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A Study of the Farming Status and Educational Needs of the Out-of-School Young Farmers in the Rockwell City (Iowa) Community School District

Don Albert Davis

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A STUDY OF THE FARMING STATUS AND EDUCATIONAL NEEDS OF THE OUT-OF-SCHOOL YOUNG FARMERS IN THE ROCKWELL CITY (IOWA) COMMUNITY SCHOOL DISTRICT

By

DOM ALBERT DAVIS

A research report submitted in partial fulfillment of the requirements for the degree Master of Education, Department of Education, South Dakota State College of Agriculture and Mechanic Arts

August, 1960
ACKNOWLEDGMENTS

The writer wishes to express his sincere appreciation and gratitude for the assistance of Mr. H. W. Gadda, Assistant Professor of Agricultural Education, South Dakota State College who helped greatly in designing the study and reading the manuscript.

He would also like to thank those who so graciously answered all the questions put to them in the interviews. Without their help the data for this problem could not have been collected.

To his wife Betty he would like to express sincere thanks and gratitude. Her encouragement and assistance was invaluable.

D.A.D.
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INTRODUCTION

The Rockwell City Community School District is located in the central part of Calhoun County, Iowa, and consists of approximately 120 square miles. According to the 1958 rural residence map of Calhoun County there were some 280 rural farm operators living in the school district.

Teachers of Vocational Agriculture have a duty to perform for their school and community in the instruction of the out-of-school youth. The preliminary step toward organizing a program for young farmers is to make a survey of their needs and interests. This is the main purpose of this study.

Wall\(^1\) stated that the future of farming and farm life depends upon the adequate program of instruction for the young farmers not enrolled in high schools. There has been no previous work with this group in the school district.

The writer has been teaching vocational agriculture in the district for the past year and desires to begin a course for these out-of-school young people. The survey was made to determine the answers to three main questions: (1) Who are the out-of-school young men between the ages of 16 and 35? (2) What are their needs and interests? (3) What help can the vocational agriculture instructor provide in the better use of approved practices?

In developing the study the writer has attempted to keep in mind the objectives for developing young farmer programs as set forth by Ekstrom and McClelland. These objectives are:

1. Progressive establishment in farming.
2. Progressive establishment in occupations related to farming.
4. Achievement of satisfactory social-civic environment.
5. Develop desirable personal qualities.

With these objectives in mind, the survey of the community was made to determine the farming status and educational needs of the young farmers living in the school district. A course of study could not be properly developed until such a survey had been made.

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PURPOSE OF THE STUDY

The controlling purpose of this study was to gain factual information and data that would aid the teacher of vocational agriculture in starting a program of instruction for the out-of-school youth living on farms in the local school district. Who are these young men? What are their needs and interests in agricultural education? Data for helping to answer such questions were sought.

Another purpose was to ascertain the farming status of these young men and to determine the kind of educational programs these men need and want. Information concerning the problems, needs, and interests of these young farmers is desired in order to inaugurate a course in vocational agriculture for this age group.

A third purpose of the study was to ascertain the interest of young farmers in attending meetings. Are there sufficient numbers of young farmers living in the school service area to justify a course in vocational education in agriculture for such persons whom it is not currently available? If so, what subject matter areas interest them the most?

A final purpose was to determine the number and kinds of approved practices that are being carried out on the farms of the community. Approved practices represent an indication of establishment in farming and should be considered an integral part of vocational education in agriculture.

This study then, purposes to yield factual data and information usable in formulating a plan of course offering which will be helpful
in the cooperative planning of a young farmer program in the community. Such a procedure is in harmony with desirable educational practice.
METHODS AND TECHNIQUES

The method of research used for the study was the normative study type of research using the interview technique. This method was used in an attempt to analyze and interpret the present status of young farmers in the community and to determine, insofar as possible, their interests and needs in vocational education in agriculture.

A questionnaire (Appendix B) containing twelve items was first developed by the writer, keeping in mind the farming status, age level and educational status of the farmers. The interests and needs of the young farmers were also taken into consideration including the approved practices with which they needed help in establishing them on their farms.

A random sampling of the community was then taken by placing the names of all 290 rural residents in a box and drawing out fifty names. These fifty farmers were interviewed individually on their farms. They were asked if there were any young farmers living with them between the ages of 16 and 35. If there were, these people were interviewed; if not, the writer did not complete the interview as it was desired to use only those between ages 16 and 35 in the study.

A total of 30 young farmers were found to be within the age group desired. Although many of the older farmers contacted during the study were interested in agricultural education, it was felt that they could best be instructed in an adult evening school. They were invited to attend the adult classes and many did. Three of the younger farmers
used in the study also attended the adult farmer class conducted by the writer during the past year.

After the data were collected the writer tabulated the results and the statistical analysis was computed. A course of study was then devised using the data to develop the subject matter areas and to determine the approved practices to include in the course.
REVIEW OF LITERATURE

There have been many studies made in recent years which sought to determine the needs and interests of young farmers in vocational agriculture. Many studies have revealed that there are as many young farmers living in most school districts as there are high school vocational agriculture students. The Agricultural Education Magazine has devoted much space in the past four years to the needs for young farmer programs. In one such article, Bender stated that there are enough young farmers in most communities to justify a young farmer program. Where this is not so it is difficult to justify vocational agriculture for high school students.

Perhaps the most extensive study was made in fifty-five Kentucky areas where it was found that there were two young farmers for every high school student enrolled in agriculture. In these areas it was indicated that the greater need for help is in the areas of farm management, livestock production, crop production, soil conservation, farm mechanics, program planning, and record keeping.

The writer found these areas to be the ones most desired in most of the studies reviewed. It was also found that young farmers are

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anxious to attend classes where they can solve their mutual problems. Rogers states that the primary problems and needs of young people today are: (1) solving financial problems, (2) lack of recreation, (3) selecting an occupation, (4) establishing a home, (5) military service, (6) lack of group activities, (7) keeping up with world affairs, (8) getting an education, (9) solving family problems, and (10) getting socially adjusted.

An Iowa study, made of the Kuepmer high school area at Carroll, Iowa, disclosed that there were sufficient numbers of out-of-school youth living on farms to justify a course for young farmers. In this study it was found that young farmers who had been 4-H members and vocational agriculture students were significantly more interested than were those who had not. Only fifteen of the ninety-eight young farmers surveyed indicated little or no interest in attending classes for young farmers. It was also indicated that shop skills, livestock feeding, livestock management and keeping and using farm records were the areas most desired. There was a significant difference, at the one per cent level between members of an adult class and non-membership in the matter of their interest in attending meetings.

Studies made in New York, North Carolina and West Virginia.

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indicated that there was sufficient interest toward establishing young farmer programs in those states. An Oklahoma study involving 94 per cent of the vocational agriculture teachers in 144 communities indicated ten or more young farmers living in each of their respective communities while fifty-five per cent indicated twenty or more young farmers.

Many studies indicate that there is a definite need for instruction for young farmers. Price has indicated that vocational agriculture instructors should make a survey of their local communities to determine the local needs for developing young farmer programs.

In reviewing the literature for this study the author found that the expressed needs in many of the studies were in the areas of agricultural economics, farm mechanics, record keeping, and farm management. Several of the studies indicated a need in the areas of livestock and crop production.

Hemp interviewed sixty-four farmers ranging from 16 to 70 years of age in an Illinois study. He found thirteen of these sixty-four were beginning farmers between the ages of eighteen and thirty years. He concluded that the first five years of farming are the critical years.

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9 Ibid.

which should be designated as the beginning farmer stage of life.

All of the literature reviewed indicates that the main problem of young farmers is becoming successfully established in farming. Most of the writers agree that the vocational teacher should survey his community to ascertain the needs and interests of these young men. Such persons are of the age at which they are just beginning to become established and need and want instruction.

Phipps\(^1\) made an extensive study involving 994 farmers in sixty-three Illinois communities. The purpose of this study was to find out who enrolls in adult farmer courses. It was found that eighty-one percent were between the ages of twenty-five and fifty-five. This study also showed that the courses for adult farmers appealed most to the farmer in the middle age group. It indicated that a young farmer class and an adult farmer class should be separated since the problems of the two groups differ greatly.

A study of considerable interest was made in Texas\(^2\) in 1956 to study the educational needs of the young farmers in the eastern part of that state. The study revealed that some of the farmers were making a living from their farming businesses but others had found it necessary to find some part-time work off the farm in order to supplement their


incomes. The young farmers in this study had a great desire to organize a young farmer course in order to better study and solve their problems.

There is a great deal of data that would indicate that instruction for out-of-school youth is associated with becoming better established in farming. Young farmers who attend young farmer classes have been found to adopt more approved farming practices than have non-members. The young farmers who participate in systematic instruction for out-of-school youth have advanced higher on the "agricultural ladder" and have demonstrated more leadership traits than those who do not attend such classes.

Bass13 made a study in 1954 to determine whether systematic instruction in vocational agriculture for out-of-school youth was associated with their advancement in farming, increase in net worth, use of approved practices, and demonstration of certain leadership traits. He compared two groups from twenty-nine high school areas in the state of Virginia. These two groups were comparable in their farming status upon leaving high school. One group of thirty-nine young farmers was enrolled in and attending meetings for young farmers. The control group of thirty young farmers had not attended such meetings.

The findings of this study indicate that there is an association between attendance at meetings and advancement in farming status. All sixty-nine young farmers had farmed an average of 8.4 years. A sizable majority of 84.6 per cent of those who had received instruction had reached the partnership status of farming and only 1.1 per cent of this group were in a lower stage of establishment. Only 53.4 per cent of the control group were in the partnership stage and 20 per cent were in a lower status. There was a significant difference in the two groups in adopting approved practices. The group with young farmer training had adopted 90.5 per cent of the approved practices listed, the group without training had adopted 79.5 per cent of the approved practices. It was found in this study that there was no significant difference in the two groups with respect to their increase in net worth.
RESULTS OF THE STUDY

The Average Age of the Young Farmers Studied

Facts regarding the average age of the young farmers interviewed were desired in order that instruction could better be provided to suit their age group. The age groups and the percentages within each group are revealed in Table I.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Frequency</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-20</td>
<td>8</td>
<td>26.7</td>
</tr>
<tr>
<td>21-25</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td>26-30</td>
<td>9</td>
<td>30.0</td>
</tr>
<tr>
<td>31-35</td>
<td>6</td>
<td>20.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Since 50 per cent of the young farmers were under 25 years of age and 50 per cent were over, the mean was computed using the formula

\[ M = \frac{\sum X}{n} \]

It was found that the mean age of the group was 26.2 years.

This would indicate that 50 per cent of those interviewed were under 20 years of age. It would probably be wise to limit the program for young farmers to those between 16 and 25 years of age. It is interesting to note that only six of these young farmers were over 30 years of age and eight were under 20. It would seem that these young farmers are just becoming established in farming.
Farming Status

To determine the farming status of the young farmers studied they were asked to list the stage, on the agricultural ladder, which they had attained. A compilation of such data is revealed in Table II.

**Table II. The Farming Status of Thirty Young Farmers**

<table>
<thead>
<tr>
<th>Farming Status</th>
<th>Number</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner-Operator</td>
<td>1³</td>
<td>3.2</td>
</tr>
<tr>
<td>Renter-Operator</td>
<td>19</td>
<td>61.2</td>
</tr>
<tr>
<td>Partnership in Home Farm Business</td>
<td>4</td>
<td>12.9</td>
</tr>
<tr>
<td>Working on Home Farm for Definite Wages</td>
<td>3</td>
<td>9.7</td>
</tr>
<tr>
<td>Working on Home Farm for a Share of Earnings</td>
<td>2</td>
<td>6.5</td>
</tr>
<tr>
<td>Living at Home and Working in Town</td>
<td>2</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>31⁴</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Using the "agricultural ladder" as an indication of farming status, it is readily seen that over half, or 61.2 per cent of the thirty farmers had reached the renter-operator stage. Only one person had reached the top stage of the ladder and he was a part owner and renter. Four individuals, or 12.9 per cent, had reached the partnership stage of farming. It is interesting to note that all four of

*One respondent was an owner-operator and also a renter.*
of these individuals are in partnership with their fathers. Various
types of partnership agreements were indicated in the interviews. Three
young farmers were still working at home for a definite wage for a total
of 9.7 per cent. These data indicate that some of the men studied had
not advanced far on the "agricultural ladder." Two of the individuals,
or 6.5 per cent were still living at home but working in town. Another
six per cent were working at the farm home for a share of the earnings.

Another index of the farming status of the young farmers is
the number and scope of their various farm enterprises. Their present
farm enterprises and the average size of each are disclosed in Table
III.

<table>
<thead>
<tr>
<th>Farm Enterprise</th>
<th>Number Reporting</th>
<th>Average Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain Crops</td>
<td>26</td>
<td>179.4 acre</td>
</tr>
<tr>
<td>Market Hogs</td>
<td>24</td>
<td>103.4 head</td>
</tr>
<tr>
<td>Breeding Hogs</td>
<td>21</td>
<td>19.8 head</td>
</tr>
<tr>
<td>Breeding Ewes</td>
<td>20</td>
<td>24.7 head</td>
</tr>
<tr>
<td>Market Lambs</td>
<td>20</td>
<td>28.6 head</td>
</tr>
<tr>
<td>Poultry</td>
<td>19</td>
<td>103.5 birds</td>
</tr>
<tr>
<td>Breeding Beef Cattle</td>
<td>10</td>
<td>14.2 head</td>
</tr>
<tr>
<td>Fattening Beef Cattle</td>
<td>9</td>
<td>31.0 head</td>
</tr>
<tr>
<td>Dairy</td>
<td>7</td>
<td>4.5 head</td>
</tr>
<tr>
<td>Other (Dog)</td>
<td>1</td>
<td>1 head</td>
</tr>
</tbody>
</table>
Twenty-five of the twenty-eight young farmers, who were farming full time, indicated an average of 179.4 acres of grain crops. A large part of this acreage is in corn as the Rockwell City Chamber of Commerce carries as its slogan the "Golden Buckle on the Corn Belt". This is by far the largest farm enterprise. Twenty-four individuals indicated an average of 102.4 head of market hogs. The third ranking enterprise was breeding hogs with twenty-one individuals reporting an average of 19.8 head. Breeding ewes and market lambs tied for fourth place in the ranking with twenty individuals reporting an average of 24.7 and 28.6 head, respectively. These young farmers reported an average of 103.5 birds in their poultry enterprises.

Breeding beef cattle and fattening beef cattle were on the lower end of the scale. Ten individuals reported an average of 14.2 head of breeding beef cattle and nine persons reported an average of thirty-one head of fattening beef. Only seven persons listed dairy as an enterprise and the average number of head was 4.5. One respondent listed his registered dogn as an enterprise.

A third factor used to ascertain farming status was the size of the farm operated by those interviewed. The ranking of the sizes of farms operated is shown in Table IV.

It was found that over one-half, or 53.6 per cent of those interviewed were operating farms of between 160-230 acres. Eight of those surveyed indicated a farm size of between 80 and 160 acres for a percentage of 28.5. Only three individuals were operating farms of over 320 acres in size. One of the young farmers was farming between
TABLE IV. SIZES OF FARMS OPERATED

<table>
<thead>
<tr>
<th>Size of Farm</th>
<th>Frequency</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>160-320 acres</td>
<td>15</td>
<td>53.6</td>
</tr>
<tr>
<td>80-160 acres</td>
<td>8</td>
<td>28.6</td>
</tr>
<tr>
<td>320-640 acres</td>
<td>3</td>
<td>10.7</td>
</tr>
<tr>
<td>40-80 acres</td>
<td>1</td>
<td>3.6</td>
</tr>
<tr>
<td>20-40 acres</td>
<td>1</td>
<td>3.5</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>100.0</td>
</tr>
</tbody>
</table>

20 and 40 acres and one person between 40 and 80 acres. The mean size of the 30 farms surveyed was 217.5 acres. This would fall within the 160-320 acre group.

Educational Needs and Interests

It was desirable to determine the educational status of the young farmers involved in the study. This was for the purpose of finding out the amount of education that had been previously received. Data concerning the number of years completed and the percentage of the total completing each level are revealed in Table V.

The mean number of years of school completed by this group of young farmers was 10.4. Four individuals, or 13.3 per cent, completed only eight years of schooling while 6.7 per cent had completed two years of high school. These data indicate that 67.7 per cent of the individuals had completed twelve years of school. Only one of the individuals had
attended a college or university.

**TABLE V. NUMBER OF YEARS OF SCHOOLING COMPLETED**

<table>
<thead>
<tr>
<th>Years of School Completed</th>
<th>Frequency</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>12</td>
<td>23</td>
<td>76.7</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Another indication of the need for training in agricultural education for young farmers is the amount of previous training in agriculture. For this reason the respondents were asked the question: what training have you had in agriculture? Data pertaining to this question are revealed in Table VI.

**TABLE VI. TRAINING RECEIVED IN AGRICULTURE**

<table>
<thead>
<tr>
<th>Kind of Training</th>
<th>Number of Individuals</th>
<th>Mean Number of Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-H Club</td>
<td>13</td>
<td>3.5</td>
</tr>
<tr>
<td>Vocational Agriculture</td>
<td>12</td>
<td>2.4</td>
</tr>
<tr>
<td>Adult Classes in Agriculture</td>
<td>10</td>
<td>2.5</td>
</tr>
<tr>
<td>College Agricultural Course</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

All thirty of the individuals had received agricultural training.
of one kind or another. Eighteen of those interviewed reported 4-H Club membership for a mean number of years of 3.5. Twelve had taken a vocational agriculture course in high school for an average of 2.4 years. Ten of the young farmers had attended adult classes in agriculture for an average of 2.5 years. Only one person had attended college and had taken an agricultural course.

Interest in Attending Meetings

When the writer first began the design of the study, it was a purpose to determine the interests of the young farmers in the school area in attending meetings for such a group. Each young farmer interviewed was asked to indicate: (1) Very much Interested, (2) Some Interest, or (3) No Interest. These data are disclosed in Table VII.

<table>
<thead>
<tr>
<th>TABLE VII. INTEREST IN ATTENDING MEETINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of Interest</td>
</tr>
<tr>
<td>--------------------</td>
</tr>
<tr>
<td>Very Much Interest</td>
</tr>
<tr>
<td>Some Interest</td>
</tr>
<tr>
<td>No Interest</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

The foregoing data reveal that 83.4 per cent of those interviewed indicated at least some degree of interest in attending meetings. Eleven of those were very much interested in attending meetings. Nearly half, or 46.7 per cent, were somewhat interested in attending such meetings.
Five of the individuals or 16.6 per cent indicated no interest in attending. It is of interest to note that these five were all in the younger age group.

The author felt that it was desirable to determine the best time suited for a young farmer program; therefore, they were asked to indicate the best day of the week and time of the day to attend classes. The results found are indicated in Table VIII.

<table>
<thead>
<tr>
<th>Preferred Day</th>
<th>Preferred Time</th>
<th>Number</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Morning</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td>Monday</td>
<td>Evening</td>
<td>12</td>
<td>48.0</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Morning</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Evening</td>
<td>3</td>
<td>12.0</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Morning</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Evening</td>
<td>4</td>
<td>16.0</td>
</tr>
<tr>
<td>Friday</td>
<td>Morning</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Friday</td>
<td>Evening</td>
<td>4</td>
<td>16.0</td>
</tr>
<tr>
<td>Saturday</td>
<td>Morning</td>
<td>1</td>
<td>4.0</td>
</tr>
</tbody>
</table>

The foregoing data indicate that 92 per cent of the young farmers interviewed prefer evening classes. Only two who responded to this question indicated a preference for morning classes. It would seem difficult to select a particular day of the week for meetings but
the first three days of the week would probably be the best. Nearly
one-half, or 48 per cent preferred Monday evening, and 12 per cent
preferred Tuesday evening. Wednesday evening was preferred by 16 per
cent of those responding.

Subject Matter Interest

In order to determine the course content for young farmers,
they were asked to check those subject matter areas which interested
them most. The preferred ranking of the 19 different subject matter
areas is indicated in Table IX.

The rankings indicated that the most desired subject matter
areas were: corn production, marketing farm products, soybean pro-
duction, swine production, weed control, and soil conservation. These
areas were desired by over 70 per cent of the respondents. Planning
annual and long time crop and livestock programs and small grain pro-
duction were listed by 53.3 per cent of those interviewed. Beef cattle
production and farm mechanics were listed by 12 individuals, or 40 per
cent each. Poultry production and sheep production were the subject
matter areas listed by 26.6 and 33.3 per cent, respectively. Over 25
per cent of those questioned indicated a desire for instruction in areas
related to buying and renting land. Areas relating to establishment and
rural sociology and family living were checked by 13.3 per cent of the
young farmers studied. Dairy production was listed by 10 per cent, and
areas relating to our economic system and other occupations were listed
by only 6.6 per cent each.
<table>
<thead>
<tr>
<th>Subject Matter Area</th>
<th>Number</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn Production</td>
<td>28</td>
<td>93.3</td>
</tr>
<tr>
<td>Marketing Farm Products</td>
<td>24</td>
<td>80.0</td>
</tr>
<tr>
<td>Soybean Production</td>
<td>22</td>
<td>70.3</td>
</tr>
<tr>
<td>Swine Production</td>
<td>21</td>
<td>70.0</td>
</tr>
<tr>
<td>Weed Control</td>
<td>21</td>
<td>70.0</td>
</tr>
<tr>
<td>Soil Conservation</td>
<td>21</td>
<td>70.0</td>
</tr>
<tr>
<td>Planning Annual and Long Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crop and Livestock Programs</td>
<td>16</td>
<td>53.3</td>
</tr>
<tr>
<td>Small Grain Production</td>
<td>16</td>
<td>43.3</td>
</tr>
<tr>
<td>Beef Cattle Production</td>
<td>12</td>
<td>40.0</td>
</tr>
<tr>
<td>Farm Mechanics</td>
<td>12</td>
<td>40.0</td>
</tr>
<tr>
<td>Poultry Production</td>
<td>11</td>
<td>36.6</td>
</tr>
<tr>
<td>Sheep Production</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>Farm Law and Taxation</td>
<td>8</td>
<td>26.6</td>
</tr>
<tr>
<td>Areas Related to Buying and Renting Land</td>
<td>6</td>
<td>26.0</td>
</tr>
<tr>
<td>Areas Relating to Establishment</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Rural Sociology and Family Living</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Dairy Cattle Production</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>Areas Relating to our Economic System</td>
<td>2</td>
<td>6.6</td>
</tr>
<tr>
<td>Areas Relating to Other Occupations</td>
<td>2</td>
<td>6.6</td>
</tr>
</tbody>
</table>
In order to formulate course content to meet the needs of all the farmers they were asked what changes in agriculture should be included in a young farmer course. Data pertaining to new trends in agriculture that should be included in a young farmer course are disclosed in Table I.

**TABLE I. NEW TRENDS IN AGRICULTURE TO INCLUDE IN A YOUNG FARMER COURSE**

<table>
<thead>
<tr>
<th>Trend</th>
<th>Number</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous Corn Versus</td>
<td>21</td>
<td>70.0</td>
</tr>
<tr>
<td>Rotations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple Farrowing of Swine</td>
<td>18</td>
<td>60.0</td>
</tr>
<tr>
<td>Vertical Integration</td>
<td>17</td>
<td>55.6</td>
</tr>
<tr>
<td>Marketing on Grade and Weight Basis</td>
<td>12</td>
<td>40.0</td>
</tr>
<tr>
<td>Minimum Tillage</td>
<td>6</td>
<td>20.0</td>
</tr>
<tr>
<td>Surgical Removal of Baby Figs</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>Corporation Farming</td>
<td>2</td>
<td>3.3</td>
</tr>
</tbody>
</table>

The foregoing data indicate that 70 per cent of the young farmers desired instruction in continuous corn versus rotations. Sixty per cent were interested in multiple farrowings of swine and 55.6 per cent were interested in vertical integration. Marketing on grade and weight was indicated as important by 40 per cent of those interviewed. Another 20 per cent indicated interest in minimum tillage. Only 3.3 per cent of those studied were interested in surgical removal of baby
pigs and corporation farming. It is the opinion of the writer that little
is understood by the respondents concerning some of these recent trends
in agriculture.

A third means used to gain information about the educational
needs of the young farmers was their expressed desire and interest in
occupations other than farming. The findings in this area are revealed
in Table XI.

**TABLE XI. INTERESTS OF THIRTY YOUNG FARMERS**
**IN OCCUPATIONS OTHER THAN FARMING**

<table>
<thead>
<tr>
<th>Occupations</th>
<th>Number</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>24</td>
<td>80.0</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Lumber Business</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Mechanics</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>Machinery Sales</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Eighty per cent of the farmers interviewed were interested only
in farming. Four individuals, or 13.4 per cent, were interested in
machinery sales and mechanics. Two individuals, or 6.6 per cent,
indicated interest in the lumber business and mathematics. It is
interesting to note that all occupations listed are closely related to
farming.

These facts would indicate that the majority of the farmers
studied are satisfied with the occupation of farming. Only six persons indicated any interest in other occupations. Two of the individuals are currently working in town at the occupation in which they expressed interest.

Approved Practices

Another indication of the needs and interests of those studied came from the approved practices that are currently practiced, those needed, and those not needed. As used here, an approved practice is a practice that is used by the well established and successful farmer. A list of the approved practices is included on the questionnaire (Appendix B). The impressions of the young farmers concerning the use of approved practices are revealed in Table XII.

These impressions indicated that fifty-one of the seventy-three approved practices are currently being practices by one or more individuals. The practices being carried out are listed in rank order according to their frequency on the farms of the respondents. Those practices most frequently indicated include: providing plenty of fresh water, cultivating to control weeds, conserving soil and other natural resources, inoculating legumes before planting and preparing a clean firm seedbed. Nearly all those responding indicated that they were carrying out some approved practice.

The practices which were indicated most frequently as being needed are: plant at the proper rate, test soil, control of disease and insect pests, flush ewes before breeding and watch the markets for highest prices. Sixty-seven of the practices listed were indicated as
<table>
<thead>
<tr>
<th>Selected Practice</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Now Practice</td>
</tr>
<tr>
<td>Dairy Cattle:</td>
<td></td>
</tr>
<tr>
<td>Select Breeding Stock with High Production Records</td>
<td>3</td>
</tr>
<tr>
<td>Keep Breeding Records</td>
<td>1</td>
</tr>
<tr>
<td>Dry Cows Two Months Before Calving</td>
<td>4</td>
</tr>
<tr>
<td>Feed Cows According to Production</td>
<td>0</td>
</tr>
<tr>
<td>Vaccinate Heifers for Bang's Disease</td>
<td>6</td>
</tr>
<tr>
<td>Provide Fresh Water Daily</td>
<td>11</td>
</tr>
<tr>
<td>Provide Adequate Ventilation</td>
<td>0</td>
</tr>
<tr>
<td>Clean and Sterilize all Utensils</td>
<td>5</td>
</tr>
<tr>
<td>Treat for Grubs</td>
<td>0</td>
</tr>
<tr>
<td>Use Fast Milking Procedure</td>
<td>0</td>
</tr>
<tr>
<td>Use Artificial Insemination Where Available</td>
<td>0</td>
</tr>
<tr>
<td>Arrange Barn for Labor Saving</td>
<td>2</td>
</tr>
<tr>
<td>Beef Cattle:</td>
<td></td>
</tr>
<tr>
<td>Select a Beef Production Program Adapted to Your Farm</td>
<td>1</td>
</tr>
<tr>
<td>Provide Adequate Fresh Water</td>
<td>18</td>
</tr>
<tr>
<td>Detect and Control Common Diseases</td>
<td>0</td>
</tr>
<tr>
<td>Cull Regularly Keeping in Mind Objectives</td>
<td>0</td>
</tr>
<tr>
<td>Selected Practice</td>
<td>Frequency Needed</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>Control Insects and Pests Harmful to Cattle</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>Feed Balanced Ration</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>Castrate and Dehorn Properly</strong></td>
<td>8</td>
</tr>
<tr>
<td><strong>Market When Prices are High</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>Purchase Feeders When Prices are Lowest</strong></td>
<td>0</td>
</tr>
</tbody>
</table>

**Swine:**

<table>
<thead>
<tr>
<th>Selected Practice</th>
<th>Frequency Needed</th>
<th>Frequency Not Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Select Meat Type Sows</strong></td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td><strong>Breed to a Meat Type Boar</strong></td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td><strong>Flush Sows Two Weeks Before Breeding</strong></td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td><strong>Keep Breeding Records</strong></td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td><strong>Pet and Tender Breed Sows</strong></td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td><strong>Follow Strict Sanitation</strong></td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td><strong>Earmark Pigs at Birth</strong></td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td><strong>Feed Sows a Balanced Ration</strong></td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td><strong>Construct Farrowing Stalls</strong></td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td><strong>Provide Plenty of Water</strong></td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td><strong>Practise Multiple Farrowing</strong></td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td><strong>Worm Pigs as Necessary</strong></td>
<td>2</td>
<td>12</td>
</tr>
</tbody>
</table>
### TABLE XII CONTINUED. THE IMPRESSIONS OF THIRTY YOUNG FARMERS CONCERNING THE USE OF APPROVED PRACTICES

<table>
<thead>
<tr>
<th>Selected Practice</th>
<th>Frequency</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Now Practice</td>
<td>Needed</td>
<td>Not Needed</td>
</tr>
<tr>
<td>Sheep:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select Good Mutton Type Ewes</td>
<td>2</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Breed to Purebred Ram</td>
<td>6</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Flush Ewes Two Weeks Before Breeding</td>
<td>2</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td>Keep Ram in Good Condition</td>
<td>1</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>Control Internal Parasites</td>
<td>4</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Feed Ewes a Balanced Ration</td>
<td>5</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>Dock All Lambs at Ten Days</td>
<td>10</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Plan a Year Around Pasture Program</td>
<td>0</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Cull Unproductive Ewes</td>
<td>6</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Shear All Wool But Avoid Second Cuts</td>
<td>18</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Watch Markets for Highest Prices</td>
<td>0</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Creep Feed All Lambs at One Week of Age</td>
<td>4</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Poultry:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Move Pullets to Laying House by October 1</td>
<td>2</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>Cull Sick Birds as They Appear</td>
<td>2</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Provide Plenty of Feeder Space</td>
<td>13</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>
TABLE XII CONTINUED. THE IMPRESSIONS OF THIRTY YOUNG
FARMERS CONCERNING THE USE OF
APPROVED PRACTICES

<table>
<thead>
<tr>
<th>Selected Practice</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Now Practice</td>
</tr>
<tr>
<td>Provide 7-9 inches Roost Space per Bird</td>
<td>2</td>
</tr>
<tr>
<td>Keep Records of Egg Production</td>
<td>1</td>
</tr>
<tr>
<td>Separate Cockerels and Pullets at 8 Weeks</td>
<td>2</td>
</tr>
<tr>
<td>Provide Roosts When Chicks are one Month Old</td>
<td>0</td>
</tr>
<tr>
<td>Feed Balanced Ration to Chicks and Pullets</td>
<td>2</td>
</tr>
<tr>
<td>Crops and Soils:</td>
<td></td>
</tr>
<tr>
<td>Use Approved Hybrids and Varieties</td>
<td>7</td>
</tr>
<tr>
<td>Test Soil and Apply Lime and Fertilizer</td>
<td>2</td>
</tr>
<tr>
<td>Innoculate Legumes Before Planting</td>
<td>12</td>
</tr>
<tr>
<td>Clean Seed If Necessary</td>
<td>4</td>
</tr>
<tr>
<td>Plant at the Proper Rate for Your Soil</td>
<td>2</td>
</tr>
<tr>
<td>Cultivate Corn to Control Weeds</td>
<td>24</td>
</tr>
<tr>
<td>Use 2,4D Spray to Control Weeds</td>
<td>18</td>
</tr>
<tr>
<td>Control Insect Pests in Stored Grain</td>
<td>3</td>
</tr>
<tr>
<td>Prepare Clean, Firm Seedbed</td>
<td>24</td>
</tr>
<tr>
<td>Conserve Soil and Other Resources</td>
<td>10</td>
</tr>
<tr>
<td>Selected Practice</td>
<td>Now Practice</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Pasture Management:</td>
<td></td>
</tr>
<tr>
<td>Plan for Adequate Pasture for Each Season of the Year</td>
<td>5</td>
</tr>
<tr>
<td>Combine Legumes and Grasses in Pasture Crops</td>
<td>2</td>
</tr>
<tr>
<td>Practice Rotation Grazing</td>
<td>4</td>
</tr>
<tr>
<td>Apply Proper Amount of Nitrogen on Sodbound Grasses</td>
<td>3</td>
</tr>
<tr>
<td>Defer Grazing, Mow, and Spray for Weed Control</td>
<td>4</td>
</tr>
</tbody>
</table>

needed by a large number of the respondents. Only twenty-seven of the practices were indicated as not needed by one or more individuals. A large number of those indicating no need for the practice did so because they do not currently have the enterprise on the farm. Several of the respondents indicated a need for all of those practices listed. Approved practices can best be inaugurated in a course of study by on-the-farm visits.
SUMMARY AND CONCLUSIONS

This study was undertaken for the primary purpose of determining the needs and interests of the young farmers in the Rockwell City School District. Facts concerning the farming status and educational status of these farmers were also desired.

The study revealed the following facts about the farming status of the young farmers interviewed.

1. The average age of the young farmers was 35.2 years
2. Slightly over one half are renters/operators
3. Each farm an average of 217.5 acres of land
4. Grain crops represent the predominant farm enterprise.

These facts would indicate that the young farmers are becoming established in farming and should be provided with any help they need and desire from the vocational agriculture teacher. Only one person had reached the stage of owner-operator on the "agricultural ladder".

From the interest indicated it would appear that most of these young farmers have some interest in attending classes. Over 83 per cent of those surveyed indicated at least some interest. It would appear that the greatest interest lies in the areas of crop production, marketing of farm products, swine production, weed control and soil conservation. Long time planning, farm mechanics and beef cattle production drew the interest of nearly one-half of those surveyed. The areas of poultry production, sheep production and farm law should be taught but less emphasis placed upon them.

Perhaps some attention should be placed upon such areas as those
relating to establishment, rural sociology and other occupations.

These subject matter areas were desired by only six per cent of those studied and should be given only minor attention. Dairy production should also be given only minor attention.

It may be concluded that there are sufficient numbers of young farmers interested in a program in vocational agriculture to justify such a course. The instructor should develop a course of study and include on-the-farm instruction that would help to encourage the use of approved practices.

Further research is needed involving larger numbers of farmers. The instructor should take steps to get the program started at an early date. This study has indicated, as others have, that young farmers need and want instruction. Vocational agriculture teachers should see that such instruction is given.

Preliminary steps have been taken to develop a course of study for the young farmers in the local school district. A four year course has been outlined in Appendix A. This course of study was designed according to the relative urgency of the various subject matter areas desired by those studied. The State plan for vocational agriculture calls for a young farmer class to have at least ten members for a total of thirty hours of instruction per year. This has been kept in mind while developing the course outline.
LITERATURE CITED


APPENDIX
APPENDIX A.

A Four-Year Course Outline for Young Farmers

The following is an anticipated four-year course outline for the young farmers in the Rockwell City Community School District. The course was developed after a study was made of the area. The number of classes and content of the course are merely suggestions. Each course provides 15 or more classes. The final course should be developed in cooperation with those attending.

First Year Course

Corn Production..........................................................4 classes.

1. Selecting the hybrid for your farm.
   a. Comparison of corn yield tests
   b. Maturity dates of various hybrids
   c. Length of growing season

2. Cultural practices for corn
   a. Methods of seedbed preparation
   b. Testing soil and applying fertilizer

   a. Pre-emergence spraying
   b. Proper time of harvesting
   c. Artificial drying of wet corn

Marketing Farm Products.............................................3 classes.

1. Price determining forces.
a. Laws of supply and demand  
b. How these forces affect farm production  

2. Seasonal price variations.  
   a. Seasonal prices for cattle  
   b. Seasonal prices for hogs  
   c. Seasonal prices for sheep  
   d. Seasonal prices for crops  

3. Government price support programs.  
   a. How these affect market prices  
   b. How support prices affect production  
   c. Surplus farm products  

Soybean Production ..........................................................3 classes.  

1. Selection of the variety.  
   a. Dates of maturity  
   b. Disease resistance  
   c. Yield comparison of various varieties  

2. Treatment of seed before planting.  
   a. Disease treatment  
   b. Immoculation of soybean seed  

3. Harvesting and marketing.  

Swine Production............................................................3 classes.  

1. Selection of breeding stock.  
   a. Meantype hogs  
   b. Crossbreeding for hybrid vigor  

2. Care of sow and pigs at farrowing time.  
   a. Feeding the sow before and after farrowing  
   b. Treating baby pigs with iron for prevention of anemia  

Soil Conservation..........................................................2 classes.  

1. Controlling wind and water erosion  
   a. Cropping practices  
   b. Mechanical control  

2. Land drainage and soil structure
Second Year Course

Corn Production.................................................. 2 classes.
1. Controlling insect pests.
   a. Corn borer control
   b. Root worm control
   c. Other insect pests
2. Planning the crop to fit your livestock program.
   a. Amount of corn needed to feed
   b. Estimating yields and production

Weed Control.......................................................... 2 classes.
1. Identification and control of noxious weeds
2. Methods of controlling weeds
   a. Cultural practices
   b. Chemical weed control

Planning Long Time and Annual Crop and Livestock Program.....1 class.
1. Planning the livestock and cropping system.
   a. Fitting the cropping system to the livestock program

Small Grain Production............................................1 class.
1. Raising small grain crops in Iowa
   a. Selection of varieties
   b. Fertilizer needs
   c. Control of insects and diseases

Beef Production..................................................2 classes.
1. Developing a feeding program for your farm.
   a. Types of feeding programs
   b. Purchasing feeder cattle
2. Nutrition in beef cattle
   a. The various food nutrients
   b. How an animal used its feed
   c. Vitamin and mineral requirements
Farm Mechanics.........................................................3 classes.

1. Care, maintenance and adjustment of farm machinery.
   a. Lubrication and daily maintenance
   b. Adjustment of plow, combine, mower and other machinery

2. Care and maintenance of farm motors.
   a. Gasoline engines
   b. Electric motors

Poultry Production..................................................1 class.


Sheep Production....................................................1 class.

1. Management of the farm flock.
   a. Care of breeding stock
   b. Care of lambs
   c. Fattening lambs

Areas Relating to Establishment.................................1 class.

1. How to become better established in farming.
   a. Methods of progressing upward on the agricultural ladder
   b. Evaluate farming status and set goals

Areas Relating to Other Occupations............................1 class.

1. Discuss and evaluate other occupations.
   a. Advantages and disadvantages
   b. Meeting requirements for the job

Rural Sociology and Family Living................................1 class.

1. The rural social institutions.
   a. What organizations to join
   b. Developing leadership in rural institutions
Areas Relating to Our Economic System.........................1 class.

1. Types of economic systems compared.
   a. Corporation farming
   b. Vertical integration in agriculture

Dairy Production......................................................1 class.

1. Feeding and management of the dairy herd.
   a. Feed according to production
   b. Housing the dairy herd
   c. Control of diseases

Third Year Course

Marketing Farm Products.............................................2 classes.

1. Livestock marketing.
   a. Marketing of cattle, hogs, and sheep
   b. Transportation of livestock to market

2. Grain marketing.
   a. Operation of the grain exchange
   b. Hedging marketing operations

Soybean Production...................................................2 classes.

1. New approved varieties.

2. Improvement of cultural practices.

Swine Production......................................................2 classes.

1. Management of the breeding herd.
   a. Sanitation
   b. Feeding the breeding stock

2. Feeding fattening swine.
   a. Rations for fattening hogs
   b. Methods of feeding fattening hogs
Weed Control ................................................................. 2 classes.

1. New chemicals for controlling weeds.
2. Costs of killing weeds.

Soil Conservation ............................................................. 2 classes

1. Soil Conservation payments.
   a. Conservation practices paid for in cooperation with the government
2. Use of soil building crops.

Planning annual and Long Time Crop and Livestock Program .......... 2 classes.

1. Planning crop rotations, cultural practices and methods of harvesting.
2. Organization of the farm for higher net returns

Small Grain Production ....................................................... 1 class.

1. Control of rusts and other diseases of small grain.
   a. Kind of diseases affecting small grain
   b. Control and treatment of diseases

Farm Mechanics ................................................................. 1 class.

1. Care and adjustment of farm machinery.
   a. Take up a discussion of machines not previously studied.

Farm Law and Taxation ....................................................... 1 class.

   a. Personal property
   b. Real estate
   c. Sales tax
   d. Income tax and social security
Fourth Year Course

Corn Production.......................................................3 classes.

1. Corn allotments.
   a. Sealing corn versus feeding to livestock
   b. Government programs

2. New approved practices for corn production.
   a. Minimum tillage
   b. New methods of weed control
   c. New methods of drying corn

Planning Annual and Long Time Crop and Livestock Program............3 classes.

1. Planning the cropping system.
   a. Cultural practices
   b. Fertilizer needs
   c. Crop rotations

2. Planning the livestock program.
   a. Selecting breeding stock
   b. Determining the type of program for your farm

Small Grain Production.............................................2 classes.

1. Selecting the rotation.

2. Fertilizers and varieties.

Beef Production.....................................................2 classes.

1. Planning the feeding program.

2. Sanitation and disease control.

Farm Mechanics......................................................2 classes.

1. Arc Welding for farmers.
   a. Learning to use the arc welder
   b. Welding farm machinery

2. Building labor saving equipment.
Poultry Production.............................................. 1 class.

1. Poultry flock management.
   a. Feeding balanced rations
   b. Sanitation and disease control

Sheep Production.....................................................1 class.

1. Management of the sheep flock.
   a. Breeding stock
   b. Selection of feeder sheep
   c. Feeding and management

Areas Related to the Establishment in Farming.........................1 class.

1. Determining whether to rent or buy a farm.
   a. Advantages of farm ownership
   b. Advantages of renting a farm

Farm Law and Taxation................................................1 class.

1. Income tax for farmers.
   a. Methods of accounting
   b. Methods of depreciation
   c. Personal and business exceptions

Areas Related to our Economic System..................................1 class.

   a. Voting in National and local elections
   b. The business outlook for the future
   c. Government programs and farming
APPENDIX B

QUESTIONNAIRE — THE FARMING STATUS AND EDUCATIONAL NEEDS OF YOUNG FARMERS

1. Your Name __________________________ Address __________________________ Age __________________

2. What is your present farming status? (check one)

   (1) Farm Owner operator __________________________

   (2) Tenant operator __________________________

   (3) Partnership in home farm business __________________________

   (4) Partnership in farm business other than home farm __________________________

   (5) Working on home farm for definite wages __________________________

   (6) Working on some other farm for definite wages __________________________

   (7) Working on home farm for a share of earnings __________________________

   (8) Working on some other farm for share of earnings __________________________

   (9) Living at home and working in town __________________________

3. Indicate by checking (x) the enterprises in your farming business and the present size of each.

   (1) Dairy __________________________ head

   (2) Grain crops __________________________ acres

   (3) Fattening beef cattle __________________________ head

   (4) Breeding beef cattle __________________________ head

   (5) Marketing hogs __________________________ head

   (6) Breeding hogs __________________________ head

   (7) Poultry __________________________ birds

   (8) Breeding ewes __________________________ head
(9) Market Lambs ( ) ___head
(10) Other (list) ( ) ___

4. What is the present size of your farming operation? (Check x)

(1) 20-40 acres ( )
(2) 40-80 acres ( )
(3) 80-160 acres ( )
(4) 160-320 acres ( )
(5) 320-640 acres ( )
(6) Over 640 acres ( )

5. What is your educational status? (circle highest grade attained)

Elementary High School College Post College
1 2 3 4 5 6 7 8 1 2 3 4 1 2 3

6. What training have you had in agriculture?

4-H club _____ Vocational Agriculture _____ Adult classes in
Yrs. Yrs. Yrs.
agriculture _____ College agriculture course _____
Yrs. Yrs.

7. What is your interest in attending classes in vocational agriculture for young farmers to help you solve your problems in farming? (check one x)

Very much interested ( ) Some interest ( ) No interest ( )

8. Check the day of the week and the time of day best suited to attending a young-farmer class (check x one day and one time)

Days Time
Mon., Tues., Wed., Thurs., Fri., Sat. Morning Afternoon Evening

9. Check X Those subject matter areas which you believe to be your greatest needs.

(1) Planning annual and long-time crop and livestock program ( )
(2) Dairy cattle production, feeding and management ( )
(3) Beef cattle production, feeding and management ( )
(4) Swine production, feeding and management ( )
(5) Sheep production, feeding and management ( )
(6) Poultry production, feeding and management ( )
(7) Corn production ( )
(8) Soybean production ( )
(9) Production of small grain ( )
(10) Marketing of farm products ( )
(11) Farm mechanics ( )
(12) Areas relating to the establishment in farming ( )
(13) Areas relating to the buying and renting of land ( )
(14) Farm law and taxation ( )
(15) Weed and pest control ( )
(16) Areas relating to our economic system ( )
(17) Soil conservation ( )
(18) Areas relating to other occupations ( )
(19) Rural sociology and family living ( )
(20) Others (list) ( )

10. What changes in agriculture should be included in a young-farmer course. (check x)

(1) Minimum tillage ( )
(2) Multiple farrowings of swine ( )
(3) Surgical removal of baby pigs ( )
(4) Continuous corn versus rotations ( )
(5) Vertical integration in farming ( )
(6) Marketing on a grade and weight basis  
(7) Corporation farming  
(8) Others (List)  

11. In what occupations other than farming, are you interested. (List)  
(1)  
(2)  
(3)  
(4)  

12. With what approved practices do you need help? (Check proper blank)  

<table>
<thead>
<tr>
<th>Approved Practice</th>
<th>Now practice</th>
<th>Needed</th>
<th>Not Needed</th>
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<tbody>
<tr>
<td>Dairy:</td>
<td></td>
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<tr>
<td>1. Select breeding stock with high production records.</td>
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<td>2. Keep breeding records on all cows.</td>
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<td>3. Dry cows two months before calving.</td>
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<td>4. Feed cows according to amount of milk produced.</td>
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<td>5. Vaccinate heifers for Bang's disease when six months of age.</td>
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<tr>
<td>6. Provide fresh water at times.</td>
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<tr>
<td>7. Provide adequate ventilation in the dairy barn.</td>
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<td>8. Clean and sterilize utensils after each use.</td>
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<tr>
<td>9. Treat for grubs.</td>
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</table>
10. Use fast milking procedure.

11. Use artificial insemination where available.


**Beef Cattle:**

1. Select a beef production program adapted to your farm.

2. Provide adequate fresh water at all times.

3. Detect and control common diseases.

4. Cull regularly keeping objectives clearly in mind.

5. Control insects and pests harmful to cattle.

6. Provide economical protein supplement.

7. Feed a balanced ration of hay, grain, and supplement in feed lot.

8. Castrate, dehorn and brand properly.

9. Market when prices are high.

10. Purchase feeders when prices are lowest.

**Swine:**

1. Select meat type sows

2. Breed to a meaty type boar.
3. **Flush sows two weeks before breeding.**

4. **Keep breeding records**

5. **Pet and gentle bred sows**

6. **Follow strict sanitation**

7. **Record pigs at birth**

8. **Feed sow a balanced ration.**

9. **Construct farrowing stalls**

10. **Provide plenty of water**

11. **Practice multiple farrowing if possible.**

12. **Worm pigs as necessary**

**Sheep:**

1. **Select good mutton type ewes or large western ewes with good mouth and udder**

2. **Breed to purebred ram with high quality fleece**

3. **Flush ewes two weeks before breeding.**

4. **Keep ram in good condition but not fat.**

5. **Control internal and external parasites.**

6. **Feed ewes a balanced ration**

7. **Dock all lambs at ten days**

8. **Plan a year around pasture program.**

9. **Cull unproductive ewes.**
10. Cull unproductive ewes. ( ) ( ) ( )

11. Watch markets for highest prices. ( ) ( ) ( )

12. Creep feed all lambs at one week of age. ( ) ( ) ( )

**Poultry:**

1. Move pullets to laying house ( ) by October 1. ( ) ( )

2. Cull sick birds as they appear. ( ) ( ) ( )

3. Provide plenty of feeder space. ( ) ( ) ( )

4. Provide 7-9" Nest space per hen. ( ) ( ) ( )

5. Keep records of egg production. ( ) ( ) ( )

6. Provide one-half sq. ft. per chick. ( ) ( ) ( )

7. Clean and disinfect brooder house before chicks arrive. ( ) ( ) ( )

8. Separate cockerels and pullets at 8 weeks of age. ( ) ( ) ( )

9. Provide roosts when chicks are one month old. ( ) ( ) ( )

10. Feed balanced ration to chicks and pullets. ( ) ( ) ( )

**Crops and Soils:**

1. Use approved hybrids and variety. ( ) ( ) ( )

2. Test soil and apply lime and fertilizer. ( ) ( ) ( )

3. Inoculate legumes before planting. ( ) ( ) ( )
4. Clean seed if necessary. ( ) ( ) ( )
5. Plant the proper rate for your soil and climate. ( ) ( ) ( )
6. Cultivate corn to control weeds. ( ) ( ) ( )
7. Use 2,4D spray to control weeds in corn. ( ) ( ) ( )
8. Control insect pests with DBF. ( ) ( ) ( )
9. Harvest all crops when dry enough to store. ( ) ( ) ( )
10. Control insect pests in stored grain. ( ) ( ) ( )
11. Prepare clean, firm seedbed. ( ) ( ) ( )
12. Conserve soil and other resources. ( ) ( ) ( )

Pasture Management:

1. Plan for adequate pasture for each season of the year. ( ) ( ) ( )
2. Combine legumes in pasture crops. ( ) ( ) ( )
3. Practice rotation grazing ( ) ( ) ( )
4. Apply proper amount of nitrogen on sodbound grasses. ( ) ( ) ( )
5. Defor grazing, mow, and spray for weed control. ( ) ( ) ( )