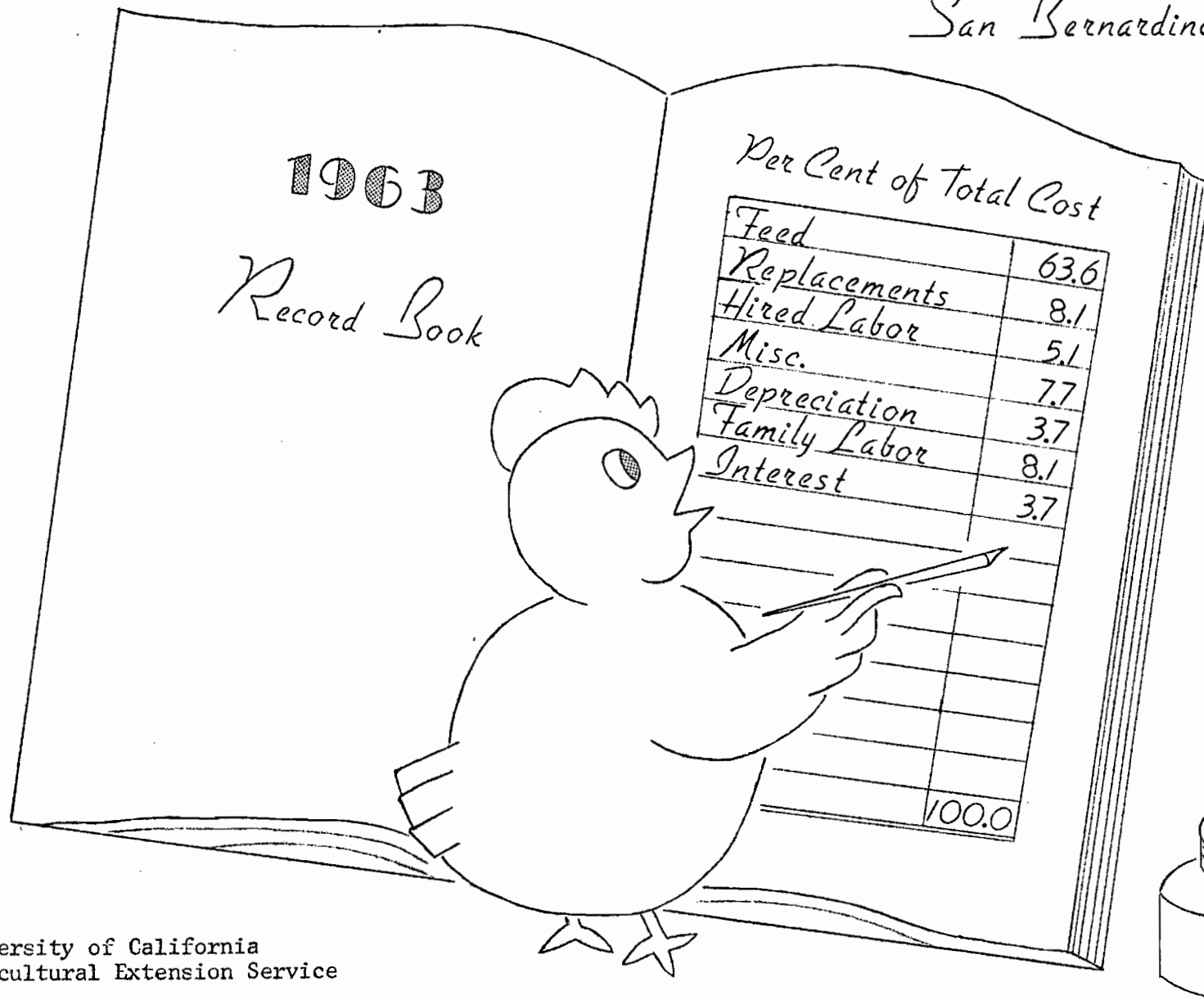


# POULTRY MANAGEMENT STUDY

San Bernardino County



## INTRODUCTION

This study was conducted with ten cooperating poultry ranches in San Bernardino County during 1963. The ranches ranged in size from 2,197 to 14,946 laying hens, with an average of 8,909 hens. The study was conducted to give participating ranches an opportunity to improve cost and income records of their operations. The study is also useful in supplying cost and management information for the poultry industry. Through the use of uniform record-keeping methods, participating ranches can compare their results with others in the study, as well as compare their own records from year to year.

Average results for the ranches were calculated by adding individual ranch results and dividing by the number of ranches involved. A weighted average was also calculated to give ranches an effect equal to their average hen number. These results are not average for the county. This is merely a summary of the records of ten poultry operations in San Bernardino County.

The cost of family labor was calculated at \$1.50 per hour. Depreciation used was the same as the producer used on his tax schedule. Interest on investment was computed at 6 per cent of reported current values of land, buildings, equipment, and poultry stock.

Most of the terms used are self-explanatory. A few which may need defining are given below:

- Stock Inventory Change - The difference between the value of the laying stock at the beginning and end of the year.
- Replacement - The amount spent on baby chicks and started pullets.
- Miscellaneous Expense - Includes vaccines, medication, repairs, taxes, utilities, insurance, etc.
- Net Farm Income - The difference between income and cash and depreciation costs before family labor and interest on investment were deducted.
- Management Income - The difference between total income and all costs.

Each cooperator was assigned a number for identification and a letter indicating flock size. Individual records in all tables are listed in order of management income, which appears in the last column. Averages are given for the high five, the low five, and an average for all ten ranches.

TABLE I - INCOME AND COST PER HEN

Ranch No. and Flock Size*	INCOME					CASH AND DEPRECIATION COSTS						Net Farm In- come	NON-CASH COSTS			Mgmt. In- come
	Egg Sales	Cull Hens	Misc. In- come	Stock Inv. Change	Total In- come	Feed	Replace- ment Cost	Hired Labor	Misc.	Depr.	Total		Family Labor	Int. on Inv.	Total Cost	
12 C	6.03	.10	--	.23	6.36	3.69	.30	.34	.40	.28	5.00	1.36	.21	.22	5.43	.93
9 B	5.79	.15	--	.46	6.40	3.84	.39	.11	.46	.18	4.98	1.42	.53	.23	5.74	.67
3 C	5.54	.05	.07	.26	5.92	3.24	.92	.11	.46	.08	4.81	1.11	.55	.12	5.48	.43
13 C	5.34	.03	.05	--	5.42	3.64	.37	.57	.35	.04	4.97	.45	--	.09	5.06	.36
10 C	5.46	.12	.01	.12	5.71	3.81	.31	.02	.47	.30	4.91	.80	.59	.23	5.72	-.01
14 B	5.01	--	.05	-.03	5.04	3.33	.58	.60	.28	.16	4.95	.09	--	.10	5.05	-.01
6 B	5.72	.28	.01	.18	6.19	3.99	.33	.24	.54	.35	5.45	.74	.45	.36	6.26	-.07
7 A	6.29	.27	--	.29	6.84	3.98	.59	--	.32	.44	5.34	1.50	2.12	.42	7.88	-1.04
4 A	5.25	.15	--	.15	5.55	3.85	.35	1.09	.42	.24	5.95	-.40	.82	.37	7.14	-1.59
2 A	5.40	.21	--	-.16	5.45	3.67	.29	.02	.71	.34	5.03	.42	1.77	.39	7.19	-1.74
Averages:																
High 5	5.63	.09	.03	.21	5.96	3.64	.46	.23	.43	.18	4.93	1.03	.38	.18	5.48	.48
Low 5	5.53	.18	.01	.09	5.81	3.76	.43	.39	.45	.31	5.34	.47	1.03	.33	6.70	-.89
All	5.58	.14	.02	.15	5.89	3.70	.44	.31	.44	.24	5.14	.75	.70	.25	6.10	-.21
Weighted Average	5.59	.11	.03	.18	5.91	3.66	.46	.29	.43	.21	5.05	.86	.45	.21	5.71	.20

\* A: Below 5,000

B: 5,000 to 10,000

C: 10,000 and above

Income from cull hens is low because of forced molting by some of the ranches. Note that the ranches in the "high" group not only had a higher income, but lower costs as well. The cost items which show the greatest difference are labor and feed. The high labor cost is caused by producers (with small flocks) working full time with a small number of birds. Management income in the study varies with size; as ranch size goes down so does management income.

TABLE II - INCOME AND COST PER DOZEN (IN CENTS)

Ranch No. and Flock Size	INCOME					CASH AND DEPRECIATION COSTS						Net Farm In- come	NON-CASH COSTS		Total Non-Cash Costs	Total Cost	Mgmt. In- come
	Egg Sales	Cull Hens	Misc. In- come	Stock Inv. Change	Total In- come	Feed	Replace- ment Cost	Hired Labor	Misc.	Depr.	Total		Family Labor	Int. on Inv.			
12 C	30.4	.5	--	1.2	32.1	18.6	1.5	1.7	2.0	1.4	25.2	6.9	1.1	1.1	2.2	27.3	4.7
9 B	28.6	.8	--	2.3	31.7	18.9	1.9	.6	2.3	.9	24.6	7.1	2.6	1.2	3.8	28.4	3.3
3 C	29.5	.3	.4	1.3	31.5	17.2	4.9	.6	2.5	.4	25.6	5.9	3.0	.6	3.6	29.2	2.3
13 C	28.5	.2	.2	--	28.9	19.1	2.0	3.0	1.9	.2	26.5	2.4	--	.5	.5	27.0	1.9
10 C	29.0	.6	.1	.7	30.4	20.3	1.6	.1	2.6	1.6	26.2	4.3	3.1	1.2	4.3	30.5	-1.1
14 B	27.7	--	.3	-.1	27.9	18.5	3.2	3.3	1.6	.9	27.4	.5	--	.6	.6	28.0	-1.1
6 B	27.8	1.3	.1	.9	30.1	19.4	1.6	1.2	2.6	1.7	26.5	3.6	2.2	1.8	4.0	30.5	-.3
7 A	29.4	1.3	--	1.3	32.0	18.6	2.8	--	1.5	2.1	25.0	7.0	9.9	2.0	11.9	37.3	-4.9
4 A	29.5	.9	--	.8	31.2	21.1	1.9	6.1	2.4	1.4	33.5	-2.3	4.6	2.1	6.7	40.2	-9.0
2 A	28.9	1.1	--	-.8	29.2	19.6	1.6	.1	3.8	1.8	26.9	2.3	9.4	2.1	11.5	38.4	-9.2
Averages:	8 9																
High 5	29.2	.5	.1	1.1	30.9	18.8	2.4	1.2	2.3	.9	25.6	5.3	2.0	.9	2.9	28.5	2.4
Low 5	28.7	.9	.1	.4	30.1	19.4	2.2	2.1	2.4	1.6	27.9	2.2	5.2	1.7	6.9	34.8	-4.7
All	28.9	.7	.1	.7	30.5	19.1	2.3	1.7	2.3	1.2	26.7	3.8	3.6	1.3	4.9	31.7	-1.1
Weighted Average	29.0	.6	.1	.9	30.6	18.9	2.4	1.5	2.3	1.1	26.2	4.4	2.4	1.1	3.5	29.7	.9

Average net farm income was 3.8 cents per dozen. Family labor and interest costs reduce the management income to -1.1 cents per dozen. This is primarily due to high family labor cost on small ranches. Management income on the "high" ranches was 2.4 cents per dozen, which reflects the lower family labor and is probably more representative of commercial operations.

TABLE III - MANAGEMENT AND PRODUCTION COST FACTORS

Ranch No. and Flock Size	Per Cent of Average Laying Flock					Price per Cull Hen	Pounds of Feed Per Hen		Pounds of Feed Per Dozen Eggs		Hours Labor per Hen	Feed Cost per Cwt.	Chick Cost
	Died to 24 Weeks	Died	Culled	Added	Change in Flock		All Feed	Est. for Layers	All Feed	Est. for Layers			
12 C	7.4	15.8	39.1	88.8	31.2	26.3	118.0	95.8	5.9	4.8	.36	\$3.04	33.3
9 B	13.0	13.1	68.3	104.8	20.2	22.4	117.7	91.5	5.8	5.0	.37	3.08	34.4
3 C	4.0*	30.7	24.5	90.8	32.9	20.9	107.9	90.0	5.7	4.8	.45	3.00	38.0
13 C	6.8*	30.4	12.7	54.7	14.7	22.7	119.8	100.0	6.4	5.3	.38	3.04	30.8
10 C	9.8	19.2	55.8	90.0	12.9	20.8	116.4	91.7	6.1	4.8	.41	3.23	32.7
14 B	3.0**	31.4	1.8	59.0	23.6	24.9	110.8	98.2	6.1	5.4	.40	3.01	-- **
6 B	5.7	9.6	96.8	97.8	-9.0	28.6	127.9	103.4	6.1	4.9	.48	3.12	28.6
7 A	4.1*	11.9	98.6	122.4	18.2	27.1	125.1	94.5	6.0	4.5	1.41	3.18	35.6
4 A	11.7*	28.4	77.1	78.7	-19.9	19.6	108.9	89.2	5.9	4.9	1.14	3.53	32.4
2 A	18.0	13.9	102.7	115.7	- 3.1	20.5	113.5	84.6	6.0	4.5	1.22	3.24	30.8
Averages:													
High 5	8.2	21.8	40.1	85.8	22.4	22.6	116.0	93.8	6.0	5.0	.40	3.10	33.9
Low 5	8.5	19.0	75.0	94.7	2.0	24.1	117.2	94.0	6.0	4.9	.93	3.22	31.9
All	8.4	20.4	57.7	90.3	12.2	23.4	116.6	93.9	6.0	4.9	.66	3.15	32.9
Weighted Average	7.4	21.5	46.6	86.1	17.3	23.5	116.5	94.9	6.0	4.9	.49	3.10	30.2

\* Chicks and Started Pullets

\*\* Started Pullets

Note that in this table per cent culled, change in flock, labor, and feed cost per cwt. are the factors showing the greatest differences between the "high" and "low" groups. Per cent died (mortality) during the laying period is high. Notice that the ranches with the highest mortality are those which force molted heavily as indicated in Table V.

TABLE IV - EGG PRODUCTION AND SALES

Ranch No. and Flock Size	Eggs Per Hen	Per Cent Production	PER CENT EGGS MARKETED				Per Cent Retail	PER DOZEN		
			Large	Medium	Small	Commercial		Average Price	Net Cost	Management Income
12 C	238.5	65.3	80.6	13.2	2.6	3.6 <sup>1/</sup>	1.5	30.4	25.7	4.7
9 B	245.2	67.2	65.1	22.9	3.2	8.8 <sup>2/</sup>	.8	28.6	25.3	3.3
3 C	225.7	63.4	71.9	18.4	2.8	6.9 <sup>3/</sup>	4.1	29.5	27.2	2.3
13 C	225.2	61.7	74.7	19.3	2.1	3.9 <sup>1/</sup>	--	28.5	27.5	1.9
10 C	227.4	62.3	77.8	17.3	3.1	1.8 <sup>4/</sup>	4.5	29.0	29.1	-.1
14 B	216.6	59.3	65.5	26.0	4.7	3.8 <sup>1/</sup>	--	27.7	28.7	-.1
6 B	251.7	69.0	73.3	19.1	3.7	3.9 <sup>1/</sup>	2.4	27.8	28.2	-.3
7 A	251.9	69.0	68.4	23.2	5.9	2.5 <sup>5/</sup>	7.2	29.4	34.3	-5.3
4 A	220.5	60.4	69.4	24.8	5.0	.8 <sup>5/</sup>	2.7	29.5	38.5	-9.0
2 A	226.9	62.2	66.1	29.4	4.5	-- <sup>6/</sup>	--	28.9	38.2	-9.2
Averages:										
High 5	232.4	64.0	74.0	18.2	2.8	5.0	2.7	29.2	27.0	2.4
Low 5	233.5	64.0	68.5	24.5	4.8	2.8	4.1	28.7	33.6	-4.7
All	232.7	64.0	71.3	21.4	3.8	4.0	3.3	28.9	30.3	-1.1
Weighted Average	232.9	64.1	72.9	19.5	3.3	4.3	2.2	29.0	28.3	.9

<sup>1/</sup> Includes bloods, liquid, B-grade, peewee.

<sup>2/</sup> Includes all eggs under AA.

<sup>3/</sup> Includes all eggs under A.

<sup>4/</sup> Includes peewees and frozen eggs.

<sup>5/</sup> Includes peewees and cracks sold retail.

<sup>6/</sup> All eggs were paid for on the basis of a quality score and size.

Note that there is practically no difference in eggs per hen and per cent production between the "high" and "low" groups. The "high" group had a larger percentage of large eggs than the "low" group. This is probably due in part to more force molting on ranches in the "high" group. There is a 2.7 cents per dozen variation between the lowest (14B) and the highest (12C) in egg prices received. This difference may be due principally to such factors as sales volume, egg size, per cent of eggs retailed, and amount of processing. Processing of eggs on the ranch may or may not result in an egg price advantage. Of the four ranches that processed eggs, 12C seems to have benefited from a better price, while the others (2A, 4A, and 7A) apparently did not.

TABLE V - OTHER MANAGEMENT PRACTICES

Ranch No. and Flock Size	2 A	3 C	4 A	6 B	7 A	9 B	10 C	12 C	13 C	14 B
Multiple Cages*		b & c	a & b	a & c	a	a & c	a, b & c	a	a	
* Floor	X						X			X
Replacements:										
Chicks	X			X		X	X	X		
Started Pullets		X								X
Chicks and Started Pullets			X		X				X	
Force Molting:										
Heavy		X							X	X
Some						X	X	X		
None	X		X	X	X					
Egg Handling:										
No Processing		X		X		X	X		X	X
Washing and Grading	X		X		X			X		

\* Multiple cages (2 to 6 birds per cage) were used by 8 cooperators as follows:

- a: 2 Birds per cage
- b: 3 Birds per cage
- c: 4+ Birds per cage

One operator used the floor in addition to multiple cages, and two used the floor only.

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