

ANNUAL NARRATIVE REPORT

OF

F. A. Chisolm^h, County Agent.

August 23, 1919 to December 1st 1919.

ORGANIZATION

- a Present organization, Flagstaff, Williams
- b Proposed "

CROPS

1 Potatoes

a Conditions

1 Results of spraying

2 " at harvest.

b. Seed selection.

1 Two farms selected for hill selection *work.*

c Potato machinery

1 grading

2 use of 2" screen on sorter.

d. Inspection of shipments

2 Wheat

a Work on standardizing, Marquis & Defiance

b Local mill

3 Oats

4 Barley.

a Varieties

1 Bald

2 Bearded.

5 Orchards

Spraying machinery

6 Corn

Varieties

7 Alfalfa

Live stock

1 Cattle

1 car load mixed shipped in by farmers

2 Hogs

A few hogs on every farm

3 Poultry

Correspondence course from University.

Soils.

1 Humus

a Manure

b Cover Crops

Marketing .

1 Individual

2 Through Local Merchants.

Buying.

1. Binder twine 3000# Saved 9¢ a pound-

2. Sacks 30000 Estimate saving \$5000

3. sack twine 400# saved 4¢ a pound

Storage.

1 Warehouse in town. 10¢ per sack for winter

Miscellaneous

1 Fair exhibit

2 Labor

a Placed 200 men on farms

b Indians

3 Silos

1.

Organization.

When I reported for work August 23rd 1919 Coconino County had in force two organizations. One at Williams known as The Williams Farm Improvement Association. One at Flagstaff known as The Coconino Farm Bureau.

These Organizations are operating for the benefit of the farming industry as a whole, but have concentrated principally on buying and selling of supplies and produce.

There is a movement on foot at present under the direction of the County Agent, to form for the purpose of carrying on special programs of work such as spraying for Potato Blight- more legumes Crop rotation etc.

The Farm Bureau has a membership of 125, which is a 20% increase over last year.

Crops.

Potatoes.

(A) On my arrival in the county I found the potato crop badly infested with Early Blight & Rhysoctonia, with some Black leg. The estimate at that time was about 40% of a crop. Dr. Oscar C. Baillett Asst. State Entomologist had done some very valuable work, by furnishing a spraying machine under state expense, and at the same time shipped in material to spray with. Limited by one machine, he went to work and checked the disease where it was not too far along.

Demonstrating the necessity of and value of control.

The farmers were discouraged over the outlook during the fall but high prices for potatoes have offset some of the losses.

Numerous inquiries have come into this office about spraying

machines and material, showing that the farmers intend to start right out to control the sideases in the spring.

(b) Seed selection.

The Agent arrived a little late to do much work in hill selection for seed. Two farmers wanted the demonstration in spite of the fact that the vines were nearly gone. In each place about 100# were located and dug with a fork. These potatoes will be planted separate next year to start a seed plot.

(c) Potato Machinery.

Several new ^{four} farm horse diggers were put into operation this fall. Three of them being operated with tractors very successfully.

Standard sorters were used on nearly every farm. With but two exceptions one and seven eighths inch screens were used. The two exceptions were two ^{inch} such screens. Next year we expect to increase the use of the latter size.

The fact that potatoes were small in size necessitated more careful grading than ever. Cocconino County in the past has had a bad reputation from poorly graded stock this year we have had no complaints where sorters were used and it is the agents opinion that the farmers realize now that grading pays. As a rule the farmers urged me to inspect their shipments as they were being loaded.

(d) Inspection.

It was the plan of the farm bureau to have every car shipped by individuals to be inspected. So far most of the potatoes have been handled by merchants and I have inspected 80% of them in the car.

(e) Identification of Varieties.

Mixed varieties have been identified by the agent in a great many cases and proper names given when possible.

Wheat.

(a) The wheat crop has been a wonderful success this year - Average yield being 30 bu per acre. The two varieties which are outstanding all the way around, are Marquis and Defiance, both hard spring varieties. Several other varieties are grown but are gradually being done away with.

Winter wheat has proved a success in only a very few instances and only a small acreage has been tried.

The fall Flagstaff is favored with a new flour mill, one of the smaller makes and to date it is running full force and furnishing a very high grade of flour.

This industry is the outcome of efforts from the Farm Bureau, however, it is privately owned, but is being run on a semi custom basis. The owners were able to pay the highest prices for wheat and have bought practically the whole crop in this county.

Oats.

This crop was also about 100% this year. Through the efforts of Delore Nichols former County Agent in this county, practically all oats were treated for smut at planting time consequently there was a large increase in yield. It is safe to say that 50 bu per acre was the average yield, with some reports of 80 and 90 bus.

The Swedish Select variety proves to be the highest yielder, with Texas Red next. We are working now towards more careful selection and planting.

Barley.

To date this crop has not been widely grown but with the coming of more live stock it has a bright future. The White Hulless variety is more popular, because it has been used for hay.

Orchards

The fruit growing district in this county is down in the Oak Creek country. It is small but very productive. The lower end of the district is infested with Coddling Moth. Plans are on foot now to place two community power spraying machines at Sedonia.

A better road movement seems to be materializing now, and when finished the fruit growers can realize more for their crops.

Corn.

There has been introduced into the county several new varieties, among them are Minnesota #13 and #27. Yellow Dent corn. These varieties were watched closely this fall and several demands for seed has resulted.

The interest in this crop is rapidly growing and with it will come silos and live stock.

Arrangements are being made for seed testing demonstrations this winter using the rag doll tester.

Alfalfa

It was the concensus of opinion in this county a few years ago that alfalfa could not be grown.

A number of the fammers have tried it, and at present there are 75 acres grown around Flagstaff showing that it can be grown.

This will be one of our programs of work to be followed the coming year.

Live Stock.

Cattle.

At present there only a very few farms that don't have at least one cow. This month Frank Lendly and Dave Steel brought in a car load of stock to be fed this winter. Lendly got Durham calves. Steel got grade Holsteins. This is a good start to get live stock on the farm.

Hogs.

There has been a very noticeable increase in hogs in this county and the increase has been in most cases pure bred stock. There is room for more pork, and that is going to be one of the programmes of work.

Poultry.

N.L. Harris has started a correspondence school for poultry growers in this county. I do not know how large his class is, but there seems to be considerable enthusiasm displayed.

Soils.

In my estimation the soil problem is probably the greatest one we have to contend with, because of the fact that the soil is shallow and contains very little humus. In only a few cases has there ever been a cover crop grown for green manure. The scarcity of live stock is responsible for lack of manure, consequently everything is being hauled off the farm, and where land is five years old it has shown a marked decrease in productiveness. A few more years at the above rate, and the farmer will have to

give up.

Several demonstrations have been attempted in growing of legumes for green manure. These have not been followed closely so it is still a problem. Live stock and green manure crops must be the slogan for the next few years.

Marketing

Here we have a problem that is fairly well solved, since the farmers have become educated to the fact that they must put their produce on the market in first class shape and condition.

There has been an attempt each year to market through the Fam Bureau with a marked success. Those who have built up an individual market are enjoying less grief than others.

This fall the potatoes have been handled in most cases by local merchants, who ship South. The price has been good, and very few complaints have come back. The favorable season this fall has made the harvest easier. The Farm Bureau has been responsible for the satisfactory way in which things have been handled by keeping in touch with markets and market conditions.

Buying

August 27, 3000# of binder twine was shipped in by the Fam Bureau and sold for 24¢ a pound. Those who were able to get this twine saved 8¢ and 9¢ per pound. Or between \$240 and \$270. 5000# could have been handled, had the farmers put their orders in in time.

September 11 30000 sacks and 400# sack twine were shipped in. These were handled on a cash basis with an estimated saving of \$5000 for sacks and \$160 for twine. It is safe to say that

the same prices that we had last year would have prevailed this, had the farmers depended on the merchants. However the merchants responded to the demands of the farmer and sold sacks even lower than the Bureau could.

Storage

Arrangements were made earlier in the fall for storage room in one of the large ware houses on the tracks in Flagstaff. Not many farmers took advantage of this however, as the prices were good and they sold most of the crop at digging time.

We got nominal rates of 10¢ a sack for the winter for both grain and potatoes. Considerable grain is being stored. Had this been a year for low prices this storage room would have been very desirable, as very few farmers are equipped with adequate storage facilities on their farms.

Miscellaneous.

Fair exhibit.

I spent several weeks with the fair commissioner Mr. Beeson, gathering exhibits for the State fair. We visited nearly every farmer in the county. I used this means for getting acquainted with farmers and community. I saw conditions as they existed, during harvest and after, much better than I could, by making routine calls.

The exhibit did credit to the community, and was of great value to those exhibiting. The county won 3rd prize in addition to \$241 in individual prizes.

Labor

Labor question was critical during harvesting and I conducted an employment bureau for farm hands. 200 men were placed on the

farms, most of them being Mexicans and Indians.

Mr. Runke Supt. of the Navaho Reservation furnished 75 Indians to help harvest the potatoes.

A wage scale was adopted by the Farm Bureau namely # 3 and board per day or \$4.00 without board.

Silos.

Two concrete pit silos were constructed this fall and filled with corn. These have caused considerable interest over the county and will be watched closely. They were filled with Squaw corn, in one case and Minnesota #27 in the other.

I have furnished information on construction and feeding rations to several farmers who are planing to build.