

ANNUAL REPORT

STATE: ARIZONA

COUNTY: YAVAPAI

REPORT OF: HARRY A. STEWART.

Dec
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III. Status of County Extension Organization.

The County Extension Organization, which is legally recognized by the State Extension Service is the County Farm Bureau. The Yavapai County Farm Bureau was organized so as to meet the requirements of the State Senate Bill 109, Section Laws of Arizona. The principle features of this bill are that the County Board of Supervisors are authorized to appropriate county funds for cooperative agriculture extension work and are required to do so when petitioned by the County Farm Bureau.

The Yavapai County Farm Bureau was organized in June 1921. Since that time a very gradual change has been going on. First it was found that the original dues of ten dollars per year was too much for the average farmer, and second the people were losing interest in the organization, no regular meetings were being called in three of the four locals. After about four months of this deprectic the agent obtained a motion picture machine, borrowed the use of a radio outfit and in a very short time the meeting house at the different local farm bureau districts were running over, and up to date the County Farm Bureau has over one hundred members. The reason for this healthy condition of the County Farm Bureau was brought about because of the reduction in dues from ten dollars to one doll

Yavapai County measures approximately fifty miles in each direction from the county seat. This is a great hindrance toward having frequent county meetings and joint community meetings, as well as taking up much of the agent's time in travel. The types of farming vary greatly in the various communities (other than range livestock growing). This condition also is not favorable toward the growth and development of the Farm Bureau.

Shortly after the county Farm Bureau was organized the Arizona Catt Growers Association was standing on very weak legs. The outstanding problem of the cattlemen was marketing. At that time the State Farm Bureau heads believed that the livestock marketing could be handled by the national committee of fifteen. Undoubtedly if this plan would have worked, many of the cattlemen would have become members of the county Farm Bureau. Furthermore there has been a standing prejudice among the cattlemen toward the name "Farm Bureau" and they felt to a certain extent that they should have an organization of their own. During 1923 the Arizona Cattle Growers Association undertook a marketing plan which looked very well until it was placed in operation and then it was found non-feasible, but this marketing plan interested many cattlemen and several local Cattle Grower's Organizations sprung up.

Some three years ago the Arizona Industrial Congress was established in Arizona. This organization is made up of the industries of the state and there we find the Farm Bureau and the Arizona Cattle Grower's Association working in close cooperation. The agent finds

the cattlemen and in some instances where it is possible for the cattlemen to attend meetings, they are joining the County Farm Bureau.

There is one half the grazing area of the county located on the National Forest and many of the cattlemen are grazing permittees on the forest, therefore a great deal of work is done with the Forest Service. The agent has attended several cattle growers' meetings in company with the District Forester and splendid cooperation exists between the Forest Service and Extension Service workers.

IV. Program of Work, Goals Established, Methods employed and Results Achieved.

(1). Factors considered and methods used in determining Program of work.

In planning schedules for demonstration meetings, or projects, the agent has found that the best results can be obtained as ascertaining the time of the year which is most adapted to the period of the year when environment conditions effect the communities, or when best results can be obtained because of character of work to be accomplished.

In many cases when the specialist's time is limited, the agent must decide between having a few demonstrations distributed over the county or having several that are located close together. Probably the most outstanding factor is the period of the year when the work should be done. For example, July, August and September are the best months for culling, July and August for the plant disease control work. Some phases of the range cattle work can be best done in the spring and fall, tho, organization work and meetings can best be carried with these people during the winter months, for at that time they are not busy working their cattle. Much of the work in dairying can be done in the winter months, however tuberculin test work, and keeping up the milk flow during fly time must be done in the summer. Rodent control work must be carried out during the spring, summer and late fall, as the gogs hibernate as soon as the frost comes. Pocket Gophers are worked during fall and winter; rats, mice, squirrels and rabbits, during the winter months, for they will consume more of the poison bait because of the shortage of other forage.

(2). Project Activities and Results.

Yavapai County consists of an extremely diversified type of farming which makes it very hard to carry on similar projects in the different districts. The policy has been to select leaders in the respective districts and to allow them to act on the particular project at the advice of the agent. In selecting the project leaders, the agent has taken into consideration the man's characteristics, such as his local leadership, his devotion to public service,

his ability to organize, his success in his own business, and his ability to maintain cooperation.

A. Soil.

The soils of some of the districts of the county are undoubtedly losing their fertility. In some cases the agent has found that farm lands have been double cropped for thirty years, that is, winter grain and summer corn. Rotation of crops have been advised when this condition has been found.

Green manuring has been advocated in several instances. One green manuring demonstration was held. On this particular farm, which was a citrus grove, the agent, thru the advice of the Extension Horticulturist, A. F. Kinnison, gave complete information for its development.

In one instance where a farmer's alfalfa field was found to be spotted, the agent took soil samples, had them analyzed by the University of Arizona Agricultural Chemist and found that the soil where a very poor stand of alfalfa grew was deficient in lime. Several other farms of this district have the same prevailing condition and it has been arranged by the agent and thru the cooperation of this farmer, to carry on a lime application demonstration.

Up to date very little attention has been given by the farmer, to the gradual disappearance of the soil fertility, but now there are five fruit growers who plan on adding commercial fertilizer and in most districts no manure is being shipped to outside markets, but is being utilized on the home farm or on the neighbors' farm.

B. Farm Crops.

One forage growing demonstration has been started. The object of this demonstration is to determine which grain will develop into the best pasture feed for dairy cattle at this elevation. Up to date there has been no winter forage for the dairy cow during the winter months, and it is hoped that one of the eight varieties that were chosen for this purpose will prove satisfactory. They are planted on the same farm and side by side, therefore similar conditions for all grains are found.

One alfalfa seed growing demonstration was completed, however, there are no threshing machines available at this time and the amount of yield has not been determined. The object of this demonstration was to determine whether alfalfa seed could be grown and if so, if it would yield a sufficient quantity to be successful. Furthermore, it was not known which crop would be the best to cut for a seed crop and we determined that by allowing a portion of the 1st, 2nd, and 3rd cuttings to go to seed.

The outlook for alfalfa seed of the highest quality is expected, for the alfalfa is extremely clean and has never lost first premium and sweep stakes on hay at the State Fair in several years.

Only fifteen men practiced improved seed planting for the first time during the year. The reason for this small number was because of climatic conditions. There had very little rainfall and many that had planned on planting improved seed could not afford the useless expense.

Ordinarily there are about five thousand acres planted to forage crops in the county, but due to the lack of rainfall during the summer months, only the irrigated districts were able to plant, cutting the total acreage planted to about 2500 acres.

We are not always too sure, even though we do have a great deal of rainfall in the summer months for a matured forage crop, for sometimes the rains do not begin in time to give the necessary length of time for development.

The greatest reason for such a large acreage of forage crops planted, is for the purpose of supplementary feed. The range cattle, some years, during the winter months, must be gathered and fed this feed in order to survive the winter.

C. Horticulture.

Next to livestock, the agent has a greater number of demonstrations started in Horticultural work than in anything else. The agent has sixteen result demonstrations and sixteen method demonstrations have been given.

The type and number of demonstrations are as follows:

Method Demonstrations, one in tree fruits, one in bush and cane fruits, one in grape vine training, one in lettuce production, and eleven in walnut grafting.

Result demonstrations: seven were given in orchard pruning, one in bush and cane fruits, two in grape vine training, one lettuce growing demonstration and five in walnut grafting.

Twenty nine farmers were advised where they could obtain improved nursery stock and twenty-nine improved their stock for the first time. Grapes, apples, peaches, bush and cane fruits and lettuce seed comprised the above types of improved stock.

D. Forestry.

The erosion demonstration which was started in cooperation with the Forest Service officials last year is still underway. Since it will extend over a long period of time before any definite results can be obtained, it has not attracted any great amount of attention, but at present at least one foot of silt has been collected above the first dyke.

E. Rodents.

Fifty-one farmers are cooperating with this office in the eradication

of prairie dogs, rats, squirrels, gophers and other rodent pests. In three instances the agent was able to assist the United States Biological Survey in carrying on their rodent control work on a large scale. Each were cattlemen controlling at least twenty-five sections of land apiece.

Cooperative work has also been carried on between the agent and the Predatory Animal Inspector. The inspector places strychnine tablets in this office and the agent issues them free of charge to farmers and stockmen who are troubled with predatory animals.

F. Livestock.

The outstanding work which has been carried on by the agent in the livestock industry of the county has been the increase of calf crop. To bring this forcefully before the cattlemen, the agent has two demonstrations underway. The fenced and the unfenced range. These two ranges are side by side, having practically the same topography climatic conditions, and approximately the same number of breeding cows. These demonstrations have not been underway long enough to show any difference in calf crop for it will be necessary to take the total years branding. The quality of these cattle are very similar and this point is being watched.

Four other ranches are working under the direct supervision of the agent and the Livestock Specialist, and these ranges which are found in different sections of the county should demonstrate to us the actual cost of production.

Other note worthy work with the cattlemen is the cooperative buying which has been brought about for them thru the efforts of the agent. The cattlemen had a bad year for cattle this summer and it will be necessary to feed a large number thru the winter and early spring. Four communities have pooled their orders for cottonseed cake, which is now at its lowest cost and received four carloads. By buying now they are able to save from five to twenty dollars per ton, that is, if they waited until the first of January, or bought in separate orders.

A fenced range demonstration was arranged by the agent. He obtained horses for the Extension Animal Husbandman of the University of Arizona and four cattlemen of the county who are interested in the possibility of fencing and the results that might be obtained. These men, in company with the agent rode thirty miles to the Cavness fenced range and there the cattle were worked. Branding, ticking, and earmarking was all done in a shoot. These men had never seen cattle worked with such ease and they returned to their homes greatly pleased with the possibilities of the fenced range.

Poisonous plants have caused many deaths of livestock in one district of the county. The agent was able to identify the plant causing the death of the animals and immediately advised the removal of the cattle from infested pastures.

G. Dairy.

Four dairy Sanitation Demonstrations were given during the year in the four dairy districts of the county. The effect of the demonstration brought the bacterial count down to such an amount that the health officers were certainly enthused over the results obtained. Because of this demonstration, five dairymen who were running around 200,000 bacteria to the c.c., are now producing certified milk.

Five dairymen are feeding balanced rations according to advice given by agent.

Forty-seven farmers were directly influenced to have their cattle tested for tuberculosis. 1376 head of dairy cattle were tested. One dairyman was able to meet the requirements of the accredited herd list.

H. Poultry.

Much work was done with the poultry industry of the county. Thirty-one demonstrations were given in culling, caponizing, dusting, dipping for lice, and dressing of table fowl. Several demonstrations were given by Mr. F. S. Jacoby of the United States Bureau of Economics on egg standardization work at the Yavapai County Fair.

Twenty-five poultrymen have been influenced by the agent to keep cost accounts of their poultry and four were given complete information as to method of constructing poultry houses.

Diseases and Insects

A considerable amount of information has been given out as to the control of mites and lice, flies and other animal pests.

Plant diseases and insects have also been given considerable attention. The agent not only has had good cooperation in controlling plant pests, from the University of Arizona, but also from the State Entomologist and from the State Pathologist's office at Phoenix.

The codling moth has probably received the greatest attention, however, assistance has been rendered the farmers on the method of control of root rot, cabbage black rot, cabbage louse, blister beetle and others.

I. Rural Engineering.

The work in rural engineering has consisted of furnishing information for the establishment of three irrigation systems and eleven farm buildings, namely three barns, four poultry houses and four silos.

Five orchard owners were advised as to where they might obtain spraying machines.

Two contour bordering demonstrations were given, with sixteen farmers present.

Three farmers were advised as to method of clearing land of stumps.

Seven steam boilers were constructed by dairymen thru the advice of agent for sanitation purposes.

J. Agricultural Economics.

Two cooperative marketing organizations were organized thru the direct influence of the agent. The cooperative Milk Producers organization have contracted and are supplying the Whipple Barracks U. S. V. B. Hospital No. 51 with two hundred and fifty gallons of raw milk and twenty gallons of buttermilk per day.

The Yavapai County Poultry Association was organized to increase the quality of poultry and cooperate in buying and selling.

Twenty-one farmers are keeping cost of production accounts thru the advice of the agent. Fifty-one men were assisted to obtain work in the county.

K. Home Demonstration.

Five demonstrations were given in Home Demonstration work. Two were given on the preparation of a hot school lunch, two on the method of making a dress form and the fifth was given on the sewing machine capabilities.

L. Community Activities.

The agent gave four talks on extension work. One to the Prescott Rotary Club, one to the Prescott Kiwanis, two to the Boy Scouts' encampment, and one to the Mayer Community Club.

The agent was appointed Arena Director of the Prescott Frontier Days Association and acted in that capacity. Over three hundred contestants were at the agent's command for four days and nights. He also had thirty-five men working directly under him.

More than 20,000 people attended this celebration and it undoubtedly benefited the Extension Service activities in this county with the cattlemen and also in other counties of the state, for they were all represented.

M. Miscellaneous.

A service that has received considerable time during the year and cannot be well taken up under any other of the above mentioned headings, is the furnishing of agricultural information to prospective settlers. In most cases the agent has been very cautious in encouraging homesteading, however where they have a bank balance of a thousand dollars or more, the agent has recommended the dairy,

poultry and the horticultural possibilities to them.

Another service that has been rendered the county is the organizing and developing a county fair which was held for the first time. The agent emphasized poultry and so much interest was shown that the Yavapai County Poultry Association organization was the after effect.

V. Outlook and recommendations, including suggestive programs of work for next year.

Since the Yavapai County Farm Bureau is now placed on a good foundation, much of the agent's time which has been spent in fostering its interest can be directed toward the different projects.

In the different Farm Bureau locals, representatives will be appointed for the purpose of pushing some individual project. By the use of the motion picture machine and allowing the people of the different districts to have complete charge of their meetings, good results should be obtained.

A great deal of work will be done with the livestock industries, squeeze shoot demonstrations, ticking demonstrations, and construction of squeeze shoots will be given. Increased number on cost of production should be obtained. A greater number of pure bred stock should be developed. This year was of such a type that very few cattlemen could afford the purchase of better stock.

More acres can be planted to orchards, the old ones should be replaced by young trees. Pruning and grape training work can still be carried on, however in the districts where this work has been done, they are following the methods advised to the last man. A greater amount of spraying can also be advocated.

Much work remains in culling, feeding and breeding of farm flocks, in order to increase the egg production. Work should be done in the standardization of poultry products. thru the newly organized Yavapai Poultry Association, the agent expects to develop the marketing division of the Poultry industry. A great amount of work can be accomplished toward the improvement of the breed. Plans are now under way for a poultry show next year and an egg laying contest in January.

The dairy industry will be given a great deal of time. More herds will be ready to become accredited with one more tuberculin test. A Cow testing Association can be organized if a sufficient number of dairymen can be persuaded to enter. More cooperation in buying and selling can be worked out..

Boys and Girls Club work will be pushed to the limit. This year was the first attempt and with a years experience for all those concerned, very good results are anticipated.

Rodent and Predatory animal control work will be continued.

VI. Summary of Activities and Accomplishments.

In summing up the amount of work accomplished by the agent there have been 113 days spent in the office and 171 days spent in the field. There have been 815 farm visits made, 335 of these were different farms. 593 office calls received attention and 213 local leaders telephoned or written to.

There are twenty communities where the agent has worked. In seventeen of these there are local leaders. 125 demonstrations were given with an attendance of 1080. Twenty-seven different circular letters with a total number sent out of 3918 toward the interest of the work. Twelve articles were written by the agent and published in the local papers.

The agent further attended the State Fair and the Arizona Wool Growers meeting held outside of the county to the interest of the Extension service.

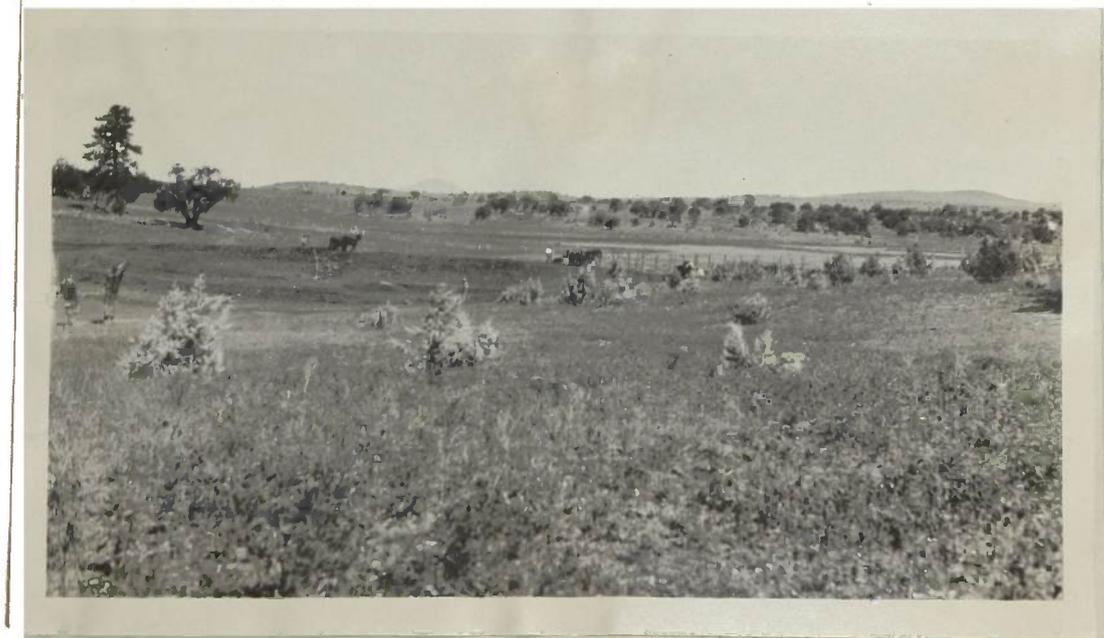
W



Boys and Girls
Club Work.
Skull Valley,
Arizona.



Caponizing
Demonstration
at Yavapai
Poultry Fair
given by L. C.
Boggs, Exten-
sion Poultry-
man.



Storage Dam
constructed by
Mr. L. Andrews
at Camp Wood,
Arizona at
advice of Agent.



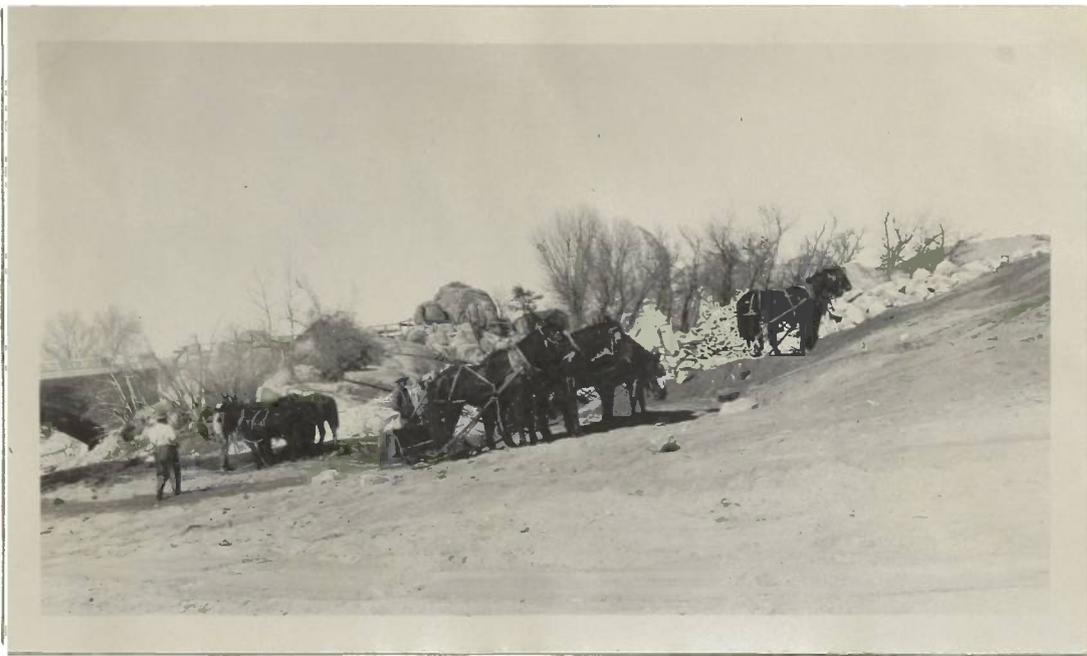
Storage Dam constructed by Mr. L. Andrews of Camp Wood, Ariz. at advice of Agent.



Land Survey in the Hassayampa country made by the Agent.



Tile used by Chino Valley Water Users Association in lining their ditch.



Chino Valley
Water Users
Association
digging a trench
for placing tile.



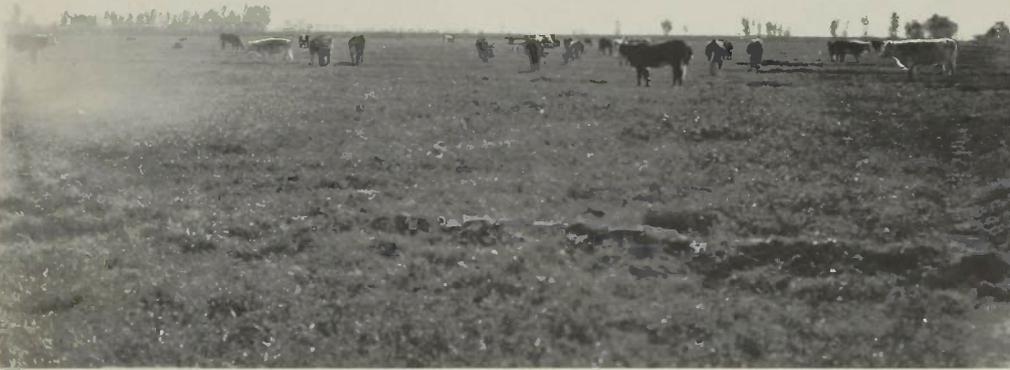
Trench after
dug, showing
amount of water
which had to be
controlled before
laying the tile.



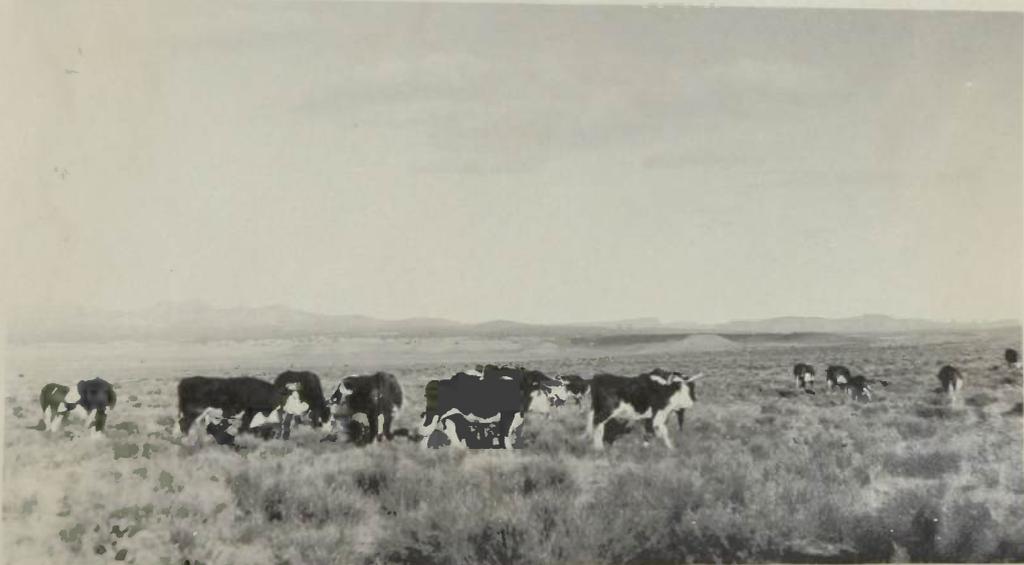
Trench after
dug.



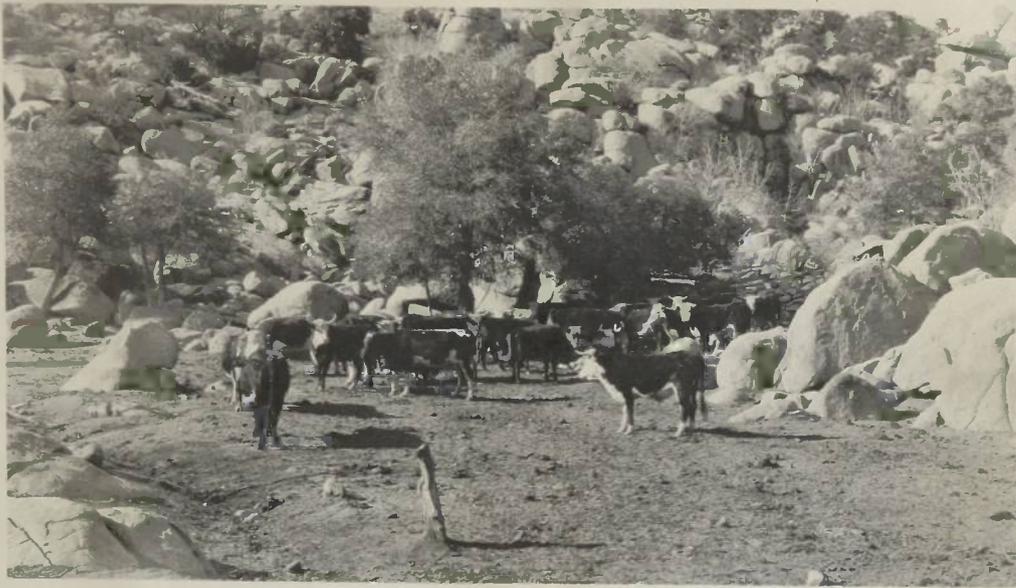
Animal Husbandry.
Cows that were
fattened in the
Salt River Valley
at advice of Agent



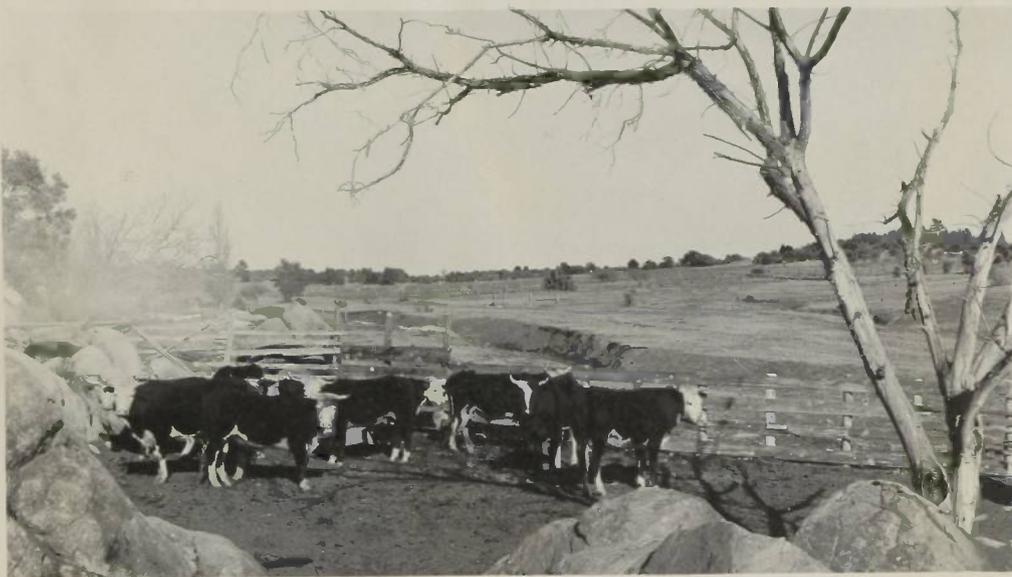
Heifers fattened
in the Salt River
Valley at advice
of Agent.



Range Steers,
for feed lot
purposes by advice
of Agent.



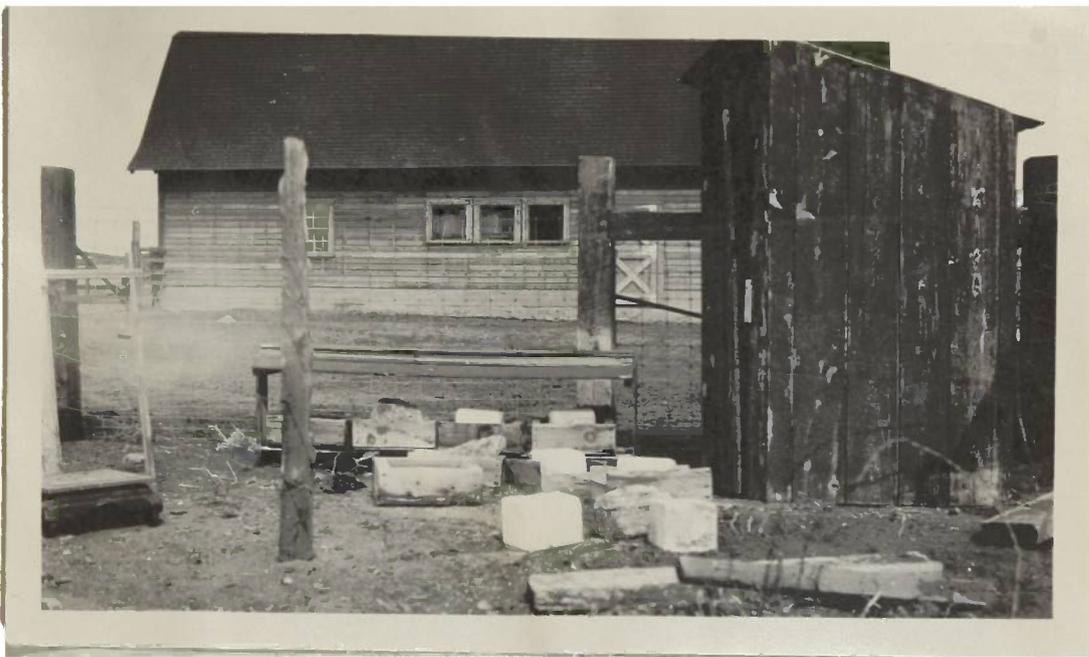
Animal Husbandry
Steers after
fattening and
ready for block.



Steers after
fattening and
ready for block.



C. U. Pickrell
Extension Animal
Husbandman and
Agent riding the
range.



Salt.
A salt enviromental
tal test.



Caponizing Dem-
onstration given
by L. C. Boggs
Extension Poultry-
man, Chino Valley.



Culling Demonstra-
tion given by L.
C. Boggs, Exten-
sion Poultryman
at Chino Valley.



Culling Demonstration give by L. C. Boggs, Extension Poultryman at Skull Valley, Arizona



Culling Demonstration given by L. C. Boggs at Miller Valley, Arizona



Grape Training Demonstration given by A. F. Kinnison, Extension Horticulturist at L. J. Hasclfelt's, Kirkland, Arizona



Pruning Demo.
given by A. F.
Kinnison at Oak
Creek, Arizona



Pruning Demo.
given by A. F.
Kinnison at Oak
Creek, Arizona
showing method



Pruning Demo.
given by A. F.
Kinnison at Kirk-
land, Ariz



Pruning Demo.
at L. J. Haselfelt's
Kirkland, Arizona
given by A. F.
Kinnison, Extension
Horticulturist



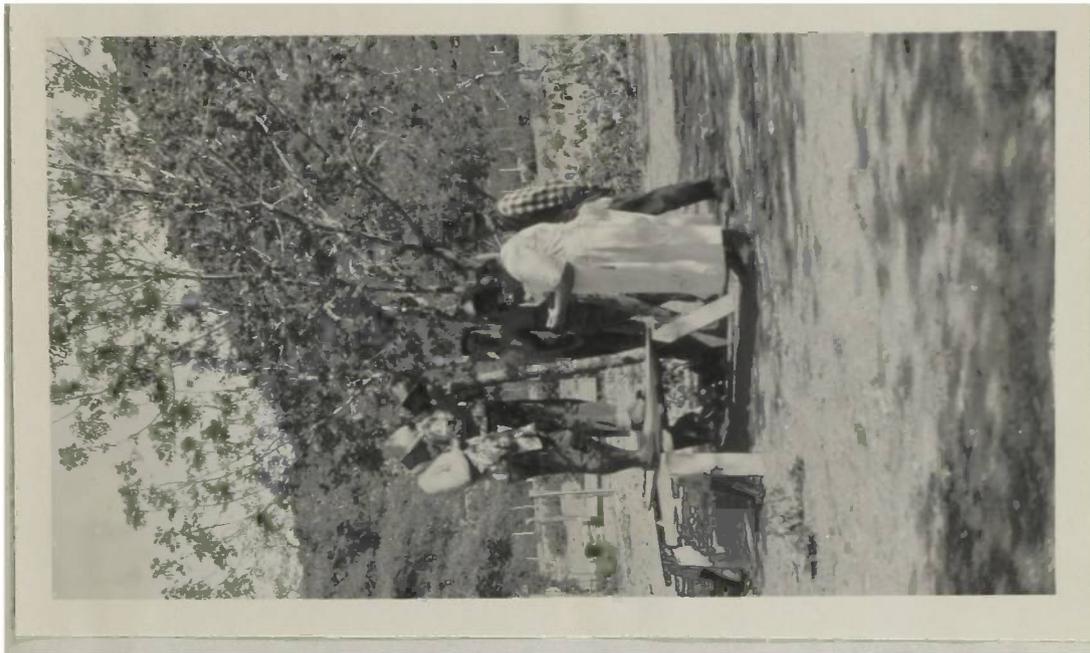
Pruning Demo.
given in the snow
at L. L. Eates'
Prescott, Arizona
by A. F. Kinnison.



Pruning Demo.
given at A. W.
Harfel's, Camp
Verde, Arizona by
A. F. Kinnison.



Walnut Grafting
Demonstration
at William Stewart's
Williamson Valley,
Arizona given by
A. F. Kinnison



Walnut Grafting
demonstration
given by A. F.
Kinnison at A
Eckel's, Fair
Oaks, Arizona.



Citrus Grove at
Castle Hot Springs
where green
manure demonstra-
tion was given by
the Agent.

Contour Bordering
Demonstration
Given to the Chino
Valley farmers.



Condition of farm
before demonstra-
tion began.



Farm after actual
contour bordering
had been started.

