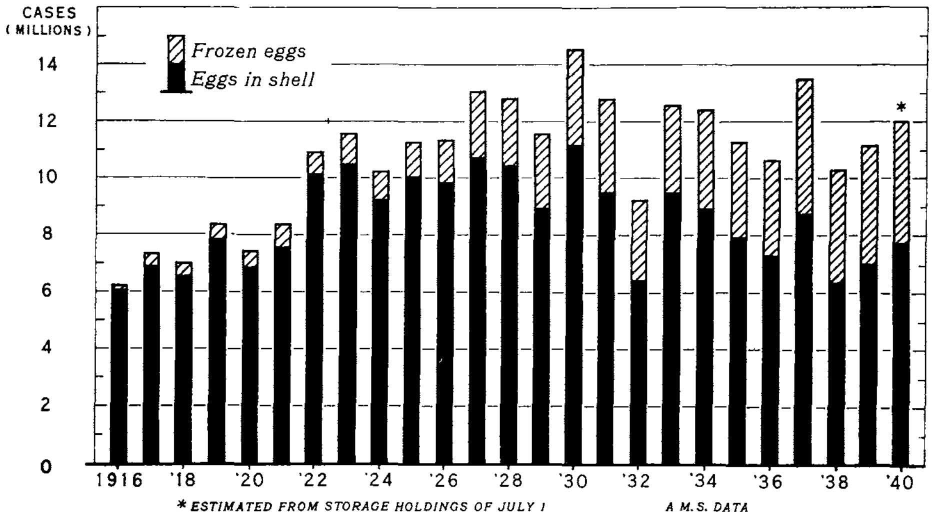
THE Poultry and Egg SITUATION

BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE

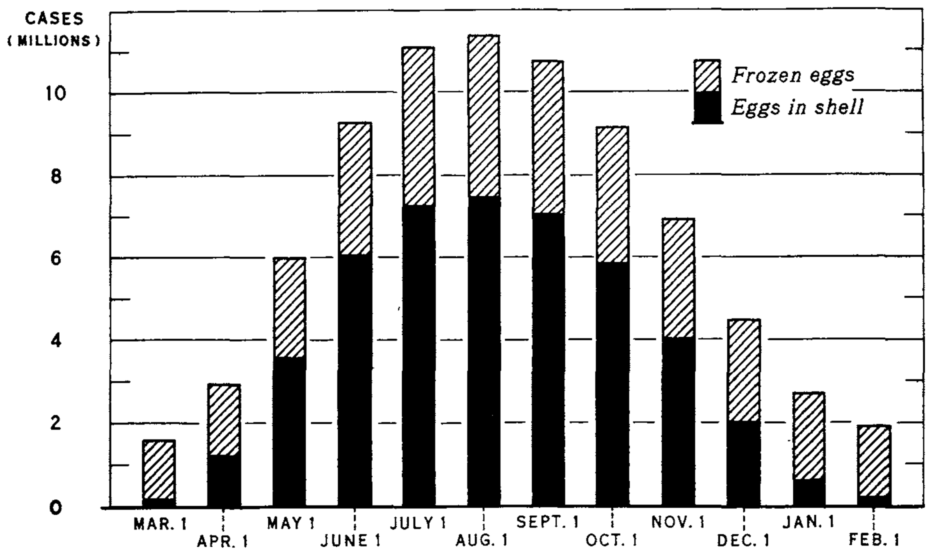
PES-44 BAE AUGUST 1940

U. S. COLD-STORAGE STOCKS OF EGGS ON AUGUST 1, 1916-40



U. S. DEPARTMENT OF AGRICULTURE NEG 26382 BUREAU OF AGRICULTURAL ECONOMICS

U. S. STORAGE STOCKS OF EGGS, MONTHLY AVERAGES, 1935-36 TO 1939-40



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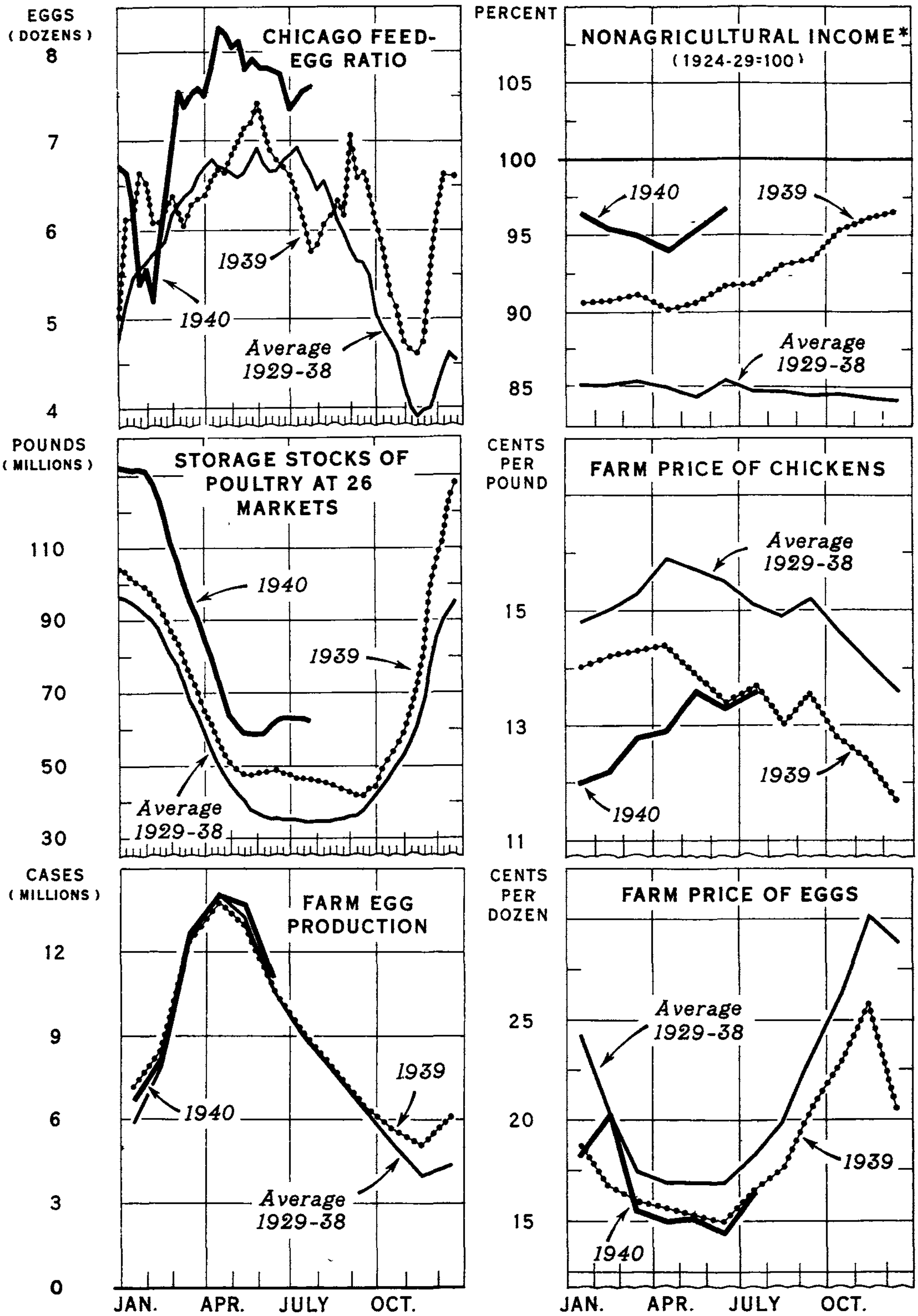
THE POULTRY AND EGG SITUATION AT A GLANCE



A. M. S. DATA, EXCEPT NONAGRICULTURAL INCOME

*INDEX NUMBERS, ADJUSTED FOR SEASONAL VARIATION

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FIGURE 1

: Beginning with the September number THE POULTRY AND :
: EGG SITUATION will be issued on or about the 20th of each :
: month. This change to a later date of issue is being made :
: in order to include production data for the preceding month.:

THE POULTRY AND EGG SITUATION

Summary

Slightly smaller supplies of eggs in the United States are indicated for the last half of 1940 as compared with the last half of 1939. Supplies of chicken meat (including fowl) may be about 5 percent smaller. These smaller supplies will be largely the result of the smaller hatch this year than last.

The larger than usual into-storage movement during June and July for both shell and frozen eggs, made possible by unusually heavy egg production in those months, has more than made up for the delayed into-storage movement at the beginning of the season. While total stocks of eggs, including Government holdings, in the United States on August 1 probably were about 8 percent larger than on the same date in 1939, private holdings probably were slightly smaller.

With smaller production and larger consumer incomes than a year earlier indicated for the remainder of 1940, egg prices may tend to rise during coming months relative to last year's prices.

Receipts of poultry are continuing heavier than a year earlier, but are tending to decline relative to last year's levels. This tendency is likely to continue during the remainder of this year as a result of the smaller production of chickens and a somewhat smaller production of turkeys in 1940 as compared with 1939. The smaller marketings during the remainder of 1940 probably will

tend to offset some of the depressing effects of the present larger total storage stocks of poultry. Smaller supplies of chickens, higher consumers' incomes, and the apparent generally favorable chicken storage deal of the past season will tend to bring about higher chicken prices in the last half of this year compared with the last 6 months of 1939. However, the effects on turkey prices of the higher level of consumer incomes and probable smaller turkey production this year compared with last will tend to be offset by the present abnormally large storage stocks of dressed turkeys and by the effects of last season's unfavorable turkey storage deal.

August 2, 1940

FEED-EGG RATIO

The cost of poultry feed, based on Chicago prices, has decreased somewhat in recent weeks but continues considerably higher than a year earlier. Thus, with egg prices only slightly higher than a year earlier, the feed-egg ratio is continuing well above the level of the corresponding period in 1939.

The seasonal increase in the price of eggs will tend to bring about some reduction in the number of eggs required to buy 100 pounds of poultry feed and by September may reduce the number below that of a year earlier, when sharp increases in grain prices occurred following the declaration of war in Europe. It is likely, however, that the feed-egg ratio will remain less favorable to poultry producers than the 10-year average during the remainder of 1940.

Feed-egg ratio at Chicago

(Dozens of eggs required to buy 100 pounds of poultry ration)

Year	Week ending as of 1940											
	Jan.	Apr.	June		July				August			Sept.
	27	27	22	29	6	13	20	27	3	10	17	9
	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.
Average 1929-38	5.55	6.68	6.66	6.79	6.84	6.92	6.75	6.62	6.46	6.56	6.36	5.79
1938	6.39	5.85	5.56	5.50	5.33	5.31	5.40	5.12	4.98	4.78	4.87	4.04
1939	6.65	6.65	6.78	6.71	6.61	6.37	6.05	5.76	5.85	6.05	6.15	7.08
1940	5.38	8.21	7.74	7.57	7.34	7.45	7.57	7.61				

HATCHINGS

June is the first month this year in which hatchery production of baby chicks was larger than a year earlier. This was chiefly the result of an increase in demand for chicks for broilers, however, and therefore probably will have a relatively small effect on the number of pullets available for next year's laying flocks. The decrease from a year earlier in the number of chicks and young chickens on farms changed from 12 percent on June 1 to 8 percent on July 1.

Commercial hatcheries reported the production of 35 percent fewer turkey poults in June this year than a year earlier and a 19 percent smaller output of poults for the first 6 months of 1940 compared with the first half of 1939. Total turkey production for this year, however, may be closer to the volume of a year earlier than these percentages indicate since home hatchings of turkeys may be larger this year than last.

A limited survey of turkey growers as of July 1 indicates the production of 2 percent fewer turkeys in 1940 as compared with 1939. A more extensive survey to be made in September will give more definite information on the number of turkeys produced this year.

Average number of chicks and young chickens per farm flock

Year	May 1	June 1	July 1
	Number	Number	Number
Average 1929-38	88.0	131.6	134.9
1937	82.4	117.8	117.4
1938	94.5	131.7	132.6
1939	99.6	135.2	136.0
1940	81.4	119.5	124.9

POULTRY SITUATION

Poultry marketings

Receipts of dressed poultry at the four principal markets during the first half of 1940 were about 18 percent larger than during the corresponding period of 1939. This apparently reflects the large inventories of live and storage poultry carried over from 1939. The excess of weekly receipts over those of a year earlier, however, was smaller during the second quarter than during the first. Receipts will tend to average smaller than a year earlier during the remainder of 1940 largely because of the smaller production of chickens and the somewhat smaller production of turkeys this year compared with 1939. Indications are that the production and marketings of chicken meat (including fowl) will be about 5 percent smaller in the last half of this year than in the second 6 months of 1939.

Receipts of dressed poultry at four markets
(New York, Chicago, Philadelphia, Boston)

Year	Week ending as of 1940								
	June		July				Aug.		Sept.
	22	29	6	13	20	27	3	10	28
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Average 1929-38	5,117	5,310	4,643	4,795	4,769	4,625	4,795	4,934	6,517
1938	5,240	5,349	4,678	5,304	4,506	5,405	5,656	5,989	6,981
1939	6,515	6,139	5,357	6,300	5,942	6,948	5,872	5,690	7,530
1940	6,584	6,653	6,044	6,406	5,724	6,079			

Poultry storage

The increase during June in storage holdings of all poultry in the United States was the largest on record for that month. This increase was mostly in holdings of fowl, since holdings of broilers, ducks, and miscellaneous poultry increased only slightly and holdings of all other classes declined. Data for the 26 markets, shown graphically in figure 1, indicate a net decline in storage holdings for the month of July.

The expected smaller stocks of poultry in storage at the end of this year will be composed of a smaller proportion of stock from this year's production and a larger proportion of fowl, since this year's production of chickens and turkeys was smaller than last but marketings of fowl probably will continue at least as heavy as a year earlier for the next few months.

Storage stocks of frozen poultry at 26 markets

Year	Week ending as of 1940					
	Storage stocks June 29	Out-of-storage movement, July				Storage stocks July 27
		6	13	20	27	
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Average 1929-38	35,279	42	177	318	266	34,476
1939	48,248	430	1,079	282	1/ 35	46,492
1940	63,340	27	326	100	355	62,532

1/ Into-storage.

Poultry prices

The farm price of chickens usually reaches a peak in April or May and then declines until the end of the year (see figure 1). During the last half of this year, however, chicken prices may tend to rise relative to prices in the last half of 1939. Three factors will tend to bring about higher prices. First, marketings in the last half of 1940 probably will be smaller than those of a year earlier; second, consumer incomes will be as high or higher than in the last half of 1939, bringing about a strong demand for poultry for immediate consumption; and, third, last season's storage deal on most classes of chickens was relatively favorable, so that storage demand may be relatively strong.

The higher level of consumer incomes this year and the probable somewhat smaller 1940 turkey production compared with 1939, will be of strengthening influence to turkey prices this coming fall. These strengthening influences, however, will be at least partly offset by the effects of the large stocks of turkeys still in storage and by the weaker storage demand resulting from losses to storage operators during the past season.

Price per pound received by farmers for chickens

Year	Jan. 15	Feb. 15	Mar. 15	Apr. 15	May 15	June 15	July 15	Aug. 15	Sept. 15	Oct. 15	Nov. 15	Dec. 15
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Average: 1929-38	14.8	15.0	15.3	15.9	15.7	15.5	15.1	14.9	15.2	14.6	14.1	13.6
1938	16.7	16.0	15.9	16.2	16.1	15.7	15.0	14.2	14.3	13.6	13.6	13.6
1939	14.0	14.2	14.3	14.4	13.9	13.4	13.7	13.0	13.6	12.7	12.4	11.7
1940	12.0	12.2	12.8	12.9	13.6	13.3	13.6					

EGG SITUATION

Number of layers on farms

The number of layers on farms usually declines about 25 percent from January to August of each year and then increases rapidly in the last 4 months as pullets are added to the laying flocks. The decline in numbers during the first half of this year was of about the usual extent, but the increase after August may be less than usual because of the smaller hatch this year as compared with 1939. On the basis of the change from a year earlier in the number of young chickens now in farm flocks, it appears likely that the number of layers on farms in January 1941 will be from 3 to 8 percent smaller than the number in January of this year.

Because of the tendency of producers to cull less severely during years of comparatively small hatches, it is likely that next year's laying flocks will contain a smaller proportion of pullet layers than they did this year.

Number of layers on farms, United States

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.
Average: 1929-39	335	328	318	304	287	270	256	250	259	280	303	325
1938	307	301	292	278	262	248	236	234	245	269	293	314
1939	322	316	306	292	276	260	246	242	253	279	305	326
1940	332	327	318	304	289	269						

Egg production

Egg production during June was larger than a year earlier for the fourth consecutive month (see one of the charts in figure 1) and was the largest production for June since 1930. Production during the first half of this year was about 1 percent larger than that for the first half of 1939, but production during the last half of this year may be from 1 to 2 percent less than in the last half of 1939. This seems likely in view of the probable smaller number of layers on farms this fall than last and a smaller than usual proportion of pullet layers in farm flocks. The smaller proportion of pullets will tend to cause a lower average rate of production this fall compared to the last several months of 1939.

The average rate of lay for June, probably stimulated by the generally cool weather, was the highest of record for the month, except for June 1938. Thus, the larger than usual June production was the result of a higher rate of lay as well as of a larger number of layers on farms as compared with the past few years.

Total farm production of eggs, United States

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases
Average: 1929-38	5.9	7.9	12.5	14.1	13.3	10.6	9.0	7.7	6.4	5.2	4.0	4.4
1938	6.7	8.3	12.5	13.5	12.6	10.3	8.9	7.6	6.4	5.6	4.8	5.5
1939	7.2	8.5	12.6	13.8	13.0	10.6	9.1	7.8	6.5	5.7	5.1	6.1
1940	6.7	8.2	12.7	14.0	13.7	11.1						

Average number of eggs produced per layer, United States

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Average 1929-38	6.3	8.6	14.2	16.6	16.7	14.2	12.7	11.1	8.9	6.7	4.8	5.0
1938	7.9	9.9	15.4	17.5	17.3	14.9	13.6	11.8	9.4	7.5	5.9	6.4
1939	8.0	9.7	14.9	17.0	17.0	14.6	13.2	11.7	9.3	7.4	6.0	6.8
1940	7.2	9.0	14.4	16.5	17.0	14.8						

Egg storage and Government purchases

The increased rate of into-storage movement for both shell and frozen eggs during recent weeks has more than made up for the delayed into-storage movement at the beginning of the storage season. Total holdings of shell and frozen eggs (including Government holdings) were about 7 percent larger on July 1 than on the same date a year earlier, and indications are that the holdings on August 1 were at least as large a percentage in excess of stocks of a year earlier. One of the charts on the cover page indicates how August 1 stocks of shell and frozen eggs have varied since 1916.

On July 1 the Surplus Marketing Administration owned 933,000 cases, or about 12 percent, of the 7,509,000 cases of shell eggs in storage in the United States. The eggs held by this agency, however, will be distributed largely in school lunch programs, etc. and therefore will not compete in the market with privately owned supplies. The Surplus Marketing Administration (which now includes the Federal Surplus Commodities Corporation) has helped to support egg prices this season by purchasing a total of 2,218,186 cases since the beginning of this season's buying program in December 1939.

Storage stocks of eggs at twenty-six markets

Year	Week ending as of 1940: Storage stocks June 29	Into-storage movement July: 6	13	20	27	Storage stocks July 27
	1,000 cases	1,000 cases	1,000 cases	1,000 cases	1,000 cases	1,000 cases
Shell						
Average, 1929-38	5,583	95	62	42	12	5,794
1939	4,868	56	16	2	1/ 2	4,940
1940	5,230	99	43	29	69	5,470
Frozen						
1939	2,345	52	44	13	0	2,454
1940	2,429	93	29	27	16	2,594

1/ Out-of-storage.

Egg prices

Wholesale egg prices advanced during early July, and the average price received by farmers for eggs in mid-July was 16.4 cents compared with 14.4 cents a month earlier and 16.5 cents in July 1939. Since privately owned supplies of eggs in the last half of this year may be smaller than a year earlier and consumers' incomes are expected to average higher in the remainder of 1940 than in the last half of 1939, it is likely that egg prices will tend to rise relative to those of 1939 and the first half of 1940 during coming months.

Price per dozen received by farmers for eggs

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Average 1929-38	24.2	20.3	17.3	16.8	16.8	16.8	18.1	19.9	23.2	26.2	30.1	28.[illegible]
1938	21.6	16.4	16.2	15.9	17.6	18.2	19.9	21.0	24.9	27.1	29.0	27.9
1939	18.8	16.7	16.0	15.5	15.2	14.9	16.5	17.5	20.6	22.9	25.8	20.5
1940	18.3	20.2	15.4	15.0	15.1	14.4	16.4					

DOMESTIC DEMAND

The improvement in business conditions which began in April continued into July. Industrial employment and payrolls have risen along with the expansion of industrial output. Domestic consumer demand for most farm-produced food products has been strengthened by this recent stimulation of domestic business and is expected to be better during the last half of 1940 than during either the last half of 1939 or the first half of 1940.

There are indications, however, that the recent rate of improvement in demand conditions is slowing down. Whether this slower rate of rise will be followed by further gains or by a temporary relapse is dependent in considerable degree upon continuation of the war by Great Britain, our most important overseas customer.

Index numbers of nonagricultural income

(1924-29 = 100, adjusted for seasonal variation)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Average 1929-38	85.2	85.1	85.4	85.0	84.3	85.4	84.7	84.7	84.4	84.5	84.2	84.1
1938	88.9	88.1	87.9	87.0	86.1	86.1	86.2	88.0	88.3	89.0	89.8	90.3
1939	90.6	90.6	91.1	90.1	90.5	91.7	91.8	93.1	93.4	95.4	96.1	96.6
1940	96.4	95.4	95.0	94.2	95.3	96.7						

Chick Hatchery Survey, 1937-38

The Poultry Division of the Surplus Marketing Administration (which now includes the former Division of Marketing and Marketing Agreements) recently completed a survey of commercial chick hatchery operations during the year 1937-38. Returns were secured from 5,786, or 55 percent, of the 10,533 hatcheries doing business in that year. An earlier survey 1/ covered operations during the year 1934. A comparison of the results obtained from the two surveys and detailed information obtained from the latter one are given in the bulletin entitled "Chick Hatchery Survey, 1937-38" by W. D. Termohlen, C. C. Warren, and G. G. Lamson. Copies are available from the Poultry Division Surplus Marketing Administration, United States Department of Agriculture, Washington, D. C.

Each of the hatcheries reporting in the later survey was asked to state the year in which it first operated. The results are shown in figure 2. From 1880 to 1920 a gradual growth took place, but from 1920 to date the growth has been very rapid. However, the increase in number of hatcheries during 1937-38 was the smallest since 1923, and it is believed that the rate of increase in hatcheries has slowed down considerably.

During 1937-38, hatcheries operated in every State and in two-thirds of the 3,070 counties in the United States. The total number of hatcheries operating in 1937-38 was slightly smaller than in 1934. However, total egg capacity increased 44 percent and chicks hatched increased 72 percent. Decreases in both number of hatcheries and capacity were reported for firms having a capacity of less than 10,000 eggs. All other size-groups showed increases, the largest increase being for hatcheries having an egg capacity of 500,000 and over.

The huge increase in the number of chicks hatched, according to the bulletins "represents in part a shift from farm hatched to commercially hatched chicks and does not represent a corresponding expansion in the number of chickens raised. Between 1934 and 1938 there was an increase of only 7 percent in the number of chickens raised on farms. Instead, the increase in hatchery chick production has occurred because the poultry industry has become more highly specialized. A much greater proportion of the total number of chickens raised is now being produced from chicks hatched by commercial hatcheries than was formerly the case. In 1934 the Bureau of Agricultural Economics estimated that about 46.6 percent of the chicks produced that year was either bought from commercial hatcheries or custom hatched by them. While no definite estimates were made for 1938, indications show that probably more than 60 percent of the chicks produced was either bought from or custom hatched by commercial hatcheries. This increase in the proportions bought will in itself account for a major proportion of the increased production of chicks."

The bulletin gives as another reason for increased chick production the rapid growth of broiler production on a commercial scale during the last few years. "Estimates of the volume of this production range between 60 and 80 million broilers a year, which, with an assumed mortality of 20 percent, would require between 75 and 100 million chicks annually. While perhaps 60

1/ Poultry Section, Agricultural Adjustment Administration, "An Economic Survey of the Baby Chick Hatchery Industry", 1935.

DEVELOPMENT OF HATCHERY INDUSTRY

NUMBER OF HATCHERIES REPORTED AS OPERATING IN EACH YEAR

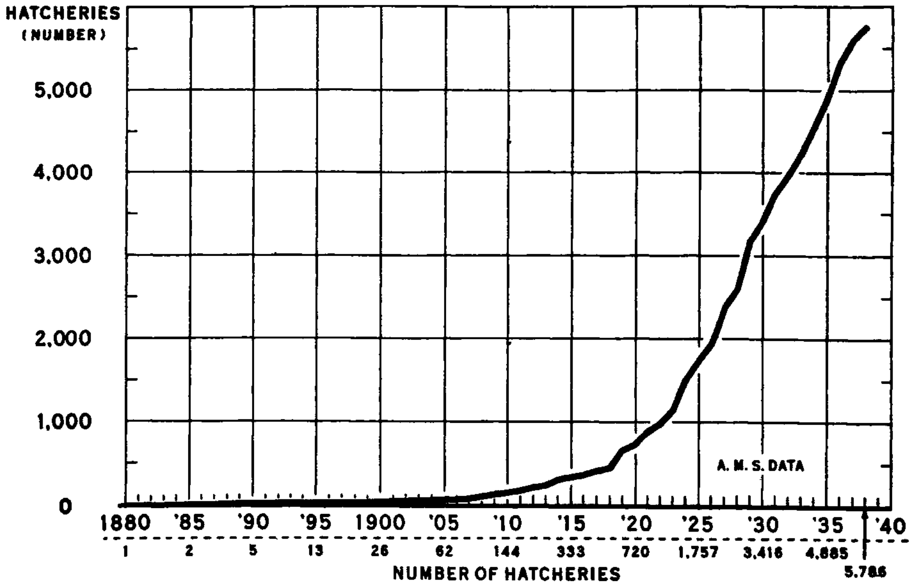

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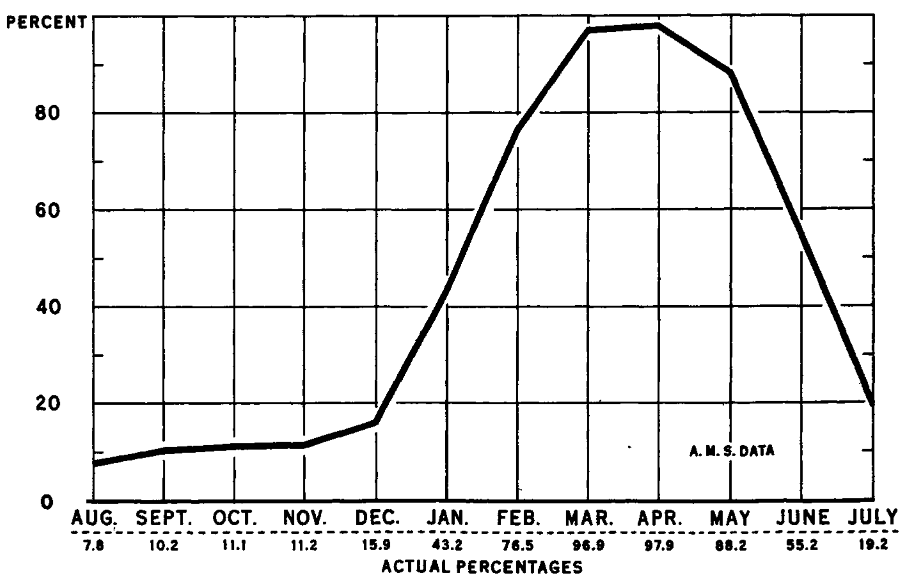
FIGURE 2.- THE EARLIEST COMMERCIAL HATCHERY BEGAN OPERATING IN 1880, AND FROM THEN UNTIL ABOUT 1920 THE INDUSTRY EXPERIENCED ONLY A GRADUAL GROWTH. FROM THAT TIME ON, A RAPID EXPANSION HAS TAKEN PLACE. THE GROWTH CURVE SHOWN ABOVE IS BASED ON REPORTS FROM 5,786, OR 55 PERCENT, OF 10,533 HATCHERIES DOING BUSINESS IN 1937-38.

PERCENTAGE OF HATCHERIES OPERATING EACH MONTH, 1937-38*



*BASED ON RETURNS FROM 5,907 HATCHERIES

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FIGURE 3.- MORE THAN THREE-FOURTHS OF THE HATCHERIES OPERATED DURING THE PERIOD FEBRUARY THROUGH MAY. APPROXIMATELY 10 PERCENT OF ALL HATCHERIES, PRINCIPALLY AMONG THE LARGER SIZE-GROUPS, OPERATED DURING THE "OFF-SEASON" FROM AUGUST THROUGH DECEMBER. THIS COMPARATIVELY NEW DEVELOPMENT HAS BEEN BROUGHT ABOUT BY THE INCREASED DEMAND FOR BROILER CHICKS DURING THAT SEASON OF THE YEAR.

percent of all farm chicks come from commercial hatcheries, practically 100 percent of broiler chicks are obtained from this source."

Increases in the number of chicks hatched commercially since 1934 have occurred in every State but the increases have been largest in the New England and southeastern regions. While in the past the Southeast has been dependent to quite an extent on chicks hatched in other sections of the country, this dependency appears to be rapidly declining. The increase in the New England States is largely due to the growth of the broiler industry in this area and an increase in shipments of chicks to other broiler-producing areas as well as shipments of large quantities of breeding stock from the many breeders in these States.

The West North Central region is now the leading producer of chicks, having displaced the East North Central States since 1934. Iowa, with an increase of nearly 100 percent since 1934, now leads all other States in hatchery chick production. Ohio, which ranked first in 1934, now ranks fourth in importance.

Figure 3 shows the percentage of hatcheries operating in each month of the year beginning August 1937. Nearly all of the hatcheries were operating in March and April and over three-fourths of them operated during the 4-month period, February through May. Hatcheries located in the eastern and far western regions tend to operate over more months than do hatcheries in other regions. Also as the size of the hatchery increases, the period of operation tends to be longer.

From 1934 to 1937-38 the average percentage hatch has increased from 63.9 to 68.2 percent. In other words, hatcherymen obtained 4.3 more chicks from every 100 eggs set than they did in 1934. This represents a saving of over 4 million dollars in hatchery costs.

Sex separating of day-old chicks is now practiced by one-fourth of the hatcheries. This practice was first adopted commercially in 1933. "The great majority of the larger hatcheries sell sex-separated chicks, while this is true of only a few of the smaller hatcheries. Since skilled persons are required to do the work of sex-separating, it can be expected for a time at least that this practice will be found more generally in the hatcheries with the larger volume of production." Approximately 7 percent of the hatcheries destroy cockerel chicks during at least a part of the year. This practice is most common on the Pacific Coast.

Some hatcheries are forced to sell started chicks (those that have been given feed and water) because they do not have sufficient orders for all the chicks as they are hatched. However, other hatcheries are supplying started chicks because some poultrymen prefer to buy their chicks after the most difficult period of raising them is over. More than half of the hatcheries in the United States sell started chicks. This practice is most common in the less commercialized poultry areas.

INDEX OF SPECIAL SUBJECTS DISCUSSED IN THE POULTRY AND EGG SITUATION