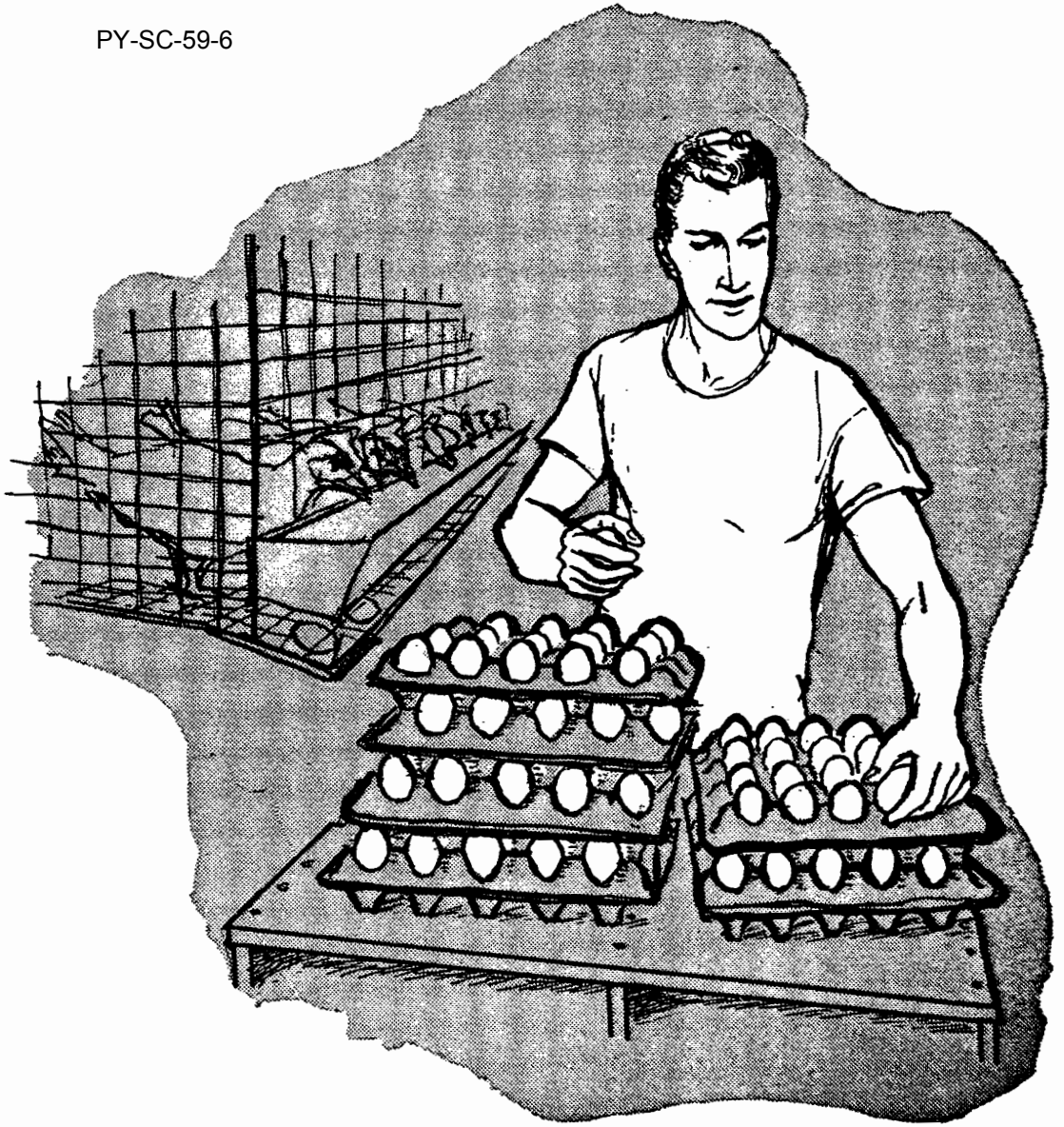
PY-SC-59-6

POULTRY MANAGEMENT STUDY

orange county



University of California
Agricultural Extension Service
County of Orange

UC Cooperative Extension

Introduction

This study is made each year so that participating ranches can gain knowledge concerning many facets of their operation. Through the use of a uniform method of bookkeeping these ranches can compare their results with others in the study as well as their own from year to year. The Agricultural Extension Service welcomes any poultry rancher into this study if he is willing to put a little time and effort into his records so that they mean something at the end of a year.

All records are calculated on a hen-day basis and results are accumulated each month. As monthly records are completed a report is mailed to the cooperating poultrymen.

This summary represents the average results obtained in the 1959 Poultry Management Study in Orange County, California. They were calculated by taking the individual ranch results and dividing by the number of ranches involved.

This year the report contains information derived from two separate studies. The first of these was the complete cost study in which ten ranches averaging 7,012 laying hens participated. A new approach was tried in 1959 whereby ranchers could enter the study on a management basis without having to enter their cost and income figures. Eleven ranches completed on this basis with an average of 19,887 hens each. For averages where information was available we used the entire 21 ranches whose combined average size was 13,756 hens. The total number of hens for the entire study was 288,885.

General Information

Ranch Sizes		Complete Cost Study		Combined Studies	
A	less than 3,000 hens	smallest ranch -	2,519 hens	smallest ranch -	2,175 hens
B	3,000 - 5,000	LARGEST RANCH -	13,222	LARGEST RANCH -	36,359
C	5,000 - 10,000	average ranch -	7,012	average ranch -	13,756
D	10,000 - 20,000				
E	over 20,000				

Discussion

1959 represents a fine example of how efficient poultrymen can be if conditions warrant it. Average price of eggs was down more than six cents per dozen from 1958, which when based on 20 dozen egg production per hen should have resulted in $1.20 less income. But, poultrymen were able to up production over last year by 9-10 eggs per hen and lower their miscellaneous costs as well. Low feed prices gave savings of another 1-2 cents per dozen over last year. Of the ten ranches cooperating in the full cost study seven were able to come up with a 5% return on their investment, $1.50 per hour for their labor and a little management income as well.

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Egg Production and Sizes

Serial No. and Size	Eggs Per Hen	Per Cent Production
5 D	226.0	61.9
6 C	229.7	62.9
7 B	251.7	69.0
10 C	259.6	71.1
11 A	248.0	67.9
15 C	243.5	66.7
18 B	270.5	74.1
19 C	255.9	70.1
22 D	250.3	68.5
25 B	273.6	75.0
1 E	250.2	68.5
2 D	243.2	66.6
3 E	249.7	68.4
8 C	239.5	65.6
9 E	251.9	69.0
12 D	242.7	66.5
14 D	239.1	65.5
16 E	238.7	65.4
17 E	252.7	69.2
26 A	242.7	66.5
27 E	234.9	64.3
AVERAGE	247.3	67.7

	Per Cent Large	Per Cent Medium	Per Cent Small	Per Cent Commercial (1)	Per Cent Retail
	75.1	19.7	4.2	1.0	1.0
	77.0	14.1	8.3	.6	0
	60.8	24.6	4.6	10.0	2.1
	84.3	11.5	1.3	2.9	3.6
	67.8	26.2	3.9	2.1	10.2
	76.3	17.0	2.6	4.1	2.8
	68.8	23.2	5.1	2.9	1.4
	82.2	14.5	1.2	2.1	1.8
	75.2	16.3	2.8	5.7	2.7
	71.1	21.0	5.6	2.3	0
AVERAGE	73.9	18.8	4.0	3.3	2.6

(1) Includes cracks, pee wees and frozen eggs

One interesting point brought out by these production figures is that the smaller ranches were able to maintain higher average egg production than the larger ones. The ten smallest ranches averaged 251.5 eggs per hen while the eleven larger ranches averaged only 243.6 eggs per hen. Single cages were more prevalent on the smaller ranches than they were on the larger ranches. More individual card marking was also done on the smaller ranches. Four of the ten small ranches exceeded 70% for the entire year while none of the eleven larger ranches were able to reach 70%.

The poultryman who wishes to get the highest return per hen must not only get high production but should also have 75% or more large eggs and then ship to a processing distributor who pays him the top price for his eggs. The four ranches which exceeded 70% production were passed in egg income by ranch No. 22 because of less favorable paying prices.

Income and Costs Per Hen

(ranked according to management income)

Serial No. And Size	INCOME					CASH COSTS					Depreciation	NON-CASH COSTS		Total Costs
	Egg Sales	Cull Hens	Change of Stock Inventory (1)	Fertilizer	Total	Feed	Chicks	Hired Labor	Misc. (2)	Total		Family Labor (3)	Int. on Investment (4)	
22 D	$ 6.68	$ .25	$ .03	$ .02	$ 6.98	$ 4.00	$ .53*	$ .90	$ .30	$ 5.73	$ .11	$ 0	$ .17	$ 6.01
15 C	6.24	.32	.15	-	6.71	4.13	.35	.08	.18	4.74	.19	.91	.18	6.02
19 C	6.39	.25	.06	.03	6.73	3.79	.35	.16	.56	4.86	.43	.68	.23	6.20
25 B	6.61	.29	-	-	6.90	4.06	.40	-	.28	4.74	.29	1.20	.18	6.41
18 B	6.66	.24	.17	-	7.07	4.16	.43	.11	.25	4.95	.37	1.02	.32	6.66
10 C	6.63	.26	.14	.02	7.05	4.15	.31	.55	.31	5.32	.40	.71	.22	6.65
5 D	5.82	.22	-.11	.07	6.00	3.76	.25	.44	.40	4.85	.26	.52	.19	5.82
11 A	6.19	.21	.24	-	6.64	4.10	.35	.13	.33	4.91	.26	1.56	.17	6.90
6 C	5.58	.20	-.20	.04	5.62	3.87	.32	.77	.54	5.50	.19	.54	.25	6.48
7 B	5.67	.26	-.30	.05	5.68	4.39	.38	-	.19	4.96	.23	1.19	.22	6.60
AVERAGE	$ 6.25	$ .25	$ .02	$ .02	$ 6.54	$ 4.04	$ .37	$ .31	$ .33	$ 5.05	$ .27	$ .83	$ .21	$ 6.36

(1) Increased or decreased flock evaluation

(2) Vaccines, medication, repairs, taxes, etc.

(3) $1.50/hr.

(4) 5% of average investment

*some started pullets

Summary of Income Per Hen

(ranked according to management income)

Serial No. And Size	Total Income	minus	Cash Costs	equals	Cash Income	minus	Depre-ciation	equals	Net Farm Income	minus	Non Cash Costs	equals	Management Income
22 D	$ 6.98		$ 5.73		$ 1.25		$ .11		$ 1.14		$ .17		$ .97
15 C	6.71		4.74		1.97		.19		1.78		1.09		.69
19 C	6.73		4.86		1.87		.43		1.44		.91		.53
25 B	6.90		4.74		2.16		.29		1.87		1.38		.49
18 B	7.07		4.95		2.12		.37		1.75		1.34		.41
10 C	7.05		5.32		1.73		.40		1.33		.93		.40
5 D	6.00		4.85		1.15		.26		.89		.71		.18
11 A	6.64		4.91		1.73		.26		1.47		1.73		-.26
6 C	5.62		5.50		.12		.19		-.07		.79		-.86
7 B	5.68		4.96		.72		.23		.49		1.41		-.92
AVERAGE	$ 6.54		$ 5.05		$ 1.49		$ .27		$ 1.22		$ 1.04		$ .18

Many different systems can be used to express earnings in a business; we use three but emphasize one. Cash Income is the amount by which your total income exceeds your total cash expenses. Farm Income is this same figure except that it takes away the cost of the buildings and equipment over a period of time. Management Income places all ranches on a fairly equal basis regardless of the amount of unpaid labor involved. It also makes a charge for the use of the money which is in the business. We feel that Management Income is the best means of comparing one ranch with another.

Due to wide variations in non-cash costs the ranches at the top in cash or net farm income are not at the top in management income. Ranch No. 22 has no unpaid labor therefore it is first in management income, but only eighth in cash income. Since management income takes into consideration all labor, whether paid for or not, it is a more true method of comparison.

Income and Costs Per Dozen Eggs Sold - Cents

(Ranked according to management income)

Serial No. And Size	INCOME			CASH COSTS					Cash Income	Depre-ciation	Net Farm Income	NON-CASH COSTS		Management Income
	Eggs	Other (1)	Total	Feed	Chicks	Hired Labor	Misc. (2)	Total				Family Labor (3)	Int. on Investment (4)	
22 D	30.7¢	1.4¢	32.1¢	18.4¢	2.4¢ *	4.2¢	1.4¢	26.4	5.7¢	.5¢	5.2¢	0¢	.8¢	4.4¢
15 C	31.2	2.3	33.5	20.6	1.8	.4	.9	23.7	9.8	.9	8.9	4.6	.9	3.4
19 C	30.3	1.6	31.9	18.0	1.7	.8	2.7	23.2	8.7	2.0	6.7	3.2	1.1	2.4
25 B	28.8	1.2	30.0	17.7	1.7	0	1.2	20.6	9.4	1.3	8.1	5.2	.8	2.1
18 B	29.7	1.9	31.6	18.6	1.9	.5	1.1	22.1	9.5	1.7	7.8	4.6	1.4	1.8
10 C	31.4	1.9	33.3	19.7	1.5	2.6	1.5	25.3	8.0	1.9	6.1	3.4	1.0	1.7
5 D	29.9	.9	30.8	19.2	1.3	2.3	2.1	24.9	5.9	1.3	4.6	2.7	1.0	.9
11 A	30.0	2.1	32.1	19.8	1.7	.7	1.6	23.8	8.3	1.3	7.0	7.5	.8	-1.3
6 C	29.8	.2	30.0	20.7	1.7	4.1	2.9	29.4	.6	1.0	-.4	2.9	1.3	-4.7
7 B	27.7	.1	27.8	21.4	1.9	0	.9	24.2	3.6	1.1	2.5	5.8	1.1	-4.4
AVERAGE	30.0¢	1.4¢	31.4¢	19.4¢	1.8¢	1.6¢	1.6¢	24.4	7.0¢	1.3¢	5.7¢	4.0¢	1.0¢	.7¢

(1) Includes change of stock inventory and fertilizer income

(2) Includes vaccines, medication, repairs, taxes, etc.

(3) $1.50 per hour

(4) 5% on average investment

*some started pullets

Income and costs on a "per dozen" basis has certain advantages over the "per hen" method. The principal advantage is that poultrymen not using the hen-day method can figure their own costs and income and compare directly with the figures in the chart above. An example of the simplicity of this method is to take your total feed bill and divide by the total dozen eggs sold. This would give your feed cost per dozen eggs sold. Likewise you can take each of your other cost and income categories and divide by the total dozen eggs sold to give the remainder of your per dozen figures. Feed cost per dozen eggs sold is probably the most important calculation you can make as it represents approximately 65% of your total cost in the business.

Feed Consumption & Feed Conversion

Serial No. And Size	Pounds Feed Per Hen		Pounds Feed Per Doz. Eggs	
	All Feed	Estimate for Layers	All Feed	Estimate for Layers
1 E	121.2	95.8	5.81	4.59
2 D	111.0	95.4	5.49	4.71
3 E	127.8	93.3	6.14	4.48
5 D	119.1	96.9	6.33	5.14
6 C	119.1	98.8	6.22	5.16
7 B	126.6	100.3	6.03	4.78
8 C	124.2	98.1	6.23	4.92
9 E	119.3	95.1	5.68	4.53
10 C	117.3	94.8	5.42	4.38
11 A	126.1	99.6	6.10	4.82
12 D	114.4	90.4	5.65	4.47
14 D	107.2	85.7	5.38	4.30
15 C	123.5	97.7	6.09	4.82
16 E	113.9	86.3	5.73	4.34
17 E	120.6	92.1	5.73	4.40
18 B	126.5	98.8	5.61	4.38
19 C	118.9	96.8	5.58	4.54
22 D	124.1	100.5	5.95	4.82
25 B	121.3	99.2	5.32	4.35
26 A	115.1	92.2	5.69	4.56
27 E	116.2	90.1	5.93	4.60
AVERAGE	120.0	95.1	5.82	4.62

Feed conversion figures give poultrymen an excellent tool with which to evaluate their feeding program. To figure the conversion rate, simply divide pounds of feed used by the dozens of eggs produced. This gives the ranch conversion rate which includes all feed used on the ranch. To arrive at an estimate for the actual laying flock (over 24 weeks of age) it is necessary to subtract the feed used up to 24 weeks to raise the pullet. For this study we subtracted 23½ pounds for each leghorn that was fed for the entire 24 week period.

Management Factors

Serial No. And Size	Per Cent Mortality to 24 weeks	Per Cent of Average Laying Flock			
		Died	Culled	Added	Increase or Decrease
1 E	7.9	10.5	108.5	118.2	-.8
2 D	11.1	13.3	63.4	95.3	+18.6
3 E	8.6	21.8	72.5	146.5	+52.2
5 D	3.2	14.8	73.9	90.5	+1.8
6 C	29.4	10.5	88.2	86.9	-11.8
7 B	12.0	12.9	102.7	115.1	-.5
8 C	11.2	14.7	87.3	105.3	+3.3
9 E	13.6	9.6	83.1	88.1	-4.6
10 C	4.1	6.4	87.7	92.7	-1.4
11 A	6.5	10.3	80.6	104.2	+13.3
12 D	16.6	14.0	77.2	91.2	0
14 D	5.5	14.5	63.7	89.6	+10.4
15 C	7.9	8.9	84.8	105.4	+11.7
16 E	24.8	9.1	63.4	75.3	+2.8
17 E	6.4	10.7	103.3	111.5	-2.5
18 B	11.5	8.9	94.0	104.6	+1.7
19 C	12.7	4.7	78.3	102.8	+18.8
22 D	5.8	9.6	99.9	94.6	-14.9
25 B	6.3	7.0	95.8	102.7	-.1
26 A	4.2	11.3	40.6	73.3	+21.4
27 E	12.2	17.7	75.0	110.7	+18.0
AVERAGE	10.5	11.5	82.1	100.2	+6.6

Since this study utilizes the hen-day method, it is a simple matter to arrive at the average flock size for the entire year. The total died, culled and added are then divided by the average flock size to arrive at the percentages in the above table. The amount of pullets you must add and the rate at which you cull is highly related to the number of eggs produced per average hen barring no disease or heavy mortality problems. The increased replacement cost must be weighed against the increased production gain. When the replacement rate is too high.

Miscellaneous Data

Serial No. And Size	Cost Per Cwt. Feed (1)	Hours Labor Per Hen	Per Cent Labor Hired	Price Rec'd Per Cull	Actual Chick Cost (2)
5 D	$ 3.15	.64	46 %	29.9 ¢	27.7 ¢
6 C	3.25	1.01	64	22.9	26.0
7 B	3.46	.80	0	25.1	36.5
10 C	3.54	.85	44	30.3	32.0
11 A	3.25	1.13	8	27.0	29.5
15 C	3.35	.68	10	36.6	30.8
18 B	3.29	.78	21	26.7	33.7
19 C	3.19	.58	13	29.2	34.8
22 D	3.23	.46	100	25.8	30.1
25 B	3.34	.80	0	29.8	36.1
AVERAGE	$ 3.31	.77	30 %	28.3 ¢	31.7 ¢

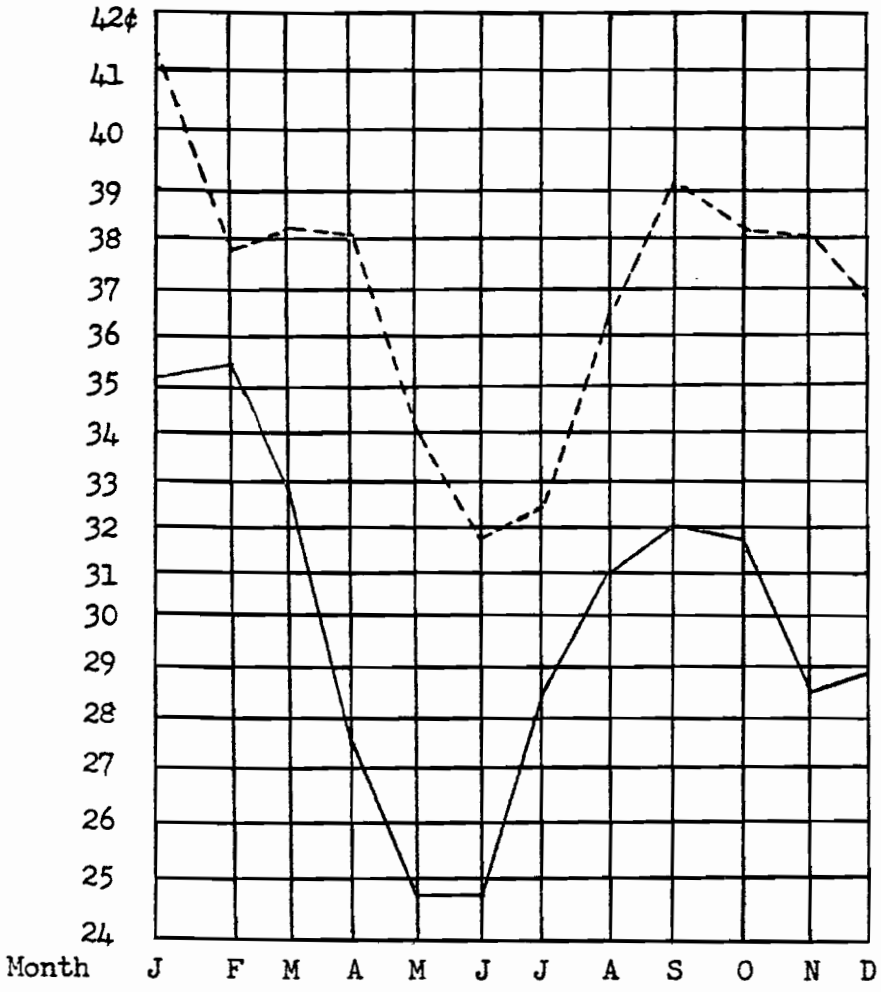
(1) Average price of all feed used on ranch minus discounts and rebates

(2) Total cost of chicks divided by total chicks delivered including extras

Housing Information

Serial No. And Size	Number of Hens Per Pen and Per Cent of Each			
	1	2 - 6	7 - 40	over 40
1 E	13 %	87 %	%	%
2 D		100		
3 E		100		
5 D				100
6 C	80	20		
7 B				100
8 C		100		
9 E	47	39		14
10 C	10	90		
11 A		93	7	
12 D		50	50	
14 D		73	27	
15 C			100	
16 E			100	
17 E	32	68		
18 B	10	90		
19 C	78	22		
22 D	23	77		
25 B	90	10		
26 A	37	63		
27 E	25	75		

*Average Prices Received for Eggs
Orange County - 1958 - 59

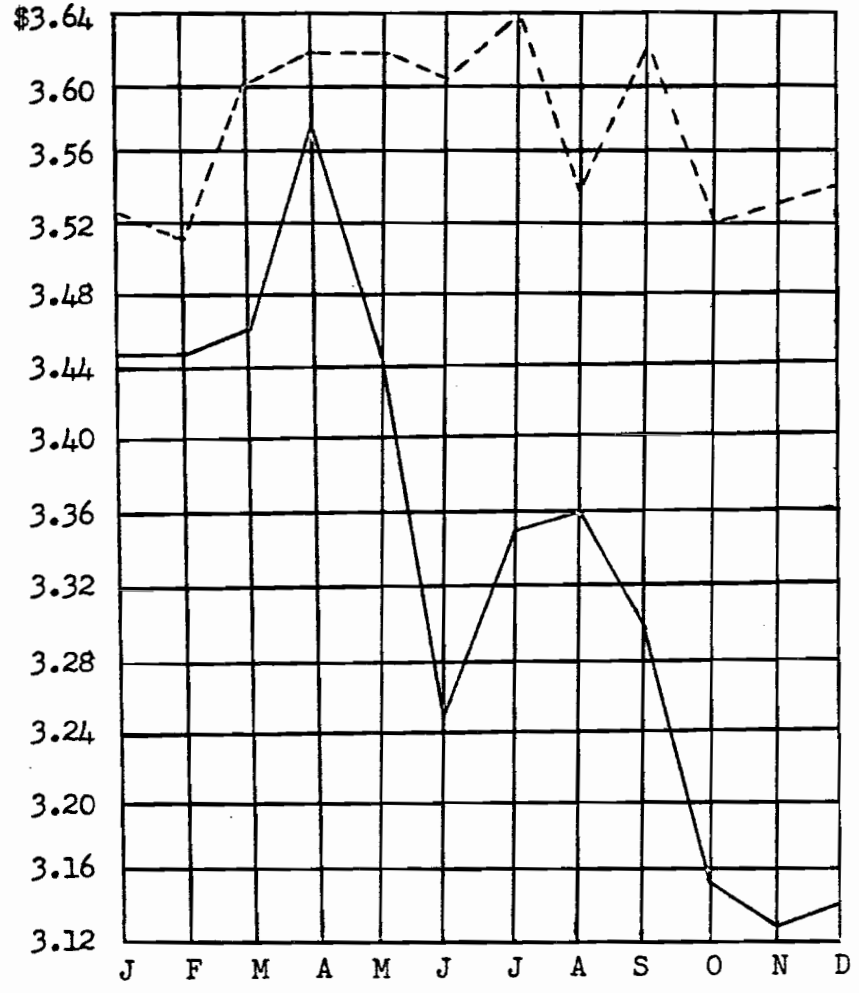


*Includes all sizes of eggs sold and 2-3% retail sales

1958 ——
1959 ——

This year many Orange County poultrymen experienced the lowest average egg prices since they have been in business. Actually it has been eighteen years since eggs have reached such a low average price. In 1941 it got down to 28.8 cents per dozen. Helping to offset the low price in 1959 though was the highest average egg production in the history of the Orange County Management Study.

*Average Total Ration Cost Per Cwt.
Orange County - 1958 - 59



*Includes all feed used on ranch

Low feed prices in 1959 was the main factor that kept the industry alive. The $3.31 average price for the year was the lowest average feed price since 1945 when it was $2.95 cwt. If feed prices had been as high as they were in 1958 the average poultryman would have had 20-25 cents more cost per hen which in many cases could not have been borne.