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Report of the First Texas National Egg-Laying Contest



B. YOUNGBLOOD, DIRECTOR COLLEGE STATION, BRAZOS COUNTY, TEXAS

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PARTIAL VIEW OF TEXAS ANNUAL EGG-LAYING CONTEST PLANT

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REPORT OF THE FIRST TEXAS NATIONAL EGG-LAYING CONTEST

BY F. W. KAZMEIER, DIRECTOR OF CONTEST*

The Texas National Egg-Laying Contest is a cooperative project of the Texas Agricultural Experiment Station and the Extension Service of the A. and M. College of Texas. The Extension Service has undertaken the responsibility of issuing monthly reports of the contest to all persons sufficiently interested to request them. These reports entail an extra effort on the part of the mailing department, and it is only through the efforts of T. O. Walton, Director of the Extension Service, and C. M. Evans, Chief of the Animal Iudustry Division of the Extension Service, that it has been possible to give the contest reports proper publicity.

ORIGIN OF THE CONTEST

The first Texas National Egg-Laying Contest was encouraged and fostered by the Texas Poultry Raisers' Association, an organization composed of the leading poultry breeders of Texas.

At the annual meeting in July, 1917, of this organization a special conference was called to consider the possibilities of holding a Texas egg-laying contest. The conference included such men as T. A. Bowden, Palestine; George Gray, Boerne; D. C. Moore, Houston; R. W. Welch, Houston; Mrs. M. Sanford, Rockdale; G. W. Good, El Campo; R. N. Harvey, College Station; T. J. Conway, College Station; F. W. Kazmeier, College Station, and many others. The consensus of opinion was that no efforts should be spared to make the contest possible.

The association elected the following as the egg-laying contest comwittee: F. W. Kazmeier, College Station, Texas, chairman; George Gray, Boerne; Mrs. Sanford, Rockdale; Walter Burton, Arlington; i.ilian Hazle, College Station; R. N. Harvey, College Station.

This committee, in a conference with B. Youngblood, Director of the Texas Agricultural Experiment Station, found that the latter was very much in favor of the contest, and that he would, through the Station, provide the houses, yards, and labor to carry on the contest. This information made it possible for the committee to report back to the association that the contest was assured.

The association then elected R. N. Harvey as superintendent of the contest and F. W. Kazmeier as director.

POPULARITY OF CONTEST

There is no question that the contest is filling a long-felt need. Over one thousand personal requests for entry in the second contest are on file. This clearly indicates that Texas poultry breeders want the contest continued.

*Mr. Kazmeier is Poultry Husbandman for the Extension Service, A. and M. College of Texas.

TEXAS AGRICULTURAL EXPERIMENT STATION.

PURPOSE

At a recent meeting of the National War Emergency Poultry Federation at Chicago one of the most important facts brought out was that during and after the war the general conditions in the business world will necessitate greater efficiency in poultry husbandry. It was clearly demonstrated that the average egg production per hen in the United

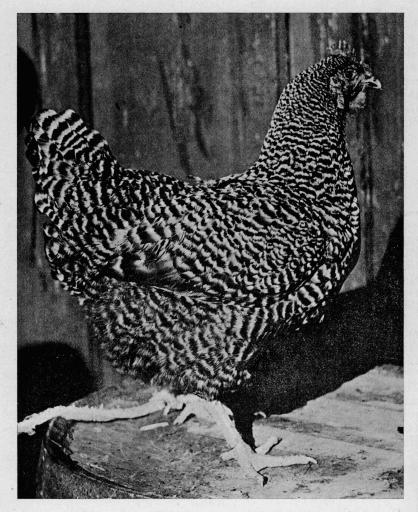


FIGURE 1-BARRED PLYMOUTH ROCK NO. 176, 207 EGGS

States was entirely too low, and that the poultry breeders should be encouraged to increase the productiveness of flocks and individuals. In Texas the average production per hen is not more than sixty eggs.

Officially conducted egg-laying contests are absolutely necessary to furnish official trap nest records of the performance of fowls. Records

from private sources do not carry the confidence and reliability of official records. Poultry breeders may send their best individuals to these contests, have them trap-nested for a year and returned to them. The individuals making good records may then be used as foundation stock for the breeding flock.

FIRST YEAR'S CONTEST

The first Texas National Egg-Laying Contest was not large. The war, drouth, and many other conditions operated against a large entry. Housing space was limited. Labor was exceedingly hard to get. It

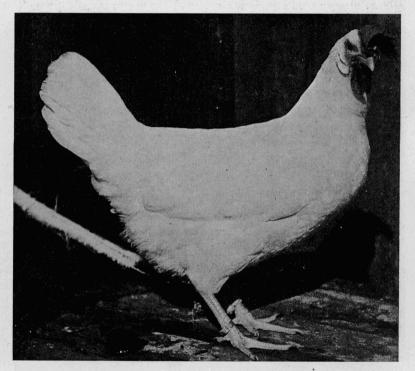


FIGURE 2-S. C. WHITE LEGHORN NO. 40, 201 EGGS

is felt, however, that, by successfully overcoming the many difficulties in the way, a start in the right direction has been made.

HOUSING

The first Texas National Egg-Laying Contest birds were housed in four houses, each house 14 feet by 14 feet, with double yards 28 feet by 150 feet. This necessitated housing different varieties together. It was possible, however, to house them according to size of birds. Birds of a similar disposition were housed together. As far as possible all of each variety were housed together. One house was full of S. C. White Leghorns, and one house of S. C. Rhode Island Reds. In one house were Reds, Rocks, Wyandottes, Rhode Island Whites, and Orpingtons. In

TEXAS AGRICULTURAL EXPERIMENT STATION.

another house were S. C. White Leghorns, S. C. Buff Leghorns and Sicilian Buttercups.

It will be noted from the foregoing that several varieties and even several breeds were housed together. Some people may consider this a disadvantage. The fact remains, however, that under these conditions the many varieties are subjected to a better comparative test than if each variety or entry were housed by itself.

The results of this contest may in all fairness be compared to those obtained with flocks kept under general farm conditions, because no special efforts were made to force for an abnormal egg production.

The open front type of houses, with wooden shutters on east, west,



FIGURE 3-S. C. RHODE ISLAND RED NO. 162, 200 EGGS

and north was used. The houses had concrete floors and foundations. The shed roof type of structure is used. The fixtures included roost platforms, suspended perches, trap nests, water dishes, dry mash hoppers, and feed cans. The houses were cleaned and disinfected regularly. The birds were kept free from lice and mites.

MORTALITY

A total of twenty-three birds died during the year. Two died because of vent gleet. Four died of egg troubles. One was accidentally killed. Seven were smothered to death in the trap nests during a very hot period in June. It will also be noticed that nine deaths, or almost fifty per cent. of the yearly mortality, occurred in June, during the

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hottest period of the year. The mortality of 8.25 per cent. for the year is lower than in many other contests, and would have been con-siderably lower had it not been for the heavy loss in June, due to extreme heat and too close nests. Considering the fact that these birds were gathered up from all sections of the State and housed together, the mortality was low.

There is no question but that chickens can stand less heat than cold, hence the houses should be built accordingly.

RATIONS

At the beginning of the contest the following ration was fed:

Scratch grain-200 pounds wheat

Dry mash mixture—

- 25 pounds beef scraps 10 pounds cottonseed meal
- 25 pounds bran
- 25 pounds shorts
- 5 pounds corn meal
- 1 pound salt

A special effort was made to get the fowls to consume about the same amount of dry mash mixture as of scratch grain.

Later in the contest, on account of the food administration's ruling on wheat, corn was substituted, and the corn meal in the dry mash mixture eliminated. The feed situation at times was very acute, and some of the ingredients were impossible to get at any price. Under more favorable conditions it is quite probable that all of the birds would have made better records. It ought not be necessary to state here that all pens in the contest were fed the same ration and handled in the same general way.

SHOW ROOM SCORES

All birds in the contest were judged on the basis of the American Standard of Perfection. The Hale explanatory score card was used, because it is considered of more value to the owner of the birds, to whom all score cards are mailed. F. W. Kazmeier did the judging. Some of the birds were not in show condition. None was prepared for exhibition purposes. All of this should be considered when studying the score. Time did not permit weighing the birds.

Scoring was not done for the purpose of making comparisons between the egg production of high scoring and low scoring birds. The birds were scored primarily for the purpose of giving the owner an idea as to the exhibition qualities of the birds. All indications are that standard-shaped birds also are the best layers. There seems to be certain color requirements in the "Standard" that are not conducive to the best egg production. There are some disgualifications that do not appear serious enough to be so designated. These things, no doubt, will be arranged properly in time. Indications are that every effort is being made leading to a combination of utility and fancy qualities.

UNIDENTIFIED EGGS

By unidentified eggs is meant eggs laid outside of the trap nests. They result from lack of attention, or improper working of trap nests due to the fact that some of the hens were unaccustomed to laying in such contrivances. Frequently eggs are laid during the night, many of them being broken. It is also of interest that some hens develop the habit of trying to get into and out of the trap nests without springing them. They occasionally are able to do this. Some hens refuse to use the trap nests, and prefer to lay on the floor. The unidentified eggs are counted in figuring the cost of egg production, the value of the eggs produced by each flock, and other data.

LITTER

Common straw was used as litter. At times it was exceedingly hard to get a good quality. Extreme care was used not to use moldy or musty litter of any kind. Frequently the litter was disinfected to guard against any possible trouble. Special effort was made to keep the litter loose, dry, and clean. To do this, the houses were kept open as much as possible.

Following are tabulations compiled from contest data:

Table 1.-Best and poorest individual records.

S. C. W	white Leghorn	n No. 40, 201	eggs.
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November.		MayJune	
January	21 eggs	July August	16 eggs
MarchApril.	23 eggs	September October	

This hen laid in fall and winter.

S. C. White Leghorn No. 99, 26 eggs.

November December January February March April	0 eggs 0 eggs 1 egg 0 eggs	May. June July. August September. October.	3 eggs 5 eggs 0 eggs 0 eggs
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This hen laid in the spring.

S. C. Rhode Island Red, No. 162, 200 eggs.

November		MayJune	
January. February	24 eggs	July. August	16 eggs
March. April.	25 eggs	September. October	4 eggs

This hen laid \$4.25 worth of eggs during the months of November, December, January, February and March.

S. C. Rhode Island Red, No. 156, 29 eggs.

November	0 eggs	May	
December	0 eggs	June	
January	0 eggs	July	2 eggs
February		August	3 eggs
March		September	0 eggs
April		October	0 eggs

This hen did not lay any eggs during the winter months when eggs brought a good price.

Month			eggs laid in trap nests		No. of doz. of uniden- tified eggs		To (doze produc each n	ens) eed in		rice per dozen	Total value
1917			Sec. 1							10000	 19. J. J.
November		8/12	9	7/12		10/12		1/12	\$	0.42	42.035
December	91	5/12	9	3/12	7	3/12	107	11/12		.52	56.113
January	104	8/12	10	2/12	7	10/12	122	8/12		.58	71.150
February	172	5/12	25	4/12	14		212	1/12		.50	106.042
March	257	10.00	35	9/12	15		307	9/12		.43	132.32
April	224	2/12	31	6/12	13	6/12	269	2/12		.34	91.517
May	232	11/12	29	1/12	9		271	9/12		.32	86.96
June	156		17	3/12	11	8/12	184	11/12		.33	61.023
July	120	9/12	9		11	4/12	141	1/12		.36	50.79
August	80	5/12	7	3/12		11/12	100	7/12		.39	39.228
September	28		2	3/12	11	6/12	41	9/12		.42	17.535
October	49	5/12	5	7/12	11 2	.,	57			.45	25.65
Total							1916	9/12	Av.	\$0.4215	\$ 780.375

Table 2.-Total number and value of eggs produced by contest.

An average of 190 birds in the contest for the year 1917-1918.

Table 3.-Monthly production of the ten best birds in the contest.

No. of hen	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Total
22 31	4	16	18 12	13 20	22 29	23 28 25 22	26 16	21 16	20 4	18	03	0 15	181 187
40	4 21 3 9 20	16 22 21	21	16	23	25	24	23 10	16	13	2	13	201
162	9	21	24 9	23	25	22	23	10	16	6	4 9	17 22	200
165	20	19	9	18	24	21	6	6	15	16	9	22	. 185
129	19	19 25	18 18	15 24	13 25	16	22 22	15	18 19	13	15 14	9	182 207
176	25	13	20	18	15	24 27	19	16	19	13	19	20 18	207
201	11	2	0	19	23	23	18	17	18 18	21	19	10	181
249	11 3	11	15	17	22	22	19	14	20	15	14	10	182
Total, 10	97	164	155	183	221	231	195	139	164	135	99	134	1909

Table 4.-Monthly production of the ten poorest hens in the contest.

No. of hen.	No.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oet.	Total
16	0 0 10 0 8 0 1 2 0	0 0 17 0 20 9 0 0 0	1 0 0 2 0 0 0 0 0 0 0 1	9 0 11 8 0 0 9 1 1 1	14 0 6 4 0 0 11 0 6 6	3 0 1 4 12 0 2 4 7 9	4 0 2 5 7 0 1 12 7 8	3 0 1 0 5 0 0 3 11 2	0 0 1 0 2 0 0 5 10 0	0 0 0 3 0 0 0 1 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	34 41 38 29 28 20 31 44 21
Total	21	46	4	40	55	42	45	30	18	4	0	0	308
Average	2.10	4.60	.40	4.0	5.5	4.2	4.5	3.0	1.8	.4	.0	.0	30.4

Month	Wheat	Corn	Alfalfa	Milk	Dry mash	Straw	Total No. lbs.	Average price per lb.	Total rost of feed
1917		all gets.					San A		
November	757.00			32.00	279.00	333.00	1036.00	\$ 0.035	\$ 36.20
December 1918				24.00	369.00		1194.00	.035	41.79
January	395.00	397.20	61.50		372.00	276.00	1225.70	.035	42.89
February	661.50				413.00		1071.50	.035	37 60
March	155.25				837.00		1549.25	.035	54.22
April		666.00			500.00		1166.00	.032	37.31
May		654 00			450.00		1104.00		35.33
June		545.00			233 00	020.00	778.00	.032	24.89
July		434.00			325.00		759.00	.032	24.29
August		331.00			415.00		746.00	.032	23.87
September						400.00	758.00	.032	24.26
October		424.00					625.75	.032	20.02
Total	2793.75	4411.20	61.50	56.00	4751.00	2155.00	12017.55		\$ 401.73

Table 5.-Total amount and value of feed consumed, average of 190 birds in the contest.

Straw used for litter.

Table 6.-Monthly value of feed consumed and value of eggs produced, average of 190 birds in contest.

Month .	Value of eggs	Cost of feed	Over cost of feed. Profit
1917 November	\$42.035 56.113	\$36.26 41.79	\$ 5.77
1918 January February March April	71.150 106.042 132.332 91.517	42.89 37.60 54.22 37.31 35.33	28.26 68.44 78.11 54.20 51.63
May June July August. September October	86.96 61.023 50.790 39.228 17.535 25.65	35, 33 24, 89 24, 29 23, 87 24, 26 20, 02	36.13 36.13 26 50 15.35 Loss 6.73 5.63
Total	780.375	401.73	\$378.64

Table 7.-Total score, judged according to standard requirements.

Band Number	Cut for shape. Total.	Cut for color. Total.	Score	Variety	Total eggs produced	Weight
81 32	5 51⁄2	71/4	8734 8716	S. C. W. Leghorns	. 187 . 130	4
33	48/	4 3/8	90 7/8		110	41/4
34	51/	4 3/8 5 ¹ ⁄ ₄	891/2		100	472
35	51/2	4	9016	"""	105	33/4
36	5	61/4	8834		150	4
37	31/2	614	.9014		192	4
	41/2	7	881/2	" "	100	41/2
38 39—Disqualified side aprig					. 169	41/4
40	43/4	51/2	893/4	"""	. 201	33/4
41	41/4	51/2	9014	"""	. 49	4
42-Died in June	51/2	51/2	89	" "	. 120	41/4
45—Died in June	434	8	871/4	S. C. R. I. Reds		5
50						51/4
47	334	71/4	89			5 1/8
48	$21/2 \\ 43/4$	9 5	881/2			5 3/10
49—Died in June	43/4	5	901/4		. 126	6
51—Died in February	5	81/4	863/4			53/4
52	414	63/4	89			6
53	31/4	614	901/2			5 1/8
54	41/4	6	893/4			6
55	33/4	534	901/2			4 3/1
56	41/4	61/2	89 1/8		. 29	5 1/8

Table 7.-Total score, judged according to standard requirements.

Band Number	Cut for shape. Total.	Cut for color. Total.	r. Score	Variety		Total eggs produced	Weight	
79	41/2 31/2	234 334	9234 9234	S. C. W.		orns	80 131	5
31	4	4	92		"		120	41/2 51/4
32	31/4	4	9234 0114				75 167	5 4
4	43/4	41/2	911/2 903/4 903/4		"		136	41/2
5 6—Disqualified 7.	5	41/4	9034				133	5
6—Disqualified	316	416			**		27 175	4
8	31/2 31/2 63/4	31/2	93		"		104	4
9	63/4	31/2 41/4 33/4 43/4	89				161 185	41/2
0 1. 2—Died in June 3	41/2	3%4 43/4	9214 9034		**		144	4
2—Died in June	5	5	90		"		103	5
3 4	314	41/2	921⁄4 94				91 148	33/4
±	314 414 314	234 534	00	"			143	4
5 6 7	314	41/2	9214 9134 891/2	"	"		113	41/2
7	31/2 43/4	43/4 53/4	913/4 801/		"		81 93	416
9	*/4	074					26 91	416
D	5	5	90				91	. 5
1	41/2 41/2	51/4 71/2	90¼ 88				73 88	41/2
2 7—Disqualified—stubs		172		S. C. R.	I. Re	ds	169	6
8	41/4 63/4	91/2	861/4		"		28	7
9	63/4 3	5	881/2 893/4 841/4				101 81	71/4 63/4
D 1	534	7¼ 10	841/4	"	**		106	6
2	534 612 434 112 412	13	811/2		**		200	61/2
	434	51/4 83/4 41/4	90				74 101	61/2
	416	414	893/4 911/4	"	**		70	61/2 61/4
9	4	8	88	"	**		131	534
3							101	51/2
3 4—Died in June 7	51/4	51/2 7	891/2 873/4 871/4	"			78 152	6
8	5	734	8714	"	**		158	616
9	5	9	86		**		143	7
0 1	23/4 2	93⁄4 12	87½ 86				137 145	6 6 6 2 6 2 6 2 6 2 6
2	41/2	6 9 8 ¹ / ₂ 5 ¹ / ₂	891/2	"	"		105	61/2
3 4	6	9	85	"	"		131	61/2
<u>.</u>	63/4 51/2 43/4	8½ 51/2	843/4 89				176 185	616
8	434	72	881/4	"	**		108	6
7 8	31/2	7	891/2		"		144	6 7 7
8	31/2 41/4 41/4	1034 734	85 88				71 179	71/2
2				Barred I			147	7
9	23/4 43/4	53⁄4	9134 8814				182	6
9 D—Died in August 1—Disqualified	4%	1	88%				81 157	61/2 6
	31/2	53/4	903/4		•		119	73/4 7
5	4	53/4 71/2 83/4	881/2				203 207	7
3 —Disqualified —Died in January	51/4	8%4	86				152	6 734 7 7 8 6 7 1/2 5 1/2
B-Died in January	41/4	834 81/2	87		•		0	7
	41/4 41/4 61/2	81/2	8714 831/2				123 137	7
). I-Disqualified	01/2	10	831/2				86	6
2	6	7	87				86 54	7
3	51/2 51/2	1034	833/4				78	71/2
l	6 6	1014 71/2 91/2	8414 8612		• •		96 71	6
	5	91/2	851/2		•		120	51/2
Disqualified				S. C. W.	Legh	orns	104 119	6 51/2 31/2 31/2 31/2
3	7	41/2 61/2 41/4 51/2	881/2 871/2				62	31/2
1	6 43⁄4 51⁄4	41/4	91	"	"		118	4
	51/4	51/2	891/4		"		89	31/2
							105 99	4 51/2
	4 3	66	90	"	"		116	51/2 41/2 41/2
5-Disgualified					"		64	41/4
3 7	43/4	6 5½ 6¼	891/4 91		"		159 95	4 41/2
3	31/2 41/2	e12	891/2				125	172

Band Number	Cut for shape. Total.	Cut for color. Total.	Score	Variety	Total eggs produced	Weight
1—Died in November 2—Disqualified for down betwe	51/4	51/2	891/4	" " " " " …	3	31/2
2-Disqualined for down betwe	en toes 41/2	5	901/2		178 137	31/2
4	$\begin{array}{r} 4\frac{1}{2} \\ 5\frac{1}{4} \\ 7\frac{3}{4} \end{array}$	51/2 41/4	8914	** **	109	31/4
5 6—Disqualified, stubs on toes 8—Died in August 9.	73/4	41/4	88	" " " ····	132	31/2
8—Died in August		516	891/2		135 77	3%4
9	61/4		8814	" "	128	31/2
10	61/2	43/4	8834	1	119	314
12	61/2 51/2 31/2	4	901/2 921/3		99 134	31/2
11—Score card lost				" " " ····	107	31/4
55	31/4	41/2	921/4		160 107	334
57	31/4	414 584 514	9034 91	" " …	115	31/2
58	2	51/4	923/4	" " ····	35	4
59 60—Disqualified, down between	31/2	5 n May	911/2		100 108	41/4
13	514	53/	89	" " …	113	4
14	514 434	53/4 51/2	8934		152	31/2
	514	6 61/4	8814		• 34	33⁄4 4
7—Died in December	584	51/2	8834	" " …	17	4
8	584	5	8914	66 66	148	4
9	4%4	53/4	891/2 903/	S. C. R. I. Whites	173 102	56
0 1—Died in July 2—Died in June	414	31/2 43/4	911/2	" " ····	86	71/2
² —Died in June	43/4	4	891/4	u u	95	6 4
4	514	6 4½	90 ¹ ⁄ ₄ 90		72 150	616
5	5	4	91	S. C. W. Leghorns	143	33/4
6 7—Disqualified	51/2	41/2	90		146 163	4
7—Disqualified. 8—Died in June	31/4	41/4	921/2	" " …	112	334
9	41/2	51/2	90		173	31/2
1		51/2	881/4 893/4		163 129	38/4
2	31/4	33/4	93	" " …	109	4
3	31/2	51/2	91	" " ····	72	4
5	65		873/4 901/2		158 72	41/4
0	33/4	43/4	911/2	" "	159	33/4
3—Died in December	51/2	41/4	901/	S. C. W. Orpingtons		5
5	51/4 51/4	41/4	901/2 913/4		98	6½ 7
7	61/4	53/4	88	" " " "	61	7
8—Died in April	53/4	6	88 ¹ / ₄ 91		63 137	6 98/
0-Never laid an egg.	472 31/2		923/	S. C. W. Leghorns	0	31/2
1	5		903/4	"""	129	314
3	38/4 51/4	4½ 5	92 983⁄4		181 98	31/4
4				" " …	72	334
5 0	41/2 23/4	6	89 ¹ /2 89	S. C. Buff Leghorn	149 142	41/2
1		814 634	89		142	41/2
4	41/4	6 ³ /4 6 ¹ /2	8914	"""	93	4
3 4	33/4 33/4	81/2 73/4	873/4 881/2		83	41/4
9	3%4 4	51/2	90 ¹ /2	S. C. W. Leghorns	123	4
0—Disqualified, died in Oct					139	41/4
2.	4 4 ³ / ₄	6 2 ³ ⁄4	921/2		176 132	4/2
B-Disqualified				" " ····	103	4
4	51/2		90 ¹ ⁄ ₄ 89 ³ ⁄ ₄		85 101	41/2
4	384 51/2 384 484	41/2 53/4	883/		167	41/4
	33/4	4	921/4	" " ····	142	33/4
ß	43/4	53/4	891/2	122 July 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	151 138	31/2
8	23/4 51/4	41/4	93	S. C. W. Leghorns	96	4
5 5—Disqualified, down between	51/4	51/4	901/2	" " "	74 137	4
	es				75	55
7	43/4	33/4	91 ¹ /2 90 ³ /4	"""	109	4
9 D	$\begin{array}{c c} 41_{2} \\ 51_{4} \\ 51_{2} \\ 51_{2} \\ \end{array}$	484 614	9034 881/2		76	31/2 51/2
	574	334	90 ³ / ₄	White Wyandottes	74 32	672

Table 7.-Total score, judged according to standard requirements.

Table 7.-Total score, judgde according tostandard require ents.

- Band Number	Cut for shape. Total.	Cut for color. Total.	Score	Variety	Total eggs produced	Weight
249	634 514 in Sept				$182 \\ 181 \\ 145 \\ 48 \\ 94 \\ 62 \\ 25 \\ 57 \\ 50 \\ 67 \\ 45 \\ 97 \\ 45 \\ 97 \\ 97 \\ 97 \\ 97 \\ 97 \\ 97 \\ 97 \\ 97$	5 6 5 5 4 3 4 4 3 3 4 4 3 4 3 3 4 3 3 4 3 3 4 2

Table 8.—Annual egg-production.

Single Comb Rhode Island Reds.

Owner	Address	Leg-band No.	Individual yearly production.	Pen total
L. C. Gibbon C. M. Evans C. M. Evans S. C. Richardson. R. L. Penick. R. L. Pou	Bryan, Texas Bryan, Texas Bryan, Texas Stamford, Texas.	$\begin{array}{c} 139 \hspace{-0.5mm}-\hspace{-0.5mm}140 \hspace{-0.5mm}-\hspace{-0.5mm}141 \hspace{-0.5mm}-\hspace{-0.5mm}142 \hspace{-0.5mm}-\hspace{-0.5mm}143 \hspace{-0.5mm}250 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}230 \hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}-\hspace{-0.5mm}$	$\begin{array}{r} 74-101-& 70-131-101\\ 154-156-100-& 0-& 0\\ 81-140-127-& 97-& 29\\ 169-& 35-102-106-200\\ 131-176-185-108-144\\ 152-158-143-137-145\\ \end{array}$	477 669 474 612 744 735
	Barred Plymout	th Rocks.		
F. W. Clark M. A. Lee M. W. Coll	Seadrift. Texas	175-176-177-179-180	$\begin{array}{c} 178 - 145 - 192 - 157 - 119 \\ 203 - 207 - 152 - 123 - 136 \\ 86 - \ 78 - \ 96 - \ 71 - 120 \end{array}$	753 822 451
	S. C. R. I. V	Vhites.		
H. E. Caldwell.	Canutillo, Texas	169-170-173-174-171	173-102- 85-141- 86	584
	White Orpi	ngtons.		
J. S. Hubbard	Fort Worth, Texas	134-135-136-137-138	50- 98- 84- 61- 72	356
	White Wyan	dottes.		
Homan's Farm	Ysleta, Texas	199-201-202-249-204	32-181-145-182- 94	588
	S. C. Buff L	eghorns.		
Laura Terry	Copperas Cove, Texas	45- 50- 51- 54- 44	151-142-123-111- 93	618
	Sicillian Butte	ercups.		
I. Freeman	Stephenville, Texas	67-69-70-71-72	60- 57- 50- 67- 43	261
	S. C. White Le	eghorns.		
Geo. Gray. J. A. Baker R. E. Sharp C. T. Knudson. A. F. Egger. C. M. Evans. D. C. Moore. M. Johnson Glenview Farm. J. Lawler J. Lawler. J. Lawler. C. H. Williams.	Boerne, Texas Cameron, Texas. Norse, Texas. Paris, Texas. Bryan, Texas Bryan, Texas. Bowie, Texas. Bowie, Texas. Bryan, Texas. Bryan, Texas. Bryan, Texas. Bryan, Texas. Bryan, Texas. San Antonio, Texas. Ysleta, Texas. Bryan, Texas.	$\begin{array}{c} 9-10-11-12-47\\ 13-14-15-16-18\\ 19-20-21-22-23\\ 25-26-30-29-27\\ 31-32-33-34-35\\ 37-38-39-40-41\\ 55-56-57-58-59\\ 61-62-63-64-65\\ 104-105-106-107-108\\ 081-83-87-89\\ 79-82-84-85-88\\ 91-92-93-94-95\\ 97-98-99-100-101\\ 109-110-111-112-113\\ 115-116-118-119-120\\ 121-122-123-124-125\end{array}$	$\begin{array}{r} 178-137-109-132-135\\ 128-119-107-134-99\\ 112-152-125-34-148\\ 137-0-129-181-98\\ 143-146-163-173-163\\ 187-130-116-168-105\\ 123-159-169-201-49\\ 160-107-115-35-100\\ 129-109-72-158-62\\ 167-142-151-135-96\\ 131-120-167-175-161\\ 80-75-136-133-104\\ 144-103-91-148-143\\ 81-93-26-94-73\\ 123-139-176-132-103\\ 123-139-176-132-103\\ 74-137-100-75-74\\ 104-119-62-118-89\\ 99-116-159-95-125\end{array}$	$\begin{array}{c} 691\\ 565\\ 572\\ 545\\ 788\\ 706\\ 711\\ 517\\ 550\\ 691\\ 754\\ 528\\ 629\\ 367\\ 663\\ 470\\ 492\end{array}$

Table 9.-Pen awards, entire contest.

	Table	9.—Pen awards, entire contest.		
Awards	Owner	Address	Variety	No. eggs per year
First Second Third	M. A. Lee. A. F. Egger Jordan Lawler F. W. Clark	Seadrift, Toxas Paris, Texas Bryan, Texas Yan Horn Texas	Barred Rocks S. C. W. Leghorns S. C. W. Leghorns Barred Rocks	822 788 754 753
Fifth. Sixth Seventh Eighth	R. L. Penick. R. L. Pou C. M. Evans. C. M. Evans.	Seadriit, Toxas. Paris, Texas. Bryan, Texas. Van Horn, Texas. Stamford. Texas. Pryan, Texas. Bryan, Texas. Bryan, Texas.	S. C. R. I. Reds. S. C. R. I. Reds. S. C. W. Leghorns. S. C. W. Leghorns.	744 735 711 70
		—Individual awards, entire con		
First Second Third Fourth Fifth Sixth Sixth Seventh Ninth Tenth	M. A. Lee. M. A. Lee. C. M. Evans. S. C. Richardson. C. M. Evans. R. L. Penick. Jordan Lawler. F. W. Clark. Homan's Farm. C. T. Knudson.	Seadrift, Texas Seadrift, Texas Bryan, Texas Bryan, Texas Stamford Bryan, Texas Van Horn, Texas Yasleta, Texas Norse, Texas	Barred Rocks. Parred Rocks. S. C. W. Leehorns. S. C. W. Leehorns. S. C. R. I Reds. S. C. R. I Reds. S. C. R. I Reds. S. C. W. Leghorns. Barred Rocks. White Wyandotte. S. C. W. Leghorns.	200 203 201 200 187 185 185 185 182 181 181
		en awards, entire year, America		
First. Serond. Third. Fourth.	M. A. Lee F. W. Clark R. L. Penick. R. L. Pou	Seadrift, Texas Van Horn, Texas Stamford, Texas Bryan, Texas	Parred Rocks Barred Rocks S. C. R. I. Reds S. C. R. I. Reds	822 763 744 735
		en awards, entire year, S. C. R.		
First Second Third	R. L. Penick R. L. Pou C. M. Evans	Stamford, Texas Bryan, Texas Bryan, Texas	S. C. R. I. Reds S. C. R. I. Reds S. C. R. I. Reds	744 735 669
	Table 13Pen	awards, entire year, Barred Ro	ocks.	
First Second	M. A. Lee F. W. Clark	Seadrift, Texas Van Horn, Texas	Barred Rocks	822 753
		wards, entire year, Mediterran		
First Second Third Fourth Fourth Sixth Seventh	A. F. Egger. Jordon Lawler. C. M. Evans. C. M. Evans. Geo. Gray. Glenview Farm. Eldridge Farm.	Paris, Texas. Bryan, Texas. Bryan, Texas. Bryan, Texas. Boerne, Texas. Bryan, Texas. San Antonio, Texas.	S. C. W. Leghorns. S. C. W. Leghorns.	788 754 711 706 691 691 663
		Pen awards, entire year, Legho		
	(Same places	s as in awards for Mediterranea	n clase.)	
		al awards, entire year, Mediter		
First Second Third Fourth Fifth Sixth	C. M. Evans. C. M. Evans. Jordan Lawler. C. T. Kundson. Geo. Gray. Eldridge Farm.	Bryan, Texas. Bryan, Texas. Pryan, Texas. Noree, Texas. Pcerne, Texas. San Antonio, Texas.	S. C. W. Iephorns S. C. W. Lephorns S. C. W. Lephorns S. C. W. Lephorns	201 187 185 181 178 176
	Table 17Ind	ividual awards, entire year, Leg	horns.	
	(Same places as in awa	rds for entire year in Mediterra	nean class.)	
	Table 18.—Individ	ual awards, entire year, Ámeric	an class.	
Firet	MATCO	Seadrift Texas	Barred Bocks	907

First	M. A. Lee	Seadrift, Texas	Barred Rocks.	207
	M. A. Lee			203
	S. C. Richardson			200
	R. L. Penick			183
Fifth	F. W. Clark	Van Horn, Texas	Earred Rocks	182

Table 19Individual a	awards,	entire year, S	. C. R	. I. Reds.
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Awards	Owner.	Address	Variety	No. eggs per year
First Second	S. C. Richardson R. L. Penick	Brvan, Texas Stamford, Texas Stamford, Texas	S. C. R. I. Reds S. C. R. I. Reds S. C. R. I. Reds	200 185 176
		lividual awards, entire year, E		
First Second Third	M. A. Lee. M. A. Lee. F. W. Clark	Seadrift, Texas Seadrift, Texas Van Horn, Texas	Barred Rocks. Barred Rocks. Barred Rocks. Barred Rocks.	207 203 182

CORRELATION OF FEED CONSUMPTION AND EGG PRODUCTION

Tables 5 and 6 clearly show the correlation of the feed consumption with the egg production. During the month of March the birds consumed the most feed and produced the greatest number of eggs. It took approximately 150 pounds of feed to produce thirty dozen, or one case of eggs. In April it took about 130 pounds of feed to produce thirty dozen eggs. In May it took 122 pounds of feed to produce thirty dozen eggs.

In June, July, August, September, and October the birds consumed the smallest amount of feed and also produced the least number of eggs. In February, March, April, and May the birds consumed the greatest amount of feed and produced the largest number of eggs.

From this it may safely be concluded that during the period of heaviest feed consumption there is also the greatest egg production.

PERIOD OF PRODUCTION

Figure 6 shows that there were approximately $16\frac{1}{5}$ eggs produced per hen in March, 14 in April, 11 in February, $14\frac{1}{5}$ in May, $9\frac{1}{2}$ in June, $7\frac{1}{5}$ in July, $5\frac{3}{4}$ in August, $2\frac{1}{5}$ in September, 3 in Ootober, $5\frac{4}{5}$ in November, $5\frac{3}{4}$ in December, and $6\frac{1}{2}$ in January.

MARKETING THE PRODUCT

The eggs were marketed in Bryan for whatever was the current price. In many places, near some of the larger cities, a higher price could have been obtained. For this reason, the profit over cost of feed, as shown in a foregoing table, is no more than can be expected from the average farm flock when given intelligent care and systematic management.

BROODINESS

It was found that the S. C. Rhode Island Reds showed the highest number of broody birds. The Barred Plymouth Rocks came next. The Leghorns seldom become broody.

DISQUALIFIED BIRDS

There were sixteen birds disqualified out of a total of 192. By far the greatest number of disqualifications were because of down, feathers, or stubs on shanks, toes or between toes. A few were disqualified on account of side sprigs on the comb.

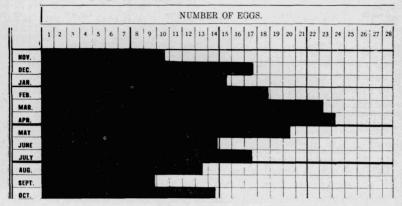


FIGURE 4-MONTHLY PRODUCTION OF TEN BEST PULLETS

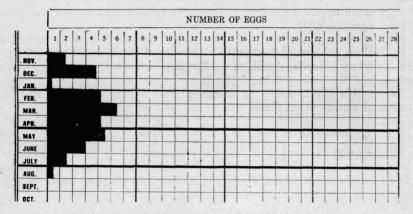


FIGURE 5-AVERAGE MONTHLY PRODUCTION OF TEN POOREST PULLETS

It is clearly evident that it is possible to breed for both egg production and exhibition purposes. To advocate anything else would be the greatest mistake. It is also clear that egg production may be bred into any breed or variety, and that it is not confined to any particular breed.

The primary benefit of the egg-laying contest is the encouragement it gives to the breeding of poultry for increased egg production. No doubt the time is not far away when one may expect to see many such contests in the various parts of the State. In fact, it is not unreasonable to expect that egg-laying competitions will be held in connection with many of the county poultry shows. Schools teaching agriculture will find them interesting.

20

BREED FOR WINTER EGG PRODUCTION

Studying the yearly egg records shows that the high producers lay in the fall and winter, when eggs are worth more than in the spring and summer. The good layers have two advantages: the larger number of eggs, and the increased value of the eggs, due to the fact that they are laid when they are worth the most.

The average price of eggs for the six fall and winter months—October, November, December, January, February, and March—was fortv-eight cents per dozen. The average price of eggs for the six spring and summer months was thirty-six cents per dozen. This year (1919) the price of eggs is much higher than foregoing quotations.

The ten best hens in the contest averaged ninety-five eggs during the six fall and winter months, an amount worth \$3.80. The ten poorest

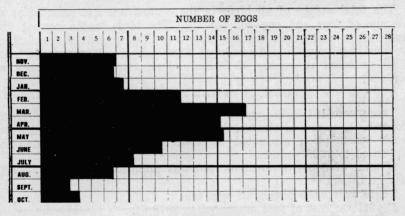


FIGURE 6—AVERAGE MONTHLY PRODUCTION OF EGGS FOR ENTIRE CONTEST

hens in the contest averaged sixteen and one-half eggs during the six fall and winter months, an amount worth sixty-six cents.

The ten best hens averaged ninety-six eggs during the six spring and summer months, an amount worth \$2.88. The ten poorest hens averaged fourteen eggs during the six spring and summer months, an amount worth forty-two cents.

From the foregoing it may be learned that the ten best hens averaged about as many eggs in the winter as in the summer months, but their winter egg production was worth \$1.00 more per bird, on account of the increased price.

The good producers layed in October and November. The average October monthly production for the ten best birds was 13.4 eggs per bird. The average October monthly production for the ten poorest hens was 0. Practically all of the good layers commenced their productiveness in November.

The average production per hen per year for the entire contest was 121 eggs. This is not a particularly good record, but when one considers that this was the first contest ever held in Texas and that at times it was impossible to get feed at any price, the records are about as good as could be expected. There is no question that the average yearly production, under more favorable conditions, would have been increased at least twenty eggs per bird.

COST OF PRODUCING EGGS

The feed consumption averaged $5\frac{1}{6}$ pounds in every dozen eggs. It cost an average price of twenty-two cents for feed to produce this number of eggs. The eggs sold for an average price of forty-two cents. The feed consumption averaged three and one-half pounds for the production of every pound of eggs.

WEIGHT OF THE BIRDS

The total weight of all birds in the contest was 846 pounds, or an average of four and one-half pounds. The birds in the contest produced three and one-half times their own live weight in eggs. They weighed 846 pounds and produced 2880 pounds of marketable eggs. They produced an average of fifteen and one-sixth pounds of eggs per bird.

SUMMARY OF THE FIRST CONTEST

There were 160 birds entered in the first Texas National Egg-Laying Contest. Counting alternates, there were 192 birds in the contest. Dry mash consumption amounted to 4751 pounds. Grain consumption aucounted to 7205 pounds.

A total of \$401.73 worth of feed was productive of \$780.37 worth of eggs.

There were 2880 pounds of eggs laid.

Profit over cost of feed amounted to \$378.64.

ANNOUNCEMENT OF A SECOND CONTEST

At the annual meeting of the Texas Poultry Raisers' Association at College Station, July, 1918, the members expressed hearty approval of the success of the first contest, and were unanimously in favor of a second contest.

The following contest committee was elected for a term of one year: F. W. Kazmeier, chairman; D. C. Moore, Houston: R. E. Caldwell, Canutillo; George Gray, Boerne; Lilian Hazle, College Station. The association re-elected F. W. Kazmeier as director.

One new house has been built for use of the second contest. This brief review brings the history of the Texas National Egg-Laying Contest up to date.