

1952

EC1410 Revised 1952 Analysis of Broiler Production Costs

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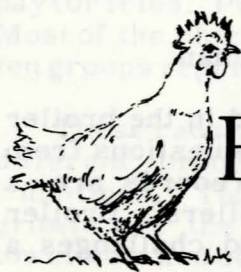
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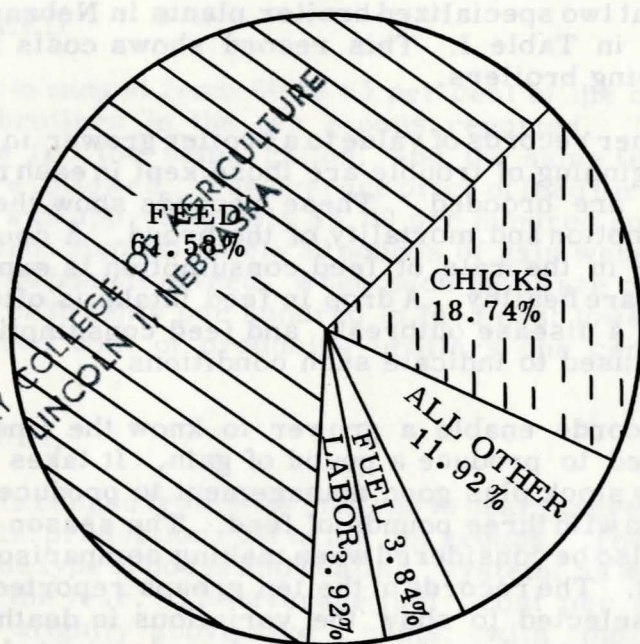
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ANALYSIS of BROILER PRODUCTION COSTS



Percentage figures indicate distribution of costs in the production of 50,000 broilers at two locations in Nebraska during a nine-month period (1950-1951).

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AND U. S. DEPARTMENT OF AGRICULTURE
COOPERATING
W. V. LAMBERT, DIRECTOR

ANALYSIS OF BROILER PRODUCTION COSTS

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Producers and others who are interested in the broiler business can get answers to many of their questions from an analysis of cost records. Complete records are a necessary part of the business of raising broilers. Broiler growing is organized mass production and challenges a manager to keep constant vigilance.

The summarized record of ten groups of broilers produced at two specialized broiler plants in Nebraska is presented in Table I. This record shows costs incurred in producing broilers.

Other records of value to a broiler grower in diagnosing the beginning of trouble are those kept in each room where chicks are brooded. These records show the daily feed consumption and mortality of the brood. A continuous increase in the rate of feed consumption is expected when chicks are healthy. A drop in feed intake is often the first sign of a disease outbreak, and feed consumption records can be used to indicate such conditions.

Records enable a grower to know the amount of feed required to produce a pound of gain. It takes well-bred, healthy stock plus good management to produce a pound of chicken with three pounds of feed. The season of the year must also be considered when making comparisons between broods. The records of the ten groups reported in Table I were selected to show the variations in death loss, feed conversion and costs between broods started during the winter and spring months.

VARIOUS PRODUCTION COSTS

COST OF CHICKS

The prices paid for chicks in the ten examples cited varied from 12.75 to 14 cents. Chick costs made up from 16 to 20 per cent of the total.

The value of broiler chicks is determined by livability, growth rate, and the price which market men are willing to pay for fries. Prices paid per chick showed little variation. Most of the chicks came from two hatcheries. Nine of the ten groups represented a broiler strain of New Hampshires.

These records show the general trend in performance of different broods of comparable chicks under similar conditions. Those broods with lower mortality and faster growth are the same ones having better feed conversion, lower cost and better net returns. When comparing growth rates in the examples given in Table I, consideration must be given to the age when sold as well as the average weight.

COST OF FEED

Feed costs ranged from 60 to 65 per cent of the cost of producing broilers in the ten groups reported. These groups were fed the same ration, and the same feeding methods were followed. The average price of feed for these ten broods was approximately \$5.00 per hundred pounds. In these records approximately 30 pounds of gain were produced from 100 pounds of feed. When such gains are obtained, a change of 30 cents per hundred in feed cost lowers or raises the feed cost of producing broilers one cent per pound.

COST OF FUEL

Fuel costs ranged from less than one to nearly seven per cent of the total production cost in the ten groups. The cost varied with the type of house and heating system, as well as the season of the year. The average fuel cost per chick started was slightly above five cents, with the cost being highest for chicks started in December. Summer chicks were brooded with a fuel cost of less than one cent per bird. The groups grown in the houses with the more efficient type of heating system are shown in Table I, columns 2, 5, 8, and 10.

COST OF LABOR

Labor costs in these large units with modern equipment ranged from three and one half to nearly five per cent of the

TABLE I.-RECORDS OF TEN NEBRASKA BROILER PR

PROJECT NO.	1	2	3	4	
Breed	New Hamp	New Hamp	New Hamp	New H	
No. Started	6,000	5,100	5,800	6,10	
Date Started	12-9-50	1-9-51	2-9-51	2-22-	
Age Sold (Weeks & Days)	12-2	10-3	11-5	11-	
Number Raised	5,228	4,920	5,392	5,620	
Culls	108	46	57	61	
Pounds Raised	14,740	14,040	16,240	16,130	
Average Weight	2.82	2.85	3.01	2.87	
Per cent That Died	.129	.035	.070	.079	
Pounds Feed Fed	58,302	26,100	53,900	53,597	
Meat Produced per 100 lbs. Feed	25.28	30.45	30.13	30.09	
Cost of Baby Chicks	.13	.1275	.13	.13	
Cost of Litter	52.01	63.17	52.01	52.10	
Cost of Fuel	307.90	180.92	260.71	213.48	
Cost of Medicine	72.50	87.22	72.90	76.48	
Cost of Feed	2754.05	2172.03	2602.73	2590.92	
Cost of Labor	157.93	144.12	149.81	154.75	
Cost of Miscellaneous	85.93	148.77	136.36	143.83	
Cost of Depreciation	45.00	205.00	45.00	45.00	
Cost of Insurance	45.00	38.25	38.50	38.50	
Cost of Repairs & Replacements	14.99	16.01	39.84	46.11	
Cost of Power	23.22	23.41	23.95	25.51	
Cost of Vaccination	91.20		85.10	91.70	
Total Cost	4429.73	3829.15	4260.91	4271.29	
Sales Price per Lb.	.31	.32	.28	.26	
Total Sales	4508.33	4465.92	4522.00	4168.84	
Cost per Lb. Produced	.3103	.2656	.2712	.2737	
Return per Bird Raised	.0124	.1496	.0217	.0436	
Lbs. Feed per Lb. Produced	3.95	3.28	3.32	3.32	
Feed Cost	Per cent of Whole	62.17	56.67	61.08	60.66
Chick Cost	" " "	17.61	19.60	17.70	18.57
Fuel Cost	" " "	6.95	4.72	6.12	4.99
Labor Cost	" " "	3.57	3.77	3.52	3.62
All Other	" " "	9.70	15.24	11.58	12.16

PROJECTS STARTED IN DECEMBER 1950 TO JUNE 1951

GROUP						
4	5	6	7	8	9	10
w Hamp	New Hamp	New Hamp	New Hamp	New Hamp	New Hamp	White Rock
,100	5,000	6,000	6,250	5,000	6,000	5,000
22-51	3-8-51	3-15-51	4-26-51	5-17-51	5-24-51	6-1-51
11-5	12-0	11-5	12-1	12-0	11-4	11-5
620	4,750	5,375	5,974	4,298	5,700	4,860
61		67	18		32	
130	14,940	15,530	16,821	12,830	15,230	13,040
.87	3.1	2.89	2.80	2.99	2.67	2.68
.079	.05	.104	.044	.14	.050	.028
597	51,900	50,600	59,050	44,200	53,260	45,600
.09	28.79	30.69	28.49	29.03	28.57	28.60
13	.13	.14	.1350	.13	.1350	.13
10	71.88	42.98	6.40	3.25	10.32	3.25
48	115.38	255.36	85.32	23.76	66.00	31.79
48	36.57	86.82	84.34	54.37	62.13	50.85
92	2387.12	2444.67	2902.42	2068.00	2635.89	2148.44
75	180.90	157.30	169.13	155.08	157.74	144.34
83	56.88	103.57	90.21	47.92	59.82	51.47
00	205.00	45.00	45.00	205.00	45.00	205.00
50	49.25	38.50	38.50	49.50	38.50	49.50
11	29.83	38.67	22.60	17.82	23.13	18.54
51	26.62	27.73	30.73	31.03	26.86	28.80
70	75.00	91.20	92.40	75.00	91.20	75.00
29	3884.43	4171.80	4410.80	3380.73	4026.59	3456.98
26	.3059	.29	.3019	.31	.32	.31
84	4570.45	4474.70	5077.50	3977.30	4857.92	4042.40
37	.2560	.2779	.2708	.2635	.2738	.2651
36	.1547	.0295	.0871	.1390	.1207	.1203
32	3.47	3.26	3.51	3.45	3.50	3.50
66	61.45	58.59	65.80	61.17	65.46	62.15
57	16.73	20.14	19.13	20.71	20.12	18.80
99	2.97	6.12	1.93	.70	1.64	.92
62	4.66	3.77	3.83	4.59	3.92	4.18
16	14.19	11.38	9.31	12.83	8.86	13.95

total cost. In most cases this amounted to about three cents per chick. When labor costs were included, not all broods showed a profit. However, with any one of the ten broods, an operator doing his own work would have had some labor income.

MISCELLANEOUS COSTS

Miscellaneous costs varied from 12 to 15 per cent of the total, or from six to nine cents per chick. These items of cost included litter, medicines, vaccinations, depreciation, insurance, repairs, power and other items not classified. Some of the houses were cleaned and new litter used. Litter cost was lower for the houses that were not cleaned and in which only a small amount of new litter was used on top of the old. Depreciation depended largely upon the investment in housing, and did not vary for different broods raised in the same building. However, the houses having the greater depreciation did have lower fuel costs.

On the other hand, the buildings having the greatest depreciation did not adversely affect net returns per bird marketed. Such complete records can be helpful to broiler producers in determining how much they can afford to invest in buildings and equipment.

ECONOMIC CONSIDERATIONS

Selling prices varied from 26 to 32 cents a pound live weight, with all sales made between March 1 and September 1. Prices paid for frying chickens are usually the lowest of the year between November 1 and January 15. Chart I shows seasonal variations in prices during the years 1950 and 1951 in the Delmarva area. Chart II shows the seasonal variations in placement of broiler chicks in the seven major broiler-producing areas. Producers with a local market and those in an area where broilers are imported are usually able to sell at somewhat higher prices than those in surplus producing areas.

For maximum profit, broiler growers cannot afford to relax on economies forced on them during periods of low prices. (See Chart I). If prices did not occasionally drop below cost-of-production levels, a free industry would have no way of forcing out marginal producers. Frequent

periods of overproduction seem to be inevitable when a new industry develops as rapidly as has the commercial production of broilers.

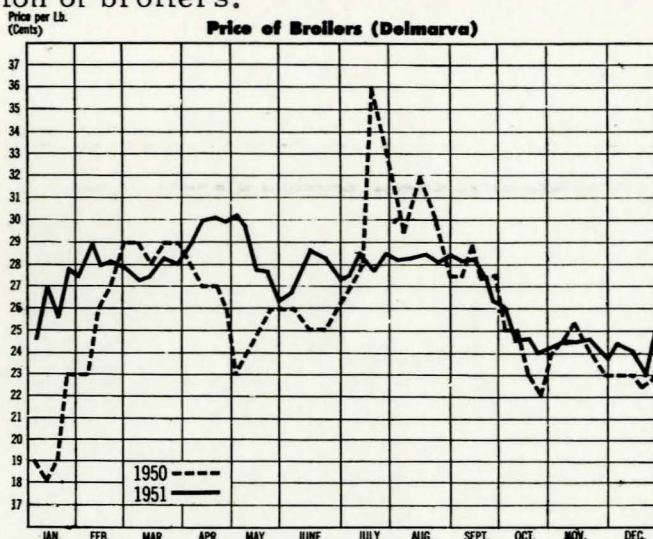


Chart I

The chart compares the weekly prices received for broilers in the Delmarva area during 1950 and 1951. It is produced from reports of the Bureau of Agricultural Economics, U.S.D. A.

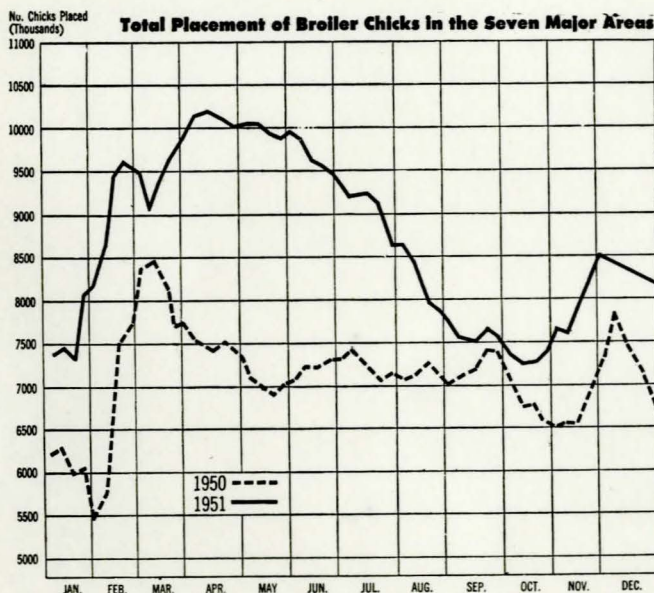


Chart II

The chart compares the placement of broiler chicks in the seven major areas by weeks, for the years 1950 and 1951. It is produced from reports of the Bureau of Agricultural Economics, U.S.D. A.