

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

September 22, 1961

8:30 A.M.

California State Polytechnic College, San Luis Obispo

ROLL CALL

Present

Absent

Verne Hoffman, Jr.	Byron J. McMahon
Cyrille Faure	E. D. Graf
Allan Grant	G. P. Couper
Fred W. Rohnert	H. H. Burlingham
Herman Sperber	J. I. Thompson
Theodore Todd	James Williams

Glen Eidman
Milton Kidd
George Nicholas

The meeting was called to order at 8:30 A.M. by Chairman Verne Hoffman, Jr.

Introduction of
New Members:

Mr. McMahon introduced the committee members, and told about the backgrounds of the three new members, George Nicholas, Herman Sperber, and Theodore Todd. Letters were read from each of the members not present, indicating a conflict of meeting dates or other circumstances causing their absence. Mr. McMahon also distributed several pieces of material including lists of the names and addresses of the members, names and addresses of past members, terms of service, the purpose of the committee, and operational procedures.

Minutes of
Last Meeting:

The minutes of the meeting held on March 17, 1961 were read by George Couper in the absence of Secretary Glen Eidman.

Reports on
New Trends:

Chairman Hoffman called on the committee members to talk about new trends in agriculture. The following reports were made:

FRED W. ROHNERT: The principal interest in the seed industry centers around varieties suitable for mechanical harvesting and the pelleting of seeds. Tomato trials in the Obregon district of Mexico, designed to provide seed for planting in the spring of 1961, were not highly successful. Some plantings were made in Central California, but the results of harvesting these varieties with machines has not been determined at this date.

There are seven or eight different tomato harvesters in operation. Three are made by commercial firms; the rest have been put together by farmers or changed to improve some operation. At the Rohnert farm they are using, with promising results, a machine made by Food Machinery Corporation. A farmer in the Willows district is said to have put together a machine which seems to be the most satisfactory.

There has been a big increase in the use of pelleted or coated seeds. Seeds so treated can be planted much more evenly than

rough or irregular seeds. Pelleting is not new. It started about 1928, but is now much more advanced. The composition of the pelleting material is greatly improved. The coating must be able to stand rough treatment but absorb water readily.

The use of pelleted seeds can cut the amount used; for example, beet seed in the Santa Maria area was reduced from three-fourths to one-fourth pound per acre. The seed can be planted evenly by machine, thus reducing thinning costs. It is possible to increase the yield of some crops, such as carrots, by getting more roots per acre with fewer cull-outs. In response to a later question, Mr. Rohmert said that many substances are used for coating including diatomaceous earth mined near Lompoc. Pelleting does not affect the viability of the seed, and the coating can contain fungicides, insecticides, and plant starters.

He mentioned the seed research center, and said they were constantly trying to satisfy the processing trade more than the farmer. Housewives are becoming more demanding and are willing to pay for the product which offers the highest quality with the least amount of work. The industry must produce a vegetable best adapted to partial preparation and packaging. In the future attempts will be made to cut labor costs by the mechanical harvesting of broccoli and possibly cabbage. Mechanical harvesting of lettuce is also up for early experimentation.

Grant asked about the prediction of the Giannini Foundation that with 6,000,000 more people expected in California in the next few years, vegetables would have to be grown in the hot central valleys and not entirely on the coast. Rohmert said that much of the vegetable business is moving to Arizona and Texas. ^{New} methods of preservation, such as better potato storage, will give the margin to such areas as Idaho, where land and water costs are less than those in California, and potato quality is higher. Mr. Sperber commented on the pelleted seed and said that since a lot had been planted, it had better work. He said some seed had not come up. In some of the ground with alkali and cut worms, it is vital to get a good stand.

CYRILLE FAURE: After three dry years, San Joaquin Valley cattlemen are looking for various economical supplemental feed. The present interest is in olive meal, which can be purchased for around \$25.00 per ton and runs about 13 per cent protein. Hay has been quite cheap in the valley.

The cow-calf operation is less popular and more difficult to finance than the yearling operation. This has raised feeder costs to a point which has shaved the profits on fed animals. Unless the market goes up, it will be impossible to absorb the spread. Cattle weights have not changed materially due to the dry years, but supplemental feeding has increased costs.

A new development, where 90 to 95 per cent barley and concentrates make up the total ration, is the addition of two per cent of sand to the ration. This "scrubs" the lining of the stomach in the manner that roughages did and seems to keep the cattle more healthy. It does not have too much of an effect on teeth. Fattening cattle are going to market anyway, and their teeth will last during the feeding period. Range cows eat dirt and sand with grass.

Mr. Faure reported they were using shade and Vitamin A to fight the hot weather. He said they were feeding 20,000 units per day of Vitamin A, which has now been fortified so that it does not lose its strength.

He said they were using irrigated dry-land pasture with all legume seed. They irrigate twice a year and pasture it as dry grass. There is one irrigation in October and another in February or March. Either flooding or sprinkling may be used. The seed is planted on hard ground after some other crop, such as barley. Working the ground stimulates the wild grasses too much. They are planting seed at the rate of 12 pounds per acre and getting 400 pounds of beef per acre on two irrigations. Most of the seed is clover mixtures.

In answer to a question on the beef promotion plan, he said those who support it think it is good; others believe it is not good. The balloting plan is wrong since it takes in too many small non-commercial producers.

In answer to a question on the palatability of olive meal, Mr. Faure reported that the animals must become accustomed to it. They are started with salt added to the meal. It has about 83 per cent of the food value of rolled barley and mixes well with other concentrates.

HERMAN SPERBER: Mr. Sperber reported that he does not think the use of pelleted seeds will come too fast in the vegetable crops in the Imperial Valley. In spite of the problems last year, lettuce plantings were as heavy as ever. The elimination of the marketing order on lettuce was good. It was unrealistic with big plantings in Arizona and Texas.

There were big increases in the plantings of flax, with the crops in the Dakotas largely a failure. More milo is being grown as well as produced for silage. Hybrid milo is yielding $3\frac{1}{2}$ tons per acre. Imperial County is getting to be one big feed lot, with more operations being built all the time. This is good for the farmer. It provides a means of pasturing off cull vegetables.

Mr. Sperber reported that on their 5,200 acres of alfalfa, carrots, lettuce, beets and cotton, the land is in use at all times, either

in cash crops or in pasture. The Imperial Valley is now farmed the year around. Twenty years ago, summer crops were almost unknown, and many people just moved out of the valley in the summer time.

Mr. Grant asked if hay was handled with a sweeter. Mr. Sperber replied that they were still using a rake. They are not field-pelleting or wafering alfalfa. The cost of the equipment is high. All of their hay goes to their own feed yard, but this is carried as a separate operation. It is sold at market price. Hay land in the valley is losing out to flax and milk. Alfalfa dehydrators are going in. Land prices and valuations are high, with taxes correspondingly so.

ALLAN GRANT: Mr. Grant reported that the Legislature has made it legal to sell milk with a two per cent fat content and 10 per cent solids not fat. He recounted a conversation with some visitors from Australia concerning the American contention that animal fat causes heart failure. The Australians said that the fat consumption in Australia is twice that of the United States, but the heart failure ratio is the same. He said, "It's that oleo you are eating." Mr. Grant reported that doctors are discovering it is the sugar ratio and not the animal fat which is causing the problem.

He said that a check was made on their own dairy operations to lower rancidity and control mastitis. As a result of calling in specialists from the University of California, they have enlarged the size of the vacuum lines. They believe it has helped and has lowered the mastitis range.

Transportation costs are a major factor in hay costs, and they are interested in pelleting or wafering to cut the weight. This could lower production costs for the dairy. He recounted some of the new developments in the attempts of the Teamsters' Union to get a foothold in farming operations, mentioning bean harvesting in the Patterson area and milk hauling from the valley to Los Angeles. He said FFA boys should have an opportunity to hear both sides of the labor problem.

THEODORE TODD: Mr. Todd reported that the labor problem is important in the citrus and avocado industry also. There is a tendency to move harvest labor management from the packing plants to the individual grower.

Much has been done in Riverside County to improve farmer public relations. The National Council of Churches presented an unfavorable report on the migrant labor situation, but a local representative of the Council countered with a good report. The local representative of the church group was taken to migrant camps and given a first-hand view. Service clubs in the county were invited to eat dinner at a bracero camp, and on the "Business Education Day" sponsored by the Chamber of Commerce, a number of teachers visited a bracero camp and were favorably impressed.

Avocado growers are interested in mechanization, not so much in a mechanical harvester as in cutting costs from the grove to the plant. It will be a long time before a machine can selectively pick lemons, oranges, or avocados.

Mr. Todd reported that root rot in avocados is cutting down the acreage. They are trying to cut down the number of avocado varieties from several hundred to a few. This is a slow process, taking six or seven years from a seed to a producing tree. This is quite different from the process with annual crops, such as tomatoes.

Mr. Todd believes that an avocado marketing order is necessary, but is being held up by independent packers. A cooperative operation is essential to the future of the avocado industry. The importance of learning about cooperative marketing must be stressed to students. Mr. Todd also believes that agricultural education is good. You are dealing with young minds not hampered by traditions. They have not been convinced that something cannot be done, so they "go ahead and do it."

Mr. Todd mentioned the increase in vegetable production in Riverside County and said the farm adviser there predicts increases in both the dairy and citrus industry. Urbanization is not necessarily driving agriculture out of the county.

He said that young people are being told too often that a profitable operation is unpopular, that it is wrong to make a profit. Mr. Grant reported that one church group is stressing "service" rather than "profit."

VERNE HOFFMAN, JR.: Mr. Hoffman reported that his operations include livestock, peaches, and grapes, but his principal interest is livestock.

He reported on a new method of raising hogs entirely on "wire", (extruded metal). Diseases and problems with sows and litters being raised on metal have been reduced 95 per cent. Pens are always clean and dry; manure drops through the screen and can be washed out. Labor costs are also cut. Pigs are also being weaned and fed off metal. It does not hurt the hoofs, but some dewclaws are damaged due to the diamond shaped pattern of the extruded metal. They are developing a metal with round holes.

Mr. Hoffman mentioned trouble with cannibalism when pigs are fed in confinement. When the animals were turned out to pasture, however, this stopped. An Oregon feeder stopped cannibalism by mixing 5 percent dirt with the feed mixture. A swine grower at Cottonwood snips off the pigs tails at birth to stop cannibalism, but this could not be done with show hogs.

Mr. Hoffman said that growers were getting 200 pounds of pork in 120 days with a feed conversion ratio of 2.4 pounds. He mentioned the electronic test for the size of the loin eye. Mr. Thompson thought that 5 percent of dirt might be too high and suggested 2 percent.

Discussion of Reports:

Comments made following the presentation of these reports included a discussion of a radio program concerning the possibility of clamping down on FFA and/or 4-H club members (16 years old and younger) who operate their own tractors on their own projects. The report on the radio indicated this might be a violation of the safety regulations.

Mr. Thompson spoke about the value of record keeping, and said there should be a supplemental page, perhaps just for senior boys, where such costs as taxes and other items could be included in the cost of production. Mr. Faure reported that their local fair sponsored farm account book competition, and this created much interest and had improved the records.

Mr. Thompson spoke in favor of vocational agriculture. He said new methods can be explained and put into operation easier with young people than with adults who may have inflexible opinions. He cited his earlier experiences with the Extension Service when he worked for the University of California.

New Legislation:

After the session on new trends in agriculture, Mr. McMahon spoke about legislation which affects education in general and agricultural education in particular. He said education is a major problem and takes 40 per cent of the state budget (about \$840 million). He mentioned impacted areas and said that federal funds have helped with school problems. He also mentioned the changes which are brought about by the restructuring of higher education administration in California - credentials, textbooks, and statewide testing.

Luncheon and Tour:

During the luncheon, President Julian A. McPhee introduced members of his California State Polytechnic College staff. The visitors were taken on a tour of the campus. Dean Warren Smith of the Agriculture Division arranged the tour.

Integrating Vocational Agriculture With Other College Courses:

Following the tour, H. H. Burlingham presented material on the place of agricultural education in the public schools, and the need for agricultural production and services. He distributed material on the objectives of agricultural education and materials prepared by the U. S. Office of Education.

Present Status and Problems of Agricultural Education:

Mr. Graf reported that agricultural education is about holding its own in enrollment and the number of departments. There is a teacher shortage which is likely to continue. People are not talking enough about the importance of agriculture. Some administrators in essentially agricultural areas are saying there is no need for agriculture in the high school curriculum. Several instances were cited around the state, some where the people have risen up to defend the agricultural program.

Mr. Faure stated that at Porterville High School five freshman boys, who had been in 4-H clubs, were deliberately counseled not to take agriculture in high school, but to continue their 4-H club programs and take a straight college preparatory program. He felt these boys would lose interest in agriculture and ultimately be directed into other fields. He felt that something should be done about this.

Mr. Faure also asked how vo-ag students do in college. He understood that they do not do as well as other students. The response was that many studies show students who have been in vo-ag do as well as, and in many cases better than, students who have not had vo-ag. Mr. McMahon quoted Dean Aldrich of the University of California, who lauded the records of vo-ag students. He also cited a communication signed by deans or presidents of the four collegiate institutions which offer degree programs in agriculture. All of them welcome vo-ag students.

1961 American
Farmer Degree
Candidates:

Mr. Couper presented the briefs of the twenty-four applicants for the American Farmer Degree as a rebuttal to the statements that "boys cannot get into agriculture." All of the applicants have impressive investments in farming. He said the twelve boys recommended, with the average age of 19, had an average labor income of \$17,500 and an average net worth of \$23,100. He cited the case of Eugene Terry of Gustine, who at the age of 20, had sold out a dairy enterprise developed in 4-H Club and FFA work, for about \$40,000, and is devoting his time to other farming operations.

Spring Meetings:

The next meeting was set for March 16, 1962. Mr. McMahon is to confer with George Nicholas to see about meeting in Sonoma. The State Advisory Committee on Agricultural Education has never met in this area and has never visited a poultry enterprise as an advisory group.

The meeting adjourned at 3:30 P.M.

Respectfully submitted

George P. Couper,
Acting Secretary