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### Rural Mail Carrier Survey- Spring 1955

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JOB COMPLETION REPORT  
INVESTIGATIONS PROJECTS

State of Nebraska  
Project No. 15-R Job No. 26-55  
Title of Job Rural Mail Carrier Survey - Spring, 1955

Objectives: To obtain extensive population data on pheasants, sharp-tailed grouse, prairie chickens, bobwhite quail, and deer.

Techniques Used: During the last week in April, post-card questionnaires were sent to all rural mail carriers. Cooperating carriers were asked to report their route mileage and number of game animals seen in four days of route driving. (See appendix for complete survey instructions.)

Findings: Observations were recorded by 665 carriers. The survey included all counties of the state with exception of Hayes and Thomas. Most observations were made during the first week in May. Table 1 contains a summary of data.

1. Pheasants

For the third consecutive spring, mail carrier data indicated a lower statewide pheasant breeding population than the preceding year. The population index of 8.9 pheasants per 100 miles is 19 percent lower than that of 1954 (11.0 pheasants per 100 miles). Since 1952, when the population index was 28.9 pheasants per 100 miles, the breeding population has decreased 70 percent. In 1955, the greatest drop in numbers was indicated among hens, which decreased 30 percent from index of last year, while cocks only decreased 10 percent. The decline of cocks and hens over the three-year period was proportionately the same.

Districts I (Panhandle) and IV (South Central) were indicated to have a higher population than the state average, while Districts II (Northcentral), III (Northeast), and V (Southeast) were shown to be lower. (Table 1 and Figure 1). This population distribution did not follow exactly the same sequence as implied by Rural Mail Carrier Survey - Winter, 1955 (Job No. 20, Project 15-R), although the variation was small. Possibly the fact that twice as many pheasants were recorded in the winter as in spring may have given winter data a greater margin of spread between district population indices.

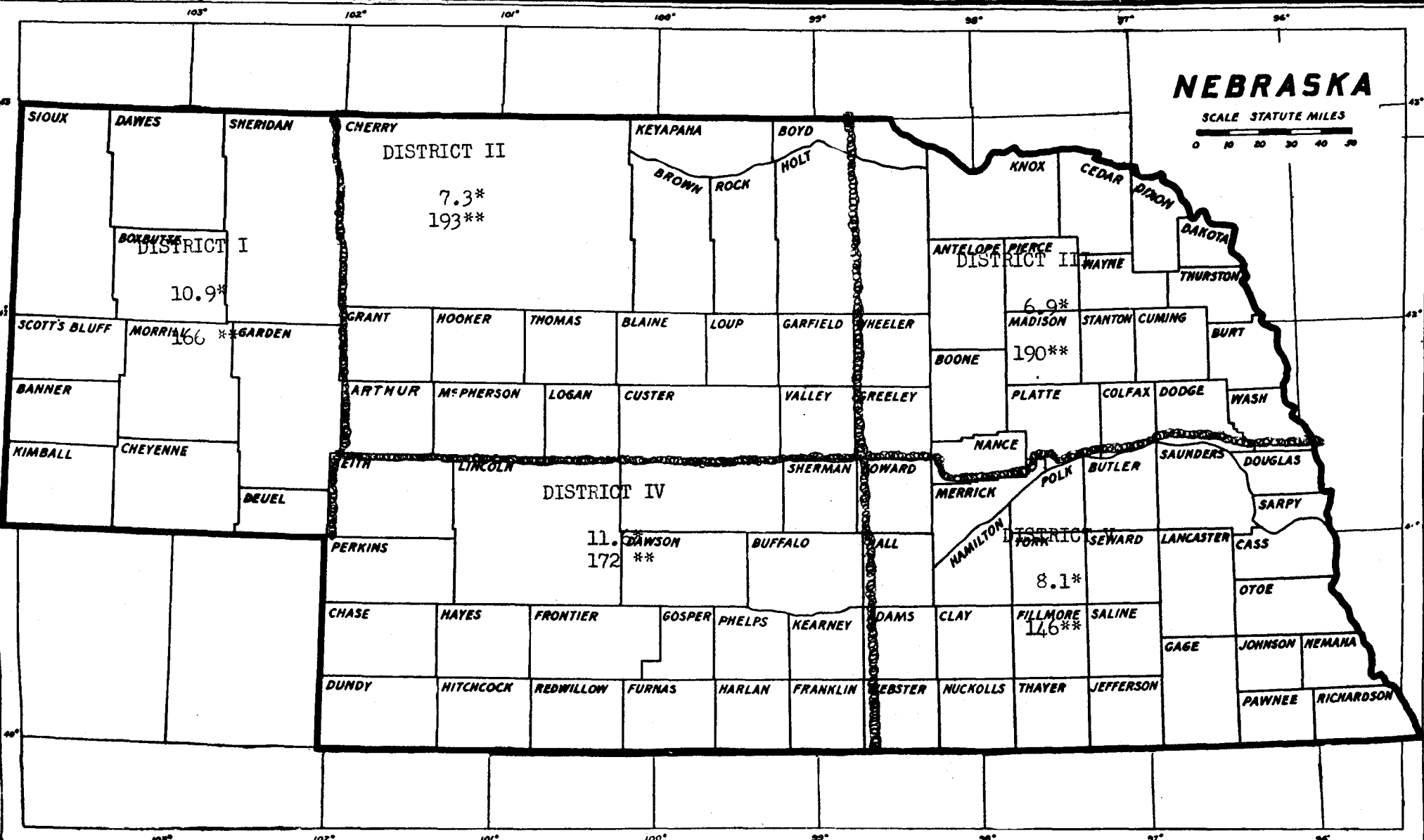
The statewide sex ratio of 166 cocks per 100 hens obtained this spring was the highest since 1951. District II (Northcentral) contained the highest sex ratio of the five districts, with Districts III (Northeast), IV (Southcentral), I (Panhandle), and V (Southeast) following in order of highest sex ratio (Table 1 and Figure 1). This relative distribution of sex ratios was also indicated by the Rural Mail Carrier Survey - Winter, 1955 (Job No. 20, Project 15-R). The spring sex ratio was much higher, however, due to seasonal activity changes of the pheasants.

Table 1  
RURAL MAIL CARRIER GAME SURVEY - SPRING, 1955  
Summary of Data

	Dist. I Pah- handle	Dist. II North Central	Dist. III North east	Dist. IV South Central	Dist. V South east	Total
Total carriers reporting	50	55	144	162	254	665
Total miles driven	11609	12361	30284	34933	48755	137942
Pheasants seen	1272	909	2107	4064	3926	12278
Cocks	781	513	1366	2531	2295	7486
Hens	471	266	718	1473	1574	4502
Unclassified	20	130	23	60	57	290
Cocks per 100 hens	166	193	190	172	146	166
Pheasants per 100 miles	10.9	7.3	6.9	11.6	8.1	8.9
Quail seen	0	105	206	253	546	1110
Quail per 100 miles	0	.85	.68	.72	1.12	.80
Prairie chickens seen	1	195	1	22	1	220
Prairie chickens per 100 mi.	0	1.58	0	.06	0	.16
Sharp-tailed grouse seen	69	150	3	39	0	261
Sharp-tailed grouse per 100 mi.	.59	1.21	.01	.11	0	.19
Deer seen	20	5	37	8	1	71

# NEBRASKA

SCALE STATUTE MILES



\* Pheasants/100 miles  
 \*\* Cocks/100 hens

Figure 1. Pheasant Density Distribution and Sex ratio  
 State Avg. Density Distribution - 8.9 pheasants/100 miles  
 State Avg. Sex Ratio - 166 Cocks/100 hens

## 2. Prairie Chickens and Sharp-Tailed Grouse

Prairie chickens and sharp-tailed grouse were both indicated to be at their lowest spring population level since before 1949. Data on prairie chickens implied their decline to be 73 percent from last year, and data on sharp-tailed grouse signified a decrease of 50 percent for the same period. There was a slight drop in numbers of both species shown in 1953 and 1954, but nothing as drastic as revealed this year. It is only fair to point out that several mail carriers who generally record many prairie chickens and sharp-tailed grouse did not participate in the survey. This factor may be at least partly responsible for the apparent decline. District II (Northcentral) had the highest number of prairie chickens and sharp-tailed grouse recorded, with District I (Panhandle) next.

## 3. Bobwhite Quail

Quail were the only upland game birds reported by carriers to appear to have increased in number. Data indicated a 36 percent increase. The southeastern part of the state continued to maintain highest quail numbers although quail are found in nearly every county except those in the Panhandle.

## 4. Deer

No previous spring mail carrier records of deer have been recorded, thus eliminating a comparison. Carriers reported 71 deer which undoubtedly includes both white-tailed and mule deer although no differentiation was made.

Recommendations: 1. This survey should be continued until such time as a statistical analysis can be completed. Data accumulated by mail carriers will offer a valuable check on data gathered by Game Managers.

Summary: The statewide pheasant population index was 19 percent lower than last year continuing the decline begun in 1953. The statewide sex ratio was 166 cocks per 100 hens; the highest spring sex ratio since 1951.

Prairie chicken and sharp-tailed grouse populations were indicated to have declined 73 percent and 50 percent, respectively. Part of this decline may be attributed to the fact that several mail carriers generally reporting many prairie chickens and sharp-tailed grouse did not participate in the survey.

The 1955 quail index figure was 36 percent higher than 1954.

Seventy-one deer were reported.

Prepared by Dan Heyl, Game Manager

Approved by J. Henry Sather  
Project Leader

Date: August 10, 1955

A P P E N D I X

RURAL MAIL CARRIER GAME SURVEY - Spring 1955

DISTRICT I

Raw Data

County	No. Rep.	PHEASANTS				Total	Prairie Sh.T.			Miles	Deer
		Cocks	Hens	Uncl.			Quail	Chicken	Grouse		
Banner	1	7	1	0	8	0	0	0	212	0	
Box Butte	2	38	33	0	71	0	0	3	235	0	
Cheyenne	7	164	66	0	230	0	0	0	1800	0	
Dawes	6	10	2	16	28	0	1	0	1206	9	
Deuel	3	21	21	0	42	0	0	0	808	0	
Garden	4	43	24	0	67	0	0	1	609	0	
Kimball	4	23	5	0	28	0	0	0	988	0	
Morrill	6	79	32	0	111	0	0	4	1578	4	
Scottsbluff	10	244	187	2	433	0	0	0	2568	7	
Sheridan	5	152	100	2	254	0	0	61	1413	0	
Sioux	2	0	0	0	0	0	0	0	192	0	
<b>Total</b>	<b>50</b>	<b>781</b>	<b>471</b>	<b>20</b>	<b>1272</b>	<b>0</b>	<b>1</b>	<b>69</b>	<b>11609</b>	<b>20</b>	

DISTRICT II

Blaine	1	1	0	0	1	0	0	0	208	0
Boyd	7	54	19	0	73	50	8	13	1470	0
Brown	4	96	31	0	127	0	43	9	876	0
Cherry	7	23	8	126	157	0	42	67	1932	5
Garfield	2	24	29	0	53	8	0	22	344	0
Grant	4	25	5	0	30	0	89	0	1328	0
Holt	9	33	18	0	51	5	9	7	2210	0
Hooker	1	0	0	0	0	0	0	3	328	0
Keya Paha	3	2	1	0	3	0	0	17	400	0
Logan	3	23	25	0	48	0	2	3	441	0
Loup	1	0	0	0	0	0	0	0	66	0
McPherson	4	9	9	0	18	0	2	9	812	0
Rock	1	1	0	0	1	0	0	0	80	0
Thomas	0	0	0	0	0	0	0	0	0	0
Valley	8	222	121	4	347	42	0	0	1866	0
<b>Total</b>	<b>55</b>	<b>513</b>	<b>266</b>	<b>130</b>	<b>909</b>	<b>105</b>	<b>195</b>	<b>150</b>	<b>12361</b>	<b>5</b>

DISTRICT III

Antelope	7	25	12	0	37	18	0	1	1499	0
Boone	10	148	97	2	247	1	0	0	2264	0
Burt	6	15	5	0	20	4	0	0	1166	2
Cedar	9	132	64	1	197	6	0	0	1819	0
Colfax	7	137	85	0	222	0	0	0	1421	0
Cuming	8	97	60	0	157	6	0	0	1783	0
Dakota	3	3	3	0	6	2	0	0	508	0
Dixon	7	61	37	0	98	25	0	0	1572	0
Dodge	11	59	35	0	94	11	0	0	2220	0
Greeley	9	43	28	11	82	31	0	0	2193	0
Knox	14	121	54	0	175	74	0	0	2774	0
Madison	12	155	64	0	219	2	0	0	2604	0
Nance	4	26	13	0	39	11	0	0	1000	2
Pierce	6	118	70	6	194	0	0	0	1328	0
Platte	8	66	34	1	101	5	1	0	1691	5
Stanton	3	46	11	0	57	8	0	0	809	0
Thurston	5	7	1	0	8	0	0	0	824	0
Washington	7	13	7	2	22	2	0	0	1133	0
Wayne	6	89	38	0	127	0	0	0	1296	0
Wheeler	2	5	0	0	5	0	0	2	380	30
<b>Total</b>	<b>144</b>	<b>1366</b>	<b>718</b>	<b>23</b>	<b>2107</b>	<b>206</b>	<b>1</b>	<b>3</b>	<b>30284</b>	<b>37</b>

PHEASANTS

County	No. Rep.	Cocks	Hens	Uncl.	Total	Quail	Prairie Chicken	Sh.-T. Grouse	Miles	Deer
<b>DISTRICT IV</b>										
Buffalo	16	167	75	17	259	13	0	0	2822	0
Chase	8	77	39	0	116	2	0	0	1485	0
Custer	19	283	192	13	488	37	6	39	4243	0
Dawson	12	110	53	1	164	19	10	0	2469	0
Dundy	4	17	15	0	32	4	0	0	822	0
Franklin	12	194	83	0	277	26	0	0	2096	0
Frontier	9	98	75	0	173	31	6	0	2264	0
Furnas	12	239	68	0	307	55	0	0	2677	0
Gosper	3	66	35	0	101	2	0	0	755	0
Harlan	5	80	35	0	115	37	0	0	1182	0
Hayes	0	0	0	0	0	0	0	0	0	0
Hitchcock	10	130	73	0	203	21	0	0	2443	0
Kearney	9	271	163	1	435	0	0	0	1862	0
Keith	5	17	7	0	24	0	0	0	713	2
Lincoln	11	27	20	2	49	6	0	0	2948	6
Perkins	7	197	196	26	419	0	0	0	1650	0
Phelps	7	251	136	0	387	0	0	0	1671	0
Red Willow	6	99	88	0	187	0	0	0	1301	0
Sherman	7	208	120	0	328	0	0	0	1560	0
<b>Total</b>	<b>162</b>	<b>2531</b>	<b>1473</b>	<b>60</b>	<b>4064</b>	<b>253</b>	<b>22</b>	<b>39</b>	<b>34933</b>	<b>8</b>
<b>DISTRICT V</b>										
Adams	10	182	196	23	401	7	0	0	2146	0
Butler	9	77	31	0	108	4	0	0	1699	0
Cass	12	5	6	0	11	11	0	0	2032	0
Clay	9	307	244	0	551	3	0	0	2092	0
Douglas	5	10	24	4	38	1	0	0	920	0
Fillmore	9	136	78	0	214	0	0	0	1408	0
Gage	15	103	90	0	193	37	0	0	2996	0
Hall	6	163	106	0	269	27	0	0	1523	0
Hamilton	7	71	39	0	110	0	0	0	1243	0
Howard	8	61	37	1	99	2	0	0	1710	0
Jefferson	10	143	60	0	203	49	0	0	2172	0
Johnson	9	10	2	0	12	55	0	0	1771	0
Lancaster	15	61	44	9	114	31	0	0	3032	0
Merrick	12	81	36	0	117	42	0	0	2137	0
Nemaha	7	10	7	0	17	39	0	0	1221	0
Nuckolls	8	104	50	3	157	20	0	0	1208	0
Otoe	14	13	16	0	29	17	0	0	2316	0
Pawnee	6	5	1	0	6	45	1	0	1248	0
Polk	8	76	57	0	133	0	0	0	1495	0
Richardson	8	0	0	0	0	17	0	0	1484	0
Saline	12	66	26	0	92	4	0	0	2408	1
Sarpy	3	7	1	0	8	26	0	0	469	0
Saunders	13	24	23	0	47	9	0	0	2436	0
Seward	11	46	17	5	68	3	0	0	1644	0
Thayer	11	235	121	0	356	26	0	0	2166	0
Webster	8	129	86	0	215	59	0	0	1656	0
York	9	170	176	12	358	12	0	0	2123	0
<b>Total</b>	<b>254</b>	<b>2295</b>	<b>1574</b>	<b>57</b>	<b>3926</b>	<b>546</b>	<b>1</b>	<b>0</b>	<b>48755</b>	<b>1</b>
<b>GRAND TOTAL</b>										
	<b>665</b>	<b>7486</b>	<b>4502</b>	<b>290</b>	<b>12278</b>	<b>1110</b>	<b>220</b>	<b>261</b>	<b>137942</b>	<b>41</b>