Poultry and Egg Situation

Economics, Statistics, and Cooperatives Service

U.S. Department of Agriculture

PES-302

JUNE 1979

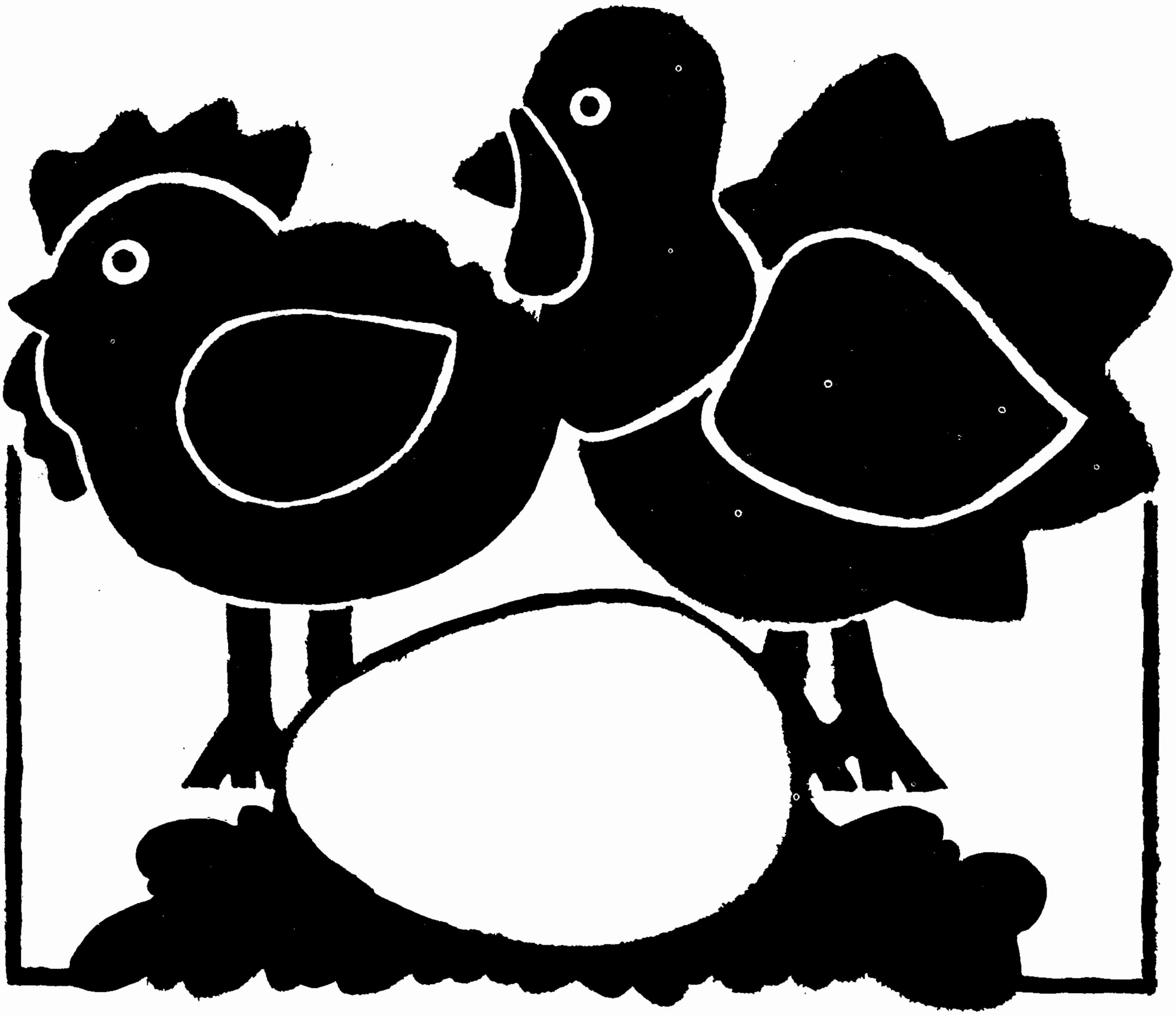

Table 1—Poultry and Egg Situation at a Glance

Item	Unit	1978 Jan.	1978 Feb.	1978 Mar.	1978 Apr.	1979 Jan.	1979 Feb.	1979 Mar.	1979 Apr.
		Eggs							
Farm production	Mil. doz.	478.2	425.2	474.7	462.8	489.2	439.3	490.3	473.8
Average number of layers on farms	Mil.	285.7	282.3	280.0	278.7	290.8	290.3	288.3	285.3
Rate of lay per layer	No.	20.1	18.1	20.3	19.9	20.2	18.2	20.4	19.9
Price received by farmers	Ct. per doz.	49.2	54.7	54.8	51.7	60.3	60.1	64.3	60.2
14 Metro areas price									
Grade A large	Ct. per doz.	57.9	64.0	64.3	59.0	72.8	70.2	75.7	71.4
Price paid for laying feed	Dol. per ton	147	146	149	154	157	159	162	163
Egg-feed price ratio	Pounds	6.7	7.5	7.4	6.7	7.7	7.6	7.9	7.4
Stocks, first of month:									
Shell	Thous. cases	39	33	27	25	38	22	18	24
Frozen	Mil. lb.	29.7	27.0	25.5	22.9	25.3	25.6	24.5	21.1
Replacement chicks hatched	Mil.	36.9	36.9	46.8	50.9	39.9	39.5	49.4	52.6
		Poultry							
Federally inspected slaughter, cert.									
Broilers	Mil. lb.	781.4	715.7	830.0	769.1	897.3	749.1	905.0	
Turkeys	Mil. lb.	81.8	59.7	86.3	80.8	99.3	77.2	95.0	
Price at farm, live weight									
Broilers	Ct. per lb.	22.9	24.8	25.0	27.8	27.0	28.9	28.9	28.2
Turkeys	Ct. per lb.	38.3	37.3	38.1	38.1	47.2	45.1	43.4	43.1
9-city wholesale broiler price	Ct. per lb.	40.2	43.1	42.2	46.1	45.8	49.2	47.5	47.5
Broiler-feed price	Dol. per ton	162	164	167	169	175	179	184	185
Broiler-feed price ratio	Pounds	2.8	3.0	3.0	3.3	3.1	3.2	3.1	3.0
Turkey-feed price	Dol. per lb.	177	177	179	183	189	194	198	200
Turkey-feed price ratio	Pounds	4.3	4.2	4.2	4.2	5.0	4.6	4.4	4.3
Stocks, first of month:									
Broilers, fryers, roasters	Mil. lb.	29.4	27.5	21.8	21.8	20.1	17.9	17.7	18.3
Turkeys	Mil. lb.	167.9	168.3	136.6	113.0	175.1	170.9	155.6	135.8
Total poultry	Mil. lb.	310.0	304.6	262.7	233.4	280.1	280.3	259.2	239.3
Average weekly placement of broiler chicks in 21 States	Mil.	67.8	69.0	71.8	74.7	73.9	74.4	79.0	82.3

Retail prices and price indexes for egg and poultry 1978-79

Month and year	Retail price[1] Eggs	Retail price[1] Frying chicken	Retail price[1] Turkeys	Retail price index[2] Eggs	Retail price index[2] Fresh whole chicken	Retail price index[2] Fresh & frozen chicken parts	Retail price index[2] Other poultry	Retail price index[2] Poultry
	Cents per dozen	*Cents per pound*	*Cents per pound*	*1967=100*	*1967=100*	*December 1977=100*	*December 1977=100*	*1967=100*
1978								
Jan.	73.2	57.8	74.6	156.1	156.2	101.9	103.0	157.5
Feb.	77.7	61.0	73.9	159.1	163.0	103.6	104.2	161.5
Mar.	79.8	61.9	75.1	160.7	165.7	105.4	105.0	163.9
Apr.	77.4	65.1	77.6	155.3	174.7	108.1	106.2	169.3
May	70.3	66.8	79.3	147.4	175.8	109.2	107.8	171.0
June	65.8	72.7	81.9	137.0	185.1	114.2	110.7	178.4
July	75.8	72.0	82.4	146.5	194.4	118.1	113.1	185.2
Aug.	81.1	72.2	84.8	164.1	182.0	113.8	115.6	179.1
Sept.	80.1	67.3	85.9	161.9	180.6	111.7	116.6	177.9
Oct.	76.5	66.8	87.5	159.1	177.6	112.4	117.2	177.3
Nov.	80.0	67.0	87.1	167.0	175.5	112.3	116.3	176.0
Dec.	86.0	67.4	88.1	179.5	176.7	112.5	118.7	177.6
Year	77.0	66.5	81.5	157.8	175.6	110.2	111.2	172.9
1979								
Jan.	88.3	67.8	90.3	180.4	179.8	114.9	121.3	181.2
Feb.	88.0	69.5	89.8	182.1	185.3	118.6	122.5	185.8
Mar.	90.4	71.5	90.9	181.3	191.5	121.6	123.0	189.9

[1] Estimated average price for 4 regipns for Grade A large eggs, Grade A frying chicken, and 8-16 pound young hen turkey.
[2] Consumer Price Index (CPI) for all urban consumers published by Bureau of Labor Statistics (BLS).

In This Issue

	Page
Poultry and Egg Situation at a Glance	2
Summary	3
Factors Affecting the Poultry Industries	5
Eggs	6
Broilers	11
Turkeys	15
More Poultry and Eggs Used in 1978	19
Higher 1978 Gross Income from Poultry and Eggs	19
Fewer Chicken and Turkey Hatcheries	19
Special Article: Egg Supply Response	31
Selected Poultry and Egg Statistics	34
List of Tables	40

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Approved by
The World Food and Agricultural
Outlook and Situation Board
and Summary released
May 25, 1979

National Economics Division
Economics, Statistics, and Cooperatives Service

U.S. Department of Agriculture
Washington, D.C. 20250

SUMMARY

Consumer demand for poultry meat and eggs has been strong in 1979, with both consumption and prices well above last year. However, if the general economy continues to slow and pork and poultry supplies increase as expected, poultry prices probably will be below 1978's level by the end of this year. The demand for eggs likely will increase seasonally in the second half of 1979 but year-to-year price increases will be smaller than during January-June 1979.

Poultry and egg production and marketing costs have been above a year earlier and will continue higher throughout the year. However, producer returns should remain favorable until late in the year.

Egg production through April was 3 percent above a year earlier, with almost all of the increase coming from a larger laying flock. Layer numbers will remain higher this spring and summer as more pullets enter the laying flock and output per layer about matches a year earlier. Culling of old flocks likely will be above last year but not by enough to offset the larger number of pullets entering the flock. Egg production is expected to average around 3 percent higher during the balance of this year.

Prices for cartoned large eggs in New York averaged 72 cents a dozen in January-March, 10 cents above a year earlier. They have declined sharply in recent weeks and were 59 cents in mid-May. For the April-June quarter, egg prices will average 65 to 67 cents a dozen. The seasonal price rise in the second half of the year probably will be less than usual but still average 4 to 6 cents above the 65 cents of July-December 1978.

Broiler meat production will remain well above

The next issue of the *Poultry and Egg Situation* will be published in September.

last year's record level for the rest of 1979. Production of ready-to-cook broiler meat in federally inspected plants during January-March was 10 percent above a year ago and totaled nearly 2.6 billion pounds. Weekly reports on slaughter and chick placements indicate that April-June output will also be up about 10 percent from both the previous quarter and a year earlier. Favorable profit margins will cause producers to continue output in the second half 8 to 10 percent above 1978 levels.

Broiler prices (9-city average) during the first quarter were up 6 cents from a year ago to nearly 48 cents a pound. Prices likely will show a small seasonal increase and average 48 to 50 cents this spring and summer. If pork supplies rise sharply as expected, an 8-percent increase in broiler output this fall would result in an October-December broiler price about equal to the 42 cents a pound of fourth-quarter 1978.

Turkey meat output during January-March was up 19 percent from 1978 and production during April-June is expected to increase a fourth or more. Production will climb seasonally in the second half of the year as producer returns remain favorable. However, limited production and processing capacity during the heavy producing months will probably result in the rate of increase slowing to 8-10 percent.

Wholesale turkey prices declined in early 1979 because of a seasonal decline in consumer demand and a sharp increase in turkey production. First quarter prices for 8-to-16-pound young hen turkeys in New York averaged 70 cents a pound, 10 cents above a year earlier. Prices have dropped to 65 cents in mid-May. In the second half they are expected to average 10 to 12 cents below 1978. Increased turkey, broiler, and pork supplies will depress turkey prices during the rest of this year.

Poultry, Livestock, and Egg Production and changes from a year earlier

	1978				1979			
	I	II	III	IV	I	II[1]	III[1]	IV[1]
Broilers[2] (Mil. lb.)	2,327	2,547	2,567	2,443	2,551	2,800	2,820	2,640
Percent change	+8	+6	+6	+8	+10	+10	+10	+8
Turkeys[2] (Mil. lb.)	228	400	680	676	271	500	745	725
Percent change	+9	+10	+1	+5	+19	+25	+10	+7
Beef[3] (Mil. lb.)	6,104	5,936	5,921	6,040	5,564	5,050	5,300	5,500
Percent change	-3	-4	-6	-3	-9	-15	-11	-9
Pork[3] (Mil. lb.)	3,242	3,264	3,158	3,539	3,399	3,600	3,700	4,250
Percent change	-2	+3	+3	+1	+5	+10	+17	+20
Total[4] (Mil. lb.)	12,154	12,372	12,538	12,908	11,954	12,125	12,715	13,269
Percent change	-1	0	-2	0	-2	-2	+1	+3
Eggs (Mil. doz.)	1,378	1,394	1,380	1,444	1,419	1,435	1,425	1,485
Percent change	+4	+4	+4	+2	+3	+3	+3	+3

Poultry, Livestock, and Egg Prices

	1978				1979			
	I	II	III	IV	I	II[1]	III[1]	IV[1]
Broiler-9-City[5] (Cents/lb.)	41.8	47.6	46.6	42.1	47.5	48-50	47-49	41-43
Turkeys, New York[6] (Cents/lb.)	60.2	61.4	68.2	77.1	70.2	64-66	61-63	60-62
Choice Steers, Omaha (Dollars/cwt.)	45.8	55.1	53.8	54.7	65.4	74-76	74-76	71-73
Barrows and Gilts, 7 7-markets ($/cwt.)	47.4	47.8	48.5	50.0	52.0	45-47	44-46	41-43
Eggs, New York[7] (Cents/doz.)	62.0	53.8	63.0	67.8	71.9	65-67	67-69	70-72

[1] Forecast. [2] Federally inspected slaughter. [3] Commercial production. [4] Includes veal and lamb and mutton. [5] Wholesale weighted average. [6] 8-16 lb. young hens. [7] Cartoned, consumer Grade A large, sales to volume buyers.

POULTRY AND EGG SITUATION

FACTORS AFFECTING THE POULTRY AND EGG INDUSTRIES

Prospects for the poultry and egg industries during the balance of 1979 are not as favorable as they have been for the past year. Prospects are for a slowdown in the general economy and sharply increasing pork supplies. Also, production and marketing costs will continue to rise.

General Economy Slows

Growth in the Nation's economy in recent years has generated a high level of employment and increased consumers' disposable incomes. This has contributed to strong demand for meats. A slowing in economic growth would dampen the demand for meats.

The gross national product (GNP), after adjustment for inflation, is expected to increase 2 to 2½ percent this year, compared with 1978's increase of 4 percent. Growth during the first quarter of 1979 advanced at a seasonally adjusted rate of only 0.4 percent, reflecting, in part, the severe winter weather. A temporary pickup is expected this spring but real GNP growth during January-June this year will be substantially below the 6.9-percent growth registered in the fourth quarter of 1978. By the third quarter, total output could stagnate or even decline.

The current high rate of inflation is expected to gradually decline as the economy slows this year. The GNP implicit price deflator, the broadest gauge of inflation, rose 8.8 percent during the first quarter of 1979 but is expected to slow slightly by the final quarter.

Larger Pork Supplies, Lower Beef

Much of the strength in poultry prices last year was due to lower total red meat supplies and changes in the mix of the various meats produced. Commercial red meat production in 1978 totaled 38.1 billion pounds, down a little more than 1 billion pounds from the previous year, with nearly all the drop occurring in beef and veal. Pork increased slightly to 13.2 billion pounds.

After two years of stable production, hog producers are expanding in 1979. Pork production during the first quarter was 5 percent above a year earlier and could be up 10 percent in the second. Producers plan to expand production sharply for the second half of this year. Reported winter farrowings and farrowing intentions for the spring quarter suggest about a 15-to-20-percent increase in second-half pork production. The sharpest year-to-year increase will be in the fall.

Barrow and gilt prices at 7 markets during January-March averaged $52, nearly $5 above January-March 1978. However, after reaching a high of $55 a hundredweight in mid-February, they dropped to a low of $45 in late March. A usual decline in demand and increased pork and poultry output will put further downward pressure on hog prices. Spring barrow and gilt prices in the 7 markets are expected to average about $46, down $6 from January-March and about $2 below a year earlier.

Continued gains in pork and poultry supplies will dampen hog prices in the second half of this year. But higher beef prices and strong consumer demand for meat will limit price declines. Hog prices may average in the mid-40's during the third quarter, but drop to the low 40's in the last quarter of 1979.

Beef supplies will continue to decline because of the reductions in the cattle inventory in recent years and indications of herd rebuilding. After 4 years of declining cattle numbers, the liquidation phase of the cattle cycle likely has ended. Producers are culling fewer cows, while the number of heifers placed on feed for slaughter continues well below year-earlier levels, suggesting greater retention of heifers for breeding purposes.

Rebuilding of the cattle herd is at the expense of current output. As a result, per capita beef supplies in 1979 may be only 109 pounds, about 9 percent less than in 1978 and the lowest in 6 years. Imported beef will account for around a tenth of total use, compared with 9 percent in 1978 and 7 percent in 1977.

During January-March, 9 percent less beef was produced despite fed cattle marketings equal to last year. The decline was caused by a sharp drop in the slaughter of cattle off grass. Second-quarter slaughter of cows and grass-fed steers and heifers will continue below last year and fed cattle marketing will be down. Thus, total April-June beef output may be down 15 percent.

Beef production will continue well below year-earlier levels during the second half of the year when fed cattle marketings are expected to be reduced slightly. Cow and grass-fed steer and heifer slaughter will continue below year-earlier levels.

With the sharp drop in slaughter this year and a slight buildup in the cattle herd by the beginning of 1980, beef production next year may be near this year's level.

The continued decline in beef output this year is reflected in higher cattle prices. January-March slaughter steer prices at Omaha averaged $65 per hundredweight, nearly $20 above a year earlier. Continued lower beef output will cause steer prices to average higher this spring and summer despite sharply larger production of hogs and poultry. Steer prices are expected to average in the low $70's this spring and advance to the mid-$70's in the summer before declining seasonally in the fall.

Continued Large Feed Supplies

The cost of producing and marketing broilers, turkeys, and eggs is above year-earlier levels and is expected to stay higher in coming months. Feed grain and soybean supplies will be relatively large but prices will remain above last year. Farmers have indicated plans to plant more acres to soybeans this year, and almost as many acres to corn, as in 1978. However, the actual size of the 1979 crops will largely depend on the effects of the weather.

On April 1, farmers planned to plant 79 million acres to corn this year, down about 1 percent from 1978. This acreage, combined with average yields, would result in a crop well below the record 7.1 billion in 1978. While a larger carryover of corn on October 1 will partially offset a smaller crop and keep supplies large in the 1979/80 year (October-September), a continued strong demand may mean corn prices well above 1978/79.

Despite record supplies of corn this year, prices will average above those of 1977/78, due to increased domestic and foreign demand and isolation of part of the supply in the farmer-owned grain reserve and under Govenment price support loans. The farm price of corn this year will average around $2.11 per bushel, up from $2.02 in 1977/78.

Soybean supplies for this marketing year ending September 30 were a record 2 billion bushels, 7 percent above 1977/78. Despite record supplies, exceptionally strong domestic and foreign demand has boosted soybean meal prices well above year-earlier levels where they are expected to remain through the end of the marketing year.

Prospects for soybean meal during 1979/80 point to larger supplies, increased domestic and foreign demand, and relatively strong prices. On April 1, growers indicated plans to plant 68.8 million acres to soybeans, 7 percent above last year and an all-time high. Production could vary from 1.8 billion bushels to 2.1 billion, depending on yields. If demand remains strong in 1978/79 and about matches a larger crop, slightly higher meal prices are likely.

Poultry and egg production costs will continue to trend upward. Feed costs likely will increase seasonally this spring and summer. They will decline as usual in the fall but stay above year-earlier levels. The cost of inputs, other than feed, will continue to rise.

EGGS

Favorable producer returns and increased hatchery activity in recent months are expected to hold this year's egg output around 3 percent above a year earlier. Strong consumer demand for high-protein foods will keep egg prices strong this summer and fall but prices may not show as much seasonal rise as usual.

Producers Expand Laying Flocks

Egg production through April this year was 3 percent above a year earlier. Nearly all of the increase was from the larger laying flocks as productivity was only slightly above the record levels of 1978.

Layers on farms and eggs produced

Calendar quarters	Number of layers		Eggs per layer		Eggs produced	
	1978	1979	1978	1979	1978	1979
	Mil.		*No.*		*Mil. doz.*	
I	283	290	58.5	58.8	1,378.1	1,418.8
II	277		60.3		1,394.0	
III	277		59.8		1,380.0	
IV	289		60.0		1,444.2	
Annual .	281		238.7		5,596.3	

The laying flock on January 1, 1979 was only 1 percent above a year earlier, but a few more replacement pullets and reduced cullings of old hens resulted in an average of 3 percent more layers in January-March. The hatch of egg-type chicks and broiler-type pullets placed in hatchery supply flocks 5 months earlier indicated there were about 1.2 million more replacement pullets in January-March than a year earlier. However, the main reason for the gain in the laying flock was the fact that producers culled fewer old hens in response to sharply higher egg prices. The slaughter of mature chickens through federally inspected plants in January-March was 53.2 million, compared with 55.8 a year earlier. All of the reduced cullings was in light-type birds (primarily birds from table-egg flocks) since heavy-type slaughter was up about 1 million.

Cullings increased in April because of expectations of the usual sharp drop in egg prices following Easter. The increased cullings caused the laying flock to drop from 2.8 percent above a year earlier on April 1 to only 2 percent above on May 1.

Table 2—Egg-type chick hatchery operations

Month	Hatch 1977	Hatch 1978	Hatch 1979	Eggs in incubators first of month change from year earlier 1978	Eggs in incubators first of month change from year earlier 1979
	Thou.			*Pct.*	
January	40,338	36,891	39,858	-11	10
February	40,893	36,906	39,527	-14	7
March	51,265	46,805	49,412	-5	9
April	55,133	50,886	52,572	-6	3
May	52,452	53,675		2	2
June	44,700	45,631		8	
July	37,412	35,806		1	
August	37,821	38,556		1	
September	37,394	37,715		0	
October	37,559	35,637		7	
November	34,470	35,878		3	
December	32,476	34,593		15	

Larger Egg Production To Continue

Egg production during the balance of 1979 is expected to remain around 3 percent above year-earlier levels as more flock replacement pullets become available and the rate of lay stays near 1978 levels.

Egg producers have increased hatchery activity since last October in response to good returns. In the last quarter of 1978, there were almost 5 percent or 2.4 million more egg-type pullets hatched and around 770,000 more broiler-type pullets placed for broiler hatchery supply flocks. The increased hatchery activity has continued in 1979. During January-April, the egg-type hatch was up 6 percent or almost 5 million above a year earlier. Broiler-type placements were up 2.4 million. In addition, eggs in egg-type incubators were 2 percent above a year ago on May 1.

Producer returns likely will be positive during most of 1979. There will be little incentive for producers to reduce layer numbers in coming months. However, even if profit margins take an unexpected turn for the worst, slaughter would have to be very heavy to reduce the flock size to year-earlier levels by the end of the year. Thus, egg production will likely continue to exceed year-earlier levels throughout 1979.

Egg Prices Above 1978

Egg prices this year have been well above 1978 despite a 3-percent increase in output. Normally a small increase in egg supplies is reflected in a sharp decline in prices. Apparently, substantially higher prices for all high-protein foods have persuaded consumers to substitute eggs for some of the higher priced meats.

Retail egg prices in 4 regions during the first quarter of this year averaged 86 cents a dozen, up around 15 percent from a year earlier. Although prices were higher, January-March consumption of eggs increased about 2 eggs from a year ago to 70 eggs per person.

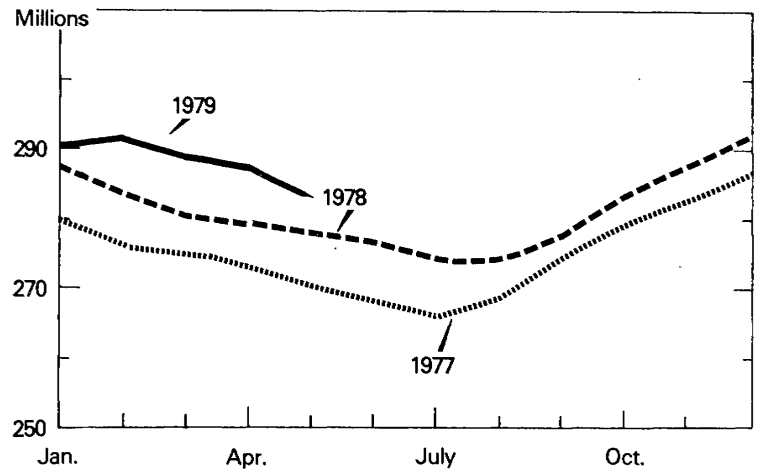
Prices for cartoned Grade A large eggs delivered to store door in New York averaged 72 cents a dozen for January-March, 10 cents above the same months of 1978. Egg prices increased to 78 cents a dozen in mid-March in expectations of increased consumer demand for Easter. However, egg

Table 3—Force moltings and light-type hen slaughter, 1977-79

Month	Forced molt layers[1] Being molted 1977	Being molted 1978	Being molted 1979	Molt completed 1977	Molt completed 1978	Molt completed 1979	Light-type hens slaughtered under federal inspection 1977	1978	1979
	Percent			*Percent*			*Thousand*		
January	3.2	2.4	2.5	15.1	13.6	14.1	14,076	15,804	15,508
February	3.4	3.7	3.5	14.4	11.9	13.8	14,519	15,232	13,529
March	3.9	3.8	3.8	13.8	12.7	13.4	16,758	17,620	15,947
April	2.7	3.3	2.9	12.5	12.1	13.1	16,587	12,969	
May	5.1	4.9	4.5	11.8	10.6	12.0	14,160	13,378	
June	5.5	4.9		11.3	11.9		15,361	15,738	
July	4.1	5.0		13.3	12.0		10,163	11,121	
August	3.6	4.5		14.3	13.7		11,976	10,698	
September	3.2	3.7		14.4	14.0		12,861	11,625	
October	4.6	4.1		13.9	13.4		12,525	13,594	
November	3.8	3.5		14.7	13.3		11,837	11,431	
December	3.0	2.5		15.4	14.9		13,990	12,977	

[1] Percent of hens and pullets of laying age in 17 selected states.

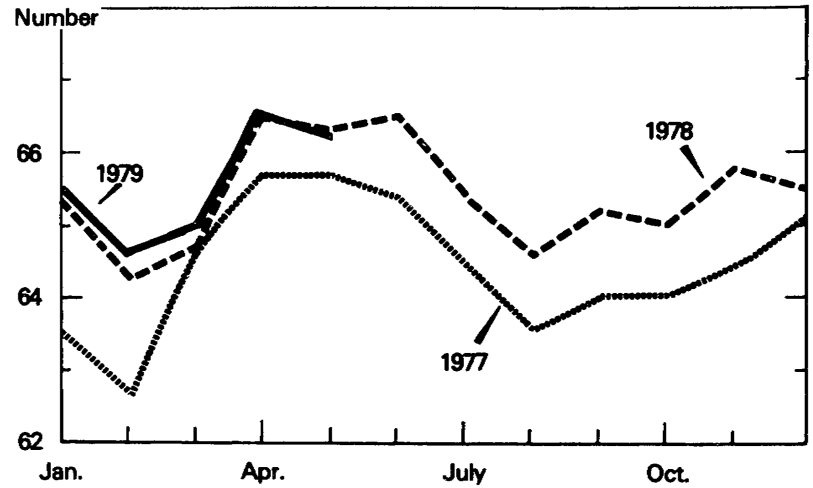
U.S. Flock Size*



* Number of layers on hand, first of month.

USDA Neg. ESCS 619-79 (5)

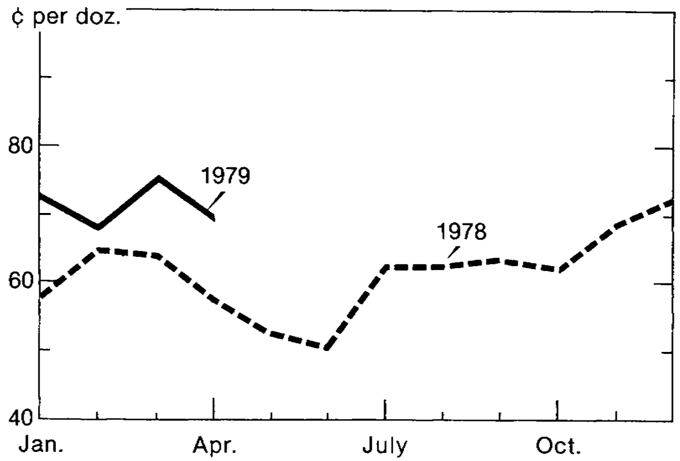
Rate of Lay*



* Eggs per 100 layers, first of month.

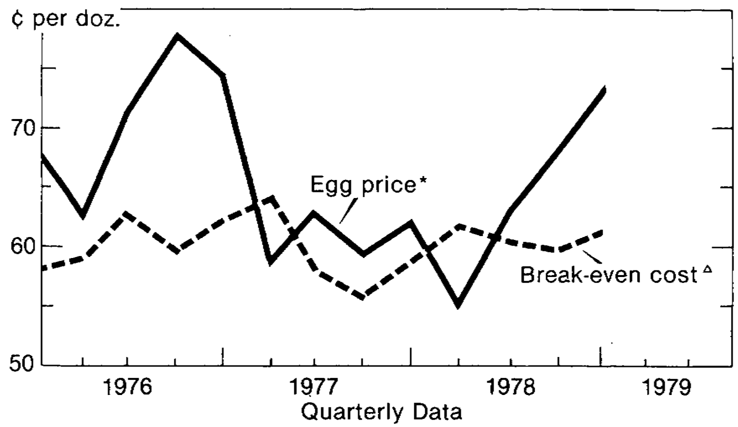
USDA Neg. ESCS 620-79 (5)

Cartoned Egg Prices, New York*



*Sales to volume buyers, consumer grade A large.

Eggs
Break-Even Cost and Market Price



*14 area metro price. △Estimated U.S. break-even cost.

Table 4—Egg prices, 1978-79

Month & year	E.M.E.C. quotes on market values[1]		Received by producers United States[2]	Cartoned Grade A large New York[3]
	East	Midwest		
	Cents			
1978				
January	44.6	43.7	49.4	57.2
February	54.2	52.8	55.1	64.9
March	53.0	52.3	55.4	64.0
April	46.4	45.0	52.2	57.9
May	43.3	42.3	49.3	52.9
June	39.3	38.9	43.6	50.6
July	52.8	51.8	48.3	62.8
August	51.4	50.1	52.0	62.6
September	53.0	51.0	53.7	63.8
October	50.1	49.5	52.3	62.1
November	57.4	56.5	56.8	68.8
December	60.8	60.1	61.6	72.6
1979				
January	62.4	60.6	60.3	72.5
February	56.4	55.0	60.1	68.0
March	64.7	63.3	64.3	75.1
April	56.5	56.2	60.2	69.6
May				
June				
July				
August				
September				
October				
November				
December				

[1] Average of weekly price quotations for No. 1 nest run eggs by the Egg Market Evaluation Committee. Does not necessarily represent prices at which eggs are traded in the market. [2] Average of all eggs sold by farmers including hatching eggs and eggs sold at retail. [3] Sales to volume buyers, store door delivery, consumer Grade A large.

inventories increased and prices dropped to 71 cents in late March where they held until Easter (April 15). Prices declined to 68 cents a dozen the week following Easter and remained at that level until early May. Prices have declined further in May and averaged about 59 cents in mid-May. April-June prices for cartoned large Grade A eggs in New York will average 11 to 13 cents above the 54 cents of the second quarter of 1978.

Egg prices in July-December are expected to show less seasonal increase than usual. New York large Grade A egg prices will increase seasonally this fall and will probably average around 70 cents-a-dozen, compared with 68 cents for October-December 1978. Continued high prices for other high-protein foods will help the demand for eggs. More eggs will be needed for hatching use but the gain over year-earlier levels will shrink as the expansion in broiler production slows later in the year. The demand by commercial egg breakers will remain strong but may not be much stronger than in 1978. Thus, if total egg supplies are up 3 percent as expected, there will be more pressure on table egg prices.

Cold Storage Stocks Lower

The movement of shell eggs to breaking plants for processing during January-March this year was about the same as the 100 million dozens a year earlier. However, weekly reports show that April breakings were substantially below a year ago.

Table 5—Shell eggs broken and egg products produced under federal inspection, 1978-79

Period[1]	Shell eggs broken	Egg products produced[2]		
		Liquid[3]	Frozen	Dried
	Thou. doz.	*Thou. lbs.*	*Thou. lbs.*	*Thou. lbs.*
1978				
Jan. 1-Jan. 28	48,855	27,867	25,652	5,506
Jan. 29-Feb. 25	47,627	29,218	24,983	5,144
Feb. 26-Mar. 25	45,341	28,348	23,021	4,000
Mar. 26-Apr. 22	51,948	30,904	26,605	5,501
Apr. 23-May 20	56,547	34,437	28,328	6,651
May 21-June 17	62,978	35,587	33,768	7,827
June 18-July 15	60,032	33,971	29,953	6,775
July 16-Aug. 12	55,138	31,030	27,054	5,805
Aug.13-Sept. 9	53,400	32,179	24,307	5,255
Sept. 10-Sept. 30	42,820	26,442	19,972	5,007
Oct. 1-Nov. 4	67,102	41,837	32,267	8,355
Nov. 5-Dec. 2	44,814	26,579	22,048	4,702
Dec. 3-Dec. 30	49,422	28,106	27,171	4,298
1979				
Dec. 31-Jan. 27	47,259	27,752	24,507	4,999
Jan. 28-Feb. 24	47,606	29,553	21,911	5,284
Feb. 25-Mar. 24	48,013	29,106	23,758	5,000

[1] Weeks in 1979 and 1978. [2] Includes ingredients added. [3] Liquid egg product produced for immediate consumption and for processing.

Stocks of frozen egg products on May 1 totaled 21.8 million pounds, compared with 22.9 million on May 1, 1978, and the lowest stocks for this date since 1925. The level of stocks has declined in recent years as users of egg products have switched to more fresh broken products, and egg breaking activity has become less seasonal.

Exports Decline

Movements of eggs for export and shipments during January-February declined sharply from a year earlier. Lower exports resulted largely from higher domestic prices for eggs and egg products and increased availability of supplies in other countries. Exports of shell eggs and egg products totaled nearly 17.7 million dozen (shell equivalent), down 44 percent from January-March 1978. Exports of hatching eggs increased 14 percent to 5 million dozen. However, other shell eggs were down 71 percent to 2.8 million dozens. Egg products declined from 17.4 million dozens (shell equivalent) to 9.8. Shipments of eggs to U.S. territories were up 17 percent from January-March 1978 to 6.7 million dozen (shell equivalent).

Table 6—Total eggs: Supply and utilization, 1977-79

Year and quarters	Supply				Utilization					
							Domestic disappearance			
	Produc-tion	Imports[1]	Beginning stocks[1]	Total supply	Ending stocks[1]	Exports and shipments[1]	Eggs used for hatching	Military[1]	Civilian[1]	
									Total	Per capita
	Million dozen									*Number*
1977										
I	1,325.8	1.1	20.7	1,347.6	19.9	16.1	109.3	7.6	1,194.7	67.0
II	1,337.7	6.0	19.9	1,363.6	25.0	23.2	112.6	10.9	1,191.9	66.7
III	1,333.1	6.9	25.0	1,365.0	27.1	26.8	102.6	10.0	1,198.5	66.9
IV	1,410.6	.2	27.1	1,437.9	23.7	24.6	104.7	7.8	1,277.1	71.1
1978										
I	1,378.1	1.4	23.7	1,403.2	18.1	37.4	113.2	6.6	1,227.9	68.2
II	1,394.0	3.3	18.1	1,415.4	21.0	30.0	122.4	7.0	1,235.0	68.6
III	1,380.0	6.7	21.0	1,407.7	23.1	24.9	111.9	7.4	1,240.4	68.8
IV	1,444.2	.1	23.1	1,467.4	20.3	28.0	115.4	6.9	1,296.8	71.7
1979										
I	1,418.8	.4	20.3	1,439.5	16.7	24.4	124.1	5.8	1,268.5	70.0

[1]Shell eggs and the approximate shell-egg equivalent of egg product. [2]Less than 100,000 dozen. [3]Calculated from unrounded data.

First-Half 1980 Prospects

The number of hens and pullets in laying flocks is expected to remain above year-earlier levels during the second half of this year and into 1980. Although egg production will be higher, second-half 1979 prices probably will stay above year-earlier levels but the margin will narrow. The cost of producing and marketing eggs is above year-earlier levels and is expected to stay higher in coming months.

Egg production costs are increasing and during the first half of 1980 likely will be well above January-June 1979. If farmers' intentions to plant more acres to soybeans this year and almost as many acres to corn are realized, and the weather is favorable, production will be large. However, indications are that increased domestic and foreign demand will keep feed prices well above year-earlier levels during the first half of next year.

Demand for eggs in the first half of 1980 may be slightly stronger but the increase likely will be much less than a year earlier. Price increases for most high-protein foods may be less than in 1979 because rising poultry and pork production will limit price increases for protein foods. More eggs will be needed for hatchery use in the first half of next year because of the expected continued expansion in the broiler industry. However, the rate of broiler expansion in 1980 will slow considerably from a year earlier. Stocks of frozen eggs are at record-low levels and likely will remain at relatively low levels during the balance of 1979. This will result in continued strong demand for breaking eggs in the first half of 1980.

If total egg output in the first half of 1980 is up about 3 percent from a year earlier, January-June 1980 prices for cartoned Grade A large eggs in New York would be expected to average 6 to 9 cents a dozen below the 68 cents estimated for January-June this year. Output at year-earlier levels would result in prices averaging 68 to 71 cents.

Table 7—Estimated January-June 1980 egg price/production relationships[1]

Total egg production		Estimated New York cartoned large egg price[2]
Million dozens	Percent change from year earlier	
		Cents per dozen
2,940	+3	59-62
2,910	+2	62-65
2,880	+1	65-68
2,854	0	[3]68-71
2,825	-1	71-74
2,795	-2	74-77
2,770	-3	77-80

[1]Based on historical relationships. [2]USDA, consumer Grade A, volume buyers, store door delivery. [3]The estimated 68-71 cents per dozen is based on prospective conditions for general economic activity, hatching and breaking use, and assumes no change from the estimated 1979 first half total egg production.

The prices, other than the base price were estimated by assuming the same conditions as under the base except that total egg production was changed.

BROILERS

Broiler production is expected to remain 8 to 10 percent above year-earlier levels through the summer and fall. Broiler prices will average in the 48-to-50-cents-a-pound range this summer before declining seasonally next fall. Sharply larger pork supplies combined with increased broiler and turkey production will put downward price pressure on broilers during the second half of this year but reduced beef supplies will limit price declines.

Output Up a Tenth from 1978

Broiler producers have responded to favorable returns in recent years by increasing production each year since 1975. Broiler production has reached record highs each year since 1975 and production will continue at record levels throughout 1979.

Output of broiler meat in federally inspected slaughter plants during January-March totaled 2,551 million pounds, ready-to-cook, nearly 10 percent above the first quarter of 1978. Most of the increase was from more birds marketed as the average weight per bird slaughtered was about the same.

Weekly reports on slaughter and broiler chick placements indicate that second-quarter broiler meat output will be up around 10 percent from both the previous quarter and from April-June 1978. The number of eggs currently going into incubators for marketing in early summer has continued around 8 to 10 percent above last year. For the first time on record, egg sets exceeded 100 million for the week of April 24 and have remained above this level through mid-May.

Egg sets normally reach their seasonal high in the spring. The decline in the increase over year-earlier levels in April and May suggests that production facilities were not available to continue the earlier rate of increase. Although the increase in weekly egg sets have narrowed, broiler meat production in July-September probably will be up around a tenth from last summer. Hatchability rates of egg sets in 1979 are expected to be improved this year over last, particularly in the summer.

Favorable profit margins so far this year will cause broiler producers to continue producing more broiler chicks for marketing during the last quarter of 1979. With expectations of sharply larger pork supplies next fall, prospects are not as favorable for broilers, and producers probably will not push production as strong late in the year. Fourth-quarter output is expected to be up around 8 percent from October-December 1978.

Strong Consumer Demand Boosts Broiler Prices

Broiler prices continue to benefit from sharply higher retail prices for competing meat supplies, particularly beef. Consumers are using more broiler meat (frying chicken) than ever before and at prices well above a year earlier.

Consumption of young chicken during January-March was up about 1 pound per person above the 10.5 pounds consumed in the first quarter of 1978. During the same period, prices for frying chicken in 4 regions gained 9 cents to an average of 70 cents a pound. Retail prices will show a seasonal gain into the summer and average in the low-to-mid-70-cents-a-pound range this summer.

January-March wholesale prices in 9 cities averaged 47.5 cents a pound, up nearly 6 cents from a year ago. Prices will increase seasonally this spring and early summer when consumer demand

Table 8—Broiler chicks hatched and pullet chicks placed in hatchery flocks

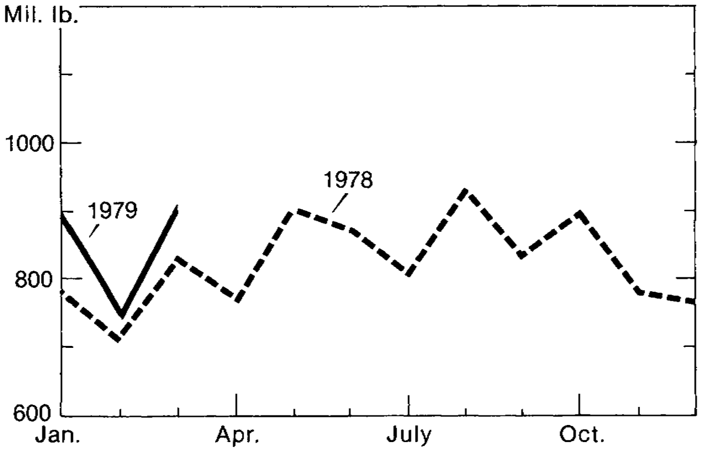
Month	Broiler-type chicks hatched			Pullet chicks placed in broiler hatchery supply flocks					
				Monthly placements			Cummulative placements 7-14 months earlier		
	1977	1978	1979	1977	1978	1979	1978	1979	1980
		Million			*Thousand*			*Thousand*	
January	294.3	313.0	340.7	2,585	2,687	3,541	21,934	24,824	
February	272.4	289.7	313.3	2,419	2,751	3,089	22,282	25,498	
March	323.2	332.3	366.2	2,919	3,309	4,004	22,353	25,360	
April	324.6	337.9	371.5	3,275	3,629	4,129	22,469	25,802	
May	337.4	360.6		3,025	3,532		23,063	26,168	
June	320.1	346.1		2,730	3,201		22,846	25,950	
July	310.6	338.5		2,782	3,376		22,584	25,610	
August	294.7	318.2		2,618	2,875		22,246	25,619	
September	280.0	296.1		2,701	3,129		22,267	25,507	
October	290.9	309.3		3,013	3,117		22,794	26,135	
November	282.2	307.0		2,702	3,091		23,805	27,389	
December	306.3	330.5		3,013	3,289		24,636		

Table 9—Broiler: Eggs set and broiler chicks placed weekly in 21 commercial broiler producing States, 1977-79[1]

Week*	Eggs set 1977/78	Eggs set 1978/79	Percent of previous year 1978-79	Chicks placed 1978-79		Percent of previous year 1978-79
	Thousands		*Percent*	*Thousands*		*Percent*
November						
4	79,144	88,685	112	58,588	63,443	108
11	82,427	91,073	110	61,857	65,919	107
18	82,537	91,041	110	64,880	70,166	108
25	81,859	90,158	110	64,080	70,716	110
2	82,616	90,895	110	66,526	72,291	109
December						
9	82,360	87,280	106	66,849	72,283	108
16	83,549	92,956	111	65,958	71,430	108
23	83,291	92,359	109	66,117	73,521	111
30	84,266	87,145	103	66,170	69,215	105
January						
6	84,065	93,604	111	67,177	73,756	110
13	85,064	93,038	111	67,943	73,682	108
20	86,067	94,104	109	68,119	73,851	108
27	86,580	93,031	107	67,903	74,316	109
February						
3	85,691	93,832	110	68,349	74,112	108
10	87,138	97,015	111	69,275	74,826	108
17	87,653	97,382	111	69,280	74,309	107
24	88,369	98,006	109	69,275	74,386	107
March						
3	89,393	98,861	111	70,686	77,161	109
10	90,039	98,690	110	70,662	77,354	109
17	90,216	100,568	111	71,631	78,982	110
24	91,114	101,574	111	72,542	80,606	111
31	92,913	102,879	111	73,329	80,819	110
April						
7	94,241	103,337	110	73,068	81,531	112
14	95,116	103,306	109	74,020	81,733	110
21	95,176	103,300	109	75,372	82,454	109
28	94,723	102,796	109	76,218	83,369	109
May						
5	95,819	104,380	109	76,740	83.222	108
12	95,836	103,947	108	76,383	82,926	109
19	95,299	103,686	109	75,838	82,312	109
26	94,954			77,527		
June						
2	94,966			77,331		
9	95,191			77,396		
16	94,044			76,747		
23	90,188			76,546		
30	92,479			76,563		
July						
7	93,962			75,362		
14	91,085			71,520		
21	89,638			72,897		
28	89,551			71,750		
August						
4	88,725			69,630		
11	87,906			68,142		
18	87,484			68,263		
25	87,167			68,883		
September						
1	84,408			68,799		
8	81,065			68,899		
15	81,566			67,807		
22	88,734			64,352		
29	88,673			62,488		
October						
6	85,485			62,525		
13	80,555			69,099		
20	83,298			69,653		
27	88,755			67,320		

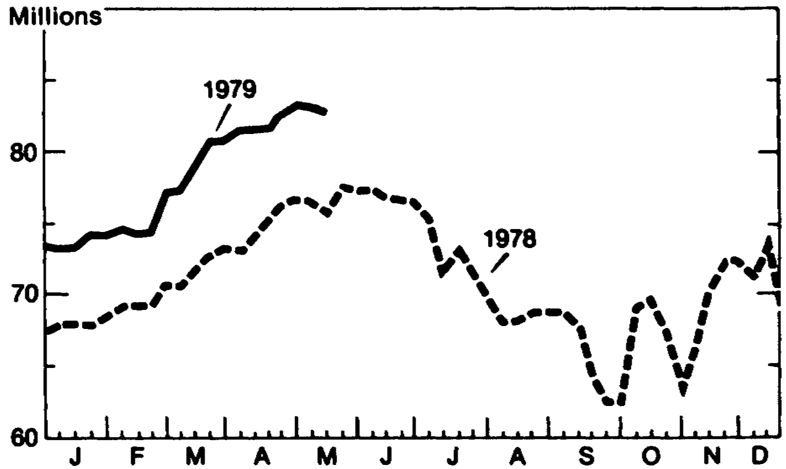
*Weeks in 1977-78 and corresponding weeks in 1978-79.

Broiler Slaughter*



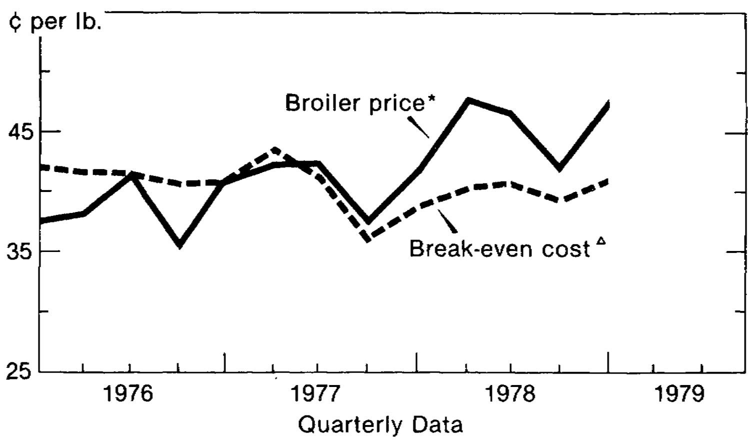
*Certified ready-to-cook, under Federal inspection.

Weekly Broiler Chick Placements*



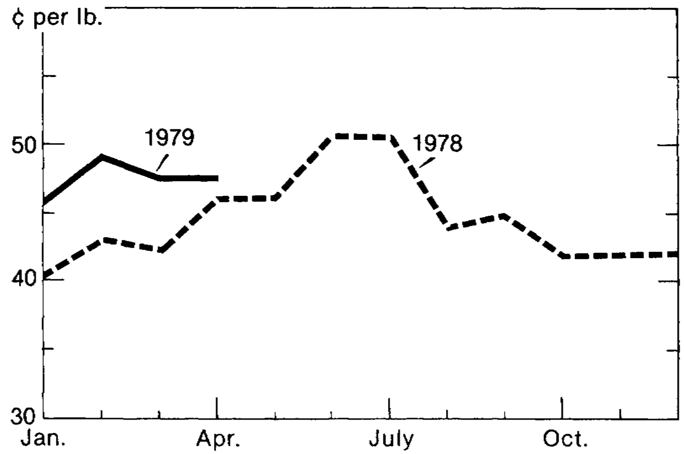
*22 important states.

Broilers
Break-Even Cost and Market Price



*Nine city weighted average. △Estimated U.S. break-even cost.

Broiler Prices*



*Nine city weighted average.

Table 10—Broiler supply and prices

Year and quarters	Federally inspected slaughter				Total production RTC[1]	Per capita consumption	Prices	
	Number	Av. wt.	Live weight pounds	Certified RTC wt.			Farm	9-city
	Mil.	*Lbs.*	*Mil. lbs.*	*Mil. lbs.*	*Mil. lbs.*	*Lbs.*	*Cts/lbs.*	*Cts./lb.*
1977								
I	782	3.82	2,985	2,156	2,201	9.8	23.5	40.9
II	869	3.80	3,305	2,399	2,447	10.8	24.4	42.3
III	884	3.78	3,340	2,424	2,474	10.9	24.6	42.4
IV	798	3.90	3,110	2,248	2,296	10.2	21.4	37.6
Year	3,334	3,82	12,741	9,227	9,418	41.7	21.5 23.5	40.8
1978								
I	831	3.88	3,226	2,327	2,390	10.5	24.2	41.8
II	909	3.87	3,519	2,547	2,616	11.6	28.7	47.6
III	922	3.84	3,540	2,567	2,636	11.6	28.0	46.6
IV	854	3.95	3,371	2,443	2,509	11.0	24.7	42.1
Year	3,516	3.88	13,656	9,883	10,151	44.7	26.4	44.5
1979								
I	907	3.90	3,541	2,551	2,622	11.5	28.3	47.5

[1] Total production equals federally inspected slaughter plus other slaughter minus cut-up and further processing condemnations.

for broilers increases as more chicken is used for outdoor barbecuing and picnic outings. Broiler prices are expected to average in the upper-40-cents-a-pound range through the summer. Prices in October-December will drop to about the 42-cent level of a year earlier. There is a seasonal drop in demand, and pork supplies are expected to be up sharply.

Exports Above 1978

Young chicken (primarily broilers) exports during January-March increased 13 percent from a year ago to 89 million pounds. The increased exports were largely to Canada, Mexico, the Caribbean countries, Venezuela, and Egypt. Exports to Hong Kong and Japan were down substantially from January-March 1978.

Shipments of young chicken to Puerto Rico and the Virgin Islands (U.S. territories) through March totaled 37 million pounds, about the same as a year ago.

Broiler Prospects for Fourth Quarter

The outlook for broiler producers during October-December is less favorable than a year ago. Production and marketing costs likely will be higher and broilers will be competing with a sharp increase in pork and turkey supplies next fall.

Table 11—Young chicken supply and utilization, 1978-79

Year	Production[1]	Beginning stocks	Total supply	End stocks	Exports and shipments	Military	Civilian disappearance	Per capita
	Million pounds							*Pounds*
1978:								
January	802.7	29.4	832.1	27.5	36.0	2.2	766.4	3.55
February	735.2	27.5	762.7	21.8	32.7	2.1	706.1	3.27
March	852.2	21.8	874.0	21.8	46.1	3.1	803.0	3.72
April	789.7	21.8	811.5	22.5	33.2	2.7	753.1	3.49
May	927.2	22.5	949.7	19.8	36.3	3.4	890.2	4.12
June	898.6	19.8	918.4	21.1	31.1	2.9	863.3	3.99
July	823.2	21.1	844.3	21.7	37.2	2.3	783.1	3.62
August	956.3	21.7	978.0	20.9	44.3	2.6	910.2	4.20
September	856.7	20.9	877.6	21.1	39.2	1.7	815.6	3.76
October	920.8	21.1	941.9	22.8	40.9	1.1	877.1	4.04
November	800.0	22.8	822.8	23.2	38.3	1.5	759.8	3.50
December	788.1	23.2	811.3	20.1	42.2	4.0	745.0	3.43
1979:								
January	922.0	20.1	942.1	17.9	41.1	2.1	880.9	4.05
February	770.1	17.9	788.0	17.7	35.4	2.7	732.2	3.37
March	930.2	17.7	947.9	18.3	49.3	2.6	877.7	4.03

Prospects point to relatively large supplies of feed grains and soybeans this fall but at higher prices than a year earlier. Farmers have indicated they will plant more acres to soybeans this year and almost as many acres to corn as in 1978. Of course, final production will depend on the effects of weather in coming months. With favorable crop development, broiler feed costs will decline seasonally during October-December, but average higher than last year. Also, the cost of inputs, other than feed, used in the production and marketing of broilers will continue to trend upward.

The growth in consumers' income is expected to slow but remain slightly above year-earlier levels during the fourth quarter. Thus, consumer demand for meats will continue strong but there will be more total meat available and the mix of the various meats will be different.

Competing meat supplies in the fourth quarter will be up slightly. Beef production is expected to decline about 9 percent, but this will be more than offset by a 20-percent increase in pork production. Also, turkey production will be higher.

Table 12—Estimated 4th quarter 1979 broiler price/consumption relationships[1]

Domestic civilian per capita consumption: Pounds	Domestic civilian per capita consumption: Percent change from year earlier	Estimated 9-city wholesale broiler prices
		Cents per lb.
12.6	+15	38-40
12.1	+10	40-42
11.6	+5	42-44
11.0	0	[2]44-46
10.4	-5	46-48
9.9	-10	48-50
9.4	-15	50-52

[1] Based on historical relationships. [2] The estimated 44-46 cents per pound is based on prospective conditions for competing meats and general economic activity and assumes no change from a year earlier in per capita consumption of broilers.

The price other than the base 44-46 cents per pound were estimated by assuming the same conditions for competing meats and economic activity as under the base but various changes from a year earlier in the per capita consumption of broilers.

If competing meat supplies and consumer incomes turn out about as currently expected, and broiler meat production increases 8 percent, the 9-city price during October-December 1979 likely will average near the 42 cents a pound of last fall. However, if past relationships hold, output at 1978 levels would result in a 9-city average price in the mid-40's.

3.6 Billion Broilers Raised in 1978

Producers continued to produce broilers in record numbers last year. They produced 3,619 million during the 1978 marketing year (December 1-November 30). This was 6 percent more than in 1977 and 25 percent more than in 1975. Production increased in each of the 10 largest States and ranged from 99 million broilers in Pennsylvania to 612 million in Arkansas. With the exception of Pennsylvania, all 10 States produced over 100 million broilers each in 1978 and together accounted for 83 percent of total U.S. production.

Arkansas, the largest producer, increased production by more than 7 percent and provided nearly 17 percent of total birds grown. The ranking of the top 10 States in 1978 was unchanged from 1977.

TURKEYS

Turkey meat output will increase seasonally in coming months, but the year-to-year gain will narrow substantially as we move into the heavy production months. Larger turkey, broiler, and pork supplies will result in second-half turkey prices below the relatively high levels of July-December 1978.

Record Turkey Production

Turkey producers responded to very favorable returns last year by increasing poult production. As a result, January-March turkey meat output in federally inspected plants was up 19 percent to a record 271 million pounds. All of the gain was from increased marketings because the average weight of bird marketed (18.8 pounds) was about the same.

Turkey output will continue well above year-earlier levels during the rest of this year but the margin over 1978 will narrow. The hatch of turkey poults during last September-December, largely for marketing in early 1979, was up 26 percent from the same period a year earlier. The rate dropped to 15 percent in January-February, and declined further to only 11 percent above for March-April. Turkey eggs in incubators on May 1 were still 5 percent above a year ago.

Turkey meat output during April-June is expected to be up around a fourth from 1978. Output will increase seasonally during the second half of the year but the increase over 1978 will decrease to around 8 to 10 percent because of limited production and processing capacity during the heavy production season. More than two-thirds of the turkey output in 1978 was in the second half of the year.

Turkey Prices Decline

Wholesale turkey prices have declined in 1979 after reaching record highs during last December. Price declines have resulted from the usual sea-

Table 13—Turkey supply and consumption

Year 2nd quarters	Federally inspected slaughter: Number	Av. wt.	Live wt. lb.	Certified RTC wt.	Total production RTC[1]	Per capita consumption
	Mil.	*Lbs.*	*Mil. lbs.*	*Mil. lbs.*	*Mil. lbs.*	*Lbs.*
1977						
I	15.0	17.90	267.7	209.5	222.4	1.3
II	26.3	17.58	462.2	365.4	388.3	1.4
III	46.2	18.35	847.2	672.2	714.8	2.3
IV	40.8	19.96	815.3	645.3	686.4	4.2
Year	128.3	18.65	2,392.4	1,892.5	2,011.9	9.2
1978						
I	15.3	18.84	289.2	227.8	242.0	1.3
II	28.1	17.96	504.3	399.6	424.1	1.7
III	45.8	18.69	856.2	679.7	722.6	2.3
IV	42.6	20.05	853.7	676.4	719.5	4.1
Year	131.8	18.99	2,503.4	1,983.5	2,108.2	9.4
1979						
I	18.3	18.83	345.5	271.5	288.5	1.4

[1] Total production equals federally inspected slaughter plusother slaughter minus cut-up and further processing condemnations.

Table 14—Turkey hatchery operations, United States, 1978-79

Month	Poults hatched: Light breeds 1978	Light breeds 1979	Heavy breeds 1978	Heavy breeds 1979	Total 1978	Total 1979	Eggs in incubator first of month change from prev. year: Light 1978	Heavy 1979	Total 1978
	Thousand						*Percent*		
January	499	955	11,288	12,813	11,787	13,768	100	15	18
February	610	1,008	13,135	14,607	13,745	15,615	59	7	10
March	652	1,052	17,409	19,025	18,011	20,077	49	9	10
April	703	1,138	18,385	19,851	19,088	20,989	53	7	9
May	799		19,835		20,634		44	3	5
June	729		18,073		18,802				
July	729		14,520		15,249				
August	762		8,806		9,568				
September	542		5,081		5,623				
October	704		5,659		6,353				
November	983		7,363		8,346				
December	1,529		9,284		10,813				

sonal decline following the Thanksgiving and Christmas season and the sharp increase in turkey production.

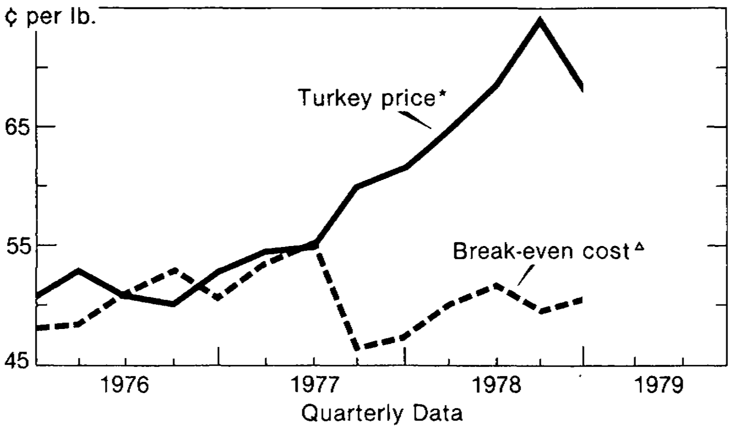
Although wholesale turkey prices declined in early 1979, average retail prices for consumer-size birds continued to rise. Retail prices in 4 regions during January-March for 8-to-16-pound young hen turkeys averaged 90 cents a pound, up 3 cents from the fourth quarter of last year. Higher average retail prices in early 1979 probably resulted from reduced specializing of turkeys following the holiday season. Turkeys are heavily specialed at relatively low margins in the fourth quarter.

Wholesale prices for 8-to-16-pound young hen turkeys in New York during January-April averaged nearly 70 cents a pound, 10 cents above the

Turkey prices

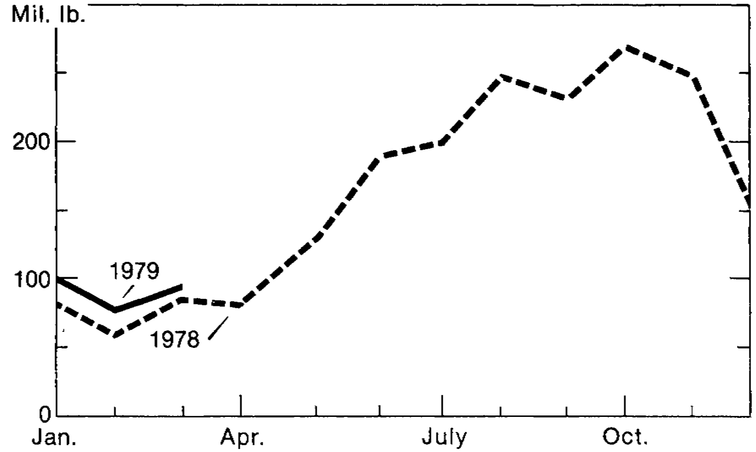
Calendar	Liveweight	New York, wholesale, frozen f.o.b. or equivalent: Young hens 8-16 lbs.	Young toms 14-20 lbs.	Young toms 24-26 lbs.
	Cents per pound			
1978				
I	37.9	60.2	59.0	62.2
II	39.4	61.4	61.0	68.5
III	43.1	68.2	67.7	70.0
IV	47.6	77.1	73.4	72.4
Year	43.6	66.7	65.3	68.3
1979				
I	45.2	70.2	70.0	72.3

Turkeys
Break-Even Cost and Market Price



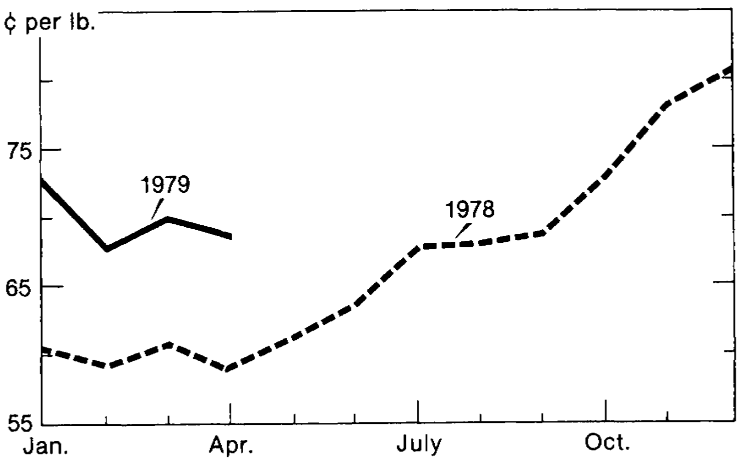
*Weighted average price in New York, Chicago, and Los Angeles of 8 - 16 pound young hens and 24 - 26 pound young toms. △Estimated U.S. break-even cost.

Turkey Slaughter*



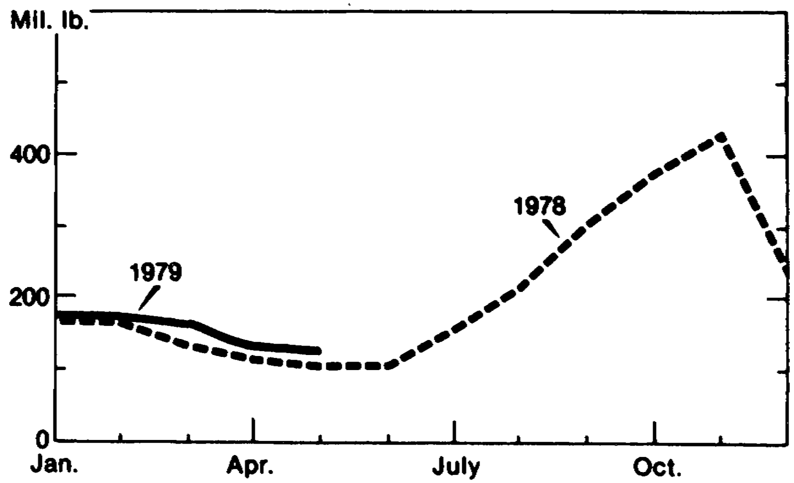
*Certified ready-to-cook, under Federal inspection.

Turkey Prices*



*Young hens 8 - 16 pounds, New York.

Turkey Cold Storage Stocks*



*First of month.

first 4 months of 1978. Prices have trended downward and were about 65 cents per pound in mid-May, but remained 4 cents above a year ago. Prices are expected to decline further in coming months and average 10 to 12 cents a pound below the 73 cents for July-December 1978. Larger turkey output and higher cold storage stocks combined with increased pork and broiler production will depress turkey prices throughout the rest of 1979.

Turkey Stocks Increase Relative to 1978

Cold storage turkey stocks have declined as usual this year but the sharply larger production has caused stocks to increase relative to a year ago. Turkey stocks on January 1, 1979 totaled 175 million pounds, up 4 percent from January 1, 1978. Stocks declined to 130 million pounds on May 1, but were 28 percent above a year earlier. With the sharp increase in turkey production during April-June, cold storage stocks will continue to increase and at midyear may total around 225 million pounds. This would be the largest July 1 stocks since July 1974.

Exports Continue Decline

Sharply higher turkey prices are resulting in further declines in turkey meat exports this year. Shipments of turkey to U.S. territories (Puerto Rico and the Virgin Islands) also declined.

Exports of turkey meat through March this year were down about a third to 9 million pounds. All of the decline was in turkey parts, down 39 percent to about 8 million pounds. Whole turkey exports were up 16 percent but accounted for only 16 percent of the total. Most of the decline in exports resulted from a sharp drop in Nigeria's imports from the United States.

Shipments to Puerto Rico and the Virgin Islands during January-March totaled 383,000 pounds, well below the 709,000 of a year ago.

Table 15—Turkey: Supply and utilization, 1977-79

Year	Production[1]	Beginning stocks	Total supply	Ending stocks	Exports and shipments	Military	Civilian disappearance	Per capita
	Million pounds							*Pounds*
1977:								
January	75.3	203.4	278.7	190.3	3.0	1.0	84.4	.39
February	62.6	190.3	252.9	167.8	3.5	.2	81.4	.38
March	85.8	167.8	253.6	142.3	2.1	.9	108.3	.50
April	84.3	142.3	226.6	130.3	2.5	1.1	92.7	.43
May	117.6	130.3	247.9	138.2	4.0	.4	105.3	.49
June	188.7	138.2	326.9	201.4	5.2	1.3	119.0	.55
July	202.7	201.4	404.1	253.6	5.2	([2])	145.3	.68
August	261.3	253.6	514.9	329.9	7.2	.1	177.7	.83
September	254.8	329.9	584.7	409.3	6.9	.2	168.3	.78
October	267.7	409.3	677.0	444.5	4.7	3.5	224.3	1.04
November	264.0	444.5	708.5	269.4	5.6	.8	432.7	2.01
December	158.5	269.4	427.9	167.9	6.3	1.7	252.0	1.17
1978:								
January	87.1	167.9	255.0	168.3	4.5	2.4	79.8	.37
February	63.4	168.3	231.7	136.6	3.7	.7	90.7	.42
March	91.8	136.6	228.4	113.0	6.6	.1	108.7	.50
April	85.9	113.0	198.9	101.1	4.6	.3	92.9	.43
May	137.3	101.1	238.4	103.9	2.3	.9	131.3	.61
June	201.4	103.9	305.3	152.1	3.4	.8	148.3	.69
July	212.6	152.8	365.4	213.6	3.2	2.0	146.6	.68
August	265.0	213.6	477.6	301.2	4.6	1.2	171.6	.79
September	245.9	301.2	547.1	373.3	6.2	1.4	166.2	.77
October	288.8	373.3	662.1	425.4	7.9	2.6	226.2	1.04
November	265.1	425.4	690.5	236.2	6.0	1.5	446.8	2.06
December	166.4	236.2	402.6	175.1	4.1	1.4	222.0	1.02
1979:								
January	105.6	175.1	280.7	170.9	3.9	.9	105.0	.48
February	82.0	170.9	252.9	155.6	2.8	1.4	93.1	.43
March	100.9	155.6	256.5	135.8	3.1	.9	116.7	.54

[1] Total monthly production is estimated by multiplying the monthly federally inspected slaughter by the ratio of the annual total production to the annual federally inspected slaughter. The ratio used in 1978 is the same as the one in 1977. [2] Less than 100,000 pounds.

MORE POULTRY AND EGGS USED IN 1978

Consumption of eggs and poultry in 1978 increased from 1977 levels. Chicken and turkey meat combined increased 3 pounds per person to a record 57.1 pounds. For the first time on record, poultry meat use was slightly above the 56.9 pounds per person of retail weight pork consumed last year (carcass weight of pork consumed was 61.4 pounds).

Egg consumption increased 5 eggs per person in 1978 to 277. This was the first year-to-year increase in per capita egg use since 1971. Egg production increased more than 3 percent in 1978—the first significant increase since 1971. However, part of the larger production went for increased hatchery use and larger exports and shipments. The data show that shell egg use was up 7 eggs to 242 per person while processed egg use, largely consumed in prepared foods, declined about 2 egg to the equivalent of 35 eggs per person.

The egg supply and utilization and per capita consumption estimates have been revised back to 1960. The new supply and utilization tables in this issue show changes in production in 1960-63 because no allowance for nonfarm production was made. In the old tables, the total production included an estimate of nonfarm production of 4 percent in 1963, 3 percent in 1962, 2 percent in 1961, and 1 percent in 1960. Also, some changes were made in the foreign trade data and hatching use.

Chicken consumption in 1978 increased nearly 3 pounds to 47.7 pounds per person, with all the increase in young chicken. Young chicken use (primarily broilers) gained 3 pounds from 1977 to 44.7 pounds per person, but other (mature) chicken declined slightly. The other chicken is mostly old hens culled from egg-laying flocks. Although layer flock numbers in 1978 were generally above a year earlier, slaughter of old layers in federally inspected plants dropped about 4 percent.

Per capita turkey consumption in 1978 increased slightly to a record 9.4 pounds. Turkey meat production last year was 5 percent larger than in 1977 but more turkey went for exports and shipments, military use, and cold storage stocks were increased. However, consumption in 1978 was helped by a drawdown in stocks.

Red meat consumption last year totaled 186.1 pounds per person, down 6.9 pounds from 1977. Beef and veal use declined 6.7 pounds to 123.1 pounds. Pork consumption gained slightly to 61.4 pounds per capita. In total, 1978 per capita consumption of red meats (carcass weight) and chicken and turkey totaled 243.2 pounds, down about 4 pounds from 1977.

HIGHER 1978 GROSS INCOME FROM POULTRY AND EGGS

The total gross income from the production of eggs, broilers, other chicken, and turkeys for the 1978 marketing year (December 1-November 30) totaled $7.9 billion, up 11 percent from the previous year. All of the increase in gross income was from broilers and turkeys. Income was down from 1977 for both eggs and for chickens other than broilers.

Gross income from broilers increased 20 percent to $3,691 million and accounted for nearly 47 percent of the combined total for poultry and eggs. The increase over 1977 levels resulted from an 8 percent larger production and an 11-percent increase in the liveweight equivalent price.

Larger turkey production and higher prices caused income from turkeys to rise nearly 28 percent to $1,163 million. Production increased 4 percent and prices averaged 23 percent higher than in 1977.

With increased egg production in 1978, income from eggs declined about 3 percent to $2,918 million and accounted for 37 percent of the total gross income for poultry and eggs. Egg production was up 4 percent but prices averaged 6 percent below 1977.

FEWER CHICKEN AND TURKEY HATCHERIES

The number of chicken and turkey hatcheries continued to decline during 1977 and 1978. At the same time, egg capacities increased for chicken hatcheries but declined for turkey hatcheries.

On January 1, 1979, there were 618 chicken hatcheries with a capacity of 469 million eggs, compared with 651 units and 420 million eggs 2 years earlier. Of the total hatcheries, 43 percent had egg capacities of 500,000 or more, up from 31 percent on January 1, 1977, and accounted for 88 percent of the total chicken hatchery capacity. This compares with about 70 percent in 1977.

The number of turkey hatcheries and total capacity declined during 1977 and 1978. The number of hatcheries on January 1, 1979 totaled 126, with a total capacity of about 37 million eggs. This compares with 149 hatcheries 2 years ago with an egg capacity of 40 million. Half of the hatcheries in 1979 had capacities of 100,000 to 499,999 eggs and accounted for 47 percent of the total turkey egg capacity. Although only a fifth of the hatcheries had a capacity of 500,000 or more eggs, they accounted for one-half of the total capacity. This was the only size group to increase egg capacity. Thirty percent of the hatcheries had a capacity under 100,000 but only made up 3 percent of the total egg capacity of turkey hatcheries in 1979.

Table 16—Gross farm income from poultry and eggs, 1970-78[1]

Year	Value of sales and consumption on farms where produced								
	Eggs		Broilers	Turkeys	Nonbroiler chicken		Total[2]		
	Sales	Consumption on farms			Sales	Consumption on farms	Sales	Consumption on farms	Gross income
	Million dollars								
1970	2,190	30	1,475	498	102	6	4,265	37	4,302
1971	1,801	20	1,487	500	99	5	3,881	25	3,906
1972	1,764	17	1,623	537	101	5	4,024	22	4,046
1973	2,859	27	2,690	936	169	8	6,655	34	6,689
1974	2,884	25	2,436	683	116	5	6,120	30	6,151
1975	2,797	22	2,915	793	104	5	6,609	28	6,637
1976	3,110	24	2,953	825	135	6	7,024	30	7,053
1977	2,973	21	3,067	910	130	6	7,080	27	7,107
1978[3]	2,899	19	3,691	1,163	129	5	7,882	25	7,907

[1] Beginning in 1970 data (except turkey) correspond to a December-November marketing year. [2] Minus other poultry which is minuscule. [3] Preliminary.

Table 17—Chicken and Turkey: Production, disposition and price, 1970-78

Year	Broilers[1]			Nonbroiler chicken[1]					Turkey		
	Produced[2]		Price per pound	Sales		Consumed on farms		Price per pound	Sales[2]		Price per pound
	Number	Pounds		Number	Pounds	Number	Pounds		Number	Pounds	
	Million		*Cents*	*Million*				*Cents*	*Million*		*Cents*
1970	2,987	10,819	13.6	233	1,121	19	73	9.1	116	2,198	22.6
1971	2,945	10,818	13.8	252	1,193	18	68	7.8	120	2,256	22.1
1972	3,075	11,480	14.1	235	1,129	16	62	8.9	129	2,424	22.2
1973	3,009	11,220	24.0	232	1,122	15	56	15.1	132	2,452	38.2
1974	2,993	11,320	21.5	252	1,203	14	55	9.7	132	2,437	28.0
1975	2,950	11,096	26.3	224	1,047	13	51	9.9	124	2,277	34.8
1976	3,283	12,517	23.6	217	1,047	13	49	12.9	140	2,605	31.7
1977	3,400	12,993	23.6	224	1,077	12	47	12.0	136	2,562	35.5
1978[3]	3,619	14,052	26.3	218	1,039	11	44	12.4	140	2,669	43.6

[1] Beginning 1970 broiler and nonbroiler data reported as December-November marketing year. [2] Includes home consumption which is less than 1 percent of total production. [3] Preliminary. [4] Marketing year average.

Table 18—Eggs: Production, disposition and value, 1970-78[1] [2]

Year	Average number of layers on hand during the year	Eggs					
		Produced		Consumed on farms where produced	Sold	Price per dozen	Gross Income
		Per layer on hand during year	Total				
	Millions	*Number*	*Millions*			*Cents*	*Million dollars*
1970	313	218	68,212	953	67,259	39.1	2,221
1971	313	223	69,649	789	68,860	31.4	1,821
1972	305	227	69,219	692	68,527	30.9	1,781
1973	291	227	66,039	627	65,412	52.5	2,886
1974	285	230	65,620	580	65,040	53.2	2,910
1975	278	232	64,626	536	64,090	52.4	2,819
1976	274	235	64,511	502	64,009	58.3	3,133
1977	275	235	64,600	475	64,125	55.6	2,995
1978[3]	281	238	67,034	457	66,577	52.2	2,918

[1] Data cover both farm and commercial operations. [2] 1970-78 are for December 1 previous year-November 30 following year. [3] Preliminary.

Table 19—Per capita consumption of shell eggs and total eggs, by quarters, 1960-78

Item and year	First quarter	Second quarter	Third quarter	Fourth quarter	Total
			Number		
			Shell eggs		
1960	76.1	70.8	69.9	74.3	291.1
1961	73.2	69.6	70.2	74.7	287.7
1961	74.8	70.3	69.5	74.6	289.2
1963	73.0	69.6	70.0	73.6	286.2
1964	73.9	69.3	70.2	73.5	286.9
1965	71.9	70.2	69.8	72.5	284.4
1966	71.1	68.7	69.3	73.3	282.4
1967	71.7	69.2	70.7	74.1	285.7
1968	73.7	69.8	69.1	71.2	283.8
1969	71.0	69.0	69.1	70.2	279.3
1970	69.1	67.5	68.2	71.4	276.2
1971	70.0	68.3	67.2	69.6	275.1
1972	70.2	65.9	65.7	66.8	268.6
1973	66.3	65.1	62.7	65.4	259.5
1974	64.3	62.1	61.7	64.2	252.3
1975	63.7	60.5	60.8	63.4	248.4
1976	61.7	59.3	59.4	60.6	241.0
1977	58.9	56.7	57.2	62.3	235.1
1978[2]	60.4	59.0	59.4	63.3	242.1
			Total eggs[1]		
1960	84.1	79.3	77.1	80.0	320.5
1961	80.8	79.6	76.9	80.8	318.1
1962	81.8	80.4	76.8	80.5	319.5
1963	78.9	78.8	76.8	79.3	313.8
1964	80.8	79.4	77.3	80.3	317.8
1965	79.7	78.8	76.3	78.3	313.1
1966	77.7	77.9	76.1	80.6	312.3
1967	80.3	79.4	79.3	81.7	320.7
1968	81.6	78.8	77.1	78.0	315.5
1969	77.3	78.2	77.1	77.7	310.3
1970	76.4	76.9	76.7	79.4	309.4
1971	78.4	77.5	76.5	79.3	311.7
1972	79.2	75.9	75.0	74.3	304.4
1973	73.8	73.7	70.7	73.2	291.4
1974	72.3	71.4	70.6	71.9	286.2
1975	69.3	69.9	69.5	70.9	279.6
1976	69.1	67.7	68.2	69.0	274.0
1977	67.0	66.7	66.9	71.1	271.7
1978	68.2	68.6	68.8	71.7	277.3

[1] Shell eggs and shell equivalent of all eggs. [2] Preliminary.

Table 20—Supply and utilization: Young chicken, other chickens, and turkeys, 1970-78[1]

Year	Production	Beginning stocks	Total supply	End stocks	Exports and shipments	Military	Civilian disappearance	Per capita
	Million pounds							*Pounds*
				Young chicken				
1970	7,687	34	7,721	52	178	58	7,433	36.9
1971	7,724	52	7,776	40	197	56	7,483	36.7
1972	8,147	40	8,187	29	198	40	7,920	38.4
1973	8,025	29	8,054	33	193	38	7,790	37.4
1974	8,126	33	8,159	37	222	32	7,868	37.5
1975	8,127	37	8,164	22	254	35	7,853	37.2
1976	9,067	22	9,089	33	414	32	8,610	40.4
1977	9,418	33	9,451	29	442	22	8,958	41.7
1978[2]	10,151	29	10,180	20	457	29	9,674	44.7
				Other chicken				
1970	778	76	854	111	4	11	728	3.6
1971	792	111	903	109	5	19	770	3.8
1972	740	109	849	82	8	12	747	3.6
1973	736	82	818	113	10	9	686	3.3
1974	789	113	902	138	13	2	749	3.6
1975	696	138	834	92	19	4	719	3.4
1976	684	92	776	122	37	1	616	2.9
1977	700	122	822	109	40	4	669	3.1
1978[2]	666	109	775	82	48	3	642	3.0
				Turkey				
1970	1,729	192	1,921	219	43	49	1,610	8.0
1971	1,772	219	1,991	223	27	41	1,700	8.3
1972	1,909	223	2,132	208	42	42	1,840	8.9
1973	1,933	208	2,141	281	54	31	1,775	8.5
1974	1,921	281	2,202	275	43	14	1,870	8.9
1975	1,803	275	2,078	195	53	19	1,811	8.6
1976	2,059	195	2,254	203	71	18	1,962	9.2
1977	2,023	203	2,226	168	56	11	1,991	9.3
1978[2]	2,111	168	2,279	175	57	15	2,032	9.4

[1] Ready-to-cook weight. [2] Preliminary.

Table 21—Per capita consumption of chicken and turkey by quarters, 1970-78

Item and year	First quarter	Second quarter	Third quarter	Fourth quarter	Total[1]
			Pounds		
Young chickens:					
1970	8.7	9.8	9.7	8.7	36.9
1971	8.7	9.3	9.7	9.0	36.7
1972	9.2	10.1	9.9	9.2	38.4
1973	8.9	9.6	9.5	9.4	37.4
1974	9.3	10.0	9.7	8.5	37.5
1975	8.6	9.6	9.7	9.3	37.2
1976	9.7	10.4	10.6	9.7	40.4
1977	9.8	10.8	10.9	10.2	41.7
1978[1]	10.5	11.6	11.6	11.0	44.7
Other chicken:					
1970	.9	.9	.8	1.0	3.6
1971	1.1	.9	.8	1.0	3.8
1972	1.1	.9	.7	.9	3.6
1973	1.0	.9	.7	.7	3.3
1974	1.0	.9	.8	.9	3.6
1975	1.0	.8	.8	.8	3.4
1976	.9	.7	.6	.7	2.9
1977	.9	.8	.6	.8	3.1
1978[1]	.9	.8	.6	.7	3.0
Turkey:					
1970	.9	.9	2.1	4.1	8.0
1971	1.0	1.2	2.0	4.1	8.3
1972	1.1	1.3	2.1	4.4	8.9
1973	1.2	1.3	2.1	3.9	8.5
1974	1.2	1.6	2.0	4.1	8.9
1975	1.1	1.4	2.0	4.1	8.6
1976	1.2	1.5	2.1	4.4	9.2
1977	1.3	1.5	2.3	4.2	9.3
1978[1]	1.3	1.7	2.2	4.1	9.4
Total:					
1970	10.5	11.6	12.6	13.8	48.5
1971	10.8	11.4	12.5	14.1	48.8
1972	11.4	12.3	12.7	14.5	50.9
1973	11.1	11.8	12.3	14.0	49.2
1974	11.5	12.5	12.5	13.5	50.0
1975	10.7	11.8	12.5	14.2	49.2
1976	11.8	12.6	13.3	14.8	52.5
1977	12.0	13.1	13.8	15.2	54.1
1978[1]	12.7	14.1	14.4	15.8	57.1

[1] Preliminary.

Table 22—Per capita consumption of red meat by quarters, 1970-78

Item and year	First quarter	Second quarter	Third quarter	Fourth quarter	Total[1]
	Pounds	*Pounds*	*Pounds*	*Pounds*	*Pounds*
Beef and Veal:					
1970	29.1	28.6	29.7	29.2	116.6
1971	28.4	28.7	30.0	28.6	115.7
1972	28.8	29.4	29.9	30.2	118.3
1973	28.5	26.6	27.2	29.1	111.4
1974	28.8	29.2	30.0	31.1	119.1
1975	31.2	29.3	31.4	32.4	124.3
1976	33.8	32.1	34.5	32.9	133.3
1977	32.7	31.8	33.0	32.3	129.8
1978	31.3	30.5	30.4	30.9	123.1
Pork:					
1970	16.9	17.0	17.8	21.0	72.7
1971	20.0	19.3	19.4	20.3	79.0
1972	18.8	17.8	16.6	18.1	71.3
1973	16.6	16.2	14.4	16.7	63.9
1974	17.2	17.8	16.8	17.3	69.1
1975	15.5	14.4	12.5	13.7	56.1
1976	14.4	13.5	14.4	17.2	59.5
1977	15.6	14.9	14.7	16.3	61.5
1978	15.2	15.0	15.0	16.2	61.4
Lamb and Mutton:					
1970	0.9	0.9	0.8	0.7	3.3
1971	0.8	0.8	0.8	0.7	3.1
1972	0.8	0.9	0.9	0.7	3.3
1973	0.7	0.7	0.7	0.6	2.7
1974	0.6	0.6	0.6	0.5	2.3
1975	0.5	0.5	0.5	0.5	2.0
1976	0.5	0.4	0.5	0.5	1.9
1977	0.5	0.4	0.4	0.4	1.7
1978	0.4	0.4	0.4	0.4	1.6
All red Meat:					
1970	46.9	46.5	48.3	50.9	202.6
1971	49.2	48.8	50.2	49.6	197.8
1972	48.4	48.1	47.4	49.0	192.9
1973	45.8	43.5	42.3	46.4	178.0
1974	46.6	47.6	47.4	48.9	190.5
1975	47.2	44.2	44.4	46.6	182.4
1976	48.7	46.0	49.4	50.6	194.7
1977	48.8	47.1	48.1	49.0	193.0
1978	46.9	45.9	45.8	47.5	186.1

[1] Detail may not add exactly to total due to rounding.

Table 23—All eggs: Supply and utilization, 1960-78[1]

Year	Supply				Utilization					
							Domestic disappearance			
	Production	Imports[2]	Beginning stocks	Total supply	Ending stocks[2]	Exports and shipments	Eggs used for hatching	Military	Civilian	
									Total	Per capita
	Million dozen									*Number*
1960	5,134	2	65	5,201	51	42	287	63	4,758	320.5
1961	5,202	2	51	5,255	48	40	302	64	4,801	318.1
1962	5,297	1	48	5,346	50	32	305	70	4,889	319.5
1963	5,292	1	50	5,343	44	42	313	67	4,877	313.8
1964	5,435	2	44	5,481	46	31	320	76	5,008	317.8
1965	5,463	([3])	46	5,509	41	39	336	93	5,000	313.1
1966	5,517	14	41	5,572	28	43	365	102	5,034	312.3
1967	5,777	4	28	5,809	71	55	358	110	5,215	320.7
1968	5,680	5	71	5,756	56	46	361	108	5,185	315.5
1969	5,629	9	56	5,694	34	41	389	83	5,147	310.3
1970	5,704	27	34	5,765	39	45	402	78	5,201	309.4
1971	5,806	10	39	5,855	58	44	389	60	5,304	311.7
1972	5,742	1	58	5,801	53	56	391	64	5,237	304.4
1973	5.502	13	53	5,568	34	49	392	42	5,051	291.4
1974	5,461	13	34	5,508	42	57	366	38	5,005	286.2
1975	5,382	5	42	5,429	28	62	372	43	4,924	279.6
1976	5,377	3	28	5,408	21	65	409	45	4,868	274.0
1977	5,407	14	21	5,442	24	91	429	36	4,862	271.7
1978[4]	5,596	11	24	5,631	20	120	463	28	5,000	277.3

1Calendar years. [2] Shell eggs and the approximate shell-egg equivalent of egg product. [3] Less than 500,000 dozen. [4] Preliminary.

Table 24—Estimated costs and returns for market eggs[1]

Calendar quarters	Production costs all eggs		Wholesale, cartoned Grade A large eggs		Net returns[2 3 5]
	Feed[2]	Total[2]	Total costs[2 3]	14 metro areas price[2]	
	Cents per dozen				
Annual average[2]					
1972	17.3	28.9	43.3	40.5	-2.8
1973	29.2	41.7	58.1	64.3	6.2
1974	31.0	45.4	63.5	63.0	-0.4
1975	29.0	43.5	61.8	62.9	1.0
1976[4]	28.5	41.5	59.9	69.9	10.0
1977[4]	27.4	40.9	59.9	63.8	3.9
1978	27.2	40.9	60.1	62.2	2.1
1976[4]					
I	26.7	39.7	58.1	67.7	9.6
II	27.7	40.7	59.1	62.5	3.4
II	31.3	44.3	62.7	71.2	8.5
IV	28.3	41.3	59.7	77.9	18.2
1977[4]					
I	29.6	43.1	62.1	74.4	12.4
II	31.7	45.2	64.2	58.9	-5.2
III	25.4	38.9	57.9	62.7	4.8
IV	23.4	36.9	55.9	59.4	3.5
1978[4 5]					
I	25.9	39.6	58.8	61.9	3.2
II	28.8	42.5	61.7	55.0	6.7
III	27.4	41.1	60.3	63.4	3.1
IV	26.8	40.5	59.7	68.2	8.5
1979[5]					
I	28.2	41.9	61.3	73.0	11.7

[1] Estimated by computerized formula. [2] Weighted by monthly egg production less estimated eggs used for hatching. [3] Based on farm cost converted to wholesale market values for Grade A large eggs. [4] 1976-78 cost and net return estimates have been revised due to changes in the method of calculation. [5] Preliminary.

Table 25—Estimated costs and returns for broilers[1]

Calendar quarters	Production costs liveweight		Wholesale ready-to-cook		Net returns[2 3 5]
	Feed[2]	Total[2]	Total costs[2 3]	9-city weighted average price[2]	
	Cents per pound				
Annual average[2]					
1972	9.0	14.3	28.2	28.2	-0.1
1973	16.4	22.2	39.8	42.4	2.6
1974	15.8	22.0	40.1	38.0	-2.0
1975	15.1	21.3	39.4	45.2	5.8
1976[4]	14.9	21.1	39.4	40.2	0.9
1977[4]	15.4	21.7	40.5	40.9	0.4
1978[4]	14.7	21.0	39.8	44.6	4.8
1976[4]					
I	13.5	19.7	37.5	42.1	4.7
II	13.9	20.1	38.0	41.7	3.7
III	16.4	22.6	41.4	41.5	0.1
IV	15.7	21.9	40.5	35.5	-5.0
1977[4]					
I	15.7	22.0	40.8	40.9	0.1
II	17.6	23.9	43.5	42.4	-1.1
III	16.0	22.3	41.3	42.3	1.0
IV	12.1	18.4	36.0	37.6	1.6
1978[4 5]					
I	13.9	20.2	38.7	41.8	3.1
II	15.0	21.3	40.2	47.7	7.5
III	15.4	21.7	40.8	46.5	5.7
IV	14.4	20.7	39.4	42.1	2.7
1979[5]					
I	15.2	21.6	41.0	47.4	6.4

1Estimated by computerized formula. [2]Weighted by monthly broiler slaughter. [3]Based on farm cost converted to wholesale market values for ready-to-cook broilers. [4]1976-78 cost and net return estimates have been revised due to changes in the method of calculation. [5]Preliminary.

Table 26—Estimated costs and returns for turkeys[1]

Calendar quarters	Production costs liveweight		Wholesale ready-to-cook		Net returns[2 3 5]
	Feed[2]	Total[2]	Total costs[2 3]	3-city composite price[2 4]	
	Cents per pound				
Annual average[2]					
1972	13.5	20.5	34.1	35.8	1.7
1973	25.6	33.1	50.6	64.2	13.6
1974	22.5	30.7	48.8	45.6	-3.2
1975	22.1	30.7	49.4	55.1	5.8
1976[5]	22.4	31.4	50.9	51.0	0.1
1977[5]	22.6	31.6	51.4	56.2	4.9
1978[5]	21.5	30.5	50.2	68.8	18.7
1976[5]					
I	20.1	29.1	48.0	50.9	2.9
II	20.5	29.5	48.4	52.9	4.5
III	22.6	31.6	51.1	50.8	-0.2
IV	24.1	33.1	53.0	50.2	-2.7
1977[5]					
I	22.2	31.2	50.8	52.9	2.1
II	24.5	33.5	53.6	54.4	0.8
III	25.6	34.6	55.1	54.9	-0.2
IV	18.7	27.7	46.4	59.8	13.4
1978[5 6]					
I	19.2	28.2	47.4	61.5	14.1
II	21.3	30.3	50.0	64.5	14.5
III	22.8	31.8	51.8	68.7	16.9
IV	21.0	30.0	49.6	74.0	24.4
1979					
I	21.9	31.0	51.1	71.6	20.4

[1]Estimated by computerized formula. [2]Weighted by monthly turkey slaughter. [3]Based on farm cost converted to wholesale market values for heavy young turkeys. [4]Weighted average of 8-16 young hens and 24-26 pound young toms in New York, Chicago, and Los Angeles. [5]1976-78 cost and net return estimates have been revised due to changes in the method of calculation. [6]Preliminary.

Table 27—Average number of layers on hand during the year, 1970-78[1]

State and region	Average number of layers[1]							
	1971	1972	1973	1974	1975	1976	1977	1978
				Thousands				
Maine	6,062	6,083	6,326	6,632	6,841	7,258	7,266	7,597
New Hampshire	1,341	1,261	1,261	1,068	1,072	989	842	879
Vermont	419	545	646	563	496	482	488	490
Massachusetts	2,274	2,010	1,721	1,610	1,669	1,430	1,487	1,413
Rhode Island	317	250	224	254	258	221	207	221
Connecticut	3,491	3,741	3,641	3,179	3,020	3,390	3,665	3,784
New York	10,472	9,903	8,916	8,639	8,510	7,986	7,475	7,488
New Jersey	3,849	3,495	3,414	3,375	2,847	2,533	2,088	1,716
Pennsylvania	13,655	12,220	12,102	11,606	11,573	11,156	12,212	13,418
North Atlantic	41,880	39,508	38,251	36,926	36,286	35,445	35,730	37,006
Ohio	10,175	10,158	9,085	9,008	9,096	8,588	8,404	9,100
Indiana	13,171	13,575	13,479	13,158	13,438	12,979	13,363	14,417
Illinois	7,999	7,804	7,285	6,809	6,507	5,995	5,873	5,772
Michigan	6,549	6,621	6,613	6,108	6,320	6,488	6,471	6,395
Wisconsin	5,890	5,806	5,574	5,240	5,253	4,865	4,346	4,117
East North Central	43,784	43,964	42,306	40,323	40,614	38,915	38,457	39,801
Minnesota	10,498	10,917	10,482	10,030	9,348	9,390	8,875	9,021
Iowa	10,690	9,993	9,605	9,039	8,822	8,637	8,429	8,152
Missouri	6,621	6,661	6,024	4,998	5,203	4,973	4,941	5,338
North Dakota	846	760	721	683	603	538	454	409
South Dakota	4,046	3,673	3,551	3,439	3,155	2,840	2,611	2,551
Nebraska	4,113	3,762	3,669	3,487	3,678	3,412	3,386	3,472
Kansas	3,325	3,087	2,938	2,648	2,609	2,354	2,334	2,150
West North Central	40,139	38,853	36,990	34,324	33,418	32,144	31,030	31,093
Delaware	611	611	594	614	520	577	585	590
Maryland	1,506	1,478	1,467	1,478	1,464	1,431	1,375	1,359
Virginia	3,872	3,661	3,518	3,292	3,254	3,375	3,499	3,748
West Virginia	1,207	1,136	1,035	1,041	1,090	1,009	829	665
North Carolina	15,248	15,172	14,090	13,001	11,954	11,591	11,874	12,738
South Carolina	5,698	5,757	5,615	5,360	5,791	5,271	5,064	5,681
Georgia	25,245	24,754	24,769	25,046	22,897	23,066	23,195	23,813
Florida	12,283	12,075	11,760	11,778	11,799	12,041	12,633	12,305
South Atlantic	65,670	64,644	62,848	61,620	58,769	58,361	59,054	60,899
Kentucky	2,661	2,457	2,328	2,261	2,254	2,365	2,498	2,449
Tennessee	4,729	4,844	4,700	4,332	4,256	4,136	4,178	4,016
Alabama	12,826	12,532	12,743	12,904	12,538	12,263	13,434	13,794
Mississippi	10,768	10,239	8,789	8,269	7,260	7,297	7,345	7,084
Arkansas	16,375	16,519	15,977	15,394	15,021	15,789	16,130	16,696
Louisiana	3,381	3,282	3,051	3,002	2,864	2,831	2,636	2,609
Oklahoma	2,421	2,330	2,117	1,978	1,975	2,061	2,160	2,612
Texas	12,386	12,115	11,310	10,609	10,271	10,263	10,688	11,263
South Central	65,547	64,318	61,015	58,749	56,439	57,005	59,069	60,523
Montana	994	942	933	884	844	794	770	797
Idaho	849	737	856	822	797	833	837	911
Wyoming	149	144	131	121	120	118	109	88
Colorado	1,388	1,393	1,450	1,734	2,023	2,138	2,200	2,339
New Mexico	1,024	1,031	931	906	968	1,115	1,274	1,484
Arizona	977	778	743	714	669	662	642	527
Utah	1,289	1,326	1,346	1,369	1,381	1,310	1,468	1,680
Nevada	17	17	20	28	24	28	20	12
Washington	4,380	4,347	4,573	4,579	4,553	4,450	4,502	4,751
Oregon	2,239	2,337	2,314	2,282	2,219	2,295	2,238	2,344
California	41,553	39,201	35,147	38,276	37,940	37,557	36,469	35,767
West	54,859	52,253	48,444	51,715	51,538	51,300	50,529	50,700
Alaska	29	34	34	34	26	26	29	21
Hawaii	980	952	990	1,031	993	988	991	1,007
United States[1]	312,886	304,504	290,588	284,732	278,101	274,134	274,871	281,068

[1] Annual estimates cover the period December 1 previous year thru November 30. [2] Sum of States will not add to U.S. total due to rounding.

Table 28—Commercial broilers: Number produced, by States and regions, by years, 1970-78[1]

State and region	Commercial broilers produced[1]							
	1971	1972	1973	1974	1975	1976	1977	1978
	Thousands							
Maine	72,014	71,344	75,642	77,426	81,035	86,659	86,938	87,895
New Hampshire								
Vermont								
Massachusetts	725							
Rhode Island								
Connecticut	4,539	3,329	2,730	1,836	1,039	1,041	1,083	0
New York	2,000	1,730	1,650	1,580	1,450	700	0	
New Jersey	650	650	625	0	0			
Pennsylvania	60,209	59,368	61,263	63,649	65,770	75,108	88,140	99,300
North Atlantic	140,137	136,421	141,910	144,491	149,294	163,508	176,161	187,195
Ohio	9,071	12,700	14,000	11,900	16,666	17,499	19,400	23,000
Indiana	9,603	13,201	13,583	11,679	12,295	13,905	13,624	14,409
Illinois								
Michigan	1,085	566	557	577	510	756	910	1,190
Wisconsin	14,950	13,130	14,795	11,274	11,067	12,285	10,907	10,912
East North Central	34,709	39,597	42,935	35,430	40,538	44,445	44,841	49,511
Minnesota	10,930	11,039	11,149	10,815	10,092	15,200	14,200	15,100
Iowa	2,439	2,992	3,889	3,615	3,250	3,835	3,494	3,425
Missouri	24,638	23,354	21,533	19,796	23,369	25,256	24,054	22,164
North Dakota								
South Dakota								
Nebraska	1,412	1,738	2,267	2,312	1,720	1,820	1,680	1,530
Kansas	706	613	703	780	627			
West North Central	40,125	39,731	39,541	37,318	39,058	46,111	43,428	42,219
Delaware	125,833	131,873	140,967	146,945	136,278	160,046	156,081	166,986
Maryland	180,837	177,247	190,673	189,709	179,769	199,008	198,509	220,882
Virginia	71,258	77,238	77,168	77,220	77,751	88,921	98,024	91,562
West Virginia	16,169	15,951	17,301	18,293	15,798	15,129	16,256	16,197
North Carolina	289,926	301,772	290,448	286,558	283,986	315,589	339,271	353,480
South Carolina	28,189	28,263	28,853	31,552	27,405	33,404	34,481	39,045
Georgia	431,307	442,937	412,986	426,857	416,599	451,531	485,879	531,889
Florida	48,606	56,655	56,833	59,727	64,347	74,307	75,727	81,685
South Atlantic	1,192,125	1,231,936	1,215,229	1,236,861	1,201,933	1,337,935	1,404,228	1,501,726
Kentucky	7,481	7,257	7,239	6,885	5,870	6,716	3,600	3,303
Tennessee	49,311	54,962	52,342	42,586	32,000	38,310	48,884	45,159
Alabama	384,347	399,274	399,324	398,303	395,769	430,225	428,099	441,699
Mississippi	247,822	256,264	239,130	227,220	231,301	257,442	255,846	269,373
Arkansas	476,143	532,135	501,845	482,875	481,886	540,428	569,558	612,102
Louisiana	53,934	55,769	55,509	54,443	50,662	57,578	63,634	75,736
Oklahoma	19,250	21,500	23,650	29,560	28,770	31,425	29,294	35,338
Texas	171,732	178,511	173,330	173,588	166,169	190,703	185,322	198,353
South Central	1,410,020	1,505,672	1,452,369	1,415,460	1,392,427	1,552,827	1,584,237	1,681,063
Montana								
Idaho								
Wyoming								
Colorado								
New Mexico								
Arizona								
Utah	0							
Nevada								
Washington	14,931	16,396	17,575	16,730	15,235	15,876	16,846	17,252
Oregon	22,300	17,100	14,000	14,253	14,000	15,150	15,600	15,500
California	89,233	86,022	83,193	90,377	95,825	104,950	112,500	122,400
West	126,464	119,518	114,768	121,360	125,060	135,976	144,946	155,152
Alaska								
Hawaii	1,794	2,046	1,915	1,900	1,789	2,039	2,158	2,281
United States[2]	2,945,374	3,074,921	3,008,667	2,992,820	2,950,099	3,282,841	3,399,999	3,619,147

[1] Includes production of other meat-type breeds. [2] Excludes states producing less than 500,000.

Table 29—Turkeys: Number raised, by states, regions and United States, 1970-78[1]

State and region	All breeds								
	1970	1971	1972	1973	1974	1975	1976	1977	1978
	1,000 head								
Maine	46	5	4	7	7	6	4	4	6
New Hampshire	24	24	21	25	28	21	26	25	23
Vermont	15	13	7	14	12	7	7	8	13
Massachusetts	224	192	170	173	172	125	143	125	146
Rhode Island	12	14	13	10	11	9	10	10	10
Connecticut	100	80	80	69	51	36	33	33	41
New York	306	264	195	184	182	155	150	138	155
New Jersey	109	105	91	75	84	74	81	58	58
Pennsylvania	2,266	2,755	2,926	2,832	2,951	2,838	3,695	3,567	3,450
North Atlantic	3,102	3,452	3,507	3,389	3,498	3,271	4,149	3,968	3,902
Ohio	4,232	4,425	3,764	3,186	3,459	2,835	2,760	2,450	2,565
Indiana	4,970	4,750	6,060	5,440	6,412	5,043	5,188	4,186	4,655
Illinois	832	784	674	593	520	445	441	638	434
Michigan	1,050	1,001	1,089	1,088	971	700	1,170	1,210	1,210
Wisconsin	3,489	3,498	4,009	4,229	4,622	4,894	5,078	5,544	5,706
East North Central	14,573	14,458	15,546	14,536	15,984	13,917	14,637	14,028	14,570
Minnesota	18,266	18,420	20,880	23,323	21,934	22,752	24,370	22,739	22,238
Iowa	6,109	6,366	7,156	7,506	6,734	6,260	6,512	6,009	6,259
Missouri	7,967	8,683	10,000	10,295	9,497	8,125	9,725	9,846	10,500
North Dakota	915	855	1,005	1,034	692	808	960	798	871
South Dakota	1,121	1,147	1,142	1,156	895	860	1,005	1,112	979
Nebraska	652	811	933	858	600	500	473	471	490
Kansas	326	307	285	210	165	154	108	113	129
West North Central	35,356	36,589	41,401	44,382	40,517	39,459	43,153	41,088	41,466
Delaware	200	220							
Maryland	80	65	88	68	65	72	90	91	91
Virginia	4,535	5,080	5,519	5,210	6,010	5,972	7,297	8,694	8,546
West Virginia	750	1,145	1,410	1,380	1,630	1,530	1,793	2,065	2,105
North Carolina	9,579	10,168	12,035	13,078	14,944	14,400	16,700	16,500	18,854
South Carolina	2,718	2,174	2,217	2,300	2,570	2,585	2,618	2,410	2,527
Georgia	2,283	2,238	1,806	1,936	1,712	1,216	1,853	1,633	1,799
Florida									
South Atlantic	20,145	21,090	23,075	23,972	26,931	25,775	30,351	31,393	33,922
Kentucky	82	30	22						
Tennessee	10	10	10	17	10	4	4	3	3
Alabama	23	23	28	29	18	17			
Mississippi	25	27	35						
Arkansas	7,258	7,840	8,165	7,707	7,673	7,100	10,138	10,800	12,500
Louisiana	3	2	2	2	2	2	2		
Oklahoma	1,646	1,770	1,795	1,975	1,600	1,370	1,800	1,300	1,450
Texas	8,350	8,378	7,851	8,881	8,780	8,845	9,300	8,600	7,300
South Central	17,397	18,080	17,908	18,611	18,083	17,338	21,244	20,703	21,253
Montana									
Idaho									
Wyoming									
Colorado	2,856	2,821	3,477	3,553	3,501	3,620	3,695	3,500	3,580
New Mexico									
Arizona	3,946	3,828	3,905	4,061	3,471	3,446	3,440	2,664	2,794
Utah									
Nevada									
Washington	615	593	457	451	416	225			
Oregon	2,178	1,750	1,400	1,400	1,225	1,075	1,300	1,350	1,275
California	15,585	16,801	17,636	17,548	17,888	15,771	17,514	17,365	16,780
West	25,180	25,793	26,875	27,013	26,501	24,137	25,949	24,879	24,429
Other States[2]	386	195	302	328	395	268	478	300	258
48 States	116,139	119,657	128,664	132,231	131,909	124,165	139,961	136,359	139,800
United States	116,139	119,657	128,664	132,231	131,909	124,165	139,961	136,359	139,800

[1] Does not include young turkeys lost; based on turkeys hatched September 1 of previous year through August 31, of the current year. [2] Combined to avoid disclosing individual operations.

Table 30—Prices and price spreads for eggs and frying chickens, by regions and 4-region average

Item	Grade A large eggs			U.S. Grade A fryers		
	January 1979	February 1979	March 1979	January 1979	February 1979	March 1979
	Cents per dozen			*Cents per pound*		
Northeast prices						
Farm price	58.7	54.5	58.9	36.2	38.9	38.2
Price to retailer	71.7	70.0	74.2	49.1	52.7	50.7
Retail price	99.0	94.4	95.3	69.0	71.0	72.5
Price spreads						
Farm to consumer	40.3	39.9	36.4	32.8	32.1	34.3
Farm to retailer	13.0	15.5	15.3	12.9	13.8	12.5
Retail	27.3	24.4	21.1	19.9	18.3	21.8
Midwest Prices						
Farm price	57.1	54.4	58.4	37.2	38.5	37.7
Price to retailer	70.5	69.0	72.4	50.5	52.1	52.9
Retail price	87.3	89.0	92.0	64.0	67.0	67.5
Price spreads						
Farm to consumer	30.2	34.6	33.6	26.8	28.5	29.8
Farm to retailer	13.4	14.6	14.0	13.3	13.6	15.2
Retail	16.8	20.0	19.6	13.5	14.9	14.6
Southern prices						
Farm price	55.0	47.2	53.1	37.3	38.9	37.9
Price to retailer	73.7	74.0	76.2	46.2	49.3	48.4
Retail price	83.3	84.4	88.9	69.5	69.5	75.5
Price spreads						
Farm to consumer	28.3	37.2	35.8	32.2	30.6	37.6
Farm to retailer	18.7	26.8	23.1	8.9	10.4	10.5
Retail	9.6	10.4	12.7	23.3	20.2	27.1
Western prices						
Farm price	56.9	55.8	61.3	38.8	41.1	38.9
Price to retailer	75.3	75.7	78.7	58.4	61.2	61.1
Retail price	83.4	84.0	85.5	68.5	70.5	70.5
Price spreads						
Farm to consumer	26.5	28.2	24.2	29.7	29.4	31.6
Farrm to retailer	18.4	19.9	17.4	19.6	20.1	22.2
Retail	8.1	8.3	6.8	10.1	9.3	9.4
4-Region average						
Farm price	56.9	53.0	57.9	37.4	39.4	38.2
Price to retailer	72.8	72.2	75.4	51.1	53.8	53.3
Retail price	88.3	88.0	90.4	67.8	69.5	71.5
Price spreads						
Fatm to consumer	31.4	35.0	32.5	30.4	30.1	33.3
Farm to retailer	15.9	19.2	17.5	13.7	14.4	15.1
Retail	15.5	15.8	15.0	16.7	15.7	18.2

EGG SUPPLY RESPONSE

By Lee P. Schrader and Rodney A. Engle[1]

ABSTRACT: Changes in the production of egg-type chicks serve as an indicator of producers' plans to increase or decrease egg production. The relationship of egg-type hatch to egg prices and feed costs in the preceding 3 months is explored using regression analysis and a simple comparison of egg prices during periods of increasing, stable, and decreasing hatch. Up to 88 percent of the month-to-month variations in egg-type chick hatch during the 1972-78 period is explained by changes in egg price, changes in corn price, and a set of monthly shifters.

KEYWORDS: Poultry, eggs, supply response.

Wide swings in prices and profits are characteristic of the egg production and marketing system. The combination of a time lag between the decision to expand or contract production and the actual change, the relative ease of expansion, and a very inelastic demand for eggs provides the conditions for an unstable performance. In most instances, the instability may be attributed to the tendency of producers to overadjust output both up and down. Instances in which consumer demand appears to have shifted substantially, and the achievement of effective control of Marek's Disease represent disturbances that do not fit the generalization.

In effect, the price of eggs is made by producers. Buyers will buy the product at as low a price as producers are willing to sell. It is important to note that it is producers' actions that determine the price, not what producers say the price should be. Egg prices will average no higher than the price at which producers are willing to expand production in the long run.

Accurate estimates of the probable response of producers to a given egg price-cost situation is important to participants in the egg system for two reasons. First, the prices at which producers begin to contract or expand production serve as estimates of the upper and lower bounds for long-run average price. And, second, such knowledge will aid in evaluating the timing of production level changes. Clearly, if projected costs for a particular firm exceed the price level at which others have begun expansion, that firm should consider other projects.

The objective of this analysis is to develop estimates of the egg supply-price relationship.

How do producers change the level of output and what motivates them to do so? In the very short run, a matter of weeks, production levels are changed only by cutting short or extending the lay period of existing flocks. Forced molting involves a short-run change in production; however, the very short-run impact is the opposite of its longer-run impact. That is, the impact of force molting a flock is to increase total production later on while the immediate impact is to decrease production. The major factors involved in a decision to send older flocks to immediate slaughter or to continue production are egg prices, feed costs, fowl prices, and the general level of performance of the flock in question. At the aggregate level, egg prices and feed costs appear to be the most important factors, with egg price the most important.

In a somewhat longer time frame, decisions involve the intensity of use of existing facilities. The primary decision variables are the level of hatch of egg-type chicks and the extent of forced molting planned. The major factors involved in these decisions are expected profitability which depends primarily on egg prices and feed costs.

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Again, egg prices appear to dominate.

In the long run, production response means the addition of or abandonment of production facilities. Here again, the primary factor determining decisions is expected profitability, which in the case of expansion must include costs of facilities and capital.

One would expect producers to increase the intensity of use of existing facilities at a price somewhat lower than necessary to induce the construction of new facilities. Data on construction of new capacity are not available and we are unable to distinguish the difference between these relationships. Generally, observation indicates that expansion of facilities tends to occur at approximately the same point that egg-type chick hatch is increased.

This analysis is focused primarily on the hatch of replacement pullets, a key variable in the egg price situation.

Producers have been shown to base expectations of future profitability of egg production on realized profitability in the relatively recent past. Accordingly, we used prices during the 3 months preceding the hatch month as an indicator of the price expectations held by producers. An estimated feed cost based on both corn and soybean meal prices proved to be less effective in explaining hatch than did corn alone. Correction of egg and corn prices for changes in the general price level also proved ineffective. Estimated returns to egg production and marketing instead of egg and corn price did not improve the relationship.

The estimated relationship between the monthly hatch of egg-type chicks to egg prices, feed costs, and monthly seasonal factors for the 1972-78 period using ordinary least squares regression follows. Standard errors of the coefficients are shown in parentheses.

$$\begin{aligned}
\text{HATCH} = {} & \underset{(1.045)}{38.033} - \underset{(.243)}{2.134}\ \text{CORNPR} + \underset{(.030)}{.266}\ \text{EGGPR} \\
& - \underset{(.011)}{.052}\ \text{TIME} \\
& - \underset{(.657)}{4.834}\ \text{JAN} - \underset{(.670)}{3.302}\ \text{FEB} + \underset{(.664)}{6.187}\ \text{MAR} \\
& + \underset{(.650)}{10.703}\ \text{APR} + \underset{(.646)}{10.921}\ \text{MAY} + \underset{(.658)}{3.635}\ \text{JUN} \\
& - \underset{(.680)}{1.015}\ \text{JUL} - \underset{(.674)}{1.393}\ \text{AUG} - \underset{(.654)}{3.212}\ \text{SEP} \\
& - \underset{(.647)}{2.904}\ \text{OCT} - \underset{(.648)}{6.842}\ \text{NOV} - 7.944\ \text{DEC}
\end{aligned}$$

R^2 = 942

Durbin Watson Statistic = 1.064

Number of observations = 84

Standard error of the estimate = 1.784

where:

HATCH = the hatch of egg-type chicks during a month, millions.

EGGPR = the average of spot quotations for fancy large eggs in New York during the 3 months preceding the hatch month, cents per dozen.

CORNPR = average price of No. 3 yellow corn at Chicago during the 3 months preceding the hatch month, dollars per cwt.

JAN-DEC = factors representing the seasonal pattern of hatch response to price, JAN - 1 if the month is January and 0 otherwise and so on.

TIME = trend variable, January 1972 = 25....December 1978 = 108.

Thus formulated, the model explains approximately 94 percent of the variation in hatch. The direction of influence is as expected, increasing with egg price and decreasing as feed costs increase; however, serial correlation of the residuals appears to present a problem.

The model was re-estimated using first differences of hatch and price with the following result. Variables are defined as above with the trend variable omitted.

$$\begin{aligned}
\text{HATCH} = {} & - \underset{(.202)}{.076} - \underset{(1.083)}{.770}\ \text{CORNPR} + \underset{(.101)}{.392}\ \text{EGGPR} \\
& + \underset{(.678)}{3.560}\ \text{JAN} + \underset{(.690)}{1.170}\ \text{FEB} + \underset{(.664)}{9.412}\ \text{MAR} \\
& + \underset{(.711)}{4.823}\ \text{APR} + \underset{(.743)}{.633}\ \text{MAY} - \underset{(.739)}{6.930}\ \text{JUN} \\
& - \underset{(.720)}{4.464}\ \text{JUL} - \underset{(.667)}{.672}\ \text{AUG} - \underset{(.733)}{2.393}\ \text{SEP} \\
& - \underset{(.763)}{.169}\ \text{OCT} - \underset{(.667)}{3.913}\ \text{NOV} - 1.057\ \text{DEC}
\end{aligned}$$

R^2 = .880

Durbin-Watson Statistic = 2.40

Number of observations = 84

Standard error of the estimate = 1.82

The correction for serial correlation increases the estimated impact of egg price but yields an estimated corn price coefficient which is not significantly different from zero.

The result indicates that the relationship may not be a simple linear relationship as specified above. The hatch is probably relatively responsive to price change in the area of the breakeven point. That is, as prices increase above a breakeven level the hatch would increase rapidly to a point. Beyond this point it would be clear to producers that prices in the future would be unlikely to average as high as current prices and the capacity of present facilities would be taxed. Likewise, at prices below some level it will again be clear that such a level cannot be maintained and there is a strong tendency to continue to use efficient facilities which are already in place.

The regression equation does indicate that during the period analyzed (1972 to 1978) the hatch would be unchanged at an average price of 58.08 cents per dozen.

A somewhat simpler analysis may be more appropriate in this case. Having established that the level of egg prices appears to be the most important variable, the analysis was continued using only egg prices. Seasonal adjustment factors were computed using a ratio to moving average method for the appropriately lagged 3-month average of egg prices. The seasonally adjusted monthly price averages were divided into three categories representing months of hatch increase of more than 2 percent, hatch between 98 and 102 percent of the previous year, and hatch at less than 98 percent of the previous year. Average prices during the periods of increasing, stable, and decreasing hatch were computed for the 1971-78 period and for the years 1977-78 separately. Results of that analysis are reported in table 1 below.

Table 1—Average of seasonally adjusted egg prices[1] during periods of deceasing, steady and increasing hatch

	Decrease	Steady	Increasing
	Cents per dozen		
1971-78	48.57	56.93	62.47
1977-78	57.94	62.00	68.14

[1] New York Fancy Large as reported by Urner Barry Company.

Interpretation of the results is complicated by the fact that prices have been increasing steadily during the period of the analysis. Nevertheless, the analysis provides some interesting information. In the 1977-78 period, producers were apparently willing to sustain a given level of production in the area of 62 cents per dozen. At prices as low as 58 cents, production potential was clearly being decreased. At prices of 68 cents per dozen, production was clearly being increased. One can infer that a price of 62 cents, or near that level, could be sustained on a long-term basis. With generally increasing price levels, one must adjust this price for increases in cost levels.

Table 33—Selected poultry and egg statistics*

Item	Data in—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Table 1.—Eggs: Production and disposition														
Number of layers:														
First of month														
1977	Mil.	280.0	276.8	275.0	273.8	270.2	268.4	266.2	268.5	274.3	279.4	282.6	286.6	
1978	Mil.	287.5	283.9	280.7	279.4	277.9	277.1	274.1	274.4	277.8	283.0	287.7	292.2	
1979	Mil.	290.4	291.3	289.3	287.2	283.4								
Average for month														
1977	Mil.	278.4	275.9	274.4	272.0	269.3	267.3	267.4	271.4	276.8	281.0	284.6	287.0	275.5
1978	Mil.	285.7	282.3	280.0	278.7	277.5	275.6	274.3	276.1	280.4	285.3	289.9	291.3	281.4
1979	Mil.	290.8	290.3	288.3	285.3									
Eggs per 100 layers:														
First of month														
1977	No.	63.5	62.7	64.6	65.7	65.7	65.4	64.5	63.6	64.0	64.0	64.4	65.1	
1978	No.	65.3	64.3	64.7	66.5	66.3	66.5	65.4	64.6	65.2	65.0	64.8	65.5	
1979	No.	65.5	64.6	65.0	66.6	66.2								
Average for month														
1977	No.	1,956	1,782	2,021	1,971	2,034	1,950	1,986	1,978	1,921	1,990	1,944	2,021	23,554
1978	No.	2,009	1,808	2,034	1,993	2,061	1,979	2,016	2,012	1,954	2,011	1,956	2,033	23,866
1979	No.	2,019	1,816	2,041	1,993									
Monthly egg production														
1977	Mil. doz.	453.9	409.7	462.2	446.8	456.5	434.4	442.5	447.4	443.2	466.0	461.2	483.4	5,407
1978	Mil. doz.	478.2	425.2	474.7	462.8	476.7	454.5	460.7	462.8	456.5	478.2	472.5	493.5	5,596
1979	Mil. doz.	489.2	439.3	490.3	473.8									
Eggs used for hatching														
1977	Mil. doz.	32.1	38.3	38.9	39.8	37.3	35.5	34.9	33.3	34.5	33.0	35.3	36.6	429
1978	Mil. doz.	33.8	39.2	40.2	43.0	40.6	38.8	38.5	36.0	37.4	36.3	38.8	40.3	463
1979	Mil. doz.	37.0	43.6	43.5										
Eggs broken commercially														
1977	Mil. doz.	43.9	45.6	56.3	57.0	65.0	70.1	61.3	64.2	58.8	54.8	56.0	53.2	686
1978	Mil. doz.	53.9	47.1	53.8	53.1	65.6	71.4	58.8	64.2	56.9	58.7	50.7	51.9	686
1979	Mil. doz.	54.8	47.3	53.1										
Cold Storage stocks:														
Frozen egg products														
1977	Mil. lbs.	26.1	26.9	24.9	24.6	25.3	28.0	31.4	35.1	35.4	33.7	33.4	31.2	
1978	Mil. lbs.	29.7	27.0	25.5	22.9	22.9	22.2	26.6	28.0	28.7	28.7	27.6	25.6	
1979	Mil. lbs.	25.3	25.6	24.5	21.1	21.8								
Shell eggs														
1977	Mil. doz.	.8	.8	1.2	1.2	1.3	1.0	1.2	1.2	1.4	1.5	1.6	1.5	
1978	Mil. doz.	1.2	1.0	.8	.8	1.1	.9	.8	.8	1.4	1.3	.7	1.1	
1979	Mil. doz.	1.1	.7	.5	.7	.6								
Shell equivalent all eggs[1]														
1977	Mil. doz.	20.7	21.2	20.2	19.9	20.5	22.2	25.0	27.8	28.3	27.1	26.9	25.2	
1978	Mil. doz.	23.7	21.5	20.2	18.1	18.5	17.7	21.0	22.0	23.2	23.1	21.7	20.5	
1979	Mil. doz.	20.3	20.1	19.1	16.7	17.1								
Exports:														
Shell eggs														
1977	Mil. doz.	2.5	2.1	3.6	2.9	3.6	4.2	4.4	4.3	5.1	5.2	5.3	4.9	48
1978	Mil. doz.	7.1	2.6	4.6	3.5	5.2	3.1	2.7	2.8	4.2	4.8	3.3	2.8	47
1979	Mil. doz.	2.7	2.5	2.7										
Shell equivalent all eggs[1]														
1977	Mil. doz.	3.1	2.5	4.4	3.9	5.7	6.1	6.4	6.4	7.6	6.5	6.7	7.5	67
1978	Mil. doz.	11.8	8.1	11.8	8.5	9.7	7.1	6.2	5.4	6.7	8.7	6.6	6.0	97
1979	Mil. doz.	5.5	6.0	6.2										
Per capita consumption:														
Shell eggs														
1977	No.	20.9	17.9	20.1	19.2	19.4	18.1	19.1	19.1	19.0	20.7	20.2	21.4	235
1978	No.	21.1	18.6	20.7	20.0	20.3	18.7	19.9	19.7	19.8	20.8	20.7	21.8	242
1979	No.	21.7	18.9	21.3										
All eggs[1]														
1977	No.	23.3	20.5	23.2	22.2	22.7	21.8	22.2	22.5	22.2	23.6	23.3	24.2	272
1978	No.	23.9	21.0	23.4	22.6	23.7	22.2	22.8	23.1	22.8	23.8	23.4	24.5	277
1979	No.	24.5	21.3	24.2										
Table 2.—Eggs: Prices for shell eggs and egg products														
Shell eggs (price per dozen):														
Received by farmers, U.S.[2 3]														
1977	Cents	66.1	65.5	58.9	55.4	49.2	47.3	50.9	51.6	52.3	47.8	51.2	53.3	54.2
1978	Cents	49.2	54.7	54.8	51.7	49.2	43.7	49.6	52.7	54.4	52.7	58.0	61.6	52.7
1979	Cents	60.3	60.1	64.3	60.2	56.7								
Midwest cities, large eggs, paid by first receivers[4]														
1977	Cents	78.5	75.4	67.0	62.6	55.1	54.6	61.6	60.9	61.7	55.6	57.8	62.7	62.8
1978	Cents	57.2	65.0	64.1	58.1	53.4	50.6	61.8	62.9	63.2	61.5	67.1	72.5	61.5
1979	Cents	71.8	69.9	73.6	69.9									

*See footnotes at end of table.

Table 33—Selected poultry and egg statistics*—Continued

Table 2.—Eggs: Prices for shell eggs and egg products—Continued

Item	Data in–	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Price to volume buyers, cartoned Grade A large[5]														
14-metro areas														
1977	Cents	78.98	76.61	67.99	63.28	56.09	57.52	63.07	62.67	62.49	56.33	58.44	63.34	63.90
1978	Cents	57.86	64.05	64.31	59.04	54.62	51.34	61.75	63.45	64.97	62.34	68.76	73.30	62.15
1979	Cents	72.79	70.17	75.66	71.42									
New York														
1977	Cents	81.04	76.25	67.39	61.38	55.05	57.00	62.35	61.35	60.81	56.05	56.57	64.05	63.27
1978	Cents	57.15	64.94	64.00	57.90	52.86	50.62	62.75	62.75	63.75	62.14	68.75	72.65	61.68
1979	Cents	72.50	68.00	75.14	69.57									
Chicago														
1977	Cents	78.74	75.55	67.50	62.45	55.69	57.00	62.75	59.33	59.29	53.68	55.05	61.52	62.38
1978	Cents	55.19	62.84	62.04	56.95	52.00	49.29	61.15	61.78	63.20	60.81	67.15	71.65	60.34
1979	Cents	71.27	67.68	73.50	68.71									
Los Angeles, Grade AA														
1977	Cents	78.29	76.47	70.13	67.29	61.05	64.00	66.50	69.00	68.30	60.68	65.10	65.62	67.70
1978	Cents	60.14	62.74	66.43	61.00	60.41	53.40	62.10	64.11	66.90	64.10	71.15	76.10	64.05
1979	Cents	75.91	75.47	80.14	77.43									
Egg products (price per lb.):														
Frozen, New York—Philadelphia[6]														
Whole, light colored														
1977	Cents	50.47	48.28	45.46	41.61	41.11	39.53	38.56	37.19	37.08	36.14	37.50	35.03	40.66
1978	Cents	33.12	34.29	35.89	37.50	37.91	36.50	37.79	40.33	40.72	41.34	46.31	47.19	39.07
1979	Cents	43.25	41.36	42.94	42.56									
Whites														
1977	Cents	32.31	32.16	31.03	30.19	30.69	29.75	28.76	27.17	26.47	25.39	25.97	25.06	28.75
1978	Cents	24.50	25.57	27.00	28.34	29.47	27.41	28.29	30.28	31.38	32.00	35.53	36.31	29.67
1979	Cents	35.03	34.00	34.39	34.66									
Yolks, sugared														
1977	Cents	79.20	76.62	71.78	65.50	64.11	63.00	63.19	62.50	63.03	61.75	62.53	59.31	66.04
1978	Cents	55.16	54.96	54.83	55.59	55.75	54.03	54.86	57.50	59.56	60.38	65.50	66.44	57.88
1979	Cents	62.06	60.57	62.78	63.62									
Dried, New York														
Whole														
1977	Dollars	2.04	2.00	(7)	1.64	1.65	1.63	1.62	1.55	1.52	1.46	1.51	1.43	(7)
1978	Dollars	1.37	1.38	1.44	1.50	1.53	1.47	1.51	1.61	1.63	1.62	1.73	1.80	1.55
1979	Dollars	1.71	1.68	1.68	1.71									
Yolks														
1977	Dollars	2.05	1.98	1.80	1.58	1.60	1.61	1.58	1.54	1.52	1.46	1.50	1.42	1.64
1978	Dollars	1.33	1.37	1.44	1.45	1.45	1.40	1.43	1.50	1.54	1.54	1.61	1.62	1.47
1979	Dollars	1.52	1.49	1.49	1.54									
Albumen, spray dried														
1977	Dollars	2.66	2.61	2.55	2.48	2.47	2.43	2.38	2.27	2.21	2.08	2.01	1.96	2.34
1978	Dollars	1.88	1.91	2.08	2.33	2.37	2.31	2.34	2.48	2.55	2.61	2.71	2.83	2.37
1979	Dollars	2.77	2.69	2.70	2.73									

Table 3.—Poultry: Slaughter in federally inspected plants

Item	Data in–	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Young chicken:														
Number inspected														
1977	Mil.	255.8	241.5	284.9	268.6	292.0	308.6	277.3	318.6	288.5	273.4	258.6	266.2	3,334
1978	Mil.	276.5	257.5	297.3	271.6	319.9	317.6	293.1	335.5	293.4	309.8	274.5	269.6	3,516
1979	Mil.	317.3	268.6	321.4										
Liveweight pounds														
1977	Mil. lbs.	989	913	1,083	1,028	1,115	1,162	1,029	1,199	1,111	1,068	997	1,045	12,741
1978	Mil. lbs.	1,084	993	1,149	1,066	1,245	1,209	1,107	1,287	1,147	1.233	1,075	1,063	13,656
1979	Mil. lbs.	1,247	1,041	1,253										
Certified ready-to-cook														
1977	Mil. lbs.	713.8	659.2	783.2	744.9	809.9	843.7	745.5	870.4	808.2	775.5	719.8	753.2	9,227
1978	Mil. lbs.	781.4	715.7	830.0	769.1	902.6	874.9	801.7	930.8	834.0	896.4	779.1	767.3	9,883
1979	Mil. lbs.	897.3	749.1	905.0										
Cut-up, ready-to-cook weight														
1977	Mil. lbs.	246.8	247.0	304.9	282.9	304.6	315.6	270.1	355.0	307.9	296.6	288.4	301.6	3,522
1978	Mil. lbs.	309.4	273.6	326.3	294.0	326.6	320.2	293.1	341.2	310.4	335.0	310.4	296.9	3,717
1979	Mil. lbs.	335.5	288.6	355.1										
Further processed, RTC weight														
1977	Mil. lbs.	50.5	52.9	66.5	58.3	53.1	67.8	59.8	65.8	60.3	60.4	61.0	59.9	716
1978	Mil. lbs.	92.4	58.6	66.5	62.2	72.9	78.3	70.1	78.3	69.6	77.0	64.0	70.3	830
1979	Mil. lbs.	79.7	72.1	90.0										

*See footnotes at end of table.

Table 33—Selected poultry and egg statistics*—Continued

Table 3.—Poultry: Slaughtered in federally inspected plants—Continued

Item	Data in—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Mature chicken:														
Number inspected														
1977	Mil.	16.6	16.7	19.5	18.8	16.6	18.0	11.6	14.0	15.5	15.0	14.0	16.5	193
1978	Mil.	18.1	17.6	20.1	14.9	15.7	18.2	13.2	13.5	14.1	16.4	13.7	15.3	191
1979	Mil.	18.3	16.0	18.9										
Liveweight pounds														
1977	Mil. lbs.	70.1	69.0	83.5	79.6	71.9	78.1	49.1	60.4	68.6	65.5	61.1	70.6	828
1978	Mil. lbs.	74.6	73.0	83.5	64.3	68.3	77.8	57.8	60.8	62.7	72.1	60.9	66.1	822
1979	Mil. lbs.	78.2	68.4	82.0										
Certified ready-to-cook														
1977	Mil. lbs.	43.6	42.6	51.5	48.6	44.3	48.3	30.4	37.5	42.6	40.7	38.0	44.0	512
1978	Mil. lbs.	46.0	45.2	51.5	39.7	42.3	47.6	35.9	38.1	39.3	44.5	38.0	40.8	509
1979	Mil. lbs.	47.9	42.0	50.8										
Cut-up, ready-to-cook weight														
1977	Mil. lbs.	.7	.8	1.0	1.3	.8	.8	.7	.9	1.1	.8	.7	.9	10
1978	Mil. lbs.	.9	.4	.7	2.2	.9	.9	.6	1.1	.7	1.7	.7	.2	11
1979	Mil. lbs.	.7	.3	.6										
Further processed, RTC weight														
1977	Mil. lbs.	37.8	38.5	43.1	39.5	35.9	33.1	22.4	35.7	32.4	34.8	31.4	33.4	418
1978	Mil. lbs.	38.5	38.5	39.9	36.5	40.8	39.1	23.2	40.5	36.3	46.2	39.2	34.7	453
1979	Mil. lbs.	44.8	40.8	46.0										
Turkeys:														
Fryers—Roasters														
Number inspected														
1977	Mil.	.4	.8	1.1	.7	.8	1.0	.9	.9	.8	.7	.8	.5	9
1978	Mil.	.5	.5	.6	.4	.6	.7	.6	.8	.6	.5	.7	.4	.7
1979	Mil.	.6	.6	.6										
Liveweight pounds														
1977	Mil. lbs.	4.0	7.2	9.8	6.4	7.3	9.6	8.2	8.0	7.4	7.0	7.9	4.3	87
1978	Mil. lbs.	4.7	4.9	5.0	3.6	5.9	6.8	5.3	7.5	5.4	4.7	7.1	3.3	64
1979	Mil. lbs.	5.8	5.4	5.4										
Certified ready-to-cook														
1977	Mil. lbs.	3.2	5.8	7.8	5.1	5.8	7.6	6.5	6.3	5.8	5.5	6.2	3.4	69
1978	Mil. lbs.	3.7	3.9	4.0	2.9	4.7	5.3	4.2	5.9	4.2	3.7	5.5	2.5	51
1979	Mil. lbs.	4.5	4.2	4.3										
Young turkey														
Number inspected														
1977	Mil.	4.0	3.4	5.0	5.1	7.2	11.2	12.2	15.7	15.3	15.2	14.8	8.8	118
1978	Mil.	4.5	3.6	5.5	5.4	8.5	12.1	12.8	15.8	14.8	16.5	15.0	9.4	124
1979	Mil.	5.6	4.7	6.2										
Liveweight pounds														
1977	Mil. lbs.	84.8	66.2	90.7	92.9	130.6	208.8	227.1	297.9	291.6	308.9	303.0	183.3	2,286
1978	Mil. lbs.	98.8	70.3	103.3	97.4	155.4	228.1	241.3	303.0	284.9	335.4	305.8	195.0	2,419
1979	Mil. lbs.	120.9	91.8	113.4										
Certified ready-to-cook														
1977	Mil. lbs.	66.1	51.9	71.0	73.1	103.3	165.4	180.2	236.7	231.2	244.5	240.3	144.7	1,808
1978	Mil. lbs.	77.6	55.3	81.5	77.4	122.7	181.0	192.4	240.7	225.5	266.6	242.6	153.6	1,917
1979	Mil. lbs.	94.1	72.4	89.9										
Total turkey[8]														
Number inspected														
1977	Mil.	4.5	4.3	6.1	5.8	8.0	12.5	13.3	16.7	16.2	15.9	15.7	9.3	128
1978	Mil.	5.0	4.2	6.1	5.8	9.3	13.0	13.6	16.8	15.5	17.1	15.7	9.8	132
1979	Mil.	6.3	5.3	6.8										
Liveweight pounds														
1977	Mil. lbs.	90.5	74.8	102.4	100.2	139.1	228.8	239.1	307.6	300.6	316.2	311.3	187.9	2,392
1978	Mil. lbs.	104.1	75.7	109.4	101.7	163.7	238.9	250.8	313.5	291.9	341.2	313.9	198.6	2,503
1979	Mil. lbs.	127.8	87.9	119.8										
Certified ready-to-cook														
1977	Mil. lbs.	70.5	58.7	80.3	78.9	110.0	176.5	189.6	244.4	238.2	250.3	246.8	148.2	1,892
1978	Mil. lbs.	81.8	59.7	86.3	80.8	129.3	189.5	199.9	248.8	230.9	271.2	248.9	156.3	1,983
1979	Mil. lbs.	99.3	77.2	95.0										
Cut-up, ready-to-cook weight														
1977	Mil. lbs.	29.0	27.6	32.5	27.7	28.6	39.0	37.2	46.7	41.9	40.0	41.0	35.1	426
1978	Mil. lbs.	32.8	30.4	35.8	32.4	40.8	37.3	39.0	48.0	44.6	45.4	42.8	36.7	466
1979	Mil. lbs.	41.7	34.4	40.5										
Further processed, RTC weight														
Whole bird[9]														
1977	Mil. lbs.	6 9	7.9	12.4	16.5	24.0	38.2	51.6	66.8	75.5	75.2	56.6	27.6	459
1978	Mil. lbs.	11.1	9.4	10.4	9.9	24.3	43.3	59.2	72.2	78.0	86.0	72.0	25.2	501
1979	Mil. lbs.	15.8	13.9	20.7										
Other														
1977	Mil. lbs.	43.3	42.9	56.8	44.1	50.8	62.4	59.2	67.3	65.8	67.9	61.4	43.5	665
1978	Mil. lbs.	45.2	44.2	53.4	42.5	53.2	62.1	59.8	81.4	71.4	76.5	72.4	48.3	710
1979	Mil. lbs.	50.9	50.9	58.1										

*See footnotes at end of table.

Table 33—Selected poultry and egg statistics*—Continued

Table 4.—Total poultry slaughter and commercial red meat production

Item	Data in—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Total poultry slaughter, ready-to-cook weight[10]														
1977	Mil. lbs.	849	780	938	895	988	1,095	988	1,179	1,115	1,092	1,028	969	11,916
1978	Mil. lbs.	932	831	981	901	1,088	1,127	1,052	1,234	1,119	1,229	1,081	978	12,553
1979	Mil. lbs.	1,057	878	1,063										
Commercial red meat production, carcass weight														
1977	Mil. lbs.	3,237	3,084	3,551	3,195	3,122	3,298	2,925	3,404	3,354	3,345	3,416	3,241	39,172
1978	Mil. lbs.	3,215	3,045	3,342	3,079	3,269	3,081	2,883	3,274	3,139	3,355	3,345	3,094	38,119
1979	Mil. lbs.	3,281	2,758	3,093	2,882									

Table 5.—Poultry: Cold storage holdings and exports

Item	Data in—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Cold storage holdings, first of month (ready-to-cook weight)														
Broilers, fryers, roasters														
1977	Mil. lbs.	32.9	27.4	24.6	26.5	25.2	27.9	31.3	30.3	29.6	30.7	31.2	33.3	
1978	Mil. lbs.	29.4	27.5	21.8	21.8	22.5	19.8	21.1	21.7	20.9	21.1	22.8	23.2	
1979	Mil. lbs.	20.1	17.9	17.7	18.3	16.1								
Total chicken														
1977	Mil. lbs.	154.5	139.3	131.5	134.6	134.4	139.3	146.4	148.7	147.7	148.0	145.9	142.6	
1978	Mil. lbs.	138.6	133.3	124.2	118.9	107.2	108.0	102.3	108.6	109.7	110.2	107.8	106.3	
1979	Mil. lbs.	101.9	106.3	100.7	100.9	103.7								
Turkey														
Whole bird														
1977	Mil. lbs.	147.8	134.6	118.0	94.5	82.5	93.3	146.0	197.7	268.2	340.4	374.1	207.4	
1978	Mil. lbs.	108.9	107.2	86.2	66.8	59.2	65.4	105.7	161.2	238.2	307.3	355.5	176.5	
1979	Mil. lbs.	117.0	112.1	100.1	86.6	81.8								
Other														
1977	Mil. lbs.	55.6	55.7	49.8	47.8	47.8	44.9	55.4	55.9	61.7	68.8	70.4	62.0	
1978	Mil. lbs.	59.1	61.1	50.4	46.2	41.9	38.4	47.2	52.4	62.9	65.9	70.0	59.7	
1979	Mil. lbs.	58.1	58.7	55.5	49.2	47.7								
Total turkey														
1977	Mil. lbs.	203.4	190.3	167.8	142.3	130.3	138.2	201.4	253.6	329.9	409.3	444.5	269.4	
1978	Mil. lbs.	167.9	168.3	136.6	113.0	101.1	103.9	152.8	213.6	301.2	373.3	425.4	236.2	
1979	Mil. lbs.	175.1	170.9	155.6	135.8	129.6								
Total poultry														
1977	Mil. lbs.	362.8	334.6	302.8	279.4	267.3	281.1	353.2	409.2	484.6	566.0	598.6	417.8	
1978	Mil. lbs.	310.0	304.6	262.7	233.4	209.7	213.3	257.0	325.8	415.9	488.4	538.3	346.4	
1979	Mil. lbs.	280.1	280.3	259.2	239.3	235.5								
Exports (ready-to-cook weight):														
Young chicken														
1977	Mil. lbs.	27.1	25.0	18.9	25.8	25.8	20.5	35.8	27.5	26.8	31.9	22.3	25.9	313
1978	Mil. lbs.	21.9	21.9	35.1	25.7	27.7	20.9	27.4	33.3	28.7	31.5	25.4	31.5	331
1979	Mil. lbs.	29.1	23.7	36.5										
Other chicken														
1977	Mil. lbs.	2.7	2.3	3.3	3.3	2.7	2.8	2.6	2.6	3.1	2.7	3.5	4.1	36
1978	Mil. lbs.	3.0	2.3	2.7	4.4	1.7	1.8	1.6	1.8	3.0	2.2	2.8	2.6	30
1979	Mil. lbs.	2.9	2.2	2.8										
Turkey														
1977	Mil. lbs.	2.9	3.3	2.1	2.4	3.9	5.0	5.2	6.9	6.1	4.4	5.5	6.0	54
1978	Mil. lbs.	4.3	3.6	6.1	4.4	2.2	3.3	3.0	4.5	5.3	4.9	5.4	4.0	51
1979	Mil. lbs.	3.7	2.7	2.9										

Table 6.—Poultry: Chicken and turkey prices

Item	Data in—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Broilers:														
Liveweight, U.S. at farm[11]														
1977	Cents	21.9	24.3	24.2	24.2	24.1	24.9	25.9	24.1	23.8	22.7	21.3	20.2	23.5
1978	Cents	22.9	24.8	25.0	27.8	27.8	30.5	31.6	26.2	26.2	24.6	24.5	24.9	26.4
1979	Cents	27.0	28.9	28.9	28.2	29.0								
Wholesale weighted average, ready-to-cook weight[12]														
9-city average[13]														
1977	Cents	38.8	42.1	41.9	41.4	42.2	43.3	44.3	42.0	40.9	39.2	37.3	36.2	40.8
1978	Cents	40.2	43.1	42.2	46.1	46.1	50.7	50.8	44.1	44.9	42.0	42.0	42.2	44.5
1979	Cents	45.8	49.2	47.5	47.5	49.4								
New York														
1977	Cents	38.0	40.7	41.1	41.0	41.8	43.7	43.8	41.6	40.3	38.8	36.0	35.5	40.2
1978	Cents	39.3	42.3	41.0	44.6	44.8	50.1	50.2	43.6	44.2	40.8	40.7	41.2	43.6
1979	Cents	44.8	48.4	46.7	46.6	48.5								

*See footnote at end of table.

Table 33—Selected poultry and egg statistics*—Continued

Item	Data in—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Table 6.—Poultry: Chicken and turkey prices—Continued														
Chicago (U.S. Grade A)														
1977	Cents	38.7	41.4	42.0	41.1	41.8	42.7	43.8	41.9	40.6	38.8	36.9	35.9	40.5
1978	Cents	40.0	42.8	41.9	46.1	45.5	50.1	50.2	43.3	44.4	41.5	41.7	42.0	44.1
1979	Cents	45.4	48.7	47.1	46.7	49.0								
Los Angeles														
1977	Cents	40.7	42.9	43.3	42.5	43.9	43.8	45.7	43.6	42.8	41.4	38.9	38.6	42.3
1978	Cents	42.1	45.2	44.7	49.2	49.1	52.4	52.7	46.4	46.9	44.9	44.9	44.5	46.9
1979	Cents	48.2	51.5	50.1	50.0	51.4								
Turkeys:														
Liveweight, U.S. at farm[3]														
1977	Cents	32.2	32.0	33.9	33.5	33.6	34.2	33.8	33.8	34.4	36.5	39.0	40.2	34.8
1978	Cents	38.3	37.3	38.1	38.1	39.5	40.7	42.0	43.4	44.0	45.7	47.2	49.9	42.0
1979	Cents	47.2	45.1	43.4	43.1	42.2								
Wholesale, frozen, f.o.b. or equivalent, RTC weight[1 4]														
New York														
Hens, 8-16 pounds														
1977	Cents	48.7	49.7	52.3	53.6	50.8	50.0	50.8	53.4	54.9	57.4	60.7	65.8	54.0
1978	Cents	60.5	59.2	60.9	59.2	61.3	63.6	67.8	68.0	68.7	72.7	78.0	80.5	66.7
1979	Cents	72.9	67.6	70.0	68.6									
Toms, 14-20 pounds														
1977	Cents	50.9	51.2	52.0	53.0	51.4	50.6	49.8	52.4	55.6	58.8	60.5	59.9	53.8
1978	Cents	57.6	59.9	59.6	59.1	60.7	63.4	65.6	67.8	69.8	71.2	74.0	75.0	65.3
1979	Cents	74.0	68.3	67.8	67.1									
Toms, 24-26 pounds														
1977	Cents	54.2	55.4	57.3	58.1	59.3	59.0	58.1	56.8	56.8	59.0	59.9	60.7	57.9
1978	Cents	61.8	62.1	62.8	65.3	68.9	71.4	70.0	70.0	70.0	71.3	72.0	73.9	68.3
1979	Cents	74.9	72.1	70.0	68.1									
Chicago														
Hens, 8-16 pounds														
1977	Cents	47.9	48.7	51.3	52.6	49.8	49.1	49.9	52.6	54.2	56.3	59.9	65.1	53.1
1978	Cents	60.2	58.2	60.4	58.3	60.2	62.8	(7)	67.6	67.6	71.1	(7)	79.2	64.6
1979	Cents	73.4	66.4	(7)	67.7									
Toms, 14-20 pounds														
1977	Cents	51.4	51.7	51.7	51.8	51.1	49.7	49.1	51.4	54.6	58.0	59.7	59.2	53.3
1978	Cents	58.7	59.0	58.9	59.1	(8)	62.6	65.2	67.0	68.4	70.1	72.6	73.8	65.0
1979	Cents	72.9	66.8	66.2	66.5									
Toms, 24-26 pounds														
1977	Cents	54.0	54.7	56.6	56.8	57.8	57.8	57.0	55.7	56.0	57.9	59.1	59.8	56.9
1978	Cents	61.0	61.4	62.1	(8)	(8)	(8)	69.0	68.9	69.2	70.5	71.2	73.4	67.4
1979	Cents	74.1	71.3	69.5	68.1									
Paid at seller's dock frozen, ready-to-cook weight[1 5]														
New York														
Hens, 8-16 pounds														
1977	Cents	51.9	52.6	55.4	56.6	54.4	53.9	53.9	56.8	57.5	60.3	64.2	70.1	57.3
1978	Cents	66.3	62.4	64.2	62.4	64.3	66.9	70.6	72.2	72.6	75.8	80.8	84.9	70.3
1979	Cents	78.8	72.2	73.4	73.2									
Toms, heaviest weight quoted														
1977	Cents	72.5	70.2	68.8	68.8	69.0	70.1	72.1	73.2	73.6	74.6	75.5	78.2	72.2
1978	Cents	78.5	78.5	78.9	79.0	82.2	86.1	86.8	87.0	87.0	89.1	91.6	90.7	84.6
1979	Cents	91.0	90.8	90.0	89.5									
Chicago														
Hens, 8-16 pounds														
1977	Cents	50.6	50.6	53.7	55.4	53.4	52.1	52.5	55.2	56.8	60.0	64.0	68.4	56.0
1978	Cents	64.7	61.6	63.8	61.2	64.1	66.2	69.4	71.0	71.3	74.5	79.8	85.0	69.4
1979	Cents	78.6	70.8	72.1	72.5									
Toms, heaviest weight quoted														
1977	Cents	70.5	68.3	67.0	66.9	67.7	69.2	70.1	71.8	72.5	72.5	73.1	74.7	70.4
1978	Cents	76.0	76.2	76.2	76.8	80.4	83.4	83.6	84.0	84.0	85.2	87.0	87.2	81.7
1979	Cents	88.0	88.0	88.5	87.8									

*See footnote at end of table.

Table 33—Selected poultry and egg statistics*

Table 7.—Prices paid for feed ingredients and poultry feed, and product-feed price ratios

Item	Data in—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Corn, Chicago No. 2 yellow (price per bushel)														
1977	Dollars	2.53	2.54	2.52	2.50	2.41	2.27	2.05	1.78	1.80	1.84	2.14	2.19	2.21
1978	Dollars	2.19	2.21	2.36	2.51	2.57	2.51	2.28	2.17	2.13	2.22	2.28	2.27	2.31
1979	Dollars	2.29	2.35	2.42	2.53									
Soybean meal, 49-50 percent, Decatur, Ill. (per ton, bulk)														
1977	Dollars	224	230	247	299	284	247	183	161	162	151	178	175	212
1978	Dollars	175	166	193	189	195	187	187	178	178	192	190	204	186
1979	Dollars	201	207	210	207									
Poultry feed (per ton, bulk)[3]:														
Laying[16]														
1977	Dollars	156	161	161	163	166	162	153	143	138	135	141	145	152
1978	Dollars	147	146	149	154	155	157	155	150	149	150	154	156	152
1979	Dollars	157	159	162	163	163								
Broiler grower														
1977	Dollars	174	178	179	183	187	184	175	164	154	153	159	160	171
1978	Dollars	162	164	167	169	171	174	170	169	168	169	174	174	169
1979	Dollars	175	179	184	185	184								
Turkey grower														
1977	Dollars	182	186	188	195	200	196	188	176	172	168	175	177	184
1978	Dollars	177	177	179	183	184	186	186	182	180	183	185	185	182
1979	Dollars	189	194	198	200	201								
Product-feed price ratios:														
Egg[16]														
1977	Pounds	8.5	8.1	7.3	6.8	5.9	5.8	6.7	7.2	7.6	7.1	7.3	7.4	7.1
1978	Pounds	6.7	7.5	7.4	6.7	6.3	5.6	6.2	6.9	7.2	7.0	7.4	7.9	6.9
1979	Pounds	7.7	7.6	7.9	7.4	7.0								
Broiler[17]														
1977	Pounds	2.5	2.7	2.7	2.6	2.6	2.7	3.0	2.9	3.1	3.0	2.7	2.5	2.8
1978	Pounds	2.8	3.0	3.0	3.3	3.3	3.5	3.9	3.2	3.2	2.9	2.8	2.9	3.1
1979	Pounds	3.1	3.2	3.1	3.0	3.2								
Turkey[18]														
1977	Pounds	3.5	3.4	3.6	3.4	3.4	3.5	3.6	3.8	4.0	4.3	4.5	4.5	3.9
1978	Pounds	4.3	4.2	4.2	4.2	4.3	4.4	4.5	4.7	4.8	4.9	5.0	5.4	4.6
1979	Pounds	5.0	4.6	4.4	4.3	4.2								

Table 8.—USDA contracts to purchase chicken and turkey

Item	Data in—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Young chicken (ready-to-cook wt.)														
1977	Mil. lbs.	4.9	6.4	4.4	---	---	---	---	6.5	6.3	8.4	13.2	11.4	62.1
1978	Mil. lbs.	9.6	12.7	3.5	---	---	---	3.2	9.4	7.6	7.8	11.1	10.2	75.1
1979	Mil. lbs.	5.4	8.6											
Canned boned chicken (RTC wt.)														
1977	Mil. lbs.	7.7	6.6	16.9	---	---	---	---	---	---	---	4.3	7.9	43.4
1978	Mil. lbs.	3.8	5.8	6.7	6.9	2.1	---	---	---	---	5.4	9.5	5.3	45.5
1979	Mil. lbs.	6.9	4.4	9.7										
Turkey (ready-to-cook wt.)														
1977	Mil. lbs.	6.2	7.2	---	---	---	---	5.8	16.6	14.3	3.9	10.3	9.0	73.4
1978	Mil. lbs.	9.6	6.8	8.0	---	---	---	---	7.7	14.5	14.0	9.4	9.8	80.0
1979	Mil. lbs.	---	---	---	---	---								
Canned boned turkey (RTC wt.)														
1977	Mil. lbs.	---	---	---	---	---	---	---	---	---	---	---	---	---
1978	Mil. lbs.	---	---	---	---	---	---	---	---	---	---	---	---	---
1979	Mil. lbs.	---	---	---	---	---	---	---						

[1] Shell eggs plus the shell egg equivalent of egg products. [2] All eggs, including hatching eggs and eggs sold at retail. [3] Price as of 15th of month. [4] Delivered f.o.b. buyer. [5] Delivered store door. [6] 30-pound containers, carlot or trucklot. [7] Insufficient price data. [8] Includes fryers-roasters, young turkeys, and old turkeys. [9] Whole carcass turkeys which have been injected, basted, marinated, etc. and packaged as such. [10] Includes federally inspected slaughter of all poultry plus other slaughter of chicken and turkey. [11] Price for month. [12] Trucklot sales of U.S. Grade A and plant grade, ice packed and CO2 chilled broilers delivered to major areas. [13] Computed by weighting the city averages by their metropolitan area populations. [14] U.S. Grade A, carlots or trucklots. [15] U.S. Grade A, less than carlots. [16] Pounds of laying feed equal in value to 1 dozen eggs. [17] Pounds of broiler grower equal in value to 1 pound of broiler liveweight. [18] Pounds of turkey grower equal in value to 1 pound of turkey liveweight.

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PES-302 JUNE 1979

LIST OF TABLES

Table	*Title*	*Page*
1.	Poultry and egg situation at a glance	2
2.	Egg-type chick hatchery operations	7
3.	Force moltings and light-type hen slaughter, 1976-79	7
4.	Egg prices, 1978-79	9
5.	Shell eggs broken and products produced under federal inspection, 1978-79	9
6.	Total eggs: Supply and utilization, 1977-79	10
7.	Estimated January-June 1980 egg price/production relationships	10
8.	Broiler chicks hatched and pullet chicks placed in hatchery supply flocks	11
9.	Broilers: Egg set and broiler chicks placed in 21 commercial broiler producing States, 1977-78	12
10.	Broiler supply and prices	14
11.	Young chicken supply and utilization, 1978-79	14
12.	Estimated 4th quarter 1979 broiler price/consumption relationships	15
13.	Turkey supply and consumption	16
14.	Turkey hatchery operation, United States, 1978-79	16
15.	Turkey: Supply and utilization, 1977-79	18
16.	Gross farm income from poultry and eggs, 1970-79	20
17.	Chicken and turkey: Production, disposition and price, 1970-78	20
18.	Eggs: Production, disposition and value, 1970-78	20
19.	Per capita consumption of shell eggs and total eggs, by quarters, 1960-78	21
20.	Supply and utilization: Young chicken, other chicken, and turkeys, 1970-78	22
21.	Per capita consumption of chicken and turkey by quarter, 1970-78	23
22.	Per capita consumption of red meat by quarters, 1970-78	24
23.	Eggs: Supply and utilization, 1970-78	25
24.	Estimated costs and returns for market eggs	25
25.	Estimated costs and returns for broilers	26
26.	Estimated costs and returns for turkeys	26
27.	Average number of layers during the year, 1970-78	27
28.	Commercial broilers: Number produced by States and regions, by years, 1970-78	28
29.	Turkeys: Number raised, by States, regions and United States, 1970-78	29
30.	Prices and price spreads for eggs and frying chickens	30
31.	Selected poultry and egg statistics	34