

CALIFORNIA STATE DEPARTMENT OF EDUCATION  
STATE ADVISORY COMMITTEE ON AGRICULTURAL EDUCATION MEETING

March 16, 1962  
Sonoma Mission Inn, Sonoma

ROLL CALL

Present

Verne Hoffman, Jr.	Byron J. McMahon
Glen Eidman	E. D. Graf
Allan Grant	R. H. Pedersen
Milton Kidd	G. P. Couper
George Nicholas	John Glaese
Fred Rohnert	David Pfeiffer
Herman Sperber	Earl Livingston
Theodore Todd	E. M. Juergenson

Absent

Cyrille Faure

The meeting was called to order by Chairman Verne Hoffman, Jr.

Introductions

Each committee member introduced himself, identifying his major enterprise and interest. Following this, the Bureau staff members and Superintendent Glaese introduced themselves.

Minutes of  
Last Meeting

The motion was made, seconded, and carried to dispense with the reading of the minutes of the September 22, 1961 meeting. The agenda proceeded as follows:

Vo-Ag  
Enrollment

Mr. Graf reported that the current vo-ag enrollment in California is the largest in history (almost 14,000 students), and it is paralleled by an increase in general agriculture enrollment as well. These facts seem to disprove statements that there is a lack of interest in agriculture. However, even with the increase, there still are about four jobs in production farming and allied occupations for every person being trained in high school and college agriculture programs. Mr. Nicholas asked if the increased vo-ag enrollment included many of the "undesirables." Mr. Graf replied that vo-ag was absorbing no more of this element than were other segments of the high school program.

The importance of high school guidance and counseling in the selection of future careers was discussed. Mr. Graf mentioned the study on recruitment made by Dr. Orville Thompson of the University of California at Davis. Brochures published by the Western Fertilizer Industry and the plans prepared by the California Seed Association were also mentioned. Mr. McMahon commented on the problems students encounter in selecting careers. Mr. Todd told of a Career Day in the Corona district where few

students showed any interest in agriculture. Mr. McMahon mentioned plans for a major Career Day at the Great Western Fairgrounds. Mr. Glaese said counselors need more specific information about agricultural opportunities. He also stated that the child labor laws pose real problems for youngsters wanting and needing to work

Study on the  
Relation of  
Biological  
Science to  
Agriculture

Dr. Juergenson, on behalf of S. S. Sutherland of the University of California at Davis, reported on a study being conducted on the amount and quality of biological science teaching in vocational agriculture classes. A pilot program is under way this year in seven high schools (one in each region). The instructors will be brought together in May for a summarization. It was indicated that the program will be expanded to fourteen schools next year. The program was discussed at considerable length, and it was generally agreed to be an excellent means of upgrading vo-ag teaching.

Area Redevelop-  
ment Program

Mr. Graf reported that there is not much information available on how this program would affect agriculture. There seems to be a question about the real need for training in the eight counties named. Apparently in several of the counties, the unemployment is due to seasonal labor, and those who are unemployed do not want to work or to be re-trained. Mr. Grant pointed out that many migrant laborers will perform only certain tasks and will not work at others. He said some occupations should be upgraded or made more desirable. Mr. Eidman said there is a real need for training sheep shearers, and Mr. Sperber reported the same is true for tractor drivers. Mr. Sperber mentioned attending the minimum wage hearings in Washington, D. C. The group generally agreed that training or re-training could provide employment for more months of the year. Mr. McMahon said that President Kennedy had signed a retraining bill on March 15, 1962. While this was set up primarily to retrain persons whose occupations have been changed or eliminated (such as the coal miners in West Virginia) this legislation could be of benefit to minority groups which need more training to become more self-sufficient and better citizens. The committee members were asked to suggest some areas in which training or re-training could be justified in California.

State Agri-  
cultural  
Scholarships

Mr. Couper requested permission to discuss the State Agricultural Scholarship Program and related problems. He sketched its history over the past three years. He said the program had been set up without consultation with the Bureau of Agricultural Education on how many boys would be interested, how large the scholarships should be in order to be attractive, or how the family need factor would have to be determined. There is an Agricultural

Advisory Committee to the State Scholarship Commission. Mr. Couper, representing secondary schools, and four other individuals, representing agricultural colleges, serve on this committee. The State Agricultural Scholarship program is under fire because only a few students are using the scholarships. The blame is being placed on "a lack of interest in agriculture and a decrease in high school and college agricultural enrollment." However, the facts do not support this statement. The amounts of the scholarships are not large enough; the method of securing them is too complicated; and the method of determining the student's need does not appear to be realistic.

Mr. Couper requested the Advisory Committee on Agricultural Education to adopt a resolution supporting the continuation of the State Agricultural Scholarships and requesting that the Bureau of Agricultural Education be consulted to help make the program more functional. The committee unanimously voted to adopt such a resolution and requested Mr. McMahon to transmit it to the State Scholarship Commission. A copy is also attached to these minutes.

Reports on  
New Trends

Committee members were requested to present statements on trends in the enterprises they represent. They were as follows:

THEODORE J. TODD: One of the new and important steps in both the citrus and avocado industries is testing for nitrogen intake by making a leaf analysis. The method was worked out by two scientists at Riverside, who have been working for ten years on this problem. Leaves, which are about seven months old, are taken from limbs without flushing terminals or fruit on the twigs. This usually occurs from August to October. The results of the tests are used to determine the fertilization program. A deficiency of nitrogen cuts citrus production, while too much of it affects the quality and size of the fruit. If the leaf shows a heavy deficiency, the fertilizer dosage should be doubled; if it is too high, fertilization should be cut down or eliminated for a year. Farmers are likely to use too much fertilizer, going on the theory that if one bag is good, two are better. As a result of using nitrogen fertilizer for many years, the nitrogen content of well water is increasing. Under certain circumstances the application of nitrogen fertilizer should be eliminated. However, the only way the experts can get some farmers to cut out nitrogen fertilizer for a while is to tell them their trees have "nitrogen burn."

Mr. Todd reported that an excess of nitrogen actually causes a decrease in avocado production. It is important that exactly

the right amount be used. It differs greatly (from 3/4 pound per tree to three pounds per tree) for different varieties. Proper fertilization can make all orchards more profitable. Leaf analysis can be done readily at many laboratories. This is a related field which offers promise to agricultural students.

The next step is working out the micro-nutrient requirements through a similar program. However, changes come slow in tree crops because of the length of time required to grow mature trees.

Mr. Todd said that Butte and Glenn Counties were as far north as the citrus industry was likely to expand. In Tulare County it could come west to Highway 99 at many points. The avocado industry probably will expand in San Diego County if water is available. It ultimately will decrease in Santa Barbara and Ventura Counties, but probably will remain the same in the "central zone."

MILTON L. KIDD: Developments in the water situation have been proceeding at an accelerated pace on the federal, state, and local levels. However, Mr. Kidd believes that sea water conversion is too far away for much hope. He is pleased that the San Luis Dam project has been authorized, but stated that Kern County agriculturalists are unhappy over the prospects of Southern California getting all of the water. He said the \$1,700,000,000 appropriated for the Feather River plan will not be enough. The Eel River appears to be the best bet for future development. It may take fifteen years to complete the Folsom to Friant canal. The Mendota pool has not been supplying enough good water for westside irrigation rights. There is increasing pressure from Fish and Game and other recreation interests to preserve adequate stream flows, and Mr. Kidd agrees that some water must be left in the rivers. He said this has been a good rainfall year, that underground water tables have stopped falling or come up slightly, but it will take three or four more wet years to raise the water tables to any extent.

He also mentioned the proposed tie-in on power from Grand Coulee and Hungry Horse dams to Boulder Dam, which would serve a vast empire.

ALLAN GRANT: Dairy problems are national in scope, with major emphasis on controls and labor. The Teamsters Union is moving in and signing up some milkers. Dairy men are receiving registered letters requesting them to come in to discuss the labor sign-up. The farmers have organized and have employed a lawyer, who has advised them not to sign for these letters from the Union.

Dairymen and feeders face problems of flies, dust, and odors, but efforts are being made to control them. The Tulare County Health Department is cooperating in this endeavor. Mr. Grant said his own farm, with nine worker houses, was offered as a "pilot study" area. Various groups are being brought together for discussions, and it often develops that other factors are causing flies and mosquitos. Schools are being used to give instruction in controlling flies and mosquitos. Mr. Grant reported that the dairy industry does not have enough technically-trained people. Mr. Eidman asked how the low-fat milk is doing, and Mr. Grant replied that it is still too early to tell. He said that in spite of much medical testimony to the contrary, milk is not a factor in cholesterol level. But because of such testimony, the per capita consumption of milk is dropping. Spray residues in milk are being watched, and the milk from some dairies is being rejected. Mr. Grant also reported that beekeepers want "Sevin" spraying eliminated during the blooming period.

HERMAN M. SPERBER: There has been a drop in tomato and cantaloupe planting in the Imperial Valley because of increased imports from Mexico. Last year, with low alfalfa prices, acreage decreased; however, now that the price of hay is increasing, the acreage is increasing. Skip-row planting of cotton is also increasing. Safflower is being planted on raised beds. Lettuce acreage is down. Cello-wrapped lettuce is not too successful. It turns brown in the wrap during shipment. The seller has to open the bag, trim the lettuce, and put it back in the wrap. Mr. Sperber also discussed the minimum wage problem and the Legislative hearings on farm labor problems.

GLEN EIDMAN: In a discussion on "ideal beef", Mr. Eidman said that what is considered "ideal" by a producer, feed-lot owner, packer, or retail grocer usually is not the same kind of steer. The beef producer wants a fast-gaining steer; the packer needs a high yield; and the chain stores must have a high cut-out value.

In his own operations, they tattoo all calves, send them as feeders to the McDougal plant at Collinsville, and follow them through to the killing plant. The dams and sires of the calves are known. He said, however, that feeding, as well as breeding, seems very important in the production of "ideal beef." Top-gaining cattle, on an average, do not cut out as well as slower gainers, and the steers must have age to get the desired marbling and federal grade. The steers that will make the most money for the rancher will not cut out the best. Many steers, which win carcass classes at shows, are "poor doers" that have gained slowly for a long period of time. They have excellent carcasses

but do not make money for the producers. He said that in a Glenn County trial, an added \$5.00 per head was made by feeding 20,000 units of vitamin-A per 1,000 pounds of weight in a group of fattening steers.

The method of grading meat on a cut-out basis was mentioned, and Mr. Eidman believes it is not fair to the producer. He will not get enough premium for the best carcasses and will be cut on the low end.

The practice of not castrating young bull calves was discussed. Even though they gain faster and have meatier carcasses, it was not felt this would become common practice in the United States.

There is a trend from sheep to cattle in the north and north-central states, and the beef industry may be in over-production trouble in two or three years.

Artificial insemination programs for both sheep and beef have increased. It was brought out, however, that only a few ewes were settled, and a much better technique must be developed. Mr. Graf reported that Modesto Junior College is establishing a Technician Program in artificial insemination. Individuals enrolling in the program need farming experience as well as technical knowledge and ability.

Mr. Eidman reported that at his establishment, ewes are ear-tagged and given one more year to produce. Ewes that were dry the previous year tend to lamb late the following year. Six or seven per cent of the ewes, which lambed the previous year, will be dry, while 30 to 40 per cent of the ewes, which were dry the previous year, will repeat. It may be more profitable to sell all dry ewes the first year of such history.

Mr. Eidman reported that 2-4-D, used to kill oak trees, proved to be quite a stimulus to pasture grass growing under such trees. This is being considered for experimentation by the Agricultural Experiment Station at Davis.

FRED W. ROHNERT: There have been varying degrees of success with the different makes of tomato picking machines. Last year they were used commercially for the first time, and some of the growers were disappointed because of the high bacterial loss due to machine injury. However, the tomato harvester is here to stay. Improved harvesters and tomato varieties are being developed to help cut these losses. Improved varieties must be high in solids, and they must be able to stand rough treatment. Injuries come not so much from dropping the tomatoes as from "rolling them around," which causes skin punctures.

Mr. Rohnert said that California exports large quantities of seed, and he feels the common market will help seed producers. He also said that the California Seed Association is trying to promote a program to interest vo-ag students in careers in crops and seed production.

VERNE HOFFMAN, JR.: SPF (Specific Pathogen Free) hogs are in the news. Pigs are taken by Caesarean section and raised on clean ground to break the disease cycle. The offspring from pigs so raised can be sold as "secondary SPF." Mr. Hoffman reported that there are still some problems to be worked out in connection with raising pigs on wire. Some growers are giving iron injections to pigs raised in this manner.

Manure disposal continues to be an economic problem. It is not worth removing manually, but something must be done with it. Mr. Hoffman said they used a disposal pond, one acre in size, which takes care of about 1,000 hogs. However, this is about five times as many hogs as should be served by this amount of space. Their pond is about a quarter mile from all buildings. He said the inflow should be in the middle, not at the side, of the pond.

GEORGE A. NICHOLAS: In a discussion of the turkey industry, a \$400,000,000 operation, Mr. Nicholas reported that the federal government, an independent group, and the middle-of-the-rovers are involved in a three-way struggle concerning controls. Turkeys sold for as little as 14½ cents per pound, live weight, last year. Many persons raised turkeys last year just to get a quota, and there was a surplus of approximately 12,000,000 birds. About 90 per cent of the crop was produced by 7,000 growers, while the remaining 10 per cent was produced by 70,000 growers. The government has not decided whether controls should be by number of birds or by number of growers, and the industry is in a chaotic condition.

He described his own operations, which started from a 1931 FFA project and one bred turkey hen. Now his company produces 18 per cent of all the turkey hatching eggs in the United States and 30 per cent in Canada. One of his prize birds, which was entered in a recent contest, weighed about 30 pounds, with a feed conversion ratio of about four to one. The bird had an 87% dressing percentage.

California produces 25 per cent of all the breeding hens and feeds 20 per cent of all market turkeys. However, it is believed there will be about an 18 per cent cut-back in feeding this year. The "ton litter" in pigs has been matched. Mr. Nicholas reported that one turkey hen produced eggs which in turn produced a ton of turkey meat. There has been a big change from brown to white

turkeys in the last five or six years largely because the white turkeys can be processed 12 per cent faster.

Chronic respiratory disease is the biggest problem in turkey production. Another problem facing growers is the fact that buyers (Campbell Soup Co., Safeway, Swift & Co., etc.) all want different types of turkeys.

There is wide use of artificial insemination in pedigree turkey breeding. Mr. Nicholas reported that his 5,000 birds represent the largest pedigreed breeding flock in the world. Later the group visited his farm.

Miscellaneous  
Items

Mr. McMahon mentioned the national committee of 25 members which is studying vocational education. He also talked about the "Technicians in Agriculture" program being developed at Modesto Junior College. He said other junior college representatives would be invited late in May to hear about the program.

Local advisory committees are becoming more numerous and active. Mr. Hoffman, member of such a committee at Galt, told of the work of his group. Mr. Grant reported that a committee is being discussed for the Visalia District.

Election of  
Officers

Mr. McMahon said Messrs. Hoffman, Grant, and Kidd, whose terms were expiring, had agreed to accept another three year term. Appreciation for the services of the past officers was officially noted. Following this, Fred Rohnert was elected Chairman for the following year, Glen Eidman was elected Vice-Chairman, and Theodore Todd was elected Secretary.

Time and Place  
of Next Meeting

The next meeting tentatively was set for September 21, 1962, at Corona. Mr. Todd will make arrangements for it.

Adjournment

The meeting adjourned at 3:10 P.M. for a visit to the Nicholas establishment.

Respectfully submitted

Glen Eidman, Secretary