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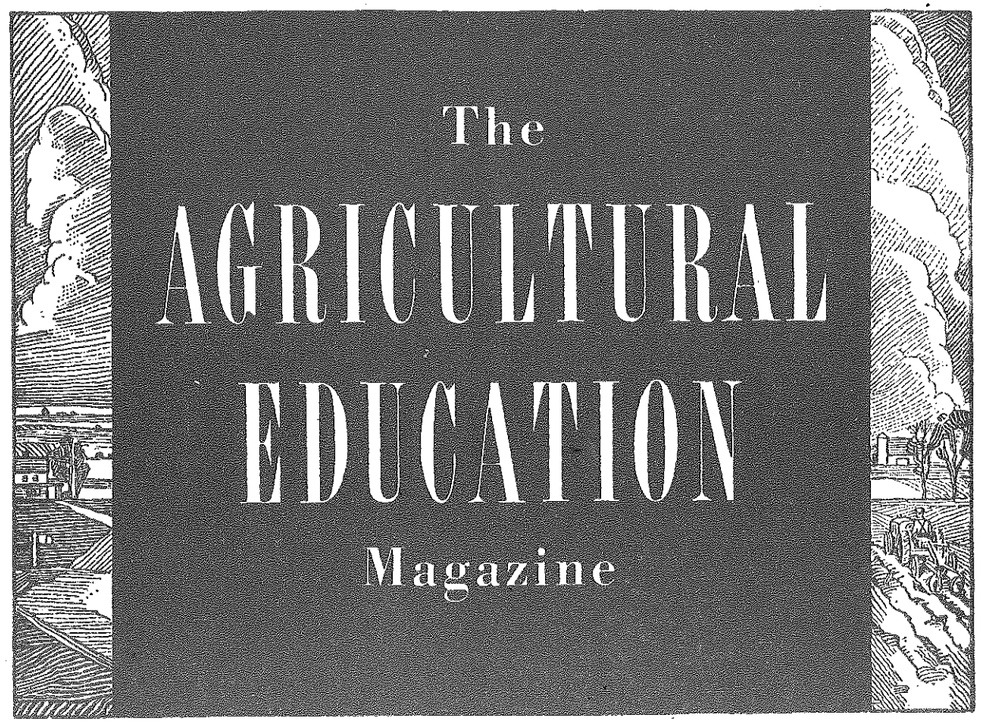

The AGRICULTURAL EDUCATION Magazine

"LET the farmer forevermore be honored in his calling, for they who labor in the earth are the chosen people of God."

—Jefferson

VOCATIONAL AGRICULTURE
for
TEACHERS
Teacher-Educators
And Supervisors
OFFICIAL PUBLICATION

The Agricultural Education Magazine

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

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Error

The Editor would like to call attention to a grievous error made on the Editorial Page of the October, 1943 *magazine.*

The editorial entitled "Agricultural Education Forges Ahead" was written by Dr. G. J. Dippold of the University of Missouri. We gave credit for this editorial to Dr. G. P. Deyoe of Michigan. The error is the result of carelessness on the part of your EDITOR. The similarily of initials, G.P.D. and G.J.D. contributed to the making of the error.

The editorial was carefully and thoughtfully developed. Credit for it should have gone to Dr. Dippold.

S. S. SUTHERLAND

Professional

R. W. GREGORY

Guided Rural Youth Migration—Steps in Action

Brief of the Findings of the Institute on War and Postwar Problems of Rural Youth Migration, Held at N. E. A. Headquarters, Washington, D. C. May 17, 26–28, 1943

THE situation: Annually 750,000 farm youth and 450,000 nonfarm youth become 15 years of age. From 30 to 70 percent of the farm youth are potential migrants, depending on the year and the area.

Social and Economic Factors Which Relate to Youth Migration

While the major reason for migration from rural to urban areas is the high reproduction rate of farm people as contrasted with that of city dwellers, another important cause is the employment opportunities available in cities especially in times of urban prosperity. The accelerated movement away from farms, due to the present world war, is likely to continue for 5 or 10 years; but if opportunities for employment decline in the cities, there will be a rapid movement back to the land.

Factors tending to promote migration from farms: Birth rates higher in rural areas, increased mechanization of farms, limited available farming opportunities, increasing proportion of aged group in city, higher standard of living in city, increased initial outlay required to start farming, lack of guidance for youth in rural areas, war demands of industry, and movement to military services.

Factors tending to retard migration from farms: Depletion of food surplus, use of agricultural products in industry, rising standards of living on farms, increased income on farms during the war, decrease in the number of older people on the farm due to death, easier credit facilities available, desire of rural youth to get away from large cities, improvement of recreational facilities in rural areas, and possible increase in part-time farming and in country estates.

Differences between past and present rural youth migration: Present migration is far greater in extent than any in the past, and goes far deeper into the socio-economic life of individuals, families, and communities; young people are migrating in large part to accept temporary rather than permanent employment; in the present war a larger proportion of our people are in the armed services or working in war industries; speed of present rural migration is causing disorganized communities; and many of present migrants will return to home communities.

Suggested Educational and Social Services for Youth Migrants

What Federal agencies might do: Make more thoro investigation of qualifications of potential employees, give facts on working and living conditions in wartime centers, furnish adequate pre-employment, in-service, and supervisory training, develop orientation and employee-counseling services, make arrangements for social contacts for new employees, encourage the preparation and dissemination of information needed by young people expecting to leave rural areas, Government employee counselors make arrangements with community agencies to work out adjustment problems, and provide services to help achieve the full utilization of local labor resources.

What rural schools can do prior to migration: Revise the curriculum to assist prospective migrants in becoming oriented to new situations, provide guidance services for potential migrants, utilize the U. S. Employment Service in discovering employment needs and make available student personnel records to this agency, organize vocational training for essential occupations and make available to rural youth a continuous educational and training service, provide for physical activity programs as well as direct health instruction, and provide more adequate recreation.

What city schools can do subsequent to migration: Provide a counseling and guidance service for migrants, develop programs of mutual co-operation with other agencies, provide training opportunities thru part-time and evening school programs.

Youth Migration in the Postwar Period

Economic and social characteristics of the transition period after the war: A marked surplus of labor and extremely high labor turnover, a transition and reconversion period, to be followed by a boom.

Economic and social characteristics of the large postwar boom and depression period: The main problem will be to prevent the boom from going too high and too far. If normal economic forces are allowed to work themselves out unchecked we are likely to have a short, sharp period of feverish prosperity followed by a secondary postwar depression of major proportions.

Some postwar statistics: Increase in normal labor force during the war period is indicated by the estimate that there will be a total of 62,500,000 persons in both the armed forces and the civilian labor force by December, 1943, which is about 6,000,000 above what might have been expected had peace-time conditions prevailed. More workers will be drawn from the farms and from housewives as the war goes on, perhaps as many as 5,000,000 more workers than we now have.

It is estimated that 8,000,000 persons will be released from the armed forces and in addition approximately 60 percent of all war-industry workers in the nation will be demobilized.

Approximately peak productivity should be reached by 1945 or 1946. There should be no marked diminution in the total goods available to the consumer. There will be more money in people's pockets than can be spent on the goods available. Some way must be found to drain off the excess purchasing power in taxes and war bonds.

Some probable trends following the war: There will be an immense psychological let-down in interest in community organization. There will be about 8,000,000 to 10,000,000 persons employed in war industries who will be thrust on the labor market soon after hostilities cease. The long run picture (after 1948) is more favorable for agriculture than the immediate one. There will be fewer but larger commercial farms. There will be fewer middle-sized farms. There will be many more small farms. Tenancy may be greatly reduced. Rural youth demobilized from the armed services and those who migrated to defense plants may, after the war, return to rural communities. It is estimated that between one-half and three-quarter million boys have had their college work interrupted because of the war. This may result in a movement back to college after the war. There should be an increased demand for vocational training after the war because of many shifts in occupations. During the demobilization period people will have more leisure time, which will increase the demand for recreational facilities.

Suggested Educational and Social Services for Youth Migrants in the Postwar Period

Community organization: Programs with communities will be more important than ever in the postwar period. The development of marginal land will help maintain higher standards of living.

Employment: The Government should provide for the orderly and planned demobilization of both men in the armed forces and persons employed in war industries. A satisfactory living should be provided for youth on farms so that they will not be attracted to cities by the lure of higher industrial wages.

Education: There is an urgent need for adequate postwar training programs including provisions for rural youth to start soon after the war. Realistic education will be needed. Training requirements of the postwar world may necessitate an increased number of public junior colleges providing opportunities to "earn and learn."

Vocational training and guidance: There will be a great need for maintaining and expanding guidance services already begun. The vocational guidance facilities of public and private agencies should be expanded. Each rural community might set up a council of existing guidance agencies and make a survey of its occupational opportunities. Adequate provisions should be made for training disabled war veterans. More complete vocational training will be needed for boys and girls who left school for war plants. Postwar agriculture may necessitate an expansion of the program of training of rural youth for higher skills in agriculture. There is a possibility of regional public occupational schools. Occupational training should be provided for those rural farm and non-farm youth who neither desire nor have the oppor-

Co-ops and the World's Food Problem

JERRY VOORHIS, Member of the U. S. Congress from California

THE principle of co-operation is as old as the first family, as old as the first group of primitive people who gathered around a fire and agreed—by sign language, no doubt—that instead of fighting one another they would work together at keeping that precious fire going.

The co-operative method of doing business stands today as a tried and tested means of solving the problems of modern men and women. And that method constitutes, in my opinion, the most solid single hope we have for a better future world after this war is won. But the particular subject I am to deal with is how co-operatives can aid in the solution of the world's food problem. Perhaps it will help if we start out with a quick glance at what co-ops have done to help solve this problem in the nation where their greatest progress has been made; namely, in Sweden. In a recent article about Sweden, Marquis Childs had these things to say:

Sweden's Example

"But it is the co-operatives that have made the most important contribution. With 750,000 consumer families they have a closeknit organization that extends into every phase of wholesale and retail trade. Nearly half of Sweden's 6,500,000 people are a part of an organization dealing directly with consumption. Almost without exception Sweden's farmers belong to marketing co-operatives. This is a big reason why almost no black market exists.

"As early as 1933 Albin Johansson, head of the co-operative movement, had begun to warn of the coming war and the need to lay in reserves of strategic materials. At his urging a special commission was formed to prepare the country for the coming crisis. The entire policy of the co-operative movement was altered to meet the threat.

"Until that time the co-operators had bought in the smallest possible amounts, in order to take advantage of price changes. Large-scale buying was a new order. Thousands of tons of rubber were bought and put in reserve, which has helped carry Sweden thru the present crisis. Working with the Government, all-important cattle fodder was acquired and stored in special silos built by co-operatives. Faced with a German-dominated vegetable fat industry, co-operatives had built a refinery which has been a salvation in the face of the present blockade.

"In 1939 co-operatives bought an additional $12,000,000 worth of strategic war materials on the world market. Also, they bought foods that could not be obtained after the start of the war. The irony has been that under wartime laws, they have had to share these reserves with private retailers. Of the co-operative reserve of coffee, one-half was turned over to private merchants. Likewise, a warning against the coming storm and the necessity to prepare for it was made by venerable Prof. Gustav Cassel. This dean of world economists never ceased stressing the peril of world economic domination by Germany. This, incidentally, is a feature of Swedish life. Professors are listened to respectfully and often make their own way actively in politics.

"Co-operatives made an equally important contribution in experts loaned to the Government to handle food rationing and widespread controls over economy. The Minister of Supply, Axel Gjores, is one of the co-operative leaders. He has pioneered in working out a food supply that keeps the consumption level comparatively high. Under this system the butterfat content is reduced in milk; cheese and butter consumption is greatly reduced; and cream is forbidden. As a result, milk production is increased 100 percent and milk is unrationed. The great increase in milk consumption supplies essential minerals and vitamins."

Here then is the sort of thing that can be done by the people and for the people in a country where the co-perative movement is big enough to be an important factor in the economy.

What America Has Done

But what about our own country? Well, I wonder what would have happened here had there been no farm co-operatives when the war came. In the first place we would have had an agriculture so distressed, so at the mercy of the middleman, that few of our farmers would have been in a position to produce abundantly. We would have had the Department of Agriculture organizations, such as those set up under the Agricultural Adjustment Agency. But the fact is that the best and most vital thing about the Agricultural Adjustment Agency consists of the fact that it has enabled farmers to act together in certain respects. Without the example and pattern of our true co-operative organizations, the best things about the agriculture program of the Government would have been impossible. And anyway, the real strength of American agriculture is to be found, not in the pattern of organization fostered by the Government, but in the co-operatives built without Government aid, assistance, or direction by the farmers themselves. For there we find the true economic expression of the spirit of a free and democratic people.

Without the co-operatives it would have been necessary for every individual farm producer to have been individually contacted in order to get our war food production program going. But where farm co-operatives existed; where men had already learned to work together for —there it was possible not only to reach the whole producing group thru one organization, but it was possible also to draw upon their training and experience of mutual loyalty and to bring it to bear for the benefit of our country's cause and thru it for the benefit of all the future of mankind.

The fundamental economic importance of a co-operative is this: It can protect people who act generously, who do their duty well. What I mean is this: To the extent that all the farmers producing a given commodity are organized into a co-operative they need have no fear of abundant production, no fear of supplying completely the demand for their product. For they are in a position to prevent that abundance from driving prices down and ruining the very producers who have made the abundance possible for others. Without the co-operative, every producer must fear abundance. For being at the mercy of a few people controlling a narrow bottleneck to the market, they know that the greater the supply the lower the price will be. I need not go into detail. All the history of American agriculture proves what I have just said.

It is true, I think, that only true co-operatives can be consistently relied upon to seek abundance for their fellow-men. This is my first point and I believe it is probably the most important one. Co-operatives can help solve the world's food problem because thru them producers of food can and will produce an abundance and at the same time be in a position by means of loyalty to one another, to prevent that abundance from harming the men who brought it forth.

Monopoly and Co-operatives

Monopoly power stands at the very opposite pole from co-operatives. Already we have seen, in connection with our attempt to fight an all-out war against our enemies, that monopoly power standing firm and unfortunately all too successfully, against the development of sponge iron to increase our steel production, against the expansion of magnesium production, and at least until very recently indeed, against the expansion of any copper production except that controlled by the Big Three copper companies upon whom we are now dependent for 85 percent of our total supply of that all-important material. Likewise, we have seen monopoly interests gaining more and more of a strangle hold on the avenues of trade thru which the farmer's crops must pass to the consumer. Farmers have had to do the best they could to combat the fertilizer trust. They have been up against overcharges for the oil they have bought from the oil monopoly and they have been told thru the years by the power trust that it was just not possible to get electricity into rural areas at a cost of less than somewhere in the neighborhood of 36 cents or 50 cents per kilowatt-hour.

So far only co-operatives have succeeded in meeting monopoly power on its own ground and defeating it. Only co-operatives—with all due respect to the vast importance of a vigorous enforcement of the antitrust laws—can break the grip of monopoly on our economy and keep it broken. And monopoly power is the one most important obstacle to a truly free world and to abun-

Methods

G. P. DEYOE

Can We Evaluate Our War Production Programs?

D. M. HALL, Assistant to the Dean and Director, College of Agriculture, University of Illinois

IF YOU should ask me to evaluate your program, my first questions would be: What kind of product do you want to turn out? What will you be proud to point out as your greatest achievement? I would insist that you state your objectives in very definite terms; otherwise, I would not know what to measure. And I do not believe that you can build programs without plans and specifications.

When you decide to build a program, you naturally begin to search your community for the most important problems. Inportant to whom? This question will distract only those who have come to believe that the school was set up to serve the teacher. Some of us do have this belief, or we wouldn't so completely ignore the persons whose problems we are being paid to solve.

Our major aim in a production program is vocational efficiency; consequently we first search for criteria of farmer efficiency. Then we begin to collect data to determine the consequences of our efforts.

What would you do if you had the data in Table I on your community?

Please ponder these questions while we consider in detail the procedures we are using to evaluate the hog production programs in Illinois.

The criteria we decided upon were:

1. Pounds of pork produced per sow in 180 days.
2. Pigs per litter raised.
3. Percent of spring pig crop marketed each month, September to January.
4. Percent of increase in sows for 1943 over 1942.

It takes but little imagination to realize that farmers are interested in comparing their efficiency figures with those of their neighbors. Such facts provide teaching materials, too. Some teachers conducted a lesson on efficient production and the measures of efficiency. They then asked the farmers to set up a goal, which usually was about 1,600 pounds of pork per sow in 180 days. These devices are certain to build interest, because they apply the first law of interest, which is: "Give the learner a goal and a means for measuring progress."

Pig Survey Cards Developed

For facilitating the collection of data, a "pig survey" card was developed for use by farmers who attended war production classes. Additional cards were collected from farmers not attending the war production classes by the boys in the all-day classes, to permit comparisons of the instructed and uninstructed groups.

The cards were checked by the teacher for completeness and were coded to show code symbols were placed in the space for farm number. They were:

W– The farmer is a member of your *war* production training class.
D– The farmer's son is a member of your *day* class.
E– The farmer is a member of an *evening* class other than one of the war production training classes.
F– The farmer or his son was a *former* member of either a day or an evening class.
N– *Neither* the farmer nor his son has ever been a member of any evening, day or war production class.

The cards were then sent to the College of Agriculture, where the criteria were calculated and the data punched into tabulating cards, from which the reports were run. The township, farm, county, and school were coded for identification and tabulation controls.

Table No. I — **Community Averages**

Criteria	1937	1938	1939	1940	1941	1942
1. Pork per sow—lbs.	960	969	987	1,005	1,020	1,042
2. Eggs per hen—No.	87	92	97	109	115	127
3. Cotton per acre—lbs.	201	214	231	240	243	257
4. Corn per acre—bu.	31	34	35	39	42	43
5. Land in legumes—%	5	7	8	11	15	17

Would you use them as proof of a co-operating community?
Would you calculate the dollars and cents value of your program therefrom?
Would you claim that your community had made real progress?
Would you continue to collect these data?

Table II — **Summarized Information**

Course No.	Name	Farm No.	Before 9/1	Percent of pigs sold During Sept.	Oct.	Nov.	Dec.	No. Sows	Pigs per Sow	Pork per Sow	Index No.	School No.
9	J. B.	1	59		38			14	6.6	1032	103	7
9	C. H.	2		82		5		12	9.4	1565	186	7
			Total					.....	.....	.....		
			Average					.....	.....	.....		

The report returned to the teacher contained the information in Table II.

Blank spaces on this report indicated no record or zero entry. For instance, J. B. sold 59 percent of his spring pigs before September 1, sold 38 percent during October, and had the remainder on hand. Up to the time the survey was taken he had sold 97 percent of his pigs. Likewise, C. H. had sold 87 percent before December 1, sold none in December, and had 13 percent on hand when the survey was taken. As these percentages were calculated they were entered in Column *a* on the card in the spaces numbered as follows:

4=before September
7=during November
5=during September
8=during December

Calculations in Column *b* were ages in days from the average farrowing date to the date of sale. If total weight was given for the lot sold, the average weight was calculated and entered in Column *c*. From an age-weight conversion chart, the weight to 180 days was determined and entered in Column *d*. These weights were multiplied by the number of pigs in each lot. The sum of these products was the total pounds of pork produced, which was recorded as Item e. Item e divided by the number of sows gave pork per sow, which was recorded as Item 10 on the card.

The number of pigs per sow was entered as Item 9 and the number of sows to be kept for 1943 was divided by number of sows kept in 1942 and the 3 digit quotient was entered as Item 11. This was the index number shown on the tabulation sheet.

Instructions Reduce Possibility of Errors

The following instructions accompanied the reports sent to the teacher:

"You can see how the figure for calculated pork per sow might be wrong if erroneous average farrowing date, weights, sale dates, or date of taking survey were given. The survey cards suggest the need for teaching how to judge weights of market pigs as one of your lessons.

"Examine the pork per sow and the pigs per litter figures very carefully; and if you think they are not correct, look for the source of error on the survey card the farmer filled out. Then let us know.

"The totals were divided by the number of reports. They represented averages of farmer efficiency rather than averages of hogs. Please note that we are averaging an average. The average pigs per litter is the average of the farms surveyed, not the sows. Be sure to make this distinction in your explanation.

"Please be careful not to list any names when you publish the results, not even

Job Instruction Training in Agriculture

WESLEY P. SMITH, Assistant Teacher-Trainer
San Luis Obispo, California

THE American farmer has had many obstacles placed in the path which leads to maximum production, and not the least difficult of these to surmount has been the manpower problem.

As American industry emerged from the preparatory or defense phase of its gigantic metamorphosis into the productive or offensive stage, it was immediately discovered that such a tremendous expansion of factories, machines, and tools necessitated an equally tremendous expansion in trained personnel. In order to meet the manpower demands of such an expansion, the war industries further perfected a training program which had for more than 25 years proved its worth. This was the Job Instruction Training program which was sponsored by the Training Within Industry Service of the War Manpower Commission.

What Is Job Instruction Training?

Job Instruction Training, in a few words, is merely an arrangement of the four steps of good instruction into a compact package which can be presented in a practical fashion by laymen. The method itself is not new; nor is it limited to any one type of education; instead, it has been basic to all vocational education.

By July of this year, more than 600,000 supervisors and foremen in the war industries had completed 10-hour training courses on how to train workers *on the job*. More than six million men and women employed in these war industries have received on-the-job training from these supervisors and foremen who have completed Job Instruction Training courses.

There is a striking parallel between the situation in our factories and that found on our farms in this war emergency. Millions of people have gone into industry for the first time in their lives. That these people have been absorbed and have produced is made evident by the tremendous production we now witness. This year alone, it is likely that three million people inexperienced in farm work are going, or have gone, onto the farms of this country to assist in the planting, cultivating, and harvesting of crops, and the care of livestock. These millions, willing but inexperienced, will join millions of other farm workers who are more or less trained to do the job expected of them. How well and how soon we win this war depends, to a large degree, on how well and how soon all agricultural workers are able to do their jobs.

Farm work is not standardized. Each farmer has developed his own ways of doing the jobs on his farm. Usually he has good reasons for every method or procedure he follows. No two farms are exactly alike in soil, contour, crop, livestock, or standards of work set up by the farmer. It is, therefore, logical that the most successful training of new workers should be done by the farmer himself right on the farm.

Until recently, the farmer has not had to be a trainer or an instructor. Today the experienced help he formerly employed is no longer at his beck and call. manpower problem hinges on the kind of job the farmer does in getting his present employees to work efficiently, especially how quickly and correctly the inexperienced new employees are able to produce, the farmer *must* become an efficient instructor.

The answer to this rather new responsibility in many cases, seems to be the adaptation of Job Instruction Training to agriculture and to farm conditions. California's experience with Job Instruction Training in agriculture seems to verify this conclusion.

The expansion of war industries, army camps, and other non-agricultural activities in this State has placed the farmer in the most difficult labor situation he has ever experienced. Even at best, the seasonal farm labor system in California has not been a very efficient one. Now, with withdrawal of the Japanese, induction of the Filipinos, and the drain by the armed forces and war industries on other experienced farm help, the California farmer has had to resort to the use of inexperienced Mexican nationals, the Women's Land Army, vacation volunteers, school children, etc.

Recognizing its responsibility in the farm labor training program, the Bureau of Agricultural Education, California State Department of Education, invited the War Manpower Commission to present members of its staff a sample of the Job Instruction Training program as carried on by industry.

In answer to this invitation, Mr. J. B. Calhoon, representing Training Within Industry, instituted Job Instruction Training for California agriculture. The staff of the Bureau of Agricultural Education foresaw the possibilities of such a program, and immediate steps were made to place it in operation, by State Supervisor Julian A. McPhee and Bureau Coordinator B. J. McMahon. This was accomplished by inviting Training Within Industry to conduct five institutes in various parts of the State, which resulted in some 40 instructors of vocational agriculture being certified as Job Instruction Trainers.

Farmers Trained to Teach

Within a few weeks after the institutes were held, 10-hour sessions were being conducted for farmers in a number of agricultural areas. From these initial sessions, a spark was ignited which gradually turned itself into a three-alarm fire. Agricultural instructors with years of successful experience with adult classes began offering testimonials to the fact that Job Instruction Training for farmers met with such unanimous appreciation that favorable reactions to other types of adult classes were dwarfed by the spontaneous and unchecked enthusiasm displayed by the members attending these sessions. Even young, comparatively inexperienced teachers found that the 10-hour sessions received such approval that additional courses were immediately scheduled. Every trainer was confident that no adult class work he ever offered gave the complete personal satisfaction that this work did. Furthermore, every mediately conducted additional sessions.

The Bureau of Agricultural Education, satisfied that Job Instruction Training was applicable to agriculture, and in answer to requests from agricultural instructors thruout the State, requested Training Within Industry to certify additional institute conductors so that practically every teacher of vocational agriculture in the State could have an opportunity to become a certified trainer. Mr. J. B. Calhoon, Assistant Director of T. W. I., again assisted the new cause by preparing and certifying as institute conductors two members of the bureau, Teacher-Trainer S. S. Sutherland and Assistant Teacher-Trainer Wesley P. Smith. In addition, Winston Strong, agriculture instructor at the Fresno State College was certified as an alternate. Each of these men had conducted a number of 10-hour units, as background for their certifications as Institute leaders.

State-wide Program

From this point on, the program expanded at a rapid rate. To date more than 150 teachers of vocational agriculture have been certified as trainers, and at this writing more than 250 units have been offered farm people. This progress has been made in spite of unusual summer harvest demands. No doubt the somewhat slack fall and winter months will make it possible for practically every farm employer or foreman in California to have an opportunity to participate in this program. Such a possibility is not at all remote, as both the Agricultural Extension Service and the California Farm Production Council have recommended that farmers follow just such a program. In many areas the Agricultural Extension Service will not appoint supervisors over volunteer student labor until they have had Job Instruction Training.

At this point it might be well to offer a thumbnail sketch of how the Job Instruction Training program operates in California. In order to conduct a J. I. T. unit, there is the necessity of certifying a trainer. This is done in an institute conducted by one of the three agriculturally trained institute leaders. These institutes usually last for five days and only 10 men can be enrolled. Those who satisfactorily complete this training are then certified and provided with the official Job Instruction Training Manual, for which agricultural adaptations have been made by the U. S. Office of Education.

The certified trainers then recruit from 10 to 12 farmers or farm foremen for each 10-hour session. This unit operates under the OSYA program, Course No. 19, Training Farm Workers. It consists of 5 two-hour meetings, held within a two-week period or less, at a local place convenient to farmers.

Materials necessary for conducting these units are furnished by the State office. In fact, Training Within Industry has practically turned over the entire agricultural phase of Job Instruction Training to the Bureau of Agricultural Education. *Preparation of trainers, organization, promotion, and follow-up have become the bureau's responsibility.*

California farmers and agriculture leaders are firm in their contention that the Job Instruction Training program will aid materially in obtaining the increased farm production which seems so necessary to the successful culmination

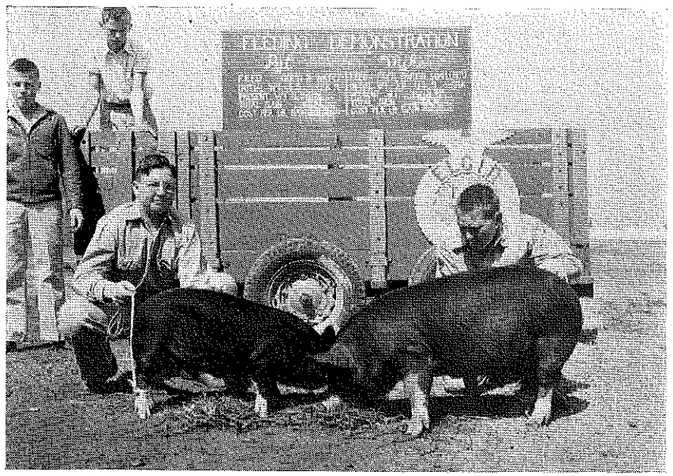
Supervised Practice

C. L. ANGERER

Securing Satisfactory Supervised Farming Programs

HAROLD BOUCHER, Teacher, Brunswick, Missouri

THE supervised practice program of a student is an important test of what he is learning in his vocational agriculture classes. While the supervised farming program is a measure of the student's ability to do, it is not always the entire measure because what a student can do or does do is greatly influenced by home conditions and co-operation, by the individual desire to do, by the teacher's help, and by co-operation of student, parents, and teacher. All of these factors are largely dependent upon the teacher. Thus to develop outstanding supervised farming programs the teacher must sell such work to his students, the parents of his students, his community, and himself.



Vocational boy feeding some of his purebred Poland Chinas

Assuming that the teacher is sold on supervised practice work, what can be done to sell the work to the student and his parents so that the necessary co-operation can be obtained to secure outstanding farming programs?

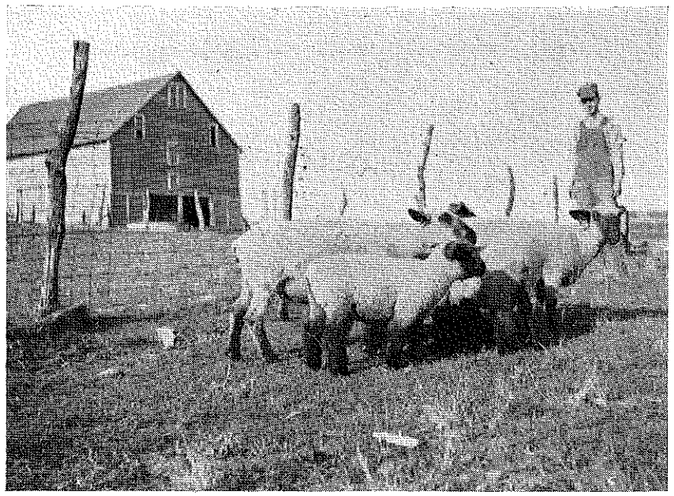
In my ten years of experience in teaching vocational agriculture, I have found that one of the most important factors for securing good supervised practice is an early start. To get such a start, a list of the eighth grade graduates in the community should be obtained from the county school superintendent's records, and those boys likely to enroll in your classes should be contacted during the summer before school begins. When these first-year students are contacted, the purpose of supervised practice work should be carefully explained to them and their parents.

The following purposes or reasons for supervised practice work may be offered to convince the student and his parents that he should develop an extensive program:

1. It will serve as an aid to the learning process. Doing helps to make learning permanent.
2. It will be a means of making money.
3. It will be a means of becoming established in farming.

All three of these major purposes will appeal to the parents unless they have been unsuccessful and do not want their son to be a farmer. Both the first and second factors should appeal to the student, particularly the opportunity to make money. Examples of former students who have been successful should be cited.

Explanation should also be made at this time of the importance of developing a supervised farming program around the most important enterprises of the farm and community and around those enterprises which have the most favorable outlook. Just as soon as possible some effort should be made toward getting the boy started, in order to create a greater interest on his part.



Three purebred Hampshire Ewes with which Virgil Bachtel hopes to become established

Getting Started

When school begins, definite time should be devoted to acquainting the beginning student with the supervised practice program. Every means should be taken to create a desire for a large, well-rounded, supervised farming program. Convince the student that this is the kind of program he will be proud to have, rather than saying this is the kind he must have. Records of boys they know can be studied and pictures of outstanding projects should be made available. Good pictures can be hung in the classroom, placed on the bulletin board, and passed out during study of supervised practice work. An older student who is doing good work can be called in to tell of his work. The long time project programs of older students or former students can also be studied.

After the desire for a good supervised practice program has been created, time should be given to getting started and to carrying out such a program. Inviting parents to a night meeting and explaining to them the supervised farming program, its purposes, what is expected, and how to get started is very helpful in solving some of the problems of initiating a good program. Credit is usually a problem and the teacher should investigate the possibilities along this line and tell the boys and their parents just what can be done. Local bankers as well as Production Credit Associations are usually willing to co-operate when the cards are laid on the table in a business-like manner. The F.F.A. chapter or local civic organizations also offer opportunities for supplying credit for individual supervised practice work.

Long-time Plan

The value of a long-time supervised farming plan should also be studied. Long-time plans of other students can be studied and a sample plan for someone in the class worked out. Then each student can work out for himself one which he thinks he would like to do. After these have been checked by the teacher, the student should be required to take them home and discuss them with his parents. The teacher should visit the boy at his home and discuss the plan with him and his parents and note possible changes which should be made. During the supervised practice study, a final and complete plan should be made and the approval of both the teacher and parents indicated in some way.

The following is the long-time supervised practice program of a student, prepared during his freshman year and carried to a successful completion.

Freshman Year

1 purebred Spotted Poland sow and litter

Sophomore Year

1 purebred Spotted Poland sow and litter
2 acres of corn

Junior Year

3 purebred Spotted Poland sows and litters
4 acres corn
2½ acres potatoes

Senior Year

5 purebred Spotted Poland sows and litters
5 acres corn
3 acres potatoes
2 acres alfalfa
1 dairy heifer

1st Year Graduate

6 purebred Spotted Poland sows and litters
10 acres corn
3 acres potatoes
2 acres alfalfa
2 dairy heifers

After the supervised practice program gets under way every means should be taken to obtain efficient practices. Goals, approved practices, and efficiency standards should be set up. Much of this can be done during class discussion of the various jobs within an enterprise, but definite time should be set aside for study of supervised practice work, and when certain crucial problems occur time should be taken to help solve them.

Self-Evaluation

The student should know what is expected of him. The use of monthly approved practice check sheets for the major enterprises will be of help. For instance, the approved practices for swine for a certain month may be listed and posted on the bulletin board where all can see, and each student with a swine

Father and Son Partnerships

STANLEY HAWTHORNE, Teacher, East Nicolaus, California

ONE of the finest outcomes of a successful vocational agriculture program is its culmination in a father-son partnership in farming. In the old days of large families, such a relationship would have been difficult. Today, with perhaps only one or two sons in the family and most of the new land taken up, making it difficult for young men to otherwise establish themselves in farming, the father-son partnership is an excellent arrangement.

There are many advantages. By the time the son is of mature age, the father may likely be ready to retire. A father-son partnership provides for a continuity in farming operations, the keeping up of well-bred herds of cattle, swine, and sheep. In many instances, father and son are partners before the boy is thru high school.

How the inspiration from a vocational agricultural course can help a boy gain a full-fledged partnership with his father is well illustrated by the case of Leo Michel, who until his graduation in 1942 was a student of mine at East Nicolaus Union High School in Sutter County, California.

Example of Partnership

Today—one year out of high school—Leo Michel is a full partner in the $80,000 agricultural holdings of "Eugene Michel and Son." It is a *real* partnership, for Leo has the legal papers to show that he is half-owner of the valuable properties. Not only that, the elder Michel feels that what his son learned at school and applied at home has definitely made a substantial contribution to the expanding business.

To see how co-operation among the parent, Future Farmer, and the vocational agriculture teacher has helped develop an outstanding young livestock man, we should first go back to 1938 when Leo Michel entered East Nicolaus High. Quick to make his interests known and to observe the suggestions of his teacher, young Michel responded to my advice on the purchase of two purebred Hampshire gilts. A few months later, he bought a registered Hampshire boar. These animals were developed at home so that by spring, Michel won a junior grand champion award and two firsts at the Yuba-Sutter County Fair. This was only a beginning, for 32 prize ribbons were to be given his entries during the following two years.

During the summer, at the end of Leo's freshman year, his two sows farrowed nine and 10 pigs, respectively. Such farrowing is, of course, unusual but what is more remarkable is that one litter at six months weighed 2,120 pounds.

Father Michel was impressed. He encouraged Leo to buy six more gilts of the same breed the following spring. Mr. Michel was still more greatly impressed as Leo's success continued, so he disposed of all 15 of his grade sows and made a deal with the boy for six of his purebred gilts.

When it was time for Leo to purchase a new boar of the same quality, Mr. Michel went along to Red Bluff with the boy and his teacher. Sensing that the boy was a "comer," Mr. Michel now saw to it that father and son built a 30′ x 50′ concrete and steel combination farrowing house and fattening pen—a structure judged one of the finest in this section of the State by H. H. Burlingham, Regional Supervisor of Agricultural Education for Northern California.

Makes Equipment

This continued in the same vein thru the rest of Leo's school years—the boy using at home his school-acquired knowledge about purebred stock, the father realizing that the boy "had something" and encouraging him to develop his interests.

Meanwhile, Leo was busy at school making equipment for his hogs, following the recommendations of the California Polytechnic School. He constructed a half dozen pig brooders, a movable loading chute, a trio of 15-foot self-feeders, and 12 individual hog troughs. Some of the types of equipment made were new to the father.

Leo was an outstanding student at East Nicolaus, ranking third in his class in scholarship and serving his student body as president. He is now president of the Sacramento Valley F.F.A., is a State Farmer, and is an applicant for the American Farmer degree.

Earned Partnership

What besides parental interest, one may ask, would have led Eugene Michel to create this partnership immediately after his son's graduation from high school? What did the boy have to offer?

First of all, Leo contributed 160 purebred hogs, five acres of alfalfa, and four purebred Guernsey cows, which had been his alone. More important, the boy proved by his accomplishments that he would be a distinct asset to the business. For instance, during Leo's four years in high school, his sows' litters averaged 8.3 pigs raised, a mark above the average of his father's sows and considerably above the California State average. It was a proud father who took his son into the firm, but he was also a wise and business-like father.

The elder Michel's main interest has been dairying—at which he has been extremely successful. But the hog expert in the $80,000 firm is Leo Michel, one year out of high school.

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gress and figure his percent of accomplishments at the end of the month.

Another means of stimulating students to do more and better work is thru participation in shows and sales. Every boy who wins a ribbon gets a great thrill and usually wants to come back and try again. Shows and sales give students a definite time to have their livestock ready, and also encourage better work. Shows and sales also furnish excellent material for publicity thru newspapers, pictures, etc. The teacher should make use of all such publicity in selling the supervised practice program to his students, their parents, and the community.

Then, let us not forget that frequent and timely visits are necessary if we are

Future Farmers of America

A. W. TENNEY

Planning and Carrying Out a Chapter Program of Work

E. J. JOHNSON, Acting Federal Agent, Agricultural Education

A WELL-PLANNED F.F.A. program is absolutely essential to successful chapter operation.

The program of work should be based on the needs of the members, the chapter, the school, and the local community. The program should represent the combined thinking of a majority of the members.

New chapters should not undertake too elaborate a program the first year, but a chapter should never be satisfied with something that is not worthy of the members' best efforts. The program should improve each year in scope and quality.

The following steps are suggested in building a satisfactory program of work for a chapter:

1. Review last year's program of work at chapter meetings. Try to find out why certain items were successful and others were not successful. Discuss also the present needs of the chapter, its membership, and the needs of the community.

From last year's program select and list the items which should be continued for the present year. Add suggestions on new items offered by members.

3. From copies of the programs of work of the State association and the national organization, select and list items which can and should be included in the chapter program.

4. Secure copies of other chapter programs and get ideas on other suitable program items.

5. Appoint a program of work committee. This committee usually consists of the chairman of the eight major divisions. It should be the duty of this committee to review the program set up by each committee and make necessary changes before the program of work is presented to the chapter for adoption.

6. Check the program of work with school authorities and others concerned.

Many chapters have found it helpful to display the program of work on a wall chart. If a chapter wishes to do this, a chart of about 28 inches by 44 inches in size will be found practical. By the use of such a wall chart many chapters have been stimulated to greater achievements.

Chapters listing their goals in detail may wish to develop a separate chart for each division of the program of work.

By including the major duties of officers and members on the wall chart, the boys have a constant reminder of their chapter responsibilities. The listing of committees and committee members emphasizes the fact that certain boys are responsible for a specific division of the program of work.

A wall chart kept up-to-date will provide an accurate record of the year's activities and will furnish recommendations for the improvement of the program the following year.

If stored carefully, the wall chart will become a valuable addition to the permanent chapter records.

The material presented on the following chart will illustrate how chapters make use of this device. This is presented as an illustration and not as a model program.

This visual wall chart and explanatory guide has been carefully reviewed and approved by Mr. A. W. Tenney, Acting National Executive Secretary of the F.F.A. It has also been reviewed and approved by the National F.F.A. Board of Trustees and the National F.F.A. Advisory Council at their 1943 conferences.

Chapter_____

F. F. A. PROGRAM OF WORK—1942-1943

High School_____

	Major Duties	Committees	Members	Goals Set	Ways and Means	Accomplishments	Recommendations
President John Jones	Preside over meetings. Appoint committees. Co-ordinate work of chapter. Member of all committees, ex-officio. Be familiar with constitution and by-laws. Check on progress being made by chapter. Represent the chapter on special occasions.	Supervised Farming	Eugene Orr Ch'm. Guy Barr Sec'y. Ed Shaw Jack Boyd Fred Dean	Encourage members to develop and carry out supervised farming programs which will help them advance to next F.F.A. degree. Encourage use of purebred breeding stock and improved strains of crops. Sponsor a project tour. Encourage home improvement projects. Treat and test seed before planting.	Give chapter trophy to boy with best farming program. Keep list of sources of good seed and registered animals. Start a chapter pig chain. Invite officials to accompany chapter members on tour. Each member carry out five home improvement projects. Build equipment and test and treat seed at school.	Earned an average of $92.08 per boy. 84 percent of animals in farming programs purebred. All used pure seed. One project tour held with 44 in attendance. An average of 4.4 home improvement projects completed per member. All seed treated for disease.	Give two trophies, one for beginners and one for advanced boys. Purchase a registered Jersey bull.
Vice President Dick Smith	Assist the president. Have charge of committee work. Preside at meetings in absence of president. Be prepared to assume duties of president.	Co-operative Activities	Ray Huff Ch'm. Rex Boone Sec'y. Glenn White Nelson Orr Loyd Cain	Purchase livestock and products co-operatively. Sell livestock and products co-operatively. Co-operate with community organizations in worth-while activities. Produce an agricultural enterprise co-operatively. Operate chapter-owned incubator.	Chapter buy co-operatively. Grade products from supervised farming programs and sell co-operatively. Purchase interest in local dairy bull ring. Plant one acre of tomatoes. Hatch chicks for members and for farmers in community.	Purchased 48 tons feed co-operatively—saved $96. Sold 800 head of fryers co-operatively at 2c per lb. above market price. F.F.A. placed on local poultry co-op board. Produced co-operatively 110 bushels of tomatoes. Hatched 10,000 chicks co-operatively.	Assist Grange and Farmers Union to put on county seed show. Build feed mixer for use of chapter. Sponsor a for sale, wanted, and exchange bulletin board for farmers in community.
Secretary Art Hill	Prepare and read minutes and reports. Attend to official correspondence. Keep permanent records of chapter. Keep membership and degree roll. Have available the list of business for each meeting. Have on hand for each meeting secretary's book and list of committees.	Community Service	Ken Black Ch'm. Sid Clay Sec'y. Louis George David Ball Ted Wilson	Assist in community war activities. Sponsor crop improvement campaign. Sponsor a wild life conservation program. Landscape school grounds. Test seed corn for farmers.	Assist in scrap collections, War Bond drives, farm machinery repair, and food conservation. Grow and sell improved sweet potato plants. Establish a quail breeding reservation. Make foundation plantings around building. Charge a small fee and test at school.	Collected 32 tons of scrap, repaired 12 farm machines, harvested 200 bushels produce for canning. Obtained use of 125 acres of land for quail breeding reservation. Planted 38 shrubs around school building. Tested 33 bushels seed corn for farmers.	Help with Food Production War Training classes. Obtain quail and restock F.F.A. quail breeding reservation. Plant grass seed in front of high school.
Treasurer Bill Dudley	Act as custodian of chapter funds. Collect dues and send in state and national dues. Assist in preparing annual budget. Keep financial record of chapter. Pay out chapter funds as authorized. Devise methods to raise funds. Encourage individual and chapter thrift.	Leadership Activities	Bud Brown Ch'm. Harry Dodd Sec'y. *James Lee* Cal Ward Carl Hall	Provide training for all members in parliamentary procedure. Give training in public speaking. Provide experience in group leadership. Chapter members study duties of officers and leaders. Assist members to prepare for higher degrees.	Organize a parliamentary procedure team. Have chapter members enter public speaking contest. Each member to serve on a committee and preside at some meeting. Have members attend leadership training conference. Provide opportunity for group leadership experience.	Entered team in district contest. A chapter public speaking contest was held. Two members attended state leadership conference. Thirty-eight articles in local paper. Scrapbook kept.	Put on radio program. Provide more group leadership experience.
Reporter James Lee	Prepare chapter news articles. Keep a chapter scrapbook. Serve as chapter historian. Keep file of all chapter news. Contact newspapers and arrange for publicity. Assist in maintaining F.F.A. bulletin board and wall chart. Assist with chapter exhibits.	Earnings and Savings	Fred May Ch'm. Howard Gray Sec'y. *Bill Dudley* Stroud Day Earl Eaton	Each member earn and save enough to be eligible for next degree. Stimulate sound agricultural investments. Make a chapter budget. Pay chapter dues on time. Establish thrift bank.	Develop chapter loan fund to assist members with farming. An award to boy with best agricultural investment program. Follow example in treasurer's book. Set deadline and have interesting activity for those who have paid dues. Follow suggestions in F.F.A. Manual.	Loaned $573 from chapter thrift bank. Members average $368 invested in farming. A budget was made and used. Chapter dues were paid by 62 members. Purchased $100 War Bond. A thrift bank was established. $725 deposited.	Repair and sell old farm machinery at a profit. Sponsor a turkey shoot.
Sentinel Henry Brown	Set up the meeting room. Care for chapter paraphernalia and equipment. Attend the door and welcome visitors. See that meeting room is kept comfortable. Assist with entertainment and refreshments.	Conduct of Meetings	Ed Hines Ch'm. Roy Hays Sec'y. Mel Adams *Art Hill* Joe Duck	Plan and post programs in advance. Have each member appear on program during year. Use ritual at all meetings. Hold regular meetings each month. Put on a chapel program. Use correct parliamentary procedure.	Plan programs in series and post on bulletin board. Program committee keep record of participants. Train officers in this activity. Present a skit of outstanding F.F.A. activity. Systematic instruction in parliamentary procedure.	Program calendar posted each semester. Each member appeared on at least one program. F.F.A. ritual memorized by officers and used at all regular meetings. Meetings were held on second Monday each month. Two chapel programs put on.	Present programs before agricultural groups. Improve performance of degree ceremonies.
Adviser R. J. Steele	Counsel members and committees on problems. Check qualifications of those who seek advanced degrees or offices. Train, direct, and inform officers and members. Assist committees when needed. See that all ceremonies are creditably carried out. See that standard chapter equipment and supplies are secured and used.	Scholarship	Al Smith Ch'm. Pete Day Sec'y. Ned James Carl Howe Alvin Reams	Devote one chapter meeting to scholarship. Each member of chapter in upper 40 percent of class in all school subjects. Encourage boys to improve scholarship. Provide big brothers for new members.	Instruct members in "How to Study." Post an F.F.A. honor roll each month. Present an award to members making greatest improvement. Have advanced boys help new members.	Scholarship of members above school average. F.F.A. knife was presented to one boy for outstanding improvement in scholarship. Three first year members assisted by advanced boys on Tuesdays and Thursdays at noon.	Give more consideration to scholarship in electing members to positions of honor.
Members	Be familiar with program of work. Attend meetings. Participate in chapter activities. Be familiar with constitution and by-laws. Serve on committees.	Recreation	Jack Ray Ch'm. Pat Young Sec'y. *Henry Brown* Sam Rowe Bill Wise	Go on a camping trip. Have three parties during year. Hold a banquet. Provide entertainment for chapter meetings. Organize string band or brass band. Organize an athletic team. Build up fiction section of F.F.A. library.	Visit F.F.A. camp or camp locally. Plan carefully and serve refreshments. Plan a parent and son or father and son banquet. Use stunts, games, motion pictures, etc. Arrange for practice period. Enter music contests. Challenge nearby chapters for games. Sponsor an F.F.A. library week.	Went on one week-end camping trip. Two parties were held with home economics girls. A parent and son banquet held with 119 present. Entertainment was provided at 50 percent of meetings. Organized a string band. Had basketball and softball teams. Won 75 percent of games. Added 11 books to chapter library.	Make additional play equipment for chapter room. Put F.F.A. emblems on shirts of boys on chapter teams.

1. In early fall officers appoint committee chairmen—then all members are carefully selected for each committee. Officers usually serve on appropriate committees as members.
2. Each committee meets separately with adviser to determine goals and ways and means to attain these goals.
3. Post program of work and goals on bulletin board October 1.
4. The reporter should keep the accomplishments posted up to date.
5. Committees should make recommendations just before school ends. Recommendations serve as guides for new committees next year.
6. Goals, ways and means, accomplishments, and recommendations may be typed on paper and glued on chart if it is desired

E. R. ALEXANDER

Farmer Classes

W. H. MARTIN

Teachers As Evening Class Members

VERNON VINE, Senior Agricultural Economist, Kansas City

THE plowman who tills an ancient battle-field probably gives little thought to the struggle waged on his land in the past, but wonders more if the crop he is about to seed will grow and prosper.

Likewise, the seven vocational agriculture instructors who bit their pencils and scratched their heads as they sat in the study hall of the old Hannibal (Mo.) High School one day last August were more intent on the problem at hand than they were in contemplating the fact that years ago Donald M. Nelson, now head of the War Production Board, pored over his algebra and chemistry problems in this same room.

Problem of Credit

The problem the men were wrestling with was this: How large a Production Credit loan should be made to a farmer whose farm they had just visited?

Solving this problem was part of an all-day short-term credit appraisal demonstration conducted by the Hannibal Production Credit Association for the teachers in the counties it serves.

Each year sees more of these short-term appraisal demonstrations held. More have been held in the Middle West and Southeast, however, than in other sections of the nation.

The Hannibal demonstration was typical. It opened with a brief discussion of the reasons why agriculture needs special credit facilities. In this, agriculture was contrasted to industry. It was pointed out that farmers need special credit facilities because they operate smaller units under individual ownership; that their operations are seasonal, subject to weather and insect hazards; that their capital turnover is slow and the returns on the capital are relatively low; that their production period is a relatively long one and because of that they are unable to make quick adjustments in enterprises.

The discussion then brought out the ways in which Production Credit Associations attempt to provide service to meet these needs thru longer-term, lower-cost loans, with repayment requirements scaled to the earning capacity of the farm enterprise.

Basis for Credit

The real work of the day got underway when each instructor was given a folder containing a copy of a purported financial statement for a member of the Production Credit Association, a copy of his livestock inventory (with values left blank) and a copy of a purported loan application showing the amounts the member proposed to borrow and the purposes for which he needed credit.

The financial statement and loan application are described as "purported" documents, because PCA Secretary-Treasurer Leland Ruffin had two things in mind. The first was to keep confidential the actual financial condition of the member who permitted his name and farm to be used. The second was to work up a typical "border-line" application, where sound judgment of character, farming methods and management, loan purpose and collateral security—all would be needed to reach a sound decision.

This, of course, in fairness to the association member, was explained to the instructors. Thus confidential information was kept confidential, and an interesting problem in credit extension was devised.

The discussion which followed their return from the farm to the classroom centered largely around the balance of the farm enterprise, the wisdom of projected expenditures in light of anticipated income, and the progress, if any, that a borrower might be expected to make under such conditions.

The net product of this discussion was something greater than simply determining that, with certain modifications, the loan in question should be made. Out of the exchange of opinions developed the concept of credit, not as a sum of money to be loaned against collateral of given value, but as a tool to produce a profit for the farmer.

Credit for Returning Service Men

In the final stages of the discussion, this point of view was related to the job vocational agriculture teachers are going to have to do when the war is over. Then, when former students return from the war and when graduating students again can look forward to placement on farms rather than to induction in the armed forces, the need for instructors to know all of the factors which make for successful farming will be greater than ever.

The short-term credit appraisal demonstration, and its companion, the long-term credit demonstration, are practical devices for instructors to use to obtain first-hand information on two vital, but little understood, phases of farm management.

The Hannibal demonstration was arranged by the local Production Credit Association as part of its program of public service. Similar demonstrations can be arranged for groups of five to 20 instructors by getting in touch with the nearest Production Credit Association or district offices of the Farm Credit Administration.

Long-term appraisal demonstrations can be arranged thru National Farm Loan Associations or district offices of the FCA.

Results of Evening Class Instruction

A. H. BUSHONG, Teacher, Ellenboro, North Carolina

THE Ellenboro Sweet Potato Storage Company, organized early in the spring of 1927 and firmly established since that time, stored 28,000 bushels of tasty yams last year for Ellenboro and other communities of the county, and as a result served the war effort well in the Food-for-Victory program. The crop cured was the largest in history despite the smaller acreage set to potatoes. This bountiful crop, produced near the famous Chimney Rock bordering the "Land of the Sky" in North Carolina, made food plentiful for local people, and supplied thousands of bushels for hungry people living in cities of other states.

A total of 13 refrigerator carloads of yams were shipped from Ellenboro to cities in northern and western states during the early part of the shipping season this year. The first of the 13 marked the first carload in history to be shipped out of Rutherford county. Shipments by carload took place at a rate of one per day. Some days a truck load was invoiced on the same days that a carload shipment took place. In addition to the carlot shipments many more thousands of bushels were sold by truck within and without the State. A. B. Bushong, president and sales manager for the potato association, found markets for both the car and truck shipments. He has made all invoices and statements of sales to the growers as one of his free services to the community, working in the capacity of the vocational agricultural instructor in the school and community.

Carefully Graded and Packed

All of the potatoes marketed by car or by truck were graded and packed in attractive containers. A special grading and packing committee did this work for the farmer at a reasonable charge. In grading and packing for carlot shipment all potatoes were brushed, graded, and packed under the supervision of a U. S. sweet potato inspector. After these potatoes were cleaned by brushing, they were packed in new bushel tubs lined with paper. This method of packing and inspection enabled sale to take place at the point of shipment and eliminated much of the risk and sometimes loss experienced in car shipment. Before the time of U. S. grades and Federal inspection, cars were accepted on delivery, resulting in much misunderstanding and often in much loss in money to the producer or shipper. Today, U. S. grades are well established, the buyer knows what he is buying,

Community Problems a Basis for Adult Programs

CARL G. HOWARD, Teacher Education, State College, New Mexico

C. G. Howard

ONE of the places where there are only a few who "hath", is Socorro, New Mexico. In addition to this, the New Mexico School of Mines which is housed near Socorro, like all of the smaller and some of the larger schools of higher education in the West, was faced with what amounted to an entire removal of the student body to the armed forces of the United States. Early in 1943 rumor and investigators indicated that there might be up to 400 members of some training agency of the army who would need to be housed in the School of Mines buildings, and given some specialized training.

This presented quite a problem to all of the folks in Socorro, particularly Mr. Jesse L. Parker, instructor of vocational agriculture in the Socorro High School. In order that the scope and magnitude of this problem may be entirely appreciated, it will be necessary to paint in a little of the local situation which confronted him.

Type of Agriculture

Socorro has a precipitation of 10.24 inches annually, practically all of which is rainfall. The frost-free growing season has averaged in 44 years some 196 days. There is a varied soil type, being mostly of the Gila series. All of this allows a wide diversity of crops which may be produced in Socorro Valley. Livestock feeds, such as alfalfa, corn, and grain sorghums yield well. Vegetables and fruit are grown to a moderate extent. Some cotton and sugar beets are grown and some small grain is produced. Livestock population has been fairly low in this area, altho quite a number of dairy animals have found their way into the valley. Many Socorro valley hay producers have sold most of their hay to Albuquerque dairymen for cash instead of feeding at home for increased fertility on the home farm.

Mining and ranching in the past have supplied the greatest demand for agricultural products near Socorro. The decline in the mining industry following the first World War has cut down even that demand. The small farm problem here is acute. About two-thirds of the farms contain less than 20 acres and one-third of them are between three and nine acres in size. Profitable market outlets are not available for intensive crops because of high unit cost of production, and high cost of transportation to distant markets forces farmers into the production of more extensive crops such as alfalfa and cash grains. Lack of capital is an important factor, too, in preventing increased acreages and enlarged operations. Family inheritance and breaking up of larger acreages to give to children have taken their toll. Special crops, additional capital, introduction of high-value cash crops, the development of larger farms, and the growing of more extensive crops which may be disposed of on the general market and by feeding to livestock at home seem the only avenues by which this area can be put back into financially successful farming operations.

Survey by Future Farmers

Many of the problems indicated in the local picture were being given some attention. But the milk supply in and near Socorro was woefully inadequate to supply an influx of some 400 soldiers. Mr. Parker had already made up his mind that the orderly disposal of farm products was the one crying need of the farmers in the area from which he drew his enrollment. As a further foundation for intelligent aid to the agriculture of his community he had his Future Farmer Chapter survey the community to determine the amount of whole milk which could be produced and collected, profitably, on a daily basis if proper arrangements could be perfected. This amount of milk, if of Grade A, would supply to the Army and Socorro inhabitants enough milk for the conservation of the health of the community.

Having determined from this survey and his 10 years' residence on a farm of his own near Socorro that enough milk could be produced to meet the anticipated need, Mr. Parker was faced with the necessity of organizing some system which would provide an acceptable grade of milk for the Army; also, a systematic and economical procedure for collecting and disposing of this milk.

This very real evening class problem caused Mr. Parker to enlist the services of Mr. Leonard Johnston, Farm Security supervisor, to aid him to arrange a series of evening class meetings so that he could make the milk producers aware of the things they would have to do in order to benefit by the new-found market for one of their commodities. It should be noted here that the need for, and value of, securing the co-operation of the Farm Security representative has been indicated in the descriptive picture of the Socorro situation.

Prospective suppliers of Grade A milk were contacted by Mr. Parker and the Farm Security agents. This resulted in around 50 farmers enrolling for the meetings. Attendance varied with the announced subject for the meeting. Average attendance was approximately 20.

Program Adjusted

A sign-up of the milk producers in the area substantiated the findings of the F.F.A. survey. A study of the requirements of Grade A milk and a knowledge of the barns and equipment of the Socorro valley, however, led Mr. Parker to invite a representative of the New Mexico Public Health Service to explain in detail to the prospective milk producers and distributors, the requirements which must be met in order that milk put on the Socorro market and provided for the Army could be classed as Grade A.

Nearly all of the producers found that they could not produce Grade A milk without at least some remodeling, building, or change in practices of handling milk. Some of them had so many changes to make they lost interest in the effort. In the main, however, these classes which started in the middle of February and ran into May on marketing and handling of milk and poultry products which met Army standards, cleared up entirely the things each farmer had to do to meet Government requirements. By that time nearly all of the farmers who stayed in the classes declared that they were ready at a moment's notice to do what was necessary to get into production, collection, and marketing of Grade A milk.

"While the school teachers of this country help to speed the day of victory, let them not neglect to cultivate that better understanding between people and nations which must underlie a peaceful world society."—*President Franklin D. Roosevelt, in a message to the convention of the American Federation of Teachers recently concluded in Chicago.*

"We insist upon boards of education serving, not anti-tax bodies, political bodies, and some industrialists in their attempt to curtail public education, but rather serving the youth of America. . . ."—*Joseph F. Landes, who was elected president of the AFT, to which President Roosevelt sent the message quoted above.*

"Actually, it's a problem of adult delinquency, not juvenile."—*J. Edgar Hoover, Director, Federal Bureau of Investigation.*

The greatest of faults is to be conscious of none.—The Art of Living Successfully.

Farm Mechanics

L. B. POLLOM

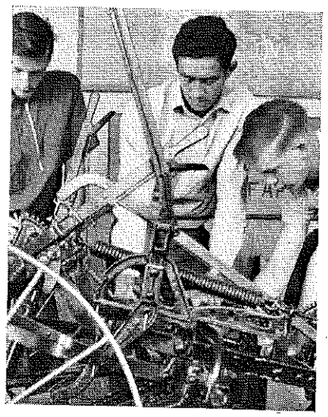
Farm Machinery Repair Program

ED HOPPE, Reporter, North Syracuse, New York

THE Future Farmers of America are carrying on very successful farm-shop programs. More than ever this type of work is of high importance.

The most important factors which made our farm-shop endeavor so profitable are the co-operation of our school board, the eagerness of the pupil to venture into such work by bringing machinery from the home farm to repair, and proper instruction on each job.

The school board has co-operated by erecting an agriculture building in which an adequately equipped shop is included, and by purchasing supplies. Our shop also serves the needs of adult classes in the evening. If it were not for the interest of our school board this splendid program would hardly have been possible.



Boys repair cultivator

The Future Farmers have been very enthusiastic about this work and have used every available minute during their shop periods for repair work. All types, makes, and kinds of farm machinery were repaired by the boys under the supervision of Mr. D. J. Watson, the instructor.

In our regular course of study almost any simple machine is repaired. Seeders, corn and potato planters, fertilizer drills, harrows, and disks are examples. Some poultry house supplies, such as metal light shades and range feeders, have been satisfactorily made.

The fathers of the Future Farmers and other near-by farmers were exceedingly glad to have their machinery repaired. The agreement with the parents was, that if they would bring in their broken or run-down machine and transport it home again after repair work was completed, the machine would be completely repaired, overhauled, adjusted, and painted by the boys. Most of the repair work was done during the winter months. The farmers paid for the parts and materials used. Generally, good work was done and word traveled around from farmer to farmer about it.

Co-ops and the World's Food Problem

(Continued from page 105)

dant production. This is true in the field of food distribution as it is in any other field.

I call your attention briefly to the fact that co-operatives are now producing, refining, and selling to their members gasoline and other oil products at substantial savings. I call your attention to the fact that thru the Rural Electrification Administration co-operatives, farmers actually are getting electricity at reasonable cost, electricity without which our present farm labor shortage would have been completely disastrous, instead of only severely crippling. I call your attention, also, to the highly beneficial results which have been achieved by such farm co-operatives as those existing in Ohio, Virginia, and Vermont in producing their own fertilizer and other necessary products for the farmers and compelling the monopolistic forces formerly controlling the supplies of these products to reduce their prices. Most important of all, however, is the fact that thru co-

becomes, for the first time, possible for them to increase their production to the limit of human need without running the risk of facing financial ruin themselves because of their very efficiency in the bounty of nature.

Co-operatives and the Food Problem

And so as we look forward to meeting the food problem of the world, both now and after this war—a problem far greater than any the world has ever faced before in this field—our one most solid hope, as I have said before, lies in the co-operatives.

There is another phase of this matter upon which I shall touch but briefly. In the quotation from Marquis Childs it was pointed out how effective the co-operatives of Sweden had been in preventing black markets. I should like simply to suggest that if consumer co-operatives in any country were in control of even as much as 25 percent of the distribution of food products, you would have a means of price control as well as control of quality of products far more effective and far better than any government agency can supply.

Finally, as we view the world problem as a whole and consider what must be finally restored, where are we to turn? What means are to be taken for the fair and just distribution of medical supplies and food? What form of organization is to be employed to enable the people of those nations to get back on their feet economically and to become once again self-sustaining? Are we to rely upon military dictators? Or upon those who have betrayed their fellow-men to the conqueror? Or upon those who have entered into business relationships with him? I trust not. On the other hand, in most of the nations that have been overrun by Hitler there were, before the war at least, co-operatives existing among the people of those countries including the farmers thereof.

Thru these co-operatives it would be altogether possible to provide both a fair and just solution of the problem of administration in the true public interest of productive properties, title to which will be in complete confusion; and also to bring about the rehabilitation of the economies of those nations with a minimum of distribution of necessary things on a basis of pure charity. For the co-operatives could be supplied with necessary food and medical supplies, and all able-bodied people could receive these things not on the basis of charity, but as payment for constructive labor which they might do in the rehabilitation of their own countries. For the sick or distressed, of course, outright help would be necessary. Over a period of time these co-operatives could by such a method not only rehabilitate their own lands, but also make repayment of a considerable amount of what had been given to them. This suggestion, I realize, has been only briefly sketched. But I know no kind of group other than the co-operatives thru whom such a constructive program could be carried on.

Sound Monetary System

There are, of course, other things we need to do. One of them, in my judgment, is to make certain constructive changes in the monetary system of this nation so that we may achieve a truly stable price level thru the years. My appeal is that instead of the present system of borrowing every dollar of the medium of exchange in circulation at interest from private creators of money, the Constitution of the United States should govern this field, and Congress should create the money of this Nation and effectively regulate the value thereof.

A sound monetary system coupled with a strong and vigorous co-operative movement can not only be the key to a solution of the world food problem but also can open the door to a future world in which abundant production will be possible, full employment reasonably assured, and these things can be achieved, without increases in governmental power or authority over the people, by the free exercise of the genius of the people themselves.

North Carolina F.F.A. Gets Results

R. J. PEELER, State Secretary, North Carolina

FUTURE FARMERS OF AMERICA—more than 26,000 strong in North Carolina—are doing their part to hasten the day of Victory!

More than 8,000,000 pounds of scrap metal have been collected by the F.F.A. members during the last year.

In addition to this, large quantities of paper, rags, rubber, and burlap bags have been contributed to the salvage campaign.

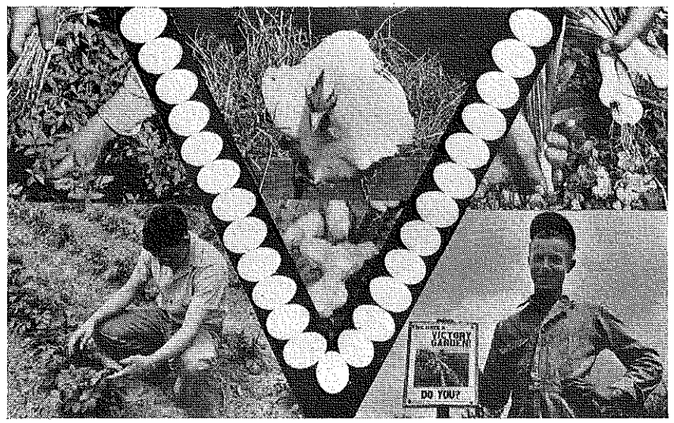
Realizing the great contributions which they can make on the home front, these F.F.A. members have purchased over $312,000 worth of War Bonds and Stamps and have planned a supervised farming program to include over 10,000 Victory Gardens, nearly three-fourths of a million laying hens, over 1,000,000 broilers, nearly 18,000 porkers, over 4,000 brood sows, 9,000 dairy cows, 7,000 beef animals, 1,500 sheep, 21,000 acres of soybeans, and 18,000 acres of peanuts for oil.

The Future Farmers have increased the scope of their war-vital food and feed crops in order to aid in bolstering the Nation's diminishing food supply. They are also assisting the teachers of agriculture in organizing commodity courses for adult farmers, in making surveys to determine the amount of food production and preservation in the community, and in promoting canning projects.

In an attempt to keep Tar Heel farmers supplied with the necessary machinery to produce an abundance of food in spite of a farm equipment shortage, Future Farmers have repaired 2,086 farm machines such as tractors, combines, and grain drills; 4,314 farm implements such as plows, planters, harrows, and wagons; and 6,461 farm tools including axes, hoes, hammers, rakes, and shovels. Numerous construction projects, such as the building of lime spreaders, hog and poultry feeders, and wagon beds, have been completed by the F.F.A. members for the benefit of local farmers.

"All out for victory!" is the 1943 F.F.A. slogan in North Carolina, and the Future Farmers emphasize their slogan with action!

F.F.A. boys and their prize baby beeves



North Carolina boys producing food for victory

Theodore Smith, member of the Lillington Chapter, and M. P. Rupard, member of the

Book Review

Supervised Farming in Vocational Agriculture, George P. Deyoe, 502 pp., illustrated, published by The Interstate, list price $3.00.

This book is intended for use as a professional guide for teachers of vocational agriculture, teacher-trainers, supervisors, school administrators, and others responsible for the development of vocational education in agriculture. Thruout the book, objectives or purposes of supervised farming and the problems of teachers in conducting these programs provide points of orientation. Many suggestions are provided on instructional techniques for selecting and developing activities in supervised farming. Significant features included are: a comprehensive treatment on methods for evaluating programs of supervised farming; importance and place of supervised farming in vocational education in agriculture; selecting programs for supervised farming, planning and developing these programs; keeping and using records; supervising the programs of day-school, young-farmer, and adult classes; and educating teachers to conduct improved programs of supervised farming. Suggested references are listed at the end of each chapter. This book should aid materially in bringing practice closer to the ideal. APD

Minds are like parachutes: they function only when they are open.—Louis-

Studies and Investigations

C. S. ANDERSON

They Raised the Pigs

G. A. SCHMIDT, Teacher-Trainer, Colorado State College

THIS is a story of the outstanding achievements in swine production made by boys in the vocational agriculture classes of the high school in West Salem, Wisconsin.

In the fall of 1926 Norman N. Rowe began teaching vocational agriculture at West Salem. He is still on the job and more enthusiastic about his work than he was 17 years ago.

During the 16-year period, 1926–1942, 185 sow-litter projects were completed by the West Salem boys under the supervision of Mr. Rowe. Please remember that these 185 projects were sow-litter projects. There were many other swine, livestock, and crop projects conducted by the West Salem boys during this period. There were 430 litters farrowed in these 185 projects, making an average of 2.3 litters per project. These projects were conducted by 74 different boys.

One of the most remarkable features of these sow-litter projects is the fact that the 430 gilts and sows farrowed 3,723 pigs or an average of 8.6 per litter.

Improving Swine Practices

Mr. Rowe's hobby is improving swine practices; in fact, he is almost a "crank" about this matter. He accounts for this high average of pigs farrowed by the fact that the following improved swine practices are generally followed by the boys:

1. Sows and gilts are selected from strains of large litters.
2. The breeding animals are of good type and desirable size.
3. The sows are flushed before breeding.
4. Legume hay is fed in some form during the gestation period.
5. The breeding sows and gilts have comfortable and dry winter quarters.
6. Well-balanced rations containing essential minerals are fed and clean drinking water is made available at all times.
7. The bred sows and gilts are so managed that they exercise daily.
8. A laxative ration is fed before farrowing time.

Saving Pigs

The records show that of the 3,723 pigs that were farrowed, 3,297 were saved. In other words, in the average litter 7.6 pigs were saved. This, too, is an exceptionally good record. Mr. Rowe believes that the following improved swine practices were the primary factors responsible in saving young pigs:

1. The farrowing pens are scrubbed with boiling water and lye.
2. The sows are washed with soap and water prior to farrowing.
3. The sow is attended at farrowing time.
4. Artificial heat is available at farrowing time.
5. The farrowing pen has guard rails around the sides.
6. The pigs are given proper care when born.
7. The young pigs are cared for to prevent anemic conditions.
8. The sow and young pigs are kept in clean, dry farrowing pens until hauled to clean pasture.

The death rate of older pigs in all the sow-litter projects that Mr. Rowe has supervised has been unusually low. Here again he attributes the fact to improved practices following in growing out and fattening hogs. These are:

1. The growing pigs receive suitable feed high in animal protein.
2. The pigs are raised on suitable pasture.
3. The pigs have access to a good mineral mixture.
4. The pigs have access to clean drinking water at all times.
5. The pigs are sprayed or dipped for lice or mange when necessary.
6. Shade is provided in hot weather.

Mr. Rowe firmly believes that feeding skim milk as a protein supplement is one of the outstanding factors in the health and vigor of the hundreds of pigs raised by his boys.

Milk in the Diet

Skim milk was fed in 155 of the 185 sow-litter projects he studied. During the last year and a half when the demand for whole milk suddenly increased his projects, workers began to cut on the amount of skim milk fed to hogs and in many cases stopped feeding it. During this period Mr. Rowe saw a very rapid increase in disease among the pigs that the boys were raising. The farmers in the community soon became aware of the same fact.

Constant Supervision

Mr. Rowe was able to make a rather systematic study of the 185 sow-litter projects completed under his supervision because from the very beginning of his teaching at West Salem 17 years ago he has kept very accurate records of completed projects. Then, too, he has kept in rather close contact with his former project workers. This was made possible because of the fact that prior to our entry into the World War only seven of the 74 project workers had left the community and practically all of them were farming. This is a phenomenal feature of vocational agriculture at West Salem.

In making a study of these 185 sow-litter projects Mr. Rowe discovered that the boys that follow all essential improved swine practices got their pigs to an average weight of 200 pounds 36 days sooner than did boys who did not follow all the essential practices. The pigs raised by the first group of boys consumed 56.87 pounds less grain than did the pigs raised by the boys in the latter group. In these projects it took less skim milk and less protein supplement, other than skim milk, for 100 pounds fed-lot gain, when all essential improved practices are followed.

Profits

The average net profit in these 185 sow-litter projects was $172.75. Since there were 430 litters involved in these projects, the net profit per litter was $74.32. It should be mentioned here that these net profits included premiums won by boys which over a period of 16 years average about $1,000 a year.

The showing of fat hogs and breeding stock at State and county fairs has always been a feature of the work in hog raising in West Salem. This feature of showing swine, accompanied with consistent winning, has always been a natural stimulant to these boys to select sow-litter projects and to follow improved swine practices. Many championship judging teams have been coached by Mr. Rowe, and three of his teams have represented Wisconsin in the national F.F.A. judging contest at Kansas City.

Community Co-operation

Mr. Rowe attributes the interest in vocational agriculture at West Salem to the whole-hearted support of the entire community. The school administrators, the farmers, and the business men are all enthusiastic about the work in vocational agriculture and back the program 100 percent. Every farm boy enrolls in vocational agriculture when he enters the West Salem High School. He wants to be one of Mr. Rowe's project workers and keep up the traditions of the community. With such attitudes much good work is accomplished.

"My greatest opportunity is to be thought the first farmer of America."—George Washington

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Co-ops and the World's Food Problem

(Continued from page 114)

Now, why do I believe so strongly in co-operatives?

I believe in them because I know that the economic problems which have been destroying democracy and freedom in other countries must be solved; because I know free government cannot live where there are no free farmers; because I know that the unemployment problem has not been solved in any fundamental sense and that it must be solved before constitutional democracy as a form of government will be safe; because I know that men, in time that could be an age

Balanced Feeding Pays

B. C. DAVIS, Supervisor, Austin, Texas

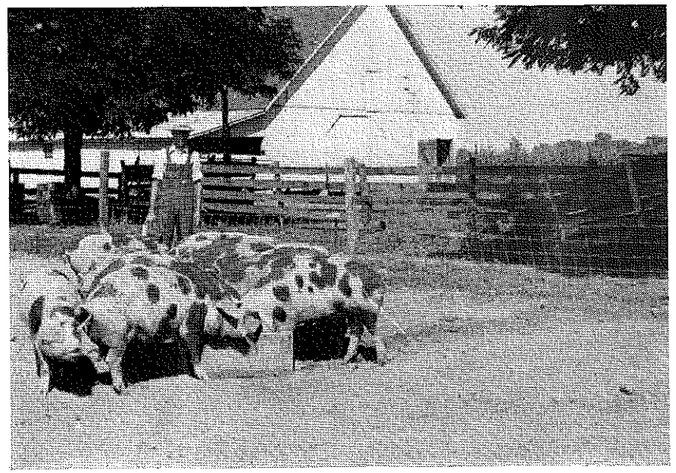
ONE of the most interesting feeding experiments that I have seen was conducted by the vocational agriculture classes at Elgin this spring, under the supervision of J. Z. Hattox, teacher of vocational agriculture.

The boys built a trailer in their farm shop, putting a partition in it and also building in each half a self-feeder.

Two Berkshire pigs, litter mates and almost identical as to size, type, and color, were purchased by the class and placed in the trailer. An opening ceremony for the project was held on the school campus February 9 when the pigs were weighed and assigned certain feeds. Some 70 students observed the beginning of this feeding experiment and served as witnesses later in the spring when certain facts were needed.

The 53-pound pig named Mike was fed yellow corn and a 40 percent protein supplement and clear water. The 55-pound pig named Pat was fed yellow corn and clear water. These animals were weighed each 30 days and the weights and cost of feed recorded on a blackboard on the side of the trailer. Each Saturday the trailer was pulled down town and parked on the main street for the day. Much interest was shown in the project and many people argued that these pigs were not even litter mates.

Final results were determined at the end of 81 days' feeding. On May 1, Mike weighed 230 pounds and Pat weighed 85. Mike was sold at 14.15 cents per pound and Pat was transferred to Mike's half of the trailer in order that he might have access to protein supplement. His gain for the first 14 days was 31 pounds as compared with the 30 pounds during the entire 81-day feeding period. The cost per pound of pork put on for the 81-day period was 6 cents plus for Mike and 13 cents plus for Pat.



Hogs used in feeding demonstration

F.F.A. Boy Honored

SOON to join the growing fleet of United States vessels carrying the materials of world freedom to all parts of the globe, is the first ship known to have been named after a member of the Future Farmers of America—the S. S. Edwin J. O'Hara.

Edwin J. O'Hara was a farm boy and Future Farmer at Lindsay, Tulare county, California. He joined the Merchant Marine at the outbreak of the war, and sailed from San Francisco in May, 1942, on a Kaiser-built ship as an engineer cadet. The boat made one successful voyage before she was attacked by two Axis raiders in south Atlantic waters.

Midshipman O'Hara took up a gun station when the navy crew was wounded, and helped pump shells from an obsolete deck cannon on the merchantman. Although one of the Axis ships was sunk and the other badly damaged, the merchant ship was finally destroyed. Midshipman O'Hara was listed as "missing in action," presumably killed by a shrapnel burst as he stood at his gun station. He is believed to have fired the last five shells at the enemy vessel.

His mother, Mrs. Elma O'Hara, received the distinguished service award in the name of her hero son, a few weeks ago at Lindsay. It was declared to have been the first such award ever to go to a merchant marine seaman.

On July 29, the late Midshipman O'Hara was further honored when a Liberty ship named after him slid down the Calship ways in Los Angeles. His mother, a sister, and other relatives were present at the ship's launching. The story of the heroism of this farm boy was recounted at this occasion. The ship is now being outfitted for active service.

Edwin O'Hara conducted a wheat project in his Future Farmer program at Lindsay High School. He was active in the affairs of the Lindsay chapter, and had represented his local organization in the State Future Farmer convention at San Luis Obispo.

"There need be no pessimism about education in this country. American teachers, like American soldiers, can improvise when faced with the emergency."—*New York Times Editorial.*

"A few years after the peace, it is probable that this country will find herself without enough trained men capable of acting as her economists, statisticians, and sociologists."—*Dr. Morton Gottschall, City College of New York.*

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of plenty, are not for long going to endure the misery and humiliation of joblessness again, especially when they have just returned from defending their nation in the front lines of war; because I know that private monopoly in industry and especially in finance means the end of free enterprise and has been the very basis upon which dictatorships have been built in other countries; and because I know that the solution of all evil things must ultimately be found in methods that are good, in methods that partake to a considerable extent at least of the eternal laws of God.

Therefore, I believe I am interested in co-operatives because they can and they have restored to farmers in this country and in many other countries the control over their own economic destiny. I believe in them because they offer a way to make the dollar of the workingman buy more of the products he and his fellows produce. I believe in them because they can and they have met more than one entrenched monopoly on its own ground and beaten it. I believe in them because the more business they do the better they prosper, because never can they be successful by a restriction on production, or distribution, or exchange. I believe in them because they are the only means I know of whereby these problems, which must be worked out if democracy is to live, can be solved without a vast control over the lives of men by government. I believe in them because they can only succeed as they increase the welfare of others besides themselves or their own members; and because the success of a co-operative therefore accords perfectly with the eternal principle of the Golden Rule.

I believe in co-operatives because they are the one means that I know of whereby I am sure our problem of poverty in the midst of plenty can be solved—and what is more, solved without resort to governmental dictatorship or to the development of a dependence of millions of people upon governmental support. Co-operatives are true democracy in the practical field of economic life because each member has one vote whether his financial contribution be large or small. If we believe in democracy sincerely, we have to believe in co-operatives.

And, last of all, I believe in them because they offer to the common people something they can do for themselves now with their small resources—a great and sound idea, a willingness to study and to work, and a deep and abiding loyalty. These resources every group of people in all the world possesses. And therefore the message of the co-operatives to a distressed world is more fundamentally a message of hope than any other message I know.

War Production Programs

(Continued from page 106)

the high man's name, or the results of your next survey may be inaccurate because of a tendency to exaggerate their returns."

It was suggested that a statement like the following be sent to the farmers as a report of the survey:

"We hope the pig survey you helped us make will be of interest to you in that it shows the relative efficiency of the hog farmers in our community. The standard given in Table III is a figure we believe farmers should be able to reach if they use approved practices.

"We wish to repeat the survey next winter and hope you will keep a record of the dates of farrowing of your hogs, the dates of each sale, the weights of each lot sold, and the number of sows and pigs."

The next step in evaluation is to determine the amount each recommended practice contributes to the total production. We do not know how much gain we can expect if a farmer washes his sows or scalds his farrowing pens.

"Plan of Action" Recorded by Each Farmer

A "plan of action" sheet was prepared in triplicate to obtain a record of recommended practices and to serve as a guide to the farmer during the season. Space is provided for the farmer to list the practices he intends to follow. These sheets are approved and signed by the teacher, who keeps the second copy and sends the third copy in for summarization regarding those who attend the course. (See Table IV.)

As the teacher visits each farmer during the year, he may use his copy as a reference sheet upon which to make notes of the exactness with which each recommended practice is performed. Next fall when the survey is repeated these notes will be used to calculate the increase attributed to each practice performed. Thus we should be able to determine the relative values of each practice in relation to the total pounds of pork. The same plan could be followed by the boys in the all-day classes.

Individual farm differences in pork per sow ranged from 180 to 2,440 pounds. Community averages varied from 557 to 1,285 pounds. We are a bit hesitant to state the community averages because the number of cases is too small and we fear teachers do not fully appreciate how important it is to have a representative sample.

A similar procedure has been designed for the beef, dairy, poultry, and soybean courses. A somewhat different approach is being tried with the machinery repair course. Altho we consider these methods less satisfactory than that used in the pig survey because of the errors of estimation introduced as a result of the nature of the questions asked, we hope they are helping us to develop techniques in these subjects.

Interpreting Data and Evaluating Progress

Now let us return to the questions left unanswered at the beginning:

1. Such data as that recorded for six years, if based upon a representative sample, give evidence of a co-operating community. They also indicate that a program was built which was based upon the local problems, and that farmers have co-operated in adopting improved practices.

2. If a hog improvement program had been vigorously prosecuted, the 82-pound increase in pork between 1937 and 1942 could be calculated as worth about $16,000 a year henceforth. If the community consisted of 200 farms which averaged 10 sows each and if hogs sold at 10 cents a pound, the increase would be worth $16,400 a year in 1942 and would increase as the number of pounds of pork produced per sow was raised above 1,042 pounds.

3. Measures of results calculated as the community average show that the planners accepted as their responsibility the total progress of all the farmers, and the increases they have made indicate clearly the progress.

4. Anyone who has realized the incentives resulting from the use of data such as that given, would continue to gather them. Everyone who comes in contact with the teacher would realize that he was teaching from the land rather than from the book.

The evaluation activity was introduced into the wartime production program in Illinois because the State Director of Vocational Education felt that we needed more objective measures of results. There are two reasons for its being organized as described: 1. Teachers generally need specialist's help in taking surveys. 2. Having an outsider complete the calculations prevents the possibility of the teacher's being charged with bias.

Orderly progress toward any goal depends upon measurement. The more accurate the measurement, the more surely and rapidly will the goal be approached. So long as a piece of work has never been measured and so long as evaluation is avoided, the worker is free. Facts always circumscribe freedom, and evaluation of a program will restrict its planners to the facts discovered. Evaluation costs a movement its right to exist by opinion.

Table III — **Comparisons With Standards**

	Percent of Pigs Sold by Oct. 1	Pigs per Litter Raised	Pounds of Pork per Sow in Six Months
Standard for community	100	8.0	1600
Community average 1942			
Your figures			

(Add any other comments)

Table IV

STATE BOARD FOR VOCATIONAL EDUCATION

Rural War Production Training

Plan of Action for Hog Production

Name.....Township.....Farm No.....
County.....School.....Date.....
Course.....
Highest grade you attended in school.....
Years of vocational agriculture taken in (all-day classes).....
(evening classes).....
Years enrolled in 4-H Club work.....
Years your family has been a Farm Bureau member.....
Acres owned.....Acres operated.....
Check tenure status: Owner.....Owner operator.....Tenant.....
Partner.....Hired hand.....Operator's son living at home.....
Do you have a son taking vocational agriculture?.....Miles from market .....
What are your major farm enterprises?
.....
.....
Goals for 1943:

During 1943 I plan to produce.....litters of pigs which I expect to make weigh.....pounds per litter by the time they are six months of age. This will be an increase (or decrease) of.....litters and.....pounds of pork per sow over (or under) my 1942 production.

To secure these production goals I plan to follow the practices listed below:

1. Select sows that show evidence of being good producers in that they have
.....
.....
2. Flush sows before breeding by feeding the following ration:
.....
3. Make gilts gain.....pounds each during gestation.
   Make sows gain.....pounds each during gestation.
4. Make litter weigh.....pounds at weaning time.
5. Make pigs weigh.....pounds at six months of age.
6. Make this gain with.....pounds of feed per 100 pounds of live weight.
7. I plan to provide legume pasture upon which pigs did not run last year.
   I'll pasture not over.....pigs per acre.
8. To prevent losses, I plan to practice the 4 steps in hog sanitation listed below:
   1.....2.....
   3.....4.....

I will feed the following ration to my growing pigs.
.....
.....
.....

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ds—T. L. Faulkner, Auburn
t—S. L. Chesnutt, Auburn
t—G. T. Sargent, Auburn
ts—R. W. Montgomery, Auburn
ct—E. A. Grant, Tuskegee Institute
ct—Arthur Floyd, Tuskegee Institute

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ds—T. A. White, Monticello
ds—O. J. Seymour, Arkadelphia
ds—J. A. Niven, Russellville
ds—Earl G. Landers, Batesville
t—Keith L. Holloway, Fayetteville
t—Roy W. Roberts, Fayetteville
sms—Henry L. Cochran, Fayetteville
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rs—B. J. McMahon, San Luis Obispo
rs—E. W. Everett, San Luis Obispo
rs—B. R. Denbigh, Los Angeles
rs—Howard F. Chappell, Sacramento
rs—A. G. Rinn, San Luis Obispo
rs—Weir Fetters, San Luis Obispo
rs—Harold O. Wilson, San Luis Obispo
rs—Wesley Smith, San Luis Obispo
rs—H. H. Burlingham, San Luis Obispo
t—S. S. Sutherland, Sacramento
t—B. J. McMahon, San Luis Obispo

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s—A. R. Bunger, Acting, Denver
t—G. A. Schmidt, Fort Collins

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t—E. W. Garris, Gainesville
it—W. T. Lofton, Gainesville
ct—L. A. Marshall, Tallahassee
ct—G. W. Conoly, Tallahassee

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s—T. G. Walters, Atlanta
ds—George I. Martin, Tifton
ds—C. M. Reed, Carrollton
ds—J. N. Baker, Swainsboro
ds—J. H. Mitchell, Athens
cs—Alva Tabor, Fort Valley
t—John T. Wheeler, Athens
t—O. C. Aderhold, Athens
sms—A. O. Duncan, Athens
t—R. H. Tolbert, Athens
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s—W. H. Coulter, Honolulu, T. H.
t—F. E. Armstrong, Honolulu, T. H.

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s—Stanley S. Richardson, Boise
s—Elmer D. Belnap, Idaho Falls
t—H. E. Lattig, Moscow
t—H. J. Winger, Moscow

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s—J. F. Hill, Springfield
s—L. C. Cannon, Springfield
s—B. A. Tomlin, Springfield
t—H. M. Hamlin, Urbana
t—Melvin Henderson, Urbana
t—J. N. Weiss, Urbana
t—H. J. Rucker, Urbana

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s—Harry F. Ainsworth, Indianapolis
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rt—S. S. Cromer, Lafayette
it—K. W. Kiltz, Lafayette
it—H. W. Leonard, Lafayette
it—I. G. Morrison, Lafayette
it—H. B. Taylor, Lafayette

IOWA

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s—R. A. Towne, Des Moines
t—Barton Morgan, Ames
t—John B. McClelland, Ames
t—J. A. Starrak, Ames
t—T. E. Sexauer, Ames

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s—L. B. Pollom, Topeka
t—C. V. Williams, Manhattan
t—A. P. Davidson, Manhattan
it—L. F. Hall, Manhattan

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s—E. P. Hilton, Frankfort
t—Carsie Hammonds, Lexington
it—Watson Armstrong, Lexington
it—W. R. Tabb, Lexington
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s—S. M. Jackson, Baton Rouge
ds—A. Larriviere, Baton Rouge
ds—T. E. Kirklin, Baton Rouge
t—C. L. Mondart, University
ct—M. J. Clark, Scotlandville
ct—Dallas Matthews, Scotlandville
ct—E. C. Wright, Scotlandville

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s-t—Wallace H. Elliott, Orono

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