# Rural Homes for Non-Agricultural Workers---A Survey of Their Agricultural Activities

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# OHIO AGRICULTURAL EXPERIMENT STATION Wooster, Ohio



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## RURAL HOMES FOR NON-AGRICULTURAL WORKERS— A SURVEY OF THEIR AGRICULTURAL ACTIVITIES

#### F. L. MORISON AND J. H. SITTERLEY<sup>1</sup>

#### INTRODUCTION

In many sections of the United States and of our own State there has been an increasing number of people living in the open country and in small towns and villages, who cannot be classed as farmers and do not consider themselves as such, even though a high percentage of them are drawing upon the land for a part of their living. High property values and rentals, crowded conditions, the noise and rush of urban life, together with the irregularity of employment, the shorter working day, and early retirement from the trades and industry. have caused many people to establish homes in rural areas and, at the same time, to continue to seek employment in non-agricultural occupations. Not all of the rural people who are employed at other than farm work have moved from cities to the country. A part of this rural non-farm group is made up of people that have always lived in rural areas. There has usually been a surplus of young people moving from farms to cities, as well as families that for various reasons discontinue full-time farming. Many of these people, although they secure work in other fields than farming, still continue to reside in the open country or village and secure part of their living from the land. Improved transportation facilities have made it possible to combine a rural living with work in occupations other than farming.

Previous to the advent of the automobile and a system of improved highways, relatively few non-farm people found it convenient to live in rural areas unless, like the local merchant, doctor, tradesmen, and farm laborers, they were supplying a service to farm people. In the earlier days a few non-farm families did live in the country or in small towns and used the interurban railway as a means of transportation. This, however, limited the area in which they could locate a homestead to that within easy walking distance from a car stop.

#### THE PRESENT SITUATION IN OHIO

Between 1920 and 1930, according to the United States Census, the rural non-farm population of Ohio (persons living in towns of under 2500, in villages, hamlets, and in the open country but not living on farms) increased 19.7 per cent, as compared with a 15.4 per cent increase in the total population of the State. The rural non-farm group comprised 1,135,038 people, or 17 per cent of the total population of the State, and exceeded the number classed as rural farm population in 1930.

The Census of 1930 considered all land holdings of 3 acres or more on which agricultural operations are conducted and all places of less than 3 acres on which farm products with a value of \$250 or more are produced in a year as farms. Thus, many of the small land holdings or homesteads of families

<sup>&</sup>lt;sup>1</sup>Acknowledgment is herewith given to Dr. J. I. Falconer, Chief of the Department of Rural Economics, for helpful suggestions and criticisms made during the study and to Mr. Marshall K. Whisler, a graduate student at Ohio State University, for assistance in gathering the data.

that do not consider themselves farmers were classed as farms. The Census Bureau, in classifying farms in Ohio according to type, placed 19,009 farms in a class called "part-time farms". It defined a part-time farm as one "where the operator spent 150 days or more at work for pay at jobs not connected with his farm or reported an occupation other than farmer, provided the value of products of the farm did not exceed \$750".

Not all of the families living in rural areas have availed themselves of the opportunity to raise part of their food, but, if we look around in almost any community in the State, we will find non-farm families that for many years have been deriving part of their living from the land. From the Census data and recent surveys in various parts of the State it has been conservatively estimated that there were 100,000 or more rural non-farm families obtaining some of their living from the land at the opening of the year 1934.

#### PURPOSE AND METHOD OF STUDY

The opportunity of producing part of the family food, available to nonagricultural workers dwelling in rural communities, has recently attracted wide attention. The past few years have brought an increased movement to rural areas, and both public and private agencies have expended much effort to encourage more families to acquire homes in the country. In 1933 by an Act of Congress, 25 million dollars were appropriated to be used to further the movement and assist families to establish homes on small tracts of land where part of the living might be raised.

A study of rural families with non-agricultural work was undertaken in the Columbus area to obtain some information on the type of people and the extent and type of their agricultural activities. The data were obtained by personal interviews during the last few weeks of 1933 and the first few weeks of 1934. No effort was made to contact all of the families in the area but rather the area was sampled to obtain a typical group.

Families that have produced any part of their living from the land since they took up residence in rural or semi-rural areas but considered some work other than farming as their major occupation, regardless of the number of weeks devoted to it in 1933, were with the following exception included in the study.

If the farming enterprise required the full-time, year-round effort of one or more members of the family or a hired man, while other members of the family worked at some other occupation, it was considered a full-time farm and excluded. Those cases, however, where the farming enterprise required the entire efforts of one or even several people for a part of the year and the remainder of the time was spent in other occupations were included. The sample also included another group of people composed of retired couples, widows, and disabled persons who were obtaining part of their living from the land and part from sources other than farming, such as pensions, insurance, savings, etc.

No lower limit was placed on the amount of agricultural production that was necessary other than that the interviews were confined to the rural and semi-rural areas immediately beyond the city limits where land was available for agricultural use.

#### DESCRIPTION OF THE AREA STUDIED

Local conditions influence the type of agriculture of any area whether it is carried on by a full-time farmer or on the rural homestead of a non-farm family. Land value, soil type, topography, climatic conditions, and local habits and customs of the people are all factors that affect the agriculture of a given area. The agricultural pursuits of families obtaining most of their living from non-farm sources are influenced by factors that do not affect full-time farming, such as the regularity and time spent on the non-farm job and other personal factors.

The area in which the interviews were made for this study was around the edge of the city of Columbus<sup>2</sup> and extended out at one point as far as 9 miles from the center of the city. The radius within which the interviews were made by no means extended out far enough to include all of the rural homes of people obtaining work in the city of Columbus. There was a tendency for the rural non-farm residents to group together in certain sections around the city and along important highways leading out of industrial centers. Not all of the families were in groups, there being isolated homes scattered through the entire area. Some of the grouping was undoubtedly the result of real estate subdividing and selling activities, and the concentration along highways was in part the result of the presence of some form of public conveyance at the time most of the homesteads were established.

Land values are relatively high, principally because of site value and in some sections because of the demand for land for commercial gardening or other agricultural uses. Soil condition varies from good to poor with a rather large amount of the soil being in a rather unproductive state because of the removal of most of the fertility before the land was relinquished by full-time farmers. The topography in the area ranged from level to gently rolling.

The industries in and around Columbus are predominately of a year-round nature and offer fairly steady employment. Only few industries in the area regularly operate on a seasonal basis—that is, running full-time for one season and closing down for the next. The trades generally do not supply steady employment, but their season of heaviest work is the same as that which requires the most work for garden and crop production on the homestead.

A net-work of improved highways makes the centers of employment readily accessible by automobile and in some cases by public carriers. The latter type of transportation has changed in character during the past decade, busses having replaced interurban railways in most cases.

# THE TYPE OF PEOPLE WHO ARE COMBINING RURAL LIVING WITH NON-AGRICULTURAL WORK IN THE COLUMBUS AREA

Rural living is limited to no one group or class of people but rather its possibilities have appealed to people in all lines of human endeavor and rank. Those that were interviewed were, when considered as a group, a thrifty energetic people who were interested in supporting themselves if at all possible. Most of them owned their homesteads or were in the process of becoming owners, indicating a high degree of stability. It should be noted that the families that were interviewed were those that have found the country to their

<sup>&</sup>lt;sup>2</sup>The population of the city of Columbus was 290,564 in 1930, and the population of the surrounding county, exclusive of Columbus, was 70,491.

liking and have continued to live there. Undoubtedly, there are many urban families that try rural life and either dislike it or for some reason do not "make a go of it" and move back to the city. These families seldom remain long on the land and, hence, very few dissatisfied families were found. Since very few dissatisfied families were interviewed, practically no information was obtained regarding the type or characteristics of the families that have tried rural life and given it up as a bad adventure.

#### PREVIOUS AGRICULTURAL EXPERIENCE

The previous agricultural experience of the 202 families interviewed varied greatly, and it was evident that rural living was by no means confined to those people with previous farm experience. In approximately one-third of the families both the operator and home-maker were born on a farm and the operator had had some farm experience after reaching the employable age. Approximately one-fourth of the families contacted had no farm experience previous to their present agricultural activities. In the remainder of the families either the operator or home-maker was born on a farm and lived there long enough that some farm experience was acquired. The influence of farm experience as reflected in the type of agricultural activities is discussed later.

#### AGE OF OPERATOR

The age of the head of the family at the time of establishing a rural residence varied from 19 years to 68 years. Eighty-five per cent of the families began this mode of living before the head of the family reached 50 years of age, 55 per cent before the age of 40, and 25 per cent before the age of 30. The average age of the operator at the time of the undertaking was 38.1 years. The age of the head of the family at the time the study was made averaged 46.4 years.

Age		of rural families*	Men at head of fam ilies in Columbust	
	Number	Per cent	Per cent	
Under 25 25-34. 35-44. 45-54. 55-64. 55-64. 55-74. 55-74.	71 55 35 16	1.510.935.227.217.37.9	4.7 24.3 27.2 22.1 13.7 6.4 1.6	
Total	202	100.0	100.0	

TABLE	1.—Age	Distribution	of	Heads	of	Families
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\*At time of interview. †Data secured from U. S. Census, 1930.

Twenty-eight families began living in the country after the head of the family was 50 years of age or older. There seem to be two explanations for these families making this change so late in life. Business depressions, with their employment uncertainties, would seem to be quite an important factor when we consider that 24 families of the 28 moved to rural communities during periods of unemployment, 17 having started since 1929. The increasing difficulty for older men to obtain employment and the early age of retirement from industry may also have had some influence on their late start.

#### SIZE OF FAMILY

Rural life has made a strong appeal to large families. Those families included in the study were 16.6 per cent larger than the families in Columbus. The average number of persons in the 202 families was 4.5 as compared with 3.8 per family in Columbus. Forty-two and five-tenths per cent of the families of the rural non-agricultural workers had 5 or more persons, while only 22.1 per cent of the city families contained 5 or more persons according to the United States Census in 1930.

The influence of size of family upon the type and scope of its agricultural efforts is discussed in a later section of the bulletin.

#### PRESENT OCCUPATION AND OCCUPATIONAL HISTORY

Among the group of families included in the study were doctors, lawyers, teachers, business executives, contractors, government employees, office workers, clerks, shop-keepers, engineers, skilled laborers, including the trades, and unskilled day laborers. As to occupation, the heads of families were classified as follows:

	Per cent
Professional and business men	
Clerks and sales people	
Skilled laborers	
Unskilled laborers	
Retired persons and widows	7.4

In the 202 rural families included in the study railroad employees comprised the largest single group engaged in any one industry. The trades—such as carpenters, masons, plumbers, electricians, etc.—were also well represented.

The occupational history of the 202 families shows a very high degree of stability. The average length of time that the family wage earner was engaged in his present job or trade or last regular work was between 10 and 12 years. Temporary jobs engaged in during the depression by those who previously had a steady employment record were not taken into account in determining the duration of their employment. Many of the group that were employed in the trades have had many sources of employment but always in the same trade. The shifting from one source of employment to another as long as it was in the same trade was not considered as a new job. Only changes in trade and in the type of regular work were considered in arriving at the average number of years on the present or last regular work.

Approximately two-thirds of the men have had but one regular job or trade since they first combined rural living with their non-agricultural work. At the time<sup>3</sup> the interviews were made 70 per cent of the men reported that they either had full or part-time work on their regular jobs during the past year, 21 per cent had temporary employment, and 9 per cent was either retired or unemployed.

<sup>&</sup>lt;sup>3</sup>Between November 20, 1933, and January 20, 1934.

#### FAMILY INCOME

Three-fourths of the families derived a little income from the sale of farm products, and one-fourth secured all of their cash from sources other than the land during the year 1933. The average income of the 202 families for the year 1933 was \$1103 per family; 77 per cent of this was derived from the operator's labor, 7 per cent from the sale of farm products, 7.5 per cent from other workers in the family, and 8.5 per cent from savings, pensions, charity, etc.

Three families had no cash income from the farm or from any employment during the year; 10 families had no income from the outside labor of the operator or other members of the family, their only source of earned income in 1933 being the homestead. The heads of six other families had no employment. The operator's labor away from the homestead was the only source of income to 32 families; 12 families supplemented the operator's income by some income derived by other members of the family working. Over half of the 202 families obtained their cash from the operator's labor and the homestead, and 35 families added some to these two sources of income by the labor of other members of the family.

Thirty-five per cent of the families interviewed had a cash income under \$600 in 1933. Only 43 per cent of the cash of these families was derived from the operator's outside employment, 29 per cent from such sources as pensions, savings, and public relief or charity<sup>4</sup>, 9 per cent was obtained from other members of the family with employment. The homestead contributed 19 per cent of the cash income to this group, as compared with slightly over 3 per cent to the families with incomes of \$1800 and above. To the families with a low income the money received from the sale of farm products was an important item, and yet the total sales were only about \$8 per homestead higher than in the high income group.

The amount received from sources other than the operator's labor was about the same in total dollars in the different income groups. The important factor that accounted for the variation in family income was the amount received by the operator.

#### REASONS NON-AGRICULTURAL WORKERS ESTABLISHED RURAL HOMES

Most of the families included in the study lived for a time in the city previous to taking up residence in the country. A few of the group have always lived in the country and worked in the city or were full-time farmers before taking up employment in the city.

The reasons for making a shift from an urban mode of living to a more rural plan varied greatly. Lower living costs, the opportunity to produce part of their own food, lower taxes, or other economic reasons were most often given for living in the country. Almost one-half of the families with incomes of less than \$600 per year gave economic reasons as the most important motive for their moving; only 19 per cent of the families with incomes of \$1800 or over gave economic reasons. Reasons such as "love of country" and the desire for more healthful surroundings and more space were more often advanced as reasons for combining rural living with non-agricultural work among the higher income groups than in the lower income groups.

<sup>4</sup>Fifteen families received direct relief; the heads of eight of these and of six additional families were on C. W. A. work for an average of 4 weeks.

A few families in the group specifically gave as their reason "more independence in periods of depression" and "the assurance of having a home in their old age"; others whose trade or occupation normally gave irregular employment looked to agriculture to utilize their spare time, and some were engaged in some agricultural pursuit because it was their hobby. A few families were living in the country because of inheritance and other family connections.

Some of the group had undoubtedly moved out of the city because of unemployment and some of the older men because of retirement or probable retirement from industry but were rather hesitant to give this as the true reason.

#### LENGTH OF TENURE

Combining rural living with non-agricultural work is not new. Eightythree per cent of the families visited in the Columbus area have been living in the country 2 or more years and more than half for 5 or more years, while 22 families have been depending upon the land to some extent for over 20 years.

Families that owned or were buying their homes had been living in the country  $9\frac{1}{2}$  years on the average at the time of the interview. Forty-seven families were renting their homesteads and were newer at the game; the average number of years that these families had been so engaged was  $3\frac{1}{2}$ . Renting makes it possible for a family to experiment before investing; it also makes it possible for families with little or no capital to get located on the land. Table 2 gives the number of years that the families included in the study have been living in rural areas.

TABLE 2.—Years of Residence in Rural Areas by Families of Non-Agricultural Workers

	Owners	Renters	Total
Under 1 year 1 and under 2 years 2 and under 3 years 3 and under 4 years 4 and under 5 years	Number 7 5 8 16 12	Number 10 11 11 3 1	Number 17 16 19 19 13
5 and under 6 years 6 and under 7 years 7 and under 8 years 8 and under 9 years	6 11 8 17 7	1 4 2	7 15 8 19 7
10 to 15 years 15 to 20 years	27 11 20	2 2	27 13 22
Tota1	155	47	202

After taking up residence in a rural community, families had a tendency to remain in the same location rather permanently. Only 26 families out of the group interviewed had changed their place of residence from that first selected.

#### TRANSPORTATION

A problem which confronts the rural non-farm family is that of transportation. In many cases it calls for a private means of transportation. On the surface this does not look like much of a problem since 93 per cent had auto-

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mobiles, but having an automobile has not entirely solved their transportation problem. If one or more members of the family work in the city, the automobile provides transportation for them but leaves the remaining members of the family without transportation unless two automobiles are owned and obviously few families had two cars.

While the automobile in most cases solves the problem of a means of transportation, it does not always provide an economical means of transportation. If one trip daily was all that was required, the cost would be relatively small but the fact that in many cases the family is also several miles from a market and social center often calls for numerous trips.

The problem of transportation is not only apparent but real; 45 per cent of the 202 families considered the item of transportation a disadvantage to living in the country. The average distance traveled to work by those that were employed was 5 miles. This, however, is by no means the average distance traveled by all rural people working in Columbus; some not included in the survey were known to be driving in from adjoining counties distances of 20 miles or more. Approximately 75 per cent drove automobiles to work, 10 per cent used some form of public conveyance such as a bus or street-car, 12 per cent walked, and a few obtained transportation with neighbors.

Many of the families that have been combining rural living with nonagricultural work for 15 or 20 years were located in areas that were supplied with some means of public conveyance at the time they established themselves in the country. Most of the interurban railway lines have since been discontinued, and the result has been an increased cost and inconvenience to many of the families that took up a rural residence 15 or 20 years ago.

In most communities transportation was supplied for the children in the lower grades and in a very few cases to children in high school. Numerous families with children of high school age were confronted with a problem of getting their children to and from school. In a few instances it was necessary that the children go to school at the same time the wage earner went to work and stay at school until the wage earner returned home.

#### **EDUCATION**

Forty-five per cent of the 202 operators had more than an eighth grade education, 15 per cent were high school graduates, and 5 per cent had graduated from college. Only 36 of the operators had less than an eighth grade education. In 1927, out of a group of 925 farm families in eight rural townships in different parts of Ohio only 12.4 per cent of the operators had more

Schooling	Heads of 202 rural non-farm families		Operators in 925 farm families*	
Eighth grade or less. Some high school High school graduate	111 38 30	Per cent 54.9 18.8 14.9	820 47 32	Per cent 88.6 5.1 3.5
Some college College graduate	13 10	6.4 5.0	20 6	0.6

TABLE 3.—Education of Heads of Families

\*Lively, C. E., Ohio Agricultural Experiment Station Bulletin No. 468, p. 9.

than an eighth grade education. Table 3 gives a comparison between the extent of the education of the heads of the 202 rural non-farm families interviewed and the education of the operators in 925 Ohio farm families.

As compared with what is believed to be a typical group of Ohio farm people the heads of the rural non-agricultural workers' families in the Columbus area had considerably more formal education. A similar comparison between these 202 operators and the education of adult males in the city of Columbus was impossible, but it is believed that it is no higher in Columbus than that of the heads of non-farm families in the adjacent rural areas, and possibly not as high.

A rather close correlation existed between the amount of formal education and the income from the rural non-farm operator's labor, but little or none existed between the number of years in school and the amount of farm products raised. Previous experience, size of family, type of soil, and other factors referred to elsewhere in the bulletin were of more importance in influencing the amount of farm products raised than the amount of formal schooling.

#### THE HOMESTEAD

Considerable variation was found in the size, type, and success of the agricultural enterprises carried on in the vicinity of Columbus by people engaged in some occupation other than farming. Soils varied all the way from cold, light gray, poorly drained clay to fertile and well drained dark loam. Not only the soil but also the needs, the likes, and dislikes of the members of the family determine the type and extent of the agricultural enterprise conducted.

#### SIZE OF HOMESTEAD UNIT

The distribution of homesteads as to size is shown in Table 4.

Acres	Number	Per cent
Less than 1.0. 1.0 to 1.9. 2.0 to 2.9. 3.0 to 3.9. 4.0 to 4.9. 5.0 to 5.9. 6.0 to 9.9. 10.0 to 14.9. 15.0 and over.	27 49 22 28 11 17 19 17 12	13.4 24.3 10.9 13.9 5.4 8.4 9.4 8.4 5.9
Total	202	100.0

TABLE 4	—Size of	Tract	Occupied	bv	Non-A	gricultural	Workers

The size of tract occurring most frequently was 1.0 to 1.9 acres. Forty of these were between 1.0 and 1.5 acres in size. The median size was 3.0 acres, and the average of all tracts was 4.7 acres. More than two-thirds of all hold-ings were less than 5 acres in size.

Since the garden is one of the principal parts of the homestead unit, it may be of interest to note the amount of land devoted to its use. One-quarter and one-half acre gardens were found most frequently. Nearly 60 per cent of the tracts had gardens of less than three-quarters of an acre in size. It is felt that there was a tendency for those interviewed to overestimate the size of their garden plots. It should be pointed out, however, that gardens were used to produce some green feeds, such as cabbage for the chickens and sweet corn for the family cow or a hog or two. Some of the families likewise used a part of the garden to produce a green manure crop to be plowed under for the following year. Some of the gardens in the groups of more than an acre were commercial truck gardens from which the family consumed only a part of the products raised.

TABLE 5.—Homesteads Grouped According to Area in Truck Crops

_	Homesteads		
Acres	Number	Per cent	
Less tLan . 25. .25 to .49 .50 to .74 .75 to .99 .00 to 1.49 .50 to 2.49 .50 to 2.49 .50 and over	29 44 47 14 29 26 13	$ \begin{array}{r}     14.4 \\     21.8 \\     23.2 \\     6.9 \\     14.4 \\     12.9 \\     6.4 \\ \end{array} $	
Total	202	100.0	

Only 51, or about one-fourth, of 202 families interviewed raised any field crops, such as corn or hay.

Acres	Number	Acres	Number
Less than 1.0	15	4.0 to 5.9	5
1.0 to 1.9		6.0 and over	10
2.0 to 3.9		Total	51

The average area of field crops grown on these 51 tracts was 3.8 acres. Only 14 out of 126 families on tracts of less than 4 acres raised any field crops.

Pasture lots or fields were found on only 65 of the tracts. Twenty-two of them had less than 2 acres of pasture each, 25 had from 2 to 3.9 acres, and 18 had 4 acres or more. The average area in pasture on the 65 tracts was 3.2 acres. In addition to this, about 15 families tethered their cows on nearby vacant lots at no cost.

#### LIVESTOCK

Nearly 90 per cent of these families kept some kind of livestock, and in a majority of cases this consisted of a flock of chickens. The various combinations of livestock enterprises are shown in Table 7.

**Cows.**—Sixty-nine of the families kept one or more cows in 1933. Twentyone of these families added the cow to their enterprise during the year, and 15 of these had been living out in the country less than 4 years. Only two families discontinued the keeping of a cow during the year. Approximately 80 per cent of the families reporting cows had one cow each. It may be of interest to note that the average size of families reporting cows was 5.5 persons; whereas those without a cow averaged 4.1 persons per family. The average size of homestead on which one cow was kept was 6.2 acres; the median of the group, however, was 5.0 acres. Families with two cows had tracts of land averaging 10.3 acres in size.

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Livestock	Families	Gross value of farm products raised per homestead		
	reporting	Livestock	Total	
No livestock. Poultry only. Poultry and cows. Poultry, cows, and hogs. Poultry and hogs. Cows only . Cows and hogs. Hogs only .	90 36 23 16 6	Livestock Dollars 100 212 360 98 141 259 112	Dollars 43 179 313 461 210 208 328 160	
Total	202	142	225	

#### **TABLE 7.—Livestock Enterprises**

#### TABLE 8.—Homesteads Grouped According to Number of Cows

	Homesteads		
Number of cows	Number	Per cent	
	133 55 12 1 0 1	65.9 27.2 5.9 0.5	
Total	202	100.0	

Chickens.—More than 80 per cent of these enterprises included a flock of chickens. The distribution of the size of flocks at the time of the interview is shown in Table 9.

	Homesteads		
Number of chickens	Number	Per cent	
None	37 57 57 21 17 13 202	18.3 28.2 28.2 10.4 8.4 6.5 100.0	

TABLE 9.—Homesteads Grouped According to Number of Chickens

Most of the flocks contained 50 birds or less. The average size flock of the 165 families keeping chickens was 57, while the average size of the 135 flocks containing 75 chickens or less was 34 birds. This smaller number (as of the close of the calendar year and thus consisting largely of hens and pullets to be kept for laying purposes) is sufficient to more than meet the needs of most families. The larger flocks, running up to as high as 500 birds, were kept for commercial purposes. A few families reported rabbits, ducks, geese, or turkeys in addition to the flock of chickens. OHIO EXPERIMENT STATION: BULLETIN 547

Hogs.—A few hogs were fattened on 46 of these rural homesteads, largely for home butchering. Most of these hogs were bought as weanling pigs or small shoats, only a few families keeping brood sows. Sales of hogs were reported on only 10 homesteads.

_	Homesteads		
Number of hogs fed	Number	Per cent	
None	156 12 19 5 3 3 4	77.2 5.9 9.4 2.5 1.5 1.5 2.0	
Total	202	100.0	

TABLE 10.—Homesteads Grouped According to Number of Hogs

One, two, or three hogs were the usual numbers butchered for home consumption. Forty-five families butchered exactly 90 hogs. The average size of the families doing any home butchering was 5.5 persons; those doing none averaged 4.3 persons.

Horses.—Most of these families depended upon some neighboring full-time farmer to do their plowing and other work requiring horses. This constitutes a serious handicap to getting the work done at the proper time. Many with gardens larger than they can spade find their plowing delayed far beyond the optimum season. Obviously, no full-time farmer can afford to spend the best part of the spring work season away from his own farm. Only eight of the 202 families had garden tractors, and 10 had horses.

	Number of homesteads					
Size of tract	Total	With garden tractor	With 1 horse	With 2 horses		
Less than 5 acres	137 36 22 7	2 4 2 0	1 1 6 0	0 0 0 2		
Total	202	8	8	2		

TABLE 11.—Garden Tractors and Horses

#### TOTAL VALUE OF FARM PRODUCTS

To arrive at the value of farm products raised on these homesteads, the following schedule of 1933 retail prices was applied to the quantities of

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products consumed. These Columbus prices were derived from published reports of the United States Bureau of Labor Statistics and from Columbus newspapers.

Milk, per qt.	
Butter, per lb	.270
Eggs, per doz	
Chickens, live wt., per lb.	.190
Pork, dressed, per lb.	.133
Potatoes, per bu	1.20
Cabbage, per lb	.03
Corn, per doz	.10
Tomatoes, per lb.	.04
Berries, per qt	.10
Canned fruits & vegetables, per qt	.175

Sales were either reported in dollars at the time of the interview or computed, with method of sale and seasonal prices taken into account. The total value of products computed in the above manner ranged in individual cases from only a few dollars to a little more than \$1000.

	Homesteads		
Total value of products	Number	Per cent	
Less than \$50	19 29 65 41 20 11 6 4 4 3 202	9.4 14.3 32.2 20.3 9.9 5.4 3.0 2.0 2.0 1.5 100.0	

TABLE 12.—Homesteads	Grouped	According t	o Total	Value of	of Products
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Nearly one-third of the families raised products with a total value ranging from \$100 to \$199. The average of the entire group was \$225; less than onefourth of these included in the survey raised more than \$300 worth of produce. The year 1933 was not normal as far as conditions favorable for gardening were concerned, the spring being wet and late and the summer hot and dry. Potatoes were a failure in many cases, cabbage and sweet corn were of poor quality and low yield. However, ideal conditions seldom prevail. Families with no previous farming experience will judge conditions unfavorable much of the time. The fact that most of the work must be done by hand increases the difficulty of getting things done on time, even when conditions are at the best.

Value of products consumed.—The retail value of products raised on individual homesteads and consumed by the families living there ranged from \$12 to \$534. Nearly 60 per cent of the families consumed less than \$150 worth of products which had been raised on their own homesteads. The value of home-raised products consumed averaged \$149 for the 202 families, of which \$37 were for dairy products, \$36 for poultry and eggs, \$10 for pork, and \$66 for fresh and home-canned vegetables and fruits. The value of home-raised products represented, on the average, only 38.3 per cent of the total value of food consumed, both raised and purchased.

	Homesteads		
Retail value of products consumed	Number	Per cent	
Less than \$50	21 45 55 29 21 15 6 5	$ \begin{array}{c} 10.4\\ 22.3\\ 27.2\\ 14.3\\ 10.4\\ 7.4\\ 3.0\\ 2.5\\ \end{array} $	
100 and over	5 202	2.5 100.0	

#### TABLE 13.—Homesteads Grouped According to Value of Home-Grown Products Consumed

Some idea of the extent to which various food products were raised for home consumption may be gained from Table 14. Although 178 of the 202 families had livestock products, only 59 of them (as shown in Table 7) raised both poultry and dairy products and only 23 had their own pork in addition to poultry and dairy products. All but six of the families had gardens and produced fresh vegetables. Tomatoes were grown more commonly than any other vegetable, while potatoes succeeded least of all. Less than half of the families had any of their own fruit, and that which they had consisted principally of strawberries, cherries, plums, grapes, and pears.

	Families		
Food products	Number	Per cent	
Livestock products	178 165 69 45 11	88.1 81.7 34.2 22.3 5.4	
Fresh vegetables Potatoes Cabbage Tomatoes Sweet corn Other vegetables	196 114 144 193 153 191	97.0 56.4 71.3 95.5 75.7 94.6	
Fresh fruits Canned vegetables and fruits	94 195	46.5 96.5	

**TABLE 14.**—Food Produced for Home Consumption

Sale of farm products.—Sales of farm products ranged from nothing in the case of 48 families to a maximum of \$730 in the case of one family with a large poultry flock.

The amount received from the sale of products exceeded \$25 on less than half of the homesteads. The average cash receipts from this source for the entire group were about \$76—poultry and eggs leading with an average of \$45 per homestead; vegetables coming next and averaging \$15; then dairy products, \$8; and hogs and other products, \$8. Although a few of the families have been increasing the farming end of their business because of unemployment, it cannot be said that the entire group has added any considerable volume to the

#### RURAL HOMES FOR NON-AGRICULTURAL WORKERS

total agricultural output. Thus, 140 of this number paid out more cash than was received from sales for seed, feed, and livestock— items produced by fulltime farmers. The total expenditure by the 202 families for these things and for labor, practically all of the money for this last item likewise going to fulltime farmers, exceeded the total cash receipts from sales of products.

	Homesteads		
Sales of products	Number	Per cent	
None	48 58 24 17 11 7 4 27	23.728.711.911.98.45.43.52.01.03.5	
00 and over	202	3.5	

TABLE 15.—Homesteads Grouped According to Sales of Farm Products

#### INVESTMENT IN REAL ESTATE

The average valuation of these homesteads, based upon recent prices paid for the same or similar tracts, was \$4083 with values of individual tracts ranging from \$1000 to \$12,000. Land in the vicinity of Columbus had a high average site value; the value of land (without buildings) in these homestead tracts ranged generally from \$200 to \$800 per acre, depending on location and availability of such facilities as gas, city water, and sewers.

Valuations placed on houses varied according to size, condition, and modern conveniences. An estimated monthly rental value was placed on each house, equivalent to what the same kind of house would have brought in Columbus. Table 16 gives the distribution of houses as to valuation and monthly rental value. The average valuation placed on all houses was \$2757, and the average rental value was \$22.11 per month.

			Estima	ted valu	ation of I	nouse, in	dollars	
Monthly rental value	All houses	Less than 1000	1000- 1999	2000- 2999	3000- 3999	4000 4999	5000- 5999	6000 and over
<i>Dol.</i> Jnder 10 5-19. 0-24. 5-29. 0-34. 5-39. 0-34. 5-30. 0-44. 5-30.	No. 7 28 49 39 35 19 15 6 4	No. 6 2	No. 1 25 15 1 	No. 1 34 32 6 			No.	
Tota1	202	8	42	73	44	21	8	6

 
 TABLE 16.—Number of Houses with Specified Valuations and Monthly Rental Values

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Electric power was available along nearly all roads surrounding Columbus, so that 96 per cent of these rural residences had electricity. City water and sewers were available to some suburban residences, while a larger proportion had their own commercial water systems. Lack of an adequate water supply was often mentioned as one of the disadvantages of living in the country. Table 17 gives the percentage of all houses having various facilities, also the status of the lower and upper income groups.

TABLE 17.—Conveniences in Rural	Residences -	of Non-	Agricultural	Workers
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Facilities	Average	Under \$600	Over \$1800
	all	income	income
Furnace Electricity. Pressure water system Bath Indoor toilet. Radio	Per cent 63.4 95.5 41.6 41.1 37.6 85.6	Per cent 45.8 91.7 33.3 27.8 31.9 73.6	Per cent 91.2 100.0 79.4 79.4 70.6 97.1

#### **OPERATING EXPENSES**

**Overhead costs.**—A check of the public records of taxes paid by owners of these rural homesteads showed this item of expense was very low as compared with taxes paid in Columbus on properties of equal value. Lower taxes were mentioned many times as one of the advantages of owning a country homestead in the vicinity of Columbus. Assessed valuations were often only a fraction of the amounts paid for rural properties recently changing hands. Average annual property taxes amounted to \$22.34 per tract. Ordinary repairs on buildings and fences averaged only about \$9 for all tracts, or about \$26 per family reporting any repairs made in 1933. In normal times the expenditure for this item, in addition to the labor supplied by the operator, will run much higher if the properties are to show a minimum amount of depreciation. Fire insurance premiums averaged about \$10 per tract. Rents paid for "part-time farms" ranged from \$10 to \$35 per month, averaging \$20. For purposes of comparison all properties were considered as if owned by the operator.

Farm expenses.—For all homesteads, the average cash expenditure for livestock feed was \$56.00, for the purchase of baby chicks and other livestock, \$10.40 per homestead, followed by \$7.90 for hired labor, \$4.50 for seeds and plants, and \$1.25 for fertilizer and spray materials. A considerable number grew their own plants and only a few used any commercial fertilizers. Those keeping no livestock had very little expense, while the expenditure for purchased feeds ranked high in all groups keeping any livestock. These expenses are given in detail in a later section of the bulletin.

#### FACTORS AFFECTING AGRICULTURAL ACTIVITIES OF WAGE AND SALARY EARNERS

The extent or proportion of the living which rural non-farm families derive from the land depends upon a number of factors. It may commonly be supposed that the smaller the income such a family has at its disposal the greater will be the effort to produce a portion of the living from the land. Thus, it would seem that the larger the income the smaller the need for supplementing the grocery with home-grown produce. Certainly, size of family income, along with number of persons in the family, would be a measure of the needs of individual families. But likes and dislikes of members of the family have a bearing on what is done in the way of raising produce and keeping livestock, in spite of the actual needs of the family. The previous farm experience of the operator and his wife likewise determines the extent and success of their agricultural activities. Capital available for the purchase of a cow or other stock and the feed necessary to care for the same and ready cash for plowing the garden or the purchase of fertilizer may be limiting factors.

Time available during the planting and growing season may have an effect on the extent of the family's agricultural endeavors. The man employed only part-time in trade or industry should be able to accomplish more on his small tract of land than one employed full-time. The size of the tract, the physical and chemical characteristics of the soil, the percentage of the land which is tillable, and possibly other factors related to the enterprise itself will influence the amount of produce raised.

#### SIZE OF HOMESTEAD

With increase in size of homestead there was further opportunity for raising more of the family food supply. Small tracts of a half acre are sufficiently large to provide most of the fresh vegetables, as well as space for a small flock of chickens. The keeping of a cow, however, requires 2 or 3 acres of pasture, unless vacant lots are available nearby, and, if part of the grain or hay is raised, additional acreage is required.

There was some correlation between size of homestead and size of family. On all tracts of less than 3 acres the average size of household was 4.1 persons, on those between 3 and 5.9 acres it was 4.7 persons, while on those of 6 acres and over the average was 5.3 persons. The average size of tract occupied by 86 families of five persons and more was 6.2 acres; whereas the 116 families with less than five persons were on tracts averaging 3.5 acres.

The value of products raised and the value of the home-raised products consumed increased with the size of the tract but by no means in the same ratio. In other words, the group of smallest tracts produced about \$232 gross value of produce per acre, as compared with about \$23 per acre on the largest size group. There are a number of reasons for this. Tracts of less than one acre had a larger proportion of their area in garden, and, in addition, four of this number kept cows by pasturing them free of charge on neighboring vacant lots (not included in the area of the homestead). In the group of 10 acres and over it will be noted that there was an average of 6.1 acres per tract in addition to that in truck crops, field crops, and pasture. This included land occupied as building site, the chicken and orchard lot, idle land, and fields rented out at very low rentals. Thus, there was no scarcity of land for pasture or gardening purposes. The larger tracts raised some of the feed required for livestock; whereas none was produced on the small-sized homesteads.

19

Item		Less than 1 acre	1 to 1.9 acres	2 to 2.9 acres	3 to 3.9 acres	4 to 5.9 acres	6 to 9.9 acres	10 acres and over	Average
Homesteads	No.	27	49	22	28	28	19	29	202
A verage size: Truck crops. Field crops Pasture All other	Acres Acres Acres Acres Acres	0.5 0.2  0.3	1.1 0.5  0.1 0.5	2.2 0.8 0.2 0.1 1.1	3.2 0.9 0.3 0.7 1.3	4.7 1.1 0.9 1.2 1.5	$\begin{array}{c} 6.9 \\ 0.9 \\ 1.0 \\ 2.4 \\ 2.6 \end{array}$	16.4 1.9 4.7 3.7 6.1	4.7 0.9 1.0 1.0 1.8
Persons per household	No.	4.2	4.1	3.8	4.9	4.5	5.4	5.3	4.5
Families having cows Families having hogs Families having chickens	Pct. Pct. Pct.	14.8 3.7 63.0	$14.3 \\ 12.2 \\ 75.5$	18.2 27.3 77.3	28.6 17.9 92.9	57.1 35.7 96.4	57.9 42.1 94.7	65.5 34.5 79.3	34.1 22.8 81.7
Food produced on tract	Pct.	30.8	32.8	36.5	34.5	45.3	42.0	46.7	38.3
Farm income: Products consumed Products sold House rental value	Dol. Dol. Dol.	$\begin{array}{c}100\\16\\260\end{array}$	115 51 227	128 56 233	142 52 258	186 79 312	194 140 269	212 164 318	149 76 265
Total	Dol.	376	393	417	452	577	603	694	490
Costs: Crop and stock expense Taxes, insurance, repairs Interest on real estate	Dol. Dol. Dol.	32 32 178	66 29 175	67 31 192	76 44 237	86 44 288	126 45 285	145 70 406	80 41 245
Tota1	Do1.	242	270	290	357	418	456	621	366
Income less costs Operator and family labor Net return per hour	Dol. Hrs. Dol.	134 566 0.237	123 687 0.179	127 857 0.148	95 896 0.106	159 1051 0.151	147 1141 0.129	73 1491 0.049	124 927 0.134

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### TABLE 18.—Size of Tract as Related to Other Factors

Sales of products were not very extensive on tracts of less than one acre, averaging only \$16. This was only half enough to meet the expenses for seed, fertilizer, livestock purchased, feed, hired labor, etc., used in crop and livestock production. In fact, crop and livestock expenses exceeded sales of products in all except the two groups of 6 acres and over.

When estimated house rental values are taken into account and costs of taxes, insurance, and repairs, along with interest on the investment in real estate, are added to cash costs of raising farm products, some relative merits of the various sized units may be seen. Tracts of less than one acre gave the greatest return per hour of labor spent in raising produce. Return per hour decreased as size increased up to the group containing tracts averaging 3.2 This appears to be an uneconomical size. It is apparently too small to acres. support a cow. The total value of products raised was only about 5 per cent larger than that produced on tracts of 2 to 2.9 acres while costs, including interest on the investment, were nearly one-fourth greater. In the next group, 4 to 5.9 acres, there is a decided increase in the number of families keeping a cow and an increase in the return per hour of labor. For a medium large family a homestead of this size might be best suited to the needs. Increasing the size of the tract beyond this necessitates additional investment and labor without any great increase in the proportion of family's food supply being produced on the homestead. Cash receipts from sales of products are considerably larger from those tracts of 10 acres and more. It will be noted, however, that this group made the lowest return per hour of labor.

In this discussion no account has been taken of the added cost of transportation. This includes not only trips to and from work but the additional trips to the city for supplies, to attend church or social functions, and even to transport children to city schools where the local school facilities do not measure up to the standards of the family involved.

The financial advantages of "part-time farming" appear to be in savings rather than in increased earnings. The security offered during periods of unemployment and other features in connection with the mode of life, such as the ready availability of fresh garden and poultry products, cleaner air, and freedom from noise and dangers of congested city streets will probably continue to attract increasing numbers of people.

#### SIZE OF FAMILY

The influence of size of family upon the type and scope of its agricultural efforts is very marked. The increased food requirements and the availability of more labor in the larger family account for a large part of the difference in scale of operation. It has been pointed out how families which were larger than average were on homesteads of larger than average size and that families keeping a cow and butchering a few hogs were larger than those not so doing. Out of 86 families of five persons and over, a total of 44 families, or about 51 per cent, kept a cow; only 25 out of 116 families of four persons or less had one. Small families cannot utilize the entire output and attempting to sell the surplus has its disadvantages. The large families consumed \$190 worth of home-raised products, as compared to \$119 for the small families. Receipts from sales averaged \$72 and \$79, respectively.

#### PREVIOUS FARM EXPERIENCE

All families in which both the operator and homemaker were farm reared and where, in addition, the operator had some practical farm experience on the home farm or one of his own after reaching the age of 20 were classed as having had previous farm experience. A total of 72 households came within this class. Those not having each of the above requirements were put in a group as having had no previous farm experience; there were 55 of these cases. In making a comparison of these groups several years of "part-time farming" experience were found to be of some value, even without any previous farm experience. Consequently, only those residing in the country 3 years or less are included in Table 19. Those who undertook this mode of living too late in 1933 to have an early garden were likewise excluded.

		Families 1 country 3 y	iving in the years or less
Item		With previous farm exper- ience	Without prev- ious farm ex- perience
Families	Number	22	18
Size of tract	Acres	5.1	$2.0 \\ 0.6 \\ 0.1$
Area in truck	Acres	1.2	
Area in field crops	Acres	0.7	
Families having cows Families having hogs. Families having chickens Fruit and vegetables canned.	Per cent Per cent Per cent Quarts	36.4 45.4 90.9 217	22.2 77.8 139
Value of product raised	Dollars	257	114
Sold	Dollars	99	20
Consumed	Dollars	158	94
Cost of food purchased	Dollars	188	242
Proportion of food raised	Per cent	45.7	28.0
Persons per household	Number	4.0	4.1
Family income, other than sales of products	Dollars	1035	1047
Crop and livestock expenses	Dollars	98	44
	Dollars	159	70
	Hours	940	900
	Dollars	0.169	0.078

Those families with previous farm experience were occupying tracts averaging 5.1 acres, as compared with 2.0 acres in the case of those without any previous experience of this sort. The inexperienced group as a whole had smaller gardens and kept considerably less livestock. Those with previous farm experience raised nearly 46 per cent of their annual food budget; the inexperienced, only 28 per cent. This was not due to any difference in needs of the two groups, as indicated by size of household and by family income. Nor was it due to any difference in soil, each group having almost exactly the same proportion of the different grades. Those with previous farm experience sold enough products to cover the cash costs of raising what they sold and consumed. Sales in the inexperienced group were not sufficient to cover such expenses, even though the latter was a small item. The experienced group spent only a little more time in raising products worth more than twice as much as those produced by the other group. Thus, it is evident that previous farm experience is a valuable asset to one just undertaking this mode of living. A lack of such experience is apt to be a serious handicap during the first few years. After about 6 years of "part-time farming" the advantage of previous farm experience was no longer of great importance.

It may be of interest to note a difference in degree of modernization of the houses occupied by the two groups.

	imilies
With and Without Previous Farm Experience	

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Item	72 families with pre- vious farm experience	55 families without pre- vious farm experience
Per cent of houses having: Furnace	19.4 93.0 31.9 34.7	69.1 21.8 96.4 49.1 49.1 47.3
Total income, all sources	\$1142	\$1120

Most dissatisfaction was expressed by city-reared homemakers. Those born in the country seemed to be able to enjoy living conditions to which they had been accustomed.

It might be well to point out here the necessity for cooperation on the part of all members of the family. Successful farm operators know how essential this is, and families of urban workers can not succeed in their new mode of living unless each member is willing to do his part. Such tasks as feeding, watering, and milking the cow regularly twice a day, looking after the chicks when a sudden rain storm comes along, carrying water to the garden when plants are in need of rain, assisting with the canning when surplus products would otherwise go to waste, these and innumerable other tasks call for a willingness to work on the part of everyone. The family must also be able to adjust itself to the new mode of living and find recreation at home, rather than at its former sources of entertainment now several miles distant.

#### NON-AGRICULTURAL INCOME

It might be supposed that those families in the lowest income group would raise more products for home consumption than those making the highest incomes. While this was true in a relative sense, the difference was not very great, those in the group with less than \$600 income producing only 40.8 per cent of their annual food bill as compared with 35 per cent in the group with incomes of \$1800 and over. Families in the high income group, however, consumed home-raised products with an average retail value of \$172; whereas those in the low income group consumed \$126 worth. It will be noted that the percentage of families in the low income group keeping a cow was less than in the higher income classes; a part of this difference might be attributed to the somewhat smaller families in the former group. In the lowest income group only 12 per cent of the families with four persons or less and 52 per cent of the families of five persons or more kept a cow; in the highest income group the proportions were 24 per cent and 65 per cent, respectively. Thus, in the low income group lack of capital to buy a cow and the feed for her may have been the limiting factor.

		Income	Income other than sales of farm products, in dollars						
Item		Under 600	600 to 1199	1200 to 1799	1800 and over	A 11 families			
Families	Number	72	65	31	34	202			
Income other than sales Sales of farm products Income from sales	Dollars Dollars Per cent	378 88 18.9	901 66 6.8	1386 63 4.3	2314 81 3.4	$\begin{smallmatrix}1027\\76\\6.9\end{smallmatrix}$			
Families having cows Families having chickens Size of tract	Per cent Per cent Acres	$25.0 \\ 79.2 \\ 4.7$	$33.8\\83.1\\4.4$	$45.2 \\ 87.1 \\ 4.6$	44.1 79.4 5.3	$34.1 \\ 81.7 \\ 4.7$			
Cost of food purchased Food raised and consumed Food produced on homestead Rental value of house Persons per household	Dollars Dollars Per cent Dollars Number	$183 \\ 126 \\ 40.8 \\ 236 \\ 4.1$	$247 \\ 155 \\ 38.6 \\ 246 \\ 4.9$	$268 \\ 165 \\ 38.1 \\ 264 \\ 4.6$	320 172 35.0 363 4.8	$240 \\ 149 \\ 38.3 \\ 265 \\ 4.5$			
Why undertook "part-time farming": Economic reasons Health and more space Love of country Other reasons	Per cent Per cent Per cent Per cent	47.2 27.2 19.6 6.0	40.0 24.0 27.3 8.7	30.7 29.5 33.0 6.8	19.0 32.0 40.0 9.0	37.4 27.4 27.7 7.5			
A ge of operators: Under 40 years 40 to 59 years 60 years and over	Per cent Per cent Per cent	22.2 52.8 25.0	$30.8 \\ 56.9 \\ 12.3$	38.7 54.8 6.5	$41.2 \\ 55.9 \\ 2.9$	30.7 54.9 14.4			

TABLE 21.—Income as Related to Other Factors

It will be noted that in the group with less than \$600 income, nearly half of the reasons given as to why this mode of living was undertaken were classed as economic reasons, including such factors as ability to raise a part of the family food supply, possibility of added income from sale of farm products, lower living costs, cheaper rent, lower taxes, insurance against unemployment particularly during declining years, etc. In the high income group economic reasons amounted to only 19 per cent of the total. It may be of significance to note here that in the low income group 25 per cent of the heads of families were 60 years of age or older and that in the high income group only 3 per cent had reached that age. It was previously pointed out that cash expenses connected with the production of foodstuffs exceeded the income from sale of farm products. In addition to these expenses, taxes, insurance, repairs, and interest on mortgage indebtedness must be met. Hence, even the group of families with the lowest cash incomes derived a larger part of the means of their living from industry and other non-agricultural sources than they did from their rural homesteads, which furnished 40.8 per cent of their food and a residence with a city rental value of \$236 per year.

#### EMPLOYMENT

It might be expected that families, the heads of which were employed only part-time at some other occupation, would expand their agricultural activities to a greater extent than would those employed full-time. However, the group of families whose heads were employed in non-agricultural occupations fulltime and made good incomes raised products practically equal in value to those produced by the partially employed group. This called for greater cooperation on the part of the wife and children of the worker employed full-time.

Item		Employment status of head of family		A11	
		Full-time	Part-time	families	
Families.	Number	102	100*	202	
Size of tract Area in truck Chickens per homestead Families reporting cows	Acres Acres Number Per cent	4.4 0.7 40 40.2	4.9 1.0 53 28.0	4.7 0.9 46 34.1	
Value of products raised: Consumed Sold	Dollars Dollars	164 60	134 92	149 76	
Total	Dollars	224	226	225	
Family's food produced Persons per household Average age, family head	Per cent Number Years	37.5 4.9 44.0	39.4 4.2 48.9	38.3 4.5 46.4	
Non-agricultural income	Dollars	1453	594	1027	

TABLE 22.—Employment as Related to Agricultural Activities

\*Including 19 families, the heads of which had no employment.

A number of factors may have been responsible for the failure of the partially employed, as a group, to utilize their apparent opportunity to raise more agricultural products for home consumption and sale. It will be noted that they had larger gardens and larger flocks of chickens but, because of smaller families, fewer of them had cows. The difficulties of disposing of surplus products constituted a factor holding their sales down to only \$32 more than was received by those employed full-time.

Lack of capital may have limited the agricultural enterprises of those employed part-time. There may have been some difference in the degree of energy and ambition possessed by the two groups, because, even with the larger families to support, those employed full-time did not have the same need for supplementing their incomes with home-produced food as did those employed at irregular work.

#### QUALITY OF SOIL

Good soil is important in any type of gardening. At the time of the interview each tract was designated as having either good, fair, or poor quality of soil. It was found in working up the records that 45 families classified as having poor quality of soil produced vegetables valued at \$73 per acre of garden, while 77 with good soil produced \$117 worth of vegetables per acre, or about 60 per cent more. It would seem that individuals about to locate on the land or public and relief agencies fostering such plans might well pay considerable attention to a study of the soil problems involved.

#### SOME TYPICAL AGRICULTURAL ENTERPRISES

Some combinations of enterprises found most frequently on these homesteads are shown in Table 23. These are arranged according to the proportion of the family's food produced on the homestead.

Item		Garden only	Garden and 10 to 35 chickens	Garden, large flock of chickens	Garden, chickens, and hogs	Garden, chickens, and a cow	Garden, chickens, cow, and hogs*	Garden, chickens, cow, and hogs†
Homesteads	Number	17	35	14	15	23	9	14
Area of tract Truck crops Field crops Pasture	Acres Acres Acres Acres	1.3 0.4	1.7 0.7	3.6 0.5 0.4	3.3 1.0 0.5 0.6	$6.0 \\ 0.8 \\ 0.9 \\ 3.4$	5.1 1.0 	$9.6 \\ 1.7 \\ 3.4 \\ 2.2$
Livestock: Chickens Cows Hogs butchered .	Number Number Number		23	214	36 1.8	51 1.0	$\substack{\textbf{65}\\1.3\\2.2}$	$70 \\ 1.3 \\ 2.0$
Food produced	Per cent	16.5	29.2	35.0	40.4	48.1	58 <b>.3</b>	58.5
Persons per house- hold	Number	4.1	4.2	3.4	4.5	4.7	6.2	7.2
Agricultural in- come: Products con- sumed Products sold Total House rental value Total income from	Dollars Dollars Dollars Dollars	$ \begin{array}{r} 52\\ 1\\ -53\\ 229\\$	99 24 123 250	127 310 437 337		223 93 316 309	318‡ 125 443 227	312‡ 161 473 243
tract Costs: Seed and fertilizer Feed purchased	Dollars Dollars Dollars	282 4	373 5 25	774 6 188	450 9 50	625 6 84	670 6 141	716 7 111
Livestock pur- chased Hired labor Total crop and livestock ex-	Dollars Dollars	2	2 3	33 10	5 9	13 7	19 6	19 26
pense Taxes, insur-	Dollars	6	35	237	73	110	172	163
ance, repairs Interest on real	Dollars	30	36	47	36	57	33	44
estate	Dollars	178	200	304	224	305	230	311
Tota1	Dollars	214	271	588	333	472	435	518
Income less cost Operator and fam-	Dollars	68	102	186	117	153	235	198
ily labor Net return per hour	Hours Dollars	427 0.159	625 0.163	1158 0.160	874 0.134	964 0.159	1407 0.167	1650 0.120

TABLE 23.—Some Typical "Part-Time Farm" Enterprises

\*All feed, other than pasture, purchased. †Part of feed produced on homestead. ‡Compare Lively, C. E., Ohio Agr. Exp. Sta. Bull. 468, p. 22. The Columbus retail value of foods raised and consumed by 137 Ohio farm families in 1927 and 1928 was \$433 per family. Since retail food prices were 55 per cent higher during those years than in 1933, the retail value of food furnished by those 137 farms, averaging 158 acres in size, would have been \$279 per family in 1933.

Some families kept no chickens or other livestock and hence confined their farming efforts entirely to the garden, of which the average size in this set-up was 0.4 of an acre. This much good soil will ordinarily be sufficient to furnish a family of four with all the fresh vegetables they want and plenty for canning and storing. The cash outlay for expenses was not large, averaging only \$6. Only about one-sixth of the annual food budget was produced on the homestead and practically no sales were made. Ordinarily from 12 to 20 hours per week were devoted to the garden.

A small flock of 10 to 35 chickens, in addition to the garden, was a common type of enterprise. The average number of chickens per flock at the time of the interview was 23. An average of 20 chickens and 96 dozens of eggs per family were used for home consumption during the year, and sales of poultry products amounted to \$11 per homestead. The average expenditure for feed was \$25 and none was produced other than some green feeds in the garden. Gardens were larger in this group. Vegetables and fruits to the value of \$63 were raised and consumed (including 143 quarts canned). Sales of garden produce were reported by about one-half of the families and averaged \$13 for all in the group. This type of agricultural enterprise with its small acreage likewise netted a fairly good return for the time devoted to it.

Large flocks of chickens and a garden comprised a type commonly found with smaller families, the heads of several of which were in the upper age groups. These flocks averaged 214 birds and were kept largely as a source of cash income. Very little feed was produced, purchased feeds costing an average of \$188 per homestead. This type of enterprise required the greatest total cash expenditure of any but, with sales of eggs and poultry amounting to \$300, gave good returns per hour of labor. An average of about 30 hours per week was devoted to the enterprise during the spring and summer and about 14 hours per week during the autumn and winter.

Some families, in addition to keeping a small to medium sized flock of chickens, fattened from one to three hogs for home butchering. These were generally bought as small pigs. Some field corn was grown on a few of these tracts, and the hogs also utilized some waste products from the garden. Hogs were relatively low in price in 1933, so that very little was gained by including them in the enterprise. It will be noted too that the size of homestead here was nearly double that on which only a small flock of chickens was kept.

A garden, a flock of chickens, and a cow were the essential parts of a type of enterprise frequently encountered. The average size of tract on which this type was found was 6.2 acres, some of the families raising corn or hay and all of them having pasture for the cow. The flocks of chickens averaged 51 birds at the time of the interview; an average of 28 chickens and 124 dozens of eggs, with a total value of \$47, were used for home consumption. Most of the cows were of Jersey or Guernsey breeding. Dairy products with a retail value of \$112 and vegetables and fruits valued at \$64 were also consumed. Homeproduced food supplies amounted to 48 per cent of the total. Sales were reported by all families and amounted to an average of \$93, of which \$78 were from livestock products. An average of 27 hours per week was spent with this type of enterprise during the spring and summer months and about 10 hours per week during the autumn and winter.

A type of enterprise suitable for large families with sufficient available time to produce a good proportion of their food supply includes a flock of chickens, a cow, some pigs, and a large garden. Enterprises of this type were divided into two classes for further comparison—those buying all their feed and those producing part of it. It will be noted that families following this type of agricultural enterprise were much larger than the average. Both classes had about the same total cash expenses. Those raising some field crops

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bought less feed but hired more labor, and, because they necessarily had more land, their overhead costs were higher. Those producing part of their feed also had larger gardens, this accounting for their increased income from sales. Those buying all of their feed devoted an average of about 40 hours per week to the enterprise during the spring and summer and about 14 hours per week during the autumn and winter. Those enterprises producing a part of the feed for livestock required not only a larger tract of land but also about one-sixth more labor. The production of feed did not compensate for the additional labor and overhead costs.

#### A BRIEF SUMMARY OF A PART-TIME FARMING CENSUS CONDUCTED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR IN 14 COUNTIES IN OHIO

A so-called part-time farm census was conducted in 1934 in several states including Ohio as a Federal Civil Works Project under the supervision of the Division of Subsistence Homesteads of the Department of the Interior. The schedules were taken in 14 counties in Ohio during the last two weeks of January and the first two in February. Local enumerators were used in the collection of the data. A total of 4650 records were obtained.

With the assistance of University students employed by funds supplied by the Federal Emergency Relief Administration, the 4650 records were sampled and 1155 from 10 counties were tabulated and summarized. The more significant and usable data have been placed in Tables 24-28, inclusive.

#### TABLE 24.—Cows on the Homesteads of Non-Agricultural Workers in 10 Selected Ohio Counties

	Homestead units		
Number of cows	Number	Per cent	
No cow	573 361 114 46 61	49.6 31.2 9.9 4.0 5.3	
Total	1155	100.0	

#### TABLE 25.—Poultry on the Homesteads of Non-Agricultural Workers in 10 Selected Ohio Counties

	Homestead units		
Number of chickens	Number	Per cent	
None 1 to 10 11 to 25 26 to 50 51 to 100 More than 100	232 109 357 285 121 51	20.0 9.4 30.9 24.7 10.5 4.5	
Total	1155	100.0	

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#### TABLE 26.—Homesteads Grouped According to Value of Home-Grown Products Consumed in 10 Selected Ohio Counties

	Homesteads		
Value of products consumed	Number	Per cen	
ess than 50	160 296 186	14.0 25.6 16.1	
0 to 199 0 to 249 0 to 249 5 to 299	176 116 87	15.2 10.0 7.5	
00 to 349	52 31 51	4.5 2.7 4.4	
Total	1155	100.0	

Item		Less than 1 acre	1 to 1.99 acres	2 to 2.99 acres	3 to 3.99 acres	4 to 5.99 acres	6 to 9.99 acres	10 to 49.99 acres	50 acres and over	Average of all
Homesteads	Number	98	214	127	69	129	103	295	120	1155
Size of tract Truck crops Field crops	Acres Acres Acres	0.6 0.3	1.1 0.5	2.1 0.7 0.2	$\begin{array}{c} 3.1\\ 0.9\\ 0.4 \end{array}$	4.6 1.0 0.8	$7.3 \\ 1.1 \\ 1.8$	$25.3 \\ 1.5 \\ 7.1$	82.6 1.8 18.7	$17.1 \\ 1.0 \\ 4.0$
Units having horse Units having cow Units having hogs Units having chickens	Per cent Per cent Per cent Per cent	223.4 11.2 60.2	5.6 26.1 19.1 71.0	2.3 28.3 22.0 76.3	$10.1 \\ 36.2 \\ 27.5 \\ 75.3$	7.7 50.3 29.4 82.1	$13.6 \\ 61.1 \\ 30.1 \\ 83.4$	43.0 68.8 46.1 89.1	65.0 84.1 61.6 90.0	21.9 50.3 32.7 79.9
A gricultural income: Products consumed Products sold Total	Dollars Dollars Dollars	79.11 6.21 85.32	109.22 20.71 129.93	111.62 32.31 143.93	$124.71 \\ 21.18 \\ 145.89$	160.10 59.17 219.27	$171.51 \\ 78.69 \\ 250.20$	211.87 114.95 326.82	229.59 177.13 406.72	158.70 70.57 229.27
Amount of family's food raised and consumed Persons in family	Per cent Number	$\begin{array}{c} 27.4\\ 3.9 \end{array}$	$\substack{\textbf{32.1}\\\textbf{4.2}}$	31.0 4.1	35.7 4.2	39.6 4.3	42.5 4.1	48.6 4.6	52.0 4.9	41.0 4.3
Costs: Feed for livestock Livestock, seed, labor, etc Tax. insurance, repairs Total.	Dollars Dollars Dollars Dollars	$18.03 \\ 6.74 \\ 36.61 \\ 61.38$	28.56 12.32 53.02 93.90	$\begin{array}{r} 39.62 \\ 15.99 \\ 56.54 \\ 112.15 \end{array}$	29.42 17.41 62.03 108.86	69.24 25.95 66.13 161.32	55.08 38.35 66.59 160.02	61.22 50.62 94.50 206.34	62.92 93.70 114.99 271.61	47.75 34.55 72.92 155.22
Value of land and buildings Annual income, 1933, from non-farm sources	Dollars Dollars	1686 · 474	2020 660	2378 674	2452 600	2894 701	2647 679	3124 583	4094 510	2737 613

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# TABLE 27.—Size of the Homestead of Non-Agricultural Workers as Related to Other Factors in 10 Selected Ohio Counties

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# TABLE 28.—A Comparison of the Rural Homes of Non-Agricultural Workers in Different Sections of Ohio

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Item		Butler	Allen	Lorain Medina	Trumbull Mahoning	Scioto Lawrence	Licking Musking- um	Columbus area
Homestezds	Number	130	117	249	211	213	235	202
Size of tract .	Acres	6.9	7.8	15.2	16.7	21.1	26.1	4.7
Truck crops .	Acres	0.7	0.5	1.0	1.1	1.4	0.9	0.9
Field crops .	Acres	2.4	2.6	4.7	4.4	2.9	5.7	1.0
Units having horse.	Per cent	12.3	15.3	24.8	20.8	28.1	22.9	5.0
Units having cow	Per cent	46.9	49.5	46.5	43.1	58.6	56.1	34.1
Units having hogs	Per cent	28.4	27.3	23.3	36.5	48.8	29.7	22.8
Units having chickens	Per cent	88.4	92.3	76.7	72.5	79.8	80.0	81.7
Agricultural income: Products consumed. Products sold. Total.	Dollars Dollars Dollars	124.16 37.92 162.08	153.47 47.44 200.91	155.41 89.60 245.01	186.07 60.87 246.94	$147.76 \\ 66.68 \\ 214.44$	169.20 92.24 261.44	149.30 75.59 224.89
Amount of family's food raised and consumed	Per cent	31.8	43.3	36.2	43.6	43.5	46.9	38.3
Persons in family	Number	4.4	4.2	4.1	4.6	5.1	4.1	4.5
Costs: Feed for livestock Livestock, seed, labor, etc. Tax, insurance, repairs. Total.	Dollars Dollars Dollars Dollars	39.82 23.78 61.43 125.03	35.66 24.04 46.69 106.39	72.40 43.83 98.03 214.26	52.20 33.92 98.78 184.90	28.54 36.89 51.60 120.03	40.47 34.22 52.17 126.86	56.00 24.40 41.00 121.40
Value of land and buildings	Dollars	2569.00	2351.00	3665.00	3359.00	$1777.00 \\ 463.00$	2496.00	4083.00
Annual income, 1933, from non-farm sources	Dollars	677.00	745.00	705.00	657.00		509.00	1027.00

A comparison of the rural homes and the agricultural activities of nonfarm workers in different sections of the State revealed rather marked differences in the size of the homestead. Those located in the better land sections of the State where a high percentage of the land was used for crop production had fewer acres than those on the less productive soils. The large acreage in the homesteads of the non-agricultural workers in the poor soil areas in the eastern part of the State was not due to a need for more land but rather to the fact that whole farms with buildings were acquired, often at lower cost than to buy less land and build on it. Also many families that were at one time regular farmers have sought work in other occupations and still live on the land but operate it on a less intensive scale.

The number of people per household on the homesteads averaging 10 acres or more in size was larger than on the smaller units. The percentage of the family's food produced increased with increased size of homestead. The small number of 3-acre tracts shows this size to be uneconomical, as pointed out previously for the Columbus area.

More than 99 per cent of the 1155 families reported a garden in 1933; crop production was much less common, only 44 per cent reporting any field crops raised that year. The average number of chickens per flock on the homesteads reporting chickens was 41 birds. Homesteads raising hogs reported between three and four hogs per unit. Only 253 owned horses.

There was a rather wide variation in the valuation of the homesteads at the time of the interview. The lowest average valuation was in Lawrence and Scioto Counties while the highest was in Lorain and Medina. The average valuation was \$2737 per homestead and the average indebtedness reported was \$828. Seventy per cent of the homesteaders were owners and 30 per cent were renters. Household conveniences were quite generally lacking; only one-third reported running water in the house and less than one-fifth had inside toilets.

The average distance to work was 6.8 miles. Eighty per cent of the 1155 rural non-farm families reported an automobile.

#### SUMMARY AND CONCLUSIONS

1. Several factors have contributed to the increase in the number of persons who are combining rural living with non-agricultural work.

2. This mode of living, while by no means new, has attracted increasing attention in recent years.

3. In Ohio it is estimated that there are more than 100,000 rural non-farm families obtaining a part of their living from the land.

4. Economic reasons were given most often for making a change from an urban to a rural mode of living, particularly among the low income groups. Love of country and desire for more space and more healthful surroundings ranked high among the reasons of those having the larger incomes.

5. Although about one-third of the families interviewed in the Columbus area had been living in the country less than 4 years, almost an equal number had been combining rural living with urban work for 10 to 30 years.

6. The families interviewed, when judged by their occupational history, degree of ownership of homes, and educational training, were thought to be considerably above the average of families in the city of Columbus.

7. The homesteads of these rural households varied in size from less than a quarter of an acre to 20 acres or more. The size found most frequently was 1.0 to 1.5 acres.

8. Eighty-eight per cent of the families kept some kind of livestock: cows were kept by 34 per cent of the families, chickens by 82 per cent, and hogs by 23 per cent.

9. The retail value of food raised and consumed averaged \$149 per household, while food purchased cost \$240 additional. Thus, these families produced only 38 per cent of their total food bill.

10. Sales of farm products exceeded \$25 per household in less than onehalf of the cases interviewed; for the entire group, sales did not cover cash costs connected with the production of crop and livestock products. Thus, the small volume of sales by these people offers little competition to full-time farmers.

11. The financial advantages of "part-time farming" appear to be in savings rather than in increased earnings. The security offered during periods of unemployment, as well as other features in connection with this mode of life, will, nevertheless, attract increasing numbers of people.

12. Rural living has made a strong appeal to families of five or six persons or more.

13. Families with previous farm experience were found to be much more successful with their agricultural enterprises than were those with no previous experience.

14. Families with low incomes produced only a slightly larger proportion of their food supply than did those in the higher income groups. Families with less than \$600 a year income derived more of the means of their living from industry and other non-agricultural sources than from their rural homesteads. Thus, in any scheme of "subsistence homesteads", a substantial source of non-agricultural income is very essential if anything more than a subsistence standard of living is to be enjoyed.

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15. Those employed full-time in non-agricultural occupations produced practically as large a proportion of their food as those employed only part-time.

16. The type of agricultural enterprise carried on depends largely upon the desires and size of the family.

17. Gardening and poultry raising are about all that are justified for a family of four persons or less; an acre or slightly more is all that is needed for this purpose. Larger families may want to keep a cow and perhaps feed two or three pigs for butchering, in addition to their garden and poultry; this will require a tract of about 5 acres.

18. The production of feed for a cow and other livestock, necessitating additional acreage and thus higher overhead costs, was not a profitable undertaking in the Columbus area.

19. Families with homesteads of 5 acres who cultivated a large garden, kept a cow and chickens, and butchered a few hogs produced less than 60 per cent of their total food budget. This does not correspond with some of the claims that practically all of the family's food can be produced on a small tract of land.

20. With better transportation facilities, the shorter working day, and the 5-day week, rural living will very likely attract increasing numbers of those employed in non-agricultural work. To avoid the establishment of rural slum areas adjacent to cities there appears to be a need for the guidance of some local planning agency and for certain restrictions on the type of houses constructed.

21. The extent of the movement of urban families to rural areas will depend to a large degree upon the amount and rate of decentralization of industry, which will minimize the problem of transportation, one of the chief disadvantages connected with the combination of rural living and urban work.

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22. Rural areas will continue to supply a greater population than is required to operate the farms of Ohio if the present, relatively high, rural birth rates are maintained. It is thought that the level of industrial employment will not rise sufficiently in the near future to absorb this surplus. Hence, any program for rehabilitation in the country should be aimed first at improving the conditions of those already in rural areas.

23. Material assembled in this study indicates that the standards of living of many individual families with urban employment may be raised by moving to rural homesteads. It, however, does not support the conclusion that the public relief and unemployment problem would be solved to any great extent by attempting to make farmers out of the urban unemployed. The people included in this study were considerably above the average, judging from their educational background and occupational and economic status. It is hardly to be expected that a random sample of unemployed day laborers from the city would meet with anything like the same degree of success.