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1973 POULTRY EGG COST STUDY
San Diego County, California

Prepared and compiled by Farm Advisor Robert H. Adolph
Cooperative Agricultural Extension Service
In cooperation with San Diego County Poultry Egg Industry

This study includes production of 1,162,111 average laying hens on 20 ranches in San Diego County

This study in San Diego County is conducted by the Agricultural Extension Service, University of California. The results of this study cannot be considered as representative of this area. The results are from a group of specialized egg producing ranches with flock sizes varing from 10,000 layers per ranch to 150,000 layers with an average of 58,106 laying hens over 6 months of age.

The 20 cooperators in this study supplied monthly reports of their results for the year of 1973 for the purpose of comparing and evaluating their results. The overall results are published so that former cooperators and others in San Diego County may compare and evaluate their own records with that of the study results.

Housing - Mostly open type, truss construction, metal roof, with curtains or lath siding. During winter, most houses have an added plastic cover over lath to retain warmth in poultry housing. Most ranches had standard type cages, 16" to 18" deep, with 2 birds in 8-inch, 3 in 12-inch, 4 in 16-inch, and 6 in 24-inch wide cages. Feed located on front of back-to-back cages, and water located in center.

Electric cart feeding and mechanical feeders are generally used. Several of the ranches had fully enclosed, forced ventilation housing. Data available was not sufficient to make an economic analysis of advantages of enclosed housing. It is considered that closing the houses during the winter months helps to save on feed energy requirements.

Replacements - Pullets were added to the flock at six months of age. Number of times varied usually two to four times during the year. About two-thirds of the replacements this year were started pullets. The laying flock had a carryover of old hens from 1972 due to lack of funds for replacements. An inventory of birds on hand at the beginning and end of the year indicated 57 percent of the flock were pullets and 43 percent, on the average for the year, were hens 18 months and older. The result was that the average rate of lay was only 227 eggs per hen or 62 percent for the year. Three cooperator flocks, mostly of old hens, averaged less than 50 percent rate of lay for the year.

Management as a cost of production - One cent per dozen eggs was charged as a management cost of production. This is designed to cover miscellaneous cost items having to do with management. In order to provide compensation to growers producing their own replacements, a charge of 20 cents per pullet added to the flock for management efforts involved in brooding, rearing, and vaccinating is included as a cost of replacement along with all other costs of growing pullets.

Total costs per dozen eggs averaged 39.5 cents with average egg income of 46.7 cents for all eggs sold wholesale "nest run" at the ranch. Income over costs was $1.36 per hen, almost equal to the $1.39 loss per hen results of 1971.

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RHA:ap

SUMMARY

Results of the 1973 study, with comparisons to previous years, are presented as follows:

Results per dozen eggs produced
Results per average layer (365 hen days)
Flock statistics, mortality, cull, added, feed and feed ratios
Summary - Costs of production - comparing low and high cost operators
Table A and B provide a 25-year summary of study results

Feed, cost, for layers only, averaged 26.9 cents per dozen. The next highest cost was replacement stock costs of 5.9 cents per dozen. The cull income of 51 cents per cull marketed, added 34 cents per hen and reduced replacement costs by 1.8 cents per dozen, compared to previous year of only .4 cent per dozen. The total of 32.8 cents per dozen cost for feed and replacement accounted for 83 percent of total costs.

Feed used by layers only per dozen eggs was 4.8 pounds, 10 percent over 1972, and the poorest ratio since 1956 study year. This is a good result when it is considered that only 57 percent of this year's birds were pullets and that a major part of the old hens had been molted several times.

The results of the 1973 cost study may be used to evaluate present costs of production. Feed cost is the major difference in present costs and 1973 average costs. Cost of laying ration at this printing is about $1.20 more per 100 pounds than the 1973 average ration cost. Assuming 1973 estimate that 5.7 pounds of feed was required per dozen eggs and that feed cost was 1.2 cents more per pound, then present feed costs could be estimated at about 7 cents more than 1973.

Cull hen values have dropped so that replacement costs would add another 1.5 cents to the seven cents greater feed cost. These two costs would then make present costs at 48 cents per dozen, assuming performance comparable to the 1973 study results.

SAN DIEGO EGG COST STUDY, 1971, 1972, and 1973

RESULTS PER DOZEN EGGS PRODUCED	1971 Average All Cents	1972 Average All Cents	1973 Average All Cents	Compare Your Results
Feed Layers Only	15.4¢	17.1¢	26.9¢	
Feed Cost Replacements	3.2	1.8	2.7	
Replacement Chicks & Started Pullets	2.7	2.4	6.3	
Supplies, Taxes, Utilities, Misc., for Layers & Replacements	1.4	1.2	1.5	
Hired Labor Costs for Layers and Replacements	1.9	2.0	2.1	
Home Chore Labor	.1	.1	.1	
Stock Inventory Value + Charge - Credit	-.2	+1.3	-2.2	
Cull Sales - Credit	-.4	-.4	-1.8	
Net Cash and Labor Cost	24.1¢	25.5¢	35.6¢	
Depreciation 15% Average Value of Buildings & Equipment	1.2	1.1	1.2	
Interest 8% on Land, Stock and Average Value of Buildings & Equipment	1.4	1.2	1.4	
Management Per Dozen (hens & pullets raised)	1.8	1.3	1.3	
Net Cost of Production Per Dozen Eggs	28.5¢	29.1¢	39.5¢	
Income Per Dozen Eggs	21.3¢	24.5¢	46.7¢	
RESULTS PER AVERAGE LAYER (365 hen days)				
Feed Layers Only	$3.15	$3.31	$5.10	
Feed for Replacements	.65	.37	.51	
Replacement Chicks, Started Pullets	.54	.46	1.20	
Supplies, Taxes, Utilities, Misc.	.29	.23	.28	
Hired Labor	.38	.39	.39	
Home Chore Labor	.03	.01	.01	
Stock Inventory Value + Charge -Credit	-.03	+.25	-.42	
Cull Sales - Credit	-.08	-.07	-.34	
Net Cash Cost Incl. Home Chore Labor	$4.93	$4.95	$6.73	
Depreciation 15% Average Value of Buildings & Equipment	.24	.22	.22	
Interest 8% on Land, Stock and Average Value of Buildings & Equipment	.28	.24	.26	
Management Per Hen (incl. pullets raised)	.29	.25	.25	
Total Cost Per Hen	$5.74	$5.66	$7.47	
Egg Income Per Hen	$4.35	$4.76	$8.83	

FLOCK STATISTICS, MORTALITY, CULL, ADDED, FEED AND FEED RATIOS

	Average Low Cost 10 Records	Average High Cost 10 Records	1970 Study Average	1971 Study Average	1972 Study Average	1973 Average
% Ave. Flock						
Mort.	13	19	22	20	17	16
Cull	64	63	50	59	34	66
M & C	77	82	72	79	51	82
Added	71	79	79	81	56	78
% Mort. Loss of chicks to 6 mos. of age	6	14	19	10	9	9
Cull Income each	$.53	$.50	$.25	$.14	$.20	$.51
*Size Flock	6B-4D	3A-2B-2C-3D	46508	46764	63940	58106
% Flock on hand Pullets	56	57	---	---	---	57
Egg Production Per layer	234	218	230	245	234	227
Doz. per layer	19.5	18.2	19.2	20.4	19.5	18.9
% Production	64	60	63	67	64	62
% Extra Large Large AA or A	69	64	69	68	72	68
Pounds Feed All including replacements	101	97	105	106	94	99
Per layer only	88	93	89	88	86	90
Feed Ratio All including replacements	5.2	5.3	5.5	5.2	4.9	5.2
Per layer only	4.5	5.1	4.6	4.3	4.4	4.8
Cost Feed per 100 lbs.	$5.59	$5.80	$3.43	$3.60	$3.89	$5.68
No. Records SP/day old pullets/none	4/6/0	5/4/1	% S.P. of total added 26%	26%	49%	67%

*Flock size in thousands: 10-20,000=A; 20-40,000=B; 40-60,000=C; Over 60,000=D

Feed ratio: All feed, including layers, started pullets, and raised own replacements estimated - 5.7 pounds per dozen eggs produced.

SUMMARY-COSTS OF PRODUCTION

CENTS PER DOZEN

	Average Low Cost 10 Records	Average High Cost 10 Records	1970 Study Average	1971 Study Average	1972 Study Average	1973 Average
Feed cost Layers only	24.8	29.1	15.7	15.4	17.1	26.9
*Net Replace. Cost to 6 mo's.	6.5	5.8	6.5	6.9	6.0	5.9
Feed and Replacement	31.3	34.9	22.2	22.3	23.1	32.8
Labor cost Layers only	2.0	2.0	1.7	1.7	1.9	2.0
Misc. cash Layers only	1.2	1.5	1.4	1.1	1.0	1.3
Deprec. 15% Layers only	1.0	1.1	1.0	1.1	1.0	1.1
Int. 8% Layers only	1.3	1.2	1.1	1.3	1.1	1.3
Management 1¢ per doz.	1.0	1.0	1.0	1.0	1.0	1.0
Total Net ¢ Cost per doz.	37.8	41.7	28.4	28.5	29.1	39.5
Wholesale only Income per dozen eggs	46.8	46.5	29.7	21.3	24.5	46.7

*Net replacement cost per doz: Total of chick or started pullet cost, feed, miscellaneous, cash, labor, depreciation, interest, management 20¢ per pullet chick raised, plus or minus difference in stock inventory value, less cull income divided by dozens produced = Net replacement cost per dozen analysis based on replacement cost to 6 months of age.

TABLE A - POULTRY EGG COST STUDY, SAN DIEGO COUNTY - 25 - YEAR SUMMARY 1949 - 1973 INCLUSIVE
Agricultural Extension Service, University of California - San Diego County

Year	Eggs per Hen	Sold % Lrg.	Percent of Average Laying Flock % Died	% Culls	% Added	% Increase	Cull Income Each	Lbs. Feed per Layer Only	Feed Ratio Layers Only*	Feed Cost per Cwt.	Feed Cost per Doz. **	Feed Cost Layers only per Doz.	Hired Labor Cost per Doz.	Pullet Chick Cost Each
1973	227	68	16	66	78	- 4	$.51	90	4.8	$5.68	29.6¢	26.9¢	2.1¢	$.31
1972	234	72	17	34	56	+ 5	.20	86	4.4	3.89	18.9	17.1	2.0	.30
1971	245	68	20	59	81	+ 2	.14	88	4.3	3.60	18.6	15.4	1.9	.29
1970	230	69	22	50	70	- 2	.25	89	4.6	3.43	18.7	15.7	2.0	.29
1969	232	69	23	36	66	+ 7	.34	89	4.6	3.15	17.1	14.4	1.8	.30
1968	246	70	20	58	85	+ 7	.20	91	4.5	3.07	16.8	13.2	1.7	.30
1967	243	69	18	65	86	+ 3	.20	87	4.3	3.24	17.7	13.5	1.9	.31
1966	247	70	15	66	96	+15	.31	90	4.4	3.17	17.6	13.4	1.9	.31
1965	246	70	16	68	95	+11	.18	89	4.4	3.12	17.1	13.1	1.7	.31
1964	242	72	15	76	98	+ 7	.21	89	4.4	3.10	17.6	13.5	1.8	.32
1963	243	69	14	63	94	+17	.25	88	4.3	3.12	17.2	13.1	1.8	.33
1962	245	72	13	68	106	+25	.23	90	4.4	3.08	17.4	13.1	2.2	.35
1961	246	71	13	75	105	+17	.29	91	4.4	3.02	16.9	12.9	2.2	.36
1960	241	70	13	71	96	+12	.27	89	4.5	2.90	16.6	12.5	2.1	.39
1959	243	68	14	82	107	+11	.30	90	4.5	3.23	18.5	14.1	2.1	.43
1958	239	68	14	79	105	+12	.46	91	4.6	3.31	19.3	14.8	2.6	.40
1957	235	70	14	68	100	+18	.40	91	4.6	3.45	20.2	16.0	1.9	.40
1956	236	69	14	74	102	+14	.52	93	4.8	3.63	21.8	16.9	2.5	.40
1955	234	66	17	70	103	+16	.56	92	4.8	3.84	24.4	18.0	2.2	.40
1954	235	61	14	86	114	+14	.52	94	4.9	3.95	25.2	18.9	2.1	N.A.
1953	228	60	15	76	107	+16	.75	95	5.1	4.06	26.5	20.2	2.5	N.A.
1952	231	61	14	82	118	+22	.61	96	5.1	4.53	29.7	22.2	2.4	N.A.
1951	222	68	13	74	102	+15	.75	100	5.4	4.06	28.5	21.5	2.3	N.A.
1950	217	65	15	64	108	+29	.70	98	5.4	3.65	26.3	19.2	1.8	N.A.
1949	213	64	15	77	124	+32	.88	100	5.6	4.09	32.7	22.3	2.6	N.A.

* Pounds Feed To One Dozen Eggs.
** Includes Feed Used For Replacement and Layers.
N.A. Not Available.

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TABLE B - POULTRY EGG COST STUDY, SAN DIEGO COUNTY - 25 - YEAR SUMMARY 1949 - 1973 INCLUSIVE
Agricultural Extension Service, University of California - San Diego County

Year	Av. Flock Size (1000)	Egg Income Per Doz.	Per Doz. Net* Cost Eggs	+Profit -Loss Per Doz.	Egg Income Per Hen	Net Cost Eggs Per Hen	+Profit -Loss Per Hen	Costs Labor Per Hen Hired	Costs Labor Per Hen Home	Per Int. on Invest-ment	Per Deprec. Allow.	Average Misc. Cash Costs	Hen All Feed Cost
1973	58	46.7¢	39.5¢	+ 7.2¢	$8.83	$7.47	$+1.36	$.39	$ .01	$.26	$.22	$.28	$5.61
1972	64	24.5	29.1	- 4.6	4.76	5.66	- .90	.39	.01	.24	.22	.23	3.68
1971	47	21.3	28.5	- 7.2	4.35	5.74	-1.39	.38	.03	.28	.24	.29	3.80
1970	47	29.7	28.4	+ 1.3	5.70	5.42	+ .28	.39	.02	.26	.24	.32	3.58
1969	46	31.7	25.5	+ 6.2	6.13	4.92	+1.21	.36	.03	.22	.14	.32	3.30
1968	43	24.7	24.8	- 0.1	5.07	5.09	- .02	.36	.01	.21	.14	.23	3.45
1967	44	24.5	26.2	- 1.7	5.00	5.29	- .30	.39	.02	.19	.16	.31	3.57
1966	42	33.2	25.4	+ 7.8	6.84	5.22	+1.62	.40	.02	.20	.15	.30	3.62
1965	29	26.9	25.6	+ 1.3	5.52	5.26	+ .26	.34	.06	.20	.20	.33	3.52
1964	25	27.9	26.2	+ 1.7	5.62	5.26	+ .36	.37	.08	.21	.19	.30	3.55
1963	21	28.4	26.4	+ 2.0	5.73	5.33	+ .40	.36	.07	.23	.23	.34	3.47
1962	16	28.9	27.8	+ 1.1	5.90	5.66	+ .24	.35	.23	.23	.23	.44	3.55
1961	13	31.5	27.5	+ 4.0	6.45	5.65	+ .80	.45	.21	.21	.25	.38	3.47
1960	9	33.3	28.7	+ 4.6	6.61	5.72	+ .89	.42	.31	.27	.30	.43	3.30
1959	7	29.8	30.9	- 1.1	5.97	6.20	- .23	.38	.44	.26	.29	.42	3.72
1958	6	37.0	31.1	+ 5.9	7.32	6.15	+1.17	.48	.38	.25	.29	.52	3.80
1957	6	36.3	30.8	+ 5.5	7.00	5.95	+1.05	.47	.60	.26	.34	.45	3.91
1956	5	38.4	32.1	+ 6.3	7.45	6.23	+1.22	.49	.64	.26	.35	.43	4.22
1955	4	41.3	32.1	+ 9.3	8.00	6.15	+1.85	.43	.59	.20	.33	.41	4.52
1954	4	36.8	34.1	+ 2.7	7.12	6.59	+ .53	.40	.54	.20	.34	.40	4.86
1953	4	51.5	36.3	+15.2	9.64	6.80	+2.84	.46	.85	.21	.37	.41	4.96
1952	3	46.0	40.8	+ 5.2	8.74	7.75	+ .99	.47	1.04	.24	.38	.35	5.71
1951	3	55.2	40.3	+14.9	9.90	7.20	+2.70	.42	1.34	.25	.38	.41	5.16
1950	2	43.6	35.6	+ 8.0	7.73	6.32	+1.41	.33	.94	.23	.31	.34	4.65
1949	2	52.0	42.0	+10.0	9.18	7.42	+1.76	.48	1.08	.24	.29	.53	5.77

*Total net cost of eggs per dozen and per hen includes all costs: feed, replacement stock, all labor, miscellaneous cash, interest, and depreciation. Cull income is credited to costs for net cost of egg production. Management charges of about two cents per dozen are included during 1960's. Currently 1 cent per dozen plus 20¢ management charge per pullet raised and added to flock for those cooperators raising their own replacements.