

POULTRY MANAGEMENT STUDY

RIVERSIDE AND ORANGE COUNTIES

1965

AGRICULTURAL EXTENSION SERVICE UNIVERSITY OF CALIFORNIA IN RIVERSIDE AND ORANGE COUNTIES

UC Cooperative Extension

INTRODUCTION

The University of California Agricultural Extension Service conducted Poultry Management Studies in six California counties in 1965. 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. One of the side benefits of a uniformly conducted study of this type is the standardization of terminology throughout the industry.

In 1965 thirteen ranches participated in this combined 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. The records were processed at the University of California at Riverside Computer Center, and complete analyses were mailed back to each cooperator representing each four week period as well as the entire year to date.

RANCH SIZES

Smallest Ranch	10,939
Largest Ranch	59,839
Average Ranch	29,158
TOTAL HENS	379,057

DISCUSSION

Los Angeles average wholesale egg prices once again were the lowest since pre-war years. Average wholesale prices were down 1¢ per dozen under 1964. Management Income per hen was down 22¢ (most of this was due to the lower egg prices).

The Author Is
Donald Bell
Riverside and Orange County Farm Advisor

GENERAL INFORMATION

All records are kept on a "hen-day" basis. In other words, a daily inventory of all chickens is maintained throughout the year.

TERMS

1. Hens - all chickens 24 weeks of age and older.
2. % Culled Total number of birds in each category
% Died divided by average number of hens.
% Added
3. Commercial Eggs - Includes cracks, pee vees, and B grade eggs.
4. Change of Stock Inventory - Increased or decreased flock evaluation.
5. Miscellaneous Costs - Vaccines, medication, repairs, taxes, utilities, small equipment, etc.
6. Depreciation - From Federal Income Tax Report.
7. Family Labor - Estimated hours @ \$1.50 per hour.
8. Interest on Investment - Average value of stock, buildings and equipment, and market value for land.
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 are paid.

A - 10-15,000 hens

B - 15-30,000

C - 30-50,000

D - 50,000 and over

EGG PRODUCTION, SIZES AND PRICES

Serial No. and Size	Eggs Per Hen	% Production	% Large	% Medium	% Small	% Commercial	% Retail	Average Egg Price		
								Wholesale	Retail	All Eggs
1B	244.3	66.9	77.9	13.6	2.0	6.5	8.1	28.3¢	41.5¢	29.3¢
2A	263.2	72.1	64.8	24.6	4.4	6.2	4.6	26.9	42.4	27.6
3C	243.9	66.8	70.3	20.3	4.4	5.1	7.0	26.8	35.9	27.4
4A	252.0	69.0	66.1	18.6	2.5	12.8	.3	25.9	28.9	25.9
5C	230.5	63.2	76.9	12.8	2.0	8.3	7.9	28.0	38.4	28.8
6A	245.1	67.2	75.9	18.0	2.8	3.3	--	27.7	--	27.7
7B	255.4	70.0	73.6	20.8	3.2	2.4	3.0	27.4	36.7	27.7
8C	163.7	44.8	88.0	7.2	.5	4.2	13.7	28.4	42.9	30.4
9B	226.8	62.1	75.7	13.1	3.0	8.2	.2	28.1	36.8	28.1
10B	230.0	63.0	75.0	19.3	2.4	3.3	.1	27.0	33.6	27.0
11D	226.3	62.0	64.9	25.8	6.1	3.2	--	27.0	--	27.0
12D	230.9	63.3	74.1	13.9	2.3	9.7	7.7	27.3	39.2	28.2
13A	232.3	63.6	68.0	19.4	3.6	9.0	2.5	26.2	35.7	26.4
Top 4	250.9	69.8	69.8	19.3	3.3	7.7	5.0	27.0	37.2	27.6
Bottom 4	229.9	63.0	70.5	19.6	3.6	6.3	2.6	26.9	36.2	27.2
Average	234.2	64.2	73.2	17.5	3.1	6.4	4.3	27.3	34.3	27.8
1964 Av. Orange C	233.5	63.8	73.8	18.1	3.6	4.5	4.4	28.4	39.3	28.9

The greatest single factor which separated the high profit ranches from the low profit ranches was eggs produced per hen. In this year's study this amounted to 21 eggs per hen. Most of this apparently was due to the lower average age of the high profit flocks. Of the top four flocks, three did not practice any force molting, but the number one flock had approximately 25% force molted hens. Of the bottom four flocks, three practiced force molting, but the bottom flock did not use this practice at all.

INCOME PER HEN

Serial No. And Size	Egg Sales	Cull Hens	Change of Stock Inventory	Misc.	Total
1B	\$ 5.98	\$.09	\$.29	\$ --	\$ 6.36
2A	5.98	.09	.16	--	6.23
3C	5.51	.10	.31	--	5.92
4A	5.42	.10	--	--	5.52
5C	5.48	.03	.10	.38	5.99
6A	5.65	.07	.10	--	5.82
7B	5.87	.11	.16	--	6.14
8C	4.26	.06	.28	--	4.60
9B	5.26	.08	-.05	--	5.29
10B	5.28	.08	.14	--	5.50
11D	5.05	.14	.06	--	5.25
12D	5.34	.11	-.09	--	5.36
13A	4.79	.11	.34	.01	5.25
Top 4	5.72	.10	.19	--	6.01
Bottom 4	5.12	.11	.11	--	5.34
Average	5.38	.09	.14	.03	5.63
1964 Avg. Orange Co.	5.62	.11	.04	--	5.77

Income from egg sales was down 24¢ per hen in 1965. This was due to the one cent lower egg prices. All but three ranches had increased inventory values at the end of the year, which helped to reduce the difference in total income between 1964 and 1965 to only 14¢.

COSTS PER HEN

Serial No. And Size	CASH COSTS					Depre- ciation	NON-CASH COSTS		Total Costs
	Feed	Replac- ment *	Hired Labor	Misc.	Total		Family Labor	Int: on Investment	
1B	\$ 3.67	\$.28	\$.39	\$.20	\$ 4.54	\$.19	\$.13	\$.20	\$ 5.06
2A	3.61	.30	.11	.21	4.23	.29	.26	.18	4.96
3C	3.62	.27	.22	.25	4.36	.14	.19	.22	4.91
4A	3.28	.24	.24	.23	3.99	.28	.12	.24	4.63
5C	2.96	.84	.58	.59	4.97	.09	--	.06	5.12
6A	3.52	.29	.35	.21	4.37	.18	.15	.25	4.95
7B	3.62	.31	.62	.55	5.10	.08	.13	.28	5.59
8C	2.59	.46	.16	.43	3.64	.13	.14	.15	4.06
9B	3.45	.25	.16	.35	4.21	.19	.19	.18	4.77
10B	3.02	.68	.06	.35	4.11	.34	.28	.28	5.01
11D	2.80	1.46	.29	.16	4.71	.13	--	.12	4.96
12D	3.09	1.22	.32	.20	4.83	.14	.04	.16	5.17
13A	3.56	.86	.53	.53	5.48	.18	.31	.32	6.29
Top 4	3.55	.27	.24	.22	4.28	.23	.18	.21	4.89
Bottom 4	3.12	1.06	.30	.31	4.78	.20	.16	.22	5.36
Average	3.29	.57	.31	.33	4.50	.18	.15	.20	5.04
1964 Av. Orange C	3.28	.57	.34	.29	4.48	.13	.14	.15	4.95

* Cost of baby chicks and/or started pullets

Costs on a per hen basis changed very little in 1965. Note that the top four ranches had higher feed costs, but drastically lower replacement costs. This was due to their not using started pullets. 79% of the replacements added on the four bottom ranches were started pullets.

INCOME OVER COSTS

Serial No. And Size	Total	Cash	Cash	Depre-	Net Farm	Non-Cash	Management
	Income	Costs	Income	ciation	Income	Costs	Income
	minus		equals	minus	equals	minus	equals
1B	\$ 6.36	\$ 4.54	\$ 1.82	\$.19	\$ 1.63	\$.33	\$ 1.30
2A	6.23	4.23	2.00	.29	1.71	.44	1.27
3C	5.92	4.36	1.56	.14	1.42	.41	1.01
4A	5.52	3.99	1.53	.28	1.25	.36	.89
5C	5.99	4.97	1.02	.09	.93	.06	.87
6A	5.82	4.37	1.45	.18	1.27	.40	.87
7B	6.14	5.10	1.04	.08	.96	.41	.55
8C	4.60	3.64	.96	.13	.83	.29	.54
9B	5.29	4.21	1.08	.19	.89	.37	.52
10B	5.50	4.11	1.39	.34	1.05	.56	.49
11D	5.25	4.71	.54	.13	.41	.12	.29
12D	5.36	4.83	.53	.14	.39	.20	.19
13A	5.25	5.48	-.23	.18	-.41	.63	-1.04
Top 4	6.01	4.28	1.73	.23	1.50	.39	1.12
Bottom 4	5.34	4.78	.56	.20	.36	.38	-.02
Average	5.63	4.50	1.13	.13	.95	.35	.60
1964 Avg. Orange Co.	5.77	4.48	1.29	.18	1.11	.29	.82

Management income is the amount left over after paying all cash costs, depreciation, unpaid family labor, and interest on the investment. It is probably the most accurate means of measuring the true value of the management used on each ranch. As usual, there is considerable spread between the most efficient and least efficient ranches.

INCOME AND COSTS PER DOZEN EGGS SOLD

Serial No. And Size	INCOME			CASH COSTS					Cash Income	Depreciation	Net Farm Income	NON-CASH COSTS		Total Costs	Management Income
	Eggs	Other	Total	Feed	Replacements	Hired Labor	Misc.	Total				Family Labor	Int. on Invest		
1B	29.3¢	1.8¢	31.1¢	18.0¢	1.4¢	1.9¢	1.0¢	22.3¢	8.8¢	.9¢	7.9¢	.6¢	.9¢	24.7¢	6.4¢
2A	27.6	1.2	28.8	16.7	1.4	.5	1.0	19.6	9.2	1.3	7.9	1.2	.8	22.9	5.9
3C	27.4	2.0	29.4	18.0	1.4	1.1	1.2	21.7	7.7	.7	7.0	.9	1.1	24.4	5.0
4A	25.9	.5	26.4	15.7	1.2	1.2	1.1	19.2	7.2	1.4	5.8	.6	1.2	22.4	4.0
5C	28.8	2.7	31.5	15.6	4.4	3.0	3.1	26.1	5.4	.5	4.9	--	.3	26.9	4.6
6A	27.7	.9	28.6	17.2	1.4	1.7	1.0	21.3	7.3	.9	6.4	.7	1.2	24.1	4.5
7B	27.7	1.3	29.0	17.1	1.5	2.9	2.6	24.1	4.9	.4	4.5	.6	1.3	26.4	2.6
8C	30.4	2.4	32.8	18.5	3.3	1.2	3.1	26.1	6.7	.9	5.8	1.0	1.0	29.0	3.8
9B	28.1	.2	28.3	18.5	1.3	.8	1.9	22.5	5.8	1.0	4.8	1.0	.9	25.4	2.9
10B	27.0	1.1	28.1	15.5	3.5	.3	1.8	21.1	7.0	1.7	5.3	1.4	1.4	25.6	2.5
11D	27.0	1.0	28.0	14.9	7.8	1.5	.9	25.1	2.9	.7	2.2	--	.6	26.4	1.6
12D	28.2	--	28.2	16.3	6.4	1.7	1.1	25.5	2.7	.7	2.0	.2	.8	27.2	1.0
13A	26.4	2.5	28.9	19.6	4.7	2.9	2.9	30.1	-1.2	1.0	-2.2	1.7	1.8	34.6	-5.7
Top 4	27.6	1.4	28.9	17.1	1.4	1.2	1.1	20.7	8.2	1.1	7.2	.8	1.0	23.6	5.3
Bot. 4	27.2	1.2	28.3	16.6	5.6	1.6	1.7	25.5	2.9	1.0	1.8	.8	1.2	28.5	-1.2
Avg.	27.8	1.4	29.2	17.0	3.1	1.6	1.7	23.4	5.7	.9	4.8	.8	1.0	26.2	3.0
1964 Av Orange	28.9	.7	29.6	16.8	3.0	1.7	1.5	23.0	6.6	1.2	5.4	.7	.7	25.6	4.0

Five ranches had total cash costs of less than 22¢ per dozen for the entire year. Five ranches had total costs of less than 25¢ per dozen.

Total costs represent all expenses during the year divided by all eggs sold. Since part of these costs include the production of cull hens, miscellaneous income and growth total costs still do not tell us the net cost of producing a dozen eggs. The table on page 11 indicates this figure.

EGG PRODUCTION MISCELLANEOUS COSTS

PER HEN

Ranch	Medicines 1) & Vaccines	Repairs & Small Equip.	Utilities 2)	Auto & 3) Truck	Insurance	Taxes	Rent	Other	Total
1B	5.50¢	3.46¢	4.83¢	1.62¢	--	3.16¢	--	1.87¢	20.44¢
2A	2.45	8.66	5.36	.72	.80	3.00	--	.20	21.19
3C	4.97	.67	4.10	.55	--	11.37	--	3.31	24.97
4A	3.27	2.76	8.31	.21	1.68	6.64	--	.51	23.38
5C	2.82	2.78	5.17	3.14	2.37	3.03	30.48	9.17	58.96
6A	5.65	3.15	5.54	1.47	--	5.56	--	--	21.37
7B	25.68	6.33	5.83	.43	1.13	10.57	--	4.66	54.63
8C	4.75	7.35	8.92	2.77	.36	5.98	.97	12.10	43.20
9B	6.48	4.92	5.49	2.85	1.67	7.12	--	6.30	34.83
10B	2.30	8.86	4.26	2.07	1.63	7.30	--	8.38	34.80
11D	.61	5.78	1.24	.09	--	4.18	3.34	.70	15.94
12D	4.97	1.70	3.33	1.40	1.63	5.48	--	1.96	20.47
13A	4.35	11.65	13.15	2.46	3.57	10.22	--	7.89	53.29
Top 4	4.05	3.89	5.65	.78	.62	6.04	--	1.47	22.50
Bottom 4	3.06	7.00	5.50	1.51	1.71	6.80	.84	4.73	31.13
Average	5.68	5.24	5.81	1.52	1.14	6.43	2.68	4.39	32.88

PER DOZEN EGGS SOLD

1B	.27¢	.17¢	.24¢	.08¢	--	.15¢	--	.09¢	1.00¢
2A	.11	.40	.25	.03	.04	.14	--	.01	.98
3C	.25	.03	.20	.03	--	.57	--	.16	1.24
4A	.16	.13	.40	.01	.08	.32	--	.02	1.12
5C	.15	.15	.27	.17	.12	.16	1.60	.48	3.10
6A	.28	.15	.27	.07	--	.27	--	--	1.04
7B	1.21	.30	.28	.02	.05	.50	--	.22	2.58
8C	.34	.52	.64	.20	.03	.43	.07	.86	3.09
9B	.35	.26	.29	.15	.09	.38	--	.34	1.86
10B	.12	.45	.22	.11	.08	.37	--	.43	1.78
11D	.03	.31	.07	--	--	.22	.18	.04	.85
12D	.26	.09	.18	.07	.09	.29	--	.10	1.08
13A	.24	.64	.72	.14	.20	.56	--	.43	2.93
Top 4	.20	.18	.27	.04	.03	.30	--	.07	1.09
Bottom 4	.16	.37	.30	.08	.09	.36	.05	.25	1.66
Average	.29	.28	.31	.08	.06	.34	.14	.24	1.74

1) Includes all antibiotics or drugs added to the feed as well as those used separately, vaccines & veterinary service.

2) Water, electricity, gas, telephone.

3) 10 cents per mile.

FEED CONSUMPTION AND FEED CONVERSION

Serial No. And Size	Pounds Feed Per Hen		Pounds Per Dozen		Cost Per CWT All Feed	Est. Cost Per CWT Lay Feed	Feed Cost Per Dozen
	All Feed	Layers	All Feed	Layers			
1B	114.8	93.1	5.64	4.57	\$ 3.19	\$ 3.09	14.1c
2A	113.9	91.0	5.19	4.14	3.17	3.07	12.7
3C	113.9	93.3	5.61	4.59	3.17	3.07	14.1
4A	107.2	88.4	5.10	4.21	3.06	3.00	12.6
5C	96.0	93.3	5.00	4.86	3.09	3.09	15.0
6A	111.9	94.1	5.48	4.60	3.14	3.04	14.0
7B	114.7	92.8	5.39	4.36	3.16	3.06	13.3
8C	83.4	82.4	6.11	6.04	3.11	3.11	18.8
9B	107.0	91.7	5.66	4.85	3.23	3.13	15.2
10B	96.3	93.4	5.03	4.87	3.14	3.12	15.2
11D	87.4	81.2	4.63	4.31	3.20	3.20	13.8
12D	98.6	94.6	5.12	4.92	3.14	3.14	15.4
13A	102.0	82.9	5.27	4.28	3.49	3.39	14.5
Top 4	112.5	91.5	5.39	4.38	3.15	3.06	13.4
Bot. 4	96.1	88.0	5.01	4.60	3.24	3.21	14.7
Avg.	103.6	90.2	5.33	4.66	3.18	3.12	14.5
1964 Av Orange	106.4	91.9	5.40	4.70	3.08	2.98	14.0

The higher feed consumption (all feed) by the top 4 ranches is a reflection of raising their own pullets, while the better feed conversion (layers) is a result of the higher production rate. Lower lay feed cost and higher production resulted in a feed cost per dozen eggs of 1.3¢ less in favor of the top 4 ranches.

MANAGEMENT FACTORS

Serial No. And Size	Per Cent Mortality 1 Day to 24 Weeks*	Per Cent of Average Laying Flock			
		Died	Culled	Added	Increase or Decrease
1B	5.0	13.1	52.2	88.3	+ 23.0
2A	7.3	12.7	60.7	107.5	+ 34.1
3C	4.7	11.6	57.4	87.3	+ 18.3
4A	2.9	7.5	63.3	83.0	+ 12.2
5C	--	12.9	29.2	52.1	+ 10.0
6A	7.4	10.8	54.0	80.6	+ 15.8
7B	3.4	10.4	68.5	87.5	+ 8.6
8C	--	31.2	33.8	97.5	+ 32.5
9B	15.4	18.1	50.4	70.2	+ 1.7
10B	--	14.5	29.9	36.0	- 8.4
11D	--	16.1	67.1	115.3	+ 32.1
12D	--	8.4	75.2	76.4	- 7.2
13A	9.5	13.4	81.1	93.4	- 1.1
Top 4		11.2	58.4	91.5	+ 21.9
Bot. 4		13.1	64.3	80.3	+ 3.9
Avg.		13.9	55.9	82.7	+ 13.2
1964 Av. Orange Co		14.6	61.6	81.3	+ 5.1

* Purchased and added in 1965

Culling rate was down 6% below 1964. This is a reflection of more force molting. Even with low egg prices, all but three ranches had a net flock increase in 1965.

UC Cooperative Extension

MISCELLANEOUS DATA

Serial No. And Size	Hours of Labor Per Hen	Per Cent Labor Hired	Price Rec'd Per Cull	Chick Cost	Started Pullet Cost		Per Cent Started Pullets	Per Cent Force Molted
					16 wk.	20 wk.		
1B	.32	72.5	16.5	34.1¢	--	--	0	25
2A	.25	32.5	14.8	28.8	--	--	0	0
3C	.30	58.5	18.2	29.1	--	--	0	0
4A	.24	66.6	14.8	29.9	--	--	0	0
5C	.24	100.0	10.7	--	--	1.60	100	25
6A	.28	64.5	15.9	29.9	--	--	0	33
7B	.47	81.9	16.5	30.0	--	--	0	4
8C	.20	53.8	18.1	--	--	1.55	100	47
9B	.25	48.4	16.7	29.2	--	--	0	34
10B	.23	16.9	25.5	27.6	--	1.58	100	33
11D	.15	100.0	20.2	--	--	1.50	100	10
12D	.18	85.6	14.5	--	--	1.57	100	25
13A	.51	59.3	13.1	29.6	--	1.60	15	0
Top 4	.28	57.5	16.1	30.5	--	--	0	6
Bottom 4	.27	65.5	18.3	28.6	--	1.56	79	17
Average	.28	64.7	16.6	29.8	--	1.57	40	18
1964 Av. Orange C	.30	68.2	18.4	30.5	1.37	1.53	39	20

The high profit ranches did not purchase any started pullets, and tended to molt less than the low profit ranches. The number of records here is for too few to bring out any conclusions on the use of these two practices, but poultrymen should be cautioned to carefully study these practices before adopting them.

HOUSING INFORMATION

Serial No. And Size	No. Hens Per Pen and % of Each			
	1	2-6	7-40	Over 40
1B	--	100	--	--
2A	--	100	--	--
3C	--	100	--	--
4A	80	20	--	--
5C	--	92	8	--
6A	20	80	--	--
7B	5	74	9	12
8C	--	60	40	--
9B	--	53	47	--
10B	--	100	--	--
11D	--	100	--	--
12D	--	--	100	--
13A	10	90	--	--

The predominant cage size used by the cooperators in this study was the 12" by 18" and the 10" by 18" cage. Three hens per cage seems to be the most common cage density.

SUMMARY OF COST OF PRODUCTION PER DOZEN

Serial No. And Size	Feed	Replacements	Hired Labor	Misc.	Depreciation	Family Labor	Interest on Investment	Total Costs	Minus Non-Egg Costs	Net Costs
1B	18.0¢	1.4¢	1.9¢	1.0¢	.9¢	.6¢	.9¢	24.7¢	- 1.8¢	22.9¢
2A	16.7	1.4	.5	1.0	1.3	1.2	.8	22.9	- 1.2	21.7
3C	18.0	1.4	1.1	1.2	.7	.9	1.1	24.4	- 2.0	22.4
4A	15.7	1.2	1.2	1.1	1.4	.6	1.2	22.4	- .5	21.9
5C	15.6	4.4	3.0	3.1	.5	0	.3	26.9	- 2.7	24.2
6A	17.2	1.4	1.7	1.0	.9	.7	1.2	24.1	- .9	23.2
7B	17.1	1.5	2.9	2.6	.4	.6	1.3	26.4	- 1.3	25.1
8C	18.5	3.3	1.2	3.1	.9	1.0	1.0	29.0	- 2.4	26.6
9B	18.5	1.3	.8	1.9	1.0	1.0	.9	25.4	- .2	25.2
10B	15.5	3.5	.3	1.8	1.7	1.4	1.4	25.6	- 1.1	24.5
11D	14.9	7.8	1.5	.9	.7	0	.6	26.4	- 1.0	25.4
12D	16.3	6.4	1.7	1.1	.7	.2	.8	27.2	0	27.2
13A	19.6	4.7	2.9	2.9	1.0	1.7	1.8	34.6	- 2.5	32.1
Top 4	17.1	1.4	1.2	1.1	1.1	.8	1.0	23.7	- 1.4	22.3
Bot. 4	16.6	5.6	1.6	1.7	1.0	.8	1.2	28.5	- 1.2	27.3
Average	17.0	3.1	1.6	1.7	.9	.8	1.0	26.1	- 1.4	24.7
1964 Av. Orange C	16.8	3.0	1.7	1.5	1.2	.7	.7	25.6	- .8	24.8

The 1965 net cost of production is almost identical to 1964. This term represents the true cost of production and differs from total cost of production in that it does not include the cost of producing cull hens, miscellaneous income or growth.

In 1965 four ranches produced eggs for less than 23¢ per dozen, while seven produced eggs below 25¢.

UC Cooperative Extension

ACKNOWLEDGEMENTS

The Agricultural Extension Service would like to express it's appreciation to the thirteen poultrymen who cooperated in the study this year. Without their full interest such a study would be impossible to conduct.

Many persons participated in the processing of this data and due recognition should be given to them.

1. Dr. Thomas Little, Extension Biometrician, U.C.R. - Dr Little devoted considerable time to the development of the computer program, and his office processed the monthly reports.
2. Mrs. Isabel Reidle, Junior Statistician, U.C.R. - Mrs. Reidle was responsible for transferring the original data to punch cards for processing, and for returning the analyses to the County office.
3. Mrs. Millicent Harrell, Secretary Riverside County A.E.S. office - Mrs. Harrell assisted in the final analyses and printed the final reports.
4. Mrs. Mabelle Quinlan, Secretary Orange County A.E.S. office - Mrs. Quinlan was responsible for checking the Orange County reports for accuracy and returning the monthly reports to the cooperators.

RIVERSIDE COUNTY OFFICE

Basement - 6370 Magnolia Avenue
Riverside, California 92506
Phone: 683-6491 (Area Code 714)

ORANGE COUNTY OFFICE

1000 South Harbor Boulevard
Anaheim, California 92805
Phone: 774-0284 (Area Code 714)