

*M. F. ...*

# THE Poultry and Egg SITUATION

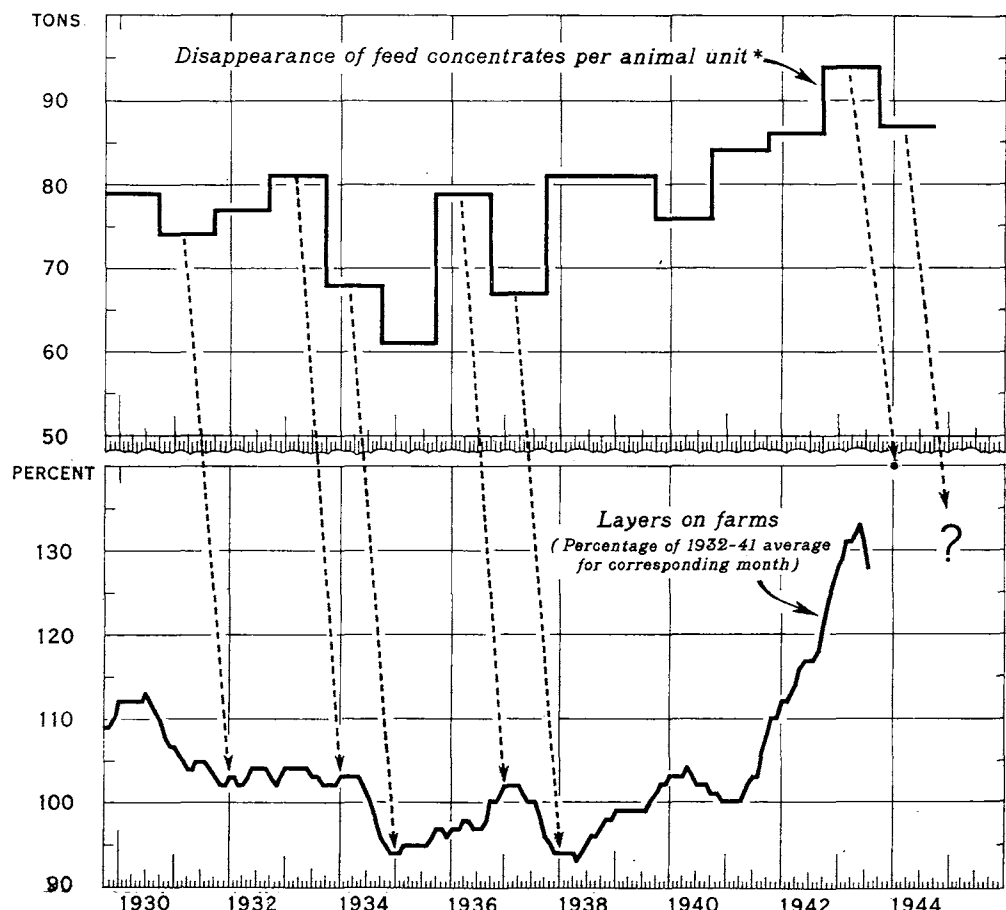
BUREAU OF AGRICULTURAL ECONOMICS  
UNITED STATES DEPARTMENT OF AGRICULTURE

PES-81



SEPTEMBER 1943

### DISAPPEARANCE OF FEED CONCENTRATES PER ANIMAL UNIT AND NUMBER OF LAYERS, 1929-43



\*SUPPLIES ON AN OCT.-SEPT. BASIS ADJUSTED FOR CHANGES IN STOCKS AND NET IMPORTS  
DATA FOR 1943-44 BASED ON CROP PROSPECTS AS OF SEPT. 1, 1943

U. S. DEPARTMENT OF AGRICULTURE

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The reduction from a year earlier in the prospective 1943-44 feed supply per animal unit is similar in magnitude to the decline from 1935-36 to 1936-37. But, if stocks of feeds are reduced to a minimum by October 1, 1944, disappearance per animal unit in 1943-44 would be only moderately less than the unusually heavy disappearance in 1942-43. On the basis of past relationships, numbers of layers on December 31, would be 8 to 10 percent larger this year than last, but some reduction in numbers would occur in 1944. Numbers of layers declined, relative to the 10-year average, in July and August but probably will increase in the next few months as pullets from this year's record hatch are added to laying flocks.

STATISTICAL SUMMARY

I T E M	UNIT	AUGUST AVERAGE		1942		1943		PCT. OF YEAR EARLIER
		PERIOD	AVERAGE	JULY	AUGUST	JULY	AUGUST	
Number of layers on farms . . . . .	Million	1932-41	246.1	295.3	288.6	330.8	316.1	110
Number of eggs laid per hen . . . . .	Number	1932-41	11.19	13.85	12.31	13.71	12.22	99
Total farm production of eggs . . . . .	Mil. case	1932-41	7.65	11.36	9.86	12.59	10.73	109
Stocks, eggs U. S.: <sup>1</sup>								
Shell . . . . .	1,000 case	1932-41	7,152	7,642	6,751	8,578	7,529	112
Frozen . . . . .	1,000 case	1932-41	3,465	7,747	7,254	9,365	9,106	126
Total . . . . .	1,000 case	1932-41	10,617	15,501	14,005	17,948	16,635	119
Purchases, eggs, USDA:								
Dried <sup>2</sup> . . . . .	Mil. lb.	--	--	13.8	9.0	15.0	8.4	93
Shell, direct . . . . .	1,000 case	--	--	0.5	12.0	27.1	5.3	44
Dried egg production . . . . .	Mil. lb.	--	--	23.9	22.5	21.2	16.0	71
Commercial hatchery operations:								
Eggs set . . . . .	Million	--	--	41.7	36.6	57.9	43.9	120
Chicks hatched . . . . .	Million	--	--	29.7	22.4	44.8	29.1	130
Receipts:								
Poultry, dressed, four markets . . . . .	Mil. lb.	1932-41	24.3	32.0	36.8	23.6	28.4	77
Poultry, live Chicago <sup>3</sup> . . . . .	Car	1937-41	386	395	421	314	375	89
Poultry, live, New York <sup>3</sup> . . . . .	Car	1937-41	631	562	564	755	709	126
Poultry, live, Midwest, per plant . . . . .	1,000 lb.	1932-41	17.83	24.24	32.88	23.87	31.63	96
Fowl (hens), live, Midwest, per plant . . . . .	1,000 lb.	1932-41	7.93	12.42	12.88	13.97	13.98	113
Young stock, live, Midwest, per plant . . . . .	1,000 lb.	1932-41	9.46	10.88	19.82	9.07	16.96	86
Stocks, poultry: <sup>1</sup>								
Broilers . . . . .	Mil. lb.	1932-41	8.8	5.5	7.9	2.9	5.8	73
Fryers . . . . .	Mil. lb.	1932-41	2.6	3.3	5.8	3.3	5.4	93
Roasters . . . . .	Mil. lb.	1932-41	4.7	4.9	7.6	3.9	7.3	96
Fowls (hens) . . . . .	Mil. lb.	1932-41	11.5	21.0	22.7	11.0	15.6	69
Turkeys . . . . .	Mil. lb.	1932-41	9.2	18.9	12.1	5.5	5.1	42
Ducks . . . . .	Mil. lb.	1932-41	7.7	7.3	9.2	2.2	3.2	35
Miscellaneous and unclassified . . . . .	Mil. lb.	1932-41	20.7	18.4	21.2	10.2	12.3	58
Total poultry . . . . .	Mil. lb.	1932-41	57.4	79.3	86.6	38.9	54.7	63
Prices received by farmers:								
Eggs, per dozen . . . . .	Cent	1932-41	19.3	29.5	32.2	36.3	38.8	120
Eggs, parity price per dozen . . . . .	Cent	1932-41	25.9	29.4	31.7	32.3	34.8	110
Eggs, percentage of parity . . . . .	Percent	1932-41	74	100	102	112	111	--
Chickens, per pound . . . . .	Cent	1932-41	13.6	18.7	19.6	25.3	25.6	131
Chickens, parity price per pound . . . . .	Cent	1932-41	14.6	17.3	17.3	18.8	18.8	109
Chickens, percentage of parity . . . . .	Percent	1932-41	92	108	113	135	136	--
Turkeys, per pound . . . . .	Cent	1937-41	14.6	18.9	19.9	28.5	28.8	145
Turkeys, parity price per pound . . . . .	Cent	1937-41	18.8	21.9	21.9	23.8	23.8	109
All farm commodities (1910-14 = 100) . . . . .	Index no.	1932-41	100	154	163	188	193	118
Chickens and eggs (1910-14 = 100) . . . . .	Index no.	1932-41	98	145	156	183	193	124
Wholesale prices, Chicago:								
Eggs, standards, per dozen <sup>4</sup> . . . . .	Cent	1932-41	19.8	32.1	34.2	38.3	40.8	119
Live heavy hens, per pound . . . . .	Cent	1937-41	17.6	20.0	22.5	24.0	24.0	107
Live broilers, per pound . . . . .	Cent	1937-41	18.5	24.5	25.7	27.5	27.2	106
Live roasters, light, per pound . . . . .	Cent	1937-41	18.3	23.7	24.8	27.5	27.2	110
Live roasters, heavy, per pound . . . . .	Cent	1937-41	18.9	24.7	24.9	27.5	27.2	107
Wholesale prices, New York:								
Dressed broilers, 25-30 pounds per dozen . . . . .	Cent	1932-41	20.7	27.7	29.5	36.5	36.5	124
Dressed roasters, 48-54 pounds per dozen . . . . .	Cent	1932-41	24.9	34.0	35.2	36.5	36.5	104
Dressed fowls, 48-54 pounds per dozen . . . . .	Cent	1932-41	19.4	26.5	28.7	32.5	32.5	113
Cash farm income:								
Total marketings . . . . .	Mil. dol.	1937-41	797	1,219	1,412	1,549	--	127
Poultry and eggs . . . . .	Mil. dol.	1937-41	75	130	125	195	--	150
Price ratios:								
Chicago, broiler-feed . . . . .	Lb. feed	1937-41	14.9	14.4	15.2	12.9	12.7	84
Chicago, light roaster-feed . . . . .	Lb. feed	1937-41	14.9	14.0	14.6	12.9	12.7	87
Farm, egg-feed . . . . .	Lb. feed	1932-41	16.2	17.7	19.3	17.1	18.2	94
Farm, chicken-feed . . . . .	Lb. feed	1932-41	11.5	11.2	11.7	11.9	12.0	108
Farm, turkey-feed . . . . .	Lb. feed	1937-41	12.4	11.3	11.9	13.4	13.5	113
Feed cost per cwt., farm poultry ration . . . . .	Dollar	1932-41	1.26	1.67	1.67	2.12	2.13	128
Wholesale food prices (1935-39 = 100) . . . . .	Index no.	1932-41	95.2	125.4	127.4	135.5	133.8	105
Retail food prices (1935-39 = 100) . . . . .	Index no.	1932-41	97.6	124.6	126.1	139.0	137.2	109
Prices paid by farmers including interest and taxes (1910-14 = 100) . . . . .	Index no.	1932-41	128	152	152	165	165	109
Retail prices (BLS):								
Roasters, dressed, per pound . . . . .	Cent	1932-41	30.3	39.8	42.0	44.5	44.3	105
Eggs, strictly fresh, per dozen . . . . .	Cent	1932-41	34.6	46.1	51.7	54.2	59.2	115
Nonagricultural employees' compensation (1935-39 = 100) . . . . .	Index no.	1932-41	96.5	187.3	191.9	236.5	--	126

<sup>1</sup>End of month. Frozen eggs converted to case equivalent.

<sup>2</sup>Includes purchases for future delivery.

<sup>3</sup>Car equivalent of receipts by freight, truck, and express.

<sup>4</sup>Fresh firsts August 1932-41 average, July, August 1942; current receipts July 1-10, 1943; standards, 43 pounds, July 12-August 31, 1943.

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THE POULTRY AND EGG SITUATION

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Summary

Over-all production of poultry products in the United States in 1944 is likely to be about the same as the record output in 1943. Prices received by farmers for some items in 1944 as a whole probably will average higher than this year and cash farm income from poultry and eggs probably will reach a slightly higher level. Prices paid by farmers for laying mash now are about 10 percent higher than in January 1943 and the average for 1944 is very likely to be above the average for this year.

Based on past relationships, the number of layers on farms at the beginning of 1944 would be between 8 and 10 percent larger than a year earlier. But because of the prospective tight feed supply situation, particularly in deficit-feed areas, some reduction in numbers is likely to take place during 1944. The rate of egg production per hen next year may be a little below the 1943 average but, with more layers to start the year, total egg production in 1944 probably will be at least as large as in 1943, if not a little larger. With a stronger all-around demand for eggs in prospect, egg prices to farmers may average higher in the first half of 1944 than in the first half of 1943 when prices were a little below ceiling levels. Civilian consumption of eggs in 1944 probably will be about the same as in 1943 and considerably above the pre-war average.

The number of chickens raised in 1944 probably will be moderately smaller than 1943 in view of the less favorable feed prospects. The number of layers for 1945, however, will be influenced to a considerable extent by the outcome of 1944 feed crops and may be little different from the level at the beginning of 1943.

Commercial broiler production is concentrated in deficit feed areas, and the number of chickens raised for broilers as well as farm chickens may be smaller in 1944 than in 1943. Total supplies of chicken meat in 1944 nevertheless are likely to be about the same as the all-time high reached in 1943, since slaughter from laying flocks is likely to be much larger than this year. Chicken prices to farmers in 1944 will average at least as high as in 1943.

Civilian supplies of turkey this fall will be slightly smaller than a year earlier, since production apparently is slightly smaller and much greater quantities are to be taken for the military. Turkey production in 1944 may be about as large as this year. Unlike broilers, the heaviest turkey producing regions are located in feed-surplus sections of the Nation.

-- September 21, 1943

#### REVIEW OF 1943

The number of layers on farms in January 1943, the seasonal high for the year, was 15 percent larger than in January 1942 and 28 percent larger than the 10-year average for that month. In the first 3 months of 1943 numbers of layers declined proportionately less than a year earlier as some of the late pullets from the 1942 hatch were added to laying flocks. But from late March to July 1943, apparently because of slightly heavier mortality and somewhat heavier culling, numbers of layers declined relatively more sharply than a year earlier, though less proportionately than the 10-year average decline during that period. From July to August the relative decline in size of flocks for the Nation as a whole was the largest ever to occur in that period. The sharp drop was largely due to unusually heavy culling in the West North Central States. In this area heavy culling of old birds has been necessary to make housing room for the record number of pullets raised this year.

With a much larger number of layers on farms this year, the actual disappearance of birds from laying flocks has been larger in all months of 1943 than ever before. The heavier mortality rate accounted for only a small part of the increased disappearance; most of the birds were sold for meat purposes. However, because of the heavy consumption of poultry near the sources of supply, these increased quantities did not show up in market receipts until the producing areas had shifted to a seasonal surplus basis. At Midwest primary markets receipts of fowl were considerably smaller for the first 6 months of 1943 than a year earlier, but so far in the second half of 1943 they have been much larger than any previously on record.

The rate of lay per bird in 1943 has been near the previous record set in 1942 despite some decrease in quality of feeds and difficulties in

actually obtaining supplies of feed in some localities. The average number of eggs laid per hen in the first 8 months of 1943 was 110.6 eggs, compared with 111.3 in the corresponding months of 1942 and the 10-year average for the period of 100.9 eggs.

Total egg production in the United States in the January-August period of 1943 was 13 percent larger than the previous record for those months set in 1942. Increases by regions in the January-August egg production were as follows: North Atlantic, 9.2 percent; East North Central, 11.1 percent; West North Central, 16.1 percent; South Atlantic, 10.4 percent; South Central, 17.0 percent and West 10.3 percent.

In August the number of layers on farms in the United States was 10 percent larger than in August last year. The rate of lay averaged nearly 1 percent below the rate a year earlier, however. Total egg output in August showed an increase of 9 percent over that of August 1942.

#### Egg Prices Advance Seasonally

Prices of top grade eggs in most terminal markets have been at ceiling levels since early July. Prices of lower grade eggs, on the other hand, have been relatively more abundant to date and prices at times have been a little below ceiling levels. Compared with a year earlier, all egg prices have been higher by fairly substantial margins. In mid-August the average price received by farmers for eggs in the United States was 38.8 cents per dozen, 20 percent higher than a year earlier. The seasonal low point in egg prices to farmers this year was reached in April -- 33.7 cents per dozen. For the first 8 months of 1943 prices received by farmers for eggs averaged between 7 and 8 cents higher than in the corresponding period last year. The weighted average price received in 1942 was 29.9 cents per dozen.

Apparent disappearance of eggs into domestic consumption has been much heavier than a year earlier since late July. But because of the unprecedented consumer demand, retail egg prices have continued well above those of a year earlier.

#### Storage Stocks of Eggs Reduced 1.3 Million Cases in August

The net into-storage movement of shell eggs in 1943 began in mid-January, the earliest date on record. This movement was of comparatively moderate proportions until the schedule of ceiling prices for eggs (MPR 333) was announced in late February. While the schedule of ceiling prices provided a seasonal pattern of egg prices not greatly different from usual, a very strong demand for eggs for storing resulted because of the prospects that egg prices would sell at ceiling prices in the out-of-storage season during the fall and winter of 1943-44. With a strong storage demand supplementing an unprecedented consumer demand, prices of fresh shell eggs became high relative to ceiling and Government purchase prices of dried whole egg.

In an effort to alleviate this situation, the War Food Administration in late March issued Food Distribution Order 40, restricting the storage of shell eggs for civilian use in late 1943 to moderate working inventories. In a subsequent amendment it was provided that all eggs in storage prior to



The delivery schedule given in the above table suggests that production of dried egg in the United States in 1943 will be about 20 percent larger than in 1942 and more than six times as large as the 1941 output. In 1943 more than 800 million dozens of eggs will be used for drying compared with about 721 million in 1942 and 139 million dozens in 1941. The shell-egg equivalent of quantities used for drying as a percentage of total United States production of shell eggs is 16 percent for both 1943 and 1942 and less than 4 percent in 1941. Prior to 1941, less than 1 percent of the annual egg output in the United States was used for drying.

FDO 41, issued in March 1943, in addition to limiting production of liquid and frozen egg, provided that all spray-dried whole egg produced in 1943 was to be exclusively for Government use. Dried egg other than spray-dried whole egg was not to be produced in larger quantities than in 1942.

#### Receipts of Poultry Increasing Seasonally

Although apparent sales of chickens by farmers have been heavier than a year earlier in every month this year, the increases have not shown up in normal marketing channels. In the first 6 months of 1943, receipts of live poultry at Midwest primary markets were between 10 and 64 percent smaller than a year earlier. Receipts of both fowl and young stock have increased greatly from the seasonally low level of last spring. Since July 1, receipts of fowl have been the largest on record, but receipts of young stock have been a little below the previous high reached in 1942.

Smaller marketings of young stock in the Midwest to early September, despite the larger production on farms this year, indicate that farmers may be feeding their young birds to heavier weights this year than last. This tendency would be supported both by price relationships and local supplies of feeds, especially home-grown grains. Farm marketings of chickens in the United States as a whole in 1943 apparently will be larger than in 1942 by more than 25 percent.

Increased farm marketings of chickens apparently have almost entirely relieved the tight supply situation that had prevailed in most Midwestern and Eastern live poultry markets in the first half of 1943. Supplies of live birds in many of these poultry markets are sufficient to meet demand at ceiling prices and prices of some classes are slightly below the established maximum levels. Compared with a year ago, however, prices of live birds at both New York and Chicago are considerably higher. Supplies of dressed poultry, on the other hand, have continued short of market demand at ceiling prices. The excess of demand over supply has been especially pronounced for heavy roasters and for fowl.

Prices of dressed chickens at New York in mid-September ranged from 14 percent higher than a year earlier for heavy roasters to 20 percent higher for broilers. Prices of dressed fowl were 10 to 21 percent higher than in the corresponding period last year.

In Pacific Coast markets demand for both live and dressed poultry exceeds supply at ceiling prices. Quotations on prices of live birds at

San Francisco, reflecting present ceilings, range from 20 percent below a year ago for Leghorn chickens to 20 percent higher for fowl. The average price received by farmers for chickens in the United States in mid-August was 25.6 cents per pound compared with 25.3 cents in mid-July and 19.5 cents in August 1942.

Into-Storage Movement of Poultry in August  
Twice that of a Year Earlier

Because of the strong consumer demand, storage stocks of poultry were reduced to unusually low levels in the first half of this year. On June 1, 1943, the seasonal low point for the year, stocks of poultry in the United States totaled 21 million pounds, only 26 percent of a year earlier and the smallest on record since 1918. By September 1, stocks had increased to 55 million pounds. This was 63 percent of a year earlier but was only 5 percent below the 1932-41 average for that date. Fowls and young chickens each accounted for about 40 percent of the net increase in total stocks from June 1 to September 1. On September 1, stocks of each class were smaller than a year earlier by from 4 percent for roasters to 65 percent for ducks. Relatively larger amounts probably have been stored for eviscerating and canning this year than last. Larger amounts also are being stored for future use by the armed forces.

Improved Chick Quality Increases Rate  
of Egg Production per Layer

Substantial changes have been made by farmers during the last decade in methods and practices of poultry and egg production. Improved feeding and breeding have been largely responsible for the increase in rate of egg production per layer that has taken place. The sharp increase in the proportion of chicks obtained from commercial hatcheries provides a means of spreading desirable qualities of a single hatchery supply flock among many flocks producing eggs for the consumer market. In 1943 farmers obtained from commercial hatcheries about 84 percent of the chickens raised compared with 82 percent in 1942, 79 percent in 1941, and 75 percent in 1940. Regionally, the preliminary percentages for 1943 are as follows: North Atlantic, 87 percent; East North Central, 93 percent; West North Central, 90 percent; South Atlantic, 72 percent; South Central, 65 percent; and West, 84 percent.

The National Poultry Improvement Plan, inaugurated in 1935 under the sponsorship of the Bureau of Animal Industry and cooperating agencies in the States, has helped greatly to raise the average quality of chicks hatched in the Nation. Hatcheries and hatchery flock owners must attain certain minimum standards of breeding, disease control, and management to become participants in the Plan. Participation in this Plan has increased several fold since the original beginning in 1935, as shown in the following table:



Participation in the National Poultry Improvement Plan,  
United States, 1935-43

Hatchery year	Number of flocks	Average number of hens per flock at beginning of season	Total number of birds at beginning of season	Egg capacity of hatcheries participating
	Number	Number	Thousands	Thousands
1935-36	23,813	148	3,522	38,066
1936-37	30,558	214	6,536	52,592
1937-38	28,820	206	5,943	60,523
1938-39	42,591	203	8,654	75,783
1939-40	50,559	212	10,714	90,579
1940-41	59,136	203	12,011	117,916
1941-42	69,681	223	15,519	135,742
1942-43	69,569	238	16,534	147,048

During this past season, the number of flocks represented in the program decreased slightly from a year earlier, but, with an increase of 15 birds per average size flock, the number of birds was increased about 1 million head. The capacity of participating hatcheries in 1942-43 apparently was equivalent to about 30 percent of the total capacity of hatcheries in the United States. Improvement in chick quality, of course, is not limited to participants in this program, but the general increase in this type of work indicates the trend of thought and effort with respect to increasing quality and livability of producing stock. Competition within the hatchery industry is pronounced, so any organized effort such as that embodied in the NFIP would be expected to have widespread results.

In early 1943 the Bureau of Animal Industry announced what has come to be known as the "Victory Cockerel Program." This program was designed to greatly increase the number of improved cockerels in hatchery flocks of the Nation. A recent survey by that Bureau covering 23 States indicates that 18.8 percent of the hatchery flocks participating in the National Poultry Improvement Plan include improved male birds. This probably is considerably above comparable figures for previous years. A substantial increase probably has taken place also among nonparticipants.

Considerations with respect to quality improvement of laying stock are important in appraising the outlook for egg production in 1944 and thereafter. Requirements of feed for maintenance of laying birds is about constant regardless of the rate of production. Hence, the amount of feed required to produce a dozen eggs decreases as the rate of lay is increased through better laying stock.

Poultry Production Compared with Goals for 1943

Production goals for 1943 for eggs, chickens, and turkeys were announced by the Secretary of Agriculture November 30, 1942. A price-support program was announced simultaneously. The goals were 4,780 million dozens

of eggs, 4,000 million pounds of chicken, and 560 million pounds of turkey, dressed weight. These goals represented increases over the preliminary estimates of 1942 production, available in late November last year, of 8 percent, 28 percent, and 15 percent, respectively. The final estimates of production for 1942 which became available in March and April 1943 resulted in no significant change for eggs from the preliminary figure available last November. For chickens, however, largely because of a change in the method of computing the weight of birds consumed on farms, the total slaughter of chicken in 1942 on a dressed weight basis was about 4 percent below the estimate used in late November 1942. The 1943 chicken goal compared with the final estimate for 1942 is 34 percent larger. Inventories of turkeys on farms were reduced slightly during 1942, increasing the dressed weight of the slaughter over expectations of November 1942 and reducing the 1943 goal as a percentage of production in 1942 from 15 percent to 13 percent. The general policy of the War Food Administration was to use as permanent goals the absolute levels announced for 1943 rather than the percentage increases over the actual 1942 output.

Total egg production in the United States in 1943 (including the non-farm output) will closely approach 5,000 million dozens, or 4 to 5 percent above the goal of 4,780 million dozens. To reach the chicken goal of 4 billion pounds in 1943 it was suggested that the slaughter of chickens from general farms and from nonfarm sources be increased 10 percent for the usual season, that broiler production be increased greatly over the 1942 output, and that 100 million birds, or more, be raised out of the usual season in general farming areas. Estimates of the number of chickens raised on farms, based on returns from crop correspondents, of course, do not distinguish entirely between early and late chicks. However, it appears that the number of chickens started between June 1 and September 1 this year was greatly in excess of the number last year. On September 1, the number of chickens on farms under 3 months old was 44 percent -- 69 million head -- larger than on the corresponding date last year. Hence, it appears that the total number of chickens raised on farms in the United States will be nearly 20 percent larger than in 1942, an increase of about 150 million birds. Broiler production this year will be considerably in excess of the 1942 output. The final outcome of this year's chicken slaughter will depend on the weight to which birds are fed and the change that actually takes place in year-end numbers. It now appears, however, that the dressed weight of chicken slaughtered in the United States in 1943 will be about 3.8 billion pounds or approximately 95 percent of the goal.

Turkey raisers were handicapped as a result of a shortage of turkey hatching eggs in 1943 and the number raised apparently is about the same as in 1942 instead of a large increase needed to reach the slaughter goal of 560 million pounds, dressed weight. The dressed weight of turkey slaughtered in 1943 probably will be about 480 million pounds or about 85 percent of the goal.

Hatchery Output in January-August 233 Million  
Chicks Larger Than a Year Earlier

Output of chicks by commercial hatcheries in August was 30 percent larger than the record high output of August 1942, making an increase of 21 percent over a year earlier for the first 8 months of 1943 or an absolute

increase of 233 million birds. In the period October 1, 1942-September 30, 1943, during which most broilers and many farm-raised chickens would be hatched for slaughter in 1943, the total hatch of baby chicks by commercial hatcheries in the United States was about 1,440 million birds, an increase of 250 million birds or 21 percent over a year earlier.

By regions, the increases over a year earlier in numbers of chicks hatched during the first 8 months of 1943 were as follows: New England, 26 percent; Middle Atlantic, 31 percent; East North Central, 17 percent; West North Central, 17 percent; South Atlantic, 29 percent; South Central, 22 percent; Mountain, 19 percent; Pacific, 29 percent.

In general the demand for chicks continues very strong. Uncertainty about future feed supplies is causing some cancellations of chick orders, but the supply of hatching eggs is the limiting factor in hatchery operations. In parts of the country, orders for chicks cannot be completely filled. The number of chicks booked on September 1 for later delivery was 55 percent larger than the number booked on September 1 a year ago. The number of eggs set was 20 percent larger in August this year than last.

OUTLOOK

BACKGROUND.- In 1941 and 1942 increases in chickens raised were greatest in the Midwest and Southern parts of the United States. Increases were particularly large in the sections affected most by the droughts of the middle 1930's. In the winter of 1942-43, poultry housing facilities apparently were more fully utilized in the Midwest and South than in other parts of the Nation. Increases in chickens raised in 1943 were large in all regions, but the North Atlantic States apparently increased the greatest, proportionately.

Egg production in the West North Central States has increased relatively more so far during this war than in other regions. This is shown by the following table:

Egg production, by regions, as percentages of the United States total

Region	1928-32	1932-41	1939	1940	1941	1942	1943
North Atlantic .....	12.5	14.9	15.5	15.8	15.5	14.6	14.1
East North Central ...	21.6	22.4	21.9	21.7	21.7	20.9	20.7
West North Central ...	27.5	25.4	26.0	26.3	27.0	28.8	29.4
South Atlantic .....	8.6	8.7	8.6	8.7	8.3	8.2	8.0
South Central .....	17.0	16.9	17.4	16.7	17.1	17.6	18.1
West .....	12.8	11.7	10.6	10.8	10.4	9.9	9.7
United States ...	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Crop Prospects Improved Further as a Result of Favorable Weather

The cost of poultry feed has increased steadily since November 1942. In mid-August 1943 the average price paid by farmers for laying mash was 10

percent higher than in mid-January and 6 percent higher than the average for March-May, the main hatching months. However, egg prices continue very favorable relative to feed and other production costs. The egg-feed price ratio may continue favorable but supplies of feed may not be sufficient to meet all livestock feeders' demands. Hence, feed supply prospects assume a dominant position for poultrymen and other livestock feeders for the coming season.

The supply of feed grains in 1943-44, including wheat and rye for feeding, based on September 1 prospects, is about 145.6 million tons, 1 percent larger than that indicated August 1 and 6 percent larger than the July 1 indication but 5 percent smaller than the actual 1942-43 supply. Conditions on September 1 last year indicated a supply for the 1942-43 crop year of 144.2 million tons, but considerable improvement occurred even after that date and a total supply of these grains of 153.0 million tons resulted. Since September 1 this year, conditions have been very favorable in the Corn Belt but have deteriorated somewhat in the East and South in contrast to the generally good conditions that prevailed a year earlier.

Total supplies of the principal vegetable protein and byproduct feeds are likely to be slightly larger than in 1942-43; but supplies of animal protein will be about as great. With the feed supplies now in prospect and about 10 percent more livestock animal units on farms, supplies of all feed concentrates per animal unit in 1943-44 will be about 12 percent smaller than last year. However, if stocks of feed grains are reduced to a minimum by October 1944, total disappearance of feed in 1943-44 would be a trifle larger than in 1942-43 but about 7 percent smaller per animal unit. The average protein content of the national feed supply in 1943-44 probably will be slightly above the previous record of 1942-43.

On the whole, relationships between prices of livestock products and prices of feed probably will not be quite so favorable as a year earlier during the early months of 1944. Consequently, any increases in livestock numbers will tend to be small and numbers of some species may decline. In that event, total disappearance of feed concentrates in the first half of 1944 would be smaller than would be indicated by January 1 total numbers. Not allowed for in the above estimate of supply and disappearance are any increased quantities of wheat that may result from the probable increased winter wheat acreage for the 1944 crop. Harvesting of winter wheat begins in June, so relatively larger quantities may be used for poultry next summer, especially in the heavy wheat-producing areas.

The above data and discussion apply almost entirely to the national situation. The extent to which feed supplies are distributed in proportion to need among regions will depend greatly on Government action with respect to pricing of feeds, distributing supplies, and allocating both land and water transportation facilities.

Supplies of feed will be shortest for poultry in deficit feed areas, such as the North Atlantic region which shows the largest increase in chickens raised this year, and in the South and West. However, because of the large proportion of poultrymen in all areas using commercially mixed feeds, continued restricted sales of grain off farms would affect poultry and egg production generally.

Record Supplies of Chicken in Prospect  
for the Fall and Winter

A large number of fowl still remain to be sold from laying flocks to make housing room for this year's record number of pullets. The number of chickens raised on farms this year apparently is nearly 20 percent larger than in 1942. The smaller receipts of young stock in the Midwest than a year earlier indicate that farmers in that area may be feeding their birds to a heavier average weight. The unusually large number of chicks started after June 1, of course, will not approach the weights farmers desire until late fall. The demand for broiler chicks to date also indicates that sales of young chickens from commercial broiler establishments will be much heavier than a year earlier in the remainder of 1943. Thus, all indications suggest that the increase in supplies of chicken compared with a year earlier will be largest in the last quarter of 1943. Supplies at that time also will be at a seasonal peak, resulting in the largest supply of the product for any 3-month period in the history of the Nation.

Unless the movement off farms seriously overtaxes transportation and processing facilities, prices of chickens at all stages of distribution probably will continue at or reasonably close to ceiling levels in most localities.

Basis Established for Material Increase  
in Egg Output in 1944

Based on past relationships between the number of chickens raised in the usual season and the number of layers on December 31 each year, an increase over a year earlier of 8 to 10 percent in number of hens and pullets on farms at the end of 1943 would be expected. Favorable egg prices in prospect and the record number of late birds raised would tend to make the increase greater than 10 percent. On the other hand, the prospective tight supply situation for poultry feeds, particularly in deficit feed areas, and the limited housing facilities in surplus feed areas, will be restraining factors. No data are available to indicate the proportion of the late hatched chicks originally intended exclusively for meat purposes.

A 10 percent increase over a year earlier in numbers of layers by January 1 would mean a total of 540 million birds compared with 381 million on January 1, 1941, and the 1935-39 average of 364 million head. It is likely that laying flocks at the beginning of 1944 will include a larger proportion of pullets than ever before. On January 1, 1943, this proportion for the United States was 65 percent. The proportion ranged from 56 percent in the Western States to 71 percent in the West North Central States. Favorable factors affecting the rate of lay per bird on hand in 1944 are the prospective increase in proportion of pullets in laying flocks, probable further increase in egg laying capacity of pullets raised in 1943 over that of 1942, and the relatively high average protein content of the national feed supply for the coming feeding year. In addition to the above and other factors, the average number of eggs produced in 1944 per hen and pullet housed on January 1 will be influenced by the extent and timing of culling next year.

From the standpoint of efficient utilization of feeds, it is desirable that the lowest producers be culled to bring numbers to a level in line with probable feed supplies. However, in any given season, as long as feed can

be obtained, a favorable relationship between egg prices and feed prices enables each individual poultryman to maximize his net cash returns by feeding a high proportion of the low producers. The national average number of eggs produced in 1944 per hen and pullet housed on January 1 also will depend on the areas in which heavy or indiscriminate culling may take place, since the rate of production per bird varies materially among regions. The rate is highest in the North Atlantic States and in the Pacific Coast States and lowest in the South.

With 10 percent more layers to start the year, a considerable drop in the rate of production per bird on January 1 could occur in 1944 without resulting in smaller egg production than in 1943. A total output as great as in 1943 or slightly greater appears most likely on the basis of present conditions.

Because of prospective stronger demand from consumers and large direct war uses, egg prices next spring may be slightly higher than they were last spring when prices generally were a little below levels permitted by the existing ceiling schedule covering sales to retailers. Prices of eggs to farmers in the second half of 1944 probably will be little different from a year earlier in view of the fact that prices of most eggs except those of low grade and small sizes have been about at ceilings since July 1, 1943. Civilian per capita consumption of eggs in 1944 probably will be little different from 1943 and will again be much above levels that prevailed in previous years.

#### Moderate Reduction in Chicken Production in Prospect for 1944

The conditions that would cause heavy culling of laying flocks in 1944, of course, also will tend to bring about some reduction in numbers of chickens raised for flock replacement purposes. On the average, over past years, the change in number of chickens raised on farms has been about 40 percent as great as the change in the opposite direction in feed prices, assuming no change in egg prices. Either reduced total feed supplies or less favorable relations between feed costs and egg and poultry prices would tend to cut poultry numbers in 1944. The reduction, however, would not be nearly so evenly distributed among feed-deficit and feed-surplus areas if brought about by stoppages in the flow of feed to some sections rather than by general feed-price increases.

The demand for chicks for broiler production has continued very strong. Output in the early part of 1943 was limited only by supplies of chicks. In recent weeks, uncertainties about feed supplies have caused some cancellation of chick orders but supplies of chicks continue as the dominant limiting factor. Broiler-producing facilities have been expanded greatly in the last 2 years. At present it appears that broiler production in 1944 will depend primarily on governmental policy with respect to distribution of feed to and within broiler-producing areas, to pricing of feeds, and to enforcement of ceilings on prices of finished broilers. Broiler production is concentrated in deficit feed areas.

Although the number of chickens raised on farms and for broilers may be smaller next year than in 1943, total supplies of chicken meat may be about

the same for the 2 years, since slaughter from laying flocks may be much greater in 1944 than this year. The average price received by farmers for chickens in 1944 probably will be about the same as in 1943.

#### Somewhat Fewer Layers in Prospect for 1945

If a reduction in number of chickens raised materializes during 1944, the number of layers on farms probably will be reduced to some extent, at least, from the record high expected in early 1944, but probably not until in the second half of the year. The outcome of feed crops in 1944 will be important in determining the number of layers for 1945 as well as the number of chickens raised next spring, since the culling rate of potential layers varies considerably in the fall and early winter.

#### Turkeys

The primary limiting factor in turkey production in 1943 was the supply of turkey poults. A transition is taking place in methods of raising turkeys in that producers are buying an increasing proportion of the poults they start, rather than hatching them at home. Commercial production of eggs and poults apparently has not kept pace, and the shortage of poults was particularly acute in 1943. Some indications point to an increase in the number of breeder turkeys to be saved for next year. But after allowing for offsetting factors, such as feed supplies and prices and labor, it appears likely that production of turkey in the Nation as a whole may be about the same in 1944 as in 1943, but considerably above the pre-war average.

#### Cash Farm Income from Poultry and Eggs Probably will Increase Further in 1944

Income from chickens and eggs in 1943 will total over 2 billion dollars compared with 1.3 billion in 1942 and the previous peak of 1.1 billion dollars reached in 1929 and 3 other earlier years. In addition, in 1943, income from broilers will be well over 200 million dollars and income from turkeys will be about 150 million dollars. Cash farm income from poultry and eggs in 1944 is likely to be slightly larger than in 1943, but this may be offset in large part by increased expenses.

Increases in income have resulted from both sales and price increases. Sales of eggs in 1943 will be about 60 percent larger than in 1935-39 and prices will be about 75 percent higher, making total cash income from eggs nearly 3 times as large. Both sales and prices of chickens in 1943 will be about 65 percent above 1935-39, resulting in an income 2-3/4 times as large as in the pre-war period.

Cash income from poultry and eggs in 1943 apparently will be about 12.7 percent of total cash farm income from all sources excluding Government payments compared with 10.6 percent in 1942 and 10.2 percent in the 1935-39 period. Production of poultry and eggs also has increased more than over-all livestock or agricultural production.

Demand to Increase Further

The over-all demand for farm products is likely to average somewhat higher in 1944 than in 1943, but the rate of increase from now on will be slower than during the last 3 years. Domestic civilian demand, as measured by nonagricultural employees compensation, is expected to continue increasing for several months though probably at a decreasing rate. In July the index of nonagricultural employees compensation, at 236 percent of the 1935-39 average, was 26 percent higher than in July 1942 and 64 percent higher than in July 1941. The rate of increase during 1942 was the highest on record. In the first half of 1943 the increase in this index was about three-fourths as great as the increase a year earlier.

The over-all demand for farm products for military, lend-lease and foreign relief uses will be substantially larger in 1944 than in 1943. Among these uses poultry meat so far has been used almost exclusively for our armed forces. Dried egg on the other hand has been used extensively for lend-lease as well as for the military forces. Dried egg became important in the lend-lease program largely because of the extremely tight shipping situation. Egg drying facilities in the United States have been expanded several fold since early 1941. It is estimated that facilities in operating condition in mid-September could produce about 420 million pounds annually based on 300 days operation of 22 hours per day. Additional facilities for processing 30 million pounds annually on the same basis were under construction in mid-September. Because of unfavorable relationships between prices of dried egg and prices of shell eggs, egg-drying facilities have not operated at capacity for several months. Total production of all dried egg products in the United States in 1943 apparently will be a little over 275 million pounds compared with 236 million pounds in 1942.

The volume of egg-drying operations in 1944 and after will depend on developments in the ocean shipping situation and on prices and availability of satisfactory substitutes for dried egg in this Nation and in other countries. Moreover, the types of food that are supplied to liberated areas for relief purposes may be conditioned to some extent at least by past eating habits of people in such areas. Egg-drying facilities can be used also for drying skim milk, the demand and need for which is in some respects relatively much greater than for dried egg.

Because of the prospective stronger civilian demand in the United States in 1944, larger quantities of both eggs and poultry probably would be taken at ceiling prices than this year. Hence, demand for poultry next year is likely to exceed supplies by a greater margin than in 1943. Demand for eggs at ceiling prices probably will exceed supplies in at least part of 1944, and consumption of eggs per capita is likely to be at least about as great as in 1943.

Wholesale prices of all commodities except farm and food products have been virtually stabilized. Prices of farm and food products, on the other hand, have continued to advance but at a slower rate and with some indications that a plateau is being approached. Except for increases in prices of some agricultural products, the general level of wholesale prices in 1944 is not likely to change materially.



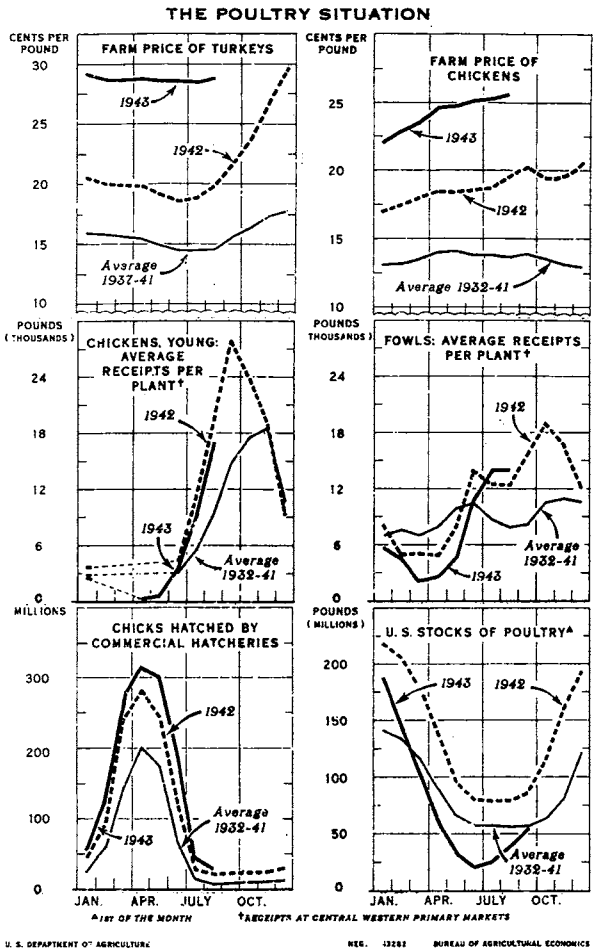


FIGURE 1

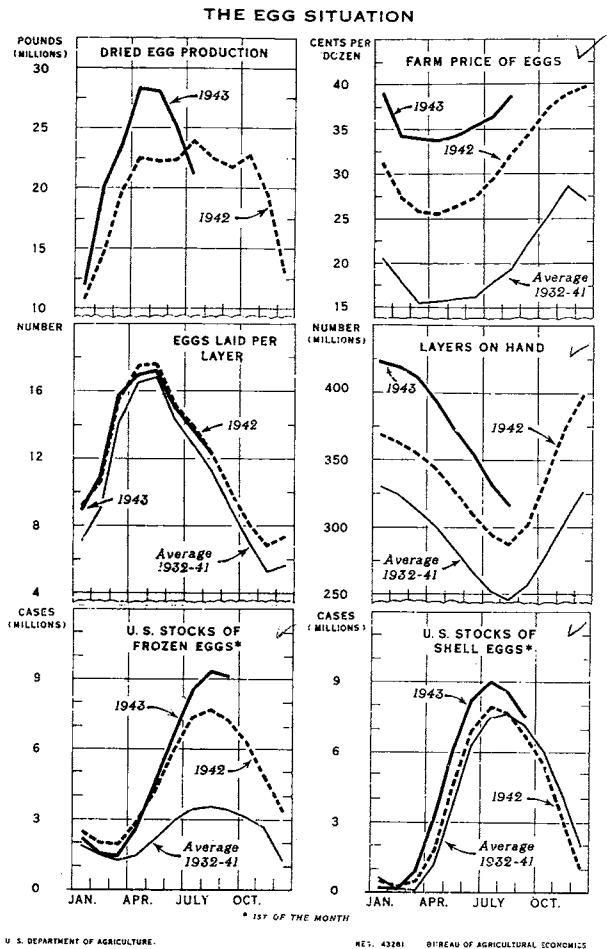


FIGURE 2

Figure 1.- Farm production of eggs, chickens, turkeys, and commercial broilers, United States, 1910-42.

Figure 2.- Cash farm income from eggs, chickens, turkeys, and commercial broilers, United States, 1910-42.

In response to favorable price relationships, production of both chickens and eggs have reached new record levels. Supplies of hatching eggs apparently limited production of both chickens and turkeys in 1943. It is likely that feed supplies will be a limiting factor during the hatching season of 1944 and that a moderate decline in chicken production will result. Turkey production in 1944 may be little different from the output in 1943. The prospective increase in numbers of layers at the beginning of the 1944 laying season provides a basis for a material increase in egg production in 1944 over 1943. But the tightening feed supply will be a limiting factor.

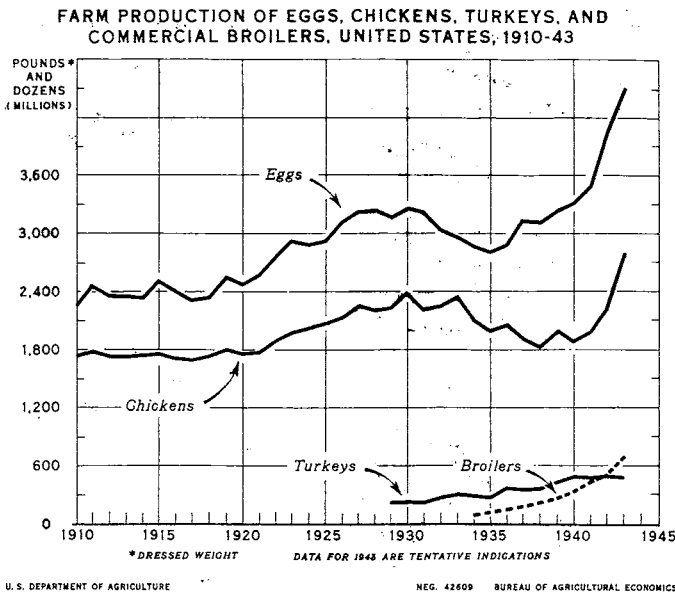


Figure 3.- Prices received by farmers for eggs, by months, United States, 1913-22 and 1938 to date.

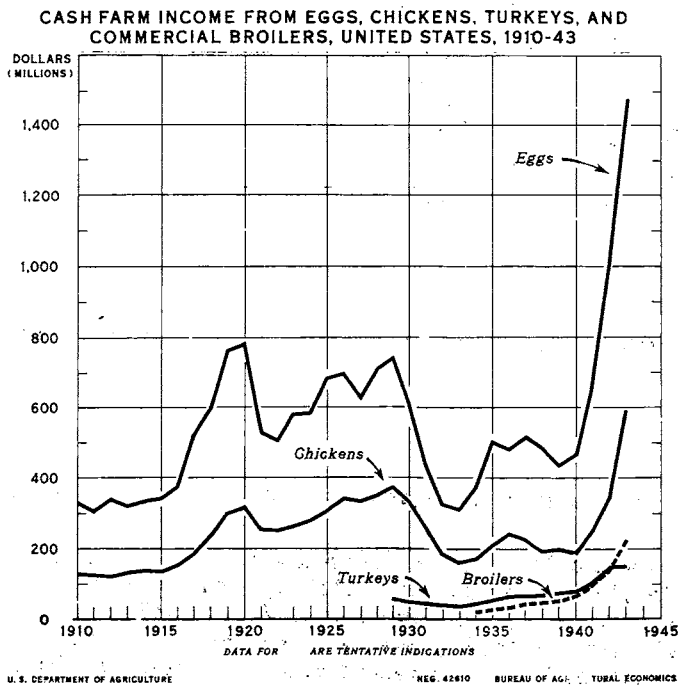
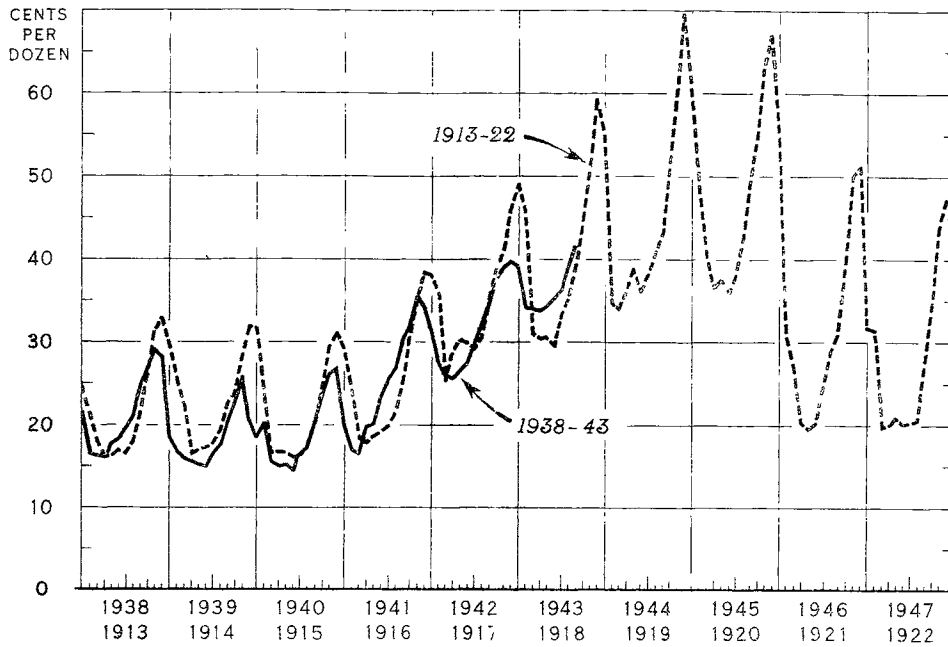


Figure 4.- Prices received by farmers for chickens, by months, United States, 1913-22 and 1938 to date.

Prices received by farmers for eggs have risen somewhat more sharply so far in this war than in the corresponding period of World War I. The seasonal variation in egg prices, however, has been much smaller than it was in the previous war period largely because of relatively greater winter production of eggs. Price ceilings also have contributed to the reduction in seasonal variation. Chicken prices in this war have been higher than in corresponding months of World War I.

EGGS: PRICE RECEIVED BY FARMERS.  
UNITED STATES, 1913-22 AND 1938-43



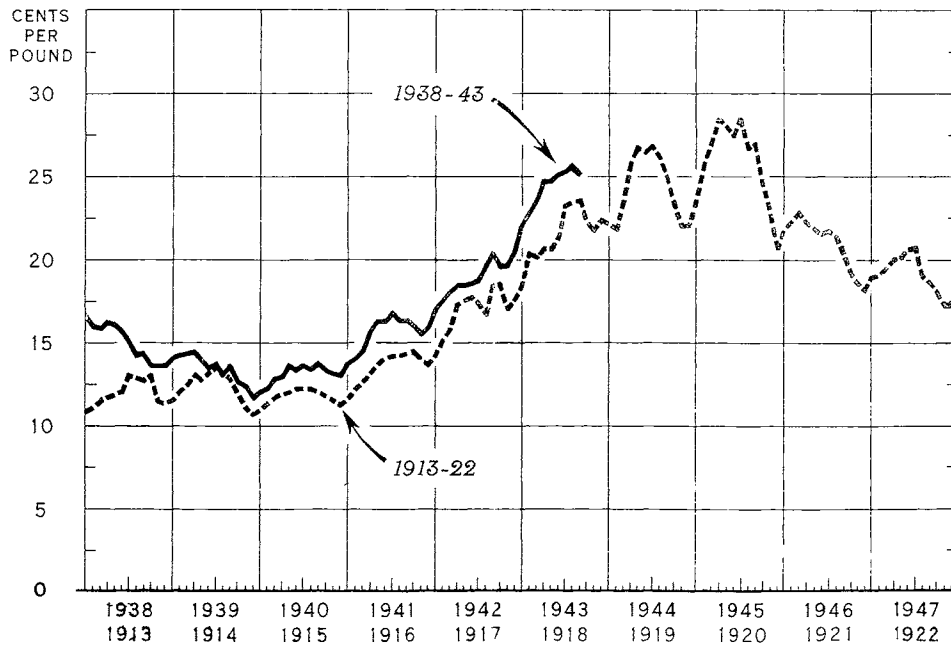
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FIGURE 5

CHICKENS: PRICE RECEIVED BY FARMERS,  
UNITED STATES, 1913-22 AND 1938-43



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FIGURE 6