

**MOHAVE COUNTY, ARIZONA**

**ANNUAL REPORT**

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**to**  
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## SUMMARY

### Organization

The county staff consists of one agent with a part time assistant this past summer.

Relations with the only local organization "The Cattlemans' Association" is excellent.

### Horticulture

An estimated 100 residents were given assistance on problems of growing Vegetables, Fruit, Shrubs, Flowers, Trees, Lawns, and Landscaping.

### Cotton

Three cotton growers were assisted in producing higher yielding cotton thru fertilization and improved water management.

### Grain and Forage Sorghums

It is estimated that 15 growers were assisted in the production of grain and forage crops. Varieties, fertilizers, insects, and cultural methods were included in this work.

### Livestock and Range Management

Approximately 25 ranchers were assisted with related problems.

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## I. COUNTY SITUATION

### A. General

Mohave County is a very large County, consisting of 8,486,400 acres total. There are two Indian Reservations which has a combined acreage of 559,972 acres. The Southern 2/3 of the County is criss crossed with 424 miles of oiled State, Federal, and County Highways. These highways being U.S. 66 and State Highway 93. The remaining roads are dirt, with a small amount of improvements. The Northern 1/3 of the County has only 19 miles of oiled roads, the rest being only fair weather roads. All in all there are 1,980 miles of dirt roads in Mohave County. There are 100 miles of double track railroads crossing Mohave County that go from coast to coast. The communication systems is very limited as only eight ranchers and farmers have telephones. Mails are alternate day services.

The population of Mohave County is approximately 11,000 people, with over 50% of the total population living in the county seat, namely Kingman. There are 140 ranch and farm families in Mohave County. Most of these live on their farms or ranches in the Southern 2/3 of the county, where as in the Northern 1/3 most live in small communities or adjacent communities out of state. There are eight different sub-divisions, some as large as two townships, that are being sold for lots. The streets are graded and one of these sub-divisions has sold 8,500 lots so far. These areas are being advertized Nationally, and daily correspondence is being received from all parts of the United States wanting more information.

Mohave County as a whole is a livestock county with farming second, and mining third in importance.

On the 9,600 acres of irrigated land the principal crops grown are: Alfalfa, Milo, Cotton, Cereals, Pasture, and Produce. On the 4,500 acres of dry land Wheat and Rye are the principal crops. But all of this land is not farmed at present. As a whole the farms are small and rather sub-marginal. It is estimated that 50 to 60 thousand acres of the land adjacent to the Colorado River will be developed in the next 10 years. Most of this land is river-bottom, with checker boarded Indian and White ownerships.

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## I. COUNTY SITUATION (continued)

There are 1,200 children of 4-H age attending schools in the county. Less than 200 are of Indian or Spanish American decent with Anglos making up the remainder.

The Extension Service has been in the County less than one year. One agent and secretary make up the force. The Agent has spent six years in the county and the secretary two years.

The organized Extension groups include a 4-H Leaders Council with seven different 4-H clubs. There is no Farm Bureau, Grange, or Farmer's Union organizations. The Mohave County Cattle Growers' Association is very active as is the Cow Bells' Organization.

### B. 4-H

4-H Club work officially began April 1, 1959, with the start of the Extension Program in Mohave County. Prior to this time some preliminary interest had been stirred up by interested people in the county. This interest was rather erratic and difficult to assess. Many of the youngsters desired to be in 4-H because of the glowing reports of the program, but lacked an appreciation of the scope of the work in any detail.

Many of the leaders selected prior to the County Agent's appointment were not felt to be qualified and were allowed to resign if they would. If, however, they expressed a sincere interest in the program and accepted the responsibility of work involved, they were encouraged to remain leaders - few leaders resigned.

Small community 4-H Clubs were set up in several outlying communities where numbers seemed to indicate a need for a club. Time did not allow a complete survey of all communities and several communities on the other side of the Colorado River were not investigated this year. Also, a few here near Kingman were not approached.

The general plan was to have community clubs in the smaller outlying communities with project clubs in the town of Kingman. This procedure, for the most part, has been quite satisfactory. We have been disappointed in a couple of instances because of indifferent leaders who did not accept their responsibility to the boys and girls. We have also had a couple of cases where the leaders are truly interested but, the boys and girls, either because of signing up without real interest or else thinking they were getting into too much work, failed to keep attending.

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I. COUNTY SITUATION (continued)

We are pleased to report a very sincere group of leaders who should be able to do a good job when they have a little experience. It must be remembered that only a couple of our leaders have had previous leader experience. Almost all of our leaders are pleased with the 4-H program as presented.

The Fair Board has been very easy to work with and have shown a lot of consideration for us. It should be pointed out that they furnished the ribbons this year. The Fair Board paid premiums on first and second place winners in each division this year.

Our facilities at the fairgrounds were very poor. Plans have been approved for an expansion of the facilities during the next several years, which should be of benefit to the 4-H program as well as the rest of the county.

The 4-H program can certainly be a great benefit to the people of Mohave County. Many communities are many miles away from organized recreational and vocational facilities. This county has shown good community interest and with a favorable record this year, next year will be better.

We are fortunate in having in our county an Indian Reservation which has already had some 4-H Club activity. They have shown considerable progress during the last few years and show promise of helping greatly in establishing Mohave County 4-H Club work.

Livestock

Mohave County has as its primary agricultural interest, range cattle operations. There are very few sheep and swine interests to be found. Only a few dairy herds and a few small poultry setups enter into the picture of Mohave County agriculture. Right now, there are also few irrigated farms though this number is increasing.

The ranchers have generously supported the 4-H program in relation to beef projects. There are good indications of an intense interest in the County Fair.

All of the boys and girls showing livestock have had no previous experience. This has produced some problems which

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## I. COUNTY SITUATION (continued)

should be easily overcome next year. It should be noted that most of the boys and girls have earnestly tried to find out what they don't know and put it to work.

Many ranchers have told us that next year the animals will be much better, though fairly good stock was selected this year.

### Home Economics

Our home economics clubs can serve a real purpose here in Mohave County. Many mothers have expressed concern because there are several youth programs for the boys but few for the girls. They were happy to hear about the girls part in our 4-H program.

We have been concerned about a tendency of some clubs to have a rather high drop-out in cooking and clothing. We certainly do hope that this is not a trend to expect in the future.

### Entomology, Electricity, and Gardening

Several projects are minor number enrolled but major in interest.

Entomology, electricity, and gardening, are quite successful clubs this year. For instance, one 16 year old boy collected over 150 different insects and keyed them out to family, genus, and species. An electric club prepared a large club exhibit for the fair. Other items of interest point out that many of our 4-H youth can benefit from these scientific projects.

One group of individuals have already approached us concerning rocks and minerals as a project. As you know, Mohave County used to be strong in the mining industry.

In conclusion we can say that the 4-H Club program can be an important asset to the community life of Mohave County as shown by the work accomplished this past year.

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## II. ORGANIZATION

Mohave County Extension staff at the present time is limited to one County Agent. The program is completely new and began April 1st., 1959. One Assistant Agent assisted for a 5 month period. A great deal of time has been spent in initiation and introducing the program to the county. It is difficult to give concrete statistical results for a great deal of the time spent in organizing and setting up the program, all of which was very vital in stimulation interest in the new program.

There are no farm organizations other than the Mohave County Cattle Growers' Association and the Cowbells' Organization. These two groups have been very influential in helping get the Extension Program to the people.

The Cattlemans Association has approximately fifty members and includes practically all of the ranchers South of the canyon. The President for 1959 was Jack Rubel and he was re-elected for the year 1960. Mr. Rubel is very interested in the Extension Program and much of our program planning will go through the Mohave County Cattle Growers' Association.

The Cowbells' Organization, headed by Mrs. Jack Wilson, have indicated a desire for specialized training meetings in food and clothing for 1960. When a Home Demonstration Group is organized, the Cowbells will probably supply the framework for these groups.

The Mohave County Chamber of Commerce looks to the Extension Service for Agriculture information and are working on an Agricultural Circular to pass on to their inquiries.

From the above it is apparent that Mohave County is open to tremendous growth in organization, and certainly the Extension Service has every opportunity to expand and push an educational program which can eventually reach every resident of Mohave County.



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### III. INFORMATION PROGRAM

#### A. Objectives

The disseminating of timely agricultural information to interested people is the objective of the Information Program. To gain this objective, circular letters, individual letters, personal calls, telephone calls, office calls, farm and ranch visits, local newspapers, radio and farm magazines are used.

#### B. Facilities and Utilization

##### 1. Newspapers

Mohave County has no daily newspaper, it does have a very excellent weekly, The Mohave County Miner. The editor is Dick Waters, who is extremely interested in the Extension Program and who has gone far beyond his call of duty in giving us more than adequate space each week. Two editorials in his paper have boosted our program on an overall basis and particularly 4-H.

##### 2. Magazines

The Arizona Farmer has used two feature articles on the county. The County Agent accompanied the writer and assisted in giving the information for these articles.

##### 3. Visual Aids

We are looking forward to the use of more visual aids as soon as this office has projector and screen available for use. Film has been used on a limited basis in schools and in 4-H Clubs. Joe McClelland, the Information Specialist, for the University took movies of the 4-H portion of the Mohave County Fair. This has been of great interest to the 4-H Clubs and the schools.

##### 4. Bulletins and Circulars

All of the University bulletins are displayed on a peg board type bulletin board in the County Agents Office. Many favorable comments have been made on the fact that they are all so well displayed giving ideas to all visitors in the office.

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IV. INFORMATION PROGRAM (Continued)

5. Radio

KAAA owned and managed by Wally Stone has done an outstanding job in keeping the public posted, giving up radio time for timely programs and offering his assistance in all ways to make Mohave County a better place to live.

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IV . LIVESTOCK

Beef Cattle

Implant Trials on Bob Blake Ranch

The objective of this trial was to determine the effects of 24 mg. Stilbestrol implant on the summer gains of yearling steers.

The initial weights of these animals were taken on June 2, 1959 as the animals were divided into two groups. Alternate animals were implanted. All animals had had access to feed and water the previous night.

Before the trial was begun, these cattle were running on spring semidesert range near Kingman, Arizona. Shortly after the trial was started the cattle were moved to an area North of Williams, Arizona for summering. Range conditions were described as "not too good" by the operator.

For the final weight the cattle were rounded up on October 6th. and held overnight without feed and water before weighing.

	<u>Control Group</u>	<u>Implant Group</u>
No. of animals	19	16
Av. initial wt.	587	605
Av. final wt.	752	796
Av. total gain	165	191
Av. daily gain	1.30	1.51

We observed that the implanted group averaged 0.2 of a pound more gain. This is in line with other experimental work which indicates Stilbestrol response is related to energy

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IV, LIVESTOCK (continued)

intake of the animal. This response of 0.2 of a pound additional weight probably would have been increased with better range conditions.

We are attempting to increase our summer gains as many cattle often do not weigh as heavy as is desired.

This trial will be to arouse more interest. It is planned to try suckling calves for 1960.

Mr. Blake was very encouraged with the results of this trial as he can see where he could have greatly increased his weight on the 750 head of summer yearlings he had.

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## V. AGRONOMY

### A. Grain Sorghum

The acreage of grain sorghums are increasing in our irrigated valleys. This is largely due to the salt content of the soil and a way in which the farmers can get a cash crop the first year while leaching and re-leveling their cropland. There is a market to adjacent ranchers for their crops.

This is the first year any variety trial plantings were tried, although, not too successful they did point out that new and improved hybrid strains are coming into the yield picture. A variety planting was planted on the Sam Joy Farms on the Colorado River on new land that was rather droughty. Only 40 units of fertilizer were applied which also was a partial reason for poor results. The following varieties were planted May 28, 1959 with a total acreage of 2.51 acres.

NK-210	NK-320	DD-38
NK-135	AMAK R-12	Plainsman
AMAK R-10	DD Yellow Sooner	NK-300

Hegari  
 FS-22  
 1-A  
 FS-610

The following were rated good and further trials should be conducted.

AMAK R-10	NK-300	1-A
NK-320	NK-210	FS-610
AMAK R-12	FS-22	Plainsman

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#### V. AGRONOMY (continued)

The DD Yellow Sooner and DD-38 were poor yielding and no further trials are anticipated. The grain on the above has not been harvested as it is in a frost free area and some still quiet green.

It is hoped that next year the above desirable varieties can be re-tried under proper fertilization and management and that some concrete results will be forth coming. The farmer, Sam Joy, can see the value of these trials and is most anxious to cooperate to a much fuller extent in 1960.

#### B. Small Grains

The acreage of small grains is increasing for the need of a cash crop that can be marketed locally and one that will also stand the rigere of land development in a new area. A variety trial planting has just been started on the Gordon McKellip Farm on the Colorado River.

The following varieties were planted:

Dual Wheat	Le Conte Oats	Alpine Barley
Trebi Barley	Dubois Oats	Early Baart Wheat
Hudson Barley	Balbo Rye	Hulless Barley

We are sure this planting will be an eye opener, as Mr. McKellip is a good farmer and very influential. He has the largest acreage of cropland in the county.

It is in an excessible area adjacent to an oiled road where it can be seen by all interested people. It will be appropriately marked for identification and show who is assisting in conducting the trial.

#### C. Cotton

This crop is of quite some importance in the county even though there is less than 400 acres total allotment.

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V. ACRONIMY (continued)

Variety A-44 is most grown with a sizeable acreage of D.P.L. this past year. A variety trial test would be most helpful as the growers are undecided on the best variety for their area. This area has been free of insects and no diseases at present are known. The yields are rather low, but management could cure this.

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## VI. 4-H

### A. Highlights

This being the first year for 4-H in Mohave County we feel it was most successful.

A 4-H Leader Council was organized in April and May of 1959. Mr. Don Wingfield was elected Chairman, Mr. Wesley Bobo Vice-Chairman, and Mrs. D. E. Evans was elected Secretary and Treasurer. These members gave guidance and leadership to the other 31 leaders and the boys and girls enrolled.

There were 181 boys and girls enrolled, with 91 completing their projects.

The 4-H boys and girls attended a 4-H picnic in the Walapai County Park. Over 100 were in attendance at this affair.

The Mohave County Fair was the real highlight as this is where they exhibited their finished products. This was also the place where their pictures were taken and a very excellent movie was made by the Extension Information Specialist, Joe McClelland. This is also when their beef projects brought an average of a little over 52¢ per pound.

### B. Local 4-H Club Program

The 4-H club program is formulated thru the Leaders Council and the Extension Service. The Leaders Council meet periodically throughout the club year. Each club plans it's own local activities, but follow the leader council plan of activities also.

### C. 4-H Club Beef Sale

The County Agent with the local leaders interested the local merchants and store owners in bidding on the calves that were to be sold. All of the calves sold with the exception



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## VI. 4-H (continued)

of two were put in local home freezers. The other two were sold over the beef counter as 4-H prize beef. Cudahy Packing Company cooperated in slaughtering and returning the beef back to Kingman. Two local meat markets cut and packaged this meat for a nominal fee.

The following people assisted in purchasing of the calves.

Old Trains Garage	City Drug
Alex Toggery	Safeway Stores
Central Commercial Company	Jade Restaurant
Biddulph and Dunton Motors	Laulo Watson and Bill Grounds Realty

The auctioneers were Dr. Kalisz and Claude Neal.

The judge for the show was Carl Safely of Prescott.

Howard Grounds hauled the beef to Cudahy for the 4-H boys and girls.

### D. 4-H Club Fair

The 4-H portion was in conjunction with the Mohave County Fair with Glenn Webb as director. Ninety one boys and girls exhibited at the county fair. All of the 4-H division was superintended by 4-H Leaders.

### E. 4-H Round-Up

One 4-H girl, Maureen Brewer of Valentine accompanied the County Agent to the 4-H round-Up in Tucson. Maureen took a red ribbon in a garment protector demonstration.

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## VI. 4-H (continued)

### F. Outlook and Recommendations

The outlook for 4-H in Mohave County is bright. There are a number of communities that have potential 4-H clubs and these will be contacted as time permits. The total enrollment can very easily double as adequate leadership is developed.

A continued effort should be made to keep the 4-H program before the public thru individual contacts, mass media of the local paper, local radio and thru group meetings.