

A N N U A L
N A R R A T I V E - R E P O R T

for

COCHISE COUNTY
ARIZONA

December 1st, 1929 - November 30th, 1930

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County Agricultural Agent.

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INTRODUCTION

During the year just past the Agent has endeavored to follow the Program of Work as outlined as closely as possible. Following a definite plan of work is the only way progress can be made. Emergency calls and miscellaneous work has had a rather too large a place in the work of the Agent but it has been unavoidable. The large area and scattered districts make organized work very hard.

The Farm Bureau is still functioning about the same as last year. The present officers will hold over another year and revival of interest in the Farm Bureau work is expected in the near future.

The livestock industry has been hard hit this year. Prices for cattle are at the lowest point of several years. A good season and good grass has been some help. A large percentage of the cattle will be held over until next year. Poultry prices are also considerable lower and not as many chickens will be grown next year.

The Agent believes the Agricultural industry in Cochise County is faced by the following problems.

First - Organization.

Second - Cheap power for pumping.

Third - Development of permanent system of agriculture and better markets for the produce grown.

COMPLETE PROJECT REPORT

Alkali Soils
 Reclamation

Project No. 1

1930

Very little work was done on alkali reclamation during the past year. The results demonstration on The E. C. Russell ranch was carried to completion by seeding the treated area. A very good stand of alfalfa was secured and the soil now takes water readily. Mr. Russell is satisfied with the results.

Three flower gardens in Willcox were treated for black alkali in December 1929. The previous year the alkali had accumulated so badly that even Dahlias would not grow well. These three yards were all given the same treatment. Nearly ten sacks of gypsum were applied to each yard, flooding was practiced until spring, an application of cotton seed meal was applied just before planting time. The co-operators reported that the treatment has remedied the trouble and that very little black alkali trouble was in evidence this year. Next year the soil will be in even better condition for it takes at least a year for the gypsum to have effect under the irrigation methods practiced.

Mr. G. I. Van Meter of Alfrida is going to treat one hundred acres of his alfalfa ranch with gypsum. The black alkali on his ranch is very bad in spots. The Phelps Dodge Company is furnishing Mr. Van Meter sixty tons of gypsum free of charge. The Agent will assist Mr. Van Meter in the distribution of the gypsum and in the methods of handling the flooding and management of the soil. This project will be carried throughout next year. All other alkali reclamation work that has been going on will be discontinued.

COMPLETE PROJECT REPORT

Horticulture
Project No.3

1930

Considerable pruning work was done during the month of January. Professor Wharton from the University of Arizona spent two days with the Agent, visiting result demonstrations and giving pruning demonstrations. Mr. Reed of St. David started a new result demonstration. He planted a two acre orchard and is following the advice of the Agent and Professor Wharton. Mr. Reed will continue following the advice of the Extension Service each year until the orchard reaches maturity. These pruning demonstrations were given at St. David on an old orchard, a young orchard and a grape vineyard. The St. David and Benson Smith-Hughes classes were both present, which covered a days time.

The young orchard demonstration of Mr. Frank Davis was visited and the trees properly pruned at this time and the orchard was found to be getting along nicely. Also the young orchard of Mr. Sheldon Dowell of Douglas was visited.

All of the recent demonstrations on deciduous fruits were visited during the months of January and February. The Agent visited the recent demonstration on the Sontner ranch at Las Simon and found conditions very satisfactory. The vineyard was pruned and instructions given for the proper care during the summer at this time.

The vineyard of Mr. Roy Reed of Bowie was visited and instructions given on irrigation practices. A pruning demonstration was held at the John Hall orchard where grapes and apples were the subjects taken up.

The grape demonstration at Naco was visited and found in good shape. The vineyard was pruned at this time and three hundred cuttings of the best varieties distributed to other farmers. In this way the proper varieties for this County will be distributed at a small cost.

The dry farm grape experiment at the Joe McCabe ranch near Moreford has been dropped as a project. The Agent visited the project on the 7th of February and found the vineyard practically destroyed by



A Homemade Portable Hay Baler

rabbits and neglect. No more work will be done on dry farm plots. A pruning demonstration was given on deciduous fruits at the McCabe Ranch on this visit.

The Agent gave Mr. Donald Scott assistance in moving a five year old orchard, which was in the wrong place and was badly neglected. He moved the forty-five trees which were left on four acres, the balance having been killed by rabbits and neglect. A visit was made to this ranch late in the fall to check up on how many of the transplanted trees had lived through the summer. Only four out of forty-five trees had died. This is a rather low mortality for transplanted trees as old as these trees were. Some of them being six years old.

The Horticultural Department of the U. of A. has refused to make any more extension trips and this has proven to be a serious hindrance in the work of the Agent. A Horticultural Specialist could be used a great deal by the Agent in this county.

All of the result demonstrations that were carried during the year will be carried over the next year. Practically all of the work on this project is done during the months of January and February.

COMPLETE PROJECT REPORT

Horticulture
Vegetable Growing
Project No.4

1930

Cauliflower

A meeting of the cauliflower growers was held in December 1929 to check up on the past years operations and lay plans for the following year. The final results of the 1929 crop was about \$75.00 per acre average above all expenses. Another meeting of the growers was held in February to decide on the acreage to plant and the seed to purchase. The same seed as last year will be purchased at \$8.50 per pound. Approximately forty acres of "flower" was decided on to be planted. Twenty-six pounds of seed was purchased.

The seed was planted the first of June. Mr. Harbour planted $7\frac{1}{2}$ pounds of seed in a bed, Mr. Takegi planted 3 pounds of seed in a bed and Mr. J. W. Church planted 6 pounds of seed direct in the field and one pound in a bed. The field planting



A Good Field of Cauliflower

did not come up causing a loss of a ten acre field. Three acres were transplanted from the one pound of seed. Mr. Harbour transplanted twenty-five acres of cauliflower and Mr. Takagi eight acres.

Heavy rains and floods drowned out all but eight acres of Mr. Harbour's "flower". The grasshoppers started working in the seed bed in July and continued to give a great deal of trouble until frosts. Over fifty pounds of paris green and white arsenic were used this season to fight the grasshoppers on twenty acres of cauliflower, at least this is the acreage left to harvest. The aphids were also very bad this season, causing an extra spraying to be necessary. Ordinary years three thorough sprayings will suffice. The blackleaf "40" and soap was purchased wholesale plus 10% through the local drug store.

The 1930 cauliflower crop had a rough road all of the way. Late warm weather caused a very loose, inferior head that brought a low price until about the 12th of November, then the temperature dropped to 11° above zero causing a considerable amount of

frost damage and crop delay. The price has been around 6½ to 7¢ this year for trimmed heads and a very slow market. Very close culling had to be practiced. It is very doubtful if the growers will much more than break even this year. Mr. Takagi is the only one of the growers who will make any money. He had the best stand of plants and less insect damage than the other growers. The entire crop has been handled through a local firm and the crop has been shipped to local markets.

Tomatoes

The vegetable growers in the vicinity of Willcox got together and organized a Vegetable growers association to handle all vegetables but mainly the tomato crop from this area. About twenty-five acres of tomatoes were planted this year. With this large acreage the growers were convinced that a marketing plan was necessary. Strict grading was practiced. About 1000 lugs of tomatoes a week were shipped at the peak of the season. The price opened at \$1.00 a lug and dropped to 40¢ for two weeks. The growers averaged approximately \$250 an acre for the crop.



First Truck Load of Tomatoes from
Vegetable Grower's Ass'n.

All of the tomatoes were sold through a local dealer and were trucked to market within the state. Phoenix was the largest and best market.

Lettuce

Mr. Frank Yoshikawa of Pomerene has been trying to grow lettuce for the past three years. Mr. Yoshikawa planted fifty acres of lettuce but about thirty acres reached maturity. This fall he has the best chance to make a complete crop that he has ever had. Last year he broke even. This year four cars of lettuce was shipped before the freeze on Nov. 21. Nov. 19th was the date the first carload went east. The freeze hurt a number of the mature heads but did not do as much damage as was anticipated. A total of fifteen or sixteen cars will be shipped, Mr. Yoshikawa states that he will make a nice profit on the lettuce crop this year. Probably about \$100 an acre above all expenses. This is the first time a lettuce crop grown in Cochise County has shown a good profit. Date of planting and cultural methods make a great difference in this crop and it is probable that more paying crops of lettuce will be grown in the next few years.

COMPLETE PROJECT REPORT

Sheep - Farm Flocks
Project No. 5

1930

Two demonstrations have been carried through the year on farm flocks. Mr. E. C. Russell of Willcox is on the second year of the project and Mr. Davis of Elfrida is on the first year. The results of the project as reported by the co-operators are as follows:

A check up of the E. C. Russell farm flock was made on November 21st. Mr. Russell has a total of thirty-seven sheep at the present time classified as follows: twenty-six ewes, four wethers and seven bucks. Six of these bucks are yearlings that have been sold to a large sheep company. The lamb crop averaged 140%. The old ewes, bucks and wethers sheared a fourteen pound average of wool, selling for 27¢ this year. The only feed that these sheep have had has been a little hay. Probably not over one ton total. Mr. Russell is buying two hundred lambs weighing about thirty pounds a piece to be delivered on December 1st. These lambs cost one dollar a head. The ewe lambs will be saved and the others will be fattened and sold in

the spring.

The farm flock of McPhearson and Davis of Webb did not do as well as the Russell flock. The ewes were old and their teeth were worn down almost to the gums. The lamb crop on thirty ewes only averaged 100% and the wool clip only averaged 9½ pounds per sheep. Mr. Davis is planning on buying a few young ewes to run next year. No money was spent on feed for this flock.

COMPLETE PROJECT REPORT

Dairy Husbandry
Tuberculosis Eradication
Project No. 6

1930

The State and Federal Governments have been carrying on the T. B. Testing in this County for about three months. All of the County except the north end has been tested. Less than one-half of one percent T. B. has been found. The funds have been exhausted and the work discontinued on November 1st. The Agent and the Douglas Veterinarian, who has been doing the testing, are trying to get the state to finish up the north end so that the county can become the first modified area in Arizona. When the north end of the County was tested three years ago only one cow in one thousand tested reacted. To date there is not a county in the state that can qualify for the modified area plan. There is no question but what Cochise County can qualify if the County can finish the testing.

COMPLETE PROJECT REPORT

Dairy Husbandry
Better Stock
Project No.7

1930

The result demonstrations that were started last year on better stock have been carried through the year. As projects of this nature require long periods of time, nothing further will be reported this year.

Mr. Lean Roberts of Wilcox had the Agent accompany him to select a string of milking short-horns. The herd was inspected and a number of good animals were selected. Mr. Roberts had financial difficulties soon after this and the cattle were not purchased.

The Bisbee Chamber of Commerce has been trying to interest a man from Kansas to build a creamery in Bisbee. The Chamber of Commerce agreed to build the building and furnish the site. The man made a trip to Bisbee to inspect the layout but as yet no deal has been made. A creamery in Bisbee would help the dairymen of the San Pedro and the McNeal areas a great deal.

LIVESTOCK

Range Cattle

The Agent and the Livestock Specialist made one trip around the entire county inspecting the herds of the pure bred breeders of Hereford cattle in this County. Demonstrations were given on how to pick the best type cattle for show purposes. Five of the breeders showed cattle at the County and State Fairs. Cochise County has more pure bred herds than any other county in the state. Close contest is maintained with three of these registered herds.

The Western Cattle Grower's Association held two meetings in Cochise County this fall. The object of the meetings was to get a larger membership and to get the cattlemen to sign up the feeder cattle at 1% commission.

The poisonous weed problem is still confronting the cattle industry. A number of cases of poisoning have been reported to the Agent. To date nothing has been done to control the loco and other poisonous

weeds. Mr. John Riggs has started a small experiment on burning broom weed. No data is available yet.

Two castration demonstrations by the use of the Bordegio Emasculatome were given by the Agent. These tools are coming into general use in this County quite rapidly. Carelessness is the only reason that failures should happen. The Agent has not had a slip that has had to be reworked.

Hogs

Two outbreaks of hog cholera have occurred on the San Pedro River. The Agent gave two method demonstrations on the control of cholera and ordered the serum to vaccinate all of the pigs in this locality. The outbreaks were both checked before a wide-spread sickness occurred.

COMPLETE PROJECT REPORT

Poultry Husbandry
Project No. 9

1930

Three group demonstrations have been carried through the year. Clubs were organized at San Simon, Sulphur Springs and Mescal. A regular program of work was carried on and either the Agent or Specialist met with these clubs regularly and the series of meetings covered the entire range of poultry management from baby chicks to laying hens. These clubs cut down the individual farm visits along poultry lines a great deal. The San Simon club had an average of twenty attendance, the Sulphur Springs club an average of twenty-five, and the Mescal club an average of thirty-one people. The results obtained were good enough that the Agent will carry this project through next year and perhaps add one or two more clubs.

Several individual result demonstrations on poultry management have been carried through the year. In each case the co-operators have shown an improvement over previous years.

Incubation and Brooding

Mr. E. C. Russell started an Incubation Project but had so much trouble that he did not expect, that the work was soon abandoned. There is no commercial scale hatching done in Cochise County.

Mr. W. N. Gilbert of Sulphur Springs co-operated with the Agent and purchased four liquified petroleum gas brooders to brood with this year. Mr. Gilbert is entirely satisfied with results. The results are as follows: A complete record of the cost of the project are below:

Cost of 4 Reliable Gas brooders	\$50.00
One extra house for one brooder	4.00
Pipe fittings	7.50
Miscellaneous fittings & hoses	2.50
Cabinet and installation of tanks	41.00
Four drums of gas	55.00
	<hr/>
Total	\$100.00

The first cost of installing the brooders and equipment was \$105.00 and only \$55.00 worth of gas was used to brood 2500 baby chicks. This cost was only \$10.00 more than the cost of coal the previous



Branding at Saxon Ranch

year. Mr. Gilbert stated that two hours time each day was necessary to clean the coal brooders last year and not over fifteen minutes each day was necessary to take care of the gas brooders this year. Excellent results were obtained from the use of the gas brooders. The Agent was responsible for Mr. Gilbert installing these gas brooders.

Brooding of the baby chicks is where most of the poultrymen in this county got off to a bad start. Chilling or overheating is largely responsible for their trouble. If these fool-proof brooders can be installed the Agent believes a large part of the trouble will be eliminated for cheap brooders can not be regulated properly.

Housing and Feeding

Considerable trouble with poultry is experienced each year by poultrymen from improper feeding methods. Lack of green feed is the chief fault. The Agent has given proper feeding methods all of the publicity possible and the Agent believes that less trouble along these lines was found this year.

Improper housing causes colds and rouse and each case inspected, a drafty house was found to be the cause. These conditions were remedied by placing partitions in the houses.

Two poultry houses were built this year by plans furnished by the Agent.

Parasites and Disease

Sanitation is the largest factor in controlling parasites and diseases of poultry in the County. Tape worms and blue bugs give more trouble than any other one thing. In every case of sickness or trouble reported, except a few where no green feed was fed, the trouble could be traced to either worms or blue bugs. The Agent had the local drug store lay in a supply of Carbolinum for blue bugs and a large quantity of worm medicine.

Rouse and chicken pox are about the only two diseases that appear in flocks in this locality. Lack of sanitation, improper feeding or faulty houses are always the indirect cause of these diseases. Several demonstrations and meetings have been held, teaching the poultrymen how to combat these troubles.

COMPLETE PROJECT REPORT

Rural Engineering
Project No. 10

1930

The purpose of this project is to improve the efficiency of pumping plants and lower the cost of producing water.

Four new deep well turbines have been installed in Cochise County this year. Records are kept on some of the more representative pumping plants. Two records are incorporated in the annual report. Each of these two records have been kept for five seasons.

Pumping record of R. R. Harbour - 1930

Five year record
Pumping Plant

40 H. P. Fairbank Morse engine
Byron Jackson 3 stage No. 3 deep well turbine pump
Depth to bowls 70 feet, suction 20 feet
Average discharge 1100 g. p. m.
Total lift 70 feet average for season

Crop Acreage

Crop	Acreage
Alfalfa	40 acres
Corn	4 "
Hogari	14 "
Beans	20 "
Beets	2 "
Cauliflower-25 acres start after Sept. 1, 8 acres	

25
105

**Pumping Record
April to November inc.**

Month	hours	minutes
April	175	45
May	193	20
June	343	20
July	138	40
August	218	50
September	106	
October	119	05
November	10	
Total	1305	00

Cost of fuel including lub. oil, grease & gasoline

5145 gallons tops @ 8.5¢	\$447.59
80 gallons oil @ 80.5¢	64.40
25 gallons gasoline @ 18.5¢	4.63
1 can grease	1.00
Total	<u>\$517.62</u>
Repairs on engine	50.00
Total expenditures	<u>\$567.62</u>

Amount of water produced	266.32 acre feet
Number of acre feet per acre	2.53 " "
Cost per acre for fuel and oil	\$4.93
Cost per acre foot on same basis	\$2.34
Cost per acre including repairs	\$5.40
Cost per acre including repairs, dropping 18 acres of abandoned caul.	\$6.52

**Water used on cauliflower ground charged to cauliflower
and total acreage, 18 acres irrigation for 45 days.**

Distribution of time in hours
April to November inc.

Month	Alfalfa 40A	Corn 4A	Hogari 14A	Beans 20A	Cauliflower 25 (8)A	Beets 2A
April	170					5-45
May	145-05	40-15				
June	253-40	9.15	9-30	64-45		6-10
July	115-10				23-30	
Aug	114-35	22-40		22-35	55-30	3-30
Sept.	100				6	
Oct	119-03					
Nov					10	
Total	1017-35	80-10	9-30	87-20	95-	15-25

Acre feet Distribution
April to November inc.

Month	Alfalfa 40A	Corn 4A	Hogari 14A	Beans 20A	Cauliflower 25 (8)A	Beets 2A
April	24.4					1.1
May	29.6	9.8				1.3
June	51.5	1.3	1.8	13.2		
July	23.5				4.6	
Aug	23.0	4.3	Summer rains	4.3	11.0	
Sept	20.3				1.2	0.6
Oct	24.2					
Nov					2.0	
Total	206.5	15.9	1.8	17.5	21.8	3.0

Acre Feet per Crop per Acre

Alfalfa	5.16	- 20 acres not irrigated the last cutting
Corn & hogari	1.99	
Beans	0.71	
Cauliflower	2.70	
Beets	1.50	



A Cheap Temporary Pumping Plant

Pumping Record of E. C. Russell
1930
Five year Record

Pumping Plant

15 H. P. Fauke engine
4 in. W. C. Swabe pump
Water level 23 feet total lift 40 feet
830 g. p. m. discharge

Crop Acreage

Crop	Acreage
Alfalfa	25 acres
Cane	10 "
Tomatoes	1 "
Total	<u>36</u> "

Pumping Record
April to November inc.

Month	hours	minutes
April	103	20
May	179	35
June	198	30
July	146	20
Aug	131	35
Sept.	97	15
Oct	110	35
Nov	53	40
Total	<u>1013</u>	<u>50</u>

Cost of fuel including lub.oil, grease & gasoline

2125 gallons tops @ 8.5 & 9¢	\$183.10
25 pounds cup grease	2.65
25 gallons oil	10.30
5 gallons gasoline @ 18.5¢	0.92
No Repairs	
Total	<u>\$196.97</u>

Amount of water produced	157.2 acre feet
Number of acre feet per acre	4.37 " "
Cost per acre for fuel and oil	\$5.47

Distribution of time in hours
April to November inc.

Month	Alfalfa 25A	Cane 10A	Tomatoes 1A
April	103-20		
May	179-35		
June	196-30		
July	111-20	20	15
Aug	94-35	20	17
Sept	97-15		
Oct	110-35		
Nov	53-40		
Total	966-50	40	28

Acre feet per Acre per Crop

Alfalfa	5.8
Cane	0.81
Tomatoes	4.25

WATER SUPPLY

The Agent found out that there were several good turbine pumps for sale in the Deming area. Mr. Donald Scott and the Agent made a trip to Deming to inspect these pumps. As a result of this trip four good cheap pumps were placed in this valley. Mr. Scott paid \$300 for 96 feet of No. 10 Kimball pump that had been run for two seasons. This pump will deliver 1000 gallons of water.

Two pumping plants were tested with the following results:

Jess Moore Ranch

25 H. P. Fairbank Morse engine
 Engine pulley 48 $\frac{1}{2}$
 Engine speed 250 R. P. M.
 Depth to water 50' 6" standing
 Draw down 12' Total lift 63 feet
 Pump V. C. American
 Discharge 700 g. p. m.

L. C. Russell Ranch

Mr. Russell dug a hole in the bottom of a pit silo and placed a Chevrolet engine and a No. 3 H.C. American pump in the bottom of the silo. Mr. Russell uses this small outfit to water the orchard and garden and pump domestic water.

American 3" H. C. Pump
 Chevrolet motor direct connected
 Discharge 350 g. p. m. at 1300 rev.
 Pump set 16' from ground surface
 Pump set 10' from water

This is not a very efficient outfit for the pump is too far from the water. If the pit was lowered 9 feet, the efficiency would increase considerable.

Mr. Ed Hooker of the of the Sierra Bonita Ranch drilled a 2,000 foot hole hoping to find artesian water. No flow was found and the hole was abandoned.

The state test well has been completed on the school section south of the Harbour Ranch. This hole was drilled 500 feet using a 16" hole all the way, casing used was 10 gauge stove pipe. This well should produce at least 2,000 gallons of water for 90 feet of water bearing stratas were found and the casing was perforated ten holes to the foot with a Mills knife. This hole may be drilled deeper next year.

COMPLETE PROJECT REPORT

Rodent Control
Project No. 11

1930

Gophers

One gopher trapping and poisoning demonstration was given by the Agent in the San Simon Valley. Very few gophers exist in this valley and twenty-seven gophers were found in a twenty acre field of alfalfa. With some trapping and poisoning every year the gophers can be held in check without any trouble.

A series of gopher trapping and poisoning demonstrations were given in the Sulpher Springs Valley by the Agent and Mr. Mack Taylor of the Biological Survey. A total of 240 gophers were caught on forty acres of alfalfa on the Harbour ranch. This is about an average for the area. The gophers are very numerous in this valley. A number of farmers have purchased traps and have been trapping all summer. Poisoning has not proven very successful where the farmers do the work. Carelessness and improper methods of poisoning is the main reason why poisoning is not successful. About one hundred quarts of poisoned barley and twenty cans of strychnine were distributed for gopher poisoning.

Rabbits

Due to the early spring rain this year the rabbit control problem was not as acute as in previous years. The rabbits moved to the mountain ranges and left the irrigated valley farms at least six weeks earlier than last year.

One rabbit poisoning demonstration was held in the San Simon Valley early in the spring, killing 180 rabbits and cottontails.

The poisoning demonstrations in the Willcox vicinity were not so successful for the rabbits had already departed for the mountains. The eradication work will be carried on again next year.

Shooting rabbits on the range with a 22 caliber rifle is proving very successful. Mr. Saxon of the Three Links Ranch is still carrying on this work. The Agent has killed over one thousand rabbits during the past year with a 22 special rifle.

Kangaroo Rats

The kangaroo rats are now the worst rodent on the cattle ranges in Cochise County. Poisoning work is being carried on each year. A total of 1442 quarts of poisoned barley was distributed on 8032 acres of range this year on this project.

Mr. Ed Hooker is the latest co-operator in this work. He purchased thirty ounces of strychnine and the Agent instructed one of his cowboys how to mix the strychnine and barley according to the modified standard formula. Mr. Hooker plans on cleaning up his entire range of 120 section. Part of this land lies in Cochise and part in Graham Counties.

AGRICULTURAL ECONOMICS

The Farmer's Warehouse Company and the Farmer's Oil Company, both of which started as Farm Bureau organizations are still doing a good business and save the farmers thousands of dollars by holding down the price of fuel oil and grains. The other merchants cannot meet the prices of these two companies.

The St. David Farm Bureau still continues to buy feed in carload lots. One carload of seed potatoes was purchased for the members. The Association has saved the farmers over one thousand dollars this year.

The Willcox Vegetable Growers Association handled the entire tomato crop of the Willcox area and commanded a much better price than individuals could have, for strict grading was enforced.

MISCELLANEOUS

Organization

Four meetings of the Cochise County Farm Bureau were held during the year at Pearce. The officers for the past year were: President, R. R. Harbour; Vice-president, Frank Davis; Secretary-Treasurer, Wm. D. Monmonier. Wm. D. Monmonier died before the year was out and Ches. Mannus was appointed to fill his place.

The Annual Farm Bureau picnic was held in June. Two speakers from the University of Arizona were present.

Programs of work have been lined up with the Smith-Hughes teachers at Willcox, Benson and St. David for extension work in those communities.

Conferences

The Agent attended the Annual Conference of Extension Workers held at Tucson in January. A number of interesting subjects were discussed and the Agents had a chance to talk over their problems

with the other Agents. In this way the Agents often find the solution to their problems.

Willcox Flower Show

The Agent assisted the Woman's Club of Willcox to put on their Annual Flower Show. Prof. J. J. Thorner of the University of Arizona was selected to judge the show and give a short talk on flowers.

Cochise County Fair

The 10th Annual Fair was held in Douglas on October 9th to 11th inclusive. The Agent was on the board of directors and had charge of all agricultural exhibits. This placed most of the responsibility of the Fair on the Agent. The exhibits in every line were the largest and best that have ever been displayed. The judges were furnished by the Extension Service.

Mr. J. Hutcheson of Willcox won permanent possession of the Loving Cup offered for the exhibitor winning the most blue ribbons for three consecutive years.

Most of the blue ribbon exhibits were held over and taken to the State Fair. The County Fair cleared about



Agricultural Exhibit at State Fair

one thousand dollars this year. This is the first time a profit was shown for three years.

State Fair

The County did not put up any money to send our exhibit to the State Fair. The Willcox Chamber of Commerce donated one hundred dollars to take the exhibit. As most of the best exhibits shown at the County Fair were held over it was rather easy to gather a good exhibit. Mr. Harbour received fifty dollars to drive his truck to Phoenix and stay all week bringing the produce home at the close of the Fair. The Agent acted as the County Commissioner. Fourth prize in agricultural display was won by the County. Thirty-five blue ribbons, twenty-two second and two sweepstakes ribbons were the prizes won. This was a very good showing for one hundred dollars expended. The Extension Service paid the expenses of the Agent.

THE OUTLOOK FOR 1931

The general agricultural outlook does not seem very favorable for Cochise County for the next year.

The large mines in Cochise County have practically closed down, laying off large numbers of men, thus spoiling the sale of large amounts of produce usually sold in Bisbee and Douglas.

The prices of beef cattle and dairy products are very low and little chance of a quick recovery. Alfalfa hay and feed stuffs have been very low during the past year which should help the dairy industry.

Development of better markets through cooperation must be carried forward by developing leaders and expanding the Farm Bureau.

A system of permanent agriculture and cash crops must be developed.

Improvement in irrigation practices should continue to be improved as in the past. One of the largest items of expense is the cost of irrigation.

TENTATIVE AGRICULTURAL EXTENSION PROGRAM

Cochise County

December 1, 1930 to November 30, 1931

<u>Projects</u>	<u>Method of Procedure</u>	<u>Goals</u>
Horticulture Vegetable Growing Project No. 4	Co-operators & Demonstrations	Secure 5 Co-operators
Poultry Husbandry Project No. 9	Clubs, Co-operators & Demonstrations	Establish 4 clubs and 10 Co-operators
Rural Engineering Project No. 10	Demonstrations & Farms visits	Secure 3 re- cords and 5 Co-operators
Rodent Control Project No. 11	Co-operators and Demonstrations	Secure 6 Co-operators
Minor Projects Horticulture Vineyard & orchard Project No. 3	Demonstration & Farm visits	Secure 5 Co-operators
Sheep-Farm Flocks Project No. 5	Demonstration Co-operators	Secure 3 co-operators
Organization	Personal contact	Better Farm Bureau
Range Cattle Project No. 12	Ranch visits	Secure 6 Co-operators

SUMMARY OF ACTIVITIES AND ACCOMPLISHMENTS**Cochise County****December 1, 1929 - November 30, 1930**

Three black alkali demonstrations carried through year.

Four vineyard demonstrations carried through year.

Three deciduous fruit demonstrations carried through year.

Four deciduous fruit pruning demonstrations.

Four vegetable growing result demonstrations.

One vegetable growers association formed.

Fifteen rodent control demonstrations given.

Seven result demonstrations carried through year.

8032 acres of ground treated for kangaroo rats.

Two sheep-farm flock demonstrations carried through year.

Four judging demonstrations given with pure bred Hereford
cattle.

Two demonstrations given for control of hog cholera.

Three adult poultry clubs formed and carried through year.

Eighteen demonstrations held in Poultry Husbandry.

Eighteen result demonstrations carried through year.

Eight cows successfully treated for various ailments.

Two method demonstrations given in Rural Engineering.

Five result demonstrations carried through year in

Rural Engineering.

Four new pumping plants installed this year.

Director of Fair Association and Supervisor of all
agricultural exhibits.

Assisted with Wilcox Flower Show.

County Commissioner at State Fair for County.

469 farm and home visits and 1144 office calls to
further extension work.

108 meetings with 1996 attendance to deal with
various phases of extension work in County.