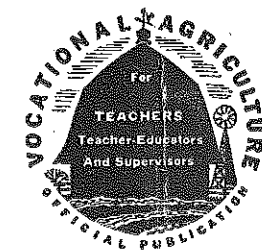


*An idea is a funny little thing—
it never works unless you do.*



The Agricultural Education Magazine

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Editorial Comment

Agriculture—Tomorrow

Editor's Note: Quentin Reynolds, the writer of this editorial, is general manger of the Eastern States Farmers' Exchange, West Springfield, Massachusetts. We are indebted to Doctor Brunner for permission to use the article from a bulletin of Pennsylvania State College.

FARMING in America is a way of life. The desire to so live is the main force which keeps most of the farm families I know growing and harvesting crops and feeding and marketing livestock. Some overlook that fact and some take advantage of it.

The foundation of America was laid by farm families fighting for opportunity. Together these families built schools and churches, and together they created homes, barns, and other private structures. In this same spirit farmers are attacking their part of the war effort. Putting in long hours to do the war job is as much a part of sound farm philosophy as working into the night to save a piece of hay, or running over to do chores for a sick neighbor for no pay after a long day's work. To farm folks it seems natural for townspeople or high-school students to come out to help save a crop. It is all part of the way of life in which farmers have been steeped for generations. That is the way of life which made America.

Farmers are disturbed to learn that the farm is getting to be about the only place in commercial enterprise where the problems of life are tackled in this simple fashion. They do not find townspeople and high-school students dashing into freight houses and docks to help freight handlers and truckmen who have more than they can do in 10 or 12 hours. They find that such teamwork is barred; and that if these citizens have more than they will do in eight hours, they are paid not only more for staying longer, but at a higher hourly rate, sometimes twice as high. They find men in industry refusing to work at the job expected of them and which they have elected to tackle. They find them limiting output, not to their own mental and physical capacity but to rates set arbitrarily under that capacity. They know these things are so because their relatives and former hired men come back Saturdays and Sundays and interrupt them at their work to tell them so, and to dangle in their faces weekly pay checks for one man's labor which may exceed the gross income of the farm family.

Farmers work for the joy of living the American way, enjoy what they have, look forward to having as much more as they can earn by working for it, and like to see others enjoy the things they hustle for in their chosen fields. On the farm the whole family is both capital and labor, and there is never any doubt but that income is the fruit of production.

Farmers are disturbed to learn that labor leaders are inducing their followers to expect that when peace comes they can automatically receive present take-home pay for a 30-hour week. Talk of a general 30-hour week in industry would be brushed aside as a pipe dream were not farmers discovering that during the depression and while the national debt was mounting, folks otherwise unemployed received incomes on made-work projects which gave them a better material standard of living than that most farmers attained after providing the food and fiber on which these goings-on depended.

A postwar economy which presupposes that farm families are going to work farm hours supplying food and fiber at present prices while urban workers enjoy present take-home pay for 30 hours is going to be short of food and fiber. Too many farm families will slow down or seek the shorter hours and the easy money. Farmers are mechanics, traders, teamsters, truck and tractor operators, machinists, and professional men and women. Most members of the farm families on whom the nation really depends are alert, resourceful individuals. As a way of life, farming holds these folks in differing degrees. Many farmers will not follow a calling, however congenial, which demands much more of the wife and the children.

Farmers do not want to interfere with labor's progress toward a higher and higher living standard, but they want that standard to be one which labor earns thru production. They want the returns to labor, management, agriculture, and capital,

to be commensurate with the skill and the industry applied in supplying the requirements of society. These returns can never be established or maintained by formulas. Farmers recognize that differences exist in congeniality, strain, training, costs, and other things which fully justify differences in cash wages. These differences will adjust themselves with reasonable effectiveness if artificial rigidities are not established and if we remain a classless society with individual and group initiative.

Farmers recognize the need for organization among groups to secure the full fruits of their activities and would deny to none the right they themselves exercise of building strong associations. But farmers are disturbed to learn of postwar planning in which the getting together of management and labor plays a prominent part. They think back to the time when management was having its day; when the worker, the stockholder, and the consumer were pawns in the hands of management. Then they wonder if this getting together will solve present economic weaknesses and lead to a sound postwar era. Stronger and better rackets are still rackets, and rackets are predatory and destructive. The stronger they become the less is the American way able to stop them and the more certain is the coming of the authoritarian state.

Our civilization can progress only on an expanding economy. By this means only can security be obtained. Recognition of this is imperatively needed and requires prompt return to reliance and citizen initiative and the abandonment of reliance on the state. It means the return of emphasis on the state as guarantor of opportunity and the abandonment of emphasis on the state as guarantor of security. Consciously and unconsciously, we are ignoring these facts today and we are greasing the skids for regression and for the destruction of our destiny and the heritage of our children.

Today all of us are encouraged to look to government for things we should provide ourselves. Farmers look for government assistance of various sorts including an important part of their income in the form of one subsidy or another. They look to government to help them organize, finance, and direct cooperative enterprise, plan their farm and household programs, and guarantee their markets. Labor looks to government for the maintenance of union membership, for income with and without employment, and for food. Businessmen turn to government to find markets, supply capital, and protect profits. The nation which repudiated Townsendism, has accepted it in fact, and panhandling has become respectable.

Theodore Roosevelt warned the nation against that plausible slogan, "Safety first," the slogan which is the predecessor of "security." The boys in the foxholes, or sailing the seas, or meeting the enemy in the air, practice and worship no such doctrine. How then can we?

There is yet time to recognize our true goal, the retention of opportunity. We can reach this objective thru:

1. A return of government to the role of referee, protecting by law the opportunities of its citizens and acting as their servant, not as their pater.

2. A balance of economic elements secured thru effective initiative of individuals and groups, unhampered by government directives or predatory pressures.

3. An economic society so organized that equitable incomes evolve without reliance on parity and cost of living formulas.

4. Acceptance and practice of the principle that while the laborer is worthy of his hire, a job is a means of accomplishment and not an end in itself.

5. Acceptance and practice of the principle that "made work" projects provide relief, not jobs, and that relief payments must be at subsistence and not at incentive levels.

6. The abilities of individuals enhanced and protected by group action.

7. A revitalizing of our traditional representative type of organizations and recognition within and across groups of the responsibilities of American citizens as legatees, whether as trustees, leaders, or followers.

8. Renunciation of the closed shop principle be it in a cooperative, a trade union, or a trade association.

9. Corporations and service agencies, profit and nonprofit, operating with due regard for the rights of all—owners, employees, and the general public.

Classroom Visitation, a Principal's Tool for Improving the Teaching of Vocational Agriculture

N. E. KULLMAN, JR., High-School Principal, Ludlowville, N. Y.

THE term "supervision," in education, has come to be accepted to mean those duties of a person in a supervisory capacity directly connected with improvement in instruction.

A most important, but often neglected, duty of a supervisor is that of classroom visitation. The reasons for its being neglected are legion, but the main reasons are the press of other duties and lack of training felt by the principal. (The remarks in this paper will be confined to the small school situation where the chief supervising officer is the principal.) The principal, most generally, is a former teacher who has had additional study in the field of educational administration.

There is a further point that must be noted with respect to the lack of classroom visitation on the part of administrative officers. It is that, in many cases where visitation is practiced, it is confined to the academic fields and does not encompass the special areas such as agriculture, home economics, industrial arts, commercial, and so on. Most principals who follow this pattern admit that they do so because of a deficiency of knowledge of the subject and to the reaction of many teachers who feel that principals are incapable of doing so as they are not trained in the subject.

For these causes of minimum visitation the following may be said: Principals who are overburdened will find it profitable to analyze their job needs and their job acts. These may be classified in order of importance; delegated to others if others can handle them, and a schedule maintained insofar as possible for the remainder. This schedule should include some time for room visitation. Even where principals teach, arrangements can be made to keep the students busy while visits are made to other areas.

As for the lack of training for special class visits, if principals feel they can visit ordinary academic classes, they possess, in all probability, the essentials for the other because they are identical with but small exception. The principal has been trained as a teacher. He has some knowledge of psychology and methods. His knowledge of subject matter content and fields varies according to experience. Further training for the principalship has acquainted him with more educational psychology, personnel relations, and sociology. These, or variations of these, are enough for a good foundation.

The principal's first job for visitation is to prepare and sell his teachers on the idea. It is up to him to have them understand and later prove by his actions that the purpose is not one of inspection, but

one for giving assistance and improving instruction.

The principal does not have to have a detailed knowledge of the subject matter, in this case agriculture. He can always look up facts to check on accuracy of material and information used in the class. (The knowledge of his community necessary as an administrator and that gained from community contacts in agriculture is helpful.) It is more essential that he apply his knowledge of teaching to the present situation. He should be interested in what the teacher and pupils do. More important, how they do it. Many thoughts will flash to mind as the principal observes.

A record of the class should be made in note form. Ideas should be jotted down as they occur; otherwise many will not be recalled. These notes will form the foundation for the final report which is the basis for the conference with the teacher during which the situation observed is discussed.

There are three areas of gain arising from this system. These are in the principal, the teacher, and the pupils. The principal learns to be a supervisor by doing. He soon has experience which will overcome the original fears. Also, he will learn to establish good teacher-principal relationships as this activity of visitation makes a good approach to such relationships. For the teacher there is a feeling of confidence in the administrator and improvement in technique. Also these complement each other making for a better all-around situation. The pupils benefit most from the improvement in teaching. It is easier to learn and pupil-teacher relationships are improved.

There is also a gain involved for the profession. This is especially true in the smaller schools where college youngsters begin teaching careers. No longer will they have to sink or swim. They will have a tug to guide them thru the teacher's early channels. This should make for happier people. Also, in the larger situation, such visitation will help reduce the upsets caused by turnover as well as stimulate growth of old-line personnel.

In our school we follow the method outlined in the preceding paragraphs. The teacher is prepared by conferences. The idea of assistance and improvement of instruction is stressed. (It has been noted that this, when told to prospective neophyte teacher, is an attraction.) The entire procedure of visit, report and conference is explained carefully.

We use a system of unannounced visits. There has been a natural doubt of this by teachers which soon fades as the system works. Teachers are further encouraged to ask for visits when problems

are recognized or when they are doing something which interests them greatly.

The basic sheet used for notes during visits has several parts. We do not use prepared sheets but rather plain sheets which the principal divides into parts with the following words.

GENERAL COMMENT:

A—Room

B—Observations and Comments

1. The Teacher
2. The Teaching
3. The Material
4. The Class

C—Conference

This the principal keeps before him as the lesson is developed. The room is checked first. Is it clean, neat? Is lighting sufficient? Temperature comfortable? Air stale, dry and so on? Is teacher aware of and does he adjust to changes? Other things will be considered as the situation varies.

The teacher is watched carefully as he steers his class. These questions flash as one observes: voice?, dress?, mannerisms?, attitude toward pupils?, personality?, at child's level?

During the class the methods of the teacher are noted. What was the plan? Did it have a purpose? Was it followed? How was it carried out? Was there a review? An application? Was presentation effective? Impression or expression? What of the techniques used? Congratulate the teacher on the things that were especially good. How to improve those noted that weren't as good as they might have been? How was that point so well emphasized? How could this be made more understandable?

The same for the material. Was it well organized? Enough, too much, or too little for time consumed? Assignment clear?

Was the class active or passive? interested or not? distributed participating? Did they act properly?

The above questions are only samples of the myriad thoughts that will occur as the visit passes. The notes made are the crux of the affair. With them before him the supervisor writes the report or dictates it. There are two copies. One for the teacher and one for the principal. Care is used in making the report. Trivial items are discarded, but care must be exercised in discarding things as they may be of value later. The phraseology of the report is important. Suggestions are put in question form, for example: Would it be a good idea to . . . ? Dictatorial statements are avoided. Strong points are stressed. Weak points are mentioned in a way that will not cause the teacher alarm or resentment, but in a way which will induce the teacher to strive to correct them.

The report notes a time for a conference, usually at the teachers convenience during the principal's office hours or other possible time. The conference is informal and friendly. It is assumed that the teacher has read the report. He is asked what he thinks of it. Does it have the right ideas? Has it helped? What is

wrong with it? The teacher is encouraged to talk. The report is then carefully discussed. Conference notes are added for future reference. The teacher is encouraged to file his copies. These form a history of his work. They build up confidence in himself and in his principal. Work improves.

The following report is a sample. It will convey the ideas presented above. Following it is a statement from the teacher of agriculture concerned, giving his evaluation of the system.

AG 2

Mr. Teacher
6/6/44

General Comments—General visit to get impressions concerning new personnel, for assisting teacher to adjust to our situation at Ludlowville, which was new to him.

A. Room. Lights, heat and air quite satisfactory. General housekeeping has been improved but further improvements can be made. Would rearrangement of wall cabinets and magazine racks lead to greater tidiness and usable board space? Wish to discuss this with you further.

B. Observations and Comments.

1. The Teacher. The teacher seemed at ease and displayed enthusiasm and energy. His appearance was neat. Sympathetic and courteous in attitude. Quiet in manner. Situation was dignified. Teacher seemed to know how to keep the situation controlled without external show. Used an encouraging manner toward the students. This makes a splendid foundation to build upon.

2. The Teaching. The teaching was well planned and the plan was carried out. Review wasn't included and the observer assumed that the material was new. Was there an application made before the close of the class? The method used was a discussion of the problem. It was analytical, and the reasoning required was inductive. The situation was cooperative. It seemed that the general scope was also fine, and if properly followed, should lead to a fine situation.

The questions were thought provoking but required only short answers. One of the problems presented in all agricultural classes is in getting the boys to answer main or pivotal questions. well. This is a point that a teacher may well work on. One point the observer wishes to commend the teacher upon is his vocabulary and use of English. The defining of terms showed that he was aware of the need of same. Keep up the good work. Just be sure that you do not go above the level of understanding of the youngsters. The observer suggests that the teacher give a short vocabulary test every so often on words used, as a means of checking this point. The "ph" explanation was over their heads. Come back to it when the need arises. In the meantime try to set up a simple plan for getting it across as the boys lack a scientific basis for understanding it literally. The teacher is also to be commended for putting the work upon the board. Visual instruction far surpasses auditory.

3. The Material. Potato Growing (farm enterprise) The unit: Control of Pests and Diseases. The approach was drawn from boys' experiences and the importance of the enterprise in the area. Material was comprehensive. It seemed to be well judged to time span and was well illustrated by board diagrams.

4. The Class. The boys were interested but puzzled. The teacher presents a different situation to them from his predecessor. They will be more active when they get to know him better.

C. Conference. As soon as possible.

D. Additional Comments. Why not test a sample of manured soil by "ph" or litmus test and really convince the boys? The observer felt that they doubted that point. Remember to speak to me about a sink for the Ag room. Would you say that viruses were chemical substances?

Is Vocational Agriculture Justified in City Schools?

J. N. CARDWELL, Teacher,
El Paso, Texas

IN THE beginning of our country everyone was dependent directly upon agriculture. The country is still dependent upon agriculture but in a more indirect way. It is possible now for a boy to reach manhood without ever having had the pleasure of working with the soil, owning and caring for livestock or poultry, or planting a seed and watching it germinate, grow and reproduce itself. These are simple but interesting experiences that mean a lot to farm people and people interested in Nature. Would a boy who did not have the opportunity to do these things miss anything worth while in life?

Which will produce more corn, hybrid or Pima? What breed of dairy cattle has a white face and white underline? What is a capon? What makes hens lay infertile eggs? These and many other questions showing an appalling lack of knowledge about farming and livestock are heard by



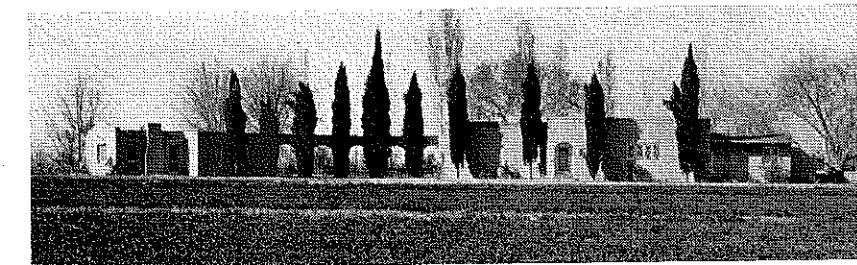
J. N. Cardwell

teachers of vocational agriculture in the city schools. Too often we are likely to ridicule or to be sarcastic about silly questions. However, in most of the cases the boy is earnest in his desire for an answer to these questions. Should he be ridiculed or laughed at because he has never had the opportunity to be on a farm, and consequently does not know the simplest facts about farming? Another danger is that we might start our instruction on too high a scale if we have been dealing with farm boys. We must not assume that boys who have never been on a farm can possibly know much about farming or livestock.

But is it necessary or desirable that city boys know anything about agriculture? Should vocational agriculture courses be offered only to those boys living on farms at the time the instruction is offered? What about the boy who is interested in animals and growing things and who likes the farm? Should he be disregarded just because he is not fortunate enough to be living on a farm?

How many vocations are entirely separate from agriculture in that they do not have any dealings with land, livestock, or with farm people? Can the banker make intelligent loans on land, livestock or crops without some fundamental facts about agriculture? Will a lawyer ever need to know something about agriculture to plead his or his clients' cause in the courtroom? Should the merchant, hardwareman, implement dealer, and

(Continued on page 35)



The farmstead of the estate owned by the departments of vocational agriculture of Ysleta High School of Ysleta, Texas, and the Austin and El Paso High Schools of El Paso, Texas. Besides two apartments the larger building includes a large meeting room for the three chapters

Conference Notes:

A. Decided to rearrange room. Teacher was glad that improvement in housekeeping was noted.

B. Application to unit was made during second period, when observer was out. Glad to know of certain solutions to the problem. It is assumed that additional work upon this unit will be carried on and that the boys will do some effective planning.

C. Noted vocabulary problem. Will watch for it. Suggestion on testing good.

D. Willing to try test on manured soil. Ought to serve its purpose.

The Teacher's Statement.*

From the standpoint of a teacher of vocational agriculture, supervision should meet two specific needs. First, it should provide an evaluation of the teaching situation, and secondly, it should provide a means of improving classroom effectiveness, and hence the amount of learning that takes place.

This system of supervision can and does fulfill both of these requirements. It provides an analytical evaluation of the teaching situation because it is based upon the application of fundamental laws of learning which obtain in any area in which

*R. M. Dickerman, Teacher of Vocational Agriculture, Ludlowville, N. Y.

learning takes place regardless of the subject matter. A competent teacher should be the master of his subject, not requiring his supervisor to be a technical expert in subject matter. By placing the emphasis upon procedures, and a determination of the amount of learning that takes place, the supervisor is able to surmount the obstacle of limited technical knowledge of the subject being taught.

Improvement of classroom effectiveness is promoted by a mutual understanding between the teacher and the supervisor of the purpose and the objective of supervision. To the teacher this implies that the object of supervisory visits is to enable the teacher to have the benefit of impersonal and constructive comments upon the class, followed by a discussion of the situation. Usually the discussion will suggest ways in which certain aspects could be improved, and will emphasize procedures that are especially effective.

To teachers of limited experience, this system of supervision offers assistance and encouragement, and inspires a feeling of confidence. In a broader sense, an effective system of supervision will further an integration of the department of vocational agriculture with other parts of the school so that all are working together for the common good.

Supervision

LANO BARRON

Standards for the Approval of Departments

L. D. CLEMENTS, State Supervisor, Lincoln, Nebraska

STATE supervisors of agricultural education throughout the nation are confronted with a particularly perplexing problem which needs immediate and careful attention. The time for the establishment and re-establishment of high-school departments of vocational agriculture is at hand.



L. D. Clements

Always a most important and urgent responsibility, this year the problem assumes the proportions of a major obligation requiring very careful planning and forethought for the future of our program. We must be ready for a great postwar expansion in agricultural education when the time comes. Already new schools are clamoring for approval to establish departments of vocational agriculture. There is a severe shortage of teachers and few are being trained. Good teachers of vocational agriculture for many years to come will be held at a premium. Former departments which were forced to close their doors for the duration are now applying for re-establishment. It is a responsibility of the state supervisor to see to it that the state and federal funds for vocational agriculture are spent in schools where the greatest good for the greatest number of rural patrons may be accomplished. How shall we determine which schools should be given preference for approval?

The answer to this question involves one of the most important problems on the horizon of the postwar future for vocational agriculture. We must anticipate the problem in advance in order to be ready for its solution.

Material prepared jointly by the agricultural education staff members in the State Department of Vocational Education and at the University of Nebraska has already been used with considerable success in upgrading the program of agricultural education in a number of schools. Included in this material is a circular setting up standards for establishing departments of vocational agriculture, as well as an application and survey blank for the establishment or re-establishment of departments of vocational agriculture.

Mr. J. H. Pearson of the United States Office of Education contributed very helpful suggestions which have been incorporated into our planning. He emphatically remarks that "The problem of re-establishing of departments of vocational agriculture on a sound basis in the various states is one of the most important services to be rendered in the program at the present time."

The text of the circular on "Standards"

already has been generally distributed to educational leaders in communities throughout the state. The "Application and Survey Blank" is made available to interested schools upon request. When the local survey is completed by local school officials an application is submitted to the state office. A representative of the state supervisory staff then meets with the local board of education to determine more in detail all angles of the local situation. Applications are filed and considered in the order of their presentation. However, actual approval is based upon the merits of each case. The idea of doing the greatest good for the greatest number of rural patrons is always kept in the forefront, as a basic consideration.

The context of the circular on "Standards" follows:

Editor's Note: The "Standards" are quoted as received. The omissions as indicated are made to serve brevity and are believed to omit nothing of special interest to our readers.

STANDARDS FOR ESTABLISHING DEPARTMENTS OF VOCATIONAL AGRICULTURE

VOCATIONAL agriculture departments in Nebraska high schools are organized to provide systematic agricultural education for the community. The courses are planned, not only for high-school boys, who expect to enter the vocation of farming, but for out-of-school young men on the farms, and for adult farmers as well.

Agriculture I (Animal Production) is usually offered for beginning students in high school. The boys devote their allotted time. . . .

Agriculture II (Crop Production) emphasizes instruction in Agronomy, Soils Management, Advanced Farm Mechanics, and the continuation of an increasing supervised farming program.

Agriculture III (Business of Farming) includes instruction in Cost Accounting, Livestock and Crops Management, Farm Power and Machinery, Feeds and Feeding, Soil and Moisture Conservation, and other important topics. . . .

Agriculture IV (Establishment in Farming) is the final course for advanced high-school students. It consists largely of personal farm management problems of the students. . . .

Young Farmer Classes are organized for young men 16 to 25 years of age. . . .

Adult Classes studying unit courses in vocational agriculture are designed for the benefit of older established farmers of the community.

A Qualified Instructor

A qualified teacher with a background of farm experience, who is a graduate of a standard four-year agricultural college,

holding a special certificate in vocational education must be employed. He must meet the standards of Nebraska teacher certification laws and be approved by the State Supervisor of Agricultural Education.

Schedule Standards

Teachers on the full-time basis are to devote their entire time to the development of a complete program of agricultural education in the community. Regularly assigned nonvocational teaching duties in the school can be approved only on a prorated basis of reimbursement. Teachers on the half-time program spend at least a full half day including one conference period, with the high-school agriculture program. The remaining half day must be devoted to the teaching of other regular high-school subjects, principalship, superintendency, or coaching responsibilities.

Teacher's Contract and Salary

The vocational agriculture teacher's contract with the local board of education is for 12 months, rather than nine. The teacher has full and important responsibilities during the summer. Contracts should be drawn to begin July 1 each year (never before that date), to coincide with the fiscal year of most vocational agriculture teachers in the state. Salaries for 1944-45 ranged from \$183.33 to \$250 per month, with an average of about \$225.

Mileage Allowance

The supervised farming program, carried out by the students on their home farms is the most important phase of the vocational agriculture program. Without this practical application, no course in agriculture can be truly vocational. Individual students are entirely responsible for the successful operation and financing of their own farming projects. Accurate farm records are kept on each enterprise, in the supervised farming program. The only way to become a successful farmer is to gain practical experience in the work and activities of the farm. The supervised farming program provides opportunity for this participation under actual farming conditions. Much of this work is done during the summer months.

In order to supervise the farming programs, conduct field trips, visit farmers, and do other community work, the agriculture teacher must have a car. Official travel expense is to be provided from local funds. The usual rate paid in Nebraska is five cents per mile. The importance of maintaining an adequate and unstinted mileage budget cannot be overestimated.

General Maintenance Fund

Like any other high-school activity the vocational agriculture department must

be maintained from year to year and incidental operating expenses must be provided. A fund amounting to at least \$4 per pupil should be set aside each year by the local school board, to be used as needed by the instructor of vocational agriculture for the efficient operation of the department.

Qualifications for Approval

Experience over a period of years has demonstrated that there is a number of points to be considered by the local board of education when applying for approval to establish a vocational agriculture department. Some of the most important points are as follows:

Enrollment

Vocational agriculture departments should be located in schools where they will serve large numbers of rural patrons. It is doubtful whether high schools with less than 30 farm boys regularly enrolled should attempt the full-time program. There may be, however, schools with fewer than this number enrolled, but having many more available farm boys within the drawing territory who would enroll if such a program were offered. It has been demonstrated that good agriculture departments attract many tuition students who otherwise are not interested in high school. Where enrollment of farm boys does not justify the full-time program, the establishment of a half-time department may be considered. Also, the transportation of students and the establishment of joint departments with one instructor serving two neighboring schools may be considered.

Possibilities for Developing a Complete Program

High-school classes, including Future Farmers of America (F.F.A.) activities, young-farmer classes and adult classes are included in the complete program of agricultural education. The "Future Farmers of America" is a national organization of farm boys enrolled in vocational agriculture. This organization is an integral part of the vocational agriculture program used as a teaching device in the development of rural leadership, community service and cooperative activities. Sponsoring a chapter of F.F.A. as local adviser is a definite responsibility of the agriculture teacher. Classes for out-of-school persons are conducted by the agriculture teacher, or other qualified persons, with little additional cost to the local board of education.

The attitude of the local school administrator, the vocational agriculture teacher, the board of education, and school patrons of the community, should be favorable for the development of all phases of the program.

Classroom

A school should have a classroom suitable for both recitation and laboratory purposes, fitted primarily for vocational agriculture. The room should be at least 24'x30', well lighted, have a wood floor, adequate blackboard space, bulletin board, storage room or cabinets, and a sink with running water. Almost any average classroom of the laboratory type may be satisfactorily adapted or remodeled. The room should be equipped

with study tables and comfortable straight-backed chairs rather than the usual students' desks. Tables about 5' x 2' for two students, or, 7' x 2' for three students are most satisfactory. The dimensions of tables used will depend upon the width and arrangement of the room.

Farm Mechanics Shop

Since a part of the program is farm mechanics, a suitable place to do such work must be available. Many schools build special buildings on the school campus for vocational agriculture. Such buildings include classroom and laboratory space, as well as the farm mechanics shop. The best ones in the state include shop floor space of about 30'x60' or larger. Sometimes it is possible to rent a suitable building in the near vicinity of the school for shop purposes. Where new school buildings are being erected, it is more convenient to plan the farm mechanics shop and agricultural classroom as an integral part of the main building. In the shop it is desirable to have the entire floor of concrete. There should be a drain in the floor underneath a chain hoist and track. The floor can thus be easily kept clean after teaching farm butchering, sheep shearing, tractor and truck repair work, and other messy jobs. A flue should be constructed for at least one good forge. The flue should be sufficiently large and sufficiently high to assure good draft. Also, the building should be wired sufficiently heavy to provide for adequate lighting and power. Care should be taken to provide sufficient electrical outlets in various parts of the shop for power machinery, such as saws, drills, grinders, and electric welding equipment. A lumber storage room or a lumber rack suspended from the ceiling or built over the toolroom should be planned. In some cases it is desirable to erect a cheaply constructed non-heated lean-to addition to the shop, thus increasing the storage space for large projects. Also, such a room provides convenient working space which may be used in mild weather for large construction jobs, and farm machinery and tractor repair work. Large doors at least 10' x 10' should be provided for the shop. Larger doors 12' x 12' are even more desirable. The cost of shop buildings varies considerably with economic conditions, type of construction, and material used.

Shop Equipment

The shop equipment under ordinary price conditions will cost from \$900 to \$1,100 for the first two years' work. This is assuming that the school has no such equipment available at present. The exact cost will depend upon what equipment is already on hand, and the total enrollment in vocational agriculture. An additional sum of approximately \$200 for specialized welding equipment, motor mechanics tools and equipment for teaching rural electrification and other advanced farm mechanics enterprises will be needed for each of the remaining two years of work in schools conducting the full four-year program. Supplies for the shop must also be provided.

Considerable saving may sometimes be effected by buying good used equipment of certain types. Also, very serviceable salvage and excess war equipment and materials may be made available to schools at reasonable prices.

A good agricultural library must be provided. About 125 books are needed the first year for departments with 30 to 40 boys enrolled. Subscriptions to good agricultural magazines and other publications should also be provided. A good collection of charts and other visual education equipment is desirable. Since much of the teaching may be done from experiment station circulars, state agricultural college or extension bulletins, and USDA publications, a convenient, steel filing cabinet should be available for filing such material. Books for Agriculture III and IV may be secured later. Costs of laboratory equipment and supplies will depend upon what is already available for use in the school. When not much is available, the cost will be approximately \$150.

Reimbursement Funds

The rate of reimbursement for regularly approved full-time departments for 1944-1945 was 45 percent of the teacher's salary. In schools where the teacher spends only a part of his time during the nine school months with vocational agriculture, the reimbursement is prorated in accordance with the amount of time spent at nonvocational assignments. Full reimbursement is paid for the three summer months. If the teacher of agriculture serves as superintendent or athletic coach, the regular reimbursement is reduced one-sixth for the nine school months only.

Application for Approval

Since many requests are received, interested schools must make application in advance. Applications are considered in the order received. Approval of departments will be based on a survey of local possibilities, and the willingness and ability of the local board of education to provide adequately for the complete program.

Applications or requests for further information should be sent to L. D. Clements, State Supervisor, State Capitol Building, Lincoln 9, Nebraska.

The Application and Survey Form

We have prepared an "Application for Establishment or Re-establishment of Vocational Agriculture Departments and Survey Blanks for Local Communities."

The survey asks in detail for information regarding:

1. Whom a vocational agriculture program would reach
2. Financial condition of school
3. Equipment for a vocational agriculture department
4. The type of program desired
5. Possibilities for out-of-school program
6. Farm organizations
7. General items (such as salaries of classroom teachers, superintendent and principal.)

The "Standards" and the "Application and Survey Form" will need to be carefully reworked and adapted to suit conditions in the various states. No doubt many state supervisors are already using survey forms superior to ours. Suggestions of improvements will be welcomed, either by correspondence or thru the columns of *The Agricultural Education Magazine*.

Methods of Teaching

G. P. DEYOE

Developing and Maintaining Interest in Improvement Projects in Dairying

GEORGE P. DEYOE, Teacher-Trainer, Michigan State College
ELMER A. LIGHTFOOT, Supervising Teacher, Williamston, Michigan



E. A. Lightfoot



Geo. P. Deyoe

IN MANY communities in Michigan, and in other states, dairying is an important enterprise. While ownership projects in dairying are frequently conducted by boys taking vocational agriculture, these usually consist of dairy heifers which do not become productive units until the students have had two or three years of vocational agriculture. Certainly such projects should be encouraged because they represent a means for boys to secure foundation animals for future herds. In addition, however, many teachers are finding it desirable to stimulate the development of improvement projects in which the boys cooperate with their fathers in improving the dairy herds on the home farms.

Improvement projects in dairying make it possible for boys and their fathers to bring about needed improvements in the home herds. In so doing, each boy gains many valuable experiences, such as keeping records of production for each cow in the herd, using these records in culling and breeding, improving the feeding program, improving the barns and the equipment, introducing labor-saving programs, and improving the health of the herd. These experiences, in turn, provide a common ground for effective instruction in a class in which many or most boys are conducting this type of improvement project.

Use Methods Which Create Interest

In conducting improvement projects in dairying with high-school students, teachers find it important to use techniques which create and maintain interest on the part of both the boys and their fathers. The following suggestions have grown out of experiences in departments where these projects have been successful.

1. In initiating these projects start a discussion with the class on the relation of high production per cow to success in dairying, by raising a question such as "How can we measure our efficiency as dairymen?"

2. Arrange a field trip to a herd where production records have been kept. Se-

lect a class of cows and have the boys judge them in the conventional fashion. After the "reasons" have been given on the basis of type, have the boys guess the butterfat production of each cow for the preceding year. After this, show the boys the production records of the individual cows. Usually the boys then realize the importance of production records for determining the production of each cow.

3. Have an advanced student who has been conducting an improvement project in dairying tell the class how he has kept records and how he and his father have improved the home herd. If possible, take a field trip to at least one of the farms where improvement projects have been conducted. Raise the question, "How can we determine the production in our home herds?" Lead the class to a recognition of the importance of yearly records of butterfat and milk for measuring the efficiency of individual cows.

4. Secure the interest and cooperation of parents thru home-farm visits early in the year. After the records have been started, maintain this interest by promptly making available the results each month, by referring to them during home-farm visits, and by furnishing an annual summary of each herd.

5. Encourage each boy and his father to set a goal of production for the average cow in the herd for the year ahead. Have each boy make a chart which shows month-to-month progress toward this goal.

6. Use simplified types of records as shown in Figure 1. Encourage the boys to keep them up to date by having a "check-off" chart in the classroom to indicate completion of monthly tests.

7. Secure good testing equipment and have a section of the classroom organized for efficient testing. Establish a feeling of pride and a sense of responsibility on the part of the boys in keeping the equipment clean and orderly.

8. Have the boys aid in planning various phases of the testing work, such as testing schedule, arrangement of room, and monthly reports. A Junior D.H.I.A. as a subsidiary of the F.F.A. is found helpful in many departments.

9. Thruout the year, in classwork and in home-farm visits, make use of information from the records. As monthly tests are completed, records should be discussed to note instructional problems.

10. Provide a sound plan of publicity for this work thru presentations of results at annual meetings of the Junior D.H.I.A., articles in newspapers, F.F.A. banquets, demonstration teams, exhibits at school fairs, and so forth.

11. Develop a feeling of pride in promptness, neatness, and accuracy of keeping records.

12. Organize the testing schedule so that certain class periods each month are set aside for testing the samples, computing the records, and entering the data in the permanent dairy herd record book. With sufficient equipment, two or three days per month per class should suffice.

13. Start records in October or November so that records for eight or nine months will be complete by the close of the school year. This creates a feeling of progress which provides added incentive for completing the records for the remaining few summer months of the testing year. By having the testing year start as indicated, the Junior D.H.I.A. can be reorganized and thus it can start to function early in the school year.

14. Have the Junior D.H.I.A. prepare an annual report. This should contain information for all herds showing the following for each herd: (1) the herd owner, (2) cow years, (3) total milk, (4) total butterfat, (5) average milk, (6) average butterfat, (7) and goals previously set for the year. Additional items and summaries may be desirable.

15. Hold an annual meeting of the parents and the boys at the close of each testing year. Have available the yearly records complete for each herd and summaries of all herds. Have boys make reports on activities and achievements. (This meeting can be sponsored by the Junior D.H.I.A.)

16. After interest has been developed in production records for each cow, encourage the boys to keep breeding records and records of calving dates. Show them how to use these data in checking on breeding and calving efficiency for the herd.

17. Have each student compare production averages from year to year in the home herd. Comparisons with averages in other herds and with a "yardstick" based on data from other herds, as shown in Table I, aid greatly in increasing the interest in their projects.

TABLE I
Data for Setting Goals or Measuring Efficiency of Production in Dairy Herds in Improvement Projects in Vocational Agriculture*

Herd Classification	Average Annual Butterfat Production
High Third	333.5 lbs. or above
Middle Third	294.6 to 333.5 lbs.
Low Third	294.5 lbs. or below
Over-all Average	306.4 lbs.

*These data are based on the herd averages for 48 herds in five Michigan departments of vocational agriculture for records completed during 1943-44. In measuring the efficiency of a herd, comparisons can be made with the data shown above, and thereby determine in which third that herd ranks. Also, the student tester and his father can decide from the above data at what level they wish to set a production goal for the herd for the coming year. Local departments may wish to develop tables similar to the above but based on data from local herds.

WILLIAMSTON COWS CONTRIBUTE TO THE WAR EFFORT

WILLIAMSTON J.R. D.H.I.A.

RESULT OF FOUR YEARS OF JR. D.H.I.A.

Year	No. of Herds	No. of Cows	% of B.F.
40-41	14	122	25.9*
41-42	20	207	29.5*
42-43	20	232	30.4*
43-44	31	398	29.8*

PRACTICES THAT INCREASE PRODUCTION

- IMPROVE BREEDING
- USE BALANCED RATION
- FEED ACCORDING TO NEEDS
- LESS SILAGE TO HIGH PRODUCERS
- PLAN PASTURE
- IMPROVE SANITATION

Reproduction of a large chart used for display at the annual meeting of the Jr. D. H. I. A. at Williamston, Michigan, to which the parents were invited. Note the year-to-year growth in terms of herds and cows included. A slight decrease in production per cow in the last year is due primarily to the increased number of herds and cows entered for the first year of testing

18. At the end of the year, encourage each boy and his father to analyze carefully the practices in the home herd and thus find the weak points or problems deserving further consideration during the year or years ahead.

Focus Instruction on Problems or "Needs"

In departments where the improvement projects in dairying have been carried on most effectively, many phases of dairying are included in the course of study. In order to keep interest at a high level, teachers find it desirable to base this content largely on problems which emerge from these improvement projects. For example, during the first year of record keeping, considerable attention is given to getting the records started, using accurate and efficient methods of testing, and using short cuts in computing the records. Some interest in feeding is usually developed as the boys note differences in production between cows in the same herd and between herds. At the end of the first year of testing, considerable time can be spent on interpreting records and on culling on the basis of records. As the work progresses, and the boys and their fathers become more conscious of factors affecting production and general efficiency in dairying, various problems arise which lead to the study of breeding, maintaining health, controlling diseases, improving the barn, improving the quality of milk, analyzing cow families, saving labor, feeding in all of its aspects, and so forth. Thus, under the guidance of a good teacher, the problems unfold from year to year. This makes it possible to maintain the interest of the boys and bring about continued improvement in the boys and in the herds.

Yearly Production Record by Months for Individual Cow

Cow's Name: _____ Eartag or Reg. No. _____ Breed _____
Sire of Cow _____ Dam of Cow _____
Age at beginning of testing period _____ Date fresh before testing year _____
Weight _____ (Can be estimated from heart-girth measurement)

Testing period	Testing day	No. of days milked in testing period	Pounds milk daily*	Yield During Testing Period			Remarks (Date fresh; date dry; disease or other special conditions affecting production; date sold and reason.)
				Pounds of Milk**	Percent test	Pounds of Butterfat*	
Mo. of _____							
Mo. of _____							
Total to Date	xx	xx			xx		
Mo. of _____							
Total to Date	xx	xx			xx		
Mo. of _____							
Total to Date	xx	xx			xx		
Mo. of _____							
Total to Date	xx	xx			xx		
Mo. of _____							
Total for Year	xx	xx			xx		

BREEDING RECORD

Date bred _____ Name and number of bull used _____

RECORD OF CALVES BORN DURING YEAR

Date of birth _____
Sire _____
Sex _____
Raised or sold _____
Reason for selling _____
Selling price _____
Eartag No. (if raised) _____

*Compute to nearest 0.1 pound.
**Compute to nearest whole pound.

Figure 1. The use of simplified records aids in maintaining the interest of young testers. The above form provides spaces for the accumulation, by month, of records of production for the individual cow during the entire year. Information on breeding, calving, and so on, is recorded in the forms at the bottom. (Form developed by G. P. Deyoe and A. C. Baltzer, Michigan State College.)

The making of a living is absolutely necessary to the making of a life. Bread and meat must precede sonnets, pictures or sculpture. Vocational education is therefore the primary need in the whole field of education.—Willis A. Sutton.

Man is like a tack—useful if he has a good head and is pointed in the right direction—but even tho he is driven he can go only as far as his head will let him.—The Kodak Magazine.

"Originality consists in thinking for ourselves, not in thinking differently from other people. To be independent of ideas, one need not be at external loggerheads with the ideas of others."

Farming Programs

C. L. ANGERER

Determining the Opportunities for Farming Programs

JOHN C. LAYMAN, Teacher, Brownsburg, Va.

ANY pupil who has entered upon or is preparing to enter upon the business of farming should have a farming program and not just projects or enterprises.

When the time comes to help the pupil make his final plans for a farming program, the teacher should give full consideration to the needs of the pupil himself. This is the most important part of his training in vocational agriculture, if properly planned, and too much thought or time cannot be given to it. The teacher should not be satisfied with the program of any boy until that boy has planned the best program that it is possible for him to plan. This program must of necessity conform to the wishes of the parents, but the teacher has not performed his duty to the boy until he has tactfully exerted all the influence that he can to make the program the best possible.

The Ideal Program

There are at least six characteristics of an ideal program. First, *It must be a balanced program.* It should contain livestock commonly grown in the community or adapted to it and feed crops for the livestock as well as a cash crop, if possible.

Second; *It must be as real as possible.* A pig in a pen by itself or an acre of corn in the best corner of a field is certainly not a real situation.

Third; *It must fit into the general farming program.* If enterprises can be found that do not interfere with father's program but on the other hand increase the total farming program, little opposition will be received from the parent.

Fourth; *It must contain opportunity for boy management.* There is very little training in a program in which the boy does not have some management privileges.

Fifth; *It must contain some opportunity for boy ownership.* No boy will be greatly interested in keeping records on his father's enterprises.

Sixth; *It should be a long-time program.* No program can be at its best unless it is helping the boy work into farming as well as giving him an opportunity to become experienced in a rounded-out program of farm skills.

The first step in setting up a practice program that approaches the ideals stated above is the choosing of a farming type by the boy. A boy that is more interested in dairying than anything else should by all means, if possible, begin with some type of dairy animal and carry thru from year to year, increasing as he goes.

The second and perhaps the most important step is the surveying or studying of the boy's farm for enterprise opportunities. A study of the present farming program is necessary if the boy's program

is to increase and improve the whole farming program without taking away from the father's. On most farms this is an economic necessity. Therefore, to be satisfactory, the boys program must be made up of additional enterprises that are woven into the father's program, or enterprises of a larger scope or of a higher breeding that increase the income and open up an opportunity for the boy to get his share. During this study of the boy's farm the subject of improvement projects and supplementary jobs must not be overlooked if the boy's program is to be a complete farming program.

Making the Survey

The survey may be of two kinds or made in two stages. There is the formal type of survey in which a lot of records are taken and a farm analysis is made. Then there is the study that is made as the interested parties are walking over the farm or are working together in the field. Of these the writer has gotten his best results from the second. This is frequently the only one that time and opportunity will permit. However, if the teacher will really make a study with the father, the program of the average boy can be greatly improved. We must always keep in mind that the training of the boy is the most important thing, and that a program that is financially successful and leads the boy into a permanent farming program is next.

The best way to learn something of the boy's home farm is to drop in for a visit of several hours during the summer. The teacher should be attired in clothes that are not too good to work in, and should pitch in and help with whatever job is in progress. The conversation can be so directed that the teacher can learn more about the farm than he could in a number of short visits. During this discussion the conversation will turn to what the boy could do to improve the farm business and to have an excellent farming program of his own.

Any program that the boy carries must have the fullest cooperation of the father. If the father can see the future possibilities in his boy growing a purebred animal, some certified chicks, some certified seed, or other more intensive crop, a good program is at once insured for the boy, and no inroads are made on the father's income. There are frequent opportunities for increasing present enterprises on a partnership basis. This is a great opportunity that is often overlooked since it gives the boy a more natural program. The keeping of an extra flock of hens increases the total farming program without interfering with those of the parents, if cooperation on the part of everyone can be secured.

In other words there is usually no limit to enterprise opportunities on most farms.

The survey must be a continuous process. It should begin before the first boy in the family enters high school and of necessity must be continued from year to year. At each visit the boy's farming program should be uppermost in the mind of the teacher, not only to see how the boy is getting along with his present program, but also getting the situation better in mind to help the boy with his future programs.

Where there is only one boy in the family, the problem is greatly simplified. When there are two or more boys in school at the same time the task of working out practical programs for each of them is greatly increased. The writer has had, on several occasions, two boys from the same family and, at one time, three in his classes at one time. Even when there are three boys to assist, it is of the greatest importance that their programs be integrated if they are to get the most from their programs. The boys should not carry the same enterprises, neither should they have them in partnership with each other. They may, and it is often desirable to, have them in partnership with their father.

Setting Up the Program

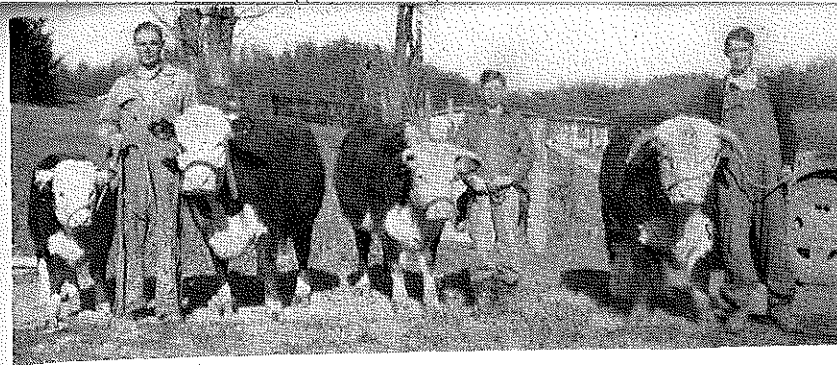
Let us look at one family in which there are three boys. One, Richard, graduated from high school last year. The second, Kenneth, is a senior this year. And the third, Donald, will enter high school next year and is in prevocational agriculture this year.

The first visit of the teacher of agriculture to the home of these boys with the future of farming programs as the chief aim, came the summer before Richard entered high school. At this time several hours were spent on a rainy afternoon with the father and the boys around the barn and the house. Almost every subject from the rain to politics was discussed. During this conversation three important things were discovered: First, the scope of the farming program of the father; second, the desire on the part of at least one parent that the boys would not stay on the farm; and third, the boys' like for the farm and their desire to be farmers.

It was found that the farm consisted of 569 acres, of which 130 acres were cropped, 359 acres were in pasture, and the rest in woods. It was also learned that around two-thirds of the farm was managed rather well but that the remainder was rather poorly managed. The chief enterprises were grade beef cattle, sheep, corn, wheat, and hay. The mother had a nice flock of hens which produced eggs for a hatchery.

One of the chief lines of reasoning that the teacher has tried to get across to the parents is that their farm is too large for them alone and that they should go into partnership with at least one boy.

It was soon learned that Richard was



Richard Beard and his two brothers Donald and Kenneth hold four head of purebred Hereford cattle. John C. Layman, Teacher, Brownsburg, Virginia.

most interested in livestock, and after the first year he was definitely interested in improving the livestock on the home farm. His interest spread and at the present time one of his brothers owns two purebred Hereford heifers and even his mother owns one. It took very little study on the part of the teacher and the father to see that there was room for more livestock if the pasture and hay crops were improved and that there was also a definite place for better livestock. Below is the program that Richard carried during his four years in high school and his program as planned for this year and the next two.

Richard's Farming Program

Enterprise	1st	2nd	3rd	4th	5th	6th	7th
Steer	1	1	1	1	2	2	2
Corn	1A	1A		1/2A			
Potatoes		3/4A			2	4	5
Purebred Cow			1	3	10	15	20
Ewes			3	1A		7A	10A
Hybrid Corn			1A	1	2	2	2
Purebred Heifer				1	1	1	1
Purebred Bull					10A		12A
Wheat							
Improvement and Supplementary jobs	5	6	7	3			
Net Profit	\$39.23	\$82.80	\$134.35	\$193.17			

This program does not meet all of the requirements of an ideal program but we see that it is rather definitely working him into farming as a business with a program which did not interfere with his father's farming program but, as his father says, made him a better helper on the farm.

Shortly after Richard entered high school we found out that Kenneth was chiefly interested in poultry. We find from his program below that he is also interested in all types of livestock.

Kenneth's Farming Program

Enterprise	1st	2nd	3rd	4th	5th	6th	7th
Approved Hens	85	150	250	225	500	750	1000
Berkshire Sow	1		1	1	2	3	4
Baby Chicks		250	250	250	500	750	1250
Calves			1	2	4	6	8
Purebred Heifers				2	4	6	4
Corn					2	5	8
Purebred Cows						2	6
Turkeys							100
Improvement and Supplementary jobs	3	4	4	8	8	6	4
Net Profit	\$167.49	\$500.24	\$343.87				

Our January meeting was handled entirely by the Greenhands. They opened the meeting, conducted the business, led the group in some games, and served refreshments.—O'Neill, Nebraska.

The local Kiwanis Club gives a trophy to the boy with the most outstanding project program each year.—Auburn, Nebraska.

This program has some definite weaknesses, one of which is that Kenneth buys a half of his pullets each year, but we also see that he has been doing very well with it and greatly increasing the family income.

Now the problem is, what is left for the third boy, Donald, to do. The farm is ideally situated for the production of hybrid seed corn and other certified seed; there is room for improvement in crops such as alfalfa hay. Then too we have not touched on forest management, garden, and many other possible enterprises that he may be interested in. His definite interests have not yet been stated, but we see that there is still room

for him on this farm if his interests do not overlap too much those of his brothers.

From this three-brother situation we make these observations: first; Each boy profits from the enterprises and experiences of his brothers; second; The total farm income is increased; third; The boys own their own enterprises and they do not interfere with their father's established enterprises; fourth; This farm can support this entire family at a fairly-high living standard as they learn to live and work together.

We have on our F.F.A. mailing list, the prominent landlords of the community. We strive to see that they receive literature on "Farm Betterment Projects." They are also invited to at least one F.F.A. meeting each year.—Neligh, Nebraska.

Our chapter served one day at the Norfolk Canteen.—Wisner, Nebraska.

Project Agreements Are Essential

J. H. FOARD, Supervisor,
Jefferson City, Mo.

VERY few leaders in vocational agriculture would disagree with the statement: "Supervised farming is the nucleus of the vocational agriculture program." Admitting this is true, then the plan and agreement for the farming program should necessarily receive careful attention. It is the opinion of the writer that this business agreement should be a triangular affair between the boy, the parent or parents, and the instructor. It is also the writer's opinion that the agreement should be reached right out on the farm with all interested parties present.

Most teachers of vocational agriculture visit prospective students before actual enrollment is made. In fact, some of our instructors will not enroll a boy in vocational agriculture until they have visited the home farm in company with the boy and his parents. This is the ideal time to make the project agreement. The boy is anxious to "get in" the class in vocational agriculture, the parents want their boy to be a real farmer and the teacher wants that boy to have a satisfactory, if not outstanding, farming program. The teacher who fails to capitalize on this opportunity has certainly blundered. The agreement should first be made verbally with specific commitments given by each person. The teacher of agriculture should explain very carefully his part in the transaction and then call for definite and precise statements of participation from each of the other two in this triangular arrangement.

There are many advantages in making a good business agreement. Some of them are: 1. Permits all three participants to get acquainted; Acquaints boy and parents with the program in vocational agriculture; 3. Provides and assures cooperation of all three; 4. Avoids misunderstandings; 5. Assures necessary facilities for the project; 6. Solicits help of parents in supervision of projects; 7. Offers opportunity for transfer of training; 8. Assists in selling the program to the community; 9. Provides for long-time planning of supervised farming; and 10. Develops business procedures.

There are many other advantages and favorable results that could be mentioned. Agreements should be brief, precise and definite. They should state very clearly the obligations of all involved individuals and should be written by the boy and corrected, amended and signed by a parent and the teacher. Some teachers have prepared very lengthy and complicated legal documents that tend to frighten both the boy and the parent. Other teachers have frowned upon the idea of having agreements at all. This latter group, however, comprises a small minority.

Project Agreement for Vocational Agriculture

Following is an example of a business agreement that was prepared by a third-year student in vocational agriculture and later adopted by his entire class.

We, the undersigned, do hereby agree
(Continued on page 33)

Training Returning Veterans

IN THE southern region thousands of young men have gone into the armed services from the rural areas and will return to civilian life to engage in an occupation in which they think they will most likely succeed and the occupation for which they believe they are best fitted. Public education has an important contribution to make in helping these men make the readjustment that they must make when they leave the armed forces.

Many of these men returning from the armed forces will desire to become established in farming. The educational needs of the group should challenge the educational leaders in the field of vocational agriculture to see that a training program is made available in agriculture to meet the needs of each individual. These young men, when they return to civilian life, will find farming conditions different from those prevailing when they left the rural areas and will not be interested in returning to the farm to follow the same methods of farming that they did prior to going into the service. The veteran, for his own welfare, will need to understand changes that have affected agriculture. He will also want information on new types of farming equipment, production practices, marketing, land values, conservation, record keeping, and many other problems related to agriculture.

The committee recognizes that the individual has changed since he went into the armed forces. He is more mature and will not be satisfied with a training program which is not interesting, challenging, and functional.

The committee, therefore, recommends that the leaders of vocational agriculture represented at the Southern Regional Conference plan a training program with definite objectives to develop the individual's ability to establish himself in farming. The committee also recommends, wherever possible, that the needs for this training be met thru the regular training facilities of organized vocational agriculture. Wherever the farm training needed for veterans cannot be met thru the regularly organized program modifications shall be made to meet the needs of the individual.

Suggestions for Action

- I. Leaders in vocational agriculture in each state should contact the chief training officer of the Veterans Administration in the respective states and acquaint him with the farm training program in vocational agriculture.
- II. Wherever possible a representative of vocational education should be appointed by the governor as a member of the state committee set up to approve training institutions for giving training to returning veterans.
- III. Leaders in vocational agriculture in each state should contact the state

service officers, the State Administrator of Veterans Affairs, the commander of the American Legion, the director of State Selective Service, the director of the War Manpower Commission, the director of the United States Employment Service, and others to acquaint them with the farming program of vocational agriculture and offer their cooperation.

IV. Each state board for vocational education should prepare a plan for training veterans who have entered or are preparing to enter upon the work of the farm. Such a plan should include:

1. Aims and purposes of the training program
2. Administrative and supervisory responsibility on state and local level
3. Standards
 - a. Basis for training program
 - b. Physical facilities
 - c. Personnel including specific qualifications
 - d. Length and intensity of training
 - e. Eligibility for training program
 - f. Setting up instructional program
 - g. Plan of financing

V. Submit the plan to the Veterans Administration in the state office for approval

VI. Public relations

1. News releases
2. Literature to be prepared for veterans
3. Contact director of education in veterans hospital to acquaint him with the program for vocational agriculture for returning veterans and offer assistance.
4. Supervisory staff acquaint teachers of agriculture and school administrators with the veterans' educational program in agriculture and the opportunity for service to this group thru the department of vocational agriculture.
5. Each teacher of vocational agriculture should assume the responsibility of contacting local service center personnel and veterans returning to his community and acquaint them with the facilities available for training thru the department of vocational agriculture.

VII. Each state supervisor of agriculture is requested to mail to other supervisors in the southern region and to the regional agent plans and materials developed.
—Southern Region Committee, T. G. Walters, Chairman.

Editor's Note: This report from the southern region gives us good plans for training returning veterans. Soon results will be obtained from action. We shall all be interested in learning what brings good results, what works.

Young Farmers on the Home Front

J. M. ANDERSON, Teacher,
Nephi, Utah

JUST as a good start often determines the winner in a horse race, so does the beginning of a young man's career help to make his future a success. In every locality thruout the nation there are a number of young men who are trying to become established in the business of farming. Many of these young men have been rejected by the armed forces but are trying to do their part in keeping up production on the home front.

Under the supervision of departments of vocational agriculture over the nation teachers of agriculture are calling these young men into organized classes to give assistance in greater production and in becoming established. In Utah this program is helping these young men feel that they are a vital link in war production.

East Juab County is devoted principally to crop, livestock, and poultry production. In two towns in this area, Levan and Nephi, having populations of 500 and 2,800 respectively, young men between the ages of 18 and 28 have been called together in groups to discuss problems and practices pertinent to their interests. A total of 26 young men have participated in this program. Their interests have been somewhat varied, but practices and trends common to their interests have been discussed. These young men meet weekly during the winter months, the main purpose being to receive help in becoming established in farming. Some topics are: better breeding, feeding and management of livestock and poultry, crop rotation and soil fertility, available farms for sale or rent, financing and cooperatives.

During the winter these young men have purchased farms, rented farms, culled inferior stock, purchased beef bulls, and are now making plans to build a dairy bull corral.

With the scarcity of farm labor and farm machinery there was a definite need for the school shop to be made available to the class members to make needed repairs and build needed equipment. Many projects were built such as wagons, stock trailers, feeders, doubletrees, neck-yokes, and the like. Cooperatively these fellows have built manure loaders attached to their tractors capable of loading 150 loads of manure a day.

As a climax to their class meetings the group visited the Snow College farms at Ephraim where many livestock and poultry buildings have just been completed and stocked. Purebred livestock herds and poultry farms were visited as well as cooperative feed plants.

The members of the class were delighted to see in operation some of the things they had discussed in their meetings. Plans are now under way for other improvement practices and supervision will go on during the summer months.

A Survey for Returning Servicemen

MANY of your farm men have left the community during the past few years to enter military service or to work in war industries. A few of these probably have returned to the community already, but most of them are still away from the community. To plan a postwar training program intelligently, we should know something about these men—whether or not they will return to the community after the war, what occupations they are interested in, whether or not they would like to have additional training, and so on. The attached survey should give us information upon which we may base our program.

Those servicemen and war workers who have been returning to the community should be interviewed for this information. To obtain the information about those still away from the community, parents, brothers, sisters, or others who know the person well should be interviewed.

Teachers should compile as complete a list of the men in service or war work as possible. They should use their pupils and others in high school in making the necessary interviews.

Individual Survey of Returning Serviceman or War Worker

Date School

- (1) Name (2) Address
- (3) Age (4) Last school grade completed
- (5) Occupation before entering military service or war work
- (6) If serviceman, what branch of service was he in
- (7) If war worker, what industry was he employed in
- (8) What occupations is the individual probably interested in? (List below)
- (9) Will individual probably return to the community after the war?
(Check)—Yes () No ()
- (10) Will individual probably desire additional training?
(Check)—Yes () No ()
- (11) If additional training will be desired, which of the following fields will likely be desired (Check one or more)

- Agriculture ()
Occupations related to agriculture ()
Others: ()

Project Agreements

(Continued from page 31)

to the following articles pertaining to projects.

First: That we understand it is required for the student to carry a satisfactory supervised farming program.

Second: That the boy must be sole or part owner of each project and the ownership is to be definitely dated in each project plan.

Third: That the parents be willing to assist and advise the boy at all times. They will be willing to help provide

(The items in this section should be compiled from the individual surveys of returning servicemen or war workers. This section cannot be completed accurately until the survey of individual servicemen and war workers has been completed.)

(1) Number of individuals who have left the community

(2) Number of individuals by age groups:

Number	Years					
	14 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 and over

(3) Number of individuals by groups according to last school grade completed:

Number	Grade												
	1	2	3	4	5	6	7	8	9	10	11	12	

(4) Number of individuals employed in the following occupations before entering military service or war work:

Number	Kind of Occupation		
	Agriculture	Related to Agriculture	Others

(5) Number of servicemen in the following branches of the armed forces:

Number	Branch of Armed Forces					
	Army	Navy	Air Corps	Coast Guard	Marines	Other

(6) Number of war workers employed in the following industries:

Number	Industries				
	Ship Building	Airplane Mfg.	Munitions	War Textiles	Others

(7) Number of individuals interested in the following occupations:

Number	Kind of Occupations		
	Agriculture	Related to Agriculture	Others

(8) Number of individuals who will or will not probably return to the community after the war:

Number who will
Number who will not

(9) Number of individuals who will or will not probably desire additional training:

Number who will
Number who will not

(10) Probable number of individuals desiring additional training in the following occupations:

Number	Kind of Occupation		
	Agriculture	Related to Agriculture	Others

Editor's Note—Additional sections of North Carolina's postwar surveys have been developed, but the ones not included here are intended for use by the staff members rather than teachers of vocational agriculture.

North Carolina Staff

equipment and finances for the project or projects.

Fourth: That the boy and the parents shall be willing to cooperate with the vocational agriculture instructor who is the supervisor of the project or projects. The instructor shall help and advise the boy as needed.

Fifth: That all projects shall be well planned. Plans shall include as many approved practices as possible.

Sixth: That complete accurate accounts shall be kept by the boy and recorded in an approved project book for that purpose.

We, the undersigned, agree that these provisions are satisfactory.

Boy
Parent

Instructor of vocational agriculture

We have agreed that the ultimate goal of vocational agriculture is to establish boys in farming. Therefore, the earlier definite steps are taken to insure guidance in that direction, the more gratifying will be the results. The written project agreement should be considered an integral procedure in that well-planned program. All too often, boys who might have made outstanding candidates for the American Farmer degree arrive at their third or fourth year in vocational agriculture before they or their parents realize the unlimited opportunities for agricultural development in such a course. A little more time spent with the boy and his parents in acquainting them with the nature of the program in vocational agriculture and in getting each to accept his responsibility in developing the boy thru such a program will pay unusual dividends.

Farm Mechanics

R. W. CLINE

Teaching Farm Safety*

W. T. SPANTON, Chief, Agricultural Education Service, U. S. Office of Education

IN VOCATIONAL education great emphasis is placed on "participating experiences" or the bringing of learning to the "doing" level. In fact, we in agriculture pride ourselves on the fact that the project method of instruction first became nationally recognized in connection with the supervised farm practice activities of students of vocational agriculture.

Very naturally, therefore, most leaders in the field of vocational education in agriculture feel that training in the field of farm safety also should be brought to the "doing" level by providing participating experiences for the learners. Certainly we all agree that something more needs to be done than the mere teaching of farm safety precautions from a textbook in a classroom, as valuable as such information may be in itself. In like manner, showing the learner thru a demonstration, while more valuable than telling, still has its limitations. But when an individual actually learns thru participating experiences, then in reality he learns thru doing, and such learning results in changed habits and behavior. It is only thru such methods of teaching that any real progress can be made in the teaching of farm safety and in the reduction of the number of farm casualties.

In addition to teaching farm safety as a regular part of all systematic instruc-



W. T. SPANTON

tion in vocational agriculture, there are opportunities to provide safety experiences and information by several other means.

Promoting Safety Thru F.F.A.

First I call your attention to the opportunity for the promotion of farm safety thru the Future Farmers of America. Already farm safety is receiving a prominent place on the national and state programs of work of this farm youth organization. Local chapters of F.F.A. have in many instances conducted farm safety surveys, put on farm safety demonstrations and special farm safety programs, and last and most important many chapters have included in their local programs of work special recognition for members who have achieved most in promoting safety on their own home farms. Such achievements have consisted mostly of the making of various farm and farm home improvements to eliminate serious accident hazards. In Ohio a detailed farm accident survey was conducted by local teachers of vocational agriculture thru the cooperation of their F.F.A. boys. That is a worthy effort that has received national recognition.

Second, the preparation of posters on safety by national and state experts on farm safety and the placing of these posters on bulletin boards in vocational agriculture classrooms and farm shops and in other appropriate public places in the community by teachers of vocational agriculture and their F.F.A. boys is a type of service that should be mutually helpful.

Personally, however, I am of the opinion that it would be best to prepare a comparatively small number of posters, making sure that the ones distributed are the best that can be designed. While posters have their value, they are also subject to abuse and misinterpretation if not carefully thought out. In this connection, I am always reminded of the advertising concerning Yellowstone National Park. On much of this material appears the picture of a tourist hand-feeding a large bear standing up on his hind legs. Contrast this with the first instructions a tourist receives from park rangers on entering the park warning him to "Beware of the bears, don't feed them; it is dangerous." Largely, in my opinion, as a result of these erroneous posters serious accidents, some fatal, occur in the park each year.

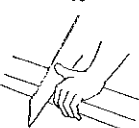
Third, I believe a great deal of value would result if more good motion pictures showing accidents and their results could be shown in our schools—alho I recognize it may be a negative approach. In addition, if the victims of such accidents could themselves be brought before vocational agriculture classes, I am sure the mere sight of such a person injured or maimed for life as a result of such an avoidable farm accident would impress young people as nothing else would.

Fourth, I recommend the appointment of a safety committee to map out a program for removing shop hazards and improving shop practices. It has sometimes proved to be good psychology to appoint to the safety committee the very boys who have been most reckless and careless in regard to safety matters.

HOW TO USE A HAND SAW

MOST hand saw injuries result from the saw jumping when being started, or the saw sticking in the cut, or from thoughtlessness in handling it. Here are some useful suggestions:

1. When starting the cut, guide the saw with left hand (as shown in the illustration), first taking one or two long slow cuts upward only; then remove your hand from the danger zone and proceed.
2. Select a sharp saw; make sure the teeth are properly set.
3. Use only a cross-cut saw for cutting across the grain, and a rip-saw for cutting with the grain.
4. Take care to keep the saw blade in direct line with the cut; it will operate more easily.
5. A little oil or paraffin will usually prevent the saw from sticking in wet or gummy wood.
6. Do not "ride" the saw. If it does not cut well under normal pressure, it probably needs sharpening or setting.
7. When sawing and using one knee to steady material, be careful not to be thrown off balance.
8. Get first aid promptly for any saw cuts, scratches, blisters and wood splinter injuries, no matter how slight they may seem to you.



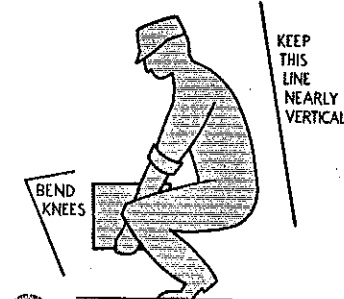
SAFETY INSTRUCTION CARD No. 255
Revised August, 1945

Posters like this are effective when supplemented by demonstrations of the steps involved, with safety precautions stressed as "Key points." Careful follow-up of performance is important. (National Safety Council, Chicago, Illinois.)

*Reprinted from Farm Safety Review for January-February 1945.

HOW TO LIFT

1. You may be as strong as an ox but be careful what you lift. Even if your back muscles were made of steel there would be a limit to the strain they would stand.
2. Size up the load before you lift it. Get help if necessary.
3. Lift with your legs and not your back.



SAFETY INSTRUCTION CARD No. 55

An example of an effective type of poster in which safety precautions are highlighted. (National Safety Council, Chicago, Illinois)

THOS. E. MABERLY, Teacher, Rupert, Idaho

(Continued from page 25)

THE main content for this discussion of farm shops is drawn from some 15 years of teaching vocational agriculture in one community. This tenure has naturally developed thinking and methods which are obviously colloquial. It is hoped this is counterbalanced by knowledge of the community and the advantage of seeing the long-time results of efforts along this line, which are denied those whose tenure is so short that results cannot be evaluated.

There are three interdependent factors that should be considered in conducting programs that will result in the establishment or development of efficient shops on farms, namely (1) the personal factor—the farmers the teachers has to work with, (2) the farm factor—the type of farm that the individual is operating, its peculiarities and similarities to other farms in the community, and (3) the educational procedures of the teacher toward the organization and establishment of shops.

The Farmer

Examining the first factor, the capabilities of the individual must first be evaluated. I know several successful farmers in my community, if their financial status is the correct measure of success, who are not mechanical minded sufficiently to do any but the simplest of shop jobs. I have in mind one particular farmer who rented my farm for two years. To him rafter cutting was a mystery to be practiced only by those whose ability bordered on the superhuman. In training and in aptitude the job was simply beyond him, and I will venture the opinion that it always will be in spite of any organized instruction he has taken or might take. Others are just the opposite. One former student of mine who, after graduating from high school, went to farming in partnership with his father on a rather large scale, and after taking a couple of OSYA courses in repairing farm machinery, bought an electric welder and other power tools, and now does practically all of his work at home in a shop which is equipped for most any job found on the farm. Both of these farmers should have shops, but the type of individual first mentioned should have a shop relatively simple and inexpensive. He will probably always rely on the local blacksmith to do most of his shop work. This type of farmer is perhaps in the extreme minority, but there are enough of his type that he cannot be overlooked.

The Farm

Now the second factor, the farm. In this community in the irrigated section, the farm unit of most common size is the 80-acre family-sized farm. There are exceptions, of course, so that each one must be considered separately. The subject would be simplified indeed if one could say, "Here is the average farm,



Thos. E. Maberly

and this is an adequate shop which will fit all conditions." On the contrary, farms do vary greatly, not only in size but in soil types, which must be considered in the "lay" of the land for irrigating, the amount of leveling needed, the drainage problems, the amounts and kinds of machinery used. All of these items have a direct bearing on the program and should be taken into consideration.

The Teacher

How are these various and involved factors going to be evaluated as a basis for planning a farm shop? Here the overworked and time-worn "survey" will help. Such a survey could even include an examination of the existing shops in the community—those on successful farms and those on ones not so successful, and those on large farms and on small ones.

The final step, of course, is that of personal interviews and other direct contact with the individual farmer and his shop problems. Survey data along with that obtained thru personal contacts will serve as a splendid basis for shop plans and specifications. The part-time class, the evening school, and especially the OSYA program in recent years have greatly helped the teacher of agriculture in making these essential contacts. The OSYA program has trained many farmers in my community to use a number of tools which the majority will never be able to own individually and operate economically. Such comparatively high-priced machines as arc and acetylene welders, power drills, grinders, and saws which these farmers have learned to use during the past few years, must either be owned and used cooperatively by farmers, or must be made available to the farmers thru the continuation of some plan similar to the War Training program.

To summarize, with suggestions that experience seems to indicate can be put into successful practice, no matter where you are teaching:

1. Become acquainted with your community, the farmers, and their problems in farm mechanics. Follow a continuous program of collecting facts thru surveys and personal interviews.
2. Establish a teaching program in shop for the farmers and their sons. A knowledge of tools and their use is the first essential in creating a desire for a well-equipped shop.
3. Help each farmer with his own shop problems, individually, on his own farm. Develop practical plans and specifications appropriate to his needs. Establish several good shops and use these as exhibits and examples for other farmers.

Editor's Comment: Mr. Maberly has given a good analysis of his procedure with adult farmers in establishing shops. The question might well be raised and discussed with reference to directing boys in establishing or in improving their home shops. In some departments boys build workbenches to take home to their shops and add many tools and, occasionally, needed equipment purchased from their project returns. Are we missing opportunities here?

other businessmen know any of the problems of the farmer? Finally, can our representative in the state and national legislative bodies represent the farm and ranch interests without some knowledge of the type of agriculture in his community? There is a definite need, not only for trained farmers and ranchers, but for agricultural leadership. What better device could be found for teaching boys leadership than the Future Farmers of America organization, which is a boys' organization run and controlled by boys?

A recent survey of students of vocational agriculture in El Paso high schools showed that about 50 percent lived in the upper valley farming district. Some lived on small plots and others on fairly large irrigated farms. What about the other 50 percent? Should we say that they cannot qualify for vocational agriculture because they live in town? Another survey of this 50 percent of city boys revealed that 60 percent of their parents or kin owned farms or ranches that they expected to have charge of some day. Most of their fathers were businessmen who had bought land as an investment. What better opportunity could be offered these boys to help them decide whether or not they would really be interested in this vocation? It might be a lot more economical if the boy could find out, before he actually took hold of a farm or ranch, whether he is going to like that type of work as a vocation. It is the responsibility of the vocational agriculture department to help boys make wise decisions in regard to the agricultural vocations. It is just as important to show a boy that he should not be in the vocation as to try and place boys we think should qualify. If a boy's interest develops in agriculture from year to year, then the training he will receive will put him in a much better position to look after his father's and his own interests.

In the large city schools, the school farm laboratory is a good method of giving the town boys some much needed farm facts and experience. The school farm should be about as large as the average farm unit for that community. It should be large enough so that the enterprises could be conducted on a practical basis as far as possible. It will naturally have a larger capital investment per acre than the average farm in the community. It will also probably have a more diversified farming program than the average farm, alho this might not be the most practical plan from a financial standpoint. This investment and diversification is necessary for the maximum amount of education. The chief aim should be education rather than commercial profit. However, after the initial investment of buildings and livestock, the farm laboratory should pay its way if properly managed.

The farm laboratory should not have to rely entirely upon the agriculture teacher and pupils for labor. A farm manager and some farm labor will be necessary. The agriculture teacher should supervise the farm and be responsible to the school board for all budgets, reports and transactions involved. The students should be given enough work with each enterprise to become familiar with the

(Continued on page 38)

Studies and Investigations

E. B. KNIGHT

Three Years of Program Planning and Evaluation

H. M. HAMLIN, Teacher Education, University of Illinois

THE project on program-planning and evaluation at the University of Illinois reached its third birthday on September 1, 1944. The third annual report of the project is now available from the department of agricultural education of the University. Six cooperating schools are active in the project as we enter the fourth year.



H. M. Hamlin

The original intentions of the project are being carried out:

1. To use a general advisory group for policy-making
2. To study each community's needs for agricultural education
3. To plan a tailor-made program with specific objectives for each community
4. To evaluate outcomes in terms of the chosen objectives
5. To work out carefully the relationships of the department of agriculture with the school and community

We are more fully informed than we were as to the possibilities of the general approach we have made and of the difficulties which inhere in it. On the whole, we are very well satisfied with the results which have been secured.

War conditions have affected the project materially. They have speeded up certain developments, particularly in adult education. They have interfered with other developments.

Each cooperating department has set out to serve impartially all the people of its community. We were not quite prepared for the response we have secured. The year before the project began the total adult enrollment in the cooperative schools had been about 50. In 1942-43, it was about 2,500. In 1943-44, with a slightly different group of schools included, it was about 2,200.

The great increase in adult attendance not only "swamped" our teachers with adult classwork, it reacted upon high-school enrollments in vocational agriculture. In the three schools which have been in the program continuously in which large increases in adult enrollments occurred, the enrollments in high-school classes have increased from 119 in 1941-42 to 202 in 1944-45. Teachers who had given much of their time to adult work from 1941 to 1943 have felt an obligation to reorganize or limit their activities in adult education so that they might give more time to the high-school group. In normal times additional teachers would have been provided in at least

two of these communities, but no additional teachers are now available.

In each community there has been further study of needs and refinement of objectives. Each community now has a rather definite and feasible program which is pretty well understood and accepted by the people of the community.

Evaluation by Outsiders

During the year one-day evaluations by outsiders were conducted in three communities. The evaluators included teachers, supervisors, principals, university professors in agriculture and in education, and a member of the staff of the United States Office of Education. In general, these evaluators were pleased with what they saw. Copies of their reports and a separate publication, "Notes on the 1944 Evaluations," are available from the Department of Agricultural Education, University of Illinois.

Special attention has been given to production records as means of diagnosing needs, as bases for teaching, and as aids in evaluation. The greatest progress has been in the use of pork and milk production records, the sheep and egg records have also been kept. A report of the work with pork production records is included in a publication of the departments of agricultural education and animal husbandry, University of Illinois, called "Education for Pork Production." A publication is now prepared in which two teachers who have cooperated in the project describe in detail the very successful methods they have evolved for getting milk and butterfat records kept by high-school boys and adult farmers and for using these records for teaching purposes.

The comments of two of the cooperating principals may be of interest. One of them says, "Mr. Holt and his council have done a splendid job in organizing our tremendously large school area. Because of the diversity of types of farming, they have set up a program of evening classes that fits the needs and desires of the farmers in each community. Through contact with the attending farmers I have discovered that they are putting the information obtained at the night schools into actual practice. These night schools have been of tremendous public-relations value to the school. It has helped to keep our farmers informed on the type of teaching that is being done in the department of agriculture of the high school." Another principal says, "I place a high value on Mr. Phipps' participation in your experiment on cooperative planning in vocational agriculture. I can see very clearly that, over a period of years, farm families will be led to a much higher standard of living

Planning and Measuring, Are You?

The Illinois project of planning the program for an agricultural department thru the services of an advisory council with the superintendent and the teacher of agriculture as nonvoting members, then all agencies combining to achieve the goals as planned, and finally, the important step at the end of the year of measuring the results of the year's achievements and analyzing them, attracts the attention of all educators interested in the democratic procedure in affairs of education. Every supervisor, each teacher-trainer, and all teachers of agriculture would do well to acquaint themselves with this project and give serious study to its objectives and achievements. It was my pleasure to spend two days with the Illinois staff acquainting myself with the project and studying in some detail the procedures and accomplishments in one community. It was a most interesting and encouraging experience.

As a result of what I saw, I am raising these questions. On the state level, are we definitely striving to set up goals of achievement in the improvement of agriculture in one or more enterprises as Supervisor Walters recently related? In union there is strength and in cooperation there is greater achievement. Mr. Supervisor, on what project are you and your teachers going to center their students' efforts this year?

To every teacher in his single community, I ask, are you showing the leadership that is expected of a graduate of a state university or a college of agriculture? Are you working with a representative advisory group so that desirable goals are stated and ways and means of obtaining them are planned? Such procedures utilize the services of a teacher of agriculture to more practical ends and to greater achievements than can possibly be attained thru working alone. These are our opportunities.—W.F.S.

thru the use of more intelligent practices in agriculture. It is also obvious to me that the advisory council is an excellent public-relations device. The participation of farm leaders on this council develops a great deal of interest in and loyalty to the school."

Future Plans

During the coming year, "open house" is to be held at each of the schools to which neighboring teachers, principals, and others will be invited. Thus far the project has had very little publicity.

In the remaining two years of the project, special attention will be given to evaluation. More devices for measuring progress toward the widely varying objectives which have been selected will have to be developed.

Photography, a Supervisory Aid

L. I. SAMUEL, Arlington, Texas

I HAVE found photography to be of great help in supervising vocational agriculture in the north Texas area. There are 60 high schools that offer vocational agriculture in the 17 counties making up this area. In 1940 the Area Future Farmers of America organization passed a motion authorizing me to use F.F.A. area funds to purchase a 4 x 5 Speed Graphic camera and materials for developing negatives and prints. At that time we had 88 chapters with over 3,000 members. Each boy pays 5c per year.



L. I. Samuel

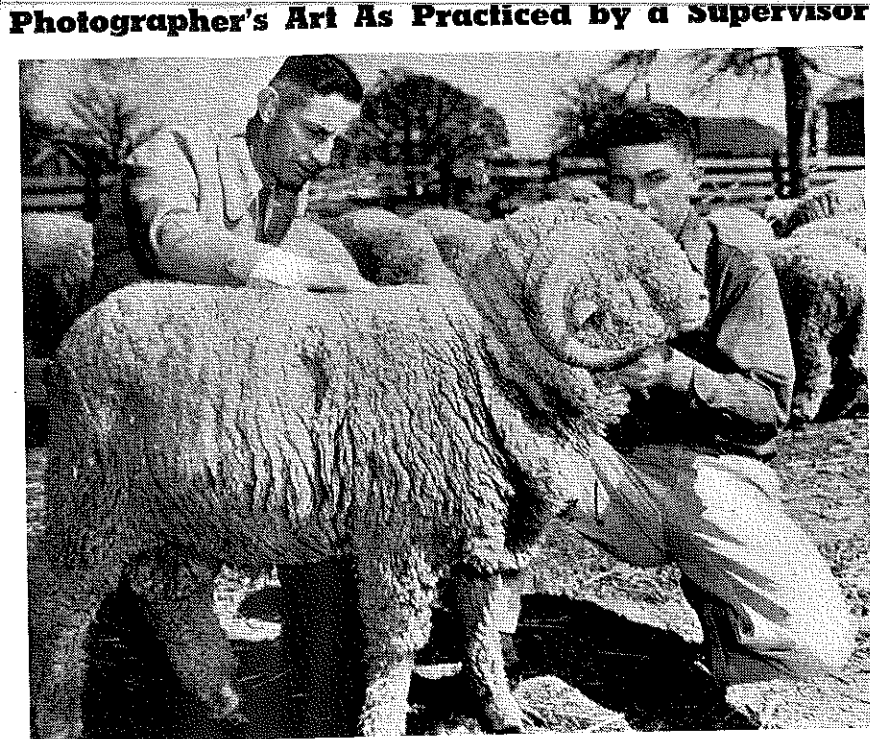
The North Texas Agricultural College, where I have an office, has an excellent darkroom with an enlarger and other photographic equipment. The physics department assisted in teaching me how to make exposures, develop films, and make enlargements. I was fortunate to find a good used camera in Dallas for \$100. It has a range finder and flash gun. I have been able to secure all the films, paper, and bulbs I have needed.

While visiting schools I take pictures of outstanding farming activities of the boys, like good livestock and poultry-feeding projects, farm shop work, and improved farm practices. These pictures are used mostly to carry stories of outstanding F.F.A. accomplishments in newspapers and farm magazines. Some of the best ones are "blown up" and used in exhibits at F.F.A. meetings. With the use of an opaque projector I reflect these pictures on large screens at civic club luncheons, Father and Son banquets, and so forth. Since I have the exposures and develop all the negatives and prints, I can remember where every one was taken and, in most instances, can relate several facts about each while the picture is on the screen.

Stimulates Better Farming Programs

A number of other benefits are derived from this hobby aside from informing the public of the kinds of training the schools are giving thru vocational agriculture classes. Boys are stimulated to carry on strong farming programs in order to have good pictures made. I usually make complimentary prints for the teacher and the boys, and this has its stimulating effect, too. When I visit a school to get pictures of the best projects—also pictures to carry stories of culling hens, pruning orchards, poisoning insects, and so forth—I usually come away with a pretty good evaluation of the "all-round" program being put over without creating a feeling on the part of the teacher and boys that they are being "inspected." It affords an excellent opportunity to me to pass on helpful suggestions that I have picked up from other teachers and F.F.A. members.

In this activity, as in most other lines of work, the use of good judgment and common sense is of as much value as technical information.



Jim Heath, F.F.A. member of Denton, Texas, High School is selecting a ram from his flock of 21 registered Ramboulet lambs. H. D. Roberts, teacher of agriculture, is checking on Jim's choice



Vannan Black and Raymond Ruth of the F.F.A. Chapter of Mexico, Texas, High School, feeding broilers. These 1,500 chicks are one of the chapter's cooperative projects
Photos by L. I. Samuel

THE EDITOR'S COMMENT

In Mr. Samuel, Texas has a supervisor who has mastered the photographer's art and is benefitting from it to the extent that his teachers and many individual boys are being stimulated to greater effort and to a better quality of performance. I wish I might have used all the photographs which Mr. Samuel sent. Eight by ten, glazed prints of school and home scenes, unusually well posed, provide an abundance of interest to one who is even an entire stranger to all subjects in the pictures, but what a mine of interest and stimulation such pictures must

provide to the boys themselves and the teachers who are fortunate enough to receive them. Publicity galore, farming program stimulus without end, suggestions to teachers convincingly portrayed as pictures pass from school to school, information to interest groups such as luncheon clubs; all in all, what multiple benefits follow the photographer's art? I am wondering if we don't need a Samuel on every state supervisory staff.

Learn to review carefully and without prejudice evidence against your own opinions.

The Sheldon Trophy



Lee Cassidy, center, passes the Kenneth Sheldon Memorial Trophy to Donald Lewis, president of the Woodstock Chapter, which will be possessor of the trophy for 1945-1946. Neal Tarbox, president of the Association, 1944-45, superintends the transfer

THE Woodstock Chapter of Future Farmers of America gained possession of Vermont's most valued F.F.A. trophy at the State Association's Sixteenth Annual Convention. The Sheldon Trophy, as it is known, has been awarded annually since 1940 to the F.F.A. chapter making the most improvement during the year, in memory of Kenneth J. Sheldon, former state adviser to Vermont Future Farmers.

To gain the right to hold this trophy, the Woodstock Chapter completed a program which surpassed that of the preceding years by a margin of 35 out of a possible 100 points.

The purchase of official F.F.A. jackets for officers for the first time gave impetus at the very beginning of the year to the chapter's program of work, designed to contribute to the war effort. The chapter collected and sold 56,000 pounds of waste paper, purchased equipment for the school in the amount of \$165, placed in all district and state F.F.A. contests, conducted several school assembly programs, and operated a milk testing service for farmers. The chapter and individual members received \$310.80 in cash awards as winnings in F.F.A. contests or exhibits. These activities were successfully carried thru even tho the teacher of agriculture and chapter adviser left on April 1.

This year our chapter offered a prize for the best library owned by an F.F.A. boy.—Nebraska City, Nebraska.

It is a big event when we hold our annual hog-calling contest. Three farmers, who are specialists in this field of activity, act as judges.—Ponca, Nebraska.

This year our chapter held a Faculty Mixer. This gave the boys a good chance to get acquainted with the teachers, but the main point was to get the teachers acquainted with the F.F.A. and "Ag." activities.—Alliance, Nebraska.

At the May meeting we always invite the nearby 8th graders. Part of the meeting is put on especially for them.—Humbolt, Nebraska.

City Agriculture

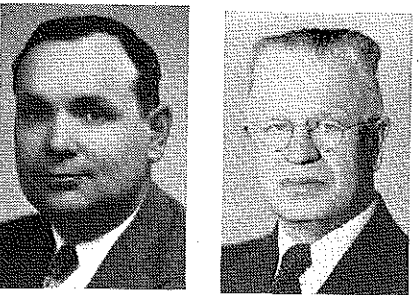
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facts and skills involved in each. One satisfactory arrangement would be for the first year boys to be given some small plots of ground for garden work. This would give the boys the opportunity of actually working with the soil, studying plant growth and culture, insect control, and the keeping of farm records. First year boys would also be given the opportunity to study with farm animals and poultry enterprises. The second year boys would study more advanced skills involved in the animal and crop enterprises. The third year boys would be more interested in farm planning, management, marketing and record keeping. Each student would be required to make a beginning inventory for the school farm. Each month's receipts and disbursements would be available for these students to keep a complete set of records on the farm. A closing inventory and financial statement should give some excellent facts about farm operation and the different enterprises.

Each of the three classes would be given some shop work, according to the equipment needed for home enterprises and equipment needed by enterprises studied on the farm. This should include the very important phase of farm machinery.

The farm laboratory is justified in large schools where many of the boys are town boys and there are few farms and ranches available for use in teaching farm jobs and skills. Boys who are really interested in this type of education should be given the opportunity to get it regardless of whether they live in town or in the country. This does not necessarily mean that every boy who wants to take a course in vocational agriculture should be admitted. It is the duty of the individual teacher and counselor to try and place students in the courses that he will benefit most from. This is done by individual interviews to determine the boy's interests, his environment, his abilities, and then counseling him accordingly.

Our Leadership



J. H. Foard H. S. Hill

J. H. FOARD, supervisor in Missouri since 1943, is Missouri-reared and educated. He received both the bachelor of science and master's degrees from the University of Missouri. He has spent 19 years in educational positions, including two years as a teacher of a rural school, two years as high-school principal, 12 years as teacher of vocational agriculture, and two years as district supervisor.

Herbert S. Hill has the unique distinction of having served as state supervisor in Maine and head teacher-trainer at the University of Maine since 1918. Mr. Hill graduated from Bowdoin College. He served as high-school principal for four years. He pursued a special course in teacher-training at the University of Maine the first year it was offered and was the only student in the course. He taught agriculture in high schools until he entered upon his present position. His graduate work has been pursued at Cornell, Harvard, and State College. Like most state supervisors, Mr. Hill is also the state adviser of the Future Farmers of America.

BANQUET BANTER

Toastmaster: We Future Farmers have many friends around town and out in the country as well. I am sure we appreciate all of these individuals and benefit from their many kindnesses. We couldn't recognize all of them this evening, so we selected one, an honorary Future Farmer as our speaker, Doctor Campbell. Doctors have all sorts of experiences, no doubt, and we probably hear of only a few. I understand Mrs. Campbell recently told of a note the doctor received which read about as follows: "Please call and see my husband, it's his head. He's had it off and on for several days and today he is sitting with it in his hands between his knees." Our fellow Future Farmers, Doctor Campbell.

Speaker: Ladies and gentlemen, it's a pleasure to be invited to speak to these hustling Future Farmers. They are a great bunch of boys interested in everything worth while and standing for the best in character, personality, and everyday living. They don't miss many bets. You all know that our toastmaster is interested in Jean Wailer. They make a fine couple but I had not realized just how thoro our T. M. is until Jean's father remarked the other day that he had spoken to Jean recently, reminding her that her young man stays very late and asking her if he does not know how to say good night. To this Jean replied, "Oh, yes, Dad, better than any boy I ever knew."

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J. C. Wright—Asst. Commissioner for Vocational Education
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d—directors
rs—regional supervisors
ds—district supervisors ts—teacher-trainers it—Itinerant teacher-trainers
rt—research workers cs—colored supervisors ct—colored teacher-trainers
sms—subject matter specialists

ALABAMA

d—J. B. Hobby, Montgomery
s—R. E. Cammack, Montgomery
ds—J. C. Cannon, Auburn
ds—H. F. Gibson, Auburn
ds—L. L. Sellers, Auburn
sms—C. C. Scarborough, Auburn
ds—T. L. Faulkner, Auburn
t—S. L. Chestnut, Auburn
rt—R. W. Montgomery, Auburn
ct—E. A. Grant, Tuskegee Institute
ct—Arthur Floyd, Tuskegee Institute

ARIZONA

d—E. D. Ring, Phoenix
s—L. D. Klemmedson, Phoenix
t—R. W. Cline, Tucson
t—J. R. Cullison, Tucson

ARKANSAS

ds—Fred A. Smith, Little Rock
s—C. R. Wilkey, Little Rock
as—S. D. Mitchell, Little Rock
ds—T. A. White, Monticello
ds—O. J. Seymour, Arkadelphia
ds—J. A. Niven, Russellville
t—Roy W. Roberts, Fayetteville
ct—J. C. McAdams, Pine Bluff

CALIFORNIA

d—Julian A. McPhee, San Luis Obispo
s—B. J. McMahon, San Luis Obispo
as—Wesley P. Smith, San Luis Obispo
rs—E. W. Everett, San Jose
rs—B. R. Donigh, Los Angeles
rs—Howard F. Chappell, Sacramento
rs—A. G. Rinn, Fresno
rs—Weir Fetters, San Luis Obispo
rs—Harold O. Wilson, Los Angeles
rs—H. H. Burlingham, Chico
t—S. S. Sutherland, Davis
sms—Geo. P. Couper, San Luis Obispo
sms—J. I. Thompson, San Luis Obispo

COLORADO

d—H. A. Tiemann, Denver
s—A. R. Bunker, Acting, Denver
t—G. A. Schmidt, Fort Collins

CONNECTICUT

d—A. S. Boynton, Hartford
s—R. L. Hahn, Hartford
t—C. B. Gentry, Storrs

DELAWARE

d—R. W. Heim, Newark
s—P. M. Hodgson, Dover

FLORIDA

d—Colin English, Tallahassee
s—J. F. Williams, Jr., Tallahassee
t—E. W. Garris, Gainesville
it—W. T. Lofton, Gainesville
it—J. D. Smith, Gainesville
ct—L. A. Marshall, Tallahassee
ct—G. W. Conoly, Tallahassee

GEORGIA

d—M. D. Mobley, Atlanta
s—T. G. Walters, Atlanta
ds—George I. Martin, Tifton
ds—C. M. Reed, Carrollton
ds—J. N. Baker, Swainsboro
ds—J. H. Mitchell, Athens
cs—Alva Tabor, Fort Valley
t—John T. Wheeler, Athens
t—O. C. Aderhold, Athens
sms—A. O. Duncan, Athens
t—R. H. Tolbert, Athens
ct—Benj. Anderson, Industrial College

HAWAII

d—W. W. Beers, Honolulu, T. H.
s—Warren Gibson, Honolulu, T. H.
t—F. E. Armstrong, Honolulu, T. H.

IDAHO

ds—William Kerr, Boise
s—Stanley S. Richardson, Boise
ds—Elmer D. Belnap, Idaho Falls
s—John A. Bauer, Boise
t—H. E. Lattig, Moscow
t—H. A. Winner, Moscow

ILLINOIS

d—Ernest J. Simon, Springfield
s—J. E. Hill, Springfield
s—J. B. Adams, Springfield
s—A. J. Andrews, Springfield
t—H. M. Hamlin, Urbana
t—Melvin Henderson, Urbana
t—J. N. Weiss, Urbana
t—H. J. Rucker, Urbana

INDIANA

d—Clement T. Malan, Indianapolis
t—Harry F. Ainsworth, Indianapolis
t—B. C. Lawson, Lafayette
rt—S. S. Cromer, Lafayette
it—K. W. Kiltz, Lafayette
it—H. W. Leonard, Lafayette
it—H. B. Taylor, Lafayette

IOWA

d—L. H. Wood, Des Moines
s—H. T. Hall, Des Moines
t—Barton Morgan, Ames
t—John B. McClelland, Ames
t—J. A. Starrak, Ames
t—T. E. Sexauer, Ames

KANSAS

d—C. M. Miller, Topeka
s—L. B. Poliom, Topeka
t—A. P. Davidson, Manhattan
it—J. F. Hall, Manhattan

KENTUCKY

ds—R. H. Woods, Frankfort
s—E. P. Hillton, Frankfort
t—Carsie Hammonds, Lexington
it—Watson Armstrong, Lexington
it—W. E. Tabb, Lexington
ct—P. J. Manly, Frankfort

LOUISIANA

d—John E. Coxe, Baton Rouge
ds—A. Larriviere, Baton Rouge
ds—T. E. Kirkin, Baton Rouge
t—C. L. Mondart, University
t—J. C. Floyd
ct—M. J. Clark, Scotlandville
ct—Dallas Matthews, Scotlandville
ct—E. C. Wright, Scotlandville

MAINE

d—Austin Alden, Augusta
s—Herbert S. Hill, Orono
s—Wallace H. Elliott, Orono

MARYLAND

d—John J. Seidel, Baltimore
s—H. F. Cotterman, College Park
ct—J. A. Oliver, Princess Anne

MASSACHUSETTS

d—M. Norcross Stratton, Boston
s—John G. Glavin, Boston
t—F. E. Heald, Amherst
t—W. S. Welles, Amherst

MICHIGAN

d—E. B. Elliott, Lansing
s—Harry E. Nesman, Lansing
ds—Luke H. Kelley, Lansing
t—C. L. Angerer, Stillwater
t—Don M. Orr, Stillwater
t—Chris White, Stillwater
ct—D. C. Jones, Langston

MINNESOTA

d—Harry C. Schmid
s—C. O. Ayers, St. Paul
as—Carl F. Allrecht, St. Paul
t—A. M. Field, St. Paul
t—G. F. Ekstrom, St. Paul

MISSISSIPPI

d—H. E. Mauldin, Jr., Jackson
s—A. P. Fetherlee, Jackson
ds—R. H. Fiskerly, Jackson
ds—E. E. Gross, Hattiesburg
ds—V. P. Winstead, State College
t—V. G. Martin, State College
t—N. E. Wilson, State College

ms—D. W. Skelton, State College
s—A. E. Strain, State College
it—V. P. Winstead, State College
ct—A. D. Fobbs, Alcorn
ct—Robert Ross, Alcorn

MISSOURI

d—Roy Scantlin, Jefferson City
s—J. H. Ford, Jefferson City
ds—Joe Duck, Springfield
ds—C. V. Roderick, Jefferson City
t—Sherman Dickinson, Columbia
t—G. J. Dippold, Columbia

MONTANA

d—Ralph Kenck, Bozeman
s—A. W. Johnson, Bozeman
s—H. E. Rodeberg, Bozeman

NEBRASKA

d—G. F. Liebendorfer, Lincoln
s—L. D. Clements, Lincoln
s—H. W. Deems, Lincoln
t—H. E. Bradford, Lincoln
t—C. C. Minter, Lincoln

NEVADA

s—Kirby E. Brumfield, Carson City

NEW HAMPSHIRE

d—Walter M. May, Concord
s—Earl H. Little, Concord

NEW JERSEY

d—John A. McCarthy, Trenton
s—H. O. Sampson, New Brunswick
s—E. V. Bearer, New Brunswick
t—O. E. Kiser, New Brunswick

NEW MEXICO

ds—Frank E. Wimberly, State College
ct—Carl G. Howard, State College
t—H. M. Gardner, State College

NEW YORK

d—Oakley Furney, Albany
s—A. K. Getman, Albany
s—W. J. Weaver, Albany
s—R. C. S. Sutliff, Albany
t—R. W. Hatch, Buffalo
t—R. M. Stewart, Ithaca
t—E. R. Hoskins, Ithaca
t—W. A. Smith, Ithaca
t—Roy A. Olney, Ithaca

NORTH CAROLINA

d—T. E. Browne, Raleigh
s—Roy H. Thomas, Raleigh
ds—R. H. Peeler, Raleigh
ds—E. N. Meekins, Raleigh
ds—J. M. Osteen, Rockingham
ds—T. H. Stafford, Asheville
ds—T. B. Elliott, La Grange
ct—S. B. Simmons, Greensboro
ct—C. E. Dean, Greensboro
ct—W. T. Johnson, Greensboro
t—Leon E. Cook, Raleigh
t—L. O. Armstrong, Raleigh
t—J. K. Coggin, Raleigh

NORTH DAKOTA

d—Edward Erickson, Grand Forks
s—Ernest L. DeAlton, Fargo
t—Shubel D. Owen, Fargo

OHIO

d—Kenneth C. Ray, Columbus
s—Ralph A. Howard, Columbus
ds—W. G. Weiler, Columbus
ds—E. O. Bolender, Columbus
ds—H. G. Kenestrick, Columbus
ds—F. J. Ruble, Columbus
t—W. F. Stewart, Columbus
it—C. E. Rhoad, Columbus
t—A. C. Kennedy, Columbus
rt—Ray Fife, Columbus

OKLAHOMA

d—J. B. Perky, Stillwater
s—Bonnie Nicholson, Stillwater
ds—W. R. Felton, Stillwater
ds—S. M. Crosnoe, Stillwater
ds—Byri Killian, Stillwater
t—C. L. Angerer, Stillwater
t—Don M. Orr, Stillwater
t—Chris White, Stillwater
ct—D. C. Jones, Langston

OREGON

d—O. I. Paulson, Salem
s—Earl R. Cooley, Salem
s—Ralph L. Morgan, Salem
ds—M. C. Buchanan,
as—Glen L. Weaver,
t—H. H. Gibson, Corvallis

PENNSYLVANIA

d—Paul L. Cressman, Harrisburg
s—H. C. Fetherlee, Harrisburg
s—V. A. Martin, Harrisburg
t—Henry S. Bruner, State College
t—William A. Broyles, State College
t—William F. Hall, State College
it—Russell B. Dickerson, State College

PUBLIC ROADS
d—Lloyd A. LeZotte, San Juan
s—Nicholas Mendez, San Juan
as—Samuel Molinary, San Juan
ds—Frederick A. Rodriguez, San Juan
ds—Juan Acosta Henriquez, Arecibo
ds—Juan Robles, Cayey
ds—Andres Ramirez, Mayaguez
t—Lorenzo G. Hernandez, Mayaguez

RHODE ISLAND

d—George H. Baldwin, Providence
t—Everett L. Austin, Kingston

SOUTH CAROLINA

d—J. H. Hope, Columbia
s—Verd Peterson, Columbia
ds—W. C. James, Columbia
ds—W. M. Mahoney, Honea Path
ds—R. D. Anderson, Waterboro
ds—J. H. Von, Loris
t—W. G. Crandall, Clemson
t—B. H. Stribling, Clemson
t—J. B. Monroe, Clemson
ct—Gabe Buokman, Orangeburg
t—T. E. Duncan, Clemson
t—F. E. Kirkley, Clemson

SOUTH DAKOTA

d—J. F. Hines, Pierre
s—H. E. Urton, Pierre
t—C. R. Wiseman, Brookings

TENNESSEE

ds—G. E. Freeman, Nashville
as—J. W. Brimm, Nashville
ds—H. N. Parks, Gallatin
ds—L. A. Carpenter, Knoxville
ds—Ben Douglas, Jackson
t—N. E. Fitzgerald, Knoxville
t—J. B. Kirkland, Knoxville
rt—A. J. Paulus, Knoxville
rt—E. B. Knight, Knoxville
ct—W. A. Flowers, Nashville

TEXAS

d—Robert A. Manire, Austin
s—J. B. Rutland, Austin
s—R. Lano Barron, Austin
t—E. R. Alexander, College Station
t—Henry Ross, College Station
t—J. L. Moses, Huntsville
t—S. V. Burka, Kingsville
t—Ray J. Chappelle, Lubbock
sms—W. R. Sherrill, College Station
it—G. H. Morrison, Huntsville
it—Malcolm Orchard, College Station
it—Joe C. Brown, Kingsville
ct—E. M. Norris, Prairie View
ct—W. M. Collins, Prairie View
ct—W. D. Thompson, Prairie View

UTAH

d—Charles H. Skidmore, Salt Lake City
s—Mark Nichols, Salt Lake City
rs—Elvin Downs, Ephraim
t—L. R. Humphreys, Logan

VERMONT

d—John E. Nelson, Montpelier
s—W. Howard Martin, Burlington
t—Robert Towne

VIRGINIA

d—Dabney S. Lancaster, Richmond
s—D. J. Howard, Richmond
ds—F. B. Cale, Appomattox
ds—T. V. Downing, Ivor
ds—J. O. Hoge, Blacksburg
ds—W. R. Legge, Winchester
ds—J. C. Green, Powhatan
t—Harry W. Sanders, Blacksburg
t—Henry C. Grosseleose, Blacksburg
t—E. Y. Noblin, Blacksburg
t—C. E. Richards, Blacksburg
ct—A. J. Miller, Ettrick
ct—G. W. Owens, Ettrick
ct—J. R. Thomas, Ettrick

WASHINGTON

d—H. G. Halstead, Olympia
t—E. M. Webb, Pullman
t—Bert L. Brown, Pullman

WEST VIRGINIA

d—W. W. Trent, Charleston
s—John M. Lowe, Charleston
s—H. N. Hansucker, Charleston
t—D. W. Parsons, Morgantown
t—M. C. Gaar, Morgantown
it—A. D. Longhouse, Morgantown

WISCONSIN

d—C. L. Greiber, Madison
s—Louis M. Sasman, Madison
t—J. A. James, Madison
it—Ivan Fay, Madison
it—Clarence Bonsack, Madison
it—V. E. Nylin, Platteville
it—J. M. May, River Falls

WYOMING

d—Sam Hitchcock, Cheyenne
s—Jack Ruch, Cheyenne