

## ANNUAL REPORT

by  
Matthew B. Lonsdale  
Assistant County Agricultural Agent

for  
December 1957 - June 1958

### IV. LIVESTOCK

#### A. Poultry

##### Situation:

##### (1) Egg Production

The number of commercial egg farms in the county is continuing to grow. The location of the new poultry farms is fairly well distributed through the county, and most of them well outside of existing city limits. Many of the new operations are owned or financed by feed companies, egg processing plants, or feed dealers.

Many of our present producers that are now within the city limits will, within the near future, be forced to relocate their operations. City regulations prohibit their expansion, and sanitary codes are making the going tougher every day; so, either the need for greater numbers of birds or the steady flow of complaints regarding flies, odor, etc., will eventually cause them to look to other areas.

A fair estimate would put the total number of layers in the county between 400,000 and 450,000. There are many small "backyard" flocks of a few hundred birds, but the average size of the commercial flock, whose sole source of income is derived from the sale of eggs, is approximately 2,000 layers.

The majority of the poultry farms employ the cage system of management, despite the fact that most of the research done on experimental farms in this area to date has confined itself to a floor type of operation. The most logical explanation for this is the fact that the greater per cent of the poultrymen had no previous knowledge of poultry husbandry prior to settling in this county. This system of keeping chickens, with its advantage of positive culling, undoubtedly attracted these people. With an eye to the future, however, many of them are giving serious consideration to some type of floor operation since it lends itself more readily to automation, fly control is a lesser problem, and the investment per bird is considerably less.

Most of our poultrymen that keep around 2,000 birds grade and pack their eggs and sell them at the farm to small independent grocery stores, to restaurants and hotels, or have retail routes. With the small margin of profit obtained via wholesale channels they have to resort to marketing their eggs by one of these outlets. The larger producers sell the bulk of their product to one of wholesale houses. In this case, the producer just cleans and packs the eggs in 30 dozen lots, the candling and cartoning being done by the wholesaler.

Prices paid on the wholesale market are based on the Los Angeles market quotation. This varies anywhere from 1 to 4 cents under the top quotation. The average price paid for Grade AA Large eggs from the months of December, 1957 - May, 1958, compared with the same months a year previous were as follows:

AVERAGE EGG PRICE - GRADE AA LARGE

Dec. 1956-May 1957

Dec.	47.5*
Jan.	45.5
Feb.	40.5
Mar.	40.5
Apr.	40.5
May	39.5

Dec. 1957-May 1958

Dec.	53.0
Jan.	48.0
Feb.	43.0
Mar.	45.0
Apr.	45.0
May	43.0

\*cents per dozen

The majority of the feed delivered to farms is done in bulk trucks. Most poultrymen have purchased their own bins in an effort to cut costs, since this method of handling feed is somewhat cheaper. The average price paid for a complete laying ration remained in line with the previous year at \$4.50 per hundred weight.

(2) Fryer Production

Commercial fryer production in the county is almost entirely financed or grown under contract. Total output is estimated at between 30,000 and 40,000 per week.

It is doubtful that fryer production will ever be of any economic importance to the county. The small margin of profit, plus cheap fryers being shipped into this market from Texas, Arkansas, and California, does not make the business too attractive to any newcomers.

(3) Turkey Production

The turkey business in the county in the last year has not been encouraging. Several of the large producers have gone out of business and the prospects for any immediate change are not too promising.

Generally, low prices due to competition from cheap frozen turkeys from the West Coast and Utah is responsible for people leaving the business.

The passage of the Mandatory Poultry Products Inspection Bill by the Federal Government, and the feeling that a similar law will be enforced by the State of Arizona, has also had an influence on the expansion of our present producers' operations. Most of them dress their own birds and sell direct to the consumer. With the size of their operation, the cost to provide and maintain a dressing plant to meet specifications for inspection service would be prohibitive. If the state passes such a bill, it will greatly affect the number of independent turkey growers in the county.

Management: Assistant Lonsdale made 361 contacts with poultrymen in the county concerning problems related to feeding, housing and other management practices. Most of the calls concerned themselves with one of the following: poultry house construction, cooling of the chicken house, control of wild birds, egg shell quality, culling, fly control and debeaking.

Assistant Lonsdale with the co-operation of Ted Welchert, Extension Agricultural Engineer, worked with several poultrymen on plans for construction of new poultry houses. Specialist Welchert and Assistant Lonsdale supplied Mr. Evans of Goodyear with plans for a truss type of structure that will enable him to eliminate the supporting members in the center of the building, making the house easier to clean out, etc., and allowing for a better alternate use, should he decide to get out of the chicken business.

An effective and economical system for keeping poultry houses cool during the summer months is still to be desired. Most of the poultrymen in the county employ the use of foggers, but have had difficulty in the past with dripping and clogging of the lines. Assistant Lonsdale with the aid of Specialist Ted Welchert, held a meeting at the Cotton Research Center in April at which various methods of cooling poultry houses were discussed. A "mock-up" of a fogging system was displayed, showing equipment that can be used to control dripping and clogging of the lines.

Assistant Lonsdale went over plans with Mr. Frank Goettl of Mesa for the construction of an egg vending machine that could be used by local poultrymen in marketing their eggs. This type of machine, similar to most coin vending machines, is working well for poultrymen in other areas of the country.

A problem confronted by quite a few poultrymen was that of poor egg shell quality including thin and wrinkled shells. Assistant Lonsdale worked with Mr. Boone of Laveen, who was experiencing a high incidence of soft shells from his birds. A supplemental feeding of Vitamin D was given to the birds for a period of 14 days with no apparent response. Calcium assimilation is directly influenced by the intake of Vitamin D. With this condition appearing in several flocks, but to a lesser degree, all on different types of feed and all vaccinated for the diseases that might have some bearing on this problem, we are at a loss as to the cause.

Fly control is still a major problem with county poultrymen, particularly those who keep their birds in cages. Assistant Lonsdale worked with many poultrymen in an attempt to satisfactorily control this insect. Apart from the fact that it soils many of the eggs and is a potential disease carrier, it is of greater concern in that it acts as the intermediate host for the tapeworm found in chickens. The tapeworm seriously retards growth and affects the over-all productivity of the chicken.

Many of the county poultrymen are now using the soldier fly as a means to control the housefly. Assistant Lonsdale with the co-operation of Dr. J. N. Roney, Extension Entomologist, obtained information from the U. S. Department of Health relative to the use of soldier flies around poultry farms. Information received indicated that they are not a carrier of any human diseases.

Disease and Parasite Control: Assistant Lonsdale aided 66 county poultrymen with disease and parasite problems. With the University of Arizona Animal Pathology Laboratory at the Mesa Experiment Station doing poultry diagnostic work, Assistant Lonsdale has had very few calls as compared to a year ago. Most of the problems handled by Assistant Lonsdale were those caused by external and internal parasites.

Coccidiosis was the most prevalent disease diagnosed. In most instances it showed up shortly after the chickens were taken off a growing feed containing a coccidiostat at the preventative level. This has happened so often, that it might be advisable for poultrymen to consider a more sound approach to the adequate control of this disease. It perhaps would be better to eliminate the medication in the feed during the growing period and allow for a natural outbreak of the disease, treat it, and be assured of good immunity before the birds come into production.

A severe infestation of large roundworms was diagnosed on several farms in the county. In most cases the infestation was high enough to cause anemia as a result of excessive amounts of toxin excreted by the worms. The toxin destroys red blood corpuscles. Assistant Lonsdale recommended treatment with piperazine along with a more strict sanitation program.

An outbreak of Hemorrhagic Syndrome in a flock of 11 week old pullets owned by Mr. Dimmic of Roosevelt was diagnosed by Dr. Rokey of the University Laboratory at Mesa. Field observations made by Assistant Lonsdale indicated that the symptoms were very much like those common to Coccidiosis. Since the normal treatment for Coccidiosis is an antagonist to Hemorrhagic Syndrome, the importance of a laboratory diagnosis should be emphasized.

One case of Epidemic Tremors was diagnosed by Assistant Lonsdale in a flock of chicks three days of age, owned by Floyd Frye of Alhambra. Mortality was about 10 per cent. There is no recognized treatment for the disease to date. Recent research indicates that survivors may experience eventual blindness in one or both eyes.

Organization: Assistant Lonsdale worked with County Agent Hudson on several occasions with 4-H poultry projects.

Assistant Lonsdale attended the monthly meetings of the Central Arizona Poultry Association and was a member of the advisory committee responsible for the planning of programs for the monthly meetings.

#### D. Small Animals

##### Chinchillas

Situation: There are around 100 ranches in the county with the average herd having 20 animals. About six of these ranches are what might be called "fur ranches" in that they are primarily concerned with improving the quality of their animals to obtain a breeding herd that will eventually produce a top quality pelt. The remainder of the ranches are interested in selling animals for breeding purposes.



Very little pelting is being done by local growers. The top price received so far in this area for a single pelt was \$50 with the average at \$22.

The cost of purchasing an animal for breeding purposes varies considerably. The Arizona Branch of the Chinchilla Association of America, however, feels that an individual should pay no more than 3 to 5 times the value of the pelt of the Animal being considered. Good animals can be bought from a member of the association for \$150.

The average cost of feeding an animal for one year is \$3.50. Most of the animals are kept in wire cages in air-conditioned buildings.

Disease problems affecting the physical health of the animal are very minor in this county. A fungus disease causing fur breakage is the only real concern. The cause of the disease is unknown.

Organization: Assistant Lonsdale attended the monthly meetings of the Arizona Chinchilla Association.

## SUMMARY OF ACTIVITIES

December 1957 - June 1958

by  
Matthew B. Lonsdale, Assistant County Agricultural Agent

Assistant Lonsdale worked with poultrymen in the county engaged in the production of eggs, fryers, and turkeys. He assisted them in whatever problems or projects they had regarding their over-all program of management, disease prevention and control.

The major management problems were: poultry house construction, cooling the chicken house during hot weather, control of wild birds, egg shell quality, culling, fly control and debeaking. Assistant Lonsdale, with the co-operation of the State Extension Specialists and the USDA Southwest Experiment Station at Glendale, provided poultrymen with information regarding these problems. Assistant Lonsdale sent out in the form of newsletters, or articles in the local papers, with the aid of Assistant Halvorson, information concerning the above mentioned problems.

Assistant Lonsdale aided county poultrymen in their disease prevention and control program by making recommendations regarding a sound vaccination and sanitation program, and by offering diagnostic assistance.

The major disease and parasite problems were: coccidiosis, hemorrhagic syndrome, roundworms, lice and fowl ticks. Assistant Lonsdale made available, through radio programs and newspaper articles, specific information regarding the treatment and control of these diseases and parasites.

Organization: Assistant Lonsdale attended the monthly meetings of the Central Arizona Poultry Association and acted as a member of the advisory committee on program planning.

Assistant Lonsdale worked with County Agent Hudson on 4-H Poultry Projects.