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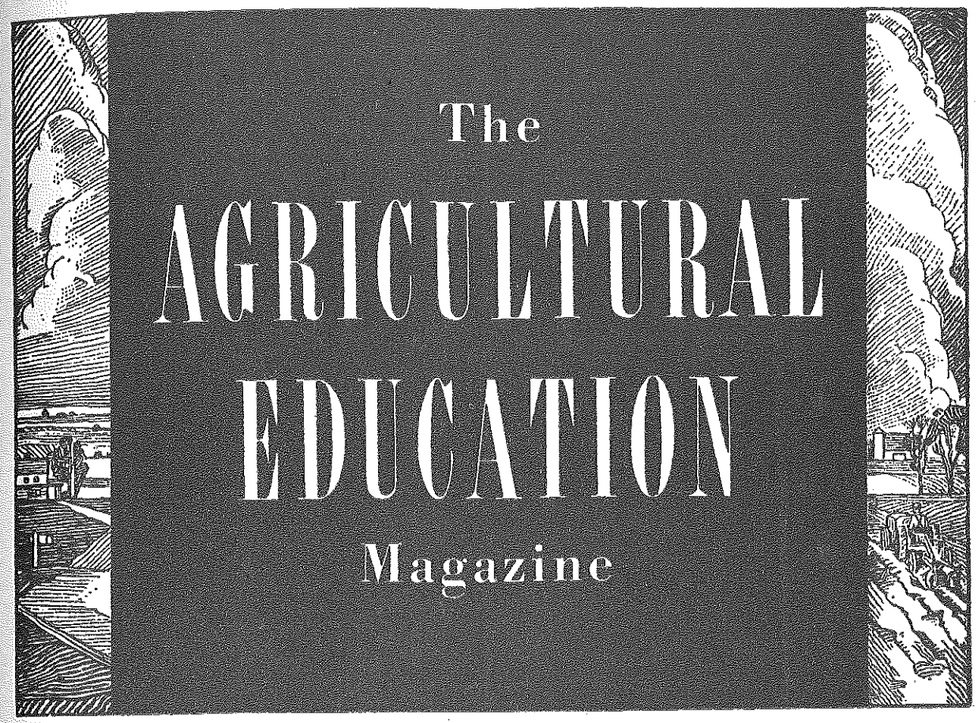

"When we have done our best, we may await the result without anxiety."

—*Anonymous*

VOCATIONAL AGRICULTURE
For
TEACHERS
Teacher Educators
And Supervisors
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CONTENTS

Editorial Comment

After the War, What Then?

WHEN the war is over and our servicemen, servicewomen, and war workers come home, what then? Will our consciences be clear? Will they feel that the sacrifices they made were worth while? As we listen to the radio and read different advertisements of new inventions that will be available after the war, our thoughts go to the uneducated masses of people who will be returning to the various rural communities. Will we have a program for them?

The Federal Government has passed the G. I. Bill which provides for our returning servicemen and servicewomen. The state and its various agencies are working on plans for the post-war period, especially in the divisions of vocational education in agriculture. In our cities, the local government, civic groups and organizations are making plans for the postwar period. What about the many isolated communities where our leadership is not as well informed as that of our more progressive communities? How will these groups be reached? When the selective service act was passed every man within the age limit was included. Numerous young men were not fit for military services because they did not have an opportunity to enjoy the educational, health and recreational opportunities provided for the youth in our more progressive communities. We shall find after the war that these men in the armed services will return to their isolated communities, after having been trained and after defending their country, to find the same unprogressive methods of living and making a living. They will have experienced contacts with men from more progressive communities. They will have enjoyed the recreational facilities of the USO Canteens and many other experiences that go to make life pleasant. Will they be the same? Will they be willing to accept conditions as they find them after spending days and nights in foxholes, on ships, or in the air—sometimes cold and hungry—being shot at and shot, moving when orders were given, and no privileges of their own? How would you feel?

"Statisticians have figured that in this war it cost a million and a half dollars to kill one man" says Mr. Frank E. Mullen, Vice-President of the National Broadcasting Company. If that is true, it seems that a very desirable program could be provided for every returning veteran, war worker, and the peoples if the respective communities, at a much lower cost. Provisions should not only include health, education and jobs, but special emphasis should be put on the recreational needs of our rural communities. From year to year cities spend millions of dollars to provide recreational facilities for their people. In the estimation of competent social authorities, these are wise investments. With such arrangements, physical developments and physical well-being are promoted.

What an individual does during his leisure time largely determines what he becomes; therefore, the cities have provided playgrounds, swimming pools, parks, recreational halls and outdoor camps. There are also art galleries, museums, libraries, and music halls. There are all kinds of organizations supplied with well trained leaders. So far little has been done to provide recreational opportunities for the youth of our rural areas other than what has been provided by the departments of vocational agriculture. The schools and 4-H Clubs provide recreational opportunities on a seasonal basis. After having spent four or five years in the armed services, these youth will have outgrown the recreational opportunities mentioned above. If they cannot use the recreational facilities of nearby towns they will amuse themselves in public dance halls, low-grade picture shows, road houses and, in other cases, places even worse. They will be found on Sunday congregated at some rural stores, homes, or in groups walking roads or highways. The rural school and the rural church should cooperate with county, state and Federal Government to provide programs to satisfy the social needs of our returning servicemen.

Supervisors and administrators could be employed in every community or county to guide the servicemen and servicewomen in spending the financial aid they will receive from the Federal Government. This does not mean that they will tell them what to buy and what not to buy, but they will give sound advice. When the bonuses were paid after World War I, some veterans who did not have sufficient clothes, jobs, and living quarters, were soon in the same position as they were two or three weeks before receiving their bonuses. The money sharks had their bonus money. It seems that that money could have been paid weekly or monthly with the proper advice to those individuals who, because of limited education, would spend it unwisely. This will present a problem but something should be worked out for the protection of our servicemen.

A good example of what our rural people can do has been demonstrated thru the FPWT program, sponsored by the Federal Government and under the supervision of the Division of Agricultural Education. In many communities people with small incomes have organized themselves, built farm shops and community canneries, repaired and improved their homes, and built and repaired farm machinery and equipment. They have produced and conserved food and feed for home use and thus reduced the drain on commercial producers. In many instances they have produced a large amount of food for commercial purposes. In some communities, credit unions have been organized to aid them in saving part of their incomes.

Thru an organized effort under trained leadership, farm families in small rural communities are beginning to develop a love for rural life and have more pride in their communities. In so many of our rural communities we do not have the rural leaders to work with farm families and aid them in improving their standards of living. The teachers of agriculture and of home economics should provide that type of leadership since their duties requires them to work with the boys and the girls in the school as well as the adults. This means, however, that they should have definite objectives based on the needs of the community. Additional help may sometimes be needed to reach these objectives. If we had such teachers in every rural high school who would develop programs to aid rural communities, who would be able to get the cooperation of the other teachers in the school and of all leaders who are interested in developing the economic, social and health conditions of our rural communities, we would have a desirable program for our returning servicemen and servicewomen as well as for the people in the respective communities.

The people in every community should be guided by our leaders in perfecting a program that will keep the morale of our returning servicemen high. This will make them feel that we did our part at home and we appreciate the sacrifices they have made.—W. T. Johnson, North Carolina

You MUST Read This

THIS title applies to Principal Spencer's excellent article on page 25 featuring the extensive program of adult education in his high school in Spencer, New York. Your superintendent should read it, your teacher of home economics, your entire faculty. It might well be discussed in a faculty meeting early in the school year. It is an excellent example of the thought expressed by your editor in his brief editorial "Adult Education, School Wide" in the January issue, and answers the query in the cover quote of that issue, "Superintendent Smith, why shouldn't all high school teachers, etc?"

Note these significant facts: The meetings continued for 10 weeks. Classes met two nights a week. There were three class periods a night. The courses included shop, homemaking, music, agriculture, citizenship, dramatics, health and recreation. What a wealth of offerings for any community! Here is a rural community in New York State that is making a study of the needs of its people and providing a program that meets these needs. While several communities may have approached this procedure on a more or less trial basis, nevertheless the editor ventures the opinion that few, indeed, are the communities which have done a better job. Principal Spencer and his associates are to be commended in glowing terms for this demonstration and presentation of this excellent type of rural education conducted by the entire school system. Verily, the morning twilight of the millenium (in rural education) approaches! All we need is a similar program in 50,000 other rural communities and we shall, indeed, realize heaven on earth (in rural education).

S. S. SUTHERLAND

Professional

HENRY S. BRUNNER

Criteria for the Establishment of Departments of Vocational Agriculture

S. S. SUTHERLAND, Teacher-Trainer, Sacramento, California

S. S. Sutherland

DURING the war period, hundreds of high schools have been compelled to discontinue departments of vocational agriculture. Many other schools wishing to establish new departments have found that such action must be postponed until after the war or until the time when teachers will again be available. It is to be expected, therefore, that many state and local school administrative officials, in the immediate postwar period, will be confronted with the necessity of deciding whether or not to establish or re-establish such departments in their respective schools.

Not only will state supervisors and directors face the problem of whether to approve the establishing of departments in given districts, but they will have to make decisions as to the order in which applications will be approved. Such decisions may have to be defended before taxpayers, parents, and other interested groups, and, in any event, should be as objective as possible and based on all available facts.

In anticipation of this situation, a study has been made in California to determine the criteria which should be considered in deciding whether or not a department of vocational agriculture should be established or re-established in a given school or community. This investigation was recommended and initiated by a state subcommittee on Agricultural Teacher-Training, composed of Julian A. McPhee, State Director of Vocational Education; Dr. Frank N. Freeman, Dean of the School of Education, University of California; and, C. B. Hutchison, Dean of the College of Agriculture, University of California, and was carried out with the cooperation of state and district supervisors in 15 states.

There were three parts to this study: (1) an analysis of 192 unsuccessful departments of vocational agriculture in these 15 states to determine the major reasons why departments fail; (2) a detailed study of a number of successful departments of vocational agriculture in California; and, (3) severance interviews thru personal letters with some 25 men who had been successful teachers of vocational agriculture but who had resigned their positions to enter other fields of work.

In formulating criteria for establishing departments of vocational agriculture, it is important to determine the conditions and situations which predicate failure. Since the common objective of all concerned should be to establish long-continuing departments where they will do credit to the local district and to the state, every effort should be made to identity the common failure factors and attempt to eliminate them. In determining the reasons for unsuccessful departments, it was found that while some causes were common to all states, there were others which were of vital importance in certain areas and relatively unimportant in others. For the 11 states in the Pacific region, the major causes of failure as revealed by analyzing 145 less successful departments in these states were, in the order of their importance:

Why Departments of Vocational Agriculture Fail

1. Too small enrollments in high-school classes of vocational agriculture.
2. Poor teachers and poor teaching.
3. Inadequate guidance and faulty selection of pupils enrolled in classes in vocational agriculture.
4. Lack of opportunity for graduates to become established in farming.
5. Departments located in poor farming areas.
6. Misunderstandings and lack of cooperation between teachers of vocational agriculture and principals.
7. Educational objectives of the schools not vocational.
8. Inadequate rooms and equipment.
9. Salaries too low to attract and hold competent teachers.
10. Communities undersirable places in which to live—teachers won't stay.
11. Teacher assigned other classes and duties which interfere with the development of the departments.
12. Class schedule of the schools unsatisfactory for classes in vocational agriculture.

As a check, analyses on 47 similar departments in the states of North Dakota, Wisconsin, Texas, and Florida revealed a slightly different set of factors, and a different order of importance. The major causes of failures of departments in these states were:

1. Poor teachers and poor teaching.
2. Inadequate rooms and equipment.
3. Salaries too low to attract and hold competent teachers.
4. Too small enrollments in high-school classes of vocational agriculture.
5. Teachers assigned other classes and duties which interfere with the development of their departments—"pro-rated" departments.
6. Communities undersirable places in which to live—teachers won't stay.
7. Lack of opportunity for graduates to become established in farming.
8. Educational objectives of the schools not vocational.
9. Misunderstandings and lack of cooperation between teachers of vocational agriculture and principals.

A glance at the two lists will show that three factors, two of which are extremely important in the Pacific region, do not appear at all among the failure factors reported in the Midwestern and Southern states. These are: (1) inadequate guidance and faulty selection of pupils, (2) departments located in poor farming areas, and (3) class schedules unsatisfactory for classes in vocational agriculture. Similarly, two failure factors which are generally important in all of the other states studied are not operative as causes of failure of departments in California. These are inadequate rooms and equipment and "pro-rated" teachers.

It would seem, therefore, that each state, or at least each area, should conduct similar studies in order to determine not only the major causes of failure of departments of agriculture, but also to formulate the criteria which should be used in locating departments where they might reasonably be expected to be successful and to accomplish most in terms of vocational objectives.

A beginning has already been made in the North Central region in the form of a survey conducted by Ernest DeAlton, State Supervisor in North Dakota, who polled state supervisors and teacher-trainers on the general problem of re-establishment of departments of vocational agriculture and recommended to the regional agent, in 1944, that a committee be named to consider this matter further and to formulate policies. It is understood, also, that a study is under way in Iowa for the purpose of formulating criteria applicable to that state. When this has been completed it will be interesting to compare the findings of these recent studies.

Largely on the basis of these failure factors, 11 criteria were formulated for use in California in determining where departments should be established and the order in which they should be established during the postwar period. For conditions in this state, the following criteria should be considered and departments of vocational agriculture should be established and have reasonable success in schools and communities where:

I. There Is a Need for Vocational Education in Agriculture

1. The number of farm boys enrolled in the high school is sufficient to justify the establishment of a department—ordinarily at least 35 boys for a full-time teacher.
2. Farmers and farm organizations in the district favor or want a course established in vocational agriculture.
3. Farming is an important, if hot the most important, occupation in the community.

II. There Are Opportunities for Worthwhile Accomplishments

4. The school in which the department is to be established is located in a good farming area.
5. There are and will continue to be opportunities for pupils trained in this department to become established in farming and in related occupations.
6. The farm people of the community are progressive and will avail themselves of the services of the department.

III. The Conditions and Facilities Necessary for an Effective Program Are or Can Be Made Available

7. Local school administrators and members of the local Board of Education understand and are in sympathy with the objectives of vocational education in agriculture and *want* a good department.
8. Competent teachers for this department can be obtained and retained.
9. Adequate provision can be made for the counseling, guidance, and enrollment of pupils in classes in vocational agriculture.
10. Satisfactory curricula and class schedules can be provided not only for pupils who desire terminal vocational courses but also for those who want college preparatory courses with a four-year major in vocational agriculture.
11. An adequate departmental budget can be provided including provision for travel and secretarial assistance.

While some of these criteria would apply in all states and in all areas, others would have to be added in line with conditions peculiar to the several states. It is apparent, from this study, that in most of the states in the Pacific Region, two additional criteria deserve consideration—one dealing with adequate rooms and equipment, and the other stressing the importance of teachers devoting full time to vocational agriculture.

Apparently, in the South and the Midwest, criterion No. 9, dealing with guidance and selection, might well be omitted since it seems that this is not a major factor in the failure of departments in these areas. The same is true of criterion No. 4, as apparently departments in those states are located in good farming areas or at least their being located in poor farming areas is not a contributing cause of failure.

Criterion No. 10 might also be eliminated since little difficulty seems to be encountered in providing favorable class schedules for vocational agriculture. In fact, of the 11 criteria suggested for California, it appears that only seven of these might apply to states outside the western region.

The same would be true in weighing these criteria since it is quite evident that their importance varies in different sections of the country.

Under conditions in the Pacific region in general and in California in particular, criteria Nos. 1 and 8 are of paramount importance. Criteria Nos. 5, 7, and 9 are of slightly less importance, and criteria Nos. 2 and 11 have perhaps the least significance. As indicated above, No. 9 may well apply only to this state and this region.

From these criteria a check list has been developed for use by school administrators in studying conditions in their respective districts and schools preparatory to making application for the establishment of a department. This check list calls for supporting evidence which will enable the state and regional supervisors to evaluate these applications objectively and to determine those which should be given primary consideration.

Lack of space prevents giving even a brief summary of the data and the findings of the studies upon which these criteria have been based. Also it seems evident that the criteria which have been formulated as a result of this study apply particularly to the state in which it was made and may have only general implications and applications to other states where conditions may be different. A few of the more important conclusions which may be of general interest follow:

1. Unless other conditions are exceptionally favorable, it is questionable whether departments of vocational agriculture can ordinarily be maintained successfully in high schools enrolling less than 100 pupils.
2. It is relatively easier to maintain a successful department in a community where farming is general and diversified and where livestock, poultry, and dairy enterprises are conducted than in a district where farming is highly specialized.
3. The attitudes of local school administrators toward vocational education in agriculture, their knowledge and understanding of the purposes of instruction in agriculture and of the duties and responsibilities of a teacher of this subject are extremely important factors in the success of a department.
4. If competent teachers are to be retained in this profession, more attention must be given to (a) developing better teacher-principal relationships, (b) to defining the job of the teacher and his responsibilities, and (c) giving teachers of vocational agriculture more voice in the guidance of farm boys and in the selection of pupils for enrollment in their classes.

(In "severance interviews" with successful teachers who resigned during the period 1941-44 to accept positions offered them in other fields of work, it was found that these factors were the major causes of dissatisfaction and primary considerations in their decisions to leave their teaching positions for other fields of work.)

5. In smaller high schools (up to 200 total enrollment), departments fail largely because of low enrollment and the inability of the school to retain competent teachers.
6. In medium-sized schools (200-500 enrollment), the most significant failure factor is misunderstanding and lack of cooperation between teachers and principals.
7. In large high schools inadequate guidance and faulty selection of pupils cause the most difficulty.

Education for Living

HARRY B. SPENCER, Former Principal, Spencer, New York

THE program in adult education at the Spencer Central School was planned according to the usual standards of 10 weeks, two nights a week, and three class periods a night. The courses also following the usual pattern included: shop (of the recreational-craft type), cooking (the favorite recipe variety), knitting, bridge, current events, citizenship, gymnasium work, music, dramatics, and others. These served a purpose and met the interests of a number of people. However, there was a feeling that the program was not meeting the educational needs of the adults in the community. This called for an analysis of the situation.

Adjusting Program to Meet Needs

The first question to be answered was what are the needs of the people to be served and are these needs constant or periodic. The second question was how to meet these needs. This second question might then be broken down into several subdivisions, namely, the time factor of when and for how long; what personnel was available or needed; were there any existing avenues of approach outside the school? and were there any new means of approach?

In answer to the first question, it was recognized that there were needs that were constant, such as training for family living. This would include sewing, cooking, parent education, and others. Then there would be periodic family or home problems to be met at a specific time. So it would be in other areas of living. The needs served by the 10-weeks program were not to be overlooked in a complete program.

If education is to be most beneficial, it must serve a need. Therefore, it must be taken care of when that need manifested itself. The length of time for instruction should be determined by the amount of content in the course rather than the time set aside determining the length of content. In this way a course may be set up for one night or a longer period of time. A study of the faculty and members of the community will determine personnel available. It might even be well to prepare a list of the people for future reference as a need might arise. A fallacy which almost spelled disaster was the belief that the school held a monopoly on education. However, it was soon recognized that many organizations held education as one of their aims. Recognition of this opened up many avenues of contact with adults. The problem that still had to be faced was how to reach that group that did not enter into group activity.

Homemaking Activities

The program that emerged at the Spencer Central School was an effort to answer these questions accurately and concretely. Being rural, the community needs of the people centered primarily around the home and the farm. Other needs might be grouped as recreational, citizenship, and programs for organizations. To meet those of the home the task concerned the homemaking department. A course in canning acquainted the women with newer practices and equipment. It helped them to plan a family food budget to insure a balanced winter diet and sufficient quantities of food to carry them thru. It also introduced new

(Continued on page 27)

Supervision

LANO BARRON

A Complete Program of Vocational Agriculture for Every Rural Community

JOHN M. LOWE, State Supervisor, Charleston, West Virginia

John M. Lowe

THE farm population of any community is composed of children, youth, and adults. Practically all of the children six years of age and over are in school; part of the youth group is in school and part is out of school; and the adult group is not in school. Each of these groups has its own problems and experiences.

A program of vocational education in agriculture is concerned primarily with the youth, both in school and out of school, and with the adults. If such a program is to render maximum service to the farm people it must include systematic instruction for each of these groups.

Since the beginning of vocational education in agriculture as a part of our educational system, emphasis has been placed on instruction for the in-school boys. As the program has developed, most states have given increasing attention to the adult farmer groups by providing evening schools and classes in agriculture. The long neglected group is of young men on farms who have left the full-time school and who are engaged in agriculture in varying degrees of responsibility from hired hand to full ownership and management.

The In-School Group

Each school that offers instruction in agriculture must provide adequate facilities in the way of classrooms, shops, library, equipment, and supplies.

Most of the departments of vocational agriculture were additions to existing school systems and school plants. The classroom was any room that was not in use or one that could be provided at little expense for repairs or remodeling. Often the room was in the basement of the school building, poorly lighted and poorly ventilated. Vocational agriculture has been slowly coming out of the "cellar" thru the construction of new buildings or additions to old ones.

Space in which to teach farm mechanics was lacking in most cases and, where provided, was inadequate. This situation has been improved materially during the past few years—many new shop buildings have been constructed thru various means, sometimes as a part of a vocational education unit including home economics. No department of vocational agriculture is complete without a shop properly heated, lighted, and ventilated and of sufficient size for all phases of instruction in farm mechanics.

The classroom and shop for vocational agriculture must be provided with adequate teaching material and supplies, including a well-selected and up-to-date library of books and bulletins.

We must give more attention to the selection of pupils for the day classes. Too many of our school administrators and teachers have thought in terms of quantity rather than quality—in terms of number of pupils enrolled rather than the objectives of educating boys for the occupation of farming.

Our day-school curriculum in agriculture must be geared to the needs of the community and to the individuals enrolled in the classes. This means that farming programs must be carefully planned and of sufficient size and scope to provide real learning opportunities. Farming programs must be developed year by year with increasing ownership and managerial responsibility leading to establishment in farming.

Every department of vocational agriculture must provide for four years of instruction in agriculture. Sufficient time must be allotted during the school day for classes in agriculture, including farm shop work. Instruction during each of the years should be such as to help the pupil by solving his immediate problems. Such problems become increasingly complex as the pupil advances thru his high-school career and progresses in his farming program. Too often instruction has been aimed at future needs and for the solution of problems which may be encountered at some future time.

In order to provide training for leadership in a rural community and for participation in rural activities, a chapter of Future Farmers of America is an indispensible part of each department of vocational agriculture. The F.F.A. provides educational experiences in areas not included in classroom and shop instruction. There cannot be a complete day-school program in vocational agriculture without an active F.F.A. chapter.

Out-of-School Young People

This group includes the farm boys who are not in school. Some were graduated from high school and some dropped out of school before graduation. Some of these boys were enrolled in vocational agriculture for one, two, three, or four years, and many never enrolled in vocational agriculture.

During the past, too many teachers of vocational agriculture have been concerned with the pupils only for the time they were enrolled in day classes and have given little attention to the boys after they ceased to be members of these classes. Most high-school boys are from 14 to 18 years of age. Their farming programs are part of the home farm business and usually are not a complete farming operation. It is ridiculous to assume that a farm boy can learn in from one to four years to deal successfully with farm and home problems for the rest of his life. If he has completed four years of vocational agriculture in high school and has developed a real farming program, the critical period is just before him. This is the period when he is establishing a farming business of his own and when he is establishing a farm home. It is during this time that vocational agriculture can render the greatest service to these young people by providing instruction and guidance that will enable them to cope with the real life situations as they face them day by day.

Of course, in these days the part-time group has been thinned thru induction into the armed services and thru employment in war and other industries. But even now there are young men on farms who need our help. Tho the number may be small, we should make every effort to provide for their needs thru part-time schools and individual instruction and supervision.

After the war the part-time group will be much larger. Young men will return to the farms from the armed services and from industrial employment. Many whose formal schooling was interrupted may not return to the day school. Many of them will want vocational training in agriculture. Why not provide such training in their home communities thru our departments of vocational agriculture?

The Adult Farmers

Adults already established in farming have many complex problems with which to deal—problems that must be solved successfully if the farm is to be operated at maximum efficiency. Vocational agriculture can be of most service to this group in offering systematic instruction in agriculture thru evening classes. These evening classes must be organized around the farm enterprises of members of the evening class and taught by a person who is well qualified thru training and experience to guide the group in the solution of its problems.

Evening classes in agriculture should be provided to reach the majority of farmers in the patronage area of the department of vocational agriculture. We should not be content with enrolling 5 to 10 percent of the farmers in evening schools. Also, evening school instruction should extend thruout the year and over a period of years for the same group.

The key to any program of vocational agriculture is the personnel who will administer, supervise, and teach. Superintendents and principals are realizing more and more that our schools have responsibilities outside the four walls of the formal classroom. As administrators develop this philosophy of education, the urge and demand for complete programs of vocational agriculture will increase. Out-of-school activities in agriculture will be considered a vital part of the job of every teacher of vocational agriculture.

The primary responsibility for the success of vocational agriculture rests with the teacher. Unless he realizes the importance of instruction and guidance for the out-of-school group, little will be done. He must have confidence in his ability to direct a program that will help meet the needs of all the farm people. The responsibility for providing such teachers is with the teacher-training institutions. We must have teachers well informed in technical agriculture who have had experience in dealing with all-day, part-time, and evening groups. They must have training in farm mechanics and in the operation of many kinds of school and community cooperative enterprises which are maintained for educational puposes. They must be able to supervise special teachers and to work cooperatively with others.

To do the kind of job outlined in the preceding paragraphs will require the full time of the teachers of vocational agriculture in all schools. In many schools, more than one teacher will be required, including well qualified teachers of vocational agriculture and special teachers to handle certain phases of the program. A large number of our departments should have at least two teachers of vocational agriculture at least one of whom should have special training in farm mechanics.

Every department of vocational agriculture should maintain: (1) day classes to meet the needs of the high-school farm youth, (2) classes for the out-of-school farm youth, (3) classes for the adult farmers. Not until each of these groups is served thru systematic instruction will vocational education in agriculture reach its goal.

Education for Living

(Continued from page 25)

varieties to the family fruit cellar.

To help housewives improve the setting for their families, a furniture refinishing workshop was set up. There they could learn how to remove the old finish and refinish the piece to get the most out of the natural wood, which many times was a pleasant surprise. These women also learned to make minor repairs. Another phase of the program taught them to reupholster furniture at which they became quite adept. After a person had learned to upholster with some confidence, she was permitted to borrow the tools to work at home under the supervision of the instructor. Problems of remodeling and redecoration also became a part of this phase of the program.

Clothing was still another field of activity for this department. The instructor was on call to visit the homes and work with the adults. To better serve in this capacity, she started a clothing pool by collecting clothing that had gone out of style or had been outgrown. This clothing was tagged with a suggestion for use as an aid to the teacher later in meeting a request or for the housewife in remodeling the garment. A second step was the organization of a library of patterns to be loaned to the women of the community. To further facilitate this training in clothing, a portable, electric sewing machine was purchased. Since this machine was to be used both in the village and on the farms, there were interchangeable motors, one for alternating current and another for home-generated direct current. The teacher always made it a point not to do any work for an adult unless the adult helped and thus learned to do it for herself.

The homemaking teacher took on the work of directing the parent-education program that was going thru the experimental stage in the elementary school. Thru this program it was possible to reach the majority of younger parents. Discussion groups were held on such topics as individual differences in children, home recreation, the school lunch, behavior problems, the choice of children's books, and toys for children.

Health Education

The health department of the school also had an important part to play in serving the families. In conjunction with the program in parent education the school nurse was able to secure the local doctor and dentist to present material on communicable diseases and dental hygiene. A course in home nursing was given for a period as outlined by the American Red Cross. A first aid course was also given to help parents meet emergencies. Combining the ideas of recognition and prevention of communicable diseases and care of the sick, a program was set up to train parents along these lines. Home visits to parents helped the nurse teach parents as the needs arose. A next step in such an educational program was the extension of these visits to expectant mothers to insure prenatal care and acquaint them with literature on the care of the baby and the mother. Following this program, the nurse will make regular periodic calls on the preschool child to insure a healthy child when the time for school enrollment comes. During these visits the parent is informed of the vaccines and inoculations available and the clinics conducted jointly by the local health officer and the school.

Farming

The farm was the responsibility of the agricultural department and the needs were varied. An organization of young farmers, calling themselves the Young Men's Agricultural Club, met regularly to discuss topics related to the enterprises which they were conducting. During a year's program the following topics came up for study: conservation, farm fire insurance, economic feeding of stock, farm study courses (thru Cornell University), poultry diseases, a trip to a feed mill, fertilizers, and artificial breeding. These meetings were held monthly except for the farm study courses which provided for weekly meetings. The meetings opened with the business period and ended in a period of recreation and refreshments since "men like to eat." The discussions were led by the teacher of agriculture, a successful farmer, the game warden, an extension specialist, or a local insurance agent, depending upon the topic.

Looking at the program of 1938-1939, one notes the Farm Shop Week. From this small start, today this program uses two stalls of the school bus garage and the two rooms used for high-school shop. Not only are these areas open two nights a week, but a farmer may come in at any time to work on his equipment or make emergency repairs. Heavy machinery is taken care of in the garage and light work such as gumming saws and making feeding troughs is carried on in the school shop.

Each year the income tax return presents a problem to the farmers. To help in this, the teacher of agriculture scheduled several meetings and secured local men to help. Out of these meetings grew a short course on farm books. Farm books were secured from the college of agriculture at Cornell University and each farmer attending was given a book for his records. This instruction opened up many avenues for individual instruction on farm problems.

The Farm Bureau or County Farm Agent was encouraged to make use of the school and all its facilities in working with the farmers. Meetings were scheduled by him for a few hours or a whole day. For the long meetings the school cafeteria was made available. Another cooperating agency was the Agricultural Forester. Field trips were made to wood lots for instruction on the care and improvement of wood lots. The school held a long-term lease on a piece of woodland for a plantation. A second piece of land was purchased to demonstrate management and improvement of the farm wood lot. Visual aids were used to bring material to the program of the local Grange. Farm cooperatives were encouraged to hold business meetings and instructional meetings in the school. Thus the school became a natural meeting place for the farmers. It was their school.

Citizenship

Spencer being a community of many fine prospective citizens, citizenship was a phase of the program. Classes were held for those preparing for citizenship. These classes taught the folks to read and to write English and to understand the operation of our government. Holidays, such as Armistice Day, Washington's Birthday, and Memorial Day, offered opportunities for community programs. Films were secured and shown to local organizations. The school made an effort to teach adult citizenship both directly and indirectly.

Recreation

Recreation was provided thru the regular shop course in the craft area. This program, open to both men and women, lasted for 10 weeks, two nights per week. Dramatics started as a short program on the 10-weeks basis and developed into a year-round organization. Each year they presented two three-act plays and an evening of one-act plays. They also participated in community programs on holidays and during Holy Week. The music department directed a community band and presented an all-community concert. The gymnasium was availabe to both men and women for exercise and was used by both. Volleyball, badminton, basketball, and dancing were the favorite activities.

Thus, from the usual program in adult education, there evolved a program of education for living. The school had won the community's support and confidence thru its program of education and service to all.

Methods of Teaching

G. P. DEYOE

The Place of Animal Breeding in the Program of Vocational Agriculture

DR. H. A. STEWART, Department of Animal Husbandry, University of Minnesota

WHAT the teacher of agriculture teaches depends upon his own knowledge of the subject and his ability to fit this knowledge, together with reference material, into the study program of the particular enterprises around which the individual members of his classes are building their farming programs. Every teacher of agriculture teaches some animal breeding. However, it is needless to say that there are great differences in the phases of this subject that are touched upon by different teachers as well as great differences in the material that is taught within those phases of the subject. Perhaps this is due to several causes:

1. Many have accepted the purebred animal as the acme of breeding.

2. Certain ideas on sex and inheritance are traditional. They have become a part of most of us thru home environment and early associations; thus we are slow to give up those ideas.

3. The teacher's knowledge of animal breeding often comes from several isolated courses such as biology, zoology, and genetics, as courses in animal breeding are either not offered or are optional.

4. The science of genetics is relatively new and geneticists, generally, have not been animal breeders.

5. Livestock breeders and many closely associated with them in colleges of agriculture have been slow to change their ideas and methods of selection and breeding.

Dr. Eugene Davenport, former dean of the College of Agriculture and director of the Agricultural Experiment Station at the University of Illinois, in the preface to his book, "Principles of Breeding," published in 1907, says, " . . . for nothing is clearer than that the successful breeder of the future will be a bookkeeper and a statistician." More than 35 years have passed since he said this, but most breeders today are little near becoming bookkeepers and statisticians than they were then, except for the records that they may be keeping for their income tax statements and for various government agricultural activities. Teachers of livestock production have been so busy teaching recommended production practices and livestock judging that they have not even had the time to consider the place of bookkeeping and statistics in livestock production, other than the usual cost of production records.

In the past, reference material in animal breeding has been lacking, but now with the material made available thru the various experiment stations and commercial concerns on methods used in producing hybrid corn, and with the 1936 Yearbook of Agriculture and "An Introduction to Breeding Farm Animals" published by Wiley and Sons, reference material now is adequate for teaching animal breeding in high schools. This material may be supplemented by records taken from farming programs of the class members, if the instructor will but organize and file the material in usable and accessible form.

In order to determine what teachers of agriculture considered should be taught in animal breeding, a questionnaire was prepared. Copies were mailed to experienced teachers of agriculture to be checked and returned. Altho the subject was arbitrarily divided into 11 phases of animal breeding and additional blank spaces were left for suggestions, only one teacher suggested an addition, which could well have been included under one of the phases listed. No one checked to indicate that any one of the 11 phases should not be taught. The phases included follow.

Phases of Animal Breeding

Judging breeding animals.

Standards of performance that should be expected for livestock in boys' farming program.

Record keeping in relation to selection of breeding animals.

Methods of breeding: purebreeding, grading, crossbreeding.

Physical basis of heredity.

Systems of breeding and their application.

Understanding of: inbreeding, outcrossing, hybrid vigor, and place of each in systems of animal breeding.

Objectives and obligations of purebred breeders.

Objectives of market producers.

Interdependence between purebred breeders and market producers.

Application of artificial insemination to farm animals.

From this survey it was evident that both the teachers and the prospective teachers felt that judging breeding livestock was the most important phase of animal breeding. This was indicated by the emphasis they would place upon it by repetition over two or more years, with about equal emphasis over the first three years. Standards of performance that the student should expect from his livestock, and record keeping in relation to the selection of breeding animals are the two other phases considered most worthy of repeating. These phases would receive their major emphasis during the second and the third years. With the exception of the objectives of market producers, which would be emphasized during the second year, the rest of the phases of animal breeding listed would be postponed until the third and the fourth years of vocational agriculture.

Teachers evidently feel they are putting first things first in stressing judging breeding livestock, record keeping in relation to selection of breeding stock, standards of performance that should be expected, and the objectives of market producers in the first two years of work. However it would seem logical that methods of breeding should be taken up at the same time. Present information would indicate that the method of breeding undertaken will directly affect performance.

How proficient should a future farmer become in the judging of breeding livestock? Should the instructor try to develop a boy's ability to the place where the boy could place a good class of cows in the order of their production during their next lactation period? Who would guess the placings on a class of gilts based on the number and the weight of the litters they will wean next spring? It is foolish to attempt such a thing, yet these are the practical aspects that the producer is interested in. Records, along with some appraisal of conformation, are of much greater value in selecting breeding stock than judging alone. They certainly justify more time than the judging activities. Of course, judging activities do create interest thru competition, but perhaps estimating weights would too, and this would have further practical value. It is easy to get the class of animals, but they are not always near a scale, so we judge. Students and teachers should realize the limitations of judging as so ably stated in the 1936 Yearbook of Agriculture. For example, Doctor Gowen, of the Maine Agricultural Experiment Station, found that a seven-day test was about twice as accurate an indication of a cow's productive capacity for the year as scoring by the most expert judges, "Drawing on the garnered wisdom of the ages to tell from the cow's looks what she would produce." An example of the practical use of judgment would be the selection of five gilts from a group of 10 or 12, considering the conformation of the animals as well as the records of their individual growth rate and feed cost, together with their dam's record of fertility and milking ability.

The following outline of material to be offered in animal breeding is presented as a suggestion of organization that appears to conform with the ideas of teachers as well as with logical sequence. It is not intended that it shall be taught as a unit divorced from farm enterprises, but rather as a part of the major enterprise of each boy's farming program. The work suggested for year II or IV may appear to be rather abstract but reference material will present practical applications.

Proposed Course in Animal Breeding Vocational Agriculture I

Objective: To produce animals having the ability to efficiently convert farm feeds into meat and other products.

Problem 1: What do we have, or need

(Continued on page 33)

Instructors Develop Courses of Study

H. W. CHAPMAN, Teacher, Whitewater, Wisconsin

EVER since I began teaching agriculture I have been interested in developing courses of study that would fit local conditions and be adapted to teaching on a seasonal basis. In Wisconsin, for many years we had been following the general practice of teaching a year each of Plant Husbandry, Animal Husbandry, Farm Mechanics, and Agricultural Economics. Finally, a group of instructors in the northwestern part of the state worked out a course of study including the many jobs and skills that went with each enterprise.

Shortly after that, in about 1936, C. B. Campbell, in charge of practice teaching at River Falls State Teachers College, led a discussion at one of our sectional meetings on the "cross-sectional" or "integrated" course of study. The next year five of us worked out a year's program following this system. At the end of the year we were all satisfied that this was an improvement over our previous organization of course materials.

This plan was then submitted to 20 more experienced instructors in the state who, each with some modifications to meet local conditions, used the plan for a year. This group met twice during the year and in committees several times. At the end of that year a program was worked out in cooperation with the state supervisor and the teacher-trainers in the State Board of Vocational and Adult Education, at the College of Agriculture, and at the teachers colleges at Platteville and River Falls. This plan was then presented to group meetings at the summer conference and was adopted for general use in the state. It has been revised a couple of times since, using much the same procedure as in its first organization.

In developing this course of study we found that there are two methods of approach. One method is to teach a little of each enterprise each year, going deeper into the subject each succeeding year. The other method is to select the major enterprise of a community and teach the core of it the first year, leaving more difficult parts of that enterprise and the teaching of other enterprises for succeeding years. We have come to the conclusion that the second plan is simpler to organize and teach and provides a better opportunity to review important practices.

Our course as it is now organized includes in the first year, poultry culling, weeds, dairy herd testing, poultry housing, winter care and feeding, woodworking, corn culture and plant growth, baby chick brooding and feeding, small grains and crop diseases, cash crops, and legumes.

The second year's work includes livestock judging, feeds and feeding based on dairy cattle, farm mechanics, landscaping, orchards and small fruits, swine, sheep, horse and beef management, pastures, nonlegume hays, and emergency hay crops.

During the third year, the units included are: tool conditioning, cold metal and forge work, dairy cattle management, marketing, cooperatives, farm accounts, advanced soils, advanced woodworking, painting farm buildings, and fencing.

The fourth year's units are: choosing and financing a farm, farm management problems, government programs and agricultural aids, farm machinery, tractors and motors, rural living and farm organizations, and conservation.

In each year from two to three weeks are set aside for discussion of farming programs by the class as a whole.

This whole program, of course, is designed especially as a guide to the beginning instructor. It is understood that after a man has had a couple of years of experience he will modify the course to meet any local needs. We firmly believe, tho, that a rather definitely organized course of instruction for each year's work is highly essential.

For seven years now I have been using some form of the "cross-sectional" type of course organization and am much better pleased with my results in holding student interest and in building better farming programs with the boys.

A Filing System

O. J. SEYMOUR, District Supervisor, Arkadelphia, Arkansas

A SIMPLE, yet adequate filing system for the busy teacher of vocational agriculture should be a very valuable aid toward making his general teaching program more systematic and more effective.

O. J. Seymour

The suggested filing system for a four-drawer filing cabinet printed here was prepared and mimeographed for the use of teachers of vocational agriculture of southwest Arkansas district.

Top Drawer

Correspondence: One set A to Z guide cards. One or more manila folders behind each guide. File material according to person or subject. Also have folder for district circular letters, book information, conferences, etc.

Records and Reports: Put records and reports for fiscal year behind Z guide card. Use manila letter folder for each title such as:

Form 1, Daily schedule.
Form 2, Indicated farming program.
Form 3, Monthly report.
Form 4A, Supervised farming program by high-school classes.
Form 4AA, Summary of supervised farming programs.
Form 4B, Evening schools.
Form 4C, Part-time classes
Form 5, Inventory of equipment
Form 6A, Course calendars
Form 6AA, Course of study. (Forms 1 to 6AA may be kept in workbook until completed and then filled in drawer 4.)

Lesson Plans:
Studies, local, district, state, and so on.
Annual program of work.
Annual achievement.
Food Production War Training folder for each class.

Second Drawer

Future Farmers of America: One set of A to Z guide cards. The material should be filed in manila folders alphabetically. Some suggested folders are:

President.
Vice-President.
Secretary.
Treasurer.
Reporter.
Adviser.
Chapter programs for meetings.
Contests, production.
Contests, district judging.
Contests, state judging
Contests, public speaking.
Couchdale.
F.F.A. information.
F.F.A. program of work.
F.F.A. achievement.
Initiations.
Leadership training.
Long time farming programs.
Manuals.
Membership lists.
Occupational records (Forms 745 & 759.)
Parliamentary procedure.
Pig chain.
Publicity.
Radio programs.
State chapter reports.
State F.F.A. conventions.
State and American Farmers.
State executive secretary.
State livestock show.
File completed record books back of Z guide card.

Third Drawer

Instructional Materials: One set of A to Z guide cards.

Clippings, letters, circulars, and other reference materials suitable for instructional use should be filed in manila folders under proper headings such as:

List of available bulletins and circulars.
Book catalogs.
Equipment catalogs.
Seed catalogs
Blueprints.
List of illustrative materials.
Fertilizers.
Soils.
Feeding Practices.
Food Production War Training.
Egg grading.
Ponds-staking out.
Special references for livestock and crop enterprises—beef, pork, breeding swine, pig, poultry, dairying, corn, cotton, legumes, etc.
Marketing.
Miscellaneous.

Fourth Drawer

Transfer Files: One set A to Z guide cards.

Correspondence, circular letters, studies, and son on, that should be kept should be transferred to this drawer and filed in properly labeled manila folders soon after July 1 of each year.

Reports: When all reports have been completed for the fiscal year they should be put in one manila folder and filed under that year heading in this transfer file drawer back of Z guide card.

Food Production War Training: When a class is completed the folder for the class should be transferred to this drawer from the top drawer.

Farming Programs

C. L. ANGERER

Follow-Up Visit With a Graduate

FRED J. HURST, Director of Information, Farm Credit Administration, New Orleans, Louisiana

LOUISIANA'S leaders in vocational agriculture and 8,000 Future Farmers are proud of the remarkable record made by Percy Fontenot, 23-year-old son of a tenant farmer in Evangeline Parish and a former member of the F.F.A. chapter in Ville Platte Vocational High School, from which he was graduated in 1939.

Percy started his hatchery business with an oil-burner incubator of 240-egg capacity and a $6 homemade brooder 10 years ago. Today he owns a modern 44,000-egg electrically heated incubator, turns out a quarter of a million baby chicks every year, buys and sells feed in carload lots, owns and operates six trucks over regular egg routes, and is the biggest buyer of chickens and eggs in Louisiana.

As a 13-year-old school boy, Percy started from "scratch." He had no money but a lot of courage and industry. His first incubator cost $24 on which he paid $6 down and $3.50 per month. He supplemented his income from the sale of baby chicks by catching frogs at night. His chick business began to grow and he bought another incubator, more than doubling his capacity, and remodeled an old house at a cost of $25 which served as a hatchery. His first chicks were hatched in his bedroom so he could look after his incubator day and night.

Scarcely had Percy expanded his operations before he again had to increase his output to meet the growing demand for baby chicks. He pitched in and, with his own labor, built a house with concrete floor and low ceiling to house a modern, electrically heated incubator. The latest-type brooders also were added.

By this time he was unable to buy locally all the hatching eggs he needed and few of these were from purebred flocks, so he started buying eggs from producers in Missouri and Oklahoma. These eggs proved disappointing since the percentage of chicks hatched was 25 percent below that of locally produced eggs.

It was then that Percy started a poultry and egg production program in cooperation with local farmers and his teachers of vocational agriculture that was to place the business on a more profitable basis.

He supplied local producers with purebred chicks, built a warehouse, put in a supply of feed, talked better breeding and sanitation, started blood testing, and inaugurated other measures for disease control.

Soon he had 175 local producers with blood-tested, U. S.-approved flocks. From Louisiana State University he purchased selected cockerels to place in these disease-free flocks to further improve the breeding and to increase production. He bought the eggs produced by these flocks, paying the producers a premium of 10 to 15 cents a dozen and furnishing a stable and satisfactory market to this large group of farmers. Meantime, this young rural businessman found it necessary to enlarge his hatchery and add another incubator. He widened his market thruout Louisiana, Mississippi, Arkansas, and Texas.

As poultry production increased in Evangeline and adjoining parishes, producers had difficulty in marketing surplus chickens and eggs and soon found themselves victims of poor markets and unprofitable prices. Percy took quick action to remedy this situation. He bought a fleet of six trucks, employed truck drivers, and established truck routes thruout a wide area where he now regularly buys chickens and eggs which are marketed from Baton Rouge and New Orleans to Waco and Dallas.

During the period of high egg production last spring, Percy sold $116,000 worth of eggs to the War Food Administration within a period of six weeks. He is now doing a $300,000 chicken and egg business annually and, according to D. C. Lavergne of the State Department of Education, Percy is handling more eggs than any other dealer in Louisiana.

But despite all of the work required to look after his poultry business, Percy found time to engage in farming operations during the past four years. This year he has had 35 acres in rice and has raised 20 head of cattle.

His next ambition is to own a cold-storage plant where he can store eggs to prevent spoilage. He also believes there is a fine opportunity to develop a big fresh-fruit market and to conserve other perishable products. He has already contracted with a New Orleans firm to construct a modern cold-storage plant. He sees this as a great need of the South.

Percy gives a lot of credit for his success to W. J. Parent, his teacher of vocational agriculture. He says, "I don't think I would be in business today if it had not been for the many things Mr. Parent did to help me."

J. H. Perrodin and Fulton Bacon, teachers of vocational agriculture at Ville Platte, say that this F.F.A. boy's work "has helped the whole parish. It has laid the foundation for enlarging and improving poultry and egg production. Percy has supplied baby chicks and necessary feed, encouraged better production, and provided a needed market for chickens and eggs."

Mr. Lavergne believes that Percy's success demonstrates the possibilities of Louisiana agriculture and proves the value of vocational education. It was in vocational classes that Percy learned so much about the basic principles of profitable poultry production, including breeding, feeding, management, and sanitation.

Boys' Adjustments in Their Farming Programs

J. C. LOVE, Teacher, Blacksburg, Virginia

THE primary objective of the teacher of vocational agriculture is to assist boys to become established in farming. How can we best attain this? That is a question that every conscientious teacher has tried to answer.

Most teachers follow the practice of having the boys set up their long-time farming program during their first year. After this long-time program has been set up, it becomes necessary for the teacher to assist the boy in making adjustments in it. The adjustment program is a day-by-day, month-by-month, and year-by-year program that does not end at graduation or even after the prospective farmer has become established in farming.

After the student has set up his actual long-time farming program, he is encouraged to make improvements. For an example: a job was taught in relation to forestry. As a result all the boys added an enterprise, a job or an improvement project to their farming programs. These included selecting and cutting mining props, selecting and cutting saw timber, setting out locust seedlings for fence posts, selecting and cutting fence posts, selecting and cutting firewood, and wood lot care.

Adjustments must be made in the long-time programs to meet the changes of any progressive rural community. The addition of the community cannery, for example, has forced us to make adjustments in planning for our farm food supply. Where we have been planting three or four varieties of beans to mature over a long period of time, we have found it better to plant one good canning variety to mature at a time which does not conflict with the harvesting of other vegetables. This will enable the family to can their entire needs in a period of two or three hours. The same adjustment will have to be made for the canning of other vegetables and some fruits. Adjusting the farm meat production program is also necessary in order to make the maximum use of our canning facilities.

Assisting boys to make adjustments according to the recommendations of the War Food Administration, so long as the recommendations are based on sound principles of farm management, is another important responsibility of the teacher of agriculture. The boy farmers may want to plant soybeans for oil in small units in areas where combines or other equipment is not available. It is always well to remember that we must guide the boy and the boy's parents along sound principles of farm management if we attain our objective.

Dr. Carsie Hammonds has said that teaching has not been effective if a change has not taken place. If a change has taken place, an adjustment must be made.

(Continued on page 31)

Financing Individual and Group Projects

L. L. BEASLEY, Teacher, Disputanta, Virginia

THE proper financing of any project is essential if it is to be successful. The boy in a class in vocational agriculture, to be a success, must carry good projects. I know of no part of the boy's training that is more necessary for success than the ability to handle money without waste. Too often the boy has drifted along with projects that are financed on paper only. This type of a program offers nothing but discouragement to anyone using it. Before any project can be successfully financed, it must be carefully analyzed to see just how much cash will be needed. It is necessary for the boy to analyze each project to be carried. The money needed for his entire program must be visualized.

The question then is how can a boy finance his entire farming program so that he will realize his responsibilities. I do not want the parents to simply set aside a sum of money and say to the boy, "Use this," then when the work has been completed at the end of the year, hear them say, "Well, I guess that your project returns will about pay you out," and then put the boy's money in their pockets and say no more. When such a practice is followed, the boy soon becomes discouraged and wants to leave the class.

We also see that he will sell most of his livestock projects in time to enable him to finance his crop projects. His seed and fertilizers can be financed from his own money, provided he has a definite system by which he can see what he needs and how long he will need the money he borrows. It also shows for what purpose he is to borrow the money.

With a plan of this kind I am prepared to talk over the work of any boy with his parents. The parents see just what I am trying to get the boy to do and how I would like to secure the parents' assistance in carrying out the plan. Dad looks over the plan and with very little explaining is ready to say, "I think it is a sound investment so I shall make the loan to my boy." Without such a plan I could hardly convince a father that his boy is a good risk. The same is true of any other agency that I might approach concerning the financing of a project.

In the case, also, of a boy who has had one or more years of work, it offers an opportunity, safe budgeting, something badly needed by most farmers. When the livestock or crops are sold he must put aside enough cash to take care of his projects for the following year.

In group projects the same plan is used, so we find little difficulty in getting the proper financing. There are, however, some obstacles that will have to be overcome in group work becuase some boy may not do his part and thus throw extra work on some other boy. This plan gives me something definite to work from so that each one may be checked at any time, thus offering an incentive or better work.

The local chapter sometimes makes loans to boys needing help. This calendar gives the executive committee something that may be watched in order to see that the money is being wisely used and something to guide them in making loans. If the boy has not made a complete expense budget, no loan is made. The calendar acts as a check from time to time so, if the boy is not using the money to the best advantage, the loan is recalled immediately.

I have approached county organizations asking that they put up money for financing certain projects for the boys in the chapter. By showing them the financial plan I have for the boy, they readily agree to put up the funds to be used for certain types of projects, such as swine and poultry. The method of paying off the loan varies. In the case of pig projects, the organization gives the money for the first gilt and asks that two pigs be given in return from the first litter. These, in turn, are given to other boys under the same terms. After several such transactions, two of the gilts are sold and the original loan is paid.

For chick projects the loan is cash to be returned at the close of the project, which is usually 90 days. In every case the calendar has been the greatest factor in putting the idea across to the lender.

This plan has enabled the members to have better projects and at the same time more nearly complete ownership of their projects. For any project to be a real success, the boy must have the controlling interest in it. He feels somewhat independent under this system and learns to handle finances in a systematic manner. It has done a great deal to make the boy realize that he must assume definite responsibilities, that the obligation is his, and that it must be met on time.

The following table, or calendar, has been used with very good success in the Disputanta F.F.A. Chapter for the past eight years. The calendar shows the scope of projects and cash needs by the month.

Calendar of Estimated Costs

Month	Peanuts 2A. cash	Corn 2A. feed	Hogs 5 Sell	Broilers 200 cash	Cover Crop	Total per Month
Sept.			Pigs $20.00			$20.00
Oct.			Feed $3.00			$3.00
Nov.			Feed $3.00	Fuel $6.00		$9.00
Dec.			Feed $3.00	Chix. $24.00		$27.00
Jan.			Feed $3.00	Feed $9.00		$12.00
Feb.		Seed $2.00	Feed $3.00	Feed $7.00		$12.00
March	Fert. $10.50	Fert. $12.00	Feed $3.00	Sell Chix.		$25.00
April			Sell Hogs	Sell Chix.		
May						
June						
July					Seed $6.00	Seed $6.00
Aug.						
Total	$10.50	$14.00	$38.00	$46.00	$6.00	$114.50

From this plan we see at once just how much ready cash the boy will need to conduct his hog, poultry, peanut, corn, and cover crop enterprises. If the plan is correctly arranged, we see that the boy should buy his pigs in the fall, preferably in October, and sell them in April or May. His broilers should be started in February requiring a cash outlay of $46, enough to buy feed until they are marketed in April.

Boys' Adjustments

(Continued from page 30)

Joe B. Carr, a third year student, had proposed to carry the following as his farming program, as set up during his *first* year in vocational agriculture: 3 dairy cows, 1 heifer, 3 baby beeves, 25 laying hens, 1 acre of corn, 1 acre of clover, 1 sow and litter. His actual program as adjusted is as follows: 3 dairy cows, 3 baby beeves, 1 sow and litter, 100 baby chicks, 3 acres of corn for grain, a hotbed, 3 ft. x 12 ft., 50 laying hens, 1 acre of white potatoes, 1 dairy heifer, ¼ acre of truck corn, ¼ acre of tomatoes, 20 ewes, marketing 4,000 feet of saw timber, selecting and cutting 200 fence posts, constructing a laying house, constructing a porch, harvesting 10 acres of wheat, harvesting 10 acres of alfalfa hay, planning the home food supply, and selecting and thinning trees for firewood.

Other adjustments have been made in this boy's program that are not indicated in the actual changing of the enterprises and supplementary farm jobs such as: cooperatively purchasing recommended varieties of seed and chicks, repairing farm machinery, financing enterprises, rotating crops, repairing farm buildings, constructing equipment in the farm shop, rearranging fences.

Yes, assisting boys to make adjustments is the most important job of the teacher of vocational agriculture. The job will increase when our rural youth return from war.

WATSON ARMSTRONG

Farmer Classes

W. H. MARTIN

A Continuing Young-Farmer Program

F. B. HOUGHTON, Teacher, Maryville, Missouri

THERE are still enough farm boys left in most communities to justify young-farmer classes.

I am completing my seventh year as a teacher of vocational agriculture in the public high schools of Missouri and also am completing my seventh year of holding courses for young farmers.

In both schools where I have taught, the young-farmer classes had been conducted by the previous teacher so that all I had to do was to carry on.

In analyzing my own teaching experiences, I find that I had the following reasons for conducting my young-farmer classes:

a. The classes had been conducted by the preceding teacher of vocational agriculture so it was the natural thing to keep them going.

b. My young farmers, in many cases, stimulated my all-day boys, which is a very desirable situation. The boys really get into the business of farming after they get out of high school. It is then that they begin to accomplish things. Their achievements can be used in teaching and stimulating all-day boys.

c. The young-farmer class was the best means for me to keep in contact with my former students. As the years of service in a community begin to increase it becomes more difficult to keep in touch with all former students. The contacts are maintained at a time when many farm boys are unsettled, undecided whether to enter a farming partnership with their dads, buy or rent a farm, leave the farm completely, or to continue their agricultural education in some college of agriculture. It is at this period of uncertainty that the teacher of agriculture can render some really valuable service.

d. It enables those boys who desire to do so to continue their training in agriculture after they have finished high school. The practice of being intensely interested in farm boys till they have graduated from high school and then dropping them before any appreciable number of them have achieved their goal of becoming established in farming never did add up quite right to me. The real stimulus to learning is to feel a need for information. The farm boy in all-day classes in vocational agriculture, in many cases, does not always feel the need for a lot of the material he studies for he knows Dad will make most of the decisions anyway. But the out-of-school young man is more nearly in the farming business and he may be completely in the business where his own decisions mean dollars and cents. He feels the need of some sound advice and feels the need of acquiring some more training in agriculture. I want my young farmers to fill that need.

e. My young-farmer class offered the opportunity to boys in surrounding communities, where vocational agriculture was not available in high school, to come in for some training. In checking the enrollment in my young-farmer classes for the last six years, I find that 53 percent were young men who did not have vocational agriculture in high school.

f. The majority of former vocational agriculture boys who are still residing in the community like to maintain fairly close relationship with the local department of agriculture. I want my young-farmer class to fill this need.

g. Altho the remuneration is not large, I must admit it has its place among the reasons why I conduct a young-farmer class.

Surveys Locate Young Farmers

In organizing these classes each year I make a preliminary survey with my all-day boys of any out-of-school young men in the community. We add this list to the revised roll of young men in last year's class. Invitation cards are sent to each prospective member early in the fall, usually the last of September, inviting him to a planning meeting at the high school. From here on the young men themselves will invite others or give me names of others to invite. At the first meeting, possibilities are discussed of holding meetings, what might be accomplished, and the nature of some previous meetings. Then the young men decide if they want to hold their meetings again. I am always very careful to let them decide and plan their own meetings. After deciding to hold meetings, the next step is to let the group organize. They elect a president, a vice-president, and a secretary and treasurer. These officers constitute the executive committee.

We next plan our series of meetings. The group votes as to what night they will meet and how often, and they are asked for any suggestions as to what they want their meetings to include. From this point all plans are made by the executive committee. This committee plans for the entire series of meetings—15 in most cases—and submits the plans to the group for approval.

The planning committee divides each meeting into educational and social or recreational activities. The educational part of the meeting will usually last about one hour and will include round table discussions, led by the teacher, talks by outside individuals, the teacher, or some of the young men, motion pictures, slides or demonstrations. Following the educational activity, a recreational period is held which usually lasts from one to two hours or until the instructor flicks the lights in the gym and tells them it is time to go home. Recreational activities include table tennis, basketball, and motion pictures. Included in each series of meetings will be a social function or two which varies with different groups, and each series closes with a chili feed or a hamburger fry.

Data on Eight Young-Farmer Classes at Maryville, Missouri, High School, 1939-45

Total number of classes held in 6 years (15 meetings each)	8
Total enrollment	165
Total enrollment by years: 1939-40	29
40-41	37
41-42	31
42-43	15
43-44	32
44-45	21
Average attendance at each meeting	14.6
Percent of enrollment not having any previous instruction	53
Number of different individuals enrolling in eight different classes	89
Percent of total enrollment that carried projects	40
Percent of last class now in armed forces	5.5

Eight young-farmer classes have been held in Maryville, Missouri, High School in the past six years under the leadership of F. B. Houghton, teacher. A total enrollment of 165 young farmers was secured from 89 different individuals. Table tennis, basketball, and other games, refreshments, and an occasional movie or social hour have added interest to these continuing courses

A Long-Time Young-Farmer Program in Missouri

L. E. MORRIS, Teacher, Marshall, Missouri

L. E. Morris

NEARLY 10 years ago a group of former students of vocational agriculture of the Marshall, Missouri, High School decided to continue the work they had begun when regular high-school students. A meeting was called in the vocational agriculture room of the high school and an organization formed. At that time few, if any, of these young farmers expected the new organization to function for any very great length of time. Contrary to most of their expectations, it has continued to live and function thruout the years and seems to be growing in numbers and usefulness as the years come and go.

At first the organization, which was made up of former Future Farmers of America, designated itself the F.F.A. Alumni Association. But as time went on, other young farmers who had never been F.F.A. members began attending the meetings, and so the name was changed to Young Farmers of America and has since been called by that name, using the letters Y.F.A. to designate the organization.

At first, meetings were held twice each month for two or three months during the winter season with an occasional social during the year. For the last few years, meetings have been held weekly beginning in September and continuing until the farm work in the spring becomes urgent. Socials are held each month thruout the entire year.

During the period in which the organization has been functioning, most of these young farmers have married and have established homes of their own. It was only natural that their wives should want to accompany them to the meetings, and as a result, about as many young women as young men are members and attend the meetings. In the selection of new officers each year, about an equal number of young men and young women are elected.

Since the organization was formed, the group has studied nearly every phase of agriculture common to this section, including courses in soils, crops, feeding and breeding of farm animals, poultry, farm management, care and repair of farm machinery, and construction of needed farm equipment, such as hog houses, wagon boxes, hay frames, and the like. In handling these different courses, various ways have been used, including the use of successful farmers, business and professional men of the community, the young men and women themselves, as well as the teacher of vocational agriculture.

In order to meet the needs of this group, as well as the needs of the regular day students in vocational agriculture, considerable new equipment has been purchased for the farm shop including small tools, a power saw, and a large electric welding machine. Other needed equipment will be added when available. The agricultural and shop libraries have been built up until they are amply able to meet the needs of an up-to-date farming community.

Frequently the young men come in on Saturdays or during regular school days to work in the shop. These young men have found that the school shop is much better equipped than their own shops and as a result the school equipment is being used more and more all the time.

The young women have engaged in various activities of interest to them, including sewing for the Red Cross. This year they assisted in making and decorating Christmas toys for their own children.

Perhaps a better picture might be obtained by taking up what is done at a given meeting. For example, let's look at a session held on any Wednesday night during the winter months.

There is an attendance of about 20 young farmers, about a dozen young women, and about an equal number of children. The meeting begins at about 7:30 o'clock. The young men begin work, some making children's toys, others constructing things needed around the home, and others repairing farm machinery.

The young women begin their activities, some by working on the construction of toys, others sewing, and others caring for the young children. At about 9:00 o'clock work stops and a brief business session held to consider such items as: means of making money with which to purchase purebred livestock to be let out on a partnership basis to members of the organization, the purchase of a terracing machine to be used by the members of the organization as well as by other farmers of the community, plans for closing the farm records and farm achievements contests, and details of the regular monthly social to be held at the home of some member of the organization.

At 9:30 o'clock some of the men go to the gymnasium for a basketball game. It might be added here that the use of the high-school gymnasium has contributed in no small degree to the interest of the meetings. These farmers are young and still remember their school experiences on the "gym" floor. The same might be said concerning the young women. They still enjoy a volleyball game with the men. Others remain in the vocational agriculture room where some good motion picture of an educational nature is shown or they go to the cafeteria where various games are played.

They assemble in the cafeteria where pop, apples, or some other simple refreshments are served. At 11:00 o'clock, which is the regular time of adjournment, all are out of the building.

The continued, regular attendance of members of the group and the interest displayed in the organization indicate that the members are receiving helpful instruction and wholesome recreation from this program.

This young-farmers' class in Marshall, Missouri, has met for nearly 10 years with some changes in membership but only an increasing interest in the meetings. The courses combine shopwork, machinery repair, and discussion hours on current farm problems with an hour for social and recreational activities and refreshments as a valuable feature. Their instructor is L. E. Morris

Animal Breeding

(Continued from page 28)

to have, to work with? (Selection of breeding stock; Objectives of market producers).

Problem 2: What should we expect to be able to do with what we have, or need to have? (Standards of performance.)

Problem 3: What breeding methods could be followed that would help in attaining these standards? (Methods of breeding.)

Problem 4: What records will be needed to help us to make more intelligent selections next year? Feed consumption, growth weights, notes on animal growth, conformation changes.)

Vocational Agriculture II

Objectives: To analyze the performance of breeding animals of previous year. (Were last year's standards equaled or surpassed?) To revise breeding plans for the following year.

Problem 1: What animals should be selected as breeders, from young stock, from old stock? (Selection based on records and conformation.)

Problem 2: What revisions in the record system would make selections easier and more efficient? (Records.)

Problem 3: How should the breeding

(Continued on page 37)

Farm Mechanics

R. W. CLINE

Adults Grow Thru Shop Activities

GEORGE PEER, Shop Teacher,
Mattawan, Michigan

THE adult farm-shop program has had a strange career in our community. When we first began promoting interest in the course, many of the people interviewed would say, "Something like that would be fine," leaving the impression in our minds that they believed it would be fine for the other fellow. Eventually we succeeded in getting enough to organize a course.

The first time we met there were several axes to grind, some hammers that needed handles, a teakettle which needed soldering, and several chains with broken links.

A few of the men had tentative plans for the construction and remodeling of large equipment. They made a beginning and everyone gained confidence and enthusiasm in the program. We progressed from welding broken chains to welding drags, tractor parts, castings for disks, and trailer frames.

Odd assortments of materials, generally classed as junk, came in. One assortment consisted of a piece of boiler plate, part of an old cream separator, a grinding head, and a good electric motor. These assorted parts were assembled and went out of the shop as a grinder which was built to meet one man's needs.

Odds and Ends Serve Well

Some old buggy axles, some angle iron, some channel iron, and some strap iron were converted into a brush rake for grapes. This man had tried to buy such an attachment for his tractor but couldn't find one. He was also unsuccessful in finding someone to build the rake for him. Now he is satisfied with what he built himself.

One man who lacked confidence in his ability built a hay wagon out of an old auto frame. The rack is easily converted into a truck bed and serves as a multiple purpose wagon. When he finished this job, he built a grape brush rake which was an improvement over the one mentioned above. He is now making plans for projects for next year.

One member, unable to buy a stock trailer at an auction sale, built one in the shop. He said the one he made was more substantial and better constructed, and besides he had a good time making it.

Two men built a buzz-saw rig for a Ford tractor because they couldn't buy one. They claim that it works as well as the one they formerly borrowed.

Our attendance fluctuates but the enthusiasm doesn't seem to diminish. More people keep coming. Some wish they had started sooner. But all agree they have benefited and want to continue their work next winter.

Supervising Learning Activities in the Shop

WILLIAM CRANER, Teacher,
Preston, Idaho

IT WOULD be folly for me to try to outline a hard and fast program for all of the teachers of farm mechanics to follow in putting over their shop programs because conditions under which the students and the teacher work are different. Schools vary as to equipment, funds available, size of shop buildings, size of classes, and in many other ways.

Shop teachers have had practically the same fundamental training and experience in setting up a shop program. This includes the steps in procedure to create the proper atmosphere for the job and the necessity of securing student interest in the job. By doing this the learning process will be complete and the student will remember what was said and done during demonstrations and class discussions. The writer is in full accord with such procedure but wishes to mention some of the things that reacted differently for him as they may have for other shop teachers.

I am sure that the boys in my farm mechanics class were given the fundamentals of shop, including demonstrations, last spring in preparation for shop work. I am certain because this is the general plan followed in Idaho and I think a plan of merit. When school opened last September I asked the boys if they were familiar with shop work and they all assured me that they were, and this being a junior and senior group I had every reason to believe them. The boys started out on the jobs they had previously listed as the ones on which they wished to work during the year.

Pupil Demonstrations

After about 10 days in the shop I could see many of the boys were having difficulty and were not quite so sure they knew all the answers. I felt that it was too late then for me to give the demonstrations and decided to let the boys give the demonstrations. I made up a list of some 20 points which needed correcting, listed them on the blackboard, and allowed each boy to choose his demonstration. Additional pointers were listed by the class so that each boy had an assignment to prepare. There are 25 boys in the class.

At first the boys were rather reluctant about giving the demonstration, but after the second boy had prepared and given his demonstration the group seemed to see the idea and really took things over. Many of the boys have asked for additional assignments because of the valuable training they received in preparing and giving a demonstration. Such demonstrations as cutting rafters, cutting window panes, making a waxed thread, cleaning a paintbrush, and the use of a farm level were given.

(Continued on page 37)

T. J. WAKEMAN, Teacher,
Christiansburg, Virginia

AFTER the shop course content for the year has been developed, the teacher should set up a schedule of work by days, including specific jobs to be done and skills to be developed under each type of work in the course. Teacher and pupil working together should provide in advance of the shop class all the materials, equipment, and information necessary to carry out each job. By this plan, each student upon entering the shop should have a clear understanding of his individual shop program for the day, the month and the year, as well as the program which he has planned for himself after he graduates or drops out of school. A boy who has such an understanding is able to visualize himself as an individual well rounded in the major farm shop skills and practices. He will not be disgruntled when, at the end of a six-weeks' period of woodworking, he is abruptly changed to a schedule calling for skills to be developed and jobs to be done in cold-metal work. By following a well-planned shop program, the pupil will know what his next job will be without asking the teacher. Instead, the teacher may ask the boy, "What is your job for tomorrow?"

Once the course layout for the year has been developed and the specific jobs selected for developing the desired skills, the instructor is ready to begin the teaching. When the group has finally assembled in the shop, demonstrations that meet the needs of the entire class or a small group, or sometimes of an individual are given at such times as the teacher thinks they will be most effective.

After the group has been oriented, the individual pupil should be encouraged to come to the teacher for help when some special problem arises. This spirit of mutual cooperation will prevent many pupils from blindly continuing an incorrect procedure. Stated another way, this principle demands that the pupil who seeks help must not be made to feel awkward, ignorant, or annoying.

While the class is in progress, the teacher should check each pupil for the proper use of plans, tools, and materials. While he is making this check, the teacher should point out to the pupil the strong points of his workmanship and any weak points that could be improved. In some cases the pupil may be directed to start the job again. Some pupils may have to practice a skill during several class periods before a job can be continued. An example of this may be the sharpening of a drill bit while the pupil is working on the job of making a tractor hitch. This may be necessary because the boy did not master this skill when tool sharpening was being taught. It is very important that the teacher detect the weaknesses in a job before it is too late, so loss

(Continued on page 37)

Planning for Returning Soldiers Who Want to Farm

HENRY M. DAVIS, Teacher, Berryville, Virginia

H. M. Davis

PLANS must be rapidly formulated to serve the returning soldiers who will be interested in farming. Many young men are expressing a desire to farm when they get back to civilian life. Alert teachers will be ready to serve and guide these young men in making their decisions and in getting started in farming when they are sure that is the occupation they wish to follow.

Teachers should proceed with caution, however, and guide only those who are quite sure of their choice, qualified, and willing to work. These young men can, with the aid of the Government, secure several thousand dollars to help establish a business. This makes the problem of guiding a veteran into farming a responsible one, as the wrong step could lose his money. A questionnaire should be made up so as to help the boy to think thru or analyze his situation. Some things to consider are:

1. Health, physical fitness.
2. Farming experience.
3. Do you like farming? Why?
4. Do you know that farming is hard work with long hours, disagreeable days and dirty jobs?
5. Do you like to work with plants, livestock, nature, and country life?
6. Do you know that the financial turnover is slow and that the cash returns are often lower than city wages?
7. Do you realize that farming is a business and must be planned?
8. Do you realize that farming is a long-time investment and that you must stick to it or you will probably lose money?
9. Do you think a farm is a good place to raise a family?
10. Are you willing to be a student of your occupation?
11. Will your wife and family like farm life and work with you?

A program should be planned and ready for those young men who seem to be good prospective farmers. A study is now being made of the farming possibilities and opportunities in Clarke County, Virginia, so local leaders may be in the best position to serve the returning soldiers interested in agriculture. A letter was sent to every farmer of the Berryville school area explaining the survey and requesting certain information needed for the study. These questions were put on a returned, self-addressed postal card: 1. Do you want to sell your farm? 2. Do you want to rent your farm? 3. Do you need a foreman or manager? Do you need year-round day labor?

A summary of these returns shows that there are five farmers interested in selling, four interested in renting, two want foremen, and 10 want year-round day hands. A detailed study will be made this summer on these farms to determine productivity, field arrangements, location, electric lines, water supply, buildings, landscape, and the farm-home possibilities. Every effort will be made to keep an up-to-date list of available farms with all pertinent information, so leaders will be in a position to make recommendations to young men interested in buying or renting a farm.

Teachers must, also, be ready to guide and help the young man with the management of the farm after he secures it thru purchase or rental. A mimeograph form, listing and explaining briefly what is believed to be the most important practices in good farm management for Clarke County, has already been prepared. This mimeograph also lists useful references for the county. A supply of these references will be kept where they will be available at all times.

Planning With Present Members

The best teaching opportunities probably lie within the young farmers. Many of these have full responsibility while others have a big share in the responsibilities of making decisions on farm management problems. The young farmers are more desirous of securing information and accept recommendations more readily than most other groups.

The teaching and farming programs with young farmers should be based upon farm management problems such as improved breeding of animals and crops; soil analysis, and proper fertilization, meeting production goals, and efficiency thru the use of self-feeders, handy equipment, and enterprises that require less labor; systematic planning for the upkeep and painting of buildings and equipment, repairing and building new fences, and the like.

Some of these problems are current while others call for planning. All are important either in time of peace or war, but some, such as repairing and painting buildings and equipment, are particularly important now since more money is available and new materials and equipment are hard to secure.

There are real opportunities to teach these young farmers to adjust, repair, and construct farm machinery and equipment in school shops. Most shops are well equipped for this type of work and should be available to these young farmers at specified hours. Let them feel that the shop is as much theirs as it is the all-day boys.

Group meetings should be called as often as it may seem necessary, but the most important and effective help can be given them by frequent farm visits when suggestions can be made and plans set up to cover the problems in sight. Leaving with them farm account books, helpful hints, and suggestions has a desirable influence in carrying out improved practices. A list of "Reminders" to consider in good farm management practices can be an influential guide.

Don't forget there are some good young farmers in the community who never studied agriculture during their high-school days. Invite them in.

Below is my reminder list of improved practices given to each member in January.

Good Practices for a Successful Farmer to Consider

Name _____

Practices I usually follow	Practices I need and will follow	IMPROVED PRACTICES
		CROPS:
		Seed a new alfalfa bed
		Top-dress old alfalfa with 400 pounds of 0-12-12 per A.
		Use borax on alfalfa—20 lbs. per A.
		Plant adapted hybrid corn
		Use some fertilizer under corn—200 lbs. of 4-12-4 per A.
		Turn under a good sod or manure cover
		Fertilize permanent pasture middle of March
		Treat seed wheat against smut
		Control erosion
		Use lime once in rotation
		LIVESTOCK:
		Breed to good purebred males
		Inoculate against diseases
		Treat against internal and external parasites
		Supplement winter feeding with proteins and minerals
		Keep houses warm and dry
		Provide plenty of water at all times
		Have legume hay for sheep and dairy cows
		FARMSTEAD AND MACHINERY:
		Keep machinery in repair
		Improve the farm shop
		Build some laborsaving device (self-feeders, windmill, etc.)
		Build some new fence
		Paint and repair buildings
		Provide running water in home
		Tap electric power line
		Conserve, can, and store enough food
		Put out some small fruits
		Plan business and keep some records

Studies and Investigations

E. B. KNIGHT

Farming Opportunities for Veterans in Coos County, Oregon

TED T. KIRSCH, Teacher, Myrtle Point, Oregon

Ted T. Kirsch

Facts presented in this article were obtained thru a local study by Mr. Kirsch who has taught at Myrtle Point the past three and one-half years. Since vocational agriculture has been offered in Myrtle Point High School for 20 years, many of the present dairy farmers are former students of vocational agriculture. Ever since the department was established it has been one of the leading centers in the state in adult-farmer classes.

WILL all qualified returning veterans and other youth interested in entering farming in their home community have an opportunity to do so following the war? Every agricultural leader should be seriously considering this question. In the Myrtle Point community of Coos County, Oregon, where dairying is the principal agricultural enterprise, two-fifths of those servicemen and youth who want to enter dairy farming will be unable to do so unless more help and guidance is forthcoming during the next 10 years than has been available during the past decade. A questionnaire mailed to 70 servicemen and a survey of youth and farmers in this community indicates that 24 young men who are interested in beginning dairy farming in the next 10 years will have to change their occupational choice unless something is done.

The purpose of this study, made during July and August, 1944, was to determine the degree of opportunity for returning veterans and others between the ages of 18 and 30 to get started in dairy farming in the Myrtle Point community during the next 10 years. Facts about these youth, dairy farms, dairy farmers and operator replacements were compiled to make this determination.

Qualifications and Interests of the Young Men

The qualifications of young men to enter farming and their interests are two primary considerations in determining the demand for farms. A large percentage of those 18 to 30 years old in most communities are now in the armed forces and questionnaires are the only feasible method of obtaining this kind of information about them.

Thirty-two of the 70 servicemen who grew up or worked on dairy farms in the Myrtle Point community answered a questionnaire designed to obtain information on their interests in dairy farming when they returned, how much dairy farm experience they had had and similar information. Two-thirds of those answering said they wanted to begin dairy farming in the Myrtle Point community during the next 10 years. Over four-fifths of these young men were between 18 and 27 years of age. The average was 22.4 years. The average serviceman had over four years of dairy farm experience after 15 years of age. Four-fifths had graduated from high school and one-third of these had had four years of vocational agriculture.

Four-fifths of those interested in dairying felt that they knew enough about dairy farming in the Myrtle Point community to make a satisfactory living. One-third of the young men had made plans to go into partnership with their parents when they returned. Over four-fifths of those answering had parents who had farmed in the Myrtle Point community an average of 15.5 years, and 59 percent of the parents are still farming in the community.

Eleven young men between the ages of 18 and 30, still living in the community but who hadn't entered upon their life's occupation, were personally interviewed by the writer. Eight of these were living with their parents on a dairy farm. Four planned to go into partnership with their parents, and four planned to take over the home farm. Two others planned to buy a dairy farm, leaving only one not interested in dairying. No detailed information was obtained on young men under 18 years of age who may want to begin dairy farming during the next 10 years.

Farms and Farmers

In order to determine the degree of opportunity for young men to begin farming in a community, some definite figures on the number of farms, farm productivity and income, percentage of tenant farms, ages of farmers and their family status are helpful. This information may be obtained from previous studies or surveys. If not, a representative survey of approximately one-third of the farms in a community will give reasonably accurate information.

In the Myrtle Point community there are 147 dairy farms which keep their operators busy more than one-half of their productive time. A survey was made of 50 farms, representative of this group, to obtain information about the farms, the farmers and their families. The average dairy farm contained 143 acres of which 66 acres were cropland. An average of 28.5 cows produced 7,587 pounds of butterfat yearly, making an average of 266 pounds of butterfat per cow per year.

The average dairy farmer was 45.3 years of age. Only 6 percent of the dairy farmers were under 30 years of age while 16 percent were above 60 years. These farmers had been dairying an average of 16.3 years, and 10.4 years of this time was on their present farm. Forty percent of the farm operators were tenants. Dairy farm operators had an average of one son and one daughter each, altho 26 percent of the farmers had no children. An operator's average gain in total net worth per year on his present farm was $697. Over four-fifths of the dairy farmers gained an average of $400 a year or more.

Operator Replacements

The number of times farms changed hands indicates to some degree the opportunity for youth to begin farming. The reason for farms changing operators, as well as other operator replacement data, seems valuable in guiding youth into or out of farming. It was found in the Myrtle Point community that:

1. Sixty-two percent of the farms changed operators a total of 73 times in 10 years. Approximately 14 percent of the farms changed hands each year.
2. One-third of the past operators left or had to leave primarily because of poor management while one-fifth were advancing themselves by moving to better farms in the community. Only 13.7 percent retired from dairying.
3. Over one-third of the new operators in the past 10 years were inexperienced at dairy farming.
4. Less than one-sixth of the new operators were youths. Approximately two-thirds of these youth were heirs.
5. Over three-fourths of the changes took place between people who knew each other.
6. Three out of every five operators leaving a farm moved from the community or changed occupations. Over one-half of the changes were from one tenant situation to another, while only about one-sixth were from one owner to another.

In order to determine whether or not the operator replacements will be the same during the next 10 years as during the past 10 years, each of the 50 dairy farmers was asked about his plans for the next 10 years. The correlation between what happened in the past 10 years and what farmers plan to do in the next 10 years was very close.

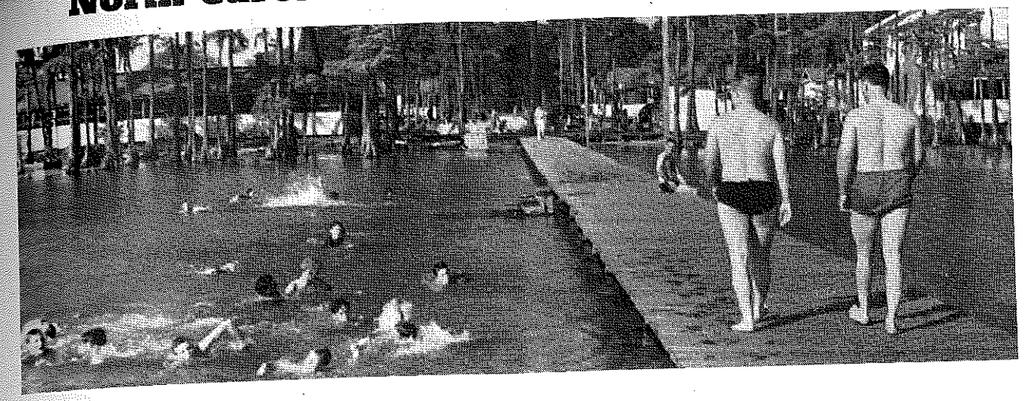
Conclusions

Conclusions which can be drawn from this study regarding youth opportunities on dairy farms in the Myrtle Point community during the next 10 years are:

1. There will be 55 youth between 18

(Continued on page 38)

North Carolina F.F.A. Camp at White Lake



FUTURE Farmers in North Carolina enjoy camping at White Lake in the eastern section of the state. This camp was opened in 1928 and has been supported largely by the teachers and the Future Farmers of the state. The original camp consisted of six cottages, a dining hall, a manager's cottage and necessary equipment. By 1938 these improvements had been paid for, six additional cottages, two bathhouses, an addition to the manager's cottage, a cook room and a staff cottage had been built, the latter a donotion by a commercial concern. Also 600 feet of lake frontage was purchased and a pier built.

The annual dues were $4 per teacher and boy, $2 of which was applied on the debt. By 1940 all buildings, site and equipment were paid for with a cash balance of nearly $2,000. To date the camp includes 20 cottages, one recreational hall 60′ x 80′, one dining hall 40′ x 80′ with a kitchen 30′ x 30′, a pantry, modern storage facilities, and an office. Also one 18-room manager's cottage, one four-room caretaker's cottage, one six-room staff cottage, one five-room manager's cottage, three bathhouses, a pump house, board walks, piers, slides, and a diving platform. Electric lights and running water are available. For sports, in addition to the water, there are a baseball field, two volleyball courts and a tennis court. In 1940 the season's attendance was 2,720. The camp is open from mid-June to late August.

Approximately 20 chapters attend for each period of a week. The camp personnel includes an assistant manager, an athletic director, a swimming and first-aid director, a director of recreation, a dietitian, cooks, a housekeeper and a janitor. Sanitation is supervised and approved by the State Board of Health.

Future Farmers of North Carolina also have a second camp, the Tom Brown Camp, in western North Carolina, "the land of the sky." When completed this camp will be worth at least $45,000. Truly, North Carolina Future Farmers have provided well for their summer recreation. R. H. Thomas is state supervisor, and R. J. Peeler is state secretary.

Shop by Craner

(Continued from page 34)

Many teachers have the demonstrations presented in the shop, but I brought the shop jobs to the classroom where each boy had a comfortable chair and where all the class could see the demonstration. I found the boys responded better, paid better attention, asked more questions and had more interest. The student giving the demonstration seemed to feel more at ease because the boys were not crowding around him so closely. I do not say this is the best method, but it has proved the best for me in over 10 years of experience in farm mechanics work.

Supervision on the Job

The greatest handicap I have in putting over a good shop program is the tendency to spend too much time with one or two boys and to allow the rest of the class to get along the best they can.

This year I have tried to limit my time so that I will find it possible to assist each boy at least once during the class period of two hours. The boys all have their work to do; it is their own work; they know what they are trying to accomplish and generally have a good idea of how the job will look when it is completed. I have refused to do the odd jobs for the school, the music teacher, and the speech department. These are the jobs that often wreck shop programs.

I have made it a *must* to demand first-class work from all the boys and in most instances the boys have done their best. Not a perfect job, but a lot better than would be done if a demand for good work had not been made. I remind the class again and again that a job worth doing at all is worth doing well. Be proud of your work, proud to have others see what you have done. The shop is operated on a modified point system of grading and the boy is graded first on the quality of work done along with allowance for time spent in actual construction or repair of the article.

The above plan works very well and I am pleased with the results this year.

Shop by Wakeman

(Continued from page 34)

of time and material are prevented.

The teacher will find it helpful to score each individual on his work during each class period. Such scoring aids the pupil in evaluating his progress and identifying weaknesses. The teacher, making note of these strong and weak points, can determine the skills to be stressed, also the jobs, materials, and tools needed for the next day's work. At the end of each period after the tools and shop have been put in order, it is a good plan for the teacher to take a few minutes to point out some good work done during the period. Such comment should not be limited to a few pupils, but should include some good work of each pupil. This may be a very small item such as a nail properly set in a board. However, the praise the boy receives will tend to create a desire to hustle into the shop the next day with renewed interest in his work.

Animal Breeding

(Continued from page 33)

program be revised? (Review of Problem 3, Vocational Agriculture I.)

Problem 4: What revisions in management would make selections more efficient? (Effects of nutrition, age, sex, and environment on selection.)

Vocational Agriculture III or IV

Objectives:

1. To get an understanding of the physical basis of heredity.
2. To understand various systems of breeding and their application.
3. To understand the objectives and obligations of purebred breeders, the objectives and opportunities of market producers, and their interdependence.
4. To understand the application of artificial insemination in farm animals.

Problem 1: What are the mechanisms thru which new individuals come into being?

Male and female reproductive systems; Gametogenesis; Reduction division; Fertilization; Pregnancy; Parturition; The role of internal secretions.

Problem 2: What are the systems of breeding and how may they be used?

Inbreeding; Outcrossing, its objective and general effects.

Explanation of hybrid vigor.

Problem 3: What is the objective of the purebred breeder and what obligations does he assume as such?

Problem 4: How might artificial insemination be used in livestock improvement?

F. E. Armstrong
Hawaii

Garcia Hernandez
Puerto Rico

THIS month we have a glimpse of two of our leaders in Island territories. Dr. F. E. Armstrong is in charge of teacher-training in the University of Hawaii at Honolulu. He received his Bachelor's Degree from Clemson College, South Carolina, his Master's Degree from the University of Minnesota, and his Doctor's Degree from Pennsylvania State College. He was a teacher of vocational agriculture in Minnesota for three years. Professor Armstrong started the department of agricultural education in Hawaii in 1926. From the quality of work done by the teachers as reported thru the magazine, it is easy to rate as superior Doctor Armstrong's ability as a trainer of good teachers.

Lorenzo-Garcia Hernandez is teacher-trainer and profesor of agricultural education at the College of Agriculture, Mayaguez, Puerto Rico. Professor Hernandez is a graduate of the College of Agriculture on the Island and was a successful teacher of vocational agriculture for several years before his selection as a teacher-trainer. He received his Master's Degree from Ohio State University in 1938. His thesis dealt with the out-of-school farm youth in Puerto Rico. He has had some experience as a supervisor on the Island and during the war has given considerable time to the planning and initiating of a program of vocational education in agriculture in the Province of Colombia, South America.

Veterans Opportunities

(Continued from page 36)

and 30 years of age who will want to begin dairy farming in this community.

2. Unless something is done, only 33 or three-fifths of these young men can begin dairy farming and the others will have to change their occupational choices or move to other areas.

3. Approximately 24 or over two-thirds of those youth who begin dairying will be in partnership with their parents or will take over the home farm.

4. Approximately 17 of the 147 farms change operators each year, indicating that a number of opportunities exist but that youth are unable to take advantage of them for reasons which were not determined.

The problem becomes apparent, but what to do about it is not so clear. The agricultural extension service is setting up advisory committees in each county to help and give guidance to returning veterans. The Farm Security Administration is setting up a veterans loan committee in each area to make farm loans.

The success of these committees and their agencies will depend largely on how well they understand the problem before them and whether or not, with so many other responsibilities, they will take the time necessary to help the situation.

If it is determined that there will not be enough farms available for the number of interested and qualified youth in a given community, it would seem that studies on the barriers which keep young men from entering farming, and the extent to which they are active in the community would certainly be appropriate. A program of action would then be in order. This is a fertile field for teachers of vocational agriculture to study in their communities. Thru cooperation with the extension service, farm security and other agencies surely some progress could be made in solving this problem.

Book Review

A. P. Davidson

Adult Education for Democracy in Family Life, by Mary S. Lyle, 161 pages, published by The Collegiate Press, Inc., Ames, Iowa, 1944, list price $2.25. The author bases her recommendations upon a survey of farm and village homes and a study of an adult education program in a rural community of central Iowa.

Six criteria of democratic living were formulated and investigated. More than half of the homes, which were investigated, failed to meet the criterion that the pattern of family living should furnish stimulation for its members to meet new situations and problems with intelligence. About half of the homes failed to provide an opportunity for members of the family to participate in joint planning and in the choice of goals for family living. Homemakers who were interviewed reported that their most serious problems were low income, poor health, and lack of recreational facilities for children and youth in the community.

The adult education program of the public schools was meeting some of the vocational needs of adults thru classes in homemaking and agriculture for adult groups and youth groups. Some of the other needs of adults were being met thru classes in subjects such as current problems, economics, crafts, hobbies, music and typing; and thru community forum programs.

The author recommends that the use of adult education councils be continued, but suggests that council members should be more representative of the people of the community. Specific suggestions are made for giving more emphasis in classes and in forums to the encouragement of democracy in the home and family life of the community. The continued use of lay leadership is recommended but the author urges that more attention be given to training such leaders.

A readable book, based upon sound philosophy, offering numerous practical suggestions of value to persons interested in adult education and problems of family life.

BANQUET BANTER

Toastmaster: I should like very much to introduce our speaker tonight with greater honor than I am able to, but I am blocked—there's nothing I can do about it. Our teacher tells us that our speaker is one of his former teachers at Ohio State. He has been at Ohio State and chairman of the department of agricultural education for 28 years; seems like he should have that job done before this. They say his name appears in "Who's Who"—whatever that is. He is editor of a magazine for teachers of agriculture, the last column on the last page of which I am told is read quite extensively. They say he has developed the teacher-training program to one of the best in the United States. If that is so, we should have a better teacher than we do. They say the graduate work under his direction ranks just about tops in the country. I can see why it might be rank, but I don't know about the "ranking first" business. Because of all of these points of merit it would seem that he must have been born in Ohio and that I should be able to introduce him as a genuine Buckeye, but alas, that is not true, and so I am forced to introduce him as just what he is—a Sucker. Ladies and gentlemen, our speaker.

Speaker: Friends all, what mature minds these Future Farmers have! One might wonder what causes that maturity, or from what source do these bright ideas come? Friends, I have no such concern. It's very clear to me. While talking to the boys here at the speaker's table, I asked about their work in agriculture, if the work was hard and if they had to really prepare their lessons. To my surprise they said yes, they worked more on agriculture than any other subject, that their teacher was a "bear cat" for preparation. I was glad for the change that has come over him since he took my courses—Pullman style. I only wish that he had had, at that time, the idea that assignments were supposed to be prepared.

By the way, I hadn't seen my former student for several months until I met him this evening. As I noticed his profile and sized up his contour I was impressed that old Von Ruhnsted wasn't the only one who lost the battle of the bulge.

About this Buckeye business, that's a rather touchy subject. I have been introduced thus, but I have objected strenuously because I am just the remnants of a red-haired, freckled faced farm boy, born and reared in Illinois, a Sucker—and proud of it. I associate with Buckeyes day by day—I have to. And I have had occasion to study them and observe them closely. Sometimes by being lenient you find some good points which you could, by using the truth liberally, say you admire, but I lack so much of being a genuine Buckeye that I simply cannot accept an introduction under that name. To get at the truth of this Buckeye business, all you need to do is to read the dictionary definition. It reads, "A small, hairy nut inside of a hard shell, and having little commercial value." So far as I can judge, the definition is very appropriate. Ladies and gentlemen, a genuine Sucker is not "a sucker" nearly as much as a certain Buckeye toastmaster and his teacher are.

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