

A

THESIS

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THE ADEQUACY OR
INADEQUACY OF THE
POULTRY MARKETING
FACILITIES IN THE
VALLEY OF VIRGINIA

1947

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INTRODUCTION

The first phase of this study is a tabulation of poultry statistics over a period of years so as to determine production, marketing and consumption trends. After a discussion of these trends, the data on the poultry processing plants is presented. Then the adequacy or inadequacy of the plants is determined in the light of the trends in production marketing and consumption of poultry.

The first step in determining the adequacy of the poultry marketing facilities in the Valley of Virginia is to consider the trend in the growth of the poultry industry in Virginia and in the United States over a long period of years. This consideration is necessary in order to determine whether the trend is toward an increase or a decrease in the production of poultry. The increase or decrease will have a direct bearing on the adequacy of the poultry marketing facilities, because if there is a trend toward an increase in growth of the poultry industry, the marketing facilities will have to be increased also. On the other hand, if the trend is toward a decrease in the growth of the poultry industry the marketing facilities will have to be decreased.

Before going further certain terminology should be defined.

1. The "Valley of Virginia" as used in this manuscript refers to the territory included in Rockbridge, Augusta, Rockingham, Shenandoah and Frederick counties.

2. The term "poultry" as used includes only chickens and turkeys.

PRODUCTION

A. Poultry Production as Compared with the Production of Cattle, Hogs and Sheep.

United States

In order that the growth of the poultry industry may be considered fully, it is necessary that the growth of livestock, which compete with poultry for the producers time and feed as well as for a place on the table of the consumer, be considered also.

The trend in the production of chickens and turkeys as compared with cattle, hogs and sheep in the United States is shown in Table 1. The figures are percentages of the 1929 production and were computed on the basis of pounds live weight produced each year from 1910 through 1945. The year 1929 was used as a base year because of the fact that adequate yearly statistics on turkey production were not available before that year.

Figure 1, which is taken from Table 1, is a graphic presentation of the trend in production of chickens and turkeys as compared with the production of cattle in the United States. The figure covers the period 1910-1945 using 1929 as the base year, other years being expressed in percentages of the 1929 production in pounds live weight. The trend in production of cattle and chickens has been slightly upward with the cattle curve being somewhat smoother than the chicken curve which deviates more sharply. This difference between the two curves may be explained by the fact that

Table 1 - Production of Chickens, Cattle, Hogs, Sheep and Turkeys on Farms in the United States, 1910-1945. (Computed on the Basis of Pounds Live Weight Having 1929 = 100%.)

Year	Chickens	Cattle	Hogs	Sheep	Turkeys
	<u>Per Cent</u>	<u>Per Cent</u>	<u>Per Cent</u>	<u>Per Cent</u>	<u>Per Cent</u>
1910	80	99	77	63	*
1911	76	99	80	62	*
1912	75	108	77	70	*
1913	75	117	78	65	*
1914	78	122	81	70	*
1915	77	119	89	69	*
1916	73	125	87	61	*
1917	75	131	83	62	*
1918	80	123	95	68	*
1919	77	105	90	63	*
1920	75	97	87	51	*
1921	81	101	91	63	*
1922	86	103	106	59	*
1923	89	103	109	69	*
1924	89	105	99	80	*
1925	92	102	91	83	*
1926	97	99	96	88	*
1927	101	95	105	91	*
1928	92	97	104	97	*
1929	100	100	100	100	100
1930	102	104	97	108	105

Figure 1 - Production of Chickens and Turkeys as Compared with Cattle in the United States 1910-1946. Expressed on a percentage basis, 1929 = 100%. (Semilogarithmic Scale)
(Source: Table 1).

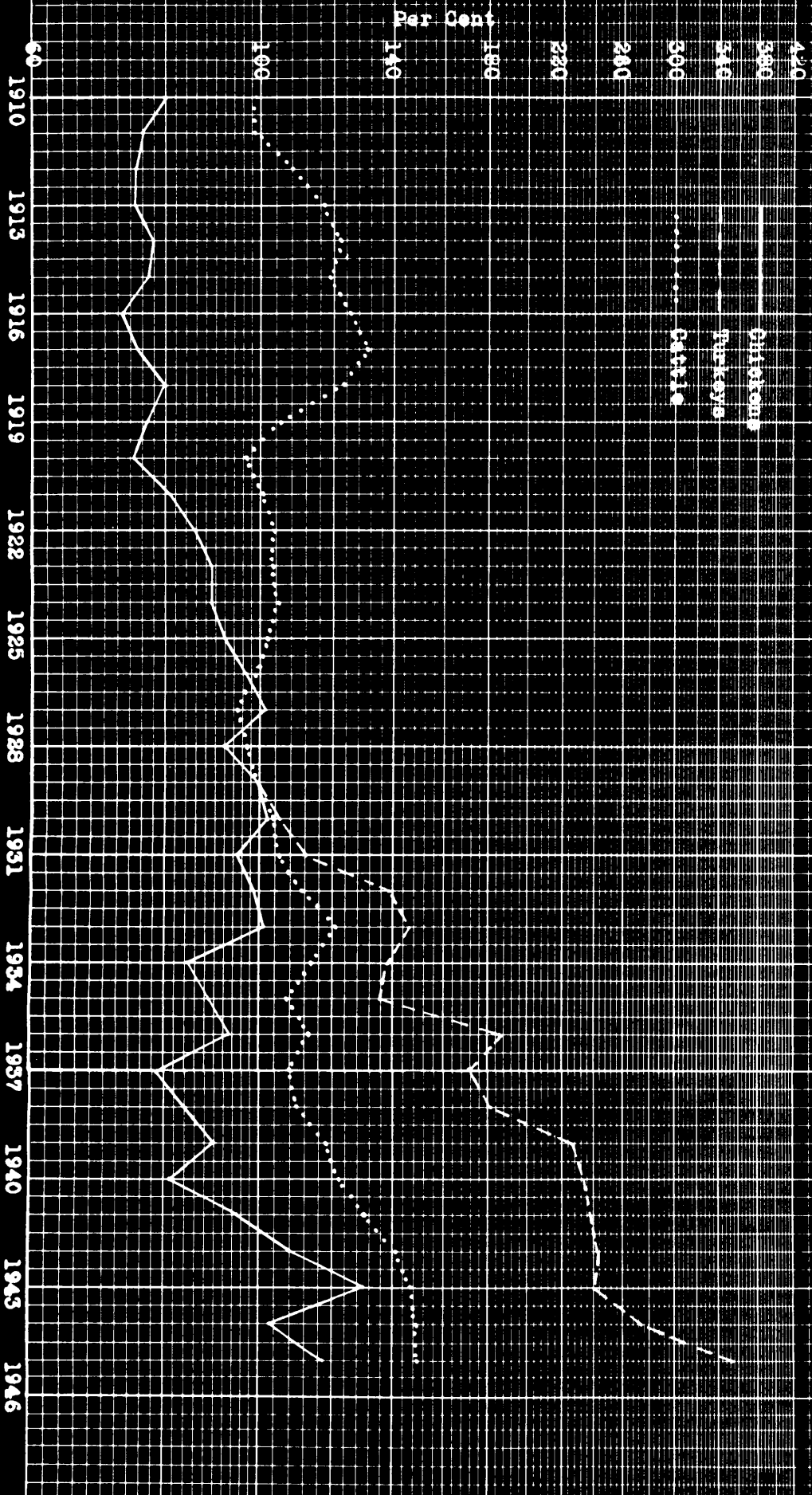


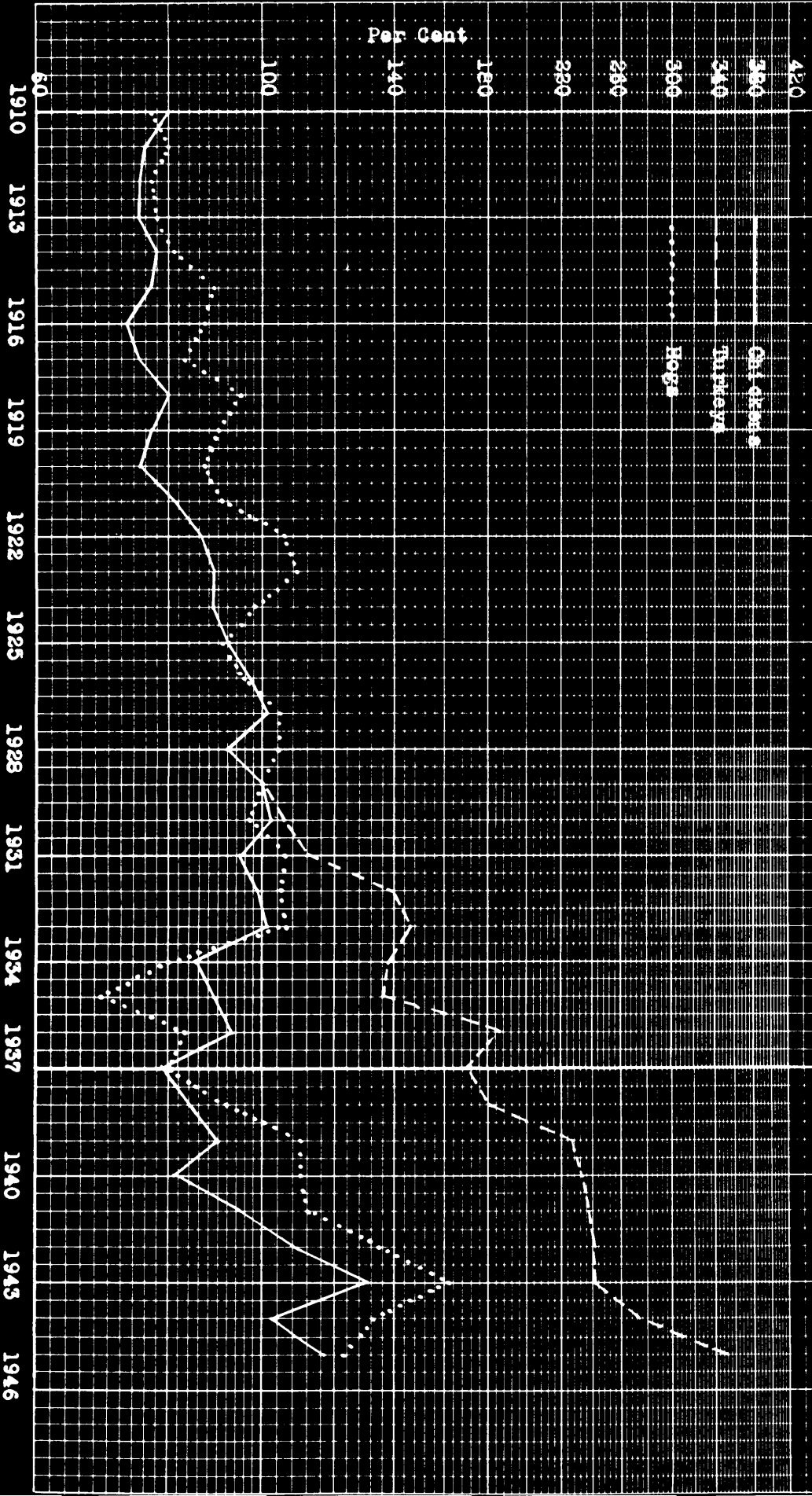
Table 1 - (Continued)

Year	Chickens	Cattle	Hogs	Sheep	Turkeys
	<u>Per Cent</u>	<u>Per Cent</u>	<u>Per Cent</u>	<u>Per Cent</u>	<u>Per Cent</u>
1931	95	105	106	113	112
1932	99	111	105	101	139
1933	101	121	106	102	146
1934	85	114	80	105	138
1935	89	107	69	101	136
1936	93	113	83	101	186
1937	79	108	80	106	172
1938	84	110	92	112	181
1939	90	118	110	112	227
1940	81	122	110	116	233
1941	95	131	112	124	239
1942	108	141	135	127	243
1943	131	147	163	117	241
1944	103	149	133	109	275
1945	117	149	123	107	352

* Not Available

Source: Computed from Appendix A, Tables 1 and 2.

Figure 2 - Production of Chickens and Turkeys as Compared With
 Hogs in the United States, 1910-1945, Expressed on a Per-
 centage Basis, 1929 = 100%. (Semi-Logarithmic Scale).
 (Source: Table 1).



it is easier to get in and out of the chicken business than it is the cattle business. Thus, the chicken curve is more variable. The most striking fact about the figure is the steady and high rate of increase in turkey production. Only in the three years, 1934, 1935, and again in 1937, was there any substantial decrease in production under the previous year. Turkey production, during the period 1929-1945, had increased to 252 per cent of its 1929 production in 1945.

In Figure 2 the trend in the production of chickens and turkeys as compared with the production of hogs is shown in percentage of the 1929 production in pounds live weight. In this figure the chicken and turkey curves are the same as in Figure 1. On the whole there seems to be no great difference in the trend of production of chickens and hogs. Both trends have been slightly upward with hogs remaining above chickens except for the years 1930 and 1934-1937. Turkey production is far above either chickens or hogs.

Virginia

The production of chickens, turkeys, cattle, hogs and sheep on farms in Virginia for the period 1924-1945 is shown in Table 2 on a percentage basis with 1929 as the base year. Figure 3, which is taken from Table 2, gives a graphic presentation of the production of chickens and turkeys as compared with the production of cattle in Virginia. The production of turkeys has been steadily upward except for a slump in production which occurred in 1931.

Turkey production has increased 173 per cent from 1929 to 1945 when 1929 is used as 100 per cent or the base year.

Chicken production has been somewhat unsteady, but the general trend has been upward. The low points were in 1928 and 1940 with 91 per cent of the 1929 production. The high points were in 1936 and 1939 with 142 per cent and 150 per cent, respectively, of the 1929 production.

Cattle production has had a steadier upward trend than chicken production. The low point for cattle production was reached in 1926 with 66 per cent of the 1929 production. The high points were reached in 1943, 1944 and 1945 with 129, 127, and 130 per cent produced, respectively, for those years.

Figure 4 gives a graphic illustration of the production of chickens and turkeys as compared with the production of hogs in Virginia. Hog production has been less variable than chicken production. The general trend has been upward with the low point in 1934 when the production was 80 per cent of 1929 and the high point in 1943 when it was 151 per cent of 1929 production.

Table 2 - Production of Chickens, Cattle, Hogs, Sheep and Turkeys on Farms in Virginia, 1924-1945. (Computed on the Basis of Pounds Live Weight Having 1929 = 100%).

Year	Chickens	Cattle	Hogs	Sheep	Turkeys
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
1924	*	70	87	77	*
1925	92	69	89	80	*
1926	98	66	91	75	*
1927	104	80	105	80	*
1928	91	88	107	89	*
1929	100	100	100	100	100
1930	96	93	88	102	113
1931	97	93	89	107	91
1932	121	97	97	110	107
1933	97	102	97	110	116
1934	101	97	80	89	141
1935	113	97	84	94	127
1936	142	103	94	124	134
1937	114	96	106	85	152
1938	139	99	108	79	155
1939	150	104	115	76	166
1940	91	110	103	72	158
1941	102	112	102	73	165
1942	109	115	119	71	184
1943	127	129	151	68	174
1944	121	127	135	65	208
1945	120	130	116	68	273

* Not Available

Source: Computed from Appendix A, Table 3.

Figure 3 - Production of Chickens and Turkeys as Compared With Cattle in Virginia, 1925-1945. Expressed on a Percentage Basis, 1929 = 100%.
Semi-Logarithmic Scale. (Source: Table 2)

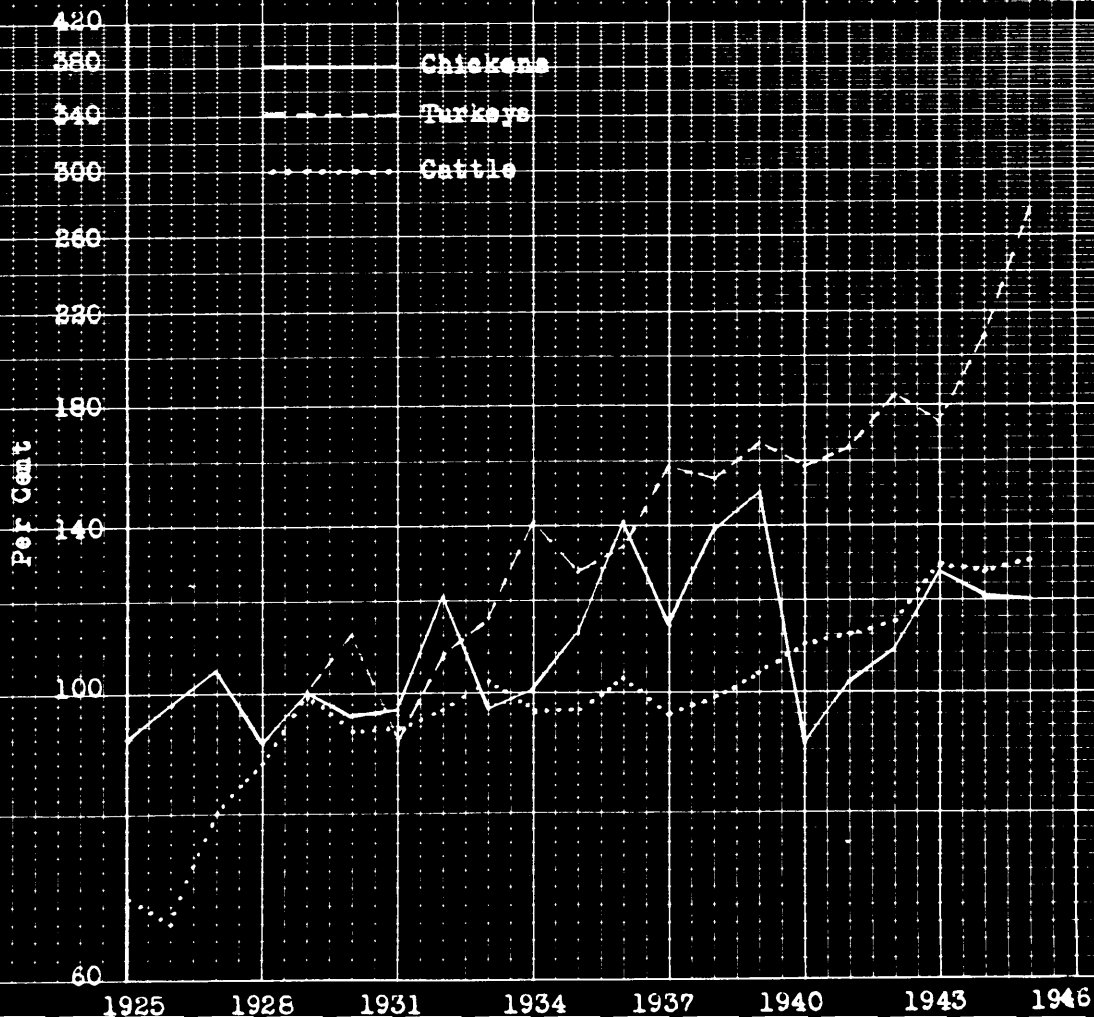
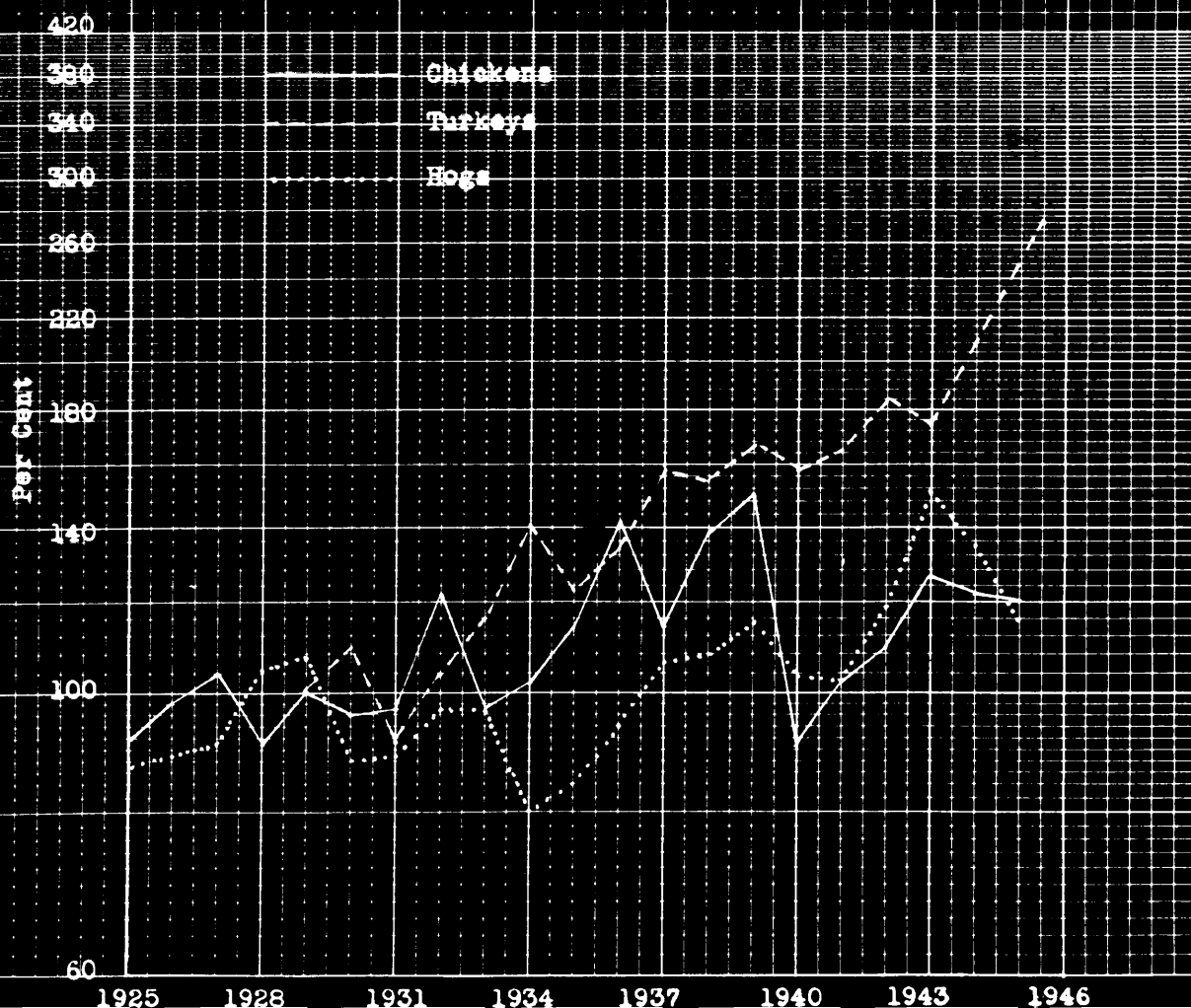


Figure 4 - Production of Chickens and Turkeys as Compared With Hogs in Virginia, 1925-1945. Expressed on a percentage basis, 1929 = 100%. Semi-Logarithmic Scale. (Source: Table 2).



B. Chickens: Farm Production Disposition and Income.

United States

The farm production, disposition of chickens, and the income from chickens in the United States for the period 1910-1945 are shown in Table 3. The production over the period 1910-1945 has averaged well over two billion pounds live weight per year. The cash income from the sale of chickens has ranged from almost 120 million dollars in 1912 to over 581 million dollars in 1946. The gross income from chickens in the United States which includes both cash income from sales and the value of chickens consumed has ranged from over 215 million dollars in 1912 to over 771 million dollars in 1945. The peak year for the United States production was 1943 with 131 per cent of the 1929 production and the low year was 1937 with 79 per cent of the 1929 production.

Virginia

Farm production, disposition of chickens, and the income from chickens produced in Virginia for the period 1925-1945 are shown in Table 4. Production in Virginia has ranged from over 47 million pounds in 1925 to well over 77 million pounds live weight in 1943. Cash income from the sale of poultry has ranged from a little over 3 million dollars in 1940 to almost 12 million dollars in 1944. Gross income from chickens in Virginia ranged from over 6 million dollars in 1933 to over 18 million dollars in 1945.

Table 3 - Chickens: Farm Production, Disposition, and Income,
United States, 1910-1945*.

Year	Number		Production in Pounds 1,000 Pounds	Farm Price Per Pounds Cents	Value of		Cash Income (Sales) 1,000 Dollars	Value of		Gross Income 1,000 Dollars
	Produced Thousands	Sold Thousands			Chickens Produced 1,000 Dollars	Chickens Consumed 1,000 Dollars				
1910	543,281	282,729	235,000	11.8	243,390	126,663	105,280	231,943		
1911	517,215	297,489	234,000	10.9	214,127	123,160	96,876	220,036		
1912	512,928	286,524	229,000	11.0	214,404	119,767	95,722	215,489		
1913	514,240	283,405	229,000	12.3	240,150	132,350	106,943	239,293		
1914	531,019	286,313	230,000	12.6	254,358	138,102	110,170	248,272		
1915	514,495	299,248	225,000	11.8	230,494	134,063	100,800	234,863		
1916	500,665	295,637	215,000	13.5	256,841	151,662	110,295	261,957		
1917	508,863	285,970	219,000	16.9	326,690	183,593	140,598	324,191		
1918	543,395	281,403	234,000	21.7	448,301	232,157	193,050	425,207		
1919	527,029	316,284	221,000	24.6	492,772	295,726	206,635	502,361		
1920	514,267	317,251	208,000	26.3	513,753	316,934	207,792	524,716		
1921	555,585	316,760	214,000	20.9	441,134	251,507	169,916	421,423		
1922	584,606	342,456	222,000	19.2	426,762	249,993	162,060	412,053		
1923	610,188	361,435	229,000	19.1	442,996	262,402	166,255	426,656		

Table 3 - (Continued)

Year	Number		Consumed Thousands	Production in Pounds 1,000 Pounds	Farm Price per Pounds Cents	Value of		Cash Income (Sales) 1,000 Dollars	Value of		Gross Income 1,000 Dollars
	Produced Thousands	Sold Thousands				Chickens Produced 1,000 Dollars	Chickens Consumed 1,000 Dollars				
1924	605,354	375,648	229,561	2,306,399	19.4	440,163	277,967	162,232	440,199		
1925	626,069	391,632	231,435	2,379,062	20.5	479,830	305,301	172,325	477,626		
1926	664,594	404,430	237,165	2,505,519	22.3	548,828	340,069	191,006	531,075		
1927	693,657	436,442	243,217	2,608,150	20.3	521,644	332,897	179,215	512,112		
1928	639,917	434,742	231,166	2,393,290	21.5	508,795	350,051	179,065	529,116		
1929	692,328	437,172	235,671	2,596,230	22.8	585,777	374,218	195,021	569,239		
1930	714,380	449,001	244,127	2,643,206	18.4	482,103	333,188	161,756	494,944		
1931	646,579	426,537	230,970	2,457,000	15.8	383,251	257,665	132,391	390,056		
1932	672,613	418,280	246,631	2,576,131	11.8	296,958	189,410	104,010	293,420		
1933	684,929	441,127	254,388	2,616,429	9.5	243,971	160,584	86,820	247,404		
1934	578,322	403,311	218,990	2,214,973	11.3	241,956	170,772	88,444	259,216		
1935	597,769	365,485	218,796	2,313,366	14.9	331,399	207,361	116,429	323,790		
1936	650,608	394,989	235,144	2,409,582	15.8	386,116	239,181	134,416	373,597		
1937	532,580	351,810	215,067	2,042,009	15.9	332,299	224,826	129,145	353,971		
1938	583,207	326,430	227,810	2,185,049	15.4	306,689	195,195	125,088	320,283		

Table 3 - (Continued)

Year	Number		Production in Pounds		Farm Price Per Pounds	Value of Chickens Produced		Cash Income (Sales)		Value of Chickens Consumed		Gross Income	
	Produced Thousands	Sold Thousands	Consumed Thousands	1,000 Pounds		1,000 Dollars	Dollars	1,000 Dollars	Dollars	1,000 Dollars	Dollars	1,000 Dollars	Dollars
1939	621,063	376,583	224,783	2,337,980	13.5	319,252	198,597	110,490	309,087				
1940	538,863	351,184	203,058	2,092,831	13.3	284,842	189,640	103,176	292,816				
1941	635,976	382,485	201,490	2,477,222	15.8	386,869	245,364	110,241	355,605				
1942	702,666	437,550	199,228	2,807,355	18.9	528,896	345,840	132,577	478,417				
1943	846,555	613,046	197,866	3,410,150	24.4	834,340	624,942	172,528	797,470				
1944	643,605	522,064	187,043	2,661,653	23.9	637,304	541,792	162,232	704,024				
1945	731,079	519,274	197,208	3,026,451	25.9	789,452	581,238	190,481	771,719				

*Does not include commercial broiler production.

Source: Agricultural Statistics, 1942 and 1946.

Table 4 - Chickens: Farm Production, Disposition, and Income,
in Virginia, 1925-1945.

Year	Number		Production in Pounds*	Farm Price Per Pounds	Value of Chickens Produced		Cash Income (Sales)		Value of Chickens Consumed		Gross Income	
	Produced Thousands	Sold Thousands	Consumed Thousands		1,000 Pounds	1,000 Dollars	1,000 Dollars	1,000 Dollars	1,000 Dollars	1,000 Dollars	1,000 Dollars	1,000 Dollars
1925	16,900	10,479	6,620	47,776	23.7	11,323	7,021	4,435	11,456			
1926	17,817	10,404	6,820	50,600	25.0	12,650	7,387	4,842	12,229			
1927	18,303	10,552	7,000	54,059	23.7	12,812	7,596	4,900	12,496			
1928	16,508	10,964	6,600	48,121	24.7	11,886	7,894	4,752	12,646			
1929	17,514	10,567	6,750	51,790	25.7	13,311	8,031	5,130	13,161			
1930	17,473	11,012	6,821	49,692	21.8	10,833	6,287	4,229	10,516			
1931	16,166	9,244	6,622	50,139	18.7	9,376	5,362	3,841	9,203			
1932	18,910	11,036	7,424	62,546	13.0	8,131	4,745	3,192	7,937			
1933	16,229	10,506	6,855	50,362	11.6	5,842	3,782	2,468	6,250			
1934	15,754	8,907	6,916	52,514	13.6	7,247	3,741	2,905	6,646			
1935	15,973	8,561	7,381	58,422	16.6	9,698	4,366	3,764	8,130			
1936	16,850	8,488	7,962	73,647	17.0	12,520	4,984	4,698	9,682			
1937	13,984	7,441	7,483	58,780	10.2	10,698	4,316	4,340	8,656			
1938	15,140	6,569	7,976	71,735	16.6	11,908	3,842	4,227	7,709			

Table 4 - (Continued)

Year	Number		Production in Pounds*	Farm Price Per Pound Cents	Value of Chickens Produced 1,000 Dollars		Cash Income (Sales) 1,000 Dollars		Value of Chickens Consumed 1,000 Dollars		Gross Income 1,000 Dollars	
	Produced Thousands	Sold Thousands	Consumed Thousands Pounds									
1939	15,564	7,474	8,078	77,526	15.7	12,144	3,737	4,044	7,781			
1940	13,868	6,182	7,764	47,151	15.3	7,211	3,215	4,037	7,252			
1941	15,312	7,194	7,531	52,863	17.4	9,189	4,506	4,324	8,830			
1942	16,199	8,283	7,305	56,284	20.6	11,595	6,313	4,815	11,128			
1943	18,727	10,659	7,378	65,601	27.0	17,712	10,648	6,375	17,023			
1944	16,675	11,607	6,788	62,627	26.7	16,722	11,820	6,162	17,982			
1945	16,612	9,436	6,924	62,017	29.9	18,543	11,003	7,246	18,249			

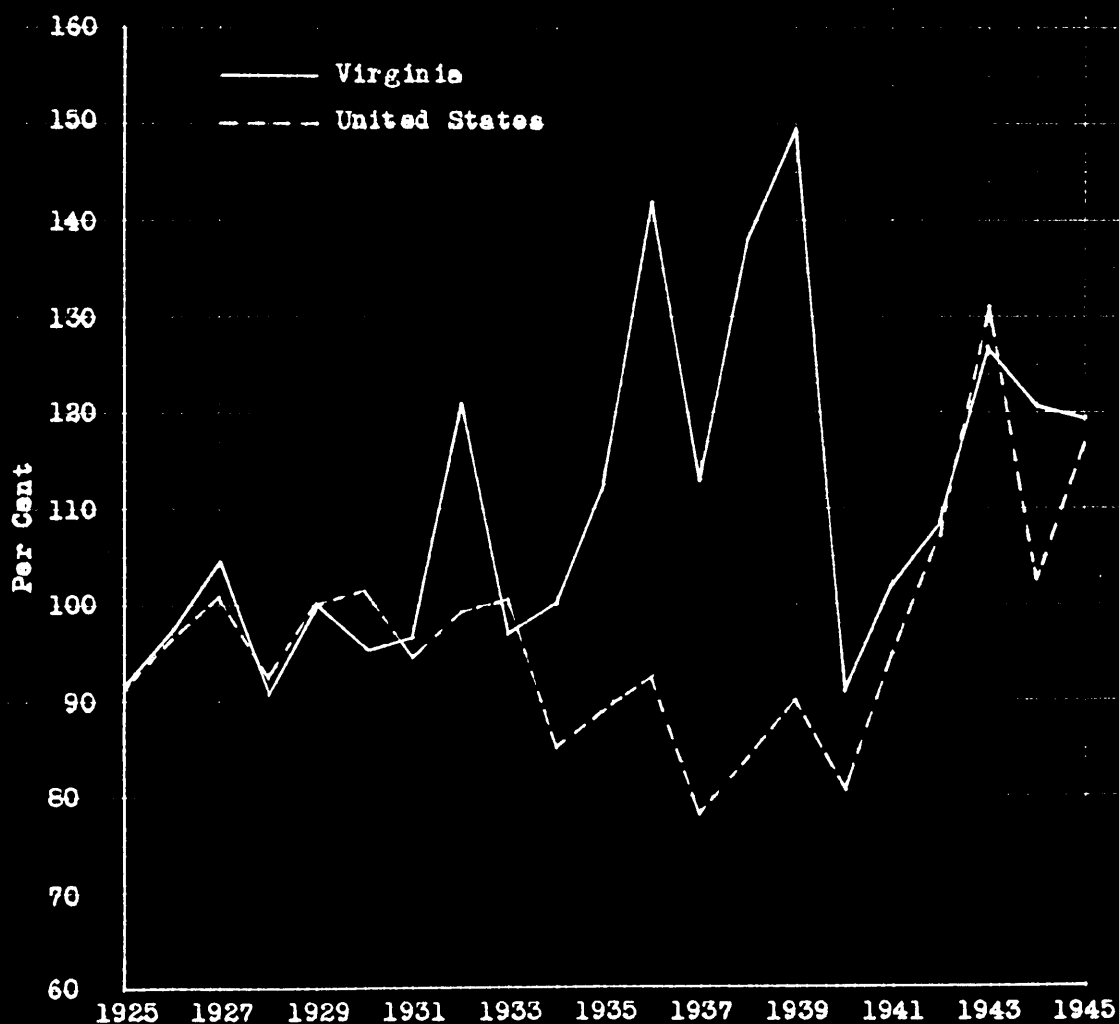
*Production in pounds, 1925-1936, was computed by dividing the farm price per pound into the value of chickens produced.

Source: Agricultural Statistics, 1942-1946
Virginia Farm Statistics, 1935-1944
Virginia Farm Economics, May, 1947.

The production of chickens in Virginia is compared with the production of chickens in the United States in Figure 5. The comparison is made in terms of per cent of the 1929 production in live weight with 1929 equal to 100 per cent. There has been considerable variation in the Virginia production from year to year. The general trend, however, in Virginia's production has been toward a greater increase than that of the United States production. The peak year for Virginia production occurred in 1939 with 150 per cent of the 1929 production.

The years of lowest production were 1928 and 1940 with only 91 per cent of the 1929 production.

Figure 5 - Chicken: Production in Virginia in Relation
to Production in the United States, 1925-1945. Ex-
pressed in Per Cent of 1929 Production in Pounds Live
Weight, 1929 = 100%. (Source: Tables 1 and 2).



C. Commercial Broiler Production and Income.

Commercial broiler production is considered separately because their production is not included in the farm production of chickens given in Agricultural Statistics. By "commercial broilers", according to Agricultural Statistics, is meant "young chickens of the heavy breeds, to be marketed at 2 to 4 pounds live weight and from which no pullets are kept for egg production."

United States

Commercial broiler production and income in the United States for the period 1934-1945 are shown in Table 5. Production in terms of numbers has increased from 34 million head in 1934 to 312 million head in 1945, an increase of 817 per cent. Gross income from commercial broiler production has increased from over 18 million dollars in 1934 to over 279 million dollars in 1945.

Virginia

Table 6 shows commercial broiler production and income in Virginia for the period 1934-1945. Production in Virginia has increased from 2 million head in 1934 to over 27 million head in 1945. The gross income from commercial broilers produced in Virginia has increased from over 1 million dollars in 1934 to well over 25 million dollars in 1945.

Figure 6 is a graphic comparison of the growth of broiler production in Virginia with the growth of production in the United

Table 5 - Commercial Broiler Production and
Income in the United States, 1934-1945.

Year	Production		Pounds 1,000 Pounds	Farm Price Per Pound Cents	Gross Income 1,000 Dollars
	Number				
	Thousands	Per Cent*			
		Increase over 1934			
1934	34,030	100	96,662	19.3	18,694
1935	42,890	126	122,884	20.1	24,651
1936	53,155	156	152,447	20.7	31,493
1937	67,915	199	195,916	21.4	41,876
1938	82,420	242	239,508	19.0	45,609
1939	102,055	300	296,865	16.9	50,286
1940	131,756	387	383,288	17.3	66,322
1941	172,490	507	505,581	18.4	93,102
1942	205,345	603	607,121	22.9	139,098
1943	251,360	739	734,994	28.6	210,289
1944	235,994	693	706,222	28.7	203,018
1945	312,200	917	943,509	29.6	279,146

* Computed on the basis of 1934 = 100%.

Source: Agricultural Statistics, 1946.

Table 6 - Commercial Broiler Production and
Income in Virginia, 1934-1945.

Year	Production			Farm Price Per Pound Cents	Gross Income 1,000 Dollars
	Number		Pounds		
	Thousands	PerCent** Increase over 1934	1,000 Pounds		
1934	2,000	100	*	*	1,400
1935	3,500	175	*	*	2,450
1936	4,500	225	*	*	3,240
1937	5,500	275	*	*	4,180
1938	7,000	350	*	*	4,550
1939	9,500	475	30,875	18.2	5,619
1940	12,000	600	39,000	18.0	7,020
1941	14,000	700	45,500	19.5	8,872
1942	17,500	875	56,000	22.5	12,600
1943	22,050	1,103	66,150	29.0	19,148
1944	20,948	1,047	64,939	29.5	19,157
1945	27,023	1,351	83,771	30.5	25,550

* Not Available

** Computed on the basis of 1934 = 100%

Source: Agricultural Statistics, 1942-1946

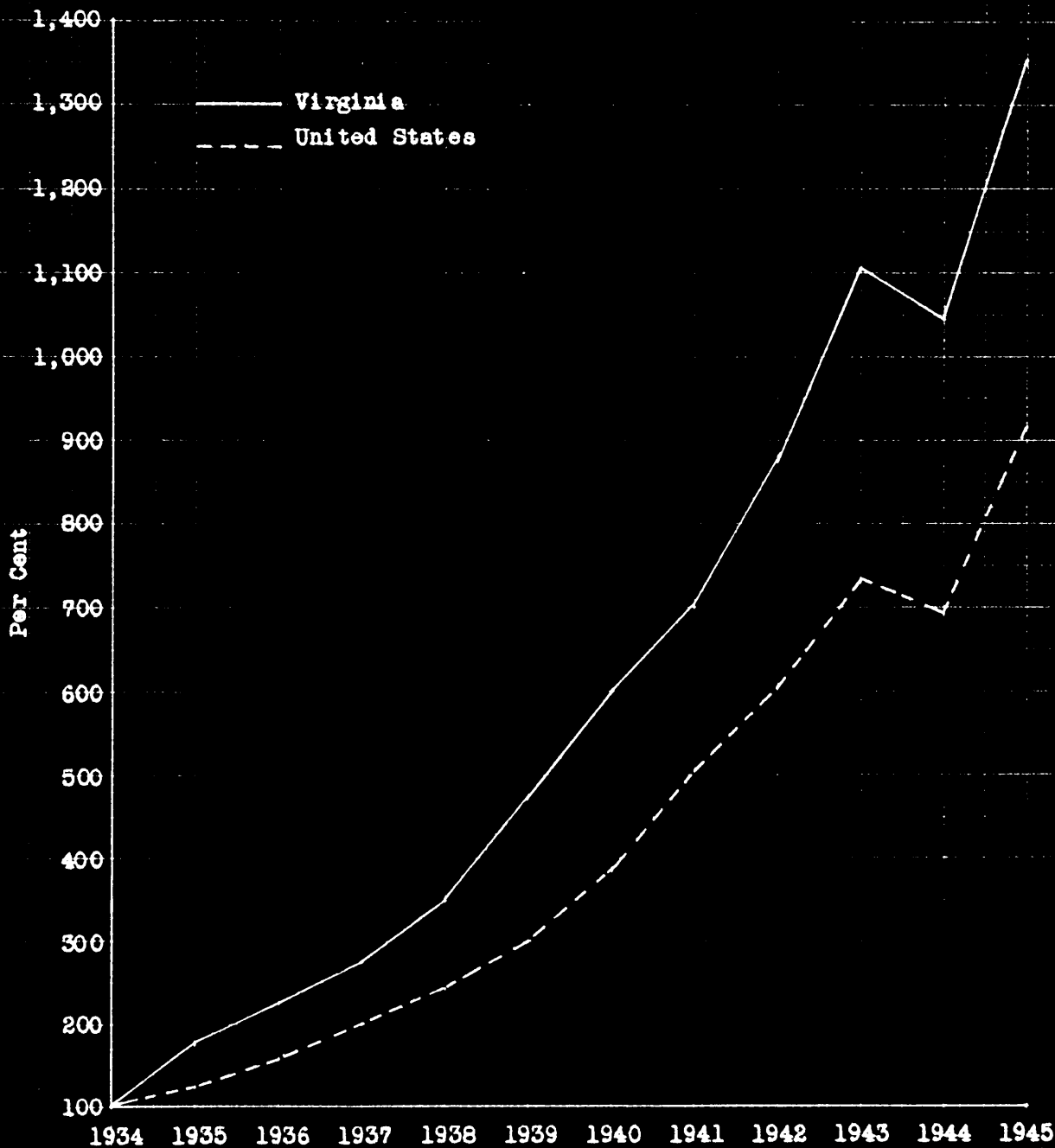
States for the period 1934-1945. The growth is expressed in per cent of the 1934 production in thousand head. The trend in commercial broiler production in both Virginia and the United States has been steadily upward. Only one setback was suffered and that was in 1944 when the number produced over the previous year decreased in both the state of Virginia and the United States. The trend of production in Virginia has been toward a greater increase than has been the trend of the country as a whole. In 1945 , Virginia produced 1,251 per cent more commercial broilers than it did in 1934 while the United States as a whole produced 817 per cent more than it did in 1934.

Figure 6 - Commercial Broiler Production in Virginia in

Relation to Production in the United States, 1934-1945.

Expressed in Per Cent of 1934 Production in Thousand

Head, 1929 = 100%. (Source: Tables 5 and 6).



D. Turkeys: Farm Production, Disposition and Income

United States

Farm production, disposition of turkeys, and income from turkeys in the United States for the period 1929-1945 are shown in Table 7. Turkey production in the United States has increased from 218 million pounds live weight in 1929 to well over 768 million pounds live weight in 1945. Cash income from the sale of turkeys during this period has ranged from over 35 million dollars in 1933 to over 242 million dollars in 1945. Gross income from turkeys during the same period ranged from over 38 million dollars in 1933 to well over 249 million dollars in 1945.

Virginia

Table 8 shows the production, disposition, and income of turkeys in Virginia for the period 1929-1945. Production in terms of pounds live weight has varied from over 6 million pounds in 1931 to 20 million pounds in 1945, an increase of 392 per cent. Cash income from the sale of turkeys in Virginia during the period 1929-1945 has varied from over 1 million dollars in 1933 to over 7 million dollars in 1945.

Gross income was only 85 thousand dollars more than cash income in 1933 and 203 thousand dollars more in 1945, and has followed the same general pattern as the cash income.

In Figure 7 turkey production in Virginia is compared with production in the United States in the period 1929-1945. The comparison is made on a percentage basis expressed in per cent of the

Table 7 - Turkeys: Farm Production, Disposition, and Income,
United States, 1929-1945.

Year	Number		Production in Pounds 1,000	Farm Price Per Pound Cents	Value of Turkeys Produced 1,000 Dollars		Cash Income (Sales) 1,000 Dollars		Value of Turkeys Consumed 1,000 Dollars		Gross Income 1,000 Dollars	
	Produced Thousands	Sold Thousands										
1929	16,563	*	1,418	24.6	218,275	24.6	53,896	47,873	4,640	52,513		
1930	17,052	15,999	1,704	21.6	228,497	21.6	49,475	46,323	4,901	51,224		
1931	17,923	15,746	1,549	19.4	243,753	19.4	47,297	41,590	4,025	45,615		
1932	21,964	19,393	1,665	14.2	303,103	14.2	42,950	37,946	3,251	41,197		
1933	22,813	21,733	1,623	11.8	319,382	11.8	37,584	35,788	2,624	38,412		
1934	21,310	20,615	1,505	14.5	300,471	14.5	43,622	42,098	2,984	45,082		
1935	20,487	18,827	1,428	19.2	297,062	19.2	57,002	52,415	3,812	56,224		
1936	27,642	25,530	1,485	16.4	406,337	16.4	66,663	61,533	3,437	64,970		
1937	25,391	24,227	1,425	17.7	375,787	17.7	66,213	63,406	3,527	66,933		
1938	26,547	24,861	1,291	17.9	395,550	17.9	70,477	66,192	3,261	69,453		
1939	33,201	29,621	1,297	15.9	494,695	15.9	78,510	70,715	2,909	73,624		
1940	33,775	33,976	1,296	15.4	508,788	15.4	78,230	78,376	2,862	81,238		
1941	32,753	31,162	1,220	19.8	520,703	19.8	103,331	98,139	3,647	101,786		
1942	32,669	32,441	1,137	27.4	530,300	27.4	145,279	144,699	4,749	149,448		

Table 7 - (Continued)

Year	Number		Production in Pounds 1,000	Farm Price Per Pounds Cents	Value of Turkeys Produced 1,000 Dollars	Cash Income (Sales) 1,000 Dollars	Value of Turkeys Consumed 1,000 Dollars	Gross Income 1,000 Dollars
	Produced Thousands	Sold Thousands	Consumed Thousands					
1943	32,495	30,447	1,180	32.6	171,516	160,436	5,867	166,303
1944	35,858	34,908	1,199	33.9	203,844	198,776	6,413	205,189
1945	44,330	41,609	1,310	33.6	258,179	242,569	7,208	249,777

* Not available

Source: Agricultural Statistics, 1941 and 1946.

Table 8 - Turkeys: Farm Production, Disposition, and Income,
Virginia, 1929-1945.

Year	Number		Production in Pounds*	Farm Price Per Pound	Value of Turkeys Produced		Cash Income (Sales)		Value of Turkeys Consumed		Gross Income	
	Produced Thousands	Sold Thousands	Consumed Thousands		1,000 Pounds	1,000 Dollars	1,000 Dollars	1,000 Dollars	1,000 Dollars	1,000 Dollars	1,000 Dollars	1,000 Dollars
1929	574	508	44	7,414	30.2	2,239	2,083	180	2,263			
1930	636	621	47	8,346	24.0	2,003	2,087	158	2,245			
1931	508	453	43	6,765	21.7	1,468	1,345	128	1,473			
1932	632	559	48	7,920	16.2	1,283	1,269	109	1,378			
1933	591	577	43	8,616	13.3	1,146	1,137	86	1,222			
1934	673	615	34	10,458	15.7	1,642	1,427	79	1,506			
1935	621	616	28	9,426	19.5	1,838	1,756	80	1,836			
1936	703	662	29	9,941	18.6	1,849	1,701	78	1,859			
1937	714	710	23	11,726	17.9	2,099	2,059	67	2,126			
1938	757	695	22	11,471	18.7	2,145	2,029	64	2,093			
1939	839	811	23	12,304	18.4	2,264	2,206	63	2,269			
1940	746	752	22	11,701	17.9	2,093	2,057	58	2,115			
1941	797	768	29	12,194	22.3	2,719	2,620	99	2,719			
1942	893	895	22	13,664	28.0	3,826	3,834	94	3,928			

Table 8 - (Continued)

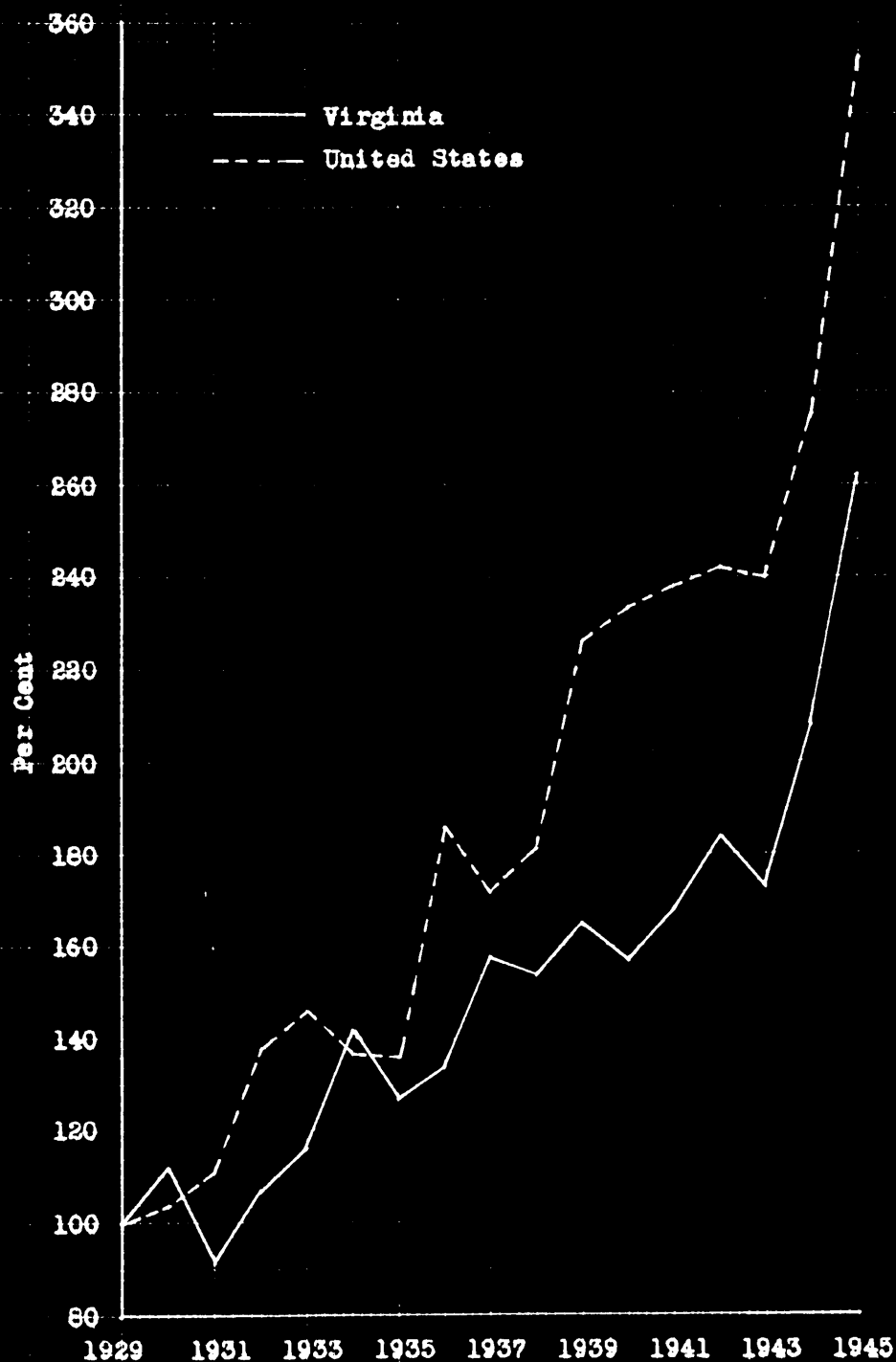
Year	Number		Production in Pounds*	Farm Price per Pound	Value of Turkeys Produced 1,000 Dollars	Cash Income (Sales) 1,000 Dollars	Value of Turkeys Consumed 1,000 Dollars	Gross Income 1,000 Dollars
	Produced Thousands	Sold Thousands	Consumed Thousands					
1943	847	804	27	34.0	4,377	4,155	139	4,294
1944	978	940	30	34.8	5,377	5,168	165	5,333
1945	1,217	1,144	33	37.1	7,495	7,045	203	7,248

* Production in pounds, 1929-1939, was computed by dividing the farm price per pound into the value of turkeys produced.

Source: Agricultural Statistics, 1939-1946
Virginia Farm Statistics, 1944

1929 production in pounds live weight. The year 1929 equals 100 per cent. Virginia turkey production has not kept up with the United States production but the trend for Virginia production has been steadily upward. United States production over the same period has increased 252 per cent over the 1929 production. Virginia production for the same period has increased 173 per cent over the 1929 production.

Figure 7 - Turkey Production in Virginia in Relation to
Production in the United States, 1929-1945. Expressed
in Per Cent of the 1929 Production in Pounds Live
Weight, 1929 = 100%. (Source: Tables 1 and 2).



E. Poultry Raised in the Valley of Virginia.

Chickens

Production figures of poultry in the five counties which make up the Valley of Virginia were difficult to obtain. For a long time in Virginia poultry was not taxed, therefore, little data were collected on the number of poultry in the various counties of the State. The United States census of agriculture is the only source which gives the number of poultry in the various counties. The census of Agriculture is taken every five or ten years and for this reason may not give a true picture of poultry production because there may be considerable variation in production between the census periods.

Table 9 gives the number of chickens raised in the five counties of the Valley of Virginia by census periods 1919-1944. The total number of chickens raised in the Valley has increased from 1 million head in 1919 to more than 10 million head in 1944. In 1944 the counties in the Valley ranked according to number of chickens raised as follows: Rockingham, first, with almost 6 million head; Shenandoah, second, with over 2 million head; Augusta, third, with well over 1 million head; Frederick, fourth, with 397 thousand head and Rockbridge, fifth, with 220 thousand head.

The percentage of increase in the number of chickens raised in the five counties of the Valley, Virginia, and of the United States is shown in Table 10 for the census periods 1919-1944. The percentages are based on the number raised in 1919, which is equal

Table 9 - Chickens: Number Raised in Five Counties by Census Periods 1919-1944.

County	Census Years					
	1919 Number Raised	1924 Number Raised	1929 Number Raised	1934 Number Raised	1939 Number Raised	1944 Number Raised
Rockingham	387,095	539,476	782,760	1,006,353	3,465,123	5,861,061
Augusta	353,100	387,279	416,005	512,785	548,664	1,426,121
Shenandoah	228,333	326,335	419,894	427,359	1,036,047	2,232,722
Rockbridge	169,316	204,269	197,491	216,114	206,222	219,944
Frederick	137,500	155,678	176,874	163,584	181,672	396,804
Total	1,275,344	1,613,037	1,993,024	2,326,195	5,437,728	10,136,652

Source: United States Census of Agriculture, 1920-1945.

Table 10 - Chickens: Percentage of Increase in Number Raised Over Census Periods in Five Counties, Virginia and the United States, 1919=100%.

Division	Census Years					
	1919 Per Cent	1924 Per Cent	1929 Per Cent	1934 Per Cent	1939 Per Cent	1944 Per Cent
Five Counties	100	126	156	182	426	795
Virginia	100	112	118	116	155	241
United States	100	115	142	137	140	186

Source: Computed from Appendix A, Table 4.

to one hundred per cent. In 1944 the Valley increased production 695 per cent over its 1919 production while the State as a whole produced only 141 per cent and the whole country 86 per cent more.

Figure 8 is a graphic presentation of Table 10. The tremendous increase in the production of chickens in the five counties of the Valley is immediately apparent. The general trend in Virginia production of chickens has been toward a greater increase than has been the trend in the United States, but at the same time it has been less of an increase than the increase in the Valley of Virginia.

Turkeys

In Table 11 may be seen the number of turkeys in the five counties of the Valley of Virginia as reported by the census for the years 1929, 1939, and 1944. The total number raised in the five counties has increased from 68,788 in 1929 to 387,044 in 1944, an increase of 463 per cent. The rank of the five counties in number of turkeys raised in 1944 was as follows: Rockingham, first, with 260 thousand head; Shenandoah, second, with 60 thousand head; Augusta, third, with 54 thousand head; Fredericks, fourth, with 8 thousand head and Rockbridge, fifth, with 3 thousand head.

Percentage of increase in number of turkeys raised in the five counties of the Valley, Virginia and the United States as reported by the census for the years 1929, 1939 and 1944 is shown in Table 12. The percentages are based on the number raised in 1929, which is equal to 100 per cent. In 1944 the Valley produced 463 per cent more than in 1929, while Virginia produced only 44 per cent more and the country as a whole produced 114 per cent more.

Figure 8 - Chickens: Increase in Number Raised in Five Counties
in Relation to the Increase in Number Raised in Virginia and
the United States in Census Periods, 1929-1944. Expressed on
a Percentage Basis, 1919 = 100%. Semi-Logarithmic Scale).
(Source: Table 10).

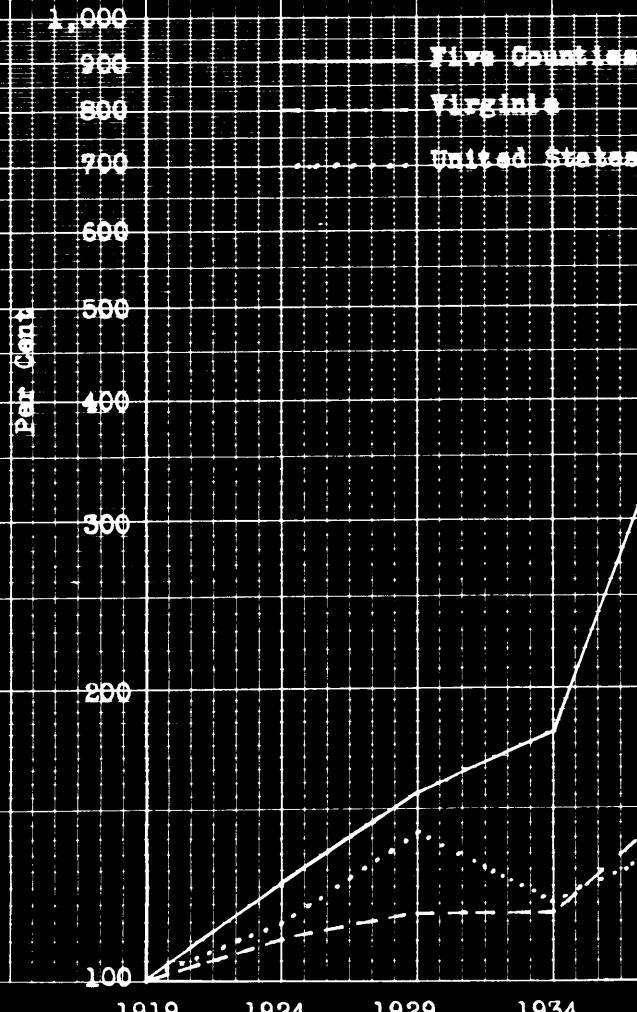


Table 11 - Turkeys: Number Raised in Five Counties by Census Periods 1929-1944.

County	Census Years		
	1929	1939	1944
	Number Raised	Number Raised	Number Raised
Hockingham	29,339	225,675	260,216
Augusta	22,420	52,125	54,673
Shenandoah	7,840	28,084	60,728
Frederick	7,378	13,431	8,263
Rockbridge	1,757	3,353	3,164
Total	68,788	322,668	387,044

Source: United States Census of Agriculture, 1930, 1940 and 1945.

Table 12 - Turkeys: Percentage of Increase in Production over Census Periods in Five Counties, in Virginia, and in the United States. 1929 = 100%.

Division	Census Years		
	1929	1939	1944
	Per Cent	Per Cent	Per Cent
Five Counties	100	469	563
Virginia	100	134	144
United States	100	166	214

Source: Computed from Appendix A, Table 4a.

F. Poultry Production in Rockingham County.

The poultry raised in the five counties of the Valley expressed as a percentage of the total poultry produced in the State of Virginia is shown in Table 13. In 1944 almost 30 per cent of the chickens and 51 per cent of the turkeys raised in Virginia were raised in the Valley.

Rockingham County is the most important county in the Valley in poultry production. The poultry raised in Rockingham County expressed as a percentage of the total poultry raised in the five counties of the Valley and in the State of Virginia as a whole is shown in Table 14. In 1944 nearly 58 per cent of the chickens and 67 per cent of the turkeys raised in the Valley were raised in Rockingham County. Rockingham County raised 17 per cent of the chickens and 34 per cent of the turkeys that were raised in Virginia in 1944.

Table 13 - Per Cent of Chickens and Turkeys
the Five Counties Raised of the Number
Raised in Virginia, 1919-1944.

Class of Poultry	Census Years					
	1919	1924	1929	1934	1939	1944
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Chickens	9	10	12	14	24.6	29.5
Turkeys	*	*	13	*	45.7	50.8

* Not Available

Source: Computed from Appendix A, Table 5.

Table 14 - Per Cent of Chickens and Turkeys
Rockingham County Raised of the Number
Raised in Five Counties and Virginia 1919-
1944.

Class of Poultry and Division	Census Years					
	1919 Per Cent	1924 Per Cent	1929 Per Cent	1934 Per Cent	1939 Per Cent	1944 Per Cent
Five Counties						
Chickens	3	3.3	3.9	43.26	63.7	57.8
Turkeys	*	*	42.6	*	69.9	67.2
Virginia						
Chickens	2.7	3.4	4.7	6.1	15.7	17.1
Turkeys	*	*	5.5	*	31.9	34.1

A consideration of some of the causes of the rapid growth of the poultry industry in Rockingham county should throw some light on the growth of the poultry industry in the Valley as a whole.

The April, 1945, issue of the Monthly Review of Financial and Business Conditions published by the Federal Reserve Bank of Richmond had this to say about the development of the poultry industry in Rockingham county:

The development of an important poultry industry in this county has taken place within the fifteen year period between 1928 and 1944, with the principal expansion occurring in the past five years.

The development of a poultry industry of the present magnitude in this county may be attributed to a number of

different factors, some of which are peculiar to the area. The principal factors, in approximate order of importance, contributing to the growth of the industry in this area include:

1. The thrifty and industrious nature of the people in this county, many of whom are members of the Mennonite faith. Poultrymen in the area contend that this is probably the most important single factor contributing to the growth of the industry, particularly under the contract feed system. The successful development of poultry is to a great extent a matter of effort expended, so that the importance of a large supply of industrious farm labor is readily apparent. In addition, honesty and integrity are essential to the operation of the "shares" system.
2. The method of "shares" contracting, worked out by the various feed mills with the farmers. Under this method the farmer is relieved of the necessity of furnishing his capital and of absorbing losses.
3. The proximity to markets along the eastern seaboard is another important contributing factor. The poultry products can be hauled overnight to most of the major eastern terminal markets, thus giving the area competitive advantage over the midwestern producing areas, since the eastern markets, particularly the New York market, are the principal poultry markets.

4. The decline of the lumber industry and the subsequent impoverishment of certain sections in the northwestern part of the county resulted in farmers in these sections turning to poultry raising as a source of income. In the early thirties a great proportion of these people were on relief, and dependent for subsistence on gardens, perhaps a few laying hens, etc. In turning to poultry raising these farmers have been rendered economically independent, thus benefiting the entire area.
5. Another factor, particularly instrumental in the above noted conversion of farmers in this so-called "Brooks Gap" area to poultry raising and in the development of the "shares" system, was the concerted action of a small group of individuals headed by the then county agent.
6. A final factor, of diminishing importance with the introduction of scientific feeding and breeding, is the general topography of the country which consists of rolling, limestone land. This rolling country assists in the provision of proper drainage of the poultry range, while the limestone is considered of some value in building the bone of the fowl.

MARKETING

A. Prices

Chickens

Estimated prices of chickens per pound live weight received by farmers in the United States as of the fifteenth of the month for the period 1929-1946 are shown in Table 15. The average of the monthly prices shows that December and February were the months of lowest price averaging 16.5 cents per pound and 16.9 cents per pound respectively. The peak months were July and September, both averaging 17.9 cents per pound*. On a yearly basis prices paid farmers per pound live weight in the United States varied from 9.5 cents in 1933 to a peak of 26.8 cents in 1946.

Table 16 gives the estimated farm price per pound live weight paid to Virginia farmers for chickens as of the fifteenth of the month for the period 1929-1946. The monthly average shows that the lowest price was received in January when only 18.5 cents was received per pound. The peak averages were for the months of June and July when 21.2 cents per pound for both months was received. The average price per year received by farmers in Virginia for chickens has varied from a low of 11.9 cents in 1933 to a peak of 30.8 cents per pound received in 1946.

Figure 9 gives a comparison of the average monthly farm price per pound live weight received by farmers for chickens in the United States and in Virginia for the period 1929-1946. The monthly Virginia farm price has followed the same general trend

*The average prices shown in Tables 15, 16, 20 and 21 are simple monthly averages with no attempt made to calculate seasonal variation.

Table 15 - Chickens: Estimated Prices Per Pound Live
Weight Received by Farmers in the United States as
of the 15th of the Month for the Period 1929-1946.

Year	Jan. Cents	Feb. Cents	Mar. Cents	Apr. Cents	May Cents	June Cents	July Cents	Aug. Cents	Sept. Cents	Oct. Cents	Nov. Cents	Dec. Cents	Av. Cents
1929	21.6	22.1	22.7	23.8	24.4	24.6	23.7	22.7	22.4	21.5	20.3	19.1	22.4
1930	19.8	20.4	20.6	21.1	20.0	19.0	17.4	17.3	17.8	17.4	16.1	15.3	18.5
1931	15.7	15.1	16.1	16.7	15.9	16.1	15.8	16.2	15.7	14.4	14.4	13.9	15.5
1932	13.3	12.6	12.6	12.6	12.2	11.4	11.7	11.7	11.6	10.7	10.1	9.2	11.6
1933	9.3	9.4	9.1	9.8	10.4	10.0	10.4	9.8	9.5	9.3	8.8	8.6	9.5
1934	9.4	10.2	10.7	11.1	11.2	11.2	11.7	11.4	12.7	11.8	11.7	11.7	11.2
1935	12.4	13.4	14.2	15.5	15.7	15.6	14.0	14.1	15.4	15.7	15.9	16.0	14.8
1936	16.5	16.9	16.6	16.9	16.6	16.4	16.1	15.1	14.9	14.0	13.2	12.6	15.5
1937	13.4	13.6	14.4	15.2	14.8	14.8	15.3	16.8	17.4	17.6	16.9	16.4	15.6
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	15.1
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	13.4
1940	12.0	12.2	12.8	12.9	13.6	13.3	13.6	13.4	13.7	13.3	13.1	13.0	13.1
1941	13.7	14.0	14.4	15.7	16.2	16.3	16.8	16.3	16.3	16.0	15.5	15.8	15.6
1942	17.0	17.4	18.0	18.4	18.4	18.5	18.7	19.6	20.3	19.5	19.6	20.5	18.8

Table 15 - (Continued)

Year	Jan. Cents	Feb. Cents	Mar. Cents	Apr. Cents	May Cents	June Cents	July Cents	Aug. Cents	Sept. Cents	Oct. Cents	Nov. Cents	Dec. Cents	Av. Cents
1943	22.1	22.8	23.5	24.6	24.7	25.1	25.3	25.6	25.2	24.6	24.3	24.4	24.4
1944	23.9	23.7	23.8	23.7	24.4	23.8	24.2	24.1	23.7	23.8	24.0	24.1	23.9
1945	24.2	24.5	25.0	25.7	26.6	27.5	28.5	28.6	27.5	24.3	23.9	23.8	25.8
1946	23.5	23.1	23.3	24.3	25.3	26.6	29.4	27.6	29.3	34.4	27.5	27.4	26.8
Aver.	16.9	16.8	17.1	17.7	17.8	17.7	17.9	17.6	17.9	17.5	16.7	16.5	17.3

Source: Agricultural Statistics, 1940

Crops and Markets, January, 1946, January, 1947

Virginia Crops and Livestock, May 15, 1946, October 15, 1946

Table 16 - Chickens: Estimated Prices Per Pound Live
Weight Received by Farmers in Virginia as of the
15th of the Month for the Period 1929-1946.

Year	Jan. Cents	Feb. Cents	Mar. Cents	Apr. Cents	May Cents	June Cents	July Cents	Aug. Cents	Sept. Cents	Oct. Cents	Nov. Cents	Dec. Cents	Av. Cents
1929	24.0	24.0	25.0	26.0	29.2	30.3	29.8	25.0	25.1	24.5	24.0	22.0	25.7
1930	22.6	22.8	23.5	23.3	23.7	23.4	22.8	20.6	22.0	20.9	18.9	17.5	21.8
1931	18.1	18.2	19.0	19.5	20.1	21.0	20.4	20.8	19.7	18.9	18.1	17.1	19.2
1932	15.9	15.0	14.9	15.5	15.4	15.0	14.7	13.6	12.8	12.3	11.3	10.1	13.9
1933	10.3	10.7	10.8	11.6	12.8	13.4	14.4	12.4	12.4	12.2	11.5	10.7	11.9
1934	11.7	12.5	13.2	13.2	14.0	15.0	16.0	15.0	15.1	14.2	13.9	13.8	14.0
1935	13.7	14.6	15.8	17.2	17.5	18.0	17.0	15.9	17.0	17.0	17.3	17.3	16.5
1936	17.5	18.0	18.0	18.6	18.6	19.4	18.9	17.2	17.1	16.7	15.9	15.3	17.6
1937	15.2	15.6	16.5	17.2	17.3	17.6	18.4	19.4	19.8	19.6	18.8	18.1	17.8
1938	18.0	17.4	17.6	18.0	18.3	18.2	16.6	15.9	16.3	15.9	15.9	15.4	17.0
1939	15.6	15.9	16.0	16.0	15.9	15.5	16.3	15.7	15.9	15.8	15.2	14.2	15.7
1940	14.0	14.0	14.6	15.0	16.0	16.2	16.0	16.0	16.0	15.5	14.9	14.6	15.2
1941	15.3	15.9	16.0	17.0	17.5	17.9	18.2	17.9	18.6	18.2	17.5	17.7	17.3
1942	18.2	18.7	18.9	19.5	19.9	20.3	21.3	21.8	22.4	21.5	22.0	22.4	20.6
1943	23.5	24.6	25.8	27.4	28.3	28.6	28.6	28.1	28.1	27.2	26.9	26.3	27.0

Table 16 - (Continued)

Year	Jan. Cents	Feb. Cents	Mar. Cents	Apr. Cents	May Cents	June Cents	July Cents	Aug. Cents	Sept. Cents	Oct. Cents	Nov. Cents	Dec. Cents	Av. Cents
1944	25.7	26.0	26.1	26.6	27.9	27.4	27.5	26.8	26.5	26.7	26.5	26.6	26.7
1945	26.6	27.4	27.7	29.2	31.6	32.3	29.2	31.6	32.3	28.7	27.5	26.3	29.2
1946	26.9	25.2	25.7	27.6	29.7	31.7	34.9	32.1	34.6	39.0	32.1	30.6	30.8
Aver.	18.5	18.7	19.2	19.9	20.8	21.2	21.2	20.3	20.7	20.3	19.3	18.7	19.9

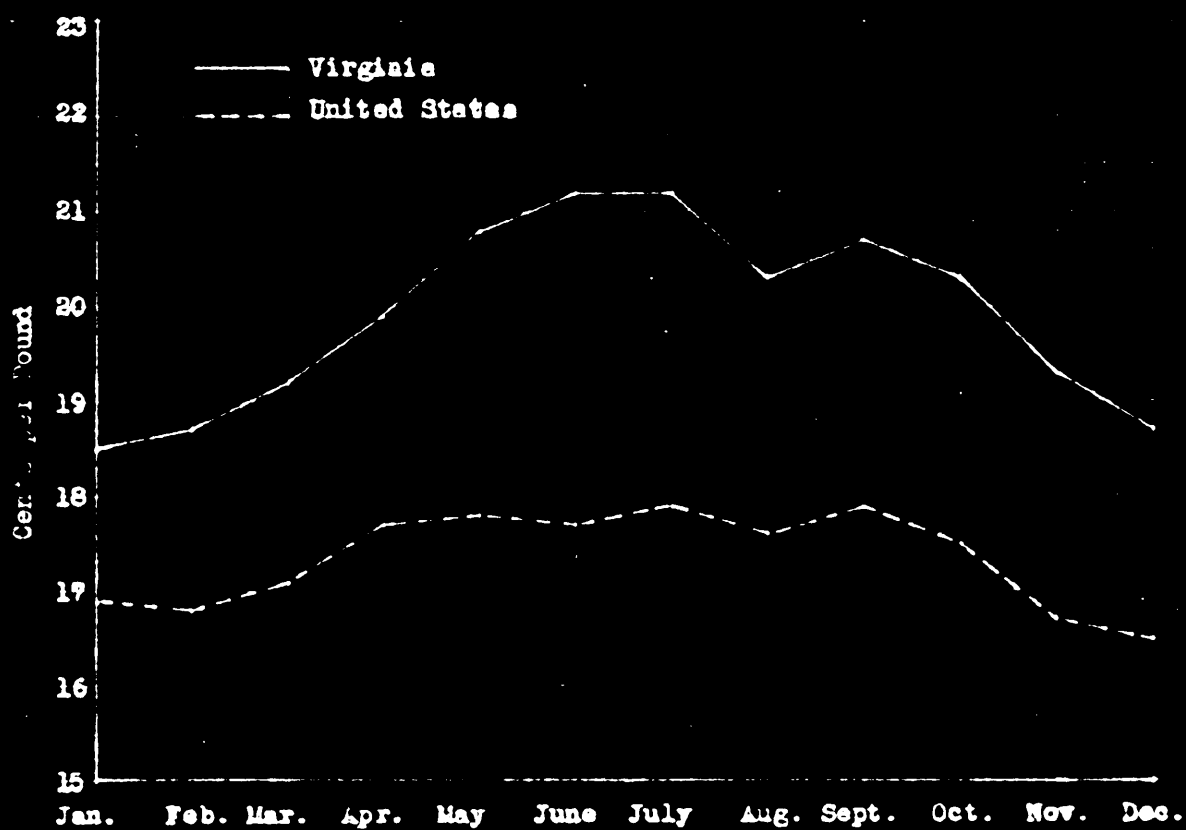
Source: Virginia Farm Statistics, 1944

Virginia Farm Economics, April, 1946, December, 1946

Virginia Crops and Livestock, January 15, 1946, May 15, 1946

Crops and Markets, April, 1943, July, 1946

Figure 9 - Chickens: Average Prices Received Per Pound Live Weight by Farmers in the United States and Virginia as of the 15th of the Month for the Period, 1929-1946. (Source: Tables 15 and 16).



as the United States farm price. Over this period of time, however, Virginia farm prices for chickens have been well above United States prices. Monthly Virginia farm prices for the period 1929-1946 averaged 19.9 cents per pound live weight while those for the United States for the same period averaged 17.3 cents per pound live weight. Virginia farmers received 2.6 cents more per pound live weight over this period for their chickens than did the United States farmers as a whole.

In Figure 10 is shown the average price per year received for chickens by farmers in the United States and in Virginia for the period 1929-1946. The Virginia farm price has followed the same general pattern as the United States farm price. Virginia prices have remained above United States prices to the extent of 2.6 cents per pound live weight. The trend in prices received by farmers for chickens has been generally upward since 1933.

Table 17 gives the wholesale price per pound live weight at Chicago of different market classes of chickens for the period 1935-1945. Heavy roasters (over 4 pounds) including both White Rock and colored have averaged 22.5 cents per pound live weight wholesale on the Chicago market. Light roasters (under 4 pounds) have averaged 22 cents per pound live weight. Broilers averaged 21.3 cents per pound while fowl have averaged 19.2 cents per pound for the same period.

The wholesale price per pound dressed weight of different market classes of chickens on the New York market for the period 1935-1945 is shown in Table 18. Fowl fresh dressed or frozen,

Figure 10 - Chickens: Average Prices Received by Farmers in the United States and Virginia per Pound Live Weight, 1929-1946. (Source: Tables 15 and 16.)

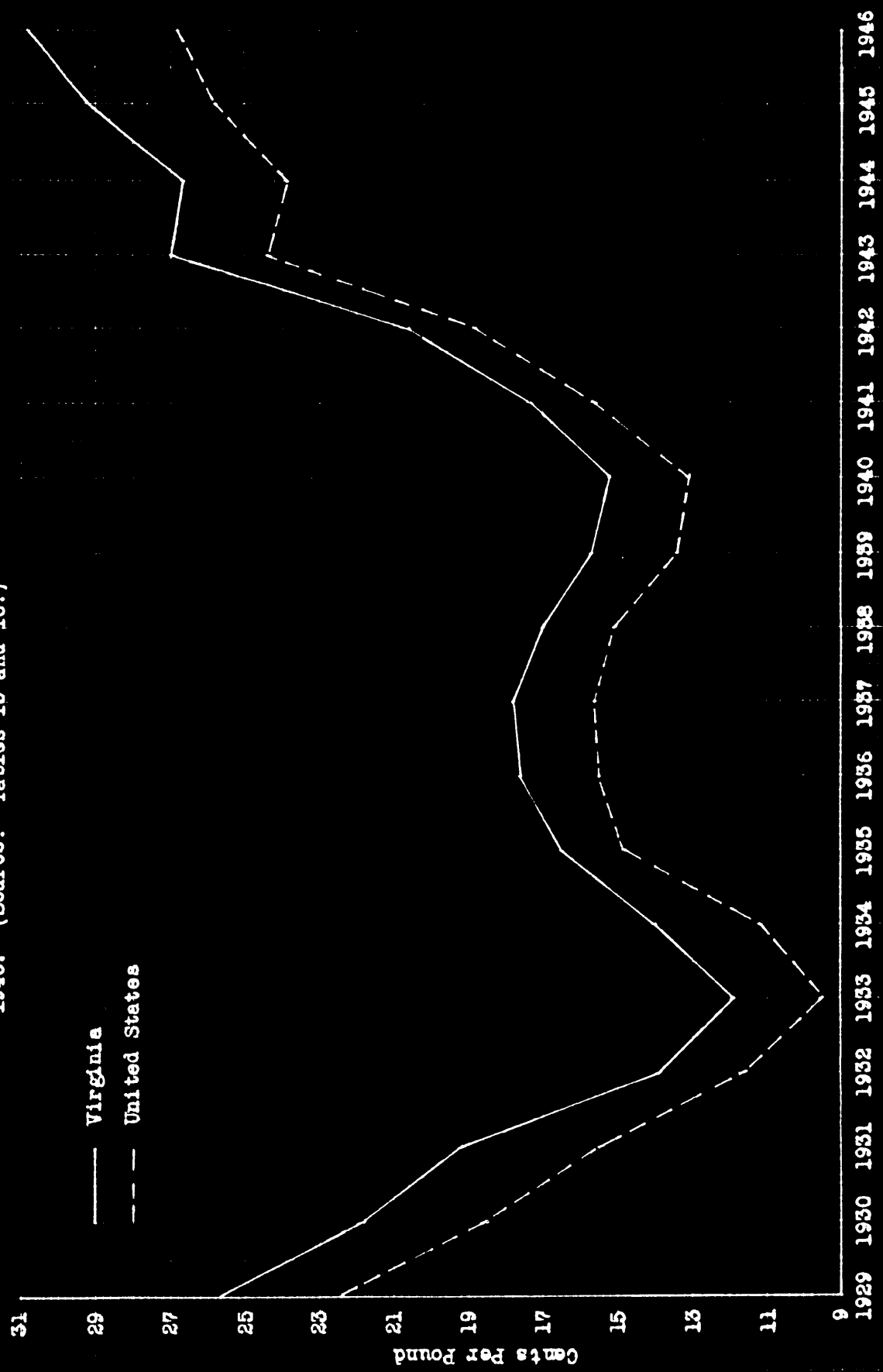


Table 17 - Poultry, Live: Wholesale Price
Per Pound, Chicago, 1935-1945.

Year	Roasters						Broilers				Fowl			
	Heavy			Light or Fryers			White		Colored		Heavy		Medium	
	White Rock Cents	Colored Cents	White Rock Cents	Colored Cents	White Rock Cents	Colored Cents	White Rock Cents	Colored Cents	White Rock Cents	Colored Cents	Heavy Cents	Medium Cents	Leghorn Cents	Leghorn Cents
1935	20.4	18.7	18.8	17.7	20.3	20.0	18.6	18.1	15.1	15.1	18.6	18.1	15.1	15.1
1936	21.6	19.9	20.1	18.6	19.9	19.2	19.1	18.3	15.5	15.5	19.1	18.3	15.5	15.5
1937	23.4	21.2	22.9	21.2	23.4	22.3	19.4	18.4	15.0	15.0	19.4	18.4	15.0	15.0
1938	20.4	18.6	19.4	17.7	19.2	18.1	18.4	18.3	14.9	14.9	18.4	18.3	14.9	14.9
1939	18.5	16.5	17.4	15.7	17.4	16.0	15.5	15.2	12.4	12.4	15.5	15.2	12.4	12.4
1940	19.9	17.2	18.4	16.4	18.5	16.6	15.1	15.0	11.9	11.9	15.1	15.0	11.9	11.9
1941	20.2	18.6	19.3	17.9	19.1	18.1	18.7	19.0	15.5	15.5	18.7	19.0	15.5	15.5
1942	25.6	24.1	24.8	22.7	24.1	23.0	21.5	22.5	18.7	18.7	21.5	22.5	18.7	18.7
1943	28.3	27.8	27.3	26.9	26.9	26.4	24.4	24.4	23.1	23.1	24.4	24.4	23.1	23.1
1944	28.6	28.6	27.8	27.8	28.2	28.2	25.2	25.2	23.6	23.6	25.2	25.2	23.6	23.6
1945	28.5	28.5	27.6	27.6	*	*	26.3	26.3	25.5	25.5	26.3	26.3	25.5	25.5
Aver.	23.2	21.8	22.2	20.9	21.7	20.8	20.2	20.0	17.4	17.4	20.2	20.0	17.4	17.4

* Not Available

Source: Agricultural Statistics, 1943 and 1946.

fancy box packed have averaged 25.3 cents per pound over the period 1935-1945. Young chickens fresh-dressed, fancy, in barrels have averaged 28.5 cents per pound dressed weight on the New York market. Young chickens, fresh-dressed and frozen, fancy box packed for the period 1935-1945 have averaged 28.2 cents per pound wholesale on the New York market. Young chickens packed in barrels brought 0.3 cents more per pound.

Table 18 - Poultry, Dressed: Wholesale Price
Per Pound, New York City, 1935-1945.

Year	Fowl, Fresh dressed or Frozen, fancy box-packed				Young chickens, fresh-dressed fancy, in barrels, predomi- nantly from Delaware and Maryland					Young chickens, fresh-dressed and frozen, fancy, box-packed									
	36-42		48-54		60-65		Average Weight Per Chicken					25-30		36-42		48-54		60-65	
	Pounds Per Dozen Cents	Pounds Per Dozen Cents	Pounds Per Dozen Cents	Pounds Per Dozen Cents	Pounds Per Dozen Cents	Pounds Per Dozen Cents	2	3	4	5	Pounds Per Dozen Cents	Pounds Per Dozen Cents	Pounds Per Dozen Cents	Pounds Per Dozen Cents	Pounds Per Dozen Cents	Pounds Per Dozen Cents			
1935	20.4	22.3	23.9	26.0	24.9	27.2	29.0	23.3	25.7	27.6									
1936	20.5	22.7	24.5	25.0	23.6	24.4	24.8	23.1	25.5	28.1									
1937	20.3	23.1	24.5	27.0	25.3	26.6	28.3	24.9	26.0	26.8									
1938	20.0	22.5	24.0	24.2	22.4	25.2	27.5	23.6	22.9	27.7									
1939	17.5	19.2	20.6	21.4	19.9	22.2	24.2	20.6	19.4	22.6									
1940	16.9	19.2	20.4	21.7	20.4	23.3	25.5	21.3	20.4	23.9									
1941	20.7	23.1	24.4	23.9	22.0	24.1	26.7	22.6	21.9	26.0									
1942	24.9	27.9	28.3	26.2	27.5	30.1	32.8	27.4	28.0	32.5									
1943	31.8	32.7	32.7	35.8	36.2	37.2	37.8	35.8	36.3	38.8									
1944	33.6	33.8	33.8	37.8	37.4	37.5	37.5	37.8	37.7	37.8									
1945	34.0	34.8	34.8	38.1	37.4	38.7	39.3	36.8	37.9	39.1									
Aver.	23.7	25.6	26.5	28.0	27.0	28.8	30.3	27.3	26.8	28.7									

Source: Agricultural Statistics, 1943 and 1946.

Table 19 shows the prices paid to producers for various farm products in Virginia including milk, butter, milk cows, eggs, chickens, beef cattle, sheep, lambs, wool and hogs. The prices are indicated in index numbers 1910-1914 = 100 for the period 1928-1946. An average index number for the period 1928-1946 shows that chickens ranked fifth along with milk in prices paid to producers. The average index numbers for products for the above period ranked as follows: lambs, first, 163; milk cows, second, 156; wool, third, 155; beef cattle, fourth, 154; milk, fifth, 145; chickens, sixth, 145; hogs, seventh, 128; butter, eighth, 121; eggs, ninth, 112; and sheep, tenth, 97. The average index number for the period 1931-1936, which was a period of relatively low prices, shows that chickens ranked second in the ten products listed in terms of prices paid to producers. For the above period the average index number for prices paid to producers for chickens was 110 and was exceeded only by milk which had an average index number of 117. For the period 1941-1946 which was a period of relatively high prices, the average index numbers of prices paid to producers show chickens ranking fifth. The products ranked were as follows: milk cows, first, 231; beef cattle, second, 227; lambs, third, 223; wool, fourth, 218; chickens, fifth, 183; hogs, sixth, 181; milk, seventh, 180; butter, eight, 165; eggs, ninth, 150; and sheep, tenth, 122. It appears that the prices paid producers for chickens are relatively higher than those paid for the products listed in periods of low prices.

Table 19 - Index Numbers of Prices Paid to Producers for Farm Products in Virginia for the Period 1928-1946. (1910-1914 = 100)

Year	Milk		Butter		Milk Cows		Eggs		Chickens		Beef Cattle		Sheep		Lambs		Wool		Hogs	
	Index Number		Index Number		Index Number		Index Number		Index Number		Index Number		Index Number		Index Number		Index Number		Index Number	
1928	160		156		178		127		179		171		165		209		214		131	
1929	163		152		193		136		186		175		154		191		168		136	
1930	156		135		151		114		158		139		112		144		104		131	
1931	136		96		110		86		136		102		72		105		68		95	
1932	115		70		85		68		94		80		55		83		41		59	
1933	105		70		75		66		84		65		57		92		118		56	
1934	112		78		78		80		100		77		57		104		114		69	
1935	115		91		100		104		120		116		67		117		106		122	
1936	117		100		113		100		123		112		77		141		145		129	
1937	133		100		120		94		132		140		85		159		182		136	
1938	122		91		120		92		120		124		68		134		100		110	
1939	116		91		125		82		112		121		67		139		123		95	
1940	121		96		129		85		109		136		71		146		155		80	
1941	133		109		150		105		125		158		81		165		195		125	

Table 19 - (Continued)

Year	Milk Index Number	Butter Index Number	Milk Cows Index Number	Eggs Index Number	Chickens Index Number	Beef Cattle Index Number	Sheep Index Number	Lambs Index Number	Wool Index Number	Hogs Index Number
1942	165	126	191	131	152	203	105	209	214	177
1943	184	165	258	166	193	226	136	225	232	185
1944	193	170	240	144	193	220	110	219	218	176
1945	184	183	249	176	209	233	133	236	227	199
1946	219	235	297	177	225	319	164	285	223	222
Aver.	145	121	156	112	145	154	97	163	155	128
AV. 1931-36	117	84	94	84	110	92	64	107	99	88
AV. 1941-46	180	165	231	150	183	227	122	223	218	181

Source: Virginia Farm Economics, June, 1947.

Turkeys

Table 20 shows the estimated prices per pound live weight received for turkeys by farmers in the United States as of the fifteenth of the month for the period 1929-1946. A monthly average was calculated for the period 1938-1946 because comparable data on Virginia farm prices was available for this period only. During the period 1938-1946 the lowest average price received by farmers in the United States for turkeys was 21.2 cents per pound live weight in the month of May. The peak month was December when the farm price of the United States averaged 26.4 cents. The average yearly price for the period 1933-1946 for which complete data are available has ranged from a low of 10.6 cents live weight in 1933 to a high of 33.4 cents per pound received in 1946.

Estimated prices per pound live weight received by farmers for turkeys in Virginia as of the fifteenth of the month for the period 1929-1946 are shown in Table 21. The average monthly price for the period 1938-1946 for which complete data are available has ranged from a low of 24.2 cents live weight to a high of 28.3 cents per pound in December. The average yearly price received by farmers in Virginia for turkeys has ranged from a low of 16.8 cents live weight received in 1940 to 35.9 cents per pound received in 1945.

Figure 11 shows the average estimated prices received per pound live weight for turkeys by farmers in the United States and in Virginia as of the fifteenth of the month for the period

Table 20 - Turkeys: Estimated Prices Per Pound
Live Weight Received by Farmers in the United
States as of the 15th of the Month for the
Period 1929-1946.

Year	Jan. Cents	Feb. Cents	Mar. Cents	Apr. Cents	May Cents	June Cents	July Cents	Aug. Cents	Sept. Cents	Oct. Cents	Nov. Cents	Dec. Cents	12 Mo. Av. Cents
1929	28.2	*	*	*	*	*	*	*	*	27.2	27.1	25.7	*
1930	23.7	*	*	*	*	*	*	*	*	21.0	20.1	21.6	*
1931	21.6	*	*	*	*	*	*	*	*	17.9	18.3	19.4	*
1932	18.0	*	*	*	*	*	*	*	*	13.2	12.9	10.9	*
1933	10.2	10.0	10.0	10.3	10.8	10.3	10.4	10.5	10.7	11.3	11.8	11.1	10.6
1934	11.6	12.1	12.2	12.2	11.5	11.1	10.9	11.0	11.8	12.7	14.6	16.0	12.3
1935	16.0	16.1	15.7	15.8	15.1	14.2	13.5	13.1	14.4	15.9	19.9	21.3	15.9
1936	19.9	18.8	17.8	17.1	16.2	15.4	15.3	15.5	15.9	15.9	15.0	14.3	16.4
1937	14.1	14.0	14.2	14.3	14.0	13.7	13.9	14.2	15.0	16.7	17.9	18.0	15.0
1938	17.5	17.7	17.2	17.0	16.4	15.6	15.7	15.0	16.0	16.5	17.1	18.4	16.7
1939	18.3	17.5	17.6	16.9	15.6	14.7	14.4	14.3	15.4	15.3	16.0	15.6	16.0
1940	14.2	14.0	13.7	13.5	13.2	12.9	12.9	13.4	14.3	14.7	15.5	15.9	14.0
1941	15.5	15.1	15.2	15.5	15.5	15.5	15.8	16.1	17.5	18.8	20.2	20.9	16.8
1942	20.5	20.0	19.9	19.8	19.1	18.6	18.9	19.9	21.9	23.9	27.0	29.7	21.6

Table 20 - (Continued)

Year	Jan. Cents	Feb. Cents	Mar. Cents	Apr. Cents	May Cents	June Cents	July Cents	Aug. Cents	Sept. Cents	Oct. Cents	Nov. Cents	Dec. Cents	12 mo. Av. Cents
1943	29.2	28.7	28.7	28.8	28.6	28.6	28.5	28.8	29.1	29.9	32.7	33.3	29.6
1944	32.4	32.0	31.3	30.7	30.5	30.0	30.1	30.7	31.1	31.8	33.8	34.6	31.6
1945	34.4	33.9	33.6	33.6	31.2	33.4	33.4	33.8	33.6	32.5	33.0	33.6	33.3
1946	32.5	31.6	30.6	30.1	31.2	31.2	32.7	32.8	34.0	40.6	37.1	35.8	33.4
Av.													
1938-1946	23.8	23.3	23.1	22.9	21.2	22.3	22.5	22.8	23.7	24.9	25.8	26.4	23.2

* Not Available

Source: Agricultural Statistics, 1940

Crops and Markets, January, 1946, January, 1947

Virginia Crops and Livestock, May 15, 1946, October 15, 1946

Table 21 - Turkeys: Estimated Prices Per Pound
Live Weight Received by Farmers in Virginia
as of the 15th of the Month for the Period
1929-1946.

Year	Jan. Cents	Feb. Cents	Mar. Cents	Apr. Cents	May Cents	June Cents	July Cents	Aug. Cents	Sept. Cents	Oct. Cents	Nov. Cents	Dec. Cents	12 Mo. Av. Cents
1929	33.0	*	*	*	*	*	*	*	*	30.0	32.0	26.0	*
1930	27.0	*	*	*	*	*	*	*	*	26.0	22.0	21.0	*
1931	25.0	*	*	*	*	*	*	*	*	20.0	20.0	22.0	*
1932	21.0	*	*	*	*	*	*	*	*	16.0	15.0	13.0	*
1933	13.0	13.0	13.0	13.0	*	*	*	*	*	14.0	14.0	13.0	*
1934	14.0	15.0	15.0	*	*	*	*	*	*	16.0	17.0	17.0	*
1935	18.0	19.0	19.0	*	*	*	*	*	*	19.0	20.0	22.0	*
1936	21.0	21.0	19.0	*	*	*	*	17.0	18.0	19.0	18.0	16.0	*
1937	16.0	16.0	17.0	*	*	*	*	16.0	18.0	20.0	20.0	20.0	*
1938	21.0	21.0	20.0	20.0	18.0	16.0	17.0	17.0	17.0	18.0	19.0	21.0	18.8
1939	21.0	21.0	21.0	20.0	18.0	16.0	17.0	16.0	17.0	18.0	18.0	18.0	18.4
1940	17.0	17.0	17.0	17.0	16.0	16.0	15.0	16.0	17.0	17.0	18.0	18.0	16.8
1941	18.0	18.0	19.0	18.0	18.0	18.0	18.0	18.0	19.0	21.0	23.0	23.0	19.3
1942	23.0	23.0	23.0	22.0	22.0	22.0	22.0	22.0	23.0	25.0	28.0	31.0	23.8

Table 21 - (Continued)

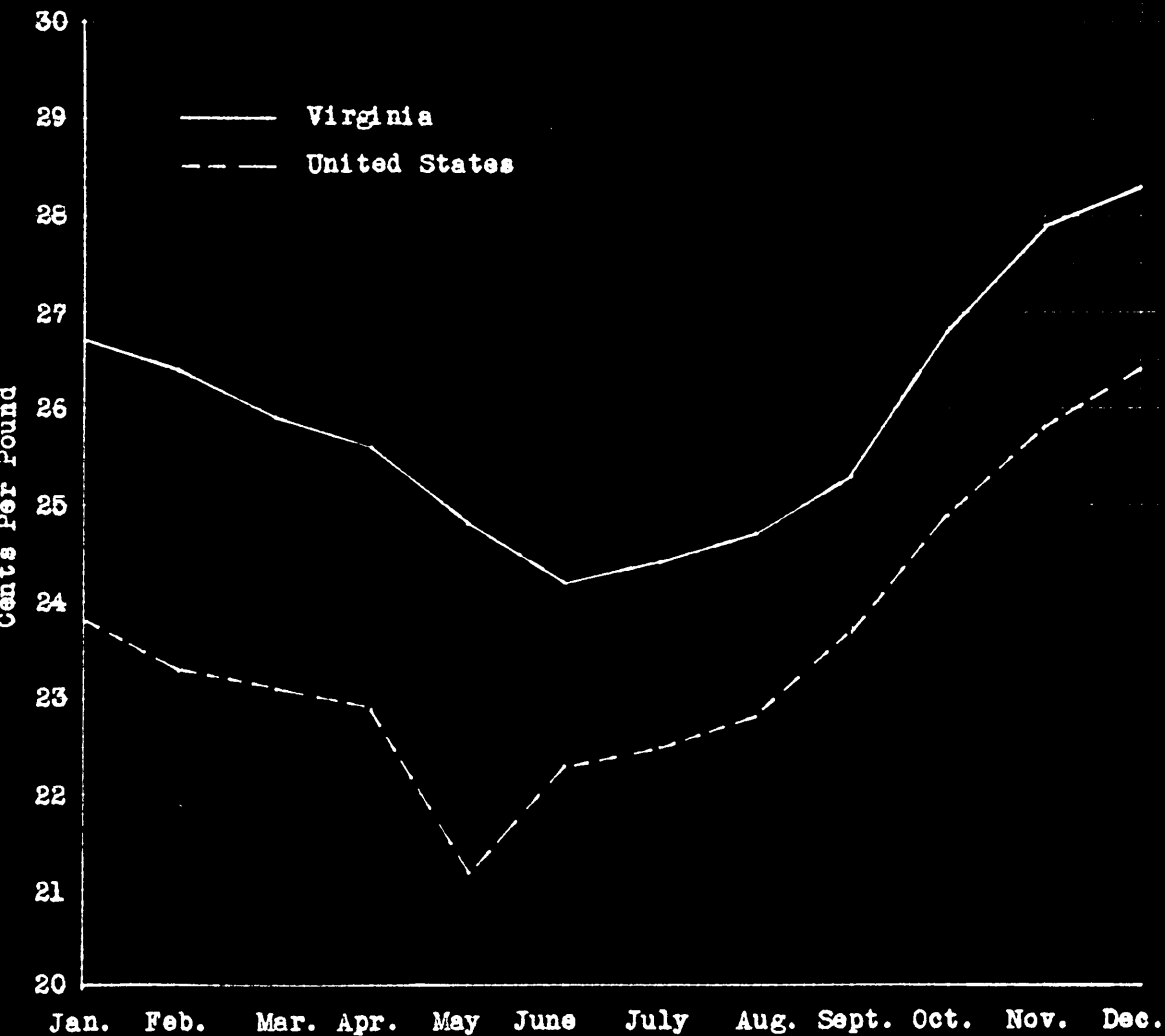
Year	Jan. Cents	Feb. Cents	Mar. Cents	Apr. Cents	May Cents	June Cents	July Cents	Aug. Cents	Sept. Cents	Oct. Cents	Nov. Cents	Dec. Cents	12 Mo. Av. Cents
1943	31.4	31.0	31.0	31.0	31.0	31.0	30.0	30.0	30.0	30.0	35.0	35.0	31.4
1944	35.5	35.0	34.0	34.0	32.0	32.0	32.0	32.0	33.0	33.0	35.0	36.5	33.7
1945	38.0	38.0	35.5	36.0	35.0	34.0	34.0	35.0	35.0	37.0	37.0	36.0	35.9
1946	35.5	33.5	33.0	32.0	33.0	33.0	35.0	36.0	37.0	42.0	38.5	36.5	35.4
Av.													
1938-1946	26.7	26.4	25.9	25.6	24.8	24.2	24.4	24.7	25.3	26.6	27.9	28.3	25.9

* Not Available

Source: Virginia Farm Statistics, 1944

Virginia Crops and Livestock, January 15, 1946, October 15, 1946
Crops and Markets, April, 1943, January, 1947

Figure 11 - Turkeys: Average Estimated Prices Received per Pound
Live Weight by Farmers in the United States and Virginia as
of the 15th of the Month for the Period 1938-1946. (Source:
Tables 20 and 21).

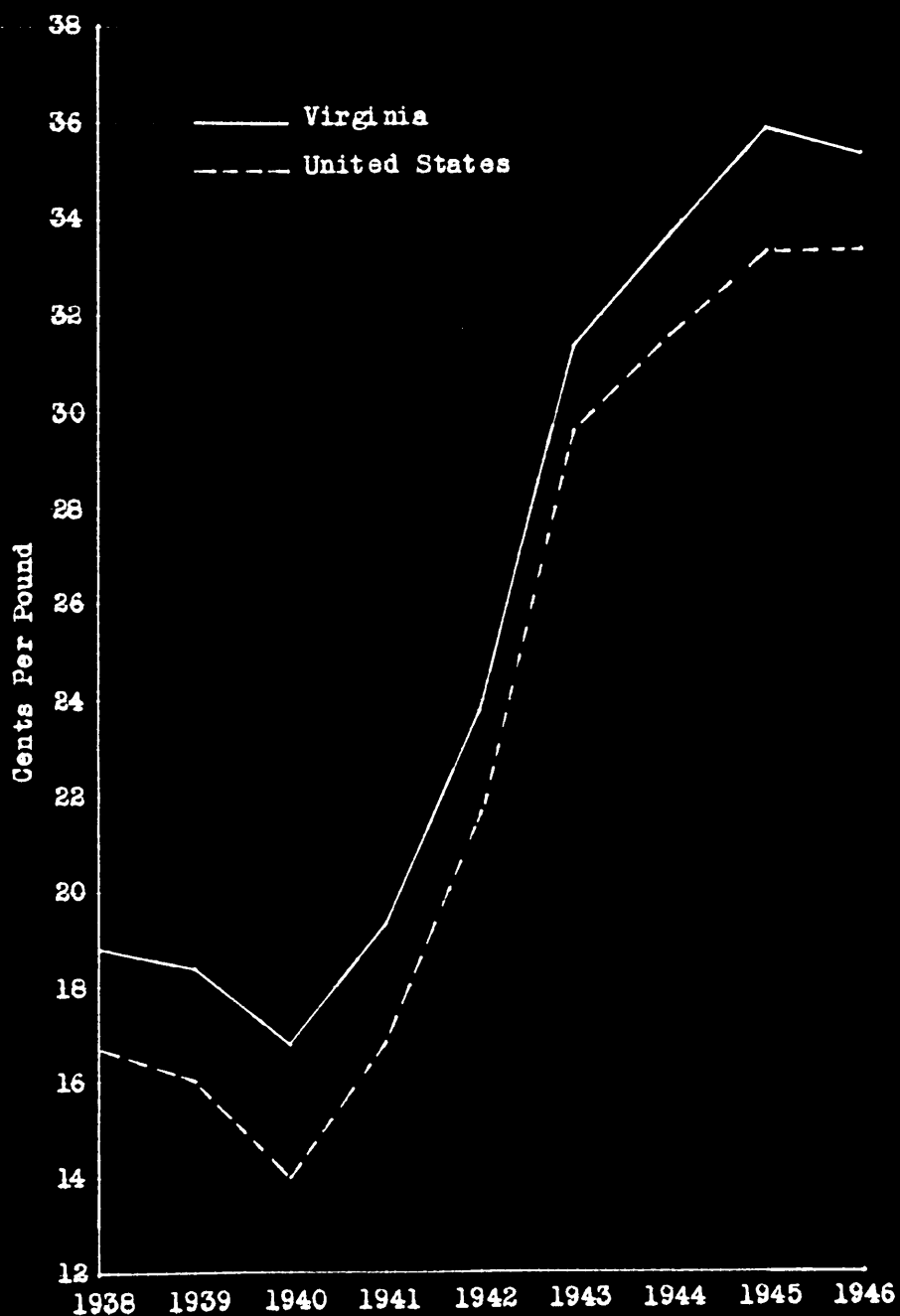


1938-1946. For this period Virginia prices declined after January, reached a low point in June, then advanced to a peak in December. United States prices declined after January, reached a low point in May and advanced to a peak in December. For the period 1938-1946 Virginia farm prices for turkeys averaged 2.7 cents per pound live weight more than United States turkey farm prices.

Average yearly estimated farm prices received by farmers for turkeys per pound live weight in the United States and in Virginia for the period 1938-1946 are shown in Figure 12. Both curves reach their low points in 1940; Virginia prices, however, reached their high point of 35.9 cents per pound live weight in 1945 while United States prices reached their high point of 33.4 cents in 1946. The trend in both United States and Virginia farm prices has been steadily upward since 1940 with Virginia prices remaining an average of 2.7 cents per pound live weight above United States Prices.

Figure 12 - Turkeys: Average Estimated Prices Per Pound

Live Weight Received by Farmers in the United States
and in Virginia, 1938-1946. (Source: Tables 20 and
21).



B. Market Receipts.

Table 22 gives the live poultry receipts of three markets by rail and truck for the period 1936-1945. In general, live receipts of poultry have been decreasing during the period 1936-1945. In the New York market, for instance, total live receipts were 151 million pounds in 1937 and about 107 million pounds in 1945. The New York market indicates that the motor truck is gaining in importance in the transporting of live poultry. The motor truck receipts of live poultry in this market increased from about 76 million pounds in 1936 to over 117 million pounds in 1943. Motor truck receipts of live poultry have suffered some set back in 1944 and 1945, due to wartime shortages and Office of Defense Transportation regulations.

Live poultry receipts in six markets by rail and truck for the period 1936-1945 are shown in Table 23. In general, truck receipts of live poultry have tended to fall off in the last three or four years of the period 1936-1945. One exception, however, to this trend is the fact that in the San Francisco market truck receipts of live poultry, except for the year 1943, have steadily increased. In the New York market during the period 1936-1945 rail receipts reached a low point in 1941 when 114 million pounds of dressed poultry and a high point in 1945 when over 212 million pounds were received. Truck receipts for the same period in the New York market started at a low point of 39 million pounds in 1936 and increased to a high point of 137 million pounds in 1942, then dropped to 83 million pounds dressed weight in 1945.

Table 22 - Poultry, Live: Receipts at Three Markets, by Rail and Truck, 1936-1945.

Year	New York			Chicago			San Francisco		
	Rail 1,000 Pounds	Truck 1,000 Pounds	Total 1,000 Pounds	Rail 1,000 Pounds	Truck 1,000 Pounds	Total 1,000 Pounds	Rail 1,000 Pounds	Truck 1,000 Pounds	Total 1,000 Pounds
1936	70,488	75,952	146,400	1,590	48,412	58,002	1,481	13,646	15,127
1937	61,760	89,984	151,744	8,400	47,880	56,280	1,132	12,827	13,959
1938	49,824	93,520	143,344	8,932	49,770	58,702	1,027	15,049	16,076
1939	42,432	79,936	122,368	8,386	57,064	65,450	735	16,588	17,323
1940	39,600	86,960	126,560	5,642	58,506	64,148	417	16,669	17,086
1941	26,480	86,016	112,496	4,802	59,892	64,694	252	15,993	16,245
1942	25,120	94,624	119,744	7,210	58,156	65,366	88	14,739	14,827
1943	24,838	117,874	142,712	11,497	33,327	44,824	2,215	10,462	12,677
1944	18,956	114,076	133,032	14,437	35,912	50,349	1,485	12,691	14,176
1945	16,031	90,788	106,819	11,689	25,688	37,377	530	12,120	12,650

Source: Agricultural Statistics, 1946

Table 23 - Poultry, Dressed: Receipts in Six
Markets by Rail and by Truck, 1936-1945.

Year	New York			Chicago			Philadelphia		
	Rail	Truck	Total	Rail	Truck	Total	Rail	Truck	Total
	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
1936	172,628	39,469	212,097	33,922	25,699	59,621	*	*	29,509
1937	165,480	41,123	206,603	27,542	17,180	44,722	*	*	27,296
1938	157,479	51,668	209,147	29,635	24,177	53,812	*	*	24,806
1939	156,148	76,771	232,919	29,618	50,570	80,188	24,813	352	25,165
1940	148,138	100,034	248,172	41,253	62,331	103,584	28,718	5,456	34,174
1941	114,395	119,419	233,814	36,047	65,715	101,762	27,885	6,260	34,145
1942	115,367	137,424	253,091	46,556	54,925	101,481	24,820	6,229	31,049
1943	129,851	81,318	211,169	38,503	37,863	76,366	20,647	2,303	22,950
1944	180,019	92,459	272,478	47,894	34,408	82,302	26,235	2,513	28,748
1945	212,531	83,468	295,999	90,922	29,431	120,353	30,944	4,231	35,175

Table 23 - (Continued)

Year	Boston			San Francisco			Los Angeles		
	Rail 1,000 Pounds	Truck 1,000 Pounds	Total 1,000 Pounds	Rail 1,000 Pounds	Truck 1,000 Pounds	Total 1,000 Pounds	Rail 1,000 Pounds	Truck 1,000 Pounds	Total 1,000 Pounds
1936	51,383	967	52,350	*	*	16,957	*	*	8,577
1937	46,621	3,247	49,868	*	*	15,364	*	*	8,712
1938	45,236	4,907	50,143	*	*	12,839	*	*	9,692
1939	48,885	8,281	57,166	*	*	12,396	*	*	13,717
1940	55,817	12,319	68,136	5,433	8,327	13,760	*	*	17,763
1941	55,993	13,110	69,103	6,434	8,149	14,583	10,098	9,637	19,735
1942	53,550	11,944	65,494	18,898	9,520	28,418	17,686	10,433	28,119
1943	41,026	6,734	47,760	15,109	7,084	22,133	18,056	8,329	26,385
1944	42,502	10,726	53,228	25,749	11,074	36,823	15,439	11,899	27,338
1945	45,908	7,455	53,364	16,747	11,357	28,104	19,263	5,597	24,860

* Rail and Truck not separated for these years

Source: Agricultural Statistics, 1946.

Table 24 shows the total live and dressed poultry receipts in three markets for the period 1930-1945. It is obvious from this Table that the trend in receipts of live poultry has been downward while the trend in receipts in dressed poultry has been upward. A graphic presentation of this Table is given in Figure 13, which gives the total live and dressed poultry receipts in three markets for the period 1930-1945 expressed in terms of percentages of the 1930 receipts in pounds of live and dressed weights, respectively. The trend in total receipts of live poultry has been steadily downward in the three markets decreasing from over 302 million pounds in 1930 to about 157 million pounds in 1945, a decrease of 48 per cent. The trend in total receipts of dressed poultry in the three markets has increased since 1935 when the receipts totaled 233 million pounds except for one year, 1943, when there was one large set back, to over 444 million pounds in 1945, an increase of 53 per cent.

Table 24 - Poultry: Total Live and Dressed Receipts in Three Markets, 1930-1945.

Year	New York			Chicago			San Francisco			Total of Three Markets*			Per Cent of 1930 Receipts*	
	Live 1,000 Pounds	Dressed 1,000 Pounds	Pounds	Live 1,000 Pounds	Dressed 1,000 Pounds	Pounds	Live 1,000 Pounds	Dressed 1,000 Pounds	Pounds	Live 1,000 Pounds	Dressed 1,000 Pounds	Pounds	Per Cent	Per Cent
1930	225,702	200,885	64,512	80,153	12,287	9,020	302,501	290,058	100	100				
1931	214,848	218,911	60,192	71,475	12,325	8,770	287,365	299,156	95	103				
1932	204,012	195,445	52,188	65,349	11,773	10,086	267,973	270,880	89	93				
1933	190,440	223,094	51,420	55,430	13,725	9,705	255,585	288,229	84	99				
1934	183,258	204,067	51,876	44,704	13,801	12,574	248,935	261,345	82	90				
1935	145,210	175,881	47,688	43,560	13,268	13,808	206,166	233,249	68	80				
1936	146,400	212,097	58,002	59,621	15,127	16,957	219,529	288,675	73	99				
1937	151,744	206,603	56,280	44,722	13,959	15,364	221,983	266,689	73	92				
1938	143,344	209,147	58,702	53,812	16,076	12,839	318,122	275,798	72	95				
1939	122,368	232,919	65,450	60,188	17,323	12,396	205,141	325,503	68	112				
1940	126,560	248,172	64,148	103,584	17,086	13,760	207,794	365,516	69	126				
1941	112,496	233,814	64,694	101,762	15,245	14,583	193,435	350,159	64	120				
1942	119,744	252,091	65,366	101,481	14,827	28,418	199,937	382,990	66	132				

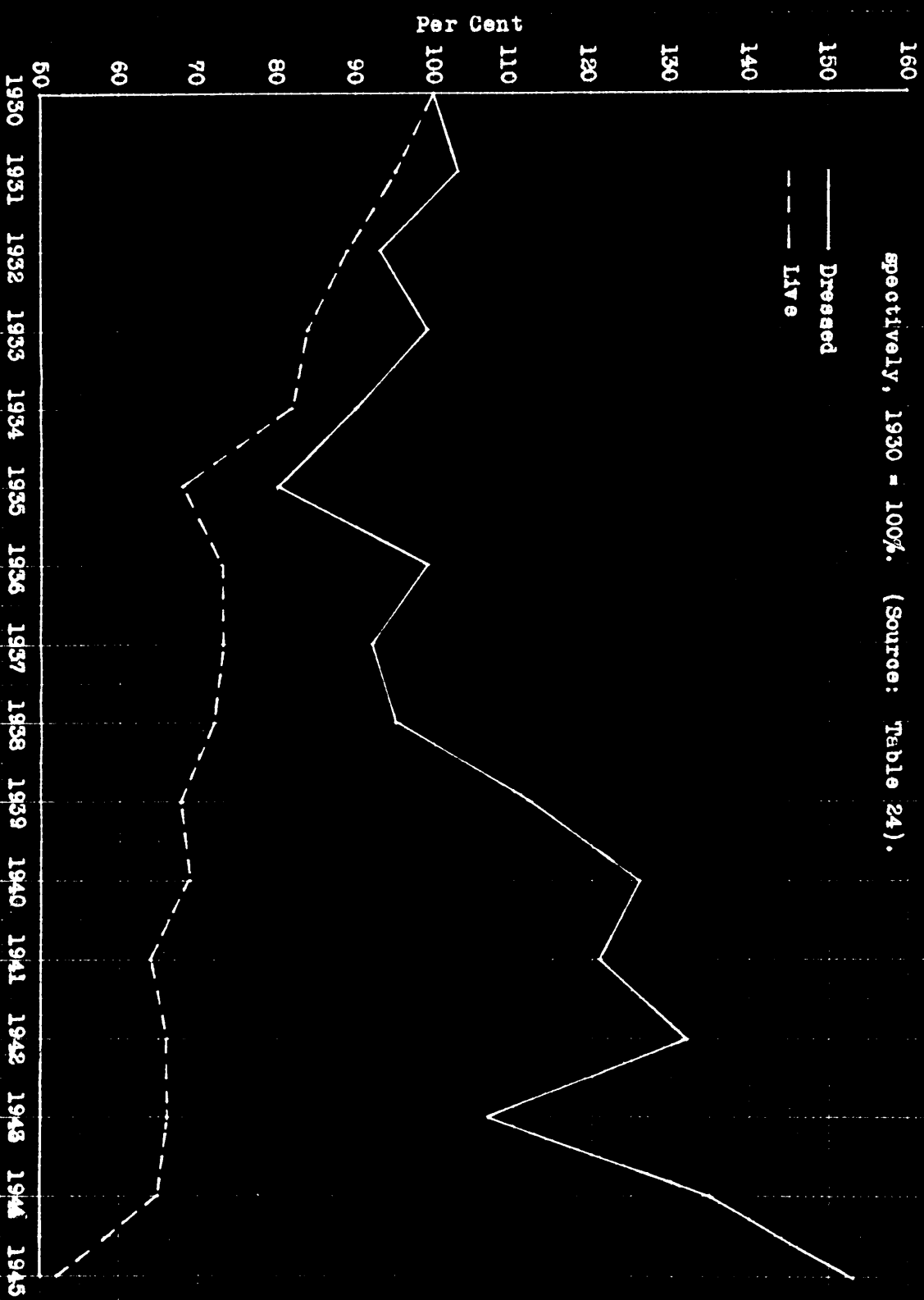
Table 24 - (Continued)

Year	New York		Chicago		San Francisco		Total of Three Markets*		Per Cent of 1930 Receipts*	
	Live 1,000 Pounds	Dressed 1,000 Pounds	Live 1,000 Pounds	Dressed 1,000 Pounds	Live 1,000 Pounds	Dressed 1,000 Pounds	Live 1,000 Pounds	Dressed 1,000 Pounds	Live Per Cent	Dressed Per Cent
1943	142,712	211,169	44,824	76,366	12,677	22,133	200,213	309,668	66	107
1944	133,032	272,478	50,349	82,302	14,176	36,823	197,557	391,603	65	135
1945	106,819	295,999	37,377	120,353	12,650	28,104	156,846	444,456	52	153

* Computed

Source: Agricultural Statistics, 1945 and 1946.

Figure 13 - Poultry: Total Live and Dressed Receipts in Three Markets for the Period 1930-1945. Expressed in Per Cent of the 1930 Receipts in Pounds Live and Dressed Weight Respectively, 1930 = 100%. (Source: Table 24).



C. Cold-Storage Holdings.

Cold-storage holdings of all classes of poultry in the United States as of the first of the month for the period 1921-1941 is shown in Table 25 in terms of million pounds. A graphic presentation of the average monthly cold-storage holdings of poultry in the United States for the period 1921-1941 is given in Figure 14 which is taken from Table 25. Cold-storage holdings for the period averaged 127 million pounds in the peak month of January, then steadily declined to 47 million pounds in the low months of August and September then rose steadily to an average of 101 million pounds in the month of December.

Figure 15, which is also taken from Table 25, gives a graphic presentation of the average monthly cold-storage holdings per year for the period 1921-1941. There have been considerable yearly fluctuations in the average monthly poultry cold-storage holdings during the period. Exceptions are the years 1931, 1932 and 1933 when the monthly averages for the year were 65, 65 and 66 million pounds, respectively. The general trend in average monthly cold-storage holdings for the year during the period 1921-1941 has been steadily upward varying from a low of 48 million pounds in 1921 to a high of 127 million pounds in 1941, an increase of 164 per cent. The straight line trend given in the Figure shows that the average monthly cold-storage holdings increased from 55 million pounds in 1921 to 100 million pounds in 1941, a rate of increase of $2\frac{1}{2}$ million pounds per year over the period 1921-1941.

Table 25 - Frozen Poultry: Cold-Storage Holdings,
United States as of the First of the Month, 1921-
1941. (Includes all Classes).
Expressed in Million Pounds.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1921	79	81	79	62	48	35	27	21	20	26	35	65	48
1922	104	103	89	68	51	39	35	31	28	26	30	52	55
1923	100	122	114	95	75	57	49	41	34	33	40	63	69
1924	93	99	93	76	52	39	35	34	34	40	55	88	62
1925	134	138	131	109	83	68	59	54	48	44	54	87	84
1926	112	109	95	73	53	43	37	36	39	45	65	107	68
1927	144	145	130	105	77	62	50	42	40	43	52	85	81
1928	117	118	103	83	57	44	38	40	41	44	58	79	69
1929	110	102	89	69	53	42	42	41	49	62	87	116	72
1930	141	142	133	106	77	61	54	47	43	47	59	83	83
1931	105	101	95	70	46	35	33	36	43	56	66	90	65
1932	117	112	96	75	57	45	37	31	30	37	55	91	65
1933	112	105	89	67	46	38	43	45	48	50	59	91	66
1934	124	120	102	74	49	40	41	45	46	55	73	106	73

Table 25 - (Continued)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1935	132	122	107	84	62	48	47	41	35	40	53	86	71
1936	107	104	86	69	49	42	43	49	65	82	105	149	79
1937	188	178	158	120	95	82	77	70	64	62	76	109	107
1938	124	115	100	79	60	52	53	53	55	60	78	118	79
1939	139	134	116	91	71	67	67	65	63	63	79	126	90
1940	168	167	145	115	86	77	82	82	82	91	114	159	114
1941	208	191	163	127	101	87	86	81	85	97	128	173	127
Av.	127	124	110	87	64	53	49	47	47	52	68	101	77

Source: Yearbook of Agriculture, 1930 and 1932
Agricultural Statistics, 1940 and 1942.

Figure 14 - Frozen Poultry: Average Monthly Cold-Storage Holdings, United States, as of the first of the Month, 1921-1941. (Source: Table 25).

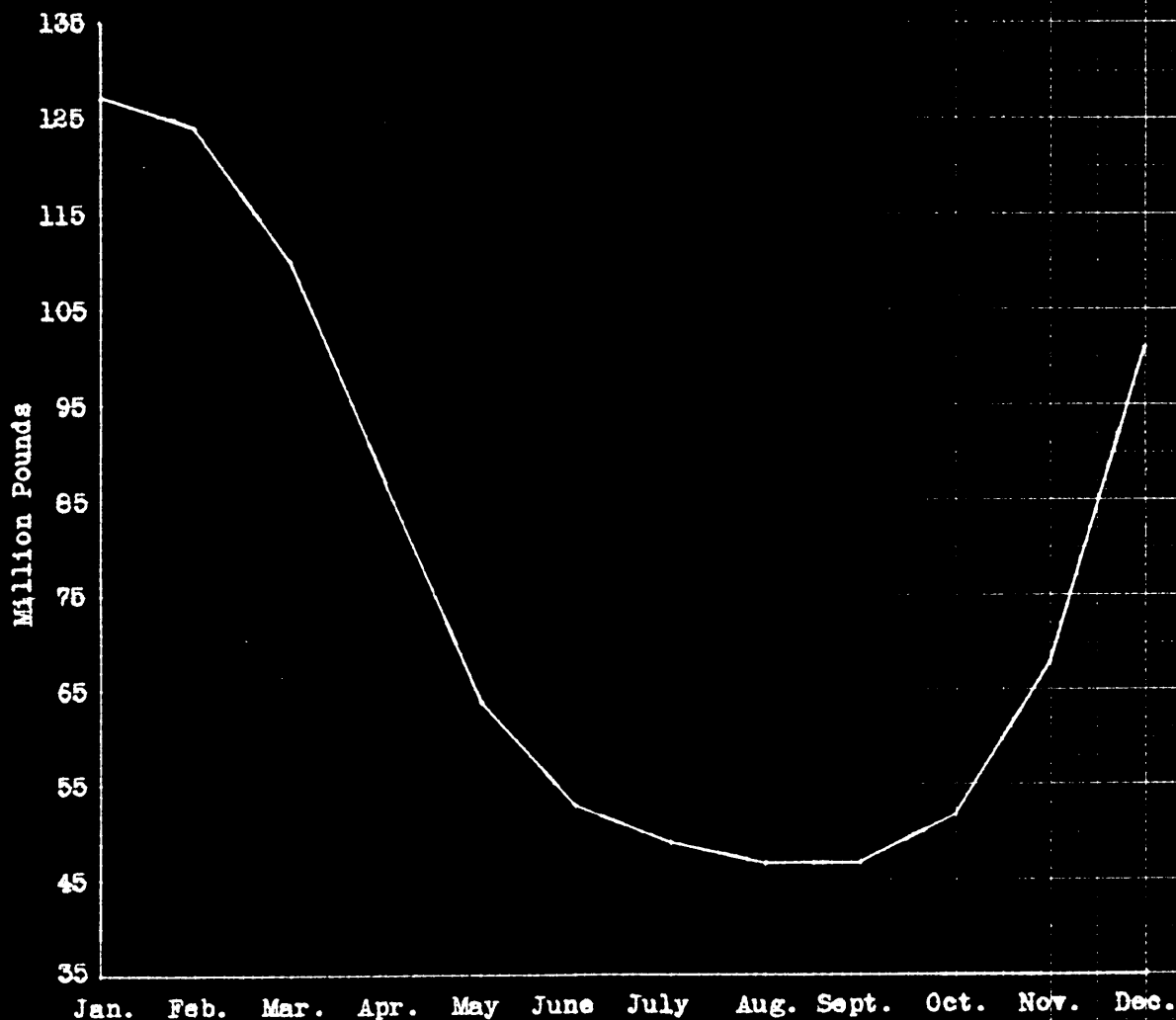
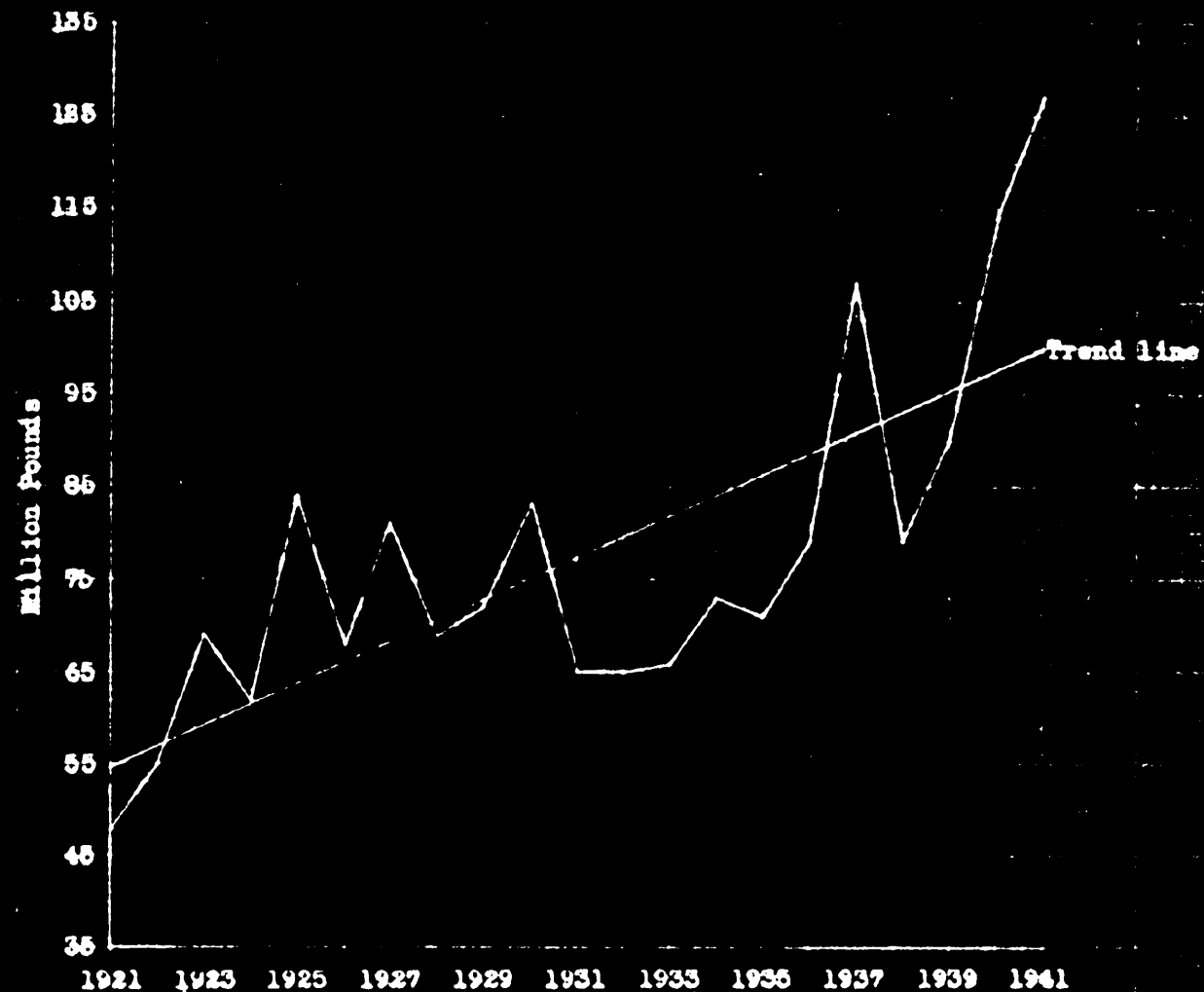


Figure 15 - Frozen Poultry: Average Monthly Cold-Storage

Holdings for the Years 1921-1941. (Source: Table 25).



Formula used to compute straight line trend

$$Y = a + bx$$

$$Y = 77.48 + 0.26x$$

CONSUMPTION

Table 26 shows chicken consumption in the United States in terms of pounds dressed weight for the period 1930-1945. The lowest per capita consumption of poultry was reached in 1938 when 16.8 pounds per person were consumed. The highest per capita consumption was reached in 1943 when 28 pounds of chicken per person were consumed.

The total and per capita consumption in pounds dressed weight of turkeys in the United States for the period 1930-1945 is shown in Table 27. For the period 1930-1945 per capita consumption of turkeys in terms of pounds dressed weight has increased from 1.7 pounds in 1931 to 4.3 pounds in 1945.

A comparison of the per capita consumption of chickens and turkeys with the per capita consumption of beef, veal, lamb, mutton, and pork for the period 1910-1945 is given in Table 28. A graphic presentation of the above Table is given in Figure 16. The Figure gives the per capita consumption of chickens and turkeys as compared with other meats which include beef, veal, lamb, mutton and pork. The comparison is made on a percentage basis and is expressed in terms of per cent of the 1929 per capita consumption in pounds. The year 1929 was used as a base year because data on turkey consumption were not available before that year. The most striking fact about this figure is the increase in the per capita consumption of turkeys over the period, 1929-1945. In 1945 the per capita consumption of turkeys was 145 per cent above the 1929

Table 26 - Chickens, Dressed Weight: Consumption
in the United States, Total and Per Capita,
1930-1945.

Year	Production			Cold- Storage			Cold- Storage			Consumption*		
	Farm and Non- Farm Million Pounds	Com- mer- cial Broilers Million Pounds	Total Million Pounds	Stocks at Beginning of Year Million Pounds	Imports Million Pounds	Exports Million Pounds	Stocks at End of Year Million Pounds	Total Million Pounds	Per Capita			
1930	2,626	**	2,626	131	2	3	100	2,656	21.5			
1931	2,426	**	2,426	100	1	3	106	2,418	19.4			
1932	2,465	**	2,465	106	1	1	93	2,478	19.7			
1933	2,572	**	2,572	93	***	2	103	2,560	20.3			
1934	2,307	85	2,392	103	1	2	110	2,384	18.8			
1935	2,189	108	2,297	110	1	2	87	2,319	18.1			
1936	2,258	134	2,393	87	2	1	148	2,332	18.1			
1937	2,101	172	2,273	148	5	2	92	2,352	18.0			
1938	2,003	211	2,214	92	2	2	110	2,196	16.8			
1939	2,188	261	2,449	110	1	3	109	2,448	18.6			
1940	2,086	337	2,423	109	2	2	140	2,392	18.0			
1941	2,197	445	2,642	140	2	3	161	2,568	19.4			
1942	2,454	534	2,988	161	3	24	149	2,844	21.5			

Table 26 - (Continued)

Year	Production			Cold- Storage		Cold- Storage		Consumption*	
	Farm and Non- Farm Million Pounds	Com- mercial Broilers Million Pounds	Total Million Pounds	Stocks at Beginning of Year Million Pounds	Imports Million Pounds	Exports Million Pounds	Storage Stocks at End of Year Million Pounds	Total Million Pounds	Per Capita Pounds
1943	3,157	647	3,804	149	2	1	187	3,628	28.0
1944	2,847	621	3,468	187	22	8	193	3,056	23.6
1945	2,870	830	3,700	193	22	11	241	3,280	25.3

* Consumption figures, 1941-1945, apply only to civilian population

** Not Available

*** Less than 500,000 pounds

Source: Agricultural Statistics, 1946.

Table 27 - Turkeys, Dressed Weight: Consumption in the United States, Total and Per Capita, 1930-1945.

Year	Production	Cold-Storage Stocks at Beginning of Year	Imports	Cold-Storage Stocks at End of Year	Consumption**	
					Total	Per Capita
	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Pounds
1930	216	10	1	5	222	1.8
1931	214	5	5	10	214	1.7
1932	264	10	1	15	260	2.1
1933	298	15	***	16	297	2.4
1934	284	16	***	19	281	2.2
1935	267	19	***	17	269	2.1
1936	361	17	1	35	344	2.7
1937	246	35	***	26	355	2.7
1938	355	26	***	26	358	2.7
1939	422	23	***	23	393	3.0
1940	482	52	***	52	473	3.6
1941*	468	61	1	61	472	3.6
1942	496	50	1	50	488	3.7
1943	466	36	3	36	439	3.4
1944	552	37	4	37	436	3.4
1945	677	72	4	72	559	4.3

* Consumption figures, 1941-1945, apply only to civilian population

** Consumption does not allow for exports: data not available

*** Less than 500,000 pounds

Source: Agricultural Statistics, 1946.

Table 28 - Estimated Per Capita Consumption of
Meats and Poultry, 1910-1945.

Year	Beef	Veal	Lamb & Mutton	Pork	Total Meats	Chickens	Turkeys
	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>
1910	70.5	7.2	6.4	62.4	146.5	20.6	*
1911	68.6	7.1	7.4	69.2	152.3	20.9	*
1912	64.7	7.0	7.7	66.8	146.2	19.9	*
1913	63.8	6.3	7.3	67.4	144.8	19.4	*
1914	62.7	5.8	7.2	65.9	141.6	19.3	*
1915	57.1	6.0	6.2	67.3	136.6	19.2	*
1916	59.6	6.5	5.9	69.8	141.8	18.1	*
1917	65.4	7.3	4.5	59.6	136.7	17.7	*
1918	69.2	7.4	4.8	61.6	143.0	17.8	*
1919	61.5	7.8	5.7	63.9	138.9	19.0	*
1920	59.1	8.0	5.4	63.5	136.0	18.2	*
1921	55.7	7.6	6.1	65.0	134.4	17.8	*
1922	59.2	7.8	5.1	65.9	137.9	18.9	*
1923	59.8	8.2	5.3	74.5	147.8	19.4	*
1924	59.9	8.6	5.3	74.7	148.5	19.2	*
1925	60.0	8.6	5.3	67.3	141.2	19.8	*
1926	60.7	8.2	5.8	64.6	139.0	19.7	*
1927	54.9	7.4	5.3	68.2	135.8	21.0	*
1928	49.0	6.5	5.5	71.3	132.3	20.1	*
1929	49.8	6.3	5.6	69.8	131.5	19.8	1.75
1930	48.9	6.4	6.7	67.0	129.0	21.6	1.81
1931	48.5	6.6	7.1	68.3	130.5	19.5	1.72

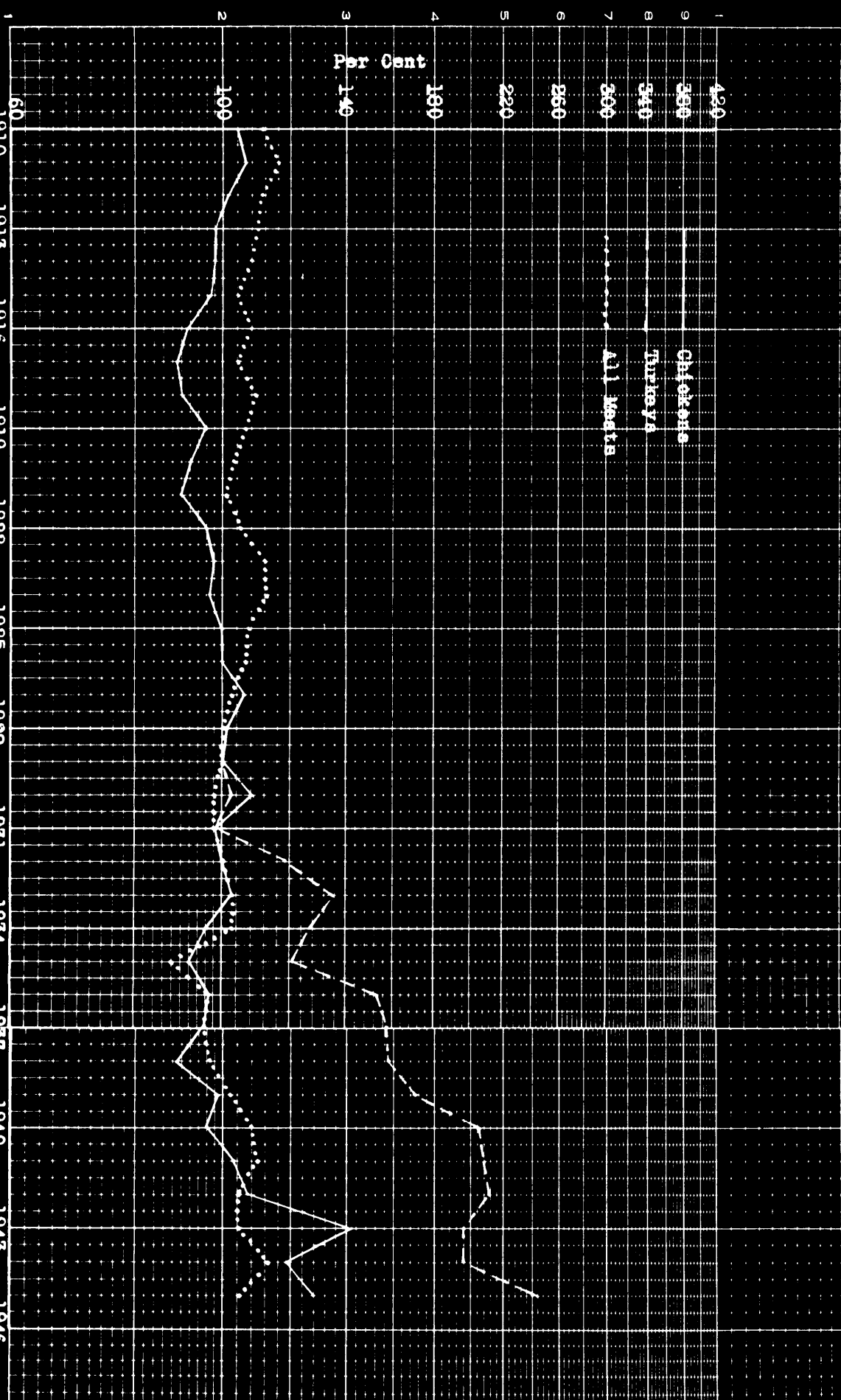
Table 28 - (Continued)

Year	Beef	Veal	Lamb & Mutton	Pork	Total Meats	Chickens	Turkeys
	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>
1932	46.7	6.6	7.1	70.6	131.0	19.8	2.09
1933	51.4	7.1	6.8	69.9	135.2	20.4	2.36
1934	55.8	8.4	6.3	64.2	134.7	18.9	2.23
1935	52.8	8.0	6.9	48.3	116.0	18.2	2.12
1936	57.9	8.4	6.6	55.0	127.9	19.1	2.68
1937	55.0	8.6	6.6	55.6	125.8	19.0	2.76
1938	54.4	7.7	6.9	58.2	127.2	17.7	2.76
1939	54.7	7.6	6.6	64.7	133.6	19.4	3.00
1940	55.1	7.4	6.6	72.9	142.0	18.9	3.59
1941	61.5	7.7	6.9	68.9	145.0	20.3	3.64
1942	61.2	8.0	7.2	61.5	137.9	21.5	3.70
1943	49.6	7.9	6.4	72.4	136.3	28.0	3.40
1944	53.4	11.3	6.7	77.0	148.4	23.6	3.40
1945	58.7	11.6	7.2	60.2	137.7	25.3	4.30

* Not Available

Source: Agricultural Statistics, 1942 and 1946.

Figure 16 - Consumption of Chickens and Turkeys as Compared With the Consumption of All Meats, Including Beef, Veal, Lamb, Mutton and Pork, in the United States for the Period 1910-1945. Expressed on a Percentage Basis, 1929 = 100%. Semi-Logarithmic Scale. (Source: Appendix A, Table 5).



per capita consumption. Per capita consumption of chickens as compared to other meats has been holding its own over the period 1910-1945 and since 1942 has increased well above the consumption of all other meats. This increase in chicken consumption in relation to other meats may be due to the fact that chicken production has had a large increase in the last few years. For instance, total production in pounds dressed weight was 2,988 million pounds in 1942, (Table 26), and 3,700 million pounds in 1945, an increase of 712 million pounds. Also, chicken imports increased from 2 million pounds dressed weight in 1943 to 22 million pounds in 1945 while chicken exports increased from 1 million pounds dressed weight to only 11 million pounds in 1945. Thus chicken imports have been increasing more rapidly than exports in the last few years.

POULTRY MARKETING FACILITIES IN THE VALLEY OF VIRGINIA

A. Description of Facilities and Area Studied.

Location

The area included in this study is shown in Figure 17 and includes the five counties of Rockbridge, Augusta, Rockingham, Shenandoah, and Frederick. This area included in these five counties is known as the Valley of Virginia and has been referred to before in this manuscript.

Figure 18 gives the location of the marketing facilities studied within the five counties of the Valley of Virginia. The facilities are located as follows: Rockbridge County, one, located in Lexington; Augusta County, four, one at Moffatts Creek, one at Stuarts Draft and two in Stanton; Rockingham County, two, one in Harrisonburg and one at Timberville; Shenandoah County, three, one at New Market, one at Edinburg and one at Toms Brook; Frederick County, two, located in Winchester.

Method Used In Study

The method for determining the marketing facilities used in this study was to personally interview the manager of the processing plant or person in charge of the establishment and secure data by filling out a questionnaire. A copy of the questionnaire used in the study is shown in Appendix B of this manuscript. Twelve facilities in all were visited, however, these marketing facilities are not homogeneous throughout and may be grouped as follows:

Area Included in Study

**Additional Area
Served by Facilities**

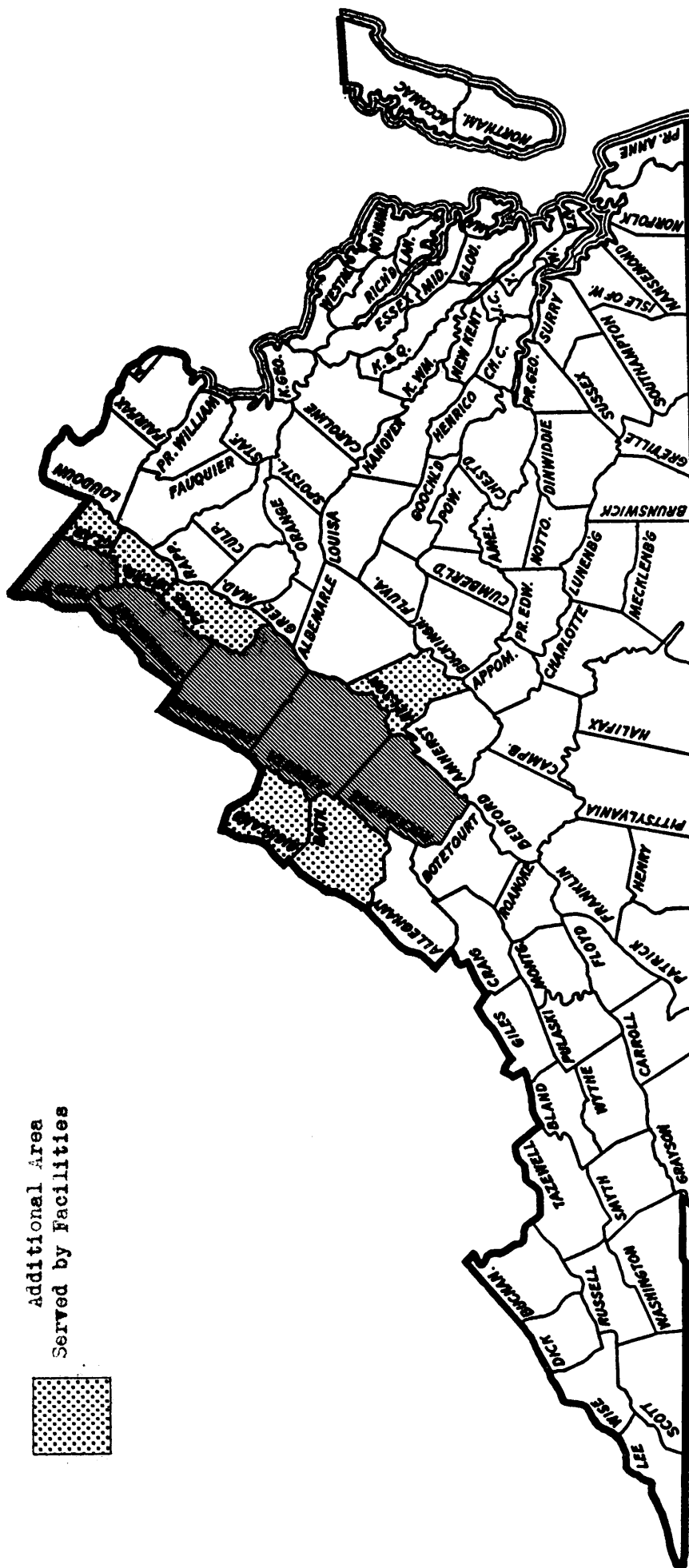
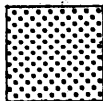
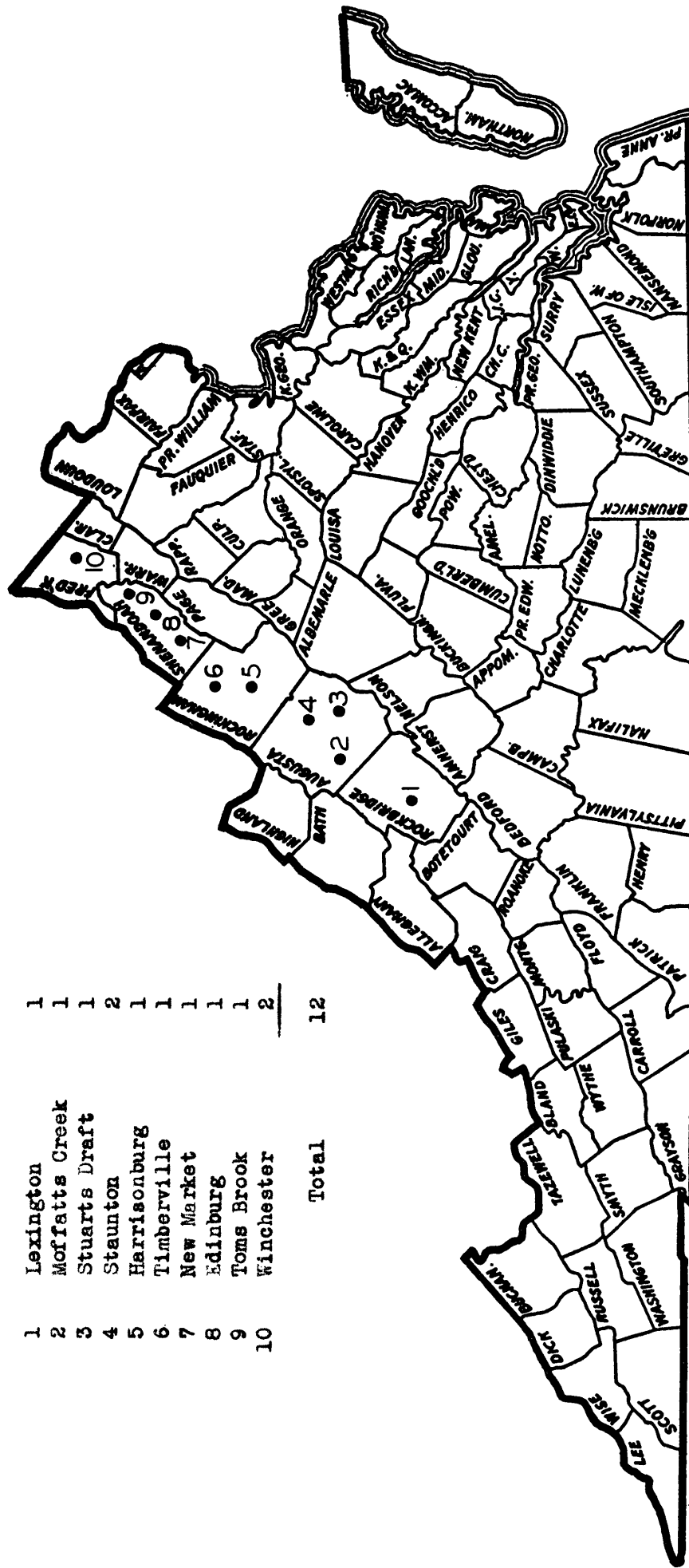


Figure 18 - Location of Marketing Facilities Studied.

Location	Number of Facilities
1 Lexington	1
2 Moffatts Creek	1
3 Stuarts Draft	1
4 Staunton	2
5 Harrisonburg	1
6 Timberville	1
7 New Market	1
8 Edinburg	1
9 Toms Brook	1
10 Winchester	2
Total	12



1. Two producers were interviewed. One of these producers had a retail license, and he purchased, dressed, and sold chickens and turkeys in addition to those produced on his farm.
2. A second group included a dealer who purchased chickens and turkeys, selling some live and some dressed. He had no means of dressing poultry at his establishment and employed some of the processing plants to dress his poultry.
3. Processing plants:

(a) Three plants were small establishments without conveyor systems.

(b) Six of the plants were large establishments with conveyor systems and modern machinery.

This made it difficult to make comparisons when there were such great differences in number of people employed, floor space, and investment. The average investment of seven of the plants on which data were obtained amounted to \$135,203 which included real estate, machinery, equipment and trucks.

Physical Make-Up of Facilities

There was considerable variation in the size of the twelve facilities studied. The small establishments had one floor. The larger ones had two floors, the upper floor being used for holding and feeding the live poultry and the lower used in the actual processing. The average number of floors for all twelve establishments was 1.6

Table 29 gives the number of workers employed and floor space by groups for the establishments studied. For the purpose of analysis, the establishments were grouped as follows:

1. Producers and dealer:
 - (a) Two producers are included in this group.
 - (b) One dealer is included in this group.
2. Three processing plants not having conveyor systems were included in a second group.
3. Six processing plants having conveyor systems were included in a third group.

Table 29 - Number of Workers Employed and Floor Space by Groups for the Establishments Studied.

Group	Number of Establishments in Group	Number of Workers Employed		Floor Space		Average Floor Space Per Worker
		Total Number	Average Number	Total Sq. Ft.	Average Sq. Ft.	
Producers & Dealer	3	11	3.7	1,601	534	146
Processing plants not having conveyor systems	3	29	9.6	4,720	1,573	163
Processing plants having conveyor systems	6	400	66.7	141,257	23,543	353
All establishments	12	440	36.8	147,578	12,298	335

The average number of workers per establishment was determined by dividing the total number of workers employed in each group by the number of establishments within the group. The producers and dealer group employed an average of 3.7 workers per establishment, while processing plants not having conveyor systems employed an average of 9.6 workers per establishment and plants having conveyor systems employed an average of 66.7 workers per establishment. While these numbers of workers per establishment may seem small, it must be remembered that at the time of the study the establishments were only operating at 51 per cent of their total capacity.

The variation in the size of facilities may be seen in the average floor space per facility for the different groups shown in Table 29. For instance, the producers and dealer group had an average of 534 square feet per facility, while the processing plants not having conveyor systems had 1,573 square feet per plant and those plants having conveyor systems had 23,543 square feet of floor space per facility.

The average floor space per worker was determined by dividing the total number of workers employed (when the plants were operating at 51 per cent of maximum capacity per 8-hour day) by each group into the total floor space for each group. Floor space per worker for the different groups was as follows: producers and dealer group, 146 square feet per worker; processing plants without conveyor systems, 163 square feet per worker; and plants with conveyor systems 353 square feet per worker. This wide difference in floor space per worker may be due to the fact that the larger establishments had feeding rooms for

finishing poultry, while many of the smaller establishments did not. Also, the plants were operating at 51 per cent of their maximum capacity, which fact would make the average floor space per worker much larger than it would be if the plants were operating at full capacity with a large number of workers employed.

In regard to the possibility of expanding or contracting their present facilities, seven out of nine said their establishments could easily be enlarged. However, nine out of eleven said that they did not have any plans to expand their present establishments.

B. Purchases.

Source of Supply

Purchases for six of the large plants on which data were obtained averaged 3,965,273 pounds live weight of poultry per plant for the year 1946. The facilities in the Valley not only serve the five counties of the Valley, but in addition they serve Highland, Bath, Nelson, Page, Warren and Clark counties in Virginia, and Hardy and Pendleton counties in West Virginia. The counties served by these facilities in addition to the counties served in the Valley are shown in Figure 17.

Prices Paid by Facilities

Table 30 shows the average prices paid per pound live weight for different market classes of poultry by the marketing facilities studied for the year 1946. The average prices paid per pound live weight by market classes were as follows: broilers, 32.6 cents; roasters, 36 cents; cocks, 15 cents; fowl, 28.6 cents; turkey hens, 31.8 cents and turkey toms, 26.4 cents per pound.

Table 30 - Average Prices Paid per Pound
Live Weight for Different Market Classes
of Poultry by Marketing Facilities
of the Valley for the Year 1946.

Market Class	Average Price Paid per Pound Cents
Broilers	32.6
Roasters	36.0
Cocks	15.0
Fowl	28.6
Turkey (Hens)	31.8
Turkey (Toms)	26.4

The market classes used in this study are defined in Farmers Bulletin, No. 1377, published by the United States Department of Agriculture, as follows:

1. "Broilers (in Virginia same definition as on Page 21) are young chickens, approximately 8-12 weeks old, of either sex, of marketable age but not weighing over $2\frac{1}{2}$ pounds each or 30 pounds a dozen, and sufficiently soft-meat to be cooked tender by broiling. The lighter weights are sometimes quoted as squab broilers."
2. "Roasters are young chickens, approximately 5-9 months old, of either sex, weighing over $3\frac{1}{2}$ pounds each or over 42 pounds a dozen, and sufficiently

soft-meated to be cooked tender by roasting."

3. "Cocks are mature male birds of any weight with darkened and toughened flesh. Sometimes they are quoted as old roosters."
4. "Fowl are mature female birds of any age or weight. They are generally divided into several sub-classes according to weight, and the lighter weights usually bring a lower price."
5. "Turkeys are commonly quoted as young and old and as hens or toms. Old turkeys are those over 1 year old with toughened flesh and hardened breastbone. Turkeys classed as young are usually less than 1 year old, are soft-meated, and have flexible breastbones. Young turkeys generally sell for the higher price, followed in order by old hens and old toms."

Table 31 gives the average prices received by farmers in Virginia and in the United States per pound live weight for the year 1946. In that year Virginia farmers received 4.0 cents per pound live weight more for their chickens and 2.0 cents per pound more for their turkeys than did farmers in the country as a whole. Comparable data on prices for farmers in the Valley could not be determined because a number of the facilities studied were cooperative organizations and as such they distribute patronage refunds to their patrons at the end of the year. These refunds are based on the amount of business that the patron does with his cooperative,

Table 31 - Prices Received by Farmers in Virginia in Relation to Prices Received by Farmers in the United States per Pound Live Weight for Chickens and Turkeys for the Year 1946.

Division	Prices Paid	
	Chickens	Turkeys
	Cents	Cents
To farmers in Virginia	30.8	35.4
To farmers in the United States	26.8	33.4
Difference	4.0	2.0

Source: Tables 15, 16, 20, and 21.

and, therefore, the patron may get more for his poultry than the average prices paid by the facilities would indicate.

Seasonality

All the facilities studied reported that they operated the year round. In general, the facilities reported that they received their largest number of young chickens in the spring and their largest number of older chickens in the winter. The largest number of turkeys is received in the months of October, November, and December. This is in keeping with Table 32 which shows the proportion of the turkey crop marketed in different months. In 1946 nearly 45 per cent of the turkey crop in the South Atlantic States, which includes Virginia, was marketed in the month of November.

Table 32 - Proportion of Turkey Crop Marketed
in Different Months.

Geographic Division	1945 Crop				1946 Crop			
	Oct.	Nov.	Dec.	Jan.	Oct.	Nov.	Dec.	Jan.
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
North Atlantic	8.8	41.9	34.9	14.4	10.7	44.4	35.2	9.7
East North Central	10.1	40.8	35.2	13.6	17.8	43.7	30.4	8.1
West North Central	33.9	37.7	22.8	5.6	41.8	37.0	17.8	3.4
South Atlantic	17.0	40.6	33.6	8.8	19.1	44.8	29.5	6.6
South Central	9.6	41.9	34.4	14.1	7.7	46.8	35.1	10.4
Western	17.4	28.8	30.7	23.1	24.5	34.7	26.2	14.6
United States	19.6	36.4	30.0	14.0	29.4	39.6	26.4	9.1

Source: Crops and Markets, October, 1946.

C. Processing Capacity and Cost of Processing.

Finishing

Only the larger plants did any finishing and in these plants the birds were held for an average of two days. The birds were held in batteries and fed a wet mixed feed in troughs. Some of the smaller plants that did not finish their poultry paid the producers a premium of 3 cents per pound live weight for birds that had been fattened on the farm or were in very good condition at the time of their purchase.

Capacity of Facilities

Table 33 gives the total maximum capacity and average maximum capacity by groups for the twelve facilities studied on the basis of pounds dressed weight per 8-hour day. All capacities were brought to this common denominator of pounds dressed per 8-hour day by using an average weight of 3 pounds per head for broilers, 5 pounds per head for fowl and 15 pounds per head for turkeys and assuming a 10 per cent shrink.

There was considerable variation between the different groups of facilities in average maximum capacity dressed weight per 8-hour day. The producer and dealer group had an average maximum capacity of 1,026 pounds dressed weight of broilers per 8-hour day or 1,274 pounds of fowl or 1,187 pounds of turkey. The processing plants not having conveyor systems had an average maximum capacity of 4,268 pounds dressed weight of broilers per 8-hour day or 7,639 pounds of fowl or 4,703 pounds of turkey.

Plants having the conveyor system had an average maximum capacity of 19,750 pounds dressed weight of broilers per 8-hour day or 46,749 pounds of fowl or 46,855 pounds of turkey. The overall average maximum capacity per 8-hour day for the twelve facilities was 11,976 pounds of broilers or 25,603 pounds of fowl, or 24,776 pounds of turkey.

Table 33 - Total Maximum Capacity and Averages
by Groups on the Basis of Pounds of Dressed
Weight Per 8-Hour Day.

Market Class of Poultry	Processing Plants									
	Producers and Dealer		Plants Not Having Conveyor System		Plants Having Con- veyor System		All Establishments			
	Capacity		Average of Three Facilities		Capacity		Average of Twelve Facilities			
	Total	Pounds	Total	Pounds	Total	Pounds	Total	Pounds		
Broilers	3,079	1,026	12,803	4,268	118,500	19,750	134,373	11,976		
Fowl	3,823	1,274	22,916	7,639	280,495	46,749	307,234	25,603		
Turkeys	2,373	1,187*	11,110	3,703	234,273	46,855**	247,756	24,776		

* Only two in this group dressed turkeys

** Only five in this group dressed turkeys.

Table 34 gives the total maximum, present, and minimum capacity in terms of dressed weight per 8-hour day for twelve facilities on which data were obtained. Minimum capacity was determined from the per cent of maximum capacity which had to be utilized in order not to lose money on operations. Considerable elasticity in operations is shown from the fact that at minimum capacity the facilities handled only an average of 103,405 pounds dressed weight of poultry per 8-hour day, while at present capacity they handle 117,193 pounds of poultry and at maximum capacity could handle 229,791 pounds of poultry per 8-hour day.

Table 34 - Capacity: Total Maximum, Present and Minimum for 12 Facilities in Terms of Pounds Dressed Weight per 8-Hour day.

Market Class	Minimum Capacity 45% of Total Pounds	Present Capacity 51% of Total Pounds	Total Maximum Capacity Pounds
Broilers	60,467	68,530	134,373
Fowl	138,259	156,694	307,243
Turkeys	111,490	126,356	247,756
Average	103,405	117,194	229,791

Table 35 shows the total number of chickens and turkeys raised in five counties in 1946 (estimated by the average yearly increase shown in the census figures between 1939 and 1944)

and total maximum capacity of the twelve facilities on which capacity data were obtained in the five counties of the Valley. The estimated production in pounds live weight in 1946 for chickens was obtained by multiplying the number of head by the average weight of broilers and fowl. The estimated production in pounds live weight of turkeys in 1946 was obtained by multiplying the number of head by an average weight of 15 pounds per head. The estimated dressed weight produced in 1946 for both chickens and turkeys was obtained by applying a 10 per cent shrink to the live weight.

According to the data presented in Table 35, twelve facilities studied could dress all the chickens raised in the five counties of the Valley of Virginia in 196 days and all the turkeys raised in 22 days.

These figures are somewhat misleading, however, because not all chickens raised are sold but some are kept by the producers for replacements in the laying and breeding flocks. Some turkeys are kept also for replacements in the breeding flocks. In addition to this not all the poultry sold in the Valley is sold to the marketing facilities in the Valley. The Monthly Review of Financial and Business Conditions, published by the Federal Reserve Bank of Richmond, has this to say:

"With regard to marketing chickens in the area (Rockingham County) the contract feeder normally sells about $\frac{1}{2}$ to individual buyers (truckers) who can make the overnight haul of live poultry to the eastern

Table 35 - Total Number of Chickens and Turkeys Raised in Five Counties and the Total Maximum Capacity of the Marketing Facilities Studied for the Year 1946.

Poultry	Number Raised as Reported by the Census		Average Yearly Increase	Estimated Production in 1946			Total Maximum Plant Capacity per 8-Hour Day		Number of Days of Operation
	1939 Number	1944 Number	Number	Number	Live Weight Pounds	Dressed 10% Shrink Pounds	Dressed Pounds	Days	Days
Chickens	5,437,728	10,136,652	939,785	12,016,222	48,064,888	43,258,399	220,804	196	
Turkeys	322,668	387,004	12,867	412,733	6,191,070	5,571,963	247,756	22	

terminal markets, and the other $\frac{1}{2}$ to dressing plants within the area."

Since these twelve facilities studied are not the only processing facilities in the Valley, and since they not only draw poultry from the five counties of the Valley but six additional counties in Virginia (Figure 17) as well as two counties in West Virginia, it would appear that the marketing facilities of the Valley are more than adequate to handle all the poultry produced in the five counties of the Valley of Virginia and the normal nearby area of supply.

Performance Per Worker

Table 36 shows the performance per worker by groups for the twelve poultry marketing facilities in the Valley of Virginia. The performance per worker is calculated on the basis of pounds dressed weight produced per eight hour day at present capacity which is 51 per cent of maximum capacity. The advantages of having a well organized processing facility are apparent in the Table. For instance, workers in the producers and dealer group dressed an average of 148 pounds of poultry per worker in an 8-hour day, while workers in the processing plants not having conveyor systems dressed 266 pounds per day and workers in plants having conveyor systems dressed 287 pounds of poultry per 8-hour day. In terms of percentages the workers in the processing plants without conveyor systems dressed 80 per cent more per worker than did the

workers in the producers and dealer group, and workers in plants having conveyor systems dressed 94 per cent more per worker in an 8-hour day than did the workers in the producers and dealer group.

Table 36 - Performance Per Worker by Groups for the Twelve Marketing Facilities Studied in the Valley of Virginia. Expressed in Pounds Dressed Weight per 8-Hour Day per Worker.

Market Class of Poultry	Producers and Dealer, 4 Workers Per Establishment				Processing Plants Plants Not Having Plants Having Con- veyor Systems, 57 10 Workers per Plant				All Facilities 37 Workers Per Facility			
	Present		Pounds		Present		Pounds		Present		Pounds	
	Capacity per	Dressed	Capacity	Dressed	Capacity	Dressed	Capacity	Dressed	Capacity	Dressed	Capacity	Dressed
	Establishment	Per	Per	Per	Per	Per	Per	Per	Per	Per	Per	Per
	Pounds	Worker	Worker	Worker	Worker	Worker	Worker	Worker	Worker	Worker	Worker	Worker
		Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Broilers	523	131	2,177	218	10,073	150	6,108	165				
Fowl	650	163	3,896	330	23,842	355	13,058	353				
Turkeys	605	151	1,889	189	23,896	357	12,636	346				
Average												
All Classes	593	148	2,654	266	19,270	287	10,600	288				

Cost of Processing

Considerable variation was found in processing cost in the facilities studied. They varied from 0.8 of a cent per pound dressed weight reported by a producer to 7.5 cents per pound reported by one of the large processing plants. Table 37 shows a break-down of the cost of some of the large processing plants. The total cost per pound dressed for the low cost plants was 3.55 cents per pound while the high cost plants averaged 7.16 cents per pound dressed. The average of the high cost plants and the low cost plants gave a total average cost of 5.36 cents per pound dressed weight for dressing all classes of poultry.

Table 38 shows the performance per worker in the high cost and low cost plants in the Valley. It is interesting to note that the low cost plants dressed an average of 324 pounds of poultry per worker per eight hour day, while the high cost plants dressed an average of only 283 pounds of poultry per worker per 8-hour day. Thus, the low cost plants were dressing 41 pounds of poultry more per worker in an 8-hour day than were the high cost plants. There seems to be some room for improvement in labor efficiency in the high cost plants. Also the high cost

Table 37 - Average Cost of Processing Poultry
Per Pound Dressed Weight Reported by Fa-
cilities in the Valley.

Costs	Low Cost Plants	High Cost Plants	Average
	Cents	Cents	Cents
Buy and Haul	.50	1.00	.75
Administrative and Plant	.75	1.51	1.13
Feed	.10	.22	.16
Labor - Dress	.75	1.51	1.13
Supplies	.20	.43	.31
Package	.50	1.00	.75
Freight	.75	1.51	1.13
Total	3.55	7.18	5.36

Table 38 - Performance Per Worker in the Low
and High Cost Plants in the Valley of Vir-
ginia in terms of pounds Dressed Weight per
8-Hour Day per Worker.

Market Class	Low Cost Plants, 66 Workers per Plant		High Cost Plants, 69 Workers per Plant	
	Present Capacity Per Plant	Pounds Dressed Per Worker	Present Capacity Per Plant	Pounds Dressed Per Worker
	Pounds	Pounds	Pounds	Pounds
Broilers	14,471	219	14,025	203
Powl	24,118	365	23,289	336
Turkeys	25,546	287	21,420	310
Average All Classes	21,378	324	19,638	283

plants had an average of 375 square feet of floor space per worker, while the low cost plants had 335 square feet of floor space per worker. According to this fact, the high cost plants had 45 square feet of floor space more per worker than did the low cost plants. There might be some room for improvement along this line.

Grading

All the large plants employed a special grader to grade their poultry. Standard U. S. Grades were used in all plants where grading was done. Specifications for U. S. Standards for grades for dressed broilers, fryers and roasters are given in Table 39. Specifications for U. S. Standards for grades for dressed fowl or stewing chickens are given in Table 40. In general, U. S. Grade AA refers to commercially perfect specimens of any class, U. S. Grade A refers to the second highest grade of dressed chickens, U. S. Grade B refers to the third highest grade of dressed chickens, and U. S. Grade C refers to edible dressed chickens below the grade of U. S. Grade B, except such as are specifically excluded by the general grading requirements or by the detailed specifications for U. S. Grade C.

Packing

There were wide variations in the type of containers used for packing poultry by the marketing facilities studied in the

Table 39 - Specifications for Tentative U. S. Standards for Grades for Dressed Broilers, Fryers, and Roasters

U.S. Grades	Quality Specifications for Individual Birds
U.S. Grade AA	Young soft meat bird, full fleshed, well bled, well dressed and free of pinfeathers. No flesh or skin bruises allowed and only slight skin abrasions or discolorations permitted, none of which shall be on the breast. Crooked breast or other deformities not allowed. A broken or disjointed wing above the wing tip or a broken or disjointed leg not permitted. No torn skin permitted whether sewn or not. The crop must be empty and clean. Must be dry picked or semi-scalded and dry packed.
U.S. Grade A	Young soft meat bird, well fleshed, well bled, well dressed, and practically free of pinfeathers. No flesh bruises except very slight on back or wings and only very slight skin bruises, abrasions or discolorations permitted, none of which shall be on the breast. Crooked breasts or other deformities not allowed. One broken wing above the wing tip permitted in broilers and fryers, if the bone does not protrude through the flesh and if there is no appreciable bruise or blood clot. Broken legs not permitted except that the shanks may be broken. Slight sewn tears permitted on the back and wings, but no sewn tears permitted on the breast or fleshy part of the carcass. Open tears not permitted. The crop must be empty and clean but an entire crop completely and properly removed through a small incision at the back or side of the neck permitted. Must be dry picked or semi-scalded.
U.S. Grade B	Young soft meat bird, fairly well fleshed. Must be fairly well dressed and fairly well bled. May show a few scattered pinfeathers over the entire carcass. Slight flesh or skin bruises, abrasions or discolorations permitted, but not more than three such defects, if on the breast. Abrasions over two inches in diameter not permitted and tears over two inches in diameter not allowed unless properly sewn. Dented or slightly crooked breast bone or other slight deformities permitted. One broken wing or one broken leg in the flesh permitted, if bone does not protrude through the flesh and if not showing excessive bruise or blood clot. The crop must be empty and clean, but an entire crop completely and properly removed permitted.
U.S. Grade C	Young bird, poorly fleshed. May show evidence of poor bleeding and have numerous pinfeathers over the entire carcass. Abrasions and discolorations permitted. Hunchback or other deformities allowed, if bird is fairly well fleshed. Bird badly bruised, so as to make an appreciable part of the carcass inedible, or bird showing evidence of disease or other condition that renders it unwholesome for human food not permitted.

Source: U.S. Department of Agriculture. Food Distribution Administration - Tentative U.S. Standards for Classes and Grades for Dressed Chickens. 1943.

Table 40 - Specification for Tentative U. S. Standards for Grades for Dressed Fowl or Stewing Chickens

U.S. Grade	Quality Specifications for Individual Birds
U.S. Grade AA	Mature female bird, full fleshed, well bled, well dressed and free of pinfeathers. No flesh or skin bruises allowed and only slight skin abrasions or discolorations permitted, none of which shall be on the breast. Crooked breast or other deformities not allowed. A broken or disjointed wing above the wing tip, or a broken or disjointed leg not permitted. No torn skin permitted whether sewn or not. The crop must be empty and clean. Must be dry picked or semi-scalded and dry packed.
U.S. Grade A	Mature female bird, well fleshed, well bled, well dressed, and practically free of pinfeathers. No flesh bruises except very slight on back or wings and only very slight skin bruises, abrasions or discolorations permitted, none of which shall be on the breast. Crooked breast or other deformities not allowed. Broken wings above the wing tips, or broken legs in the flesh not permitted. Slight sewn tears permitted on the back and wings, but no sewn tears permitted on the breast or fleshy part of the carcass. Open tears not permitted. Excessive scaly leg or excessive abdominal fat not permitted. The crop must be empty and clean, but an entire crop completely and properly removed through a small incision at the back or side of the neck permitted. Must be dry picked or semi-scalded.
U.S. Grade B	Mature female bird, fairly well fleshed, fairly well dressed and fairly well bled. May show a few scattered pinfeathers over the entire carcass. Slight flesh or skin bruises, abrasions or discolorations permitted but not more than three such defects if on the breast. Abrasions over two inches in diameter not permitted and tears over two inches in diameter not allowed unless properly sewn. Dented or slightly crooked breast bone or other slight deformities permitted. One broken wing or one broken leg in the flesh permitted, if bone does not protrude through the flesh and if not showing excessive bruise or blood clot. The crop must be empty and clean, but an entire crop completely and properly removed permitted.
U.S. Grade C	Mature female bird. May be poorly fleshed, show evidence of poor bleeding and have numerous pinfeathers over the entire carcass. Abrasions and discolorations permitted. Hunchback or other deformities allowed, if the bird is fairly well fleshed. Bird badly bruised so as to make an appreciable part of the carcass inedible or birds showing evidences of disease or other condition that renders it unwholesome for human food not permitted.

Source: U.S. Department of Agriculture. Food Distribution Administration - Tentative U.S. Standards for Classes and Grades for Dressed Chickens. 1943.

Valley of Virginia. They varied from old orange crates used by producers to a special hotel pack put up by one of the large processing plants. One producer used galvanized cans in which he packed and iced his poultry then delivered it and reused the cans.

Table 41 gives the quantity packed in different containers by the facilities studied on a percentage basis. Barrels ranked first, with 55 per cent of the quantity packed; boxes, second, with 38 per cent; consumer size packages, third, with 4 per cent; and miscellaneous, fourth, with 3 per cent. Barrels seem to be the most popular package with the poultry processing facilities studied in the Valley of Virginia.

Table 41 - Type of Packages Used and the Quantity Packed in Each by the Facilities in the Valley.

Packages	Volume Packed
	Per Cent
Barrels	55
Boxes	38
Consumer Size	4
Miscellaneous	3
Total	100

D. Sales.

Market Channels Utilized

The market channels utilized by the facilities in the Valley of Virginia are shown in Table 42. The producers and smaller plants tended to sell to local hotels, restaurants and retail stores in the area. The larger plants tended to sell to wholesalers and wholesale distributors located along the eastern seaboard including such markets as New York, Philadelphia, Washington and Norfolk. Market channels utilized as shown in Table 42 and the extent to which they were utilized on a per cent of volume of sales basis were as follows: wholesalers, 24 per cent; hotels, 20 per cent; wholesale distributors, 17 per cent; restaurants, 13 per cent; retail stores, 7 per cent; retail routes, 2 per cent; and other channels, 17 per cent.

Table 42 - Market Channels Utilized by the
Facilities Studied and Quantity Taken
by Each.

<u>Market Channels</u>	<u>Per Cent Taken</u>
Wholesalers	24
Hotels	20
Wholesale Distributors	17
Restaurants	13
Retail Stores	7
Retail Routes	2
Others	17
Total	100

Some idea of the magnitude of the quantity of sales of dressed poultry may be obtained from the fact that seven of the facilities, for which data were available, sold a total of 21,401,725 pounds of dressed poultry or an average of 3,057,389 pounds per plant in the year 1946.

Prices Received by Facilities

Average prices received per pound for various market classes of poultry by the marketing facilities studied are shown in Table 43.

Table 43 - Average Prices Received per Pound
for Poultry by the Marketing Facilities
Studied for the Year 1946.

Market Class	<u>Dressed</u> <u>Cents</u>	<u>Dressed and Drawn</u> <u>Cents</u>	<u>Average of Dressed and Dressed and Drawn</u> <u>Cents</u>
Broilers	39.5	55.7	47.6
Roasters	41.5	60.0	50.8
Cocks	24.0	42.2	33.1
Fowl	36.0	55.0	45.5
Turkey - Hens	41.7	55.0	48.4
Turkey - Toms	30.8	55.0	42.9

Shipping

Table 44 gives the facilities used to ship poultry by the poultry marketing establishments visited in the Valley of Virginia for the year 1946. The facilities used ~~in~~ rank in importance of per cent of quantity carried were as follows: trucks of the establishment, 71 per cent; private trucking agencies, 18 per cent; railroads, 10 per cent; and motor trucks of customer, 1 per cent. The table indicates that 90 per cent of the poultry shipped by the marketing facilities of the Valley of Virginia was shipped by motor truck.

Table 44 - Facilities Used to Ship Poultry and
Extent of Use by Marketing Establishments
in the Valley.

Facilities Used	Volume Shipped Per Cent
Trucks of Establishments	71
Private Trucking Agencies	18
Trucks of Customer	1
Railroads	10
Total	100

SUMMARY AND CONCLUSIONS

1. The increase in chicken production over the period 1910-1945 in the United States has compared favorably with the increase in production of livestock which compete with it for the farmers time and feed as well as for a place on the table of the consumer. Turkey production has increased 252 per cent in the United States over the period 1929-1945.
2. Chicken and turkey production has increased more in Virginia than cattle, hogs, and sheep.
3. During the period 1925-1945 chicken production in Virginia has had a greater increase than that of the country as a whole.
4. Commercial broiler production in Virginia has increased faster than commercial broiler production in the United States. Virginia production in 1945 was 1,251 per cent greater than in 1934 while for the country as a whole the 1945 production was only 817 per cent greater.
5. Turkey production in Virginia has not kept pace with the United States production. In 1945 the United States produced 252 per cent more than in 1929 while Virginia produced only 173 per cent more.
6. The production of chickens in the Valley of Virginia has increased to a greater extent than has the production in either the United States or Virginia. In 1944 the Valley produced 695 per cent more than in 1919 while Virginia produced 141 per cent more and the United States produced only 86 per cent more.

7. Turkey production has had a greater increase in the Valley than in either the United States or Virginia. In 1944 the Valley produced 463 per cent more than in 1929.
8. In 1944 the five counties in the Valley of Virginia produced 30 per cent of the chickens and 51 per cent of the turkeys raised in Virginia.
9. Rockingham County is the largest producer of poultry in the Valley of Virginia. In 1944, it produced 58 per cent of the chickens and 67 per cent of the turkeys raised in the Valley. In this same year Rockingham county produced 17 per cent of the chickens and 34 per cent of the turkeys raised in Virginia.
10. Farm prices per pound live weight received for chickens by Virginia farmers have tended to be higher than farm prices received by farmers in the United States. Over the period 1929-1945 Virginia farm prices averaged 2.6 cents more per pound than United States farm prices for chickens.
11. Virginia farm prices per pound live weight received for turkeys for the period 1938-1946 have averaged 2.7 cents per pound more than farm prices for turkeys in the United States.
12. Live poultry receipts in three markets have been steadily falling off while dressed receipts have been increasing over the period 1930-1945. This has been due in part to a change in consumer demand and a shift in processing facilities from areas of consumption to areas of production. In 1945 the live receipts in three markets were 52 per cent of the 1930 live receipts while the dressed receipts were 153 per cent of the 1930 dressed receipts.

13. Average monthly cold-storage holdings of dressed poultry per year over the period 1921-1941 have increased.
14. The trend in the consumption of chickens over the period 1910-1945 is similar to the consumption of all other meats. Turkey consumption has increased greatly over the period 1929-1945. In 1945 the per capita consumption of turkeys was 145 per cent more than the 1929 consumption.
15. Although the poultry industry has grown considerably in the Valley of Virginia, the facilities studied were only operating at an average of 51 per cent of their maximum capacity per 8-hour day. Furthermore, the facilities were operating on an average of 4 days per week. On the basis of a 40-hour week they were only operating at 41 per cent of their maximum capacity.

The facilities studied could dress all the chickens raised in the Valley in 196 days and all the turkeys in 22 days on an 8-hour day basis. However, it is highly improbable that these facilities would have to do this since some of the chickens raised would be kept for layers and breeders and some of the turkeys raised would be kept for breeders and many would be marketed live.

The facilities studied, in addition to serving the five counties in the Valley, also served six other counties in Virginia and two in West Virginia.

Not all the poultry sold in the Valley is sold to the processing plants but in normal times much is sold to truckers who

take it overnight to live poultry markets on the eastern seaboard.

In the light of the above facts, it must be concluded that not only are the present poultry marketing facilities in the Valley of Virginia entirely adequate but these facilities may be considered as being more than adequate under existing conditions and for some years to come.

APPENDIX A

Table 1 - Production in Pounds Live Weight and Value of Cattle, Hogs and Chickens Produced on Farms in the United States, 1910-1945.

Year	Cattle		Hogs		Chickens	
	Quantity 1,000 Pounds	Value 1,000 Dollars	Quantity 1,000 Pounds	Value 1,000 Dollars	Quantity 1,000 Pounds	Value 1,000 Dollars
1910	12,671,577	647,242	12,024,795	985,613	2,064,468	243,390
1911	12,586,484	596,145	12,517,212	787,760	1,965,417	214,127
1912	13,806,621	759,969	11,944,861	803,934	1,949,126	214,404
1913	14,865,589	938,870	12,219,962	923,300	1,954,112	240,150
1914	15,561,942	1,032,716	12,593,573	954,238	2,017,872	254,358
1915	15,136,310	966,915	13,935,217	915,480	1,995,081	230,494
1916	15,933,296	1,099,254	13,582,465	1,124,349	1,902,527	256,841
1917	16,764,055	1,448,782	12,927,941	1,776,428	1,933,679	326,690
1918	15,658,139	1,549,865	14,791,531	2,376,635	2,064,901	448,301
1919	13,387,352	1,361,514	13,985,843	2,268,681	2,002,710	492,772
1920	12,402,914	1,101,352	13,532,950	1,753,873	1,954,215	513,753
1921	12,816,792	737,724	14,132,316	1,097,940	2,111,223	441,134
1922	13,185,275	768,601	16,518,111	1,388,271	2,221,503	426,762
1923	13,174,367	784,707	17,007,565	1,192,287	2,318,714	442,996
1924	13,401,665	803,635	15,388,156	1,137,848	2,306,399	440,163
1925	12,953,100	871,159	14,167,523	1,540,048	2,379,062	479,830
1926	12,604,625	885,246	14,909,297	1,755,094	2,505,519	548,828
1927	12,072,445	946,907	16,339,974	1,583,843	2,608,150	521,644

APPENDIX A

Table 1 - (Continued)

Year	Cattle		Hogs		Chickens	
	Quantity 1,000 Pounds	Value 1,000 Dollars	Quantity 1,000 Pounds	Value 1,000 Dollars	Quantity 1,000 Pounds	Value 1,000 Dollars
1928	12,326,763	1,194,325	16,188,885	1,385,115	2,593,290	508,795
1929	12,753,939	1,227,920	15,581,878	1,426,836	2,596,230	585,777
1930	13,626,398	1,031,868	15,175,728	1,340,302	2,643,206	482,103
1931	13,400,949	744,270	16,541,384	966,570	2,457,000	383,251
1932	14,190,814	595,897	16,367,644	561,989	2,576,131	296,958
1933	15,369,948	575,268	16,566,123	602,150	2,616,429	243,971
1934	14,504,576	553,566	12,385,535	520,162	2,214,973	241,956
1935	13,650,546	839,405	10,672,796	906,973	2,313,366	331,399
1936	14,437,789	856,653	12,975,896	1,196,314	2,409,582	386,116
1937	13,740,695	974,199	12,506,271	1,176,449	2,042,009	332,299
1938	14,046,970	931,675	14,372,173	1,105,438	2,185,049	336,689
1939	15,097,570	1,087,824	17,081,824	1,066,232	2,337,980	319,252
1940	15,583,310	1,185,175	17,043,067	919,784	2,092,831	284,842
1941	16,718,197	1,484,073	17,473,427	1,575,520	2,477,222	386,869
1942	17,967,445	1,930,098	21,054,376	2,728,414	2,807,355	528,896
1943	18,706,781	2,225,319	25,470,237	3,480,019	3,410,150	834,340
1944	19,012,085	2,082,930	20,756,868	2,697,233	2,661,653	637,304
1945	19,027,585	2,310,292	19,189,701	2,685,894	3,026,451	789,452

Source: Agricultural Statistics, 1940-1946.

APPENDIX A

Table 2 - Production in Pounds Live Weight and Value of
Sheep and Turkeys Produced on Farms in the United
States, 1910-1945.

Year	Sheep		Turkeys	
	Quantity	Value	Quantity	Value
	1,000 Pounds	1,000 Dollars	1,000 Pounds	1,000 Dollars
1910	1,149,833	68,353	*	*
1911	1,127,847	54,696	*	*
1912	1,275,029	67,273	*	*
1913	1,186,839	65,985	*	*
1914	1,270,852	75,312	*	*
1915	1,254,128	81,528	*	*
1916	1,118,335	87,068	*	*
1917	1,125,720	135,124	*	*
1918	1,238,044	161,684	*	*
1919	1,142,755	145,951	*	*
1920	925,518	98,354	*	*
1921	1,146,492	72,223	*	*
1922	1,080,432	97,402	*	*
1923	1,252,848	117,985	*	*
1924	1,458,666	141,327	*	*
1925	1,508,345	166,262	*	*

APPENDIX A

Table 2 - (Continued)

Year	Sheep		Turkeys	
	Quantity	Value	Quantity	Value
	1,000 Pounds	1,000 Dollars	1,000 Pounds	1,000 Dollars
1926	1,609,107	167,385	*	*
1927	1,664,088	167,528	*	*
1928	1,772,717	193,183	*	*
1929	1,822,660	191,972	218,275	53,896
1930	1,965,377	133,963	228,497	49,475
1931	2,050,185	101,900	243,753	47,297
1932	1,831,338	74,578	303,103	42,950
1933	1,863,156	86,362	319,382	37,584
1934	1,920,605	100,024	300,471	43,622
1935	1,834,514	115,847	297,062	57,002
1936	1,848,508	132,868	406,337	66,663
1937	1,938,413	150,665	375,787	66,213
1938	2,042,429	127,476	395,550	70,477
1939	2,040,699	139,175	484,695	78,510
1940	2,111,877	150,049	508,788	78,230
1941	2,267,056	193,424	520,703	103,331
1942	2,332,259	236,964	530,300	145,279
1943	2,133,546	244,832	525,883	171,516
1944	1,979,610	219,565	600,726	203,844

APPENDIX A

Table 2 - (Continued)

Year	Sheep		Turkeys	
	Quantity	Value	Quantity	Value
	1,000	1,000	1,000	1,000
	Pounds	Dollars	Pounds	Dollars
1945	1,958,604	232,252	768,957	258,179

* Not Available

Source: Agricultural Statistics 1940-1946

APPENDIX A

Table 3 - Production in Pounds Live Weight and Value of Cattle, Hogs, Chickens, Sheep and Turkeys Produced on Farms in Virginia, 1924-1945.

Year	Cattle			Hogs			Chickens			Sheep			Turkeys		
	Quantity 1,000 Pounds	Value 1,000 Dollars		Quantity 1,000 Pounds	Value 1,000 Dollars		Quantity 1,000 Pounds	Value 1,000 Dollars		Quantity 1,000 Pounds	Value 1,000 Dollars		Quantity 1,000 Pounds	Value 1,000 Dollars	
1924	110,715	6,864		164,705	13,528	*	*			22,780	2,450	*	*	*	*
1925	109,445	7,230		167,010	12,538	47,776	11,323			23,640	2,722	*	*	*	*
1926	104,340	7,072		170,005	20,401	50,600	12,650			22,220	2,592	*	*	*	*
1927	126,970	10,127		197,785	21,361	54,059	12,812			23,710	2,552	*	*	*	*
1928	135,310	13,252		200,675	18,663	48,121	11,886			26,360	3,115	*	*	*	*
1929	158,070	14,836		187,560	18,381	51,790	13,311			29,710	3,347	7,414	2,239		
1930	147,270	9,446		165,460	15,553	49,692	10,833			30,410	2,488	8,346	2,003		
1931	147,160	7,869		167,740	11,574	50,139	9,376			31,730	1,942	6,765	1,468		
1932	153,845	6,634		182,700	7,673	62,546	8,131			32,750	1,579	7,920	1,283		
1933	161,025	5,951		181,354	7,207	50,362	5,842			32,590	1,772	8,616	1,146		
1934	153,945	6,554		150,870	7,317	52,514	7,247			26,570	1,641	10,458	1,642		

APPENDIX A

Table 3 - (Continued)

Year	Cattle			Hogs			Chickens			Sheep			Turkeys		
	Quantity	Value	1,000 Pounds	Quantity	Value	1,000 Pounds	Quantity	Value	1,000 Pounds	Quantity	Value	1,000 Pounds	Quantity	Value	1,000 Pounds
	1,000 Pounds	1,000 Dollars		1,000 Pounds	1,000 Dollars		1,000 Pounds	1,000 Dollars		1,000 Pounds	1,000 Dollars		1,000 Pounds	1,000 Dollars	
1935	153,600	9,626		157,780	13,411		58,423	9,698		27,800	1,912		9,426	1,838	
1936	162,584	9,625		175,569	16,960		73,647	12,520		36,951	2,121		9,941	1,849	
1937	151,205	11,298		199,210	19,124		58,780	10,698		25,120	2,368		11,726	2,099	
1938	156,940	10,699		202,290	15,981		71,735	11,908		23,240	1,887		11,471	2,145	
1939	164,160	11,788		215,860	14,678		77,526	12,144		22,430	1,883		12,304	2,264	
1940	173,165	12,916		193,360	11,215		47,151	7,211		21,410	1,872		11,701	2,093	
1941	177,615	15,354		191,403	16,652		52,863	9,198		21,549	2,089		12,194	2,719	
1942	181,705	19,776		223,943	27,993		56,284	11,595		21,135	2,596		13,664	3,826	
1943	204,215	25,171		286,760	38,426		65,601	17,712		20,119	2,643		12,874	4,377	
1944	201,120	23,036		252,786	33,368		62,627	16,722		19,375	2,424		15,452	5,377	
1945	204,640	26,429		218,405	31,323		62,017	18,543		20,243	2,846		20,202	7,495	

* Not Available

Source: Agricultural Statistics, 1939-1946
 Farm Production and Income From Meat Animals - B. A. E., 1936
 Virginia Farm Statistics, 1935-1944
 Virginia Farm Economics - May, 1947

APPENDIX A

Table 4 - Chickens: Number Raised in Five Virginia Counties, in the State of Virginia and in the United States in Census Years 1919-1944.

Division	Census Years							
	1919	1924		1929		1934		1944
	Number Raised	Number Raised	Number Raised	Number Raised	Number Raised	Number Raised	Number Raised	Number Raised
Five Counties	1,275,344	1,613,035	1,993,024	2,326,195	5,437,728	10,136,652		
Virginia	14,227,483	15,892,037	16,728,622	16,517,441	22,116,616	34,334,812		
United States	473,200,699	545,848,035	673,092,052	598,867,134	660,565,663	879,559,000*		

* Taken from Agricultural Statistics, 1946

Source: United States Census of Agriculture, 1920-1945.

APPENDIX A

Table 4a - Turkeys: Number Raised in Five Virginia Counties, in the State of Virginia and in the United States in Census Years 1929-1944.

Division	Census Years		
	1929	1939	1944
	Number Raised	Number Raised	Number Raised
Five Counties	68,788	322,668	387,044
Virginia	527,715	705,970	761,432
United States	16,794,485	27,933,756	35,858,000*

* Taken from Agricultural Statistics, 1946

Source: United States Census of Agriculture, 1930-1945.

APPENDIX A

Table 5 - Consumption of Chickens and Turkeys as Compared with the Consumption of Beef, Veal, Lamb and Mutton and Pork in the United States, 1910-1945. Expressed on a percentage basis having 1929 = 100%.

Year	Beef	Veal	Lamb & Mutton	Pork	Total Meats	Chickens	Turkeys
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
1910	142	114	114	89	111	104	*
1911	139	113	132	99	116	106	*
1912	130	111	138	96	111	101	*
1913	128	100	130	97	110	98	*
1914	126	92	129	94	108	98	*
1915	115	95	111	96	104	97	*
1916	120	103	105	100	108	91	*
1917	131	116	80	85	104	89	*
1918	139	118	86	88	109	90	*
1919	124	124	102	92	106	96	*
1920	119	127	96	91	103	92	*
1921	112	121	109	93	102	90	*
1922	119	124	91	94	105	96	*
1923	120	130	95	107	112	98	*
1924	120	137	95	107	113	97	*
1925	121	137	95	96	107	100	*
1926	122	130	98	93	106	100	*
1927	110	117	95	98	103	106	*
1928	98	103	98	102	101	102	*

APPENDIX A

Table 5 - (Continued)

Year	Beef	Veal	Lamb & Mutton	Pork	Total Meats	Chickens	Turkeys
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
1929	100	100	100	100	100	100	100
1930	98	102	120	96	98	109	103
1931	97	105	127	98	99	99	98
1932	94	105	127	101	100	100	119
1933	103	113	121	100	103	103	135
1934	112	133	113	92	102	96	127
1935	106	127	123	69	88	92	121
1936	116	133	118	79	97	97	153
1937	110	137	118	80	96	96	158
1938	109	122	123	83	97	89	158
1939	110	121	118	93	102	99	171
1940	111	118	118	104	108	96	205
1941	124	122	123	99	110	103	208
1942	123	127	129	88	105	109	211
1943	100	125	114	104	104	141	194
1944	107	179	120	110	113	119	194
1945	118	184	129	86	105	128	245

* Not Available

Source: Computed from Table 28.

APPENDIX B

Blank Schedule Used in Interviewing Managers
of Poultry Marketing Facilities - All Data
for the Year 1946.

I. Plant Make Up.

1. Financial (Value of Assets)

- a. Land \$ _____
- b. Buildings \$ _____
- c. Office Furniture and Fixtures \$ _____
- d. Plant Machinery and Equipment \$ _____
- e. Feed Room Equipment \$ _____

2. Physical Make Up

- a. Floor Space _____
- b. Number of Floors _____
- c. Cold-Storage Facilities _____

3. Personnel

- a. Number of dressers _____ Wage rate _____
- b. Number of office workers _____ Wage rate _____
- c. Other _____ Wage rate _____

4. Possibility of Expansion or Contraction of Present Capacity.

- a. Could establishment be easily enlarged? _____
- b. Could additional machinery be easily added to the present unit to increase the capacity? _____
- c. Could a unit of machinery be disconnected so as to cut down present capacity? _____
- d. Are there any plans to expand or contract the present capacity? _____

APPENDIX B
(Continued)

e. How much of an increase in volume would be required to make it profitable to enlarge the present establishment? _____

f. What is the smallest volume the establishment could operate at and not incur losses? _____

II. Purchases.

1. Total lbs. purchases in 1946 and cost. lb. _____ \$ _____

2. Source of supply

a. Counties _____

b. Localities _____

3. Average prices per pound live weight at plant paid for:

a. Broilers _____

b. Roasters _____

c. Capons _____

d. Cocks _____

e. Fowl _____

f. Turkeys _____

(1) Hens _____

(2) Toms _____

4. Seasonality.

a. In what months do you receive the largest number of:

(1) Chickens (list months) _____ % rec.

(2) Turkeys (list months) _____ % rec.

(3) Highest month:

(a) Chickens (list month) _____ % rec.

(b) Turkeys (list month) _____ % rec.

b. In what months do you receive the smallest number of:

(1) Chickens (list months) _____ % rec.

APPENDIX B
(Continued)

(2) Turkeys (list months) _____ % rec.

c. Is establishment closed during the year? If so, list months closed _____

III. Processing Capacity and Cost of Processing.

1. Finishing.

a. Cost of feed in relation to value of weight gained

b. Range in time used to finish birds _____ days

2. Present capacity (lbs. dressed birds)

a. Total capacity of establishment _____ lbs.

b. Per cent of total capacity now utilized (8-hours=100%)

3. Processing speed and cost of processing

	Processing Speed			Cost of Processing		
	Birds per Hour			per lb.		
	Dressed	Dressed	Cut	Dressed	Dressed	Cut
		and Drawn	Up		and Drawn	Up
Broilers						
Fowl						
Turkeys						

4. Grading

a. Who does the grading? _____

b. What U. S. Grades are used? _____

5. Packing (on percentage basis) and cost of package

a. Boxes _____ \$ _____ %

b. Barrels _____ \$ _____ %

c. Consumer size _____ \$ _____ %

d. Cost of ice per lb. packed _____ \$ _____ %

APPENDIX B
(Continued)

6. Storage

- a. Average cost per lb. for storage _____
- b. Average length of time held _____ months

IV Sales

1. Total lbs. sold dressed in 1946 and returns (lbs. _____
\$ _____
2. Market channels (including percentage and location)
- a. Brokers _____
- (1) Wholesalers _____
- (2) Restaurants _____
- (3) Hotels _____
- (4) Others _____
- b. Direct cooperative distribution _____
- c. Other _____
3. Average prices received in 1946 per pound dressed for:
- a. Broilers _____
- b. Roasters _____
- c. Capons _____
- d. Cocks _____
- e. Fowl _____
- f. Turkeys _____
- (1) Hens _____
- (2) Toms _____
4. Transportation - shipping (on percentage basis) & (transportation costs)
- a. Trucks (cost per lb. transported)
- (1) Trucks of establishment _____ \$ _____ %

APPENDIX B
(Continued)

(2) Trucks of customer _____ \$ _____ %

(3) Employ private trucking agency _____ \$ _____ %

b. Rail (cost per lb. transported) _____ \$ _____ %

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