by several factors, one of which is the size of farms.



Source: Table LVIII

Figure 55. Distribution of Land in Farms of 140 Acres and Over, by Civil Districts, Overton County

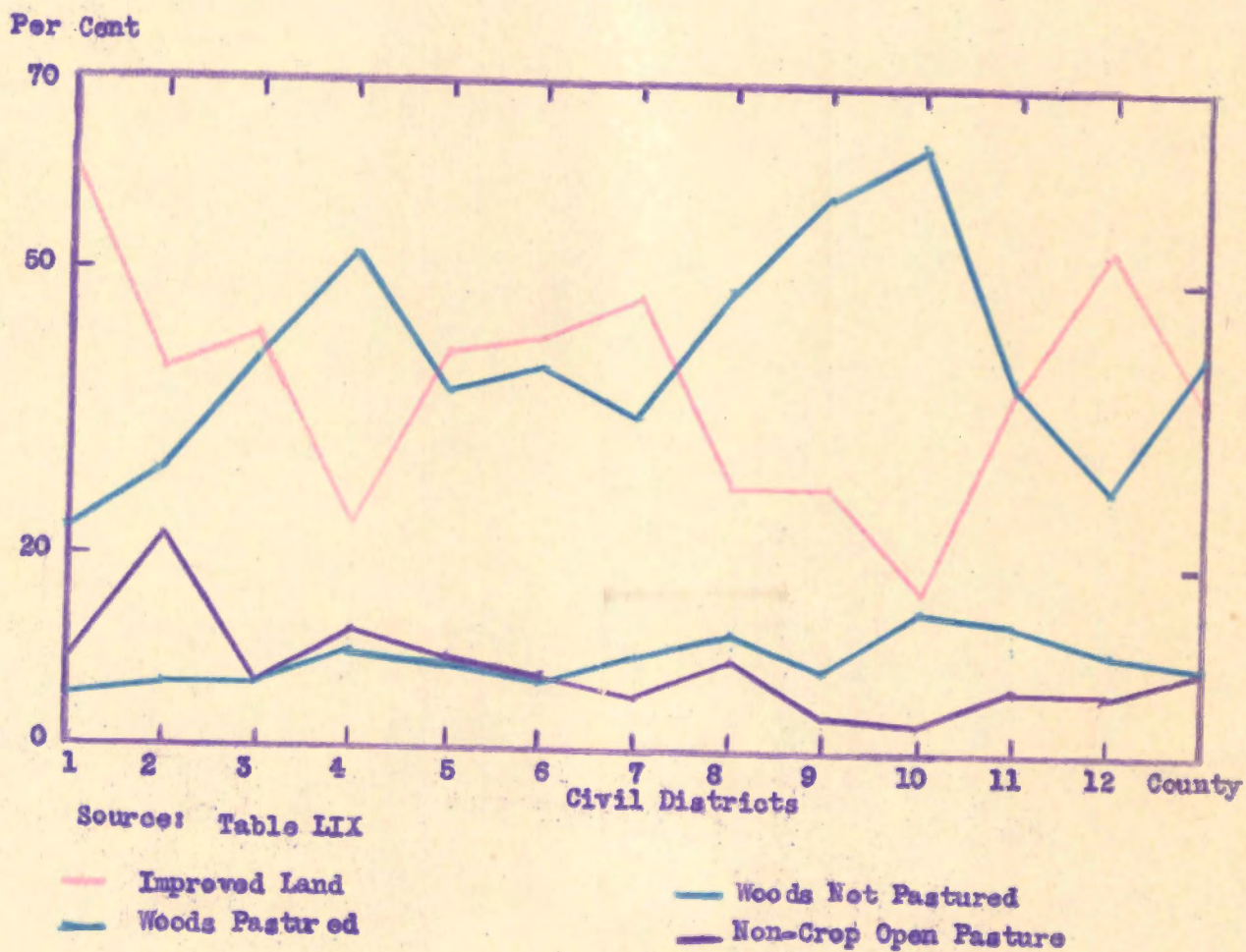


Figure 56. Distribution of Major Land Uses on Farms of 140 Acres and Over, by Civil Districts, Overton County

TABLE LVIII. NUMBER OF FARMS, AREA, DISTRIBUTION OF MAJOR LAND
USES OF FARMS 140 ACRES AND OVER, BY CIVIL DISTRICTS,
OVERTON COUNTY

C.D.	No. of Farms	Farms by Land Class					Total All Land (Acres)	Improved Land (Acres)
		II	III	IV	VI	VII		
1	19	8	9	2			4084.0	2465.5
2	45	0	5	28	12		10333.0	4105.0
3	40			25	10	5	8226.0	3552.5
4	8			4	2	2	2762.0	567.0
5	35	4	25	5		1	8481.5	3508.0
6	64	15	18	26		5	13654.4	5873.9
7	25		17	5	3		4669.0	2217.0
8	41		19			22	12594.5	3481.5
9	19		4			15	3925.0	1089.0
10	24		13			11	10061.0	1730.0
11	46	2	33	11			11528.0	4482.6
12	10			9	1		2214.0	1175.0
County aver.	376	29	143	113	30	61	92510.4	34337.0

(continued)

C.D.	Buildings, Roads, Lanes, Etc. (Acres)	Woods Not Pastured (Acres)	Woods Pastured (Acres)	Open Pas- ture Non- Crop Land (Acres)	Other Land (Acres)
1	50.5	954.5	216.5	391.0	6.0
2	184.0	3026.0	668.5	2339.5	10.0
3	131.0	3381.5	542.0	567.0	52.0
4	32.0	1436.0	288.0	349.0	0
5	178.0	3130.7	710.0	848.8	56.0
6	171.0	5505.5	944.0	1100.0	40.0
7	73.0	1651.0	459.2	268.8	0
8	166.5	6162.0	1553.0	1231.5	0
9	51.3	2296.7	337.0	146.0	3.0
10	79.5	6400.0	1484.0	367.5	0
11	160.9	4434.0	1552.5	848.0	0
12	26.0	617.0	240.0	156.0	0
County aver.	1303.7	39094.9	8994.2	8613.1	167.0

Several large farms with over 500 acres had only a small portion improved. Class of land also apparently influences land use of land on farms of this size. This is especially noticeable in the 2nd and 8th Districts, where most of the farms are on the poorer land classes, a smaller proportion being improved. The 8th District is also highest in proportion of land in woods not pastured.

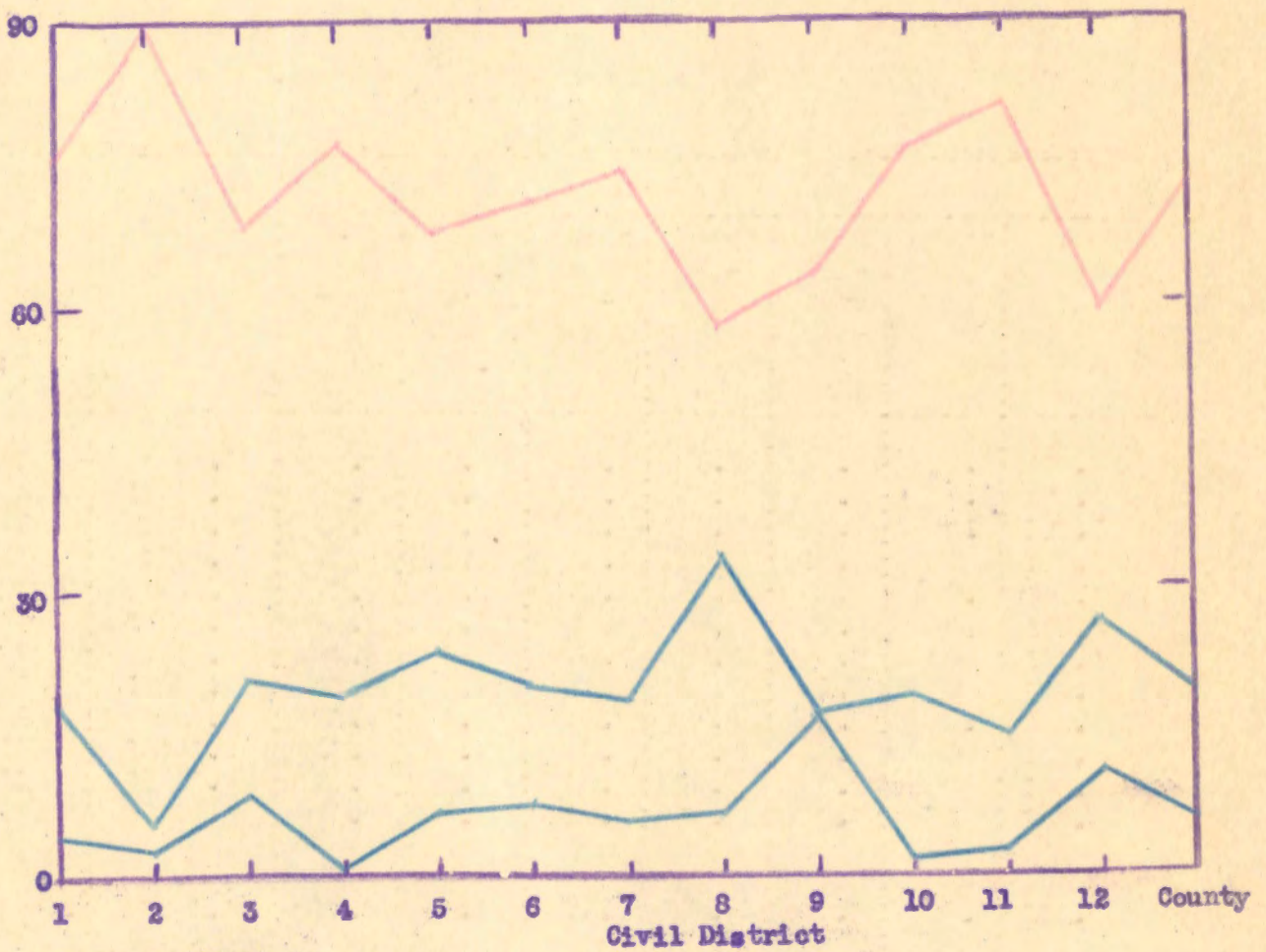
TABLE LIX. DISTRIBUTION OF MAJOR LAND USES ON FARMS OF 140 ACRES AND OVER, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Total All Land (Acres)	Per Cent						Total
		Im- proved Land	Build- ings, Roads, Lanes, Etc.	Woods Not Pas- tured	Woods Pas- tured	Open Pas- ture Non- Crop Land	Other Land	
1	4084.0	60.4	1.2	23.4	5.3	9.6	0.1	100.0
2	10333.0	39.7	1.8	29.3	6.7	22.4	0.1	100.0
3	8226.0	43.2	1.6	41.1	6.9	6.6	0.6	100.0
4	2762.0	23.8	1.2	52.0	10.4	12.6	0	100.0
5	8481.5	41.4	2.1	37.5	8.7	9.7	0.6	100.0
6	13634.4	43.1	1.2	40.4	7.1	7.9	0.3	100.0
7	4669.0	47.5	1.6	35.4	9.8	5.7	0	100.0
8	12594.5	27.7	1.3	48.9	12.5	9.6	0	100.0
9	3923.0	27.8	1.3	58.5	8.6	3.7	0.1	100.0
10	10061.0	17.2	0.8	63.6	15.0	3.4	0	100.0
11	11528.0	38.9	1.3	38.9	13.7	7.2	0	100.0
12	2214.0	53.1	1.2	27.9	12.8	7.0	0	100.0
County aver.	92501.4	37.1	1.4	42.3	9.9	9.1	0.2	100.0

In regard to the use of woods for pasture, the relation is not so clear. Probably the interpretation of different committeemen in filling out the work sheets is an influential factor. In some instances there

Per Cent

154.



Source: Table LX

Land Planted in Crops

Idle

Pasture

Figure 57. Principal Uses of Improved Land on Farms of 140 Acres and Over, by Civil Districts, Overton County

might be difficulty in properly determining whether a field were open pasture on non-crop land or woods pastured. This may account for the high proportion of land as non-crop open pasture in District 2.

TABLE LX. DISTRIBUTION OF IMPROVED LAND ON FARMS, 140 ACRES AND OVER, BY CIVIL DISTRICTS, OVERTON COUNTY

C.D.	Improved Land (Acres)	Per Cent				
		Orchard	Idle	Pasture	Land Planted in Crops	Total
1	2465.5	1.6	18.0	4.7	75.7	100.0
2	4105.0	1.7	5.8	2.7	89.8	100.0
3	3552.5	1.7	20.8	8.9	68.6	100.0
4	657.0	3.0	19.1	0.8	77.1	100.0
5	3508.0	1.3	24.2	6.7	67.8	100.0
6	5873.9	1.5	20.1	7.3	71.1	100.0
7	2217.0	1.3	18.6	5.8	74.3	100.0
8	3481.5	1.4	33.8	6.5	58.3	100.0
9	1089.0	2.0	16.9	16.9	64.2	100.0
10	1730.0	2.3	18.6	1.6	77.5	100.0
11	4481.0	1.7	14.7	2.6	81.0	100.0
12	1175.0	2.5	26.8	10.9	59.8	100.0
County aver.	34335.4	1.7	19.4	5.8	73.1	100.0

The principal use of improved land, in all districts, is as crop land. For the county as a whole, 73.1 per cent of improved land is used in this manner (Figure 57). Idle land is next, followed in turn by pasture and orchards.

Differences among the districts is more noticeable in the first two uses than on the others. The 8th District has the smallest proportion of land planted to crops, while the 2nd is highest. To some extent this

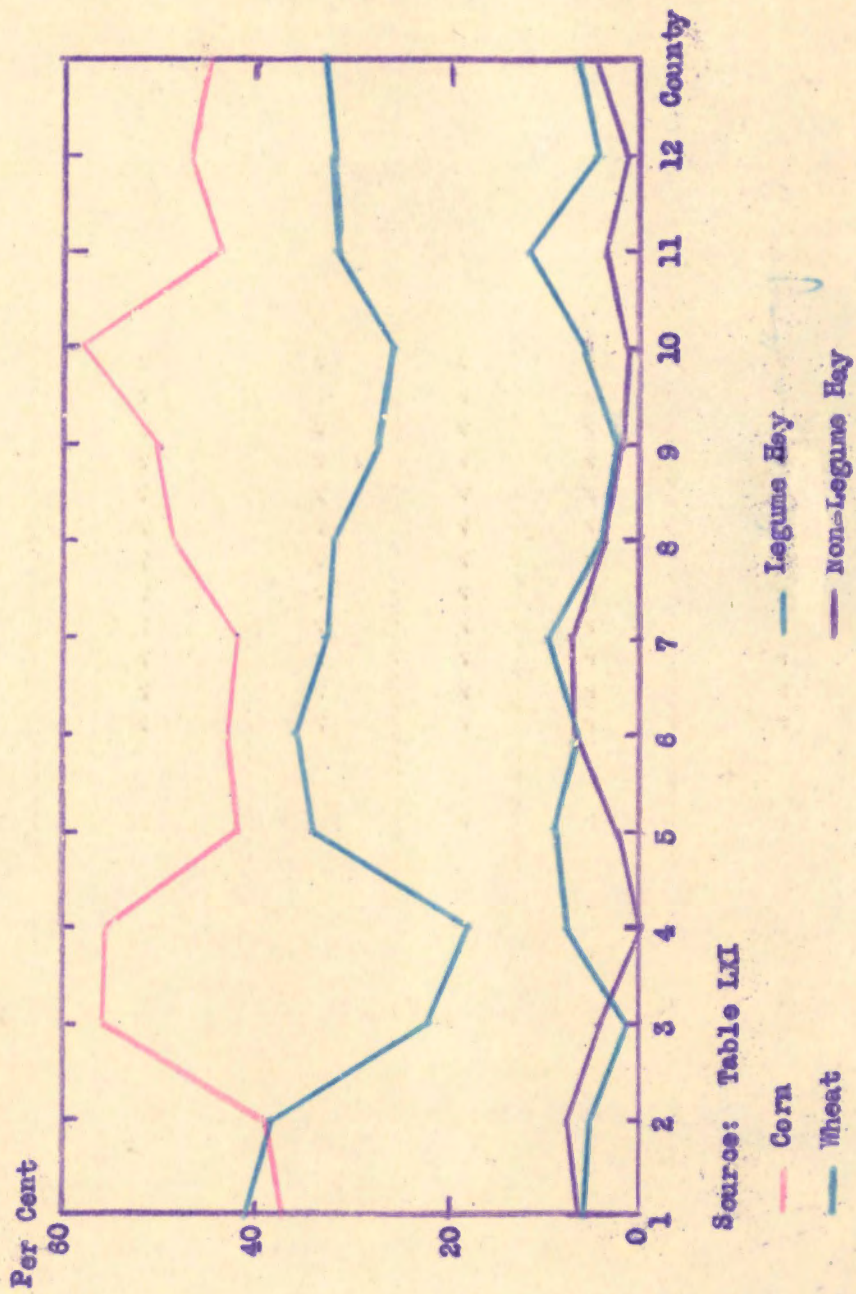


Figure 58. Distribution of Land Planted in Crops on Farms of 140 Acres and Over, by Civil Districts, Overton County

variation is accounted for by land class. A great deal of the land in the 8th District is on the Cumberland Plateau, which is Class VII land. The high proportion of idle land in the 8th District indicates that Class VII land is easily drained of its fertility, and is taken out of cultivation for a period of rebuilding. Districts high in proportion of land planted to crops tend to be low in proportion of land that is idle.

Variation among the districts in proportion of land occupied by orchards and pasture is more closely associated with the proportion land in the two principal uses than with any other factor.

The four major crops on farms of this size group are corn, legume hay, wheat, and non-legume hay (Figure 58). These four crops occupy 89.5 per cent of the crop land. Oats and sorghum are other crops of importance.

The 2nd District is lowest in proportion of land planted to corn, with 39 per cent and the 3rd is highest with 56 per cent. Much of the difference between these districts is probably due to class of land. Farms in the 2nd District are located on Classes III, IV, and VI, while in the 3rd they are on Classes IV, VI, and VII. The 11th District is also low in proportion of crop land planted in corn, and has a large number of its farms on Class III land.

In most instances the proportion of land planted to legume hay is larger in districts with more farms on better land classes. To an even larger extent the same is true of wheat.

TABLE LXI. DISTRIBUTION OF LAND PLANTED IN CROPS ON FARMS OF
140 AND OVER ACRES, BY CIVIL DISTRICTS, OVERTON
COUNTY

C.D.	Land Planted in Crops (Acres)	Per Cent				
		Corn	Irish and Sweet Po- tatoes	Truck and Garden	Sor- ghum	Tobacco
1	1862.2	37.2	2.3	1.6	2.1	0
2	3684.5	39.0	1.5	2.8	3.2	0
3	2436.9	56.0	1.8	2.7	4.8	0.1
4	506.5	55.7	2.9	3.8	3.4	0
5	2379.2	41.9	1.3	1.5	3.1	0.5
6	4176.0	43.1	0.8	1.6	2.3	0.1
7	1647.3	41.9	0.9	1.4	1.7	0
8	2030.5	49.0	1.9	2.0	1.2	0.8
9	699.5	50.0	5.6	2.7	2.9	0.07
10	1340.5	58.3	2.7	3.1	1.2	0
11	3631.3	43.8	1.1	1.4	1.5	0
12	702.7	47.3	1.5	1.9	1.3	0
County aver.	25097.1	45.1	1.6	2.0	2.4	0.1

(continued)

C.D.	Per Cent							Total
	Wheat	Oats	Rye	Barley	Legume Hay	Non-Legume Hay	Misc.	
1	5.6	1.6	1.6	0.5	41.2	6.3	0	100.0
2	5.1	1.2	0.8	0	38.7	7.6	0.1	100.0
3	1.6	2.4	2.5	0	21.9	4.1	2.1	100.0
4	7.9	8.3	0	0	18.0	0	0	100.0
5	8.7	3.8	2.3	0	34.4	2.5	0	100.0
6	6.5	2.1	0.3	0	36.2	6.8	0.2	100.0
7	9.6	2.3	1.8	0.2	32.7	7.5	0	100.0
8	4.4	3.9	0.5	0	32.0	3.8	0.5	100.0
9	2.6	7.1	1.4	0	27.5	2.2	0	100.0
10	5.7	1.6	0.7	0	25.6	1.1	0	100.0
11	11.6	3.6	1.1	0.5	31.9	3.7	0	100.0
12	4.6	5.6	3.6	0	32.2	1.0	1.0	100.0
County aver.	6.6	2.8	1.2	0.1	33.2	4.6	0.3	100.0

Sorghum and garden crops are most important on farms on the poorer land classes, which accounts for part of the variation among districts in this respect.

Summary. There were 3,392 farms of all sizes reported in Overton County in 1935.⁽³⁾ Work sheets were obtained on 2,067 farms, these being the farms that were cooperating in the Agricultural Conservation Program.

Size of farm is a factor influencing participation in the program. As the size of farm increased a larger proportion entered the program (Table LXII). It will be noted that only 136 farms, out of a reported 1,057 with less than 20 acres, are participating in the program. This is due partly to small farms being on a part-time basis, and thus not in position to reduce their acreage in soil depleting crops. Consequently they would not receive any payment if they entered the program. On the other hand, there are 14 more farms in the group with 140 acres and over participating in the program than are reported by the census. This is due to differences in the definition of a farm by the census and the Conservation Program. A farm, for census purposes, is all the land which is directly farmed by one person, either by his own labor

(3) United States Census of Agriculture, Volume II, 1935, p. 613.

alone or with assistance of members of his household, or hired employees. Thus when a land owner has one or more tenants, renters, croppers, or managers the land operated by each is considered a farm. (4)

In the Agricultural Conservation Program a farm is all land under the same ownership and operated as a unit which may include (1) land rented from another person, or (2) land rented out to another person if these lands are considered a unit with respect to rotation of crops.

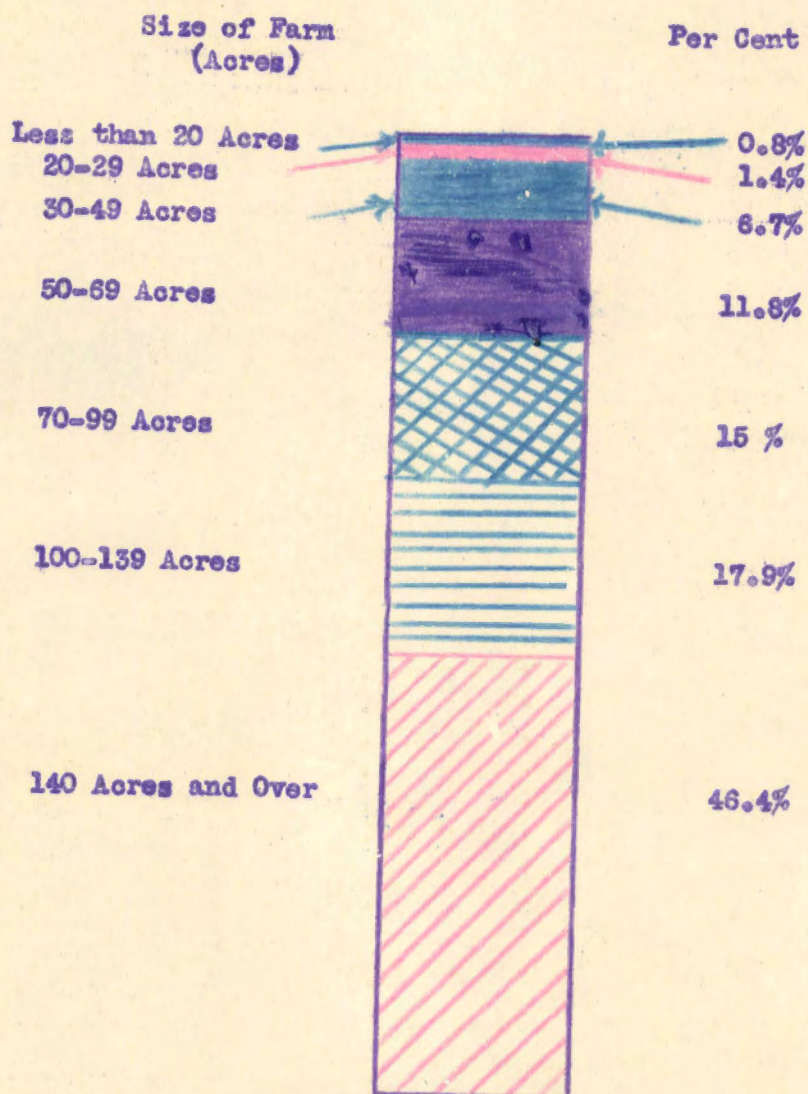
TABLE LXII. NUMBER OF FARMS BY SIZE GROUPS, OVERTON COUNTY, 1935 CENSUS AND 1936-38 AGRICULTURAL CONSERVATION PROGRAM

Size of Farm	Census			Conservation Program		
	Number	Area (Acres)	Pct. of Total	Number	Area (Acres)	Pct. of Total
Less than 20 acres	1057	10,634	5.0	136	1667.7	0.8
20-29 acres	348	8,057	3.8	113	2711.5	1.4
30-49 acres	460	17,010	8.0	347	13412.3	6.7
50-69 acres	464	26,478	12.5	407	23521.9	11.8
70-99 acres	374	30,183	14.3	310	29913.7	15.0
100-139 acres	327	36,875	17.4	318	35574.0	17.9
140 acres and over	362	82,438	39.0	376	92510.4	46.4

Source: Census of Agriculture, 1937, Second Series, p. 613.

The largest percentage of land is in the size group of 140 acres and over. Only 0.8 per cent is in farms of less than 20 acres (Figure 59).

(4) Ibid., p. vi.



Source: Table LXII

Figure 59. Distribution of All Land by Size of Farm, Overton County

As the size of farms increases a greater proportion of the total area is occupied, both in the census classification and in that of the Conservation Program. The greatest difference between the two classifications is noted in the group of largest farms.

TABLE LXIII. NUMBER OF FARMS, AREA AND DISTRIBUTION OF MAJOR LAND USES, BY SIZE OF FARM, OVERTON COUNTY

Size of Farm	Number of Farms	Farms by Land Class					Total All Land (Acres)
		II	III	IV	VI	VII	
Less than 20 acres	136	5	56	41	12	22	1667.7
20-29 acres	113	8	33	34	9	29	2711.5
30-49 acres	347	14	96	112	23	102	13412.3
50-69 acres	407	29	115	134	40	89	23521.9
70-99 acres	370	25	119	117	37	72	29913.7
100-139 acres	318	24	113	104	35	42	35574.0
140 acres and over	376	29	143	113	30	61	92510.4
County	2067	134	675	655	186	417	199311.5

(continued)

Size of Farm	Improved Land (Acres)	Buildings, Roads, Lanes, Etc. (Acres)	Woods Not Pastured (Acres)	Woods Pastured (Acres)	Open Pasture Non-Crop Land (Acres)	Other Land (Acres)
Less than 20 acres	1260.2	82.8	162.0	54.0	108.7	0
20-29 acres	1838.9	99.7	439.1	108.0	225.8	0
30-49 acres	7796.0	382.8	3306.5	573.2	1327.5	26.0
50-69 acres	13 285.9	542.7	6045.5	1345.6	2275.2	27.0
70-99 acres	15 699.2	650.2	7972.3	2217.8	3290.8	83.5
100-139 acres	17 981.7	647.3	11189.9	2337.5	3377.1	41.0
140 acres and over	34337.0	1303.7	39094.9	8994.2	8613.6	167.0
County	92198.6	3709.2	68210.2	15630.3	19218.7	344.5

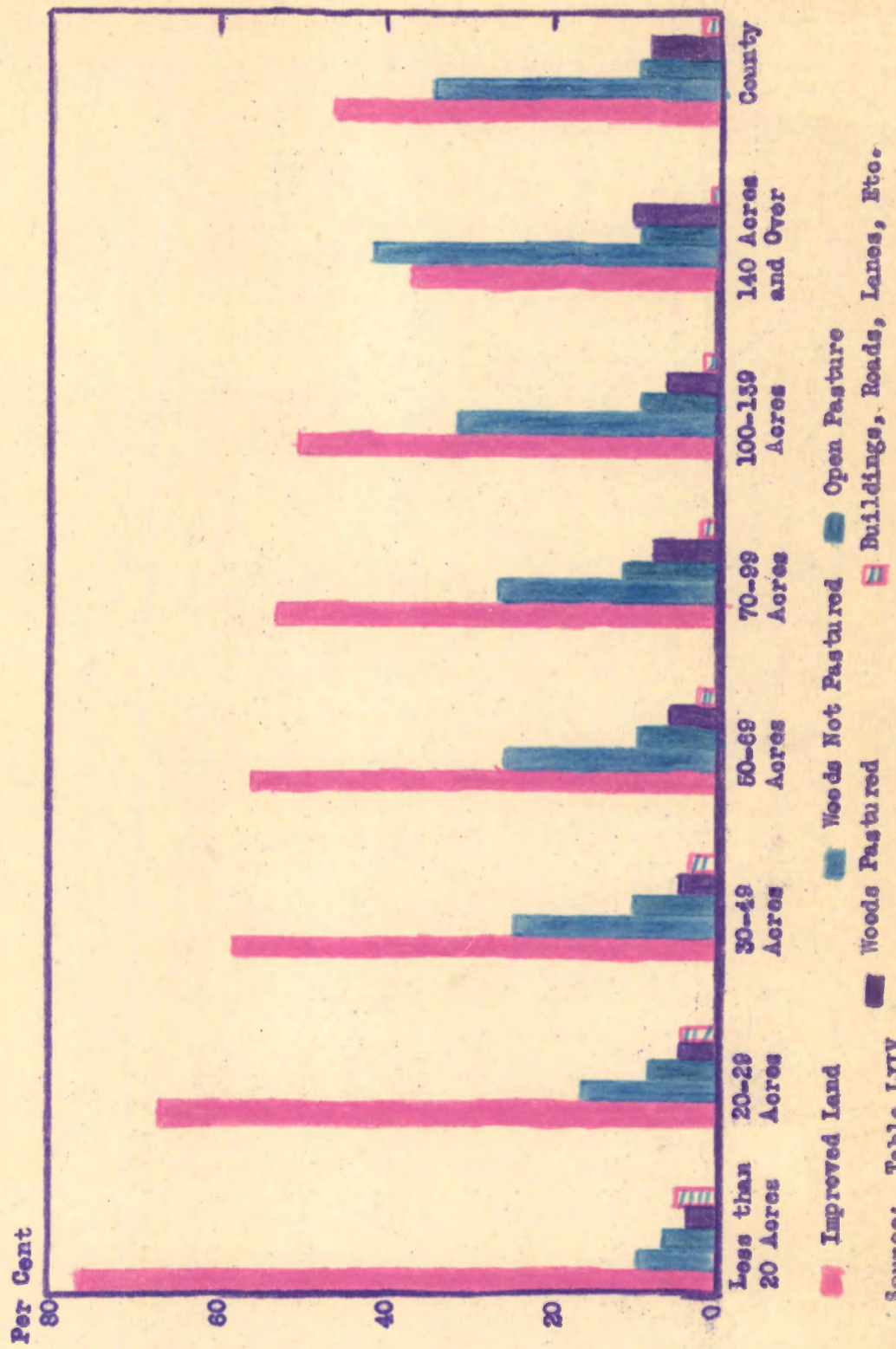


Figure 60. Distribution of Major Land Uses, by Size of Farm, Overton County

Distribution of farms by land class is adequate for all groups above 30-49 acres. The number of farms on Class II land is too small

TABLE LXIV. DISTRIBUTION OF MAJOR LAND USES, BY SIZE OF FARMS, OVERTON COUNTY

Size of Farm	Total All Land (Acres)	Per Cent						
		Im- proved Land	Bldgs., Roads, Lanes, Etc.	Woods Not Pas- tured	Woods Pas- tured	Open Pas- ture Non- Crop Land	Other Land	Total
Less than 20 acres	1667.7	75.6	5.0	9.7	3.2	6.5	0	100.0
20-29 acres	2711.5	67.8	3.7	16.2	4.0	8.3	0	100.0
30-49 acres	13412.3	58.1	2.8	24.7	4.3	9.9	0.2	100.0
50-69 acres	23521.9	56.5	2.3	25.7	5.7	9.7	0.1	100.0
70-99 acres	29913.7	52.5	2.2	26.6	7.4	11.0	0.3	100.0
100-139 acres	35574.0	50.5	1.8	31.5	6.6	9.5	0.1	100.0
140 acres and over	92510.4	37.1	1.4	42.3	9.9	9.1	0.2	100.0
County aver.	199311.5	46.3	1.9	34.2	7.8	9.6	0.2	100.0

to be representative (Table LXIII), in the three smaller size groups. As a rule, more of the farms on the better classes of land are in the larger size groups, which influences the use of land to some extent.

There is a close relation between size of farm and use to which the land is put. The most important use of land on all farms of less than 140 acres is as improved land. Seventy-five and six-tenths per cent of the land on farms less than 20 acres is improved. As the size of farm increases the proportion of improved land decreases (Figure 60).

The situation with regard to woods not pastured is reversed. As the size of farm increases the percentages of woodland not pastured increases (Figure 60). The most important use of land on farms of 140 acres and above is woods not pastured.

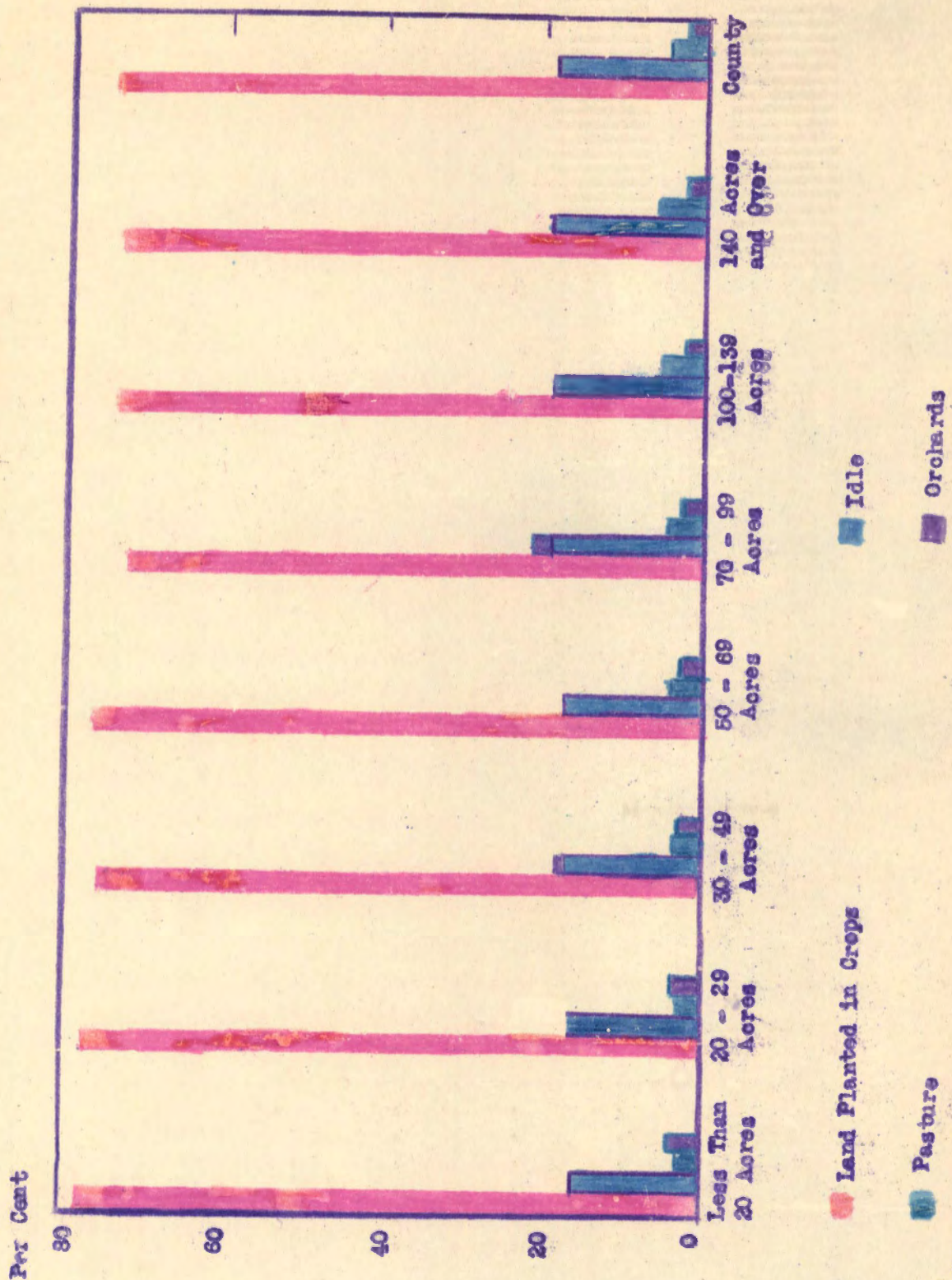
This situation is to be expected, the smaller farms usually being part-time farms. Also, it would take more land, in proportion, to supply family living on the smaller farms than on the larger farms. That is, a one-acre garden on a ten-acre farm is 10 per cent of the total land while on a 100-acre farm is only 1.0 per cent.

Variation among the size groups does not show any relationship regarding the use of woods pastured or non-crop open pasture (Figure 60).

A somewhat larger percentage of the land on the smaller farms is occupied by buildings, roads, etc., than on the larger farms. This is explained in part by the previous illustration in regard to one-acre being a larger proportion of the small farms.

TABLE LXV. PRINCIPAL USES OF IMPROVED LAND, BY SIZE OF FARM, OVERTON COUNTY

Size of Farm	Improved Land (Acres)	Per Cent				
		Or-chard	Idle	Pasture	Land Planted in Crops	Total
Less than 20 a.	1260.2	3.9	15.5	2.4	78.2	100.0
20-29 acres	1838.9	3.5	16.2	2.5	77.8	100.0
30-49 acres	7796.3	3.0	17.8	3.4	75.8	100.0
50-69 acres	13285.9	2.8	17.2	3.6	76.4	100.0
70-99 acres	15699.1	2.6	20.8	4.4	72.2	100.0
100-139 acres	17981.2	2.1	18.9	5.1	73.9	100.0
140 acres and over	34337.2	1.7	19.4	5.8	73.1	100.0
County	92197.6	2.2	19.0	4.8	74.0	100.0



Source: Table LXV

Figure 61. Principal Uses of Improved Land, by Size of Farm, Overton County

There is not much variation in the proportion of improved land planted to crops. For the county as a whole, 74 per cent of the improved land is in crops (Figure 61). As a rule, smaller farms have more land planted in crops, in proportion to size, than do larger farms.

Small farms are more often self-sufficing farms than are larger farms. This is possibly the reason that a larger proportion of the area on small farms is planted to crops. To some extent land class influences this also. Apparently more of the small farms are on the poorer land classes which tends to cause an increase in proportion planted in crops.

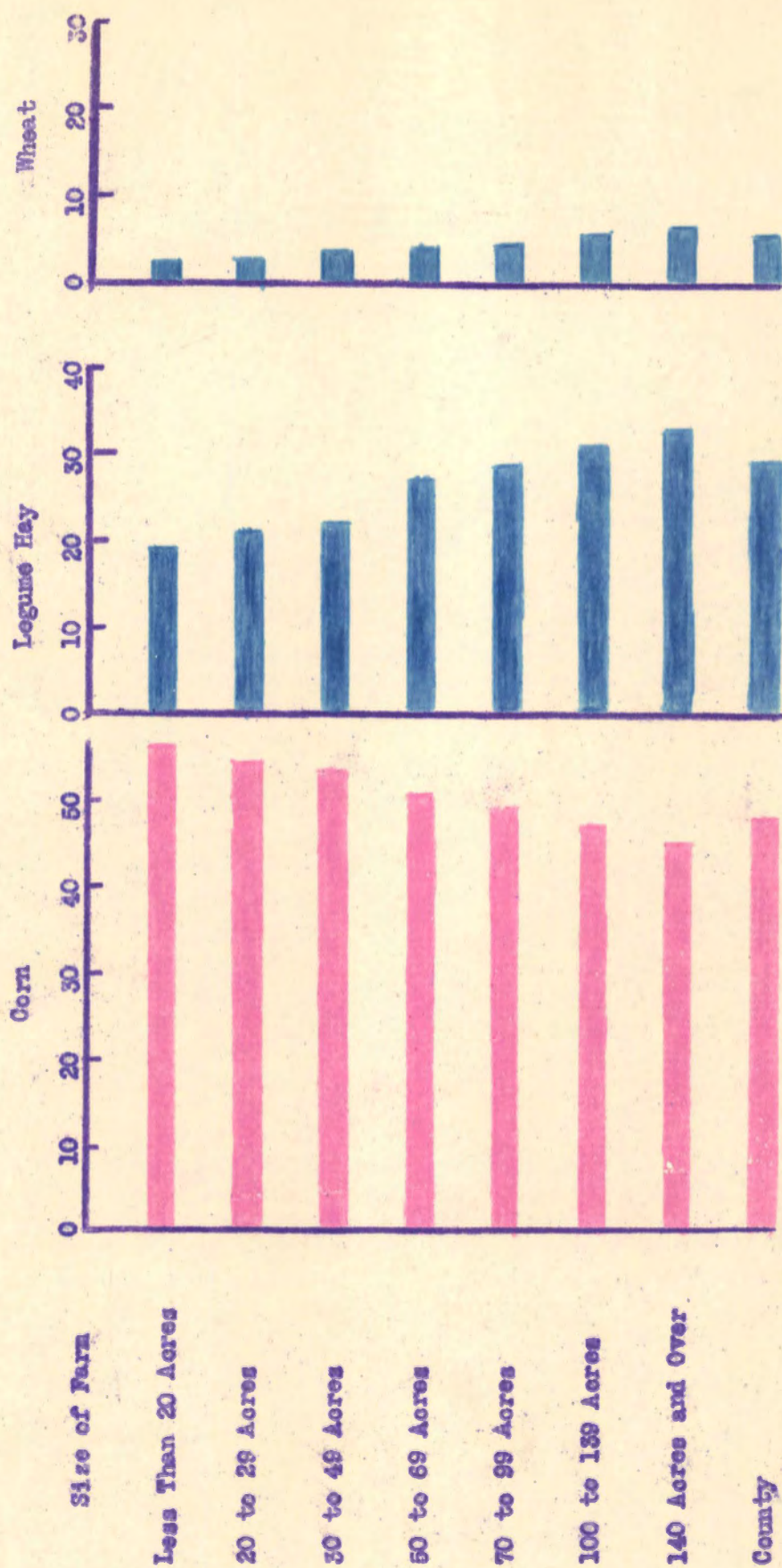
The proportion of idle land is not much different on the various size farms. For the most part the larger farms have a larger percentage idle.

There is a gradual increase in the proportion of land devoted to pasture as the size of farm increases (Figure 61).

A larger proportion of the land is devoted to orchards on the smaller farms (Figure 61). The smaller farms tend to be self-sufficing, and may have about as many fruit trees as larger farms.

The three most important crops on farms of all size groups are corn, legume hay, and wheat, in the order named. These are followed by non-legume hay, sorghum, truck and vegetables, oats, and Irish and sweet potatoes.

Corn occupies 56.2 per cent of all land planted in crops on farms less than 20 acres, but only 45.1 per cent on farms of 140 acres and over. There is a gradual decrease in the proportion of corn grown as the size of



Source: Table LXVI

Figure 62. Distribution of Land Planted in Crops, by Size of Farm, Overton County

farms increases (Figure 62). To some extent class of land influences the proportion planted in various crops. The better land classes produce larger yields. Also, the larger farms likely have more cattle, and need more hay and pasture. These two factors help explain the variation in proportion of corn and legume hay.

In proportion of land planted in Irish potatoes, truck crops and sorghum, the smaller farms are highest. It will take as many acres to

TABLE LXVI. DISTRIBUTION OF LAND PLANTED TO CROPS, BY SIZE OF FARM, OVERTON COUNTY

Size of Farm	Land Planted in Crops (Acres)	Per Cent				
		Corn	Irish and Sweet Potatoes	Truck and Vege- tables	Sor- ghum	Tobac- co
Less than 20 acres	986.0	56.2	6.2	8.6	4.1	0.3
20-29 acres	1431.6	54.8	4.6	5.5	3.2	0
30-49 acres	5911.3	53.8	3.9	4.8	4.3	0.1
50-69 acres	10152.0	50.8	2.9	3.7	4.1	0.1
70-99 acres	11326.5	49.1	2.5	3.0	3.4	0.1
100-139 acres	13306.6	47.4	1.8	2.4	3.3	0.1
140 acres and over	25097.1	45.1	1.6	2.0	2.4	0.1
County	68211.1	48.2	2.3	3.0	3.2	0.1

(continued)

Size of Farm	Per Cent							Total
	Wheat	Oats	Rye	Barley	Legume Hay	Non- Legume Hay	Misc.	
Less than 20 acres	2.5	0.9	0.4	0	19.0	1.7	0.1	100.0
20-29 acres	2.8	2.8	1.6	0	20.9	3.5	0.3	100.0
30-49 acres	3.5	3.1	1.3	0	22.0	2.9	0.2	100.0
50-69 acres	4.0	2.6	1.4	0	27.1	3.0	0.3	100.0
70-99 acres	4.7	2.5	1.2	0.1	28.9	4.5	0	100.0
100-139 acres	5.9	2.4	1.1	0	31.0	4.5	0.1	100.0
140 acres and over	6.6	2.8	1.2	0.1	33.2	4.6	0.3	100.0
County	5.4	2.7	1.2	0.1	29.2	4.4	0.2	100.0

produce these crops on one farm as on another, but the proportion will be larger on small farms.

It is interesting to note that the smaller farms plant more tobacco than larger farms. Tobacco is probably used instead of potatoes as a cash crop.

Wheat is the most important of the small grains, and is more important on the larger farms. The larger farms are to a considerable extent on the better land classes, which partly accounts for the proportion of wheat on them. There is apparently no relationship between size of farm and the planting of oats and rye.

A gradual increase occurs in proportion of land devoted to non-legume hay, as the size of farm increases. Probably the greater number of livestock explain this relationship.

CHAPTER IV

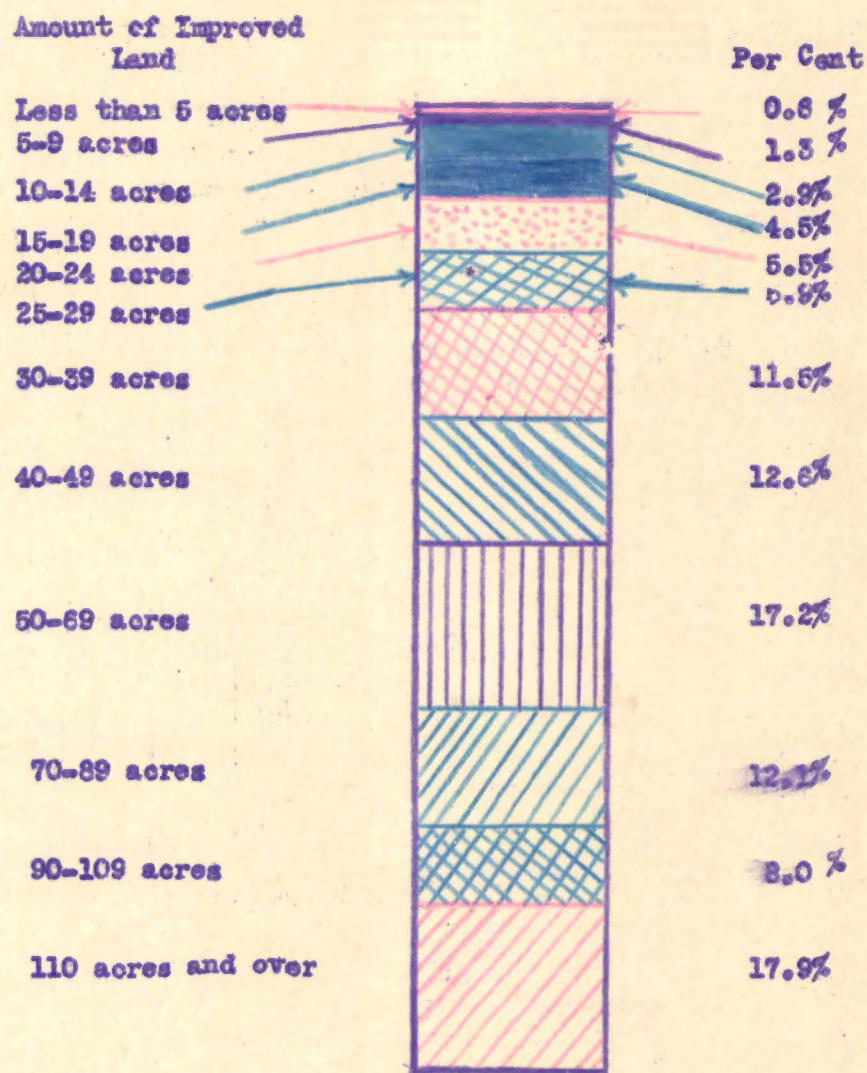
RELATION OF IMPROVED LAND PER FARM TO LAND USE

In addition to class of land the amount of improved land per farm has considerable influence on the way in which land is used. Farms with little improved land utilize it mostly in the production of crops to be consumed at home. This means that a large proportion of the land is in soil depleting crops such as corn, truck crops, vegetables, sweet and Irish potatoes, and very little is left to be planted in non-depleting crops. Continued cropping in this way eventually leads to poor soil. On the other hand, farms with a larger acreage of improved land are in better position to grow non-depleting crops and thus maintain the fertility of the soil.

Improved land was divided into twelve groups for tabulation purposes. There was an adequate number of farms in each group except those with less than 5 acres improved (Table XLVII). The proportion of the total in this group was very small, being 0.6 per cent.

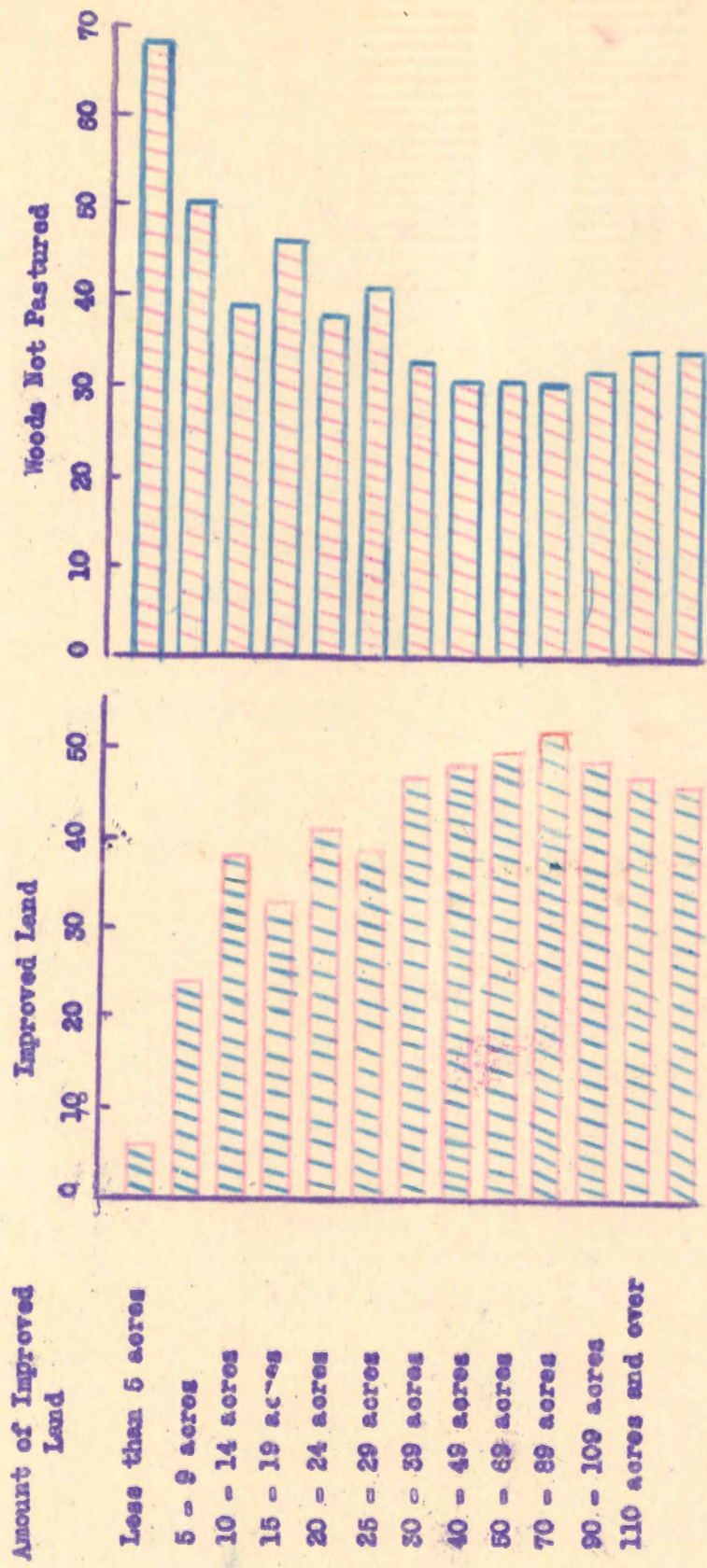
Farms with 110 acres or more of improved land contained the largest proportion of the total area (Figure 63). The next group was that containing 50 to 69 acres, with 17.2 per cent. In general it may be said that most of the land was in the groups containing 30 acres and above (Figure 63).

Major Uses. The two major uses of the land are improved land and woods not pastured (Figure 64). Woods not pastured is the most important



Source: Table LXVII

Figure 63. Distribution of Improved Land by Specified Amounts per Farm, Overton County



Sources: Table LXVIII

Figure 64. Distribution of Major Land Uses on Farms, by Acres of Improved Land, Overton County.

TABLE LXVII. NUMBER OF FARMS, AREA AND DISTRIBUTION OF MAJOR
LAND USES ON FARMS BY ACRES OF IMPROVED LAND, OVERTON
COUNTY

Acres Im- proved Land	No. of Farms	Farms by Land Class					Total All Land (Acres)	Improved Land (Acres)
		II	III	IV	VI	VII		
Less than 5	26		15	5	1	5	1,114.0	67.5
5-9	86	4	24	24	11	23	2,626.6	639.7
10-14	175	3	56	47	17	52	5,829.3	2,214.7
15-19	174	6	50	49	11	58	8,894.9	2,967.7
20-24	205	12	53	64	18	58	11,043.2	4,535.4
25-29	170	4	63	49	11	43	11,705.2	4,531.9
30-39	314	19	87	116	40	52	22,977.5	10,773.9
40-49	276	22	95	86	28	45	25,154.7	12,215.7
50-69	295	25	88	106	29	47	34,234.8	17,028.2
70-89	160	16	66	57	12	9	24,166.4	12,542.6
90-109	79	8	37	20	3	11	15,959.0	7,806.7
110 and Over	107	15	41	32	5	14	35,605.9	16,874.6
County	2067	134	675	655	186	417	199,311.5	92,198.6

(continued)

Acres Im- proved Land	Buildings, Roads, Lanes, Etc. (Acres)	Woods Not Pastured (Acres)	Woods Pastured (Acres)	Open Pasture Non-Crop Land (Acres)	Other Land (Acres)
Less than 5	13.5	762.0	58.0	177.0	36.0
5-9	61.8	1,317.4	234.0	373.7	
10-14	156.0	2,267.4	347.5	836.7	7.0
15-19	204.6	4,117.9	587.2	1,017.5	
20-24	277.2	4,204.9	600.5	1,385.2	40.0
25-29	227.0	4,822.8	552.5	1,557.0	14.0
30-39	479.1	7,582.5	1,504.8	2,624.2	13.0
40-49	486.3	7,719.2	2,206.0	2,486.0	41.5
50-69	615.5	10,592.5	2,772.8	3,131.8	94.0
70-89	379.5	7,424.5	1,729.0	2,045.8	45.0
90-109	255.0	5,211.5	1,464.0	1,183.8	38.0
110 and Over	553.7	12,187.6	3,574.0	2,400.0	16.0
County	3,709.2	68,210.2	15,630.3	19,218.7	344.5

use on farms with less than 5 acres improved (Figure 64). This is due to a few large farms that had large proportions of woods. The proportion of all improved land in this group is quite small, being only 6.1 per cent. Farms with 70 to 89 improved had the highest proportion of land used in this manner. Both of these uses show a close relationship with the acreage of improved land per farm.

TABLE LXVIII. DISTRIBUTION OF MAJOR LAND USES ON FARMS BY ACRES OF IMPROVED LAND, OVERTON COUNTY

Acres of Improved Land	Total All Land (Acres)	Per Cent						Total
		Improved Land	Bldgs., Roads, Lanes, Etc.	Woods Not Pastured	Woods Pastured	Open Pasture Non-Crop Land	Other Land	
Less than 5	1,114.0	6.1	1.2	66.4	5.2	15.9	3.2	100.0
5-9	2,626.6	24.3	2.4	50.2	8.9	14.2		100.0
10-14	5,829.3	38.0	2.7	38.9	6.0	14.3	.1	100.0
15-19	8,894.9	33.4	2.3	46.3	6.6	11.4		100.0
20-24	11,043.2	41.1	2.5	38.1	5.4	12.5	.4	100.0
25-29	11,705.2	38.7	2.0	41.1	44.8	13.3	.1	100.0
30-39	22,977.5	46.9	2.1	33.0	6.5	11.4	.1	100.0
40-49	25,154.7	48.6	1.9	30.7	8.8	9.9	.1	100.0
50-69	34,234.8	49.7	1.8	30.9	8.1	9.2	.3	100.0
70-89	24,166.4	51.9	1.6	30.7	7.1	8.5	.2	100.0
90-109	15,959.0	48.9	1.6	32.6	9.2	7.4	.3	100.0
110 and Over	35,595.8	47.4	1.5	34.2	10.0	6.7	.2	100.0
County	199,301.4	46.3	1.9	34.2	7.8	9.6	.2	100.0

The proportion of improved land increases as the amount of improved land per farm increases, up to 70 to 89 acres. The two remaining groups

decrease slightly in this respect. As they are large farms with considerable woodland this situation is to be expected. The proportion of woods not pastured decreases as the amount of improved land per farm increases up to 70 to 89 acres, after which there is a slight increase (Figure 64).

The third use of land is open pasture on non-crop land (Table LXVIII), which occupies 9.6 per cent of the land. There is some variation among the groups in regard to this use, especially those with small amounts of improved land. However as the amount of improved land increases the proportion in open pasture decreases.

Woods pastured occupy 7.8 per cent of the total land in the county. In most cases farms with a high amount of improved land have a larger percentage of the land used in this manner. Farms with 110 acres and more have 10 per cent of the total farm area in this category. The relation of this use is not so closely associated with amount of improved land per farm.

The least important use of the land is that devoted to buildings, roads, lanes, etc. This use is closely correlated with the amount of improved land (Table LXVIII). As the amount of improved land increases the proportion occupied by buildings, roads, etc., decreases.

Principal Uses of Improved Land. Land planted to crops is the most important use of improved land (Figure 65). Seventy four per cent of the improved land in the county is used in this way. On the average,



Source: Table LXIX

Figure 65. Principal Uses of Improved Land, by Acres of Improved Land, Overton County

all farms with 50 acres or more of improved land fall below the county average in this respect. Farms with a small amount of improved land have a larger proportion of it planted to crops. To some extent the variation in the groups is probably due to class of land, as more farms in better land classes are found in the groups with the larger amounts of improved land.

The next use of improved land is lying idle. The relation between amount of improved land and the proportion that is idle is not so definite as in the case of some of the other uses. However, there is a tendency toward a larger proportion of idle land in farms with more improved acres. Here again class of land probably influences the use.

Pasture is the third most important use of improved land, in the county as a whole (Figure 65). There is a definite relation between the proportion in pasture and the amount of improved land. Farms with less than 40 to 49 acres of improved land have a smaller proportion devoted to pasture. Farms with 50 or more acres of improved land have from 4.8 per cent to 6.7 per cent occupied by pasture. This is correlated with a larger amount of livestock on these farms. Most farms with 5 acres and less of improved land have no livestock. To a large extent these small farms rely upon woods for their small pasture requirements, and not upon crop land open pasture.

The proportion of land devoted to orchards is largest on farms with the least acreage of improved land (Figure 65).

Both class of land and size of farm affect all the uses of improved land, as there is a tendency for the smaller farms to be on the poorer land

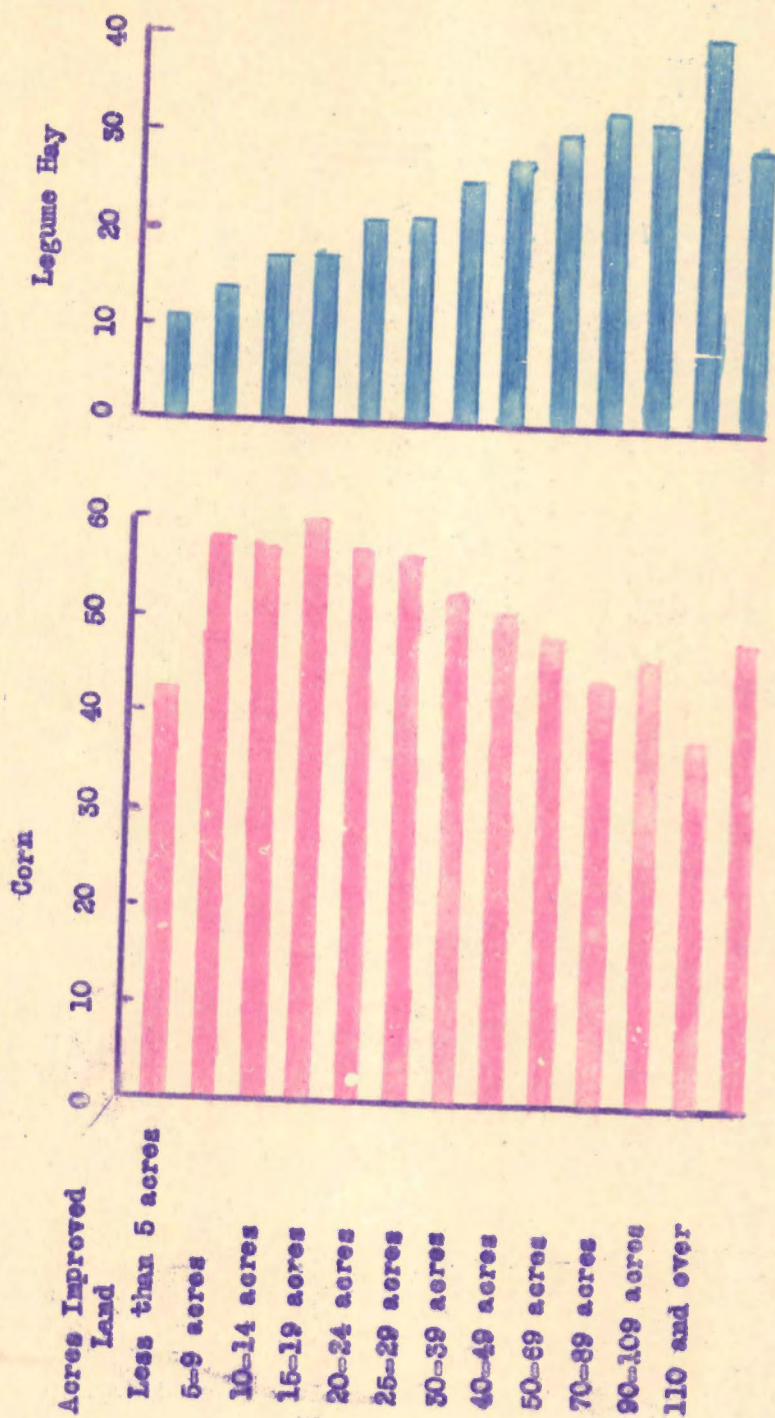
TABLE LXIX. PRINCIPAL USES OF IMPROVED LAND ON FARMS BY ACRES
OF IMPROVED LAND, OVERTON COUNTY

Acres of Improved Land	Improved Land (Acres)	Per Cent				Total
		Orchard	Idle	Pasture	Land Planted in Crops	
Less than 5	67.5	6.7	17.0	0	76.3	100.0
5-9	639.7	5.7	12.7	0.8	80.8	100.0
10-14	2,214.7	4.1	15.6	2.4	77.9	100.0
15-19	2,967.7	4.5	14.7	1.5	79.3	100.0
20-24	4,535.4	3.5	16.0	2.6	77.9	100.0
25-29	4,531.9	3.0	17.7	2.3	77.0	100.0
30-39	10,773.9	2.6	19.5	3.1	74.8	100.0
40-49	12,215.7	2.6	17.9	4.0	75.5	100.0
50-69	17,028.2	2.0	19.4	5.5	73.1	100.0
70-89	12,542.6	1.7	19.8	6.6	71.8	100.0
90-109	7,806.7	1.6	24.2	4.8	69.4	100.0
110 and Over	16,871.5	1.5	18.3	6.7	73.5	100.0
County	92,195.6	2.3	19.0	4.7	74.0	100.0

classes. Also the small farms produce more to be consumed at home, thereby accounting in part for the higher proportion of orchard land.

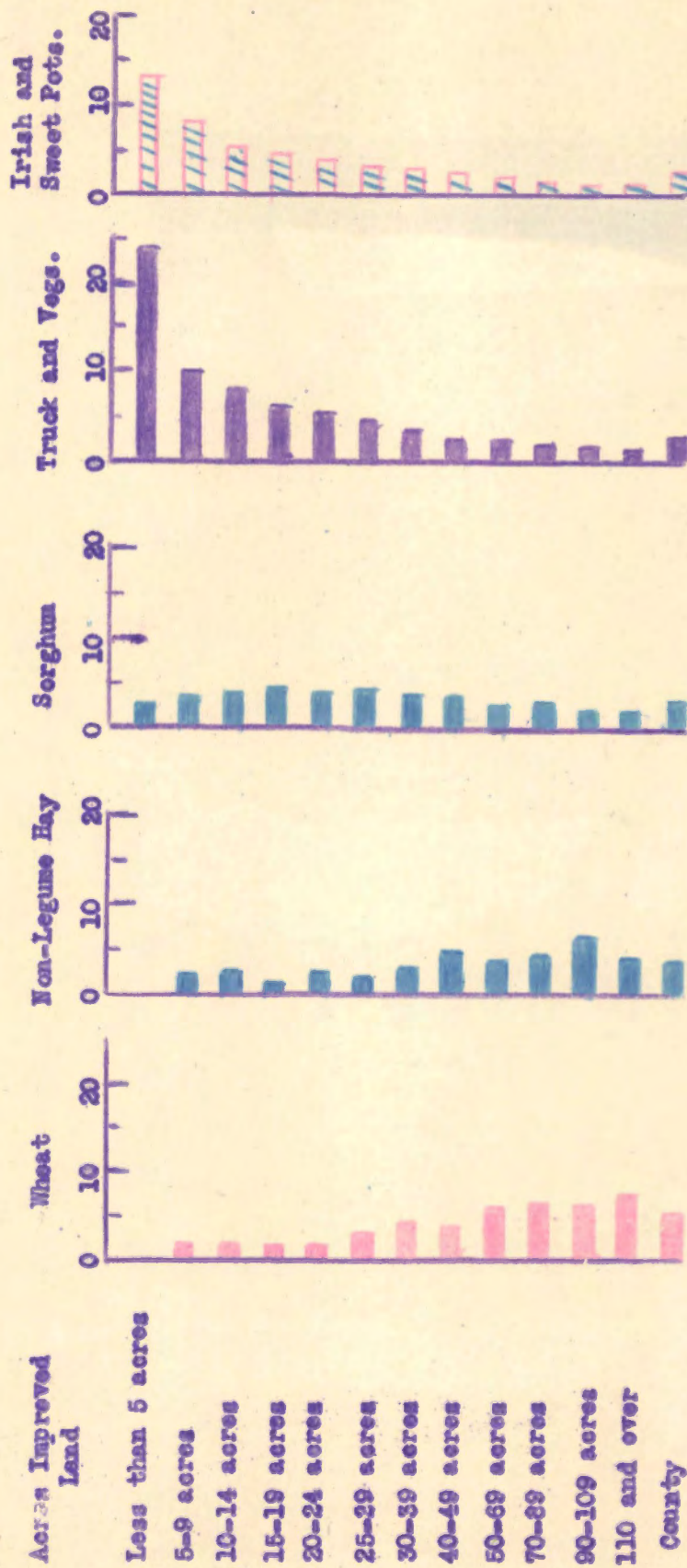
Use of land planted in crops shows a close correlation with size of farm, on most crops. Corn is the most important crop on all farms (Figure 66A). Those with 110 acres or more of improved land have the least proportion planted in corn. As the amount of improved land decreases the proportion planted in corn increases, with the exception of farms with less than 5 acres. Probably the small sample in this group influences the figures to some extent. On the other hand, a larger proportion of land on very small farms is devoted to sorghum, potatoes, and truck and garden.

Legume hay is the second most important use of land on farms, except those with 4 acres or less of improved land. As the amount of improved land increases the proportion planted to legume hay increases.



Source: Table LXX

Figure 66A. Distribution of Land Planted in Crops, by Acres of Improved Land, Overton County



Source: Table LXX

Figure 66B. Distribution of Land Planted in Crops, by Acres of Improved Land, Overton County

TABLE LXX. DISTRIBUTION OF LAND PLANTED IN CROPS ON FARMS, BY
ACRES OF IMPROVED LAND, OVERTON COUNTY

Acres of Im- proved Land	Land Planted in Crops (Acres)	Per Cent					
		Corn	Irish and Sweet Pota- toes	Truck and Garden	Sor- ghum	Tobac- co	Wheat
Less than 5	51.5	42.7	13.0	23.9	2.9	1.9	0
5-9	516.8	58.0	8.0	10.1	3.9	0.3	1.8
10-14	1,725.7	57.4	5.4	7.9	4.1	0	1.9
15-19	2,352.1	60.0	4.8	5.7	4.7	0	1.5
20-24	3,533.9	57.0	4.0	5.0	4.2	0.1	1.8
25-29	3,487.8	56.8	3.4	4.8	4.5	0	3.4
30-39	8,059.2	52.7	3.0	3.6	4.0	0	4.6
40-49	9,217.7	50.6	2.5	2.8	3.8	0.1	4.0
50-69	12,439.8	48.5	2.0	2.5	2.8	0.1	6.2
70-89	9,009.2	44.2	1.4	2.0	3.0	0.1	6.6
90-109	5,419.0	46.2	1.3	1.9	2.3	0.2	6.4
110 and Over	12,402.4	37.9	1.3	1.5	2.1	0.1	7.6
County	68,215.1	48.2	2.3	2.9	3.2	0.1	5.4

(continued)

Acres of Im- proved Land	Oats	Rye	Legumes	Non- Legumes	Misc.	Total
Less than 5	0	4.9	10.7	0	0	100.0
5-9	1.3	0	13.9	2.5	0.2	100.0
10-14	2.3	0.1	17.4	2.9	0.6	100.0
15-19	3.2	0.7	17.6	1.8	0	100.0
20-24	3.0	1.0	21.1	2.5	0.3	100.0
25-29	2.4	1.2	21.3	2.1	0.1	100.0
30-39	2.3	1.3	25.1	3.1	0.3	100.0
40-49	2.6	1.2	27.1	5.1	0.2	100.0
50-69	2.5	1.2	30.1	4.0	0.1	100.0
70-89	3.2	1.8	32.7	4.7	0.3	100.0
90-109	2.7	0.7	31.6	6.7	0	100.0
110 and Over	2.7	1.4	40.5	4.3	0.6	100.0
County	2.7	1.2	29.7	4.1	0.2	100.0

All groups with 50 acres or more have a higher percentage in this use than the average for the county.

Wheat and non-legume hay have the same relationship with amount of improved land. As the acreage of improved land increases the proportion planted to wheat increases (Figure 66B). This would be expected as wheat is grown on the better classes of land, and there is more land in this category on the farms with more improved land. Non-legume hay does not show so clear a picture as wheat. However, most of the non-legume hay is found on farms with 40 or more acres of improved land. Farms in this group have a higher percentage in non-legume hay than those with 110 acres or more.

Crops such as potatoes, vegetables and sorghum occupy a greater proportion of land on farms with little improved land (Figure 66B). Farms with small amounts of improved land depend largely upon home grown foods. This fact probably explains the large proportion of land planted in crops for home consumption.

As to oats and rye, there is not much difference in their proportionate use among the various groups. They are grown on only a small proportion of the farms, and one farm with several acres devoted to them tends to throw the whole group out of line. It appears that comparatively large acreages on a few farms explains most of the variation among the groups.

CHAPTER V

183.

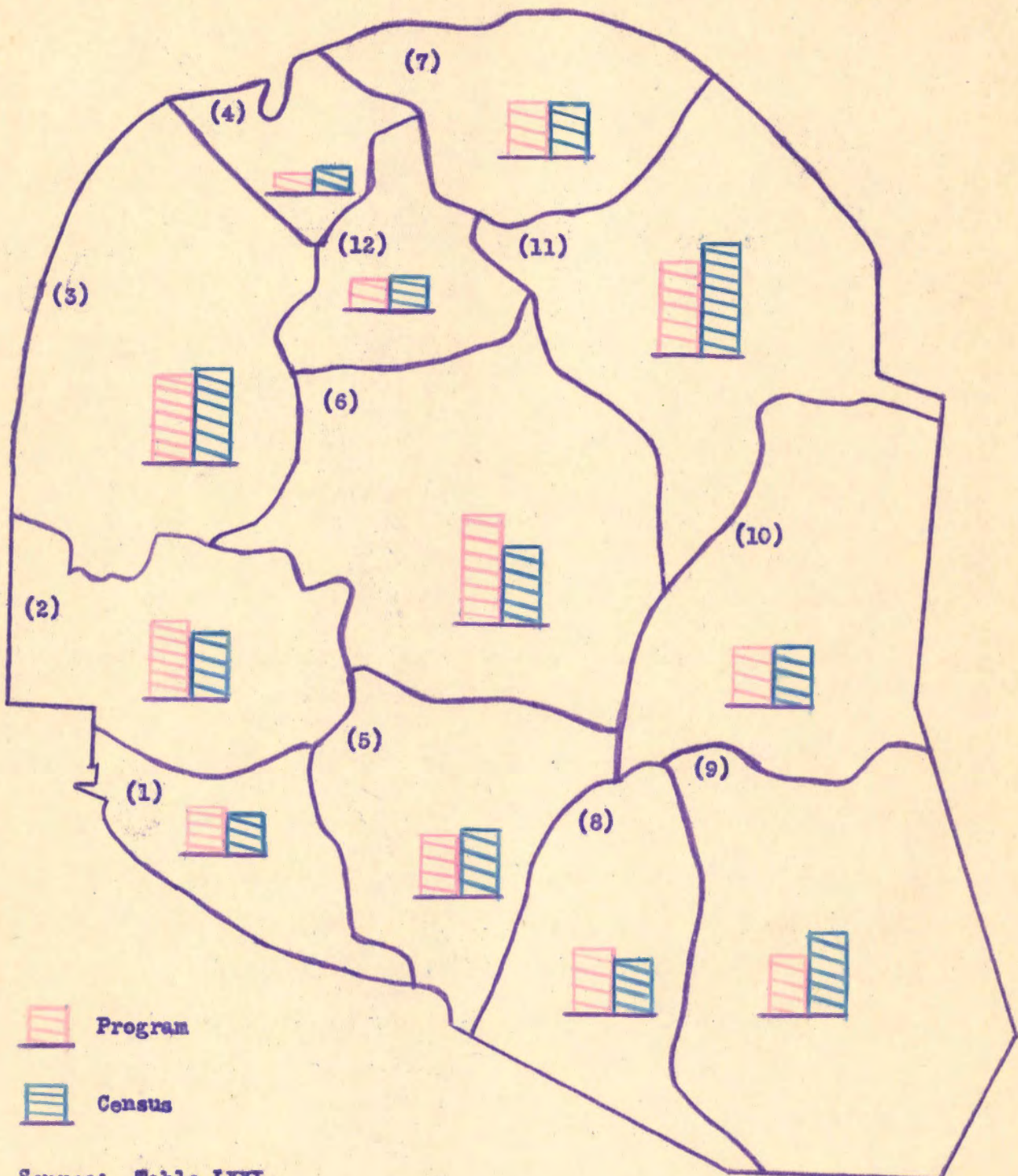
COMPARISON OF CENSUS AND CONSERVATION PROGRAM DATA

Figures gathered by the census were compared with those obtained in the program, to check the accuracy of the latter and to indicate trends in utilizing the land. As part of the districts are located on the Highland Rim and part on the Cumberland Plateau, comparison between districts should reflect a difference in use of land between these areas.

It should be kept in mind that the comparison is subject to limitations, as the definitions in each source are different. These differences will be discussed as they appear from time to time.

The distribution of land, in the program and in the census, appears to be approximately the same in most cases. The 6th District has a greater proportion of land represented in the conservation program than in the census (Figure 67). The reverse is true for the 9th and 11th. The remaining districts have about the same per cent of the total land in the program as is shown by the census.

Uses of land, in order of importance, are as improved, woods not pastured, open pasture, and woods pastured (Figures 68A and B). The census did not report any acres in buildings, roads, and lanes. Land in this category was reported under "other" land in the census. This causes



Source: Table LXXI

Figure 67. Distribution of All Land by Civil Districts, Overton County

TABLE LXXI. NUMBER OF FARMS, AREA, AND DISTRIBUTION OF MAJOR LAND USES BY CIVIL DISTRICTS, OVERTON COUNTY, AS REPORTED BY THE CONSERVATION PROGRAM AND THE CENSUS

C. D.	Source	Number Farms	Total All Land (Acres)	Improved Land (Acres)	Bldgs., Roads, Lanes, Etc. (Acres)	Woods Not Past. (Acres)	Woods Past. (Acres)	Open Past. Non- Crop Land (Acres)	Other Land (Acres)
1	Progr.* Census **	152 189	12,057.5 11,556.0	8,103.0 8,373.0	258.7 0	1,860.2 2,710.0	660.6 59.0	1,158.0 145.0	17.0 269.0
2	Progr. Census	178 228	19,791.0 18,147.0	8,701.0 11,471.0	449.0 0	4,703.5 5,626.0	1,169.0 61.0	4,750.5 614.0	18.0 375.0
3	Progr. Census	258 482	22,435.6 26,004.0	11,834.8 13,327.0	490.8 0	6,745.0 8,815.0	998.0 1,799.0	2,265.0 573.0	102.0 1,490.0
4	Progr. Census	37 123	4,897.0 6,983.0	1,750.5 2,744.0	82.0 0	2,002.7 3,159.0	466.3 382.0	595.5 126.0	0 572.0
5	Progr. Census	144 276	16,291.1 18,431.0	7,615.6 8,288.0	319.2 0	5,642.5 5,122.0	1,090.5 1,540.0	1,521.3 2,998.0	102.0 483.0
6	Progr. Census	292 319	27,830.9 21,303.0	13,743.8 11,647.0	496.6 0	9,138.0 7,269.0	1,832.0 1,789.0	2,570.5 292.0	50.0 306.0
7	Progr. Census	195 292	15,434.0 14,565.0	8,338.0 8,069.0	304.0 0	4,690.5 4,208.0	1,232.7 775.0	868.8 410.0	0 1,103.0
8	Progr. Census	116 149	17,197.0 15,116.0	5,133.1 4,841.0	256.7 0	8,144.5 6,229.0	2,105.7 2,270.0	1,552.0 1,182.0	5.0 594.0
9	Progr. Census	237 517	16,280.0 23,682.0	7,146.8 7,481.0	373.3 0	7,150.4 14,245.0	827.0 893.0	766.5 326.0	16.0 737.0
10	Progr. Census	110 215	15,361.5 16,759.0	3,911.7 5,128.0	203.2 0	8,200.0 7,620.0	2,039.0 996.0	991.1 606.0	16.5 2,409.0
11	Progr. Census	246 421	24,106.2 29,793.0	11,934.4 13,998.0	334.5 0	7,619.8 9,385.0	2,446.5 2,168.0	1,759.0 530.0	12.0 3,712.0
12	Progr. Census	102 181	7,629.7 9,336.0	3,985.9 4,905.0	141.2 0	2,313.1 2,803.0	763.0 607.0	420.5 341.0	6.0 680.0
Co.	Progr. Census	2067 3392	199,311.5 211,675.0	92,198.6 100,272.0	3,709.2 0	68,210.2 77,191.0	15,630.3 13,339.0	19,218.7 8,143.0	344.5 12,730.0

* Program means Agricultural Conservation Program.

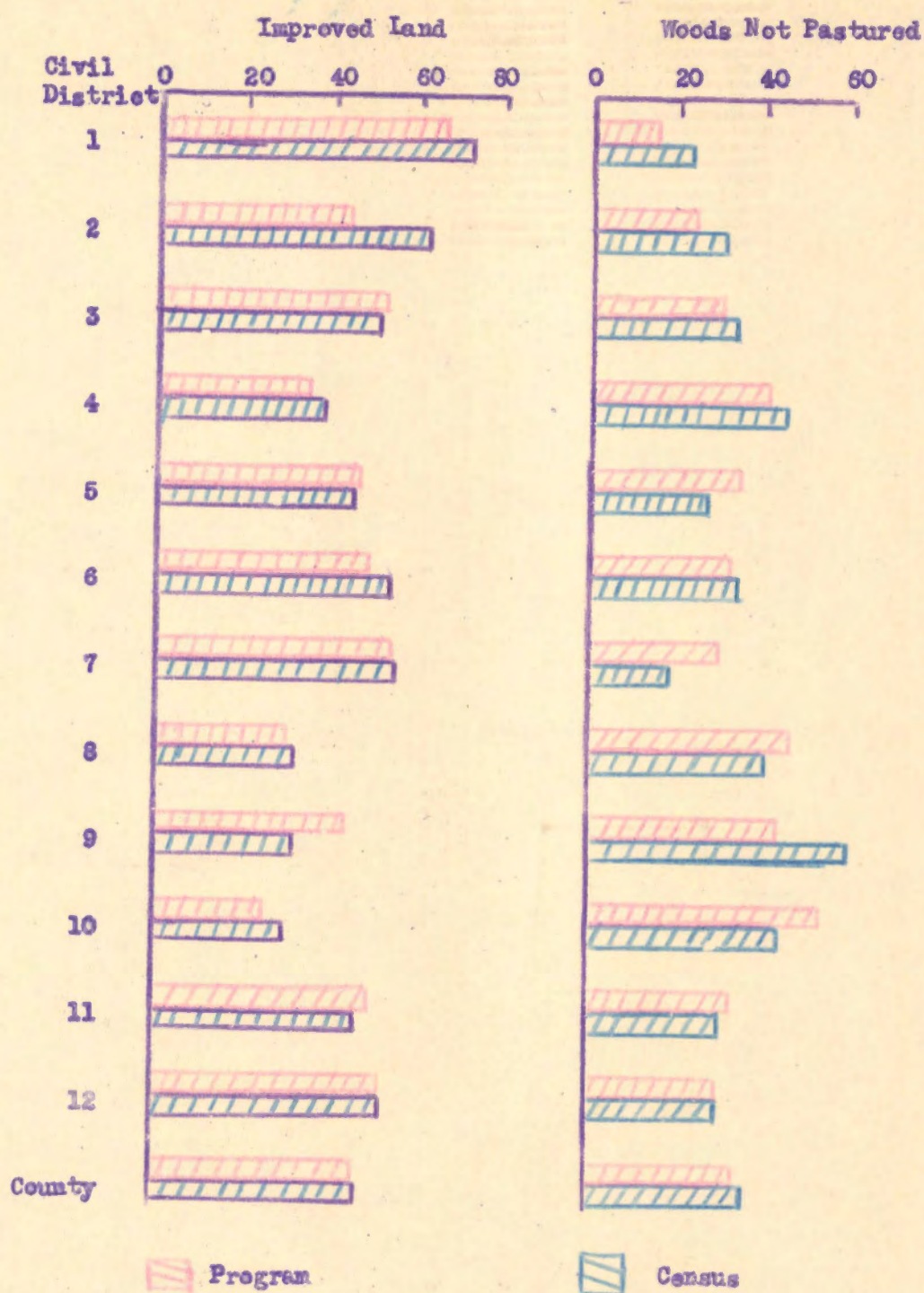
** United States Department of Commerce, Bureau of Census, Special Tabulations by State, County, and Minor Civil Districts, 1935 Census of Agriculture.

a minor difference in the major uses of the land. However the other groups are on a comparable basis.

There is no great difference in the proportion of land improved. For the Conservation Program 46.3 per cent is improved while 47.4 of that reported by the Census is improved. The greatest differences occur in the 2nd and 9th Districts (Figure 68A). The census reports a larger proportion of improved land in the 2nd District than is shown by the Conservation Program. This is probably due to difference in definitions, as the Conservation Program shows 24 per cent in open pasture compared with 3.4 per cent in the Census. The 9th District has the opposite situation. This is due in part to difficulty in classifying land in the 9th District. Variations among districts in regard to this use is most likely due to land class. Districts with low proportions of improved land have a larger per cent of the poorer land classes, notably in Districts 4, 8, 9, and 10.

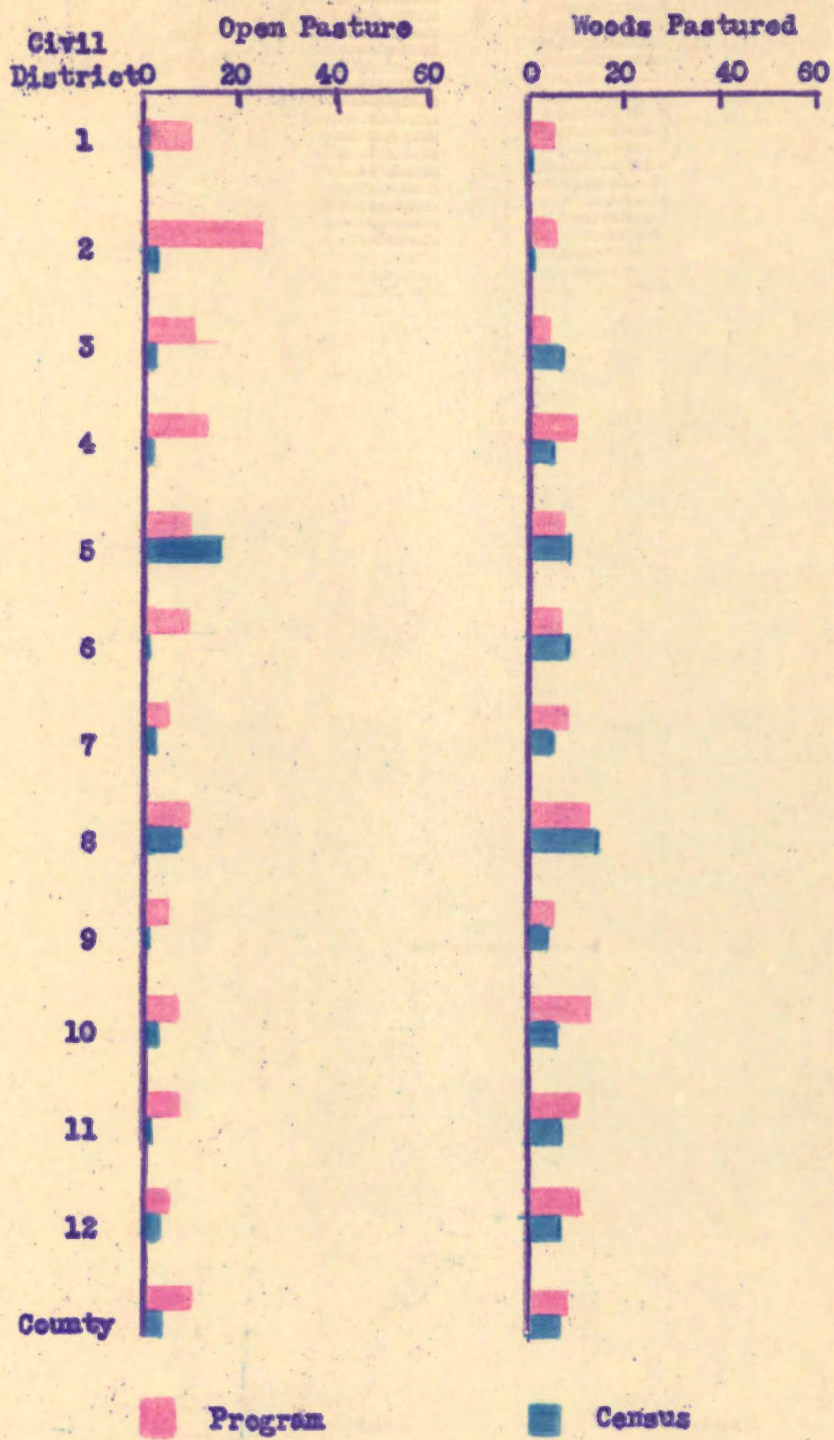
The greatest differences between the two sources in regard to woods not pastured are found in the 9th and 10th Districts. Much of the differences is due to difficulty in classifying the land. However the data are for different periods of time, and some of the variation is probably due to this fact. In the county as a whole there is not much difference between the proportion of land devoted to this use in the Conservation Program and in the Census (Figure 68A).

A greater proportion of the land is shown to be in open pasture and woods pastured in the Conservation Program than in the Census (Figure 68B). Part of this difference is probably due to definition of



Source: Table LXXII

Figure 68A. Distribution of Major Land Uses, by Civil Districts, Overton County



Source: Table LXXII
 Figure 68B. Distribution of Major Land Uses, by Civil Districts,
 Overton County

TABLE LXXII. DISTRIBUTION OF MAJOR LAND USES BY CIVIL DISTRICTS, OVERTON COUNTY, AS REPORTED BY CONSERVATION PROGRAM AND CENSUS

C.D.	Source	Total All Land (Acres)	Per Cent						
			Imp. Land	Bldgs., Roads, Etc.	Woods Not Past.	Woods Past.	Open Past.	Other Land	Total
1	Progr. Census	12,057.5	67.2	2.2	15.4	5.5	9.6	0.1	100.0
		11,556.0	72.4	0	23.5	0.5	1.3	2.3	100.0
2	Progr. Census	19,791.0	44.0	2.2	23.8	5.9	24.0	0.1	100.0
		18,147.0	63.2	0	31.0	0.3	3.4	2.1	100.0
3	Progr. Census	22,435.6	52.7	2.2	30.1	4.4	10.1	0.5	100.0
		26,004.0	51.3	0	33.9	6.9	2.2	5.7	100.0
4	Progr. Census	4,897.0	35.7	1.7	40.9	9.5	12.2	0	100.0
		6,983.0	39.3	0	45.2	5.5	1.8	8.2	100.0
5	Progr. Census	16,291.1	46.8	2.0	34.6	6.7	9.3	0.6	100.0
		18,431.0	45.0	0	27.8	8.4	16.2	2.6	100.0
6	Progr. Census	27,830.9	49.4	1.8	32.8	6.6	9.2	0.2	100.0
		21,303.0	54.7	0	34.1	8.4	1.4	1.4	100.0
7	Progr. Census	15,434.0	54.0	2.0	30.4	8.0	5.6	0	100.0
		14,565.0	55.4	0	28.9	5.3	2.8	7.6	100.0
8	Progr. Census	17,197.0	29.8	1.5	47.4	12.3	9.0	0	100.0
		15,116.0	32.0	0	41.2	15.0	7.8	4.0	100.0
9	Progr. Census	16,280.0	43.9	2.3	43.9	5.1	4.7	0.1	100.0
		23,682.0	31.6	0	60.1	3.8	1.4	3.1	100.0
10	Progr. Census	15,361.5	25.5	1.3	53.4	13.3	6.4	0.1	100.0
		16,759.0	30.6	0	45.5	5.9	3.6	14.4	100.0
11	Progr. Census	24,106.2	49.5	1.4	31.6	10.2	7.3	0	100.0
		29,793.0	47.0	0	31.5	7.3	1.8	12.4	100.0
12	Progr. Census	7,629.7	52.2	1.9	30.3	10.0	5.5	0.1	100.0
		9,336.0	52.5	0	30.0	6.5	3.7	7.3	100.0
Co.	Progr. Census	199,311.5	46.3	1.9	34.2	7.8	9.6	0.2	100.0
		211,675.0	47.4	0	36.5	6.3	3.8	6.0	100.0

terms. Variation among districts is partially caused by interpretation of the various committeemen and enumerators that filled out the schedules.

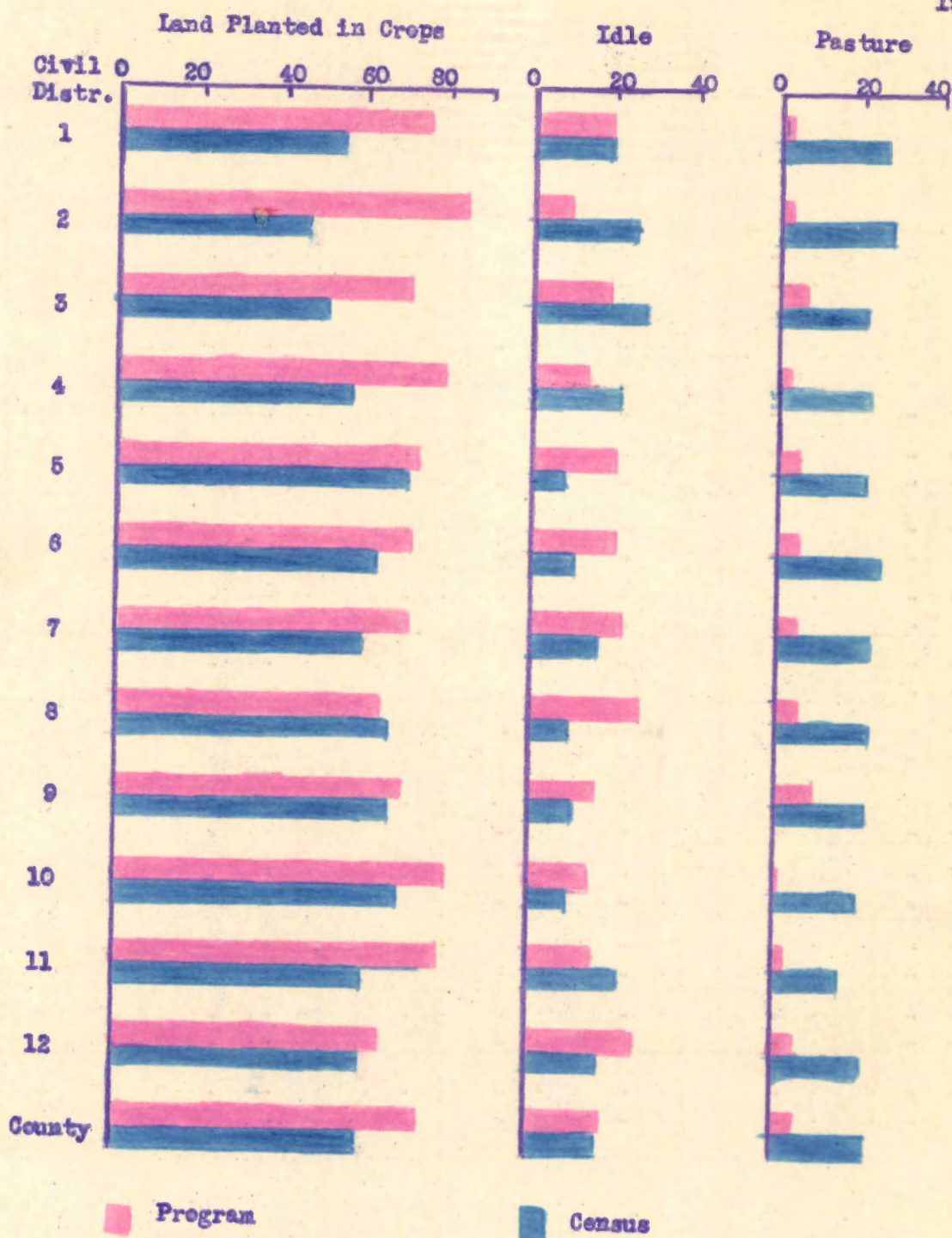
TABLE LXXIII. PRINCIPAL USES OF IMPROVED LAND BY CIVIL DISTRICTS,
OVERTON COUNTY AS REPORTED BY CONSERVATION PROGRAM
AND CENSUS

C.D.	Source	Improved Land (Acres)	Per Cent				
			Orchard	Idle	Pasture	Land Planted in Crops	Total
1	Program	8,103.0	2.2	19.4	3.1	75.3	100.0
	Census	8,373.0	0	19.5	26.2	54.3	100.0
2	Program	8,701.0	2.2	9.0	3.3	85.5	100.0
	Census	11,471.0	0	24.9	28.6	46.5	100.0
3	Program	11,834.8	2.4	19.3	6.6	71.7	100.0
	Census	13,327.0	0	28.0	21.1	50.9	100.0
4	Program	1,750.5	2.7	14.5	3.0	79.8	100.0
	Census	2,744.0	0	21.0	21.5	57.5	100.0
5	Program	7,615.6	1.7	20.7	4.8	72.8	100.0
	Census	8,288.0	0	8.0	21.7	70.3	100.0
6	Program	13,743.8	2.0	20.9	5.3	71.8	100.0
	Census	11,647.0	0	11.6	25.4	63.0	100.0
7	Program	8,338.0	1.5	22.5	4.8	71.2	100.0
	Census	8,069.0	0	17.2	23.3	59.5	100.0
8	Program	5,133.1	2.2	26.8	5.3	65.7	100.0
	Census	4,841.0	0	9.1	23.3	67.6	100.0
9	Program	7,146.8	3.7	17.1	9.4	69.8	100.0
	Census	7,481.0	0	11.4	22.4	66.2	100.0
10	Program	3,911.7	3.2	15.5	1.1	80.2	100.0
	Census	5,128.0	0	10.6	20.2	69.2	100.0
11	Program	11,934.4	2.0	16.4	3.0	78.6	100.0
	Census	13,998.0	0	22.3	17.6	60.1	100.0
12	Program	3,985.9	2.5	27.4	5.3	64.3	100.0
	Census	4,905.0	0	18.4	21.6	60.0	100.0
Co.	Program	92,198.6	2.3	18.9	4.3	74.0	100.0
	Census	100,272.0	0	18.0	22.8	59.2	100.0

Source: Bureau of Census, Special Tabulations, 1935 Census of Agriculture.

Principal uses of improved land are as pasture, idle, and land planted in crops. Land planted in crops is the most important of these

192.



Source: Table LXXIII

Figure 69. Principal Uses of Improved Land by Civil Districts, Overton County

(Figure 69). This difference is due mostly to a larger proportion of the land being idle on farms represented in the Conservation Program. In the county as a whole more land is planted in crops, proportionately, on farms in the program than is shown by the census. There is only 0.9 per cent difference in the use of idle land. The greatest difference between the two sources is in proportion of land pastured. The census data shows 18 per cent more land used in this manner than the Conservation Program (Figure 69). This is due to a great extent to failure of the various committeemen to indicate the land pastured. This is especially true of lespedeza, which was reported as "lespedeza on crop land" with no indication as to whether it was for hay or pasture.

Another difference is the manner in which orchards are handled. Under the Conservation Program orchards are considered a part of the improved land, while in the census data they are considered a part of the farmstead or land that is occupied by buildings, roads, etc. The definition of terms and manner of reporting various acreages probably cause most of the variation in use between the Conservation Program and the census.

The most important use of the land planted to crops is corn, followed by legume hay and non-legume hay. The census shows 61.8 per cent of the land planted in crops to be occupied by corn, while the Conservation Program shows 48.2 per cent. On the other hand the Conservation Program shows a larger proportion of land planted to legume hay than the census (Figure 70).

Distribution of Land Planted to Crops, by Civil Districts, Oregon County



Source: Table LXXIV

Figure 70. Distribution of Land Planted in Crops, by Civil Districts, Overton County

TABLE LXXIV. DISTRIBUTION OF LAND PLANTED IN CROPS BY CIVIL DISTRICTS, OVERTON COUNTY,
AS REPORTED BY CONSERVATION PROGRAM AND CENSUS

C.D.	Source	Land Planted in Crops (Acres)	Per Cent												Total
			Corn	I.& Sweet Pots.	Truck and Vegs.	Sor- ghum	Tobac- co	Wheat	Oats	Rye	Crop Fail- ure	Leg. Hay	Non- Leg. Hay	Misc.	
1	Program Census	6,100.3 4,545.0	40.3 53.3	1.7 1.0	1.9 0	2.2 3.7	0 0	6.1 4.3	1.7 0.3	1.9 2.0	0 3.0	36.1 22.0	7.8 9.0	0.3 1.4	100.0 100.0
2	Program Census	7,433.2 5,339.0	44.2 63.2	2.5 1.0	4.7 0	3.9 3.7	0 0	4.1 4.0	1.3 0.3	0.8 0.9	0 2.1	30.6 13.8	7.9 7.3	0 3.7	100.0 100.0
3	Program Census	8,494.4 6,789.0	53.7 73.7	2.8 1.8	3.8 0	5.8 5.2	0 0.1	2.4 2.0	2.8 0.3	2.3 0.8	0 0.6	22.0 8.8	3.2 2.9	1.2 3.8	100.0 100.0
4	Program Census	1,396.0 1,577.0	53.0 63.1	2.3 2.0	5.8 0.3	3.2 3.2	0.1 0.1	6.2 5.5	5.6 2.3	0.4 0.7	0 5.1	22.9 7.7	2.1 5.8	0.4 4.2	100.0 100.0
5	Program Census	5,545.8 5,829.0	45.6 56.7	1.8 1.7	1.9 0.8	3.2 2.2	0.3 0.4	8.1 7.5	2.2 0.4	1.0 0.7	0 0.6	29.2 17.5	6.7 8.8	0 2.7	100.0 100.0
6	Program Census	9,863.0 7,342.0	46.0 58.7	1.5 1.3	2.3 0.2	3.0 3.5	0.1 0	5.3 4.3	1.8 0.4	0.6 0.3	0 0.4	33.3 20.6	5.9 9.5	0.2 0.8	100.0 100.0
7	Program Census	5,934.2 4,798.0	49.1 57.6	1.8 1.7	2.1 0.4	2.3 2.4	0.1 0.1	5.3 6.0	2.1 1.0	2.0 1.8	0 4.7	31.0 11.7	3.6 9.5	0.1 3.1	100.0 100.0
8	Program Census	3,373.1 3,271.0	51.7 53.4	2.4 2.8	2.6 0.9	1.3 3.0	0.6 0.4	3.7 3.8	3.5 0.1	0.3 0.3	0 5.6	29.2 15.2	4.4 4.7	0.3 4.8	100.0 100.0
9	Program Census	4,900.6 4,956.0	53.1 74.1	4.8 2.7	4.2 0	5.1 1.5	0 0	0.7 0	6.2 0	0.7 0.1	0 0	22.9 12.7	2.1 1.6	0.2 7.3	100.0 100.0
10	Program Census	3,135.9 3,548.0	57.2 66.8	3.3 1.9	3.5 0	1.8 0.8	0 0	6.3 5.6	2.4 0	0.8 2.1	0 2.2	23.6 14.6	1.1 5.9	0 0.1	100.0 100.0
11	Program Census	9,374.5 8,419.0	45.5 56.6	1.8 1.8	2.4 0	2.1 1.0	0 0.1	9.6 6.8	2.8 1.6	1.2 0	0 1.0	31.1 21.0	3.3 6.9	0.2 5.2	100.0 100.0
12	Program Census	2,561.9 2,944.0	53.4 61.5	2.8 2.8	2.8 0.3	2.4 3.5	0 0.1	4.4 4.7	4.1 0.4	1.8 0	0 5.2	25.3 7.6	2.6 8.3	0.4 5.6	100.0 100.0
Co.	Program Census	66,202.9 59,357.0	48.2 61.8	2.3 1.8	3.0 0.2	3.2 2.8	0.1 0.1	5.3 4.6	2.7 0.6	1.2 0.7	0 1.9	29.0 15.6	4.7 6.7	0.3 3.1	100.0 100.0

Source: Bureau of Census, Special Tabulation, 1935 Census of Agriculture.

The Conservation Program shows 13.4 per cent more land in this category than the census. Probably a portion of this difference is due to some legumes being used as pasture, the Conservation Program not indicating such use.

The census reports a larger proportion of land planted in non-legume hay than the Conservation Program. This is possibly due to a shift on the part of farmers to make a larger compliance with the Conservation Program, by using legumes.

It appears that the Conservation Program may have stimulated the use of small grain to some extent. A larger proportion of the land was planted to wheat, oats, and barley in the program than was shown by the census (Table LXXIV). This indicates that small grains are being used to somewhat larger extent as winter cover crops.

The proportion of land planted to potatoes, truck and vegetables, and sorghum is larger on farms in the Conservation Program than in the census (Table LXXIV). This is probably due to several factors. The one which has the greatest influence is the tendency to report all fractions of acres as whole numbers. This tendency was noticed especially on orchards and truck and vegetable crops, increasing the actual acreage in these crops considerably. As the farms were reducing acreages in the most important crop, corn, they increased acreages in other crops accordingly. The above-mentioned crops are consumed mostly at home.

In the case of truck and vegetables the greater portion of the difference is probably due to definitions. The census reported only

acreages that were harvested for sale, while the Conservation Program included crops grown for home use as well as for sale.

Another difference is in proportion of land planted in crops that failed. The census obtained this figure while the Conservation Program did not, which is another limitation on the comparability of the data.



CHAPTER VI

RELATION OF LAND CLASS TO NUMBER AND KIND OF CATTLE; TO TENURE; AND TO YIELD OF CORN

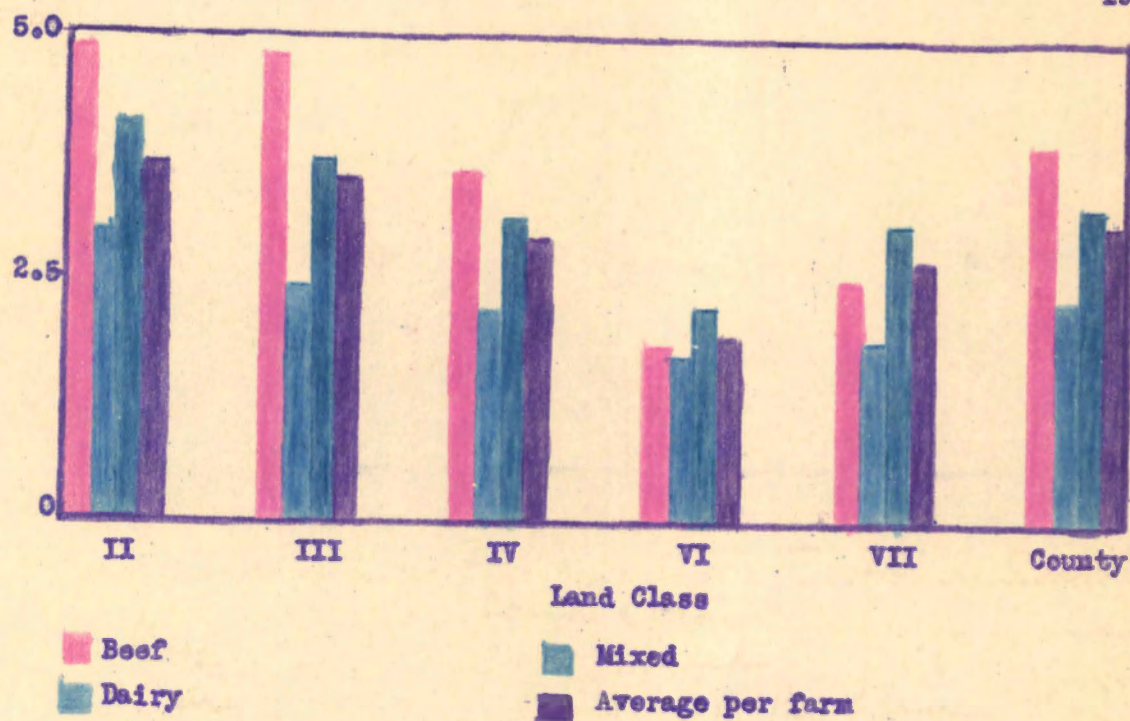
Distribution of Cattle. In connection with this study, the distribution of cattle by land class was determined. Record of the number and ownership of cattle was secured from the state veterinarian and their location was identified by land class by comparing with the list of residents. In 1935, according to the Census, there were 9,271 cattle of all ages in Overton County. Of those inspected by the veterinarian, 8,306 were located by land class (Table LXXV).

TABLE LXXV. NUMBER AND KIND OF CATTLE, BY LAND CLASS,
OVERTON COUNTY

Number and Kind of Cattle	Land Class					County
	II	III	IV	VI	VII	
Beef: Number farms	27	239	165	40	80	551
Number cattle	131	1149	590	70	203	2143
Ave. per farm	4.9	4.8	3.6	1.8	2.5	3.9
Dairy: Number farms	79	307	259	74	130	849
Number cattle	239	725	574	126	249	1913
Ave. per farm	3.0	2.4	2.2	1.7	1.9	2.3
Mixed: Number farms	55	410	400	107	321	1293
Number cattle	227	1527	1253	239	1004	4250
Ave. per farm	4.1	3.7	3.1	2.2	3.1	3.3
Total: Number farms	161	956	824	221	531	2693
Number cattle	597	3401	2417	435	1435	8306
Ave. per farm	3.7	3.5	2.9	1.9	2.7	3.1

Number

199.



Source: Table LXXV

Figure 71. Average Number of Cattle by Kind, per Farm, by Land Class, Overton County

More than half the cattle were on Classes III and IV land. There is a close relationship between number of cattle and land class. On Class II land there were 3.7 cattle per farm (Figure 71). As the land becomes poorer the number of cattle per farm decreased. An exception is that land Class VII had more cattle per farm than Class VI. However, Class VII land is interspersed with narrow coves of Class III land, which would probably increase the number of cattle in that area.

More mixed or cross-bred cattle were found in the county than any other kind (Table LXXV). Beef cattle out-numbered dairy cattle. There is some indication that the better land classes have more beef and dairy cattle than mixed. On the other hand Class VI and Class VII land have more mixed cattle.

TABLE LXXVI. ACRES OF PASTURE PER ANIMAL, BY LAND CLASS, OVERTON COUNTY

Land Class	Number Cattle	Total Pasture (Acres)	Pasture per Animal (Acres)
II	597	2,314.1	3.9
III	3401	14,061.7	4.1
IV	2417	12,730.6	5.3
VI	435	3,937.5	9.0
VII	1435	6,252.2	4.3
County	8306	39,296.1	4.7

The better land classes tend to have fewer acres of pasture per animal than the poorer land. There are 3.9 acres per animal on Class II and 4.3 acres on Class VII land (Table LXXVI). Class VI land had the

largest number of acres per animal. This indicates that the carrying capacity of pasture is greater on the better land classes.

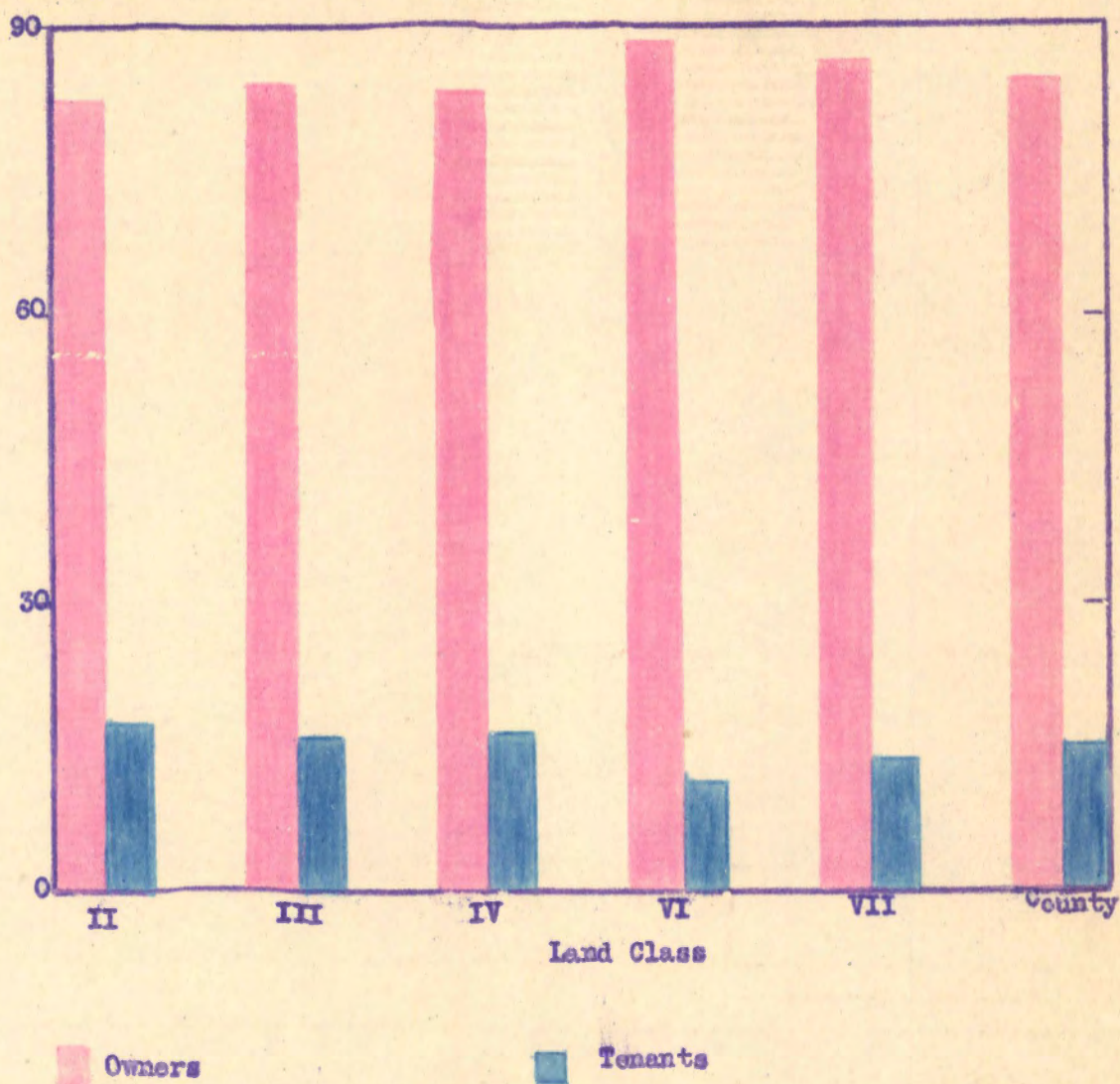
Tenure. An effort was made to determine whether the farms were operated by owners or tenants. In many cases the status of the operator was not properly shown. A test run on the 10th Civil District showed that many tenants were listed as owners while in a few cases ownership could not be determined. With these limitations the results of tabulations on the relation of land class to tenure are shown.

According to the 1935 Census there were 3392 farms in Overton County. Of these, 1815, or 53.5 per cent, were operated by owners, and 46.5 per cent by tenants. Results secured from a study of the AAA work sheets are shown in the following table.

TABLE LXXVII. DISTRIBUTION OF FARMS BY TENURE AND LAND CLASS, OVERTON COUNTY

Land Class	Number Farms	Per Cent Operated by		
		Owners	Tenants	Total
II	134	82.1	17.9	100.0
III	675	83.8	16.2	100.0
IV	655	83.4	16.4	100.0
VI	186	88.7	11.3	100.0
VII	417	86.3	13.7	100.0
County	2067	84.5	15.5	100.0

While these results are subject to limitations, they indicate that a greater per cent of tenancy exists on the better land classes (Figure 72). Class II land has 17.9 per cent of the farms operated by tenants,



Source: Table LXXVII

Figure 72. Distribution of Farms by Tenure and Land Class, Overton County

compared with 13.7 per cent on Class VII. These results are not comparable with the census data because of differences in definition of a farm. The small cropper-operated acreages are not listed separately in the Conservation Program, as is done by the census.

Yield of Corn. There is a fairly close relationship between yield of corn per acre and class of land. Class II land yielded an average of 21.1 bushels of corn per acre (Figure 73).

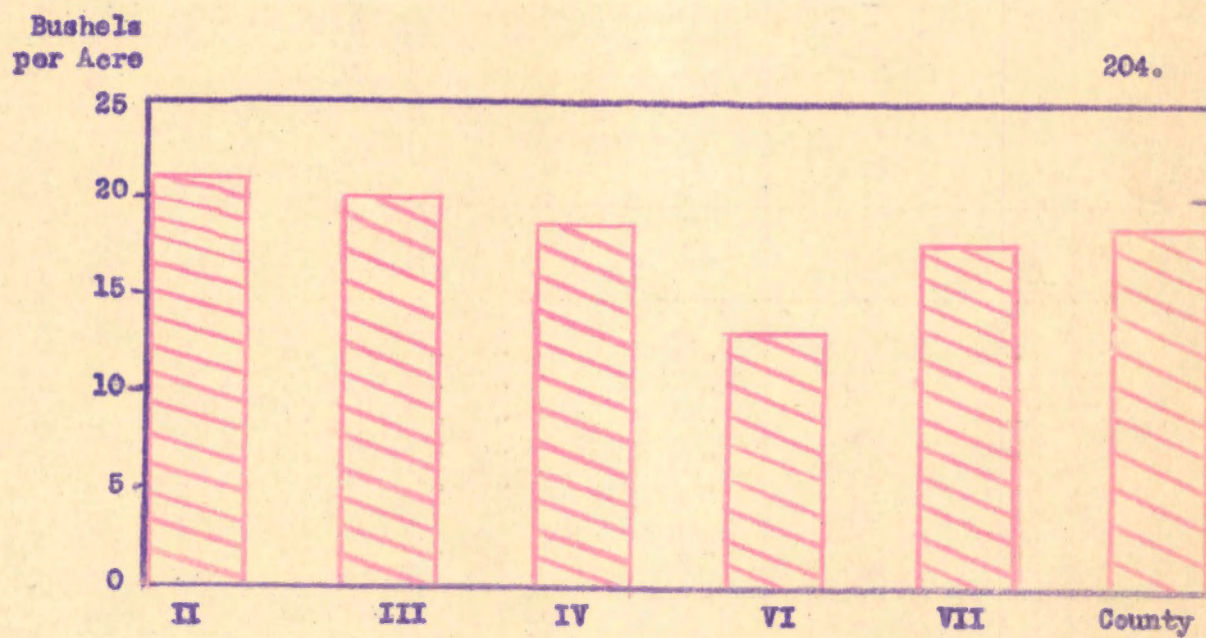
TABLE LXXVIII. YIELD OF CORN PER ACRE BY LAND CLASS, OVERTON COUNTY

Land Class	Corn (Acres)	Yield (Bushels)	Average Bushels per Acre
II	2,472.8	52,292	21.1
III	11,473.1	230,303	20.1
IV	10,908.7	203,976	18.7
VI	33,014.1	39,254	13.0
VII	4,980.7	88,872	17.8
County	32,849.4	614,697	18.7

Class VI land had the smallest yield, with 13.0 bushels. The yield on Class VII land is considerably higher than Class VI, due probably to small areas of Class III land interspersed with it.

The difference in yield on the various land classes may not all be due to inherent characteristics of the land but to some other factors also. A tabulation of land planted in crops was made to show the relation of yield to utilization. Table LXXXIX shows the groups used.⁽¹⁾

(1) Farms averaging a yield of 19, 21, 23, and 24 bushels per acre of corn did not have an adequate sample to be representative.



Source: Table LXXVIII

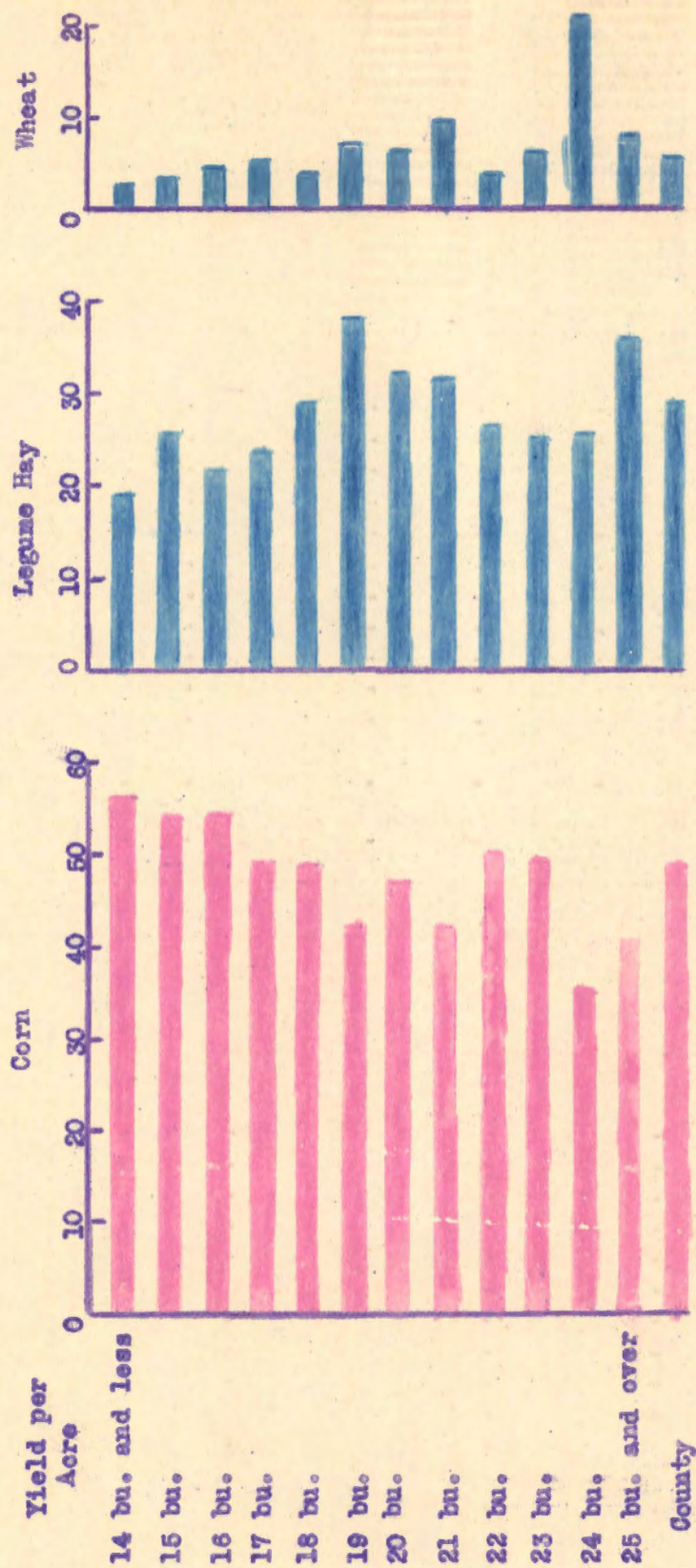
Figure 73. Yield of Corn per Acre, by Land Class, Overton County

TABLE LXXIX. DISTRIBUTION OF CROP LAND, BY YIELD PER ACRE OF CORN, OVERTON COUNTY

Yield per Acre	Land Planted in Crops (Acres)	Per Cent					
		Corn	Sweet and I. Pots	Truck and Garden	Sorghum	Tobacco	Wheat
14 bu. and less	2,263.8	56.2	4.0	4.6	4.2	0.1	2.7
15 bu.	10,015.6	54.1	3.0	3.4	3.2	0	3.2
16 bu.	8,137.4	54.6	3.0	3.5	4.0	0	4.4
17 bu.	3,449.7	49.4	3.2	3.4	5.0	0	5.3
18 bu.	9,272.9	49.3	2.4	3.4	3.8	0	3.9
19 bu.	356.6	42.7	2.0	2.3	3.8	0.1	7.4
20 bu.	18,436.2	47.3	1.9	2.6	2.7	0.1	6.1
21 bu.	403.3	42.6	2.1	2.0	2.2	0	9.5
22 bu.	18,838.4	50.0	2.3	2.8	4.0	0.1	3.7
23 bu.	235.3	49.7	2.1	2.8	3.0	0.3	6.4
24 bu.	66.1	34.8	0.9	3.8	6.0	0	21.2
25 bu. and more	12,900.6	41.0	1.4	1.9	2.3	0.3	7.8
County	67,375.9	48.7	2.3	2.9	3.2	0.1	5.3

(continued)

Yield per Acre	Per Cent						
	Oats	Rye	Barley	Legume Hay	Non-Leg. Hay	Misc.	Total
14 bu. and less	2.3	2.5	0	19.3	3.3	0.3	100.0
15 bu.	2.5	1.0	0	25.6	3.8	0.2	100.0
16 bu.	2.6	0.7	0	21.8	5.4	0	100.0
17 bu.	2.9	1.3	0.3	23.9	4.9	0.4	100.0
18 bu.	2.3	0.7	0	29.0	4.2	1.0	100.0
19 bu.	0.8	0	0	38.4	2.5	0	100.0
20 bu.	2.7	1.1	0	32.0	3.4	0.1	100.0
21 bu.	7.7	0	0	31.6	2.3	0	100.0
22 bu.	4.4	3.3	0	26.1	3.2	0.1	100.0
23 bu.	2.1	0	0	25.1	7.6	0.9	100.0
24 bu.	0	7.6	0	25.7	0	0	100.0
25 bu. and more	2.7	1.5	0.1	36.4	4.4	0.1	100.0
County	2.7	1.2	0.1	29.2	4.1	0.2	100.0



Sources: Table LXXXIX

Figure 74. Distribution of Crop Land, by Yield of Corn, Overton County

Farms with a yield of 14 bushels and less per acre have 56.2 per cent of the crop land in corn (Figure 74). As the yield increased the proportion of land planted in corn decreased, farms with a yield of 25 bushels or more having only 41.0 per cent of the crop land used in this manner.

Legume hay and wheat show the same relation. There is less land devoted to these crops on farms with 14 bushels or less per acre (Figure 74). As the yield of corn increases the proportion of land planted in these crops increases. However there is probably not a great difference in the utilization of land on farms with a yield of 20 bushels and above.

It would thus seem that farms with good yield follow a rotation that helps to maintain the fertility of the soil by the use of legumes and winter cover crops. On the other hand farms with poor yields have more land in corn, and tend to plant it in this crop oftener, which probably depletes the fertility of the soil and causes poorer yields.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Summary. Tabulations were made on 2067 Overton County farms that were participating in the Agricultural Conservation Program. These farms were first located by land class.

The farms contain 199,311.5 acres, distributed as follows, on the various land classes: Class II, 7.2 per cent; Class III, 34.7 per cent; Class IV, 29.8 per cent; Class VI, 8.7 per cent; and Class VII, 19.6 per cent. No Class I and Class V land was found in the county.

Major Land Uses. The principal land uses in the county are improved land, woods not pastured, open pasture on non-crop land, woods pastured, and land occupied by buildings, roads, lanes, etc., in the order named. Class of land, total acres per farm, and amount of improved land per farm all influenced the proportion of land in the various farm uses. The influence of class of land upon the proportion of land improved, and upon the proportion in woods not pastured, is quite marked. On Class II land 57.5 per cent of the land area is improved, and 25.7 per cent in woods not pastured. As the class of land becomes poorer the proportion of improved land decreases and the proportion of woods not pastured increases, until on Class VII land only 34.7 per cent is improved and 50 per cent in woods not pastured.

Total acres per farm is closely related to land class and to land utilization. The average size of farms is greatest on Class II land, being 102.9 acres, while the average on Class VII land is 93.8 acres. Farms with less than 140 acres have over 50 per cent improved. Farms with more than 140 acres have the greatest proportion in woods not pastured. Thus, as the size of farm increases the proportion of improved land decreases and the proportion in woods increases.

The amount of improved land per farm is also associated with land use. In general, farms with less than 30 acres of improved land have approximately 30 per cent improved and 45 per cent in woods not pastured, while those with more than 30 acres improved have approximately 32 per cent and 49 per cent in improved land and woods not pastured, respectively. As the number of acres of improved land per farm increases the proportion in this use also increases, and the proportion in woods not pastured decreases.

There is no apparent correlation between land class, or between total area, and open pasture, or woods pastured. But there is a close relationship between improved land per farm and open pasture. On farms with less than 5 acres of improved land 15.9 per cent is in open pasture. Farms with 110 acres and more of improved land have only 6.7 per cent in this category.

The proportion of land occupied by buildings, roads, etc., is definitely related to total area. Farms with less than 20 acres had 5 per cent of the land in this category while those with 140 acres and more

had only 1.5 per cent so used. Thus, as the size of farm increased the proportion occupied by buildings, roads, lanes, etc., decreased.

Principal Uses of Improved Land. The most important use of improved land is as land planted in crops, these occupying 74 per cent. The next most important uses are as idle land, pasture, and orchards, in the order named.

On Class II land 80 per cent of the improved land is planted in crops while on Class VII 69.7 per cent is used in this manner. As the land becomes poorer the proportion of improved land in crops decreases. In general, based on total acres per farm, small farms have a greater proportion of their improved land in crops. Farms of less than 20 acres total area have 78.6 per cent of the improved land in crops, while those with 140 acres or more have 73.1 per cent in crops. Number of acres of improved land per farm is also associated with the percentage of the land in crops. Farms with 5 acres and less have about 76 per cent of the improved land planted in crops while those with 110 acres improved land have 73.5 per cent planted in crops.

There is no apparent relationship between the above factors and the proportion of land that is idle, except as it is affected indirectly by other uses.

In regard to pasture, there is a marked correlation with other factors. Land Class II has 3.2 per cent of the improved land in pasture, and the per cent in pasture increases as the quality of the land decreases. Land Class VII has 7.3 per cent used in this way.

Total acres per farm and acres of improved land per farm show the same relationship in regard to pasture. As the number of acres increases the proportion of improved land in pasture increases. Farms with less than 10 acres of improved land have 0.8 per cent of it in pasture, and farms with 110 acres improved have 6.9 per cent in pasture. While farms with 20 acres per farm have 2.4 per cent of the improved land in pasture, those with 140 acres show 5.8 per cent of the improved land in pasture.

The proportion of improved land in orchards is also correlated with land class. Two per cent of the improved land on Class II is in orchards, while 3.8 per cent of that on Class VII is used in that way.

Total acres and acres of improved land show an inverse relation with the percentage of improved land in pasture. In each case, as the acreages increase the proportion of improved land in pasture decreases.

The most important pasture crops are lespedeza or lespedeza and red top, red top, other mixed grasses, and bluegrass. Lespedeza is used on 16.7 per cent of the pasture land in the county. Most of the pasture is described only as "rotation pasture", in which case the crop is unknown.

Distribution of Land in Crops. Corn is the most important crop, being planted on 48.2 per cent of the land in crops. Its use is closely correlated with land class. Thirty-nine and one tenth per cent of the land in crops is devoted to corn on Class II land, while 52.6 per cent is used in this manner on Class VII land. As the class of land becomes

poorer the proportion of land planted to corn becomes greater. Total acres per farm, and improved land per farm, are also closely associated with the proportion of land planted in corn. Farms with less than 20 acres have 56.2 per cent of the crop land planted in corn, this percentage constantly decreasing as the size of farm increases, until farms with 140 acres and more have 45.1 per cent used in this way.

Based on acres of improved land, the situation is practically the same. Farms with 30 acres and less of improved land have more than 50 per cent of the crop land in corn. On the other hand, farms with more than 30 acres of improved land have about 43 per cent planted to corn.

Legume hay is the second crop in importance. A larger proportion of the farms on the better land classes is occupied by this crop. Class II land has 37.6 per cent planted to legume hay while Class VII has only 24.6 per cent.

As the total area of the farms increases the proportion of land in legume hay increases; and when based on acres of improved land per farm the same situation prevails, being 58 per cent on farms with less than 10 acres of improved land and 37.9 per cent on those with 110 acres and more of improved land.

The most important legume hay is lespedeza, which occupies 80.2 per cent of all land planted to legume hays. Lespedeza and red top, soybeans, and cowpeas are used on 7.2 per cent, 6.4 per cent, and 3.3

per cent respectively. Alfalfa, red clover and sericea are found on some of the farms in the better land classes.

The use of wheat is greatest on farms in the better land classes, occupying 8 per cent of the crop land on Class II land and 2 per cent of Class VII. Farms of less than 20 acres have wheat on 2.5 per cent of the crop land, while those with 140 acres and more have wheat on 6.6 per cent. As the number of acres of improved land increases the proportion of land in wheat increases.

The situation regarding non-legume hay is exactly the same as for legume hay and wheat. However, it is less important than either of them. The most important non-legume hay crop is red top, followed by millet. Sixty-two and six tenths per cent of the land planted in non-legume hay is occupied by red top, and 13.8 per cent by millet.

Oats and rye are other small grain crops grown in the county, being used on 2.7 per cent and 1.2 per cent of the crop land. The use of rye is not associated with any of the factors. Oats is closely associated with land class, being used on only 1.4 per cent the land in crops on Class II, but on 4.7 of Class VII.

Minor crops such as Irish and sweet potatoes, truck and vegetable crops, and sorghum are most important on the poorer land classes, on small farms, and on farms with little improved land. Sorghum is the most important of these crops, being grown on 3.2 per cent of all land in crops. Class VII land has 4 per cent of crop land planted in sorghum while Class II land has only 2 per cent used in this manner. As size of

farm, and acres of improved land per farm, increases the proportion in these crops decreases.

Land class is closely associated with the number of cattle kept. There were 3.7 head of cattle per farm on Class II land and 2.7 on Class VII. The carrying capacity of pasture is greater on Class II land, where 3.9 acres are available per animal, while 4.7 acres are available on Class VII land.

Tenure status is definitely correlated with land class. Seventeen and nine-tenths per cent of the farms on Class II land were operated by tenants. As the land becomes poorer the per cent of farms operated by tenants decreases.

In yield of corn Class II land is highest, with 21.1 bushels per acre, while Class VII land averages 17.8 bushels. Farms with yields of 20 bushels or more per acre devote a smaller proportion of the crop land to corn, and a larger proportion to wheat and legume hay.

Recommendations. Any recommendations made from this study must of necessity be general. More information is needed before specific conclusions or recommendations could be made for a particular farm.

As a rule, farms located on Class II land have a well balanced program. Farms are large enough to afford opportunity for a balance between soil depleting crops and soil conserving crops, thereby maintaining a fair rate of productivity.

Farms on Classes IV, VI, and VII land are handicapped in following a balanced program. To begin with they are too small. This means

that the land is in row crops more often. Less legumes and cover crops are used, farms on these land classes being largely self-sufficing, with a large proportion of the land used to supply home consumption.

Farms on the poorer land classes would probably find it profitable to plant more winter cover crops, which would help increase and maintain productivity. Possibly some well constructed terraces would be profitable on land most susceptible to erosion.

For the county as a whole, and for all land classes, about 20 per cent of the improved land is idle. If this land could be used as pasture for livestock, it would probably be more advantageous than leaving it idle.

The most profitable practices for maintaining the productivity of these farms are probably the use of winter cover crops, use of more legumes, and establishing better pastures on idle land.

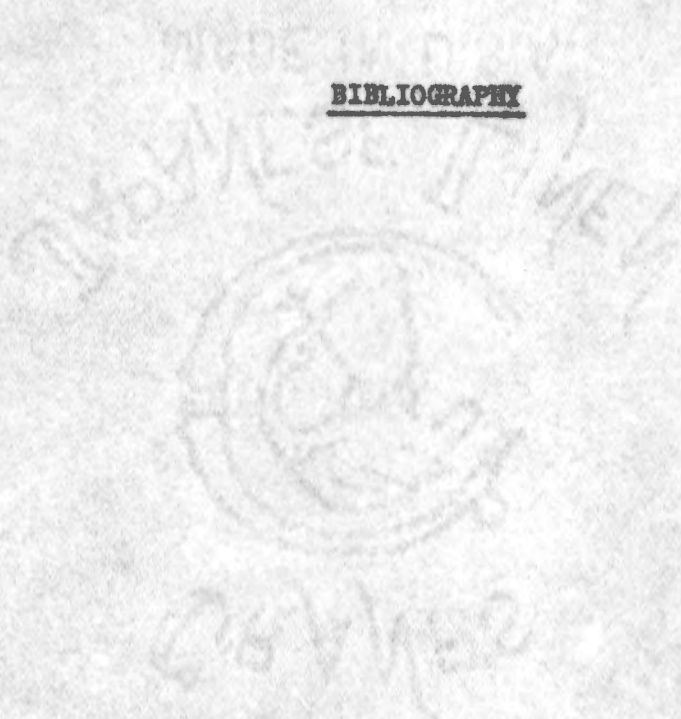
Some additional studies would be helpful in understanding the problem of man-land relationships. In an area of this kind an analysis of the live-at-home program would be fruitful, to give an indication of the use of garden crops, potatoes, and sorghum.

Another study of value would be an analysis of year by year participation in the conservation program, to show the trend in the uses from year to year.

A limitation previously discussed of this study is the difficulty

of properly classifying of all the land. A study of a sample area from which this difficulty has been eliminated would be fruitful, especially on Class VII land. By selecting farms located entirely in each land class the data could be refined.

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