

PY-VN-60

POULTRY  
STUDY  
MANAGEMENT

THIRD ANNUAL  
STANISLAUS COUNTY

1960

UNIVERSITY OF CALIFORNIA  
AGRICULTURAL EXTENSION SERVICE

Prepared by:  
ROBERT D. YOUNG, FARM ADVISOR

## THIRD ANNUAL REPORT

### STANISLAUS COUNTY POULTRY MANAGEMENT STUDY 1960

This report contains the summarized records of the 24 poultry ranches participating in 1960. These ranches varied in size from 1,900 to 13,250 hens, averaging 6,102 layers. The size is designated for each ranch as follows: S = up to 3,000 hens; M = 3,000 to 6,000; and L = over 6,000 hens.

This study of poultry management practices is conducted by the University of California Agricultural Extension Service in cooperation with local poultrymen. The purpose of this study is to disclose important management, cost, income and profit information for the benefit of the cooperators and others in the local poultry industry.

Each cooperator furnishes detailed monthly reports covering production and mortality, as well as cost and income. When the individual record is completed each cooperator receives an annual record and analysis on his ranch. Certain figures from their annual records are presented in this report.

A careful comparison of the records in this report shows opportunities for improving profit. High egg production per hen, a good average price per dozen for eggs, and costs no higher than necessary are important profit-making factors. In comparing the twenty-four 1960 records, you will see a wide range in costs, returns, and flock statistics.

It is our desire that this information will be of use to all area poultrymen as well as those cooperating in the study.

## Definition of Terms

"Per Hen" - This term refers to the average number of hens on that ranch during the year. It is determined on a "hen day" basis, with all birds over six months of age considered hens.

"Per Dozen" - All figures based on "per dozen eggs" refer to the total income or cost of that item divided by the total dozens sold.

Farm Income is the difference between total income and total cash and depreciation cost.

Management Income is Farm Income less a value for family labor (\$1.50 per hour) and 5% interest on the total average investment.

Per cent Mortality or Culled or Added - The number of hens that died or were culled or disposed of or the number of pullets added to the flock, divided by the average number of hens.

Net Pounds of Feed per Hen - This figure is the amount consumed by the hen only. The amount eaten by young stock has been subtracted.

Total Net Cost per Dozen Eggs - Total cost including family labor and interest on investment.

Net Cash and Depreciation Cost per Dozen Eggs - This is the cash cost per dozen eggs. If the average price of eggs is below this figure, the ranch is losing money.

1959 Averages: The 1959 "per Hen" averages are based on all hens over 5 months of age. Therefore, these figures are not exactly comparable with the 1960 "per Hen" averages which are based on 6 months of age. However, all "per Dozen" averages for all years shown are comparable inasmuch as all costs were divided into the total dozens of eggs sold each year.

TABLE I - INCOME AND EXPENSE PER HEN  
(Ranked by Management Income)

Ranch No. & Size	Income per Hen					Cash and Depreciation Costs per Hen						Farm Income per Hen	Non-cash Costs per Hen		Management Income per Hen
	Egg Sales	Poultry Sales	Misc. Income	Change Stock Income	TOTAL INCOME	Feed	Chicks	Misc.	Hired Labor	Depreciation	TOTAL EXPENSE		Family Labor	Interest on Invest.	
1-L	7.87	.37	.06	-.17	8.13	3.70	.77	.41	.01	.19	5.06	3.04	.41	.13	2.51
*2-M	7.80	.49	.04	1.43	9.76	3.19	2.48	.46	.21	.27	6.60	3.15	.51	.20	2.45
3-M	7.94	.24	.03	1.19	9.41	4.26	.62	.27	1.14	.47	6.76	2.65	--	.24	2.41
*4-L	7.30	.01	.01	-1.28	6.05	2.59	--	.29	.44	.11	3.43	2.62	.14	.10	2.37
5-L	7.85	.29	.01	.46	8.61	3.14	1.80	.44	.17	.18	5.73	2.89	.45	.16	2.28
*6-M	8.45	--	.04	.74	9.22	3.32	1.73	.37	.03	.26	5.71	3.51	1.10	.16	2.25
7-L	7.66	.11	.02	1.10	8.90	3.38	1.81	.38	.24	.19	6.00	2.90	.58	.13	2.19
8-L	6.12	.42	.02	.44	7.01	3.50	.33	.32	.17	.19	4.51	2.50	.24	.16	2.10
9-L	7.14	.41	.04	.56	8.15	3.82	.42	.61	.16	.28	5.29	2.85	.59	.19	2.08
10-M	7.38	.47	.04	-.05	7.83	3.89	.39	.25	--	.20	4.73	3.10	1.02	.17	1.91
11-M	7.28	.28	.05	-.15	7.46	3.45	.21	.42	.07	.28	4.43	3.03	1.00	.18	1.86
12-L	6.59	.25	.06	.35	7.25	3.58	.37	.35	.56	.26	5.12	2.13	.14	.18	1.81
13-L	7.00	.33	.01	.08	7.42	3.43	.59	.52	.26	.16	4.96	2.47	.65	.12	1.70
*14-S	8.50	--	.02	.71	9.15	3.36	1.82	.61	--	.39	6.18	2.97	1.10	.22	1.65
15-L	7.19	.24	.08	1.12	8.62	4.36	.75	.49	.87	.22	6.69	1.94	.10	.20	1.63
16-S	7.48	.36	.03	.87	8.73	4.21	.47	.75	.21	.25	5.89	2.84	1.05	.21	1.59
17-M	7.46	.19	.05	.19	7.89	4.03	.39	.43	.04	.21	5.10	2.79	.97	.23	1.59
18-L	6.71	.17	.05	.17	7.10	3.25	1.24	.28	.07	.15	4.99	2.11	.62	.15	1.34
19-M	7.19	.25	.09	.18	7.70	4.25	.43	.19	--	.32	5.18	2.52	1.15	.18	1.19
20-S	7.09	.28	--	.20	7.57	3.90	.21	.60	.02	.45	5.17	2.40	1.03	.27	1.11
21-L	7.03	.32	.07	.14	7.56	3.77	.38	.46	--	.40	5.00	2.56	1.23	.25	1.07
22-L	6.36	.24	.02	1.28	7.90	3.97	1.59	.32	.48	.23	6.59	1.31	.12	.22	.97
*23-M	7.39	.50	--	.16	8.04	3.64	1.99	.48	.01	.27	6.39	1.65	.75	.17	.82
24-S	8.07	.22	.04	-.28	8.05	4.44	.19	.41	.01	.26	5.31	2.75	1.93	.18	.64
Average															
1960	7.37	.27	.04	.39	8.06	3.68	.87	.42	.22	.26	5.45	2.61	.70	.18	1.73
1959	5.58	.23	.04	.13	5.98	3.75	.65	.35	.27	.17	5.10	.88	.77	.21	-.11

\* All-in, all-out replacement programs

TABLE II - PRODUCTION AND MANAGEMENT PRACTICES  
(Ranked by Management Income)

Ranch No. & Size	Eggs Laid per Hen	Eggs Sold per Hen	Dozen Sold per Hen	Based on Average Number of Hens for Year						Investment per Hen	Price per Cull Hen	Price per Chick	% Chick Mortality
				% Production	% Mortality	% Pignouts mortality	% Sold	% Added	% Change				
1-L	259	256	21.3	71	15	5	91	114	8	\$ 2.53	40.7 ¢	41.8 ¢	5
2-M	261	262	21.8	71	10	-	116	210	84	3.90	42.1	--	--
3-M	282	281	23.4	77	8	5	63	149	78	4.84	37.8	35.3	4
4-L	264	264	22.0	72	5	13	5	0	-10	2.06	30.1	--	--
5-L	273	272	22.7	75	13	26	70	167	83	3.16	40.8	--	--
6-M	293	293	24.4	80	7	21	--	129	123	3.18	--	--	--
7-L	257	256	21.3	70	8	25	24	153	121	2.57	46.3	--	15
8-L	227	231	19.3	62	17	5	98	85	-31	3.16	43.0	25.3	5
9-L	263	262	21.8	72	18	25	97	143	29	3.78	42.3	29.2	10
10-M	261	258	21.5	71	17	11	85	96	-6	3.34	44.6	35.3	13
11-M	260	262	21.8	71	15	9	67	90	8	3.57	42.1	23.2	9
12-L	233	233	19.4	64	26	35	64	93	4	3.66	39.1	30.6	11
13-L	246	243	20.2	67	14	25	89	100	-3	2.41	36.9	38.6	8
14-S	293	291	24.2	80	16	37	1	--	-18	4.41	--	--	--
15-L	240	239	19.9	66	17	16	59	144	68	4.08	40.2	28.0	8
16-S	266	267	22.2	73	15	20	97	131	19	4.11	36.9	33.5	6
17-M	262	259	21.6	72	26	24	48	156	82	4.53	39.2	36.1	12
18-L	239	238	19.8	65	15	--	40	111	56	2.97	43.2	51.9	--
19-M	250	245	20.4	68	12	--	68	84	4	3.58	36.6	37.2	10
20-S	265	261	21.7	72	22	22	64	128	42	5.31	44.1	21.9	10
21-L	251	250	21.9	69	15	40	83	112	14	5.09	38.5	32.2	10
22-L	234	231	19.2	64	14	--	64	152	74	4.47	36.9	34.5	7
23-M	251	247	20.6	69	9	3	119	120	-7	3.47	42.2	--	--
24-S	258	251	20.9	70	14	6	60	63	-11	3.60	35.8	28.6	4
<b>Averages</b>													
1960	258	256	21.4	71	15		66	114	34	3.66	40.0	33.1	9
1959	226	224	18.6	62	15		69	104	20	4.03	33.0	37.0	6

TABLE III - POUNDS OF FEED AND COSTS PER DOZEN  
(Ranked by Management Income)

Ranch No. & Size	FEED				CENTS PER DOZEN EGGS							MISC. COSTS PER DOZEN			
	Net Pounds per Hen	Net Pounds per Doz	Cost Per Hundred	Net Cost/Dozen	Total Expense	Less Income Not Egg	Total Net Cost	Less Family Lbr&Int.	Net Cash & Deprec. Cost	Farm Income	Mgt. Income	Medi-cation	Misc. Expense	Depreciation	Interest
1-L	95	4.5	3.25	14.5	26.4	1.2	25.2	2.5	22.6	14.3	11.8	.3	1.9	.9	.6
2-M	83	3.8	2.99	11.4	33.5	9.0	24.5	3.2	21.3	14.4	11.2	1.1	2.1	1.2	.9
3-M	92	3.9	3.32	13.0	29.9	6.3	23.7	1.0	22.6	11.3	10.3	.2	1.1	2.0	1.0
4-L	85	3.9	3.04	11.8	16.7	-5.7	22.4	1.1	21.3	11.9	10.8	.5	1.5	.5	.5
5-L	85	3.7	3.09	11.6	28.0	3.4	24.6	2.7	21.9	12.7	10.0	.8	1.9	.8	.7
6-M	88	3.6	3.16	11.4	28.6	3.2	25.4	5.2	20.2	14.4	9.2	.4	1.5	1.1	.7
7-L	82	3.9	3.12	12.1	31.5	5.8	25.7	3.3	22.4	13.6	10.3	.4	1.8	.9	.6
8-L	84	4.3	3.15	13.7	25.5	4.6	20.9	2.1	18.8	13.0	10.9	.7	1.7	1.0	.8
9-L	86	4.0	3.07	12.2	27.8	4.62	23.2	3.6	19.6	13.1	9.5	.1	2.8	1.3	.9
10-M	99	4.6	3.13	14.4	27.6	2.1	25.5	5.5	19.9	14.4	8.9	.2	1.2	.9	.8
11-M	87	4.0	3.17	12.6	25.7	.8	24.9	5.4	19.5	13.9	8.5	.7	1.9	1.3	.8
12-L	84	4.3	3.18	13.8	28.1	3.4	24.6	1.7	23.0	11.0	9.3	.5	1.8	1.3	.9
13-L	83	4.1	3.16	13.0	28.3	2.1	26.2	3.8	22.4	12.2	8.4	1.0	2.6	.8	.6
14-S	91	3.8	3.09	11.6	30.9	3.0	27.9	5.4	22.5	12.2	6.8	.9	2.5	1.6	.9
15-L	92	4.6	3.36	15.5	35.2	7.2	27.9	1.5	26.4	9.7	8.2	.6	2.4	1.1	1.0
16-S	96	4.3	3.15	13.6	32.2	5.6	26.5	5.7	20.9	12.8	7.1	.1	3.4	1.1	.9
17-M	92	4.3	3.19	13.7	29.2	2.0	27.2	5.5	21.7	12.9	7.4	—	2.0	1.0	1.1
18-L	84	4.3	3.22	13.9	29.0	1.9	27.1	3.9	23.2	10.7	6.8	.4	1.4	.8	.7
19-M	95	4.6	3.61	16.8	31.9	2.5	29.4	6.5	22.9	12.3	5.8	—	.9	1.5	.9
20-S	98	4.5	3.06	13.8	29.7	2.2	27.5	6.0	21.6	11.0	5.1	.3	2.7	2.1	1.2
21-L	101	4.9	2.90	14.1	31.1	2.5	28.5	7.1	21.4	12.3	5.1	.4	2.2	1.9	1.2
22-L	96	5.0	3.01	15.0	36.1	8.0	28.1	1.8	26.3	6.8	5.0	.3	1.7	1.2	1.2
23-M	94	4.6	3.63	16.6	35.5	3.2	32.3	4.1	28.3	8.0	4.0	1.0	2.3	1.3	.8
24-S	98	4.7	3.80	17.8	35.5	-1	35.6	10.1	25.5	13.1	3.1	.1	2.0	1.3	.9
Averages															
1960	90	4.3	3.20	13.7	29.7	3.3	26.5	4.1	22.3	12.2	8.1	.5	2.0	1.2	.9
1959	88	4.7	3.42	16.1	32.7	2.2	30.5	5.3	25.3	4.7	-0.6	.4	1.9	1.5	1.1
1958			3.62				30.5	5.2	25.4	11.7	6.5				

TABLE IV - EGG QUALITY SUMMARY  
(Ranked by Wholesale Price per Dozen)

Ranch Size & No.	% of TOTAL EGGS			% of AA of Large	% of TOTAL EGGS				AVERAGE PRICE/DOZ. EGGS			% Retail	% Comm. of Retail
	Lg AA	Lg A	Lg B		Large	Med.	Small	Comm.	Whlse	Retail	All		
15-L	70	-	2	97	72	20	3	5	35.9	42.8	36.1	3.6	33
7-L	61	3	2	92	66	23	4	7	35.9	40.0	35.9	.6	100
23-M	67	-	1	98	69	22	4	6	35.0	44.4	35.7	8.4	21
6-M	68	-	3	96	71	21	1	6	34.6	28.8	34.5	.9	92
5-L	60	3	3	90	66	25	3	6	34.6	30.2	34.6	.4	82
17-M	69	-	3	96	71	19	3	7	34.5	29.5	34.5	.7	81
14-S	67	-	3	96	69	25	2	4	34.4	40.9	34.7	5.4	17
13-L	69	5	3	90	77	16	2	5	34.1	45.8	34.6	4.2	36
10-M	72	-	3	96	75	16	3	5	33.9	42.0	34.3	6.3	69
12-L	69	-	6	92	76	16	3	5	33.9	41.5	33.9	.1	0
3-M	60	7	3	86	69	21	4	6	33.9	34.2	33.9	.2	0
18-L	63	6	2	89	71	21	2	5	33.8	37.1	33.8	1.7	47
16-S	62	2	4	92	67	20	6	7	33.5	44.4	33.6	1.3	29
4-L	71	-	3	96	74	19	1	6	33.3	27.5	33.2	.8	63
22-L	57	-	4	93	61	27	4	8	33.0	36.0	33.0	.2	42
11-M	67	5	3	88	76	11	2	12	32.9	40.0	33.3	6.7	67
9-L	62	1	3	94	66	21	5	8	32.7	34.8	32.7	.9	30
20-S	54	6	4	85	64	21	5	11	32.5	34.7	32.6	2.4	92
8-L	63	4	8	84	75	13	4	8	31.7	---	31.7	0	0
1960 Ave	65	-	3	92	70	20	3	7	33.9	35.5	34.0	2.4	-
1-L					75	20	2	2	36.5	42.7	36.8	5.1	26
2-M					61	28	7	3	35.6	36.3	35.6	.8	32
19-M					68	20	3	9	35.1	35.3	35.1	12.5	67
24-S					80	16	2	2	34.8	40.0	38.6	33.6	4
21-L					60	31	5	4	33.7	29.4	33.6	.8	82
1960 Ave. of 1,2,19,24 & 21					69	23	4	4	35.1	36.7	35.9	10.4	--

Total Average All Eggs 1960 - - - - - 34.2 35.8 34.4  
 1959 - - - - - 29.6 34.5 30.0  
 1958 - - - - - 36.7 40.2 37.0

TABLE V

LABOR ANALYSIS  
(Ranked, Hours per Hen)

Ranch No. & Size	Total		Cost per Dozen		
	Hrs/Hen	Cost/Hen	Hired	Family	Total
8-L	.27	\$ .42	.9 ¢	1.3 ¢	2.2¢
1-L	.28	.42	.1	1.9	2.0
4-L	.38	.58	2.0	.6	2.7
5-L	.39	.62	.7	2.0	2.7
22-L	.43	.60	2.5	.6	3.1
2-M	.45	.72	1.0	2.4	3.3
18-L	.47	.69	.4	3.1	3.5
9-L	.49	.75	.7	2.7	3.4
12-L	.49	.70	2.9	.7	3.6
23-M	.50	.76	.1	3.6	3.7
7-L	.52	.81	1.1	2.7	3.8
13-L	.63	.91	1.3	3.2	4.5
15-L	.65	.97	4.4	.5	4.9
17-M	.67	1.01	.2	4.5	4.7
10-M	.68	1.02	--	4.7	4.7
20-S	.70	1.05	.1	4.7	4.8
14-S	.73	1.10	.2	4.5	4.8
11-M	.73	1.07	.3	4.6	4.9
3-M	.74	1.14	4.9	--	4.9
6-M	.76	1.13	.1	4.5	4.6
19-M	.77	1.15	--	5.6	5.6
21-L	.82	1.23	--	5.9	5.9
16-S	1.00	1.26	1.0	4.7	5.7
24-S	1.29	1.93	--	9.2	9.2
1960Av.	.62	.92			4.3
1959Av.	.64	.94			5.0

CONVERSION TO 5 MONTHS OF AGE

Prior to the initiation of the 1960 Poultry Management Study, it was decided by the poultrymen involved to change the age of maturity from 5 months to 6 months of age. In other words, a pullet becomes a hen at 6 months of age and the hen days begin then.

This change resulted in a reduction in the average number of hens for the year and thus affected all the "per Hen" figures reported here. For the benefit of those who participated in previous "Management Studies", the following is a simple way the 1960 "per Hen" figures can be converted to the "5 months" basis to compare with previous years:

1. Multiply the number of hens "added" by 30 days (the difference between 5 months and 6 months) and add this figure to the "Total Hen Days" shown on the Annual Summary.

Hens Added x 30 + Total Hen Days = Hen Days on a 5 months basis.

2. Divide the new total Hen Days by 366 days to get the Average Number of Hens based on 5 months of age.

Total Hen Days ÷ 366 = corrected Average Number of Hens.

3. Divide the corrected Average Number of Hens into any of the "per Hen" figures in the Annual Summary. For example, divide the corrected number of hens into the "Farm Income" or "Hours of Labor" or any other item to arrive at the "per Hen" figure corrected to 5 months of age.

This method will not be 100% correct but will be close enough for comparison with previous years. It should be noted, however, that the "per Dozen Eggs" figures are correct and comparable with previous years. The dozens of eggs sold would remain the same.



ALL-IN, ALL-OUT OPERATIONS

The following is a summary of the 5 all-in, all-out laying flocks in the 1960 Management Study. Four of these five ranches were out of production for approximately 2 months during the year. This is the time necessary to clean up and bring the new pullets to 6 months of age. The other operation, 4-L, had birds 6 months of age at the beginning of the Study and sold them at the conclusion of the year.

Table A

Ranch No. & Size	Farm Income per Hen	Mgt. Income per Hen	Eggs per Hen	Per cent Mortality	Investment per Hen	Net Lbs. Feed per Doz.	Total Net Cost per Doz.	Net Cash & Deprec. Cost/Doz.	Farm Income per Doz.
2-M	\$3.15	\$2.45	262	10	\$3.90	3.8	24.5¢	21.3¢	14.4¢
4-L	2.62	2.37	264	5	2.06	3.9	22.4	21.3	11.9
6-M	3.51	2.25	293	7	3.18	3.6	25.4	20.2	14.4
14-S	2.97	1.65	291	16	4.41	3.8	27.9	22.5	12.2
23-M	1.65	.82	247	9	3.47	4.6	32.3	28.3	8.0
Average	2.78	1.91	271	9	3.20	3.9	26.5	22.7	12.2
Av. for Study	2.61	1.73	256	14.5	3.66	4.3	26.5	22.3	12.2

It should be noted that all of these ranches did very well except #23-M. This ranch never got high egg production and had an extremely high feed cost per dozen eggs. In spite of the poor performance of 23-M, the averages of these five ranches were better than the Study as a whole. The cost of producing a dozen eggs was about the same as the Study average but four of the five ranches had many more eggs to sell, thus netting a higher return per hen.

The all-in, all-out replacement program is a highly efficient and profitable system if two major conditions can be met. The first is to secure a regular supply of carefully vaccinated and raised pullets. The second is an egg market that will absorb the variation in egg size and quality. This replacement program should be recommended where these two conditions can be met.

# how efficient are you?

Compare your results below to determine what factors need improving. Then determine how??

	<u>Average of Study</u>	<u>Your 1960 Results</u>
Farm Income per Hen - - - - -	\$ 2.61	_____
Management Income per Hen - - - - -	\$ 1.73	_____
Egg Production per Hen - - - - -	256 eggs	_____
Egg Price per Dozen, Wholesale - - - - -	34.2 ¢	_____
Hen Mortality - - - - -	15%	_____
Feed Cost per Dozen Eggs - - - - -	13.7 ¢	_____
Net Lbs. Feed per Dozen - - - - -	4.3 lbs.	_____
Cost per Hundred - - - - -	\$ 3.20	_____
Total Net Cost per Dozen - - - - -	26.5 ¢	_____
Net Cash and Depreciation Cost per Dozen - - - - -	22.3 ¢	_____
Medication Cost per Dozen - - - - -	.5 ¢	_____
Labor per Hen - - - - -	.62 hrs.	_____
Labor Cost per Dozen - - - - -	4.3 ¢	_____