

ANNUAL REPORT

OF

THE MARICOPA COUNTY, ARIZONA, AGRICULTURAL AGENT.

December 1, 1921 to November 30, 1922.

REPORT OF THE MARICOPA COUNTY, ARIZONA,

AGRICULTURAL AGENT,

DECEMBER 1, 1921 to NOVEMBER 30, 1922.

The County Extension Organization.

An Arizona Statute provides for the organization of County Farm Bureaus, which have the authority to cause the Board of Supervisors of the county to set aside sums of money, between fixed limits, for extension work in agriculture and home Economics. The County Farm Bureau, furthermore, is jointly responsible, with the State Agricultural College, for administering the work of extension agents. Nothing in the law prevents the Farm Bureau from engaging in any business activities and, as a matter of fact, except for the peculiar legal basis, the Maricopa County Farm Bureau is very much like other similar county organizations.

The county is divided into eighteen farm bureau districts, each district sending its President to the county meetings as a director. It is these directors who have to do directly with extension work. In addition to these men, project leaders and special committeemen are appointed when needed.

The county Farm Bureau does not buy or sell directly but fosters cooperative marketing organizations. It does not permit an officer to be holder or candidate for any political office. It takes no part in partizan legislation but occasionally fosters other legislation. The general policies of the organization are quite in accord with most county Farm Bureaus and a main function is its educational activity.

The policy of the local county agent's office necessarily has conformed to the policies of the States Relation Service, The State Agricultural College and the Maricopa County Farm Bureau.

Program of Work.

The present county agent has been in service in Maricopa county for about four and one half years and has seen a decided, though constant and gradual, evolution in local extension work. The trend of these changing policies seems for the better and the program of work has become largely self determining. The County Farm Bureau has considerable authority to determine the program of work and has left it in substantially the same form as last year. Peculiarities of local conditions call for the whole program to be centered around working out a fixed agricultural program and the development of more intensive farming. Many things but remotely connected with these main ideas must be done, of course.

The descriptions of communities is irregular. No attention is paid to township lines but school district boundaries have much to

do with community designations. There are twenty-seven recognized agricultural districts in the county and eighteen Farm Bureau community organizations, the latter, however, covering twenty-one districts.

In the statistical report only the meetings of the county executive committee having especial reference to extension work were mentioned. This committee meets about twice a month. The same is true of the community committee meetings and the county project committee meetings. No record was made of meetings of this sort not attended by the agent, since there have been no adequate facilities for ~~giving~~ this information.

Soil Improvement.

Most irrigation and drainage work is planned on a community or district plan and is carried out by eng neers hired by project managers. The small amount of drainage and irrigation work is reported however, and has to do with changing irrigation systems, alkali control, and adapting existing systems to a different agricultural practice.

The key to fertility in an arid formed soil is the addition of organic matter. Hence the agent has lent a good deal of stimulus to cover cropping and the use of organic manures especially among citrus and deciduous fruit growers. A field tour last year included the majority of citrus growers and was primarily for the purpose of studying fertilizing methods. As a result most citrus groves that had been clean cultivated for several years were cover cropped this year. Numerous inquiries were received as to the use of commercial fertilizers. In many cases much preliminary experimental work must be done before satisfactory answers to such questions can be given. Oftentimes inquirers were presented with an outline of desirable experimental work they should undertake. Due to lack of facilities for handling all the work the office was called on to do, we were unable to follow up this fertilizer work to determine of what value the suggestions were and to what extent they were applied.

Acid soils are unknown to us, and the use of lime reported was prescribed for its flocculating effect rather than as a neutralizer of acids.

Crop Projects.

Little work with corn has been done. It is a crop of minor importance, being used only for silage, and it has strong competitors in that field in some of the sorghums. Corn work therefore was limited to miscellaneous cultural advice, showing three farmers the type of seed corn to select and the identification of disease and insect troubles.

The small grains are grown quite extensively. Work has centered about smut control and individual suggestions relative to seed bed preparation, planting and irrigation.

While a few acres of beans and potatoes are grown locally, climatic conditions are not perfect for the growth of either. Bean work was confined to cultural suggestions to a few growers. More than the normal

acreage of potatoes were planted with disastrous results. During the growing season the county agent made several inspections to locate the causes of improper development, while a few were assisted in treatment for the control of diseases.

Sweet potatoes are a crop of some importance and efforts to acquaint growers with the principles of construction of adobe storage houses were productive of some results. Cultural suggestions were also included.

Alfalfa is one of the chief local crops. Work was practically confined to seed bed preparation and seeding, and disease and insect control. Other legumes including three varieties of sweet clover, peas, cowpeas and soy beans have been extensively recommended with resultant use, for soil improvement as cover crops.

In disease and insect work, extreme courtesy has been shown by the office of the State Entomologist. The personnel of this office has helped materially in institutes and in handling field calls.

The county agent served for the second year on a committee segregating pure Pima cotton seed for valley planting. This seed production scheme is a model for community production of farm seed, and enlists the cooperation of the Federal Bureau of Plant Industry, The Tempe Cotton Exchange, The Maricopa County Farm Bureau, the Arizona College of Agriculture and numerous individuals. Briefly, the scheme is as follows: Purest line bred seed is planted in an eighty acre field, and the resultant plants rogued by the Bureau of Plant Industry. Seed from the rogued field is handled so as to prevent undesirable mixture and the next season is used to plant the rogued field again, plus an increase block which surrounds the rogued field. The increase block seed is used the following year to plant a larger acreage in a solid block which is free from contamination and the resultant seed, rightly handled, is certified by representatives of the State College or Farm Bureau. This seed is sold approximately at cost.

Rodent and Insect Pest Control.

For the past two years the Bureau of Biological Survey and the county extension offices have been adjacent. Because of the well organized force of this Bureau and the splendid cooperation with this department, all rodent problems which have come to the county agent's office have been referred to the Bureau of Biological Survey, with the exception of minor instances not worth reporting. Because of lack of time the county agent has been unable to assist the Rodent Pest Director as much as he desired.

Insect and disease control have been of a very miscellaneous nature.

Fruit and Truck Crops.

Fruit and truck crops have been the subject at a great many institutes and special meetings, the desire of the county agent being to stimulate production of such crops and to properly guide the inexperienced thus

encouraged. In these matter the closest cooperation of local commodity and civic organizations has been given. The State University has been represented by members of the Horticultural Department, who deserve special commendation, and other speakers have been secured from California institutions and associations, while local men have contributed much to the success of the work. A number of prospective fruit growers in one district are looking to the county agent's office to supply them with timely demonstrations of correct methods of laying out and handling orchards. A grower in another promising community is a cooperative demonstrator who is growing his own nursery stock under the supervision of the extension service.

Numerous demonstrations are planned in these communities, and the response is very gratifying. Similar grape work has been done to a large extent. Blackberry growers were brought together on one occasion to talk over matters of packing, supply, prices, etc.

Livestock.

Livestock breeding in Maricopa County is largely confined to hogs, dairy cattle, and poultry. There has been an opportunity to do considerable good work especially in these lines, but about all the livestock work done personally by the county agent was in poultry. In line with the intensive farming program of the office poultry keeping has been stimulated as much as possible and has met with proper public response. Demonstrations have been essentially confined to culling and caponizing, with numerous meetings covering almost all lines of poultry endeavor. The demand for poultry work has been much more extensive than the personnel of the University Poultry Department and the county agent were able to supply. Local poultrymen are keenly interested in the development of the new poultry plant at the University and the consequent expansion of experimental work, and it is to be hoped that a material increase of poultry extension work can be made next year.

Because of the precarious nature of dairying in the past two years, the Tempe Cow Testing Association, organized July 1, 1921, had to be assisted to get new members frequently. It finished the first fiscal year in very healthy condition and on July 1, 1922, was reorganized as the Maricopa County Cow Testing Association. This association plans to handle practically all cow testing work of the county, though at present are only employing one tester. As this year closes an attempt is being made to get enough additional members to justify employment of another tester. The Dairy Department of the University, at times cooperating with the State Dairy Commissioner, has looked after the cow testing work of this office and the work done has occasioned much satisfaction.

Assistance was given in the organization of boys pig clubs, only one of which materialized and clubs already running were helped at their achievement day programs. Judging demonstrations have been prominent features of the pig club festivities.

Other livestock work has been of miscellaneous nature.

Farm Economics Projects.

Due to lack of facilities for handling all the work called for no particular effort has been put forth to develop Farm Economics projects, and the work reported in the statistical outline has been of minor importance.

Marketing Projects.

The county agent assisted the Farm Bureau in developing cooperative marketing organizations. A big drive was staged in May, during which Hay, Grain and Dairy marketing organizations were formed, and an already existing cotton marketing organization was assisted to get new members. A requisite of each organization was that at least fifty percent of the commodities grown in the Salt River Project should be signed up before the Association should become operative. On June 1st, at the close of the campaign, a big barbecue was held at the State Fair Grounds attended by about five thousand persons. As soon as organization was completed the Farm Bureau relieved itself of further responsibility concerning the organizations. No financial report is given of the work of the organizations, since the fiscal years of each are not completed.

The above Associations are modeled closely after the Sapire plan, calling for pooling of products on a five year basis.

Farm and Home Projects.

In view of the pressure of what appeared to be more important work, no Farm and Home Projects have been undertaken.

Office and Field Service.

It becomes increasingly difficult to do field work, and as a result office work such as correspondence has suffered shamefully during the past year. It has been necessary to take part in increasingly more conferences on public matters, a thing desirable if the office personnel were sufficient to follow up many things that develop.

The institute program has increased and shows great room for further expansion. Many more people have been reached in public meetings than ever before.

Publicity work has suffered, and publicity, rightly placed, is very desirable.

Outlook and Recommendations.

There seems no reason to change the plans and policies of the past year. It appears that the big object in view is still the intensive development of this region. Present methods seems satisfactory under

present conditions.

As has been mentioned in four previous annual reports, the key to successful extension work in Maricopa County is an adequate number of workers. There is now hope of an assistant county agent at an early date. He should be seen augmented with others.

Aside from the regular duties of the county agent, he served as Maricopa County Fair Commissioner for the past season, handling the display from Maricopa County at the State Fair held early in November. He also served as advisory member of a committee which developed a plan for field classification of cotton.