

POULTRY EGG COST STUDY

1954 REPORT
SAN DIEGO COUNTY

Agricultural Extension Service
University of California

Prepared in Cooperation with the
San Diego County Poultry Industry

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POULTRY EGG COST STUDY-1954 REPORT, SAN DIEGO COUNTY
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The 1954 Poultry Egg Cost Study is conducted by the University of California Agricultural Extension Service in cooperation with the poultry industry of San Diego County.

Particular reference has been made to comparative results with one bird to a cage, two birds to a cage, and wire colony housing. Flock size average 3719 layers. All except two of 38 flocks were of white leghorn breed.

This report is a comparative study of efficiency of production of 38 poultrymen in San Diego County. Reports cannot be considered as representative of the industry in the county. The purpose of the study is to provide participating poultrymen a detailed analysis of their poultry operation. It is published to help participating producers and other poultrymen in the county to improve production efficiency by a comparative study of the records compiled.

Poultrymen interested in participation in the study may contact the Farm Advisor.

Definitions of Terms Used

COSTS & INCOME are based on totals for year, divided by average number birds over 5½ months old on a hen day basis.

RANK identifies cooperator's record, arranged according to management income.

SIZE OF FLOCK: A - under 2000; B - 2000-3000; C - 3000-4000; D - 4000-5000; E - over 5000 layers.

LABOR - Hired labor at cost. Family labor at \$1.00 per hour.

INTEREST - Based on average investment at 5%.

MANAGEMENT INCOME - All income less all costs. FARM INCOME - Same, except farm labor and interest on investment not included as a cost.

OTHER INCOME - Includes total poultry, manure sales, and stock inventory credit or debit.

ONE BIRD TO A CAGE - mostly 8" x 18" cages. TWO BIRDS TO A CAGE - 12" x 18".
WIRE COLONY - Mostly 4' x 12' and 6' x 16' pens.

ORIGINAL COST BUILDING AND EQUIPMENT PER CAPACITY - based on number of square feet of poultry housing equipment used for laying flock only. Allowance was made where equipment was used part of time for layers and the other part of time for growing birds.

EGGS PER HEN AND PER CENT DIED, CULLED, ADDED - based on totals for year, divided by average number layers.

FEED COSTS: Net costs after sacks and potential refunds considered.

LAYERS ONLY - FEED: Based on total feed, less estimated amount used for growing pullets.

TABLE I. COSTS--AVERAGE LAYING HEN--1954*
(In Dollars)

Rank & Flock Size	Feed	Chix	Misc. Cash	Depreciation	Hired Labor	Total Cash & Deprec.	Family Labor	Int. on Inv.	Total Costs
<u>One Bird to Cage</u>									
4-B	5.04	.44	.19	.41	.43	6.51	.36	.21	7.08
5-E	5.13	.47	.18	.44	.12	6.34	.56	.25	7.15
10-B	4.51	.26	.48	.45	.58	6.28	.05	.22	6.55
13-C	5.08	.40	.29	.42	.45	6.64	.22	.23	7.09
19-C	5.25	.42	.58	.65	.54	7.44	.17	.30	7.91
22-C	4.76	.30	.38	.35	.39	6.18	1.08	.20	7.46
23-A	5.34	.57	.25	.40	--	6.56	1.36	.26	8.18
28-A	4.98	.45	.24	.50	--	6.17	1.06	.26	7.49
34-B	5.70	.44	.35	.52	.55	7.56	.70	.25	8.51
36-A	7.61	.46	.96	.59	.66	10.28	1.23	.42	11.93
Average:	5.01	.41	.32	.46	.34	6.54	.52	.24	7.30
<u>Two Birds to Cage</u>									
3-D	4.30	.49	.25	.31	.47	5.82	.28	.17	6.27
6-C	4.88	.62	.53	.38	.01	6.42	.98	.20	7.60
7-C	5.07	.44	.54	.30	.14	6.49	.44	.21	7.14
8-E	4.42	.59	.44	.20	.51	6.16	.36	.15	6.67
9-D	5.26	.49	.24	.50	--	6.49	.83	.26	7.58
15-B	4.94	.64	.15	.31	.01	6.05	1.23	.19	7.47
18-E	5.05	.37	.16	.26	.57	6.41	.21	.17	6.79
24-B	4.92	.64	.34	.47	.33	6.70	1.09	.24	8.03
25-E	5.11	.45	.47	.33	.29	6.65	.26	.18	7.09
26-D	4.72	.69	.34	.32	.53	6.60	.47	.20	7.27
29-B	5.68	.45	.87	.27	.34	7.61	.35	.19	8.15
30-B	5.30	.49	.53	.40	--	6.72	1.12	.25	8.09
35-A	5.63	.75	.39	.39	--	7.16	1.82	.23	9.21
37-C	6.30	.38	.07	.47	.17	7.39	.72	.25	8.36
Average	4.99	.52	.33	.34	.30	6.48	.59	.20	7.27
<u>Wire Colony</u>									
1-E	4.20	.37	.35	.15	.28	5.35	.31	.14	5.80
2-D	4.56	.38	.37	.29	-	5.60	.94	.21	6.75
11-C	4.69	.41	.30	.26	.26	5.92	.47	.17	6.56
12-A	5.49	.54	.62	.37	.97	7.99	.13	.24	8.36
14-E	4.10	.37	.63	.23	.85	6.18	.11	.15	6.44
16-B	4.86	.49	.22	.47	-	6.04	.91	.24	7.19
17-D	4.46	.54	.18	.36	.47	6.01	.84	.23	7.08
20-E	4.40	.43	.28	.35	.71	6.17	.46	.19	6.82
21-D	4.90	.65	.51	.27	.56	6.89	.45	.21	7.55
27-B	4.88	.34	.18	.29	.35	6.04	.56	.18	6.78
31-A	4.24	.36	.41	.22	--	5.23	1.99	.16	7.38
32-A	4.50	.38	.37	.37	.71	6.33	1.44	.22	7.99
33-C	4.44	.42	1.00	.24	.50	6.60	.43	.19	7.22
38-D	6.45	.69	.56	.38	.18	8.26	.57	.23	9.06
Average	4.59	.45	.46	.28	.51	6.29	.46	.19	6.94
Ave. All	4.86	.46	.40	.34	.40	6.46	.54	.20	7.20

* See Page 1 for explanation of terms.

TABLE II. INCOME vs EXPENSE PER AVERAGE LAYING HEN, 1954*

Rank & Flock Size	Income per Hen (in Dollars)					Per Dozen Produced (in Cents)			
	Egg Sales	Other	Total	Mgmt. Income	Farm Income	Cash Cost	All Costs	All Income	Mgmt. Income
<u>One Bird to Cage</u>									
4-B	7.59	.65	8.24	1.16	1.73	30.3	35.3	41.1	5.8
5-E	7.46	.79	8.25	1.10	1.91	30.1	36.4	42.0	5.6
10-B	6.99	.43	7.42	.87	1.14	30.8	34.6	39.2	4.6
13-C	7.31	.55	7.86	.77	1.22	31.5	35.9	39.8	3.9
19-C	7.87	.56	8.43	.52	.99	33.8	39.4	42.0	2.6
22-C	7.33	.57	7.90	.44	1.72	30.1	38.5	40.7	2.2
23-A	7.80	.80	8.60	.42	2.04	28.9	38.4	40.4	2.0
28-A	6.50	.94	7.44	-.05	1.27	31.0	40.9	40.6	-.3
34-B	7.07	.75	7.82	-.69	.26	37.0	44.7	41.1	-3.6
36-A	8.84	1.77	10.61	-1.32	.33	47.4	58.4	52.0	-6.4
Average	7.40	.64	8.04	.74	1.50	30.9	37.1	40.9	3.8
<u>Two Birds to Cage</u>									
3-D	6.80	.76	7.56	1.29	1.74	28.9	32.9	39.6	6.7
6-C	7.67	.95	8.62	1.02	2.20	31.1	39.2	44.5	5.3
7-C	7.55	.59	8.14	1.00	1.65	29.6	34.0	38.8	4.8
8-E	6.78	.86	7.64	.97	1.48	31.7	35.4	40.6	5.2
9-D	7.87	.61	8.48	.90	1.99	27.5	34.8	38.9	4.1
15-B	7.12	1.01	8.13	.66	2.08	29.5	38.4	41.8	3.4
18-E	7.16	.20	7.36	.57	.95	31.7	35.0	38.0	3.0
24-B	7.81	.62	8.43	.40	1.73	30.0	38.7	40.6	1.9
25-E	7.09	.40	7.49	.40	.84	31.0	34.7	36.7	2.0
26-D	6.91	.75	7.66	.39	1.06	33.6	38.9	41.0	2.1
29-B	7.02	.99	8.01	-.14	.40	40.1	44.5	43.9	-.8
30-B	7.46	.46	7.92	-.17	1.20	29.7	38.0	37.2	-.8
35-A	7.49	.80	8.29	-.92	1.13	33.2	45.2	40.7	-4.5
37-C	6.63	.39	7.02	-1.34	-.37	38.1	46.0	38.7	-7.3
Average	7.20	.61	7.81	.54	1.33	31.1	36.7	39.5	2.8
<u>Wire Colony</u>									
1-E	7.36	.46	7.82	2.02	2.47	26.1	29.2	39.4	10.2
2-D	7.66	.68	8.34	1.59	2.74	25.8	32.7	40.4	7.7
11-C	7.10	.32	7.42	.86	1.50	27.7	32.0	36.2	4.2
12-A	7.18	2.00	9.18	.82	1.19	39.7	43.5	47.8	4.3
14-E	6.72	.46	7.18	.74	1.00	32.3	35.0	39.0	4.0
16-B	7.12	.68	7.80	.61	1.76	28.0	36.2	39.2	3.0
17-D	6.79	.90	7.69	.61	1.68	29.9	37.5	40.8	3.3
20-E	7.07	.22	7.29	.47	1.12	29.9	35.0	37.4	2.4
21-D	7.46	.54	8.00	.45	1.11	33.7	38.5	40.8	2.3
27-B	6.16	.87	7.03	.25	.99	31.9	37.6	39.0	1.4
31-A	6.29	.87	7.16	-.22	1.93	31.5	46.4	45.0	-1.4
32-A	7.04	.45	7.49	-.50	1.16	34.4	46.1	43.2	-2.9
33-C	5.94	.65	6.59	-.63	-.01	38.1	43.2	39.5	-3.7
38-D	6.45	.20	6.65	-2.41	-1.61	45.2	52.1	38.2	-13.9
Average	6.93	.55	7.48	.54	1.19	31.8	36.6	39.5	2.9
Ave. All	7.12	.61	7.73	.53	1.27	31.6	37.3	40.0	2.7

* See Page 1. for explanation of terms.

TABLE III. EGG PRODUCTION AND REPLACEMENT *

Rank & Flock Size	% Production	Eggs per Hen	Dozen Sold Per Hen	% Large Eggs	Laying Flock				% Chick Mort.
					% Died	% Sold	% Died & Sold	% Repld.	
					<u>One Bird to Cage</u>				
4-B	67	244	20.1	71	12.3	86	98	104	4
5-E	66	240	19.6	69	5.3	95	100	89	6
10-B	63	229	18.9	70	14.3	72	86	89	5
13-C	65	238	19.7	72	14.2	89	103	108	4
19-C	67	246	17.3	--	9.0	102	111	112	0
22-C	65	237	19.4	70	5.7	87	93	90	4
23-A	72	262	21.3	53	6.8	129	136	148	2
28-A	61	221	18.3	66	10.1	85	95	119	3
34-B	63	230	19.0	74	12.2	85	98	127	8
36-A	67	245	20.4	--	14.7	113	128	150	8
Average	65	239	19.7	69	9.5	92	101	103	4
					<u>Two Birds to Cage</u>				
3-D	64	234	19.1	--	7.2	63	70	102	10
6-C	65	237	19.4	--	12.3	107	119	119	9
7-C	69	251	21.0	--	9.4	92	101	124	8
8-E	63	230	18.8	--	16.9	62	79	109	11
9-D	72	263	21.8	62	17.2	103	120	119	14
15-B	62	228	19.5	58	13.6	85	98	98	18
18-E	64	235	19.4	68	24.3	104	128	111	14
24-B	70	255	20.7	--	21.9	104	126	123	15
25-E	68	250	20.4	60	20.1	71	91	151	10
26-D	62	227	18.7	65	15.6	101	117	129	2
29-B	60	220	18.3	81	8.1	85	93	104	0
30-B	68	248	21.3	49	9.5	92	101	136	5
35-A	66	240	20.4	--	20.2	114	134	138	19
37-C	59	216	18.2	71	11.0	103	114	128	1
Average	65	239	19.8	63	16.0	90	106	121	10
					<u>Wire Colony</u>				
1-E	65	239	19.9	60	9.6	91	101	106	0
2-D	69	253	20.6	55	6.5	96	103	93	1
11-C	70	254	20.5	45	28.3	68	96	127	19
12-A	64	234	19.2	60	16.1	60	76	121	1
14-E	61	224	18.4	55	11.9	68	80	97	4
16-B	64	235	19.9	50	10.3	105	116	109	3
17-D	67	245	18.9	49	17.1	35	52	129	9
20-E	65	238	19.5	--	10.1	99	109	117	5
21-D	66	240	19.6	52	26.2	90	116	144	12
27-B	59	216	18.0	54	18.5	93	112	141	8
31-A	53	192	15.9	69	22.4	73	95	77	9
32-A	57	209	17.3	58	14.8	120	135	125	4
33-C	56	205	16.7	53	10.8	86	96	108	4
38-D	57	209	17.4	--	14.3	99	113	138	34
Average	63	231	18.9	55	13.8	81	95	114	9
Ave. All	64	235	19.3	61	13.8	86	100	114	8

* See Page 1. for explanation of terms.

TABLE IV. PRICES AND INPUTS*

Rank and Flock Size	Price Recd. (Cents)		(Dollars) Net Cost	Lbs. Feed Per Hen		Lbs. Feed Per Doz. Eggs	Hours Labor Per Hen	Original Cost Bldg. & Equipmt. Per Cap. (Dollars)	% Ave. No. Hens of Capacity
	Doz. Eggs	Cull Hens		Feed Per Cwt.	Lay. Only				
	One Bird to Cage								
4-B	37.8	.56	3.91	103	129	6.4	.9	4.02	98
5-E	38.0	.47	3.96	107	129	6.6	.7	4.28	97
10-B	37.0	.71	3.87	94	116	6.2	1.0	4.78	105
13-C	37.0	.47	3.84	105	132	6.7	.9	3.81	96
19-C	39.2	.53	4.24	96	124	6.2	1.0	6.36	98
22-C	37.8	.49	3.91	99	121	6.2	1.5	3.28	94
23-A	36.6	.63	4.03	95	132	6.2	1.4	3.38	85
28-A	35.5	.51	3.90	98	128	7.0	1.1	3.81	77
34-B	37.2	.53	3.94	111	143	7.5	1.2	4.10	79
36-A	43.2	1.50	4.33	137	175	8.6	1.8	4.49	77
Ave.	37.6	.53	3.96	102	127	6.4	1.0	4.28	95
Two Birds to Cage									
3-D	35.6	.51	3.93	86	110	5.7	.8	2.95	94
6-C	39.6	.53	4.04	86	116	6.0	1.0	4.04	106
7-C	36.0	.45	4.11	93	124	5.9	.7	4.58	151
8-E	36.0	.41	3.99	84	111	5.9	.9	2.61	114
9-D	36.1	.36	3.86	107	137	6.3	.8	4.23	84
15-B	36.6	.43	4.01	103	128	6.3	1.2	3.41	109
18-E	36.9	.51	3.87	102	130	6.7	.9	4.08	157
24-B	37.7	.52	3.96	93	124	6.0	1.4	5.43	115
25-E	34.7	.53	4.02	89	127	6.2	.7	3.15	95
26-D	37.0	.43	3.89	90	122	6.5	1.0	4.27	133
29-B	38.3	.81	3.90	115	146	8.0	.8	2.56	96
30-B	35.1	.48	3.99	99	133	6.2	1.1	4.51	112
35-A	36.7	.56	3.87	111	145	7.1	1.8	3.52	90
37-C	36.5	.50	4.54	105	138	7.6	.8	4.19	89
Ave.	36.4	.47	4.00	95	125	6.3	.9	3.79	113
Wire Colony									
1-E	37.1	.47	3.72	86	113	5.7	.7	2.52	147
2-D	37.1	.57	4.03	90	113	5.5	.9	2.72	94
11-C	34.7	.64	3.62	97	130	6.3	1.0	2.81	108
12-A	37.4	.50	3.80	101	144	7.5	1.4	2.55	68
14-E	36.6	.48	3.82	83	107	5.8	.9	2.66	115
16-B	35.8	.59	3.91	97	124	6.2	.9	3.86	82
17-D	35.9	.29	3.82	85	117	6.2	1.4	3.93	110
20-E	36.3	.88	4.00	81	110	5.6	1.1	2.94	83
21-D	38.0	.50	3.85	90	126	6.4	1.1	1.73	64
27-B	34.2	.51	3.86	91	126	7.0	1.0	2.23	78
31-A	39.6	.96	3.97	88	107	6.7	2.0	1.77	81
32-A	40.6	.42	3.87	85	116	6.7	2.1	3.65	100
33-C	35.6	.53	3.86	88	115	6.9	1.1	2.84	119
38-D	37.0	.37	4.65	104	139	8.0	.9	2.84	74
Ave.	36.6	.51	3.91	89	117	6.2	1.0	2.76	97
Ave. All	36.8	.52	3.95	--	123	6.4	1.0	3.40	101

* See Page 1. for explanation of terms.

TABLE V. SUMMARY COMPARISON--TYPE OF HOUSING*

	One Bird to Cage	Two Birds to Cage	Wire Colony	Ave. All**
No. Records	8	13	13	38
Ave. Flock Size	3122	3853	4519	3719
% Hens Died	9.5	16.0	13.8	13.8
% Hens Culled	91.5	89.7	81.2	86.2
Eggs per Hen	239	239	231	235
Price per Dozen	37.6	36.4	36.6	36.8
% Large Eggs Sold	69	63	55	61
Lbs. Feed per Dozen Eggs	6.4	6.3	6.2	6.4
Feed Cost per Cwt.	3.96	4.00	3.91	3.95
Hours Labor per Bird	1.0	.9	1.0	1.0
<u>Value per Hen</u>				
Total Income	8.04	7.81	7.48	7.73
Hired Labor	.34	.30	.51	.40
Cash Costs	6.08	6.14	6.01	6.12
Depreciation	.46	.34	.28	.34
Farm Income	1.50	1.33	1.19	1.27
Family Labor	.52	.59	.46	.54
Interest on Inv.	.24	.20	.19	.20
Management Income	.74	.54	.54	.53

CONCLUSIONS:

1. An average of lower mortality in the individual cage group is the most evident difference in comparing the three types of housing.
2. Depreciation Costs were higher with the 1 bird to a cage group due to a higher original cost of housing and equipment.
3. No great difference is shown in average net earnings in favor of any one type of housing.
4. Factor of type of housing is not as important as other factors of care and management. Net earnings and average costs of production vary in a wider range than the group averages for the three types of housing.
5. These conclusions are similar to those developed in the 1953 Poultry Egg Cost Study Report, San Diego County.

* See Page 1. for explanation of terms.

** Average All-Includes four other miscellaneous records not considered under the three specific types of housing.

TABLE VI. 1954 COMPARED WITH PREVIOUS YEARS

	1949	1950	1951	1952	1953	1954	Six Year Ave.
No. Records	21	23	27	30	35	38	29
Ave. Flock Size	2070	2183	2517	3034	3801	3719	2887
% Hens Died	15	15	13	14	15	14	14
% Hens Culled	77	64	74	82	76	86	77
Eggs per Hen	213	217	222	231	228	235	224
Price per Dozen	52.0	43.6	55.2	46.0	51.5	36.8	47.5
% Large Eggs	64	65	68	61	60	61	63
Lbs. Feed per Hen	140	127	129	126	122	123	128
Lbs. Feed per Dozen Eggs	8.0	7.2	7.0	6.6	6.5	6.4	6.9
Feed Cost per Cwt.	3.79	3.65	4.06	4.53	4.06	3.95	4.01
Hours Labor per Hen	1.6	1.4	1.3	1.2	1.1	1.0	1.3
Value per Hen							
Total Income	10.76	8.66	11.18	9.69	10.60	7.73	9.77
Cash & Deprec. Cost	7.68	6.08	6.89	7.42	6.70	6.16	6.87
Farm Income	3.08	2.58	4.29	2.27	3.90	1.27	2.90
Family Labor	1.08	.94	1.34	1.04	.85	.54	.97
Interest on Inv.	.24	.23	.25	.24	.21	.20	.23
Management Income	1.76	1.41	2.70	.99	2.84	.53	1.70

CONCLUSIONS

Progress is shown in comparing the averages for the six years of the San Diego County poultry study:

1. Fewer pounds of feed per dozen eggs.
2. Fewer hours labor per layer.
3. More eggs per hen.
4. Average mortality losses continue at a high level.
5. Producers are now relying more on pullet performance as indicated by a cull and mortality average total of 100 per cent in 1954.