

1961 POULTRY MANAGEMENT STUDY
IN ORANGE COUNTY

INTRODUCTION

This study is conducted 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 the 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 1961 Poultry Management Study in Orange County, California. Averages 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 eleven ranches averaging 9,633 laying hens participated. A new approach was started in 1959 whereby ranchers could enter the study on a management basis without having to enter their cost and income figures. Eight ranches completed on this basis with an average of 29,427 hens each. The total number of hens for the entire study was 342,361.

GENERAL INFORMATION

<u>Ranch Sizes</u>	<u>Complete Cost Study</u>	<u>Combined Studies</u>
A less than 3,000 hens	smallest ranch - 3,064 hens	smallest ranch - 3,064 hens
B 3,000 - 5,000	LARGEST RANCH - 17,585	LARGEST RANCH - 51,475
C 5,000 - 10,000	average ranch - 9,633	average ranch - 18,019
D 10,000 - 20,000		
E over 20,000		

DISCUSSION

A thorough review of the pages following should indicate to the reader the wide degree of variation existing between individual poultrymen. The averages are not intended to represent the results of the industry but rather the results of a group of poultrymen interested in knowing what is going on in their business.

This study is not considered as a contest and no prizes are awarded at the completion. Accurate reporting on the part of the cooperators is a must if he is to be able to compare his results with others in the study.

Errors are bound to occur in any study of this magnitude, but when results are out of proportion with others in the study, a double check of the data is made.

EGG PRODUCTION AND SIZES

Serial No. And Size	Eggs Per Hen	Per Cent Production	Per Cent Large	Per Cent Medium	Per Cent Small	Per Cent Commercial (1)	Per Cent Retail	No. Months In-plant Egg Processing
1C	258.4	70.8	66.2	24.0	6.4	3.4	1.1	12
2B	272.7	74.7	65.8	25.2	7.3	1.7	2.9	12
3D	246.4	67.5	71.6	21.0	4.5	2.9	4.6	0
4D	250.1	68.5	77.2	12.9	1.8	8.1	10.2	1.5
5D	258.5	70.8	75.0	21.2	2.8	1.0	.6	12
6C	261.1	71.5	73.6	23.0	2.6	.8	3.2	12
7D	254.1	69.6	67.6	24.8	4.8	2.8	0	2
8B	263.0	72.1	74.3	19.6	3.4	2.7	8.1	12
9D	232.7	63.8	65.2	26.1	7.3	1.4	1.1	0
10D	216.0	59.2	75.4	18.5	3.9	2.2	11.4	0
11C	205.9	56.4	62.5	18.9	17.8	.8	0	1.5
AVERAGE	247.2	67.7	70.4	21.4	5.7	2.5	3.9	
12D	248.5	68.1						
13E	246.8	67.6						
14E	245.0	67.1						
15E	238.4	65.3						
16E	237.2	65.0						
17D	236.1	64.7						
18E	235.5	64.5						
19E	230.0	63.0						
AVERAGE	239.7	65.7						
OVER-ALL AVERAGE	244.0	66.8						

(1) Includes cracks, pee wees and frozen eggs

Average production rate in the 1961 study exceeded that of the 1960 study by $\frac{1}{2}\%$. This probably is not a significant difference due to the rather wide range of results. A difference of $5\frac{1}{2}$ dozen eggs exists between the highest and lowest producing ranches. Five ranches maintained better than 70% average production for the entire year while two averaged less than 60%.

This year we saw a trend away from the on-ranch cleaning and sizing of eggs. Egg processors were beginning to provide this service to the poultrymen for a fee of one-half cent to one cent per dozen. For this reason we have included a column to indicate where this task was being performed and for how long. It is an attempt to further explain differences in egg income.

INCOME AND COSTS PER HEN

(ranked according to management income per hen)

Serial No. And Size	INCOME					CASH COSTS					Depre- ciation	NON-CASH COSTS		Total Costs
	Egg Sales	Cull Hens	Change of Stock Inventory (1)	Ferti- lizer	Total	Feed	Re- place- ments	Hired Labor	Misc. (2)	Total		Family Labor (3)	Int. on Investment (4)	
1C	\$ 6.80	\$.24	\$.33	\$ 0	\$ 7.37	\$ 3.63	\$.53*	\$.12	\$.31	\$ 4.59	\$.27	\$.46	\$.20	\$ 5.52
2B	6.79	.23	.09	0	7.11	3.56	.28	.10	.40	4.34	.13	.73	.18	5.38
3D	6.51	.28	0	.01	6.80	3.55	.26	.07	.27	4.15	.24	.61	.18	5.18
4D	6.77	.20	.05	0	7.02	3.45	.31	.87	.47	5.10	.10	.05	.16	5.41
5D	6.57	.19	.11	0	6.87	3.56	.28	.10	.44	4.38	.31	.41	.22	5.32
6C	6.76	.25	.03	0	7.04	3.66	.28	.06	.28	4.28	.40	.57	.25	5.50
7D	6.52	.24	.02	.01	6.79	3.36	.28	.43	.36	4.43	.38	.25	.30	5.36
8B	6.91	.27	-.01	0	7.17	3.80	.34	0	.37	4.51	.16	.88	.20	5.75
9D	6.32	.26	.16	.01	6.75	3.49	.32	.55	.43	4.79	.22	.49	.20	5.70
10D	5.97	.21	.31	0	6.49	3.51	.31	.46	.57	4.85	.25	.31	.18	5.59
11C	5.17	.23	.10	0	5.50	3.49	.22	.70	.51	4.92	.15	.44	.24	5.74
AVERAGE	6.46	.24	.11	0	6.81	3.56	.31	.31	.40	4.58	.24	.47	.21	5.50

(1) Increased or decreased flock evaluation

(3) \$1.50 per hour

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

(4) 6% of average investment

SUMMARY OF INCOME PER HEN

(ranked according to management income per hen)

Serial No. And Size	Total Income	Cash Costs	Cash Income	Depre- ciation	Net Farm Income	Non-Cash Costs	Management Income
		minus	equals		minus	equals	
1C	\$ 7.37	\$ 4.59	\$ 2.78	\$.27	\$ 2.51	\$.66	\$ 1.85
2B	7.11	4.34	2.77	.13	2.65	.91	1.73
3D	6.80	4.15	2.65	.24	2.41	.79	1.62
4D	7.02	5.10	1.92	.10	1.82	.21	1.61
5D	6.87	4.38	2.49	.31	2.18	.63	1.55
6C	7.04	4.28	2.76	.40	2.36	.82	1.54
7D	6.79	4.43	2.36	.38	1.98	.55	1.43
8B	7.17	4.51	2.66	.16	2.50	1.08	1.42
9D	6.75	4.79	1.96	.22	1.74	.69	1.05
10D	6.49	4.85	1.64	.25	1.39	.49	.90
11C	5.50	4.92	.58	.15	.43	.68	-.25
AVERAGE	6.81	4.58	2.23	.24	1.99	.68	1.31

Income on a per hen basis was 45¢ less than in 1960 while total costs were 37¢ less. This resulted in an 8¢ difference in management income for the two years.

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.

Non-cash costs may be considered as income by some persons, but for the sake of comparison these non-cash costs must be included as an expense. Due to extreme variations in these non-cash costs ranches highest in Cash Income may fall somewhat lower in Management Income.

INCOME AND COSTS PER DOZEN EGGS SOLD IN CENTS

(ranked according to management income per hen)

Serial No. And Size	INCOME			CASH COSTS					Cash Income	Depre- ciation	Net Farm Income	NON-CASH COSTS		Management Income
	Eggs	Other (1)	Total	Feed	Re- place- ments	Hired Labor	Misc. (2)	Total				Family Labor (3)	Int. on Investment (4)	
1C	31.8¢	2.7¢	34.5¢	16.9¢	2.4¢	.6¢	1.5¢	21.4¢	12.6¢	1.3¢	11.8¢	2.1¢	1.0¢	8.7¢
2B	32.4	1.5	33.9	17.0	1.3	.5	1.9	20.7	13.2	.6	12.6	3.5	.9	8.2
3D	32.0	1.3	33.3	17.4	1.3	.3	1.3	20.3	13.0	1.2	11.8	3.0	.9	7.9
4D	33.1	1.2	34.3	16.9	1.5	4.2	2.3	24.9	9.4	.5	8.9	.2	.8	7.9
5D	30.5	1.4	31.9	16.5	1.3	.5	2.0	20.3	11.6	1.4	10.2	1.9	1.1	7.2
6C	31.3	1.3	32.6	16.9	1.3	.3	1.3	19.8	12.8	1.9	10.9	2.7	1.1	7.1
7D	31.3	1.3	32.6	16.1	1.3	2.1	1.7	21.2	11.4	1.8	9.6	1.3	1.4	6.9
8B	31.6	1.1	32.7	17.3	1.6	0	1.7	20.6	12.1	.7	11.4	4.0	1.0	6.4
9D	30.8	2.1	32.9	17.0	1.5	2.7	2.1	23.3	9.6	1.1	8.5	2.4	1.0	5.1
10D	33.6	2.9	36.5	19.8	1.7	2.6	3.2	27.3	9.2	1.4	7.8	1.8	1.0	5.0
11C	30.8	2.0	32.8	20.8	1.3	4.2	3.0	29.3	3.5	.9	2.6	2.6	1.4	-1.4
AVERAGE	31.7	1.7	33.4	17.5	1.5	1.6	2.0	22.6	10.8	1.2	9.6	2.2	1.1	6.3

(1) Includes change of stock inventory, cull hens and fertilizer income

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

(3) \$1.50 per hour

(4) 6% on average investment

This page of "Income and Costs Per Dozen Eggs Sold" enables poultrymen not keeping records on a hen-day basis to compare directly with those ranches in this study. The only figures needed for this comparison are the total dozens of eggs sold during the year and the total cost of the item for which you wish to make comparisons.

Income from egg sales in 1961 averaged 1.8¢ per dozen less than in 1960. Part of this was due to in-plant processing of eggs and part was due to a lower market price. Egg size and retail sales were essentially the same for the two years.

FEED CONSUMPTION AND FEED CONVERSION

MANAGEMENT FACTORS

Serial No. And Size	Pounds Feed Per Hen		Pounds Feed Per Doz. Eggs	
	All Feed	Estimate for Layers	All Feed	Estimate for Layers
1C	122.5*	99.9	5.69*	4.64
2B	111.5	88.9	4.91	3.91
3D	114.7	90.0	5.59	4.38
4D	118.2	96.7	5.67	4.64
5D	120.8	96.3	5.61	4.47
6C	119.4	97.2	5.42	4.47
7D	114.5	92.1	5.41	4.35
8B	129.2	106.2	5.90	4.85
9D	117.8	93.2	6.07	4.81
10D	115.9	92.5	6.44	5.14
11C	118.8	94.8	6.92	5.52
AVERAGE	118.5	95.3	5.78	4.65
12D	111.3	85.1	5.38	4.11
13E	118.9*	98.6	5.78*	4.79
14E	119.4	94.5	5.85	4.63
15E	120.4	93.1	6.06	4.69
16E	108.0	86.0	5.46	4.35
17D	110.7	93.9	5.63	4.77
18E	105.2	83.0	5.36	4.23
19E	111.2	91.5	5.80	4.77
AVERAGE	113.1	90.7	5.67	4.54
OVER-ALL AVERAGE	116.2	93.3	5.73	4.61

*Some started pullets' feed consumption not included

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.

Serial No. And Size	Per Cent Mortality to 24 Weeks	Per Cent of Average Laying Flock			
		Died	Culled	Added	Increase or Decrease
1C	5.4	8.5	71.3	94.3	+14.5
2B	6.3	8.3	80.0	96.2	+ 7.9
3D	5.1	9.6	80.1	106.3	+16.6
4D	6.7	6.5	75.9	91.4	+ 9.0
5D	8.1	9.6	67.5	106.1	+29.0
6C	4.8	6.8	84.4	92.0	+ .8
7D	5.8	9.0	80.8	102.6	+12.8
8B	6.4	11.7	87.2	93.5	- 5.4
9D	4.6	9.8	72.2	88.6	+ 6.6
10D	5.3	14.8	70.1	87.3	+ 2.4
11C	22.6	15.1	68.8	91.7	+ 7.8
AVERAGE	7.4	10.0	76.2	95.5	+ 9.3
12D	5.6	11.8	88.6	127.7	+27.3
13E	6.2	8.7	80.8	100.8	+11.3
14E	6.6	13.0	89.8	112.9	+10.1
15E	8.4	13.6	96.5	113.7	+ 3.6
16E	9.5	13.0	69.4	88.3	+ 5.9
17D	5.8	12.8	74.2	84.4	- 2.6
18E	?	18.3	75.6	94.4	+ .5
19E	5.5	11.5	72.3	107.2	+23.4
AVERAGE	6.8	12.8	80.9	103.7	10.6
OVER-ALL AVERAGE	7.2	11.2	78.2	98.9	+ 9.5

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.

In 1961 a great improvement was noted in the pullet and hen mortality columns. In both cases a 2% less mortality rate was noted. This was done with essentially the same amount of culling.

MISCELLANEOUS DATA

(ranked according to management income per hen)

Serial No. And Size	Cost Per Cwt. Feed (1)	Hours Labor Per Hen	Per Cent Labor Hired	Price Rec'd Per Cull	Chick Cost (2)
1C	\$ 2.96	.40	23%	33.5¢	30.9¢
2B	3.19	.49	6	26.9	27.2
3D	3.09	.48	14	34.9	26.0
4D	2.92	.40	92	26.7	31.8
5D	2.94	.35	22	27.6	32.7
6C	3.06	.43	9	29.7	34.5
7D	2.94	.41	58	29.6	28.7
8B	2.94	.59	0	31.0	33.5
9D	2.96	.66	50	35.3	27.2
10D	3.03	.51	59	30.1	27.8
11C	2.94	.88	67	34.0	20.6
AVERAGE	\$ 3.00	.51	36%	30.8¢	29.2¢

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

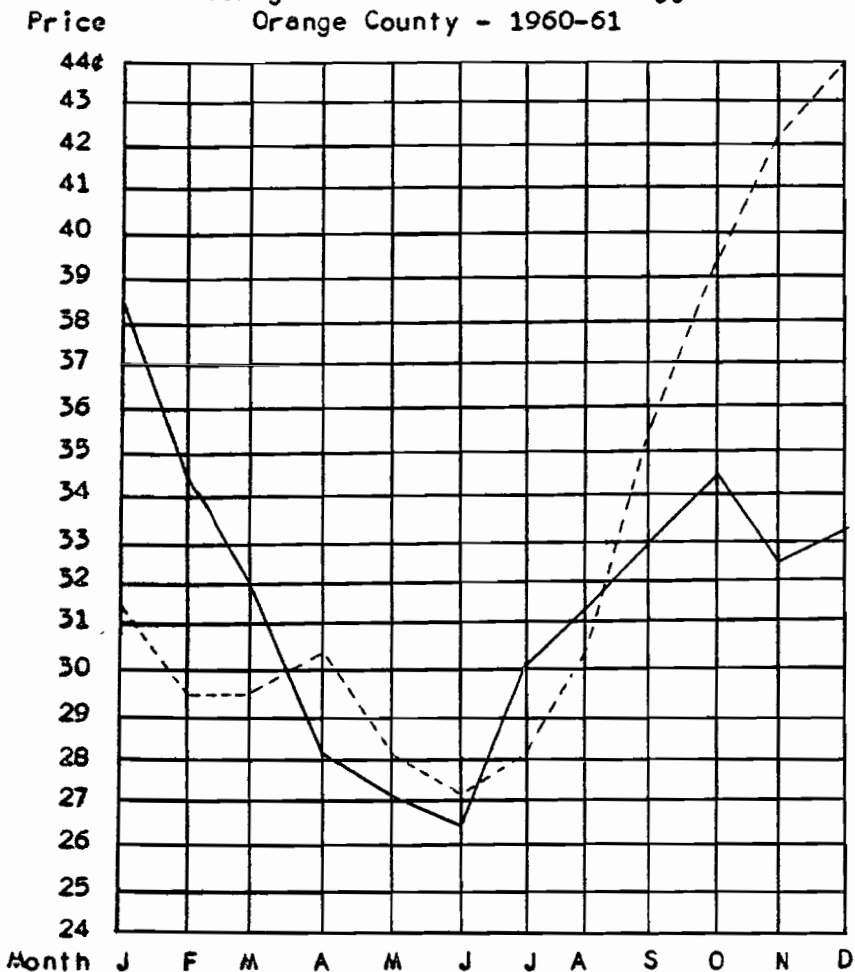
(2) Total cost of chicks divided by total chicks delivered including extras

HOUSING INFORMATION

Serial No. And Size	Number of Hens Per Pen and Per Cent of Each			
	1	2 - 6	7 - 40	over 40
1C	8%	92%	%	%
2B	47	53		
3D			100	
4D	21	79		
5D	50	50		
6D	5	95		
7D	50	50		
8B	80	20		
9D				100
10D		100		
11C	80	20		
12D		75	25	
13E			100	
14E	47	39		14
15E	32	68		
16E	20	80		
17D		56	44	
18E		23		77
19E		100		

All of the chickens in this study are housed in some type of wire-floored pen. These range in size from 8 by 18 inches to 8 by 10 feet. The most consistent type of housing is the single aisle cage house with two or three hens in a 12 by 18 inch cage.

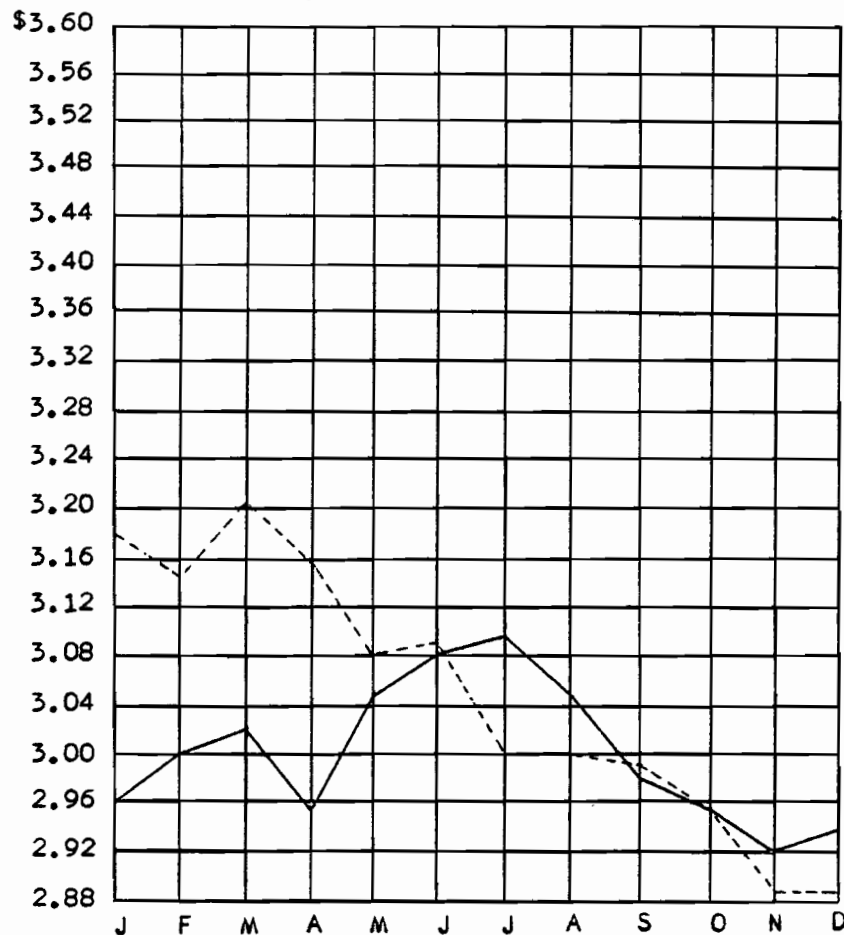
*Average Prices Received for Eggs
Orange County - 1960-61



*Includes all sizes of eggs sold and 2-4% retail sales

This graph of average monthly egg prices indicates the seasonal pattern of the supply and demand of eggs in this area. During the past six years of poultry management studies in Orange County, the annual low price for eggs always occurs in June. The highest price varies from December to February.

*Average Total Ration Cost Per Cw.
Orange County - 1960-61



*Includes all feed used on ranch

1960 -----
1961 ———

Feed prices remained at a relatively low level in 1961 as compared to 1960. This year the over-all average feed price was \$3.00 per hundred pounds as opposed to \$3.05 in 1960. Many ranches are purchasing feed in larger quantity than in the past and thereby are receiving volume discounts. Egg-feed ratio (the pounds of feed one dozen eggs will buy) is 9.4 against 9.3 for 1960.