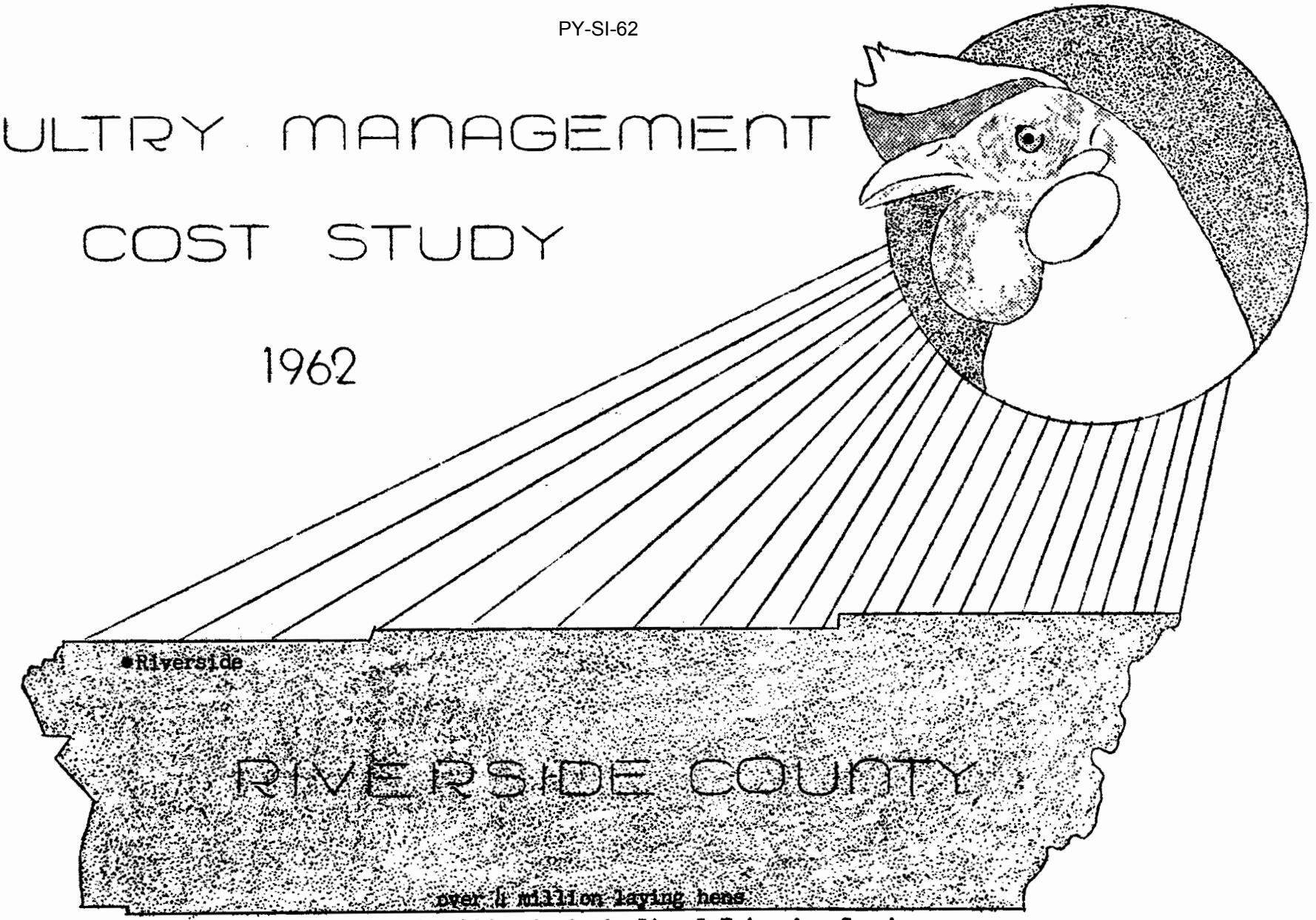
POULTRY MANAGEMENT COST STUDY 1962



University of California Agricultural Extension Service
Riverside County

Twenty - Fourth Annual Poultry Management Study Riverside County

Conducted by:

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INTRODUCTION

This is the twenty-fourth annual summary of the Riverside County Poultry Management Cost Study. The study was conducted by the Agricultural Extension Service of the University of California in cooperation with 13 Riverside County poultrymen. The records in this study reflect production, costs and income on commercial poultry operations, although they vary in size and management practices. The records in this study do not represent averages for the poultry industry in the county.

Management studies such as this should be helpful to poultrymen in learning to keep more accurate cost and production records. They are most valuable when used as a tool to help in analyzing the poultry operation to pin-point poor management practices that need to be improved. Comparing costs and management practices with other co-operators in the study can be helpful to everyone.

POULTRY SITUATION

Egg prices received by cooperators participating in the 1962 Poultry Management Study averaged 29.5 cents a dozen. This was the lowest average egg price recorded in our management study in the past ten years. This is not encouraging, but it does point up the importance of following good management practices and cutting operating costs wherever possible.

A significant trend according to management studies that have been conducted point up the fact that new and larger production units generally are able to obtain higher prices for their eggs. This is because their expanded output permits significant economics in assembling, grading, cartoning and distributing eggs which can substantially lower total marketing costs. We are experiencing this same trend in Riverside County. Flocks of 100,000 layers or more are becoming common in California today.

The outlook for 1963 indicates about a five per cent increase in replacement layers this year which would restore the nation's laying flock to the 1962 level by early fall. This egg production during the latter part of 1963 could exceed the same period last year.

EXPLANATIONS OF TERMS USED IN A POULTRY ENTERPRISE ANALYSIS

TOTAL INCOME is composed of returns from the sale of eggs, poultry manure, and other miscellaneous incomes; the value of eggs and poultry eaten in the home and the net increase in the poultry stock inventory.

TOTAL EXPENSE includes all costs of feed, chicks or poultry stock bought, hired labor, miscellaneous cash items, Value of family and operator labor, depreciation on buildings and equipment and six per cent interest on the average investment as shown by the inventory and capital record.

FARM INCOME is the total income minus cash and depreciation costs. It does not include the value of the operator and family labor and interest on investment or miscellaneous expenses.

MANAGEMENT INCOME is the amount by which the total income exceeds the total expense including the value of the operator and family labor and interest on the investment. If the total expense is larger, a net loss occurs, which is designated by a minus sign (-) preceding the figure.

AVERAGE NUMBER OF HENS is the average number of hens in the flock for the year. It is obtained by dividing the number of hen days for the year by the number of days in the year.

PER CENT MORTALITY is the per cent of the average number of hens that died during the year. It is obtained by dividing the number died by the average number of hens.

PER CENT CULLED is the per cent of the average number of hens that were sold and eaten in the home during the year. The per cent is obtained by dividing the number disposed of in this manner by the average number of hens.

PER CENT ADDED is the per cent of the average number of hens which were actually added to the flock during the year. It is obtained by dividing total additions by the average number of hens. Pullets are added at 24 weeks of age.

STOCK INVENTORY CHANGE is the difference between the value of the poultry stock on hand at the beginning of the year and the end of the year.

TABLE I - INCOME AND EXPENSE PER HEN

Ranch No. Flock Size*	INCOME					CASH AND DEPRECIATION COSTS							Net Farm Inc.	NON-CASH COSTS		Total Cost	Management Income
	Egg Sales	Cull Hens	Misc. Inc.	Stock Inv. Chng.	Total Inc.	Feed	Replacement Stock	Medication	Hired Labor	Misc.	Depreciation	Total		Family Labor	Int. on Invest.		
17 B	5.77	.11	.04	.49	6.41	3.60	.32	.03	.19	.23	.20	4.57	1.84	.15	.26	4.98	1.43
21 D	5.59	.11	- -	1.14	6.84	3.67	.64	.04	.37	.25	.31	5.28	1.56	- -	.45	5.73	1.11
24 C	5.07	.11	- -	.71	5.89	3.49	.28	.09	.24	.28	.16	4.54	1.35	.18	.29	5.01	.88
22 B	5.06	.06	- -	.47	5.59	3.36	.28	.03	- -	.17	.11	3.95	1.64	.59	.19	4.73	.86
14 D	5.64	.19	.02	.34	6.19	3.19	.43	.07	.48	.65	.35	5.17	1.02	.10**	.24	5.51	.68
7 B	5.41	.10	- -	.12	5.63	3.43	.31	.17	.05	.18	.22	4.36	1.27	.45	.16	4.97	.66
16 C	5.91	.17	.01	.63	6.72	4.03	.66	.06	.31	.18	.41	5.65	1.07	.12	.33	6.10	.62
6 C	5.94	.21	- -	.19	6.34	3.41	.73	.13	.40	.53	.25	5.45	.89	.06	.28	5.79	.55
11 B	6.48	.14	- -	- -	6.62	3.90	.28	.05	.19	.30	.40	5.12	1.50	.67	.30	6.09	.53
12 D	5.93	.14	- -	.08	6.15	3.47	.30	.02	.78	.35	.48	5.40	.75	- -	.23	5.63	.52
5 B	5.77	.17	- -	.12	6.06	3.83	.40	.07	.06	.49	.57	5.42	.64	.47	.33	6.22	- .16
3 C	5.27	.17	- -	.24	5.68	4.18	.34	.08	.58	.32	.30	5.80	- .12	- -	.32	6.12	- .44
1 B	4.99	.23	- -	-.16	5.06	3.55	.78	.04	.73	.65	.39	6.14	-1.08	.46	.36	6.96	-1.90
HI.7	5.60	.16	.01	.54	6.31	3.44	.47	.07	.37	.43	.32	5.10	1.21	.12	.29	5.51	.80
LOW6	5.76	.17	- -	.11	6.04	3.64	.45	.06	.57	.41	.39	5.52	.52	.13	.28	5.93	.11
AVG.	5.66	.16	.01	.38	6.21	3.51	.46	.06	.44	.43	.35	5.25	.96	.12	.29	5.66	.55

*A: up to 5,000 B: 5,001 - 10,000 C: 10,001 - 25,000 D: over 25,001 **Manager's Labor

For the cooperator's identification, each flock is assigned a ranch number as noted in the left hand column. Letters of the alphabet indicate flock size. Flock records are listed according to management income per hen from the highest down to the lowest. Cooperators showed an average net farm income of 96 cents per hen or an average management income of 55 cents per hen.

TABLE II - INCOME AND EXPENSE IN CENTS PER DOZEN EGGS SOLD

Ranch No. Flock Size	INCOME					CASH AND DEPRECIATION COSTS							Net Farm Inc.	NON-CASH COSTS		Total Cost	Management Income
	Egg Sales	Cull Hens	Misc. Inc.	Stock Inv. Chng.	Total Inc.	Feed	Replacement Stock	Medication	Hired Labor	Misc.	Depreciation	Total		Family Labor	Int. on Invest.		
17 B	29.3	.6	.2	2.5	32.6	18.3	1.6	.1	1.0	1.2	1.0	23.2	9.4	.8	1.3	25.3	7.3
21 D	29.7	.6	--	6.0	36.3	19.5	3.4	.2	2.0	1.3	1.7	28.1	8.2	---	2.4	30.5	5.8
24 C	28.1	.6	--	3.9	32.6	19.3	1.6	.5	1.3	1.5	.9	25.1	7.5	1.0	1.6	27.7	4.9
22 B	29.2	.3	--	2.7	32.2	19.4	1.6	.2	- -	1.0	.6	22.8	9.4	3.4	1.0	27.2	5.0
14 D	29.6	1.0	.1	1.7	32.4	16.7	2.2	.4	2.5	3.4	1.9	27.1	5.3	.5	1.3	28.9	3.5
7 B	30.6	.5	--	.7	31.8	19.4	1.8	.9	.3	1.0	1.2	24.6	7.2	2.5	.9	28.0	3.8
16 C	29.0	.8	.1	3.1	33.0	19.8	3.2	.3	1.5	.9	2.0	27.7	5.3	.7	1.6	30.0	3.0
6 C	28.8	1.0	--	.9	30.7	16.6	3.5	.6	1.9	2.6	1.2	26.4	4.3	.3	1.4	28.1	2.6
11 B	31.8	.7	--	- -	32.5	19.1	1.4	.3	.9	1.5	1.9	25.1	7.4	3.3	1.5	29.9	2.6
12 D	30.4	.7	--	.4	31.5	17.8	1.5	.1	4.0	1.8	2.4	27.6	3.9	---	1.2	28.8	2.7
5 B	29.6	.9	--	.6	31.1	19.7	2.0	.4	.3	2.5	2.9	27.8	3.3	2.4	1.7	31.9	- .8
3 C	28.8	.9	--	1.3	31.0	22.9	1.9	.4	3.2	1.7	1.6	31.7	- .7	---	1.7	33.4	- 2.4
1 B	28.5	1.3	--	-.9	28.9	20.3	4.5	.2	4.1	3.7	2.2	35.0	-6.1	2.6	2.1	39.7	-10.8
HI. 7	29.5	.8	.1	2.8	33.2	18.1	2.5	.3	2.0	2.3	1.6	26.8	6.4	.7	1.5	29.0	4.2
LOW 6	29.7	.9	--	.5	31.1	18.7	2.3	.3	2.9	2.2	2.0	28.4	2.7	.6	1.5	30.5	.6
AVG.	29.5	.8	.1	2.0	32.4	18.3	2.4	.4	2.3	2.2	1.8	27.4	5.0	.6	1.5	29.5	2.9

The average farm income per dozen eggs sold averaged 5.0 cents per dozen or an average of 2.9 cents per dozen management income.

TABLE III - FLOCK MANAGEMENT AND PRODUCTION COST FACTORS

Ranch No. Flock Size	Per Cent Died to 24 Weeks	Per Cent of avg. Laying Flock				Price Per Cull Hen	Pounds Feed Per Hen			Hours Labor Per Hen	Feed Conversion	Egg-Feed Ratio	Feed Cost Per Cwt.	Chick Cost
		Died	Culled	Added	Stock Inv. Change		Young Birds*	Hens	Total					
17 B	4.9	9.0	53.5	106.9	+42.5	20.9	26.7	97.7	124.4	.3	4.9	10.1	2.89	38.0
21 D	10.3	9.9	49.3	89.3	+29.8	22.6	22.3	96.1	118.4	.3	5.0	9.6	3.10	32.9
24 C	3.4	13.2	43.2	91.2	+25.7	26.5	22.8	93.3	116.1	.3	4.9	9.4	3.00	34.6
22 B	44.8	19.3	35.3	65.1	+10.5	17.7	16.3	81.6	97.9	.4	4.6	8.5	3.44	24.2
14 D	7.0	17.9	86.8	120.3	+15.2	22.3	30.1	81.1	111.2	.4	4.3	10.3	2.87	29.6
7 B	16.5	15.2	54.7	93.8	+23.8	17.0	23.4	85.6	109.0	.3	4.7	9.8	3.13	27.0
16 C	11.5	10.7	77.1	124.7	+37.2	21.8	31.2	92.2	123.4	.3	4.4	8.9	3.27	32.9
6 C	5.3	13.8	88.2	93.2	- 8.7	23.9	23.3	91.0	114.3	.3	4.4	9.6	2.99	32.7
11 B	5.0	10.2	64.5	80.6	+ 5.9	22.3	20.2	101.1	121.3	.6	4.5	9.9	3.21	33.9
12 D	3.3	7.3	71.4	77.9	- 2.1	19.6	19.5	93.0	112.5	.5	4.7	9.9	3.08	37.1
5 B	11.1	8.0	70.9	92.3	- .6	24.3	23.1	101.8	124.9	.4	5.0	9.6	3.07	29.3
3 C	10.5	10.4	68.9	106.7	+27.3	24.8	26.7	101.1	127.8	.4	5.0	8.8	3.27	30.6
1 B	21.7	11.7	96.7	145.5	+37.1	23.7	36.4	74.7	111.1	.8	4.0	8.9	3.20	37.4
HI.7	9.4	14.7	71.2	109.9	+22.9	22.1	27.4	87.1	114.5	.4	4.5	9.8	3.00	31.1
LOW6	8.6	9.8	76.2	92.9	+ 5.2	22.4	23.2	93.6	116.8	.5	4.7	9.5	3.11	33.9
AVG.	9.1	12.9	73.0	103.8	+16.5	22.2	25.9	89.4	115.3	.4	4.6	9.7	3.04	31.8

*Young birds under 24 weeks of age.

Feed Conversion - Pounds of feed to produce a dozen eggs.

Egg-Feed Ratio - Pounds of feed that can be purchased with a dozen eggs.

The number of pullet replacements added to the laying flock averaged 103.8 per cent compared with 103.1 per cent in 1961. While the per cent of pullet replacement was slightly higher than in 1961, average egg production per bird was lower as indicated on page 7.

TABLE IV - EGG PRODUCTION AND SALES

Ranch No. Flock Size	Eggs Per Hen	Per Cent Production	Per Cent Eggs Marketed				Value Per Dozen		
			Large	Medium	Small	Commercial	Average Price	Net Cost	Management Income
17 B	240.5	65.9	70.2	23.7	4.8	1.3	29.3	22.0	7.3
21 D	228.7	62.7	80.9	11.7	1.5	5.9	29.7	23.9	5.8
24 C	228.7	62.6	71.1	23.5	4.5	.9	28.1	23.2	4.9
22 B	214.0	58.6	84.5	8.2	1.4	5.9	29.2	24.2	5.0
14 D	228.1	62.5	66.1	21.5	2.3	10.1	29.6	26.1	3.5
7 B	220.6	60.4	87.9	9.0	1.1	2.0	30.6	26.8	3.8
16 C	249.8	68.4	66.4	24.1	4.9	4.6	29.0	26.0	3.0
6 C	247.2	67.7	67.4	19.1	3.3	10.2	28.8	26.2	2.6
11 B	267.7	73.3	71.8	17.3	3.7	7.2	31.8	29.2	2.6
12 D	235.2	64.4	84.0	11.5	2.6	1.9	30.4	27.7	2.7
5 B	244.0	66.8	78.8	13.0	2.4	5.8	29.6	30.4	- .8
3 C	245.0	67.1	68.2	18.5	3.3	10.0	28.8	31.2	-2.4
1 B	225.7	61.8	72.0	21.1	5.1	1.8	28.5	39.3	-10.8
HI.7	230.9	63.3	70.7	19.5	2.7	7.1	29.5	25.3	4.2
LOW6	241.3	66.1	75.6	15.6	3.1	5.7	29.7	29.1	.6
AVG.	234.6	64.3	72.5	18.0	2.9	6.6	29.5	26.6	2.9

The average price of eggs received by cooperators was 29.5 cents per dozen compared with 31.6 cents in 1961. The average net cost of producing eggs was 26.6 cents per dozen compared with 28.6 cents in 1961.

TABLE V - SUMMARY OF RIVERSIDE COUNTY POULTRY MANAGEMENT STUDIES SINCE 1953

	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Number of Records	20	23	28	20	17	16	14	13	15	13
Average number of hens	2181	2805	2765	2693	3068	4444	5536	8152	11839	22453
Eggs per hen	230	234	234	232	232	230	242	240	242	235
Per cent hen mortality	10			10.5	10.1	10.9	11.6	12.4	11.9	12.9
Per cent chick mortality	10			4.5	7.3	7.5	9.6	9.8	8.0	9.1
Per cent culled	92	96	87	94	74	90	80	56	72	73
Per cent added	121			121	101	104	108	90	103	104
Hours labor per hen	1.4	1.1	1.1	1.1	.9	1.0	.8	.6	.5	.4
Pounds feed per hen	144	133	130	130	120	122	122	116	118	115
Pounds feed per dozen eggs				5.0	4.9	5.0	4.7	4.7	4.6	4.6
Feed cost per 100 pounds	4.10	3.92	3.77	3.66	3.49	3.47	3.31	3.03	3.11	3.04
Feed cost per dozen eggs							20.7	18.0	18.7	18.3
Average price of eggs	52.7	36.4	42.6	36.2	35.8	36.5	30.0	33.8	31.6	29.5
Net cost per dozen	41.2	36.4	36.4	34.2	33.2	34.0	32.3	27.9	28.6	26.6
Mgt. income per dozen	11.5	- -	6.2	2.0	3.1	2.5	-2.3	5.9	3.0	2.9
Total income per hen	11.48	7.77	9.08	8.03	7.44	7.77	6.28	7.13	6.67	6.21
Total expense per hen	7.80	7.78	7.90	7.63	5.53	5.81	5.77	5.31	5.47	5.25
Farm income per hen	3.68	1.01	2.46	1.81	1.91	1.77	.51	1.82	1.20	.96
Management income per hen	2.20	-.01	1.18	.40	.59	.44	-.44	1.16	.59	.55
Egg-feed ratio				9.8	10.3	10.5	9.1	11.2	10.0	9.7

The above chart compares the management income per bird over the past ten years. The trend of the poultry business is reflected in the increase in average flock size. It is amazing how fast the poultry business is becoming big business.

TABLE VI - POULTRY FLOCK MANAGEMENT PRACTICES

Ranch Numbers	1	3	5	6	7	11	12	14	16	17	21	22	24
LAYING FLOCK													
Average Number Layers 1/	B	C	B	C	B	B	D	D	C	B	D	B	C
Number Layers per Pen:													
Individual cages - 1 bird	x	x								x			
Multiple cages - (1) 2-6" (2) 3-10" (3) 2-12"	1	1	1	2	1	1	1	1	1	3		1	
Wire pens - over 6 birds		x									x		
EGG HANDLING													
Times gathered daily	2	2	2	3	2	2	2	2	2	2	2	1	
Equipment Used in Gathering Eggs:													
Push carts	x	x		x		x	x	x		x	x	x	
Power-driven carts		x	x		x	x			x				
Filler flats	x	x		x	x	x	x	x	x	x	x	x	
Egg Processing Done on Ranch:													
(1) Cleaned (2) Graded (3) Both	3	3	3		3		3	3			1	3	
Packed in cartons		x						x					
Eggs cooled under refrigeration immediately after gathering		x		x		x		2/ x	x	x	x		
Eggs cleaned and graded before cooling	x		x				x	3/ x			4/ x	x	
MANURE REMOVAL PLAN													
Months between cleanout	12	6	6	3	6	6	4	4	6	6	6	6	

1/ A: up to 5,000 B: 5,001 - 10,000 C: 10,001 - 25,000 D: over 25,001
2/ summer 3/ winter 4/ not graded

It is interesting to compare number of layers per pen and method of handling eggs, all of which influence net returns.

BROODING, VACCINATION AND DISEASE CONTROL PROGRAM

Ranch Numbers	1	3	5	6	7	11	12	14	16	17	21	22	24
BROODING													
Source of Brooder Heat:													
Electricity - (1) canopy (2) hot water (3) sunshine (4) infra-red	1	1+4	4		1			2		3		1	
Gas - (1) canopy (2) hot water			1	1	2	1	2	2	2		2		
Number of Broods	4	5	7	7	7	5	6	27	5	4	4	6	8
Type of Brooder Housing:													
Floor	x	x	x						x		x		
Wire pens (s) sunshine			x	s	x	x	x	x		x		x	
VACCINATION													
Newcastle disease		x				x		x	x		x		
First vaccination, B[1]	x	x	x	x	x	x			x	x	x		
Second vaccination (1) wing web (2) intramus.	1		1	2	1	1	1		1	1	1	1	
Newcastle & Bronchitis												x	
Bronchitis	x	x	x	x	x	x	x	x	x		x		
Tracheitis	x	x	x	x	x	x	x	x	x	x	x	x	
Fowl Pox		x	x	x	x	x	x	x	x	x	x	x	
DISEASE													
Complex disease present	x	x		x	x			x	x		x		
Treatment Used:													
Sulfa													
Antibiotic	x	x			x			x					
Bacterin (coryza)	x	x	x	x	x			x	x		x		

The above chart contains pertinent information pertaining to types of equipment and management practices followed in rearing replacement stock in this study. It also pin-points disease problems and methods of vaccinating and controlling disease.