BULLETIN No. 291 AUGUST 1954

Marketing Practices of Commercial Egg Producers in Alabama

AGRICULTURAL EXPERIMENT STATION
of the ALABAMA POLYTECHNIC INSTITUTE
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First Printing August 1954, 6M

MARKETING PRACTICES of COMMERCIAL EGG PRODUCERS in Alabama*

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IT IS ADVANTAGEOUS for commercial egg producers to know and analyze their marketing practices. Successful egg producers must keep two things in mind. First, there are certain factors in production that affect the profitableness of the laying enterprise. Second, and of equal importance, are factors affecting efficiency in marketing eggs. While efficient marketing is of utmost importance, it will not insure profits if production costs are too high. On the other hand, low production costs will not insure profits if poor marketing practices are followed. Greatest profits result when both proper production and proper marketing practices are followed. This report deals primarily with the marketing practices of commercial egg producers in Alabama.

The need for this study has been indicated by previous research work.[1] Alabama imports approximately half of the eggs consumed in the State. Annual importation of eggs amounts to more than annual egg sales from Alabama farms. Although there is an annual deficit of approximately 1,600,000 cases of eggs in Alabama, there are unused resources on many Alabama farms that could be used for egg production. Increased production of eggs in Alabama to meet more of the local needs would be advisable only if it would increase net returns to those who increased pro-

* This project was supported by funds provided by the Research and Marketing Act of 1946 and State research funds. It is a contributing project to the Southern Regional Research Project on Marketing Poultry and Poultry Products, SM-6.

** The author gratefully acknowledges the cooperation, assistance, and supervision given him throughout the study. Various members of the SM-6 Technical Committee made helpful comments and suggestions. Members of the Poultry Husbandry and Agricultural Economics Departments of the Agricultural Experiment Station, and personnel of the Extension Service of A.P.I. also made helpful comments and suggestions. Without the cooperation of 130 farmers in the sample this study would not have been possible.

[1] Including Blackstone, J. H. "Alabama's Egg Industry." A.P.I. Agricultural Experiment Station Bulletin 283. October 1952. Comments in this section are based largely on this reference.

duction. Historical evidence indicates that if there is to be much increase in local egg production it will be on commercial egg farms rather than from small noncommercial flocks. A number of studies have indicated that higher quality eggs are marketed by commercial producers than by noncommercial producers.[2] Consumers of eggs and certain handlers would benefit if more high quality eggs were available. If better quality eggs were available, total egg consumption could be increased.

Both wholesalers and retailers in Alabama have expressed an interest in obtaining more local eggs, but their needs can be met only by the production of large volumes of eggs of the qualities needed during desired seasons. If increased local production should replace part of the eggs now imported, some of the agencies now handling eggs would likely be by-passed, while others would be used more intensively.

The objectives of this study were:

(1) To enumerate marketing and related production practices of commercial egg producers in Alabama.

(2) To determine the relationship between these practices and returns to producers.

(3) To suggest ways of improving returns to producers.

(4) To estimate the impact of selected marketing practices on the egg industry.

The procedure used was to study the operations of a sample of commercial egg producers in the State during the period September 1, 1951 to August 31, 1952. This period was one of relatively unfavorable price relationships for egg production. Only 10.5 pounds of feed could be bought with a dozen eggs during the year studied compared to 11.9 for the 10-year average, 1943-52.[3] If producers could "break even" during periods such as the year studied, they would likely make good profits during normal years.

The sample included only those producers that had 400 or more layers as of January 1, 1952, although the average number kept throughout the year was considerably below 400 on some farms. Names of such producers were obtained from personnel of the State Department of Agriculture, and from county agents, feed

[2] Including Blackstone, J. H. "Egg Production and Marketing Practices in Alabama." A.P.I. Agricultural Experiment Station Bulletin 275. June 1950; and "Marketing Eggs at the Producer Level in Nine Southern States." Southern Cooperative Series Bulletin 17. December 1951.

[3] Simple average of monthly data. "Crops and Markets, 1953." Bureau of Agricultural Economics, U. S. Department of Agriculture. Washington 25, D. C. p. 121.

dealers, and others expected to have knowledge of commercial egg producers. A random sample of producers was selected from each of 23 selected counties in proportion to the size of the commercial egg industry in these counties.

Data were summarized to show the major marketing and related production practices used. Some of these practices were related directly to producer returns; other relationships were suggested but these often could not be clearly indicated from the empirical data available.

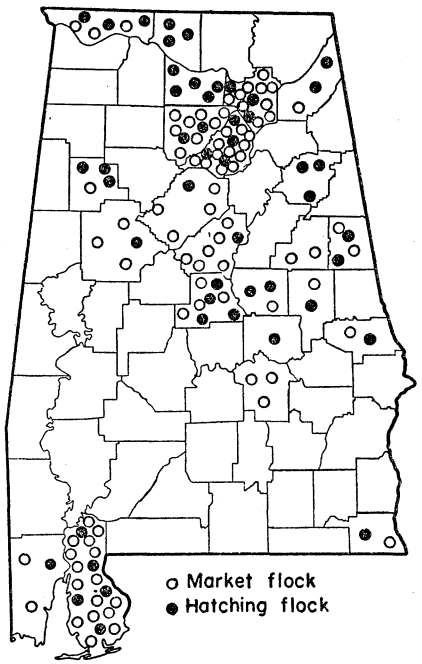

FIG. 1. Location of the 81 commercial market egg producers and 49 commercial hatching egg producers included in study, Alabama, September 1951-August 1952.

Sample farms were located in the major egg producing counties of the State, Figure 1. Although the 130 sample farms were located in 23 counties, nearly half were located in 4 counties. Thirty per cent were in the Sand Mountain counties of Cullman, Marshall, and Blount, and 16 per cent were in Baldwin County. The remaining 54 per cent were in 19 scattered counties in other parts of the State.

GENERAL CHARACTERISTICS OF FARMS STUDIED[4]

The average size of the farms studied was 86 acres; these farms had an average of 784 layers per farm. The egg enterprise was the most important source of gross receipts on 64 per cent of the farms, and second in importance on 23 per cent. On 13 per cent of the farms, two or more other enterprises returned more gross receipts than did the egg enterprise.

[4] A more detailed description of these farms and their production practices is contained in "Costs and Returns to Commercial Egg Producers." A.P.I. Agricultural Experiment Station Bulletin 290. June 1954.

More than 95 per cent of the operators owned part or all of the land they operated. The average age of operators was 46 years. Operators had produced eggs commercially an average of 12 years – the range in experience being from 1 to 40 years.

Sixty-two per cent of the farms produced only market eggs, while 38 per cent produced hatching eggs. Fourteen per cent of the market egg farms and 35 per cent of the hatching egg farms produced eggs for 11 months or less during the period studied. These are referred to as part-time producers although their egg production was on a commercial scale during the time they were producing. The period of no production was due to disease on some farms, to normal flock replacement practices on some, while other farmers either started or stopped producing eggs during the period studied.

Commercial egg production in Alabama is handled largely with family labor; less than a third of the farms studied used hired labor in handling their poultry enterprises. The housewife helped with the poultry work on 55 per cent of the farms and children helped on 22 per cent. Much of the work on commercial egg producing farms was of a nature that women and children were being utilized to handle the work load. On 15 per cent of the farms, the operators did no work in connection with the poultry enterprise.

MARKETING AND RELATED PRODUCTION PRACTICES

Selected practices of commercial egg producers are enumerated in this section. The relationship of these practices to the financial rewards of producers is considered later. Some practices that are normally considered production practices are discussed here because of their important effect on the marketing of eggs.

GATHERING EGGS

Ninety-three per cent of the market egg producers and 98 per cent of the hatching egg producers gathered eggs twice per day or oftener, and 44 per cent of the market egg producers and 67 per cent of the hatching egg producers gathered eggs three or more times daily in the summer. Both market and hatching egg producers gathered eggs slightly less often in the winter than in the summer. Part-time producers gathered eggs more often than did full-time producers.

Sixty-one per cent of the producers used wire baskets for gathering eggs. Thirty-two per cent used pails and 7 per cent used split baskets. Hatching egg producers tended to use relatively more wire baskets and relatively fewer pails than did market egg producers.

Storing Eggs

Ninety-two per cent of the producers stored eggs to allow them to cool before they were sold or packed; 8 per cent packed or sold eggs as soon as they were gathered. The types of storage places used and the percentage of producers that used each type are shown in Table 1.

Table 1. Place of Storing Eggs by Type of Producer, 130 Commercial Egg Producing Farms, Alabama, September 1951—August 1952

Place of storing eggs	Market egg farms	Hatching egg farms	All farms
	Per cent	*Per cent*	*Per cent*
Egg room	27	20	24
House, porch, or garage	20	25	22
Cellar, basement, or pumphouse	17	20	18
Feed room	16	20	18
Poultry house or barn	6	6	6
Smokehouse	4	2	3
Cooler	4	5	4
Not ascertained	6	2	5
Total	100	100	100

Producers generally kept eggs in a cool, moist place around the homestead, but only 24 per cent had places designated as egg rooms. More market egg producers had egg rooms than did hatching egg producers.

Sixty-two per cent of the producers reported selling some eggs in wooden cases, 72 per cent sold eggs in fiber cases, and 18 per cent sold in cartons. No other type of container was reported as being used for selling eggs. Eight per cent of the producers selling hatching eggs and 23 per cent of those selling market eggs sold some eggs in cartons.

Packing Eggs

Eighty-four per cent of the market egg producers and 96 per cent of the hatching egg producers reported packing eggs with the small end down. Eighty-four per cent of the market egg producers and 88 per cent of the hatching egg producers cooled their egg containers to storage temperature before packing eggs.

Hatching egg producers followed these practices more closely than did market egg producers, possibly because of hatchery requirements. These practices should be followed by both market and hatching egg producers. Because fertile eggs deteriorate faster than infertile eggs, and also because hatching egg producers do not market as often as do market egg producers, these practices are of somewhat more importance to hatching egg producers.

Grading

Eggs were graded for color on 90 per cent and for size on 80 per cent of the farms. More hatching egg producers graded both for color and size than did market egg producers. Only 65 per cent of the market egg producers graded for size as compared to 90 per cent of the hatching egg producers. Some small eggs were sold by 81 per cent of the farms and some were used on 24 per cent of the farms. Most operators used cracked and abnormal eggs for home consumption.

Cleaning

All farmers reported cleaning some eggs. The percentage of total egg production that was cleaned by producers averaged 21 per cent. Forty-two per cent of the farm operators cleaned 5 per cent or less of their eggs. Ten per cent of the market egg farmers and 4 per cent of the hatching egg farmers reported cleaning all eggs produced. Market egg farmers, in general, cleaned a larger percentage of the eggs they produced. The percentages of farms using different cleaning methods are shown in Table 2.

Table 2. Method Used to Clean Eggs, by Type of Producer, 130 Commercial Egg Producing Farms, Alabama, September 1951—August 1952

Method used	Market egg farms	Hatching egg farms	All farms
	Per cent	*Per cent*	*Per cent*
Wash	65	18	47
Wipe	27	29	28
Steel wool	1	41	16
Sandpaper	1	6	3
Other	6	6	6
Total	100	100	100

Market egg producers tended to use wet methods of cleaning while hatching egg producers used dry methods. This was probably due to recommendations and requirements of hatcheries, and the belief that washing eggs reduced hatchability. Some

market egg farmers cleaned all eggs by soaking them in a detergent.

Transportation to Market

The types of transportation used by farmers in marketing eggs were as follows:

Type of transportation used	*Percentage of farms*
Open truck	25
Closed truck	22
Passenger car	16
Express	5
Picked up at farm by buyer	32

Ninety-six per cent of the producers reported that they tried to prevent eggs from jarring while in transit. The average distance to the most important (largest volume of eggs) market outlet of these 130 farms was 24 miles. It was an average of 26 miles to the second and 2 miles to the third most important market outlet. Twenty-two per cent of the market and 4 per cent of the hatching egg producers reported selling some eggs to consumers on regular retail routes, while 28 per cent of the market egg producers and 24 per cent of the hatching egg producers delivered eggs to retail stores, Appendix Table 1.

Frequency of Marketing

Market egg producers sold eggs more frequently than did hatching egg producers. More than half of the market egg producers marketed eggs twice each week or oftener in the summer, compared to only 41 per cent of the hatching egg producers. Once per week was the most common marketing period for both groups, while some producers marketed daily and some marketed every 2 weeks.

Market egg producers used approximately the same marketing schedule throughout the year, while hatching egg producers changed from summer to winter. Only 2 per cent more market egg producers marketed eggs twice weekly or oftener in the summer than in the winter. Forty-three per cent of the hatching egg producers changed from selling less frequently than twice weekly in the winter to twice weekly or oftener in the summer.

There was no difference reported in the number of consumers buying direct from market egg producers. Hatching egg pro-

ducers sold direct to 19 per cent more consumers in the fall than in the winter. Market egg producers reported that they sold to 45 stores in the winter and spring and 50 in the summer and fall, while hatching egg producers sold to 10 stores in the spring, 11 in the summer, 14 in the fall, and 13 in the winter.

Basis for Pricing Eggs

Prices received by hatching egg producers were usually set by contract or agreement with hatcheries while prices received by market egg producers were usually based on some central market in Alabama or on local prices. Table 3 shows a list of markets or methods reported as used to determine egg prices received by producers.

Table 3. Market or Method Used to Determine Prices Received, by Type of Producer, 130 Commercial Egg Producing Farms, Alabama, September 1951-August 1952

Market or method used to determine prices	Market egg farms[1]	Hatching egg farms[1]
	Per cent	*Per cent*
Local	15	6
Birmingham	12	4
Montgomery	6	2
Pensacola	2	0
Chicago	14	2
New York	5	0
Atlanta	2	0
Nashville	1	0
Chain stores	5	2
Price of chicks	0	2
Minimum price guaranteed (usually maximum is same)	1	53
Unknown by producer	41	37

[1] Some producers were selling to more than one market or buyer and consequently reported more than one market or method used to determine prices.

Only 4 per cent of the producers reported that they received a premium when eggs were used as barter for other goods. The average premium was 8.5 cents per dozen.

Market News

Twenty-two per cent of the 130 farms studied reported that they received no market news. Of those that received market news, 46 per cent received news by radio, 33 per cent from newspapers and 21 per cent from a number of other sources.

The primary use made of market news was to set or to check on the price of eggs. Uses of news reported by kind of producers are shown in Table 4.

TABLE 4. USE MADE OF MARKET NEWS, BY TYPE OF PRODUCER, 130 COMMERCIAL EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951—AUGUST 1952

Use made of market news	Market egg farms	Hatching egg farms
	Per cent	*Per cent*
To set price	22	8
General knowledge or "just to keep up with the price"	11	0
To check on buyer	4	0
None	4	0
No answer or did not receive news	59	92
TOTAL	100	100

A larger percentage of market egg producers than of hatching egg producers reported that they made use of market news. Only 8 per cent of the hatching egg producers reported that they used market news, while 37 per cent of the market egg producers used market news. Hatching egg proudcers did not feel that they needed market news as much as did market egg producers because prices were fixed by contract for most hatching egg producers.

Seventy per cent of the market egg producers and 54 per cent of the hatching egg producers stated that they "always" knew the current price of eggs before making a sale. Those knowing the price "sometimes" were 22 and 39 per cent respectively for market and hatching egg producers. Eight per cent of the market egg producers and 7 per cent of the hatching egg producers "never" knew the price of eggs before selling.

Some producers suggested changes in, or additions to, the types of market news that were available. However, comments indicated that farmers were, in general, satisfied with the news that was available.

SEASONALITY OF LAYERS ON HAND

Egg production in Alabama varies seasonally. Previous studies have indicated that production in the fall (September, October, and November) amounts to only 16 per cent of annual production, while 38 per cent of annual production is in March, April, and May. Both wholesalers and retailers of eggs list seasonal production of eggs in Alabama as one of their major problems.[5]

A comparison of the average number of hens on the farms

[5] Blackstone, J. H. "Alabama's Egg Industry." A.P.I. Agricultural Experiment Station Bulletin 283. October 1952. pp. 7, 29, and 30.

studied with the average number on all Alabama farms during the same period indicates that commercial farms, as represented by the sample farms studied, had relatively more hens on hand during seasons when there was a shortage of eggs in Alabama, and relatively fewer hens on hand during months of highest production in the State as a whole.

Although seasonal production was not determined on these farms, the average number of hens on hand by seasons indicates that commercial producers, especially market egg producers, produced relatively more eggs when they were needed most, and relatively fewer during the months of local surpluses of eggs.

There was considerably more seasonal variation in size of market egg flocks than in hatching egg flocks. Market egg flocks fluctuated in size from 78 to 116 per cent of the average number of hens on hand during the year, while the range in size of hatching egg flocks was only 93 to 107 per cent of the average number of hens on hand, Figure 2 and Appendix Table 2.

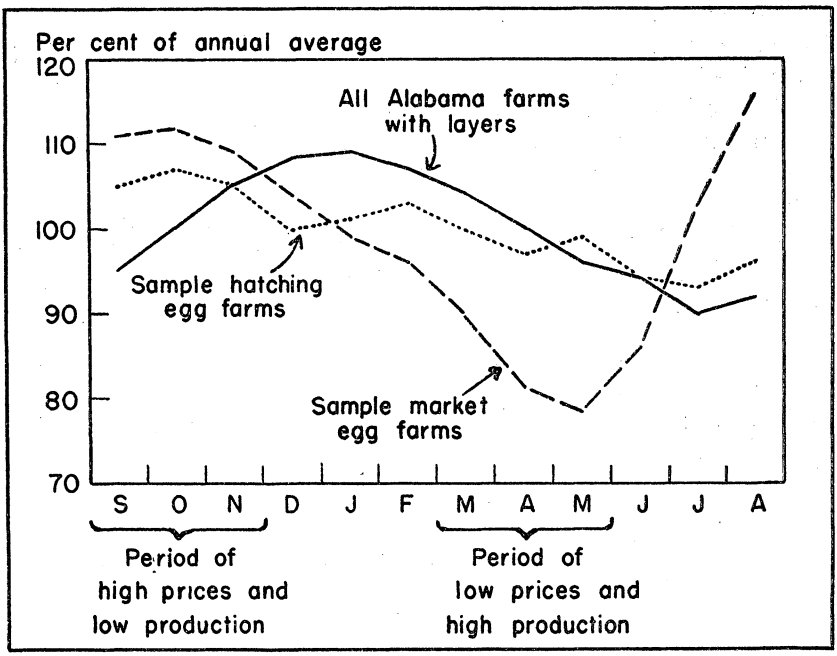

FIGURE 2. Layers on hand, by months, all Alabama farms and sample farms, September 1951-August 1952. (Appendix Table 2.)

Financing Egg Production

There were two general types of credit used by commercial poultrymen. One was used for convenience in making transactions, and the other was used to supplement or replace producers' capital. The convenience credit was usually repaid no later than the 10th of the month following delivery of purchased items. This type of credit was usually referred to as cash and is considered to be a cash sale in this study.

Credit used to supplement or replace producers' capital and to permit them to enter, expand, or continue their business with the use of outside capital was referred to as "financing," and the arrangement used to obtain outside capital was called a "financing plan." "Financing," as used in the feed industry, refers to this type of credit.

Producers who used a financing plan were usually obligated to sell products to and buy supplies from the agency that did the financing or to an agency designated by it. Many of the managerial functions were performed by the financing agency. The receipts from eggs were often divided in various ways between producers and financers by mutual agreement. Approximately a third of the hatching egg producers and a sixth of the market egg producers used a financing plan.

MARKET EGGS or HATCHING EGGS

Costs and Returns[6]

Producers who sold hatching eggs appeared to be making more profit than did those who sold market eggs. Hatching egg producers averaged 21.4 cents more receipts for each dozen eggs, but costs were 8.4 cents more. Therefore, there was a profit difference of 13.0 cents more per dozen on hatching egg farms than on market egg farms. Labor income was $2.03 per hour on hatching farms compared to 83 cents on market egg farms, Table 5.

There was little difference in costs per dozen eggs except for 8.3 cents feed cost, Appendix Table 3. This difference was due to about 21.0 cents per hundred pounds higher price paid for feed and to more feed consumed per dozen eggs produced by hatching

[6] A detailed description of how costs and returns were computed is included in "Costs and Returns to Commercial Egg Producers." A.P.I. Agricultural Experiment Station Bulletin 290. June 1954.

TABLE 5. COSTS AND RETURNS, BY KIND OF EGGS PRODUCED, 130 COMMERCIAL EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951—AUGUST 1952

Item	Kind of eggs sold		All farms
	Market eggs	Hatching eggs	
Flocks, number	81	49	130
	Cents	*Cents*	*Cents*
Receipts per dozen eggs	53.6	75.0	61.6
Costs per dozen eggs	51.1	59.5	54.2
Profit per dozen eggs	2.5	15.5	7.4
Labor income per hour	83.1	203.4	125.9

egg producers. More feed was needed because roosters were kept. Also, most hatching flocks were of meat-producing strains, and hens of the meat strains usually did not produce eggs as efficiently as did egg-laying strains.

Hatching egg producers had a larger average size of flock, used less labor per dozen eggs produced (due to less time required for marketing), had a slightly lower mortality rate, and had a higher return per dollar of expenses, than did market egg producers, Appendix Table 4. Market egg producers had higher rates of lay, because they used egg-producing strains and did not keep roosters in their flocks.

There has been more shifting from market egg production to hatching egg production than from hatching to market egg production. Only 12 per cent of the market egg producers indicated that they had had experience in hatching egg production, while 59 per cent of the hatching egg producers indicated they had had some past experience as market egg producers. This shift from market to hatching egg production can be expected to continue as long as farmers realize more profit from producing hatching eggs.

PERCENTAGE OF EGGS SOLD AS HATCHING EGGS BY HATCHING EGG PRODUCERS

The percentage of eggs sold as hatching eggs by individual hatching egg farms ranged from 6 to 98, with an average of 73 per cent. Farms that sold 80 per cent or more of their eggs for hatching eggs were more profitable than were those that sold less than 80 per cent for hatching eggs, Table 6.

TABLE 6. COSTS AND RETURNS, BY PERCENTAGE OF ALL EGGS SOLD THAT WERE HATCHING EGGS, 49 COMMERCIAL HATCHING EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Percentage of eggs sold that were hatching eggs		
	Under 80	80 and over	All farms
Farms, number	27	22	49
Hatching eggs, Pct. of all eggs sold	61	88	73
	Cents	*Cents*	*Cents*
Receipts per dozen eggs	69.1	81.5	75.0
Costs per dozen eggs	55.4	63.9	59.5
Profit per dozen eggs	13.7	17.6	15.5
Labor income per hour	177.4	235.4	203.4

There was a difference of 8.0 cents in feed costs per dozen eggs produced between the two groups, Appendix Table 5. This probably was due to keeping roosters longer; also, the egg-laying strains produced hatching eggs for only a short period of the year.

The producers who sold the most hatching eggs had larger flocks, better labor efficiency, and more receipts per dollar of expenses. The ones who sold the fewest hatching eggs had higher rates of lay, used less feed per dozen eggs, and had lower mortality than those selling more hatching eggs, Appendix Table 6.

SPECIAL PROBLEMS OF HATCHING EGG PRODUCERS IN DISPOSAL OF MARKET EGGS

Problems of hatching egg producers in disposing of market eggs are somewhat different from those of market egg producers. Hatching egg producers give priority in sales to hatcheries that buy their eggs because of price differentials between market and hatching eggs (average price received for hatching eggs sold was 83.9 cents per dozen compared with 51.4 cents per dozen for market eggs sold by the same farms, and 53.4 cents per dozen for all eggs sold by market egg producers). Hatching eggs must meet standards as to size, shape, texture, color, etc. Eggs purchased by hatcheries but failing to meet hatching standards are referred to by the industry as "culls," and have a higher percentage of nonuniformity. Market eggs from hatching egg flocks may be predominately small when hens are young and unusually large when hens are older. Eggs sold by market egg producers are infertile, while those from hatching egg farms are usually fertile.

Volume of market egg sales on hatching egg farms may be erratic due to seasonal requirements of hatcheries for hatching eggs in addition to changes in volume due to physical factors that are also present on market egg farms.

Notwithstanding these difficulties and the lack of price knowledge by hatching egg producers, they received only 2.0 cents less per dozen for market eggs than did market egg producers, Appendix Table 1. Since most market eggs are sold in Alabama as current receipts, this is understandable. Hatcheries helped with the disposal of cull eggs by buying almost a fourth of the market eggs sold from hatching egg farms. Hatcheries paid 53.5 cents per dozen for market eggs compared to an average of 49.7 cents paid by wholesalers purchasing eggs from straight market egg producers and 51.5 cents paid by all wholesalers for hatchery culls.

RETURNS TO MARKET EGG PRODUCERS RELATED TO MARKETING AND SELECTED PRODUCTION PRACTICES

PRIMARY OUTLETS USED

WHOLESALERS, RETAILERS, OR CONSUMERS. Direct sales to consumers were the major outlets for 27 per cent of the 81 farms producing market eggs, while 33 per cent sold to retailers and 40 per cent sold to wholesalers.

Selling direct to consumers was apparently more profitable than selling to either wholesalers or retailers, Table 7. Producers who sold direct to consumers received 5.4 cents profit per dozen eggs, compared with 2.1 cents for those who sold to retailers and only 0.8 cent for producers who sold to wholesalers.

TABLE 7. COSTS AND RETURNS BY SALES TO PRIMARY MARKETS, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Primary market			All farms
	Consumers	Retailers	Wholesalers	
Farms, number	22	27	32	81
	Cents	*Cents*	*Cents*	*Cents*
Receipts per dozen eggs	58.4	54.0	50.0	53.6
Costs per dozen eggs	53.0	51.9	49.2	51.1
Profit per dozen eggs	5.4	2.1	.8	2.5
Labor income per hour	96.3	81.7	70.7	83.1

The primary difference in profits was due to the prices that producers received for eggs. The receipts of producers who sold eggs to consumers averaged 8.4 cents more per dozen than did receipts of producers who sold to wholesalers and 4.4 cents more than did receipts by those who sold to retailers. Total costs for producers who sold to consumers was only 3.8 cents per dozen greater than for producers selling to wholesalers and 1.1 cents greater than for those selling to retailers. Differences in labor and miscellaneous costs[7] accounted for 5.6 and 3.0 cents difference in total costs of those selling to consumers from those selling to wholesalers and retailers, respectively. Flock costs were slightly lower for those who sold to consumers, Appendix Table 7.

There was little difference in flock size, feed efficiency, and rate of lay between operators using different outlets for eggs, Appendix Table 8. Receipts per dollar of expenses were $1.10, $1.04, and $1.02 for those operators selling to consumers, retailers, and wholesalers, respectively.

Labor used for producing and marketing eggs by major outlets for eggs is shown in Table 8.

TABLE 8. LABOR USED TO PRODUCE AND MARKET A DOZEN EGGS, BY METHOD OF SALE, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Eggs sold to	Labor used per dozen eggs produced		
	Producing	Marketing	Total
	Minutes	*Minutes*	*Minutes*
Consumers	4.5	4.8	9.3
Retailers	5.1	2.2	7.3
Wholesalers	4.5	1.5	6.0
AVERAGE	4.7	2.6	7.3

POINT OF CONSUMER CONTACT. Selling to consumers on regular routes was apparently more profitable for some producers than selling to consumers not on routes. There was a profit difference of 4.5 cents per dozen in favor of sales made on consumer routes as compared with other sales to consumers, including curb market sales, sales at the farm, and sales at stores owned or operated by producers, Appendix Table 7. There was a difference in receipts

[7] Labor and miscellaneous costs included cartons, delivery, and other marketing costs, and varied directly with type of buyer.

of 4.6 cents per dozen in favor of selling on routes, but no significant difference in total costs. An increase of 3.9 cents per dozen in miscellaneous and labor costs for route delivery was offset by decreased feed, flock, and other cost. Even if all costs except miscellaneous and labor costs had been the same for each group, it would have been more profitable under the conditions that existed during the year of this study to sell on routes.

The marketing of eggs direct to consumers on routes provided a higher priced market but required approximately 15 hours per week per flock more labor than selling to wholesalers. On the typical farm with a retail route, one full day each week was devoted to the route by one adult family member. Additional labor was needed for producers using routes to handle eggs and to do other necessary jobs.

The average retail route consisted of 77 customers buying a total of 101 dozen eggs each per year. This was 1.9 dozen per customer per week and 150 dozen per farm per week. These producers sold about three-fourths of their eggs on consumer routes. To develop a retail route, the producer would need a steady and continuous supply of uniform eggs. This was indicated by the data since no part-time market egg producers used consumer routes as outlets for their eggs. Only one part-time market egg producer reported sales of eggs to consumers.

Most producers that operated retail routes indicated that they were well pleased with results obtained by selling on routes. According to many statements volunteered by route operators they had little competition from other farmers doing house to house selling of eggs. Several stated that they would not expand their route to a "block" where another farmer was selling, and said that they had no trouble with other farmers selling in "their blocks." Egg producers usually attempted to sell in higher income areas of towns. Those selling on retail routes expressed pride in their routes, their customers, and the quality of their product. Some also sold poultry and other farm products on their routes. Supplies were often purchased on the same trip that was used to deliver eggs.

Distance to Market

Eggs were picked up by primary buyers on 41 per cent of the market egg farms while other producers delivered eggs up to

100 miles. Producers that sold eggs at the farm kept an average of 678 hens. Producers that delivered eggs averaged 812 layers. Operators that delivered eggs the shortest and longest distances were larger than were those delivering intermediate distances.

Distance to market was not a matter of traveling a given number of miles. Rather, it was a case of farmers near small markets making delivery to some larger market. In Alabama, the four main egg markets are Birmingham, Mobile, Montgomery, and Gadsden. Some producers found it more profitable to make deliveries to these markets, or similar ones in nearby states, than to sell to a local outlet that had to perform such functions as assembling, grading and packaging, and delivery to some large market. The farmer who delivered his eggs to a distant market was in effect paid to perform more of the marketing functions.

Operators selling eggs at the farm had average receipts of 50.5 cents per dozen. Operators delivering eggs 51 to 100 miles had receipts of 56.5 cents per dozen, Table 9. Some 12 per cent of the market egg producers were selling eggs on markets located an average of 66 miles from their farms.

Producers who delivered eggs had flocks that were more profitable than were those who did not. As average distance to market increased from 0 to 66 miles, labor and miscellaneous costs per dozen eggs increased from an average of 7.6 to 10.9 cents per dozen, a difference of 3.3 cents, Appendix Table 9. Receipts increased 6.0 cents per dozen for the same distance. This was probably because farmers were seeking higher prices for their eggs, and could find them only at more distant places. If only these costs are considered, there would be a net gain of 2.7 cents

TABLE 9. COSTS AND RETURNS, BY DISTANCE TO PRIMARY MARKET, 81 MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Distance to primary market				All farms
	0	1-10	11-50	51-100	
Farms, number	33	18	20	10	81
Average distance to primary market, miles	0	6	34	66	18[1]
	Cents	*Cents*	*Cents*	*Cents*	*Cents*
Receipts per dozen eggs	50.5	53.8	55.4	56.5	53.6
Costs per dozen eggs	50.5	52.8	52.7	47.2	51.1
Profit per dozen eggs	.0	1.0	2.7	9.3	2.5
Labor income per hour	60.1	73.9	80.9	147.6	83.1

[1] Average of 30 miles for those delivering.

per dozen for delivering eggs up to 66 miles from the farm rather than selling at the farm. If all costs are considered, however, there was a difference in average profit of 9.3 cents per dozen eggs and a difference in labor income of 87.5 cents per hour.

Producers who delivered eggs had much higher average rates of lay and attained a better feed conversion. Rate of lay on the farms delivering eggs an average of 66 miles was 223, compared with 178 for producers who sold eggs at the farm. The pounds of feed used to produce a dozen eggs was 5.5 on farms that delivered eggs the greatest distance as compared with 6.5 on farms that sold eggs at the farm, Appendix Table 10. Apparently some managers did a better job of both producing and marketing.

Receipts per dollar of expenses by distance to point of sale were as follows:

Miles to market	*Receipts per dollar of expenses, dollars*
0	1.00
1- 10	1.02
11- 50	1.05
51-100	1.20

Labor costs per hour apparently did not vary with distance to market. Feed costs per pound were less for operators delivering eggs greater distances; they were as follows:

Miles to market	*Feed costs per pound, cents*
0	4.90
1- 10	5.03
11- 50	4.77
51-100	4.71

Apparently farmers that found a high-priced market for their eggs also found a lower priced market for feed. However, a part of this difference in costs may have been due to farm delivery of feed by the dealer on nearby farms with producers selling on distant markets making their own delivery.

Grading Eggs

Apparently, it was profitable for some producers to grade eggs. Producers who graded eggs before selling them received 1.2 cents more profit per dozen than did producers who did not grade eggs, Table 10. Egg producers who graded eggs received 4.2

TABLE 10. COSTS AND RETURNS OF PRODUCERS WHO SOLD GRADED AND UNGRADED EGGS, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Kind of eggs sold		All farms
	Graded	Ungraded	
Farms, number	53	28	81
	Cents	*Cents*	*Cents*
Receipts per dozen eggs	54.8	50.6	53.6
Costs per dozen eggs	52.0	49.0	51.1
Profit per dozen eggs	2.8	1.6	2.5
Labor income per hour	84.2	80.0	83.1

cents per hour more labor income in addition to selling an average of one additional minute of their labor per dozen eggs than did non-grading producers. Costs of producing eggs were 3.0 cents per dozen more on farms that sold graded eggs than on those that sold ungraded eggs, Appendix Table 11.

Labor used to produce and market a dozen eggs on the farms selling graded and ungraded eggs is shown in Table 11.

Producers who graded eggs had an average of 176 more hens than did producers who did not grade eggs. Producers who graded eggs had about the same rates of lay and feed efficiency as did those who did not grade eggs according to size. Receipts per dollar of expenses were only slightly higher for the farms that graded eggs, Appendix Table 12.

Of the producers selling ungraded eggs, 7 per cent sold to consumers, 39 per cent to retailers, and 54 per cent to wholesalers. Of the producers selling graded eggs, 37 per cent sold to consumers, 30 per cent to retailers, and 33 per cent to wholesalers. Producers selling graded eggs to consumers and retailers received higher prices than did producers selling ungraded eggs to these same outlets. Producers selling graded eggs to wholesalers re-

TABLE 11. LABOR USED TO PRODUCE AND MARKET A DOZEN EGGS, BY KIND OF EGGS SOLD, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Kind of eggs sold	Labor used per dozen eggs produced		
	Producing	Marketing	Total
	Minutes	*Minutes*	*Minutes*
Graded	4.8	2.8	7.6
Ungraded	4.4	2.2	6.6
AVERAGE	4.7	2.6	7.3

ceived the same average price per dozen for their eggs as did producers selling ungraded eggs to wholesalers. Often wholesalers graded all eggs purchased using their own grade determination; consequently, they would not pay producers for the extra effort of grading eggs. This emphasizes the necessity for each egg producer to determine the need and willingness of his market outlet to pay for graded eggs before he makes this a practice on his farm.

Frequency of Selling Eggs

Producers who sold eggs three times or more per week received only 3.0 cents per dozen more than did producers who sold only once, and their expenses were 16.3 cents more per dozen, Table 12. Costs of marketing often included extra transportation costs and extra labor costs. Also, absence of the operator from the producing unit, with possible neglect of the production processes, may have increased costs. There was a profit difference of 13.3 cents per dozen, and a labor income difference of $1.25 per hour, in favor of marketing weekly rather than three or more times per week. Only 3.2 cents of the 16.3 cents per dozen difference in costs was for labor and miscellaneous costs; however, this 3.2 cents was more than the difference in price received for the eggs, Table 12 and Appendix Table 13.

Physical production efficiency was much lower on the egg producing farms that sold eggs oftener than once weekly. Seventy-two per cent of the producers selling eggs three or more times per week produced eggs at a loss. Rates of lay were much lower, labor used per dozen eggs was higher, feed consumed per dozen eggs produced was much higher, and mortality was twice as high

Table 12. Costs and Returns, by Frequency of Selling Eggs, 81 Commercial Market Egg Producing Farms, Alabama, September 1951-August 1952

Item	Frequency of selling eggs			All farms
	Weekly[1]	Two times per week	Three or more times per week	
Farms, number	26	37	18	81
	Cents	*Cents*	*Cents*	*Cents*
Receipts per dozen eggs	53.0	52.4	56.0	53.6
Costs per dozen eggs	45.3	50.7	61.6	51.1
Profit per dozen eggs	7.7	1.7	-5.6	2.5
Labor income per hour	148.0	71.3	23.2	83.1

[1] Includes one producer that marketed once every 2 weeks.

on farms that sold eggs three times per week as on farms that sold eggs only once per week, Appendix Table 14.

Producing eggs requires continuous attention, and the inverse relationship between frequency of selling eggs and production efficiency suggests that producers who marketed eggs more frequently may have neglected their production processes.

Receipts per dollar of expenses were:

$1.17 on farms that sold eggs once per week,
$1.03 on farms that sold eggs twice per week, and only
$0.91 on farms that sold eggs three or more times each week.

There is little evidence that infertile eggs, when properly handled and cooled, are perishable enough to require delivery more often than once weekly if satisfactory storage space is available on the farm. A recent research publication states that Wisconsin eggs bought from farmers weekly, held as long as 3 days by the assembler in Wisconsin, shipped, and again held by a southern wholesale-jobber up to 3 days before being delivered to retail stores in a southern city, were advertised as "top quality" and "high quality eggs" that sold at "a distinctly higher than average retail price."[8] If local producers deliver eggs weekly to retail stores, these eggs will reach retail stores in approximately half the time that is required for out-of-state eggs that are presently being sold at a premium and which are presently being advertised as fresh or quality eggs.

A recent report states that: "As long as 6 weeks often elapses between the time eggs are laid and the time they are consumed" when they go through normal marketing channels.[9] If commercial egg producers sell direct to retail stores once weekly, this time will be reduced to a maximum of 3 weeks; and if sold to consumers weekly, the time will be reduced to a maximum of 2 weeks or a third of the time taken for normal marketing channels in some states. Frequency of delivering should be considered from the standpoint of both quality and costs. Some producers will be able to sell quality at sufficiently higher prices to justify frequent delivery; others will not.

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[8] Mortensen, W. P., and Graf, Truman F. "Marketing Wisconsin Eggs in a Southern City." Dept. of Agr. Econ., Univ. of Wis. Madison. 1953.

[9] Raskopf, B. D. "Egg Marketing, Wholesale and Retail." Rural Research Series Monograph No. 267. Agr. Expt. Sta., Univ. of Tenn. Knoxville, Tenn. 1953.

Seasonality of Layers on Hand

Farmers generally have been advised to produce a large part of their eggs in the fall months when egg prices are high and production is low, and to produce fewer eggs in the spring months when eggs are usually produced in large numbers and are cheaper. It will be profitable for farmers to shift to fall production only if their net returns for total eggs produced over the year are greater, relative to their costs of production. Farmers should be advised to place emphasis on fall production only if it is more profitable than to emphasize spring production. It is desirable to know how the profitableness of high spring production and somewhat lower prices will compare to low fall production which offers higher prices.

The relative price premium of fall eggs has not been as great in recent years as formerly, Figure 3. If this trend continues, there will be less premium for fall production in the future. This change has been due to developments in storage and processing

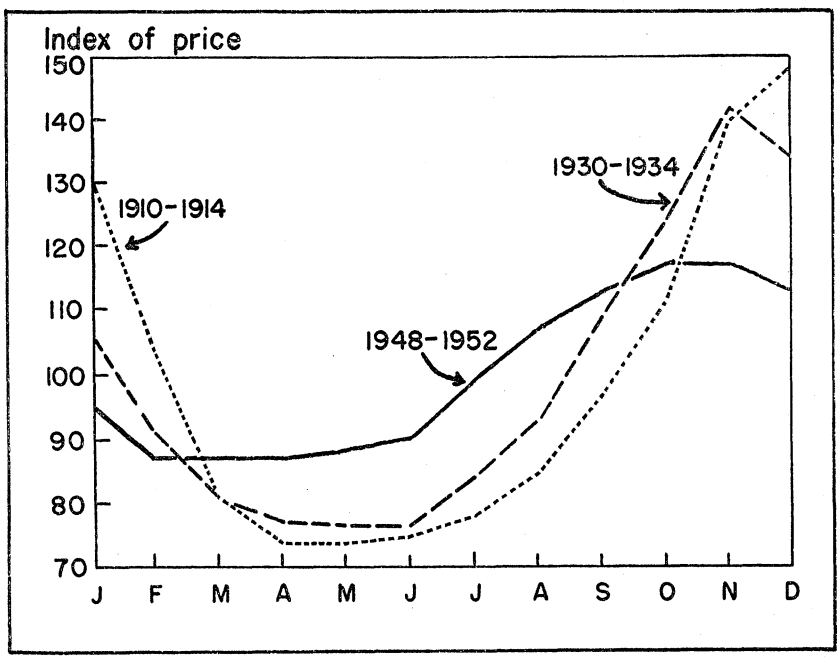

FIGURE 3. Seasonal changes in egg prices received by U. S. farmers, selected years, 1910-52. Data source: 1954 Agricultural Outlook Charts. BAE, USDA. 1953.

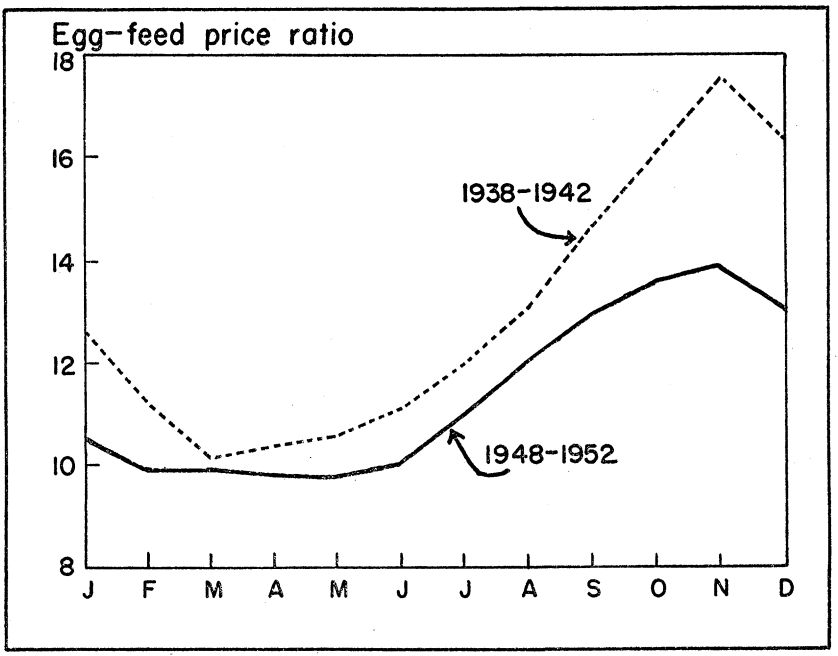

FIGURE 4. Egg-feed price ratio by months, U. S., 1938-42 and 1948-52. Data source: "Crops and Markets." BAE, USDA. 1953.

of seasonal surpluses of eggs, the growing number of commercial producers with year-around production, and improved methods of feeding and management that permits a more continuous production from each hen kept.

There has not been as great a seasonal difference in feed price ratios in recent years as previously, Figure 4.

The market egg producers included in this study kept only 78 per cent as many hens during the spring months of March, April, and May, as they did in the fall months of October, November, and December. The sample farms kept relatively more layers in the fall than did all Alabama farmers with layers, Figure 2.

Commercial market egg producers were sorted on the basis of relative number of spring and fall layers on hand. Farms that had more than the average number of hens on hand during the fall in relation to hens on hand in the spring were designated as fall producers. Those with fewer layers on hand during the fall relative to the spring were designated as spring producers.

This method assumed that seasonal production was related to number of layers on hand during different seasons.

The relative costs and returns of spring and fall producers indicated, although probably not conclusively, that a further shift to fall production would not be profitable for these commercial producers. There was 0.8 cent per dozen eggs difference in receipts in favor of fall production, while fall producers had 3.2 cents additional costs per dozen eggs. Fall producers received 22.0 cents per hour less for their labor than did spring producers, Table 13. Each of the major costs except feed was greater for fall producers than for spring producers, Appendix Table 15. However, it is possible that fall producers could use better management to reduce some of these costs.

TABLE 13. COSTS AND RETURNS, BY SEASONALITY OF LAYERS ON HAND, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Season with most layers on hand[1]		All farms
	Fall	Spring	
Farms, number	37	44	81
	Cents	*Cents*	*Cents*
Receipts per dozen eggs	54.0	53.2	53.6
Costs per dozen eggs	52.9	49.7	51.1
Profit per dozen eggs	1.1	3.5	2.5
Labor income per hour	71.5	93.6	83.1

[1] Spring or fall, relative to average of all 81 farms.

Spring producers had slightly larger flocks, higher rates of lay, used less labor per dozen eggs, and had 5.0 cents greater return per dollar of expenses than did fall producers. Spring producers used 0.4 pound more feed per dozen eggs, Appendix Table 16.

Commercial producers produce a larger percentage of their total production in the fall than the average of all producers. Since there is less seasonal variation in consumer demand for eggs than in production, each commercial egg producer must keep himself fully informed of his market needs and produce sufficient eggs for that market without too much regard for seasons.

SIZE OF ENTERPRISE

The assembling of products into large volumes is a marketing process. If eggs are produced in large quantities on individual farms, the process of assembly is not as expensive as assembling smaller volumes of eggs from a large number of small volume egg producing farms.

TABLE 14. PRICES RECEIVED FOR EGGS, BY TYPE OF BUYER AND SIZE OF FLOCK, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Size of flock	Price received per dozen eggs from			All buyers
	Consumers	Retailers	Wholesalers	
	Cents	*Cents*	*Cents*	*Cents*
Under 400 hens	61.6	48.0	46.2	51.7
400 to 700 hens	59.8	54.0	48.0	53.2
Over 700 hens	60.1	53.6	50.9	53.8
AVERAGE	60.3	53.1	49.7	53.4

Due to the producer of large volumes of eggs performing a part of the job of assembling, he should receive a higher price for eggs than the smaller producer. This premium should equal the cost of assembling the same quantity of eggs from smaller farms if the producer should sell to or by-pass an agency that performs the function of assembly. If the producer sells to an agency that is handling the distribution function, or if he sells direct to consumers, there should be little or no price difference related to volume.

Of the market egg farms studied, there was little difference in prices of eggs from different sized flocks that sold to consumers. Eggs from farms producing large volumes brought higher average prices from retailers and wholesalers than from small flock farms that sold to the same general kinds of agencies. Prices received for eggs sold by different size-of-flock farms to wholesalers, retailers, and consumers are shown in Table 14 and Appendix Table 17.

A larger precentage of eggs from small farms were sold direct to consumers and a smaller percentage sold to retailers than on large flock farms. There was little difference, however, in the percentage of eggs from different sized flocks that were sold to wholesalers. The percentages of eggs sold by various sized flocks to specified outlets are shown in Table 15.

TABLE 15. PERCENTAGE OF EGGS SOLD TO DIFFERENT TYPE BUYERS, BY SIZE OF FLOCK, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Size of flock	Percentage of eggs sold to			All buyers
	Consumers	Retailers	Wholesalers	
	Per cent	*Per cent*	*Per cent*	*Per cent*
Under 400 hens	31.8	31.1	37.1	100
400 to 700 hens	21.5	43.8	34.7	100
Over 700 hens	19.3	41.3	39.4	100
AVERAGE	21.2	40.8	38.0	100

Poultrymen have long recognized that size of commercial flocks is related to profitableness. The minimum size of a commercial flock previously has been accepted to be 300 layers,[10] but data from this study indicate that the minimum profitable size should be somewhat larger than 300 layers.

Farms with an average of less than 400 hens lacked 8.6 cents per dozen eggs produced of receiving enough to pay for all costs including an allowance for labor. Farms with 400 to 700 hens made an average of 6.5 cents profit per dozen eggs produced, and farms with over 700 hens made an average of 2.7 cents profit on each dozen eggs produced, Table 16.

TABLE 16. COSTS AND RETURNS, BY SIZE OF FLOCK, 81 COMMERCIAL MARKET EGG PRODUCERS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Size of flock			All farms
	Under 400 hens	400 to 700 hens	Over 700 hens	
Farms, number	22	29	30	81
Size of flock, hens	312	508	1,325	757
	Cents	*Cents*	*Cents*	*Cents*
Receipts per dozen eggs	51.9	53.3	53.9	53.6
Costs per dozen eggs	60.5	46.8	51.2	51.1
Profit per dozen eggs	-8.6	6.5	2.7	2.5
Labor income per hour	17.7	110.8	90.0	83.1

Most of the difference in profit was due to production efficiency and the resulting lower unit costs of production. Farms with 400 to 700 hens had higher rates of lay and used less labor and feed than either of the other groups. Mortality was higher on small farms. Receipts accounted for only approximately 2.0 cents per dozen difference in profit between the smallest and the other two groups. The average producer with 400 to 700 hens produced eggs for 13.7 cents per dozen less than did small flock groups, while producers with more than 700 hens produced eggs for 9.3 cents less than did those with fewer than 400 layers, Appendix Tables 18 and 19.

The amount of labor used per dozen eggs decreased as size of flock increased, Table 17. Most of the difference in labor efficiency was in production, although some saving was made in labor used for marketing. The saving in labor used for marketing by the largest size-of-flock group was possible because of type of primary market used and the efficiencies due to scale of operation.

[10] "Handbook of Alabama Agriculture." 15th Edition. Extension Service. Alabama Polytechnic Institute. 1951. p. 231.

TABLE 17. LABOR USED TO PRODUCE AND MARKET A DOZEN EGGS, BY SIZE OF FLOCK, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Size of flock	Labor used per dozen eggs produced		
	Producing	Marketing	Total
	Minutes	*Minutes*	*Minutes*
Under 400 hens	8.0	3.5	11.5
400 to 700 hens	5.0	2.8	7.8
Over 700 hens	3.9	2.4	6.3
AVERAGE	4.7	2.6	7.3

Even though returns per dozen eggs were less on the larger farms, total returns to the larger farms were greater than those from the 400- to 700-layer enterprises. Returns per farm were as shown in Table 18.

TABLE 18. FINANCIAL REWARDS TO PRODUCERS, BY SIZE OF FLOCK, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Size of flock	Labor income	Profit
	Dollars	*Dollars*
Under 400 hens	169	–425
400 to 700 hens	1,261	571
Over 700 hens	2,002	576
AVERAGE	1,239	302

Farmers with over 700 hens had higher costs and returns per dozen eggs and 21.0 cents less labor income per hour than did farmers with 400 to 700 hens. Farmers with over 700 hens had lower rates of lay, lower feed efficiency, and lower receipts per dollar of expenses than did farmers with from 400 to 700 hens.[11]

Some farmers can handle large flocks efficiently and profitably, but the average farmer should be cautious about expanding beyond 700 layers. He should consider the greater risks present with larger-sized flocks. The farmer with an abundance of labor, adequate managerial ability and experience, however, may find it wise to expand to the larger sized flock. The additional labor used may be less skilled and cost less per hour than the first labor used on a given size flock. If this is the case, returns to the operator may be increased by adding extra layers.

[11] When hatching egg flocks were included with market egg flocks, the profit per dozen eggs was greater for farms with over 700 hens than for either of the smaller groups. See "Costs and Returns to Commercial Egg Producers." A.P.I. Agricultural Experiment Station Bulletin 290. June 1954.

Experience of Operator

Commercial egg production is an enterprise that has a high ratio of variable to fixed costs; consequently, new producers can enter or old operators can leave the business quickly and easily when there are shifts in returns to producers. Feed, labor, and flock depreciation costs together made up over 90 per cent of all costs on commercial hatching and market egg farms. These resources, as well as some others, including land and buildings, can be utilized to varying degrees for other enterprises. There is evidence that some shifting is taking place between egg production and other enterprises, especially hatching egg and broiler production. The apparent shifting raises the question of the importance of experience of the operator as a factor in determining success of the business if shifts are to be made to meet changing demand for the products. The average experience of market egg producers was 10 years; 42 per cent had less than 6 years' experience, while 12 per cent had more than 20 years' experience.

There was apparently little relationship between years of experience and success in commercial egg production. Commercial egg producers with 10 years of experience or less made 3.5 cents profit per dozen eggs as compared to only 0.2 cent per dozen for producers with over 10 years' experience. Labor income per hour also decreased with experience, Table 19.

Rates of lay decreased as experience of the operator increased, as did receipts per dollar of expenses. There was no apparent difference in labor and feed efficiency. Mortality was lowest on farms that had operators with from 6 to 10 years of commercial flock experience, Appendix Tables 20 and 21.

There was little evidence to indicate that potential egg pro-

Table 19. Costs and Returns, by Years of Experience of Operator, 81 Commercial Market Egg Producing Farms, Alabama, September 1951-August 1952

Item	Years of experience of operator			All farms
	1-5	6-10	11 and over	
Farms, number	34	22	25	81
Experience, years	3	8	21	10
	Cents	*Cents*	*Cents*	*Cents*
Receipts per dozen eggs	54.2	52.8	53.2	53.6
Costs per dozen eggs	50.7	49.3	53.0	51.1
Profit per dozen eggs	3.5	3.5	.2	2.5
Labor income per hour	95.9	90.6	57.0	83.1

ducers should hesitate to enter the business because of lack of previous experience provided they follow recommended production and marketing practices. On the other hand, there was some indication that producers of long years' experience may have been averse to adopting new methods and techniques that would have enabled them to lower their production costs. Many operators with long years of experience had reached an age that made them physically unable to make some of the needed changes for more economical egg production. Many of the hatching egg producers had produced market eggs for 6 to 10 years. It is possible that the more efficient producers were the ones who made the shift leaving the less efficient producers as market egg producers. If this was true, it might explain the lower returns of market egg producers with longer experience. Such marketing practices as grading, frequency of marketing, and distance eggs were delivered, apparently were not related to the experience of operator.

Operators with the most years of experience had a slight tendency to sell more eggs to retailers than did those with fewer years of experience. A slightly smaller percentage of producers with less than 6 years of experience than producers with more than 6 years of experience sold to wholesalers. There was not enough difference in the type of market used as related to years of experience to indicate that certain outlets were "closed" to any producers; rather, it indicated that commercial egg producers had their choice of markets. Some producers possibly could have benefited by shifting production to and from various poultry enterprises as market conditions changed.

SUMMARY AND CONCLUSIONS

One hundred and thirty commercial egg producers were studied as a sample of all commercial egg producers in Alabama to determine the marketing and related production practices in use, and the relationship of these practices to financial rewards of producers.

In general, practices used by Alabama producers were satisfactory; however, some improvements can be made. Producers should make these improvements only if they lower their costs or if buyers of eggs will give them sufficient financial rewards to cover their additional costs.

Some agencies, primarily handlers of poultry supplies and buyers of eggs, are extending the use of capital to producers, or are entering into financial partnerships with producers. The primary objective of this outside financing is to expand the business of the person furnishing the additional capital. Producers that accept this outside capital, however, may benefit financially by also having a larger size of business. Financing agencies may offer, without cost to producers, supervision and services that they would not furnish to cash producers.

The hatching egg flocks included in this study were more profitable than were the market egg flocks studied. Several hatching egg producers had previously sold market eggs, but only a few market egg producers had previously sold hatching eggs. These shifts indicated that the industry as a whole was moving toward an equilibrium of market and hatching egg production. The hatching egg industry depends largely on the broiler industry and should be expanded as the broiler industry is expanded.

Some commercial egg producers apparently can perform a number of marketing functions cheaper than marketing agencies presently are willing or are forced to perform them. Producers who sold direct to consumers received greater financial rewards than did those who sold to retailers, and producers who sold to retailers received greater rewards than did those who sold to wholesalers. Producers who sold eggs on consumer routes made more profits than did those selling to consumers not on routes. Producers who performed the following marketing functions received greater rewards than did those who did not perform these

functions: hauling eggs to market, grading eggs for size, and assembling eggs (by producing larger quantities of eggs).

If a farmer received more profit per dozen eggs, and more labor income per hour of labor by performing these jobs himself, it appears that he should continue to do these jobs rather than ask a marketing agency to do them for him.

The fact that some farmers received more profit and labor income per hour when they performed more of the marketing functions indicates that there were opportunities available to some commercial egg producers to increase their income above that of normal egg production by performing some of the marketing functions that are often conducted by outside agencies.

The statement that some commercial producers should perform certain marketing functions does not imply that presently established marketing agencies are not desirable, or necessary. Egg production remains seasonal and commercial producers are in no position to store seasonal surpluses of eggs; neither can they obtain, process, and distribute out-of-state eggs during months of egg shortages. Owners of small home-and-farm flocks that market small volumes of eggs most likely will find it necessary and profitable to depend more on marketing agencies to perform most of the marketing functions than will some commercial producers. All commercial producers will not find it profitable to do the complete marketing job. Many do not have the available labor or facilities to perform the marketing jobs indicated, or they may use poultry as a supplementary enterprise and their alternative employment would be more profitable than marketing eggs direct to consumers, or at some point in the marketing channel nearer the consumer.

If the marketing system develops into a competitive or efficient system, it may be that no producers could profit by performing these added marketing functions. If more farmers sold on routes or direct to consumers, the added competition could narrow the present profit margin now enjoyed by some producers. If an efficient and acceptable grading system were used so that consumers could depend on quality of store-purchased eggs, this premium would possibly also disappear.

Data in this study raise some doubt as to the profitableness of shifting commercial production further toward fall production rather than spring production, unless farmers are willing to fol-

low recommended production and marketing practices. Commercial producers, in general, have higher fall production now than small producers. A further expansion of commercial production probably will continue to decrease the relative differences in spring and fall production of all farms and as a result further reduce seasonal spreads in prices paid producers for eggs.

It apparently does not pay some producers to sell eggs more often than weekly. This is probably due to either the general lack of an appreciation for greater freshness in eggs, or to an absence of competition with eggs of equal or better freshness. Probably only a small percentage of all eggs retailed in Alabama are as fresh when they reach consumers as are those sold weekly by Alabama's commercial producers. Most of Alabama's commercially produced eggs follow a more direct route to consumers than do eggs produced and sold by small farmers and the out-of-state produced eggs that are sold in competition with them.

APPENDIX

APPENDIX TABLE 1. EGGS SOLD, PRICE OF EGGS, AND VALUE RECEIVED FOR EGGS, BY TYPE OF PRODUCER, 130 COMMERCIAL EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Sales agency	Type of producer							
	Market egg flocks				Hatching egg flocks			
	Number of farms[1]	Volume of eggs produced	Price of eggs sold	Value of eggs sold	Number of farms[1]	Volume of eggs produced	Price of eggs sold	Value of eggs sold
	No.	*Doz.*	*Ct.*	*Dol.*	*No.*	*Doz.*	*Ct.*	*Dol.*
Consumer-route	18	140,719	60.8	85,567	--			
Other consumers	15	61,365	59.1	36,258	--			
All consumers	33	202,084	60.3	121,825	12	43,155	53.1	22,916
Institutions	10	99,547	54.0	53,765	3	6,785	50.0	3,392
City retail stores	21	209,937	53.7	112,652	7	25,583	49.6	12,693
Country stores	2	10,616	50.0	5,309	5	10,450	49.1	5,130
Hucksters	12	69,647	51.4	35,768	6	6,929	52.1	3,613
All retailers	45	389,747	53.2	207,494	21	49,747	49.9	24,828
Cooperatives	7	55,983	49.3	27,583	1	616	56.7	349
Feed dealers	7	66,000	47.3	31,224	0			
Egg dealers	16	144,027	49.9	71,842	5	36,162	49.4	17,853
Produce dealers	7	96,767	51.4	49,774	0			
Hatchery culls[2]	0				13	36,825	53.5	19,688
All wholesalers	37	362,777	49.7	180,423	19	73,603	51.5	37,890
All market eggs	115	954,608	53.4	509,742	52	166,505	51.4	85,634
Hatching eggs	0				49	403,664	83.9	338,568
Home use	81	18,651	40.6	7,579	49	9,121	42.9	3,915
TOTAL OR AVERAGE	81	973,259	53.2	517,321	49	579,290	73.9	428,117

[1] Some farms included more than once.

[2] Bought by hatchery, but not used for hatching eggs because of size, shape, shell texture, color, etc.

APPENDIX TABLE 2. PERCENTAGE OF THE AVERAGE NUMBER OF LAYERS ON HAND, BY MONTHS, 130 SAMPLE FARMS, AND ALL FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Month	130 sample farms			All Alabama farms with layers[1]
	Market egg flocks	Hatching egg flocks	Average	
	Per cent	*Per cent*	*Per cent*	*Per cent*
September	111	105	108	95
October	112	107	110	100
November	109	105	108	105
December	104	100	103	108
January	99	101	100	109
February	96	103	99	107
March	90	100	94	104
April	81	97	88	100
May	78	99	86	96
June	86	94	89	94
July	103	93	99	90
August	116	96	108	92

[1] Computed from "Monthly Egg Production." BAE, USDA.

APPENDIX TABLE 3. ITEMIZED COSTS OF EGG PRODUCTION, BY KIND OF EGGS PRODUCED, 130 COMMERCIAL EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Average costs					
	Per 100 layers			Per dozen eggs		
	Market egg flocks	Hatching egg flocks	All farms	Market egg flocks	Hatching egg flocks	All farms
	Dollars	*Dollars*	*Dollars*	*Cents*	*Cents*	*Cents*
Feed	503.95	576.23	532.74	31.2	39.5	34.3
Labor	123.68	108.12	117.49	7.6	7.4	7.6
Flock depreciation	117.63	104.75	112.50	7.3	7.2	7.2
Laying house	36.33	36.97	36.59	2.2	2.5	2.3
Miscellaneous	30.65	22.60	27.44	1.9	1.5	1.8
Taxes and insurance	2.82	3.26	2.99	.2	.2	.2
Litter	2.12	2.58	2.30	.1	.2	.1
Equipment	6.58	11.16	8.40	.4	.7	.5
Land	1.12	1.91	1.44	.1	.2	.1
Other buildings	1.12	.62	.92	.1	.1	.1
TOTAL	826.00	868.20	842.81	51.1	59.5	54.2

APPENDIX TABLE 4. SPECIFIED EFFICIENCY FACTORS, BY KIND OF EGGS PRODUCED, 130 COMMERCIAL EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Unit	Kind of eggs produced		
		Market	Hatching	All farms
Size of flock	Hens	757	828	784
Rate of lay	Eggs	194	175	186
Labor per dozen eggs	Minutes	7.3	6.8	7.1
Feed per dozen eggs	Pounds	6.4	7.8	6.9
Mortality	Per cent	19	17	18
Receipts per dollar expenses	Dollars	1.05	1.26	1.14

APPENDIX TABLE 5. ITEMIZED COSTS PER DOZEN EGGS PRODUCED, BY PERCENTAGE OF EGGS SOLD THAT WERE HATCHING EGGS, 49 COMMERCIAL HATCHING EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Percentage of eggs sold that were hatching eggs		All farms
	Under 80	80 and over	
	Cents	*Cents*	*Cents*
Feed	35.7	43.7	39.5
Labor	7.6	7.3	7.4
Flock depreciation	7.1	7.3	7.2
Laying house	2.2	2.8	2.5
Miscellaneous	1.8	1.2	1.5
Taxes and insurance	.1	.4	.2
Litter	.2	.1	.2
Equipment	.6	.9	.7
Land	.1	.1	.2
Other buildings	.0	.1	.1
TOTAL	55.4	63.9	59.5

APPENDIX TABLE 6. SPECIFIED EFFICIENCY FACTORS, BY PERCENTAGE OF EGGS SOLD THAT WERE HATCHING EGGS, 49 COMMERCIAL HATCHING EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Unit	Percentage of eggs sold that were hatching eggs		All farms
		Under 80	80 and over	
Size of flock	Hens	732	946	828
Rate of lay	Eggs	187	164	175
Labor per dozen eggs	Minutes	7.2	6.3	6.8
Feed per dozen eggs	Pounds	7.0	8.6	7.8
Mortality	Per cent	15	18	17
Receipts per dollar expenses	Dollars	1.25	1.28	1.26

APPENDIX TABLE 7. COSTS AND RETURNS, BY KIND OF PRIMARY MARKET ON WHICH EGGS WERE SOLD, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952[1]

Item	Primary market												All farms
	Consumers			Retailers				Wholesalers					
	Route	Other	All farms	Stores	Huck-sters	Insti-tutions	All farms	Coop.[2]	Egg dealers	Feed dealers	Produce dealers[3]	All farms	
Farms, number	14	8	22	14	9	4	27	6	13	6	7	32	81
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Receipts per doz. eggs	60.4	55.8	58.4	54.4	52.2	54.7	54.0	49.2	50.9	46.5	51.4	50.0	53.6
Expenses per doz. eggs	53.0	52.9	53.0	50.6	50.7	56.5	51.9	59.5	47.8	48.0	44.2	49.2	51.1
Profit per doz. eggs	7.4	2.9	5.4	3.8	1.5	–1.8	2.1	–10.3	3.1	–1.5	7.2	.8	2.5
Labor income per hour	105.5	81.8	96.3	97.6	71.7	36.2	81.7	–44.6	89.2	42.9	164.5	70.7	83.1
Itemized costs per dozen:													
Feed	29.3	32.7	30.8	27.7	32.0	35.7	30.4	42.2	30.3	33.8	26.2	32.1	31.2
Labor	10.4	8.2	9.5	8.9	7.8	5.0	7.8	6.0	6.7	6.5	5.7	6.3	7.6
Flock depreciation	6.2	7.5	6.8	7.7	6.7	9.0	7.8	7.2	7.4	5.3	8.2	7.2	7.3
Laying house	2.1	1.5	1.9	2.8	2.7	3.5	2.9	1.7	2.0	1.5	2.4	1.9	2.2
Miscellaneous	4.1	2.4	3.3	2.3	.5	2.5	2.0	1.4	.8	.5	.9	.9	1.9
Taxes and insurance	.1	.1	.1	.3	.1	.2	.2	.1	.1	.1	.3	.2	.2
Litter	.2	.1	.1	.1	.1	.2	.1	.3	.1	.0[4]	.1	.1	.1
Equipment	.4	.3	.4	.5	.7	.3	.5	.3	.3	.3	.4	.3	.4
Land	.1	.1	.1	.1	.1	.1	.1	.1	.1	.0[4]	.0[4]	.1	.1
Other buildings	.1	.0[4]	.0[4]	.2	.0[4]	.0	.1	.2	.0[4]	.0[4]	.0	.1	.1
TOTAL	53.0	52.9	53.0	50.6	50.7	56.5	51.9	59.5	47.8	48.0	44.2	49.2	51.1

[1] The term "primary market" means the agency that bought the greatest number of eggs from each farm.

[2] Does not consider patronage refunds.

[3] Most farms in this group had a financing plan that provided some management and services that were not charged for.

[4] Less than 0.05 cent.

APPENDIX TABLE 8. SPECIFIED EFFICIENCY FACTORS, BY KIND OF PRIMARY MARKET ON WHICH EGGS WERE SOLD, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952[1]

Item	Unit	Primary market												All farms
		Consumers			Retailers				Wholesalers					
		Route	Other	All farms	Stores	Huck-sters	Insti-tutions	All farms	Coop.[2]	Egg dealers	Feed dealers	Pro-duce dealers	All farms	
Size of flock	Hens	673	918	762	772	590	1214	777	808	737	684	724	737	757
Rate of lay	Eggs	190	192	191	206	168	175	188	185	192	195	236	201	194
Labor per dozen eggs	Minutes	10.1	8.1	9.3	7.8	7.8	5.3	7.3	5.8	6.6	6.8	4.7	6.0	7.3
Feed per dozen eggs	Pounds	6.2	6.5	6.3	5.6	6.3	8.6	6.4	8.4	6.0	6.6	5.4	6.4	6.4
Mortality	Per cent	18	8	14	23	15	34	24	30	14	16	12	18	19
Receipts per dollar expenses	Dollars	1.14	1.06	1.10	1.07	1.03	0.97	1.04	0.83	1.07	0.97	1.16	1.02	1.05

[1] The term "primary market" means the agency that bought the greatest number of eggs from each farm.

[2] Does not consider patronage returns.

APPENDIX TABLE 9. ITEMIZED COSTS OF PRODUCING A DOZEN EGGS, BY DISTANCE TO PRIMARY MARKET, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Miles to primary market				All farms
	0	1-10	11-50	51-100	
	Cents	*Cents*	*Cents*	*Cents*	*Cents*
Feed	32.0	32.8	31.9	26.0	31.2
Labor	6.9	8.6	7.6	7.9	7.6
Flock depreciation	7.9	6.0	8.1	6.7	7.3
Laying house	2.2	2.5	1.7	2.7	2.2
Miscellaneous	.7	1.9	2.7	3.0	1.9
Taxes and insurance	.1	.2	.1	.3	.2
Litter	.1	.1	.1	.2	.1
Equipment	.5	.4	.4	.3	.4
Land	.1	.1	.1	.1	.1
Other buildings	.0	.2	.0[1]	.0[1]	.1
TOTAL	50.5	52.8	52.7	47.2	51.1

[1] Less than 0.05 cent.

APPENDIX TABLE 10. SPECIFIED EFFICIENCY FACTORS, BY DISTANCE TO PRIMARY MARKET, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Unit	Miles to primary market				All farms
		0	1-10	11-50	51-100	
Size of flock	Hens	678	828	758	891	757
Rate of lay	Eggs	178	200	195	223	194
Labor per dozen eggs	Minutes	6.9	7.8	7.7	7.0	7.3
Feed per dozen eggs	Pounds	6.5	6.5	6.7	5.5	6.4
Mortality	Per cent	21	16	18	19	19
Receipts per dollar expenses	Dollars	1.00	1.02	1.05	1.20	1.05

APPENDIX TABLE 11. ITEMIZED COSTS OF PRODUCING A DOZEN EGGS, BY GRADING PRACTICE FOLLOWED, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Grading practice followed		
	Graded	Ungraded	All farms
	Cents	*Cents*	*Cents*
Feed	31.3	30.9	31.2
Labor	7.8	7.2	7.6
Flock depreciation	7.4	7.0	7.3
Laying house	2.3	2.2	2.2
Miscellaneous	2.3	.9	1.9
Taxes and insurance	.2	.2	.2
Litter	.1	.1	.1
Equipment	.4	.4	.4
Land	.1	.1	.1
Other buildings	.1	.0[1]	.1
TOTAL	52.0	49.0	51.1

[1] Less than 0.05 cent.

APPENDIX TABLE 12. SPECIFIED EFFICIENCY FACTORS, BY GRADING PRACTICE FOLLOWED, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Unit	Grading practice followed		
		Graded	Ungraded	All farms
Size of flock	Hens	818	642	757
Rate of lay	Eggs	193	196	194
Labor per dozen eggs	Minutes	7.6	6.6	7.3
Feed per dozen eggs	Pounds	6.5	6.2	6.4
Mortality	Per cent	20	16	19
Receipts per dollar expenses	Dollars	1.06	1.03	1.05

APPENDIX TABLE 13. ITEMIZED COSTS OF PRODUCING A DOZEN EGGS, BY FREQUENCY OF SELLING EGGS, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Number of times eggs were sold per week			All farms
	One	Two	Three or more	
	Cents	*Cents*	*Cents*	*Cents*
Feed	27.2	30.6	38.8	31.2
Labor	6.6	8.0	9.0	7.6
Flock depreciation	6.9	7.4	7.7	7.3
Laying house	2.1	2.0	2.8	2.2
Miscellaneous	1.5	2.0	2.3	1.9
Taxes and insurance	.2	.1	.2	.2
Litter	.2	.1	.2	.1
Equipment	.4	.4	.4	.4
Land	.1	.1	.1	.1
Other buildings	.1	.0[1]	.1	.1
TOTAL	45.3	50.7	61.6	51.1

[1] Less than 0.05 cent.

APPENDIX TABLE 14. SPECIFIED EFFICIENCY FACTORS, BY FREQUENCY OF SELLING EGGS, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Unit	Number of times eggs were sold per week			All farms
		One	Two	Three or more	
Size of flock	Hens	903	578	915	757
Rate of lay	Eggs	217	180	179	194
Labor per dozen eggs	Minutes	5.8	8.2	8.7	7.3
Feed per dozen eggs	Pounds	5.7	6.2	7.9	6.4
Mortality	Per cent	14	17	28	19
Receipts per dollar expenses	Dollars	1.17	1.03	.91	1.05

APPENDIX TABLE 15. ITEMIZED COSTS OF PRODUCING A DOZEN EGGS, BY SEASON WITH MOST LAYERS ON HAND, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Season with most layers on hand[1]		All farms
	Fall	Spring	
	Cents	*Cents*	*Cents*
Feed	30.3	31.8	31.2
Labor	8.5	7.0	7.6
Flock depreciation	8.6	6.3	7.3
Laying house	2.5	2.1	2.2
Miscellaneous	2.2	1.7	1.9
Taxes and insurance	.2	.1	.2
Litter	.1	.1	.1
Equipment	.3	.5	.4
Land	.1	.1	.1
Other buildings	.1	.0[2]	.1
TOTAL	52.9	49.7	51.1

[1] Spring or fall, relative to average of 81 farms.

[2] Less than 0.05 cent.

APPENDIX TABLE 16. SPECIFIED EFFICIENCY FACTORS, BY SEASON WITH MOST LAYERS ON HAND, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Unit	Season with most layers on hand[1]		All farms
		Fall	Spring	
Size of flock	Hens	733	778	757
Rate of lay	Eggs	189	198	194
Labor per dozen eggs	Minutes	8.1	6.7	7.3
Feed per dozen eggs	Pounds	6.2	6.6	6.4
Mortality	Per cent	18	19	19
Receipts per dollar expenses	Dollars	1.02	1.07	1.05

[1] Spring or fall, relative to average of 81 farms.

APPENDIX TABLE 17. VOLUME AND VALUE OF EGGS SOLD, BY SIZE OF FLOCK, 81 COMMERCIAL MARKET EGG PRODUCING FARMS,[1] ALABAMA, SEPTEMBER 1951-AUGUST, 1952

Size of flock and sales outlet	Number of flocks	Volume of eggs sold	Price of eggs sold	Value of eggs sold
	Number	*Dozen*	*Cents*	*Dollars*
Under 400 hens:				
Consumers	9	32,473	61.6	20,004
Retailers	11	31,783	48.0	15,268
Wholesalers	10	37,851	46.2	17,483
TOTAL	30	102,107	51.7	52,755
400 to 700 hens:				
Consumers	9	51,708	59.8	30,915
Retailers	13	105,458	54.0	56,937
Wholesalers	12	83,655	48.0	40,187
TOTAL	34	240,821	53.2	128,039
Over 700 hens:				
Consumers	15	117,903	60.1	70,906
Retailers	21	252,506	53.6	135,289
Wholesalers	15	241,271	50.9	122,753
TOTAL	51	611,680	53.8	328,948

[1] Some farms in all size groups sold to more than one outlet.

APPENDIX TABLE 18. ITEMIZED COSTS OF PRODUCING A DOZEN EGGS, BY SIZE OF FLOCK, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Size of flock			All farms
	Under 400 hens	400 to 700 hens	Over 700 hens	
	Cents	*Cents*	*Cents*	*Cents*
Feed	36.3	27.9	31.6	31.2
Labor	12.0	7.9	6.8	7.6
Flock depreciation	6.5	6.6	7.7	7.3
Laying house	2.6	2.0	2.2	2.2
Miscellaneous	2.3	1.5	2.0	1.9
Taxes and insurance	.1	.2	.2	.2
Litter	.1	.1	.2	.1
Equipment	.4	.5	.3	.4
Land	.1	.1	.1	.1
Other buildings	.1	.0[1]	.1	.1
TOTAL	60.5	46.8	51.2	51.1

[1] Less than 0.05 cent.

APPENDIX TABLE 19. SPECIFIED EFFICIENCY FACTORS, BY SIZE OF FLOCK, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Unit	Size of flock			All farms
		Under 400 hens	400 to 700 hens	Over 700 hens	
Size of flock	Hens	312	508	1,325	757
Rate of lay	Eggs	191	206	190	194
Labor per dozen eggs	Minutes	11.5	7.8	6.4	7.3
Feed per dozen eggs	Pounds	7.3	5.8	6.5	6.4
Mortality	Per cent	22	19	18	19
Receipts per dollar expenses	Dollars	0.86	1.14	1.05	1.05

APPENDIX TABLE 20. ITEMIZED COSTS OF PRODUCING A DOZEN EGGS, BY YEARS OF EXPERIENCE OF OPERATOR, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Years of experience of operator			All farms
	1-5	6-10	11 and over	
	Cents	*Cents*	*Cents*	*Cents*
Feed	30.0	31.2	32.8	31.2
Labor	8.6	7.5	6.4	7.6
Flock depreciation	6.6	6.7	8.6	7.3
Laying house	2.4	1.8	2.3	2.2
Miscellaneous	2.1	1.5	1.9	1.9
Taxes and insurance	.2	.1	.2	.2
Litter	.2	.1	.1	.1
Equipment	.4	.3	.5	.4
Land	.1	.1	.1	.1
Other buildings	.1	.0[1]	.1	.1
TOTAL	50.7	49.3	53.0	51.1

[1] Less than 0.05 cent.

APPENDIX TABLE 21. SPECIFIED EFFICIENCY FACTORS, BY YEARS OF EXPERIENCE OF OPERATOR, 81 COMMERCIAL MARKET EGG PRODUCING FARMS, ALABAMA, SEPTEMBER 1951-AUGUST 1952

Item	Unit	Years of experience of operator			All farms
		1-5	6-10	11 and over	
Size of flock	Hens	806	610	822	757
Rate of lay	Eggs	201	198	183	194
Labor per dozen eggs	Minutes	7.6	7.3	6.9	7.3
Feed per dozen eggs	Pounds	6.2	6.3	6.7	6.4
Mortality	Per cent	21	15	18	19
Receipts per dollar expenses	Dollars	1.07	1.07	1.00	1.05