Sale of

Missouri Hatching Eggs
1941-1952

UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE AGRICULTURAL EXPERIMENT STATION

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#### ABSTRACT

Production of Missouri hatching eggs for use in other states has developed into an important agricultural business, amounting to more than \$3,000,000 annually.

Movement of these eggs is seasonal but the trend is toward more

uniform production throughout the year.

Missouri supplies more than 30 states with hatching eggs but more than 80 percent of these eggs are shipped to Texas, Mississippi, Georgia, Alabama, Louisiana, and South Carolina.

Within recent years there has been a decided shift from the egg production breeds to the meat breeds and crosses used for the production of broilers.

# Sale of Missouri Hatching Eggs 1941 - 52

E. M. FUNK

#### INTRODUCTION

Sale of Missouri produced hatching eggs to hatcheries located in other states has developed into an annual business of more than \$3,000,000. The analysis reported here is based on records accumulated by the Missouri Poultry Improvement Association on the sale of hatching eggs produced under the National Poultry Improvement Plan and sold, primarily, to participants in the National Poultry Improvement Plan in other states. These records cover possibly 90 percent of all hatching eggs sold by members of the Missouri Poultry Improvement Association. Data are considered sufficiently reliable to indicate major differences and trends in the industry.

Data for 1952 is the last complete year's data available for analysis. Though hatcherymen found it to be a very poor year, the number of chicks produced was only about 3.0 percent less than in 1951.

The form used in recent years to report sales is shown in Figure 1.

#### SEASONAL MOVEMENT OF HATCHING EGGS

Since production of baby chicks in the United States continues to be seasonal, movement of Missouri hatching eggs follows the same general pattern. However, the demand for Missouri hatching eggs has shifted to broiler strains in recent years and thus to more year-around production. Figure 2 and Table 1 show seasonal movement of Missouri hatching eggs in 1941, 1945, 1950 and 1952.

Seasonal movement of Leghorns and New Hampshires for 1943 and 1952 is shown in Figure 3 and Table 2. Seasonal movement of eggs to different states varies widely. (See Figure 4 and Table 3.) The principal broiler producing states use hatching eggs throughout the year. States where Leghorns pre-

dominate, as in Minnesota, buy eggs during spring months, only.

#### GEOGRAPHICAL DISTRIBUTION

Missouri hatching eggs are shipped to more than 30 states (37 in 1952). Ten states generally purchase more than 90 percent of the eggs shipped outside the state. In 1952 the leading buyers of Missouri hatching eggs were: Dallas (Texas) 39.7 percent, Texas (other towns) 15.6, Texas total 55.3; Mississippi 10.1; Georgia 8.8; Alabama 7.9; Arkansas, 3.8; Louisiana 3.1; South Carolina 2.7; and Minnesota 1.4 percent.

Movement of Missouri hatching eggs to different states is shown by Table 4.

From these data it is evident that Missouri's hatching egg business has become primarily one of supplying hatching eggs to the broiler-chick producing states of the south.

A strong contributing factor to this movement is the fact that hatcheries located in the south that are owned by Missouri hatcherymen secure their eggs in Missouri.

### SALES BY BREEDS, VARIETIES AND CROSSES

There has been a marked change in breeds, varieties and crosses during the period covered by this study (1941-1952). In 1941, the breeds and percentage of the total hatching eggs supplied were: Barred Rocks, 24.2; White Rocks, 16.6; White Leghorns, 16.0; Rhode Island Reds, 15.7; White Wyandottes, 6.6; and all others 20.9.

By 1952 radical changes had occurred in breeds and varieties (See Table 5). These varieties and crosses demanded by broiler producer have replaced egg producing varieties. N.P.I.P. Form 15 (Revised July 1951)

# UNITED STATES DEPARTMENT OF AGRICULTURE BUREAU OF ANIMAL INDUSTRY

BUDGET BUREAU CLEARANCE WAIVED



## THE NATIONAL POULTRY AND TURKEY IMPROVEMENT PLAN

REPORT OF SALES OF HATCHING EGGS, CHICKS, AND POULTS TO HATCHERIES

I wish to report the sale of {	☐ Chicken hatc ☐ Turkey hatch	hing eggs  Baby ending eggs  Poults	chicks } list	ted below to—	THE STATE OF THE S	
(Na	me and address of I	ourchasing hatchery)		2		
(Date of shipment or delivery) U. S. pullorum class: Controlled □; Passed □; Clean □.		(Pro	ducer or shipp	er)		
Flocks tested to fewer than% reactors.		(Address	of producer of	r shipper)	16-29729-7 GPO	
Breed and Variety	Eggs (Dozen)	CHICKS OR POULTS (Number)	Breeding Stage (Check which)			
. west			None	U.S. Approved	U.S. Certified	
					The state of the s	
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PURCHASER'S COPY (To accompany shipment)

Fig. 1—Form used in reporting the sale of Missouri hatching eggs.

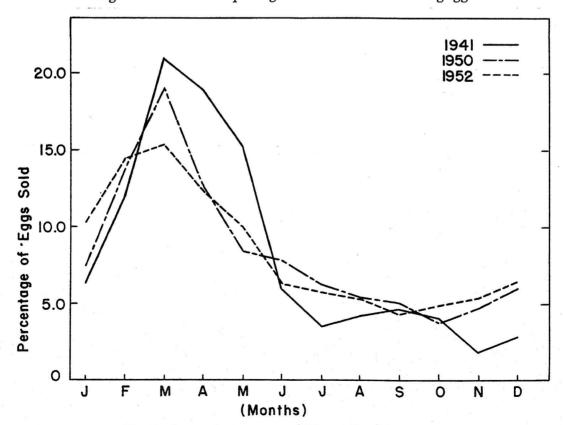


Fig. 2—Seasonal movement of Missouri hatching eggs.

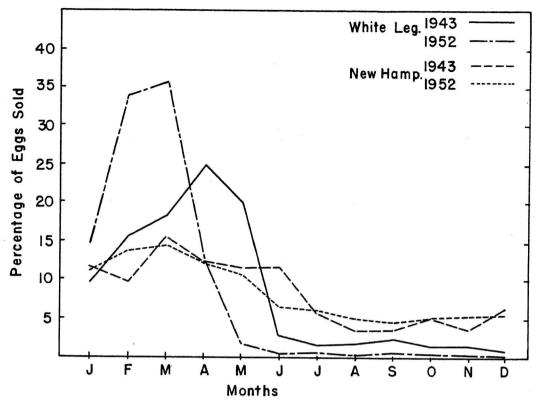


Fig. 3—Seasonal movement of Leghorn and New Hampshire eggs in 1943 and 1952.

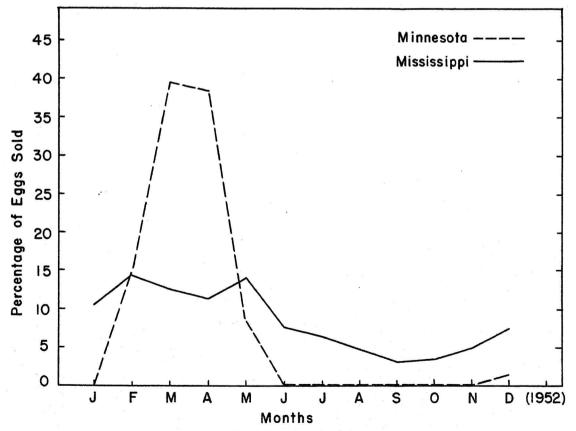


Fig. 4—Seasonal movement of Missouri hatching eggs to Minnesota and Mississippi.

Table 1. Seasonal Movement of Missouri Hatching Eggs

	(Thousands of Dozens)								
	19	41	19	45	19	50	1952		
	Doz.	%	Doz.	%	Doz.	%	Doz.	%	
January	99	6.3	140	6.3	258	7.5	586	10.3	
February	186	11.9	246	11.1	475	13.9	818	14.4	
March	327	20.9	394	17.8	652	19.0	863	15.2	
April	295	18.9	324	14.7	422	12.3	695	12.2	
May	235	15.2	293	13.2	288	8.4	570	10.0	
June	92	5.9	223	10.1	<b>25</b> 8	7.6	347	6.1	
July	55	3.5	157	7.1	216	6.3	324	5.7	
August	66	4.2	98	4.5	179	5.2	300	5.3	
September	71	4.6	75	3.4	172	5.0	249	4.4	
October	62	4.0	63	2.8	129	3.8	274	4.8	
November	28	1.8	75	3.4	164	4.8	297	5.2	
December	43	2.8	122	5.5	207	6.0	353	6.2	
Total	1,559		2,210		3,420		5,676		

Table 2. Seasonal Movement of White Leghorn and New Hampshire Hatching Eggs (Thousands of Dozens 1943 and 1952)

	W	hite L	eghorns	New Hampshires				
	1943		19	52	19	943	1952	
	Doz.	%	Doz.	%	Doz.	%	Doz.	%
January	40	9.7	29	14.1	19	11.8	252	11.1
February	65	15.7	70	34.0	16	9.9	314	13.8
March	75	18.1	74	35.9	25	15.5	328	14.4
April	103	24.9	26	12.6	20	12.4	280	12.3
May	83	20.0	4	1.9	19	11.8	241	10.6
June	11	2.7	1-	.3	19	11.8	146	6.4
July	6	1.4	1	.5	9	5.6	136	6.0
August	7	1.7	1-	.1	5	3.1	125	5.5
September	9	2.2	1	.5	5	3.3	106	4.7
October	6	1.4	1	.3	8	5.0	113	5.0
November	6	1.4	1-	.2	6	3.7	115	5.1
December	3	0.7	1-	.1	10	6.2	118	5.2
	414		206		161		2,274	

Table 3. Seasonal Movement of Missouri Hatching Eggs to the States Using More than 90 Percent of Such Eggs, (Thousand Dozens 1952)

1902)																		
	Alab	ama	Arka	nsas	Dallas	(Tex.)	Geo	rgia	Loui	siana	Minn	esota	Missi	ssippi	S. Ca	rolina	Tex.	(Other)
	Doz.	%	Doz.	%	Doz.	%	Doz.	%	Doz.	%	Doz.	%	Doz.	%	Doz.	%	Doz.	%
January	44	11.2	28	14.7	159	8.0	69	15.6	15	9.7	1-		53	10.5			130	16.6
February	63	16.0	36	18.9	187	9.4	54	12.2	26	16.9	10	14.5	72	14.2	24	17.6	158	20.2
March	56	14.2	48	25.3	204	10.2	56	12.6	28	18.2	27	39.1	63	12.5	25	18.4	133	17.0
April	48	12.2	15	7.9	205	10.3	48	10.8	19	12.3	25	36.2	57	11.3	25	18.4	84	10.7
May	45	11.4	11	5.8	209	10.5	42	9.5	17	11.0	6	8.7	71	14.0	21	15.4	49	6.2
June	23	5.8	11	5.8	129	6.5	28	6.3	9	5.8	1-		39	7.7	14	10.3	38	4.8
July	28	7.1	8	4.2	139	7.0	24	5.4	13	8.4			32	6.3	12	8.8	33	4.2
August	19	4.8	2	1.1	145	7.3	21	4.7	11	7.1			24	4.7	6	4.4	37	4.7
September	15	3.8	3	1.6	120	6.0	16	3.6	9	5.8			15	3.0	7	5.1	37	4.7
October	19	4.8	13	6.8	137	6.9	25	5.6	4	2.6			17	3.4	2	1.5	26	3.3
November	20	5.1	7	3.7	159	8.0	25	5.6	1	0.6			25	4.9			29	3.7
December	14	3.6	8	4.2	200	10.0	34	7.7	2	1.3	1	1.4	37	7.3			30	3.8
Total	394		190		1993		442		154		69		505		136		784	

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Table 4. Movement of Missouri Hatching Eggs by States-1952

	1904	
		% of
State	Dozens	Total
Alabama	394,050	6.94
Arizona	9,330	.16
Arkansas	190,690	3.36
California	12,986	.23
Colorado	48,560	.86
Florida	36,425	.64
Georgia	442,719	7.80
Idaho	1,890	.03
Illinois	12,287	.22
Indiana	6,535	.12
Iowa	30,741	.54
Kansas	22,416	.39
Kentucky	4,017	.07
Louisiana	154,236	2.72
Mexico	6,000	.11
Michigan	6,643	.12
Minnesota	68,772	1.21
Mississippi	505,604	8.91
Missouri	662,766	11.68
Montana	17,125	.30
North Carolina	1,440	.03
North Dakota	32,691	.58
New Jersey	2,054	.36
New Mexico	360	.01
New York	420	.01
Nebraska	8,906	.16
Ohio	37,351	.66
Oklahoma	18,393	.32
Oregon	360	.01
Pennsylvania	900	.02
South Carolina	136,029	2.40
South Dakota	9,246	.16
Tennessee	9,646	.17
Texas	2,772,799	48.85
Utah	1,770	.03
Washington	9,061	.16
Wisconsin	480	.01
Wyoming	960	.02
Total	5,676,658	

Table 5. Rank of the Breeds, Varieties and Crosses Represented in Missouri's Hatching Eggs Sold in 1952.

1952		
		Per-
Rank	Dozens	centage
	2,274,564	40.07
2. Delaware x New Hampshire	1,245,972	21.95
3. White Plymouth Rock	980,088	17.27
4. Cornish x New Hampshire	343,816	6.06
5. White Leghorn	206,312	3.63
6. White Wyandotte x New Hampshire	203,861	3.59
7. Rhode Island Red	120,962	2.13
8. Barred Plymouth Rock	77,062	1.36
9. Black Australorp x White Leghorn	42,639	.75
10. White Wyandotte	35,872	,63
11. Barred Rock x New Hampshire	31,446	.55
12. New Hampshire x White Leghorn	25,908	.46
13. Delaware	18,862	.33
14. Jersey White Giant	11,787	.21
15. Buff Orpington	8,715	.15
16. White Cornish x White Rock	6,748	.12
17. Jersey Black Giant	5,950	.10
18. Brown Leghorn	4,718	.08
19. Black Minorca x White Leghorn	3,510	.06
20. White Wyandotte x White Rock	3,212	.06
21. True Line	2,905	.05
22. Ancona	2,701	.05
23. Dark Cornish	2,498	.04
24. Delaware x Rhode Island Red	1,994	.04
25. Columbian Plymouth Rock	1,800	.03
All Others	12,756	.22
	6,676,658	