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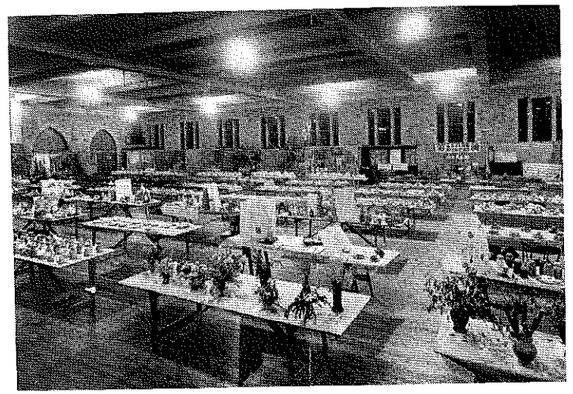
THE AGRICULTURAL EDUCATION MAGAZINE



FARM SHOW — LYNCHBURG, VIRGINIA

(See page 163)

Nature has provided no means by which the pupil long retains the information he does not use.—Thorndike.

The Agricultural Education Magazine

A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by the Meredith Publishing Company at Des Moines, Iowa.

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Editorial Comment

New Staff Members

C. S. Anderson

G. F. Ekstrom

WE ARE glad to announce two new members to the staff of *The Agricultural Education Magazine:* Dr. C. S. Anderson and Mr. G. F. Ekstrom.

Mr. Anderson, who is connected with the teacher-training department at Pennsylvania State College, State College, Pennsylvania, will assume the duties of special editor for the Studies and Investigations Section of the Magazine. He is well qualified for this service and is at present chairman of the research committee for the North Atlantic Region. He will be glad to receive your contributions for this section.

After many requests by Professor E. C. Magill, Virginia, to be relieved of his duties as special editor for this section, the editor, even tho very reluctantly, accepted it and decided to change the policy for the section by having one man in charge instead of two. We are greatly indebted to Professor Magill for his long and faithful service, which he has so well performed. We also appreciate the work which Professor Alexander, Texas, did in co-operating with Mr. Magill.

Mr. Ekstrom, state supervisor of vocational agriculture, Des Moines, Iowa, will be the regional respresentative for the Central Region to take the place of Mr. E. E. Gallup, Michigan, who resigned. While the duties of this place on the staff are not burdensome, they are important to the better functioning of the magazine in every region in the United States. We have every confidence that Mr. Ekstrom will serve well the region which he will represent. Workers in the Central Region will be called upon from time to time by Mr. Ekstrom to support the magazine in one way or another. We ask you to give him your hearty support and co-operation.

Community Leadership

FOR 15 years the question, "Why did you choose an agricultural college course?" has been asked seniors in the college of agriculture of the University of Arkansas. Many answers have been received, but upon further questioning, most of the senior students have admitted that as youngsters they were greatly impressed by the knowledge that the teacher of vocational agriculture, or the county agent was drawing salaries from $1,800 up. The primary objective, by and large, in the minds of the young men entering agricultural colleges has been preparation for positions which would pay, what was to most of them, a munificent salary.

It is no reflection on the young men in colleges of agriculture that they are, in the main, members of large families. However, the fact that they are from large families usually would indicate that their educational, social, cultural, and recreational opportunities have been limited thruout their lives.

The history of the placement of recent agricultural college graduates shows, at least in the state of Arkansas, that most of the group goes immediately into leadership positions either with the extension service or in the field of vocational teaching. Personal conversation with practically every trainee in the college has proved conclusively to the writer that these young men recognize their deficiencies in the broader intellectual and social fields, and they keenly feel their inability to completely fulfill their larger community responsibilities.

The problem of better training, from a social point of view, of the young men who are the future's rural leaders as yet has not been solved. It is to be hoped, however, that teacher-training staffs in particular will recognize this situation, and to the best of their ability, develop among their trainees a higher appreciation for intellectual and cultural ideals to the end that they may better take their places as leaders of rural youth.—Keith L. Holloway, Arkansas.

OUR COVER
Lynchburg Farm Show

NEARLY all our F. F. A. chapters in Virginia are identified with a federation. Some of these federations are really functioning. Others are quite questionable. The Hub Federation composed of ten chapters around Lynchburg was responsible for conducting a farm show. They, of course, provided competition, not only for F. F. A., but for adults, for 4-H club members and encouraged educational exhibits by a number of organizations. They had 4,000 exhibits by 800 exhibitors. It was estimated that from 10 to 15 thousand visitors attended the show. The bulk of the prizes was won by Future Farmer chapters in the Hub Federation. Some features which might be significant or diffrent in this particular show in comparsion with others are: No commercial exhibits, nothing sold, no paid amusements, a large number of educational exhibits, Kiwanis Club held dinner on floor while show was in progress, example of close co-operation between city organizations and rural workers, self-supporting, no paid admissions, purely agricultural, entertainment program presented, city officials estimate over $40,000 would have been taken out of city by old-type carnival-fair, since establishment of this show old-type fair has been outlawed in Lynchburg.—E. C. Magill, Blacksburg, Virginia and W. C. Dudley, Teacher, Amherst, Virginia.

Vocational Teachers and Rural Electrification at the Cross Roads

DURING the past 15 years while we teachers have been trying to develop a well-balanced five-point program, a need has arisen in our respective communities that we have overlooked. Rural electrification has been creeping into our program by the "back-door" method. We have pointed with pride to an outstanding neighbor in our community as a user of electricity with a few model conveniences in his home. While this neighbor was equipping with expensive power that scarcely did more than give lights, we "plodded" along forgetting co-operation and overlooking the demands of our rural people.

We teachers are now standing with "Rural Electrification at the Cross Roads," figuratively speaking. One road points toward the capital necessary for financing projects. Another road leads to the rural people whose demands have brought the problem directly to our attention. The third road refers to the vocational teachers and farm leaders who are located in the rural communities. The fourth road leads back to the colleges and universities from whence the teachers have come. The above roads or points shall be discussed separately.

The problem of financing power projects has, for some reason or other, been left entirely to individuals. Co-operative borrowing and building has been out of the picture so far as rural people were concerned. Since the advent of the Rural Electrification Administration program, some co-operative life has been revived, but in most cases, we as teachers and rural leaders still hesitate to move, doubting the safety of an attempt. Many small communities have invested enough money in small power unit machines to have built a co-operative project which would have been their own after a few years of service. These machines were bought while prices were high and are now ready to discard. These users have learned the electric lesson well and would much rather join

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Professional

A. K. GETMAN — R. W. GREGORY

Some Challenging Teaching Problems in Vocational Agriculture

LEON E. COOK, Teacher-Training,
Raleigh, North Carolina

Editor's Note: (An address delivered to the Teachers of Vocational Agriculture at the Annual Meeting of the North Carolina Education Association in Raleigh.)

IN THIS discussion I mean by "teaching problems" to include not only the procedures of classroom instruction but all the activities of teachers of agriculture in preparing for and in carrying on their instructional responsibilities in and out of the classroom.

It is my purpose to call attention to some of the issues most in need of careful study and of remedial action, in the hope that more attention will be given to them by teachers of agriculture and that further experimentation may be instituted. I fully realize that the responsibility for these problems is shared by our supervisory and teacher-training staffs. Obviously it will be possible here, only to introduce the issues in this brief discussion and to raise some pertinent questions about them, except that in a few cases a somewhat more extensive consideration will be given.

The Problems

1. A reconsideration and clarification of the objectives of vocational agriculture to give added emphasis to certain very important factors which may seem to be secondary but which in educational values are of primary importance.

2. The selection and organization of content and making available more suitable subject matter materials.

3. Introduction of individualization into our program of instruction and in classroom technique in such a manner and to such an extent as to realize the important values without sacrificing the indispensable advantages of group instruction.

4. The development of a program of guidance, which will involve the preparation of teachers in the diagnostic function of teaching, and in the techniques of interviewing and counseling.

5. Improvement in the use of tests and examinations with emphasis on their diagnostic and instructional values rather than merely for grading purpose. Emphasis here will be on the analyses and the processes employed in arriving at grades and the essential information resulting from these procedures.

6. A fuller understanding of individual interests and their significance in the learning process and in life activities.

7. The opportunity of vocational agriculture to contribute to the wholesome and profitable utilization of leisure time of youth and adults.

8. Our share of responsibility for the educational guidance and the vocational adjustment of the out-of-school farm

study of the content and methods in the light of changing conditions.

10. A further study of the educational opportunities of the Future Farmers of America and of realizing more of the values incident in the development of this organization.

Introduction

One of the urgent problems of our schools is to provide for the needs of the great body of unselected pupils, and so far as possible to prevent the elimination of boys and girls before they have been able to prepare themselves for the adjustments which must follow their school days. They are leaving school now in great numbers before they are able to utilize the resources that are available or should be available for their education. They are leaving, therefore, unequipped for making their way in the world vocationally, or for taking their proper place in civic, social, or family relations.

The lock-step system of education has virtually said to them, "Because you are not balanced in your capacities, interests, and aptitudes the school has no particular responsibility for helping you to adjust yourself to the life which you are to live."

This may seem a severe indictment of our schools and the statement is made fully conscious of the progress that has been made in the introduction of vocational work in the form of vocational agriculture, home economics, commercial subjects, industrial arts, and trade courses in some of our cities; and yet it is my opinion that we have only started to work on the problem of adapting school offerings and instructional procedures to the needs of our vast unselected school population. We are still too apt to avoid our responsibility by saying, "Billy is too dull to profit from school work," because he fails in his academic subjects as they are now organized and taught, or even in certain phases of his agriculture as it is still taught on a modified lock-step system.

Many are now quite concerned about the great mass of out-of-school and unemployed youth, rural and urban, between the ages of 14 and 24. This, indeed, is a serious responsibility and deserves our most careful study and effort. But I wonder how many have seriously thought of the conditions that have produced this situation and of ways and means of preventing a recurrence on the vast scale on which it now exists.

For the most part it is due to a failure of the school to make adjustments to fit their needs and desires. True it is that lack of funds is somewhat responsible but to a very large extent it is due to traditionalism in our school

Objectives

In attacking our problems one of the first responsibilities we should consider is the clarification of our objectives. Time is too short to go into a comprehensive discussion of the objectives of vocational agriculture, so let us merely suggest some of the trends.

We still have as our aim teaching boys to plan, manage, and carry on successfully the work of the farm; to make a good farm home; and to create and maintain the best rural community we can conceive of and have the resources to build. We should not forget, however, that individuals make up the community and that their intelligence, attitudes, and ideals, along with their working together co-operatively for worthy occupational and social-civic goals are requisites for bringing into being a kind of farming and a type of rural community so much desired. It is, therefore, obvious that attention must be given to the kind of person who is to become this farmer and rural citizen.

Many a boy who has not distinguished himself in academic scholarship, or who perhaps has even failed, has been able, out of the influence of the school, to become a better person by developing finer attitudes, manners, and many of the other requisites of a worthy citizen.

We have been too apt to think of the school as a place to get information and so called mental training, but to forget that success in life depends upon many other acquisitions, which for many a boy and girl are of equal or greater importance, and to overlook the contribution the school should make to these other values.

If a pupil is not making what is considered satisfactory progress in learning prescribed subject matter, in our present system, he fails and, discouraged with his lack of success, drops out of school. As a result another one joins the great army of out-of-school unemployed youth. He thereby foregoes all the other benefits which a modern school system ought to offer him, including the guidance and influence of teachers, participation in the socializing activities of the school and association in various relationships with others of both similar and different ideas, aspirations, interests, capacities, and traits of personality and character, all of which are or ought to be distinctly educational in nature.

True it is that the school can not transform native mediocrity into intellectual superiority, but if properly organized and equipped, it can develop better manners, finer attitudes, more attractive and worth-while personalities, and strength of character even in those of only ordinary mental endowment.

This is what I think the school ought to be doing for those who seem not to be able to profit to any considerable extent from the stereotyped academic work of our schools. A public school system should include in its program a variety of offerings to take care of "all the children of all the people," and the procedures should be adapted to all groups and so far as possible to individuals.

With reference to the important service of the thousands of common people who may have more integrity and common sense than intellectuality or education, President Conant of Harvard has said, speaking of the social leader of this type: "He is honored, respected, and his opinions are heeded not because of any specialized intellectual power but because of the integrity of his character, the wisdom of his judgment and his skill in handling human problems.—The healthy development of every small unit of community life in this country depends on having a few men of unusual character and of social vision who direct the political and social policies of the group." [1]

One more illustration of the simple virtues of the common people, which should be cultivated in our educational system, is found in the story of *John Gilley* written by the late President Charles William Eliot. This is an account of a simple fisherman and farmer, living off the coast of Maine. He was industrious and frugal, stable and honest, careful and particular about his work. He reared a fine family, succeeded in his occupation, and exemplified in life's relationships those simple virtues which made him a man among men and a noble citizen. In closing this life story, which ended by his being capsized in his boat, President Eliot paid him this concluding tribute: "He left his family well provided for and full of gratitude and praise for his honorable career and his sterling character.

"This is the life of one of the forgotten millions. It contains no material for distinction, fame, or long remembrance; but it does contain the material and present the scene for a normal human development thru mingled joy and sorrow, labor and rest, adversity and success, and thru the tender loves of childhood, maturity, and age. We can not but believe that it is just for countless, quiet, simple lives like this that God made and upholds this earth." [2]

It is for the building of such lives that the public school should set its aim and it should not withhold its beneficent influence from those unable to get on the honor roll or even failing to pass its standardized tests and examinations, provided they give evidence of satisfactory growth in the other essentials of education.

Now it is frequently asserted that the work of general education is responsible for the development of personality and of what has been called the cultural aspects of education. But I here submit a more recent view of culture, as that of enlightened living. "Culture," says Dr. J. L. Mursell, "if it is worth while and genuine, expresses itself in the ability to deal, as a human being should, with the practical problems of life." [3] In speaking of Danish education Mursell again well says, "The boy or girl who goes thru such a school, has done much more than study certain standardized subjects, supposed to be the marks of elegance, and the passports to polite circles. He has learned the greatest of all lessons—how to be a human being, not a clod. He succeeds because his adjustment to life's problems is humanized, flexible, creative, ever advancing. He succeeds as a farmer because he is a cultured man." [3]

It is by no means here my intention not to fully recognize the contributions of general education, intelligently selected and administered, to this interpretation of culture, but I want also to point out briefly the opportunities of the agricultural teacher in bringing about this adjustment of the person to his natural and normal life situations.

The extensive and intimate association of the teacher of agriculture with his boys, in classroom, shop, field, in the home, on camping trips, hikes and other F. F. A. activities puts him in a place where his personality, example, and counsel weigh heavily in fashioning the boys' thinking, habits, manners, attitudes, ideals, and outlook on life. If this be the case, and I think it is, then what of the teacher's preparation for his job and of his professional growth on the job, in the way of understanding youth and his problems, and of developing personality and character? Emphasis on teaching personality, ability to diagnose weaknesses and to serve as a guide to youth are now decided trends in the professional training of teachers. This is a problem for all teachers in service, but especially for those who received their preparation some years ago. I am frank to admit that while these things have been recognized, they have not received the amount of attention in our teacher-training program which they deserve, but it is the plan of the teacher-training department to put greater emphasis on these accomplishments and understandings in the immediate future. Especially is this important as individualized instruction developes. Dr. Spilman well said last night, "The teacher is the most important factor in the educational process."

Individualization

From the beginning of the teaching of vocational agriculture teachers have been asking, "How can I provide for the exceptionally wide difference in ability, and interests in classes in vocational agriculture?" We have tried by various means to answer this question, but with only partial success. We have had the double period with variety of procedure, supervised study, indeterminate assignments, work books, and contracts. All have been of value, but still more has been needed. Now we have developing what is called individualized instruction in various forms and degrees of individualization. This movement has been in progress a number of years; it has made progress and it shows promise; but it needs study and experimentation; it needs the process of trying and testing and trying again in the hope of developing plans which will realize the values looked for without sacrificing the values of group instruction.

Like most ventures it has its advocates and it has its critics. Both may serve constructively in working out its benefits. Harry D. Kitson has said, "All signs indicate that individualization is coming to be the dominant note in education and that the schools of the future will be organized around it." [4]

The older curricula and instructional procedure attempted to make individuals more uniform in spite of their natures to be different. It is as Dr. Thomas H. Briggs has said, "The world has need of differences, and that the best in each youth shall be developed, education above the common elementary foundation must be as varied in its possiblities as natural man is." [5]

Advantages of Individualization

Now let us enumerate the advantages claimed for individualization:

1. It tends to eliminate the lock-step system into which group instruction has fallen. It permits students to progress at a rate in accordance with their ability and interest.

2. If skillfully conducted, it tends to eliminate problems of discipline. The plan motivates, and the busy industrious student is seldom a trouble maker.

3. Responsibility is placed on the student for his own progress, therefore, he tends to develop initiative and self-reliance.

4. Definiteness is essential to a good plan of individualization, and it facilitates learning activity.

5. Students learn to be resourceful in locating information and in making use of that which is needed in the solution of the problem under consideration.

6. It relieves the pupil who is nervous about numerous class reports and discussions.

7. For some pupils pressure is needed but for others the lack of pressure enables them to work deliberately but effectively. They do not have the constant overstrain of keeping up with the group, therefore, attempting to work at a rate beyond the optimum.

8. It enables the capable and quick pupil to work on significant and to him real worth-while material rather than remain in idleness or be assigned some busy work while the slow pupils are catching up in the group method.

9. It enables pupils to capitalize on their strength and interests and to develop the capacities they have without being forced to display their natural shortcomings before others with resulting embarrassment.

Difficulties and Dangers of Individualization

1. Individualization is not equally adaptable to all subjects and activities.

2. If affectively carried on it requires much time in planning and preparation, and an amount of paper work for the teacher as to make his work burdensome by excessive routine.

3. The stimulation of group contacts is lost by doing away with most of the class discussions.

4. There is a danger of neglecting drill and certain phases of memory work essential in learning activity.

5. There is the loss of stimulation and the fixation values of the work of the teacher in the older class procedure particularly the explanations, illustrations, demonstrations, type cases, blackboard sketching, and the force of the teacher's personality in action before the class.

6. More reference and other materials are essential to efficiency in individual instruction; adequate material is expensive and difficult to supply.

7. Our schools at present are not arranged or equipped for the best utilization of this plan.

8. Learning in this case is mostly carried on by reading, therefore, students are unaccustomed to and unskilled in listening and getting information from the spoken word.

9. There is a danger of pupils wasting time unless supervision is very efficient.

10. Unless the plan is well systematized it is difficult to keep a record of the student's work and to keep it

(Continued on page 173)

A. M. FIELD

Methods

A Plan for Fourth Year Agriculture

WILBUR F. PEASE, Former Teacher,
Castile, New York

THE MODERN attitude toward education is that educational processes must provide not alone for the economic phase of life, but also for the physical, cultural, social, moral, recreational, esthetic, and civic phases of living. In a small rural high school this ideal is difficult to achieve. Lack of facilities, lack of finances, and the inexperience of the teachers are the more obvious causes for failure.

It seems to me, however, that the teacher of vocational agriculture can do much along these lines, at least for those who come under his instruction. Moreover, by skillfully unifying all of these training ideals, he could secure greater co-operation and interest from his students, for properly presented they are a powerful force for motivation. The plan I am presenting here I have used two years with good results and will use it again this year with the largest class I have had.

Our first task will be to decide, "Shall I Be a Farmer?" Briefly stated this will consist of a study of agricultural opportunities and the outlook for farming. We will try to get at some of the major trends in our present society that may influence the agriculture of the future. I hope, too, to open up to them some of the related agricultural fields.

The next job, that of buying a farm, is really the basis for much of the remainder of the year's work. Types of farming, ways of entering farming may be considered here. Farm boys will use their home farm; village boys will use any farm of the community where co-operation can be secured on the part of the owner. Each boy will map his farm, indicating highways, distance to town and railroad, distance to markets, farm layout, and farmstead layout.

After each boy has these physical characteristics of his farm in mind we will proceed to the other farm jobs of making an organization plan, stocking the farm, buying machinery, seeds, fertilizers, feeds, improving buildings, improving the farm layout. About 15 different managerial jobs may come in this part of the work. When this unit is well started, but before we have gone too far in it for the next idea to lose its significance, we shall decide that the modern successful farmer must be a businessman-farmer, or else we shall be like the depressed characters of Louis Bromfield's story, "The Farm." And as a businessman-farmer we shall have to plan our records, make a farm inventory and credit statement, insure ourselves and our possessions, measure the success of our business. Then, towards the end of the year, after measuring the success of our business, we can analyze our accounts and make such reorganization plans as may be necessary.

Logically, all of these jobs cannot be taken up as one distinct unit at one set period of time and then dropped. They must be skillfully interwoven with each, entering the pattern at the correct time and following thru or branching off as conditions may require. Measuring success of our farm business, analyzing accounts, making reorganization plans, for example, will come toward the end of the year when we shall have completed a year's work on our farms. But in my mind, at least, all of these activities constitute the unit of being a businessman-farmer.

Let's see how this plan of teaching can be fitted *naturally* into giving training in those fields of our life other than strictly materialistic. The inculcating of attitudes is, I believe, of equal importance with training in skills. Our farm will have to be financed, both long-time financing and short-term financing. In hunting for ways of financing quite naturally we would come to the Farm Credit Administration. And right there we can do a good job not only in teaching the boys how to make out loan applications but in touching up, evaluating, and questioning the social and civic phases of the government's farm loan plans. Not that the boys need be bothered by sociological terms or even know we are trying to develop their civic and social lives. So, too, when we take up planning a crop rotation we will have to consider it from the standpoint of soil conservation and soil erosion for we are subject to some erosion in our community. What opportunities lie in wait here for the skillful teacher to grasp hold of to open up new areas of thought to his boys!

So far most of this pertains to the economics of living. The next units are designed to at least introduce to each boy other activities that will turn living into a real life. One part of man's life is civic. Quite naturally, in these days of burdensome taxation a study of taxation is indicated. But paying one's taxes and attempting to advance a more equitable taxing system is not one's full civic duty. In all pertinent current civic events the man of today must be educated; the duties and privileges of citizenship must be realized. Then too, we are social creatures, and since social training is so often slighted, I believe I can work naturally into the course a unit on social obligations—support of religious, social, civic, educational, and agricultural organizations of the community of which we are members.

Man needs recreation. If, as Walter B. Pitkin writes, "Life Begins at Vacation Time," the case of the majority of farmers is hopeless—they have no life. But it is not so, a set vacation at a given period of the year is not essential for the re-creating of man. So I shall introduce to my farmers-to-be the world of hobbies, wherein they may find recreation at any time. A farmer can turn the collection of insects, of plant diseases, into a hobby—and learn a wonderfully lot in doing it! Once in a college public speaking class in which I had talked on country roads, I was rather bitterly accused by a farm-reared person of reading poetry into farming. Undoubtedly, I was, but it is there for those who can read. I hope to get my boys to see a little of it. As my father, a farm-reared clergyman, has often said, "The farmer must be trained to 'cash-in' on his natural environment as only too often it's the only thing he can reap a profit on."

Finally, I must get my boys to grasp the idea of growing vocationally, of keeping up to date on agricultural means and methods. Never before have they had such a storehouse of material from which to draw as they now have in magazines, books, bulletins, the radio, short-courses, and Farmers' Week at their State College of Agriculture. One of my greatest tasks is to make them appreciate that some of the things I am now teaching them may be of little value 20 or 30 years hence, that therefore they must learn to become their own teachers. I must acquaint them with the sources and methods by which they may teach themselves.

These last units—the civic, social, recreational, and growing vocational—are they too ambitious? Will the economics of making a living from soil and stock be neglected? I think not, for I have planned on 110 periods for the strictly farm management phases and 30 periods for these others, leaving the others for farm mechanics, and any special problems that may occur. After all, I can only make the introductions—I could not make the boy and the ideas real friends even if I spent 100 periods with them. I trust I may not bore them with these non-materialistic things, but may present them carefully and interestingly so that the ideas and the boys grow together.

I hope, then, thru this series of units, to secure greater interest on the part of the fellows, to motivate them to higher ideals and methods, and finally to help develop a well-rounded life for each boy, for surely it is as important to make a life as a living.

Landscape Program for Covington County, Alabama

J. R. PARRISH, Teacher,
Red Level, Alabama

THRU a $203,000 building program in 1935-36 Covington County was able to practically complete the consolidation of her schools; thus making her school buildings permanent structures. This condition offered to the five vocational agricultural departments in the county an opportunity to put on an extensive and worth-while landscape program.

Last September before schools opened the vocational teachers met with Superintendent E. B. Norton to map out an agricultural program for the county, in keeping with the state vocational program. One of the main points in our county program was the beautification of all permanent school buildings. The county was divided into five parts, and the vocational teacher was given the schools in his respective part of the county. The teachers did not assume the entire responsibility for landscaping the schools but worked with the principals, and with their co-operation drew up plans for beautifying the school.

In planning our beautification program we used all the native shrubs possible. Some schools raised money to purchase shrubs, others purchased lining out stock and are growing it for a year before placing around buildings, others were furnished from the vocational nurseries, and still other plants were donated by interested patrons. In our plans we also laid out play grounds, walks, drives, and parking areas.

Some work has been attempted at every school in the county and several have been completed. We will continue this program next year and expect to have all schools in the county complete when the school terms end.

We hope that the landscape idea will carry over from the schools to each community, and that in the future Covington County will be known for its beauty as it is now known for its good farms.

(Editor's Note: Mr. Stanley High in his article, "A Kind Word for the South," *Saturday Evening Post*, January 8, 1938, made very favorable comments on the work of Mr. Parrish and the vocational agricultural program in the South.)

Co-operative Project

J. C. CANNON, Assistant Supervisor,
Auburn, Alabama

THE Resettlement Administration decided to establish an infiltration project in Coffee County, Alabama, in 1935. Two hundred eighty-two tracts of land were purchased from the Federal Land Bank consisting of 60,754 acres. One hundred thirteen of these tracts of land have been broken down into 184 farms, and resettlement clients have been placed upon most of them. Thirty thousand acres of land in Coffee County including 4,045 acres of the original purchase have been put into the Pea River Land Use Project and will be retired from farming. This land will be used for a forestry and game reserve.

As resettlement clients were moved into their homes a feeling developed on the part of resettlement officials that these people would need a great deal of help if they succeeded in establishing themselves on farms that had been lost by their original owners. In addition, resettlement clients had either lost their land or had never owned land. In view of the facts given above it seemed that income and standards for the county as a whole must be raised if resettlement clients could ever hope to own land and enjoy minimum social, educational, and health advantages.

It was decided that present educational agencies in Coffee County would be expanded rather than setting up a new one. Officials of the county school system, state health department, extension service, home demonstration agents, vocational home economics, and vocational agriculture were invited to help plan an educational program. This program was to be planned on a basis of raising income and standards for the entire county rather than attempting to work with resettlement clients alone. The objective of all agencies would be to raise income and general standards in the county by following their regular methods of procedure. The Resettlement Administration agreed to furnish additional personnel and asked each agency to be responsible for planning and supervising their part of the program.

The personnel finally agreed upon for the county consisted of:

(1) A doctor and three nurses
(2) A county agent and club agent
(3) A home demonstration agent and club agent
(4) Six teachers of vocational home economics
(5) Six teachers of vocational agriculture
(6) Project manager, assistant manager (both agriculturally trained) and one home economist.

Resettlement workers contact their clients only, while the rest of the group work with everybody.

Workers received their appointments effective September 3, 1936. Immediately all agencies were called into conference to formulate a program.

A county council was formed consisting of representatives from all agencies for the purpose of correlating effort, setting up policies for the group, and adjusting difficulties. This council has met at least once each month and has also served as a means of keeping each agency informed as to activities of other agencies. The council has been a big factor in putting over the program thus far and, as a whole, has promoted a very wholesome relationship between agencies. The project manager W. L. McArthur has shown rare insight in keeping all agencies working for a program of betterment in Coffee County rather than working selfishly.

One of the first acts of the council was to designate territory, since it was thought that it would be unwise for too many agencies to be concentrated in one community or on one farm. Accordingly the county was divided into three areas and one nurse assigned to each area. The county agent was to have charge of the entire county in administering the Soil Conservation Program, but three areas around Enterprise, New Brockton, and Elba, were assigned to vocational teachers for intensive instruction. These areas consisted of approximately 45 percent of the county and were suggested by the county superintendent of education and the project manager and adopted by the council. The county agent and club agent were to confine their agricultural activities, other than the Soil Conservation Program, to the remainder of the County. A similar agreement was worked out in home economics.

The areas assigned to vocational agriculture were around Enterprise, New Brockton, and Elba. There were departments at Enterprise and New Brockton, and a department was established at Elba. Two teachers were assigned to each school. An all-day program is maintained in each of the three schools. Two classes are taught in each school and the "inside" teacher is released for outside work at noon. One teacher of vocational agriculture is attached to each school and devotes his entire time to an outside program. Both teachers are jointly responsible for planning the program in their area. They work as a team. It was agreed that agricultural instruction would be offered so that all men and boys in each area would have an opportunity for agricultural instruction.

Since there were three agencies doing agricultural work in the county, it was decided that agricultural recommendations for the county should be worked out. This was done in rather detailed form after a visit to the sub-experiment station at Headland. In this way conflicting agricultural recommendations were avoided.

The Resettlement Administration has made exhaustive surveys in Coffee County, and this data was made available for the teachers of agriculture and helped a great deal in formulating programs.

Some of the outstanding facts were:

1. One-third of the land in the county was marginal or sub-marginal..

2. Approximately 80 percent of the farmers are tenants.

3. The educational level of the county is less than three and one-half grades.

4. Sixty-two percent of the school children in the county have hookworms. Pellagra is a common disease.

5. There is a heavy county indebtedness for which no sinking fund is provided.

6. "The net revenue receipts per pupil enrolled in Coffee County schools amounts to only $15.65, while the average for the state as a whole is $28.99."

7. Sixty percent of the farms in the county are one-horse farms.

8. The number of farms without mortgages is small. Extensive holdings have been foreclosed by the Federal Land Bank, insurance companies, and others. Land Bank officials estimate that more land was probably taken by them in Coffee County than any other county in the state.

9. One of the most pernicious credit systems in Alabama is in operation in Coffee County.

A detailed annual program was set up by each pair of men assigned to an area. This program covered the activities of both men and was designed to raise agricultural standards in the area around their center.

It was almost October before preliminaries could be finished and work started. An evening class program was launched first. This was started by contacting key men, writing cards, announcements at churches, and personal visits. A few classes were started and others organized as contacts and visits were made. A total of 31 evening classes have been organized, one in each small church or community center in the three areas, with a total enrollment of 887 April 1. Enrollment is increasing as time goes on and the neighbors begin to see results. The classes are met regularly every two weeks. In a number of centers additional meetings have been requested. Evening class instruction is available and almost within walking distance for every man in the three areas.

Instruction has been on the basis of problems in the community with emphasis on the farmer going home and doing something about it. Visits in the communities plus data assembled by the Resettlement Administration have determined the problems to attack.

Frequently teachers are besieged with requests for a visit next day after a meeting. A majority of the meetings are held at night; however, demonstrations

(Continued on page 178)

Supervised Practice

H. H. GIBSON

A Group Project in Fruit-Growing

J. T. AULD, Teacher,
Myerstown, Pennsylvania

THE GROUP project in fruit-growing conducted for the past two years by the Myerstown Chapter of Future Farmers of America, was the outgrowth of a class discussion on fruit-growing during 1935. Myerstown, located in Lebanon County, Pennsylvania, borders Berks County apple-growing section. The raising of fruit is a relatively important enterprise on the diversified farms of Lebanon County, where a large percentage of farm produce is sold at local markets direct to the consumer. Knowing that the section was suitable for fruit-growing and wishing to make more money for carrying on some of the activities of the organization, the chapter rented—on shares—a small orchard of 20 acres.

Fifty dollars was borrowed from the school board to start the project during the spring of 1935. The spraying was done by a local farmer. The apples were picked and sorted by hand, with no attempt for strict grading. The better grade apples were sold locally in bushel baskets while the low grade apples were made into apple cider and apple butter. The chapter made a profit of $20.00 on the project for the first year.

During the spring of 1936 the chapter rented—on shares—a different orchard of 120 trees about 20 years old. The boys did all the work including pruning, spraying, thinning, picking, grading, packing, and marketing the fruit.

The trees were pruned during the early spring and thinned after the "June drop." Three sprays were applied requiring a total of 3,500 gallons of spray material. Since the boys did not own a sprayer, a spray rig was hired but the boys operated the nozzles. The spraying was effective since very little disease was found on the mature fruit. The picking was done by members of the chapter during class periods, after school, and on Saturdays.

A grader was built in the school shop from materials secured in a local junk yard. The cost of the grader was $37.40. With this grader it was possible to size the apples and secure a better price according to the U. S. standards for apples. A large portion of the crop was packed in clean, used baskets, but it was found that it pays to buy new baskets since the increased price per bushel more than offsets the difference in the two kinds of baskets. The quality fruit was marketed wholesale in Reading and Philadelphia; some were sold locally. The culls and drops were either used in making cider or sold to a local huckster.

The total yield from the orchard of 120 trees was 861 bushels. The total expenses were $360.37 and the total [illegible] making a profit of $266.93. The chapter paid its members a total of $87.91 for labor at the rate of 13 cents per hour. An additional income for the members of $4.71 was paid in commissions for selling summer apples. The total paid to individual members for their work was $92.62. The labor income on the project was $359.55.

The chapter continued with the same orchard for 1937. A fertilizer experiment is being conducted on 40 trees. During February 20 trees received an application of five pounds each of aerocyanamid while the other 20 trees were used as a check. On June 5 it was observed that the trees which had received the fertilizer had made more growth, the foliage was a darker green, and the sod beneath the trees had a much heavier growth.

Harvesting the Crop

Early in the spring, the chapter secured a second-hand sprayer which was thoroly overhauled in the school shop. The sprayer, which has a capacity of 150 gallons and is powered by a five h. p. gasoline engine, was mounted on a used one-ton truck purchased for that purpose. This year the boys have done all the spraying which consisted of four sprays, namely: delayed dormant, prepink, pink, and petal fall. Commercial lime sulphur, nicotine sulfate, and arsenate of lead were used in the proportions recommended by the Pennsylvania Agricultural Experiment Station.

During the winter the boys in the shop were busy preparing for the crop the following year. Lug boxes were made in which to haul the fruit from the orchard to the packing house; three new A-type ladders were made, using old pipe for the rungs.

During the spring of 1937 the bark was scraped from 25 of the older trees and the trees were chemically treated; coddling moth bands were applied on June 8.

A reel of moving pictures was taken showing the various operations as conducted in the orchard. These pictures will be shown at agricultural meetings and used for classroom instruction for future classes.

Evaluation

The course in fruit-growing as taught in the Myerstown High School is organized on a seasonal job analysis basis; the orchard management is the pivot around which all class study, discussion, and field trips revolves. The group project heretofore described meets the following standards of good teaching as set forth by Stewart and Getman:

1. Motivation: With a project of this size and type it becomes necessary to do part of the work outside school hours. Most boys are anxious to work, especially when they receive pay for their work. The chapter voted to pay 13 cents per hour, which is three cents per hour higher than charged for "self labor" on individual supervised projects, for all work done outside school time.

The practical experience secured in operating the spray truck, sprayer, and the grader, appeals to boys of high school age. The spirit of competition enters in, especially in pruning and packing fruit. A desire to satisfactorily prune more trees in a given time than his competitor, and to do a better job of ring packing a bushel of apples than the other fellow, urges the boys on.

Perhaps one of the greatest motivating forces has been that of responsibility. With so many operations conducted at one time, as are necessary during the harvesting season, it is impossible for one man to oversee all activity. Consequently, it was necessary to appoint a foreman from the group. Practically every member of the chapter was anxious to be appointed foreman of a particular group and become responsible for the results obtained.

2. Providing for initiative: Practically all the decisions as to the method of performing the various jobs connected with the fruit-growing project were made by the chapter members, either during the class period or in bi-weekly F. F. A. meetings. The supervisor made every effort to impress upon the boys that the success or failure of the project depended upon them; the decisions were theirs to make since the project belonged to them. Consequently, the chapter members had training in making decisions and assuming much responsibility which too frequently they were not permitted at home.

3. Supplies opportunities for making choices: Most of the decisions made were good, altho some mistakes were made. The chapter decided to purchase baskets which had been used one year instead of new ones, thus making a saving of six cents per basket. They were advised by a Reading Commission House that no discrimination was made on the Reading market between old and new baskets. A commission man agreed to handle the fruit but it later became necessary to market part of the crop in Philadelphia, and there old baskets were discriminated against to the extent of 20 to 30 cents per bushel.

4. Involving organization of thought: At the beginning of each project it is necessary to take inventory and with the treasury balance in mind, plan the activities for next year's project. The group project here described is self-supporting and receives no financial assistance from outside sources; therefore, it is necessary to use caution in planning expenditures. As the class work in fruit-growing progresses, the members are organizing the actual work to be done in the orchard: planning for spraying materials, packing materials, fertilizer, and other equipment.

5. Providing opportunity for use of new knowledge: Knowledge for the sake of knowledge is of little value, but knowledge which is put to work in an actual situation is valuable. The group project provides numerous opportunities for using new knowledge learned in the classroom. What benefit does a student derive by learning "how" to mix spray materials if he never does any spraying? But how much different the situation becomes when the student is confronted with the job of spraying properly to secure good fruit. He learns that to make a profit, spraying must be carefully done. Here, then, is a problem to be solved—one which requires immediate attention. He proceeds to learn the fundamentals of spraying in the classroom and then goes into the orchard and there, under proper supervision, actually puts into practice the new knowledge. The various jobs that must be done in producing a crop of fruit give to the student an opportunity to put into practice much of the material as taught in a fruit class of vocational agriculture.

6. Provides for self-discipline: A group project is successful only so far as the group is willing to put into effect the plans which have been made. Each member feels responsible for the success or failure of the project. Fruit is one enterprise in which the work must be completed in a relatively short period of time, particularly the spraying and harvesting. Students, realizing this, forego personal pleasures or other work in order that the job at hand be done on time, without loss or failure in their project.

The group project must meet not only the standards of good teaching: it provides opportunities for exploration into other types of work than would ordinarily be provided in the regular course of vocational agriculture; it is a first-rate device for teaching the principles of co-operation, for without that there would be no group project; it develops the spirit of group pride; it creates the interest of the community in the work of the school and especially in the agricultural department. The parents look with pride and favor upon the work which is being done on the project; they feel that here is something concrete, which will provide actual experience for their children with proper supervision, which tends to bring home and school closer together.

Biography, especially of the great and good who have risen by their own exertions to eminence and usefulness, is an inspiring and enobling study.—Its direct tendency is to reproduce the excellence it records.—*H. Mann.*

My advise is, to consult the lives of other men as we would a looking-glass, and from thence fetch examples for our own imitation.—*Terence.*

Supervised Farm Practice: A Community Program

A. S. RUGGLES, Instructor,
Earlham, Iowa

IF vocational agriculture teachers are to serve their communities to the fullest extent, all of their patrons must be reached in one way or another. Vocational agriculture classes are comparatively small considering the people who could use the material taught.

A. S. Ruggles

The large group, the whole community, is reached by the successful vocational teacher thru carefully planned and supervised farm practice carried out by individuals enrolled in the vocational agriculture department. It might be well for the teacher to stop and ask himself, "Is a balanced program being taught this large class (the community) and are its needs being met?" It takes time to develop this kind of education. One person must not attempt to do it all at once, but first must work where the community most needs it and then gradually move the entire front forward.

A long-time program which we have worked out for our community calls for "projects" which demonstrate the value of (1) new varieties of crops, (2) more balanced cropping systems, (3) high quality purebred livestock, especially sires, (4) farm records as a means of locating and stopping leaks in the farm business, (5) co-operative work for the common good of all, and (6) appreciation of rural life.

In the past three years we have been able to carry this program forward in the following manner: (1) crops have been almost a total failure here due to drought permitting only limited accomplishment of the first point; (2) a group of farmers who are enrolled in our adult evening school are working on farm records which include farm maps and cropping systems; (3) students with sheep projects have won consistently at the Iowa State Fair and other competition and have pedigrees as good as money can buy. Seven ram lambs went to farmers this fall in the community to be used on grade flocks. Next season these will demonstrate to the community the value of a good sire for grade flocks. Some boys are raising hogs on clean ground using the best strains of purebreds. Others are crossing these for market litters and are feeding economical, balanced rations. One boy and his father have milking Shorthorn cattle with high production records back of them. The heifers, when they freshen, will demonstrate the value of good breeding for milk production. Three boys have four Hereford steers from a herd of Hereford cattle which has won 13 Grand champion carlots of feeder steers in 14 times showing. This breeding should develop a greater demand for better quality beef cattle for home production.

Another boy has a dozen Rhode Island Red pullets from pedigreed hens with [illegible] records back of the eggs. He will use these pullets for a breeding pen next spring and plans to keep trapnest records. This is another highly educational project for the community to watch.

(4) As mentioned before, farmers from the evening school group are starting their farm records. They are meeting once a month to check the books and discuss problems in connection with their farms. (5) The vocational agriculture boys formed the Earlham Junior Pure Bred Live Stock Association which now includes students in school, F. F. A. members, and others.

The aim of the projects is to meet the needs of the Earlham community as well as to train the individuals who are carrying the projects. Our program is going to be strengthened thru added projects and improvements on those already started. We are trying to discover weak spots in our plans and revise and strengthen them so that the entire community will receive the most good from the vocational agriculture department.

Project Selection and Plan Development

RALPH VOSE, Teacher, Grant, Nebraska

THE practices followed in the vocational agriculture department of the Perkins County high school in the selection of projects and the preparation of plans are probably no better and not very much different from what is being done in other departments. I believe that this part of our program could well receive greater consideration.

To begin with, we analyze several enterprises in class. We analyze these enterprises in regard to the farming program on the farms in the community; the boys' likes and dislikes; probable cash out-lay; power and equipment required; probable labor; total expenses; total receipts; net income; market possibilities; and the possibilities of continuation and growth. We spend from four to six days on this enterprise analysis and it is done before the boys make any attempt to decide upon a project. In the analysis of these enterprises we make use of former project records; farm account books; farm account records of the extension service; and various pamphlets and bulletins.

Up until this time the boys have been concerned with the selection of a project program. The next step starts the development of plans for carrying out this program. Each boy makes a list of the jobs that will have to be done in carrying out his program. If his program includes more than one enterprise, as is often the case, he makes a list of jobs for each enterprise. These jobs are then arranged in the order in which they will naturally come.

The course content is based quite largely on these jobs. As the jobs are studied in class thruout the year the boys work them into their project plans. Usually the boys make a more detailed analysis of the jobs for their projects than is made in class. Quite obviously, every job that is listed can not be studied in class but it is very probable that a similar job will be studied and the boy can proceed to analyze his own job for his plans.

Farmer Classes

V. G. MARTIN — J. B. McCLELLAND

Individual and Small Group Teaching Methods Bring Results

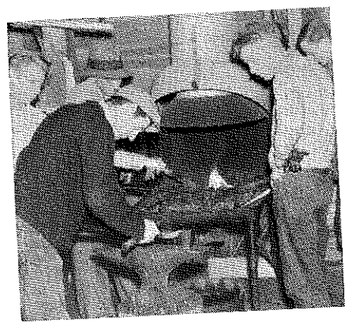
WARREN E. CRABTREE, Teacher,
Silverton, Oregon

PART-TIME classes in the vocational agriculture department of the Silverton, Orgeon, schools came as a logical development or outgrowth of experiences gained from several years of night class work with adult farmers.

Night classes for adults had been held in a wide variety of subjects. A number of younger men came into the older group where they were most welcome. Realizing that these younger men could be better served in another form, however, it was decided to offer courses specifically adapted to the needs of the younger group and to develop the work on a personal or individual problem basis.

Due to demands of participants, this is the third year such a plan has been in operation, with attendances running from 12 to 24.

Enrollment was secured largely thru personal visitations to worthy prospects during the summer project rounds, thru contact in former night class offerings, and thru help of day class students, whereby a list and mailing addresses of highly desirable young men were made up. In this way, the aim was to be able to reach those who would profit most by the work in their respective communities.



Forge Practice

Near the time for classes to start, a mimeographed letter was sent out to those upon our mailing list. The 1935 letter was addressed to "Rural Boys and Young Men of the Silverton Community," offering *Part-time Night Classes in Farm Shop, Farm Mechanics, and Agricultural Laboratory Work*, covering such fields as rope work; soldering; general blacksmithing; belt lacing; milk and cream testing; farm wood construction; machinery repairing; tool sharpening; soil testing; egg grading; tempering and welding; and budding

Individually and in groups, the majority held fairly close to shop work tho a number took up the actual testing of soil for acidity and phosphorus, construction and use of septic tanks, studies in feeding livestock or poultry, milk and cream testing, planning an irrigation system, exercises in budding and grafting, and planning all farm buildings.

The 1936-37 group, at the first meeting, organized themselves into groups to cover general blacksmithing; dairy feeding; irrigation systems; rope; soil testing (42 samples tested at the second meeting); milk testing; saw filing; tempering steels; budding and grafting; harness stitching and repair; pipe cutting and threading; and tool sharpening.

As was true in evening class work the ages of those interested in certain group activities varied widely. However, this appears to be a minor factor as far as results are concerned when work is planned on a personal basis. A few adults come in with the part-time group, but since they work on individual problems, they fit in better than when work is on a group basis.

There seems to be a decided advantage in placing this type of work for the young men of the community on an individual or small group basis. In operation small groups will naturally work together on jobs or problems of mutual interest. In fact, where from two to six work together a high degree of efficiency is gained, and the individuals team up well together tho this may possibly be their first experience in co-operative effort.

True, the instructor has a real job on his hands in making proper preparation for a number of activities going on at the same time in comparison with single topic activity. This, however, is compensated for in the satisfaction to be seen in actual accomplishment in any given time. The work can be handled quite satisfactorily thru the help of a few reliable, advanced alumni students of the department.

Saw Filing Instruction

Summary

From the experiences of the writer in work with part-time students, it may be well to state a few conclusions drawn:

1. The personal problem method appears to appeal not only to the individual, but also makes him most re-

the teaching mechanism, and he enjoys this type of organization wherein he begins to feel he has his place in working with a small group.

3. The method reaches not only the ones who would make the best material to work with, but also the ones who should be able to profit most from the training.

4. The student feels by working on his own problems under guidance, that he is more or less the one achieving something worth while. He is self-motivated and gains confidence in himself, which is necessary in any field of vocational training in agriculture.

5. The community is well served and should profit from such an extra-school service by having these young men make application of their educational activities during their dull season.

6. Not only do these young men profit by the work at hand, but many also are led into a broader appreciation of farming opportunities thru part-time contacts and develop an added impetus toward staying on the farm and securing land of their own.

7. Almost without exception these young men determine to develop a home farm shop with a self-built or purchased forge and other adequate tools and equipment.

8. The young man who early dropped out of school now realizes his mistake, his shortcomings and is a most satisfying and pleasurable individual to help. Being older he knows what he wants, is a receptive pupil, and learns to develop his own program.

(Continued on page 175)

Developing a Sound Agricultural Program

R. V. DIGGINS, Instructor,
Redfield, South Dakota

SOUTH DAKOTA, as is generally known, is in a semi-arid region. However, climatic conditions run in cycles, and for a time wheat was an excellent paying crop. During the World War, which called for a tremendous amount of foodstuffs and especially wheat, prices advanced so high that thousands of acres more of the virgin prairie were put under the plow. Then the period of drought set in; the soil became parched and dry; the winds blew; and there was no cover on the ground to hold the soil in place. We have experienced the worst dust storms in South Dakota's history. Thousands of acres of land have blown until it is impossible to get any vegetation to grow without special treatment. Because of the shortage of pastures and the inability to raise grain and hay for feed, the farmers have been forced to sell their livestock, leaving them little source of income.

Agriculture specialists and farmers are now faced with the problem of revamping the cropping system in order

These problems offer our best topics for evening school discussion in which the Redfield Agriculture Department has been of service.

In our discussions we first start with the more drought-resistant crops which have produced feed and also cover, even during the driest years. The various sorghums are known to require less moisture than most any other crop, also producing excellent forage and grain for feed. Then sweet clover because of its deep rooting systems is able to use any available moisture, thus producing when the shallow rooted crops fail. The millets, because of their rapid growth, can make use of early spring moisture and produce feed before the hot summer winds set in. So, with these three crops replacing some of the small grain and corn ground, we are developing a cropping system which is far more certain to produce feed year after year than the old system of wheat, oats, barley, and corn.

In an effort to check soil blowing we are studying the possibilities of strip cropping, also throwing up of ridges every few feet with a lister plow in fields that are loose and liable to start blowing.

Another project has been to interest farmers in tree planting. We believe that if farmers will all co-operate in planting shelter belts that we will be able to break the wind. The F. F. A. co-operated in this movement last year by ordering 3,000 trees for distribution at lower prices than farmers themselves were able to purchase them.

While the agriculture department at Redfield is less than two years old we have been able thru our evening school meetings and community meetings to interest farmers in what we consider a sound program of agriculture for Spink County, South Dakota.

Planning and Conducting the Organization Meeting

IRA E. BARKLEY, Instructor,
Anthony, New Mexico

THE purpose of this article is to discuss common practices in handling a group of farmers strictly on the conference basis at the preliminary or organization meeting of an evening school on any major farm enterprise. The enterprise should be one with which the majority of the group has had considerable experience.

I. Preliminary work to be done by the teacher.
   A. Contact key farmers to discover a need for the school.
      (See that the key farmers attend. They will assist you in bringing up many problems and materially aid you in leading the conference by virtue of your original contact.)
   B. Interest the group which will be at the first meeting by:
      1. News stories
      2. Letters (personal and circular)
      3. Follow-up cards
      4. Personal contacts
   C. Handle publicity in such a way that the farmers who will be at the first meeting will attend because they have problems they wish to bring up for discussion.
      Thru contacts of key farmers and others who know the problems of the farmers, the teacher or conference leader has drawn up an outline listing the problems he thinks should be discussed during the series of meetings.

II. Handling the group after it has assembled in the conference room.
   A. Tell the group the purpose of the meeting.
      1. Discuss the part you plan to take in the discussions. Impress the group with the fact that you are only the leader. The problems are those of the individual members of the group and usually their combined experiences would solve their problems. Tell them this is a practical school by and for practical men.
      2. Tell the group about any special leaders you might be able to get during the conferences. (Be certain these are persons the group respects.)
      3. Ask for questions or comments.
   B. Open the discussion to set up the problem to be solved at the subsequent meetings. (You have your list of questions on the table for reference. The following questions and discussions are based on a cotton school.)
      1. Openly ask for the statement of a problem. (No one will answer.)
      2. Place the next lead question closer to a definite problem you have in mind, as:
         a. Are stands easy to get?
         b. Do we need fertilizers?
         c. How much water should be applied?
         d. How deep do you plow?
         e. Is any depth of plowing satisfactory?

NOTE: There are hundreds of the above type of question which the leader should have in mind. In fact, he should have listed at least three close-up lead questions for each major problem he has on his own list. By using close-up leads he can set up any problem he desires.

It will be found that the above method will subdivide some of the major problems. When this occurs, say to the group: "Can't we put these together as they are closely related? We can make them into one major problem."

      3. Moving the group along in the discussion.
         a. It will be noted at this point in the discussion that most of the farmers have problems. They will argue with one another. (This must be eliminated as much as possible.)
         b. When a problem has been decided upon, place it on the blackboard and throw out another lead or take up a suggestion a member has made. (If you will listen for new problems and keep them in mind while the discussion of the present one is in progress, it is that much easier to keep the group interested.)
         c. Throw out new leads while you are working at the board.
         d. Call on individuals as a last resort to draw out
         e. Toward the close of the discussion check your list. Draw additional problems from the group.
         f. If the leads have been properly directed you will find you have developed all your original problems and possibly several new ones.
   C. Select a problem or problems for discussion at the next meeting or meetings. (Try to make the topic seasonal. Of course, this may be governed by the length of the school and frequency of meetings.)
   D. Determine the day of the week or month and the hours for all meetings. (Stress this point and try to make the group agree.)
   E. Make closing remarks.
      1. Tell farmers you are glad they came.
      2. Tell them you hope we will be able to solve the problems.
      3. Compliment them on their discussion.
      4. Stress the fact that they are a live group of farmers, etc.
      5. Close by mentioning the next meeting, topic, and special leader or speaker you might be able to get who could help solve the problem. Hope they all come back to the next meeting.

The Ackley Part-Time School

HERMAN HOLMES, Instructor,
Ackley, Iowa

OUR part-time school attracted 24 members for 28 meetings. The course combined farm shop and discussions on "How to Get Started in Farming." The ages of the boys varied from 14 to 21 years. The majority of the members was of high school age, averaging 16 years. The major portion of the time was spent in shop as the age of the boys discouraged more mature discussions of farm management problems.

The meetings started early in December and continued until the latter part of January. Four meetings were held a week—three in the evenings from 7:00 to 9:00 p. m., and on Saturday afternoons from 3:00 to 5:00 p. m. These were supplemented by daily meetings thruout the holiday vacation from 1:30 to 3:30 p. m. Of the total 16 meetings conducted during the evening, the average attendance was 12 and for the 12 daytime meetings, 12.5. Apparently it made little difference to the student who was interested as to whether the meetings were held during the day or the evening. Seventeen boys attended 10 or more meetings.

Among the projects completed were four large chicken self-feeders, one wagon box, a large number of farm repair jobs such as saw conditioning, soldering, glazing, etc. Several woodworking projects for the farm home were included.

Of the 24 boys in attendance two were high school graduates, and only five had attended high school at any time. It was interesting to note that the majority

of boys worked at home and received no direct pay for their services except as their parents gave them money to buy clothes and for recreation. However, several are working away from home this year and do not have much time for a project program.

One of the highlights of the program was a trip to Waterloo to visit the various industrial plants, including John Deere, Rath Packing, and Soy Bean Processing establishments. Several of the boys attended the youth conference at Iowa State College during Farm and Home Week. The recreation program consisted of basketball, volleyball, and parties. Recreation of some sort usually followed the regular meetings. Monthly meetings are being held, both of social and discussion nature, as a follow-up program.

Young Farmer Education

WENDELL M. WESCOAT, Instructor,
Osage, Iowa

PART-TIME school work is now two years old at Osage, our first course having been held during the school year 1935–36. It seems to be quite a definite part of the school curriculum at present, and the eight of 25 big farm boys coming to school in the afternoons during the winter no longer presents the novelty it did to the high school students.

In starting the work it was first necessary to bring together a number of young men who were interested in improving themselves for the vocation of farming thru further study, discussion, and investigation. We were fortunate in being able to form a council of five boys of exceptional interest and ability who were representative of the group that we wished to enroll in former schooling, in status in farming, age, and ambitions. Each of these boys was from a different community or neighborhood served by the school.

This council conducted a survey of the out-of-school farm boys of the community between the ages of 16 and 30 in an endeavor to find out what the boys were interested in, what recreations they preferred, the amount of schooling they had had, their status in farming, and a number of other questions including whether they would like to become a member of a part-time class. A good response was had and the council and I went to work on a course.

Newspaper publicity was secured a month before the course opened; bulletins were obtained; enrollment cards and information folders were mimeographed and placed in the hands of prospective students by the council. A course was organized, the special features of which were: two major courses and two related courses to be offered five afternoons a week for six weeks beginning in January. Swine production and farm arithmetic were to be offered the first three weeks with legume production and farm law the second three weeks. Discussions, reports, trips, speakers, parties, basketball, and wrestling were also included on the program.

As a result of the course, a county rural young peoples' organization was started with the part-time members as a nucleus. Supervised practice work with special emphasis on liming, seeding of alfalfa, clean ground for hogs, and increased feeding of mineral and protein supplements.

The 1936–37 course was planned and executed in about the same manner as that in the first year, except that "Getting a Start in Farming" was the feature course, with dairying and soil conservation as the others. As the majority of the members belonged to the rural young peoples' organization the need and desire for parties and social opportunities was not as evident as the year before.

The unit proved to be the most popular one offered and fitted in quite ideally with the plans of several of the young men who were just starting farming. Great interest was shown in the discussions on farm leases, credit establishment, planning crop and livestock systems, farming compared with other businesses, essentials of a good farm manager, insurance, taxes, farm tenure, machinery and power problems, government plans for agriculture, and the future of farming.

Conclusions formed after discussion of the above unit on the part of the members of the class were that a young man who wishes to farm does not have the opportunities that his grandfather did to secure land cheaply and profit by its advancing price, but that his best opportunity is to go into partnership with his dad either on individual enterprises or whole farm or to rent land from someone else. Other choices not so popular, but often necessary, were to work out or at home, or to carry crop or livestock projects on a small scale but to earn and learn as much as possible so as to be prepared for a better opportunity when it comes.

The boys believe in practicing what they preach, for their actual supervised practice activities are as follows: two boys to work out and three at home, nine in partnership with their dads, three with livestock projects, two renting forties, two renting 120-acre tracts of land, and two renting quarter sections.

Completes Two Evening Classes in Farm Shop

D. R. PURKEY, Instructor,
Old Fort, Ohio

TWO series of evening classes have been successfully completed in the vocational agriculture department at Old Fort School. One class was for adult farmers, which met every Wednesday night during the winter, and the other was for young farmers who are members of the Young Men's Farming Club. Some of the work accomplished in these classes was to clean, repair, and oil 32 sets of harness; clean, gum, set, and file 12 crosscut saws; clean, gum, set and file 6 circular saws; clean, file, and set 10 hand saws; clean and file many auger bits; sharpen numerous cutting tools; make 500 feet of halter rope and splice it into halters; and many other operations that were done at home.

Demonstrations were given by farmer members of the classes who had experience in the type of work they were [illegible], such as cleaning harness, harness repairing, saw guming and filing, rope making and splicing, auger bit filing, hand saw fitting, and many other shop operations.

Evening Class Instruction in Horticulture

F. P. JAQUESS, Teacher,
Evansville, Indiana

IN southwestern Indiana fruit growing is very important from the standpoint of income, number of people employed, and advantageous climatic conditions. Anything that would benefit this class of farmers would in turn benefit the entire area. With these points in mind some of the growers of the area were approached on the question of an evening class in horticulture. As there had never been an evening class in this section, care was taken to convince them that it would not entail any outlay of money and very little time to attend such classes. On the whole, most of the growers were more than willing to give the class a trial. After obtaining a nucleus for the class the problem arose as to the content of the course. There were so many problems to choose from and with the success or failure of the school resting largely on selecting the right problems, a great deal of time was spent on this. Monroe McCown, Extension Specialist in Horticulture of Purdue University, was asked to help select the problems, for he was more familiar with the problems of fruit growers in this state than any vocational teacher could possibly be. Mr. McCown set up a list of problems. A rather complete list of reference material was listed and procured by the instructor for use in the preparation of lessons. To me this was of inestimable value, because any practice which can be cited which has been successful in several widely scattered regions carries more weight with adults than citing some experiment which has been carried on only locally and not proved very widely. These results from as many sources as possible were presented to the class, and they were allowed to draw their own conclusions.

After the content of the course had been decided upon and a few of the growers consulted, a few news articles concerning the content of the course, the purpose, place, and date of the first meeting were run in the local newspaper. The idea was stressed that anyone interested was welcome and that there were no obligations in attending the meetings.

The supervised farm practice was built around several jobs, but perhaps more interest was taken in the control of disease and insect pests than any other job. This was perhaps due to the fact that apple scab and codling moth were on the increase. Nineteen growers scraped and banded apple trees for the partial control of codling moth. Several of these growers destroyed old containers around the packing shed and screened part of the shed to insure against the codling moth being spread from this most common source. Advantage was also taken by a greater number of growers than usual of the emergence date of the codling moth and dissemination date of the apple scap spore, in order to time their spray applications. This resulted in a very substantial saving in spray material, especially in the number of scab spray applications.

Perhaps the next most important practice put into effect by many of the growers had to do with soil renovation. Many of the orchards had been in sod for years and there was such a drain on the fertility of the soil from the grasses that the trees had to receive a heavier application of commercial fertilizer each succeeding year until it was a question whether it was profitable to fertilize or not. Those orchards which had the sod cut up early last spring have come thru the very dry summer in much better shape and have matured a much better crop than did those orchards which still have the heavy sod of several years standing. The question of mouse control was also a factor which caused some growers to break up the sod and clean up around the trees.

One grower who has a planting of 120 acres has never been able to get a crop from a rather large block of Winesap, Stayman, and Black Twig due to the lack of pollination. This year he has top-worked a sufficient number of these trees to insure efficient cross pollination. This was rather an expensive job, but it should pay rather large dividends in the next three or four years. Several new plantings have been made by growers, and they have taken care of the pollination problem at planting time rather than waiting until the trees come into bearing. A more intelligent use of cover crops and the prevention of soil erosion are being practiced by many of the growers. More legumes, especially Korean Lespedeza, are being used as a cover crop and also as a permanent covering. Mulching trees with straw and using the clippings of the cover crop as a mulch around the trees rather than removing it for hay are also practiced.

Pruning came in for its share of consideration in the improved practices put into effect because the grower, because of the discussions held in class, now has a better understanding of the effect of pruning on the growth of the tree and upon its fruitfulness.

The practices were put into effect largely on the grower's initiative, but informal visits were made during the year and problems were discussed at that time which were of immediate importance to the grower.

As time for the first session approached, I was somewhat dubious as to my ability as a teacher to cope with this group of orchardmen who were more or less experts in their own right, but at the first session I found that if a person has his subject well in mind there is not a great deal of difference in teaching adults and high-school pupils. I certainly never would try to teach any class of adults without careful preparation of the lesson first. I have never enjoyed working with any group more than I did with this group of orchardists; they were appreciative of the effort that I was putting forth and were willing and eager to learn more about their profession.

The first night there were 23 growers present. The enrollment gradually grew until it reached 66 present one session. There were 87 different individuals enrolled and an average attendance of 34 for each of the 10 sessions. This gradual increase in attendance was proof that something was being given to this group of adults who thought it was worth while. Some of these men drove a distance of 38 miles one way to attend these classes.

These classes were attended by growers who actively managed some 3,000 acres of orchards, and of the number who attended most of the sessions there were represented 2,308 acres of peach and apple orchards. It would be safe to say that if each orchardman carried only one idea home and put it into effect the class was well worth while from the teacher's, the grower's, and the taxpayer's standpoint.

The real test of the worth-whileness of any evening class may be measured by the number of participants, increased interest as shown by increased enrollment, and the number of changes, which might be directly attributed to the class, which have been put into effect. Considering these three measuring devices of success, the first "Evening School in Fruit Problems" was successful. The plan now is to continue these classes each year, covering different phases and presenting those new things which have been introduced during the year just past.

The following jobs made up the course in fruit production.

1. Bridge grafting of injured apple trees.
2. Supplementing the spray schedule with sanitary measures to aid in codling moth control.
3. Controlling apple scab.
4. Providing for fruit bud formation.
5. Providing for set of fruit.
6. Fertilizing fruit trees.
7. Building a practical soil management system.
   a. The role of organic matter in orchard soils.
   b. Soil management in the peach orchard.
   c. Soil management in the apple orchard.
   d. Cover crops.
8. Thinning the fruit crop.

Teaching Problems

(Continued from page 165)

planned according to both interest and levels of difficulty.

11. A desirable pedagogical continuity and sequence is difficult to provide.
12. Large groups make the plan hard to administer.
13. If work is carried on wholly by the individualized plan, socializing experience is sacrificed such as socialized discussion, debates, panel discussions, dramatizations, etc.
14. Pupils of high-school age are not capable of understanding fully all they read without interpretation and discussion such as is carried on in good group work. Nor are they capable unaided of analysis and critical evaluation.
15. There is the danger of the work becoming a routine and a perfunctory task rather than interesting and worthwhile activity.
16. It is difficult or impossible for the teacher to keep up with his supervision. One is ready for a field study but the teacher can not go just now, or one wants to work in the shop, but must do so without the teacher.
17. Group instruction provides training and experience for many [illegible] important in adult life, such as working and planning together, respect for the opinions and experiences of others, and the development of a wholesome give-and-take attitude.

From the foregoing it may appear that the difficulties and dangers so outweigh the benefits as to be entirely discouraging, but this, however, is not the case in my judgment. It is true, I think, that the dangers are numerous and important enough to receive very careful study and planning to avoid, but the benefits of a partial individualization are so great that effort must be made to work out a practicable plan. Because a problem is difficult is by no means a reason for shying away from it. On the other hand we must attack it with open minds, persistence, and courage.

In connection with these problems we should recognize the broader aspect of the adjustment problem. We realize that we now have in classes of vocational agriculture many students who appear not to be primarily interested in farming or in agricultural work, but who are in agriculture classes because no other offering of the school fits as well. Teachers of agriculture should co-operate in working out means of satisfying the needs of such boys by other provisions as far as it is practicable to do so. But until this is accomplished we must accept the situation and make the best disposition we can of a difficult set of circumstances.

In the interest of time I shall not attempt a further discussion of these issues further than to call attention to one more of the most urgent responsibilities upon us—that of vocational guidance. I commend very highly the article in the January, 1936, issue of *Agricultural Education* entitled "Vocational Guidance as a Responsibility in Agricultural Education" by H. M. Bryam. We have plans for providing in the near future materials and references in this field for study of teachers in service.

I want to conclude this incomplete discussion of a vast subject by citing two quotations, the first by Dr. J. L. Mursell and the second by Dr. W. C. Bagley.

"The real excellence of a school is not to be measured by the degree to which it enables its pupils to do well in a difficult examination, or to pass standardized tests with a high score. It depends upon the richness, variety, and the value of life experiences which the school provides." [6]

"A good school is characterized by eager and aggressive industry, wholehearted co-operation, a spirit of helpfulness, happiness, fine workmanship, and the ability of its product to stand alone." [7]

1 Conant, J. B.—Cultural Leadership, School and Society, 41:1–7.
2 Eliot, C. W.—*John Gilley* in "Stories of the Day's Work," by Davis & Getchell—Ginn & Company.
3 Mursell, J. L., *Principles of Education*, p. 307, published by W. W. Norton & Company, Inc., New York.
4 Teachers College Record, Oct. 1934, p. 34.
5 Briggs, Thomas H., in Secondary Education, pp. 558–559.
6 Mursell, J. L., Ibid., p. 277.
7 Bagley, W. C., in Idaho Journal of Education 1930, Vol. 11, pp. 300–302.

Laughter is day; sobriety is night; and a smile is the twlight that hovers gently between both, and more bewitching than either.—*Henry Ward Beecher.*

Studies and Investigations

C. S. ANDERSON

Recent Studies in Vocational Agriculture Related to the Establishment of Young Men in Farming

F. W. LATHROP, Research Specialist,
Office of Education, Washington, D. C.

F. W. Lathrop

THE length of time over which a study extends is a factor in its reliability. I first recognized this truth in connection with farm management surveys. Here reliability requires a good number of farm businesses and is greatly enhanced if the records of each farm business extend over two or more years rather than over one year's time. I wish to discuss two studies in agricultural education, the reliability of which are greatly enhanced by the *time* factor.

The first of these studies entitled, "An Evaluation of Certain Factors that Influence the Occupational Choices of Rural Boys," was made by Victor E. Nylin of the University of Minnesota. Nylin obtained rather complete data on vocational students who were enrolled in departments in Minnesota in 1925–26. He obtained intelligence quotients, the occupational choice made by students in 1925–26, certain information about parents, size of family, size of home farm, school record, occupations and occupational changes. One important sideline was the classification of agricultural occupations in six different levels of occupational intelligence. Nylin followed 633 vocational students over a 10-year period.

The second study is entitled, "Factors Influencing Establishment in Farming of Former Students in Vocational Agriculture"; and was made by R. W. Gregory, formerly of Purdue University and now of the Office of Education. Gregory obtained data on vocational students in 75 Indiana high schools in 1929–30. He obtained somewhat different data than Nylin, including such items as school marks and credits, marks and credits in vocational agriculture and other subjects, other school activities, vocational intentions in 1929–30, partnership and other arrangements with parents, possible expansion of home farm business, occupations and occupational changes checked in 1931, 1934 and 1937. The Nylin and Gergory studies were alike, in that they started with groups of vocational students and checked their occupational students over a series of years. Gregory followed 636 vocational students over a six-year

ing the effectiveness of a vocational training program and of discovering its shortcomings is thru the study of individual vocational students during and after the training period. The fact that Nylin and Gregory studied quite different characteristics shows that this kind of study is still in the process of development.

The American Council on Education has developed a cumulative record form which has been used to study high school students. A modification of this record form, which will include some of the points in the Nylin and Gregory studies and probably other points on establishment in farming, is urgently needed. The Office of Education follow-up record form (Form 8-745) may well supplement the record form or be incorporated into it.

If cumulative data are to be obtained relating to individual vocational students, comparable data should be secured from a check group of non-vocational students. In small high schools we might get data from all freshman boys and use the entire group of non-vocational boys as a check group. A cumulative record form used with vocational and non-vocational students will enable us, after a suitable lapse of time, to relate their personal and environmental characteristics and their training to their progress and accomplishments after leaving school.

Length of Vocational Courses

The findings of both Gregory and Nylin indicate that students who take four-year courses in vocational agriculture are more likely to go into farming and related occupations than students taking 1, 2 or 3 years of agriculture. Gregory found that 58 percent of those taking three or four years were in farming in 1935 as compared with 46 percent of those who took one or two years. Nylin found that about 75 percent of those taking four years of training were in farming or related occupations and this percentage declined with the number of years of training. Slightly over one half of the young men who had had one year of agriculture were in farming or related occupations.

For some time there has been a trend toward the four-year course; these two studies confirm what many have believed for some years. We need to do what we can to see that at least a majority of vocational agriculture students go into farming; increasing the length of course is shown to be a factor in increasing the percentage going into farming. Adding part-time courses at the end of all-day courses has the same effect as lengthening all-day courses.

What Vocational Students are Most Likely to Become Farmers?

Both studies show that certain characteristics of vocational students are related to whether they go into farming. These and other studies show that a negligible percentage of town boys enrolled in agriculture ever enter farming. For example, Gregory shows that of 110 town ex-students, 7 were in farming in 1937, or about 6 percent. We might stop on the pros and cons of town boys in vocational agriculture classes; the studies do not go into these. They do tell us, in effect, that if we continue to admit town boys to these classes, we should not delude ourselves. Only a small percentage of these town boys will farm after leaving school.

Young men from owned farms are more likely to farm than young men from rented farms. Gregory shows that of 311 young men from owned farms, 64 percent were farming in 1934 and of 162 young men coming from rented farms 55 percent were farming in 1934.

Gregory shows also that young men from medium-sized farms are more likely to farm than those from very large or very small farms. Nylin concluded that "young men coming from farms larger than 120 acres were more likely to go into farming."

We have assumed that young men in large-farm families were less likely to go into farming than young men from small families. Nylin's data, however, shows that the size of the farm family has little or no relation to the percentage of young men who go into farming. Perhaps further studies are needed to prove or disprove this finding.

Gregory shows that three times as many of the young men *in farming* had investments in farming at the time of leaving school as did the young men *not in* farming. The subject of investment in farming and financial interest in farming will be discussed a little later.

Nylin and Gregory have given us valuable help in determining what young men are most likely to go into farming. It is possible to estimate rather closely what percentage of a group of vocational students will go into farming, if we know such things as:

1. Whether the young man lives on a farm.
2. Whether the farm is owned or rented.
3. How large the farm is.
4. How long a course of instruction the young man is taking.
5. What financial interest or investment in farming the young man has when he leaves school.
6. The occupational intelligence level of parents. (To be discussed.)

Financial Interest and Investment in Farming

The term financial "interest" refers to arrangements between a young man and his parents whereby he receives or

farming program. Gregory found that 47 percent of those former students who were farming had had some financial interest in the returns from productive enterprises at the time of leaving school as compared with 12 percent of former students *not* farming. This indicates that young men who have a financial interest in the supervised farming programs are more likely to enter farming occupations.

Only 25.6 percent of the 636 former students in the Gregory study were reported as having money to invest or investments in farming. If this is typical of the situations in all the States, teachers of agriculture are not developing one of the finest possibilities of vocational agriculture. No young man should complete an agriculture course without accumulating savings or an investment which may be used to establish him in farming. Such an investment may be in the form of farming equipment, such as cattle, swine, work horses, machinery, pedigreed seed, and the like. One of the major objectives of a supervised farming program should be to create such an investment, which is frequently an important factor in the decision of a young man to become a farmer.

Parents and Parental Relationships

One of Nylin's most interesting contributions was his classification of parents into six levels or categories of occupational intelligence. He used the same technique which was employed in the Brussel-Barr Scale of Occupational Intelligence. The following examples will indicate the character of the classification.

Category 1. Dean of the college of agriculture.
Category 2. Owner and operator of a farm of 480 acres or more.
Category 3. Nursery inspector.
Category 4. Poultryman 300–500 birds.
Category 5. Farm hand on a general farm.
Category 6. Corn picker—hand.

A scale of this kind is useful in two ways. First, it gives us a measure of the ability of parents. It seems to make a difference what category parents are in. For example, of the young men whose fathers were in Category 2, 62.5 percent graduated from high school and as the occupational intelligence levels of the fathers became lower, the young men dropped out of high school in increasing proportions.

This scale may also be used as a measure of the progress of young men after they leave school. The level of occupational intelligence reached and the time required to reach various levels may be significant measures of the effectiveness of a vocational program.

Gregory studied the relationship of parents to the establishment of their sons in farming. He found that most fathers of seniors encouraged their sons to farm; but relatively few had made definite partnership plans, and still fewer had assisted them in plans to farm away from the home farm. This lack of definiteness in planning between father and son is one of the important obstacles to satisfactory establishment of young men in farming. The findings of Gregory raise the question, "What is the responsibility of the teacher of agriculture in causing arrangements between parent and son so that sons may become satisfactorily established in farming?"

The relationships between son and parent are particularly important because for generations sons have served an apprenticeship at home and have taken over the management of the home farm. Records of our ex-students show that the great majority of them go home, at least for a time, after completing vocational courses.

Gregory gave particular attention to the possibility of taking on an extra man on the home farm. Three fifths of the farms were too small to accommodate 2 men. Two thirds of the fathers believed it possible to rent land adjacent to or near the home farm.

Hoskins, in his study of young men in farming, pointed out that one of the important features in a part-time course should be the study by part-time students of their home farms with the possibilities of additional renting or expansion of present farm business in mind. This seems to me a most valuable kind of farm management study for a part-time course.

Placement

I have purposely delayed discussion of the study by James E. Hatch up to this point. Hatch made a study of 128 farms where he had previously been employed as teacher of agriculture, for the purpose of discovering opportunities for young men to establish themselves in farming. The following statements show the kinds of opportunities on these 128 farms:

1. Fifty-three farm operators hire one or more men for the full year and expressed a need for 86 men.
2. Fifty operators expressed willingness to make a share agreement with their own sons. However, in many of these cases, the farm business would need to be enlarged.
3. Four farms were for rent.
4. Eleven farms were for sale.

Here are 151 farming opportunities on 128 farms. Hatch studied such factors as history of agriculture in the community, changes in ownership, size and character of farm families, plans for expansion of farm business, living conditions on farms and others. He is now working on an individual record card for each farm in the community, which would be checked and brought up to date each year.

I venture to say that many thousands of young men have left their home communities, who would not have left had they known of existing local opportunities. Many of these young men have entered non-agricultural occupations, but would have welcomed an opportunity to stay in farming.

There is a crying need for this kind of study in every farming community which has a vocational department. I do not presume to say who should do the job. The teacher of agriculture is the logical man, and it is one of the most valuable services he can render to present and former vocational students.

We are finding that, in rural communities where departments have been established a long time, about 50 percent of the former students are now engaged in farming. In some cases the percentages are smaller than this. There are those who compare this percentage with the percentage from other vocational training programs and are satisfied. I would raise the question whether this is a satisfactory percentage and whether we should take steps to increase it.

point to ways in which this percentage of former students engaged in farming may be evaluated and increased. By way of summarizing my discussion, I will merely state what the studies point out in this connection:

1. Certain personal and environmental characteristics of vocational students correlate with what they have done after they left school. For example, young men from owned farms are shown to be more likely to enter farming than young men from rented farms. Knowing certain characteristics, we can predict with a high degree of certainty what vocational students will do. A knowledge of these characteristics in given situations enables us to evaluate what happens to former students. We know, for example, that we cannot expect as high a percentage of former students in farming in areas where there are mostly rented farms as compared with other areas where the farms are owned.

2. In general, we may expect to find a larger percentage of former students in farming in areas where a relatively long course of instruction has been offered.

3. In areas where teachers see the importance of a financial interest in farming for young men, we are going to see these young men enter farming occupations in greater proportions than at present.

4. The studies do not prove conclusively that teachers should definitely work with parents of young men to the end that they become established in farming, but they do point out the possibilities. The relationship between the teacher and the parent in respect to the establishment of young men in farming is one of the most interesting problems of the future.

5. There can be little doubt that more young men will enter farming occupations if teachers accept placement responsibility so that their former students can become satisfactorily established in farming.

My final sentence still further summarizes and points out one practical application of these studies. *We can increase the percentage of former students who go into farming by (1) selection of students (2) lengthening the course (3) promoting financial interest and investment in farming by students (4) working with parent-and-son relationships and (5) accepting responsibility for placement.*

Group Teaching Methods

(Continued from page 170)

9. A decided help to the part-time student is to give out at each class meeting at least one piece of prepared subject or reference material upon topics thru which the individual may gain added knowledge, skills, or groundwork toward solving future problems which may confront him. (The problem or skill often may be planned for the next meeting of the class.)

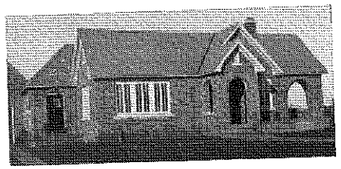
10. The part-time program becomes most satisfying to the instructor since the follow-up program with these young men of the community shows measurable results and much progress.

Future Farmers of America

F. F. A. Beautification Program

G. S. WILLIAMS, Teacher,
Frisco City, Alabama

THE homeowners of the patronage area of the Frisco City high school are fast becoming landscape conscious, and the community is dressing up its homesteads more and more each year, according to a recent survey made by the department of vocational agriculture of the Frisco City high school. The greatest stimulus in creating a desire for home improvement work within the community, as well as one of the means of making it possible to carry the program forward, is the Frisco City F. F. A. Nursery.



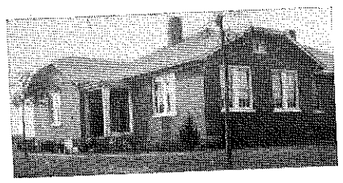
Before

After

A Home Landscaped

In 1928 when the department of vocational agriculture was established at Frisco City, only 13 percent of the homesteads had any landscape treatment. In 1936, 70 percent of the homesteads had some landscape treatment. A study of the factors influencing the spread of this program reveals the local F. F. A. chapter operating thru a non-commercial nursery to be one of the most important factors.

The origin of the Frisco City F. F. A. Nursery dates back to the spring of 1929 when the first propagation work was done. For several years the work was on a very small scale and was more of a



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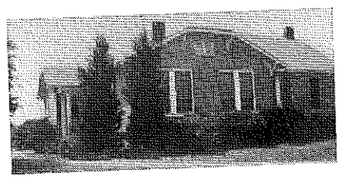


1936

Vocational Building

class activity than a chapter activity. In 1933 R. E. Martin, former chapter adviser, conceived the idea of enlarging the scope of the nursery and making it an activity of the F. F. A. chapter. Since that time the nursery has grown into an acre field plot with more than 3,000 ornamental plants of 35 varieties, and propagating facilities for making 4,000 cuttings annually for use by members.

The responsibility for propagating the plants, care of the nursery stock, and the distribution of the plants rest on the local chapter. Since the nursery is operated on a non-commercial basis, the responsibility of operating the nursery carries the financing of the project in addition to the duties above named.

This responsibility is met by the chapter largely thru the activity of a nursery committee, which is appointed annually by the chapter president. This committee finds itself the most active committee in the chapter, and the work designated by this committee often has the entire membership of the chapter at work.

Briefly, the method of distribution of the nursery stock, which has been adapted by vote of the local chapter, gives a prior claim to nursery stock to a member of two years standing who is carrying home improvement as a part of his supervised practice program. Other members have a secondary claim to the nursery stock upon showing a need for using it on their homestead. Nursery stock may also be allotted by the nursery committee and chapter adviser for use on the local school campus or on the campus of consolidated schools of the district, for use on any public-owned property, and in cemeteries. In all cases all nursery stock is supplied gratis.

The survey made in connection with the study of the home improvement conditions of the Frisco City community shows that the F. F. A. Nursery supplied all or a part of the plants to 16 percent of the homes of the community that have used ornamental plants. Considering the time required to establish a nursery to the point where the output of nursery stock is large enough to be very useful, this high percent reflects the possibilities of such an enterprise as a source of ornamental plants.

Seventeen homes of the community, two vacant lots of the town, the school campus, and one cemetery received the use of the nursery stock in 1936-37. As it has already been said, the local project is operated on a non-commercial basis and very few, if any, of the premises treated with ornamentals would have been landscaped except that the plants were supplied gratis. This condition is due to the low financial status of homestead occupants.

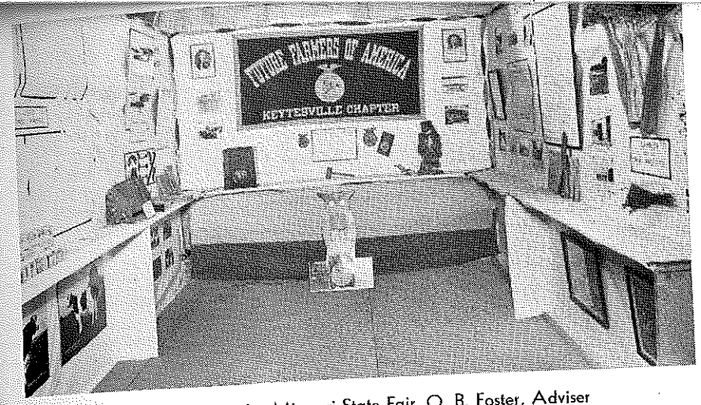
A worth while outgrowth from operation of the nursery has been the operation of home propagation beds. It is estimated that over 50 such beds are operated by all-day class members and others of the community. In fact, so many of the boys are including the operation of home propagating beds in their supervised practice program that the F. F. A. nursery stock is being used in many cases to supplement the plants grown at home rather than being the only source of ornamental plants for the F. F. A. boys.

Aside from the value of the F. F. A. Nursery as a source of plants and as a chapter activity, it is a very valuable source of teaching material. With a majority of the all-day class members being members of the F. F. A. and including home improvement in their long-time supervised practice program, the nursery affords an abundant source of teaching material for giving instruction of the best type in every job taught under this enterprise. Moreover, the source of this teaching material is conveniently located and at our command at all times.

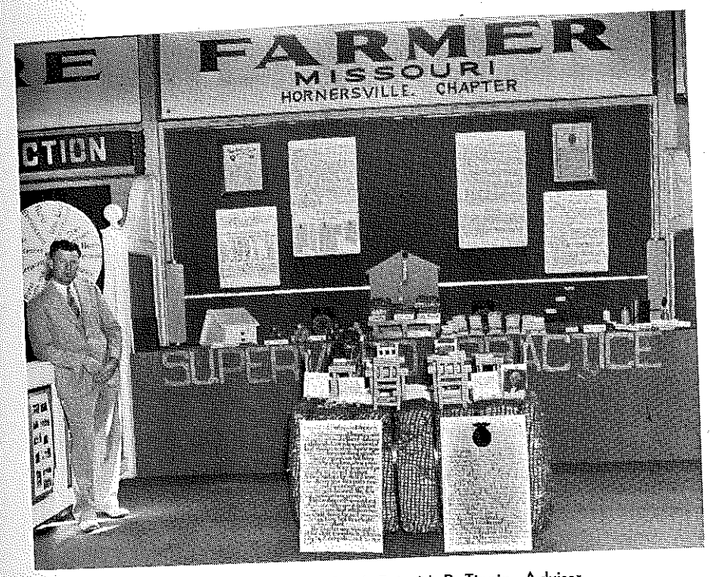
Soil Conservation

FLOYD SHIRLOCK, Reporter,
Lorenzo, Texas

THIRTY-FIVE hundred and fifty trees have been planted in the F. F. A. tree planting campaign. The trees were purchased by the Future Farmers from the Experimentation Station at Lubbock; the farmers agreed to construct diversion terraces, ditches, check dams, and any other engineering structures necessary to provide extra water for the trees, protect them from livestock, and keep the land free from weeds and grass on a strip ten feet wide on each side of the row of trees. In some cases the boys have entered into a contract with the farmers to set out the trees, do all the surveying, and water them for two years. They have provided a watertank on a flat two-wheel trailer that will hold 150 gallons of water and is equipped with a water hose 50 feet long to do the watering with. Most of the trees have been set for windbreaks and groves and are a part of the Soil Conservation Program of the local chapter of the F. F. A.



First-Prize Booth—Missouri State Fair, O. B. Foster, Adviser



First-Prize Exhibit Mid-South Fair, N. B. Tinnin, Adviser

F. F. A. Junior Fair

DAVID H. ENGLE, Teacher,
Milligan, Nebraska

EACH year in August after the major part of the summer work is over the people of the Milligan community gather in our little city for a three-day picnic.

Last year in one of our F. F. A. meetings I suggested the Junior Fair as a chance for the boys to take an active part in the next summer picnic as an F. F. A. group. The boys fitted calves and lambs by training, washing, and trimming them; some planned to show litters of pigs, while others prepared samples of seed potatoes and small grains.

In planning with the committees in charge of the Milligan picnic I found friendly co-operation and an additional idea, that of having a colt and stallion show with the Junior Fair, and forming a parade. Of course, there was not much time left after we had this idea to tame and train colts, but we finally secured seven, and three stallions, the sires of the colts.

The F. F. A. boys met three days before the picnic and made a float out of a hay rack upon which we exhibited our crop projects, two litters of pigs and two lambs. One of the boys had made a garden tractor out of a model-T Ford with which we pulled the float.

Co-operating with the chairman of the concessions committee, we finally had our parade at 11 o'clock Friday morning, August 7, 1937, the first day of the picnic. A 30-piece bugle corps from Dorchester led our parade, then our school band of 25 pieces came playing our school song, The Purple and White. Our F. F. A. float was third in line followed by three calves, seven colts, three stallions, and six purebred Percheron mares and fillies owned by a horse breeder of York. Bringing up the rear was a six-pony shetland team hitched to a dray wagon.

the picnic committee got a large tent for the colts and stallions.

We had considerable help from the businessmen with the parade, but boys were responsible for their project exhibits, which they brought in with trailers and trucks.

In addition to the Junior Fair parade our F. F. A. boys operated a watermelon stand as a concession to the Milligan picnic. We secured an ideal location for the stand in the center of the main street. The F. F. A. boys rented lumber from the Milligan lumber yard with which they built a stand, covered it with tarpaulin, borrowed a horse tank from an implement dealer to fill with water and ice to cool the melons.

Our president asked the mayor to back the F. F. A. financially on the first truck load of watermelons. The second and third day we paid cash for the melons from truckers. The boys found difficulty in making ends meet the first day, but soon learned the proper-sized pieces in which to cut the melons in order to make a profit.

The Junior Fair parade and F. F. A. watermelon stand were accomplishments on which the boys look back with pride as it was the first affair of its kind and the boys had the leading part in it. The F. F. A. feels that they developed several of their aims such as:

1. Ability to fit livestock and crop projects for exhibit.
2. Co-operation in a profitable undertaking.
3. Advertising vocational agriculture department.
4. Means of financing chapter activity.

Our Ideals, Hopes, and Ambitions

DURWARD SIMPSON, Pupil,
Lorenzo, Texas

NO institution becomes great that does not have high ideals, great hopes, and large ambitions; and those ideals, hopes, and ambitions must crystallize in the minds of all the members of a democratic organization before they live and influence the organization.

It is not to the value of these things themselves that I wish to call your attention but rather the value to us boys in the doing of them. You know our motto is: Learning to Do, Doing to Learn, Earning to Live, Living to Do. Our adviser is not only a master teacher but a master builder of men and character. It is he who recently sent seven of us to see Miss Craddock and make arrangements for our banquet including the time, place, price, menu, etc.; to see Dean Weeks and Dean Doak to invite them to be on the program; to see Dean Leidigh, Doctor Young, and Mr. Clay about the contests in the spring, securing grain samples, and doing shop work, to see Mr. Ryan and Mr. Chappelle about the part-time school we are planning; to see Mr. Davis, at the chamber of commerce, about holding a district project show. It was he who sent another group of five of the boys to the experiment station to see Mr. Jones about buying 1,000 trees to plant in the Lorenzo community and about the ir-

rigation projects on the South Plains; and to see Mr. Guy, editor of the Avalanche-Journal, to learn how to write news stories and to still another committee to confer with the area supervisors about our program of work. Recently two of the boys attended the banquet at the Hilton Hotel for agriculture men, and besides putting them at the head table, Dean Leidigh introduced them to all the biggest agriculture men in this whole West Texas Country.

Think of us boys contacting and associating with the best agriculture men and businessmen in the country. Think of the education and training of a group of boys who sit down and plan a new kind of judging contest and hold the first of its kind in the state, or who make a chapter conducting team to initiate members for a dozen other chapters. And we are learning to live. It is the height of our ambition to be diligent in labor, just in our dealings, in all things be honest and above all play the game fair, and at the same time have the best chapter in the area and state. Then when our ideals have become habits, custom, and tradition we intend to bid for national honors.

Co-operative Project

(Continued from page 167)

and field meetings are held in the afternoon.

Improved practices put into effect on each man's farm are emphasized in meetings and in individual visits. A record is kept of these practices. "Outside" teachers usually spend the entire day visiting farmers.

Day-Unit classes have been established in 14 centers with an enrollment of 435. An effort is made to direct these boys into regular all-day classes. A limited number of practices are being promoted and put into effect with this group.

A part-time class has been organized by each teacher in at least one community. These were the last groups organized and have not been in operation long enough to predict results. The classes have been organized on the basis of finding something in which the boys are interested, and developing an interest in agriculture later. Other classes will be organized as demand arises and time permits.

As stated before, six all-day classes are in operation in the three schools and an additional class has been organized in the Kinston school by one of the outside teachers. There is a total all-day enrollment of 114 with regular supervised practice programs and three active F. F. A. chapters.

Five thousand fruit trees have been ordered co-operatively, 1,250 hogs have been wormed, 925 hogs have been vaccinated, over 2,000 hens culled, seven one-variety-cotton communities have been established, and 614 bushels of pure seed bought. Practices have also been put into effect in landscaping, terracing, feeding hogs, feeding poultry, care of poultry, improved pasture, Kudzu planting, and numbers of others. Farm credit has been taught in every center. The Resettlement Administra-

the Ozark Bank met with the vocational teachers and gave them information as to how to secure a loan and this has been taught. Some farmers broke away from furnishing merchants and borrowed from the Production Credit Bank and others from the Resettlement Administration.

County Superintendent A. C. Dunnaway says that the people in the county are enthusiastic over the work of the teachers of agriculture and that he is beginning to see results on individual farms. He further states that after observing these six teachers work he would rate the teaching of vocational agriculture as important as English in his high schools.

Community agricultural organizations are beginning to be formed in a few communities and others will be added as other communities are developed to this point.

Health, education, agriculture, and home economics are presenting a united front in a co-operative effort to better conditions in Coffee County. A beginning has been made and results are beginning to show even in six months. One of the greatest results is the teamwork shown by all agencies in attacking a common problem.

Rural Electrification

(Continued from page 163)

in a co-operative financing enterprise than to refinance with new power units at much greater rates for the power used.

Immediately after the World War, the rural people began a silent clamor for electric power and service. Their demands and needs have grown steadily until the present time, and now their hopes are brighter than ever before and they are only hoping for the opportunity of chances. Individuals, themselves, have been their own teachers. Few, if any, co-operative enterprises have been undertaken by teachers or rural leaders, even tho many wonderful opportunities have been afforded. Statistics show that where rural electric projects have been established there has been an annual 15 percent increase in power used each year. The rural people are surely ready for this new power program if there is some leadership to help them along.

The vocational teacher stands at "the Cross Roads" with folded arms. He knows the correct road to follow but there are some strings that hold him back. 1. Experience has taught him the difficulties of becoming involved in programs that conflict with private industries. 2. This type program has appeared so suddenly and with such force that he must concentrate and move cautiously to avoid any pitfalls. 3. The teacher has not had training during his collegiate years in the program that is to be undertaken. All these things in the teacher's hesitancy lead to the final road which must eventually serve as a foundation for the whole program.

Colleges and teacher-training institutions must serve as a background for public education in rural electrification programs. Vocational teachers are now pausing, due to the lack of training in the electrical field. In most cases, the training that the average vocational teacher

you had better let it alone." Now, the vocational teachers are in the midst of a vast expansive program and must teach the uses of electrical power to both students and adults and with no training in the background. The résumé is that all such training institutions should introduce suitable courses in their curricula at once so the public can be educated in rural electrification in the shortest time possible.—Marvin Bull, Teacher, Cave City, Arkansas.

A Collegiate Chapter Program

FRED T. ULLRICH, Adviser,
Platteville, Wisconsin

IN addition to the regular officers of the chapter, five different members are assigned to the following committees: program, social, and publicity.

The program of work is made out so that every member of the chapter takes part in one or more activities. Each of the following activities in the program has a chairman and four members who are responsible for attaining the desired goals. By this method prospective teachers of agriculture have an opportunity to get experience in what they will expect members in local F. F. A. chapters to do later.

1. Assist in judging tryouts at the State Teachers College preparatory to judging contests at College of Agriculture at Madison.
2. Preparation of a float to represent the chapter at college home coming.
3. Reforestation project on the college farm.
4. Arrangements for "Round-up" of students in departments of vocational agriculture in high schools in the Platteville patronage area at the time of Farmers' Week.
5. Arrangements for an exhibit of farm products, canned goods, sewing, etc. by students enrolled in rural schools in the Platteville patronage area at the time of Farmers' Week.
6. Demonstrations and discussions of farm skills before community clubs in the rural area contributory to Platteville.
7. Presentation of a rural life play before community clubs.
8. Sponsoring a public speaking contest on vital farm problems among the members of the Collegiate Chapter of Teachers of Future Farmers.
9. The beautification of some spot on the college campus.
10. Sponsoring of basketball team to represent the Collegiate Chapter of Teachers of Future Farmers in the intramural basketball contests in the college.
11. Participation in a radio broadcast on rural life problems.
12. Sponsoring of a man's chorus.
13. Sponsoring of the "Ag Round-up" at the time of Farmers' Week.
14. A study of items in programs of work in collegiate chapters in teachers training institutions.
15. A study of methods for realization of programs of work in high school chapters of Future Farmers of America.
16. Arranging for the annual outing of the membership of collegiate chapter.
17. Assisting needy students in the department to secure work to aid in paying expenses.

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