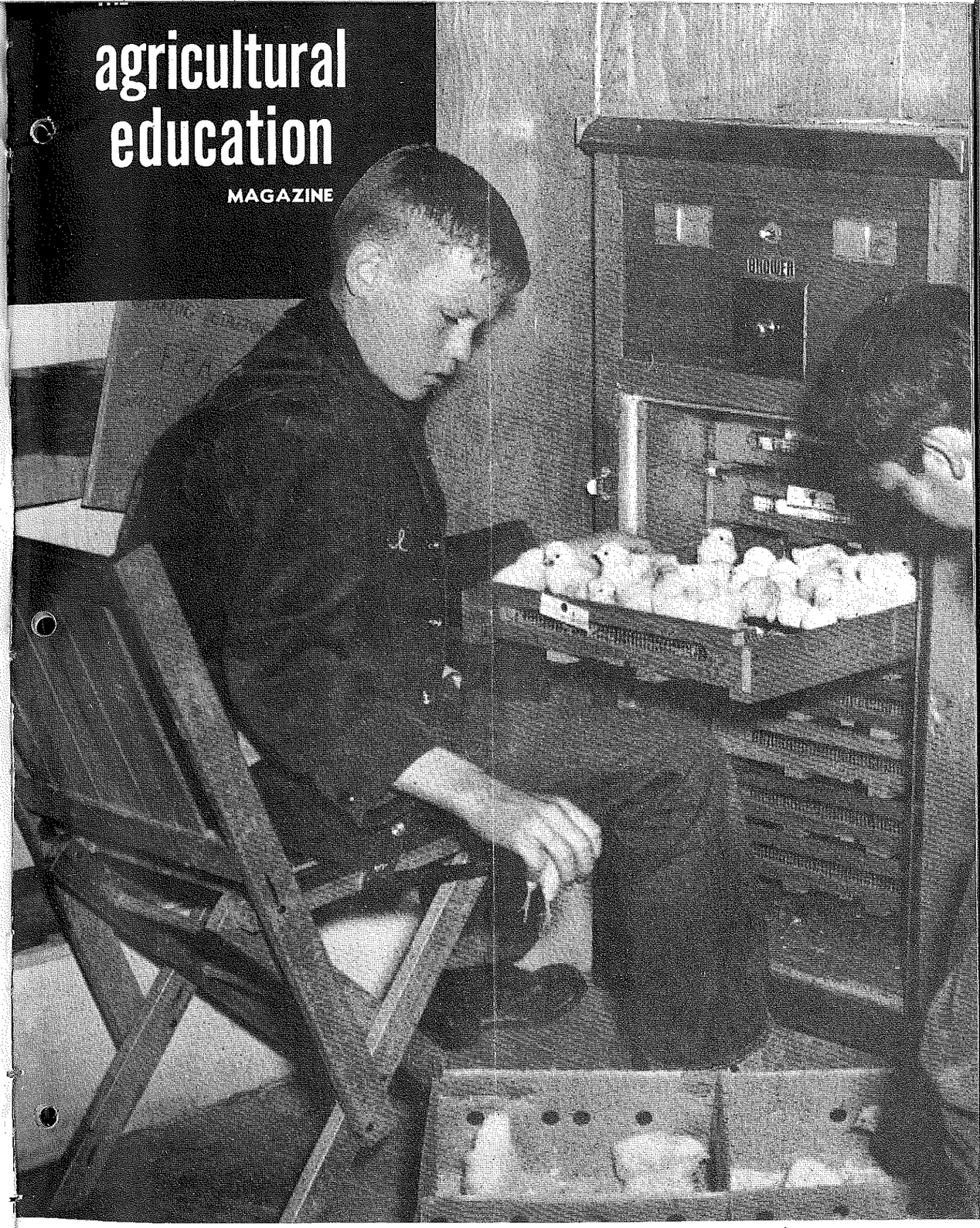
agricultural education

MAGAZINE



F.F.A. members at Alpine, Texas, operate incubator as cooperative chapter project.

NOVEMBER, 1947
VOL. 20
NUMBER 5

The Agricultural Education Magazine

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

MANAGING EDITORS

G. F. Ekstrom, University of Missouri, Columbia.....Editor
W. F. Stewart, Ohio State University, Columbus 10.....Consulting Editor
W. Howard Martin, University of Connecticut, Storrs.....Business Manager

SPECIAL EDITORS

S. S. Sutherland, University Farm, Davis, California.....Professional
B. C. Lawson, Purdue University, Lafayette, Ind.....Professional
G. P. Deyoe, University of Illinois, Urbana.....Methods
Lano Barron, Dept. of Education, Austin 11, Texas.....Supervision
R. W. Cline, University of Arizona, Tucson, Arizona.....Farm Mechanics
C. L. Angerer, State A. & M. College, Stillwater, Oklahoma.....Farming Programs
J. N. Weiss, University of Illinois, Urbana, Illinois.....Farmer Classes
R. B. Dickerson, Pa. State College, State College Pa.....Farmer Classes
E. B. Knight, University of Tennessee, Knoxville, Tennessee.....Research
A. W. Tenney, U.S. Office of Education, Washington, D. C.....F.F.A.
A. P. Davidson, Kansas State College, Manhattan, Kansas.....Book Reviews

SPECIAL REPRESENTATIVES

North Atlantic, Henry S. Brunner.....State College, Pennsylvania
Central, H. M. Byram.....East Lansing, Michigan
Western, R. W. Cline.....Tucson, Arizona
Southern, A. Larriviere.....Lafayette, Louisiana

EDITING-MANAGING BOARD

Henry S. Brunner, Pennsylvania; H. M. Byram, Michigan; R. W. Cline, Arizona; A. Larriviere, Louisiana; W. Howard Martin, Connecticut; W. F. Stewart, Ohio; W. T. Spanton, Washington, D. C.; H. C. Fetterolf, Pennsylvania; Carsie Hammonds Kentucky; J. Everett Walker, Association of Teachers of Agriculture, California.

Subscription price, $1 per year, payable at the office of the Meredith Publishing Company, Des Moines 3, Iowa. Foreign subscriptions, $1.25. Single copies, 10 cents. In submitting subscriptions, designate by appropriate symbols new subscribers, renewals, and changes in address. Contributions should be sent to the Special Editors or to the Editor. No advertising is accepted.

Entered as second-class matter January 21, 1929, under Act of Congress, March 3 1879, at the post office, Des Moines, Iowa

CONTENTS

Editorial Comment

Farmer cooperation

W. I. Myers

TEACHERS of vocational agriculture are rendering a great service to American agriculture and to the nation by training the future farmers of this country in sound agricultural production and marketing methods. We are all aware of the fact that farms are increasing in size. They require more initial capital and more working capital; they are more mechanized and require higher skill in their operation and management than ever before. All of these developments emphasize the need for the American farmer of the future to understand the business and economic problems of farming as well as those of physical production and the best place for him to obtain this understanding is in our public educational system.

In the evolution of American agriculture during our history great changes have occurred, but the typical unit has continued to be the family farm. Under this system the farm people of the United States have turned in a magnificent performance in food production. They helped win the war and are doing their full share to attain a democratic, peaceful world by producing the largest volume of food in history with the smallest labor force.

Cooperative Business Essential in Farming

There are three basic reasons why the family farm has been able to compete successfully and to continue as the prevailing type of farm operation in our agriculture in spite of the dominance of corporations in other lines of business. One of these is publicly supported agricultural research to find out and to make available to everyone improved methods of production and marketing. Another is free public education including vocational agriculture and the Extension Service so that any farmer can get and understand these improved methods and thus compete with the expert employed by the corporate farm. The third is cooperative business to give equality of opportunity to efficient family farms with corporations in marketing farm products and in purchasing production supplies, credit and other business services. By the use of cooperatives, farmers have been able to retain the efficiency of family farm production and to pool their volume to obtain the advantages of large scale operation in marketing and purchasing.

Congress and the state legislatures long ago recognized the need for continuing independent rural citizenship in the interest of state and national welfare. By statute, farm people were empowered to use corporate nonprofit organizations for self-service and self-help. Farm cooperatives are private enterprises with democratic control. They are a form of business which operates for the benefit of the owner as a patron. Farm cooperatives are a natural business development within a democracy, as they are democratic in form, practice, and principle.

In addition to the economic advantages of cooperative action by farm people, there are intangible social developments. The fact that farm families meet on a business basis to help one another in an economic way results in a finer community life, more sympathy for their neighbors and a broadening of their outlook upon the world. The great church organizations of the democratic countries appreciate the part cooperatives play in building men as well as in saving dollars. Democracy can become more nearly an exemplification of Christian thinking when there are groups of people within it using the cooperative method of dealing with each other.

Teachers of vocational agriculture are to be envied because they have the facilities to teach many more or less abstract problems of economics thru the boys' projects or thru school activities. As a person not connected directly with vocational agriculture but one vitally interested, I can see the ways in which cooperative and business principles may be taught to the next generation of farmers thru class instructions and Future Farmer activities. As an example, in their study of feeding livestock the boys may find that they are paying too much for the kind of feed that is needed for their particular use. After examining available sources of supply, they may decide that by cooperative action they could pool their orders and thus lower the costs on this part of their farming business.

While they are studying marketing of their farm projects they have the opportunity to analyze marketing costs and methods. This study may show that cooperative endeavor is necessary in order to lower this cost or provide for more adequate service that would benefit both the farmer and the consumer. In both instances cited, the importance of the boys making a study of whether or not a cooperative is needed has been emphasized. This factor is very important since history shows that many farmer cooperatives fail because they did not consider all the business and economic factors before the cooperative was organized. Enthusiasm for cooperative endeavor is important, but at the same time, the organization must be founded on a sound business basis if it is to survive and serve the farmers for whom it was organized.

Opportunity for Experiences in Cooperation Thru F.F.A.

If the boys decide that they should have a cooperative, it would be advisable for them to spend some classroom time in studying the cooperative laws of their state so that they would be informed regarding the legal aspects of a cooperative corporation. It would be desirable for the boys to prepare a set of articles and bylaws that will guide them in the operation of their organization. By doing this, they would learn the corporate structure of a cooperative and the responsibilities and duties of the directors, officers, and patrons of their organization. This type of information is needed by adult farmers regarding their own off-farm business organizations.

Thru the years farm cooperatives have developed certain principles and practices that need to be followed and understood by their members. In these respects the cooperative corporation differs from the proprietary type of business. It is fundamental that the farmer patron understand these principles if the cooperative is to be most beneficial to him. To teach the principles merely as facts without application would be difficult with high-school students. However, by tying them up with a cooperative activity the teaching should be much more effective.

The principles of democratic control, or "one man—one vote," could be brought out by a group that has decided to buy cooperatively a potato digger in order to harvest their crops more efficiently. The boys should be given training in the selection of machinery; and after a full discussion of the problem, a vote would be taken as to what type and kind of machine to purchase. This vote would be based on one vote for each member and not on the number of acres than an individual boy might have in his enterprise. Most cooperatives follow this principle quite closely.

The principle of patronage refunds, which is based on the use made by an individual of the cooperative, is fundamental. This

(Continued on page 85)

Training received in farmer cooperation

D. L. MacDonald, American Institute of Cooperation, Washington, D. C.

EVIDENCE shows that the sound development of farmer cooperatives depends upon their members being well informed concerning this method of doing private business. It is essential that the farmer member and his family understand the principles and practices by which his cooperative operates. He needs to understand its strong points, its weaknesses, its possibilities, and its limitations.

Teachers of vocational agriculture, thru their close contacts with the farmer and his family, wield a major influence in the development of a sound appreciation and understanding of farmer cooperation. Many times, while supervising the home-project program of a farmer's boy, the teacher is questioned by the farmer or the farmer's wife regarding the practices that are being followed or are contemplated by the local cooperative.

During the teaching of an evening class, the farmers may consider that a cooperative is needed to solve one of their problems, and the teacher will be called on for sound educational advice regarding such a venture. Sometimes the teacher's well-meaning enthusiasm for cooperation may lead the group to the wrong decision or, at the other extreme, he may not see where cooperative action would be desirable.

In the all-day class in marketing or farm management, the farmer cooperative is a factor that will often be considered in arriving at a recommended practice for a farmer to follow. It may be found that a cooperative is needed to economically move his product to market or to reduce operating costs by purchasing cooperatively his farm supplies.

Study of Training in Cooperation

To determine the amount of training being given teachers of vocational agriculture in the field of cooperation, a study was made. A questionnaire was prepared and sent to the head teacher-trainer in each state. Thirty-five of the 55 questionnaires distributed were completed and returned. Three Negro teacher-training institutions participated. It was assumed for the purpose of the questionnaire that the prospective teacher could receive technical training in cooperation in one or more of the following ways: A course in agricultural cooperation, a phase of a course in marketing of farm products, a part of an agricultural production course, or in a rural sociology course.

In the professional field, it was assumed that the trainee could receive some instruction in cooperative endeavor as it relates to supervised practice and the Future Farmer program of work in one of the agricultural education courses, and thru participation with an F.F.A. cooperative activity at the cadet teaching center.

A review of the accompanying table brings out the following information:

Section I of the table shows that a little over one-tenth of the 35 teacher-training institutions reporting require their prospective teachers to enroll in a course in farm cooperation. Over one-half of the institutions neither require courses in this subject nor offer such courses as electives.

Section II indicates that less than one-half of the institutions require courses in marketing in which farmer cooperation would be considered. One-fourth of the institutions neither require, nor offer as an elective, courses in this field.

Section III pertains to those production courses which would touch on farmer cooperation. Nearly three-fifths of the institutions require their students of agricultural education to enroll in these courses.

Section IV shows that about three-fourths of the institutions require their trainees to enroll in a sociology course. Ordinarily, little time is devoted to the principles and practices in such a course. The place of the cooperative is often considered from the social effect it may have on the community.

In the professional courses, Section V shows that seven-tenths of the institutions offer training in the operation of an F.F.A. cooperative; three-tenths do not provide for such training.

Since the student teaching center is such an important phase of the training program, it is interesting to note in Section VI that 10 of the 35 institutions reporting were sure that an F.F.A. cooperative would be in operation at the student teaching center. Over one-half of the centers might have such an activity, while the trainees attending nearly one-fifth of the institutions would have no opportunity to observe or work with an F.F.A. cooperative activity.

Training Received by Teachers of Vocational Agriculture in Farmer Cooperation

	Number of institutions reporting	Percent of total
I. Courses in farm cooperation		
Required	4	11.4
Elective	11	31.4
Not required or elective	20	57.2
Total	35	100.0
II. Courses in marketing that include farm cooperation		
Required	16	45.7
Elective	10	28.6
Not required or elective	9	25.7
Total	35	100.0
III. Parts of other courses that include farm cooperation (Livestock, horticulture, grain)		
Required	20	57.2
Elective	2	5.7
Not required or elective	13	37.1
Total	35	100.0
IV. Sociology courses that include farm cooperation		
Required	25	71.5
Elective	6	17.1
Not required or elective	4	11.4
Total	35	100.0
Professional courses in which trainee would obtain training in operation of an F.F.A. cooperative.		
V. Pre-service courses		
Required	25	71.5
Elective	0	0.0
Not required or elective	10	28.5
Total	35	100.0
VI. F.F.A. cooperative available at student-teaching center		
Yes	10	28.6
Maybe	19	54.3
None	6	17.1
Total	35	100.0
VII. In-service training on farmer cooperation		
Number of states making cooperative education available thru summer courses, state conferences, etc.	16	45.7
No activities indicated	19	54.3
Total	35	100.0

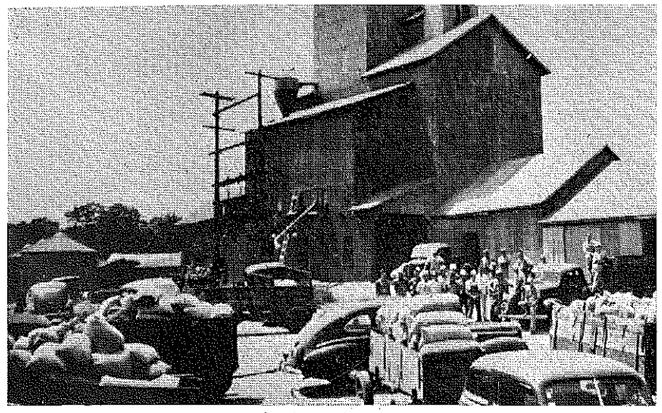
Section VII indicates that nearly one-half of the institutions provide in-service training for their teachers. Ten of the 16 institutions reporting an affirmative answer to this question, indicated that it was accomplished by talks made by specialists during the state conferences of agricultural teachers. Six colleges indicated that short, intensive courses in cooperation were offered during the summer session.

There was a great variation between states in the amount of cooperative education made available to the majors in agricultural education. Four institutions provide training in all of the categories listed in the questionnaire, while one institution provides cooperative training only in the professional course designed to train the student in advising with an F.F.A. chapter.

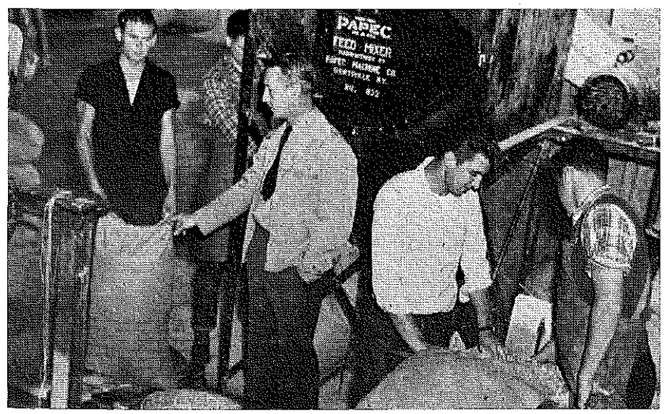
In summary, it may be said that teachers of vocational agriculture are receiving little training in farm cooperation while in college. This is indicated by the small number of institutions that require their trainees to enroll in such a course, or in a marketing course, which may develop the principles and practices of sound farm cooperation. It is felt that, in many cases, training in farmer cooperation will be limited if it is confined to production or sociology courses.

It is realized that there are many demands for the curricular time of the undergraduate. The course in cooperation, if it is available, may be restricted by prerequisites or it may be taught from the viewpoint of the student specializing in economics. A practical summer short course on the subject could be considered as a means of correcting this situation.

In no case should the agricultural teacher be expected to organize or manage a farmer cooperative—that is the farmer's job. However, since the agricultural teacher works as an educational leader among the present and future operators of family-type farms, he needs to have a sound understanding of cooperative principles and practices. By having this knowledge, he will be able to teach wisely regarding this corporate device that has aided the individual farmer in maintaining his place in our social and economic structure.



A cooperative feed organization within the Iowa Falls, Iowa, F.F.A. chapter is responsible for the mixing of feed for chapter members and other farmers in the community. The chapter members report considerable savings from this cooperative project and plan to continue it in future years. In the above photograph members of the chapter take feed from the local elevator



Members of the Santa Maria, California, F.F.A. chapter have their own feed warehouse and mixing equipment in their school agriculture building. This activity permits the boys to buy feed in the field at harvesttime at low cost, teaches them how to operate cooperatively and gives them valuable instruction in selecting livestock and poultry rations

Farmer cooperation

(Continued from page 83)

principle could be taught to a group that is planning on purchasing a commodity which they have decided could be secured more economically by pooling their orders and thus obtain quantity prices. Each boy would pay the market price to the cooperative for the number of units he purchased. After the total cost of the commodity had been determined, each boy would receive a patronage refund based on the number of units of the commodity he had purchased. In other words, the member would benefit, according to the use he made of the organization.

A third principle is the limited rate of interest for capital. This recognizes the right of capital to a fair return for its use. Cooperatives need capital as well as any other business. The boys will find in a study of the cooperative laws that there is a limit on the amount of interest that can be paid for capital used in a cooperative. This is one of the main differences between cooperatives and proprietary business.

There are several other practices that are followed by cooperatives that could be taught thru boy participation. These would include open membership, expansion of services when desirable, political and religious neutrality. For the purchasing cooperatives the practice of selling at the prevailing price for cash is often followed. From this consideration it is only a step to the problems of obtaining farm credit, and we are all aware of the need for a farmer to understand this phase of his farming business.

The section of the Future Farmer creed that says "I believe in leadership from ourselves and respect from others. I believe in my own ability to work efficiently and think clearly, with such knowledge and skill as I can secure, and in the ability of organized farmers to serve our own and the public interest in marketing the product of our toil. I believe we can safeguard those rights against practices and policies that are unfair" would be sound philosophy for all of our agricultural population to consider. By following these thoughts the majority of our farms will remain family owned and operated which in my opinion is the most efficient and socially desirable method for the organization of farm production in the United States.—W. I. Myers, Dean, College of Agriculture, Cornell University.

California Future Farmer cooperatives

George P. Couper, California Polytechnic School, San Luis Obispo

G. P. Couper

THE interest and participation in cooperatives on the part of California members of the Future Farmers of America is, no doubt, a natural result of two factors: Close contact with a considerable number of successful farmer cooperatives, and a different concept of the function of a Future Farmer chapter than exists in many states.

The first factor is an important one. California is the home of about 40 separate cooperatives, each handling a different product and many of them state-wide in character. These organizations handle the marketing of a vast number of products—citrus, avocados, rice, almonds, walnuts, dairy products, poultry products, prunes, apricots, other deciduous fruits, wool, and so on.

Cooperatives Provide Services

Not only do these cooperatives handle a considerable proportion of the marketing of California farm products—which have topped the nation since 1944 in total value—but they also provide a great deal of service. The poultry cooperative sells the farmers eggs and meat birds, and provides for him at lowered cost feed and other supplies. The citrus cooperative owns vast mills and provides its own boxes. Then, there are also separate consumers cooperatives, with a state-wide parent organization—members can buy almost anything needed for the household or farm.

The second factor is equally important. In California, the Future Farmer chapter is an integral part of vocational agriculture. No attempt is made to separate strictly functions of "vocational agriculture" from F.F.A functions. The Future Farmer chapter is looked upon as that *part* of vocational agriculture which contributes to training in rural leadership, citizenship, cooperation, better rural living.

Where conditions are right and teacher leadership is sound, F.F.A. chapters are encouraged to develop one or more cooperative enterprises in their own name. They set up a bank account under the sanction of the local school trustees, but the funds are their own and are continuing, year after year. A number of California chapters have developed assets worth $10,000 or more—these are their own, and not public funds.

This seems to be quite a natural development in California, but when mentioned to visitors from other states who are perhaps engaged in state administration of vocational agriculture, it frequently astonishes them. This is partly due to the fact that many California high schools are consolidated units with large enrollments and several teachers of vocational agriculture; nevertheless, some of the best and most extensive cooperatives are in schools with no more than 30 students and 1 teacher.

The boys must be given a considerable share in the operation of the chapter co-op if it is to serve as a training device, and in most cases this is true. Committees meet to discuss chapter loans, amounts of grain to buy to be ground and mixed, rates to be charged for use of co-op farm machinery. In one school where the chapter owns several thousand dollars' worth of farm machinery, two boys actually handled most of the transactions, dealing with farmers on custom work, assigning F.F.A. operators, servicing the equipment, and even collecting and banking the fees charged.

When passing upon important financial matters, the F.F.A. members are found to be more conservative than the teachers—because they are handling group funds. Where is there better training for self-proprietorship, for holding county or state legislative office? Boys naturally go rapidly into adult cooperatives, with such a background.

Interest in cooperation is systematically cultivated by the cooperatives themselves. They have prepared teaching aids, and each year conduct a "quiz" contest based upon a thoro study of the fundamentals of cooperative marketing. Attractive prizes are provided by the cooperatives for chapter and individual winners. It is one type of conpetition which takes in virtually all students in the areas served; last year 92 percent of the eligible boys participated.

Conduct of some type of chapter cooperative involving finances, is one of the 17 requirements for a "Master Chapter" certificate. While a chapter need meet only 15 of the 17 requirements to qualify, of the 61 chapters approved for the "Master Chapter" certificate this year, all but four had some kind of cooperative enterprise in operation.

81 Chapters With Cooperatives

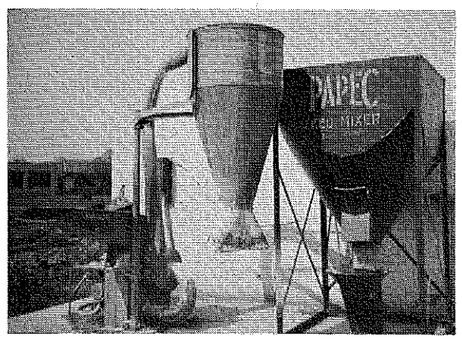
A survey conducted early in 1946 showed 81 chapters with enrollment of more than 4,000 boys, had some cooperative activity. There were 451 cooperative enterprises, many chapters have several, each with separate finances and different operating committees.

The survey showed that 58 of the chapters buy whole or ground grain for resale, 40 buy concentrates, 18 hay, 22 seed, 15 fertilizer, 8 spray, 17 lumber, 14 feeder pigs, 9 feeder lambs, 28 breeding hogs, 11 breeding sheep, 22 dairy heifers and calves, 35 veterinary supplies, 38 baby chicks, 13 tractors, 11 tillage equipment, 15 grain mills, 31 poultry brooding equipment, 4 orchard equipment, and 4 vineyard equipment.

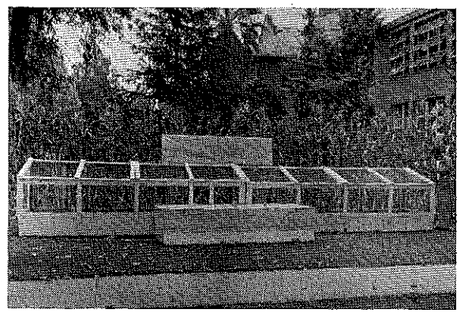
The basis of the success of such a program is:

1. A clear concept of, and belief in, farmer cooperatives, by teachers and the state administration
2. Intergration of the study of cooperatives in the curricula of vocational agriculture
3. Wholehearted assistance of adult cooperatives
4. Development of Future Farmers chap-

(Continued on page 88)



At least 30 California F.F.A. chapters own cooperative feed-grinding and mixing machinery. The Modesto, California, chapter does an annual business of more than $27,000. Here is a new installation for the Chowchilla, California, chapter



Cooperative poultry brooder unit, built and operated at Madera, California, by Future Farmers. A survey conducted early in 1946 showed 81 chapters had some cooperative activity, of which 31 chapters possessed poultry brooding equipment

F.F.A. chapter at Limestone, Maine, grows potatoes cooperatively with local farmers

W. H. Elliott, Teacher Education, University of Maine, Orono, Maine

W. H. Elliott

PRESCOTT E. THORNTON, instructor of agriculture at Limestone High School, established that department 21 years ago. At that time the Future Farmers of America had not been organized. Today Limestone Chapter is recognized as one of the most outstanding chapters in the Maine Association of Future Farmers of America, and received the Silver Emblem Award in the 1945–46 national chapter contest.

A total of 259 boys have enrolled in agriculture at Limestone High School, and since 1931 they have become members of an active F.F.A. chapter. The program of work has always been well balanced, with due emphasis placed on each activity included in the national program of work.

On a recent visit to Limestone, I had the opportunity to review with Mr. Thornton the written programs of work and chapter reports. The cooperative activities sponsored by the chapter over a period of 18 years include several items. However, there is one item that appears consistently for 16 years as a part of the chapter records, and that is "A tuber-unit seed plot owned and managed by the chapter in cooperation with (name of local farmer)."

Project Started in 1930

Limestone chapter first started with a cooperative potato project in 1930. That year the school had an undeveloped athletic field, which was good farm land, available for use by the chapter. The project planted on this land consisted of one acre of certified Green Mountains. The seed was treated by the members with seed-treating equipment owned by the chapter for treating seed in the community. The chapter did not own any other equipment so all the work of planting, cultivating, spraying, and harvesting had to be done by farmers and the members, with their teams and equipment.

When the crop was harvested, the yield was found to be 121 barrels, and the selling price was 35 cents per barrel on the day they were harvested. The chapter sold 40 barrels from the field at 35 cents per barrel and placed 81 barrels in storage, which sold later for $1 per barrel, less shrinkage. The chapter received $25 for this project, which was made possible as a result of the cooperation of farmers and members who donated their time and equipment. The chapter paid for the fertilizer, seed, and spray materials.

The following year the school developed the athletic field, so the land was not available for a chapter project. Furthermore, the chapter was not satisfied with the results of the previous year, and did not care to start another project elsewhere, under the same conditions as prevailed in 1930. However, it was during this year that the chapter developed the cooperative plan with the local farmers, that has gradually increased from one-quarter acre to 16 acres. During this period 12 local farmers have cooperated with the chapter, and one farmer has cooperated continuously for seven years.

Cooperative Plan

Good potato seed is always in demand; and when this plan was initiated, high-quality seed was difficult to obtain from reliable sources. Therefore, the chapter made a working arrangement for growing tuber-unit seed with each cooperating farmer, whereby, the chapter purchases the seed, fertilizer, and spray materials. In order to obtain the seed desired on one occasion they imported it from Baie de Chaleur, and another time from New Brunswick. The chapter pays the farmer for the labor, use of equipment and rent on the land. All roguing (see pictures) is done by chapter members, and the chapter pays for the state certification.

When the potatoes are harvested, the farmer places them in storage. At this point he exchanges barrel for barrel with the chapter potatoes from his commercial crop, which he keeps in storage and markets whenever the chapter decides to sell them. Under this arrangement the chapter does not stand any loss from shrinkage, because the farmer delivers to market as many barrels of U.S. No. 1 potatoes as were harvested field run from the tuber-unit seed plot.

The seed produced from these tuber-unit seed plots is all used locally. Whenever the farmer has more than he needs to plant his own crop, the extra seed is sold to neighbors. Frequently the chapter members buy seed from the cooperating farmers for their own supervised farming programs.

All chapter members who work on the project planting tuber units, roguing, or harvesting are paid the regular wages for their labor.

These cooperative tuber-unit seed plots owned and managed by the F.F.A. chapter on farms of cooperating farmers provide an excellent opportunity to introduce new practices into the community. For the last three years the chapter has early harvested these plots. The Florida seed test has been used for two years. Last year (1946 crop) they received a clean reading for the eight acres entered in the Florida test. DDT was used in the spray materials last year and again this year. Since the chapter started testing, they have used their own seed, instead of buying from a new source each year.

Rouging crew at work. Note burlap sacks for carrying diseased plants, tubers, and seed pieces from seed plot

When the chapter plans for some special activity in their annual program of work, they budget the proceeds from the cooperative tuber-unit plots to finance some of those activities. However, due to economic factors, in addition to size and yield, the net profit received from these projects has ranged from $16 to $2,486.75.

Three extensive tours have been largely financed from these funds for all chapter members except freshmen. The chapter does not include freshmen because they haven't saved funds from their own supervised farming programs, neither have they helped the chapter to earn the funds for these special tours, taken at the end of their first year in high school. One tour included a nine-day trip to the World's Fair. Another one was an 11-day trip to New York City, New Jersey, Pennsylvania, Steuben County, New York ("Little Maine"), Niagara Falls, Montreal, and Quebec. The longest trip was a 13-day tour to New York City, Washington, D. C., and the Shenandoah Valley. In addition to these long tours, two shorter ones were taken. The first one was to Boston, the White Mountains, and Quebec, while the second one included Bar Harbor, Maine, and Quebec via Jackman, Maine.

Funds from these projects are also provided to make loans to chapter members in order to assist them with their supervised farming programs. Other purposes for which they have been used are as follows: contributed to the construction of a farm shop 40'x60', the purchase of a paint-spraying outfit, the purchase of an air-compression outfit, the purchase of a secondhand pickup truck, and the purchase of hand tools for the shop. Last year the chapter constructed a camp 20'x24', purchased an 18' Old Town boat and a 5 hp Johnson outboard motor.

They now have as a goal for this year $2,000 to be used for a scholarship fund at the University of Maine. The proceeds from this fund would be used for an anual F.F.A. scholarship.

The cooperative tuber-unit seed plots conducted by Limestone Chapter of the Future Farmers of America have been advantageous for the chapter and beneficial to the community. The farmers cooperating with the chapter have secured better seed as a result of this program for their commercial crop, and the introduction of new farming practices into the community have helped to make these cooperative projects a regular activity in the annual program of work.

Kentucky Future Farmer Cooperative, Incorporated

Lee Harris, Graduate Assistant, University of Kentucky, Lexington

KENTUCKY Future Farmers transacted $192,712 worth of business thru their Future Farmer Cooperative, Incorporated, during the fiscal year ending April 30, 1947, according to a report released by W. R. Tabb, department of agricultural education, University of Kentucky, who is manager of the cooperative.

Largest purchases made thru the cooperative were 1,589 head of beef cattle at a price of $106,473, and 534 head of dairy cattle at a cost of $43,474. Other purchases made were:

Western ewes, 1,550, $19,527; hybrid seed corn, 1,669 bushels, $10,018; fire extinguishers, $7,896; F.F.A. chapter supplies, $1,379; D.D.T. cattle spray, $3,243; phenothiazine, $705.

According to the audited report, the cooperative has a net worth of $11,020. Funds needed to purchase livestock and supplies is borrowed from the Farm Credit Administration on the basis of this collateral.

The cooperative was formed to meet the need of Kentucky F.F.A. members, and was the first state F.F.A. cooperative organized in the United States.

For many years Kentucky Future Farmers had been buying crossbred ewes, high-grade beef breeding heifers and feeder steers from the western range country. Experiences from this buying had made it apparent for some time that a business organization was needed to help Kentucky Future Farmers procure this livestock.

Also of equal improtance was the fact that such an organization would teach Future Farmers the value of cooperation. With these factors in mind the Kentucky Future Farmer Cooperative, Incorporated, was formed. Its main objectives are:

1. To provide desirable educational experience for Future Farmers in cooperative activities.

2. To provide desirable means of aiding Future Farmers in getting things they need for their farming programs, and perhaps to aid them in marketing some of the products produced on their farms.

At the annual meeting of the cooperative held early in August during the state F.F.A. convention at Louisville, Marion Hibberd, instructor of vocational agriculture at Hawesville, was elected president of the cooperative. Other officers named were:

Harlan Veal, teacher, Wilmore, vice-president; Fred Bunger, teacher, Dry Ridge, secretary; W. R. Tabb, re-elected business manager; Watson Armstrong, state director of vocational education, Frankfort, and Stanley Wall, agricultural education staff, University of Kentucky, purchasing agents.

Membership in the association is limited to Future Farmer chapters that own a $10 share of common stock. At present 182 Kentucky F.F.A. chapters are members of the cooperative. Each member chapter is represented by one Future Farmer and his F.F.A. adviser.

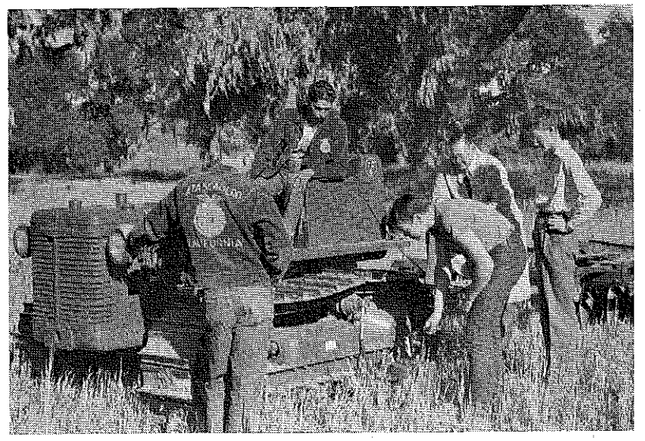
Kentucky's agricultural leaders are encouraging cooperative efforts in the belief that great advances will be made in the next 25 years thru these endeavors.

California F.F.A. cooperatives

(Continued from page 86)

ters as strong, continuing organizations with a real part and function in rural youth training—not merely the conduct of "extracurricular" activities.

Teaching cooperative marketing in vocational agriculture will be the topic of one section of the American Vocational Association national convention in Los Angeles in December. Visitors will get firsthand information on how this is conducted in California.



Part of the machinery in a $10,000 farm machinery cooperative, owned and operated by the Atascadero California, F.F.A. chapter

Book reviews

A. P. Davidson

Two Blades of Grass—A History of Scientific Developments in the U. S. Department of Agriculture—by T. Swann Harding, pp. 352, illustrated, published by University of Oklahoma Press, Norman, Oklahoma, 1947, list price $3.50. An absorbing account of the research performed by the Department of Agriculture scientists. The scientist's search for better grains, fruits, and vegetables, for better methods of soil and forest conservation, for pervention of disease in plants and animals, for control and destruction of harmful insects, for preservation of game and wild life, and for additional economic uses of farm products and by-products are interestingly set forth in this stimulating book. Teachers of vocational agriculture, F.F.A. members and others will find this publication interesting and enlightening as it pertains to the contribution made to society by the research workers of the U. S. Department of Agriculture.

DDT—and the Insect Problem—by J. C. Leary, Willian I. Fishbein, and Lawrence C. Salter, pp. 176, illustrated, published by McGraw-Hill Book Co., Inc., 1946, list price $2.50. A complete and up-to-date story about the development, application and effectiveness of DDT. The book is written in nontechnical language and covers both large-scale uses and small-scale uses of DDT. Clear-cut instructions are given for handling DDT properly and safely. A.P.D.

They Did It in Indiana—the story of the Indiana Farm Bureau Cooperatives, by Paul Turner, pp. 159, illustrated, published by The Dryden Press, 1947, list price $2.25. This book is a study of how Indiana farmers have applied the Rochdale pattern of cooperation to their particular problems. It is a case study in how cooperative methods have been adapted to a certain set of conditions and circumstances. The organization which it describes—the Indiana Farm Bureau Cooperative—is one of the larger units in the American cooperative movement. However, the Farm Bureau is only one of many cooperatives which make up the movement in America, and should not be taken as typical of the entire movement. There are several definite features of cooperatives and the way they work which causes the author to believe that cooperative organization of business is superior to organization of business for profit. These features are briefly outlined in the text so that the reader can consider them in the light of the story told. Teachers of vocational agriculture and others interested in agricultural education will find this case study report interesting and helpful in gaining an understanding of the cooperative movement. A.P.D.

Our leadership

A. Larriviere

MR. A. LARRIVIERE, who is head of the department of agriculture education at Southern Louisiana Institute, Lafayette, Louisiana, has had the experience of being a student and a teacher of vocational agriculture. He is a graduate of Louisiana State University and received the Masters degree from this university.

Mr. Larriviere was designated Master Teacher of Louisiana two successive years while he was instructor of the department at Sunset. From 1932 to 1944 he served as assistant state supervisor of vocational agriculture and returned to that position for one year after working on a special mission for the government in the South Pacific during the war. He assumed his present position in 1945.

Mr. Larriviere is the regional representative for the Southern states on the Editing-Managing Board of *The Agricultural Education Magazine.*

Ralph Howard

RALPH HOWARD, state supervisor in Ohio since 1936, is a native of Ohio and a graduate of the Ohio State University. He farmed for one year and taught vocational agriculture at Wascon, Ohio, for eight years before becoming assistant state supervisor in 1928.

Mr. Howard received the masters degree in school administration from the state university in 1931. He served on the national F.F.A. advisory council for two years, is chairman of the A.V.A. safety committee, president of the Ohio Livestock Loss Prevention Association, and chairman of the Farm and Home Section of the Ohio State Safety Council.

The F.F.A. chapter at Powell, Wyoming, owns farm equipment valued in excess of $3,000. Major items added to the cooperative machinery pool during the past year include an Overland scraper, posthole digger, fresno, two-way plow, cement mixer, mowing machine, and a bean cutter.

During the past season, the Orosi F. F. A. chapter in California conducted several cooperative production projects. One of these projects was a tomato enterprise of 13,000 plants. Profits from the enterprises, which are being projected on school-owned land, are used to improve the facilities of the agricultural department.

Local cooperatives aid small-farm operators

S. B. Simmons, Teacher Education, A. & T. College, Greensboro, North Carolina

MUCH has been said about the future problems of the small farmer during this age of bigger and better farms. Negro teachers of vocational agriculture in the 95 departments in North Carolina have found one answer to the many problems of the small farmers is cooperative enterprises. The all-day program of the New Farmers of Amcrica, a national organization of Negro farm boys studying vocational agriculture in the public high schools, provides for cooperative activities. Adults studying agriculture under these teachers have made cooperation a major activity in their evening classes. Furthermore, the 2,000 veterans of World War II in this state taking training in departments of vocational agriculture arc also participating in the local farm cooperative program.

The first successful venture in the cooperative farm program was begun in 1938 by Principal S. P. Dean and the teacher of agriculture, G. K. McKethan, in the Tyrrell County Training School at Columbia, North Carolina, which is located on the Atlantic Seaboard. There are 126 Negro farmers in the county with a total Negro population of 1,700. Much of the area is swampland. Farms are small and the farm homes are, for the most part, rather dilapidated. The chief source of income is derived from farming, fishing, and work in the log mills and sawmills. Principal Dean and the agricultural teacher, McKethan, developed their plan around the slogan "Better Farming and Living Thru Cooperation."

Outgrowth of Adult Class

Adult evening classes were organized during the year 1938 by the agricultural teacher giving instruction dealing with better farm methods and the school principal giving instruction on setting up a credit union under the North Carolina laws. The farmers discussed farm cooperatives and were shown pictures of how the people of Nova Scotia achieved success thru their credit union. They were taught the purposes for which loans could be made, and how, working together, they would lighten the load of each individual and at the same time increase their income and raise the standard of living.

The first credit union among Negro farmers of the state thus was formed under the supervision of the State Department of Agriculture. During the first year members of the group had loans totaling $1,051. Loans were made for the purchase of fertilizer, seeds, farm tools, poultry and livestock. The "Lights of Tyrrell" Credit Union grew rapidly and at the end of the first five-year period the assets had risen to more than $50,000. Twelve members of the credit union have purchased a 680-acre farm on a cooperative basis and subsequently purchased a tractor, power machinery, and a sawmill. Around the little sawmill may be seen growing piles of neatly stacked lumber which will be used in improving the dilapidated Negro homes in the county.

The credit union idea, "Lights of Tyrrell," has spread to other parts of the state. Forty-five of the 95 Negro teachers have aided in setting up credit unions in their communities. Total assets for the year 1946 were $491,867.83, and total loans $351,092.75. The credit unions have helped many farmers pay the mortgages on their property and in the purchase of farm machinery. It has also been instrumental in providing medical and hospital care for many unfortunate rural people. These cooperatives have been a means in guiding farmers in sound productive investments and the thrift habits thus inculcated have proved a great benefit to the N.F.A. members, adult farmers, and young veterans who are farming. Most of the teachers in the schools are members of the credit unions. The experience gained by this membership makes it easy for these teachers to impart to their students the fundamentals of farm cooperatives and the credit union.

Emphasis on Cooperatives in N.F.A.

The New Farmers of America have always placed emphasis on teaching its members to cooperate thru local chapters, state associations, and the national organization. The most outstanding example of this cooperative movement with N.F.A. in North Carolina is the annual program carried out for the benefit of the Negro Orphanage at Oxford. Since 1941 each chapter has conducted a special financial drive for this orphanage, which culminates the Sunday before Christmas when the members gather at the orphanage and present their gift. This year the boys raised $10,616.21. To date, the orphanage has $30,000 in United States Bonds that were purchased by the N.F.A. This fund is to be used in constructing on their campus a George Washington Carver memorial vocational building in the near future. They have also established at the orphanage a special fund of more than $5,000 which is to be used to assist worthy students.

Several students are now in college because this fund was made available by the N.F.A. This one act is regarded by many as the most outstanding achievement of the North Carolina Association of New Farmers of America.

Instruction and participation in farm cooperatives and credit unions has become an integral part of the program in vocational agriculture for both the adult farmers and the in-school students in North Carolina.

Cooperative group projects

H. M. Olson, Assistant State Supervisor, Olympia, Washington

MANY times during the course of a year we wonder about the value of group projects of a productive nature for a Future Farmer chapter. Teachers argue the pros and cons of values received from such projects, relate their experiences and usually are as undecided at the conclusion of the discussion as they were at the beginning. Supervisors are often asked to state their opinion on this problem and too often their advice is the determining factor in deciding whether or not a chapter should undertake such a venture. Because many of the men out in the field have conducted cooperative group projects, I have asked a number of them to comment upon each of five questions. Enough sample answers are included in this report to indicate the general thinking of the agricultural instructors who responded.

These observations and comments by successful teachers may be helpful to established teachers in evaluating their group projects. I feel beginning teachers will profit by considering these comments from men who have had the responsibility of supervising a group project. Most certainly, this brief report is not all-inclusive and in no sense does it answer all problems encountered in conducting a cooperative farming project.

1. Question: Do you think a productive group project requires too much supervision?

Answers: a. "Group projects require a lot of instructor supervision. They no doubt take more supervision, but on the other hand one is probably getting a greater student participation in jobs being done."
b. "Not if properly organized."
c. "We will have no more group projects depending upon student labor in the summertime; it usually means that the instructors do all the work during the summer months."
d. "A group project does take more than its share of the instructor's time."
e. "In the past, mine have required too much supervision and actual work on my part."
f. "No more than any other worthwhile activity."

Conclusion: Too much instructor time time is required for supervision and actually doing much of the work. This criticism is not so pronounced in a two-man department, where it is possible for one instructor to assume this responsibility as his major summer activity.

2. Question: What should be the main objective or objectives of a group project?

Answers: a. "To provide project opportunities for boys not having project facilities at home."
b. "To make money."
c. "Project for town boys."
d. "To make money, since that is the main objective of all farming."
e. "To teach management skills, to teach boys to plan and work together."
f. "The main objective must be educational."
g. "To improve the quality of project work."

Conclusion: The majority of teachers think the main objective must be educational in nature. To be educational they believe a group project should include supervised work experience on a cooperative basis so as to demonstrate and teach improved farming practices, techniques, and efficient work habits. A group project that is successful in all respects offers so many worthwhile objectives to the students and chapter that it becomes difficult for the teacher to decide which one is the most important. Most any objective would have educational aspects as long as there is active student participation for all members of the group.

3. Question: Have you found a productive group project to be a good teaching device?

Answers: a. "Yes, because a group project can set up a lifelike situation."
b. "Group projects have been the most successful and outstanding of the teaching devices practiced in my experience."
c. "A good teaching device because the boys are dealing with a problem concerning the entire group."
d. "Any project, group or otherwise, is a good teaching device."
e. "Yes, a splendid opportunity."
f. "They can lose their teaching value if students are required to do too much manual labor. If properly organized and work experiences are shared by all members, a group project is a fine teaching device."

Conclusion: Practically all answers were positive in nature with the qualification, in order to be a good teaching device there must be an active and intelligent participation on the part of all chapter members. Also, that there must be some variety in the work so a student could move to another job as soon as he had mastered a particular skill. Too much manual labor is the determining factor whether a project is a teaching device or not.

4. Question: Should the school district help finance Future Farmer group projects or should the project be self-supporting?

Answers: a. "The project will be more successful if the boys have the financing."
b. "I do not believe that such a project can successfully be self-supporting."
c. "A group project should be self-supporting whether by membership fees to the boys or by a loan from some lending agency."
d. "An F.F.A. financed and supported project is the best."
e. "School district should help finance group projects."
f. "I am in favor of complete F.F.A. ownership."

Conclusion: On a percentage basis, 60 percent of the teachers are in favor of complete F.F.A. control of financing. This way the department can proceed without interference from school or community. The feeling of ownership and the securing of a financial return on the part of members offsets the security offered by assistance from others. Forty percent of the teachers think the school district should provide the land and equipment in addition to operating expense so the teacher can spend his time teaching rather than trying to make money.

5. Question: Have you found it difficult to get F.F.A. members to participate in group projects?

Answers: a. "In a district where mileage is a factor it is difficult to get good students to participate."
b. "No trouble if project has an interest."
c. "Not difficult at first, but certainly a problem to have them carry thru to completion."
d. "Cooperative F.F.A. projects cannot compete with the high wages being paid in industry at the present time."
e. "Yes, to overcome this trouble we have to pay good wages for out-of-school work."

Conclusion: This seems to be the big obstacle. At the present time student participation on an out-of-school time basis must be bought at a good wage per hour. Nearly all teachers agree that projects of this nature will create a lot of enthusiasm in the classroom and in the field if handled properly, but student interest and teaching value diminish rapidly if the students are required to do a lot of manual labor.

(Continued on page 91)

Jordan, South Carolina, Cooperative Area

Kermit M. Watson, Teacher, Greer, South Carolina

JORDAN High School is located nine miles north of Greer (population 8,000), Greenville County, South Carolina. It is a consolidated high school, with Greer as the nearest town. The Jordan area is thought of as that area covering the territory from which pupils come to attend the high school. The area embraces eight school districts lying between the South and the Middle Tyger rivers and extends from the Spartanburg County line on the south to the mountains on the north. In this area of about 60 square miles approximately 500 families live, of which a majority of these are small landowners.

Community Canning Center

The community is progressive and has a higher-than-average per capita wealth. For the past 10 years the number of high-school graduates going to college has averaged 30 percent, while the average for the state as a whole has only been approximately 14 percent. The majority of the college students come back to Jordan Community to make their homes.

The community service program was started in August, 1938, with the opening of a community canning center. The cannery was later enlarged and a dehydrator was installed for the purpose of dehydrating fruits and vegetables. The cooperative now consists of the cannery, a seed treater, a seed grader, a shop equipped for mechanic, forge, and woodwork, a farmers' cooperative exchange, a sweet potato curing house, a freezer locker and storage plant, and a credit union. Practically all the 500 families use some of the projects in the cooperative. Some families use all seven of the community services during the year.

All the Jordan cooperative projects are located adjoining the school grounds except the store, which is about one mile away. It is located on State Highway 14 at the intersection of the Jordan-Highland road. The cooperative owns the grounds for all the service units except the store grounds.

Locker Plant

The locker plant at Jordan is one of the newest and most used projects in the co-op. The building is constructed of brick and is 56′x50′. It consists of a curing room, a chill room, a quick freeze, and an individual locker room with 348 boxes. The meat cured during the year averages 28,000 pounds. The meat processed (cut for boxes, home use, or ground into sausage) averages 23,500 pounds. Fruits and vegetables in the amount of 19,140 quarts are frozen during the year, and 1,500 pounds of lard are stored.

The cannery is a frame building 56′x 60′. It is conveniently equipped with laborsaving devices and operates five large retorts. The dehydrator is large enough to dry 28 to 32 bushels of fruit or vegetables at one time. Last season the dehydrator was busy each canning day. The cannery processed 56,750 quarts of fruits and vegetables and 24,100 quarts of meats last season. Since Jordan is in a peach-growing area, 23,000 quarts of peaches were processed last year.

The Jordan Cooperative Exchange is also a frame building 24′x56′. A room 24′x24′ in the back of the store is used for storing hardware, poultry and dairy feed. In addition to selling feed and hardware, the store carries general merchandise including dry goods, groceries, meats, vegetables, fertilizer, gas, and oil. The store also aids in marketing surplus poultry products. Last year's business was $64,736, and this year's business will probably exceed this amount. At the end of the year, the profits go back to members in the form of dividends based on purchases and sales thru the exchange.

Potato Storage House

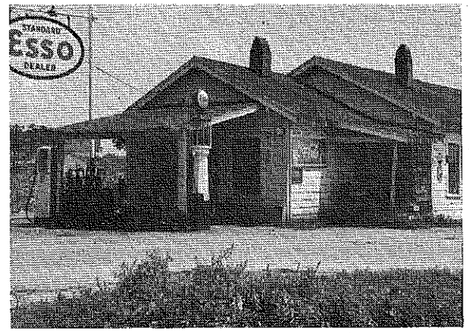
The potato house is a 24′x60′ building and is heated with stoves. However, plans are under way to heat the building electrically. Each year the house is packed to capacity. Last year the potato house cured 4,036 bushels of potatoes.

The seed treater and grader is the Clipper type and is a very busy machine in the fall and spring months. Last grain season 4,658 bushels of small grain were treated and graded. Several bushels of clover seed were cleaned and graded this summer. Since a small acreage of cotton is planted at Jordan, only 625 bushels of cotton seed were treated and graded and most of this seed came from neighboring communities.

Credit Union

The Jordan Area Federal Credit Union acts as a local bank for savings and loans. Members may apply to the directors of the credit union and obtain loans up to $200 for as long as a year's time. Interest is collected when the loan is repaid and only for the period during which the loan is outstanding. Deposits and withdrawals may be made at any time. The Credit Union encourages thrift in its membership, particularly among those of school age. The Credit Union is operated under the direct control of the federal government.

The locker plant at Jordan, South Carolina, is one of the most popular of the units in the cooperative area. It includes a curing room, a chill room, quick freeze, and 348 lockers



Jordan Cooperative Exchange. Other units include cannery, a shop, seed treater and grader a sweet potato curing house, and a credit union

Cooperative group projects

(Continued from page 90)

Regardless of all the problems of a cooperative group project, the majority of teachers seem willing to continue with theirs, in hopes that they can discover ways and means of doing a better job of teaching vocational agriculture. Such comments as: "I know I have made some mistakes, but I am willing to try it again." "With proper choice and planning I am sure group projects can be very valuable." "Group projects are worthwhile and can be recommended to most any vocational agricultural department." All indicate that a group project has its place in a well-rounded program of vocational agriculture.

The Arbuckle, California F.F.A. operates a 10-acre almond orchard.

Professional

S. S. SUTHERLAND B. C. LAWSON

The role of vocational education in agriculture

B. C. Lawson, Teacher Education, Purdue University, Lafayette, Indiana

HOW should vocational education in agriculture differ from other forms of agricultural education? What objectives should be given major consideration in instruction in vocational agriculture? What adjustments should be made between objectives of instruction and stages of maturity and occupational progress of the learner? Such questions as these are involved in a discussion of the role of vocational education in agriculture.

B. C. Lawson

The article by Professor Lawson is the second in a series of professional contributions dealing with the *Role of Vocational Education in Farming*. The series was introduced in the September 1947 issue with an article by Paul W. Chapman, Dean of Agriculture at the University of Georgia.

One may be inclined, sometimes, to omit considering questions of policy in order to devote his efforts to other activities which seem to him to be more practical. Yet, in the long run, vocational education in agriculture is likely to be inappropriate and ineffective to the extent that workers in this field fail to perform their services in accordance with a carefully developed educational policy. In reality, determining answers to questions of policy is a very practical activity, because wise answers to these questions can be used as guiding principles for the development of an efficient educational program. It is important, therefore, even from a practical point of view, that careful consideration be given to questions concerning the nature and purpose of vocational education in agriculture.

No claim is made that this brief article will give complete or final answers to questions concerning the role of vocational education in agriculture. In fact, "best answers" may vary to some extent with the conditions under which instruction in vocational agriculture is to be given. Yet it is hoped that this article will serve as a source of suggestions for one who is trying to develop a guiding policy for vocational agricultural education.

Characteristics of Instruction to Be Provided

Vocational education in agriculture like other forms of agricultural education is concerned with achievement in agricultural occupations. However, a program of vocational education in agriculture should provide special educational services which distinguish it from other kinds of agricultural education that may be available in the community.

In comparison with school instruction in general or nonvocational agriculture, instruction in vocational agriculture should place greater emphasis on the use of farming activities as learning experiences. Vocational education in agriculture should provide not only for the study of facts and principles in the classroom, as general agriculture does, but also for experience in using agricultural facts and principles as guides to activity in out-of-school occupational situations. This kind of practical learning experience is usually designated as "supervised farm practice," or "supervised farming."

Wherever farming is a year-round occupation, programs of instruction in vocational agriculture cannot be entirely adequate unless the programs provide for farm practice activities thruout the calendar year. It is equally important that these practical activities have enough supervision by the teacher, both during the school year and during the summer months, to make them effective educational experiences for the learner. If a program of vocational education in agriculture is conducted in such a way that some students do not engage in real out-of-school farm practice under the supervision of the teacher, to that extent vocational education in agriculture becomes merely instruction in general agriculture.

In comparison with non-school forms of agricultural education, vocational education in agriculture should offer instruction that is, in general, relatively more systematic, more instensive, and more individualized; and that, in some cases at least, provides for better integration of theory and practice in the learning experiences of the persons being instructed. Instruction with these characteristics is possible if appropriate instructional conditions are made available to the teacher, and if too many extra-class duties or too many community responsibilities are not assigned to him. To the extent that instruction in vocational agriculture does not have such distinguishing characteristics, this instruction can do little more than merely offer educational services like those offered by non-school programs of agricultural education.

Nature of Objectives to Be Achieved

It has long been said that objectives are necessary in order for educational programs to be carried out intelligently. There are, however, differences in the nature of objectives which may be selected for vocational education in agriculture. Objectives may be stated in terms of the learner or in terms of the environment of the learner.

Much that is still said and done relative to vocational agriculture seems to indicate that, at times, the objectives which are being emphasized are those concerned with changes in the environment; for example, changes in farms instead of changes in people, or changes in pigs instead of changes in boys. Yet a change in the farm environment, such as the establishment of a given number of acres of a legume on a farm, is hardly a true educational objective. The real objective, in this case, is to help the learner develop those abilities which will enable him to decide wisely the number of acres of a legume crop that should be established under given farm conditions and to put that decision into operation.

From one point of view, it may be said that the objectives of farmers are to improve farms, but the objectives of teachers are to improve people. Thus the objectives of instruction in vocational agriculture are to help farmers improve their ability to make desirable changes in their farm environment; or to make desirable adaptations to that environment—all to the end of greater human welfare.

Of course, concrete aspects of farms, such as soils, crops, and livestock, are important factors in vocational agricultural education. This is true because they are elements of the environment with which a teacher should help farm people learn to deal wisely and effectively. Under some conditions, changes in these concrete aspects of the farm may be indirect indications of improvement in human ability. However, the real objectives of vocational education in agriculture, like those of all other forms of education, are changes in people—improvement of the abilities of human beings.

Holding to the development of human abilities as the true objectives of vocational education in agriculture tends to keep the teacher-student relationship from degenerating into a foreman-labor-

er relationship. The latter type of relationship is undesirable because the activities engaged in are primarily governed by the purpose of producing some concrete environmental change or product, while the abilities developed by the learner tend to become not only incidental but also accidental. Activities under these conditions tend to bring about the development of persons who are dependent upon continous and immediate direction; whereas vocational education in agriculture should be concerned with the development of self-directive persons. Instruction in vocational agriculture can hardly be fully appropriate and effective unless the objectives selected, or formulated, are directly concerned with the improvement of people instead of the improvement of farms.

Primary and Secondary General Objectives

The primary general objective of vocational education in agriculture may be stated briefly as "proficiency in agricultural occupations." The particular kind of agricultural occupation, for which instruction in vocational agriculture should help to prepare one, will depend not only on agri-socio-economic conditions and trends, but also on the accepted concept of what is a "good" agricultural life. A learner might make some preparation to engage in any one of several occupations: (1) commercial farming, (2) self-sufficient farming, (3) part-time farming, (4) a nonfarming agricultural occupation, or perhaps even (5) a nonagricultural occupation which involves dealing with farm people. This article is primarily concerned with the role of vocational agricultural education in farming occupations.

The constituent elements of the general objective "proficiency in a farming occupation" should, of course, be subject to continuous modification in the light of current farm-life conditions, and the trends which are developing with respect to these conditions. A consideration of these conditions should include an analysis of such matters as: the consequences of continued cultivation of the land, developments in agricultural science, mechanical inventions, and relationships between production and market outlets. Factors such as these cannot be reviewed in detail in this article, but obviously, consideration should be given to the conditions of farm life today and tomorrow in the development of programs of vocational education in agriculture.

The secondary general objectives of vocational education in agriculture include all the commonly accepted objectives of high-school education that are related to the various nonvocational areas of human endeavor; for example, the areas of civic affairs and recreation. No absolute cleavage exists, or should exist, between vocational and nonvocational education. In general, however, it may be said that types of instruction other than vocational education are offered by the school primarily to make contributions to objectives related to the nonvocational areas of human endeavor. Consequently, any effort to make instruction in vocational agriculture contribute to the nonvocational objectives should be secondary to effort devoted to securing effective contributions to the objective "vocational proficiency."

The exact nature and extent of the contributions that instruction in vocational agriculture should make to the nonvocational objectives will not always be the same under all conditions. Any final decision concerning these contributions should be made only after consideration has been given to the achievements already made by the students and to the other types of instruction to be provided for them by the school.

Adjustment of Objectives to Maturity and Occupational Progress

The achievement and maintenance of success in a farming occupation is a long-time task which extends over the major portion of one's lifetime. This being true, the educational needs of an individual will change as he becomes more mature and progresses in his occupation.

The activities in which people engage as they achieve and maintain success in a farming occupation may be classified into four major groups, representing stages of progress: (1) deciding to farm, (2) preparing for initial full-time employment on a farm, (3) becoming established in farming, (4) making adjustments to current farming conditions. In turn, the general objective of instruction in vocational agriculture "proficiency in a farming occupation" may be analyzed into four groups of sub-objectives, closely related to the four major groups of activities involved in making progress in a farming occupation. These groups of sub-objectives may be designated as: (1) the exploration group, (2) the preparation group, (3) the establishment group, and (4) the adjustment group.

The major groups of activities involved in achieving success in farming and the major groups of sub-objectives of the educational objective "proficiency in farming" may be used as bases for establishing important correlations between objectives and stages of maturity and progress in a farming occupation. The following statements describe the major groups of sub-objectives of the general objective of instruction in vocational agriculture, and briefly suggest the relationships of these groups of sub-objectives to stages of maturity and occupational progress.

1. *Exploration:* to help individuals develop the abilities necessary to analyze the nature of a farming occupation and to make an intelligent decision relative to making further preparation for engaging in the occupation. This phase of the objective "vocational proficiency" may well be emphasized in instruction offered in the ninth grade.

2. *Preparation:* to help individuals develop the abilities desirable for initial full-time employment in a farming occupation. This phase of the objective "vocational proficiency" may well be emphasized in the instruction offered in grades 10–12.

3. *Establishment:* to help individuals develop the additional abilities necessary to become fully established in a farming occupation; for example, to become an operator of a dairy farm. This phase of the objective "vocational proficiency" may well be emphasized in part-time or young-farmer instruction offered for out-of-school youth not fully established in a farming occupation.

4. *Adjustments:* to help individuals develop the abilities necessary to meet the changing and unpredicatable conditions of farming occupations to the end that they will be able to raise the level of their success and satisfaction in these occupations. This phase of the objective "vocational proficiency" may well be emphasized in evening-school instruction offered for adults who are already established in a farming occupation.

No suggestion which has been made concerning the particular phase of vocational proficiency that may well be emphasized at a given stage of maturity and occupational progress is supposed to mean that all other phases of vocational proficiency should be entirely ignored at that stage. In fact, any general policy to be followed in regard to these relationships should be flexible in order that appropriate adjustments may be made to individual differences among students.

In harmony with the proposals made relative to adjustments between objectives and stages of maturity and occupational progress, it may be said that there are four groups of persons in a school community with educational needs which can be met by vocational education in agriculture. These groups are: (1) high-school students who are trying to decide whether to engage in a farming occupation; (2) high-school students who expect to engage in a farming occupation; (3) out-of-school youth who have secured some kind of initial employment on a farm but who are not yet fully established in farming; and (4) adults who are already established in farming but who wish to raise the level of their success and satisfaction in the occupation. The phase of vocational proficiency which should be emphasized in the instruction offered will vary with the maturity and occupational progress of the group involved.

Facilitating Relationships in School and Community

Experience indicates that the role of vocational education in agriculture outlined in this article can be fulfilled. But this fulfillment is dependent upon the existence of facilitating relationships in both the school and the community. Perhaps two illustrations will make this point clear. It is evident that a complete program of vocational education in agriculture can hardly be developed without the cooperation of the administrative officers of the school. It is also obvious that help from farm people in the community is necessary in order to provide

(Continued on page 96)

Studies and Investigations

E. B. KNIGHT

Pre-employment records and activities of recent Pennsylvania teachers of vocational agriculture

C. S. Anderson, Teacher Education, The Pennsylvania State College, State College, Pennsylvania

C. S. Anderson

RESEARCH was conducted in 1932-33 to ascertain important pre-employment background information concerning Pennsylvania teachers of vocational agriculture. Selected background factors were then related to length of teaching experience and to other generally accepted measures of progress and success in teaching.

A primary purpose of the study was to discover facts that contribute to the problem of selection, acceptance, and guidance of young men who apply for training to become teachers of vocational agriculture. Then, too, there were implications in the study that pertained specifically to the organized training afforded students while preparing to become teachers.

The results of the investigation may be found in complete form by referring to Pennsylvania State Agricultural Experiment Station Bulletin 333, "Pre-employment Records and Activities of Teachers of Vocational Agriculture," or in abstract form in *The Agricultural Education Magazine*.

Investigation Brought Up to Date

The 1933 study included records of 300 graduates in the curriculum in agricultural education at The Pennsylvania State College. A recent study includes, in addition, the records of 175 persons who have been graduated in the same curriculum since 1933. These two figures represent for the respective periods 72.2 percent and 68.3 percent of all agricultural education graduates from the institution.

Information was obtained in much the same manner as in the first study. The principal means were a questionnaire sent to all graduates and the permanent record files of The Pennsylvania State College.

Results of Two Studies Compared

In this summary comparison, the year 1933 refers to the earlier study and includes data taken from the records of agricultural education graduates prior to and including that date. The year 1943 refers to the more recent study, and includes only data drawn from the records of graduates subsequent to 1933, including those who graduated in 1943.

Elementary School Attendance

Agricultural education graduates' attendance at one-room rural elementary schools decreased 9 percent from 1933 to 1943. At urban elementary schools, it decreased to 10 percent from 1933 to 1943. At rural consolidated elementary schools, it increased 8 percent from 1933 to 1943. The 1943 group of agricultural education graduates attended all types of elementary schools .65 of a year less than did the group studied in 1933.

Secondary School Attendance

Attendance of agricultural education graduates at rural secondary schools increased 8 percent in 1943 over 1933, and decreased 8 percent over the same period in urban secondary schools. Members of both groups attended secondary schools an average of 3.85 years.

Extent to Which Graduates Studied Vocational Agriculture When Attending High School

Twenty-three percent of the 1933 group studied vocational agriculture when attending high school. Forty-eight percent of the 1943 group studied vocational agriculture when attending high school. Those in the 1933 group who studied vocational agriculture studied this subject an average of slightly less than one year. Those in the 1943 group studied the subject an average of slightly more than 2.5 years.

Participation in the Future Farmers of America Organization

In 1943, 30.3 percent of the agricultural education graduates were members of the Future Farmers of America when attending high school. Most members of the 1933 group were out of high school before the establishment of the F.F.A., and consequently had only limited opportunity to be participants in the organization.

Farm Experience

In 1933, 82 percent of the agricultural education graduates were farm-reared. In 1943, this figure dropped to 76 percent. The average size of the farm on which the farm-reared men lived remained approximately the same, 123 acres in 1933 and 120 acres in 1943. Approximately 95 percent of the nonfarm-reared members of both groups acquired farm experience before entering the teaching profession.

Major Enterprises on Home Farms

The five leading farm enterprises on the home farms of the two groups were in order of importance in 1933: Dairy — Grain — Poultry — Swine — Truck Gardening — and in 1943; Dairy — Poultry — Grain — Truck Gardening — Swine.

Extent to Which Four Summers Prior to College Graduation Were Spent on Farms

Both the 1933 and 1943 groups of agricultural education graduates spent an average of slightly more than three of the four summers prior to college graduation on farms.

Attitudes, Decisions, and Influences Toward Training for Teaching

Approximately 90 percent of the agricultural education graduates in both groups reported that their interest and enthusiasm for teaching began early in their college experience. Encouragement from both parents increased in 1943 over 1933. Eighty-one percent of the mothers favored their sons' becoming teachers in 1933. In 1943, 93 percent were reported as favorable. Seventy percent of the fathers were favorable in 1933 and 85 percent in 1943.

Fathers' Occupations

Sixty-four percent in 1933 and 67 percent in 1943 of the fathers of the agricultural education graduates were engaged in farming. Other parental occupational groups represented were: skilled and unskilled laborers, professional men, business and commercial tradesmen, miners, and men engaged in transportation, communication, building and manufacturing trades.

Time When Decision Was Made to Teach Vocational Agriculture

In 1933, only 34 percent of the members of the group had decided before entering college that they wanted to become teachers of vocational agriculture. In 1943, 69 percent had made this decision before coming to college. In 1933, 46 percent made this decision while attending college and in 1943, 30 percent came to the decision when in college.

Extracurricular Secondary School Activities

The average number of extracurricular secondary school activities participated in per man was 1.61 in 1933 and 2.02 in 1943. In 1933, 88 percent of the agricultural education graduates had participated in one or more secondary school extracurricular activities. This number increased to 96 percent in 1943.

Extracurricular College Activities

In 1933, 47 percent of the agricultural education graduates participated in one or more extracurricular college activities. In 1943 this number increased to 72 percent.

Extent to Which They Belonged to College Fraternities

Forty percent of both the 1933 and 1943 groups belonged to social fraternities. Twice as many men in the 1943 group belonged to professional societies as belonged in 1933. One-fourth of the 1933 group and one-third of the 1943 group belonged to honorary societies.

Manner of Meeting College Expenses

Thirteen percent of the 1933 group had all of their college expenses paid for them by parents or other relatives. The figure for the 1943 group was only 10 percent. In 1933, 2 percent borrowed all the funds needed for their college education as against 7 percent in 1943. Five percent of the 1933 group worked their way entirely thru college, but in 1943 only 3 percent met their college expenses in this manner.

Scholarship Records in College

The college grade point average for all undergraduate work earned by the 1933 group was 14.4. For the 1943 group the figure was 16.6. Measured in grade point averages, the physical sciences were the most difficult subjects for both groups, English ranking second in difficulty. The highest grade point averages for both groups were earned in the professional subjects.

Conclusions

(1) The number of agricultural education students who in their elementary school experience attend one-room schools is decreasing. Also, the number who attend the urban elementary schools is decreasing. Elementary school attendance of agricultural education students at rural consolidated schools is sharply increasing.

(2) The number of agricultural education students who in their secondary school experience attend rural schools is increasing. Similarly, attendance at urban secondary schools is decreasing.

(3) The number of former students of vocational agriculture among the enrollees at The Pennsylvania State College is increasing and also the mean number of years devoted to the study of vocational agriculture is sharply increasing.

(4) Experience on the part of agricultural education students as participating members in the Future Farmers of America organization is increasing and soon will approximate 100 percent.

(5) The average size of the farm on which farm-reared agricultural education students gained experience remains the same. Practically all nonfarm-reared agricultural education students acquire farm experience before graduation or before entering teaching.

(6) The major farm enterprises on the home farms of agricultural education students remain the same, altho poultry and truck gardening enterprises have moved up in order of importance.

(7) Approximately two-thirds of all agricultural education students are sons of farmers. Positive parental encouragement for their sons to prepare to teach agriculture continues to increase. The mothers are more enthusiastic about their sons' choice of a vocation than are the fathers.

(8) Decisions to prepare for the teaching profession were made much earlier by recent agricultural education enrollees than by former groups.

(9) Participation of agricultural education students in extracurricular activities when attending secondary schools has increased sharply. Similarly, interest and active participation in extracurricular college activities have increased.

(10) Membership in college social fraternities has remained about the same, but interest and active participation in professional and honorary societies has nearly doubled.

(11) Fewer students of agricultural education now have all funds needed for college expenses provided by their parents or other relatives. More of them are borrowing money with which to pay for college educations. Fewer of them are working to meet their expenses while attending college.

(12) Recent agricultural education students rated higher scholastically, measured in terms of the college grade point averages, than did the earlier enrollees. Again using grade point averages as a basis of comparison, they presumably are better prepared now in technical agriculture and in professional courses. Physical sciences and English continue to give them principal scholastic difficulties.

Bulletin on Results of Previous Investigation Available

Note: The bulletin in which the writer reported results of his 1933 investigation is now out of print, but a full account of this most recent study may be had by requesting a copy of Bulletin 484, "Pre-employment Records and Activities of Teachers of Vocational Agriculture" from the Pennsylvania State Agricultural Experiment Station, State College, Pennsylvania.

Amounts, sources, and uses of state F.F.A. funds

IN THE summer of 1946, Kenneth Diehl, teacher of vocational agriculture at Lovington, Illinois, began a study of state F.F.A. funds. He found it advantageous to determine the sources of receipts by state organizations in 1944-45 and the uses of funds in 1945-46. He received returns from 27 states. Not every state reported completely on every item.

Amounts and Sources of Funds

Twenty-five state organizations took in funds ranging in amount from $248.40 to $32,931.57 in 1944-45. The median amount of income of these state organizations was $2,145. These funds came from state dues, from gifts, and from appropriations by state legislatures.

The range in state dues collected in 24 states was from $35 to $7,191.80. The median amount of dues collected in these states was $639.37.

Twenty-four states collected a total of $80,149.25 in gifts and donations. The range in 24 states was from $4.52 to $25,739.77. The median amount donated was $1,004.12.

Legislatures in six of the states reporting appropriate funds for the F.F.A. The total amount appropriated for 1944-45 was $43,300. The appropriations ranged from $300 to $20,000.

Twenty-six states reported state dues varing fron 10 cents to $1 per member. The median amount of dues was 38 cents per member.

Uses of Funds

Twenty-one states reported total expenditures in 1945-46 ranging from $15 to $20,000. The median amount spent by these states was $800. However, seven states spent a total of $13,214.67 for leadership activities, so that the amount spent for this purpose was second only to the amount spent for contests and awards. Three states spent money for campus aggregating $1,644; one state spent $1,225 of this amount. Two states gave scholarships, one of them contributing $1,200 for this purpose. Three states contributed to the salary of the state executive secretary in amounts varying from $25 to $479.88. Two states helped to support a band, one state contributing $350 and the other $100.

Twenty-one states had investments totaling $78,546.87. The largest part of these investments was in state camps. The range in investments was from $15 to $20,000; the median amount invested was $800.

Teachers of vocational agriculture may be placed on the mailing list for the *Agricultural Situation* by addressing requests on official stationery to the Bureau of Agricultural Economics, U. S. Department of Agriculture, Washington.

Role of vocational education in agriculture

(Continued from page 93)

supervised farm experience for youth in school. Such forms of facilitating relationships cannot be established unless there is much mutual understanding in the school and community regarding the role of vocational agricultural education.

There is evidence which indicates that within some schools, there is not enough appreciative understanding of vocational education in agriculture to make possible the complete fulfillment of its real role. To the extent that this is true, it becomes vitally important that workers in the field of vocational agricultural education do more than they have done in the past to interpret the nature and purpose of instruction in vocational agriculture to other workers in the field of education.

Perhaps some kinds of education can be made sufficiently effective without community cooperation, but vocational agricultural education cannot. An understanding of the nature and purpose of vocational education in agriculture on the part of laymen is essential for community cooperation. It seems that this understanding has not been well enough developed in some communities to make possible an adequate fulfillment of the role of vocational agricultural education. People cannot be expected to want for themselves, or to be willing to support for others, an educational program concerning which they have little or no appreciative understanding.

The Role in Brief

A program of vocational education in agriculture should do more than merely extend the kinds of educational services that are available thru other school or non-school forms of agricultural education. It should provide distinguishing educational services to take care of needs for vocational instruction regarding farming not fully met by other forms of agricultural education. Vocational agricultural education should be directed toward improvement of human abilities rather than toward changes in concrete aspects of farms. Altho it should make some contribution to other objectives of education, its primary general objective should be to help people develop proficiency in agricultural occupations. This general objective may be analyzed into four major phases: exploration, preparation, establishment, and adjustment. In the education of present and prospective farmers, these various phases should be emphasized in accordance with the maturity and occupational progress of the learners. A program of instruction in vocational agriculture should, of course, be subject to continuous modification in the light of current farm-life conditions, and trends which are developing concerning these conditions. Cooperation from within the school and the community is essential if the role of vocational education in agriculture is to be fulfilled.

Duties and responsibilities of local N.F.A. advisers

D. C. Jones, Teacher Education, Langston University, Langston, Oklahoma

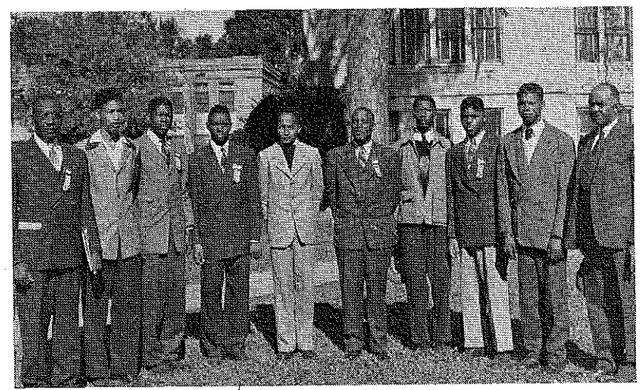
THE National Association of New Farmers of America held its thirteenth annual convention at A. and T. College, Greensboro, North Carolina, August 3–6. As we saw this assemblage of anxious, determined, and enthusiastic youngsters, it seemed fitting to pause and take stock of some of the high purposes, ideals, persons and achievements which characterize the organization.

1. The purposes and ideals constitute the first part of our stock. These have been conceived in and kept allied with the life and philosophies of the immortal Booker T. Washington. His idea of the dignity of labor and the reward which comes to the man who makes his full contribution in the creation of goods and services are in themselves a good stock. The constitution develops these ideals into specific objective by stating, among other things, that the purposes are to develop competent, aggressive, agricultural and rural leaders; make intelligent choice in farming and develop farming programs; improve farm home and surrounding; and to develop character, train for useful citizenship, and foster patriotism.
2. The second part of the stock is in terms of person. The hopes and aspirations of the men whose best thoughts, works, and ideas have become ours, charge us with the responsibility of completing the work they so nobly began. The roll of founders includes George W. Owens, H. O. Sargent, Church Bank, and C. S. Woodard. These together with many others, still active, place a weight of responsibility on every local adviser to live up to the charge of the founders.
3. The achievements constitute the third part of our stock. Each year, the national association makes two achievement awards. The first is given to former vocational agriculture students who have become established in farming. It is known as the H. O. Sargent Award. The second is given to N.F.A. members who have become or are about to become established in farming. This constitutes our Superior Farmer group. The number in this group is constantly increasing. In addition to these, each state association makes achievement awards in terms of Modern Farmers degree to hundreds who are established or are about to become established in farming. Add to these the large number of achievement awards made by local chapters and the scope of our achievement becomes impressive.

Some of the specific duties and responsibilities of the local adviser may be listed in five categories. It is the duty and responsibility of each local adviser:

I. To keep the stock of purposes, ideals, and objectives clearly before him; remember the charge of our founders; and to contribute his share to the total achievement.
II. To have farming goals and plans leading to establishment in farming. Each year a reasonable percentage of boys who graduate or drop out should enter farming and others who have entered should become progressively established.
III. To develop a strong local chapter by mastering the technique of the 21 points listed in our N.F.A. Guide.
IV. To develop strong chapter leadership in an attack on important economic enterprises and problems in the community. This may well be done by having the executive committee help determine the problems, and plan the attack on them thru the long-time program. It has been the experience of many teachers that the development of leadership depends on how well important and worthwhile responsibilities are placed upon the shoulders of leaders in the making, how much guidance is given,

(Continued on page 98)



National officers of the N.F.A. for the past year. D. C. Jones, national adviser, Langston University, is at left. B. B. Simmons, national executive treasurer is at right

Future Farmers of America

A. W. TENNEY

The F.F.A. on the air

Everett H. Frink, Teacher, Northwood, Iowa

IN 1927 when my father got his first radio receiving set, our neighbors and friends in that small town thought that it was certainly the last word in communication and entertainment when they could listen to events that previously they had only read about. In this day, radio is a necessity to advertisers, entertainers, educators, and many others. We teachers of vocational agriculture and our F.F.A. boys here in northern Iowa, have been very fortunate to be able to promote our various programs by this wonderful means.

Early in the spring of 1946, several teachers met in Mason City, Iowa, with "Hank" Hook of radio station KGLO and arranged series of F.F.A. broadcasts.

Dean Nerdig, instructor at Garner, Iowa, was elected chairman of the instructors to co-ordinate broadcasts. The programs are 10 minutes long and are handled in any way that the instructor or his boys may desire. In the beginning, the instructors preferred to handle the programs alone, but after their first experience, they brought a boy or two along with them. Now whenever the announcer starts the program, he more than likely follows the instructor's name with a list of F.F.A. boys who have usually written the script and then produced the broadcast.

Members of the Northwood, Iowa, F.F.A. chapter and their adviser broadcasting on the regular period assigned to vocational agriculture. Mr. H. B. Hook, farm service director for KGLO, Mason City, Iowa, is at the extreme right

Types of Broadcasts

We have three main types of broadcasts, (1) The instructors and announcer discuss a problem, (2) the F.F.A. boys and instructor handle the broadcast, and (3) the announcer, the F.F.A. members, and the instructor are on the air. We have found that the listening audience would rather hear the latter type of broadcast. Usually the instructor summarizes what has been said, if time permits at the end of the program.

The first broadcast was designed primarily to let the public know "why we have vocational agriculture in our schools." Two instructors of vocational agriculture and Mr. Hampton T. Hall, state supervisor of agricultural education discussed the place and purposes of our program in providing training for farming. The next topics discussed on later broadcasts were, (1) All-day classes, (2) adult-farmer classes, (3) young-farmer classes, and (4) summer activities in the program of vocational agriculture. These topics served to open up our series of broadcasts to the listening public. They are being followed by broadcasts on the F.F.A. activities of the vocational departments and current problems of farmers. Each department gives program time to explaining what they are actually doing in their own community to further agriculture.

Our boys who have appeared on the broadcast really appreciate a radio program now when they hear one. This type of public appearance tends to develop leadership and broaden personalities. Our English teachers are interested in working with our boys to help them learn to speak more clearly and distinctly over the air. It really gives her another teaching aid outside of the classroom. Another way that the students in the communtiy are helped by this time on the air comes from the fact that we let the other students listen to the broadcast on the school radio or dismiss school early at noon so that the students can reach home in time for the broadcast. It is surprising how easy it is to get a group of boys on the air, who normally are very bashful about doing anything individually.

Parents and others in the community really appreciate what we are doing for the young folks and also like to keep informed on the activities of their school. Parents of children not on the air encourage their youngsters to participate. Parents realize that this fine type of experience increases the student's ability to speak fluently and freely, which is a great asset in later life.

Much groundwork can be laid ahead of time to insure a listening audience. Local newspapers are helpful and the radio station itself announces the program in advance.

Encourages Support for Local Programs

We have also found that farm groups and organizations have given more support to the program of vocational agriculture now that they have become acquainted with it over the air. These people know that if we have boys who can produce a broadcast and also produce at home thru their farming programs, that they can be counted upon as future leaders in the community.

In small towns where everyone is acquainted with each other, it is not uncommon for friends to call the instructor or the boys and congratulate them on the work which they are doing. One of the most common expressions in the home town is, "We heard you on the radio today," and it does something for your pride.

Radio reaches more homes than any other means of communication, so let's encourage all of our own and other organizations with a worthy program to try to get all of the radio publicity possible. You know, "It pays to advertise."

Patronage checks totaling more than $4,000 have been distributed to members of the Walla Walla, Washington, F.F.A. Seed Growers Cooperative. The organization was incorporated last February and is the only one of its kind in the state.

Future Farmers of America who are members of Conrad, Newark, Alexis I. DuPont, and Middletown High School chapters in New Castle County have started a reforestation project embracing 5,000 acres of land. The boys were expecting to plant more than 20,000 trees and 2,400 shrubs last spring. The work is being carried on with cooperation of the Soil Conservation Service and the landowners.

Civic clubs cooperate with F.F.A.

Ben Bristol, Teacher, Rocky Ford, Colorado

Ben Bristol

NO OTHER organizations are in a position to do more to promote F.F.A. work in the community than the various civic clubs that are there. It is our job as teachers of vocational agriculture and F.F.A. advisers to foster closer cooperation between civic clubs and our Future Farmers of America chapters. In order to bring this desired situation about we must attract the clubs to the F.F.A. program of work in the particular locality.

To accomplish the worthwhile objective of cooperation with civic organizations, it is necessary that we have the proper "slant" on this subject. The idea that the civic-minded clubs should come to us and "offer their valuable assistance on a silver platter" is entirely wrong.

In the first place, most such clubs have a full schedule of work themselves without going out of their way to "mother" us and our chapters. In the second place, the clubs are justifiably cautious in sponsoring what to them may still be an "unknown quantity." Thirdly, the civic organizations have a right to expect that we will not only want their cooperation but will be willing to cooperate with them as well.

Program Must Be Worthy

Keeping these things firmly in mind, we find that it is essential that we as advisers and our boys as F.F.A. members prove the worth of our chapter. One of the best ways to do this is to develop a strong program of work, carry the various objectives to successful conclusions, and see to it that adequate publicity is given the results.

Another thing which an adviser and his chapter can do is to educate the people of the community and the members of the various civic clubs as to the meaning, ideals, objectives, purposes, and accomplishments of the F.F.A. program of work on local, state, and national levels. This can be done thru the local newspapers, thru speeches at the civic club meetings, thru radio programs, and thru contacting individuals personally.

In order to see more clearly just how these principles can operate practically and successfully in a real life situation, let's consider a few examples of cooperation between the Rocky Ford, Colorado, F.F.A. chapter and local community civic organizations.

The Rocky Ford Future Farmers of America chapter was reinstated last year after a lapse of the four war years. During the summer preceding the reinstatement, however, the new instructor of vocational agriculture carried on an intensive one-man campaign to inform the taxpayers of the community and prospective students about the agricultural course of study and proposed F.F.A. chapter. News articles were written; pamphlets telling the story were distributed to farm boys eligible for the new course; speeches were made at service clubs; and businessmen, professional men, and farmers were contacted personally. One of the first things the new teacher did upon entering the community was to join one of the local service clubs.

Shortly after school started in the fall, the F.F.A. chapter was reactivated, officers were elected, committees chosen, and a program of work was set up. Work was begun at once to accomplish as many of the goals as possible.

Several Civic Clubs Cooperate

The Lions' Club was the civic organization that took the initiative in promoting the Rocky Ford Future Farmers. It did this by presenting a large trophy to the outstanding student of vocational agriculture from the local high school. This was done at a regular noon luncheon meeting of the Lions' Club to which senior F.F.A. members and their adviser were invited. The club plans to make this an annual event.

The Rotary Club, of which the Rocky Ford F.F.A. adviser is a member, has invited the future farmers to its meeting as honored guests on two occasions.

At the first meeting to which they were invited the boys presented a program for the club. The members enjoyed this program and plan to invite the boys to present a program each year hereafter.

The Rotary Club invited the F.F.A. members and their adviser to its meeting the second time in recognition of their winning the Regional Six-State F.F.A. Safety Contest, conducted each year by the KLZ Radio Station of Denver, Colorado. A program was broadcast from the club meeting by remote control over KLZ to the western states. Lowell Watts, KLZ farm reporter, presided on the broadcast.

F.F.A. Chapter Assists With Community Project

During the year the F.F.A. chapter undertook a cooperative project with the Quarterback Club to raise money for a new grass athletic field for the high school. The Future Farmers made several floats for a parade which preceded a big rally and the drive for funds.

The cooperation and promotion received from the local civic clubs have done much to establish firmly the F.F.A. chapter in the community. The people of the area, as a result of this, take pride in their Future Farmers of America and are strong promoters of the organization.

As the old adage goes, "No one lives unto himself." No F.F.A. chapter can thrive without the active cooperation and support of all agencies in the community. Do you think it is worthwhile to "Attract community civic clubs to the F.F.A. program"?

Adviser and members of Rockford chapter being interviewed by Lowell Watts, KLZ farm reporter, at a Rotary Club luncheon. The program gave recognition to the top award in a regional farm safety contest

N.F.A. advisers

(Continued from page 96)

and the number and duration of such experiences.

V. To develop some outstanding and attracting chapter features such as special contest to stimulate supervised practice work, plan for financing supervised practice work, develop and distribute pure seed or purebred livestock to the communtiy or develop some cooperative service in which the whole community may participate. Such features not only tell of a live and going chapter, but train future leaders in the solution of the most difficult economic and social problem.

OFFICE OF EDUCATION, WASHINGTON, D. C.

John W. Studebaker—U. S. Commissioner of Education
R. W. Gregory—Ass't Commissioner for Vocational Education
W. T. Spanton—Chief, Agricultural Education
D. M. Clements—Ass't Chief, Agricultural Education

Specialists: F. W. Lathrop—Research; A. W. Tenney—Subject Matter; H. B. Swanson—Teacher-Training; R. E. Naugher—Part-time and Evening; A. H. Hollenberg—Farm Mechanics; E. J. Johnson—Program Planning; W. N. Elam—Program Planning

d—directors; ad—assistant to director; s—supervisors; as—assistant supervisors; rs—regional supervisors; ds—district supervisors; t—teacher-trainers; it—itinerant teacher-trainers; rt—research workers; Nt—Negro teacher-trainers; sms—subject matter specialists

Note—Please report changes in personnel for this directory to Dr. W. T. Spanton, Chief, Agricultural Education, U. S. Office of Education.

ALABAMA
d—R. E. Cammack, Montgomery
s—J. C. Cannon, Montogomery
ds—H. F. Gibson, Auburn
ds—T. L. Faulkner, Auburn
ds—B. P. Delworth, Auburn
ds—J. L. Dailey, Montogomery
ds—H. R. Culver, Auburn
ds—L. L. Sellers, Auburn
t—S. L. Chesnutt, Auburn
t—D. N. Bottoms, Auburn
t—R. W. Montogomery, Auburn
sms—C. C. Scarborough, Auburn
Nt—Arthur Floyd, Tuskegee Institute
Nt—F. T. McQueen, Tuskegee Institute
Nt—E. L. Donald, Tuskegee Institute

ARIZONA
d-s—J. R. Cullison, Phoenix
t—R. W. Cline, Tucson
t—W. A. Schafer, Tucson

ARKANSAS
d—J. M. Adams, 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
ds—V. H. Wohlford, State College
t—Roy W. Roberts, Fayetteville
t—LaVan Shoptaw, Fayetteville
Nt—L. R. Gaines, Pine Bluff

CALIFORNIA
d—Julian A. McPhee, Sacramento
ad—Wesley P. Smith, Sacramento
s—B. J. McMahon, San Luis Obispo
rs—E. W. Everett, San Jose
rs—B. R. Denbigh, Los Angeles
rs—Howard F. Chappell, Sacramento
rs—A. G. Rinn, Fresno
rs—H. H. Burlingham, Chico
rs—J. C. Gibson, Los Angeles
t—S. S. Sutherland, Davis
sms—Geo. P. Couper, San Luis Obispo
sms—J. I. Thompson, San Luis Obispo

COLORADO
d—E. C. Comstock, Denver
s—A. R. Bunger, Denver
t—R. W. Canada, Ft. Collins

CONNECTICUT
d—Emmett O'Brien, Hartford
s—R. L. Hahn, Hartford
t—W. Howard Martin, Storrs

DELAWARE
d-t—R. W. Heim, Newark
s—W. L. Mowlds, Dover

FLORIDA
d—Colin English, Tallahassee
s—Harry Wood, Tallahassee
t—E. W. Garris, Gainsville
t—W. T. Lofton, Gainsville
it—J. G. Smith, Gainsville
it—J. L. Poucher, Gainsville
it—T. L. Barrineau, Jr., Gainsville
it—Otis Bell, Gainsville
Nt—L. A. Marshall, Tallahassee
Nt—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
t—John T. Wheeler, Athens
t—R. H. Tolbert, Athens
t—G. L. O'Kelley, Athens
t—A. O. Duncan, Athens
t—T. D. Brown, Athens
Nt—Alva Tabor, Fort Valley
Nit—S. P. Fugate, Fort Valley

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

IDAHO
d—William Kerr, Boise
s—Stanley S. Richardson, Boise
as—Elmer D. Belnap, Idaho Falls
t—H. A. Winner, Moscow

ILLINOIS
d—Ernest J. Simon, Springfield
s—J. E. Hill, Springfield
as—J. B. Adams, Springfield
as—A. J. Andrews, Springfield
as—H. M. Strubinger, Springfield
as—P. W. Proctor, Springfield
as—H. R. Damisch, Springfield
t—H. M. Hamlin, Urbana
t—G. P. Deyoe, Urbana
t—J. N. Weiss, Urbana
t—L. J. Phipps, Urbana
sms—Melvin Henderson, Urbana
sms—H. J. Rucker, Urbana
sms—Harold Witt, Urbana

INDIANA
d—Ben H. Watt, Indianapolis
s—H. B. Taylor, Lafayette
t—B. C. Lawson, Lafayette
rt—S. S. Cromer, Lafayette
it—K. W. Kiltz, Lafayette
it—H. W. Leonard, Lafayette
it—E. E. Clanin, Lafayette
it—I. G. Morrison, Lafayette

IOWA
d—L. H. Wood, Des Moines
s—H. T. Hall, Des Moines
as—D. L. Kindehy, Des Moines
as—M. Z. Hendren, 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. Pollom, Topeka
t—A. P. Davidson, Manhattan
it—L. F. Hall, Manhattan

KENTUCKY
d—Watson Armstrong, Frankfort
s—E. P. Hilton, Frankfort
as—B. G. Moore, Frankfort
as—S. S. Wilson, Frankfort
t—Carsie Hammonds, Lexington
it—W. R. Tabb, Lexington
it—Stanley Wall, Lexington
Nt—P. J. Manly, Frankfort

LOUISIANA
d—John E. Coxe, Baton Rouge
s—D. C. Lavergne, Baton Rouge
as—J. J. Arcencaux, Baton Rouge
as—I. N. Carpenter, Baton Rouge
as—J. J. Stovall, Baton Rouge
t—Roy L. Davenport, Baton Rouge
t—J. C. Floyd, Baton Rouge
t—M. C. Garr, Baton Rouge
sms—Harry Braud, Baton Rouge
t—A. Larriviere, Lafayette
t—A. A. LeBlanc, Lafayette
Nt—M. J. Clark, Scotlandville
Nit—D. B. Matthews, Scotlandville

MAINE
s-t—Herbert S. Hill, Orono
ast—Wallace H. Elliott, Orono

MARYLAND
d—John J. Seidel, Baltimore
s—Harry M. MacDonald, College Park
t—Arthur M. Ahalt, College Park
Nt—J. A. Oliver, Princess Anne

MASSACHUSETTS
d—M. Norcross Stratton, Boston
s—John G. Glavin, Boston
t—Jesse A. Taft, Amherst
t—Charles F. Oliver, Amherst

MICHIGAN
d—Ralph C. Wenrich, Lansing
s—Harry E. Nesman, Lansing
s—Luke H. Kelley, Lansing
s—Raymond M. Clark, Lansing
s—John W. Hall, Lansing
t—H. M. Byram, East Lansing
t—G. C. Cook, East Lansing
t—Paul Sweany, East Lansing

MINNESOTA
d—Harry C. Schmidt, St. Paul
s—Leo Knuti, St. Paul
t—A. M. Field, St. Paul
t—M. J. Peterson, St. Paul

MISSOURI
d—Tracy Dale, Jefferson City
ds—J. A. Bailey, Jefferson City
ds—C. M. Humphrey, Jefferson City
t—G. F. Ekstrom, Columbia
t—C. V. Roderick, Columbia
sms—Joe Duck, Columbia

MISSISSIPPI
d—H. E. Mauldin, Jr., Jackson
s—A. P. Fatherree, Jackson
as—R. H. Fisackerly, Jackson
ds—E. E. Gross, Hattiesburg
ds—E. E. Holmes, Oxford
ds—V. P. Winstead, State College
t—V. G. Martin, State College
t—N. E. Wilson, State College
t—J. F. Scoggin, State College
t—O. L. Snowden, State College
sms—D. W. Skelton, State College
sms—A. E. Strain, State College
Nt—A. D. Fobbs, Alcorn

MONTANA
d—Ralph Kenck, Bozeman
s—A. W. Johnson, Bozeman
as—Arthur B. Ward, Bozeman
t—R. H. Palmer, Bozeman

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

NEVADA
d—Donald C. Cameron, Carson City
s—Lloyd Dowler, Carson City

NEW HAMPSHIRE
d—Walter M. May, Concord
s-t—Earl H. Little, Concord

NEW JERSEY
d—John A. McCarthy, Trenton
s-t—H. O. Sampson, New Brunswick
as—O. E. Kiser, New Brunswick
as—W. H. Evans, New Brunswick

NEW MEXICO
s—L. C. Dalton, State College
as—Alan Staley, State College
t—Carl G. Howard, State College

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

NORTH CAROLINA
d—J. W. Smith, Raleigh
s—Roy H. Thomas, Raleigh
as—R. J. Peeler, Raleigh
ds—F. N. Meekins, Raleigh
ds—J. M. Osteen, Rockingham
ds—T. H. Stafford, Asheville
ds—T. B. Elliott, Woodland
ds—N. B. Chesnutt, Whiteville
t—Leon E. Cook, Raleigh
t—L. O. Armstrong, Raleigh
t—J. K. Coggin, Raleigh
t—F. A. Nylund, Raleigh
Nt—S. B. Simmons, Greensboro
Nt—C. E. Dean, Greensboro
Nt—W. T. Johnson, Greensboro

NORTH DAKOTA
d—A. F. Arnason, Grand Forks
s-t—Ernest L. DeAlton, Fargo
as—Winston H. Dolve, Fargo
t—Shubel D. Owen, Fargo

OHIO
d—J. R. Strobel, 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
ds—D. R. Purkey, Columbus
t—W. F. Stewart, Columbus
t-ds—C. E. Rhoad, Columbus
t—A. C. Kennedy, Columbus
rt—Ray Fife, Columbus

OKLAHOMA
d-s—J. B. Perky, Stillwater
as—Bonnie Nicholson, Stillwater
ds—W. R. Felton, Stillwater
ds—Bryl Killian, Stillwater
t—C. L. Angerer, Stillwater
t—Don M. Orr, Stillwater
t—Chris White, Stillwater
Nt—D. C. Jones, Langston

OREGON
d—O. I. Paulson, Salem
s—Ralph L. Morgan, Salem
as—M. C. Buchanan, Salem
t—H. H. Gibson, Corvallis

PENNSYLVANIA
d—Paul L. Cressman, Harrisburg
s—H. C. Fetterolf, Harrisburg
s—V. A. Martin, Harrisburg
t—Henry S. Brunner, State College
t—William F. Hall, State College
t—C. S. Anderson, State College
t—David R. McClay, State College

PUERTO RICO
s—Nicholas Mendez, San Juan
as—Samuel Molinary, San Juan
as—Rafael Muellar, San Juan
ds—Fredericko A. Rodriquez, San Juan
ds—Juan Acosta Henriquez, Arecibo
ds—Andres Ramirez, Mayaguez
t—Lorenzo G. Hernandez, Mayaguez

RHODE ISLAND
d-s—George H. Bladwin, Providence
t—Everett L. Austin, Providence

SOUTH CAROLINA
d—Verd Peterson, Columbia
s—E. D. Anderson, Columbia
as—P. G. Chastain, Chester
as—W. E. Gore, Columbia
ds—W. M. Mahoney, Honea Path
ds—J. H. Yon, Loris
ds—W. R. Carter, Walterboro
t—B. H. Stribling, Clemson
t—J. B. Monroe, Clemson
t—T. E. Duncan, Clemson
t—F. E. Kirkley, Clemson
t—W. C. Bowen, Clemson
Nt—Gabe Buckman, Orangeburg
Nt—J. P. Burgess, Orangeburg

SOUTH DAKOTA
d—J. F. Hines, Pierre
s—H. E. Urton, Pierre
t—Stanley Sundet, Brookings

TENNESSEE
d-s—G. E. Freeman, Nashville
as—J. W. Brimm, Nashville
ds—H. N. Parks, Gallatin
ds—L. A. Carpenter, Knoxville
ds—Ben Douglas, Jackson
ds—S. L. Sparks, Nashville
t—N. E. Fitzgerald, Knoxville
t—J. B. Kirkland, Knoxville
rt—A. J. Paulus, Knoxville
rt—E. B. Knight, Knoxville
Nt—W. A. Flowers, Nasbville

TEXAS
d—W. E. Lowry, Austin
s—Robert A. Manire, Austin
s—R. Lano Barron, Austin
as—George H. Hart, Austin
ds—O. T. Ryan, Lubbock
ds—C. B. Barclay, Commerce
ds—C. D. Parker, Kingsville
ds—A. B. Childers, Mart
ds—L. V. Halbrooks, College Station
ds—W. K. Williams, Alpine
ds—J. B. Payne, Stephenville
ds—L. I. Samuel, Arlington
ds—J. A. Marshall, Nacogdoches
ds—Thomas R. Rhodes, Huntsville
t—E. R. Alexander, College Station
t—Henry Ross, College Station
t—J. L. Moses, Huntsville
t—Ray L. Chappelle, Lubbock
t—S. V. Burks, Kingsville
it—E. V. Walton, College Station
it—G. H. Morrison, Huntsville
it—F. B. Wines, Kingsville
it—R. M. Hargrave, Lubbock
Nt—E. M. Norris, Prairie View
Nt—W. D. Thompson, Prairie View
Nit—O. J. Thomas, Prairie View
Nit—E. E. Collins, Texarkana
Nit—S. E. Palmer, Tyler
Nit—Gus Jones, Caldwell
Nit—Wardell Thompson, Prairie View
Nit—Paul Rutledge, Palestine

UTAH
d—E. Allen Bateman, Salt Lake City
s—Mark Nichols, Salt Lake City
as—Elvin Downs, Salt Lake City
t—L. R. Humpherys, Logan

VERMONT
d—John E. Nelson, Montpelier
s—C. D. Watson, Burlington
t—James E. Woodhull, Burlington

VIRGINIA
d—Richard N. Anderson, Richmond
s—F. B. Cale, Richmond
as—R. E. Bass, Richmond
ds—W. R. Emmons, Boykins
ds—J. O. Hoge, Blacksburg
ds—W. R. Legge, Winchester
ds—J. C. Green, Powhatan
ds—W. C. Dudley, Appomattox
t—H. W. Sanders, Blacksburg
t—C. E. Richard, Blacksburg
t—C. S. McLaren, Blacksburg
Nt—J. R. Thomas, Ettrick
Nt—A. J. Miller, Ettrick
Nt—M. A. Fields, Ettrick

WASHINGTON
d—H. G. Halstead, Olympia
s—Bert L. Brown, Olympia
as—M. C. Knox, Olympia
as—H. M. Olsen, Olympia
as—E. M. Webb, Pullman
ts—Oscar Loreen, Pullman

WEST VIRGINIA
d—John M. Lowe, Charleston
s—H. N. Hanseucker, Charleston
as—S. D. McMillen, Charleston
t—D. W. Parsons, Morgantown
t—C. W. Hill, 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
t—V. E. Nylin, Platteville
t—J. M. May, River Falls

WYOMING
d—Sam Hitchcock, Cheyenne
s—Percy Kirk, Cheyenne
t—Jack Ruch, Laramie