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Data Concerning the  
Egg and Broiler Industries

of  
Indiana

by

R. L. Kohls, Department of Agricultural Economics

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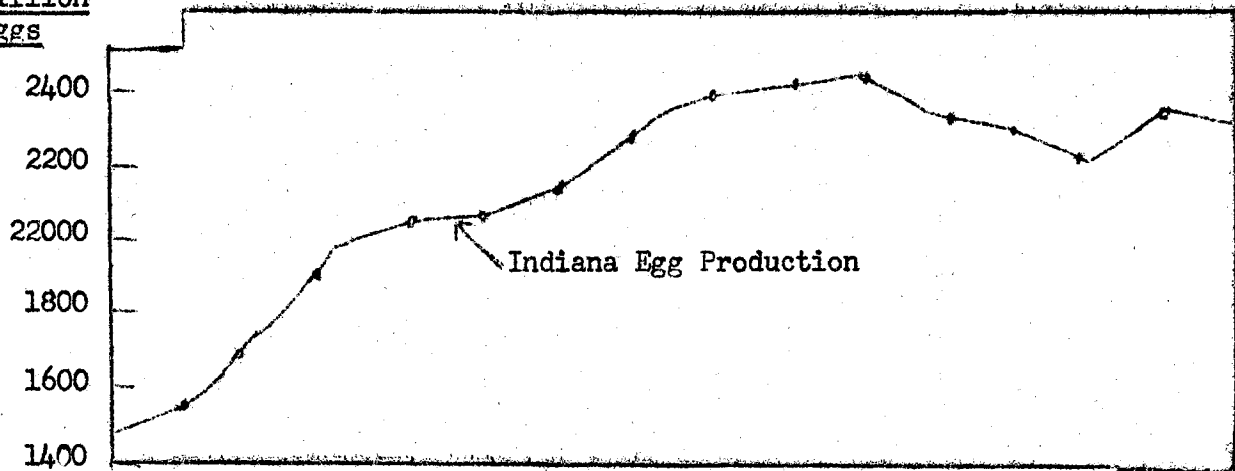
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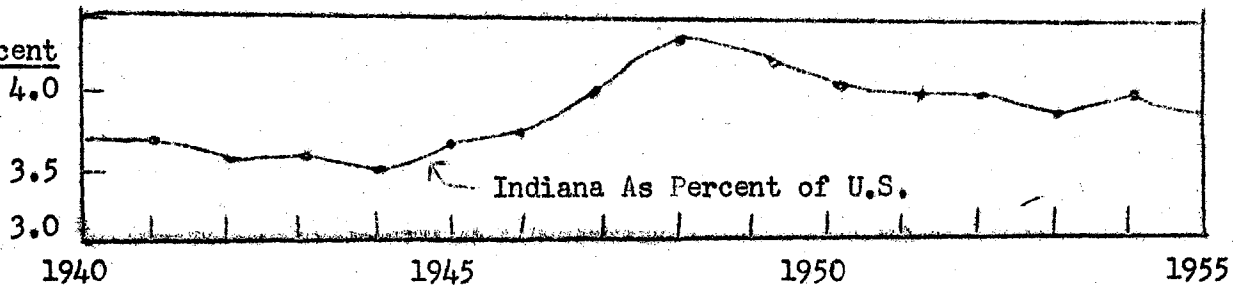
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Item 1. Indiana Egg Production, 1940 - 1955

Million  
Eggs



Percent



1. Considering the entire 15 year period, egg production in Indiana has increased at an average rate of 3% a year. However, since 1950, production has tended to decline slightly.
2. From 1944 through 1948, Indiana egg production increased more rapidly than the U.S. From 1949 through 1951, it grew less rapidly than U.S. Since 1951, Indiana egg production has kept pace with U.S. developments--supplying about 4% of the nations eggs. In 1940, Indiana ranked 10th among the states in egg production; in 1955, 8th.

Item 2. Egg Production As A Percent of U.S. Total For Selected States

	1940-44	1945-49	1950-54
	Percent of U.S.		
Indiana	3.6	4.1	4.0
Illinois	4.9	4.9	5.0
Iowa	7.3	7.7	8.0
Michigan	3.0	2.8	2.8
Minnesota	5.9	6.8	6.7
Ohio	5.0	4.6	4.2

1. Iowa, Minnesota and Illinois have tended to increase their production at a more rapid rate than the U.S.
2. Michigan and Ohio have not kept pace with the U.S. expansion.

Item 3. Estimated Indiana Surplus Egg Production Over Consumption, 1940-1954

	Surplus	
	Millions of Eggs	% Total Production
1940-44	633	36
1945-49	852	38
1950-54	752	32

(Consumption estimated by use of population and U.S. Average Consumption Data)

1. Though Indiana is still a large surplus egg state, the "home market" has grown more rapidly than has production during the past 5 years.
2. Though the data are not given here, the following conclusions are possible:
  - (a) N.Y., Pennsylvania, and New Jersey are still major egg deficit states.
  - (b) Ohio and Michigan are egg deficit states and their deficit is increasing.
  - (c) Illinois is an egg deficit state, but less so than 15 years ago.
  - (d) Minnesota and Iowa are large surplus states and their surplus is somewhat greater than 15 years ago.

Item 4. Relationship of Indiana Egg Prices to Selected Other Areas, by 5 Year Periods.

	Prices as percent of Indiana			
	1935-39	1940-44	1945-49	1950-54
U.S.	109	107	110	111
Indiana	100	100	100	100
Illinois	99	99	96	94
Iowa	94	97	94	90
Michigan	110	107	112	111
Minnesota	95	98	96	94
Ohio	109	107	110	112
N.Y., Penn., N.J.	138	130	136	139
Indiana Average Prices	19.0	26.3	38.9	37.6

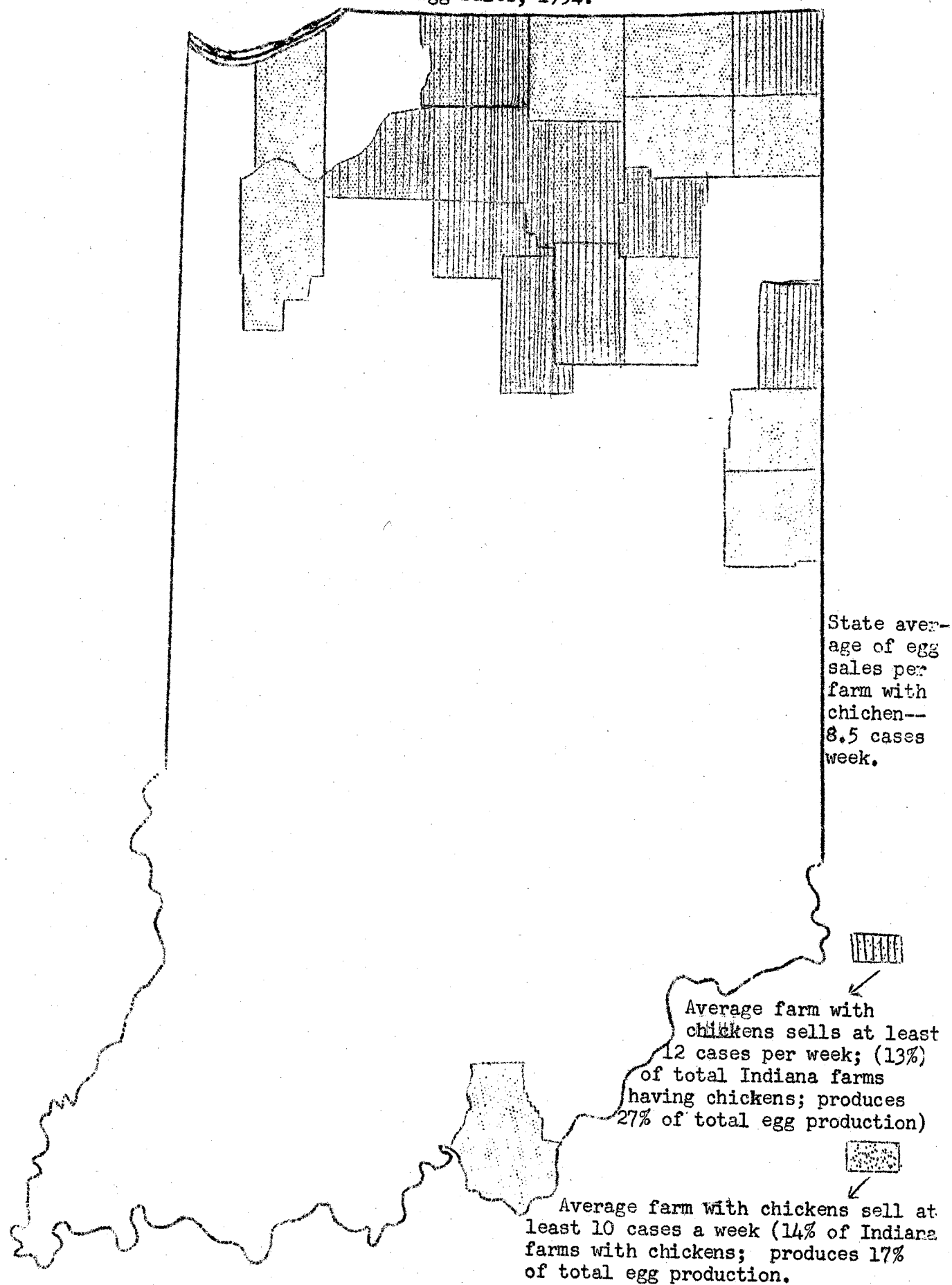
Adapted from p. 65, "Trends in Poultry Industry - Effects in Midwest"

1. Though not great, there is a tendency for prices Indiana producers receive for eggs to be lower in relation to the national price. In general since 1935-39, Indiana egg prices have:

- Strengthened relative to neighboring western states of Illinois Iowa and Minnesota.
- Weakened relative to neighboring eastern states of Michigan and Ohio and the East coast states.



Item 5: Concentration of Indiana Egg Sales, 1954.



Item 6. Percentage of Farms Reporting Chickens On Hand

	<u>1940</u>	<u>1950</u>	<u>1954</u>
U.S.	85	79	71
Indiana	86	77	67
Illinois	91	83	
Iowa	93	86	
Michigan	78	67	
Minnesota	82	76	
Ohio	84	77	
N.Y., Penn., N.J.	76	68	

Item 7. Changes in Distribution of Flock Size, Selected Areas, 1940-1950.

	<u>Under 100</u>		<u>100-199</u>		<u>200-399</u>		<u>400 over</u>	
	<u>1940</u>	<u>1950</u>	<u>1940</u>	<u>1950</u>	<u>1940</u>	<u>1950</u>	<u>1940</u>	<u>1950</u>
	Percent of Chickens							
U.S.	42	31	27	24	17	21	14	24
Indiana	43	28	35	35	15	22	7	15
Illinois	32	24	46	42	19	26	3	8
Iowa	14	10	42	36	38	42	6	12
Michigan	45	39	30	28	17	22	8	16
Minnesota	23	8	90	27	31	46	6	19
Ohio	37	31	35	34	19	22	9	13
N.Y., Penn., N.J.	21	12	17	10	20	15	42	63

Source: Adopted from p. 66, "Trends in the Poultry Industry - Effects in the Midwest"



### Movement Toward Specialization:

The change in flock-size distribution and the portion of farms having chickens might be taken as indications of specialization (Item 6 and 7)

For Indiana this might be summarized as follows:

1. From over 86% of farms having chickens in 1940, Indiana dropped to 67% in 1954. (In number of farms reporting Selling Eggs Indiana fell from 58% of total farms in 1950 to 48% in 1954; U.S. comparable figures were 45% and 35%.)

It would appear that this movement to fewer farms having chickens was moving at a more rapid rate in Indiana than in the U.S. as a whole. States surrounding Indiana were also "thinning flocks" at about the same rate as Indiana.

2. Indiana is rapidly reducing the proportion of very small flocks, holding steady in the 100-200 bracket, and increasing the large flocks. This same situation has occurred in neighboring states of Ohio, Illinois and Michigan. However, the trend toward larger flocks has gone on much more rapidly in Iowa and Minnesota. Almost two-thirds of the N.Y., Penn., and N.J. Flocks would now be classified as large.

### Item 8. Changes in Rate of Lay, Indiana and Surrounding States, 1940-44 and 1950-54.

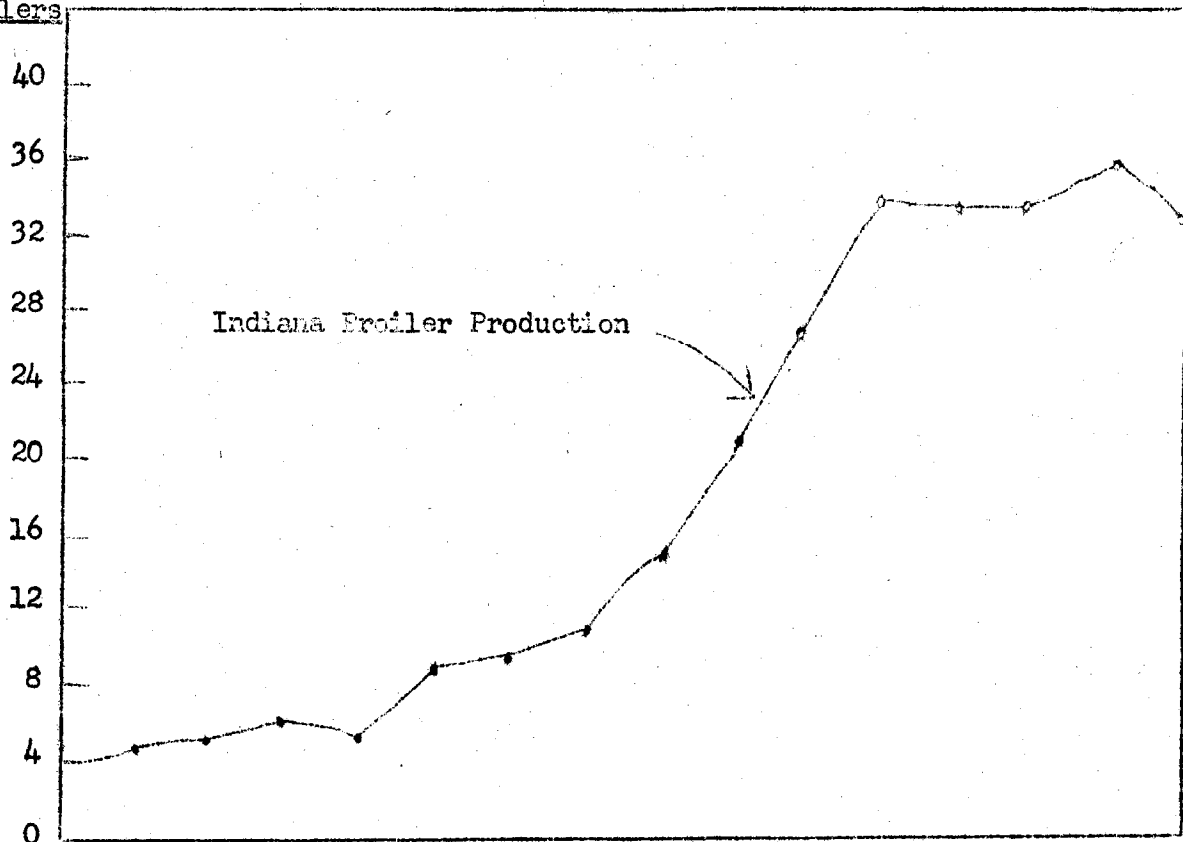
	Eggs per potential layer on farms		Eggs per potential layer as percent of U.S. Average	
	1940 - 44	1950 - 54	1940 - 44	1950 - 54
U.S.	110	148	100	100
Indiana	117	158	106	107
Illinois	105	149	95	101
Iowa	102	160	93	108
Michigan	116	153	105	103
Minnesota	118	160	107	108
Ohio	119	156	108	105
N.Y., Penn., N.J.	130	162	118	109

Adapted from p. 62, "Trends in the Poultry Industry - Effects on Midwest"

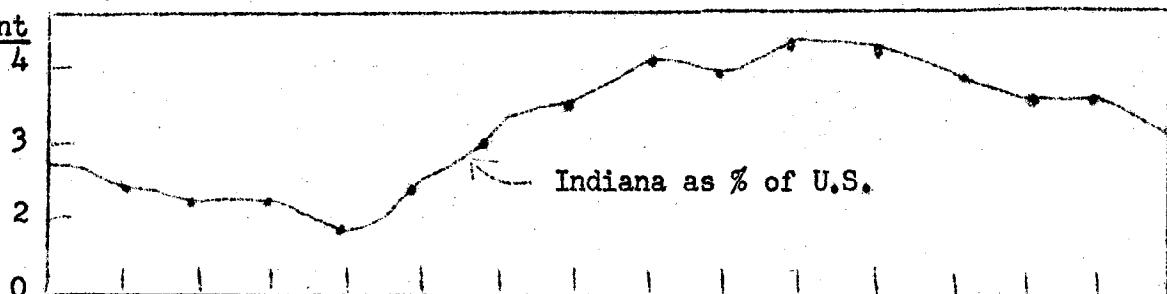
1. Indiana Egg production per hen has increased at a slightly more rapid rate than the U.S.
2. Iowa and Illinois have made the most rapid improvement from their low rates of the early forties.
3. There is much less variation in the rate of lay now than there was 15 years ago.

Item 1. Indiana Broiler Production, 1940 - 1955.

Million  
Broilers



Percent



1940

1945

1950

1955

1. Indiana broiler production grew very rapidly both absolutely and relative to the U.S. rate of growth from about 1945 through 1950.
2. Since 1950 Indiana production has stabilized while U.S. production has continued to increase - the result is a declining percentage that Indiana broilers contribute to U.S. totals.

Item 2. Rates of Broiler Production Growth in Relation to U.S.  
of Selected Production Areas

Area	1940-44	1945-49	1950-54	1955
	Percent of U.S. Total			
Indiana	2.3	3.5	3.9	3.0
Alabama	1.3	1.6	2.9	5.4
Arkansas	5.9	5.9	8.1	7.1
Delaware-Maryland	34.5	22.3	16.7	11.9
Georgia	4.9	8.6	12.4	16.5
Mississippi	.6	1.3	3.4	3.5
N. Carolina	3.9	4.9	6.0	5.5
Virginia	7.7	7.4	7.0	5.1

Item 2 shows which areas have grown more or less rapidly than the total U.S. production (U. S. production has increased each year since 1940 with the exception of 1944. U.S. production in 1955 was 7.5 times larger than in 1940.) Recent growth relative to U.S. for areas other than Indiana can be summarized as follows:

Alabama: Rapid increase started 1952.  
Arkansas: Slow decline since 1951.  
Delaware-Maryland: Fairly constant at 11-13% since 1952.  
Georgia: Rapid increase started in 1950.  
Mississippi: Fairly constant since 1952.  
N. Carolina: Fairly constant since 1953.  
Virginia: Decline since 1953.

Item 3. Indiana Broiler Surplus Over Estimated Indiana Consumption,  
1940-1954.

Years	Surplus	
	Mil. Lbs.	% of Supply
1940	4.8	42
1945	13.4	44
1950	55.5	62
1954	59.5	51

(Consumption estimated at U.S. average rates)

Indiana's potential broiler production surplus has continued to increase. However, since 1950, because of the slow-down in production growth and the increase in population, the portion of the supply which is potential surplus has decreased.

Item 4. Indiana Broiler Prices and Their Relationship to U.S. and the Other Areas, 1940 - 1954.

Area	1940-44	1945-49	1950-54
	Percent of Indiana		
U.S.	99	98	99
Alabama	113	108	98
Arkansas	99	96	96
Delaware-Maryland	95	93	96
Georgia	100	96	96
Mississippi	103	101	97
N. Carolina	96	96	96
Virginia	101	97	95
Indiana Prices	24	32	27

Indiana broiler prices have been slightly above the U.S. average: And above the other major areas. Price movements in other areas relative to Indiana can be summarized as follows:

Alabama - decline

Arkansas - unchanged since end of W.W.II

Delaware-Maryland - relatively unchanged

Georgia - unchanged since end of W.W.II

Mississippi - declined

N. Carolina - relatively unchanged

Virginia - declined

Item 5. Broiler Growing Mash and Broiler Feed Ratios in Important Areas, 1953, 1955.

Area	Feed Price		Broiler-feed	
		\$/Cwt.	ratio	
	1953	1955	1953	1955
Indiana	4.95	4.62	5.6	5.5
Alabama	5.56	5.18	4.9	4.7
Arkansas	5.05	4.79	5.2	5.1
Delaware-Maryland	5.10	4.82	5.2	5.3
Georgia	5.58	5.25	4.8	4.8
Mississippi	5.68	5.33	4.7	4.6
N. Carolina	5.40	5.12	4.8	4.8
Virginia	5.23	4.97	4.9	5.0
U.S.	5.26	5.00	5.1	5.0

1. Feed data has been available only since 1953. In interpreting feed costs one must remember, that the farmer often brings many other services when he brings feed--financing, etc. Probably the price differences among areas are partly due to these difference
2. There has been no change in the relative positions of Indiana feed prices when compared with other areas from 1953 to 1955. Relative ratios have also remained unchanged.

Item 6: Location of Indiana Broiler Production 1954  
 (2095 growers in State averaging 13,700 birds)

