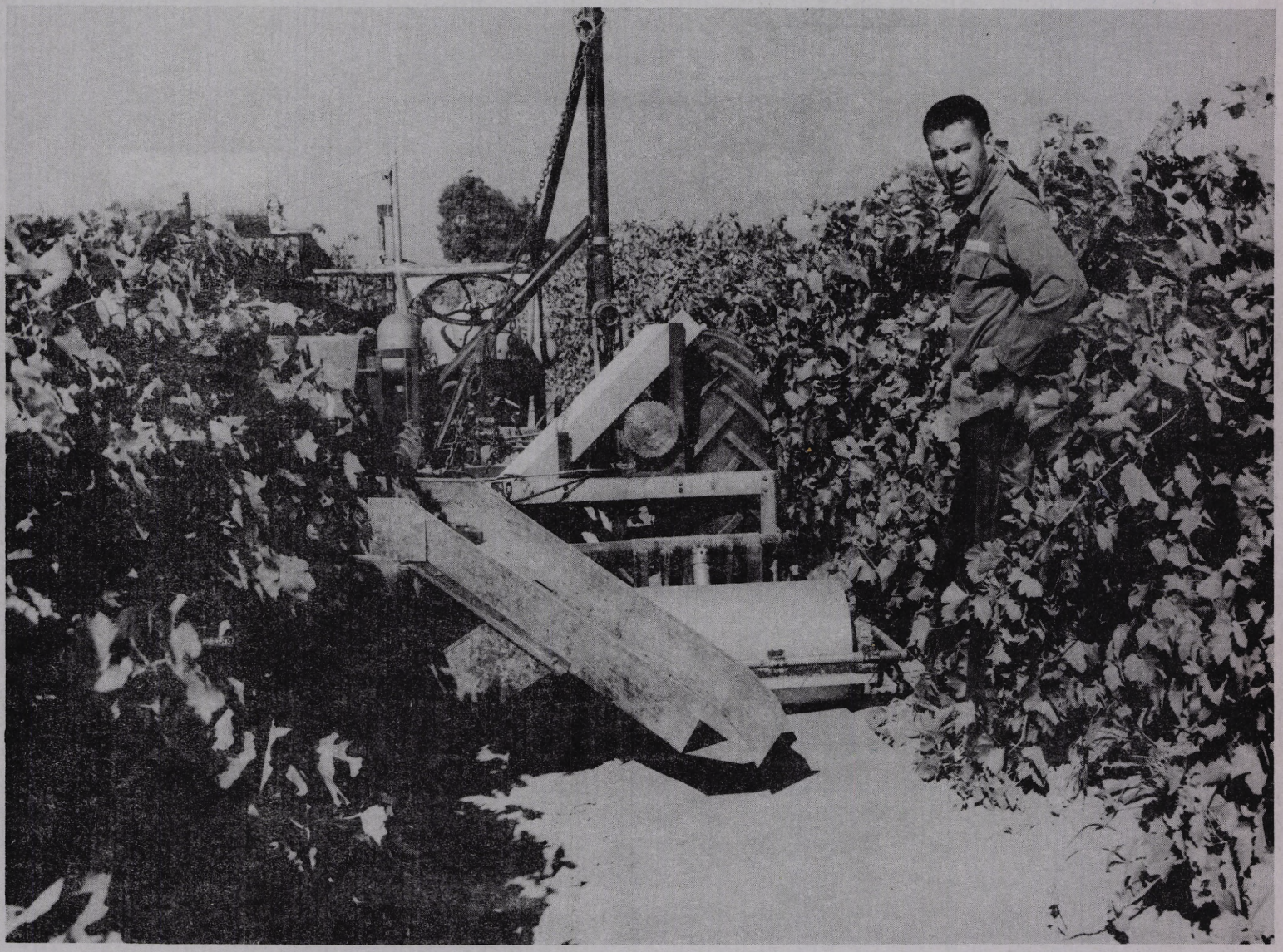
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AGRICULTURE IN REVIEW

MADERA COUNTY
FARM AND HOME ADVISORS



ANNUAL REPORT - 1956

FRONT COVER PICTURE

The mechanical harvester comes to the vineyard. This historical event occurred in Madera County on September 14, 1956 when George Abernathy, a University of California Agricultural Engineer, harvested 55 vines of Thompson Seedless grapes for raisins on the George Kovacevich ranch.

Approximately 250 people observed this historical event.

YOUR FARM AND HOME ADVISORS OFFICE

The Madera County Farm and Home Advisors Office is part of the educational system of the University of California. It aids farm people to make their farming operations more profitable and their rural way of life more enjoyable.

The Farm and Home Advisors Office in Madera County participates in a cooperative agreement between the University of California, the United States Department of Agriculture and the Board of Supervisors of Madera County.

The farm and home advisors specialize in the various fields of agriculture, home economics and 4-H Club work. They are charged with the responsibility of teaching the practical application of knowledge within the fields of agriculture and home economics and its application to the problems of the farm and home. The farm and home advisors use various methods of teaching; such as, farm and home visits, field meetings and tours, demonstrations, news articles, radio and TV programs, bulletins and circulars, and 4-H Club work.

This is our annual report to the people of Madera County for 1956. It represents only a brief summary of the many accomplishments during a busy year of service to the farm people.

WHAT WE DID IN 1956

Farm and home visits	2584
Office calls	3063
Telephone calls	5716
News articles or stories prepared	442
Radio broadcasts	90
Television programs	31
Training meetings held for local leaders	109
Attendance at these meetings	1582
All other meetings held or participated in	446
Attendance at these meetings	13016
Meetings held or conducted by local leaders	939
Attendance at these meetings	9790
Number of local leaders participating	441
Number of organized groups carrying on adult home demonstration work	15
Members in these groups	629
Number of 4-H Clubs	17
Number of 4-H Club members	558
Total number of 4-H members completing projects	309
Total number of 4-H projects completed	463

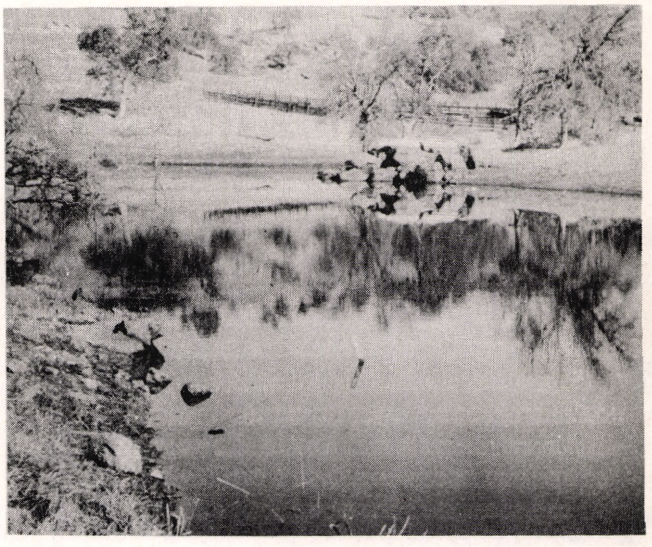
FERTILIZER CONTROLS POND WEEDS



Pond weeds and scum can be a serious problem in a farm pond, especially if you like to fish and swim. This photo shows the condition of the South Pond on the Martin Brothers ranch, River Road, in early October, 1954. Pond weeds and scum ringed the pond along the shoreline making fishing difficult. At the request of Bob Martin an aquatic weed killer was tried and results were satisfactory. Because of the danger to fish life, it was decided to try fertilizer in the 1955 season.

Notice the stake in the left center of the photo.

In 1955, this pond received nine applications of fertilizer for a total of 2,600 pounds for the season. In early October, 1955, the same spot, as in the above photo, looked like this. It was almost free from pond weeds and no scum was present. At no time during the season were the pond weeds heavy enough to interfere with fishing. The water level was approximately two feet higher than the previous year. Also, along the shoreline the grass improved. The best fertilizer proved to be a pelletted 10-10-10. It was applied by boat and also broadcast from the shoreline.



Since the results were so good in 1955, it was decided to continue the test in 1956. Results are shown in the photo taken in early October, 1956. More pond weeds were present than in 1955, but much less than in 1954. The water, however, was free from scum. The stake was just visible below the water line.



Conclusions made from the test indicate that fertilizer should be applied from a boat as well as broadcast from shore. Fertilizer should be applied more often early in the season as compared to late in the season. Also, that the fertilizer controls the pondweeds in two ways -- acts as a contact or toxic agent to young weeds and builds up an algae blanket that shades the weeds and prevents them from growing.

GRAIN YIELDS INCREASED BY TESTING





Fertilizer trials and variety plots have been carried on for years to increase dryland grain yields. Even though some results have remained elusive, some conclusions can be made.

The best fertilizer recommendation at the present time includes a low nitrogen with a high phosphate applied before or at seeding time. The nitrogen can vary from 10 to 20 units, and the phosphate should be around 40 units.

For the past two years good results have been obtained using such a combination of fertilizer on Atwater sandy loam. Results can be seen in the top photo compared to the check. In 1955 the fertilized plot yielded $10.00 net above the check, and in 1956 it yielded $4.25 net above the check. On Rocklin, San Joaquin and Whitney fine sandy loams, however, only the fertilizer cost was returned. Even though no money was made on these soil types, no money was lost either.

Winter application of nitrogen may pay off in years of good rainfall, but in general, after good summer fallow, the nitrogen level is sufficient to get the grain off to a good start. Moisture is still the limiting factor, but in general, grain fertilized with phosphate and low nitrogen will withstand drought better.

Atlas 54 barley is compared to Atlas 46 in the variety block, and results show that in Madera County it yields slightly higher. Since 1947, Rojo barley has remained the best yielding barley, followed by Arivat, Atlas 54 and Atlas 56. Of the wheat varieties, Onas 53 looks the best, followed by Onas 41, White Federation 54 and Poso 48. Some years, because of climatic conditions, some low yielding barley or wheat may outyield our best varieties, but in the long haul the proven varieties are best. It is a good practice to change seed every three to five years to make sure your seed does not become contaminated with inferior varieties and weeds.



VINYARDISTS FACE THE FUTURE



Standard two-wire trellis for Thompson Seedless grapes for raisins may be a thing of the past.



George Kovacevich, grower, and Paul Baranek, farm advisor, discuss the merits of the grape trellis of the future.



The new five-wire, horizontal trellis for machine harvesting is the new model. Canes are tied to the middle wire. Vines are six years old and were formerly trained on a sloping trellis.

Machine harvesting of grapes requires a special type of trellis to facilitate the harvest. Clusters must hang freely inside the outer wires to enable the cutter bar to get them. Tests in Madera County, and in the valley counties, indicate that the harvester developed by the University of California is practical.

The new harvester is only three years old and is capable of harvesting better than 80% of the crop on Thompson Seedless, and better than 90% on some of the wine varieties. The main limiting factor at the present time is stem length in the grape cluster.

Future work will continue along three fronts: improvement of trellis and training of the vine, breeding work to increase stem length in clusters and improvements in the harvester.

CHEMICALS IMPROVE GRAPE CULTURE



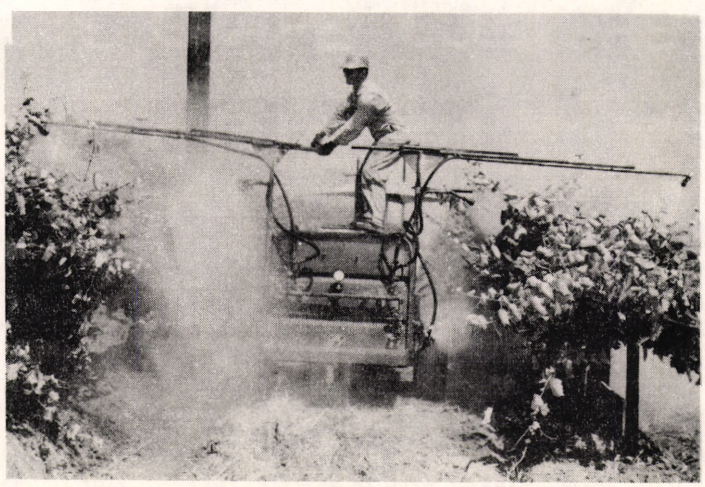


Madera County vineyards infested with Johnson grass can now be cleaned up with chemicals at low cost. After two years of testing with aromatic weed oil and Dalapon, it has been demonstrated that with only two properly spaced sprayings it is possible to have a clean vineyard at harvest. The top photo shows what can be accomplished in one year with two applications of Dalapon compared to the check row. Two applications of aromatic weed oil applied on the same dates looks equally as good.

At the present time only the weed oil can be recommended because Dalapon has not been registered for vineyard use. It takes considerable scientific data before a new chemical can be released for use. This past summer your farm advisor was able to furnish samples of grapes for analysis of Dalapon tolerance. This should help to speed up the registry of Dalapon, probably in time for use during the 1958 growing season.

Johnson grass in the vineyard is first sprayed when it is approximately ten inches high. The second application is put on from four to six weeks later when the regrowth is again about ten inches high. Weed oil is used straight. Dalapon is used at the rate of one pound per seven-and-one-half gallons plus a good wetting agent.

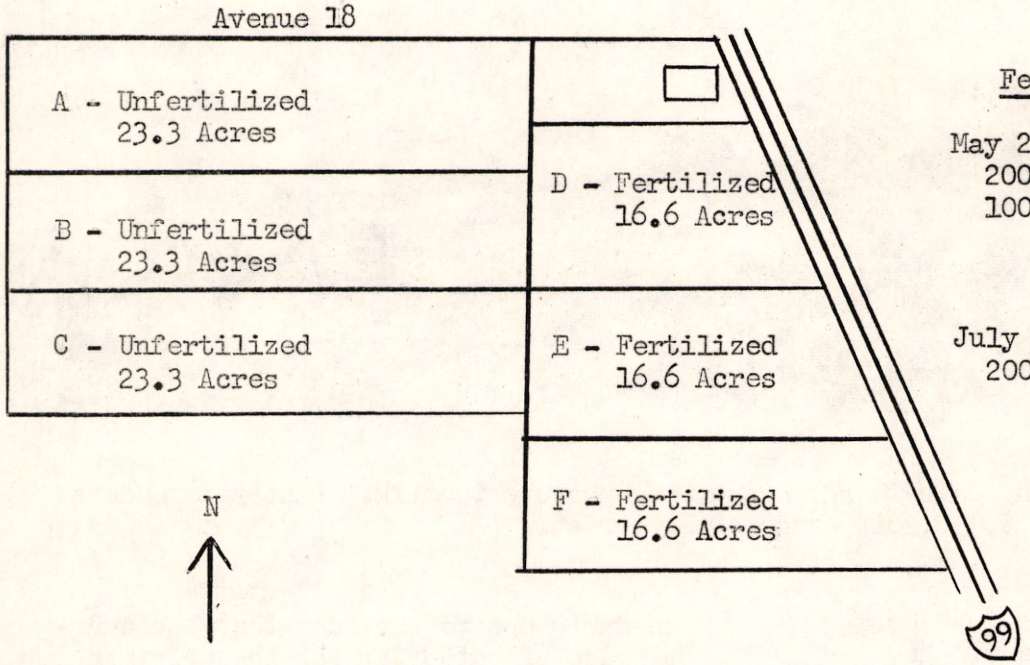
The girdling knife is rusting on the shelf. This past year 70 acres of Zante currants were sprayed with 4 Chloro hormone to assure the grower a good crop of raisins. Two-row sprayers, like the one in the photo, does the work of ten men, working one week, in less than ten hours. The currants are sprayed from five to ten days after full bloom but before berry shatter occurs. Approximately 250 gallons of spray, at a concentration of seven ppm, are applied per acre.



MORE FEED PER ACRE

An irrigated pasture fertilization plot was established last spring on the H. Clay Daulton ranch located about three miles north of Madera on Highway 99. The soil was mostly San Joaquin sandy loam. A fifty acre field was fertilized and a seventy acre field was left unfertilized. The diagram shows the layout of the test and gives the kind and amount of fertilizer used and the dates that it was applied.

Yearling steers were pastured on each of the fields to measure the amount of forage produced. They were weighed at the beginning and end of the pasture period at 8 o'clock in the morning.



Fertilizer Applied

May 2, 1956
200 lbs. 20-20-0 per acre
100 lbs. Ammonium Sulfate per acre

July 6, 1956
200 lbs. Ammonium Sulfate per acre

RESULTS FROM MAY 8, 1956 TO SEPTEMBER 26, 1956

	Unfertilized	Fertilized
Number of acres	70	50
Number of yearling steers	189	204
Average weight of steers at start	494 lbs.	480 lbs.
Average weight of steers at end	617 lbs.	640 lbs.
Days pastured	103 to 141	103 to 141
Total gain per head	123 lbs.	160 lbs.
Daily gain per head	.93 lbs.	1.18 lbs.
Production of beef per acre	324 lbs.	602 lbs.
Value of beef produced per acre @ 18¢ per lb.	$58.34	$108.36
Value of additional beef produced per acre		$ 50.02
Cost of fertilizer applied per acre		19.60
Interest per acre on fertilizer investment @ 6%		.59
Profit per acre resulting from fertilization		$ 29.83

DHIA DAIRYMEN PROFIT



One of Madera County's many dairy herds converting pasture to milk. Last year Madera County's dairies produced 5,356,260 pounds of butterfat.

One hundred and five herds in Madera County used the facilities of the Dairy Herd Improvement Association last year. These herds represented 42% of the cows in the county.

One may well pose the question, "How did these DHIA cows produce in comparison with the balance of the cows in the county?"

The total production of butterfat in Madera County last year was 5,356,260 pounds, and it was produced by about 16,500 cows. The 6,868 cows in the testing association produced 2,702,663 pounds of butterfat, or an average of 395 pounds of butterfat per cow. The 9,632 non-tested cows produced 2,653,597 pounds of butterfat, or an average of 265 pounds per cow.

When one stops to consider that the average price of butterfat for the dairyman was 93¢ per pound, it is easy to see the value of measuring the production on your herd, then culling and feeding accordingly.

The association cow produced 395 pounds of butterfat selling at 93¢ per pound, thus realizing a gross income of $367.35 per cow. The non-tested cows averaged 265 pounds of butterfat selling at 93¢ per pound, thus showing a gross income of $246.45. This is a difference of $120.90 per cow per year in favor of the DHIA cow.

The average size of the dairy herd in Madera County is around 60 cows. If the individual dairyman could realize this additional gross income of $120.90 per cow, it would mean 60 x $120.90 or $7,254.00 more toward a better living for himself and his family.

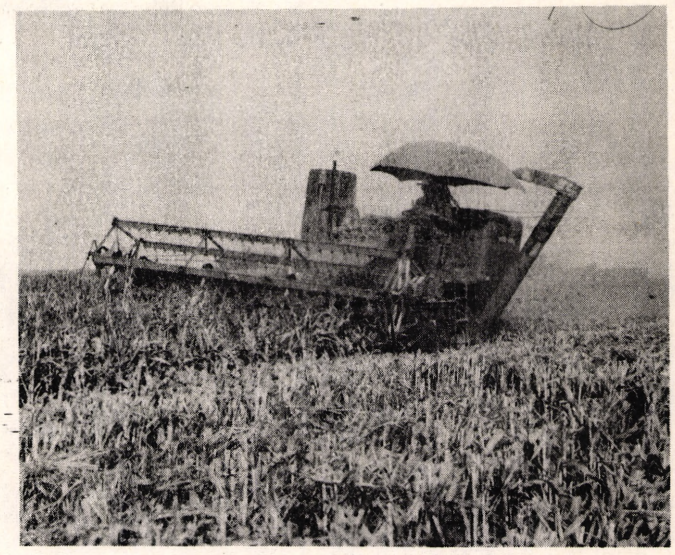
FIFTY POUNDS OF MILO SEED PER ACRE

A new method in growing milo was used very successfully this year by Otto Baumback, a Dixieland District farmer. Basically, his system involved the use of a high rate of seed disked in rather than planted at a low rate with a drill. His reason for changing to this system was his variable soil conditions. Disking placed the seed at variable depths and moisture for germination was not as critical.

Mr. Baumback prepared his land, put up borders and pre-irrigated. When sufficiently dry, he broadcast Double Dwarf 38 seed at the rate of 50 pounds per acre and disked the field. As might be expected, the stand was exceptionally thick over most of the field but nowhere was the stand poor. Because of the thick stand, weeds were almost completely smothered, except for a small amount of water grass on borders. Nitrogen, at the rate of 70 pounds on two fields and 100 on a third field, was applied in the irrigation water. Some of the milo lodged where the higher rate of nitrogen was used. Perhaps the higher rate was in excess of that needed for best results on that field.



Otto Baumback planted 50 pounds of seed and produced over two tons of milo per acre. Note the tall growth for the Double Dwarf 38 variety.



Harvesting presented no difficulty in the thick stand of milo.

Because of the thick stand and high rate of fertilizer, the plants grew generally to a height of four feet or more, almost twice that of row-planted Double Dwarf 38. The fields were sprayed with a dessicant and the thick stand presented no difficulty in harvesting.

These fields produced over two tons of milo per acre. This was a better yield than Mr. Baumback had been able to produce by row planting in previous years.

The only disadvantage to this system of growing milo is the higher cost of seed, which amounted to only a few dollars per acre. Not considering yield, the advantages were several. The thick stand appeared to have reduced weed growth to a minimum. The labor in irrigating by the check method was much less than that required for row irrigating. It is well established that flood irrigating methods are more effective in leaching alkali salts into the subsoil. Cultivation was eliminated. Perhaps not the least advantage was the return of a very large amount of crop residue to the soil. Further field plot checking is anticipated on rates of seed and fertilizer. Providing other limiting factors are not found, this method might very well become the general practice in growing milo.

POTATOES BENEFIT FROM POTASH

Tests with potash continue to show the need for this fertilizer material for growing a maximum crop of potatoes on Ripperdan soils. Although not many areas of California require the addition of potash, the number of deficient soils is increasing with continued intense farming programs. The need for potash for potatoes on a soil already fairly low in that element, does not seem unusual when the high potash requirement of potatoes is considered. It has been determined that 100 pounds of tubers will remove about a pound of potash. Multiplied by a crop of 300 sacks per acre, the total removal over several years can be very great. Continued potato production on Ripperdan soils seems to have caused this deficiency condition.

Similar responses have not been found in other crops so far. This seems reasonable since most other crops common to this area have lower potash requirements and because of deeper root systems, probably get adequate potash from the subsoil. Continued intense cropping, however, may make it necessary to add potash for other crops as well as to potatoes.

Side dress treatments of 100 to 300 pounds of potash were made this year on a field selected because of its low potash content indicated by soil tests. These treatments were applied on four rows the length of the field and replicated four times. Broadcast treatments were not used as in previous years. Although broadcast treatments are effective, fertilizer materials for a row crop are used more efficiently by side dress treatments and this method is considered more practical and economical. Sulfate of potash was used in preference to muriate of potash to avoid increasing the harmful salt content of the soil. Following are the results from this fertilizer trial.

Fertilizer Treatment	Average Yield	Increase Over Check
(Pounds of K_2O)	(100# sacks per acre)	
None	276	--
100	326	50
200	338	62
250	362	86
300	354	78

Statistical analysis showed a significant difference between the check and all other treatments, but not between potash treatments. However, the results show a continuous increase up to the addition of 250 pounds of potash per acre. At this rate, the increase of 86 sacks was made at a cost of about $15 for fertilizer. Considering a normal price for potatoes of about $2.00 per cwt. and a cull-out of about 20%, this represents an added gross return of about $140 per acre. Deducting the additional cost of harvesting, packing and fertilizer would leave a normal net return of about $60 per acre.

Soil samples were tested for potash and other nutrients both before and after the crop season. Tissue samples were taken at intervals during the growing season to determine the relative level of nutrients and comparative uptake of nutrients between treated and untreated plots.

Soil tests and potato tissue tests have corresponded fairly closely to results obtained from fertilizer treatments. Efforts are being made to develop the use of these devices so as to be able to predict the potash requirements before planting.

As a result of field tests during the past few years, several growers have begun to use potash in their potato fertilizer practices.

ANOTHER CROP WORTH CONSIDERING



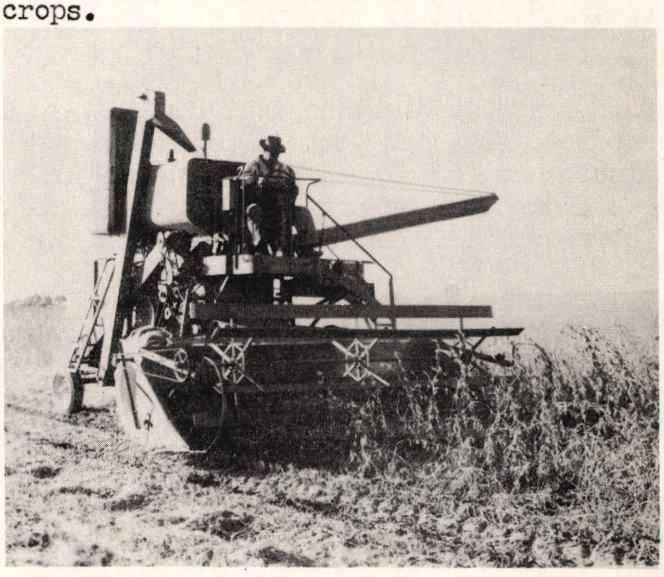
Forrest Fullmer, American Potash Institute, compares treated and untreated rows on a potato potash fertilizer plot on the J. K. Mendrin Ranch. Treated plots produced up to 86 sacks over the untreated plots.

A crop that might soon be of significance in the agriculture of the San Joaquin Valley is soybeans. The crop has been grown experimentally many times, but without success until recently. Hazards to growing soybeans have been its severe susceptibility to spider mite damage, nematodes and resulting low yields. Selection of varieties has been difficult in that there are over 1,500 different varieties or strains with maturity dates ranging from 75 to 175 days. Soybeans have a characteristic called photoperiodism which prevents it from blooming and setting seed until the day length for the particular variety is just right.

It was demonstrated this year by R. M. Firebaugh that soybeans can be grown successfully in Madera County. Mr. Firebaugh grew eleven acres of the Clark variety and produced a yield of 2,700 pounds per acre. Present value for oil purposes is about $90 per ton. Although the return per acre is not large, compared with many other crops, soybeans probably can be grown profitably as a double crop following other early summer harvested crops.



Potato harvesting on the J. K. Mendrin Ranch. Picking is still done largely by hand, but complete mechanization has been proved possible.



R. M. Firebaugh harvests his soybeans with a combine. This field produced 2,700 pounds per acre.

RELIEF IS IN SIGHT FOR ALFALFA GROWERS

Without a doubt, the spotted alfalfa aphid has become a permanent resident of California, and it will continue to be of concern to all alfalfa growers. Because of its rapid spread, prolific reproduction and extensive damage, this pest is considered one of the worst to have ever plagued the California farmer. The fight against this insect, although not yet won, is well on the way to reducing it to a point that growers can live with it and stay in hay production.

When the aphid first appeared and was identified, in 1954, agricultural scientists mobilized their efforts in three directions to find a solution for control.

The first effort was to find chemical treatments, and in very short order parathion and malathion treatments were worked out. These chemicals were found to be very effective in killing the aphids when proper procedures were followed. Even though this insect could be killed easily, it was found difficult to control because of rapid reinfestation from adjoining fields.

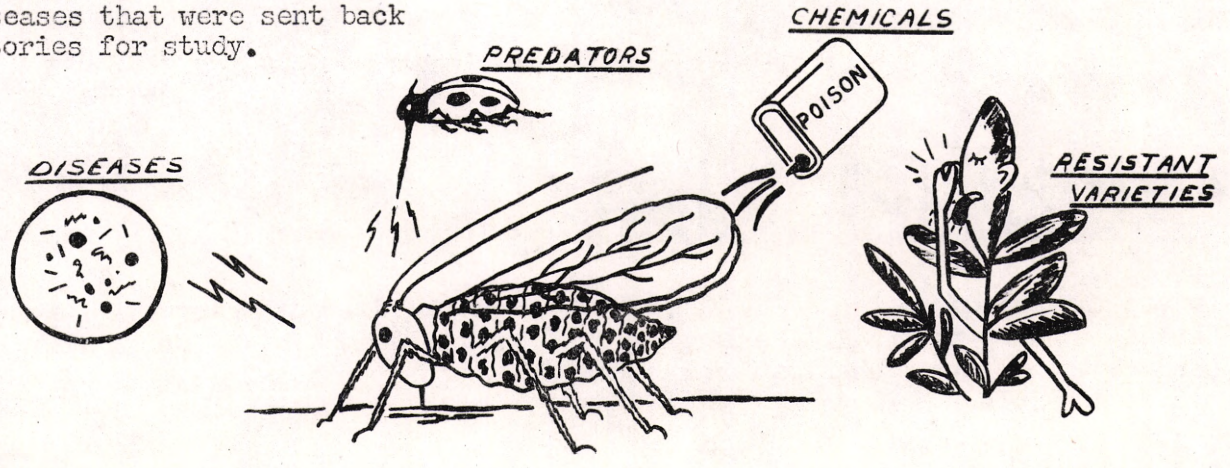
Another program started at the same time was that of biological control. Entomologists and pathologists were dispatched immediately to the Mediterranean area, where the aphid was known to exist, to look for natural enemies of the insect. There they found several parasitic insects and fungus diseases that were sent back to laboratories for study.

Three small wasps and five fungus diseases out of this selection showed promise. These were propagated and distributed throughout alfalfa growing areas of California. Colonies of these insects, or cultures of the diseases, were placed in over twenty locations in Madera County by the Agricultural Commissioner.

Preliminary reports indicate that at least one of the diseases has been very effective where earliest cultures were placed. If the fungus diseases and parasites live through the winter, aphid damage should be reduced considerably during the next season.

A third phase of the aphid control program is that of breeding resistant varieties. One variety, Lahontan, was developed for stem nematode resistance, but by chance was also resistant to aphids. This variety, however, does not produce as well in the warmer areas of the state. Some plantings of this variety are being made, but its main value will be for breeding aphid resistance into Caliverde and California Common. Because of the time-consuming program required in breeding varieties, it may take two or three years more before any relief can be expected from this source.

It is improbable that the alfalfa aphid can be erradicated. With the combined efforts of biological and chemical control and the breeding program, the greatest threat to the alfalfa industry is past and the outlook for the future is bright.



THE ATTACK ON APHIDS

MORE BEEF PER ACRE



Range fertilization paid dividends at this 55-acre demonstration plot on the Lindsay Wright ranch at Oakhurst. It was one of four plots that were conducted during the 1955-56 season by the Agricultural Extension Service.

This is a story that covers the results of two years' work in Madera County on large scale fertilization trials on range land. One trial was conducted during the 1954-55 season, and four trials were conducted during the 1955-56 season.

In the five trials a total of 225 acres were fertilized. In each trial an area was left unfertilized as a check. During the winter, yearling steers were weighed into the fields. The unfertilized fields were stocked at customary rate, as practiced on the ranch. The fertilized fields were stocked with enough cattle to efficiently use the increased growth resulting from the fertilization.

As the season progressed, cattle numbers were adjusted in the fields during the grazing season in order to maintain the same grazing intensity in the fertilized and unfertilized field. The steers were weighed out of the fields at the end of the season when the feed was mature and drying. In each case, enough grass growth remained in the field to provide dry feed for more normal fall use.

Fertilization Paid

In all the trials, fertilizer containing nitrogen was used. In each case, nitrogen stimulated forage growth during the cold winter and early spring weather. In each trial the fertilized field produced enough extra beef over and above the production on the unfertilized to more than pay the cost of fertilizing.

The profit resulting from fertilizing in the various trials are as follows:

McKinney Bros.	$ 4.30 per acre
Lindsay Wright	11.85 per acre
Andy Olsen	8.56 per acre
Joe Urrutia (1955)	21.00 per acre
Joe Urrutia (1956)	20.54 per acre

"Carry-Over"

The 1954-55 range fertilization trial on the Joe Urrutia ranch, near Friant, was carried over into the 1956 season in order to determine the amount of "carry-over" that would result. This fertilized field, the second year, without any additional fertilizer, produced almost twice the beef per acre as did the unfertilized field.

RESEEDING RANGELAND PAYS DIVIDENDS

Madera County ranchers, working with their farm advisor, have found that control brush burning is the most economical method to use in reclaiming brush lands. They have found that a well planned and conducted control burn will leave an abundance of white brush ash that is an ideal seed bed in which to plant improved grasses and clovers.

15,000 Acres Burned

Last summer the fifteen control brush burns that were conducted in Madera County by the Range Improvement Association were highly successful. The hot brush-destroying burns left many thousands of acres of white ash on the 15,000 acres that were control burned.

Seed Pool Formed

The Agricultural Extension Service helped the ranchers organize and conduct a range seed pool this fall. The ranchers, through their pool, purchased over five tons of grass and clover seed to sow on the burns that were cooperatively conducted on their ranches last summer.



John O'Neal, Madera County foothill cattle rancher and veteran control brush burner, inspects the good results of his 1956 control brush burn. Madera County ranchers last summer successfully conducted 15 burns that destroyed the brush on 15,000 acres of rangeland.

BETTER USE OF THE FAMILY INCOME

The 1956 home economics program stressed making the best use of the family income. Programs in buymanship included the selection and cooking of less expensive meat cuts, a comparative study of ready prepared and home prepared foods, and the selection of cotton materials for home furnishings. A study was made of credit and installment buying. Indirectly, programs on nutrition contributed to the wise use of the food dollar by helping the homemaker to spend the food dollar for a nutritionally adequate diet.

The home economics program reaches 16 areas of the county through meetings, with approximately 650 women participating, and is a cooperatively planned program. Many personal contacts are made through home calls and phone calls. These deal with individual problems, mainly in home furnishing or home planning.

Project leaders, such as Mrs. Janz and Mrs. McLaughlin, in the accompanying pictures, make it possible to expand the home economics program to reach more women with more subjects than one home advisor could possibly reach alone. Ninety-eight women attended training meetings where the home advisor instructed them in subject matter. They in turn presented this to their groups, which consisted of 687 women.

FAMILY ECONOMICS

An important part of the family economics program is an understanding of the importance of family financial planning and how a family can measure how much debt they can afford. With this as one of our goals, a series of discussion meetings on credit and installment buying was held. A total of 236 women participated in all parts of the county. The advantages and disadvantages of installment buying were discussed; also, the importance of always understanding a contract. The women had an opportunity to figure the yearly interest rates and learn the true rate of interest paid.

HOME MANAGEMENT



Mrs. Marvin McLaughlin of Chowchilla, a project leader on simplified ironing, demonstrates a quick, easy way to iron a man's shirt. Mrs. McLaughlin is seated at an adjustable ironing board which is one of the pieces of equipment used at these meetings to show how good equipment lightens any task. All steps in the laundry process which affect the ease of ironing from washing through hanging to sprinkling were discussed or demonstrated.

CLOTHING

The clothing program was carried out through special meetings. Two coat schools were held in the Chowchilla area. One of these was held at night for mothers of young children who find it difficult to attend daytime meetings. These coat schools showed that many women not contacted by the regularly organized program are interested in special phases.

Dress forms were made as several special interest meetings. This is a sort of revolving project -- a couple of women learn how and then they get neighborhood groups together to make forms for others.

NUTRITION

One program effecting food buymanship was a series of meetings held by trained project leaders on "Buying Meat For Economical Use." The leaders demonstrated how large, less expensive cuts of meat can be divided and cooked in different ways so as to be economical for a small or average sized family. A blade or 7-bone chuck roast was used in the demonstrations.

Meetings were held by leaders to analyze what we are getting for our food dollar when we buy various types of prepared or semi-prepared foods. The quality, price and time of preparation was compared, using fresh, frozen, canned vegetables, fresh and dried potatoes, prepared and semi-prepared fish, and pies, as illustrated below.



Mrs. Jack Janz, project leader from Burbank, is about to compare two pies; one bought frozen, ready to bake, the other made from purchased pie crust mix and pie filling.

To further better nutrition in Madera County, two series of meetings were held by the home advisor. The first series was on "Food Facts and Fallacies." The truth about many old ideas about food was brought to light and many of the latest developments in nutrition were discussed.



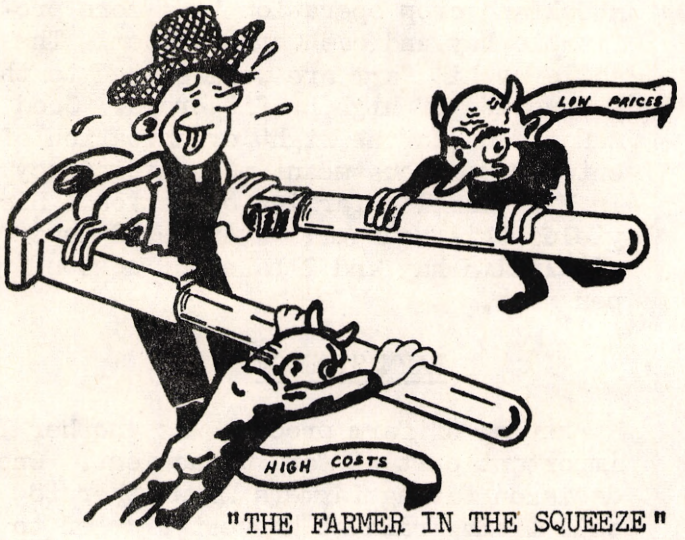
A group of North Fork women check a day's diet. They are figuring the food nutrients present, and then, with help of the home advisor, will decide how adequate is their diet. These meetings showed that many Madera County women were deficient in calcium (this was true of those who do not drink milk) and thiamine.

RURAL DEVELOPMENT

Most of the work in rural development was done in the Fairmead district in clothing. However, the group spent one afternoon discussing installment buying and some interest has been aroused in account keeping.

GOOD MANAGEMENT PRACTICES HELP CUT COSTS

The amount of profit a farmer makes today depends on how well he manages his farm business. Modern farming today requires a highly specialized knowledge of production techniques, machinery know-how, marketing information, labor efficiency, and financial management. The increasing advancement in new farm equipment, irrigation systems, pest control, fertilization, improved seeds, and other factors makes it important that good farm management is used.



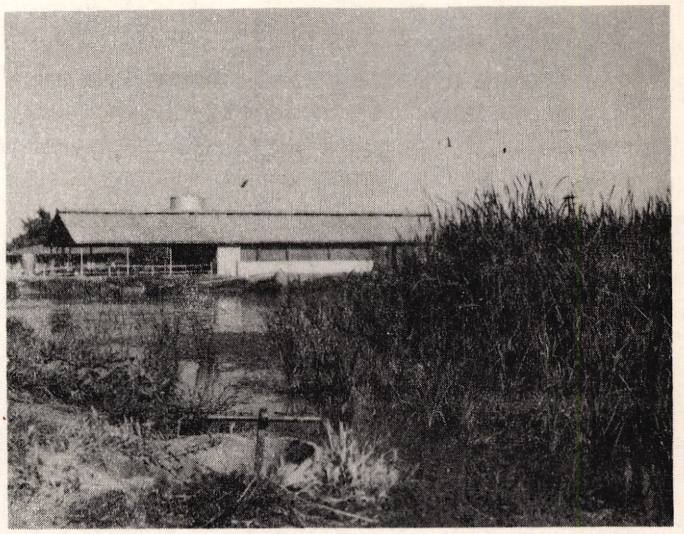
"THE FARMER IN THE SQUEEZE"

In the last few years many farmers have found themselves caught between rising costs for goods and services used in operating the farm business and decreasing prices for their farm products. Many Madera County farmers have used good management practices to meet these wide variations in prices.

BETTER METHODS BRING RESULTS

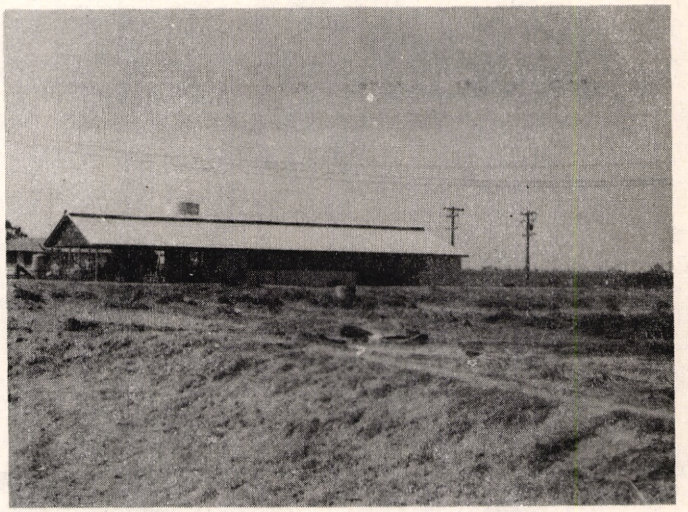
Morial Williams, Madera County dairy farmer, has undertaken several management practices that he feels will help him to survive the cost-price squeeze.

Before



During the irrigation season, water was pumped 24 hours a day into the pond. A large amount of water was lost through seepage and evaporation. Pumping cost was way out of line with the number of acres being irrigated.

After



Through planning, it was found that by installing a pipeline water could be pumped directly into the pipeline, thus eliminating the need for the pond and 24 hour pumping. This system would also allow for more efficient and economical irrigation.

By pumping directly into the pipeline, pumping costs were reduced $150 per month. The former pond site is now used for a "bunker silo" and cattle corral, thus it releases good land for the production of crops. In addition, manure from the dairy barn, which was going to waste feeding tules, is now pumped into the pipeline. Mr. Williams says management is a big factor in profitable farming.

BUNKER SILO CUTS LABOR

The management of labor on a small farm is very important. Bob Lind, Madera County dairy farmer, found that labor efficiency is an important factor in operating his farm profitably. Bob wanted to feed his cows corn silage, but did not want to spend a couple of hours each day digging and hauling silage out of a trench silo. To solve the problem, he built a "bunker" self-feeding silo with his own labor at a total cost of $341. His cows now feed themselves. He calls it his "cowfeteria." Bob says it takes him about 10 minutes each day to clean up around the self-feeding manger.



PLANNING PAYS

The manner in which a farmer uses the various enterprises in organizing his farm business may often determine whether or not he can show a profit. Howard Randel, Madera County farmer, says his changes in enterprises has meant the difference between profit and loss. He has developed a management plan which fits his farm. Howard has shifted from a livestock and crop operation to a more profitable hay and cash crop system. The soils on his farm are well suited to the production of high profit crops. Good management in the right organization of enterprises thus means more efficiency in Mr. Randel's farming operation. His yields this year will average 10 tons of alfalfa hay and 2 bales of cotton per acre.

FARM STORAGE = $

Marketing of farm products is another important part of farm management. One decision facing farmers is whether to sell their grain at harvest time or to hold it for a possible seasonal price increase. Farm storage of grain is one way of increasing the margin of profit. By storing grain on the farm, farmers can avoid low harvest-time prices and can take advantage of higher seasonal prices. Farm advisors played an important part in getting marketing information to Madera County farmers.

The farm advisors also helped farm families with farm records, income tax, farm leases, financial management, budgeting, and many other management problems.

"The day is over when land was always a desirable investment because, even with incompetent use, it always grew in value. Now, land is a profitable investment when capable management obtains earnings and assures increased productive power."

--Wheeler McMillen--

SERVING THE 4-H CLUB PROGRAM IN MADERA COUNTY

BUILDING TOMORROW'S CITIZENS . . . . . .

"To develop leadership and help achieve the broad 4-H objectives of character and effective citizenship".

The Agricultural Extension Service of Madera County promotes and guides the 4-H Club Program for the over five hundred 4-H Club members participating in the 4-H Club Program in the county. There is a farm advisor and a home advisor, who are representatives of the University of California, hired to devote full time to 4-H Club work.

PURPOSE OF 4-H CLUB WORK . . . . . .

The objectives of the 4-H Club Program are to enable boys and girls to:

- appreciate the value and dignity of work.
- acquire knowledge and skills.
- develop attitudes and ability to cooperate with others.
- recognize the value of rural life.
- develop a healthy personality.
- learn to accept and discharge responsibility.
- be of service to others.



A symbol of tomorrow's citizen

TO MAKE THE BEST BETTER - 4-H CLUB MOTTO

SERVING 4-H



Left to Right - Nita Ratley, Norma Baumback, Rogierre Brill, and Walter E. Emrick, County Director.

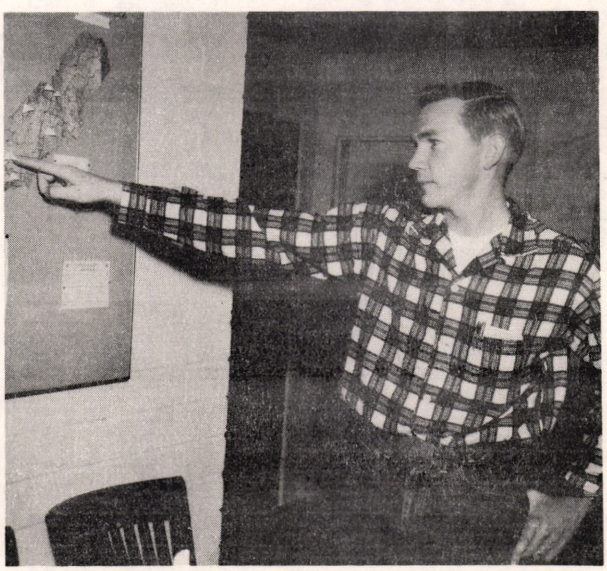
(Left) Walter E. Emrick, County Director, makes available his experience in the field of livestock to the Dixieland 4-H Beef Judging Team. Extension staff members stand ready to serve 4-H activities at all times.

(Bottom Left) Betty J. Kelly, 4-H Home Advisor. By training leaders, Betty is able to utilize her knowledge in the field of Home Economics to the best advantage. The Extension Service helps plan the yearly 4-H program and directs the events with the club leaders and members.

(Bottom Right) Jim Young, Extension Assistant (4-H). Part of Jim's activities include assisting 4-H Leaders, Junior Leaders, and Officers in organization and subject matters. The Extension Service keeps abreast of modern farming and homemaking methods in order that they might better serve the 4-H Program.



Betty J. Kelly, 4-H Home Advisor



James O. Young, Extension Assistant (4-H)

4-H ACTIVITIES IN MADERA COUNTY



(Left) DRESS REVUE -- Mary Sampaulesi, winner, and Gail Beatty, alternate winner, of the 1955 Dress Revue. A Dress Revue is held each year in Madera County for all 4-H clothing project members. The county winner competes in the State 4-H Dress Revue, which is held at the State 4-H Club Convention at Davis each year.



(Left) JUDGING DAY -- Mary Ellen Moss and Kathy Kuhr, Alamo 4-H members, make their decisions as to selecting better food buys, at the annual Madera County 4-H Judging Day activity.



FOODS PROJECT -- Kathy Lothridge, Bethel 4-H Club member, illustrates safety practices in her 4-H Club Food Preparation project.



DEMONSTRATION DAY -- Marlene Schlumbohm and Merilyn Brown, Cloverleaf 4-H Club, demonstrate a sewing technique in a clothing project demonstration at the annual County 4-H Demonstration Day.

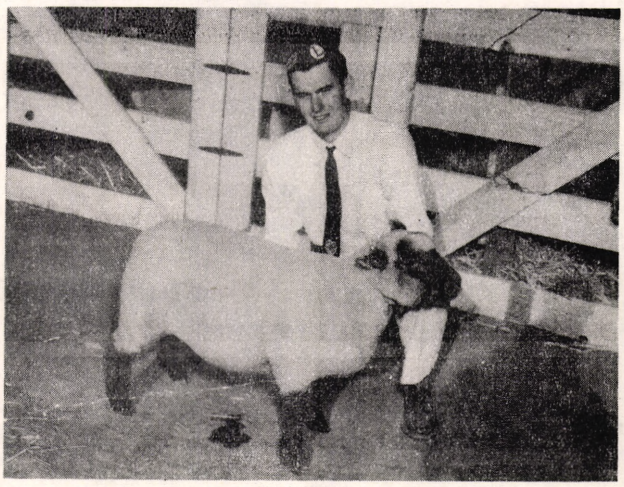
4-H ACTIVITIES



4-H'ers proudly show off their Guide Dogs. Bottom row, left to right: Judy Probert, Nancy Probert, Norma Baumback, Dick Baldy. Top row: Betty J. Kelly, Home Advisor, Neil Schmidt, Janis McRee, and Jim Young, 4-H Advisor.



Harold Wagnon, O'Neals electricity member, uses all this paraphernalia to demonstrate the operation principles of an electric motor! 4-H members are diversified.

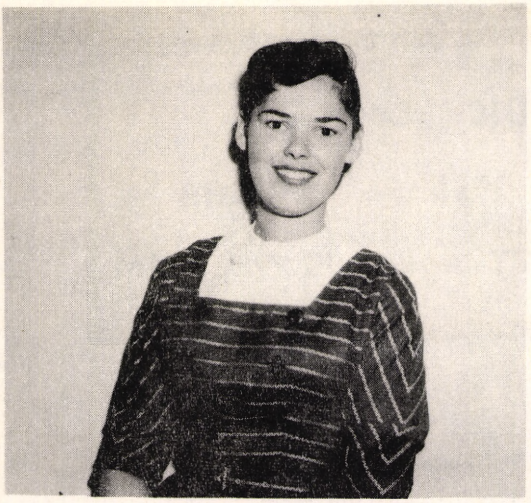


Jim Nolan and his Grand Champion Lamb - Fairs, and Shows are an integral part of 4-H.



Janis McRee demonstrates to fellow 4-H members the art of fitting a show calf. "Learn by Doing" is the motto of good project work.

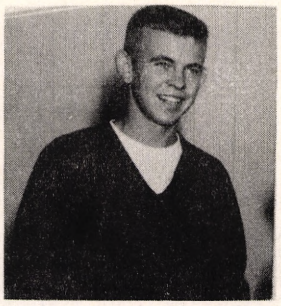
There are unlimited opportunities for youth to grow in wisdom, skill, stature, and character through the 4-H Program. These two pages on 4-H activities have briefly touched on some of the methods used to improve our 4-H Program.



Judy Russell, Alpha 4-H Club member, a 1956 National Award winner in the National 4-H Awards Program.



Rogierre Brill, Dixieland 4-H Club, 1955-56 Madera County girl All-Star.



Norman Van Der Veen, Bethel 4-H Club, 1955-56 Madera County boy All-Star.



Benton Cavin, seated at left, Oakhurst 4-H Club member, receives a Standard Oil Scholarship at a banquet honoring other scholarship winners in the San Joaquin Region. Mr. & Mrs. Carl Cavin, are standing behind him.

4-H AWARDS

Recognition by awards is a tool that gives the 4-H member real satisfaction and is a result of real effort on his part.

National Awards Program

Trips to the 4-H Club Congress in Chicago, scholarships, certificates, and medals are available to 4-H Club members participating in the National Awards Program. Judy Russell, of the Alpha 4-H Club, Madera County, received the honor of winning the 1956 Community Relations Program, and was honored by a trip to the 4-H Club Congress in Chicago.

County All-Stars

Each year a boy and a girl are selected in the county to represent Madera County as All-Stars. These two members are selected on the basis of their leadership and participation in the 4-H Club Program. The 1955-56 4-H All-Stars are Rogierre Brill, Dixieland 4-H Club, and Norman Van Der Veen, Bethel 4-H Club.

Scholarships

The State 4-H Club Office distributes annually over $5000 in the form of scholarships to 4-H Club members. In 1956, Benton Cavin, Oakhurst 4-H Club member, was awarded one of these scholarships by the Standard Oil Company. Benton is now attending Stanford University.

Fairs, Contests, and Shows

4-H Club members receive ribbons, premium money, medals, trophies, and certificates for their accomplishments in their club projects by entering fairs, contests, and shows.



Hi 4-H activities at Madera High School. Left to right, top row: Harold Ashton, Nat Dellavalle, Darrel Schmall, Miss Grace Fuller, Hi 4-H Advisor. Bottom row: Judy Russell, and Carol Mott.



Mrs. Fern Schmall and Mrs. Irene Ashton receive training for their jobs as 4-H foods project leaders.

A QUICK LOOK AT THE 1955-56 MADERA COUNTY 4-H CLUB PROGRAM

1. Fairs, Shows, and Contests
2. County Club Council Meetings
3. Officer Training
4. Industrial and Educational Tours
5. 4-H Parties
6. Silver Star, All-Star, and Diamond Star Competition
7. Demonstration and Judging Days
8. Scholarships
9. National 4-H Club Week
10. Talent Contest
11. All-Star Conference
12. Project Tours
13. Dress Revue
14. Work-work-work on projects and record books
15. National 4-H Sunday
16. Junior Leader Conference
17. Summer Camps
18. State Convention

1956 Enrollment

Members..... 558

Project Completions.... 485

Percent completed..... 70%

Junior Leaders..... 56

Members age 10 - 14 years..... 390

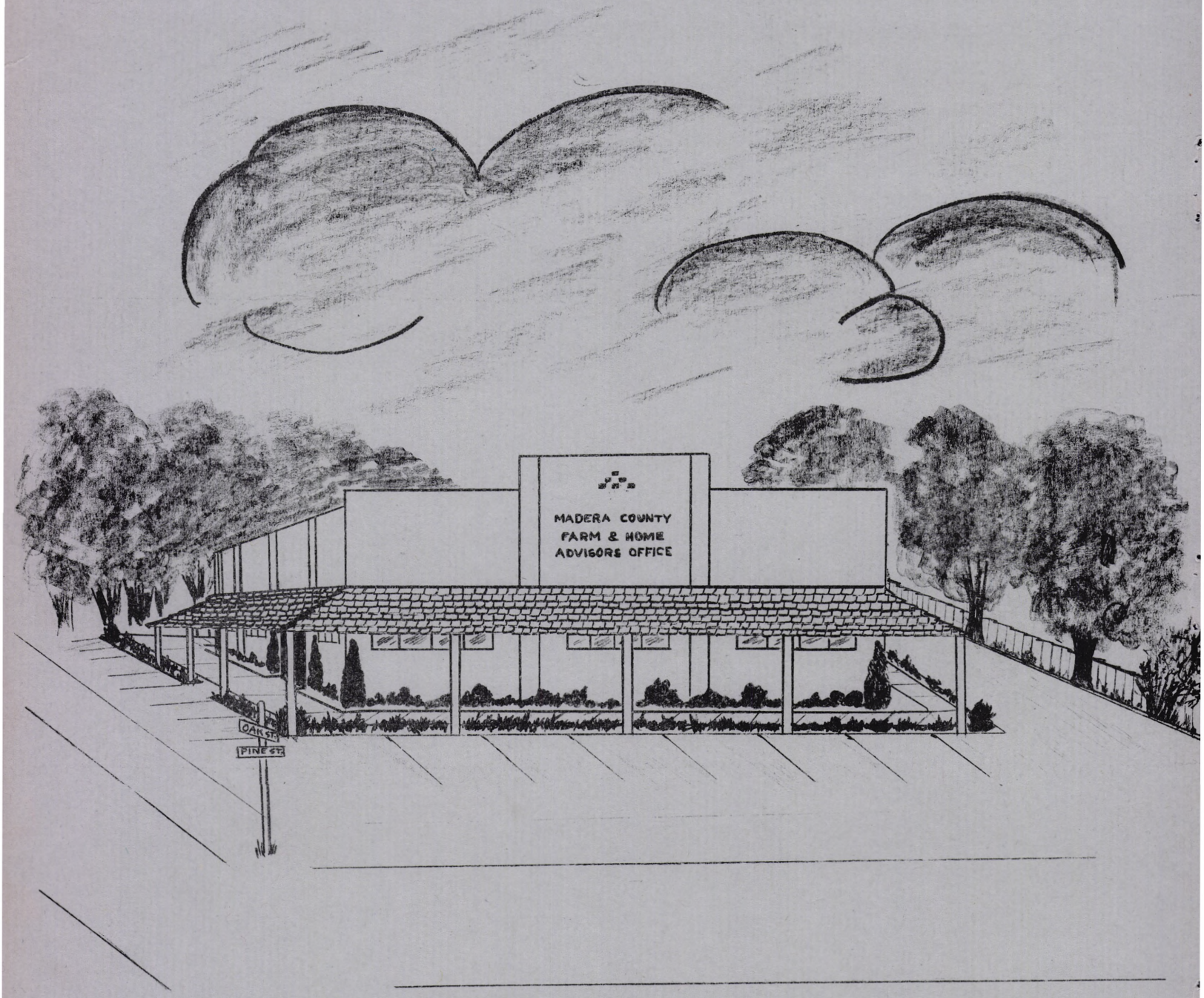
Members age 14 - 21 years..... 168

45,000 ACRES FLOODED

In Madera County last December, 45,000 acres of farm land were flooded, but damage was confined to 8,000 acres bordering waterways. Most of the loss came from soil erosion and silting, wet hay, flooded silage pits, washed-out fences and scattering of debris. Newly seeded pastures and alfalfa fields sustained damage. Not more than 100 homes had flood water in them.

Local farm and home advisors made a farm-to-farm canvas. They supplied information on emergency measures for houses, crops and land. Extension flood emergency leaflets were also distributed by the Red Cross, the Agricultural Stabilization and Conservation Committee, and the Madera and Chowchilla irrigation district offices. Several newspaper releases and radio programs gave additional information on flood problems.

Extension meetings were held at Madera and Chowchilla for farmers who had suffered flood damage. With the cooperation of representatives of financial and public service organizations, information was presented on emergency loans, assistance in restoring and releveling damaged farm lands, emergency cropping programs, and using flood-damaged feeds.



UNIVERSITY OF CALIFORNIA
AGRICULTURAL EXTENSION SERVICE
MADERA COUNTY