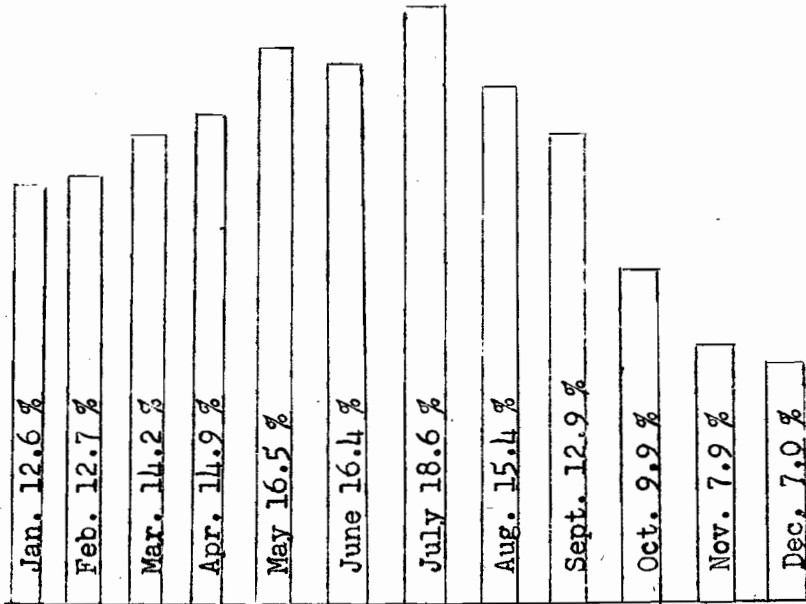


29<sup>th</sup>

# POULTRY MANAGEMENT STUDY



COMMERCIALS, % OF TOTAL EGGS SOLD



## SACRAMENTO COUNTY 1956

University of California  
 College of Agriculture Extension Service  
 310 Old Post Office Building  
 Sacramento, California

This study started March 1, 1928, with 26 cooperating poultrymen located in the Rio Linda district of Sacramento County. This year, 1956, completes 29 years of records in this area. Two ranches have been in the study for the entire 29 years. Three have been in the study for 23 years or more, and four for 18 years or more indicating the permanence of poultry production in this area. Several of the older ranches are being operated by the second generation.

In order to continue the management study and to allow the Farm Advisor time to work with poultrymen on specific problems which are brought out through records obtained from the summaries, the members of the study elected an Advisory Committee to work with the Agricultural Extension Service. The group then assessed each member a fee and engaged an accountant to compile the monthly and annual reports.

Compiled by:

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Advisory Committee:

John Cox, Chairman  
E. R. Temperli, Treasurer  
Joe Minke, Member  
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The flocks in this study have nearly all been of the White Leghorn breed. Most of the feed has been purchased through the Rio Linda Poultry Producers' Association, a local feed cooperative. Most of the egg sales are through the Poultry Producers of Central California, except for hatching eggs sold to hatcheries. Management practices have varied some from ranch to ranch, but there has been rather universal adoption of practices as soon as their worth was proven.

Due to the low returns in 1954, many new practices are being adopted.

Such as:

1. Brooding three or four broods of chicks during the year.
2. Disposing of entire laying flock at 18 to 20 months of age.
3. Installation of mechanical refrigeration for cooling and holding eggs on the ranch.
4. General vaccination program which includes vaccinating for Fowl Pox (Pox), Laryngotracheitis (LT), Infectious Bronchitis (IB), and Newcastle Disease (ND).
5. Using the services of local practicing veterinarians.
6. Bulk handling of feeds.

TRENDS OBSERVED THROUGH MANAGEMENT STUDY CONDUCTED DURING THE PAST 25 YEARS. SEE TABLE I.

1. Size of Flocks - Getting larger - 1932 average 1232 - 1956 average 5683.
2. Egg Production - Increased from a low of 153 eggs per hen in the 1932 Study to a high of 220 eggs per hen in the 1956 Study. This is a 44% production increase.
3. Mortality - Due to breeding, disease control and management, death losses have been cut in half.
4. Flock Disposal - Now consists largely of removing sick and dead birds until about the 15th month. Then non-producers are culled and at the 18th to 20th month the entire flock is sold. These "all pullets" flocks contribute to increased egg production and egg quality.
5. Feed Consumption - Has increased from 100 pounds per hen per year to 123 pounds per hen due to higher pullet replacement and increased egg production.
6. Labor - By increasing the size of their flock, and by using labor saving equipment, poultrymen have cut their average hours of labor required from two hours per hen to one hour and 12 minutes per hen per year.
7. Income - Despite lower egg prices, 1956 net farm income was \$1.10 per hen per year and management income of 36 cents per hen for the year.

DEFINITIONS:

Management Income - Total income minus total expense including family labor and interest on investment as expenses.

Farm Income - Total income minus cash and depreciation costs (not including family labor) and interest on investment as expenses.

TABLE I. SUMMARY OF SACRAMENTO COUNTY POULTRY MANAGEMENT STUDY

Record Year	No. Records	Hens per Flock	Eggs per Hen	Laying Flock		Lbs. Feed per Hen	Hrs. Labor per Hen	Value per Dozen			Cost Feed per Cwt.	Value per Hen			
				% Mortality	% Culled			Av. Price	Net Cost	Net Income		Total Income	Total Cost	Management Inc.	Farm Income
1932	58	1232	153	28	64	100	1.9	17.4	19.5	-2.1	1.28	2.49	2.77	-.28	.63
1933	30	1453	157	27	61	104	2.0	16.5	17.5	-1.0	1.35	2.59	2.73	-.14	.59
1934	22	1580	158	25	70	108	2.2	20.8	17.9	2.9	1.55	3.50	3.09	.41	1.14
1935	24	1697	166	24	61	118	2.2	23.2	17.6	5.6	1.58	4.08	3.26	.82	1.44
1936	24	2022	165	25	66	108	1.8	23.2	19.6	3.6	1.64	3.53	3.01	.52	1.07
1937	20	2234	174	22	71	107	1.8	21.5	19.7	1.8	1.85	3.45	3.17	.28	.76
1938	24	2361	180	19	68	112	1.7	23.7	16.9	6.8	1.52	3.92	2.89	1.03	1.50
1939	26	2812	187	17	82	112	1.5	18.9	15.8	3.1	1.49	3.26	2.77	.49	.89
1940	25	3298	186	15	71	112	1.4	21.4	16.1	5.3	1.47	3.58	2.75	.83	1.19
1941	30	3422	175	15	73	116	1.5	29.2	19.3	9.9	1.75	4.74	3.25	1.49	1.86
1942	28	3819	172	16	74	118	1.4	36.6	24.6	12.0	2.09	5.69	3.92	1.77	2.26
1943	26	3913	177	14	83	117	1.6	42.1	25.8	16.3	2.36	6.87	4.41	2.46	2.99
1944	24	4106	185	18	91	121	1.7	39.6	28.3	11.3	2.74	6.95	5.15	1.80	2.35
1945	21	4291	178	14	85	121	1.6	43.7	30.7	13.0	2.82	7.38	5.38	2.00	2.56
1946	23	3817	175	13	98	127	1.6	44.2	40.4	3.8	3.59	7.61	6.79	.82	1.47
1947	21	4842	187	14	84	121	1.5	53.0	41.5	11.5	4.10	8.83	7.01	1.82	2.40
1948	21	4875	177	14	75	125	1.7	55.9	45.0	10.9	4.09	9.10	7.46	1.64	2.23
1949	24	4875	181	15	80	121	1.6	46.0	38.8	7.2	3.48	7.53	6.42	1.11	1.71
1950	22	5713	184	14	74	115	1.3	42.0	34.5	7.5	3.23	6.91	5.74	1.17	1.69
1951	24	5689	180	13	88	119	1.4	52.6	41.9	10.7	3.76	8.42	6.78	1.64	2.20
1952	22	6246	184	14	81	117	1.2	47.3	43.5	3.8	4.08	7.69	7.10	.59	1.11
1953	29	5513	190	12	81	119	1.3	50.7	44.0	6.7	3.85	9.02	7.93	1.09	1.84
1954	31	5124	203	11	93	120	1.2	34.1	38.7	-4.6	3.49	6.48	7.29	-.81	-.08
1955	30	5128	210	10	83	125	1.2	38.7	37.6	1.1	3.36	7.67	6.58	.22	1.09
1956	27	5683	220	12	98	123	1.2	36.7	34.8	1.9	3.25	7.57	6.47	.36	1.10

1. Total Income - Varied from a low of \$4.85 to a high of \$9.05 per hen this year.
  - a. Income from egg sales was largely responsible for total extremes with a low of \$4.78 to a high of \$8.22 per hen. Also, change of stock inventory varied considerably from ranch to ranch.
  - b. Percentagewise - Income from poultry sales and manure show extreme variations.
2. Total Costs - Varied from a low of \$4.67 to a high of \$7.68 per hen.
  - a. Feed Cost - Largest single expense item varies from a low of \$3.41 per hen to a high of \$6.56 per hen.
  - b. Labor Costs:
    1. Family labor varied from .02 cents to a high of \$1.40 per bird.
    2. Hired labor varied from zero to a high of \$1.46 per bird.

These extremes in labor costs were due to variations in size of flocks, other enterprises and interests of the operator.

Farm Income - Greater variations occurred between individual ranches in 1956 than between averages over the 25 year period.

Management or net income - Shows even a greater variation.

\* The following pertains to Table III:

Size of flock: Large - over 7,000; Medium - 4,000 to 7,000; Small - under 4,000.

Pounds Feed per Hen = Total pounds of feed fed divided by the average number of hens.

Feed Estimated for Pullets = Number of pullets raised to production times 25 divided by the average number of hens in the flock.

Feed Estimated for Hens = Total feed used minus estimated feed used for pullets.

TABLE II. INCOME AND EXPENSE PER FHM

Rank	Income					Cash and Depreciation Costs						Non-cash Costs			Management Income
	Egg Sales	Poultry Sales	Manure	Change Stock Inv.	Total	Feed	Hired Labor	Chix	Misc.	Deprec.	Total	Farm Income	Family Labor	Interest	
1L	6.73	.37	.12	.08	7.30	3.93	---	.38	.23	.13	4.67	2.63	.47	.17	1.99
2M	7.99	.60	.07	.14	8.80	4.17	.71	.38	.87	.37	6.50	2.30	.56	.38	1.36
3M	6.68	.60	.04	.51	7.83	3.88	.24	.34	.78	.39	5.63	2.20	.54	.36	1.30
4M	8.01	.68	.06	.14	8.89	4.07	1.14	.69	.74	.44	7.08	2.32	.41	.25	1.15
5L	8.22	.52	--	.31	9.05	4.08	.85	1.03	1.09	.31	7.36	1.69	.40	.15	1.14
6L	6.58	.38	.03	.48	7.47	4.13	.33	.40	.56	.23	5.65	1.82	.54	.19	1.09
7M	7.73	.38	.04	.02	8.17	4.42	.03	.45	.73	.21	5.84	2.33	1.00	.27	1.06
8L	6.72	.47	.05	.13	7.37	3.57	.62	.64	.66	.33	5.82	1.55	.31	.27	.97
9S	7.34	.53	.01	-.35	7.53	3.76	--	.38	.41	.39	4.94	2.59	1.40	.26	.93
10M	6.22	.28	.03	.27	6.80	3.41	.64	.43	.62	.22	5.32	1.49	.51	.19	.79
11M	5.91	.31	.03	.50	6.75	3.91	.41	.36	.32	.20	6.08	1.55	.72	.16	.67
12M	6.13	.46	.05	-.02	6.62	3.75	.32	.51	.45	.34	5.37	1.25	.50	.26	.49
13L	7.19	.64	.04	.44	8.31	4.24	.85	.88	.68	.53	7.17	1.14	.31	.35	.48
14M	7.93	.46	.06	.49	8.94	4.74	.73	.59	.99	.63	7.68	1.26	.48	.54	.24
15L	6.44	.52	.07	.36	7.39	3.62	1.16	.75	.65	.29	6.47	.92	.39	.29	.24
16L	5.61	.52	.05	-.58	5.60	3.44	.49	.37	.47	.11	4.89	.71	.38	.10	.23
17M	6.67	.52	.05	.04	7.28	4.14	.80	.49	.54	.42	6.39	.89	.53	.34	.02
18L	7.33	.49	.07	-.05	7.84	4.12	.96	.75	1.00	.45	7.28	.56	.26	.36	-.06
19L	7.23	.64	.06	-.05	7.88	4.07	1.46	.63	1.16	.25	7.57	.31	.12	.27	-.08
20M	6.27	.76	.03	.52	7.59	4.59	.95	.55	.84	.24	7.17	.42	.50	.21	-.29
21M	6.96	.25	.01	-.20	7.02	4.11	.19	.49	.67	.56	6.02	1.00	.80	.51	-.31
22M	6.28	.45	.03	-.21	6.55	4.13	.05	.62	.62	.35	5.77	.78	1.01	.26	-.49
23M	4.78	.18	.03	-.14	4.85	3.77	.72	.28	.20	.29	5.26	-.41	.02	.14	-.57
24S	5.22	.74	.01	.31	6.28	4.19	.29	.63	.49	.32	5.92	.36	.93	.29	-.86
25M	6.48	.75	.06	-.34	6.95	4.63	.37	.52	1.06	.16	6.74	.21	.97	.23	-.99
26M	6.34	.96	.03	.93	8.26	4.62	.26	1.29	1.31	.84	8.32	-.06	.71	.40	1.17
27S	7.34	.33	--	1.13	8.80	6.56	.23	.89	.62	1.07	9.37	-.57	.58	.59	-1.74
Hi 13	7.04	.48	.05	.24	7.81	3.96	.51	.57	.64	.31	5.99	1.82	.51	.25	1.06
Lo 14	6.71	.55	.05	.05	7.36	4.19	.84	.62	.85	.37	6.87	.49	.43	.31	-.25
Av All	6.86	.52	.05	.14	7.57	4.09	.69	.60	.75	.34	6.47	1.10	.46	.28	.36

TABLE III. PRODUCTION FACTORS AND MANAGEMENT PRACTICES

Rank	% Died	% Sold		Price per Cull Hen	Hours Labor per Hen	Pounds Feed per Hen			% Mash	Cost per Cwt.			Average Cost per Pullet Chicks	% Chix	
		% Cull-ed	% Flock Dispos-al			Total	Est. for Pullets	Est. for Hens		Mash	Mash	Grain			Ave.
1L	18.3	18.8	59.2	.46	.5	120.0	21.5	98.5	54.7	3.69	2.65	3.22	.33	15.3	
2M	5.5	16.3	84.4	.60	1.2	125.1	31.5	93.6	66.8	3.40	2.77	3.19	.37	8.9	
3M	8.1	30.7	70.3	.58	.8	121.7	21.9	99.8	53.5	3.41	2.84	3.14	.37	5.2	
4M	6.5	20.3	77.5	.66	1.5	122.9	28.1	94.8	58.1	3.57	2.84	3.26	.56	6.3	
5L	12.7	19.0	115.6	.50	1.5	118.5	24.9	93.6	76.8	3.68	2.51	3.41	.56	33.0	
6L	13.2	25.3	51.4	.49	.9	116.7	24.2	92.5	53.7	4.12	2.77	3.50	.31	11.5	
7M	4.4	40.6	45.4	.43	1.0	116.9	25.3	91.6	71.7	4.10	2.74	3.71	.53	9.5	
8L	10.9	20.3	69.7	.52	.9	113.5	20.1	93.4	60.4	3.43	2.60	3.10	.46	13.3	
9S	7.5	11.6	88.7	.52	1.4	114.4	22.9	91.5	59.3	3.59	2.66	3.23	.40	14.2	
10M	8.5	27.2	40.8	.40	1.1	110.5	25.3	85.2	51.6	3.46	2.61	3.05	.38	23.5	
11M	13.1	13.7	39.2	.59	1.1	126.5	23.2	103.3	56.1	3.64	2.27	2.97	.35	10.1	
12M	13.8	15.7	70.5	.53	.8	111.5	23.4	88.1	58.0	3.75	2.70	3.31	.56	7.3	
13L	12.3	41.0	54.3	.65	1.2	131.9	24.7	107.2	62.9	3.40	2.80	3.14	.54	21.5	
14M	6.5	34.5	61.3	.47	1.2	131.0	34.9	96.1	74.7	3.83	2.79	3.57	.54	2.1	
15L	11.2	17.0	71.8	.58	1.4	115.8	21.8	94.0	52.8	3.42	2.68	3.07	.54	8.3	
16L	13.1	5.5	89.8	.53	.8	103.6	12.5	91.1	51.5	3.64	2.87	3.27	.41	18.8	
17M	20.4	27.5	82.0	.48	1.2	129.1	27.1	102.0	63.1	3.41	2.76	3.17	.39	3.9	
18L	8.6	27.6	68.2	.51	1.3	138.3	21.2	117.1	60.0	3.07	2.74	3.40	.56	34.6	
19L	10.6	27.2	87.9	.55	1.7	122.6	28.8	93.8	55.3	4.02	2.37	3.28	.45	16.5	
20M	8.6	37.2	80.3	.64	1.5	138.8	33.8	105.0	57.8	3.58	2.80	3.25	.36	11.9	
21M	37.7	8.2	70.0	.31	1.2	118.9	21.9	97.0	55.6	3.85	2.90	3.37	.49	7.9	
22M	7.5	51.7	50.9	.44	1.1	125.3	28.9	96.4	58.0	3.51	2.88	3.11	.33	23.5	
23M	9.7	24.9	15.8	.45	.6	113.4	10.2	103.2	57.2	3.68	2.79	3.30	.37	8.9	
24S	13.1	23.4	105.1	.58	1.2	123.3	31.3	92.0	59.1	3.74	2.75	3.34	.38	9.6	
25M	16.4	21.0	115.9	.55	1.3	138.1	28.7	109.4	53.8	3.78	2.75	3.30	.40	15.3	
26M	5.4	25.0	157.8	.52	.9	135.1	16.8	118.3	66.5	3.68	2.70	3.35	.48	10.9	
27S	11.4	40.5	12.8	.60	.8	146.7	48.1	98.6	72.8	4.29	4.92	4.60	.57	12.1	
Hi 13	11.0	23.4	66.9	.54	1.0	119.5	24.2	95.7	60.4	3.34	3.15	3.24	.45	11.1	
Lo 14	12.1	25.6	78.2	.53	1.3	126.1	25.8	100.3	58.7	3.40	3.09	3.25	.46	11.8	
Av. All	11.6	25.9	71.7	.53	1.2	123.1	25.1	108.0	59.5	3.38	3.12	3.25	.45	11.5	

TABLE IV. EGG PRODUCTION AND SALES

Rank	Eggs Per Hen	Per Cent of Market Eggs Sold				Pullets Added to Laying Flock				Per Dozen		
		Large	Medium	Small	Com'l	Jan-Mar.	Apr-June	July-Sept.	Oct-Dec.	Av. Price Eggs	Net Cost	Mgt. Income
1L	209.2	73.7	11.3	1.3	13.7	23.6	20.3	36.8	19.3	38.1	26.8	11.3
2M	248.2	54.8	30.3	9.0	5.9	28.3	46.3	25.4	--	37.2	30.9	6.3
3M	214.7	52.9	24.1	10.1	12.9	--	100.0	--	--	36.0	29.1	6.9
4M	243.6	54.5	27.7	7.1	10.7	--	60.4	39.6	--	37.1	31.8	5.3
5L	255.0	63.9	25.3	4.6	6.2	--	--	63.0	37.0	39.5*	34.0	5.5
6L	209.4	63.5	19.3	5.4	11.8	--	19.4	80.6	--	37.9	31.6	6.3
7M	244.0	51.0	30.0	9.0	10.0	23.3	46.9	29.8	--	37.1	32.1	5.0
8L	212.9	53.4	26.8	7.6	12.2	47.9	--	52.1	--	36.8	31.5	5.3
9S	214.0	59.2	33.3	6.5	1.0	16.2	26.0	--	57.8	39.5	34.5	5.0
10M	210.3	47.5	28.7	12.1	11.7	--	100.0	--	--	35.0	30.6	4.4
11M	192.2	55.9	20.3	4.9	18.9	--	--	100.0	--	36.2	32.1	4.1
12M	201.2	56.9	17.8	8.9	16.4	--	60.5	39.5	--	35.8	33.0	2.8
13L	219.0	56.5	22.8	6.9	13.8	--	40.9	59.1	--	37.0*	34.6	2.4
14M	256.7	46.0	26.3	16.3	11.4	27.2	22.7	50.1	--	37.6*	36.5	1.1
15L	213.3	56.3	24.5	6.7	12.5	--	33.6	32.4	34.0	36.7	35.3	1.4
16L	187.1	52.5	18.0	4.7	24.8	--	100.0	--	--	35.0*	33.6	1.4
17M	210.1	47.7	29.5	10.1	12.7	--	69.2	30.8	--	35.6	35.5	.1
18L	231.8	55.7	24.6	5.0	14.7	39.2	27.3	16.8	16.7	37.2*	37.5	-.3
19L	229.5	54.6	22.6	6.2	16.6	--	23.9	76.1	--	36.8*	37.2	-.4
20M	218.0	50.8	24.3	10.0	14.9	--	--	100.0	--	34.7	36.3	-1.6
21M	226.0	60.8	20.5	4.9	13.8	--	49.2	50.8	--	36.8	38.4	-1.6
22M	208.0	49.9	29.0	9.8	21.1	--	18.8	81.2	--	35.6	38.4	-2.8
23M	172.8	41.5	32.5	7.4	18.6	--	--	100.0	--	33.2	37.2	-4.0
24S	186.7	48.9	24.5	9.4	17.2	--	56.8	--	43.2	35.1	40.9	-5.8
25M	218.6	53.2	23.7	7.0	16.1	--	50.4	24.8	24.8	35.2	40.6	-5.4
26M	191.1	57.6	25.3	5.6	11.5	--	--	--	100.0	37.7	44.7	-7.0
27S	237.9	50.0	32.5	9.6	7.9	23.5	26.1	36.2	14.2	37.2	46.0	-8.8
Hi 13	221.4	57.5	23.9	2.3	16.3	10.7	43.3	40.9	5.1	37.2	31.6	5.6
Lo 14	217.9	52.4	24.8	7.5	15.3	8.1	31.5	49.8	10.6	36.3	37.7	-1.4
Ave	219.5	54.8	24.4	5.0	15.8	9.0	37.0	45.8	8.2	36.7	34.8	1.9

\* Average price of eggs includes hatching eggs sold.