UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE

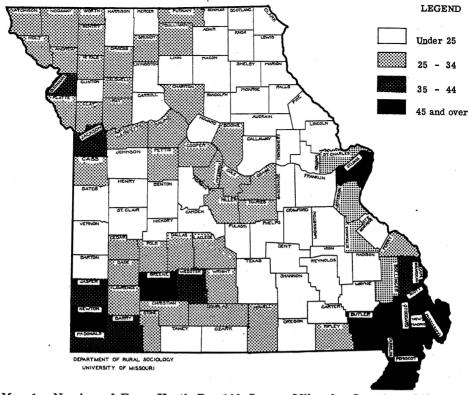
#### AGRICULTURAL EXPERIMENT STATION

E. A. TROWBRIDGE, Director

# FARM YOUTH IN MISSOURI

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Map 1.—Number of Farm Youth Per 100 Square Miles, by Counties, 1940

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## Farm Youth in Missouri

MARGARET L. BRIGHT and C. E. LIVELY

Farm youth are among our state's most precious resources. What, then, is their situation? How numerous are they? And what is the outlook for their future? What are their attributes of health, education and employment?

This bulletin seeks to cast light on these and related questions. In this study farm youth are defined as persons aged 15 to 24 years living on farms.

## NUMBERS OF FARM YOUTH Distribution of Farm Youth in State

In general, farm youth in 1940 were distributed over the state in a fairly uniform manner corresponding roughly to the distribution of the total farm population. The average density for the state was 29 farm youth per 100 square miles, or an area 10 miles square. The number varied from 13 in Carter county to 140 in Permiscot county. (Map 1.) Less than average density was apparent in northeast Missouri and in the southeast-central Ozark area. Notable concentrations were observed in the southeast Missouri lowlands and in certain counties containing, or adjacent to, sizeable urban centers. Six counties in southeast Missouri contained 16 per cent of the total farm youth in the state and only 6 per cent of the land area.

#### Numbers Have Declined Since 1910

Farm youth declined in number from an estimated 241,500 in 1910 to 197,861 in 1940, a decrease of 18 per cent in 30 years. Fewer children are born on farms. The number of women of childbearing age on the farms has declined since the turn of the century, and in each decade since that time the average farm woman has had fewer children during her life than the farm woman of the previous decade.

Furthermore, a smaller proportion of farm-reared youth remain on farms than was once the case. Migration from farms is responsible for a heavy loss of farm-reared youth.

In 1940 the number of farm youth in Missouri was 0.6 per cent greater than in 1930. The break in the trend towards a decrease in numbers and the slight increase for this period may be explained by (1) failure of youth to migrate as a result of depressed economic conditions prevailing during the decade, and (2) attainment of youth

age of a large number of persons born in the years following World War I when birth rates were high.

Continued decline of farm youth in future enumerations is to be expected. Since fewer youth are required for replacement of farm workers lost through death or retirement, a decline in number represents a partial solution to the diminishing number of farm opportunities. A decline in the number of youth, on the other hand, poses problems in the maintenance of vital institutions and groups.

#### Only 3 Per Cent of Farm Youth Are Negroes

In 1940 there were 5,628 Negro farm youth in Missouri, constituting only 3 per cent of all farm youth. Approximately four-fifths of all Negro youth in the state are in nonfarm areas. Only in Mississippi, New Madrid and Pemiscot counties—southeast lowland counties—did the Negro element constitute a relatively important proportion of farm youth.

An increase in the number of Negroes born on farms may be expected to continue for some time in view of the birth rates prevailing among the Negro farm population. The number of Negro youth living on farms, however, decreased slightly between 1930 and 1940 and is likely to continue to decline as a result of migration.

### Youth is the Age of Migration from Farms

Between 1930 and 1940 the estimated net migration from Missouri farms was 87,000 persons. Of this number approximately 77,000 were young people who at the middle of the decade were between 15 and 24 years of age. In the previous decade, 1920 to 1930, it is estimated that 112,600 farm youth were lost as a result of migration.

Farm females migrate at an earlier age and in greater numbers than do farm males. Between 1930 and 1940, the net migration was greater for females between 15 and 19 years of age than for those aged 20 to 24 years. The situation was reversed for males. Total net migration amounted to 40,000 female youth as compared with 37,000 male youth.

Urban areas of the state gain in population as a result of farm youth migration. Farm areas produce and rear more than their proportion of children, many of whom later migrate. Thus, in 1940 while 37 per cent of all Missouri youth aged 15 years were on farms, only 25 per cent of all 24-year-olds were on farms. (See Figure 1.)

So, also, do other states gain in population as a result of the migration of Missouri farm youth. These states are chiefly those adjacent to Missouri and Pacific Coast states. California is the chief recipient of farm youth migrants from Missouri.

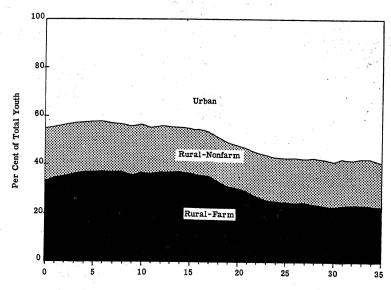


Figure 1.—Percentage Distribution of Youth by Single Years of Age, 0-35 years. Urban, Rural-Nonfarm, and Rural-Farm Populations, Missouri, 1940.

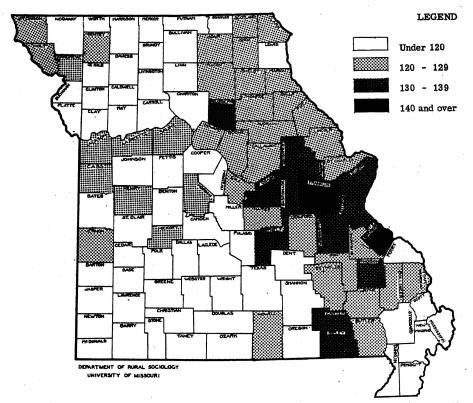
World War II has undoubtedly altered the attitude which young people have with respect to living at some distance from the parental home. It acquainted them with other localities in the United States where they would prefer to live. In a survey conducted among men in the armed forces during the war, responses from Missouri servicemen indicated that a large proportion did not plan to reside in their home state when released.

## Boys Outnumber Girls on Farms

In any given period the numbers of males and females who survive early childhood are approximately equal. But since females migrate in larger numbers than males, and at an earlier age, an excess of males on farms occurs in the youth group. In 1940 there were 118 male farm youth for every 100 female farm youth in the state. In every county the number of males exceeded the number of females. In contrast, urban and rural-nonfarm areas had more females than males in the youth group. (See Map 2.)

## Farm Girls Marry Earlier than Farm Boys

In 1940 about three-fifths of the farm girls had married by age 21 as contrasted with only one-fifth of the males of this same age. And in 1940 there were 13,245 single females aged 20 to 24 years as compared with 32,244 single males of the same age living on farms.



Map 2.—Number of Males Per 100 Females, Rural-Farm Youth 15-24 Years, 1940.

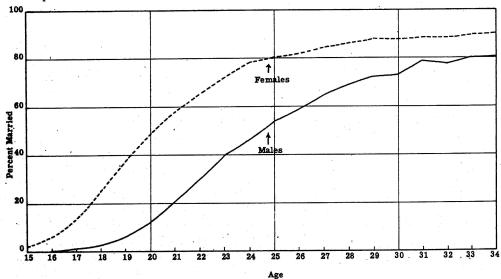


Figure 2.—Percentage of Farm Youth Married, by Age and Sex, Missouri, 1940.

Girls ordinarily marry earlier than boys because they mature earlier.

Farm girls marry earlier and their chances to marry during youth are greater than that of girls living in villages, towns, and cities. Farm boys, on the other hand, tend to postpone marriage later than do those of the same age living in nonfarm places.

#### HEALTH OF FARM YOUTH

#### The Death Rate Among Youth Is Low

The death rate in 1940 among all Missouri youth 15 to 24 years of age was 190 per 100,000 persons. This was the lowest rate for any age group except children of school age (5 to 14 years). Notwithstanding the fact that more has been done to reduce the death rates in urban areas, the death rate among farm youth remains below that found in nonfarm areas.

The average farm and village young person can look forward to a longer life span than the average urban youth. It is estimated that the average 20-year-old male living on farms and in places under 2,500 population may expect to live 49.5 more years. The future life expectancy for the urban boy aged 20 years is 46.3 years in places of 100,000 population or more and 47.7 years in smaller urban areas. Rural females aged 20 years have a greater expectancy of life than do rural males, but have a smaller advantage in life expectancy over urban females than exists between rural and urban males.

Decade by decade, the average life expectancy of young people has increased steadily. The steady improvement in chances for a longer life has come about largely as a result of the prevention and control of contagious diseases. Diseases once responsible for a large toll of deaths among young people are today less frequent due largely to vaccination and other preventive measures.

## Youth is the Favored Age for Physical Fitness

Youth fare well in comparison with other age groups with respect to illness and physical defects. A survey of 1,544 rural households in five Missouri counties in 1939-1942, found that persons aged 15 to 24 years had the lowest proportion reporting illness and the smallest number of illnesses per 1,000 persons of any age group. Only 37 per cent of the 973 youth aged 15 to 24 years were ill one or more days during the year prior to the survey, as compared to 44 per cent for all ages.

Physical and dental examinations conducted among 843 FSA client families in southeast Missouri in the spring of 1941 revealed that the farm youth examined averaged nearly 3 defects per person.

This average was somewhat greater than that found among persons in younger age groups, but less than that found in all older age groups.

#### Health of Farm Youth Needs Improvement

That the country is the most healthful place in which to live has been generally accepted. Yet records of the Selective Service System during World War II reveal that, for the United States as a whole, rejection rates and the proportion of registrants with defects were higher in rural areas than in urban areas. Rejection rates were higher among farmers and farm laborers than for any other large occupational group except domestic workers, emergency workers, and unemployed persons. Such data represent a reversal of the situation found in World War I, when the Provost-Marshall announced that "a considerable physical advantage accrues to the boy reared in the country."

Rejections among Missouri registrants, 18 to 37 years old, in World War II indicated that farm and village youth of Missouri demonstrated less fitness for passing a physical examination than did youth living in urban areas. In general, rejection rates were highest in counties with little or no urban population.

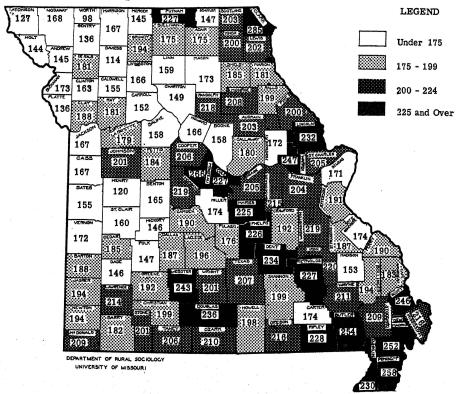
Rejection rates varied also with the level of living found in the area, and, in general, were lowest in northwest Missouri and highest in Ozark and southeast lowland areas of the state. (See Map 3.)

Illness prevents youth from carrying on normal activities. The extent to which illness was present among youth has been recorded for 973 youth aged 15 to 24 years in Dallas, Franklin, Lewis, New Madrid and Ray counties. Among these youth, 30,649 days were lost from usual activity through illness during a one-year period. This represented an average of 31.5 days per person for the entire group, or 78 days per person for those ill. Cause for most concern was the fact that 10 per cent of the illnesses were of three months or longer duration; doubtless many of these were chronic.

Diseases and defects generally require medical attention. Their presence may result in time lost from normal activity through illness, or may only limit the vigor or degree to which the individual operates in his daily living. Without medical attention, these diseases and defects are often debilitating and may result in more serious complications as the person becomes older. Among 667 youth examined in southeast Missouri, it was found that the defects and diseases most prevalent were anemia, defective tonsils, defective vision, deviation of the nasal septum, hernia, and syphilis. The average number of defects among white and Negro male youth was 2.2; among white females the average number of defects per person was 3.4 and among Negro females. 3.7.

Illnesses and defects most common among youth are of the type which can be prevented or corrected. Since the state of health throughout life is in no small way dependent upon the foundation laid in earlier years, it is of the utmost importance that young people have a knowledge of the principles of healthful living and that they obtain health and medical services when needed.

Farm youth have not been sufficiently exposed to health education, because it has not been widely disseminated among farm people. The evidence at hand indicates that poor sanitary practices, poor dietary habits and the use of patent remedies are common in many rural districts. Treatment and control of illness and disease have been based to a large extent upon folk knowledge handed down from generation to generation. Not enough has been known of the contribution that modern science, intelligently applied, can make towards a solution of these problems.



Map 3.—Number of Medical Rejections Per 1,000 World War II Selective Service Registrants, for Period Ending September, 1943, Missouri. (Exclusive of the number rejected because of psychiatric causes.) Data from Hepple, Lawrence Milton, "Selective Service Rejectees in Missouri; An Ecological and Statistical Study," Ph.D. thesis, University of Missouri, 1946.

Certain lines of evidence point to the fact that young people on farms do not obtain needed health and medical service. Results of the five-county health survey showed that less than three-fifths of the illnesses of persons 15 to 24 years old were treated by practitioners. Likewise, physician recommendations for young people examined in southeast Missouri indicated the need for considerable medical and surgical care.

#### SCHOOLING

## Farm Youth Get More Schooling than Formerly

Once an eighth grade education was regarded as sufficient for the farm boy or girl. To a considerable extent this is still true. Gradually, however, high schools have increased in number and more farm youth are attending high school.

In 1900 there were only 20,000 pupils attending high schools in Missouri, a large proportion of which were located in cities. In 1943 there were 159,549 pupils enrolled in high schools throughout the state, including a larger proportion of youth from villages, hamlets and farms. That some improvement in the formal education level of the farm population has occurred is illustrated in Figure 3. Those persons obtaining their education most recently have gone farther in school than have the other adult population whose school days are more remote.

There is indication that some progress has been made in recent years in the direction of enlisting the interest of farm boys and girls in continuing their schooling in high school. For the school years 1930-1932, only 57 per cent of the eighth-grade graduates of rural

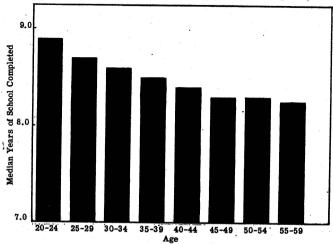
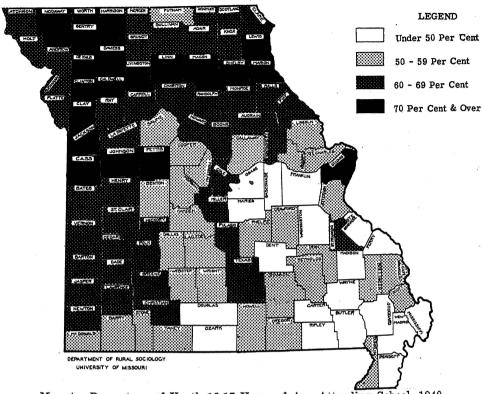


Figure 3.—Median Years of School Completed by Different Age Groups in Farm Population, Missouri, 1940.



Map 4.—Percentage of Youth 16-17 Years of Age Attending School, 1940.

schools, largely farm-reared youth, entered high school as compared with 73 per cent of such graduates in 1941-1943.

Furthermore, there has been an increase in the percentage of farm youth of high school age attending school. In 1930 only 47 per cent of the farm youth 16 and 17 years of age were in school as compared with 56 per cent in 1940.

## High School Attendance Varies with County

Although separate information for farm and nonfarm youth is not available on a county basis, it is probable that in counties where the proportion of total youth attending school is low, attendance is corresponding low among farm youth. Map 4 shows that the proportion of total youth 16 and 17 years of age attending school is highest in north and southwest Missouri counties and lowest in Ozark and southeast counties, varying from 78 per cent in Nodaway to 34 per cent in Washington county in 1940. With the exception of twelve counties—Barry, Butler, Cooper, Dent, Howell, Mississippi, New Madrid, Ozark, Schuyler, Stoddard, Washington, and Wayne—improvement is shown over 1930.

#### Most Youth Who Farm Never Attend High School

As is pointed out elsewhere, many farm-reared youth do not remain on farms and there is reason to believe that those with the most schooling leave to a greater extent than do those with less schooling. In 1940, ninety-six per cent of the farm youth of Missouri aged 20 to 24 years were not attending school. Among this group, 44,699 youth or 56 per cent had completed only an eighth grade education or less. Thirty-eight per cent had not even completed the eighth grade. Only 28 per cent had completed high school.

Some undoubtedly had begun high school, but dropped out early. A large proportion, no doubt, never entered high school. As yet the high school fails to interest or attract a large share of those youth who remain on farms.

## Farm Girls Get More Schooling than Farm Boys

In 1940, of the girls aged 15 to 24 years, 32 per cent were attending school as compared with 28 per cent of the boys. While there is little difference in the percentage of boys and girls completing grade school, girls more often finish high school than boys. In 1940 only 24 per cent of the boys aged 24 years as compared with 30 per cent of the girls had completed as much as a high school education.

Girls appear, also, to progress somewhat more rapidly in school than boys. In 1940, of the girls aged 15 years attending school, 53 per cent had completed the first year of high school as compared with 43 per cent of the boys. It has frequently been observed that the school curriculum contains more of interest for the girl than for the boy, and that boys do not progress in school as rapidly as girls because they lack interest. Another possible reason for retardation is that the greater employment opportunities for males tend to interrupt their schooling. And retardation itself may often discourage prolongation of schooling. A youth finding himself behind others of his own age in school often prefers to drop out, rather than lag behind his associates.

## Farm Youth Get Less Schooling than Nonfarm

Farm youth in general leave school at an earlier age than do village and city youth. In 1940 only 74 per cent of the male farm youth 15 years of age were attending school as compared with 86 per cent of the rural-nonfarm youth and 90 per cent of the urban youth. Among farm girls of the same age 77 per cent were attending school as compared with 83 per cent of the rural-nonfarm girls and 88 per cent of the urban girls. Throughout the youth age group, the proportion of farm youth attending school is below that found among rural-nonfarm and urban youth.

The level of educational attainment for farm youth who have

terminated their schooling is below that of youth in rural-nonfarm and urban areas. In 1940 the median years of schooling completed for persons 24 years old was 8.8 for rural-farm youth as compared with 10.5 for rural-nonfarm youth and 11.4 for urban youth.

#### Higher Education Uncommon Among Farm Youth

In 1940 only 6.7 per cent of the young people on farms between the ages of 20 and 24 years had obtained as much as one year of college work. This was in contrast to 11.3 per cent for youth of the same age in rural-nonfarm areas and 16.2 per cent for those in urban areas.

Less than two per cent of those persons living on farms aged 24 years had completed four years or more of college work. Farmreared youth who complete a college education rarely return to live on farms, but more commonly obtain positions in other occupations. When a young person leaves his home community to attend college it is generally accepted that he plans to "better" himself; that is, that he will do something other than farm. Despite the increasing complexity of the farm business and the need of the farmer for technical and diversified knowledge, the majority of farm people are not yet convinced that higher education is essential for farming.

That young people who remain on the farms are poorly equipped educationally is one of the most pressing problems confronting Missouri agriculture and rural life. Not only do they obtain less schooling than village and city youth, but various studies have shown that those who remain on farms have received less schooling than those who migrate from farms. The building of a scientific agriculture and better farm and community living in rural areas will in the future depend in no small way upon the education obtained by farm-reared youth who remain in the country.

#### **EMPLOYMENT**

## Farm Boys Are Employed Relatively Young

In 1940, the records show, 21 per cent of all Missouri farm boys 15 years of age were working or seeking work as compared with 9 per cent of rural-nonfarm boys and 7 per cent of the urban boys. At age 19 years, 80 per cent of all farm youth and 72 per cent of the nonfarm youth were working or seeking work.

During the recent years of full employment all youth not in the Armed Services have been entering the labor force at a younger age than is customary when employment opportunities are scarce. It is indeed likely, however, that nonfarm youth have continued their schooling and worked part-time to a greater extent than has the

farm-reared boy, who ordinarily seeks employment away from home and, thus, is more likely to terminate his schooling.

Farm boys because of a background of work experience about the farm are probably more mature and prepared for starting work at an earlier age than are town and city boys of similar age. From another point of view, however, it is unfortunate that such a large proportion of farm boys, either by choice or necessity, terminate their schooling in favor of employment.

Although the scarcity of labor during the war years has obscured the problem of a surplus of untrained rural youth in the labor market, the situation represents a potential threat for periods of less economic prosperity. For it is the youth without education who is least securely situated in times of labor surplus. The migration back to farms during the depression of the last decade revealed the unfavorable position of farm youth who had sought employment away from farms. The return to farms was greatest in those parts of the state where the educational level of the population was lowest and where the level of living and the ability to support the population are also lowest.

#### Few Girls Who Stay on Farms Work Outside the Home

In March, 1940 only 14 per cent of the farm females 15 to 24 years of age were working or seeking work outside the home. At age 17, somewhat less than 10 per cent of the farm females were in the labor force. At 19 years the proportion in the labor force increased to 22 per cent, probably as a result of high school completion. By age 24 the per cent of total females in the labor force had declined to 14 per cent.

Girls who remain on farms generally marry and withdraw from the labor force. Others leave the farms in search of employment, since the nature of the farming business excludes much occupational opportunity for the girl except as a homemaker. An increasing proportion of girls reared on farms enter the labor force, but they must leave the farm to do so. Remunerative employment for farm girls remaining at home is restricted largely to teaching in rural schools and to limited work to be had in nearby villages and towns.

## Not All Farm Boys Can Become Farm Operators

The traditional ideal of the young man who remains in agriculture is to operate a farm. But farm operation today requires more capital than can usually be accumulated at an early age. In 1945 only 14 per cent of the farm operators of the state were under 35 years of age. In 1940, in Missouri, 53,713 male youth 15 to 24 years were employed in agriculture. Most of them lived on farms. Of this

number, only 11,831 were classified as farmers or farm managers, while 78 per cent were employed as farm laborers, including 19,324 wage workers and 22,558 unpaid family workers. A negligible proportion of those employed in agriculture and aged 15 to 17 years were farmers. Generally, they were unpaid family workers employed on the home farm. After age 18 years the proportion working as unpaid family workers decreased, but of the age group 20 to 24 years, only one-third of those in agriculture were farm operators. Twenty-eight per cent were working without pay for parents or relatives, and the remaining 36 per cent were working for wages. (See Figure 4.)

More farm-reared children reach employment age than can readily be absorbed by the agricultural industry. According to estimates, only 48 per cent of the Missouri males reaching 20 years of age in the decade 1940-1950 will be needed for replacing farm operators who die or retire, as contrasted with 54 per cent in the previous decade, 1930-1940. Such estimates are conservative in view of the trend towards increased use of machinery and larger farm units.

Replacement requirements are highest in northern Missouri where the net migration of youth from farms is high and the birth rates relatively low. In northwest Missouri it is estimated that approximately 60 per cent of the youth coming 20 years of age in 1940-1950 will be needed for replacement. In an area comprising the remaining part of northern Missouri and certain southwest counties the proportion is 57 per cent. But in Ozark areas, only 42 per cent

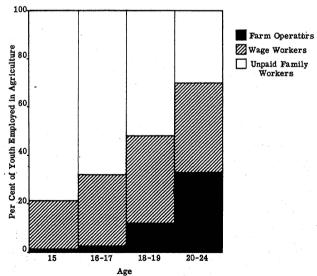


Figure 4.—Percentage of Male Youth Employed in Agriculture as Farm Operators, Wage Workers, and Unpaid Family Workers, by Age, Missouri, 1940.

of such youth are required for replacement. In southeast Missouri where birth rates are the highest in the state, only 35 per cent of the youth are needed for replacement in agriculture during this decade.

### Farm Youth Need More Occupational Training

Traditionally, farm youth have learned the occupations of farming and home-making on the home farm under parental supervision. Working for wages among neighboring farmers has further contributed to their training. Even today, probably the majority of those who farm received no additional training for the occupations of farmer and farm homemaker. There is little in the work of rural elementary schools that could be called direct preparation for farming or homemaking. More than one-half of those youth who remain on farms do not progress beyond elementary school, and hence, cannot take advantage of the vocational courses offered by high schools.

But not all farm youth who attend high school have an opportunity for work in vocational agriculture and vocational home economics, since to date many high schools do not offer such courses. Only 27 per cent of the high schools in Missouri were offering courses in vocational agriculture during the school year 1946-1947. The percentage of high schools offering home economics was also 27.

Specialized trade courses have not been established in the smaller high schools of the state to any extent because of the cost of equipment and maintenance of shop rooms and because of the small number of persons to be trained. Schools offering such courses are limited largely to urban centers where only a relatively small proportion of the farm-reared youth of the state are in attendance.

In addition to formal schooling, many farm youth supplement the vocational training obtained on the farm by means of 4-H Club work. In 1945 there were 22,783 members enrolled in 4-H Clubs in 110 counties of the state. While it is true that the 4-H Club members are in general younger than the age group under consideration here, in 1945 there were 4,151 youth 15 years of age or over enrolled in 4-H Club work. It is known that many youth have been enrolled in 4-H Clubs in their earlier years, but have since dropped out.

Improvement of occupational preparation hinges upon wider vocational offerings and greater high school attendance. In view of the intent to make public education available to all, more effort should be devoted to enrolling young people in high schools. But increasing the interest of farm youth in attending high school depends largely upon the development of a more diversified and vitalized curriculum.