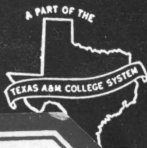


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Economics of Laying Flocks in Texas

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Economics of Laying Flocks in Texas

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TEXAS, A LARGE EXPORTER OF EGGS to other states in the past, now is a deficit producer most of the year. Recent population growth has increased the market demand at the same time that egg production has been changing from a small sideline on general farms to a specialized, commercial enterprise. During recent years, many small, inefficient flocks have been discontinued, resulting in fewer laying hens on Texas farms now than there were 10 years ago. The expansion of commercial flocks has not kept pace with the growing demand for market eggs. Although Texas is a surplus egg producer for a short period in the spring, approximately 30 to 35 percent of the total shell egg requirements are imported from other states. This recently expanded market offers an opportunity for added income to Texas farmers.

As Texas egg production expands, eggs now imported from other states will be replaced. Texas producers must expand at prices that will be competitive. Consequently, the poultryman must know his production costs before planning for expansion.

A laying flock may be attractive to the operator of a relatively small farm because little land is required. The operator of a small farm who wishes to increase the volume of his business can do so without diverting land from crops or other productive uses. When labor is available, an egg laying flock may be added to the farm business without reducing the output of other farm enterprises.

This publication reports the results of a study to determine the production, production requirements, costs and returns and production efficiencies of representative farm laying flocks.

Description of Poultry Enterprise

Flocks

Also, this study points out the relative importance of various cost factors. Data were obtained from 14 commercial laying flocks. None of the flock owners devoted full time to the poultry enterprise. In each instance, the laying flock was maintained with crops or livestock or other enterprises. Detailed records were obtained for 12 months, from October 1, 1956 to September 30,

1957. All the cooperators had been in commercial egg production for an average of 5.5 years with a range of 2 to 15 years. In some instances, egg production was the most important source of farm income, while in others, it was a relatively minor enterprise.

The flocks studied ranged from 250 to 2,886 average layers during the year. The average size of all flocks was 1,264 layers.

Five of the 14 flocks produced market eggs and 9 produced hatching eggs. All of the market flocks and all but one hatching egg flock consisted of light Mediterranean-type birds and were either cross breeds, inbred hybrids or White Leg-horns. The one heavy-breed hatching flock was of the Peterson variety (Cornish-White Rock cross), which produced broiler-type chicks.

Three of the 5 market egg flocks were in cages and 2 were on litter-covered floors.

The study was started soon after the floor flock operators, selling either market or hatching eggs, had refilled their houses with replacement pullets.

Eggs were produced throughout the year by 11 of the 14 flock owners. Most of the flocks had been in production for only a short time when the study began and all birds were not disposed of during the year. In the three flocks that did not produce eggs the entire year, the period out of production represented the normal lag between the time the old hens were sold and the new pullets came into production.

In the light-breed hatching flocks, an average of one rooster was kept for each 11 hens, while in the heavy-breed flocks, one rooster was kept for each eight hens.

Housing and Equipment

On the 14 farms studied, there were 20 laying houses with floor equipment and 6 with cages. Generally, the houses were of frame construction and had concrete foundations. All cage-equipped houses had dirt floors, while 15 of the houses with floor equipment had dirt floors and 5 had concrete floors.

Corrugated sheet metal was used for the roofs on all of the laying houses and either wood or corrugated sheet metal was used to cover the sides. The sides were equipped with shutters for ventilation. The south side of some houses was open except for poultry wire. These houses had

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no roof-type ventilators. Houses that were completely enclosed with wood and metal sides (with shutters) had roof ventilators.

Cooperators used automatic waterers and self-feeders and all were equipped to clean and refrigerate eggs. Artificial lights were used to provide an average light day of between 14 and 15 hours.

Cage producers used cages 10 inches wide which were constructed to hang back to back in double rows. Each house contained six rows of cages. There was an average of 3.1 square feet of floor space per layer in cage houses. When the houses were filled, the light-breed floor flocks had an average of 2.8 square feet per bird and the heavy-breed flock had an average of 3.9 square feet.

The cost of new houses and equipment used with the poultry enterprise averaged \$3.92 per layer for all flocks, Table 1. Of this amount, houses and other buildings made up approximately three-fourths and the equipment for the laying enterprise made up one-fourth. Cages were used with three of the flocks producing market eggs. This explains the relatively high cost per layer for equipment.

Flock Replacement Costs

As a rule, the laying flock was replaced each year on the farms studied. The usual practice was to purchase sexed baby chicks from which to raise replacements. The cage producers usually planned to start from two to four groups of chicks a year in an attempt to keep the cages full at all times. Producers who used the floor plan completely refilled their laying houses at one time. Floor plan producers with more than one house usually staggered the starting date so that only one house would be out of production at a time.

In this publication, the cost of raising replacements includes all cash costs until the time pullets are in 50 percent production, usually about 6 months of age. Replacements for hatching flocks include sufficient cockerels to insure one cockerel for each 12 pullets at the time the birds were housed. Credits from the sale or use of culls, cockerels and eggs before the time pullets are in 50 percent production were deducted from the expense in determining the total cost per layer housed. Data were not obtained for the heavy-breed flock.

Average cost per pullet housed was \$1.79. Pullets housed for market egg production averaged \$1.64 as compared with \$1.95 for hatching egg flocks, Table 2.

Replacements raised for market egg flocks consumed an average of 22.9 pounds of feed per pullet put in the laying flock compared with 24.3 pounds for pullets going in hatching egg flocks. For these flocks, feed costs made up 67.4 percent

TABLE 1. AVERAGE REPLACEMENT COST OF BUILDINGS AND EQUIPMENT PER LAYER FOR COMMERCIAL EGG FLOCKS, 1956-57

Item	Market egg flocks	Light-breed hatching egg flocks	Heavy-breed hatching egg flocks	All flocks
Number flocks studied	5	8	1	14
	----- Dollars -----			
Replacement cost per layer				
Buildings	3.14	2.64	2.65	2.85
Equipment	1.41	.87	.39	1.07
Total	4.55	3.51	3.04	3.92

and 56.9 percent, respectively, of the total cash cost of raising flock replacements.

The cost of pullet chicks for market egg production ranged from 45 to 60 cents each and averaged 49 cents per replacement of the flock studied. This was 29 percent of cash replacement costs. Pullet chicks purchased by hatching egg producers cost approximately 78 cents each, or 38.6 percent of the total cash cost of replacement. The average mortality rate of chicks purchased was less than 9 percent.

Other cash cost items, which amounted to 4 percent of the total for all flocks, included litter, utilities, brooding, medication and vaccination and other miscellaneous costs.

Noncash cost items were estimated by cooperating flock owners. For the market flocks, the total cost (cash and noncash) amounted to \$2 per pullet going in the laying house. For hatching flocks, the total cost was \$2.25 per replacement pullet. The most significant difference in replacement costs between the two groups was chick cost.

TABLE 2. TOTAL COST PER PULLET OF LAYING FLOCK REPLACEMENTS, 1956-57¹

Item	Market egg flocks	Light-breed hatching egg flocks ²
	----- Dollars -----	
Feed cost	1.14	1.15
Chick cost	.49	.78
Miscellaneous cash costs	.06	.09
Total cash costs	1.69	2.02
Less credits ³	.05	.07
Total cash cost per layer housed	1.64	1.95
Estimated noncash costs ⁴	.36	.30
Total cost per layer housed	2.00	2.25

¹Until pullets are in 50 percent production.

²Includes costs of raising cockerels which are charged to pullets.

³Sales of eggs, cockerels and culls prior to 50 percent production.

⁴Depreciation of buildings and equipment, interest on investment in buildings and equipment and labor.

Production Practices

Feeding

A mixed feed in the form of crumbles, pellets or mash was fed on all farms. Four of the producers fed mixed feed only, while 10 added grain (corn, milo or oats). The blended ration (the combination of both mixed feed and grain) for all flocks was approximately an 18 percent protein ration. All producers attempted to keep feed before the birds at all times. Grain commonly was fed in the late afternoon. No mechanical devices were used in the distribution of feed to the birds.

Culling

The cage producers could keep production records that facilitate systematic culling. These operators usually culled frequently or at least every 2 or 3 months. One cage operator did not cull until his flock production dropped below 50 percent. Then he kept a record on each cage for 2 or 3 weeks and culled low-producing hens. Other cage producers kept records on the production of each cage at all times and culled as needed. Birds usually were kept as long as they were laying at a satisfactory rate.

Floor flock owners generally followed no set pattern of culling. Sick, weak and rundown birds were culled as they appeared. Otherwise, the entire flock was not culled from the time the birds were placed in the laying house until the flock was sold. Some flock owners who produced hatching eggs removed the roosters and culled the flock after the hens had been in production a year. These flock owners then sold eggs commercially as long as it was profitable.

TABLE 3. AVERAGE PRICES RECEIVED FOR EGGS AND CULL HENS AND AVERAGE PRICES PAID BY COOPERATING FLOCK OWNERS FOR FEED ITEMS, 1956-57

Item	Market egg flocks	Light-breed hatching egg flocks	Heavy-breed hatching egg flocks	All flocks
Average prices received				
Per dozen eggs sold, ¹ cents	37.10	41.00	57.20	40.00
Per layer (culls) sold, dollars	.65	.59	1.25	.72
Average prices paid per cwt.				
Laying mash, ² dollars	4.10	4.33	3.90	4.16
Grain, ² dollars	3.54	2.41	2.25	2.55
Shell, ² dollars	1.10	1.20	1.10	1.10
Grit, ² dollars	1.50	1.50	1.50	1.50
Blended feed price, ³ dollars	4.04	4.18	3.81	4.10

¹The average sale price received by hatching egg producers includes both hatching and nonhatching eggs.

²Simple average of the average monthly prices paid by each producer.

³Weighted average of all feed fed and prices paid.

Cull hens usually were delivered and sold to a processor. None of the birds were dressed for sale.

The cage operators culled 52 percent of the layers during the year of the study. Operators with light-breed floor flocks culled only 38 percent of the layers. A number of these flocks were in production when the study commenced and had not been replaced at the end of the year. During the year the owner of the heavy-breed floor flock disposed of the entire starting layers and also removed some culls from the replacement pullets.

Sanitation, Disease Control and Mortality

Disease did not present a major problem on the farms studied. Regular vaccination programs were followed. A typical disease control program began with vaccinating the chicks for Newcastle at 5 days of age. At 8 weeks, Newcastle and bronchitis vaccines were given, and as soon as the birds recovered, pox vaccine was given. Pullets were vaccinated again for Newcastle when they started to lay.

All floor plan producers used litter in the laying houses. Cane litter was most commonly used but some wood shavings were used. The built-up litter method was used; that is, dry, clean litter was added when needed. The laying houses were cleaned completely when the entire flock was culled.

The producers of cage eggs sprayed the droppings every few days during the warm season with a commercial insecticide to control flies.

Death losses averaged 10.4 percent for all flocks. Mortality for the commercial egg flocks was 14.9 percent, 7.7 percent for light-breed hatching egg flocks, and 4.0 percent for the heavy-breed flock. Injuries, cage fatigue, over-heating and leucosis were major causes of death losses. None of the farms studied were equipped with disposal pits. Almost three-fourths of the dead birds were thrown in open pastures or gullies. Other methods of disposal included burning or feeding the birds to hogs.

Handling of Eggs

Eggs were gathered by hand, usually three or more times daily. During the summer months, some producers gathered eggs as often as six times daily. Eggs that did not go immediately into retail channels were refrigerated when cooling was needed.

All eggs were cleaned before marketing. Ten of the cooperators used mechanical cleaners and the other four cleaned eggs by hand. All but one of the mechanical cleaners used were of the washing type. Hatching egg producers commonly used both mechanical and hand-cleaning methods. Hatching eggs and market eggs that were sold in the local and wholesale channels were sorted for size by the producers. Market eggs that were sold to egg dealers were sorted for grade and size

TABLE 4. ANNUAL SUMMARY COMPARING VARIOUS EFFICIENCY FACTORS FOR 14 LAYING FLOCKS IN BRAZOS AND BURLESON COUNTIES, OCTOBER 1, 1956 TO SEPTEMBER 30, 1957

Flock code number	Average number days in production	Feed required per dozen eggs produced, pounds	Average number eggs per hen	Average price per dozen eggs sold, cents	Hens mortality, percent	Hens culled, percent	Labor per dozen eggs, minutes
P-3	365	4.83	222.9	33.4	16.5	55.4	5.5
P-4	365	6.69	200.1	43.8	27.0	15.2	12.1
P-8	365	4.52	211.8	33.8	13.6	61.4	9.4
P-15	365	4.27	205.5	41.5	13.0	47.2	8.7
P-21	292	4.49	204.6	34.8	15.3	91.6	4.8
P-2 ¹	365	4.84	246.9	44.1	9.5	22.4	6.0
P-6 ¹	365	4.90	240.9	42.4	5.8	31.9	4.8
P-9 ¹	365	5.46	211.4	39.7	5.3	31.0	8.4
P-12 ¹	365	4.66	253.7	42.9	5.9	10.0	5.0
P-16 ¹	335	8.40	153.6	57.2	4.0	113.0	5.8
P-17 ¹	365	4.38	222.6	41.0	6.5	62.1	7.2
P-18 ¹	365	4.45	220.2	42.4	6.7	0.0	4.6
P-19 ¹	365	4.67	206.5	38.5	8.3	0.0	5.7
P-20 ¹	263	3.60	201.9	35.9	8.3	98.8	5.3
Yearly average	355	4.94	215.0	40.0	10.4	48.1	6.4

¹Hatching flocks.

by the purchaser rather than the producer. As a general rule, eggs were marketed at least twice a week.

Prices Paid and Received

Prices paid and received by producers varied, Table 3. Market egg producers received an average price of 37.1 cents per dozen. Eggs sold for hatching brought a substantial premium. However, not all eggs produced by hatching egg flocks were sold for hatching purposes. Eggs sold by producers of lightweight hatching eggs brought an average price of 41 cents per dozen. The producer of heavy-breed hatching eggs received an average of 57.2 cents per dozen.

The price received for lightweight culls averaged 60 to 65 cents per bird. Heavy-breed culls averaged \$1.25 each.

During the study, the blended feed price for all flocks averaged \$4.10 per hundredweight. However, the eight producers of light-breed hatching eggs paid an average of 14 cents more per hundredweight for feed than the producers of market

eggs and 37 cents more per hundredweight than the owner of the heavy-breed flock.

Production of Laying Flocks

Eggs

A daily record was kept of the eggs gathered on each farm and was used in calculating egg production per flock and per layer. Production per hen was calculated for the average number of hens in each cooperating flock during the year. Average figures for individual flocks are shown in Table 4. These data are summarized in Table 5.

Of the 13 light-breed flocks, production per hen for farms producing market eggs and those selling hatching eggs averaged 212 eggs and 224 eggs, respectively. On the average, these 13 flocks were in production all but 9 days during the 365-day study. The one heavy-breed flock averaged 154 eggs per hen but was in production fewer days than either group of light-breed birds. For all flocks, egg production averaged 61.0 percent.

TABLE 5. SUMMARY OF EGG PRODUCTION AND FEED AND LABOR REQUIREMENTS FOR 14 LAYING FLOCKS, OCTOBER 1, 1956 TO SEPTEMBER 30, 1957

Item	Market egg flocks	Light-breed hatching egg flocks	Heavy-breed hatching egg flocks	All flocks
Flocks studied, number	5	8	1	14
Average hens per farm, number	1,458	1,183	942	1,264
Length of production period, days	356	356	335	355
Production and sales				
Average eggs produced per farm, dozen	25,716	22,110	12,054	22,679
Average eggs produced per hen, number	212	224	154	215
Proportion of flock in daily production, percent	60.0	63.0	46.0	61.0
Average eggs sold per farm, dozen	25,049	21,651	11,562	22,144
Unmarketed eggs, percent	2.6	2.1	4.1	2.4
Feed consumed				
Per bird during production period, pounds	88	87	107	89
Per dozen eggs, pounds	4.98	4.67	8.40	4.94
Labor requirements				
Per layer in flock, hours	2.2	1.8	1.2	1.9
Per dozen eggs, minutes	7.2	5.9	5.8	6.4

None of the farms marketed all of the eggs produced. The difference between total eggs gathered and eggs marketed averaged 2.4 percent. Unmarketed eggs included those cracked or broken in handling and cleaning and eggs consumed on the farm.

Manure

The amount of manure varied with the quantity of litter used. Ordinarily, the manure and litter from the laying houses were spread on pastures or cropland. Under these circumstances, it was difficult to estimate the value of the manure. Consequently, work done at Purdue University was used as a guide in estimating the value of the manure produced. Indiana Extension Bulletin 403, "Extra Fertility for Crops," estimated the value of manure at 37 cents per layer per year. The value of manure produced was proportionately less for a flock that was in production less than a year. The same plan was used in this study to estimate the value of manure produced by the flocks studied.

Production Requirements

Feed

Light-breed flocks ate between 87 and 88 pounds of feed per hen on the average, Table 5. Because of high egg production, the hatching egg flocks produced a dozen eggs for a third of a

pound less feed than did the birds producing market eggs. The heavy-breed flock ate approximately 20 pounds more feed per day than did the light-breed flocks. Also, the feed efficiency of the heavy-breed hens was relatively low compared with the lighter weight birds. One flock owner produced a dozen eggs with 3.6 pounds of feed. Table 4 gives the feed conversion ratio (the number of pounds of feed used to produce 1 dozen eggs) of the individual flocks.

Labor

Producer estimates of labor requirements were obtained for each month throughout the study. These estimates included the time involved in feeding and caring for the birds and the time used in gathering, cleaning and caring for the eggs. All producers averaged slightly less than 2 hours of labor per layer during the year. In terms of egg production, this amounted to a little more than 6 minutes per dozen eggs or about 30 seconds per egg produced. Table 4 gives the variation in labor requirements for cooperating flocks.

Income From Egg Laying

Items included in computing income from the laying enterprise include eggs sold, feed sacks sold and the manure credit. Often the eggs used in the farm household were cracked or broken and not salable. Consequently, no credit was given for eggs used on the farm. Returns from the

TABLE 6. SUMMARY OF GROSS ANNUAL INCOME, ANNUAL PRODUCTION COSTS AND RETURNS TO LABOR AND MANAGEMENT FOR 14 LAYING FLOCKS

Item	Market egg flocks	Light-breed hatching egg flocks	Heavy-breed hatching egg flocks	All flocks
Number flocks studied	5	8	1	14
	Dollars			
Income and costs per layer				
Gross annual income				
Egg sales	6.37	7.50	7.02	7.01
Miscellaneous sales ¹	.04	.01	.01	.02
Manure credit ²	.36	.36	.34	.36
Total	6.77	7.87	7.37	7.39
Annual production costs				
Feed	3.54	3.64	4.09	3.63
Flock depreciation	1.51	1.80	1.44	1.66
Miscellaneous cash costs	.43	.43	.18	.42
Depreciation, buildings and equipment	.34	.29	.26	.30
Interest on investment	.14	.11	.08	.11
Total	5.96	6.27	6.05	6.12
Returns per hen to labor and management	.81	1.60	1.32	1.27
Returns per hour of labor	.38	.87	1.06	.65
	Cents			
Income and costs per dozen eggs produced				
Gross income				
Egg sales	36.1	40.1	54.8	39.1
Miscellaneous sales ¹	.2	.1	.1	.1
Manure credit ²	2.1	1.9	2.7	2.0
Total	38.4	42.1	57.6	41.2
Production costs				
Feed	20.1	19.5	32.0	20.2
Flock depreciation	8.6	9.6	11.3	9.3
Miscellaneous cash costs	2.4	2.3	1.3	2.3
Depreciation, buildings and equipment	1.9	1.5	2.0	1.7
Interest on investment	.8	.6	.7	.7
Total	33.8	33.5	47.3	34.2
Net returns per dozen eggs	4.6	8.6	10.3	7.0

¹Sales of feed sacks.

²Based on 37 cents per hen-year equivalent.

sale of cull layers or cull pullets were shown as a credit in computing flock depreciation costs and are not included in Table 6 as income. All average returns are based on the number of eggs produced.

For the farms studied, egg sales amounted to an average of \$7.01 per layer. Because of higher egg prices, Table 3, and higher production, Table 4, egg sales for light-breed hatching flocks averaged \$1.13 more per hen than for the market egg flocks. Even so, egg sales amounted to 94 or 95 percent of total gross returns for each group and for all flocks.

Production Costs

The total annual cost, excluding labor, of the laying flock enterprise averaged \$6.12 per layer for all flocks studied, Table 6. This was approximately 34 cents per dozen eggs produced. On the average, feed expenses made up about 60 percent of these costs and, together with flock depreciation, amounted to 85 percent of production costs.

All mash, pellets, grain, grit and oyster shell were included in feed costs. Flock depreciation was calculated by finding the difference between the total estimated value of the birds October 1, 1956, plus the value of birds added during the year, and the value of birds sold during the year or on hand September 30, 1957. Six percent interest on the average flock investment was added as a part of flock depreciation. An example of the computations made in determining flock depreciation for one of the flocks included in the study is shown in Table 7.

Feed costs varied between flocks, but the most noticeable difference was between the light-breed and heavy-breed layers. Of the two, the heavy birds ate the most feed and their feed cost averaged about 50 cents per layer more than that of the light-breed birds.

The relatively high feed cost for heavy-breed layers was offset largely by a relatively low flock replacement cost. The relatively high sale value of cull hens, Table 3, (nearly twice that of light-breed culls) kept replacement costs relatively low for heavy-breed flocks.

Miscellaneous cash costs included utilities, litter, medication, insecticides, repairs and extra labor that was hired. These costs averaged only 42 cents per layer. Depreciation and interest together averaged approximately the same amount.

With light-breed flocks, the cost per dozen eggs was approximately 34 cents. Due to relatively low egg production, the one heavy-breed flock in the study had an egg production cost of 47 cents per dozen.

A flock owner has the greatest likelihood of cutting egg production costs through practices that increase feed efficiency or that reduce re-

TABLE 7. AN EXAMPLE OF COMPUTATIONS FOR DETERMINING FLOCK DEPRECIATION USING A TYPICAL FLOCK INCLUDED IN THE STUDY

Item	Number	Value	Total value
		per head	
		Dollars	
Layers on hand October 1, 1956	600	1.17	702.00
Layers added during the year	1,100	2.25	2,475.00
Total	1,700		3,177.00
Layers on hand September 30, 1957	1,036	1.45	1,502.20
Layers sold during the year	590		360.00
Layers died during the year	74		
Total	1,700		1,862.20
Loss during the year			1,314.80
Interest on average investment			88.17
Total flock depreciation			1,402.97

placement costs. For example, a saving of only 5 percent in feed costs for the flocks studied would have lowered costs 1 cent per dozen. At the same time, a 40 percent saving in housing expense would have been required for equal saving.

The depreciation of buildings and equipment was determined by dividing the producer's estimated value of buildings and equipment by his estimated years of life of particular items. Six percent interest was charged on the average investment in buildings and equipment and is shown as a separate item in Table 6.

The producers and their families provided for the care of the poultry enterprise. Some producers hired extra labor for cleaning the houses, moving birds or similar work. This cost was a minor item and was charged as miscellaneous cash expense.

Costs and Returns for Egg Enterprise

Returns to labor and management per layer averaged \$1.27 for all flocks. Of the groups stud-

TABLE 8. ANNUAL COST AND RETURNS PER AVERAGE LAYER ON THE MOST PROFITABLE AND LEAST PROFITABLE LIGHT-BREED HATCHING EGG FLOCKS, 1956-57

Item	Light-breed hatching egg flocks	
	Least profitable	Most profitable
Number of flocks	4	4
--- Dollars ---		
Cost per layer		
Feed	3.65	3.63
Flock depreciation	1.75	1.86
Miscellaneous cash cost	.57	.25
Depreciation of buildings and equipment	.30	.27
Interest on investment of buildings and equipment	.12	.09
Total cost	6.39	6.10
Returns per layer		
Eggs sold	7.19	7.92
Miscellaneous sales	.00	.01
Manure credits	.35	.37
Total returns	7.54	8.30
Less total cost	6.39	6.10
Net returns per layer to labor and management	1.15	2.20

ied, there was substantial difference in returns to labor and management per bird between the producers of market eggs and of light-breed hatching eggs. In the latter group, higher production costs per hen were more than offset by higher rate of lay and the premium paid for hatching eggs. The returns of 87 cents per hour of labor from light-breed hatching eggs was more than double the hourly returns from market egg flocks. Labor returns were relatively low during the period of the study, primarily because of unfavorable egg prices.

Labor efficiency was relatively high on the farm selling heavy-breed hatching eggs where the returns per hour of labor were well above the average for all flocks. In spite of lower than average production per hen, the returns above costs for the heavy birds were relatively high per dozen eggs.

The same cost-price relationships which affect returns per layer affect returns per dozen

TABLE 9. COMPARISON OF VARIOUS EFFICIENCY FACTORS AND PRACTICES FOR THE MOST PROFITABLE AND LEAST PROFITABLE LIGHT-BREED HATCHING EGG FLOCKS, 1956-57

Item	Light-breed hatching egg flocks	
	Least profitable	Most profitable
Number of flocks	4	4
Average number of layers per flock	1,342	1,024
Average days in production	348	365
Average price received per dozen eggs sold, cents	40.3	41.8
Average cost per dozen eggs produced, cents	34.6	32.2
Production, eggs per hen	222	227
Mortality rate, percent	7.3	8.2
Feed used, pounds		
Per layer (annual)	87.5	87.3
Per dozen eggs produced	4.74	4.58
Labor used		
Per layer (annual), hours	2.0	1.7
Per dozen eggs produced, minutes	6.4	5.3

eggs. On the average, during the period covered by the study, cooperating market egg producers operated on a narrow profit margin—4.6 cents per dozen eggs, or 2.4 cents per dozen below the average of 7 cents for all flocks. In part, the narrow margin between costs and returns for market flocks reflected a relatively weak market for commercial eggs during much of the year. Generally, producers of hatching eggs have the advantage of a market that does not fluctuate as much seasonally as the farm price of market eggs.

High and Low Profit Flocks

The most profitable and least profitable flocks producing hatching eggs were studied to determine the characteristics of each. The 4 most profitable of the 8 light-breed flocks selling hatching eggs had a net return of \$2.20 per average layer as compared with \$1.15 for the 4 least profitable flocks, Table 8. The average price received for the 4 most profitable flocks was 41.8 cents per dozen eggs sold as compared with 40.3 cents per dozen for the 4 least profitable flocks. Cost per dozen eggs produced was 32.2 cents for the 4 most profitable flocks as compared to 34.6 cents for the least profitable flocks, Table 9.

Generally, the most profitable light-breed hatching egg flocks had the following characteristics in relation to the least profitable flocks: more days in production, higher average price received per dozen eggs sold, lower average cost per dozen eggs produced, slightly higher egg production per hen and slightly less feed used per dozen eggs produced.

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