

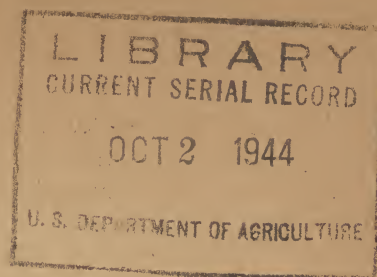
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UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Administration
Bureau of Animal Industry

1944 ANNUAL REPORT ON PARTICIPATION
in the
NATIONAL POULTRY IMPROVEMENT PLAN



Participation in the National Poultry Improvement Plan, designed to improve the production and breeding qualities of poultry and to reduce mortality from pullorum disease, has continued to grow during the past year. Not only has it increased from the standpoint of the number of States actively cooperating, which was raised to a total of 45 through the entrance of Pennsylvania during the year, but also through another substantial increase in the number of breeders, hatcherymen, and hatching-egg flock owners voluntarily participating in the plan, as shown in the accompanying tables. The scope of the plan is evidenced by the fact that the egg capacity of participating hatcheries amounted to 39.1 percent of the egg capacity of all hatcheries in the 45 cooperating States, according to the latest hatchery survey.

In the report we have tabulated participation in all phases of the plan by States for the year ending June 30, 1944. Some of the significant facts shown in these tables are as follows:

Table 1.--An increase over last year of 12.9 percent in the number of participating hatcheries. An increase over last year of 27 percent in the egg capacity of participating hatcheries. The five leading States in number of participating hatcheries: Massachusetts, Indiana, New York, Illinois, and Minnesota. The five leading States in egg capacity of participating hatcheries: Illinois, Indiana, Minnesota, Ohio, and Missouri.

Table 2.--The five leading States in the percentage of total egg capacity participating: Louisiana, North Dakota, New Hampshire, Connecticut, and Mississippi.

Table 3.--An increase over last year of 17.6 percent in the number of flocks and 23.0 percent in the number of birds in participating flocks. The five leading States in the number of flocks: Missouri, Illinois, Indiana, Ohio, and Iowa. The six States with a million or more birds in participating flocks: Missouri, Illinois, Indiana, Ohio, Minnesota, and Iowa. The average number of birds in hatchery-supply flocks is shown for each of the States. The range is from a low of 88 in Louisiana to a high of 1,945 in Oregon. The five States with an average flock size of 1,000 or more birds: Oregon, New Hampshire, Massachusetts, Connecticut, and Rhode Island.

Table 4.--The five States with the greatest number of birds in participating flocks in relation to egg capacity of participating hatcheries (exporting States of hatching eggs): Maine, Vermont, New Hampshire, Rhode Island, and Missouri. The five States with the smallest number of birds in participating flocks in relation to egg capacity of participating hatcheries (importing States of hatching eggs): New Mexico, Mississippi, Louisiana, Texas, and Alabama. An estimated 7 percent more birds in participating flocks than are required to supply participating hatcheries for the country as a whole.

Table 5.--In the 22 States reporting on the use of males of improved breeding, 23.5 percent of all birds in participating flocks were mated to such males. This may be compared with 19.2 percent last year.

Table 6.--Of the 3,080 participating hatcheries in 1943-44, 2,246 were U.S. Approved, 293 were U.S. Certified, and 541 were participating in the pullorum phase of the plan only. In addition to the U.S. Certified hatcheries, there were 160 U.S. Approved hatcheries selling U.S. Certified chicks of one or more breeds or varieties.

Table 7.--This table shows participation by breeding stages for each of the nine years that the plan has been in operation. There has been a constant increase in the number of U.S. Approved hatcheries and supply flocks. There has also been a substantial increase in the number of flocks and birds qualifying for the U.S. Certified breeding stage during recent years.

Table 8.--The number of U.S. Pullorum-Controlled hatcheries increased from 264 in 1941-42 to 448 in 1942-43, and to 782 in 1943-44. The number of U.S. Pullorum-Clean flocks and birds has increased constantly since the beginning of the plan.

Table 9.--Hatchery-supply flocks averaged 248 birds per flock in 1943-44. The average size of the participating flocks has increased each of the past three years. The egg capacity of participating hatcheries averaged 61,609, as compared to an average of 54,755 for the previous year.

Table 10.--Of the 20 million birds in hatchery-supply flocks in 1943-44, the percentage in flocks of each pullorum class was as follows:

U.S. Pullorum-Tested - 42 percent
U.S. Pullorum-Controlled - 39 percent
U.S. Pullorum-Passed - 6 percent
U.S. Pullorum-Clean - 13 percent

The number of birds qualifying for a pullorum class increased from about 16 million in 1942-43 to more than 20 million in 1943-44. The number of birds in U.S. Pullorum-Controlled flocks now almost equals the number in the U.S. Pullorum-Tested flocks.

Table 11.--U.S. Record of Performance work was carried on in 42 States during the year. The number of birds trap-nested exceeded 159,000. The five leading States in the number of birds entered in U.S.R.O.P.: Massachusetts, Indiana, Texas, Minnesota, and Ohio. The five leading States in the number of females in U.S.R.O.P. mating: Indiana, Massachusetts, Ohio, Wisconsin, and Michigan. Over 3,500 U.S.R.O.P. breeding pens were available for the production of individually pedigreed hatching eggs and chicks during the 1944 breeding season.

Table 12.--The five most popular breeds in U.S. Record of Performance: White Leghorn, Rhode Island Red, New Hampshire, Barred Plymouth Rock, and White Plymouth Rock. These five breeds included more than 97 percent of the candidates. The portion of the candidates that are White Leghorns has decreased from 65.8 percent in 1937-38 to 49.9 percent in 1943-44. During the same period the New Hampshire breed has increased from 3.7 to 12.4 percent.

Table 13.--During 1943-44 there were 320 U.S.R.O.P. breeders and 447 flocks, as compared to 326 and 435, respectively, the previous year. The number of U.S.R.O.P. flocks has remained about the same for the past 6 years, but there has been a constant increase in the number of U.S.R.O.P. matings and number of females in such matings. This means that there is an increasing number of males of improved breeding available for flock improvement.

Table 14.--It has been recommended that a breeder should establish 8 or more single-male breeding pens for each breed, since a relatively large number of matings is necessary for progress in family selection. Only 44.3 percent of the U.S.R.O.P. flocks had 8 or more breeding pens this past year. This is an improvement over the preceding year when 42.1 percent of the flocks had 8 or more single-male matings. However, more than five-sixths of the U.S.R.O.P. products are produced on farms having 8 or more single-male matings, since only 16 percent of the females in U.S.R.O.P. matings are on farms where fewer than 8 breeding pens are maintained.

Table 15.--It is recommended that an R.O.P. breeder should trap nest at least 400 candidates of each breed in order to obtain records for testing a sufficient number of families. The percentage of the flocks with 400 or more candidates was 29.0 in 1943-44, as compared with 27.4 in the previous year. The breeders are handicapped in their trap-nest work because of the labor shortage during the war emergency. However, 65.9 percent of the 1943-44 candidates were in flocks of 400 or more candidates.

Table 16.--Five-day-a-week trap-nesting has been a very popular wartime labor saver. The number of flocks trap-nested 5 days a week increased from 126 in 1942-43 to 163 in 1943-44. Approximately 39 percent of the flocks are trap-nested only 5 days a week.

Table 17.--Each of the 447 U.S.R.O.P. flocks qualified for a pullorum class of the plan, and 335 of these flocks qualified for the U. S. Pullorum-Controlled or higher class.

The requirement that flocks must qualify for a pullorum class of the plan as a prerequisite to qualifying for a breeding stage became effective September 1, 1943. This change was made in each of the cooperating States concerned without any serious difficulty. There are still 12 States in which breeders and hatcheries may participate in a pullorum class without participating in the breeding phase of the plan.

During the year, special emphasis was placed upon the early selection of cockerels for fast feathering, rapid growth, and good body type; testing and retesting hatchery-supply flocks to a low tolerance level or to the point where no reactors were found; to the closed flock system of breeding; and to the use of the best available production-bred cockerels in hatchery-supply flocks.

The data in these tables definitely show that progress is being made toward meeting the objectives of the plan. Participants in the plan, as well as those engaged in the administration, supervision, and coordination of its provisions should never be satisfied with progress that has been made. Working together, we must all endeavor to do a better job each year of producing quality chicks that will live, grow, and produce a profit for the farmers of the Nation.

Table 1 -- Hatchery participation by States, 1943-44 compared with 1942-43, and percentage increase or decrease

State	Participating hatcheries				Percent increase or decrease	
	1942-43		1943-44		Number	Egg capacity
	Number	Egg capacity	Number	Egg capacity		
Alabama	87	2,813,214	95	3,416,566	+9.2	+21.4
Arizona	19	722,198	11	279,584	-42.1	-61.3
Arkansas	46	2,016,434	45	2,016,278	-2.2	- 0.01
Colorado	18	1,179,040	18	1,253,900	0.0	+6.4
Connecticut	112	4,190,986	129	5,182,274	+15.2	+23.6
Delaware	3	383,000	16	3,500,600	+433.3	+814.0
Florida	52	1,398,922	60	1,696,695	+15.4	+21.3
Georgia	52	4,458,088	56	4,323,082	+7.7	- 3.0
Idaho	26	967,430	28	995,005	+7.7	+2.9
Illinois	153	13,340,465	165	17,433,101	+7.8	+30.7
Indiana	155	13,854,944	178	15,171,000	+14.8	+ 9.5
Iowa	69	6,399,080	91	8,806,792	+31.9	+37.6
Kansas	93	5,044,873	99	6,280,078	+ 6.5	+24.5
Kentucky	61	3,064,338	69	3,602,650	+13.1	+17.6
Louisiana	54	1,114,650	64	2,237,186	+18.5	+100.7
Maine	125	1,614,455	110	1,261,652	-12.0	-21.9
Maryland	43	4,584,260	44	6,530,040	+ 2.3	+42.4
Massachusetts	174	2,886,431	205	3,603,740	+17.8	+24.9
Michigan	45	2,731,600	46	2,764,000	+ 2.2	+ 1.2
Minnesota	139	12,099,972	151	14,936,168	+ 8.6	+23.4
Mississippi	36	1,307,360	43	1,732,740	+19.4	+32.5
Missouri	86	7,075,180	109	12,281,670	+26.7	+73.6
Nebraska	8	545,300	16	1,248,800	+100.0	+129.0
New Hampshire	119	2,750,234	116	3,400,992	-2.5	+ 23.7
New Jersey	42	3,838,712	46	4,371,530	+ 9.5	+ 13.9
New Mexico	4	143,000	2	84,000	-50.0	-41.3
New York	97	2,186,518	171	4,394,363	+76.3	+101.0
North Carolina	112	5,241,340	132	7,076,920	+17.9	+ 35.0
North Dakota	54	2,857,791	54	3,297,035	0.0	+ 15.4
Ohio	127	11,756,421	140	14,092,792	+10.2	+ 19.9
Oklahoma	72	3,875,720	73	4,599,392	+ 1.4	+ 18.7
Oregon	9	225,500	8	275,500	-11.1	+ 22.2
Pennsylvania	0	0	3	104,528	---	---
Rhode Island	18	219,092	18	208,620	0.0	-4.8
South Carolina	22	555,508	31	1,154,388	+40.9	+107.8
South Dakota	40	2,490,876	39	2,616,966	-2.5	+ 5.1
Tennessee	43	2,154,900	46	2,586,910	+ 7.0	+ 20.0
Texas	78	5,167,997	90	6,295,410	+15.4	+ 21.8
Utah	7	311,852	18	1,158,300	+157.1	+271.4
Vermont	31	309,617	35	329,663	+ 12.9	+ 6.5
Virginia	90	6,355,816	94	7,804,147	+ 4.4	+ 22.8
Washington	24	1,107,700	29	1,223,100	+20.8	+ 10.4
West Virginia	22	1,191,300	23	1,296,852	+ 4.5	+ 8.9
Wisconsin	56	2,799,580	58	2,702,800	+ 3.6	- 3.5
Wyoming	6	95,140	6	128,200	0.0	+34.7
Total	2,729	149,426,834	3,080	189,756,009	+12.9	+27.0

Table 2 -- Egg capacity of participating hatcheries, 1943-44, compared with egg capacity of all hatcheries, 1943 hatchery survey by States.

State	Egg capacity all hatcheries 1943 *	Egg capacity participating hatcheries 1943-44	Percentage of 1943 egg capacity participating in 1943-44
Alabama	4,084,000	3,416,566	83.7
Arizona	907,000	279,584	30.8
Arkansas	3,827,000	2,016,278	52.7
Colorado	4,515,000	1,253,900	27.8
Connecticut	5,780,000	5,182,274	89.7
Delaware	7,002,000	3,500,600	50.0
Florida	2,500,000	1,696,695	67.9
Georgia	6,668,000	4,323,082	64.8
Idaho	1,773,000	995,005	56.1
Illinois	36,681,000	17,433,101	47.5
Indiana	33,596,000	15,171,000	45.2
Iowa	43,652,000	8,806,792	20.2
Kansas	19,816,000	6,280,078	31.7
Kentucky	5,263,000	3,602,650	68.5
Louisiana	1,981,000	2,237,186	112.9
Maine	1,886,000	1,261,652	66.9
Maryland	9,532,000	6,530,040	68.5
Massachusetts	6,828,000	3,603,740	52.8
Michigan	13,376,000	2,764,000	20.7
Minnesota	35,952,000	14,936,168	41.5
Mississippi	1,938,000	1,732,740	89.4
Missouri	39,542,000	12,281,670	31.1
Nebraska	15,760,000	1,248,800	7.9
New Hampshire	3,599,000	3,400,992	94.5
New Jersey	10,519,000	4,371,530	41.6
New Mexico	678,000	84,000	12.4
New York	10,804,000	4,394,363	40.7
North Carolina	9,393,000	7,076,920	75.3
North Dakota	3,243,000	3,297,035	101.7
Ohio	30,783,000	14,092,792	45.8
Oklahoma	11,500,000	4,599,392	40.0
Oregon	4,209,000	275,500	5.6
Pennsylvania	23,744,000	104,528	0.4
Rhode Island	677,000	208,620	30.8
South Carolina	2,568,000	1,154,388	45.0
South Dakota	7,717,000	2,616,966	33.9
Tennessee	4,707,000	2,586,910	55.0
Texas	25,471,000	6,295,410	24.7
Utah	1,638,000	1,158,300	70.7
Vermont	407,000	329,663	81.0
Virginia	9,346,000	7,804,147	83.5
Washington	5,950,000	1,223,100	20.6
West Virginia	1,714,000	1,296,852	75.7
Wisconsin	12,873,000	2,702,800	21.0
Wyoming	186,000	128,200	68.9
Total	485,285,000	189,756,009	39.1

* From Bureau of Agricultural Economics July 1944 report entitled "Hatchery Industry Shows Big Increase Since 1938"

Table 3 -- Hatchery supply-flock participation by States, 1943-44 compared with 1942-43, percentage increase or decrease, and average number of birds in supply flocks, 1943-44

State	1942-43		1943-44		Percent increase or decrease		1943-44 average per flock
	Flocks	Birds	Flocks	Birds	Flocks	Birds	
Alabama	1,189	185,921	1,309	185,162	+10.1	-0.4	141
Arizona	278	52,131	131	38,672	-52.9	-25.8	295
Arkansas	1,049	159,650	1,085	163,317	+3.4	+2.3	151
Colorado	780	155,954	795	178,368	+1.9	+14.4	224
Connecticut	275	387,357	369	395,680	+34.2	+2.1	1,072
Delaware	234	103,634	713	419,632	+204.7	+304.9	589
Florida	367	128,524	357	137,039	-2.7	+ 6.6	384
Georgia	831	214,605	1,006	330,132	+21.1	+53.8	323
Idaho	412	80,217	465	91,900	+12.9	+14.6	198
Illinois	8,122	1,462,964	9,417	1,860,210	+15.9	+27.2	198
Indiana	8,102	1,661,663	8,382	1,798,748	+3.5	+ 8.2	215
Iowa	3,341	838,380	4,638	1,229,226	+40.3	+46.6	262
Kansas	3,774	617,661	3,236	748,763	+16.7	+21.2	231
Kentucky	3,105	372,045	3,595	432,997	+15.8	+16.4	120
Louisiana	1,152	98,205	1,223	107,151	+ 6.2	+ 9.1	88
Maine	565	469,498	628	557,272	+11.2	+18.7	887
Maryland	1,368	392,251	1,815	488,826	+32.7	+24.6	269
Massachusetts	329	473,740	459	519,784	+39.6	+ 9.7	1,132
Michigan	804	235,489	863	239,714	+ 7.3	+ 1.8	278
Minnesota	3,316	1,074,193	3,860	1,331,802	+16.4	+24.0	345
Mississippi	754	77,504	804	80,789	+ 6.6	+4.2	100
Missouri	8,301	1,486,260	10,830	1,993,423	+30.5	+34.1	184
Nebraska	131	40,065	404	98,420	+208.4	+145.7	244
New Hampshire	554	993,667	749	865,961	+35.2	-12.9	1,156
New Jersey	590	305,589	681	369,793	+15.4	+21.0	543
New Mexico	33	8,768	11	3,277	-66.7	-62.6	298
New York	301	250,458	577	483,331	+91.7	+93.0	838
North Carolina	2,387	528,045	2,835	711,850	+18.8	+34.8	251
North Dakota	976	158,512	1,368	229,196	+40.2	+44.6	168
Ohio	5,952	1,190,070	7,020	1,431,346	+17.9	+20.3	204
Oklahoma	2,763	464,111	2,794	493,199	+ 1.1	+ 6.3	177
Oregon	18	22,230	12	23,338	-33.3	+ 5.0	1,945
Pennsylvania	0	0	54	13,735	---	---	254
Rhode Island	44	38,826	39	40,439	-11.4	+ 4.2	1,037
South Carolina	216	45,505	412	76,804	+90.7	+68.8	186
South Dakota	930	216,864	984	230,024	+ 5.8	+ 6.1	234
Tennessee	2,160	246,316	2,145	263,608	-0.7	+ 7.0	123
Texas	1,193	224,987	1,558	338,974	+30.6	+50.7	218
Utah	91	34,945	172	67,932	+89.0	+94.1	394
Vermont	168	93,490	128	105,359	-23.8	+12.7	823
Virginia	1,522	473,437	1,708	586,409	+12.2	+23.9	343
Washington	270	100,765	265	129,851	-1.9	+28.9	490
West Virginia	865	113,096	852	135,050	-1.5	+19.4	159
Wisconsin	900	248,784	997	298,136	+10.8	+19.8	299
Wyoming	57	8,082	49	7,509	-14.0	-7.1	153
Total	69,569	16,534,458	81,844	20,332,048	+17.6	+23.0	248

Table 4 -- Estimated percentages of eggs needed by participating hatcheries in each State supplied by participating flocks in that State

State	Egg capacity of participating hatcheries	No. birds in participating flocks	Estimated No. birds needed to supply participating hatcheries *	Estimate of eggs for participat- ing hatcheries supplied in State
				Percent
Alabama	3,416,566	185,162	341,700	54.2
Arizona	279,584	38,672	28,000	138.1
Arkansas	2,016,278	163,317	201,600	81.0
Colorado	1,253,900	178,363	125,400	142.2
Connecticut	5,182,274	395,680	518,200	76.4
Delaware	3,500,600	419,632	350,100	119.9
Florida	1,696,695	137,039	169,700	80.8
Georgia	4,323,082	330,132	432,300	76.4
Idaho	995,005	91,900	99,500	92.4
Illinois	17,433,101	1,860,210	1,743,300	106.7
Indiana	15,171,000	1,798,748	1,517,100	118.6
Iowa	8,806,792	1,229,226	880,700	139.6
Kansas	6,280,078	748,763	628,000	119.2
Kentucky	3,602,650	432,997	360,300	120.2
Louisiana	2,237,186	107,151	223,700	47.9
Maine	1,261,652	557,272	126,200	441.6
Maryland	6,530,040	488,826	653,000	74.9
Massachusetts	3,603,740	519,784	360,400	144.2
Michigan	2,764,000	239,714	276,400	86.7
Minnesota	14,936,163	1,331,802	1,493,400	89.2
Mississippi	1,732,740	80,789	173,300	46.6
Missouri	12,281,670	1,993,423	1,228,200	162.3
Nebraska	1,248,800	98,420	124,900	78.8
New Hampshire	3,400,992	865,961	340,100	254.6
New Jersey	4,371,530	369,793	437,200	84.6
New Mexico	84,000	3,277	8,400	39.0
New York	4,394,363	483,331	439,400	110.0
North Carolina	7,076,920	711,850	707,700	100.6
North Dakota	3,297,035	229,196	329,700	69.5
Ohio	14,092,792	1,431,346	1,409,300	101.6
Oklahoma	4,599,392	493,199	459,900	107.2
Oregon	275,500	23,338	27,500	84.9
Pennsylvania	104,528	13,735	10,500	130.8
Rhode Island	208,620	40,439	20,900	193.5
South Carolina	1,154,388	76,804	115,400	66.6
South Dakota	2,616,963	230,024	261,700	88.0
Tennessee	2,586,910	263,608	258,700	101.9
Texas	6,295,410	338,974	629,500	53.8
Utah	1,153,300	67,832	115,800	58.6
Vermont	329,663	105,359	33,000	319.3
Virginia	7,804,147	586,409	780,400	75.1
Washington	1,223,100	129,851	122,300	106.2
West Virginia	1,296,852	135,050	129,700	104.1
Wisconsin	2,702,800	298,136	270,300	110.3
Wyoming	128,200	7,509	12,800	58.7
Total	189,756,009	20,332,048	18,975,600	107.1

* Based on estimated 1000 birds needed to supply hatching eggs for 10,000 egg capacity.

Table 5 -- The use of males of improved breeding in hatchery-supply flocks as reported by 22 States in schedules A & B, A. H. Form 519

State	Total number birds in supply flocks	Number of birds in U. S. Certified flocks	No. birds in U.S. Approved flocks				Percent of all birds in supply flocks mated to males of improved breeding
			Mated with males from single-male U.S.R.O.P. mating	Mated with males from U.S.R.O.P. flock matings	Mated with males from U. S. Certified flocks	Mated with privately pedigreed males	
Arizona	38,672	0	439	25	905	799	5.6
Colorado	178,368	17,036	54,552	0	1,201	360	41.0
Connecticut	395,680	24,554	*	*	*	1,059	6.5
Florida	137,039	24,124	0	*	*	3,523	20.2
Georgia	330,132	25,319	33,911	3,670	16,587	22,365	30.9
Illinois	1,860,210	39,271	34,709	*	21,060	5,276	5.4
Iowa	1,229,226	4,824	66,797	55,385	30,434	65,168	18.1
Kentucky	432,997	39,634	1,356	*	864	*	9.7
Louisiana	107,151	10,603	0	729	4,749	407	15.4
Maryland	488,826	11,061	2,474	0	8,967	5,240	5.7
Michigan	239,714	82,660	27,208	2,112	27,298	14,121	64.0
Mississippi	80,789	4,475	6,868	158	11,724	1,766	30.9
Missouri	1,993,423	14,272	418,024	0	213,248	124,701	38.6
Nebraska	98,420	10,888	0	0	28,245	2,097	41.9
North Dakota	229,196	16,705	0	0	39,899	0	24.7
Oklahoma	493,199	27,202	27,011	*	40,888	9,021	21.1
South Carolina	76,804	16,980	7,282	1,082	5,363	619	40.8
South Dakota	230,024	485	395	2,356	34,738	17,149	24.0
Texas	338,974	36,052	37,428	16,366	19,320	8,286	34.6
Utah	67,832	25,539	147	12,424	2,614	10,197	75.1
Washington	129,851	44,892	6,168	12,941	21,064	24,789	84.6
Wyoming	7,509	557	557	0	401	1,736	43.3
Total	9,184,036	477,133	725,326	107,248	529,569	318,679	23.5

* No data received

Table 6 -- Hatchery and hatchery-supply flock participation by breeding stages and pullorum-control and eradication classes, 1943-44

Breeding stage and pullorum class	*Number States	Hatcheries		Supply flocks	
		Number	Egg capacity	flocks	Birds
U.S. Approved, Pullorum-Tested	34	1,476	120,504,221	42,007	8,181,578
U.S. Approved, Pullorum-Controlled	37	583	37,303,854	28,971	6,589,892
U.S. Approved, Pullorum-Passed	20	28	809,044	2,710	751,798
U.S. Approved, Pullorum-Clean	18	159	6,837,463	1,359	1,041,400
U.S. Approved Stage Total	45	2,246	165,454,582	75,047	16,564,668
U.S. Certified, Pullorum-Tested	29	59	2,628,070	1,170	342,593
U.S. Certified, Pullorum-Controlled	35	150	5,715,936	2,791	1,133,820
U.S. Certified, Pullorum-Passed	12	12	197,055	221	70,015
U.S. Certified, Pullorum-Clean	23	72	2,448,924	142	257,979
U.S. Certified Stage Total	41	293	10,989,985	4,324	1,804,407
No Breeding Stage U.S. Pullorum-Tested	4	17	620,514	60	31,923
No Breeding Stage U.S. Pullorum-Controlled	5	49	2,879,693	364	189,337
No Breeding Stage U.S. Pullorum-Passed	10	66	2,550,908	589	357,669
No Breeding Stage U.S. Pullorum-Clean	10	409	7,260,327	1,460	1,384,044
Total - U.S. Pullorum-Control and eradication only	12	541	13,311,442	2,473	1,962,973
Total participation	45	3,080	189,756,009	81,844	20,332,048

* Number of States that have one or more hatcheries or flocks participating in the breeding stage or pullorum class indicated.

Table 7 -- Hatchery and hatchery-supply flock participation by breeding stages, 1936-1944

Year	States	U. S. Approved			
		Hatcheries		Supply flocks	
		Number	Capacity	Number	Birds
1935-36	26	668	34,891,113	22,110	2,805,214
1936-37	31	968	45,634,537	28,141	4,903,129
1937-38	33	981	48,135,020	26,149	4,287,283
1938-39	37	1,219	61,337,972	39,402	6,480,143
1939-40	40	1,435	75,066,154	46,508	7,859,086
1940-41	42	1,611	98,294,123	53,187	8,734,279
1941-42	44	1,810	115,030,293	62,572	11,679,005
1942-43	44	2,013	131,143,411	63,355	13,111,155
1943-44	45	2,246	165,454,582	75,047	16,564,668

Year	States	U. S. Certified			
		Hatcheries		Supply flocks	
		Number	Capacity	Number	Birds
1935-36	14	91	984,132	672	266,824
1936-37	23	173	4,495,321	981	687,006
1937-38	27	182	5,323,806	1,004	506,776
1938-39	31	197	5,006,002	987	566,795
1939-40	34	208	5,360,130	1,701	758,166
1940-41	39	251	6,534,314	3,378	1,273,101
1941-42	39	279	7,610,997	4,571	1,587,742
1942-43	39	264	8,304,541	4,471	1,673,979
1943-44	41	293	10,989,985	4,324	1,804,407

Year	States	No breeding stage - U. S. Pullorum classes only			
		Hatcheries		Supply flocks	
		Number	Capacity	Number	Birds
1935-36	3	249	1,657,000	968	435,487
1936-37	8	98	2,461,928	1,436	945,772
1937-38	11	312	6,957,496	1,643	1,144,392
1938-39	11	613	9,252,008	2,174	1,583,858
1939-40	13	546	10,124,598	2,308	2,079,188
1940-41	13	601	13,067,867	2,535	1,989,268
1941-42	15	577	13,084,889	2,492	2,238,106
1942-43	10	452	9,987,882	1,743	1,749,324
1943-44	12	541	13,311,442	2,473	1,962,973

Table 8 -- Hatchery and hatchery-supply flock participation by pullorum classes, 1936-1944

Year	U.S. Pullorum-Tested			
	Hatcheries		Supply flocks	
	Number	Capacity	Number	Birds
1935-36	461	17,756,504	11,839	1,746,751
1936-37	619	27,040,921	17,524	3,051,051
1937-38	653	29,870,516	16,195	2,800,237
1938-39	998	47,055,524	30,805	5,184,120
1939-40	1,157	58,394,872	37,860	6,522,647
1940-41	1,342	80,289,299	46,637	7,878,480
1941-42	1,435	95,831,500	47,313	8,596,461
1942-43	1,401	100,171,297	36,503	6,758,383
1943-44	1,552	123,752,805	43,237	8,556,094

Year	U.S. Pullorum-Controlled			
	Hatcheries		Supply flocks	
	Number	Capacity	Number	Birds
1941-42	264	13,025,532	13,772	3,090,932
1942-43	448	24,632,412	23,134	5,531,120
1943-44	782	45,899,483	32,126	7,913,049

Year	U.S. Pullorum-Passed			
	Hatcheries		Supply flocks	
	Number	Capacity	Number	Birds
1935-36	40	*	130	48,771
1936-37	74	1,292,500	452	613,741
1937-38	100	2,233,137	610	444,606
1938-39	189	2,861,394	914	607,143
1939-40	149	4,454,825	2,341	1,033,088
1940-41	158	5,379,909	2,883	1,121,180
1941-42	121	4,468,358	3,026	909,040
1942-43	116	3,499,971	4,568	1,021,776
1943-44	106	3,557,007	3,520	1,179,482

Year	U.S. Pullorum-Clean			
	Hatcheries		Supply flocks	
	Number	Capacity	Number	Birds
1935-36	139	*	169	257,577
1936-37	81	1,264,886	384	552,941
1937-38	264	4,639,586	542	692,776
1938-39	474	6,232,175	799	980,768
1939-40	486	6,638,709	1,532	1,435,134
1940-41	549	9,048,386	2,220	1,528,286
1941-42	616	12,241,413	2,361	2,310,216
1942-43	585	11,399,448	2,785	2,588,732
1943-44	640	16,546,714	2,961	2,683,423

* Data not available.

Table 9 --- Hatchery and hatchery-supply flock participation, 1936-1944

Year	States	Hatcheries			Supply flocks		
		Number	Capacity	Average egg capacity	Number	Birds	Average number birds per flock
1935-36	34	1,017	38,066,000	37,430	23,813	3,522,409	148
1936-37	41	1,239	52,591,786	42,447	30,558	6,535,907	214
1937-38	42	1,478	60,523,222	40,949	28,820	5,948,498	206
1938-39	44	2,033	75,782,922	37,276	42,591	8,653,568	203
1939-40	44	2,192	90,578,718	41,322	50,559	10,714,238	212
1940-41	44	2,465	117,915,752	47,836	59,136	12,010,766	203
1941-42	44	2,667	135,742,179	50,897	69,681	15,518,967	223
1942-43	44	2,729	149,426,834	54,755	69,569	16,534,458	238
1943-44	45	3,080	189,756,009	61,609	81,844	20,332,048	248

Table 10 -- Number and percentage of hatchery-supply birds in each pullorum class, 1936-1944

Item	PT	PCd	PP	PC	Total
1935-36					
Birds	1,746,751		48,771	257,577	2,053,099
*Percent of total	85		2	13	100
1936-37					
Birds	3,051,051		613,741	552,941	4,217,733
Percent of total	72		15	13	100
1937-38					
Birds	2,800,237		444,606	692,776	3,937,619
Percent of total	71		11	18	100
1938-39					
Birds	5,184,120		607,143	980,768	6,772,031
Percent of total	77		9	14	100
1939-40					
Birds	6,522,647		1,033,088	1,435,134	8,990,869
Percent of total	73		11	16	100
1940-41					
Birds	7,878,480		1,121,180	1,528,286	10,527,946
Percent of total	75		11	14	100
1941-42					
Birds	8,596,461	3,090,932	909,040	2,310,216	14,906,649
Percent of total	58	21	6	15	100
1942-43					
Birds	6,758,383	5,531,120	1,021,776	2,588,732	15,900,011
Percent of total	43	35	6	16	100
1943-44					
Birds	8,556,094	7,913,049	1,179,482	2,683,423	20,332,048
Percent of total	42	39	6	13	100

* Refers to birds, not to flocks.

Table 11 -- U.S. Record of Performance participation by States, 1943-44

State	Number of breeders	Number of flocks	Pullets on farm	Birds entered fall, '43	Birds qualified fall, '43	U.S.R.O.P. breeding pens	
						Pens	Females
Alabama	17	24	10,264	3,140	915	63	788
Arizona	1	2	347	5	25	6	57
Arkansas	3	5	1,890	982	217	16	256
Colorado	3	3	5,199	2,193	647	26	479
Connecticut	7	12	24,960	5,068	1,206	158	1,712
Delaware	1	2	6,800	1,325	63	16	78
Florida	5	6	21,650	3,717	797	45	594
Georgia	10	17	7,428	2,521	764	68	881
Idaho	2	2	2,075	1,303	221	27	341
Illinois	10	19	13,607	4,572	584	92	421
Indiana	11	22	74,380	13,870	3,970	259	4,404
Iowa	7	18	12,702	5,999	1,554	119	1,171
Kansas	9	14	8,398	5,448	835	103	1,278
Kentucky	5	6	3,261	1,975	126	33	419
Louisiana	14	16	3,919	1,745	95	21	238
Maryland	7	8	8,835	2,621	584	47	683
Massachusetts	16	18	66,814	15,276	6,191	299	3,668
Michigan	11	21	14,464	6,934	1,881	177	2,606
Minnesota	9	11	21,434	8,410	3,795	224	4,603
Mississippi	2	2	5,500	2,300	631	26	533
Missouri	17	26	6,213	5,539	1,661	208	2,435
Nebraska	3	4	4,524	1,055	435	22	382
New Hampshire	11	13	47,997	5,520	2,434	149	1,549
New Jersey	11	15	17,135	3,047	770	80	883
New York	13	17	34,819	5,512	988	92	1,314
North Carolina	14	17	27,365	2,972	1,277	102	1,395
North Dakota	2	3	452	452	66	9	130
Ohio	16	18	25,610	7,808	2,750	211	3,354
Oklahoma	6	7	2,463	1,386	217	59	706
Oregon	6	6	10,517	4,017	2,564	103	1,777
Pennsylvania	3	5	3,792	2,191	1,150	66	977
South Carolina	9	10	5,850	2,562	800	64	738
South Dakota	1	3	252	220	---	---	---
Tennessee	4	6	5,830	2,157	252	20	272
Texas	12	14	17,645	10,973	2,652	115	2,105
Utah	6	8	13,965	1,907	407	34	482
Vermont	3	5	5,583	1,123	294	26	329
Virginia	7	7	10,096	2,633	859	65	980
Washington	7	9	7,900	2,188	634	53	781
West Virginia	3	6	1,483	819	254	23	347
Wisconsin	15	18	22,650	5,697	2,031	187	3,034
Wyoming	1	2	300	352	151	5	100
Total	320	447	586,368	159,534	47,711	3,518	49,280

Table 12 -- U.S. Record of Performance participation by breeds and varieties, 1943-44

Breed and variety	No. of flocks	Pullets on farm	Birds entered fall, '43	Birds qualified fall, '43	U.S.R.O.P. breeding pens		Males
					Pens	Females	
Single-Comb White Leghorns	164	327,101	79,555	26,110	1,630	27,228	66,124
Single-Comb Rhode Island Reds	57	89,367	22,103	7,444	490	5,827	11,694
Barred Plymouth Rocks	65	46,631	17,215	4,132	408	4,757	5,377
New Hampshires	79	87,553	19,791	5,110	407	4,527	9,141
White Plymouth Rocks	56	30,173	16,886	4,238	472	5,797	7,202
White Wyandottes	11	2,607	1,791	382	60	647	1,220
Black Australorps	7	1,635	1,268	218	24	247	326
White Minorcas	1	450	171	29	10	102	374
Buff Orpingtons	2	231	211	18	6	54	46
Buff Plymouth Rocks	1	125	58	7	2	10	--
Rose-Comb Rhode Island Whites	1	275	275	21	8	82	35
Black Minorcas	1	135	98	--	--	--	26
Light Brahmas	1	35	36	2	1	2	--
Buff Minorcas	1	50	76	--	--	--	--
Total	447	586,368	159,534	47,711	3,518	49,280	101,565

Table 13 -- U.S. Record of Performance Participation by years, 1936-1944

Year	States	Breeders	Flocks	Female candidates entered	Qualified		U.S.R.O.P. matings	
					Females	Percent	Males	Pens
1935-36	21	*	190	66,547	*	*	*	*
1936-37	31	301	352	112,202	*	*	1,675	22,322
1937-38	33	298	353	108,183	32,920	30.4	1,966	26,135
1938-39	36	317	396	124,937	34,634	27.7	2,206	30,081
1939-40	41	335	429	144,447	42,858	29.7	2,429	32,949
1940-41	42	335	445	154,969	47,493	30.6	2,749	38,957
1941-42	40	317	425	160,022	50,660	31.7	2,999	42,841
1942-43	42	326	435	151,685	47,711	31.5	3,261	45,964
1943-44	42	320	447	159,534	*	*	3,518	49,280

* Information not available

Table 14 -- Distribution of U.S.R.O.P. flocks according to the number of breeding pens

Number of breeding pens	1942-43 flocks		1943-44 flocks		
	Number	Percent of total	Number	Percent of total	
0	58	13.3	67	15.0	
1	32	7.4	26	5.8	
2	34	7.8	29	6.5	
3	22	5.1	29	6.5	
4	32	7.3	34	7.6	
5	23	5.3	32	7.2	
6	37	8.5	22	4.9	
7	14	3.2	10	2.2	
8	40	9.2	32	7.2	
9	13	3.0	22	4.9	
10	36	8.3	30	6.7	
11	17	3.9	11	2.5	
12	20	4.6	26	5.8	44.3 percent with 8 or more breeding pens
13	10	2.3	12	2.6	
14	8	1.8	11	2.5	
15 to 19	15	3.4	26	5.8	
20 to 29	12	2.8	16	3.6	
30 to 39	6	1.4	5	1.1	
40 +	6	1.4	7	1.6	
Total	435		447		

Table 15 -- Distribution of U.S.R.O.P. flocks according to the number of candidates

Number of candidates	1942-43		1943-44		
	Number flocks	Percent	Number flocks	Percent	
None	15	3.4	23	5.1	
1 - 99	90	20.7	80	17.9	
100 - 199	75	17.2	84	18.8	
200 - 299	70	16.1	69	15.5	
300 - 399	66	15.2	61	13.7	
400 - 499	31	7.1	31	6.9	
500 - 599	29	6.7	29	6.5	
600 - 699	16	3.7	23	5.1	29.0 percent 400 or more candidates
700 - 999	22	5.1	22	4.9	
1000 - 1999	14	3.2	17	3.8	
2000 +	7	1.6	8	1.8	
Total	435		447		

Table 16 -- A comparison of the number of days each week trap-nesting is performed

Amount of trap-nesting in home U.S.R.O.P.	BREEDERS			FLOCKS		
	Number	Percent of breeders	Percent of all breeders trapping	Number	Percent of flock	Percent of flocks trapped
Laying test only	13	4.1		17	3.8	
Supervision only	7	2.2		8	1.8	
5-day trapping	115	35.9	38.3	163	36.5	38.6
6-day trapping	2	0.6	0.7	3	0.7	0.7
7-day trapping	183	57.2	61.0	256	57.2	60.7
Total	320	100.0	100.0	447	100.0	100.0

Table 17 -- U.S. Record of Performance participation by pullorum-control and eradication classes, 1943-44

Pullorum Class	Number breeders	Number flocks	Number pullets on farm	Number candidates entered	U.S.R.O.P. matings	
					Number	Females
U.S. Pullorum-Tested	70	112	61,929	28,398	652	8,314
U.S. Pullorum-Controlled	163	223	276,512	80,930	1,701	25,739
U.S. Pullorum-Passed	10	12	15,054	3,723	62	777
U.S. Pullorum-Clean	77	100	232,873	46,483	1,103	14,450
Total	320	447	586,368	159,534	3,518	49,280