

HD
1751
A952
no. 26

ALBERT R. MANN
LIBRARY

OCT 1 - 1965

COSTS and RETURNS



**Commercial
Broiler
Farms
Delmarva,
Maine and
Georgia**

1963

FARM COSTS STUDIES

This report is part of a continuing nationwide study of costs and returns on commercial farms and ranches by type and size in some of the important farming regions of the United States. The study is conducted under the general supervision of Wylie D. Goodsell, Farm Production Economics Division, Economic Research Service. Objectives, methodology, procedure, and terms are uniform for all areas covered in the study.

The 1963 costs and returns studies have been conducted on the following:

- Dairy Farms, Northeast and Midwest
- Corn Belt Farms
- Egg-Producing Farms, New Jersey
- Broiler Farms, Maine, Delmarva, and Georgia
- Cotton Farms
- Tobacco Farms, Coastal Plain, North Carolina
- Tobacco-Livestock Farms, Bluegrass Area, Kentucky
- Wheat Farms, Plains and Pacific Northwest
- Western Livestock Ranches

Summary statistics for all types of farms in the study are presented in a report, revised annually. The latest such report was published in 1963 and is titled: "Farm Costs and Returns, Commercial Farms, by Type, Size, and Location," Agriculture Information Bulletin No. 230, Revised, 1963.

Information on the studies can be obtained from Farm Production Economics Division, Economic Research Service, U.S. Department of Agriculture, Washington, D.C., 20250.

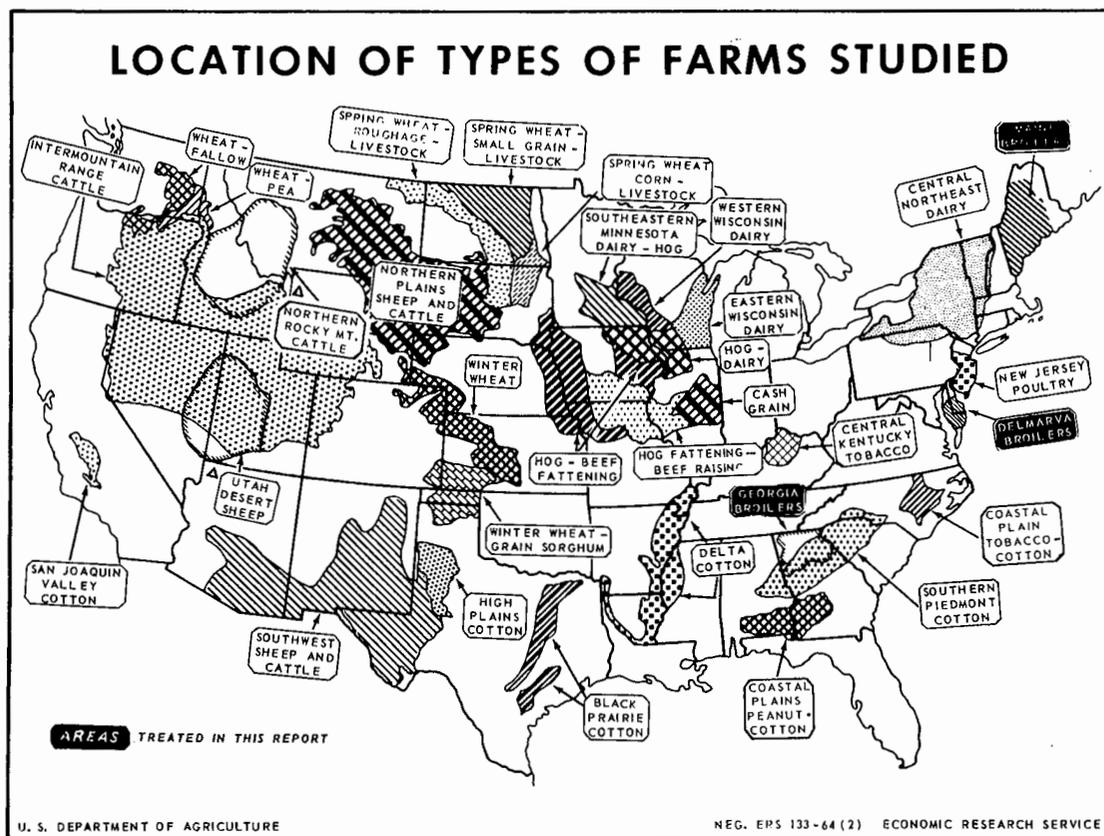


Figure 1

COSTS AND RETURNS

COMMERCIAL BROILER FARMS

MAINE, DELMARVA AND GEORGIA, 1963

Everett O. Stoddard, II, Agricultural Economist
Farm Production Economics Division

SUMMARY

In 1963, net farm income for typical contract broiler growers in Maine and Delmarva averaged nearly the same as in 1962 (fig. 1 and 2). In Georgia net income averaged about 5 percent less than in 1962. Greater contractual income for growing broilers in Maine and greater returns from the crop enterprise on Delmarva farms offset higher farm operating expenses in 1963. Georgia growers received less income in 1963 from both broilers and livestock, and incurred slightly higher operating expenses. Net farm income per farm on contract broiler farms in these important producing areas for 1962 and 1963 were as follows:

	<u>1962</u>	<u>1963</u>	<u>Percentage change</u>
Maine.....	\$4,066	\$4,121	1
Delmarva....	5,519	5,542	0
Georgia.....	783	743	-5

Average contractual returns per 1,000 birds produced in Maine remained at a favorable level in 1963. Payments from an increased production of roasters more than offset lower income from straight broiler lots compared with 1962. In Delmarva and Georgia a less favorable broiler price-cost relationship gave lower returns to growers. The farm price for broilers was about 5 percent less in Maine and 4 percent less in the other two areas, than in 1962. Higher feed prices forced variable production costs above the 1962 level for broiler contracting firms in all three areas. The contractual payment per 1,000 birds produced was as follows:

	<u>1962</u>	<u>1963</u>	<u>Percentage change</u>
Maine.....	\$106	\$108	2
Delmarva.....	79	75	-5
Georgia.....	68	62	-9

The typical broiler house capacity in 1963 was 15,900 birds in Maine, 11,400 in Delmarva, and 7,200 in Georgia. Growers in Maine and Delmarva produced about 4.2 lots whereas Georgia growers averaged less than 4 lots. The size of the various farm enterprises for these growers for the 2 years averaged as follows:

	<u>Broilers produced</u>		<u>Cropland acres</u>		<u>All Cattle on hand,</u>	
	<u>1962</u>	<u>1963</u>	<u>1962</u>	<u>1963</u>	<u>Jan. 1</u>	<u>1963</u>
Maine.....	63,244	64,655	2.4	2.5	0	0
Delmarva.....	44,426	46,127	87.6	93.3	0	0
Georgia.....	25,850	26,966	4.3	3.8	6.4	6.7

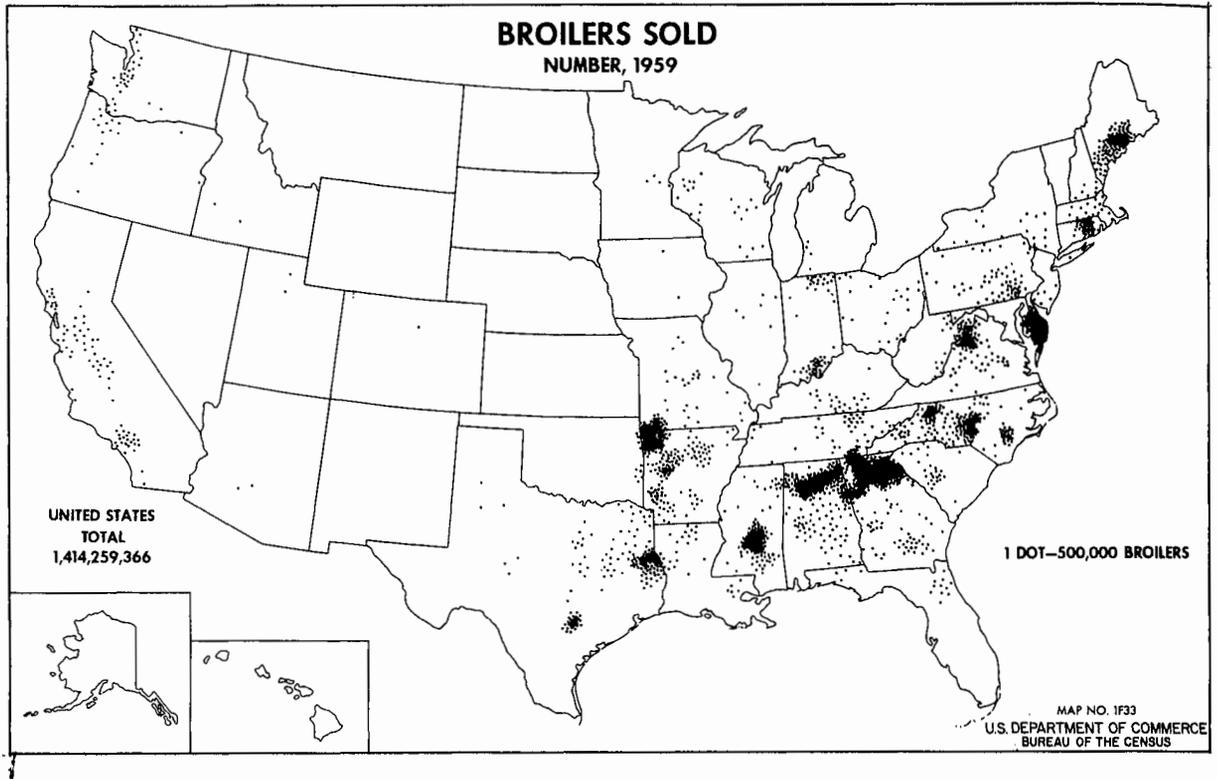


Figure 2

Maine

In 1963, net farm income for typical contract broiler growers in Maine averaged \$4,121 per farm, \$55 more than for a year earlier (table 1). A more favorable grower payment and more birds produced per farm in 1963 offset increased operating expenses compared with a year earlier.

These growers produced 64,655 birds (broilers and roasters) per farm in 1963. They started about 15,900 birds per lot, not including extras, and grew out about 4.2 lots. Broiler contracting firms usually gave extra chicks to offset mortality from weak chicks. The number of extra chicks varied, depending on weather, supply, and price conditions.

Contractual income from broilers averaged \$6,983 per farm in 1963

compared with \$6,704 a year earlier. This income comprised about 95 percent of total cash receipts on these farms. Sales from minor crop enterprises, mostly hay, and some wood products, comprised the remainder of cash receipts for these operators.

In 1963, contractual payment per 1,000 birds averaged \$108 per lot, \$2 more than for a year earlier. This is an average composite payment for growing both broilers and roasters. Growing returns from straight broiler lots averaged below the 1962 level because of a further price-cost squeeze for broilers. However, the total payment for roasters was higher in 1963 as this production increased. Since most growers in this area are paid on a per bird per week basis, the increased production of roasters kept the per 1,000 bird payment from decreasing. Poultry

processors (broiler contracting firms) marketed pullets at around 9 weeks of age and left the cockerels on the farm for about another 5 or 6 weeks to be marketed as roasters. Growers received 1 cent per square foot per week while growing the roasters. This was about equal to the regular broiler growing income on a weekly basis. Consequently, contractual returns for roaster production averaged about 50 percent more per flock than straight broiler production for the same housing capacity.

In 1963, most Maine broiler contracting firms guaranteed a minimum of either one-half or three-quarters of a cent per bird per week plus either one-half of the profits or a cost of efficiency bonus. Some growers still receive a straight payment of 1 cent per bird per week. This arrangement was prevalent in this area in the early and mid-1950's. The per bird returns under the latter type of contract have decreased slightly since then because growing time has been reduced. Some growers operate under a payment plan based on weight and feed conversion, seasonally adjusted, with a minimum payment of 2 cents per pound of broiler produced.

During periods of depressed broiler prices some contractors occasionally crowd in additional birds, thus decreasing the floor space per bird by about 10 percent. This is done with the better growers and was not unusual in 1963. This helped stabilize gross returns per lot on those farms. These growers did not incur any additional operating expenses, since most of their costs were incurred during the cleanout period.

Operating expenses on these typical broiler farms in 1963 aver-

aged \$3,474 per farm, \$189 more than a year earlier. Operating expenses were higher than in 1962 because of a slight increase in the number of lots produced and higher wage rates for hired labor, increased real estate taxes, and higher prices paid for most other inputs.

Most of the variable broiler expenses on these farms such as machine hire, custom work, hired labor, and building and broiler equipment repairs were incurred during cleanout. During cleanout, growers must move broiler equipment, bring in cleanout equipment, and open windows and doors to remove the birds and litter. Any damage to buildings and equipment usually necessitates immediate repairs or replacement to accommodate new flocks.

Delmarva

In 1963, net farm income in Delmarva for contract broiler growers averaged \$5,543 per farm, about the same as a year earlier (table 2). Greater receipts from crop sales (corn and soybeans) offset lower broiler growing income and higher operating expenses.

The typical broiler producer in this area averaged 11,400 birds started per lot, not including extras. About 4.2 lots of broilers were grown, making a total farm output of 46,127 birds. In addition, about 94 acres of crops were grown in 1963.

The contractual income to these growers in 1963 averaged \$72 per 1,000 broilers started (excluding extras), a decrease of \$6 from a year earlier. Delmarva contracts are figured on the basis of birds placed on the farm (excluding extras), and not the number produced as in Maine or the number marketed as in Georgia.

Table 1.- Organization, production, costs and returns,
commercial broiler farms, Maine, 1962 and 1963

Item	Unit	AVERAGE 1957-59	1962	1963 <u>1/</u>
Land in farm.....	Acre	116	119	119
Cropland harvested.....	do.	3.6	2.4	2.5
Hay harvested.....	do.	3.6	2.4	2.5
Hay yield per harvested acre.....	Ton	1.20	1.18	1.20
Birds started, per lot.....	Number	13,951	15,524	15,858
Broilers produced annually:				
Number.....	do.	54,790	63,244	64,655
Pounds.....	Pound	208,215	252,976	265,086
Tractors on farm.....	Number	.56	.64	.64
Total labor used.....	Hour	2,290	2,060	2,060
Operator and family.....	do.	1,900	1,730	1,710
Hired.....	do.	390	330	350
Total farm capital, Jan. 1.....	Dollar	24,150	31,700	32,290
Land and buildings.....	do.	17,930	23,310	23,640
Machinery and equipment.....	do.	6,220	8,390	3,650
Total cash receipts.....	do.	5,645	6,992	7,232
Broilers.....	do.	5,253	6,704	6,983
Crops.....	do.	110	75	76
Forest products.....	do.	98	94	94
Other, including Government payments.....	do.	184	119	79
Value of perquisites.....	do.	329	360	363
Gross farm income.....	do.	5,974	7,352	7,595

Table 1.- Organization, production, costs and returns,
commercial broiler farms, Maine, 1962 and 1963--Continued

Item	Unit	AVERAGE 1957-59	1962	1963 <u>1/</u>
Total cash expenditures <u>2/</u>	Dollar	3,675	4,293	4,123
Farm buildings.....	do.	966	1,258	1,093
Machinery.....	do.	1,571	1,747	1,668
Hired labor.....	do.	407	377	411
Taxes.....	do.	323	448	469
Electricity and miscellaneous broiler expense.....	do.	358	397	414
Other.....	do.	50	66	68
Inventory adjustment, machinery and buildings.....	do.	-897	-1,008	-649
Total operating expenses.....	do.	2,778	3,285	3,474
Net farm income.....	do.	3,196	4,067	4,121
Purchasing power in 1947-49 dollars.....	do.	2,723	3,361	3,378
Charge for capital at current interest rates.....	do.	1,332	1,823	1,857
Return per hour, operator and family labor.....	do.	.98	1.30	1.32
Charge for capital at 4.1 percent interest.....	do.	990	1,300	1,324
Return per hour, operator and family labor.....	do.	1.16	1.60	1.64
INDEX NUMBERS (1957-59=100):				
Gross farm income.....	---	100	123	127
Net farm income.....	---	100	127	129
Net farm production.....	---	100	113	114
Broilers produced annually.....	---	100	121	127
Production per hour of man labor.....	---	100	126	127
Production per unit of input.....	---	100	110	108
Operating expense per unit of production.....	---	100	104	109
Total cost per unit of production.....	---	100	101	103
Power and machinery (quantity).....	---	100	119	118
Prices received for products sold.....	---	100	109	111
Prices paid, including wages to hired labor.....	---	100	110	109

1/ Preliminary. 2/ Feed, chicks, medicines, fuel, litter, and miscellaneous items are supplied by the broiler contracting firms.

Note: Information presented here is on an owner-operator basis primarily for comparability between types of farms. Net farm income is the return to operator and unpaid members of the family for their labor and management on the farm and return to total capital. No allowance has been made for payment of rent, interest, or mortgage.

Table 2.- Organization, production, costs and returns,
commercial broiler farms, Delmarva, 1962 and 1963

Item	Unit	AVERAGE 1957-59	1962	1963 <u>1/</u>
Land in farm.....	Acre	106	109	110
Cropland harvested.....	do.	79	88	93
Crops harvested:				
Corn.....	do.	37.8	34.0	43.5
Soybeans.....	do.	40.9	53.6	49.8
Crop yields per harvested acre:				
Corn.....	Bushel	48.8	59.6	51.8
Soybeans.....	do.	22.4	20.2	17.5
Birds started, per lot.....	Number	9,710	10,905	11,381
Broilers produced annually:				
Number.....	do.	38,014	44,426	46,127
Pounds.....	Pound	131,574	168,819	175,283
Tractors on farm.....	Number	1.24	1.30	1.30
Total labor used.....				
Operator and family.....	Hour	2,040	2,190	2,290
Hired.....	do.	1,830	1,970	2,060
	do.	210	220	230
Total farm capital, Jan. 1.....				
Land and buildings.....	Dollar	27,860	34,330	36,090
Machinery and equipment.....	do.	21,210	27,660	29,310
Crops and livestock.....	do.	6,590	6,670	6,780
	do.	60	---	---
Total cash receipts.....				
Broilers.....	do.	7,068	8,822	8,885
Crops.....	do.	2,680	3,527	3,442
Livestock and livestock products.....	do.	4,254	5,083	5,372
Other, including Government payments.....	do.	91	---	---
	do.	43	212	71
Value of perquisites.....	do.	501	572	596
Change in inventory of crops and livestock.....	do.	-12	---	---
Gross farm income.....	do.	7,557	9,394	9,481

Table 2.- Organization, production, costs and returns, commercial broiler farms, Delmarva, 1962 and 1963--Continued

Item	Unit	AVERAGE 1957-59	1962	1963 ^{1/}
Total cash expenditures ^{2/}	Dollar	3,728	4,087	4,273
Feed purchased and livestock expense.....	do.	53	34	36
Fertilizer and lime.....	do.	553	492	585
Other crop expense.....	do.	238	265	299
Machinery.....	do.	1,944	2,156	2,137
Farm buildings and fences.....	do.	482	611	653
Hired labor.....	do.	202	230	243
Taxes.....	do.	129	153	166
Other.....	do.	127	146	154
Inventory adjustment, machinery and buildings.....	do.	-282	-208	-335
Total operating expenses.....	do.	3,446	3,879	3,938
Net farm income.....	do.	4,111	5,515	5,543
Purchasing power in 1947-49 dollars.....	do.	3,497	4,558	4,543
Charge for capital at current interest rates.....	do.	1,582	2,109	2,218
Return per hour, operator and family labor.....	do.	1.38	1.73	1.61
Charge for capital at 4.1 percent interest ^{3/}	do.	1,186	1,457	1,533
Return per hour, operator and family labor.....	do.	1.60	2.06	1.95
INDEX NUMBERS (1957-59=100):				
Gross farm income.....	---	100	124	125
Net farm income.....	---	100	134	135
Net farm production.....	---	100	112	112
Broilers produced annually.....	---	100	128	133
Production per hour of man labor.....	---	100	105	100
Production per unit of input.....	---	100	105	103
Operating expense per unit of production.....	---	100	99	101
Total cost per unit of production.....	---	100	101	105
Power and machinery (quantity).....	---	100	100	100
Prices received for products sold.....	---	100	108	111
Prices paid, including wages to hired labor.....	---	100	105	106

^{1/} Preliminary. ^{2/} Feed, chicks, medicines, fuel, litter, and miscellaneous items are supplied by the broiler contracting firms. ^{3/} Invested capital at 4.1 percent and production credit at current short-term interest rates charged by production credit associations on loans outstanding.

Note: Information presented here is on an owner-operator basis primarily for comparability between types of farms. Net farm income is the return to operator and unpaid members of the family for their labor and management on the farm and return to total capital. No allowance has been made for payment of rent, interest, or mortgage.

Many Delmarva contracting firms modified their contracts in 1963 to reflect production efficiency by their growers. Growers with lower than average variable production costs, usually based on a 2-week period, received a bonus depending on their relative standing in comparison with all growers for that firm. In 1963, the minimum payment ranged from \$40 to \$65 per 1,000 started. Some of the variation in the guaranteed payment was because of the varying amount of floor space allotted per bird. Contracting firms offering lower minimum payments usually allotted less floor space per bird.

Many contracting firms in late 1962 started to give an allowance to growers who had insulated their houses and made other housing improvements such as mechanical ventilation. The profit sharing contract in effect earlier did not compensate the growers for such capital outlays. The new efficiency bonus contract rewards the grower for the quality of his building and also for his growing ability. Contracting firms usually placed more birds in insulated broiler buildings. This tended to increase the grower's gross flock return.

Broiler contractors have not had enough experience in this area with insulated houses to determine any significant influence on feed conversion, mortality, and condemnation losses. However, substantial winter fuel savings and better weight gains on summer flocks have been reported.

Gross receipts from the sale of corn and soybeans averaged \$5,372 per farm in 1963, an increase of \$289 from the previous year. Increased acreage and higher prices received for crops in 1963 more than offset reduced yields. Cropland per

farm was increased by about 6 acres. This acreage came from cropland formerly in the feed grain program and an increase in size of farm. Prices received for the 1963 crop of soybeans were a record high and prices for corn were the highest since 1957. Drought conditions continued in this area in 1963. Crop yields were 13 percent below 1962 and the lowest since 1952 for soybeans and 1957 for corn.

Total farm operating expenses averaged \$3,938 per farm in 1963. This was \$59 more than for a year earlier and was due mostly to increased purchases of inputs at slightly higher prices. Operating expense per unit of production was higher than in 1962 because of lower crop yields and higher broiler mortality.

Georgia

In 1963, net farm income to Georgia broiler growers averaged \$743 per farm, \$40 less than in 1962 (table 3). Reduced broiler contractual payments more than offset increased farm production. Total operating expenses in 1963 were about 4 percent above the previous year.

The typical broiler house capacity in this area was about 7,200 birds per lot, not including extras. These operators grew out slightly less than 4 lots per year with a farm output totaling about 27,000 birds in 1963. In addition, they operated a small crop and livestock enterprise.

Gross returns for growing broilers in 1963 averaged \$1,672 per farm. This was \$86 less than a year earlier. In recent years about 80 percent of cash receipts has come from the broiler enterprise. In addition, some growers received

patronage dividends from farm co-operatives for broiler production. The refund was 0.7 cent per pound of liveweight broiler marketed during a given period.

The contractual broiler-growing payment in 1963 in this area averaged \$62 per 1,000 birds marketed (1.88 cents per pound). It was \$68 or 2.06 cents per pound in 1962.

Georgia growers usually supplied the fuel and litter for the broiler enterprise whereas in Maine and Delmarva the contractor furnished these items. However, in 1963, many contractors in Georgia modified their agreements with growers to include a fuel allowance. This ranged from 1/8 to 1/2 cent per pound of broilers for the two winter flocks. Some growers who had insulated and improved their houses were also given an additional allowance. Insulated houses are not common in this area and most operators or contractors have not had enough experience with insulated houses to determine their possible cost advantages.

The major types of contracts in 1963 in this area were as follows: (1) A minimum payment ranging from 1/2 cent to 2 cents per pound of broiler, depending on the farm price of broilers. In addition, a bonus was given for efficient performance. This was based either on flock profit or feed conversion; (2) a payment of 2 cents per pound

of broiler with only a feed conversion differential; and (3) a minimum payment ranging from \$40 to \$50 per 1,000 birds with either a feed conversion factor or market price differential. Variation among the three major groups depended on whether the contractor or grower furnished the fuel and litter.

Cash receipts from the sale of cattle and hogs averaged \$179 per farm in 1963. This was \$27 less than for a year earlier because livestock prices were lower and a smaller quantity was sold. Sales of livestock and corn comprised the remaining one-fifth of cash receipts. These farmers are continuing to decrease or eliminate the hog enterprise. However, the number of cattle per farm increased in 1963, since many farmers were reluctant to sell at the prices offered.

Gross farm operating expenses averaged \$1,901 per farm, \$66 more than for a year earlier. Operating costs per unit of production were slightly below a year earlier mostly because of reduced broiler mortality. Expenditures for fuel, litter, and other inputs were higher than for a year earlier primarily because more lots were produced and more broilers per lot were started. While fuel and litter were minor items in total broiler production costs, these two items made up 16 percent of the gross operating expenses on these farms in 1963.

Table 3.- Organization, production, costs and returns,
commercial broiler farms, Georgia, 1962 and 1963

Item	Unit	AVERAGE 1957-59	1962	1963 <u>1/</u>
Land in farm.....	Acre	64	65	65
Cropland harvested.....	do.	6.29	4.35	3.85
Crops harvested:				
Corn.....	do.	4.34	3.10	2.80
Hay.....	do.	1.95	1.25	1.05
Crop yields per harvested acre:				
Corn.....	Bushel	28.1	30.0	43.0
Hay.....	Ton	1.17	1.34	1.58
Livestock on farm, Jan. 1:				
All cattle.....	Number	6.06	6.40	6.72
Hogs.....	do.	2.60	1.20	.80
Birds started, per lot.....	do.	6,317	7,068	7,203
Broilers produced annually:				
Number.....	do.	22,083	25,850	26,966
Pounds.....	Pound	70,665	85,305	88,988
Tractors on farm.....	Number	.60	.64	.64
Total labor used.....	Hour	1,690	1,520	1,500
Operator and family.....	do.	1,580	1,380	1,360
Hired.....	do.	110	140	140
Total farm capital, Jan. 1.....	Dollar	12,400	16,580	17,550
Land and buildings.....	do.	8,630	12,150	12,970
Machinery and equipment.....	do.	3,020	3,530	3,680
Crops and livestock.....	do.	750	900	900
Total cash receipts.....	do.	2,012	2,201	2,166
Broilers.....	do.	1,590	1,758	1,672
Crops.....	do.	22	54	78
Livestock and livestock products.....	do.	239	206	179
Other, including Government payments.....	do.	161	183	237
Value of perquisites.....	do.	465	440	454
Change in inventory of crops and livestock.....	do.	13	-23	24
Gross farm income.....	do.	2,490	2,618	2,644

Table 3.- Organization, production, costs and returns, commercial broiler farms, Georgia, 1962 and 1963--Continued

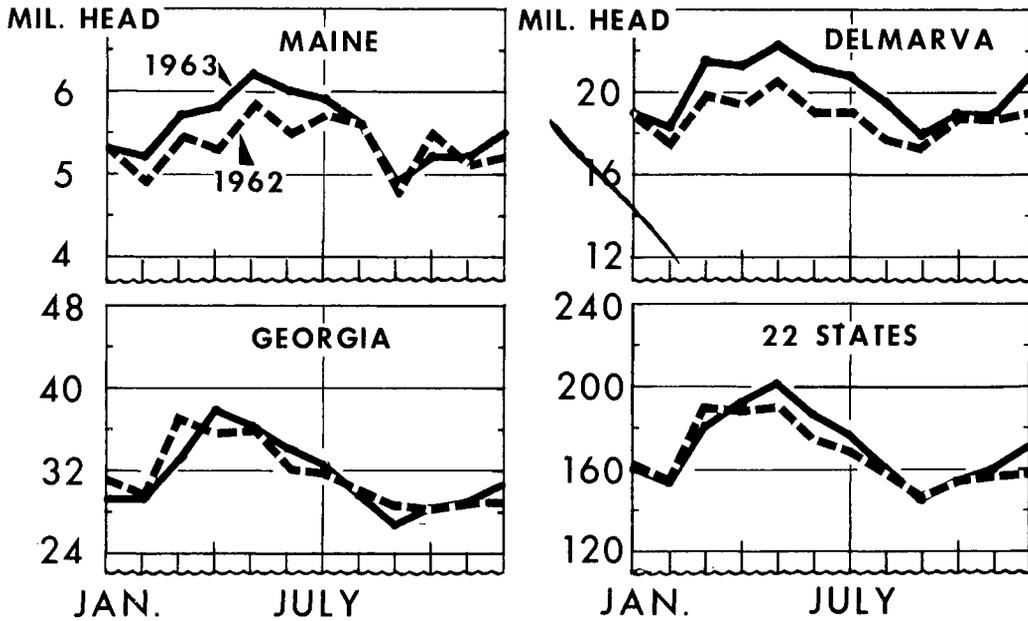
Item	Unit	AVERAGE 1957-59	1962	1963 <u>1/</u>
Total cash expenditures <u>2/</u>	Dollar	2,001	1,912	1,913
Feed purchased and livestock expense.....	do.	336	385	395
Fertilizer and lime.....	do.	42	33	30
Other crop expense.....	do.	4	4	4
Machinery.....	do.	1,138	1,056	1,048
Farm buildings and fences.....	do.	333	221	213
Hired labor.....	do.	64	95	99
Taxes.....	do.	38	56	58
Other.....	do.	46	62	66
Inventory adjustment, machinery and buildings.....	do.	-422	-77	-12
Total operating expenses.....	do.	1,579	1,835	1,901
Net farm income.....	do.	911	783	743
Purchasing power in 1947-49 dollars.....	do.	776	647	609
Charge for capital at current interest rates.....	do.	684	995	1,053
Return per hour, operator and family labor.....	do.	.14	-.15	-.23
Charge for capital at 4.1 percent interest.....	do.	508	680	720
Return per hour, operator and family labor.....	do.	.26	.07	.02
INDEX NUMBERS (1957-59=100):				
Gross farm income.....	---	100	105	106
Net farm income.....	---	100	86	82
Net farm production.....	---	100	107	112
Broilers produced annually.....	---	100	121	126
Production per hour of man labor.....	---	100	119	126
Production per unit of input.....	---	100	105	109
Operating expense per unit of production.....	---	100	109	108
Total cost per unit of production.....	---	100	106	106
Power and machinery (quantity).....	---	100	102	104
Prices received for products sold.....	---	100	96	88
Prices paid, including wages to hired labor.....	---	100	106	108

1/ Preliminary. 2/ Feed, chicks, medicines, and miscellaneous items are supplied by the broiler contracting firms.

Note: Information presented here is on an owner-operator basis primarily for comparability between types of farms. Net farm income is the return to operator and unpaid members of the family for their labor and management on the farm and return to total capital. No allowance has been made for payment of rent, interest, or mortgage.

Maine, Delmarva, Georgia, and 22 States

BROILER CHICKS STARTED

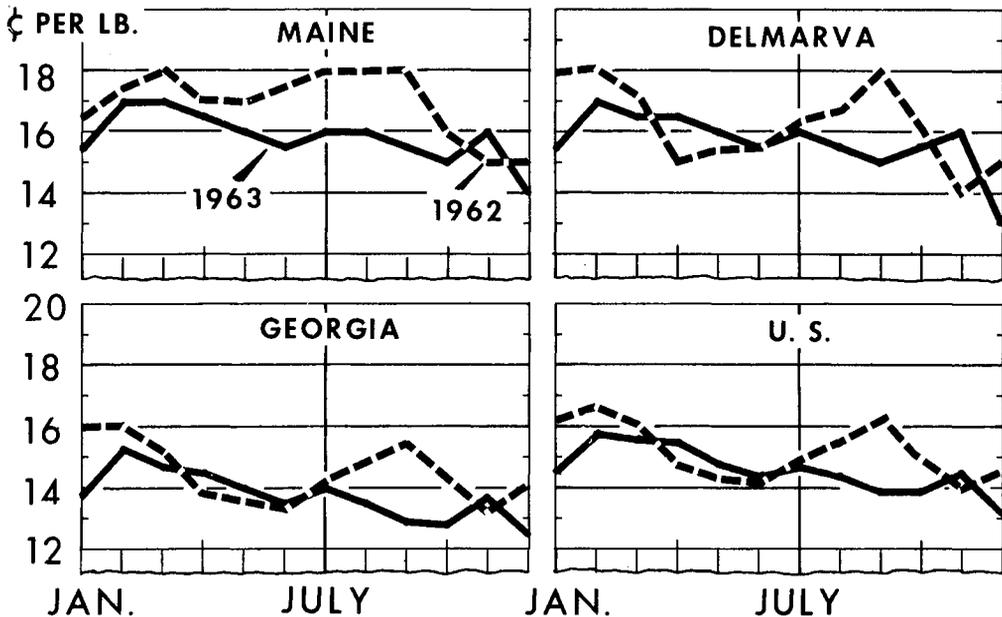


U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2329-64 (3) ECONOMIC RESEARCH SERVICE

Maine, Delmarva, Georgia, and U. S.

MONTHLY PRICES RECEIVED FOR BROILERS

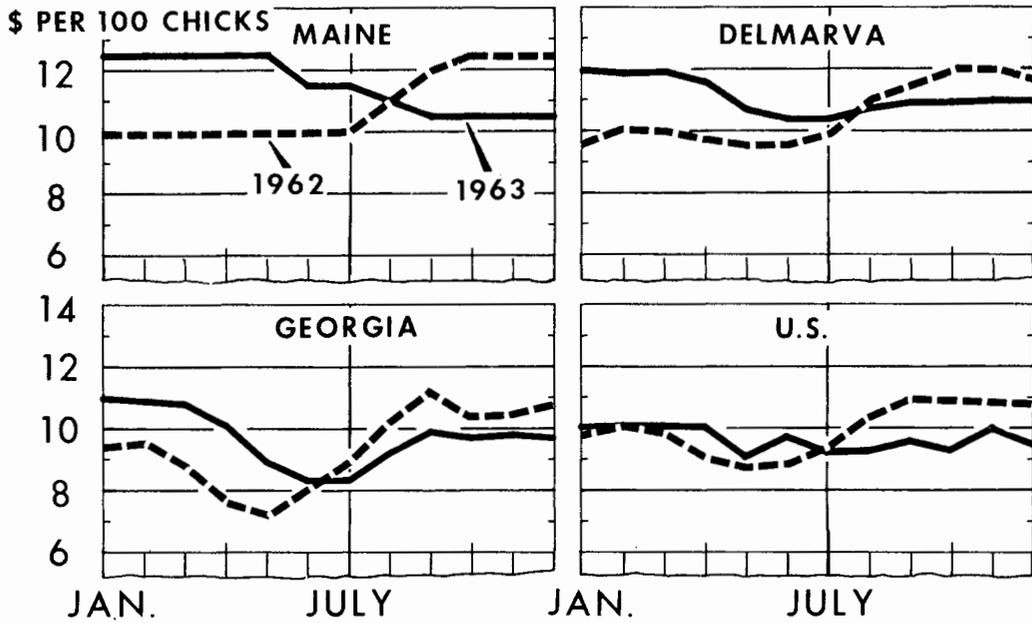


U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2723-64 (3) ECONOMIC RESEARCH SERVICE

Maine, Delmarva, Georgia, and U. S.

PRICES PAID HATCHERIES FOR BROILER CHICKS

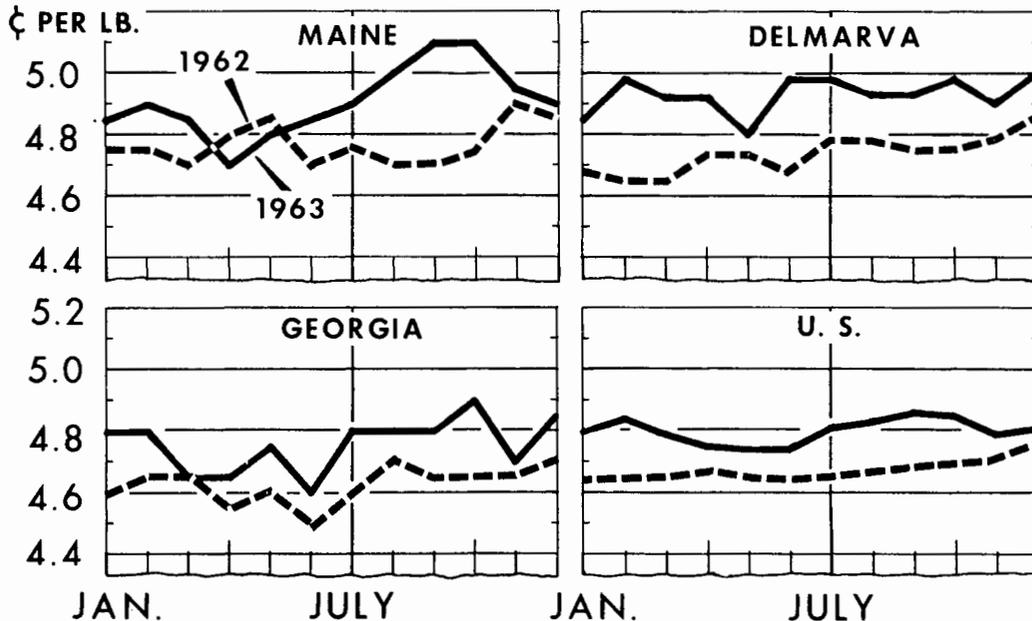


U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2725-64 (3) ECONOMIC RESEARCH SERVICE

Maine, Delmarva, Georgia, and U. S.

PRICES PAID FOR BROILER MASH



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2724-64 (3) ECONOMIC RESEARCH SERVICE

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE

OFFICIAL BUSINESS

