

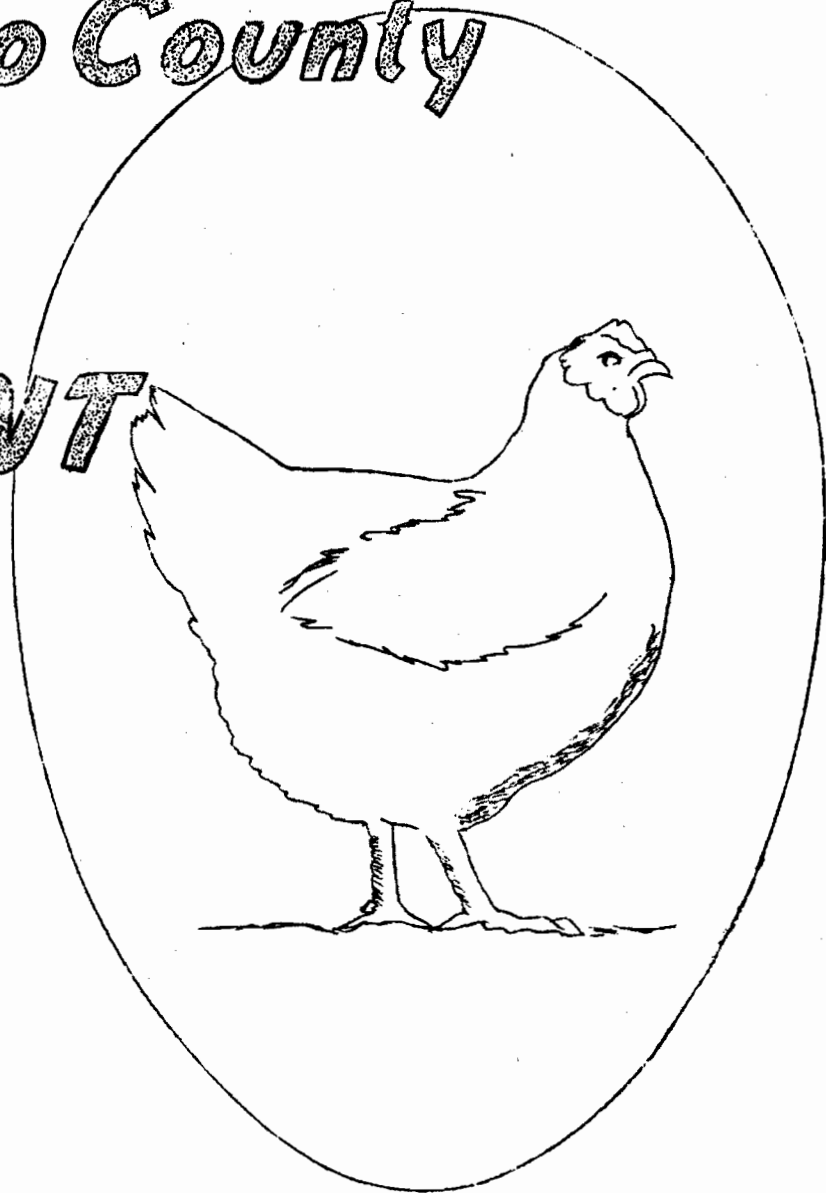
San Luis Obispo County

POULTRY

MANAGEMENT

STUDY

1958



University of California
Agricultural Extension Service
1235 Monterey Street
San Luis Obispo, California

Fifth Annual Report
by
John H. Evans & Arthur Shultis

INTRODUCTION

This is the fifth in a series of San Luis Obispo County Laying Hen Management Studies which are conducted by the University of California Agricultural Extension Service.

These studies are carried on in order to:

- . encourage poultrymen to keep better records
- . show poultrymen how records can be used to advantage
- . aid poultrymen in finding the weak points in their individual operations
- . enable poultrymen to compare their operations against others
- . keep the farm advisor informed

The number of cooperators participating in this year's study was small, therefore the averages presented can not be considered typical for the county. They do, however, show some interesting information on local production costs and profits.

By consulting Table I you will note there have been a number of significant changes in our poultry industry since the 1950-53 period. For instance:

- . The average number of hens per flock has increased 323 per cent.
- . Local hens have increased production by some 21 eggs per bird
- . Average culling percentage dropped significantly from 96 per cent in '53 to 66 per cent in '58
- . A decrease of 13.6 cents average price per dozen eggs emphasizes more than anything else the need for reducing costs through improved management
- . A cull hen today is worth less than half that received in 1953
- . A 70 cent drop per cwt. in feed cost has enabled the poultrymen to survive declining egg prices
- . A .6 hour decrease in labor per hen shows real improvement in labor efficiency
- . Probably the most significant profit factor is the \$1.48 decrease in feed cost per hen
This tremendous improvement is undoubtedly the result of lower feed costs, improved feed efficiency, and improved feeding methods
- . Farm income per hen of \$2.13 is just about average for the four years, 1950-53
- . Management income per hen at 48 cents is 11 cents better than the average for 1950-53

All of the above factors would seem to indicate that poultrymen today are no worse off, or no better off, than they were five or six years ago. The deciding factor in determining if the poultry enterprise is to be a profitable one lies with the individual poultryman.

EXPLANATION OF TERMS USED IN A POULTRY ENTERPRISE ANALYSIS

Total Income is composed of returns from the sale of eggs, poultry, manure and other miscellaneous incomes; the value of eggs eaten in the home; and the net increase in the poultry stock inventory. A decrease is subtracted in obtaining total income.

Total Expense is made up of all costs of feed, chicks or poultry bought, hired labor, other cash expense items, the value of operator and other family labor, depreciation on buildings and equipment, and five per cent interest on the average investment shown by the inventory and capital record.

Management Income is the amount by which the total income exceeds the total expense. If the total expense is larger, a Net Loss occurs, which is designated by a minus sign (-) preceding the figure.

Farm Income is the sum of the management income, the value of the operator and family labor, and the interest on investment. It is the net income the poultryman receives above cash expenses and depreciation. It includes interest for the use of his capital, wages for his actual labor, and the profit for his management.

Average Number of Hens is the average number of hens in the flock for the year. It is obtained by dividing the number of hen days for the year by the number of days in the year.

Per Cent Mortality is the per cent of the average number of hens that died during the year. It is obtained by dividing the number died by the average number of hens.

Per Cent Culled is the per cent of the average number of hens that were sold and eaten in the home during the year. Dividing the number so disposed by the average number of hens gives this figure.

Per Cent Added is the per cent of the average number of hens which were actually added to the flock during the year. It is obtained by dividing total additions by the average number of hens. Pullets are added at about six months of age.

Per Cent Pullets is the per cent of total hens in the flock which were pullets between six and eighteen months of age. It is obtained by dividing the total number of pullets of this age at the beginning and end of the year by the total number of hens and pullets at these times.

TABLE I
STUDY AVERAGES OTHER YEARS

San Luis Obispo County

| | 1958 | 1953 | 1952 | 1951 | 1950 |
|--|-------------|--------------|--------------|--------------|-------------|
| Number of records | 6 | 8 | 10 | 8 | 11 |
| Average number of hens per flock | 3629 | 1122 | 1393 | 1092 | 956 |
| Eggs laid per hen | 232 | 211 | 205 | 206 | 200 |
| Per cent mortality, hens | 16.1 | 18 | 22 | 20 | 24 |
| Per cent culled | 66.2 | 96 | 97 | 81 | 85 |
| Per cent increase or decrease | + 23 | 4 | 25 | 23 | 23 |
| Average price per dozen eggs | 38.4 | 52.0 | 51.8 | 58.4 | 46.9 |
| Average price per cull hen | .30 | .68 | .84 | .83 | .85 |
| Average cost per cwt. mash and grain | 3.37 | 4.07 | 4.52 | 4.37 | 3.98 |
| Hours of labor per hen | 1.1 | 1.5 | 1.8 | 1.7 | 2.4 |
| Income per hen, eggs sold | 7.38 | 9.40 | 8.79 | 9.88 | 7.66 |
| Miscellaneous income | .04 | .08 | .05 | .06 | .04 |
| Increase stock inventory | .43 | .45 | .78 | .20 | .48 |
| TOTAL INCOME PER HEN | 8.15 | 10.67 | 10.87 | 12.02 | 9.68 |
| Total feed cost per hen | 4.34 | 5.82 | 7.67 | 6.98 | 6.34 |
| Poultry stock bought | .56 | .73 | .67 | .61 | .84 |
| Miscellaneous costs | .55 | .58 | .66 | .53 | .50 |
| Depreciation | .34 | .34 | .33 | .46 | .23 |
| Hired labor | .19 | .04 | .40 | .51 | .46 |
| CASH AND DEPRECIATION COSTS PER HEN | 5.98 | 7.51 | 9.73 | 9.09 | 8.37 |
| Farm income per hen | 2.17 | 3.13 | 1.14 | 2.93 | 1.31 |
| Value operator's labor | 1.40 | 1.46 | 1.43 | 1.20 | 1.90 |
| Interest on investment | .29 | .29 | .32 | .21 | .26 |
| MANAGEMENT INCOME PER HEN | .48 | 1.41 | -.61 | 1.52 | -.85 |

TABLE II
INCOME AND PROFIT HEN

| | 1 | 2 | 3 | 4 | 5 | 6 | Av. |
|---|--------|--------|--------|--------|--------|--------|--------|
| Size of flock: M-2000 to 4000, L-4000 to 6000 | M | M | M | L | L | M | 3629 |
| Eggs laid per average hen | 265 | 222 | 245 | 232 | 205 | 253 | 232 |
| Per cent mortality, hens | 9.8 | 17.6 | 12.3 | 11.5 | 26.8 | 7.8 | 16.1 |
| Per cent culled or sold | 73.0 | 71.8 | 60.6 | 77.9 | 59.7 | 49.4 | 66.2 |
| Per cent added | 119.6 | 50.3 | 164.5 | 95.0 | 111.4 | 117.0 | 105.3 |
| PER CENT INCREASE OR DECREASE (minus -) | 36.8 | -39.1 | 91.6 | 5.6 | 24.9 | 59.8 | 23.0 |
| Dozen eggs sold per hen | 22.8 | 18.0 | 19.9 | 19.5 | 17.1 | 20.8 | 19.3 |
| Average price per dozen all eggs | 42.3¢ | 35.8¢ | 37.4¢ | 35.5¢ | 36.7¢ | 44.1¢ | 38.4¢ |
| Net cost per dozen | 35.2 | 31.7 | 34.5 | 34.1 | 35.3 | 47.4 | 35.8 |
| MANAGEMENT INCOME PER DOZEN | 7.1 | 4.1 | 2.9 | 1.4 | 1.4 | -3.3 | 2.5 |
| FARM INCOME PER DOZEN | 15.8¢ | 11.8¢ | 11.1¢ | 9.3¢ | 7.7¢ | 14.1¢ | 11.3¢ |
| Income per hen, eggs sold | \$9.67 | \$6.45 | \$7.44 | \$6.93 | \$6.26 | \$9.24 | \$7.38 |
| Poultry sold - mostly cull hens | .41 | .28 | .21 | .29 | .24 | .39 | .30 |
| Miscellaneous income - mostly manure | .06 | .02 | .01 | .02 | .04 | .15 | .04 |
| Increase in stock inventory for year | .47 | .13 | .83 | .32 | .42 | .67 | .43 |
| INCOME PER HEN TOTAL | 10.61 | 6.88 | 8.49 | 7.56 | 6.96 | 10.45 | 8.15 |
| Total cash costs and depreciation | 6.99 | 4.74 | 6.27 | 5.74 | 5.65 | 7.54 | 5.98 |
| Net farm income | 3.62 | 2.14 | 2.22 | 1.82 | 1.31 | 2.91 | 2.17 |
| Less - value of operator's & family labor | 1.65 | 1.12 | 1.36 | 1.23 | .85 | 3.26 | 1.40 |
| interest on av. investment at 5% | .34 | .28 | .29 | .31 | .22 | .35 | .29 |
| MANAGEMENT INCOME PER HEN | 1.63 | .74 | .57 | .28 | .24 | -.70 | .48 |

Individual records are listed above in order of management income per hen, which appears on the last line. Notice that #6 was last in management income, but second in farm income. This is due to a high labor charge.

The top three flocks in farm income also have the highest number of eggs laid per hen. Also #5 had the highest mortality and the lowest production per hen. High mortality and low egg production go hand in hand.

The 2.5 cents management income per dozen eggs shows the very narrow profit margin per dozen. The slightest extravagant expenditure can turn a profit into a loss.

TABLE III
QUANTITIES, PRICES AND COSTS PER HEN

| | 1 | 2 | 3 | 4 | 5 | 6 | Ave. |
|--|-------------|-------------|-------------|-------------|-----------------|--------------|-------------|
| POUNDS OF MASH AND GRAIN USED PER HEN | 128 | 104 | 145 | 132 | 134 | 133 | 128 |
| Average price per hundredweight, mash and grain | 3.54 | 3.22 | 3.40 | 3.52 | 3.16 | 3.49 | 3.37 |
| Hours of labor per hen, hired and family | 1.7 | .7 | .95 | .8 | <i>A. B</i> 2.2 | 2.2 | 1.1 |
| Cost per hour of hired labor per hour | 1.25 | -- | 1.06 | -- | 1.25 | .77 | 1.23 |
| Pullet chicks bought per hen | 1.4 | 1.1 | 1.5 | 1.2 | 1.7 | 1.2 | 1.4 |
| Average price per pullet chick | 42.3¢ | 40.0 | 42.3 | 39.1 | 40.2 | 37.8 | 40.4 |
| Per cent of chicks died or lost | 4.9 | 3.9 | 4.9 | .4 | 21.9 | 10.7 | 11.7 |
| Feed costs per hen | 4.54 | 3.46 | 4.91 | 4.67 | 4.23 | 4.62 | 4.34 |
| Chicks and poultry stock bought | .60 | .44 | .61 | .46 | .67 | .50 | .56 |
| Miscellaneous costs, repairs, medicine, electric, taxes, etc. | .63 | .47 | .23 | .36 | .26 | 1.98 | .55 |
| Depreciation buildings and equipment | .51 | .37 | .47 | .25 | .19 | .42 | .34 |
| Hired labor | .71 | -- | .05 | -- | .30 | .02 | .19 |
| TOTAL CASH AND DEPRECIATION COSTS PER HEN | 6.99 | 4.74 | 6.27 | 5.74 | 5.65 | 7.54 | 5.98 |
| Value of operator's and family labor at \$1.50 per hour | 1.65 | 1.12 | 1.36 | 1.23 | .85 | 3.26 | 1.40 |
| Interest on investment | .34 | .28 | .29 | .31 | .22 | .35 | .29 |
| TOTAL ALL COSTS OF PRODUCTION | 8.98 | 6.14 | 7.92 | 7.28 | 6.72 | 11.15 | 7.67 |
| Less income not egg - poultry and miscellaneous | .94 | .43 | 1.05 | .63 | .70 | 1.21 | .77 |
| Net cost of eggs per hen | 8.04 | 5.71 | 6.87 | 6.65 | 6.02 | 9.94 | 6.90 |
| Dozens sold per hen | 22.8 | 18.0 | 19.9 | 19.5 | 17.1 | 20.8 | 19.3 |
| Net cost per dozen eggs sold | 35.2¢ | 31.7 | 34.5 | 34.1 | 35.3 | 47.4 | 35.8 |

Costs per hen frequently are the most important factors in allowing a profit or causing a loss in the individual flock. Feed was 73 per cent of cash expenses per hen, shown above as the average for six flocks. The quantity of feed fed per hen will vary with the proportion of young stock raised during the year. Number 3 had a high proportion of replacements, while #2 had a low proportion. With an average replacement rate, any amount over 125 pounds of feed per hen is probably due to waste.

TABLE IV
EGG PRICE AND MISCELLANEOUS FACTORS

| | 1 | 2 | 3 | 4 | 5 | 6 | Ave. |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Average price per dozen wholesale | -- | 35.2¢ | 36.5 | 35.5 | 35.3 | 33.6 | 36.9 |
| Average price sold retail | 42.3 | 37.2 | 48.8 | 37.8 | 41.8 | 46.2 | 43.0 |
| AVERAGE ALL EGGS SOLD | 42.3 | 35.8 | 37.4 | 35.5 | 36.7 | 44.1 | 38.4 |
| Per cent of eggs: | | | | | | | |
| Large | 54 | 81 | 74 | 68 | 69 | 50 | 67 |
| Medium | 22 | 13 | 22 | 23 | 25 | 34 | 23 |
| Small and commercial | 23 | 6 | 4 | 9 | 6 | 16 | 10 |
| Per cent of eggs sold wholesale | -- | 78.3 | 92.0 | 99.5 | 74.4 | 14.4 | 75.8 |
| Retail | 98.8 | 21.5 | 7.7 | .3 | 25.4 | 84.5 | 23.9 |
| Miscellaneous and home use | .2 | .2 | .3 | .2 | .2 | 1.1 | .3 |
| Pounds of feed per dozen eggs sold | 5.6 | 5.8 | 7.2 | 6.8 | 7.8 | 6.4 | 6.7 |

Pounds of feed per dozen eggs sold is an excellent measurement of feed efficiency. Number 1 shows good feed efficiency. Number 2 is also good but the low per cent added probably helped here. Number 3 is high probably due to high per cent added. Numbers 4,5, and 6 could improve on feed efficiency.

Per cent large eggs varies with breed and age of hens. A good figure to aim for is 70 per cent large eggs.

LOOKING TO THE FUTURE

From all reports, egg prices will average a few cents lower than they did in 1958. This means that in order to tread water, poultrymen will have to cut costs of production. How best to do this is the question.

Here are a few suggestions based on information brought to light by the 1958 Management Study:

- 1) Poultrymen must not waste feed. Repairing and improving feed troughs will help. Also feeding three or more times a day may be practical. Feeding a larger portion of grain can cut feed cost and not hurt production when done intelligently. Feeding whole grains in cage operations can be and is being done. More grain should be purchased at harvest time, when prices are the lowest. This is one of our biggest assets in San Luis Obispo County.
- 2) Labor is the poultryman's second biggest cost item. It cost our six cooperators approximately \$1.59 per hour. Much of this time is spent in the egg room washing and sizing eggs with out-moded equipment. If your present machine will not move fast enough, plan on purchasing one that will. It will make money for you in the long run.
- 3) Miscellaneous costs amounted to 55 cents per hen. If this figure were cut in half, our average ranch of 3629 hens would save \$1000. This figure can be cut by making intelligent use of insecticides, antibiotics, etc.
- 4) A balanced flock, producing a uniform proportion of large, medium and small eggs means money in the bank. Selection of quality stock and uniform replacements will accomplish this purpose.

* * *