1967

POULTRY MANAGEMENT STUDY

FOR

RIVERSIDE AND ORANGE COUNTIES

INTRODUCTION

The University of California Agricultural Extension Service conducted Poultry Management Studies in six California counties in 1967. This report represents the combined study in Orange-Riverside Counties.

There are several purposes for conducting such studies. The first and most important is to help the individual cooperator analyze his management decisions and economic situation. The second purpose is to provide a set of management and economic standards which can form the basis for industry comparison. It is only through accumulated data of this type that poultrymen can know where they stand and then make changes to improve their position.

In 1967 seven ranches with an average of 27,059 hens per ranch participated in this two-county study. All of these ranches submitted full cost and income data as well as production and management information on a regular interval every four weeks. Complete analyses were mailed back to each cooperator representing each four week period as well as the entire year to date.

TERMS

1. Hens - All chickens 24 weeks of age and older.
2. Percent Culled, Percent Died, Percent Added — Total number of birds in each category divided by average number of hens.
3. Commercial Eggs - Includes cracks, pee wees and B grade eggs.
4. Change in Stock Inventory - Increase or decrease in flock valuation.
5. Miscellaneous Costs - Vaccines, medication, repairs, taxes, utilities, small equipment, etc.
6. Depreciation - From Federal Income Tax Report.
7. Family Labor - Estimated hours at $1.50 per hour.
8. Interest on Investment - Average value of stock, buildings and equipment, and market value for land times 6%.
9. Costs and Income Per Dozen - Costs or income divided by dozens of eggs sold.
10. Feed Consumption and Conversion - Feed used divided by dozens of eggs produced.
11. Cost per cwt. of Feed - Value of all feed purchased divided by total weight.
12. Chick Cost - Total cost of chicks divided by total chicks delivered, including extras.
13. Cash Income - Amount remaining after all cash costs are paid.
14. Net Farm Income - Amount remaining after all cash costs and depreciation costs are paid.
15. Management Income - Amount remaining after all cash, depreciation, and non-cash costs (family labor and interest on investment) are paid.

RANCH CODES

A - 10-15,000 hens
B - 15-30,000
C - 30-50,000
D - 50,000 and over

GENERAL INFORMATION

All records are kept on a "hen-day" basis. A daily inventory of all chickens is maintained throughout the year. The ranches in all tables are listed in the order of decreasing management income per hen as shown in Table No. 5.

DISCUSSION

1967 returns to management were the second lowest in the 21 years of the Riverside County Poultry Management Study. The 44¢ per hen deficit in 1959 still holds the post World War II record for losses in the egg business. This is still true even though the cooperators in the 1967 study received 4.6¢ less per dozen for their eggs than did the cooperators in 1959. This tends to illustrate the remarkable cost cutting which has taken place during the last eight years.

EGG PRODUCTION, SIZES AND PRICES

Table No. 1

Serial No. and Size	Eggs Per Hen	% Production	% Large	% Medium	% Small	% Commercial	% Retail	Average Egg Price		
								Wholesale	Retail	All Eggs
1C	251.3	68.8	67.7	21.3	4.2	6.8	1.8	25.6¢	39.1¢	25.8¢
2C	239.3	65.6	72.4	18.2	3.0	6.4	4.6	24.8	33.2	25.2
3B	220.9	60.5	74.1	12.7	4.6	8.6	1.4	27.3	45.0	27.5
4B	234.6	64.3	78.4	12.7	1.5	7.4	.1	25.3	35.1	25.3
5B	204.4	56.0	66.2	21.7	3.6	8.5	2.7	23.8	38.8	24.3
6C	219.1	60.0	68.4	19.6	3.9	8.1	.7	24.1	50.8	24.2
7A	208.5	57.1	72.6	16.0	3.1	8.3	7.2	24.7	40.2	25.8
Top 3	237.2	65.0	71.4	17.4	3.9	7.3	2.6	25.9	39.1	26.2
Bottom 3	210.7	57.7	69.1	19.1	3.5	8.3	3.5	24.2	43.3	24.8
1967 Average	225.4	61.8	71.4	17.5	3.4	7.7	2.6	25.1	40.3	25.4
1966 Average	230.9	63.3	70.0	18.4	3.6	8.0	2.5	33.6	41.7	33.8

Egg production per hen is the lowest since 1951. This is in large part due to the increased use of force molting. During the rest period of the molt relatively few eggs are laid. Since the molting hens are still included in the inventory for the ranch, this tends to lower hen-day production. On the surface this would appear to be a poor practice, but not necessarily if it has resulted in lower costs at the same time.

INCOME PER HEN

Table No. 2

Serial No. and Size	Egg Sales	Cull Hens	Change in Stock Inventory	Miscellaneous	Total
1C	$5.30	$ .13	$ .01	--	$5.44
2C	5.02	.05	-.24	.01	4.84
3B	5.03	.08	-.07	--	5.04
4B	4.98	.09	-.08	--	4.99
5B	4.05	.12	-.04	--	4.13
6C	4.50	.06	-.32	.01	4.25
7A	4.45	.18	-.08	.03	4.58
Top 3	5.12	.09	-.10	--	5.11
Bottom 3	4.33	.12	-.14	.01	4.32
1967 Average	4.76	.10	-.12	.01	4.75
1966 Average	6.43	.16	.14	0	6.73

Income from egg sales was down $1.67 per hen from the 1966 study. This huge drop in income was a result of the drop in egg prices of 8.4¢ per dozen. All but one farm had less value in poultry stock at the end of the year than they did at the beginning. This was a direct result of skipping or delaying their normal replacements. All but one farm had less hens at the end of the year than at the beginning.

COSTS PER HEN

Table No. 3

Serial No. and Size	CASH COSTS					Depreciation	NON-CASH COSTS		Total Costs
	Feed	Replacement*	Hired Labor	Misc.	Total		Family Labor	Int. on Investment	
1C	$3.78	$ .29	$ .23	$ .33	$4.63	$ .12	$ .19	$ .24	$5.18
2C	3.21	.07	.47	.45	4.20	.06	.10	.30	4.66
3B	3.51	.25	.21	.47	4.44	.15	.17	.25	5.01
4B	3.49	.17	.30	.34	4.30	.32	.17	.29	5.08
5B	3.29	.21	.10	.30	3.90	.16	.27	.20	4.53
6C	3.34	.35	.17	.32	4.18	.23	.20	.17	4.78
7A	3.31	.30	.46	.49	4.56	.16	.27	.27	5.26
Top 3	3.50	.20	.30	.42	4.42	.11	.15	.26	4.95
Bottom 3	3.31	.29	.24	.37	4.21	.18	.25	.21	4.86
1967 Average	3.42	.23	.28	.39	4.32	.17	.20	.25	4.93
1966 Average	3.51	.41	.28	.37	4.57	.23	.17	.25	5.22

*Cost of baby chicks and/or started pullets divided by average hens.

Costs in 1967 were down because there were fewer started pullets purchased and because less feed was used per average hen. These two items together accounted for 90% of the reduction in costs between the two years. The bottom three farms actually had 9¢ per hen lower costs but this was offset by 79¢ less income.

MISCELLANEOUS COSTS PER HEN

Table No. 4

Ranch	Medicines & Vaccines[1]	Repairs & Small Equip.	Utilities[2]	Auto & Truck[3]	Insurance	Taxes	Other	Total
1C	4.61¢	.53¢	3.46¢	.61¢	--	17.43¢	6.24¢	32.88¢
2C	12.48	4.04	3.52	1.17	3.37¢	13.30	7.09	44.97
3B	10.66	6.38	6.44	3.05	2.35	8.05	9.56	46.49
4B	3.57	3.99	6.29	1.80	2.46	9.16	6.92	34.19
5B	4.50	5.29	9.20	1.02	1.10	7.75	1.16	30.02
6C	9.11	9.10	6.21	.63	.95	6.28	.07	32.35
7A	3.18	12.02	10.83	2.61	3.79	10.26	6.55	49.24
Top 3	9.25	3.65	4.47	1.61	1.91	12.93	7.63	41.45
Bottom 3	5.60	8.80	8.75	1.42	1.95	8.10	2.59	37.20
1967 Average	6.87	5.91	6.56	1.56	2.00	10.32	5.37	38.59
1966 Average	7.77	5.50	6.37	1.48	1.41	8.30	6.41	37.64

1) Includes all antibiotics or drugs added to the feed as well as those used separately, vaccines and veterinary service.
2) Water, electricity, gas, telephone.
3) 10 cents per mile.

INCOME OVER COSTS PER HEN

Table No. 5

Serial No. and Size	Total Income	minus	Cash Costs	equals	Cash Income	minus	Depreciation	equals	Net Farm Income	minus	Non-Cash Costs	equals	Management Income
1C	$5.44		$4.63		$ .81		$ .12		$ .69		$ .43		$ .26
2C	4.84		4.20		.64		.06		.58		.40		.18
3B	5.04		4.44		.60		.15		.45		.42		.03
4B	4.99		4.30		.69		.32		.37		.46		-.11
5B	4.13		3.90		.23		.16		.07		.47		-.40
6C	4.25		4.18		.07		.23		-.16		.37		-.53
7A	4.58		4.56		.02		.16		-.14		.54		-.68
Top 3	5.11		4.42		.68		.11		.57		.42		.16
Bottom 3	4.32		4.21		.11		.18		-.08		.46		-.54
1967 Average	4.75		4.32		.44		.17		.27		.44		-.18
1966 Average	6.73		4.57		2.16		.23		1.93		.42		1.51

Management income in 1967 was in the red for the third time since 1947. The other two years were 1954 and 1959. This was brought about by the excessively large hatch of egg-type chicks in 1966. The California 1966 hatch was 14% over the 1965 hatch. The number of layers in California in 1967 was 37.1 million versus 34.2 million in 1966 and 32.6 million in 1965.

INCOME AND COSTS PER DOZEN EGGS SOLD

Table No. 6

Serial No. & Size	INCOME			CASH COSTS					Cash Income	Depre-ciation	Net Farm Income	NON-CASH COSTS		Total Costs	Manage-ment Income
	Eggs	Other*	Total	Feed	Replace-ments	Hired Labor	Misc.	Total				Family Labor	Int. on Invest.		
1C	25.8¢	.7¢	26.5¢	18.3¢	1.4¢	1.1¢	1.6¢	22.4¢	4.1¢	.6¢	3.5¢	.9¢	1.2¢	25.1¢	1.4¢
2C	25.2	-.9	24.3	16.1	.4	2.4	2.3	21.2	3.1	.3	2.7	.5	1.5	23.5	.7
3B	27.5	.1	27.6	19.2	1.4	1.1	2.5	24.2	3.4	.8	2.6	.9	1.4	27.3	.3
4B	25.3	0	25.3	17.7	.9	1.5	1.7	21.8	3.5	1.6	1.9	.9	1.5	25.8	-.5
5B	24.3	.4	24.7	19.7	1.3	.6	1.8	23.4	1.3	.9	.4	1.6	1.2	27.1	-2.4
6C	24.3	-1.4	22.9	18.0	1.9	.9	1.7	22.5	.4	1.2	-.8	1.1	.9	25.7	-2.8
7A	25.8	.8	26.6	19.2	1.7	2.7	2.9	26.5	.1	.9	-.8	1.6	1.6	30.6	-4.0
Top 3	26.2	0	26.1	17.9	1.1	1.5	2.1	22.6	3.5	.6	2.9	.8	1.4	25.3	.8
Bottom 3	24.8	-.1	24.7	19.0	1.6	1.4	2.1	24.1	.6	1.0	-.4	1.4	1.2	27.8	-3.1
1967 Av.	25.5	0	25.4	18.3	1.3	1.5	2.1	23.1	2.3	.9	1.4	1.1	1.3	26.4	-1.0
1966 Av.	33.8	1.6	35.4	18.5	2.2	1.5	2.0	24.2	11.2	1.2	10.0	1.0	1.3	27.7	7.7

*Includes cull and manure sales and change of inventory value.

Income from eggs failed to equal the total cost of production for 40 weeks of 1967. It also failed to equal the cash costs of production during 20 weeks. The 18.3¢ per dozen feed cost represents all feed purchased on the farm (including that fed to pullets). The replacement costs represent only the cost of chicks and/or started pullets.

MISCELLANEOUS COSTS PER DOZEN

Table No. 7

Ranch	Medicines & Vaccines[1]	Repairs & Small Equip.	Utilities[2]	Auto & Truck[3]	Insurance	Taxes	Other	Total
1C	.22¢	.03¢	.17¢	.03¢	--	.85¢	.30¢	1.60¢
2C	.63	.20	.18	.06	.17¢	.67	.36	2.17
3B	.58	.34	.35	.17	.13	.44	.52	2.53
4B	.18	.20	.32	.09	.13	.47	.35	1.74
5B	.27	.32	.55	.06	.07	.46	.07	1.80
6C	.49	.49	.33	.03	.05	.34	--	1.73
7A	.18	.70	.63	.15	.22	.60	.33	2.86
Top 3	.48	.19	.23	.09	.10	.65	.39	2.10
Bottom 3	.31	.50	.50	.08	.11	.47	.13	2.13
1967 Average	.36	.36	.36	.08	.11	.55	.28	2.06
1966 Average	.41	.34	.34	.08	.08	.44	.34	2.01

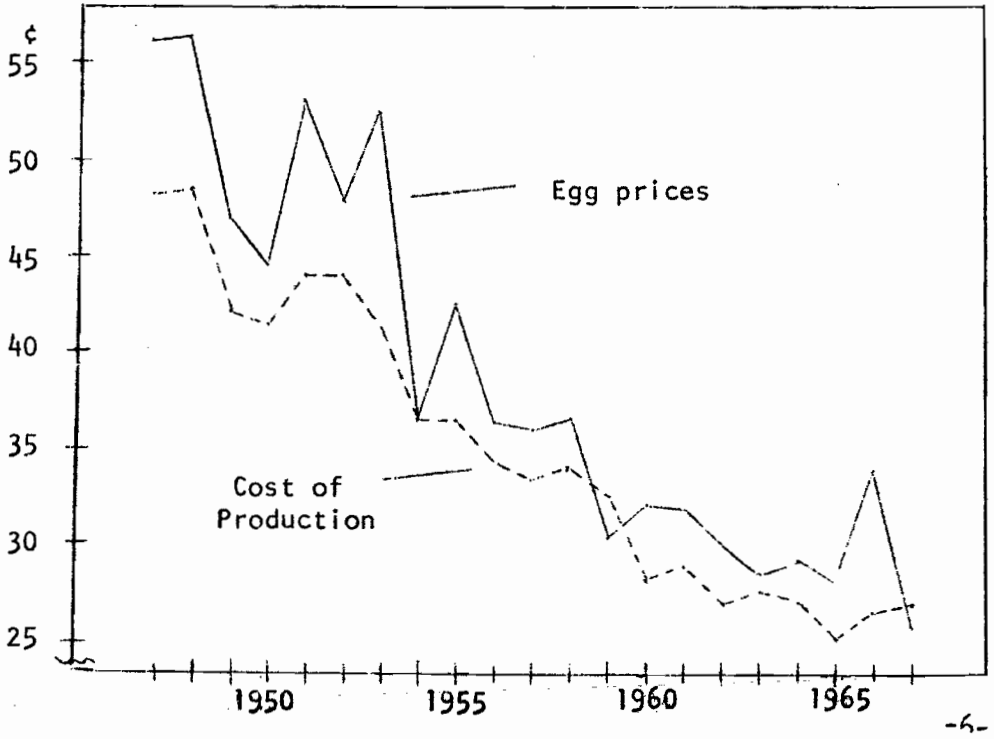
1) Includes all antibiotics or drugs added to the feed as well as those used separately, vaccines and veterinary service.
2) Water, electricity, gas, telephone
3) 10 cents per mile.

SUMMARY OF COST OF PRODUCTION PER DOZEN

Table No. 8

Serial No. and Size	Feed	Replacements	Hired Labor	Misc.	Depre-ciation	Family Labor	Interest on Investment	Total Costs	Minus Non-Egg Costs	Net Costs
1C	18.3¢	1.4¢	1.1¢	1.6¢	.6¢	.9¢	1.2¢	25.1¢	.7¢	24.4¢
2C	16.1	.4	2.4	2.3	.3	.5	1.5	23.5	-.9	24.4
3B	19.2	1.4	1.1	2.5	.8	.9	1.4	27.3	.1	27.2
4B	17.7	.9	1.5	1.7	1.6	.9	1.5	25.8	0	25.8
5B	19.7	1.3	.6	1.8	.9	1.6	1.2	27.1	.4	26.7
6C	18.0	1.9	.9	1.7	1.2	1.1	.9	25.7	-1.4	27.1
7A	19.2	1.7	2.7	2.9	.9	1.6	1.6	30.6	.8	29.8
Top 3	17.9	1.1	1.5	2.1	.6	.8	1.4	25.3	--	25.3
Bottom 3	19.0	1.6	1.4	2.1	1.0	1.4	1.2	27.8	-.1	27.9
1967 Average	18.3	1.3	1.5	2.1	.9	1.1	1.3	26.4	-.1	26.5
1966 Average	18.5	2.2	1.5	2.0	1.2	1.0	1.3	27.7	-1.6	26.1

EGG PRICES AND COST OF PRODUCTION 1947 - 67



The term "net cost of production" has many interpretations in the egg business. We prefer to define it as the total of cash and non-cash costs minus non-egg costs. These non-egg costs are those associated with the production of cull hens and manure. Since all of these farms have several flocks of birds of various ages, it is also necessary to account for inventory changes. We feel that the term "net cost of production" is a truer reflection of costs of production than the term "total costs."

The table at the left depicts the income from eggs and cost of production for the last 21 years in the Riverside County Poultry Management Study. During the last six years the cost of production has leveled off at 25¢ to 27¢ per dozen.

FEED CONSUMPTION AND FEED CONVERSION

Table No. 9

Serial No. and Size	Pounds Feed Per Hen		Pounds Per Dozen		Cost per CWT	Est. Cost Per	Feed Cost
	All Feed	Layers	All Feed	Layers	All Feed	CWT Lay Feed	Per Dozen
1C	114.2	91.5	5.45	4.37	$3.30	$3.23	14.1¢
2C	98.8	89.2	4.95	4.47	3.25	3.21	14.3
3B	108.1	90.2	5.87	4.90	3.25	3.18	15.6
4B	108.1	93.3	5.53	4.77	3.23	3.16	15.1
5B	100.2	84.0	5.88	4.93	3.28	3.21	15.8
6C	103.9	88.5	5.69	4.85	3.22	3.18	15.4
7A	101.3	82.1	5.83	4.72	3.26	3.20	15.1
Top 3	107.0	90.3	5.42	4.58	3.27	3.21	14.7
Bottom 3	101.8	84.9	5.80	4.83	3.25	3.20	15.4
1967 Average	104.9	88.4	5.60	4.72	3.26	3.20	15.1
1966 Average	107.3	89.2	5.60	4.65	3.27	3.22	14.9

Feed consumption and conversion records are based on the total quantity of feed purchased on the ranch divided by the average number of hens or the total number of dozens of eggs produced. The column headed "layers" is an estimate of the portion of the total used by the hens over 24 weeks of age. If a poultryman purchased started pullets, we would expect the "all feed" figure to be less than if he raised his own pullets.

MANAGEMENT FACTORS

Table No. 10

HOUSING INFORMATION

Serial No. and Size	Per Cent Mortality 1 Day to 24 Weeks*	Per Cent of Average Laying Flock				Number of Hens Per Pen			
		Died	Culled	Added	Increase or Decrease	1	2-6	7-40	Over 40
						Percent on Each Ranch			
1C	5.3	12.2	83.5	95.3	-.4	--	100	--	--
2C	5.7	9.5	42.8	45.9	-6.4	3	79	8	10
3B	7.8	18.1	55.8	79.9	+6.0	--	50	50	--
4B	11.1	14.4	56.0	54.9	-15.5	--	100	--	--
5B	4.9	24.7	49.4	70.3	-3.8	--	100	--	--
6C	22.0	27.0	53.1	70.8	-9.3	--	100	--	--
7A	9.3	15.5	91.8	110.0	+2.7	5	95	--	--
Top 3	6.3	13.3	60.7	73.7	-.3				
Bottom 3	12.1	22.4	64.8	83.7	-3.5				
1967 Average	9.4	17.3	61.8	75.3	-3.8				
1966 Average	6.9	16.0	57.4	84.8	+11.4				

*Based upon those pullets purchased and added to the flock in 1967.

The average mortality rate in 1967 hit a 21 year high of 17.3%. This is the result of two farms having over 2% mortality per month. The number of new pullets added also was at an all-time low reflecting the increase in average age of our flocks.

MISCELLANEOUS DATA

Table No. 12

Serial No. and Size	Hours of Labor Per Hen	Per Cent Labor Hired	Price Received Per Cull	Chick Cost	Started Pullet Cost[1]	Per Cent Started Pullets[2]	Per Cent Force Molted[3]
1C	.27	53	16.5¢	28.5¢	--	0	0
2C	.31	78	12.6	28.9	--	0	70
3B	.27	56	13.0	28.0	--	0	30
4B	.27	58	15.9	28.8	--	0	33
5B	.25	26	22.6	28.8	--	0	35
6C	.24	44	11.9	34.4	$1.59	18	35
7A	.41	56	23.3	31.9	--	0	20
Top 3	.28	62	14.0	28.5	--	--	33
Bottom 3	.30	42	19.3	31.7	--	--	29
1967 Average	.29	53	16.5	29.9	--	--	32
1966 Average	.28	58	28.1	28.8	--	--	17

1) 20 week started pullets.
2) Per cent of total replacements purchased which were started pullets.
3) Per cent of molted hens on December 31, 1967.

The author wishes to express his appreciation to the participating poultrymen for their splendid cooperation in providing the necessary records for this study. I would also like to acknowledge the assistance of Miss Linda McGinty who processed the records, assisted in the final analysis and prepared this report.

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