

# UTAH UPLAND GAME Annual Report 1974

PUBLICATION NUMBER 75-7  
Federal Aid Project W-65-R-D-23



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WILDLIFE RESOURCES

John E. Phelps, *Director*

UTAH  
UPLAND GAME  
Annual Report  
1974

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PUBLICATION NO. 75-7  
Completion Report for Federal Aid Project W-65-R-D-23

Utah State Department of Natural Resources  
DIVISION OF WILDLIFE RESOURCES

John E. Phelps  
Director

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JOB COMPLETION REPORT  
RESEARCH PROJECT SEGMENT  
(Inventory)

State of U T A H

Project Title: Statewide Wildlife  
Management Inventory

Project No. W-65-R-D-23

Job Title: Statewide Upland Game  
Inventory and Management

Job No. A-4

Period Covered: January 1, 1974 to June 30, 1975

Abstract: This report includes upland game inventory and harvest data relating to the 1974-75 hunting seasons. Results of annual inventory and harvest surveys and long-term trends of indexes derived by each method are included. Data obtained in 1974 are compared to 1973 and long-term averages.

Objectives: To conduct annual inventories and determine the population trend and annual harvest of upland game.

Procedures: Annual inventory procedures for ring-necked pheasants included winter sex-ratio counts and summer roadside counts. The winter sex-ratio counts were conducted from December 15, 1973, through February 10, 1974, as snow cover conditions allowed. Indexes derived include hen-cock ratios and pheasants observed per 100 hours. Annual summer roadside counts (three or more per route) were conducted from July 22 - August 3 on permanently established routes. Indexes derived include pheasants per mile, young per mile, young per hen, mean brood and percent of hens with young.

Mourning dove breeding population trend was determined via the annual call-count survey. This survey is part of a nation-wide survey administered by the Fish and Wildlife Service. Call-counts are conducted over 15 permanent, 20-mile routes. One count was made on each route between May 20-30. Doves were banded during the pre-season banding period (June 1 - August 20) primarily using mist nets at waterholes.

Random brood counts were conducted on chukar and Hungarian partridge, forest grouse (ruffed and blue), sage grouse, wild turkey and quail from July 10-August 5. Indexes derived for each species include mean brood size, young per 100 adults and birds observed per 100 hours effort.

Sage grouse strutting ground counts were conducted from March 15-May 15. Total cocks counted, average cocks per ground and percent change from 1973 for comparable grounds were determined on a county basis.

One Gambel's quail call-count route was run in Washington County in late April and early May. Long-period waterhole counts were completed in July and August.


Cottontail rabbit roadside counts were conducted over pre-established routes between July 15 and August 5. Indexes derived include rabbits per mile and young per 100 adults.

A harvest questionnaire was mailed to an 18 percent sample of eligible licensees selected from the previous year (1973) license file. For several years prior to 1974 the current year license file was used. Closure of the cottontail rabbit hunting season on January 31 instead of March 1 facilitated the use of a single harvest questionnaire (except for wild turkeys). Questions were asked concerning the number harvested and the number of days hunted in each county by species. A separate questionnaire was mailed to all wild turkey permittees. Upland game harvest questionnaires were processed by the University of Utah Computer Center and the turkey questionnaire by Game Management Section personnel. Total harvest, hunters and hunter-days afield were estimated using standard projection factors based on total eligible licensees and questionnaires returned. Hunter success per hunter-day and per hunter for each season were determined as well as the distribution of harvest and hunting pressure by county.

Field bag checks of upland game hunters were made at random or at checking stations during each hunting season. Indexes derived include bag per hunter (per day), bag per 100 hours, average hours per hunter-day and average hours per bird bagged.

Recommendations: This project should be continued for the purpose of determining trends of upland game inventory and harvest statistics in Utah.

Approved by:

  
\_\_\_\_\_  
Chief, Game Management

  
\_\_\_\_\_  
Federal Aid Coordinator

# INTRODUCTION

The objective of Utah's upland game management program is to provide recreational hunting opportunity for sportsmen within the limits of the annual harvestable surplus for each species. It is based on the knowledge that populations of upland game experience relatively high rates of annual turnover. High reproductive rates are naturally compensated for by high death rates, whether hunting is allowed or not. Annual surveys are conducted to measure the production, trend and harvest of each upland game population hunted.

This is the fourth edition of this annual Upland Game Report. It is a consolidation of, and annual completion report for, information compiled during inventory and harvest surveys conducted under Federal Aid Project, W-65-R, Job A-4. Information contained herein was compiled by conservation officers, biologists and game managers of the Division of Wildlife Resources.

This report serves as a handbook of inventory and harvest trend data. It is designed primarily for the use of those concerned with the management of upland game in Utah. A separate section is devoted to each form of upland game hunted in Utah. Data is presented primarily in tabular form with limited narrative comment. The first page of each section provides a brief summary of population status and trend as indicated by inventory and harvest data.

During 1974, a total of 99,556 Utah sportsmen spent 634,249 days afield in pursuit of various upland game species. The harvest of upland game totaled 701,704. The proportion of the total upland game hunters which pursued each species is shown in Appendix Table 2 and the percentage failing to bag at least one bird of each species in Appendix Table 3. The framework for 1974 upland game hunting seasons is shown in Appendix Table 4. Harvest statistics by species were as follows:



Species	Hunters Afield	Total Harvest	Hunter Days	Bag/ Hunter-day	Bag/Hunter for Season
Pheasant	85,252	167,408	282,294	0.59	1.96
Mourning dove	34,021	306,076	112,967	2.71	9.00
Chukar partridge	16,412	44,658	48,856	0.91	2.72
Sage grouse	12,214	15,215	23,516	0.65	1.25
Forest grouse	21,920	62,438	55,258	1.13	2.85
Quail	6,097	12,005	14,702	0.82	1.97
Hungarian partridge	4,103	7,389	10,789	0.68	1.80
Wild turkey					
spring	112	6	289	0.02	0.05
fall	26	3	79	0.03	0.10
Cottontail	22,737	86,506	85,499	1.01	3.80

Total hunters afield for all species of upland game = 99,556

A total 27,379 questionnaires were mailed. Of this number, 3,676 (13.4 percent) were non-deliverable. Of 23,703 deliverable questionnaires, 9,157 (38.6 percent) were returned. Of these, 1,130 (4.8 percent) did not purchase a 1974 small game or combination license and 2,786 (11.8 percent) did not hunt upland game. Usable returns, hunts plus no hunts, totaled 8,027. When combined with 152,478 total eligible licensees a projection factor of 18.995640 resulted.

January and February temperatures were generally below normal. Precipitation was above normal in January but below in February. In March, temperatures rose to above normal and precipitation continued below normal. The moisture deficit caused early dessication of spring ranges. Temperatures in April were a little below normal and precipitation increased to slightly above normal. Freezing temperatures (20's) occurred over much of the State in late April. Above normal temperatures and attendant below normal precipitation prevailed through May and June. During July temperatures were near normal with slightly above normal precipitation. August temperatures and precipitation were both below normal while in September temperatures rose but precipitation remained below normal. In October temperatures were above normal and precipitation increased to well above normal; the only month of the year to show above normal precipitation in all climatic divisions. Temperatures continued above normal in November but then dropped to below normal during December. Precipitation was below normal both months. Perhaps the most prominent weather factor throughout the year was the persistent below normal precipitation and resultant drought conditions in many areas (based on a "Weather Summary for 1974" by E. Arlo Richardson, State Climatologist).

# RING-NECKED PHEASANT

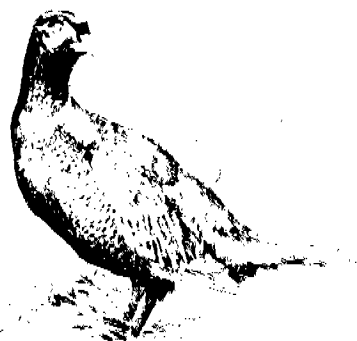
## SUMMARY

The Statewide pheasant breeding population level for 1974, as indicated by both the 1973 harvest statistics and winter sex-ratio counts, was lower than in 1973 and probably at its lowest level since prior to the 1940's when pheasants were becoming established over the State. The greatest decline was evident in the Northern, Central and Southeastern regions. Hen-cock ratios during winter counts were narrower than in the winter of 1972-73, probably reflecting the decreased bag limit and reduced hunting pressure of the 1973 season.

Production indicated by summer roadside counts was similar to 1973 but below average on a Statewide basis. Regional indexes showed increased production in the Central and Southeastern and decreases in the Northern and Southern. Pheasant density (pheasants per mile) was indicated to be higher than 1973 in the Central Northeastern and Southeastern regions and on a Statewide basis but was still well below average. Improved counting conditions probably were responsible for at least part of the indicated increases.

Harvest statistics for 1974 reflected the low fall pheasant population. The indicated increase shown by the pheasants per mile index was generally not reflected in harvest statistics. This was at least partially due to widespread inclement weather on the opening day of the season. Total hunters increased over 1973 to slightly higher than average with a consequent slight increase in hunter-days. Total harvest dropped to the lowest level on record reflecting all-time low hunter success. Reasons for the low success and harvest include low pheasant densities, continued reduced bag and possession limits and the poor weather opening day.

The present trend of the Statewide pheasant population is a continued reflection of below normal production, resulting from adverse spring weather and reduced nesting cover and continuing habitat deterioration.





### Winter Sex-ratio Counts

Results of this survey for the winter of 1973-74 and long-term trends are shown in Tables 1 and 2 of this section. Comparisons to the winter of 1972-73 and the average on a statewide basis are as follows:

	<u>Winter of</u> <u>1973-74</u>	<u>Percent change from</u>	
		<u>1972-73</u>	<u>Average</u>
Total pheasants counted (roadside)	6,683	-55	-58
Hens per cock	4.8	-14	+ 2
Pheasant observed per 100 hours	981	-42	-44
Total hours effort (roadside)	681	-22	-17

These data indicate a markedly decreased breeding population for 1974. The degree of decline was exaggerated by an unusually high count in the winter of 1972-73 when relatively severe winter weather resulted in greater pheasant concentration in limited winter habitat and greater ease of observation. The indicated decline was substantiated by 1973 harvest statistics.

Closer hen-cock ratios indicate a smaller proportion of cocks harvested during the 1973 season. Assuming a pre-season sex ratio of 1.1 hens per cock, hunters bagged approximately 77 percent of the 1973 fall population.

### Roadside Counts

A summary of pheasant roadside counts for 1974 is shown in Table 3. Long-term trends of pheasants per mile, young per mile, young per hen, percent of hens with young and mean brood size are found in Tables 4-8. Survey results for 1974 compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total pheasants observed	2,468	+30	-37
Total miles driven	2,971	+16	+ 6
Pheasants per mile	0.83	+12	-42
Average brood size	5.46	- 3	- 1
Young per hen	3.95	0	- 7
Percent of hens with young	71	- 4	- 7

Indicated Statewide density (pheasants per mile) increased over 1973 but was still well below average. Counting conditions were improved from 1973 and may have been responsible for at least part of the increased number of pheasants observed. The Northern Region was the only region significantly lower than 1973. Both the Northeastern and Southeastern regions showed substantially increased pheasants per mile indexes.

Production (young per hen) was identical to 1973, although mean brood size and percent of hens with young were slightly lower. It was slightly below the Statewide average. The young per hen index was below average in the Northern, Central and Southern regions and above average in the Northeastern and Southeastern regions. It was especially high (73 percent above average) in the Southeastern Region.

This survey indicates a fall population level slightly higher than in 1973 but still well below average.

## Harvest

### Hunter Questionnaire

Results of the hunter questionnaire for 1974 are shown in Table 9. Long-term trends of pheasants bagged per hunter-day, percent of harvest and percent of pressure (hunter-days) by county are found in Tables 10-12 and total statewide harvest statistics in Table 13. Following is a comparison of 1974 harvest statistics to 1973 and the average:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Pheasant hunters	85,252	+12	+ 1
Pheasants harvested	167,408	-15	-33
Hunter-days afield	282,294	+ 2	+34
Pheasants per hunter	1.96	-24	-34
Pheasants per hunter-day	0.59	-16	-49

Total hunters increased over 1973 to a level slightly above average; consequently, hunter-days increased but not proportionately. Hunter success, both per day and per hunter for the season, decreased significantly; resulting in a marked decrease in total pheasants harvested. The total harvest and hunter success values were the lowest on record. They were attributable to the low pheasant population, continued reduced bag and possession limits and widespread inclement weather on the opening day of the season (November 2).

Long-term trends (1964-74) of total pheasant hunters harvest and hunter success are shown in Figure 1.

### Field Bag Checks

A summary of pheasant field bag check data for 1974 is shown in Table 14. The hunter success trend determined via bag check since 1966 is found in Table 15. A comparison of 1974 data on a statewide basis to 1973 and the average follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total hunters checked	5,340	-23	+27
Total hours hunted	17,014	-29	+16
Pheasants per hunter (complete hunts)	0.51	-27	-48
Pheasants bagged per 100 hours	12	-14	-43
Average hours per hunter-day (complete hunts)	4.3	- 2	- 9
Hours hunted per pheasant bagged	8.5	+35	+73

Hunter success indicated by this survey for 1974 was well below 1973 and the average. The Statewide index of 0.51 pheasants per hunter day was 13 percent below the same index derived by questionnaire.

The average hunter checked spent 4.3 hours afield per hunter-day, slightly less than in 1973. Considerably more time was required to bag a pheasant than in 1973.

Pheasants bagged per hunter and per hunter-day.

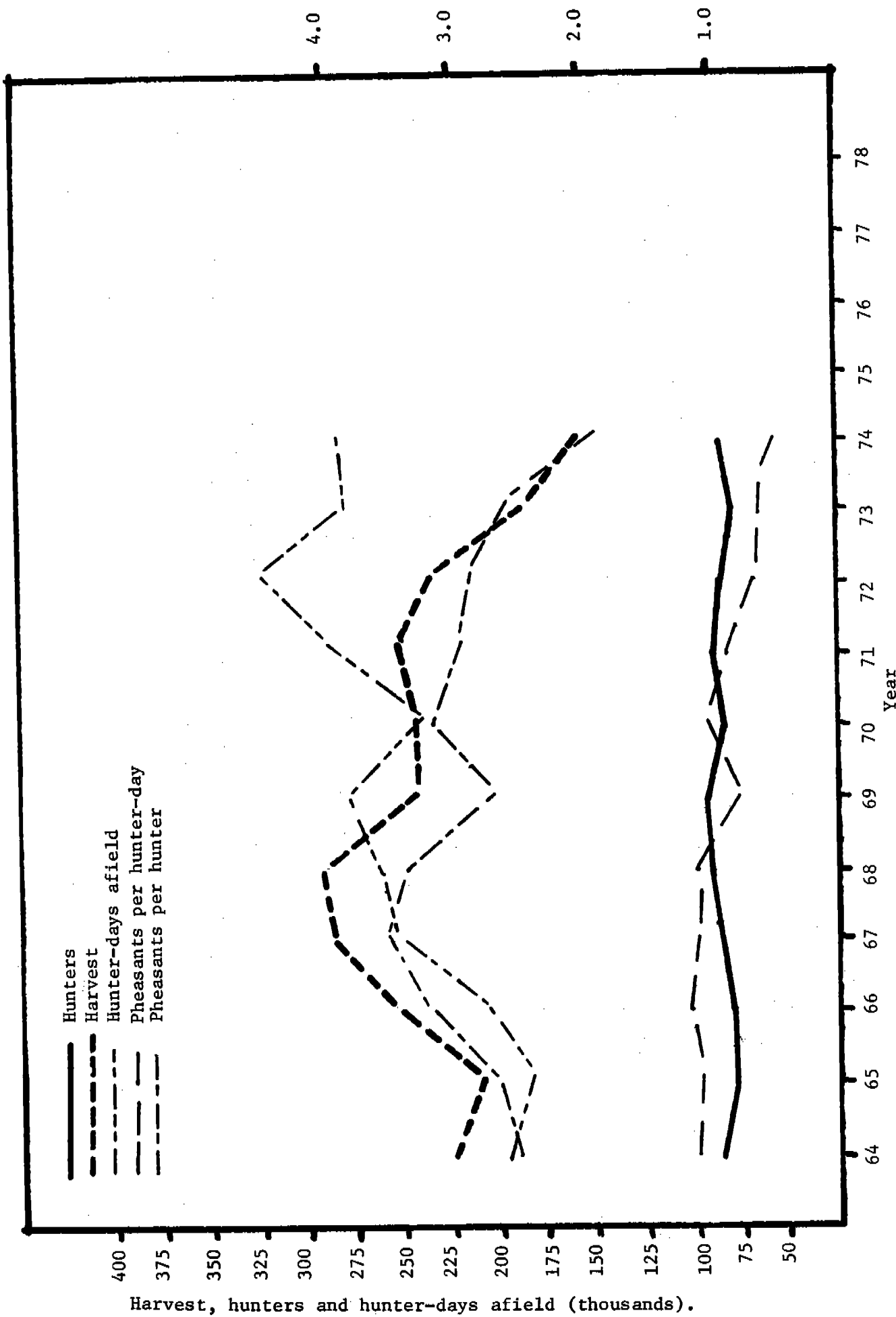


Figure 1. Statewide trend of pheasant harvest statistics.

Table 1. Summary of pheasant winter sex-ratio counts, 1973-74

Region & County	Roadside Observations			Flushing Observations			Effort Expended			Pheas. Obs. 100 Hrs. c Road Obs				
	Hens/ Cocks/ 100 Hens		Total	Hens/ Cocks/ 100 Hens		Total	Hours Effort		Vehicle Miles					
	Cocks	Hens		Cocks	Hens		Vehicle	Walk						
<b>Northern</b>														
Box Elder	85	474	559	18	12	128	140	10.7	9	349	36	4	40	1553
Cache	18	106	124	17	15	43	58	2.9	35	394	28	3	31	443
Davis	10	63	73	16	0	0	0	--	--	55	8	0	8	912
Morgan	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Weber	15	91	106	16	1	17	18	17.0	6	120	16	4	20	662
<b>REGIONAL TOTALS</b>	128	734	862	17	28	188	216	6.7	15	918	88	11	99	980
<b>Central</b>														
Juab	1	6	7	17	1	5	6	5.0	20	76	6	1	7	117
Salt Lake	65	603	668	11	14	97	111	6.9	14	1011	87	10	97	768
Sanpete	198	1233	1431	16	4	9	13	2.2	44	914	70	10	80	2044
Tooele	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Utah	162	847	1009	19	17	60	77	3.5	28	1004	104	1	105	970
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	426	2689	3115	16	36	171	207	4.8	21	3005	267	22	289	1167
<b>Southern</b>														
Beaver	23	85	108	27	3	45	48	15.0	7	198	20	2	22	540
Garfield	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	13	58	71	22	24	121	145	5.0	20	275	13	5	18	546
Kane	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Millard	114	430	544	27	16	120	136	7.5	13	727	82	7	89	663
Piute	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sevier	95	604	699	16	4	81	85	20.2	5	343	38	4	42	1839
Washington	80	154	234	52	54	137	191	2.5	39	216	19	18	37	1232
Wayne	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	325	1331	1656	24	101	504	605	5.0	20	1759	172	36	208	963
<b>Northeastern</b>														
Daggett	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Duchesne	53	165	218	32	83	253	336	3.0	33	873	43	35	78	507
Uintah	146	434	580	34	11	58	69	5.3	19	588	49	4	53	1184
<b>REGIONAL TOTALS</b>	199	599	798	33	94	311	405	3.3	30	1461	92	39	131	867
<b>Southeastern</b>														
Carbon	13	46	59	28	3	4	7	1.3	75	545	35	8	43	169
Emery	35	66	101	53	17	43	60	2.5	40	170	14	6	20	721
Grand	5	22	27	23	2	10	12	5.0	20	159	10	2	12	270
San Juan (Bluff)*	24	41	65	59	14	109	123	7.8	13	188	3	10	13	2167
<b>REGIONAL TOTALS</b>	77	175	252	44	36	166	202	4.6	22	1062	62	26	88	406
<b>STATE TOTALS</b>	1155	5528	6683	4.8	21	295	1340	4.5	22	8205	681	134	815	981

Table 2. Trend of Pheasant Winter Sex-ratio Counts, 1968-74.

Region & County	1968-69		1969-70		1970-71		1971-72		1972-73		1973-74	
	Hens/ Cock	Birds/ 100 hr.	Hens/ Cock	Birds/ 100 hr.	Hens/ Cock	Birds/ 100 hr.	Hens/ Cock	Birds/ 100 hr.	Hens/ Cock	Birds/ 100 hr.	Hens/ Cock	Birds/ 100 hr.
<b>Northern Region</b>												
Box Elder	4.4	2612	4.8	1900	4.0	2653	5.2	3327	3.9	1941	5.6	1553
Cache	4.5	7685	3.2	372	3.6	1900	4.1	772	9.3	912	5.9	443
Davis	4.6	2141	7.7	1733	9.5	3890	9.7	2703	11.1	2420	6.3	912
Morgan	1.3	433	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--
Summit	0.3	262	--	--	--	--	--	--	--	--	--	--
Weber	6.3	2959	6.7	1244	12.1	3140	8.7	2085	9.8	2995	6.1	662
<b>REGIONAL TOTALS</b>	<b>4.6</b>	<b>3454</b>	<b>5.1</b>	<b>1163</b>	<b>5.1</b>	<b>2651</b>	<b>5.6</b>	<b>1727</b>	<b>6.2</b>	<b>1838</b>	<b>5.7</b>	<b>980</b>
<b>Central Region</b>												
Juab	4.1	6017	5.1	1585	3.6	4886	3.2	284	14.9	1725	6.0	117
Salt Lake	5.4	5076	6.0	2362	7.3	3155	6.5	1651	5.0	2107	9.3	768
Sanpete	3.3	1001	3.1	1377	3.5	1590	3.4	1838	5.8	1674	6.2	2044
Tooele	6.1	8120	5.0	2311	4.9	4245	5.8	2698	10.5	4631	--	--
Utah	5.4	2660	4.6	1567	4.6	1762	5.3	1782	5.4	1432	5.2	970
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>5.2</b>	<b>3339</b>	<b>4.7</b>	<b>1899</b>	<b>4.8</b>	<b>2419</b>	<b>5.2</b>	<b>1818</b>	<b>6.6</b>	<b>2215</b>	<b>6.3</b>	<b>1167</b>
<b>Southern Region</b>												
Beaver	5.8	1225	2.3	486	8.8	612	7.7	538	10.4	705	3.7	540
Garfield	1.8	206	3.3	390	21.0	880	0	67	--	--	--	--
Iron	2.5	1150	--	--	--	--	9.8	634	9.8	491	4.5	546
Kane	--	--	--	--	--	--	--	--	--	--	--	--
Millard	4.7	587	5.4	767	3.9	1351	8.0	1341	9.2	1439	3.8	663
Piute	4.0	556	3.1	650	3.7	467	2.2	1733	--	--	--	--
Sevier	5.0	3268	6.0	1527	4.6	2546	6.1	1740	7.7	1505	6.4	1839
Washington	4.4	415	4.0	294	4.5	592	1.5	416	4.8	444	1.9	1232
Wayne	--	--	--	--	--	--	1.7	375	1.8	450	--	--
<b>REGIONAL TOTALS</b>	<b>4.5</b>	<b>836</b>	<b>4.9</b>	<b>820</b>	<b>4.4</b>	<b>1430</b>	<b>5.3</b>	<b>1005</b>	<b>7.7</b>	<b>984</b>	<b>4.1</b>	<b>963</b>
<b>Northeastern Region</b>												
Daggett	--	--	--	--	--	--	--	--	--	--	--	--
Duchesne	1.8	770	2.2	428	2.1	1036	1.7	847	2.3	839	3.1	507
Uintah	3.0	2834	3.0	3087	4.2	2069	3.3	1783	2.0	1795	3.0	1184
<b>REGIONAL TOTALS</b>	<b>2.5</b>	<b>1492</b>	<b>2.7</b>	<b>915</b>	<b>3.0</b>	<b>1414</b>	<b>2.5</b>	<b>1222</b>	<b>2.1</b>	<b>1219</b>	<b>3.0</b>	<b>867</b>
<b>Southeastern Region</b>												
Carbon	3.9	817	1.3	694	2.0	924	1.3	857	1.8	578	3.5	169
Emery	3.3	3593	3.5	1623	3.5	1353	3.6	1235	3.2	1141	1.9	721
Grand	--	--	--	--	--	--	--	--	1.8	243	4.4	270
San Juan	--	--	--	--	--	--	--	--	--	--	1.7	2167
<b>REGIONAL TOTALS</b>	<b>3.4</b>	<b>2760</b>	<b>3.1</b>	<b>1333</b>	<b>2.8</b>	<b>1150</b>	<b>3.3</b>	<b>1197</b>	<b>2.8</b>	<b>855</b>	<b>2.3</b>	<b>406</b>
<b>STATE TOTALS</b>	<b>4.4</b>	<b>2167</b>	<b>4.3</b>	<b>1353</b>	<b>4.4</b>	<b>2044</b>	<b>4.9</b>	<b>1555</b>	<b>5.6</b>	<b>1692</b>	<b>4.8</b>	<b>981</b>

Table 3. Pheasant Summer Inventory Summary, 1974.

Region & County	No. Routes	Total Miles	Distinct Broods		Mixed Observ.	Adults w/o Young		Total Total		Pheas./ Mile	Yng./ Mile	Brood Ad./ Hen w/Yng	% Hens				
			Yng.	Hens		Yng.	Hens	Yng.	Cocks								
<b>Northern Region</b>																	
Box Elder	2	164	23	96	2	6	8	7	32	102	8	142	0.87	0.62	4.17	3.19	78
Cache	2	162	13	57	0	0	1	6	19	57	1	77	0.48	0.35	4.38	3.00	68
Davis	1	72	4	14	0	2	3	0	4	16	3	23	0.32	0.22	3.50	4.00	100
Morgan	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Weber	1	81	11	80	9	26	8	9	29	106	8	143	1.77	1.31	7.27	3.66	69
<b>REGIONAL TOTALS</b>	<b>6</b>	<b>479</b>	<b>51</b>	<b>247</b>	<b>11</b>	<b>34</b>	<b>20</b>	<b>22</b>	<b>84</b>	<b>281</b>	<b>20</b>	<b>385</b>	<b>0.80</b>	<b>0.59</b>	<b>4.84</b>	<b>3.35</b>	<b>74</b>
<b>Central Region</b>																	
Juab	1	26	2	10	0	0	0	0	2	10	0	12	0.46	0.38	5.00	5.00	100
Salt Lake	2	204	10	50	2	16	8	11	23	66	8	97	0.48	0.32	5.00	2.87	52
Sanpete	2	205	38	174	13	84	12	7	58	258	12	328	1.60	1.26	4.59	4.45	88
Tooele	1	60	4	26	3	11	4	4	11	37	4	52	0.87	0.62	6.50	3.36	64
Utah	4	324	45	281	5	27	25	36	86	308	25	419	1.29	0.95	6.24	3.58	58
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>10</b>	<b>819</b>	<b>99</b>	<b>541</b>	<b>23</b>	<b>138</b>	<b>49</b>	<b>58</b>	<b>180</b>	<b>679</b>	<b>49</b>	<b>908</b>	<b>1.11</b>	<b>0.83</b>	<b>5.46</b>	<b>3.77</b>	<b>68</b>
<b>Southern Region</b>																	
Beaver	1	75	4	32	1	3	4	1	6	35	4	45	0.60	0.47	8.00	5.83	83
Garfield	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	3	206	6	57	2	38	5	2	10	95	5	110	0.53	0.46	9.50	9.50	80
Kane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Millard	2	225	20	124	2	4	6	22	44	128	6	178	0.79	0.57	6.20	2.91	50
Piute	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sevier	2	190	22	106	7	27	2	6	35	133	2	170	0.89	0.70	4.82	3.80	83
Washington	2	102	12	53	9	52	5	6	27	105	5	137	1.34	1.03	4.42	3.89	78
Wayne	1	50	1	7	0	0	4	12	13	7	4	24	0.48	0.14	7.00	0.54	8
<b>REGIONAL TOTALS</b>	<b>11</b>	<b>848</b>	<b>65</b>	<b>379</b>	<b>21</b>	<b>124</b>	<b>26</b>	<b>49</b>	<b>135</b>	<b>503</b>	<b>26</b>	<b>664</b>	<b>0.78</b>	<b>0.59</b>	<b>5.83</b>	<b>3.73</b>	<b>64</b>
<b>Northeastern Region</b>																	
Daggett	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Duchesne	3	367	14	76	2	2	22	5	21	78	22	121	0.33	0.21	5.43	3.71	76
Uintah	2	141	24	125	4	27	8	0	28	152	8	188	1.33	1.08	5.21	5.43	100
<b>REGIONAL TOTALS</b>	<b>5</b>	<b>508</b>	<b>38</b>	<b>201</b>	<b>6</b>	<b>29</b>	<b>30</b>	<b>5</b>	<b>49</b>	<b>230</b>	<b>30</b>	<b>309</b>	<b>0.61</b>	<b>0.45</b>	<b>5.29</b>	<b>4.69</b>	<b>90</b>
<b>Southeastern Region</b>																	
Carbon	2	182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emery	2	120	6	40	4	57	17	3	13	97	17	127	1.06	0.81	6.67	7.46	77
Grand	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	1	15	8	49	0	12	6	0	8	61	6	75	5.00	4.07	6.12	7.62	100
<b>REGIONAL TOTALS</b>	<b>5</b>	<b>317</b>	<b>14</b>	<b>89</b>	<b>4</b>	<b>69</b>	<b>23</b>	<b>3</b>	<b>21</b>	<b>158</b>	<b>23</b>	<b>202</b>	<b>0.64</b>	<b>0.50</b>	<b>6.36</b>	<b>7.52</b>	<b>86</b>
<b>STATE TOTALS</b>	<b>37</b>	<b>2971</b>	<b>267</b>	<b>1457</b>	<b>65</b>	<b>394</b>	<b>148</b>	<b>137</b>	<b>469</b>	<b>1851</b>	<b>148</b>	<b>2468</b>	<b>0.83</b>	<b>0.62</b>	<b>5.46</b>	<b>3.95</b>	<b>71</b>

Table 4. Trend of pheasants observed per mile during summer roadside counts, 1962-74.

Region & County	Year													Average 1962-73
	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	
<b>Northern Region</b>														
Box Elder	3.06	1.29	2.00	1.56	1.85	0.91	0.82	0.68	0.57	1.75	1.10	0.38	0.87	
Cache	1.90	1.15	0.71	1.62	2.30	1.50	2.20	1.46	1.90	1.98	1.10	0.36	0.48	
Davis	3.12	1.06	1.26	0.70	2.12	1.39	0.83	4.04	0.70	2.75	1.77	--	0.32	
Morgan	--	--	--	--	--	--	--	--	--	--	--	--	--	
Rich	--	--	--	--	--	--	--	--	--	--	--	--	--	
Summit	--	--	--	--	--	--	0.32	--	--	--	--	--	--	
Weber	2.31	2.11	2.15	1.81	2.48	1.67	2.00	3.18	0.71	1.82	2.44	2.36	1.77	
<b>Regional Totals</b>	<b>2.47</b>	<b>1.31</b>	<b>1.38</b>	<b>1.39</b>	<b>2.13</b>	<b>1.24</b>	<b>1.27</b>	<b>1.89</b>	<b>1.20</b>	<b>2.04</b>	<b>1.45</b>	<b>1.04</b>	<b>0.80</b>	
<b>Central Region</b>														
Juab	4.06	1.61	1.56	1.32	1.28	1.30	1.07	0.46	1.20	0.32	0.64	0.23	0.46	
Salt Lake	2.37	1.94	1.80	1.80	1.98	1.40	3.04	2.60	0.88	1.74	1.29	0.44	0.48	
Sanpete	2.47	1.60	0.88	1.63	2.03	1.00	2.61	2.33	3.34	2.22	3.27	1.78	1.60	
Tooele	1.90	1.82	1.78	2.03	5.96	1.40	3.70	2.82	3.18	1.69	2.52	0.07	0.87	
Utah	3.80	4.87	3.97	2.67	2.37	2.40	2.74	2.49	1.84	2.31	2.02	1.36	1.29	
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>Regional Totals</b>	<b>2.75</b>	<b>3.05</b>	<b>2.11</b>	<b>2.21</b>	<b>2.38</b>	<b>1.77</b>	<b>2.74</b>	<b>2.38</b>	<b>1.97</b>	<b>2.00</b>	<b>2.06</b>	<b>0.98</b>	<b>1.11</b>	
<b>Southern Region</b>														
Beaver	1.15	1.00	1.20	0.41	--	0.83	0.88	0.46	0.96	0.69	0.75	0.60	0.60	
Garfield	--	0.84	0.75	1.10	0.75	0.41	0.79	1.05	0.36	0.03	--	--	--	
Iron	3.38	0.88	0.19	0.43	0.86	0.69	--	0.73	0.87	0.77	0.51	0.56	0.53	
Kane	--	--	--	0.75	--	--	--	--	--	--	--	--	--	
Millard	1.48	2.05	1.70	1.84	1.48	1.19	1.61	1.68	1.01	1.15	1.09	0.57	0.79	
Plute	--	0.16	0.31	0.89	1.02	0.39	--	0.64	0.53	0.35	--	--	--	
Sevler	3.33	1.83	0.70	0.88	1.90	1.67	1.71	1.66	1.99	4.13	2.37	1.03	0.89	
Washington	--	2.77	--	1.39	1.89	1.49	0.99	0.67	0.29	1.32	0.92	1.12	1.34	
Wayne	--	--	--	--	--	--	--	--	--	--	--	--	0.48	
<b>Regional Totals</b>	<b>2.60</b>	<b>1.61</b>	<b>0.86</b>	<b>1.11</b>	<b>1.54</b>	<b>1.08</b>	<b>1.37</b>	<b>1.12</b>	<b>0.92</b>	<b>1.48</b>	<b>1.19</b>	<b>0.79</b>	<b>1.30</b>	
<b>Northeastern Region</b>														
Daggett	--	--	--	--	--	--	--	--	--	--	--	--	--	
Duchesne	0.51	0.42	0.48	0.42	0.37	0.31	0.30	0.36	0.45	0.32	0.27	0.31	0.33	
Uintah	0.26	2.16	1.36	3.10	1.40	0.47	1.14	1.27	0.66	0.82	0.74	0.61	1.33	
<b>Regional Totals</b>	<b>0.49</b>	<b>1.22</b>	<b>0.72</b>	<b>1.21</b>	<b>0.66</b>	<b>0.36</b>	<b>0.46</b>	<b>0.70</b>	<b>0.51</b>	<b>0.51</b>	<b>0.42</b>	<b>0.39</b>	<b>0.61</b>	
<b>Southeastern Region</b>														
Carbon	2.03	0.87	0	0	0.23	0	2.34	0.09	0.20	0.05	0.15	0.01	0	
Emery	--	1.92	1.00	1.19	1.12	1.21	0.32	0.69	0.83	0.55	1.32	0.64	1.06	
Grand	--	--	--	--	--	--	--	--	--	--	1.03	--	--	
San Juan	--	--	--	--	--	--	--	--	--	--	--	--	5.00	
<b>Regional Totals</b>	<b>2.03</b>	<b>1.26</b>	<b>0.69</b>	<b>0.80</b>	<b>0.82</b>	<b>0.84</b>	<b>0.93</b>	<b>0.39</b>	<b>0.57</b>	<b>0.31</b>	<b>0.76</b>	<b>0.34</b>	<b>0.64</b>	
<b>STATE TOTALS</b>	<b>2.24</b>	<b>1.86</b>	<b>1.35</b>	<b>1.40</b>	<b>1.57</b>	<b>1.15</b>	<b>1.58</b>	<b>1.40</b>	<b>1.18</b>	<b>1.40</b>	<b>1.33</b>	<b>0.74</b>	<b>0.83</b>	

Table 5. Trend of young observed per mile during summer roadside pheasant counts, 1962-74.

Region & County	Year													Averages 1962-73
	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	
<b>Northern Region</b>														
Box Elder	2.44	0.93	1.55	1.18	1.34	0.71	0.51	0.40	0.35	1.32	0.76	0.28	0.62	
Cache	1.63	0.88	0.59	1.25	1.94	1.25	1.84	1.05	1.39	1.62	0.81	0.32	0.35	
Davis	2.17	0.86	0.97	0.53	1.59	0.95	0.65	3.11	0.54	2.25	1.28	--	0.22	
Morgan	--	--	--	--	--	--	--	--	--	--	--	--	--	
Rich	--	--	--	--	--	--	--	--	--	--	--	--	--	
Summit	--	--	--	--	--	0.19	--	--	--	--	--	--	--	
Weber	1.91	1.61	1.50	1.52	1.55	1.33	1.60	2.35	0.58	1.35	1.74	1.72	1.31	
<b>Regional Totals</b>	<b>1.67</b>	<b>0.98</b>	<b>1.07</b>	<b>1.08</b>	<b>1.60</b>	<b>0.99</b>	<b>0.97</b>	<b>1.37</b>	<b>0.86</b>	<b>1.62</b>	<b>1.04</b>	<b>0.77</b>	<b>0.59</b>	
<b>Central Region</b>														
Juab	3.19	1.25	1.17	1.02	0.90	1.10	0.90	0.27	0.95	0.18	0.50	0.17	0.38	
Salt Lake	1.93	1.27	1.30	1.26	1.44	1.00	2.14	1.91	0.61	1.31	1.04	0.32	0.32	
Sanpete	2.08	1.25	0.60	1.12	1.74	0.80	2.10	1.90	2.54	1.74	2.64	1.43	1.26	
Tooele	1.67	1.53	1.43	1.72	5.06	1.20	3.15	2.49	2.74	1.41	2.09	0.00	0.62	
Utah	3.06	3.87	3.13	2.18	1.96	1.80	2.11	1.88	1.30	1.68	1.35	1.02	0.95	
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>Regional Totals</b>	<b>2.27</b>	<b>2.38</b>	<b>1.59</b>	<b>1.73</b>	<b>1.91</b>	<b>1.40</b>	<b>2.10</b>	<b>1.84</b>	<b>1.46</b>	<b>1.50</b>	<b>1.53</b>	<b>0.73</b>	<b>0.83</b>	
<b>Southern Region</b>														
Beaver	1.08	0.40	0.76	0.21	--	0.55	0.80	0.26	0.64	0.48	0.57	0.39	0.47	
Garfield	--	0.57	0.47	0.86	0.57	0.30	0.63	0.74	0.19	0	--	--	--	
Iron	2.75	0.67	0.09	0.33	0.65	0.48	--	0.53	0.55	0.62	0.39	0.51	0.46	
Kane	--	--	--	0.00	--	--	--	--	--	--	--	--	--	
Millard	1.29	1.64	1.30	1.51	1.19	0.86	1.39	1.32	0.84	0.90	0.87	0.48	0.57	
Piute	--	0.13	0.24	0.68	0.81	0.28	--	0.53	0.31	0.25	--	--	--	
Sevier	2.87	1.39	0.40	0.57	1.50	1.38	1.49	1.26	1.58	3.21	1.93	0.85	0.70	
Washington	--	2.07	--	0.86	1.27	1.03	0.71	0.46	0.17	0.95	0.65	0.72	1.03	
Wayne	--	--	--	--	--	--	--	--	--	--	--	--	0.14	
<b>Regional Totals</b>	<b>2.13</b>	<b>1.21</b>	<b>0.61</b>	<b>0.85</b>	<b>1.19</b>	<b>0.81</b>	<b>1.15</b>	<b>0.85</b>	<b>0.69</b>	<b>1.14</b>	<b>0.95</b>	<b>0.61</b>	<b>0.59</b>	
<b>Northeastern Region</b>														
Daggett	--	--	--	--	--	--	--	--	--	--	--	--	--	
Duchesne	0.35	0.30	0.36	0.32	0.27	0.19	0.20	0.25	0.27	0.21	0.15	0.18	0.21	
Uintah	0.16	1.70	0.98	2.50	1.10	0.33	0.86	0.86	0.40	0.55	0.55	0.47	1.08	
<b>Regional Totals</b>	<b>0.32</b>	<b>0.94</b>	<b>0.53</b>	<b>0.96</b>	<b>0.50</b>	<b>0.23</b>	<b>0.32</b>	<b>0.47</b>	<b>0.31</b>	<b>0.34</b>	<b>0.28</b>	<b>0.26</b>	<b>0.45</b>	
<b>Southeastern Region</b>														
Carbon	1.69	0.70	0	0	0.20	0	1.82	0.03	0.17	0.03	0.10	--	0	
Emery	--	1.52	0.70	0.94	0.77	0.89	0.18	0.58	0.56	0.30	0.96	0.47	0.81	
Grand	--	--	--	--	--	--	--	--	--	--	0.67	--	--	
San Juan	--	--	--	--	--	--	--	--	--	--	--	--	4.07	
<b>Regional Totals</b>	<b>1.69</b>	<b>1.01</b>	<b>0.48</b>	<b>0.60</b>	<b>0.58</b>	<b>0.61</b>	<b>0.67</b>	<b>0.31</b>	<b>0.39</b>	<b>0.17</b>	<b>0.54</b>	<b>0.25</b>	<b>0.50</b>	
<b>STATE TOTALS</b>	<b>1.82</b>	<b>1.43</b>	<b>1.01</b>	<b>1.09</b>	<b>1.20</b>	<b>0.88</b>	<b>1.23</b>	<b>1.06</b>	<b>0.86</b>	<b>1.06</b>	<b>0.99</b>	<b>0.55</b>	<b>0.62</b>	



Table 6. Trend of young per adult hen ratios found during summer roadside pheasant counts, 1962-74

Region & County	Year												Averages 1962-73
	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	
<b>Northern Region</b>													
Box Elder	5.26	3.49	4.86	3.38	3.15	4.02	2.07	2.00	2.19	4.02	3.26	3.23	3.19
Cache	8.54	4.30	5.91	4.20	6.59	6.29	5.65	3.38	3.65	6.64	3.88	10.00	3.00
Davis	4.55	3.33	4.50	3.86	3.71	2.75	4.82	4.00	4.00	5.45	3.42	--	4.00
Morgan	--	--	--	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	1.75	--	--	--	--	--	--
Summit	--	--	--	--	--	4.47	4.74	3.70	4.22	3.40	3.49	3.72	3.66
Weber	5.52	3.33	3.17	7.38	2.23	4.47	4.74	3.70	4.22	3.40	3.49	3.72	3.66
<b>Regional Totals</b>	<b>5.85</b>	<b>3.70</b>	<b>4.55</b>	<b>4.10</b>	<b>2.97</b>	<b>4.58</b>	<b>3.89</b>	<b>3.27</b>	<b>3.32</b>	<b>5.02</b>	<b>3.50</b>	<b>3.82</b>	<b>3.35</b>
<b>Central Region</b>													
Juab	5.48	4.58	4.20	3.41	3.27	6.30	5.40	3.25	4.22	2.33	4.50	4.00	5.00
Salt Lake	4.95	3.33	3.48	2.86	3.36	3.40	3.02	3.63	2.96	4.08	4.74	3.24	2.87
Sanpete	7.44	4.93	3.26	3.04	7.40	5.60	4.71	5.48	4.02	4.73	5.52	5.33	4.45
Tooele	8.33	7.25	4.53	7.15	6.54	8.40	7.08	7.89	6.78	5.95	5.95	0.00	3.36
Utah	4.98	4.75	5.03	5.66	4.51	3.80	3.94	3.85	3.69	3.28	2.71	3.33	3.58
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Regional Totals</b>	<b>5.30</b>	<b>4.65</b>	<b>4.38</b>	<b>4.54</b>	<b>5.06</b>	<b>4.20</b>	<b>3.92</b>	<b>4.30</b>	<b>3.94</b>	<b>3.86</b>	<b>3.78</b>	<b>3.46</b>	<b>4.28</b>
<b>Southern Region</b>													
Beaver	16.20	1.35	2.40	1.60	--	2.05	10.67	1.86	5.33	3.27	5.38	2.78	5.83
Garfield	--	2.87	3.60	4.10	4.80	3.83	4.00	3.50	2.00	--	--	--	--
Iron	4.73	5.48	3.80	5.30	6.40	2.93	--	3.21	2.53	4.43	4.54	13.67	9.50
Kane	--	--	--	0	--	--	--	--	--	--	--	--	--
Millard	9.07	5.14	5.20	5.00	5.70	4.91	6.10	4.58	5.89	4.62	5.65	5.75	2.91
Piute	--	3.67	3.00	3.57	4.90	2.50	--	5.33	1.75	5.00	--	--	--
Sevier	6.90	4.16	2.00	4.50	4.80	5.89	6.72	3.74	4.30	4.34	4.94	5.18	3.80
Washington	--	3.89	--	2.32	3.00	3.33	3.42	2.88	1.50	3.45	3.50	2.62	3.89
Wayne	--	--	--	--	--	--	--	--	--	--	--	--	0.54
<b>Regional Totals</b>	<b>6.37</b>	<b>4.09</b>	<b>3.67</b>	<b>4.19</b>	<b>4.68</b>	<b>3.98</b>	<b>5.75</b>	<b>3.84</b>	<b>3.92</b>	<b>4.19</b>	<b>4.98</b>	<b>4.41</b>	<b>4.50</b>
<b>Northeastern Region</b>													
Daggett	--	--	--	--	--	--	--	--	--	--	--	--	--
Duchesne	4.36	6.00	4.60	5.60	4.70	3.21	5.92	5.00	2.51	3.50	3.00	4.06	3.71
Uintah	1.57	5.72	3.90	6.40	5.70	4.27	4.24	3.37	2.62	3.08	4.84	5.64	5.43
<b>Regional Totals</b>	<b>3.62</b>	<b>5.77</b>	<b>4.20</b>	<b>6.00</b>	<b>5.20</b>	<b>3.60</b>	<b>4.93</b>	<b>3.77</b>	<b>2.56</b>	<b>3.23</b>	<b>3.92</b>	<b>4.70</b>	<b>4.69</b>
<b>Southeastern Region</b>													
Carbon	5.00	6.08	0	0	8.00	0	4.52	1.40	5.00	5.00	4.33	--	--
Emery	5.68	3.76	3.53	4.30	5.30	5.17	2.46	6.78	3.55	2.25	3.34	4.70	7.46
Grand	--	--	--	--	--	--	--	--	--	--	2.22	--	--
San Juan	--	--	--	--	--	--	--	--	--	--	--	--	7.62
<b>Regional Totals</b>	<b>5.62</b>	<b>4.51</b>	<b>3.53</b>	<b>4.30</b>	<b>5.50</b>	<b>5.17</b>	<b>3.91</b>	<b>5.61</b>	<b>3.74</b>	<b>2.36</b>	<b>3.20</b>	<b>4.70</b>	<b>7.52</b>
<b>STATE TOTALS</b>	<b>5.35</b>	<b>4.31</b>	<b>4.22</b>	<b>4.62</b>	<b>4.40</b>	<b>4.20</b>	<b>4.25</b>	<b>3.94</b>	<b>3.68</b>	<b>4.09</b>	<b>3.93</b>	<b>3.95</b>	<b>3.95</b>

Table 7. Trend of the percent of hens observed with broods during summer roadside pheasant counts, 1963-74.

Region & County	Year													Averages 1963-73
	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974		
<b>Northern Region</b>														
Box Elder	85	90	75	86	88	57	58	59	75	69	62	78		
Cache	83	81	74	82	86	65	62	66	86	78	50	68		
Davis	62	80	65	76	62	91	56	82	87	85	--	100		
Morgan	--	--	--	--	--	--	--	--	--	--	--	--		
Rich	--	--	--	--	--	--	--	--	--	--	--	--		
Summit	--	--	--	--	--	38	--	--	--	--	--	--		
Weber	91	74	100	61	100	87	80	100	77	54	82	69		
<b>Regional Totals</b>	<b>82</b>	<b>81</b>	<b>75</b>	<b>78</b>	<b>86</b>	<b>66</b>	<b>66</b>	<b>68</b>	<b>82</b>	<b>70</b>	<b>77</b>	<b>74</b>		
<b>Central Region</b>														
Juab	83	100	75	100	100	100	75	100	67	100	100	100		
Salt Lake	74	76	80	53	71	69	76	62	66	78	71	52		
Sanpete	83	81	67	100	81	97	91	78	95	91	93	88		
Tooele	100	94	100	89	100	88	100	100	84	74	0	64		
Utah	82	78	79	78	66	72	74	60	69	57	62	58		
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--		
<b>Regional Totals</b>	<b>82</b>	<b>79</b>	<b>79</b>	<b>77</b>	<b>71</b>	<b>76</b>	<b>79</b>	<b>71</b>	<b>74</b>	<b>69</b>	<b>66</b>	<b>68</b>		
<b>Southern Region</b>														
Beaver	42	50	60	--	75	100	72	100	82	88	64	83		
Garfield	81	100	85	100	100	100	83	50	--	--	--	--		
Iron	80	75	90	71	76	--	75	59	62	54	100	80		
Kane	--	--	0	--	--	--	--	--	--	--	--	--		
Millard	82	79	88	96	74	100	77	94	81	88	100	50		
Piute	67	100	57	85	50	--	100	50	100	--	--	--		
Sevier	56	40	35	98	100	100	96	88	85	90	85	83		
Washington	74	--	39	65	67	92	42	67	74	62	66	78		
Wayne	--	--	--	--	--	--	--	--	--	--	--	8		
<b>Regional Totals</b>	<b>--</b>	<b>75</b>	<b>73</b>	<b>84</b>	<b>78</b>	<b>98</b>	<b>79</b>	<b>77</b>	<b>80</b>	<b>83</b>	<b>79</b>	<b>64</b>		
<b>Northeastern Region</b>														
Daggett	--	--	--	--	--	--	--	--	--	--	--	--		
Duchesne	100	92	95	95	53	92	81	44	68	68	81	76		
Uintah	92	70	100	84	91	65	59	42	55	84	91	100		
<b>Regional Totals</b>	<b>88</b>	<b>80</b>	<b>98</b>	<b>90</b>	<b>67</b>	<b>76</b>	<b>65</b>	<b>43</b>	<b>60</b>	<b>76</b>	<b>85</b>	<b>90</b>		
<b>Southeastern Region</b>														
Carbon	75	0	0	100	0	74	20	75	100	67	--	--		
Emery	72	74	55	92	86	77	94	70	42	66	76	77		
Grand	--	--	--	--	--	--	--	--	--	56	--	--		
San Juan	--	--	--	--	--	--	--	--	--	--	--	100		
<b>Regional Totals</b>	<b>70</b>	<b>74</b>	<b>55</b>	<b>96</b>	<b>86</b>	<b>75</b>	<b>78</b>	<b>71</b>	<b>44</b>	<b>64</b>	<b>76</b>	<b>86</b>		
<b>STATE TOTALS</b>	<b>78</b>	<b>72</b>	<b>82</b>	<b>85</b>	<b>76</b>	<b>78</b>	<b>74</b>	<b>69</b>	<b>75</b>	<b>72</b>	<b>74</b>	<b>71</b>		

Table 8. Trend of average brood size for pheasants, 1962-1974.

Region & County	Year													Averages 1962-73
	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	
<b>Northern Region</b>														
Box Elder	5.58	4.11	5.42	4.70	3.75	4.93	3.80	3.53	3.68	4.96	4.81	4.75	4.17	
Cache	6.04	4.93	7.55	5.50	6.17	5.86	6.88	5.63	7.12	8.34	5.47	5.00	4.38	
Davis	4.00	4.10	4.44	5.67	4.78	5.17	5.14	6.67	5.14	6.52	4.50	--	3.50	
Morgan	--	--	--	--	--	--	--	--	--	--	--	--	--	
Rich	--	--	--	--	--	--	--	--	--	--	--	--	--	
Summit	--	--	--	--	--	--	4.67	--	--	--	--	--	--	
Weber	5.52	4.79	4.44	6.00	3.73	3.00	5.69	5.33	3.43	4.80	6.07	6.55	7.27	
<b>Regional Totals</b>	<b>5.31</b>	<b>4.56</b>	<b>5.49</b>	<b>5.29</b>	<b>4.54</b>	<b>5.13</b>	<b>5.25</b>	<b>5.56</b>	<b>5.28</b>	<b>6.33</b>	<b>5.13</b>	<b>6.00</b>	<b>4.84</b>	
<b>Central Region</b>														
Juab	5.32	5.50	4.20	4.50	3.78	6.30	5.40	4.33	4.22	7.00	4.50	--	5.00	
Salt Lake	5.64	4.08	4.22	3.43	5.25	4.67	5.28	5.35	4.95	5.76	6.93	4.58	5.00	
Sanpete	5.88	5.88	2.64	4.57	6.39	5.18	4.68	5.13	5.52	4.94	6.11	5.92	4.59	
Tooele	8.33	7.25	4.81	7.15	--	8.38	8.10	7.89	6.78	6.81	8.07	--	6.50	
Utah	5.95	5.79	6.44	6.20	5.76	5.94	5.07	5.08	5.13	5.89	5.31	5.78	6.24	
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>Regional Totals</b>	<b>5.93</b>	<b>5.63</b>	<b>5.26</b>	<b>5.26</b>	<b>5.69</b>	<b>5.83</b>	<b>5.28</b>	<b>5.37</b>	<b>5.41</b>	<b>5.70</b>	<b>5.92</b>	<b>5.60</b>	<b>5.46</b>	
<b>Southern Region</b>														
Beaver	6.00	3.50	3.17	2.67	--	4.75	10.67	--	--	5.75	6.17	4.33	8.00	
Garfield	--	3.67	3.60	4.82	4.78	4.25	4.00	4.25	3.00	--	--	--	--	
Iron	5.50	4.61	5.00	5.89	6.40	5.62	--	11.00	4.50	7.17	5.67	6.00	9.50	
Kane	--	5.20	--	--	--	--	--	--	--	--	--	--	--	
Millard	6.38	6.14	5.40	5.70	5.09	6.88	--	5.74	6.24	4.44	5.31	5.50	6.20	
Piute	--	--	3.00	6.25	5.67	5.00	--	5.00	3.50	5.00	--	--	--	
Sevier	5.95	5.84	5.00	5.48	5.88	5.35	--	4.22	5.00	5.24	5.67	6.14	4.82	
Washington	--	5.06	--	5.91	4.90	5.72	4.31	8.00	--	5.25	6.33	4.33	4.42	
Wayne	--	--	--	--	--	--	--	--	--	--	--	--	7.00	
<b>Regional Totals</b>	<b>5.84</b>	<b>5.27</b>	<b>4.89</b>	<b>5.48</b>	<b>5.45</b>	<b>5.78</b>	<b>5.37</b>	<b>5.42</b>	<b>5.30</b>	<b>5.13</b>	<b>5.60</b>	<b>5.38</b>	<b>5.83</b>	
<b>Northeastern Region</b>														
Daggett	--	--	--	--	--	--	--	--	--	--	--	--	--	
Duchesne	6.00	6.00	4.79	5.94	4.95	6.10	6.45	6.45	4.82	6.50	4.45	5.64	5.43	
Uintah	2.20	6.22	5.62	6.79	6.73	4.70	6.54	6.65	6.14	6.05	5.75	6.28	5.21	
<b>Regional Totals</b>	<b>4.88</b>	<b>6.03</b>	<b>5.18</b>	<b>6.51</b>	<b>5.90</b>	<b>5.40</b>	<b>6.50</b>	<b>6.59</b>	<b>5.33</b>	<b>6.21</b>	<b>5.13</b>	<b>5.89</b>	<b>5.29</b>	
<b>Southeastern Region</b>														
Carbon	5.00	8.11	--	5.40	6.25	--	7.50	1.00	4.00	5.00	6.50	--	--	
Emery	5.69	5.22	4.79	5.15	6.71	6.67	4.00	8.42	5.64	6.00	5.08	6.22	6.67	
Grand	--	--	--	--	--	--	--	--	--	--	4.00	--	--	
San Juan	--	--	--	--	--	--	--	--	--	--	--	--	6.12	
<b>Regional Totals</b>	<b>5.62</b>	<b>5.42</b>	<b>4.79</b>	<b>5.18</b>	<b>6.68</b>	<b>6.67</b>	<b>6.45</b>	<b>7.85</b>	<b>5.29</b>	<b>5.89</b>	<b>5.00</b>	<b>6.22</b>	<b>6.36</b>	
<b>STATE TOTALS</b>	<b>5.72</b>	<b>5.30</b>	<b>5.20</b>	<b>5.62</b>	<b>5.42</b>	<b>5.70</b>	<b>5.40</b>	<b>5.59</b>	<b>5.36</b>	<b>5.73</b>	<b>5.62</b>	<b>5.65</b>	<b>5.46</b>	

Table 9. Summary of pheasant hunter success and distribution of harvest and hunting pressure by region and county, 1974.

Region and County	Hunters Reporting	Days Hunted	Birds Bagged	Birds per Hunter-day	Birds per Hunter*	% of Pressure	% of Harvest
<u>Northern</u>							
Box Elder	547	1,479	1,026	0.69	2.42	9.95	11.64
Cache	456	1,474	1,036	0.70	2.59	9.92	11.76
Davis	495	1,537	729	0.47	2.08	10.34	8.27
Morgan	20	69	21	0.30	2.04	0.46	0.24
Rich	2	4	4	1.00	0.00	0.03	0.05
Summit	6	13	9	0.69	2.18	0.09	0.10
Weber	546	1,730	904	0.52	2.08	11.64	10.26
REGIONAL TOTALS	2,072	6,306	3,729	0.59	2.23	42.43	42.31
<u>Central</u>							
Juab	85	220	85	0.39	1.75	1.48	0.96
Salt Lake	603	1,643	716	0.44	1.55	11.06	8.12
Sanpete	245	653	578	0.89	3.55	4.39	6.56
Tooele	141	407	152	0.37	1.47	2.74	1.72
Utah	937	2,061	1,258	0.61	1.72	13.87	14.27
Wasatch	1	1	0	0.00	2.27	0.01	0.00
REGIONAL TOTALS	2,012	4,985	2,789	0.56	1.70	33.54	31.65
<u>Southern</u>							
Beaver	25	96	56	0.58	2.36	0.65	0.64
Garfield	4	9	4	0.44	2.62	0.06	0.05
Iron	57	123	68	0.55	1.85	0.83	0.77
Kane	0	0	0	0.00	1.67	0.00	0.00
Millard	265	727	469	0.65	2.31	4.89	5.32
Piute	8	17	15	0.88	1.45	0.11	0.17
Sevier	223	676	475	0.70	2.56	4.55	5.39
Washington	65	206	78	0.38	1.82	1.39	0.89
Wayne	7	11	12	1.09	1.88	0.07	0.14
REGIONAL TOTALS	654	1,865	1,177	0.63	2.22	12.55	13.36
<u>Northeastern</u>							
Daggett	2	4	2	0.50	1.00	0.03	0.02
Duchesne	160	420	350	0.83	2.25	2.83	3.97
Uintah	166	532	374	0.70	2.75	3.58	4.24
REGIONAL TOTALS	328	956	726	0.76	2.55	6.43	8.24
<u>Southeastern</u>							
Carbon	58	127	32	0.25	1.53	0.85	0.36
Emery	104	357	164	0.46	2.32	2.40	1.86
Grand	3	5	0	0.00	2.40	0.03	0.00
San Juan	6	16	15	0.94	3.20	0.11	0.17
REGIONAL TOTALS	171	505	211	0.42	1.84	3.40	2.39
Unknown counties	81	223	140	0.63	7.00	1.50	1.59
Mixed counties	5	21	41	1.95	1.00	0.14	0.47
STATE TOTALS	5,323	14,861	8,831	0.59	1.96	100	100

\*Based on county of residence.

Table 10. Summary of pheasants bagged per hunter-day by region and county, 1970-74

Region and County	1970	1971	1972	1973	1974
<u>Northern</u>					
Box Elder	1.25	1.18	0.85	0.85	0.69
Cache	1.29	1.09	0.85	0.87	0.70
Davis	0.69	0.67	0.54	0.50	0.47
Morgan	0.95	1.02	0.54	0.63	0.30
Rich	1.00	1.00	0.38	0.00	1.00
Summit	0.50	0.00	1.00	0.33	0.69
Weber	0.79	0.72	0.69	0.63	0.52
REGIONAL TOTALS	1.02	0.92	0.75	0.72	0.59
<u>Central</u>					
Juab	1.09	0.93	0.52	0.43	0.39
Salt Lake	0.76	0.59	0.55	0.61	0.44
Sanpete	1.32	1.14	0.91	0.81	0.89
Tooele	0.95	0.69	0.46	0.48	0.37
Utah	1.11	0.86	0.75	0.67	0.61
Wasatch	0.00	0.41	0.25	0.00	0.00
REGIONAL TOTALS	1.01	0.80	0.68	0.65	0.56
<u>Southern</u>					
Beaver	0.91	1.00	0.70	0.53	0.58
Garfield	1.00	0.95	0.50	0.88	0.44
Iron	0.69	0.75	0.63	0.45	0.55
Kane	--	3.00	--	--	--
Millard	1.18	0.99	0.81	0.86	0.65
Piute	0.79	0.93	0.39	0.77	0.88
Sevier	1.28	1.02	0.84	0.73	0.70
Washington	0.47	0.54	0.49	0.36	0.38
Wayne	1.17	0.88	0.00	1.57	1.09
REGIONAL TOTALS	1.04	0.90	0.74	0.70	0.63
<u>Northeastern</u>					
Daggett	0.50	0.47	1.00	0.50	0.50
Duchesne	1.22	1.19	1.09	1.15	0.83
Uintah	1.13	1.10	0.82	0.92	0.70
REGIONAL TOTALS	1.16	1.13	0.93	1.03	0.76
<u>Southeastern</u>					
Carbon	0.70	0.58	0.45	0.52	0.25
Emery	1.07	0.92	0.92	0.60	0.46
Grand	0.50	0.75	0.20	0.30	0.00
San Juan	2.00	0.75	--	1.08	0.94
REGIONAL TOTALS	0.94	0.76	0.73	0.57	0.42
Unknown counties	0.58	0.67	0.75	0.75	0.63
Mixed counties	4.00	--	0.00	0.75	1.95
STATE TOTALS	1.02	0.88	0.73	0.70	0.59

Table 11. Distribution of pheasant harvest by region and county, 1970-74.

Region and county	1970	1971	1972	1973	1974
<u>Northern</u>					
Box Elder	14.94	15.36	16.87	12.86	11.64
Cache	13.44	11.47	12.07	11.31	11.76
Davis	6.95	6.60	6.81	5.70	8.27
Morgan	0.34	0.36	0.37	0.38	0.24
Rich	0.01	0.01	0.03	0.00	0.05
Summit	0.01	0.00	0.02	0.04	0.10
Weber	7.54	9.15	9.21	8.31	10.26
REGIONAL TOTALS	43.24	42.95	45.39	38.60	42.31
<u>Central</u>					
Juab	1.65	1.50	1.31	0.87	0.96
Salt Lake	7.58	6.43	6.33	7.80	8.12
Sanpete	4.70	5.18	4.90	6.88	6.56
Tooele	1.42	2.52	1.46	1.87	1.72
Utah	15.84	15.41	14.51	15.84	14.27
Wasatch	0.00	0.10	0.01	0.00	0.00
REGIONAL TOTALS	31.19	31.13	28.52	33.26	31.65
<u>Southern</u>					
Beaver	0.48	0.75	0.79	0.82	0.64
Garfield	0.04	0.16	0.07	0.07	0.05
Iron	1.38	1.26	1.41	1.06	0.77
Kane	0.00	0.05	--	--	--
Millard	5.62	4.37	5.05	6.01	5.32
Piute	0.09	0.12	0.08	0.35	0.17
Sevier	4.26	4.33	4.25	4.06	5.39
Washington	0.52	1.06	0.93	0.74	0.89
Wayne	0.06	0.06	0.00	0.32	0.14
REGIONAL TOTALS	12.45	12.15	12.59	13.42	13.36
<u>Northeastern</u>					
Daggett	0.03	0.06	0.01	0.02	0.02
Duchesne	3.56	4.22	3.30	4.45	3.97
Uintah	4.62	4.09	3.95	4.24	4.24
REGIONAL TOTALS	8.22	8.37	7.27	8.71	8.24
<u>Southeastern</u>					
Carbon	1.10	1.30	1.05	1.51	0.36
Emery	3.21	2.52	3.62	2.32	1.86
Grand	0.02	0.10	0.04	0.03	0.00
San Juan	0.03	0.02	--	0.13	0.17
REGIONAL TOTALS	4.36	3.94	4.71	3.99	2.39
Unknown counties	0.44	1.45	1.52	1.99	1.59
Mixed counties	0.10	--	0.00	0.03	0.47
STATE TOTALS	100	100	100	100	100

Table 12. Distribution of pheasant hunting pressure by county hunted, 1969-74.

Region and County	1969	1970	1971	1972	1973	1974
<u>Northern</u>						
Box Elder	12.31	12.23	11.47	14.61	10.71	9.95
Cache	9.85	10.64	9.23	10.42	9.21	9.92
Davis	11.29	10.35	8.73	9.28	8.05	10.34
Morgan	0.53	0.37	0.31	0.50	0.42	0.46
Rich	0.04	0.01	0.01	0.06	0.01	0.03
Summit	0.10	0.02	0.01	0.01	0.08	0.09
Weber	11.87	9.79	11.23	9.76	9.24	11.64
<b>REGIONAL TOTALS</b>	<b>45.99</b>	<b>43.41</b>	<b>40.99</b>	<b>44.64</b>	<b>37.72</b>	<b>42.43</b>
<u>Central</u>						
Juab	1.55	1.54	1.42	1.84	1.44	1.48
Salt Lake	10.26	10.27	9.64	8.46	8.99	11.06
Sanpete	3.24	3.63	3.99	3.95	6.00	4.39
Tooele	1.97	1.53	3.19	2.31	2.72	2.74
Utah	14.01	14.62	15.78	14.27	16.68	13.87
Wasatch	0.04	0.01	0.21	0.03	0.03	0.01
<b>REGIONAL TOTALS</b>	<b>31.07</b>	<b>31.60</b>	<b>34.23</b>	<b>30.86</b>	<b>35.85</b>	<b>33.54</b>
<u>Southern</u>						
Beaver	0.64	0.55	0.66	0.83	1.10	0.65
Garfield	0.11	0.04	0.15	0.10	0.05	0.06
Iron	1.42	2.03	1.49	1.66	1.66	0.83
Kane	--	0.00	0.01	--	--	--
Millard	4.17	4.86	3.89	4.60	4.95	4.89
Piute	0.20	0.12	0.11	0.16	0.32	0.11
Sevier	3.90	3.40	3.74	3.70	3.93	4.55
Washington	1.14	1.15	1.72	1.39	1.44	1.39
Wayne	0.04	0.05	0.06	0.07	0.14	0.07
<b>REGIONAL TOTALS</b>	<b>11.62</b>	<b>12.20</b>	<b>11.83</b>	<b>12.50</b>	<b>13.59</b>	<b>12.55</b>
<u>Northeastern</u>						
Daggett	0.05	0.07	0.11	0.01	0.03	0.03
Duchesne	2.62	2.99	3.13	2.22	2.72	2.83
Uintah	3.85	4.19	3.26	3.52	3.23	3.58
<b>REGIONAL TOTALS</b>	<b>6.52</b>	<b>7.25</b>	<b>6.50</b>	<b>5.76</b>	<b>5.98</b>	<b>6.43</b>
<u>Southeastern</u>						
Carbon	1.85	1.61	1.98	1.71	2.05	0.85
Emery	2.73	3.05	2.41	2.88	2.73	2.40
Grand	0.13	0.05	0.12	0.14	0.07	0.03
San Juan	0.09	0.02	0.03	--	0.08	0.11
<b>REGIONAL TOTALS</b>	<b>4.80</b>	<b>4.73</b>	<b>4.54</b>	<b>4.73</b>	<b>4.93</b>	<b>3.40</b>
Unknown counties	--	0.78	1.92	1.49	1.88	1.50
Mixed counties	--	0.03	--	0.03	0.03	0.14
<b>STATE TOTALS</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 13. State-wide summary of pheasant harvest statistics, 1948-1973.

Year	Total hunters	Total harvest	Hunter-days afield	Pheasants per hunter	Pheasants per hunter-day
1948	96,534	280,914	--	2.91	--
1949	88,369	263,340	189,453	2.98	1.39
1950	92,724	249,428	235,309	2.69	1.06
1951	76,576	246,575	171,233	3.22	1.44
1952	78,773	246,559	185,383	3.13	1.33
1953	82,595	245,307	176,480	2.97	1.39
1954	82,370	260,289	201,774	3.16	1.29
1955	78,793	196,195	178,359	2.49	1.10
1956	77,826	206,239	182,512	2.65	1.13
1957	83,025	228,319	170,387	2.75	1.34
1958	88,290	309,015	220,725	3.50	1.40
1959	86,268	243,276	202,730	2.82	1.21
1960	81,976	232,812	177,719	2.84	1.31
1961	83,493	238,439	243,305	2.86	0.98
1962	86,336	262,448	209,921	3.04	1.25
1963	87,647	297,873	198,582	3.40	1.50
1964	88,242	225,775	196,314	2.56	1.15
1965	77,409	211,876	186,215	2.74	1.14
1966	78,721	249,814	209,082	3.17	1.19
1967	85,664	284,000	257,033	3.32	1.10
1968	90,453	297,752	267,788	3.29	1.11
1969	90,573	250,241	277,887	2.76	0.90
1970	78,585	250,503	244,958	3.19	1.02
1971	87,878	259,189	294,618	2.95	0.88
1972	84,311	240,573	327,669	2.85	0.73
1973	75,968	196,012	278,033	2.58	0.70
1974	85,252	167,408	282,294	1.96	0.59
<hr/>					
TOTALS					
(1948-74)	2,274,651	6,640,171	5,765,763	2.92	1.15
<hr/>					
AVERAGES					
(1948-74)	84,208	248,952	210,903	2.99	1.16



Table 14. Pheasant field bag check summary, 1974.

Region and County	ALL HUNTS				COMPLETE HUNTS			
	Total Parties	Total Hunters	Total Hours	Total Birds/100 hrs.	Total Complete Hunts	Total Hunters	Total Hours	Total Birds/100 hrs. Hunter
<u>Northern</u>								
Box Elder	295	642	1,826	238	13	190	1,198	167
Cache	98	275	730	120	16	29	206	45
Davis	41	110	355	38	11	18	201	27
Morgan	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--
Weber	103	235	458	63	14	36	167	45
<b>REGIONAL TOTALS</b>	<b>537</b>	<b>1,262</b>	<b>3,369</b>	<b>459</b>	<b>14</b>	<b>272</b>	<b>1,772</b>	<b>284</b>
<u>Central</u>								
Juab	16	36	63	3	5	6	22	1
Salt Lake	100	232	488	45	9	29	134	19
Sanpete	92	294	759	100	13	24	186	9
Tooele	119	266	698	70	10	2	19	10
Utah	240	708	2,017	336	17	25	254	61
Wasatch	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>567</b>	<b>1,536</b>	<b>4,025</b>	<b>554</b>	<b>14</b>	<b>86</b>	<b>615</b>	<b>100</b>
<u>Southern</u>								
Beaver	--	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	--	--
Iron	43	115	249	46	18	13	97	14
Kane	--	--	--	--	--	--	--	--
Millard	147	398	1,115	155	14	14	193	31
Piute	1	2	10	2	20	1	10	2
Sevier	130	382	1,272	207	16	6	125	6
Washington	--	--	--	--	--	--	--	--
Wayne	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>321</b>	<b>897</b>	<b>2,646</b>	<b>410</b>	<b>15</b>	<b>34</b>	<b>425</b>	<b>53</b>
<u>Northeastern</u>								
Daggett	--	--	--	--	--	--	--	--
Duchesne	228	629	3,061	275	9	141	2,235	192
Uintah	147	3.8	1,833	180	10	141	1,911	175
<b>REGIONAL TOTALS</b>	<b>375</b>	<b>947</b>	<b>4,894</b>	<b>455</b>	<b>9</b>	<b>282</b>	<b>4,146</b>	<b>367</b>
<u>Southeastern</u>								
Carbon	24	74	278	8	3	7	100	8
Emery	189	534	1,560	185	12	65	567	74
Grand	--	--	--	--	--	--	--	--
San Juan	36	90	242	36	15	22	131	29
<b>REGIONAL TOTALS</b>	<b>249</b>	<b>698</b>	<b>2,080</b>	<b>229</b>	<b>11</b>	<b>94</b>	<b>798</b>	<b>111</b>
<b>STATE TOTALS</b>	<b>2,049</b>	<b>5,340</b>	<b>17,014</b>	<b>2,107</b>	<b>12</b>	<b>768</b>	<b>7,756</b>	<b>915</b>

Table 15. Pheasant hunter success trend as determined by field bag check, 1969-73.

Region and County	1969		1970		1971		1972		1973		1974	
	Birds/100 hr.	Birds/Day	Birds/100 hr.	Birds/Day	Birds/100 hr.	Birds/Day	Birds/100 hr.	Birds/Day	Birds/100 hr.	Birds/Day	Birds/100 hr.	Birds/Day
<u>Northern</u>												
Box Elder	9	0.41	24	1.00	10	0.30	18	1.18	13	0.51	13	0.43
Cache	19	0.51	35	1.10	21	0.63	19	0.70	16	0.69	16	0.61
Davis	25	0.58	27	0.98	16	--	16	1.12	13	0.52	11	0.55
Morgan	--	--	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--	--	--
Weber	12	0.50	10	0.52	13	0.35	18	0.65	13	0.37	14	0.54
<b>REGIONAL TOTALS</b>	<b>16</b>	<b>0.50</b>	<b>24</b>	<b>0.99</b>	<b>16</b>	<b>0.52</b>	<b>18</b>	<b>0.59</b>	<b>14</b>	<b>0.53</b>	<b>14</b>	<b>0.47</b>
<u>Central</u>												
Juab	--	--	50	--	13	2.00	--	--	6	0.80	5	0.10
Salt Lake	13	0.53	16	0.28	15	0.32	13	0.39	15	0.71	9	0.27
Sanpete	13	0.69	21	0.61	34	0.71	15	0.58	20	1.68	13	0.14
Tooele	30	1.90	20	2.18	19	0.72	10	0.64	17	0.67	10	1.67
Utah	17	1.05	26	0.77	27	1.13	15	0.65	13	0.62	17	0.94
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>16</b>	<b>0.98</b>	<b>21</b>	<b>0.61</b>	<b>22</b>	<b>0.77</b>	<b>14</b>	<b>0.51</b>	<b>15</b>	<b>0.77</b>	<b>14</b>	<b>0.46</b>
<u>Southern</u>												
Beaver	65	2.00	19	0.67	39	1.33	22	0.86	11	0.94	--	--
Garfield	--	--	20	0.50	23	0.33	--	--	--	--	--	--
Iron	46	2.22	19	0.77	26	1.32	25	1.07	7	--	18	0.44
Kane	--	--	--	--	--	--	--	--	--	--	--	--
Millard	68	2.00	12	0.98	18	0.79	14	0.87	14	0.79	14	0.79
Piute	--	--	32	1.32	36	3.00	--	--	--	--	20	1.00
Sevier	38	1.11	25	1.36	26	1.10	24	1.30	14	0.80	16	0.30
Washington	46	--	7	0.43	21	0.31	14	0.31	17	0.80	--	--
Wayne	--	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>52</b>	<b>1.61</b>	<b>18</b>	<b>1.07</b>	<b>22</b>	<b>0.89</b>	<b>19</b>	<b>1.13</b>	<b>14</b>	<b>0.81</b>	<b>15</b>	<b>0.57</b>
<u>Northeastern</u>												
Daggett	--	--	--	--	--	--	--	--	--	--	--	--
Duchesne	15	1.36	15	0.99	22	1.73	15	1.14	16	1.13	9	0.57
Uintah	21	0.93	19	1.16	24	1.36	16	0.88	15	0.89	10	0.59
<b>REGIONAL TOTALS</b>	<b>17</b>	<b>1.24</b>	<b>17</b>	<b>1.06</b>	<b>23</b>	<b>1.56</b>	<b>16</b>	<b>1.09</b>	<b>16</b>	<b>1.03</b>	<b>9</b>	<b>0.58</b>
<u>Southeastern</u>												
Carbon	15	3.00	5	0.10	15	1.00	3	0.08	6	0.15	3	0.40
Emery	16	1.02	24	0.96	13	0.53	15	0.62	9	0.42	12	0.42
Grand	--	--	--	--	9	0.33	--	--	--	--	--	--
San Juan	--	--	--	--	--	--	--	--	12	0.40	15	0.62
<b>REGIONAL TOTALS</b>	<b>16</b>	<b>1.04</b>	<b>23</b>	<b>0.90</b>	<b>13</b>	<b>0.51</b>	<b>14</b>	<b>0.54</b>	<b>9</b>	<b>0.37</b>	<b>11</b>	<b>0.46</b>
<b>GRAND TOTALS</b>	<b>21</b>	<b>1.00</b>	<b>20</b>	<b>0.97</b>	<b>21</b>	<b>1.05</b>	<b>16</b>	<b>0.82</b>	<b>14</b>	<b>0.70</b>	<b>12</b>	<b>0.51</b>

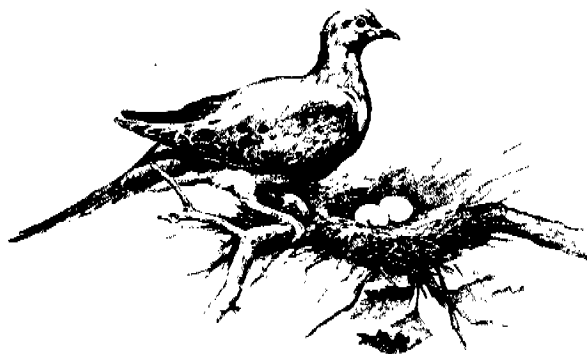
# MOURNING DOVE

## SUMMARY

The breeding density index for the State increased substantially over both 1973 and the average primarily reflecting an increased dove population in the southwest corner of the State. This increase has probably occurred in response to high moisture levels in all of the southwest desert States during the winter of 1972-73 and resultant relative abundance of food. General observations of doves throughout the summer also suggested a generally high dove population.

Dove hunting pressure increased somewhat over both 1973 and the average probably in response to the opening on Labor Day. Hunter success per day as shown by field bag checks was similar to 1973 while the same index derived from the harvest questionnaire was relatively low. This condition resulted from a combination of two factors. First, field bag check data were primarily collected on opening day (Monday) while the questionnaire more randomly sampled hunters afield later in the season, especially the first Saturday, when doves were fewer in number. Secondly, disproportionate sampling between the two methods by both time and area. Complete hunt data in field bag checks was biased by a large sample from Box Elder County where hunter success was relatively good. The total mourning dove harvest for 1974 was the second highest recorded due to the increased hunting pressure. It seemed apparent from harvest statistics that the below normal temperatures during August accelerated migration even though the usual prominent cold, wet weather late in the month did not occur.

Banding efforts resulted in a record 2,989 doves banded in 1974. The age composition of birds banded was 68 immatures per 100 adults.



### Call-Count Survey

Results of the 1974 call-count survey are found in Table 1 of this section. The long-term trend of the State's Breeding Density Index (average doves heard per route) is shown in Table 2. Indexes shown in each of these tables are unweighted and consequently differ from those published in the annual Mourning Dove Status Report compiled by the Fish and Wildlife Service. Indicated trends are similar. (Figure 1) Following is a comparison of the results of the 1974 survey to 1973 and the average for the period 1964-73:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total doves heard per route	19.3	+50	+27
Total calls heard per route	74.8	+62	+11
Total doves seen per route	22.0	+389	+35

The breeding density index for the State was higher than both 1973 and the average due to a substantial increase on the routes in the Southern Region. Indexes for the other four regions were similar to 1973. The increased dove population in the Southern Region was apparently a response to high moisture and improved food conditions in that area since the winter of 1972-73. Similar increases have been evident in other Southwestern states.

### Harvest

#### Hunter Questionnaire

Information obtained from the hunter questionnaire for 1974 is summarized in Table 3. Long-term trends of mourning doves bagged per hunter-day, percent of harvest and percent of pressure (hunter-days) by county are found in Tables 4-6 and total statewide harvest statistics in Table 7. Harvest statistics for 1974 compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Mourning dove hunters	34,021	+24	+100
Mourning dove harvest	306,076	-0.3	+98
Hunter-days afield	112,967	+16	+129
Mourning doves per hunter	9.00	-19	+3
Mourning doves per hunter-day	2.71	-14	-29

Temperatures and precipitation were generally below normal during August with dry conditions prevailing from mid-August through September 4. The hunting season opened on September 2 (Monday). Scattered rainshowers occurred on September 5 and 6 but were restricted to the southern part of the state. Freezing temperatures did not occur until near mid-September.

Results of the harvest questionnaire showed an increased number of hunters and hunter days but a slightly decreased harvest due to a substantial drop in hunter success.

Long-term harvest trends are depicted in Figure 2.

### Field Bag Checks

A summary of field bag check data for 1974 is shown in Table 8. Hunter success trends determined via this method are shown in Table 9. Results of the 1974 survey compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total hunters checked	1,536	+16	+25
Total hours hunted	4,992	+35	+47
Doves per hunter (complete hunts)	3.51	0	-0.3
Doves bagged per 100 hours	81	-36	-28
Average hours per hunter-days (complete hunts)	4.1	+14	+24
Hours hunted per dove bagged	1.2	+20	0

Hunter success shown by field bag checks was similar to 1973 in terms of doves per hunter-day but considerably lower in doves per 100 hours. The latter index agreed with reduced success shown by the harvest questionnaire.

Dove hunters spent slightly more time afield per hunter-day and more time was required per dove bagged.

### Banding

Results of the annual preseason mourning dove banding program for 1974 are shown in Table 10. The trend of doves banded since 1961 is shown in Table 11. Band recovery rates and distribution of recoveries by State and country for Utah banded doves are shown in Tables 12 and 13 respectively. Table 14 is a summary of the number of doves banded in other states that have been recovered in Utah.

During 1974, 2,989 doves were banded in Utah, all by Division personnel. Banding was distributed among 15 counties.

Age composition of doves banded was 68 immatures per 100 adults. This suggests decreased reproductive success in 1974 as compared to 1973.

The direct recovery rate or the percentage of doves killed during the first hunting season following banding for immatures and adults combined from 1949-62 was 1.1 percent. From 1964-73 this value was 1.3 percent. Total recovery rate (direct recoveries plus all subsequent recoveries) for 1949-62 was 2.7 percent and for 1964-71, 2.6 percent. Expansion of the direct recovery rate of 1.3 percent for the period 1964-73 using an assumed band reporting rate of 30 percent indicates that only 4.7 percent of the State's mourning doves were harvested by hunters during this period. If crippling loss is considered, the total death rate due to hunting would still not exceed 5-10 percent of the population.

The distribution of band recoveries for Utah banded doves shows that 78.6 percent of combined recoveries (including recoveries, returns or foreign retraps) have been made in Utah. Recoveries from Utah and apparent primary dove wintering areas in Arizona, California and Mexico combined account for 97.7 percent of all recoveries received as of March 31, 1972.

Only 31 bands have been recovered in Utah from doves banded in other states. Of this number, 14 were originally banded in Arizona, primarily during the winter months.

In summary, it is evident that Utah hunters primarily harvest doves that are raised in Utah. They do not harvest a significant number of migrating doves. Doves produced in Utah, but harvested elsewhere, are probably not harvested while migrating, but rather on the wintering area indicating rapid movement from summer to winter habitat.

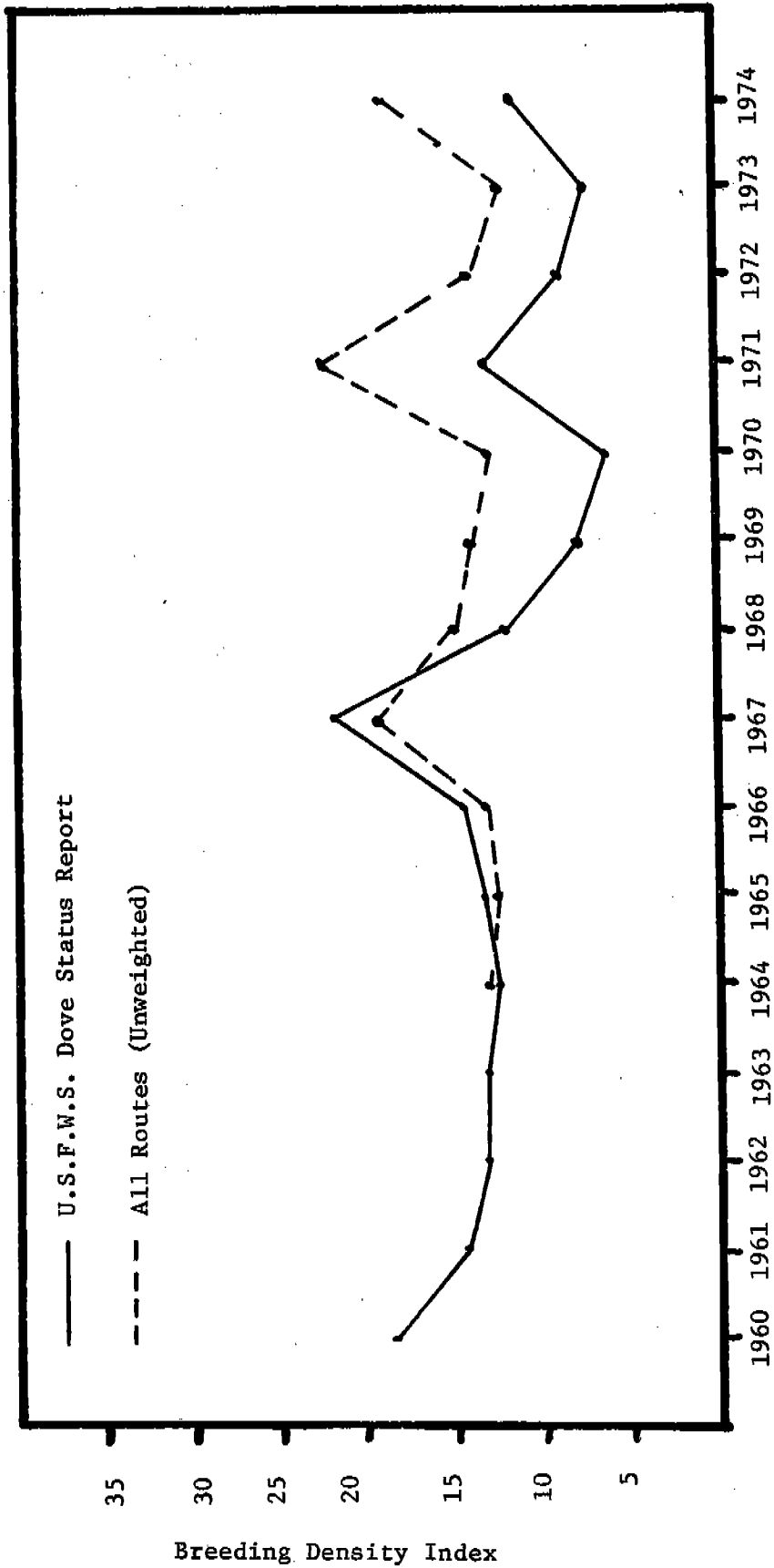


Figure 1. Mourning dove breeding density index trend, 1960-74.

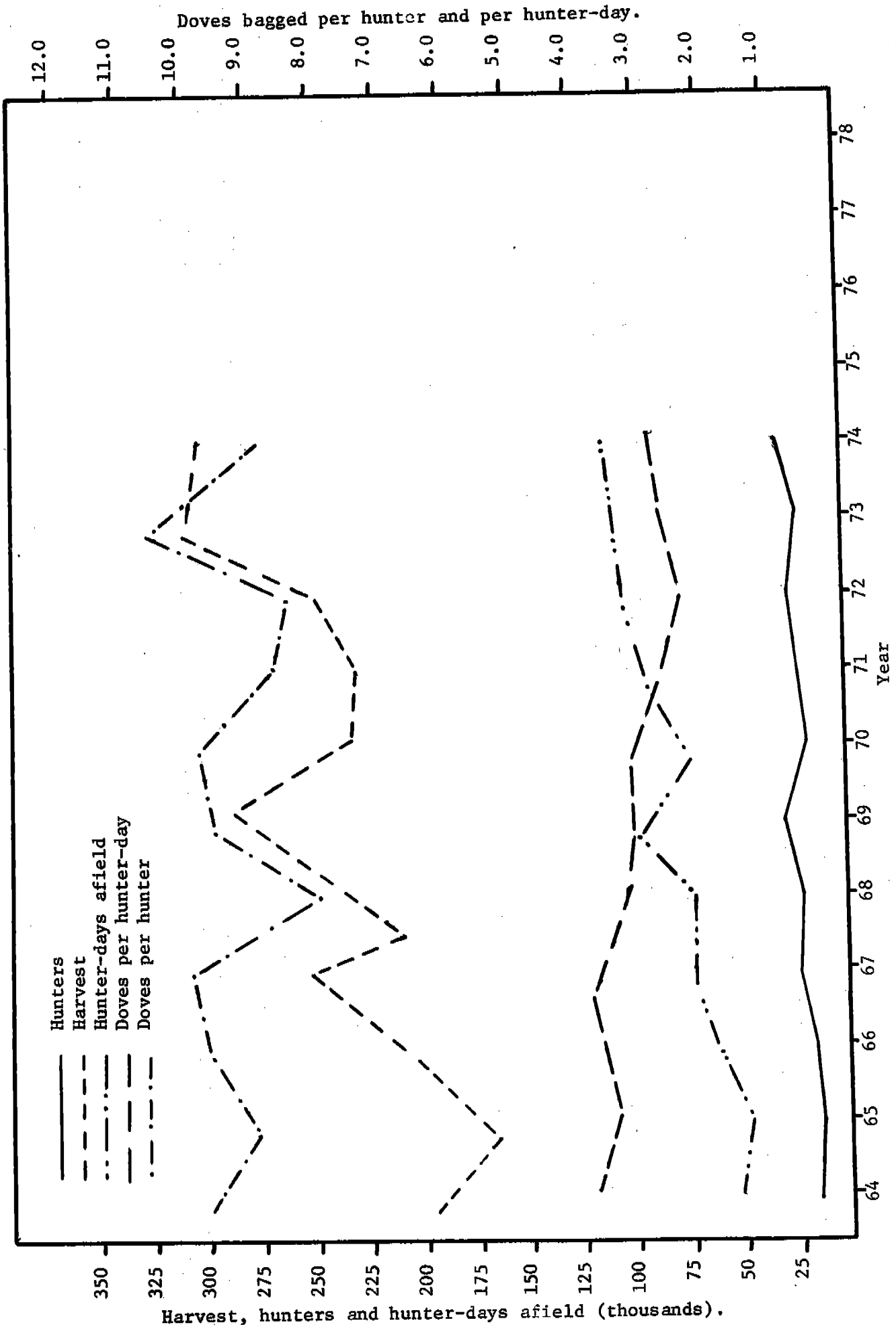


Figure 2. Statewide trends of mourning dove harvest statistics.



Table 1. Summary of the mourning dove call-count survey for 1974.

Region and County	Route Number	Total Doves Heard Per Route	Total Calls Heard Per Route	Total Doves Seen Per Route
<u>Northern</u>				
Summit	R1020	3	7	23
Box Elder	R1500	3	6	8
REGIONAL TOTALS		6	13	31
<u>Central</u>				
Juab	R2830	16	50	7
REGIONAL TOTALS		16	50	7
<u>Southern</u>				
Sevier-Sanpete	R0370	0	0	2
Wayne-Sevier	R0660	16	36	14
Garfield	R1090	0	0	0
Millard	R3640	22	175	8
Beaver	R3820	24	57	13
Iron	R4000	103	254	36
Washington	R4310	32	125	16
REGIONAL TOTALS		197	647	89
<u>Northeastern</u>				
Duchesne	R0080	14	76	11
Uintah	R0220	12	36	23
REGIONAL TOTALS		26	112	34
<u>Southeastern</u>				
Emery	R0540	4	18	19
San Juan	R1170	41	282	150
San Juan	R1450	Automatic Zero		
REGIONAL TOTALS		45	300	169
STATE TOTALS		290	1,122	330
STATE AVERAGE		19.3	74.8	22.0
PERCENT CHANGE (from previous year)		+51	+62	+389

Table 2. Regional and county summary of mourning dove breeding population trend as indicated by the number of doves heard per route during random call-count surveys, 1964-74.

Region and County	Route Number	Number of Doves Heard per Route										
		1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>Northern Region</b>												
Summit	R1020	11	9	16	10	16	7	11	10	7	3	3
Box Elder	R1500	2	5	6	2	6	3	7	4	2	5	3
<b>Regional Totals</b>		13	14	22	12	22	10	18	14	9	8	6
<b>Central Region</b>												
Juab	R2830	28	17	22	42	23	8	15	32	6	17	16
<b>Regional Totals</b>		28	17	22	42	23	8	15	32	6	17	16
<b>Southern Region</b>												
Sevier-Sanpete	R0370	3	3	0	7	1	0	1	1	0	0	0
Wayne-Sevier	R0660	8	8	5	12	7	2	8	11	20	11	16
Garfield	R1090	22	19	29	27	17	18	6	14	29	0	0
Millard	R3640	--	18	18	40	43	26	7	17	19	24	22
Beaver	R3820	9	17	19	9	23	9	17	12	13	6	24
Iron	R4000	26	33	13	19	13	26	15	24	20	35	103
Washington	R4310	33	36	36	40	21	38	54	64	61	26	32
<b>Regional Totals</b>		101	134	120	154	125	119	108	143	162	102	197
<b>Northeastern Region</b>												
Duchesne	R0080	10	7	23	62	11	10	3	16	8	3	14
Uintah	R0220	6	9	12	17	33	38	15	66	4	18	12
<b>Regional Totals</b>		16	16	35	79	44	48	18	82	12	21	26
<b>Southeastern Region</b>												
Emery	R0540	6	6	3	2	7	11	9	10	1	27	4
San Juan	R1170	5	5	1	6	7	18	33	60	24	17	41
San Juan	R1450	--	2	0	0	0	Automatic	Zero				
<b>Regional Totals</b>		11	13	4	8	14	29	42	70	25	44	45
<b>STATE TOTALS</b>												
		169	194	203	295	228	214	201	341	214	192	290
<b>STATE AVERAGES</b>												
		13.0	12.9	13.5	19.7	15.2	14.3	13.4	22.7	14.3	12.8	19.3
												$\bar{X}=15.2$
<b>PERCENT CHANGE (from previous year)</b>												
			-1	+5	+46	-23	-6	-6	+69	-37	-10	+51

Table 3. Summary of mourning dove hunter success and distribution of harvest and hunting pressure by region and county, 1974.

Region and County	Hunters Reporting	Days Hunted	Birds Bagged	Birds per Hunter-Day	Birds per Hunter*	% of Pressure	% of Harvest
<b>Northern</b>							
Box Elder	166	438	1,465	3.34	10.46	7.37	9.09
Cache	86	309	593	1.92	7.12	5.20	3.68
Davis	79	325	422	1.30	8.06	5.46	2.62
Morgan	35	82	253	3.09	11.25	1.38	1.57
Rich	14	38	75	1.97	5.33	0.64	0.47
Summit	15	29	64	2.21	4.67	0.49	0.40
Weber	125	422	645	1.53	6.50	7.10	4.00
<b>REGIONAL TOTALS</b>	<b>520</b>	<b>1,643</b>	<b>3,517</b>	<b>2.14</b>	<b>7.54</b>	<b>27.63</b>	<b>21.83</b>
<b>Central</b>							
Juab	155	369	1,337	3.62	10.16	6.20	8.30
Salt Lake	186	558	1,049	1.88	7.86	9.38	6.51
Sanpete	58	159	581	3.65	13.36	2.67	3.61
Tooele	121	291	815	2.80	9.49	4.89	5.06
Utah	400	1,166	3,103	2.66	8.99	19.61	19.26
Wasatch	14	43	86	2.00	7.18	0.72	0.53
<b>REGIONAL TOTALS</b>	<b>934</b>	<b>2,586</b>	<b>6,971</b>	<b>2.70</b>	<b>8.56</b>	<b>43.48</b>	<b>43.26</b>
<b>Southern</b>							
Beaver	15	63	185	2.94	13.15	1.06	1.15
Garfield	9	47	84	1.79	6.75	0.79	0.52
Iron	40	134	623	4.65	19.23	2.25	3.87
Kane	8	29	82	2.83	10.25	0.49	0.51
Millard	101	272	1,398	5.14	14.58	4.57	8.68
Piute	4	18	36	2.00	8.67	0.30	0.22
Sevier	62	260	736	2.83	12.80	4.37	4.57
Washington	32	162	623	3.85	20.46	2.72	3.87
Wayne	4	6	17	2.83	4.25	0.10	0.11
<b>REGIONAL TOTALS</b>	<b>275</b>	<b>991</b>	<b>3,784</b>	<b>3.82</b>	<b>14.71</b>	<b>16.66</b>	<b>23.48</b>
<b>Northeastern</b>							
Daggett	5	8	17	2.12	3.00	0.13	0.11
Duchesne	24	61	171	2.80	6.61	1.03	1.06
Uintah	49	169	301	1.78	6.92	2.84	1.87
<b>REGIONAL TOTALS</b>	<b>78</b>	<b>238</b>	<b>489</b>	<b>2.05</b>	<b>6.69</b>	<b>4.00</b>	<b>3.03</b>
<b>Southeastern</b>							
Carbon	30	99	252	2.55	13.17	1.66	1.56
Emery	33	184	342	1.86	13.85	3.09	2.12
Grand	9	29	105	3.62	11.50	0.49	0.65
San Juan	15	46	194	4.22	15.33	0.77	1.20
<b>REGIONAL TOTALS</b>	<b>87</b>	<b>358</b>	<b>893</b>	<b>2.49</b>	<b>13.30</b>	<b>6.02</b>	<b>5.54</b>
Unknown counties	56	121	429	3.55	38.00	2.03	2.66
Mixed counties	1	10	30	3.00	6.50	0.17	0.19
<b>STATE TOTALS</b>	<b>1,951</b>	<b>5,947</b>	<b>16,113</b>	<b>2.71</b>	<b>9.00</b>	<b>100</b>	<b>100</b>

\*Based on county of residence.

Table 4. Summary of mourning doves bagged per hunter-day by region and county, 1965-74.

Region and County	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>										
Box Elder	4.97	5.37	4.35	3.79	3.88	3.60	3.85	3.16	4.25	3.34
Cache	2.96	3.83	3.27	3.03	2.49	3.27	2.62	2.23	2.29	1.92
Davis	1.75	1.81	1.76	1.56	1.68	1.56	1.64	1.30	1.43	1.30
Morgan	3.94	4.79	4.18	3.69	3.88	3.70	3.63	2.11	3.42	3.09
Rich	9.50	--	3.20	2.18	4.27	3.44	3.80	3.08	1.30	1.97
Summit	3.17	3.57	2.60	1.70	3.15	5.00	2.77	2.03	2.65	2.21
Weber	2.25	2.33	2.45	1.68	2.12	1.98	1.59	1.67	1.36	1.53
<b>Regional Totals</b>	<b>3.32</b>	<b>3.57</b>	<b>3.30</b>	<b>2.59</b>	<b>2.84</b>	<b>2.77</b>	<b>2.53</b>	<b>2.23</b>	<b>2.53</b>	<b>2.14</b>
<b>Central</b>										
Juab	5.86	5.67	6.21	5.05	4.88	5.89	5.06	3.83	5.38	3.62
Salt Lake	2.42	2.75	3.14	2.29	2.26	2.18	2.03	1.81	2.36	1.88
Sanpete	3.00	5.25	3.03	2.82	3.14	3.64	3.90	2.04	2.50	3.65
Tooele	3.70	3.39	3.78	3.23	3.33	3.76	2.98	2.38	2.58	2.80
Utah	3.27	3.27	3.32	2.92	3.10	3.41	2.71	2.24	2.78	2.66
Wasatch	3.90	2.71	4.48	4.11	1.49	2.41	1.75	1.48	2.12	2.00
<b>Regional Totals</b>	<b>3.18</b>	<b>3.39</b>	<b>3.70</b>	<b>3.03</b>	<b>3.07</b>	<b>3.16</b>	<b>2.75</b>	<b>2.31</b>	<b>2.90</b>	<b>2.70</b>
<b>Southern</b>										
Beaver	4.78	3.96	4.55	4.85	5.65	4.28	4.00	4.71	4.31	2.94
Garfield	2.44	1.20	3.61	1.60	3.11	1.33	3.25	4.93	6.03	1.79
Iron	4.83	4.55	3.59	4.97	2.91	3.72	3.41	3.35	3.96	4.65
Kane	8.04	5.00	5.86	1.64	3.60	3.00	3.53	2.60	4.98	2.83
Millard	4.90	5.35	4.41	4.81	3.84	5.83	4.45	3.84	4.63	5.14
Piute	3.64	2.00	6.78	0.55	2.16	7.67	3.60	3.54	2.00	2.00
Sevier	1.93	2.79	1.99	2.31	3.20	2.95	3.32	2.44	3.22	2.83
Washington	4.17	4.02	4.21	2.71	4.04	4.38	3.87	3.33	3.92	3.85
Wayne	5.69	10.00	0.47	2.50	--	2.58	3.00	2.50	6.74	2.83
<b>Regional Totals</b>	<b>4.15</b>	<b>4.10</b>	<b>3.75</b>	<b>3.56</b>	<b>3.55</b>	<b>4.15</b>	<b>3.79</b>	<b>3.42</b>	<b>4.15</b>	<b>3.82</b>
<b>Northeastern</b>										
Daggett	2.75	--	3.69	4.00	1.67	7.30	5.86	2.70	0.82	2.12
Duchesne	2.00	3.73	2.00	1.12	2.67	4.54	3.00	4.91	4.73	2.80
Uintah	4.13	3.59	2.37	2.62	2.21	3.05	2.30	1.58	2.97	1.78
<b>Regional Totals</b>	<b>3.77</b>	<b>3.62</b>	<b>2.42</b>	<b>2.10</b>	<b>2.26</b>	<b>3.70</b>	<b>2.60</b>	<b>2.39</b>	<b>3.04</b>	<b>2.05</b>
<b>Southeastern</b>										
Carbon	2.37	2.87	2.56	3.17	3.56	2.26	0.89	2.95	3.65	2.55
Emery	1.58	2.89	4.68	3.69	2.81	1.28	2.39	2.68	2.66	1.86
Grand	2.82	2.00	4.00	3.67	3.71	5.79	2.71	3.14	3.84	3.62
San Juan	3.88	5.60	4.65	7.00	3.27	2.29	3.15	3.94	4.36	4.22
<b>Regional Totals</b>	<b>2.48</b>	<b>3.08</b>	<b>3.76</b>	<b>3.81</b>	<b>3.24</b>	<b>2.38</b>	<b>1.93</b>	<b>3.15</b>	<b>3.61</b>	<b>2.49</b>
Unknown counties	2.18	1.84	3.28	2.88	--	4.55	2.49	2.90	2.58	3.55
Mixed counties	3.76	--	3.88	1.00	--	0.00	--	10.00	0.00	3.00
<b>STATE TOTALS</b>	<b>3.36</b>	<b>3.51</b>	<b>3.56</b>	<b>2.96</b>	<b>3.07</b>	<b>3.14</b>	<b>2.79</b>	<b>2.53</b>	<b>3.14</b>	<b>2.71</b>

Table 5. Distribution of mourning dove harvest by region and county, 1970-74.

Region and County	1970	1971	1972	1973	1974
<b>Northern</b>					
Box Elder	10.11	9.99	10.11	7.85	9.09
Cache	5.42	4.13	4.08	3.29	3.68
Davis	3.31	2.62	1.69	1.80	2.62
Morgan	1.77	0.92	1.24	1.27	1.57
Rich	0.49	0.72	0.38	0.08	0.47
Summit	0.71	0.68	0.75	0.61	0.40
Weber	3.52	4.61	5.05	2.03	4.00
<b>REGIONAL TOTALS</b>	<b>25.32</b>	<b>23.68</b>	<b>23.31</b>	<b>16.93</b>	<b>21.83</b>
<b>Central</b>					
Juab	6.56	8.07	8.16	8.58	8.30
Salt Lake	12.04	11.08	8.83	7.95	6.51
Sanpete	3.63	2.65	2.13	2.51	3.61
Tooele	5.51	8.51	5.99	6.07	5.06
Utah	17.46	17.46	16.48	14.30	19.26
Wasatch	0.72	1.69	0.38	1.11	0.53
<b>REGIONAL TOTALS</b>	<b>45.93</b>	<b>49.45</b>	<b>41.97</b>	<b>40.52</b>	<b>43.26</b>
<b>Southern</b>					
Beaver	1.21	1.85	3.45	2.26	1.15
Garfield	0.04	0.61	0.70	1.08	0.52
Iron	4.57	2.76	3.09	5.63	3.87
Kane	0.03	0.50	0.12	1.35	0.51
Millard	6.23	5.71	4.70	8.04	8.68
Piute	0.20	0.17	0.87	0.31	0.22
Sevier	3.02	3.57	3.71	3.26	4.57
Washington	1.32	3.43	4.02	3.63	3.87
Wayne	0.27	0.17	0.09	0.79	0.11
<b>REGIONAL TOTALS</b>	<b>16.88</b>	<b>18.77</b>	<b>20.76</b>	<b>26.37</b>	<b>23.48</b>
<b>Northeastern</b>					
Daggett	0.64	0.39	0.26	0.20	0.11
Duchesne	0.52	0.42	1.54	1.61	1.06
Uintah	1.97	2.04	1.59	1.85	1.87
<b>REGIONAL TOTALS</b>	<b>3.14</b>	<b>2.85</b>	<b>3.38</b>	<b>3.66</b>	<b>3.03</b>
<b>Southeastern</b>					
Carbon	2.85	0.64	2.75	3.47	1.56
Emery	0.93	0.81	1.20	2.02	2.12
Grand	1.69	0.72	1.73	2.51	0.65
San Juan	1.13	0.98	1.95	3.18	1.20
<b>REGIONAL TOTALS</b>	<b>6.60</b>	<b>3.15</b>	<b>7.62</b>	<b>11.18</b>	<b>5.54</b>
Unknown counties	2.13	2.09	2.48	1.34	2.66
Mixed counties	0.00	--	0.47	0.00	0.19
<b>STATE TOTALS</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 6. Distribution of mourning dove hunting pressure by region and county, 1970-74.

Region and County	1970	1971	1972	1973	1974
<b>Northern</b>					
Box Elder	8.83	7.23	8.11	5.80	7.37
Cache	5.22	4.39	4.65	4.50	5.20
Davis	6.66	4.45	3.30	3.96	5.46
Morgan	1.50	0.71	1.49	1.16	1.38
Rich	0.44	0.53	0.31	0.19	0.64
Summit	0.44	0.68	0.94	0.72	0.49
Weber	5.58	8.08	7.68	4.70	7.10
<b>REGIONAL TOTALS</b>	<b>28.68</b>	<b>26.07</b>	<b>26.48</b>	<b>21.03</b>	<b>27.63</b>
<b>Central</b>					
Juab	3.50	4.45	5.39	5.01	6.20
Salt Lake	17.38	15.23	12.37	10.59	9.38
Sanpete	3.14	1.89	2.65	3.16	2.67
Tooele	4.61	7.97	6.38	7.37	4.89
Utah	16.10	17.94	18.66	16.12	19.61
Wasatch	0.94	2.68	0.65	1.65	0.72
<b>REGIONAL TOTALS</b>	<b>45.67</b>	<b>50.17</b>	<b>46.10</b>	<b>43.91</b>	<b>43.48</b>
<b>Southern</b>					
Beaver	0.89	1.29	1.86	1.65	1.06
Garfield	0.08	0.53	0.36	0.56	0.79
Iron	3.86	2.26	2.34	4.46	2.25
Kane	0.03	0.39	0.12	0.85	0.49
Millard	3.36	3.58	3.11	5.45	4.57
Piute	0.08	0.13	0.63	0.49	0.30
Sevier	3.22	3.00	3.85	3.18	4.37
Washington	0.94	2.47	3.06	2.91	2.72
Wayne	0.33	0.16	0.10	0.37	0.10
<b>REGIONAL TOTALS</b>	<b>12.80</b>	<b>13.81</b>	<b>15.41</b>	<b>19.93</b>	<b>16.66</b>
<b>Northeastern</b>					
Daggett	0.28	0.18	0.24	0.76	0.13
Duchesne	0.36	0.39	0.79	1.07	1.03
Uintah	2.03	2.47	2.55	1.96	2.84
<b>REGIONAL TOTALS</b>	<b>2.67</b>	<b>3.05</b>	<b>3.59</b>	<b>3.78</b>	<b>4.00</b>
<b>Southeastern</b>					
Carbon	3.97	2.00	2.36	2.99	1.66
Emery	2.28	0.95	1.13	2.39	3.09
Grand	0.92	0.74	1.40	2.06	0.49
San Juan	1.55	0.87	1.25	2.29	0.77
<b>REGIONAL TOTALS</b>	<b>8.72</b>	<b>4.55</b>	<b>6.14</b>	<b>9.72</b>	<b>6.02</b>
Unknown counties	1.47	2.34	2.17	1.63	2.03
Mixed counties	0.00	--	0.12	0.00	0.17
<b>STATE TOTALS</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 7. State-wide summary of mourning dove harvest statistics, 1951-74.

Year	Total Hunters	Total Harvest	Hunter-Days Afield	Doves per Hunter Day	Doves per Hunter
1951	3,007	20,448	4,455	4.59	6.80
1952	6,420	49,498	10,784	4.59	7.71
1953	9,887	75,636	17,797	4.25	7.65
1954	9,901	75,941	19,724	3.85	7.67
1955	9,653	79,444	19,282	4.12	8.23
1956	10,744	95,729	20,411	4.69	8.91
1957	11,298*	86,769*	18,620*	4.66	7.68
1958	11,853	85,934	21,591	3.98	7.25
1959	12,142	110,856	24,911	4.45	9.13
1960	12,440	108,477	25,766	4.21	8.72
1961	15,192	128,001	33,434	3.89	8.42
1962	14,663	144,826	34,281	4.23	9.89
1963	18,258	162,769	40,490	4.02	8.91
1964	19,829	193,538	51,671	3.75	9.76
1965	18,710	164,087	48,835	3.36	8.69
1966	20,594	212,696	60,608	3.51	10.33
1967	25,161	263,949	74,171	3.56	10.49
1968	25,105	207,922	70,186	2.96	8.28
1969	29,131	279,311	90,965	3.07	9.59
1970	23,908	232,469	73,984	3.14	9.72
1971	26,064	226,645	81,271	2.79	8.70
1972	29,341	238,354	94,046	2.53	8.12
1973	27,435	307,062	97,788	3.14	11.19
1974	34,021	306,076	112,967	2.71	9.00
<b>TOTALS 1951-1974</b>	424,754	3,856,619	1,248,211	3.09	9.08
<b>AVERAGES (1951-1973)</b>	16,988	154,371	49,358	3.80	8.78

\*Estimated.

Table 8. Mourning dove field bag check summary, 1974.

Region and County	ALL HUNTS				COMPLETE HUNTS					
	Total Parties	Total Hunters	Total Hours	Total Birds/100 hrs.	Total Complete Hunts	Total Hunters	Total Hours	Total Birds/100 hrs.	Birds/Hunter	
<b>Northern</b>										
Box Elder	192	467	1,988	1,528	77	162	1,735	1,366	79	3.74
Cache	6	11	51	13	25	4	36	9	25	1.12
Davis	6	21	45	3	7	5	39	3	8	0.18
Morgan	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--
Weber	22	49	127	48	38	11	108	46	43	1.59
<b>REGIONAL TOTALS</b>	<b>226</b>	<b>548</b>	<b>2,211</b>	<b>1,592</b>	<b>72</b>	<b>182</b>	<b>1,919</b>	<b>1,424</b>	<b>74</b>	<b>3.40</b>
<b>Central</b>										
Juab	8	22	51	87	171	0	0	0	--	--
Salt Lake	20	40	60	16	27	12	37	7	19	0.32
Sanpete	31	98	228	112	49	6	52	12	23	0.63
Tooele	47	112	336	285	85	2	6	10	167	3.33
Utah	123	308	805	364	45	26	202	66	33	1.06
Wasatch	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>229</b>	<b>580</b>	<b>1,480</b>	<b>864</b>	<b>58</b>	<b>46</b>	<b>297</b>	<b>95</b>	<b>32</b>	<b>0.90</b>
<b>Southern</b>										
Beaver	4	20	126	144	114	2	39	59	151	6.56
Garfield	2	7	30	30	100	1	6	30	500	10.00
Iron	--	--	--	--	--	--	--	--	--	--
Kane	2	12	23	81	352	2	23	81	352	6.75
Millard	56	148	587	637	109	13	260	283	109	7.08
Piute	2	6	7	6	86	1	2	3	150	1.50
Sevier	4	47	103	156	151	1	6	0	0	0.00
Washington	--	--	--	--	--	--	--	--	--	--
Wayne	2	2	4	4	100	0	0	0	--	--
<b>REGIONAL TOTALS</b>	<b>72</b>	<b>242</b>	<b>880</b>	<b>1,058</b>	<b>120</b>	<b>20</b>	<b>336</b>	<b>456</b>	<b>136</b>	<b>6.71</b>
<b>Northeastern</b>										
Daggett	9	18	43	2	5	3	9	2	22	0.40
Duchesne	13	31	88	86	98	5	36	51	142	3.92
Uintah	26	64	156	210	135	11	61	93	152	4.23
<b>REGIONAL TOTALS</b>	<b>48</b>	<b>113</b>	<b>287</b>	<b>298</b>	<b>104</b>	<b>19</b>	<b>106</b>	<b>146</b>	<b>138</b>	<b>3.65</b>
<b>Southeastern</b>										
Carbon	--	--	--	--	--	--	--	--	--	--
Emery	--	--	--	--	--	--	--	--	--	--
Grand	--	--	--	--	--	--	--	--	--	--
San Juan	25	53	134	248	185	19	104	234	225	6.32
<b>REGIONAL TOTALS</b>	<b>25</b>	<b>53</b>	<b>134</b>	<b>248</b>	<b>185</b>	<b>19</b>	<b>104</b>	<b>234</b>	<b>225</b>	<b>6.32</b>
<b>STATE TOTALS</b>	<b>600</b>	<b>1,536</b>	<b>4,992</b>	<b>4,060</b>	<b>81</b>	<b>286</b>	<b>2,762</b>	<b>2,355</b>	<b>85</b>	<b>3.51</b>



Table 9. Mourning dove hunter success trend determined by field bag checks, 1969-74.

Region and County	1969		1970		1971		1972		1973		1974	
	Doves/ 100 hrs. Hunter	Doves/ 100 hrs. Hunter	Doves/ 100 hrs. Hunter	Doves/ 100 hrs. Hunter	Doves/ 100 hrs. Hunter	Doves/ 100 hrs. Hunter	Doves/ 100 hrs. Hunter	Doves/ 100 hrs. Hunter	Doves/ 100 hrs. Hunter	Doves/ 100 hrs. Hunter	Doves/ 100 hrs. Hunter	Doves/ 100 hrs. Hunter
<b>Northern</b>												
Box Elder	79	3.30	81	3.20	70	3.43	84	3.43	85	3.41	77	3.74
Cache	91	1.88	164	4.44	106	7.00	79	1.88	33	1.00	25	1.12
Davis	62	0.80	--	--	--	--	--	--	30	0.33	7	0.18
Morgan	--	--	--	--	131	3.70	45	1.20	--	--	--	--
Rich	118	2.20	--	--	67	3.00	39	0.85	55	0.80	--	--
Summit	191	4.66	91	1.44	12	0.43	--	--	--	--	--	--
Weber	85	1.98	116	3.75	33	0.37	108	2.26	83	3.50	38	1.59
<b>REGIONAL TOTALS</b>	<b>82</b>	<b>3.08</b>	<b>86</b>	<b>3.20</b>	<b>71</b>	<b>3.22</b>	<b>84</b>	<b>3.20</b>	<b>83</b>	<b>3.37</b>	<b>72</b>	<b>3.40</b>
<b>Central</b>												
Juab	130	8.00	95	4.33	83	3.00	135	3.83	119	10.00	171	3.95*
Salt Lake	43	0.65	72	1.28	71	1.36	47	1.53	57	1.16	27	0.32
Sanpete	--	--	19	0.47	22	0.82	167	3.17	47	1.94	49	0.63
Tooele	46	1.58	36	0.60	61	0.78	41	2.72	83	7.15	85	3.33
Utah	75	1.50	85	4.20	111	5.27	82	1.38	105	3.89	45	1.06
Wasatch	70	4.00	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>63</b>	<b>1.92</b>	<b>66</b>	<b>1.46</b>	<b>70</b>	<b>1.58</b>	<b>73</b>	<b>1.95</b>	<b>80</b>	<b>2.51</b>	<b>58</b>	<b>0.90</b>
<b>Southern</b>												
Beaver	--	--	--	--	88	--	81	1.30	150	4.50	114	6.56
Garfield	143	--	72	2.23	--	--	--	--	150	1.50	100	10.00
Iron	--	--	486	5.45	205	5.36	300	6.60	249	7.67	--	--
Kane	143	3.33	75	--	--	--	233	3.00	220	6.67	352	6.75
Millard	--	--	--	--	119	6.33	108	3.16	88	4.29	109	7.08
Piute	190	2.78	158	6.00	92	--	--	--	200	0.66	86	1.50
Sevier	--	--	217	--	133	5.33	76	0.80	105	5.57	151	3.32*
Washington	220	6.24	238	4.33	--	--	175	3.50	42	0.72	--	--
Wayne	--	--	--	--	--	--	93	3.50	88	1.75	100	--
<b>REGIONAL TOTALS</b>	<b>205</b>	<b>4.06</b>	<b>217</b>	<b>4.42</b>	<b>124</b>	<b>5.86</b>	<b>118</b>	<b>4.45</b>	<b>119</b>	<b>5.19</b>	<b>120</b>	<b>6.71</b>
<b>Northeastern</b>												
Daggett	38	0.69	--	--	152	4.20	94	2.03	20	0.75	5	0.40
Duchesne	78	1.83	36	3.00	--	--	69	1.85	238	6.76	98	3.92
Uintah	141	5.77	132	3.39	147	3.29	149	3.26	179	7.11	135	4.23
<b>REGIONAL TOTALS</b>	<b>122</b>	<b>3.98</b>	<b>109</b>	<b>3.37</b>	<b>150</b>	<b>3.78</b>	<b>122</b>	<b>2.74</b>	<b>162</b>	<b>4.95</b>	<b>104</b>	<b>3.65</b>
<b>Southeastern</b>												
Carbon	175	3.71	0	0.00	--	--	--	--	92	1.00	--	--
Emery	161	3.54	159	6.44	207	--	--	--	147	1.87	--	--
Grand	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	339	10.00	--	--	--	--	--	--	--	--	185	6.32
<b>REGIONAL TOTALS</b>	<b>246</b>	<b>4.00</b>	<b>155</b>	<b>6.44</b>	<b>207</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>126</b>	<b>1.00</b>	<b>185</b>	<b>6.32</b>
<b>STATE TOTALS</b>	<b>87</b>	<b>3.00</b>	<b>87</b>	<b>2.98</b>	<b>82</b>	<b>3.07</b>	<b>86</b>	<b>3.03</b>	<b>92</b>	<b>3.51</b>	<b>81</b>	<b>3.51</b>

\*Doves per hunter index based on all hunts.

Table 10. Summary of preseason mourning dove banding in Utah during 1974.

Region and County	Adult		Total	Young	Total	Juveniles per 100 Adults
	Male	Female				
<u>Northern</u>						
Box Elder	15	7	22	16	38	73
Cache	--	--	--	--	--	--
Davis	--	--	--	--	--	--
Morgan	9	3	12	59	71	492
Rich	--	--	--	--	--	--
Summit	--	--	--	--	--	--
Weber	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>24</b>	<b>10</b>	<b>34</b>	<b>75</b>	<b>109</b>	<b>220</b>
<u>Central</u>						
Juab	166	131	297	91	388	31
Salt Lake	--	--	--	--	--	--
Sanpete	--	--	--	--	--	--
Tooele	148	181	329	158	487	48
Utah	--	--	--	--	--	--
Wasatch	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>314</b>	<b>312</b>	<b>626</b>	<b>249</b>	<b>875</b>	<b>40</b>
<u>Southern</u>						
Beaver	38	24	62	22	84	35
Garfield	--	--	--	--	--	--
Iron	33	3	36	13	49	36
Kane	--	--	--	--	--	--
Millard	37	51	88	128	216	145
Piute	--	--	--	--	--	--
Sevier	--	--	--	--	--	--
Washington	103	85	188	112	300	60
Wayne	32	22	54	28	82	52
<b>REGIONAL TOTALS</b>	<b>243</b>	<b>185</b>	<b>428</b>	<b>303</b>	<b>731</b>	<b>71</b>
<u>Northeastern</u>						
Daggett	117	42	159	0	159	0
Duchesne	48	23	71	37	108	52
Uintah	129	118	247	48	295	19
<b>REGIONAL TOTALS</b>	<b>294</b>	<b>183</b>	<b>477</b>	<b>85</b>	<b>562</b>	<b>18</b>
<u>Southeastern</u>						
Carbon	23	19	42	58	100	138
Emery	46	23	76	153	229	201
Grand	--	--	--	--	--	--
San Juan	87	7	94	289	383	307
<b>REGIONAL TOTALS</b>	<b>156</b>	<b>56</b>	<b>212</b>	<b>500</b>	<b>712</b>	<b>236</b>
<b>STATE TOTALS</b>	<b>1,031</b>	<b>746</b>	<b>1,777</b>	<b>1,212</b>	<b>2,989</b>	<b>68</b>

Table 11. Summary of mourning doves banded in Utah, 1970-74.

Region and County	1970		1971		1972		1973		1974		Totals 1961-74			
	Imm.	Adult Total	Imm.	Adult Total	Imm.	Adult Total	Imm.	Adult Total	Imm.	Adult Total	Imm.	Adult Total		
<b>Northern</b>														
Box Elder	14	83	97	--	2	5	7	--	16	22	38	1011	2444	3455
Cache	--	--	--	--	--	--	--	--	--	--	--	30	39	69
Davis	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Morgan	--	22	20	45*	--	--	--	--	59	12	71	81	32	113*
Rich	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>14</b>	<b>83</b>	<b>97</b>	<b>22</b>	<b>20</b>	<b>45*</b>	<b>7</b>	<b>--</b>	<b>75</b>	<b>34</b>	<b>109</b>	<b>1122</b>	<b>2515</b>	<b>3637*</b>
<b>Central</b>														
Juab	67	58	125	64	53	117	71	151	229*	--	--	91	297	388
Salt Lake	--	--	--	--	--	--	--	--	--	--	--	47	214	261
Sanpete	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tooele	126	228	354	85	370	455	60	158	218	27	57	84	158	329
Utah	--	--	--	--	--	--	--	--	--	--	--	--	61	155
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>193</b>	<b>286</b>	<b>479</b>	<b>149</b>	<b>423</b>	<b>572</b>	<b>131</b>	<b>309</b>	<b>447*</b>	<b>27</b>	<b>57</b>	<b>84</b>	<b>249</b>	<b>626</b>
<b>Southern</b>														
Beaver	--	--	--	--	--	--	--	--	--	6	4	10	22	62
Garfield	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	179	49	228	113	1	114	125	124	249	4	--	4	13	36
Kane	--	--	--	--	--	--	--	--	--	206	17	223	--	--
Millard	28	35	63	38	13	51	15	12	27	1	56	57	88	128
Piute	132	268	400	166	211	377	75	15	90	--	--	--	--	--
Sevier	--	--	--	2	0	2	--	--	--	--	--	--	--	--
Washington	13	26	40*	41	2	43	37	17	55*	136	84	220	112	188
Wayne	--	--	--	--	--	--	--	--	--	--	--	--	28	54
<b>REGIONAL TOTALS</b>	<b>352</b>	<b>378</b>	<b>731*</b>	<b>360</b>	<b>227</b>	<b>587</b>	<b>252</b>	<b>168</b>	<b>421*</b>	<b>353</b>	<b>161</b>	<b>514</b>	<b>303</b>	<b>428</b>
<b>Northeastern</b>														
Daggett	7	2	9	7	28	35	39	60	99	0	137	137	0	159
Duchesne	4	26	30	7	64	71	15	128	143	1	2	3	37	71
Uintah	38	83	121	49	123	172	9	85	94	--	--	--	48	247
<b>REGIONAL TOTALS</b>	<b>49</b>	<b>111</b>	<b>160</b>	<b>63</b>	<b>215</b>	<b>278</b>	<b>63</b>	<b>273</b>	<b>336</b>	<b>1</b>	<b>139</b>	<b>140</b>	<b>85</b>	<b>477</b>
<b>Southeastern</b>														
Carbon	--	--	--	--	--	--	--	--	--	--	--	--	58	42
Emery	--	--	--	--	--	--	--	--	--	--	--	--	153	76
Grand	--	--	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	15	5	20	37	52	89	73	129	202	7	10	17	289	94
<b>REGIONAL TOTALS</b>	<b>15</b>	<b>5</b>	<b>20</b>	<b>37</b>	<b>52</b>	<b>89</b>	<b>73</b>	<b>129</b>	<b>202</b>	<b>7</b>	<b>10</b>	<b>17</b>	<b>500</b>	<b>212</b>
<b>STATE TOTALS</b>	<b>623</b>	<b>863</b>	<b>1487*</b>	<b>631</b>	<b>937</b>	<b>1571</b>	<b>521</b>	<b>884</b>	<b>1413</b>	<b>388</b>	<b>367</b>	<b>755</b>	<b>1212</b>	<b>1777</b>
*Includes some unclassified birds.														

Table 12. Summary of mourning dove band recovery rates for the period 1949-73.

Time Period	Doves Banded	Number of Recoveries		Recovery Rates	
		Direct*	Total**	Direct	Total
1949-62	4,001	43	110	.011	.027
1964	1,945	37	68	.019	.035
1965	1,416	33	57	.023	.040
1966	973	1	7	.001	.007
1967	2,233	37	60	.017	.027
1968	640	6	14	.009	.022
1969	2,006	36	55	.018	.027
1970	1,487	16	40	.011	.027
1971	1,571	8	13	.005	.008
1972	1,413	5	--	.004	--
1973	755	5	--	.007	--
<b>TOTALS</b> 1964-73	14,439	184	314***	.013	.026
<b>GRAND</b> <b>TOTALS</b>	18,440	227	424***	.012	.026

\*Direct recovery - A banded dove that is killed during the first hunting season following banding.

\*\*Total recovery - Direct recoveries plus all subsequent recoveries for any given cohort of banded doves.

\*\*\*Total recoveries updated through 1971 only.

Table 13. Summary of combined recoveries, returns and foreign retraps of mourning doves banded in Utah, 1961-71.

State and Country of Recovery	Recoveries as of August, 1970	(Percent)	Recoveries During 1970 and 1971*	Total Recoveries	(Percent)
UNITED STATES					
Utah	540	(81.3)	15	555	(78.6)
Arizona	38	( 5.7)	16	54	( 7.6)
Northern	2		--	--	
Southern	36		--	--	
California	21	( 3.2)	2	23	( 3.2)
Northern	3		--	--	
Central	4		--	--	
Southern	14		--	--	
New Mexico	4	( 0.6)	1	5	( 0.7)
Northern	2		--	--	
Southern	2		--	--	
Idaho	2	( 0.3)	0	2	( 0.3)
Texas	2	( 0.3)	0	2	( 0.3)
Oregon	2	( 0.3)	0	2	( 0.3)
Colorado	2	( 0.3)	0	2	( 0.3)
Nevada	1	( 0.2)	0	1	( 0.1)
Iowa	1	( 0.2)	0	1	( 0.1)
States Other Than Utah	73	(11.0)	19	92	(13.0)
United States Total	613	(92.3)	34	647	(91.6)
MEXICO					
Jalisco	20	( 3.0)	1	21	( 3.0)
Michoacan	7	( 1.0)	4	11	( 1.6)
Sinaloa	9	( 1.4)	0	9	( 1.3)
Sonora	5	( 0.8)	0	5	( 0.7)
Unknown State	1	( 0.2)	3	4	( 0.6)
Durango	2	( 0.3)	0	2	( 0.3)
Guanajuato	1	( 0.2)	0	1	( 0.1)
Aguascalientes	1	( 0.2)	0	1	( 0.1)
Colima	1	( 0.2)	0	1	( 0.1)
Nayarit	1	( 0.2)	0	1	( 0.1)
Mexico State	1	( 0.2)	0	1	( 0.1)
Baja California	1	( 0.2)	0	1	( 0.1)
Mexico Total	50	( 7.5)	8	58	( 8.2)
HONDURAS	1	( 0.2)	0	1	( 0.1)
TOTAL RETURNS	664	( 100)	42	706	( 100)

\*As per reports received as of March 31, 1972

Table 14. Summary of mourning doves banded in other states and recovered in Utah through August, 1970.

<u>State Where Banded</u>	<u>Number of Returns</u>
Arizona	14
Idaho	7
Washington	4
Nevada	3
Texas	2
Oregon	<u>1</u>
Total Recoveries and Returns of Doves Banded In Other States:	31

# CHUKAR PARTRIDGE

## SUMMARY

The improved harvest and hunter success of 1973 reflected excellent production that year and indicated an increased breeding population level for 1974 in the Northern, Central and Southeastern regions as well as on a statewide basis. Accumulated moisture during the January-April period was slightly lower than the average since 1962; however, most of the precipitation occurred in January with dry conditions later on. Vegetation dried early in most areas.

Effort on brood counts continued to decline. Total chukars observed was more than double the value for 1973 but was still below average due to the decreased effort. Chukars observed per 100 hours was over 200 percent greater than 1973 and above average. Concentration of chukars near water contributed to increased observability.

Production, both young per 100 adults and mean brood size, was slightly less than 1973 but above average. Fall population levels were higher than 1973 in the Northern and Southeastern regions and on a statewide basis. They were lower than 1973 in the Central and Southern Regions.

Harvest data reflected the indicated increase in the Northern and Southeastern regions but showed a decline elsewhere. Hunter success was down slightly on a Statewide basis and, combined with reduced hunter-days, resulted in a decreased harvest. Total hunters increased slightly over 1973.



### Brood Counts

Results of the annual random brood survey for 1974 are shown in Table 1 of this section. Long-term trends of young-adult ratios, mean brood size and chukars observed per 100 hours are found in Tables 2-4. Survey results for 1974 compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total chukars observed	1,304	+139	-13
Young per 100 adults	487	-6	+15
Mean brood size	10.00	-6	+10
Chukars observed per 100 hours	469	+212	+21
Total hours effort	278	-23	-29

The increased harvest and hunter success of 1973 indicated an increased breeding population level for 1974. Accumulated moisture during the January-April period of 1974 decreased from 1973 to a level slightly below average. The result was reduced production compared to 1973 but both the young per 100 adult ratio and mean brood size were above average.

Hours effort on chukar brood counts continued to decline. Total chukars observed more than doubled the value for 1973 but was still below average. Chukars observed per 100 hours effort increased over 200 percent. The greater observability of chukars was partly due to dry weather and concentration of birds near water. Nevertheless it was evident that a substantial increase in chukar numbers had occurred in the Northern and Southeastern regions. The West Desert area of the Central and Southern regions showed an increase but this was probably due to concentration because production decreased in that area.

### Harvest

#### Hunter Questionnaire

Results of the hunter questionnaire survey for 1974 are shown in Table 5. Long-term trends of chukars bagged per hunter-day, percent of harvest and percent of pressure (hunter-days) by county are found in Tables 6-8 and total statewide harvest statistics in Table 9. Following is a comparison of 1974 harvest statistics to 1973 and the average:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Chukar hunters	16,412	+18	+4
Chukars harvested	44,658	-7	+3
Hunter-days afield	48,856	-4	+9
Chukars per hunter	2.72	-22	+12
Chukars per hunter-day	0.91	-4	-1



Daily bag and possession limits were increased to 8 and 16 respectively for the 1974 season. Total hunters increased but hunter-days declined slightly. The reduction in hunter-days occurred primarily in the Central Region where hunter success was low. Statewide hunter success was slightly less than 1973. This combined with the reduced hunter-days afield resulted in a slightly decreased harvest. Hunter success increased slightly in the Northern Region and considerably so in the Southeastern Region.

Long-term trends of chukar harvest statistics are shown in Figure 1.

#### Field Bag Checks

A summary of field-bag check data for 1974 is shown in Table 10. The hunter success trend determined via bag check since 1970 is shown in Table 11. Data for the 1974 season compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total hunters checked	422	+5	-46
Total hours hunted	2,006	+8	-46
Chukars per hunter (complete hunts)	1.60	+76	+39
Chukars bagged per 100 hours	27	+59	+8
Average hours per hunter-day (complete hunts)	5.4	+10	+12
Hours hunted per chukar bagged	3.4	-37	-26

Field bag check sample sizes were poor in most counties. Total hunters checked statewide was up slightly from 1973 but well below average. Hunter success increased over 1973, but largely reflected the high success in Box Elder County where most of the data were collected.

The number of hours per hunter-day increased over both 1973 and the average. Less time was required to bag a chukar than in 1973 or in comparison to the average.

Chukars bagged per hunter and per hunter-day.

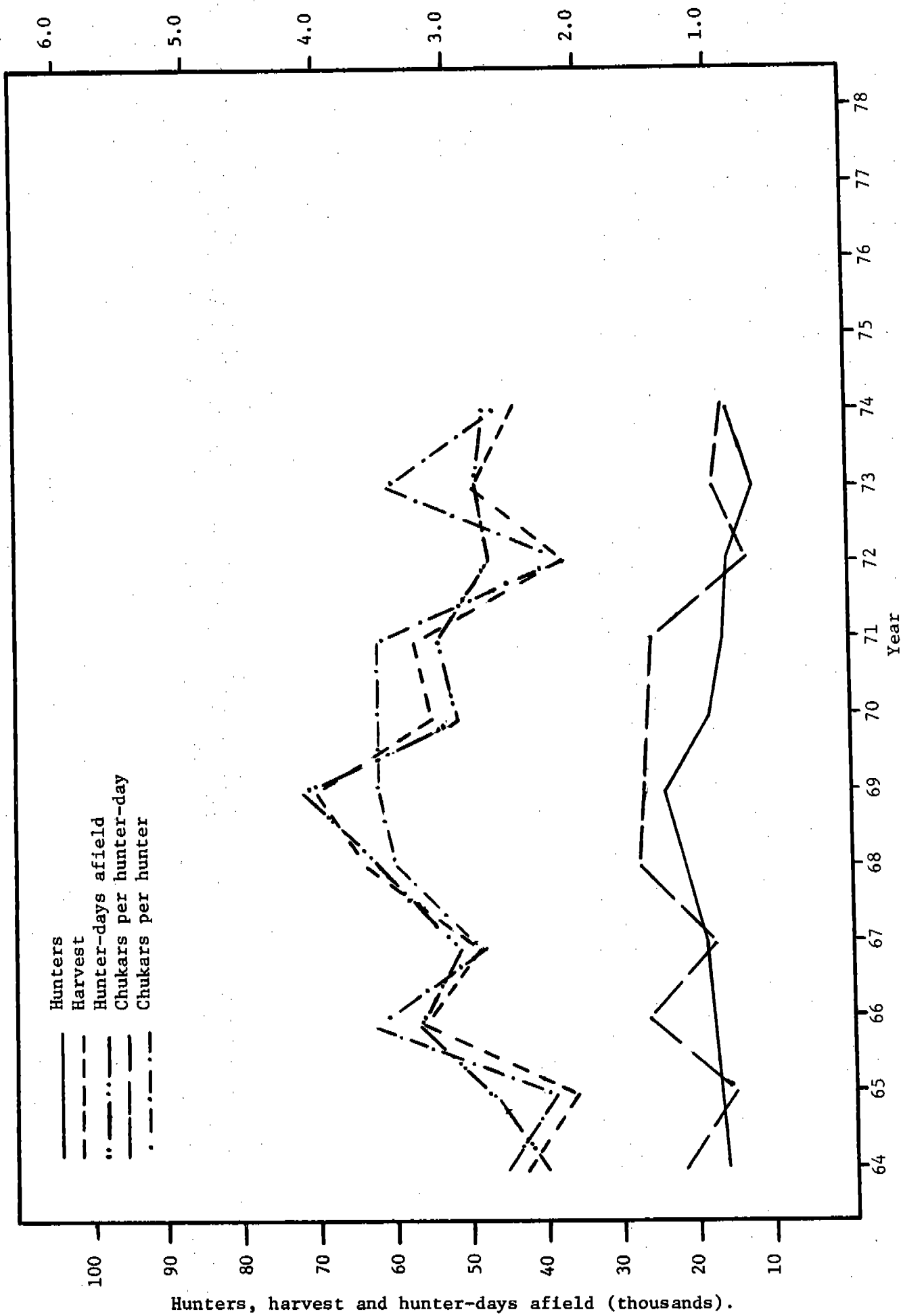


Figure 1. Statewide trends of chukar partridge harvest statistics.

Hunters, harvest and hunter-days afield (thousands).

Table 1. Chukar summer inventory summary, 1974.

Region and County	Distinct Broods		Mean		Mixed Yng. & Adults		Total Yng. 100 Ad.	Total Young/ 100 Ad.	Vehicle Miles	Hours Effort		Birds/ 100 hrs.			
	No. Ad.	Yng.	Brood	Ad.	Yng.	w/o Yng.				Veh.	Horse		Walk	Total	
<b>Northern</b>															
Box Elder	1	11	11.00	17	115	1	19	126	663	125	10	21	0	31	468
Cache	3	3	7.00	2	24	1	6	45	750	0	0	0	0	0	---
Davis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Morgan	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Rich	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Summit	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Weber	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>REGIONAL TOTALS</b>	<b>4</b>	<b>32</b>	<b>8.00</b>	<b>19</b>	<b>139</b>	<b>2</b>	<b>25</b>	<b>171</b>	<b>684</b>	<b>125</b>	<b>10</b>	<b>21</b>	<b>0</b>	<b>31</b>	<b>632</b>
<b>Central</b>															
Juab	1	2	11.00	10	31	0	12	42	350	500	12	0	4	16	338
Salt Lake	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Sanpete	0	0	---	0	0	0	0	0	---	35	0	6	0	6	0
Tooele	19	19	11.89	39	59	22	80	285	356	808	42	0	8	50	730
Utah	3	3	8.00	0	0	22	25	24	96	248	35	0	0	35	140
Wasatch	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>REGIONAL TOTALS</b>	<b>23</b>	<b>24</b>	<b>11.35</b>	<b>49</b>	<b>90</b>	<b>44</b>	<b>117</b>	<b>351</b>	<b>300</b>	<b>1,591</b>	<b>89</b>	<b>6</b>	<b>12</b>	<b>107</b>	<b>437</b>
<b>Southern</b>															
Beaver	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Garfield	0	0	---	0	0	0	0	0	---	179	9	0	13	22	0
Iron	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Kane	0	0	---	0	0	0	0	0	---	100	5	0	3	8	0
Millard	0	0	---	0	32 unclassified	chukars	---	---	---	242	10	0	1	11	291
Piute	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Sevier	0	0	---	0	0	2	2	0	0	43	2	0	0	2	100
Washington	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Wayne	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>REGIONAL TOTALS</b>	<b>0</b>	<b>0</b>	<b>---</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>564</b>	<b>26</b>	<b>0</b>	<b>17</b>	<b>43</b>	<b>79</b>
<b>Northeastern</b>															
Daggett	0	0	---	0	0	0	0	0	---	140	7	0	1	8	0
Duchesne	0	0	---	0	0	0	0	0	---	120	5	5	1	11	0
Uintah	1	1	6.00	2	16	0	3	22	733	180	11	0	0	11	227
<b>REGIONAL TOTALS</b>	<b>1</b>	<b>1</b>	<b>6.00</b>	<b>2</b>	<b>16</b>	<b>0</b>	<b>3</b>	<b>22</b>	<b>733</b>	<b>440</b>	<b>23</b>	<b>5</b>	<b>2</b>	<b>30</b>	<b>83</b>
<b>Southeastern</b>															
Carbon	6	6	9.50	12	86	0	18	143	794	277	9	0	8	17	947
Emery	5	5	9.80	7	52	0	12	101	842	110	4	0	6	10	1,130
Grand	4	4	6.25	21	139	0	25	164	656	291	19	0	2	21	900
San Juan	5	7	10.00	13	80	0	20	130	650	437	2	0	17	19	789
<b>REGIONAL TOTALS</b>	<b>20</b>	<b>22</b>	<b>9.05</b>	<b>53</b>	<b>357</b>	<b>0</b>	<b>75</b>	<b>538</b>	<b>717</b>	<b>1,115</b>	<b>34</b>	<b>0</b>	<b>33</b>	<b>67</b>	<b>915</b>
<b>STATE TOTALS</b>	<b>48</b>	<b>51</b>	<b>10.00</b>	<b>123</b>	<b>602</b>	<b>48</b>	<b>222</b>	<b>1,082</b>	<b>487</b>	<b>3,835</b>	<b>182</b>	<b>32</b>	<b>64</b>	<b>278</b>	<b>469</b>

Table 2. Trend of chukar young per 100 adults ratios, 1962-74.

Region and County	Year													Average 1962-73
	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	
<b>Northern Region</b>														
Box Elder	--	214	535	410	416	360	455	600	247	529	492	760	663	
Cache	--	467	625	700	317	220	--	1011	250	258	--	488	750	
Davis	--	--	--	0	500	0	--	1100	--	--	--	--	--	
Morgan	--	933	600	135	680	88	315	668	178	950	--	--	--	
Rich	--	480	950	--	--	--	--	--	--	--	--	--	--	
Summit	--	--	--	254	--	350	--	--	525	--	--	--	--	
Weber	--	1200	--	--	600	--	--	91	--	286	--	--	--	
<b>Regional Totals</b>	--	350	574	210	429	276	420	510	267	382	475	639	684	
<b>Central Region</b>														
Juab	900	26	300	--	--	475	450	607	421	594	420	725	350	
Salt Lake	608	208	670	--	--	671	409	372	0	367	--	0	--	
Sanpete	765	758	375	--	--	368	400	194	256	171	216	0	--	
Tooele	1267	628	--	--	--	--	1733	1360	922	372	154	410	356	
Utah	860	300	405	--	--	--	240	463	360	352	552	335	96	
Wasatch	--	--	480	--	--	--	--	767	--	--	--	--	--	
<b>Regional Totals</b>	729	201	473	643	638	445	407	496	471	386	208	364	300	
<b>Southern Region</b>														
Beaver	--	--	--	--	--	--	--	--	--	--	--	--	--	
Garfield	183	530	500	160	--	--	--	--	495	275	--	--	--	
Iron	--	--	--	--	--	500	--	--	--	--	--	--	--	
Kane	512	320	--	--	--	--	--	--	--	--	--	--	--	
Millard	1038	390	--	770	514	--	1108	812	700	255	66	--	--	
Piute	600	650	600	--	--	--	--	--	--	550	500	--	--	
Sevier	1425	179	857	1350	833	--	--	--	--	--	800	--	0	
Washington	--	660	--	--	817	315	--	--	--	--	--	--	--	
Wayne	1036	619	364	0	--	--	--	--	--	67	--	--	--	
<b>Regional Totals</b>	643	392	548	462	608	315	1108	812	581	245	131	--	0	
<b>Northeastern Region</b>														
Daggett	182	--	--	--	1056	436	709	1250	150	--	--	--	--	
Duchesne	833	--	--	833	--	0	515	548	--	120	--	--	--	
Uintah	--	--	--	600	1273	1075	482	463	450	678	--	--	733	
<b>Regional Totals</b>	235	--	--	654	1217	485	540	575	279	479	--	--	733	
<b>Southeastern Region</b>														
Carbon	--	--	--	50	--	--	1000	--	383	474	372	650	794	
Emery	264	--	722	300	1100	317	--	--	900	--	--	725	842	
Grand	--	--	--	825	539	367	1000	--	446	205	274	871	656	
San Juan	151	--	400	375	678	57	590	138	234	161	317	500	650	
<b>Regional Totals</b>	169	--	655	389	604	269	635	138	338	226	324	712	717	
<b>STATE TOTALS</b>	434	292	571	338	638	306	523	511	382	311	235	519	487	

Table 3. Trend of chukar mean brood size from 1963-74.

Region and County	Year													Averages	
	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1963-73	1963-74	
<b>Northern</b>															
Box Elder	--	--	--	--	7.53	10.09	8.00	10.59	6.17	13.23	13.00	11.00			
Cache	--	--	--	--	8.00	--	12.00	10.00	3.43	--	13.00	7.00			
Davis	--	--	--	--	--	--	10.50	--	--	--	--	--			
Morgan	--	--	--	--	7.50	--	10.17	8.00	9.50	--	--	--			
Rich	--	--	--	--	--	--	--	--	--	--	--	--			
Summit	--	--	--	--	7.00	--	--	7.33	--	--	--	--			
Weber	--	--	--	--	--	--	--	--	20.0	--	--	--			
<b>REGIONAL TOTALS</b>	<b>7.88</b>	<b>9.08</b>	<b>7.50</b>	<b>7.38</b>	<b>7.52</b>	<b>10.09</b>	<b>9.67</b>	<b>9.91</b>	<b>6.25</b>	<b>13.23</b>	<b>13.00</b>	<b>8.00</b>		<b>9.23</b>	
<b>Central</b>															
Juab	--	--	--	--	7.00	9.00	11.62	5.25	9.33	9.53	9.67	11.00			
Salt Lake	--	--	--	--	--	11.25	16.50	--	--	--	--	--			
Sanpete	--	--	--	--	7.00	6.00	--	6.67	7.00	6.00	--	--			
Tooele	--	--	--	--	--	17.33	14.50	12.14	11.29	10.83	15.00	11.89			
Utah	--	--	--	--	--	5.62	9.40	9.00	8.14	7.50	8.40	8.00			
Wasatch	--	--	--	--	--	--	11.50	--	--	--	--	--			
<b>REGIONAL TOTALS</b>	<b>7.92</b>	<b>6.00</b>	<b>6.43</b>	<b>8.50</b>	<b>7.00</b>	<b>9.22</b>	<b>11.38</b>	<b>9.00</b>	<b>9.88</b>	<b>9.98</b>	<b>10.10</b>	<b>11.35</b>		<b>8.67</b>	
<b>Southern</b>															
Beaver	--	--	--	--	--	--	--	--	--	--	--	--			
Garfield	--	--	--	--	5.00	--	--	8.20	5.00	--	--	--			
Iron	--	--	--	--	--	--	--	--	0	--	--	--			
Kane	--	--	--	--	--	--	--	--	--	--	--	--			
Millard	--	--	--	--	--	15.43	9.67	--	11.50	10.00	--	--			
Piute	--	--	--	--	--	--	--	--	5.50	5.67	--	--			
Sevier	--	--	--	--	--	--	--	--	--	--	--	--			
Washington	--	--	--	--	--	--	--	--	--	--	--	--			
Wayne	--	--	--	--	--	--	--	--	6.00	--	--	--			
<b>REGIONAL TOTALS</b>	<b>8.98</b>	<b>11.50</b>	<b>6.17</b>	<b>8.83</b>	<b>5.00</b>	<b>15.43</b>	<b>9.67</b>	<b>8.20</b>	<b>7.80</b>	<b>6.75</b>	<b>--</b>	<b>--</b>		<b>8.83</b>	
<b>Northeastern</b>															
Daggett	--	--	--	--	7.71	19.00	15.50	4.00	--	--	--	--			
Duchesne	--	--	--	--	--	7.64	11.50	--	6.00	--	--	--			
Uintah	--	--	--	--	--	--	9.00	4.50	7.00	10.00	--	6.00			
<b>REGIONAL TOTALS</b>	<b>--</b>	<b>--</b>	<b>8.50</b>	<b>10.00</b>	<b>7.71</b>	<b>8.58</b>	<b>12.00</b>	<b>4.33</b>	<b>6.86</b>	<b>10.00</b>	<b>--</b>	<b>6.00</b>		<b>8.50</b>	
<b>Southeastern</b>															
Carbon	--	--	--	--	--	10.00	--	7.67	7.29	9.29	9.00	9.50			
Emery	--	--	--	--	7.33	--	--	9.00	--	--	12.00	9.80			
Grand	--	--	--	--	9.35	10.00	--	7.20	8.33	7.20	1.00	6.25			
San Juan	--	--	--	--	6.50	--	6.60	6.50	5.82	9.00	--	10.00			
<b>REGIONAL TOTALS</b>	<b>9.83</b>	<b>10.48</b>	<b>9.25</b>	<b>9.68</b>	<b>8.48</b>	<b>10.00</b>	<b>6.60</b>	<b>7.36</b>	<b>6.88</b>	<b>8.50</b>	<b>8.50</b>	<b>9.05</b>		<b>8.69</b>	
<b>STATE TOTALS</b>	<b>8.50</b>	<b>9.08</b>	<b>7.52</b>	<b>9.27</b>	<b>7.91</b>	<b>10.16</b>	<b>10.47</b>	<b>8.34</b>	<b>7.81</b>	<b>10.08</b>	<b>10.65</b>	<b>10.00</b>		<b>9.07</b>	

Table 4. Trend of chukars observed per 100 hours ratios, 1967-74.

Region and County	Year							Averages 1967-73
	1967	1968	1969	1970	1971	1972	1973	
<b>Northern Region</b>								
Box Elder	165	274	1322	386	71	374	77	468
Cache	291	0	911	175	358	--	--	--
Davis	50	--	600	--	--	--	--	--
Morgan	107	--	1670	500	262	--	--	--
Rich	0	0	--	--	--	--	--	--
Summit	19	--	--	--	--	--	--	--
Weber	--	--	928	--	--	--	--	383
<b>Regional Totals</b>	<b>125</b>	<b>288</b>	<b>1196</b>	<b>445</b>	<b>132</b>	<b>374</b>	<b>119</b>	<b>632</b>
<b>Central Region</b>								
Juab	230	367	450	197	1724	613	174	338
Salt Lake	270	830	354	15	108	--	60	--
Sanpete	202	48	91	371	475	527	7	0
Tooele	--	688	730	1022	592	2044	198	730
Utah	--	567	938	177	210	833	336	140
Wasatch	--	0	867	0	--	--	--	416
<b>Regional Totals</b>	<b>222</b>	<b>285</b>	<b>408</b>	<b>320</b>	<b>510</b>	<b>997</b>	<b>167</b>	<b>437</b>
<b>Southern Region</b>								
Beaver	--	--	0	--	--	--	--	--
Garfield	300	--	0	761	123	--	0	0
Iron	--	--	--	--	0	--	--	0
Kane	--	--	0	--	--	--	--	291
Millard	--	--	3950	--	529	573	--	--
Piute	0	--	0	0	650	2400	--	100
Sevier	--	--	--	--	--	900	--	--
Washington	372	--	0	--	--	--	--	--
Wayne	--	--	--	--	600	--	--	--
<b>Regional Totals</b>	<b>216</b>	<b>--</b>	<b>484</b>	<b>1448</b>	<b>259</b>	<b>543</b>	<b>0</b>	<b>79</b>
<b>Northeastern Region</b>								
Daggett	2143	741	2700	1333	0	--	0	0
Duchesne	4	496	438	0	41	--	0	0
Uintah	115	200	255	110	350	48	0	227
<b>Regional Totals</b>	<b>199</b>	<b>433</b>	<b>396</b>	<b>82</b>	<b>162</b>	<b>16</b>	<b>0</b>	<b>83</b>
<b>Southeastern Region</b>								
Carbon	288	550	--	--	1282	621	375	947
Emery	3550	0	0	--	--	--	194	1130
Grand	3329	37	--	693	643	710	358	900
San Juan	419	1144	438	731	321	431	800	789
<b>Regional Totals</b>	<b>1550</b>	<b>284</b>	<b>211</b>	<b>816</b>	<b>364</b>	<b>541</b>	<b>298</b>	<b>915</b>
<b>STATE TOTALS</b>	<b>328</b>	<b>382</b>	<b>516</b>	<b>459</b>	<b>325</b>	<b>556</b>	<b>150</b>	<b>469</b>

Table 5. Summary of chukar hunter success and distribution of harvest and hunting pressure by region and county, 1974.

Region and County	Hunters Reporting	Days Hunted	Birds Bagged	Birds per Hunter-day	Birds per Hunter*	% of Pressure	% of Harvest
<u>Northern</u>							
Box Elder	217	645	947	1.47	5.42	25.08	40.28
Cache	66	146	134	0.92	3.63	5.68	5.70
Davis	12	23	37	1.61	3.04	0.89	1.57
Morgan	38	97	47	0.48	1.29	3.77	2.00
Rich	6	6	8	1.33	0.00	0.23	0.34
Summit	12	30	13	0.43	4.00	1.17	0.55
Weber	33	91	49	0.54	2.95	3.54	2.08
<b>REGIONAL TOTALS</b>	<b>384</b>	<b>1,038</b>	<b>1,235</b>	<b>1.19</b>	<b>3.38</b>	<b>40.36</b>	<b>52.53</b>
<u>Central</u>							
Juab	40	85	67	0.79	2.25	3.30	2.85
Salt Lake	55	155	86	0.55	2.39	6.03	3.66
Sanpete	16	54	52	0.96	4.73	2.10	2.21
Tooele	151	422	333	0.79	3.68	16.41	14.16
Utah	130	371	264	0.71	2.02	14.42	11.23
Wasatch	12	17	15	0.88	1.00	0.66	0.64
<b>REGIONAL TOTALS</b>	<b>404</b>	<b>1,104</b>	<b>817</b>	<b>0.74</b>	<b>2.44</b>	<b>42.92</b>	<b>34.75</b>
<u>Southern</u>							
Beaver	0	0	0	0.00	0.00	0.00	0.00
Garfield	2	7	7	1.00	0.00	0.27	0.30
Iron	0	0	0	0.00	2.00	0.00	0.00
Kane	0	0	0	0.00	0.00	0.00	0.00
Millard	27	69	36	0.52	1.07	2.68	1.53
Piute	10	35	10	0.29	0.14	1.36	0.43
Sevier	25	71	38	0.54	1.29	2.76	1.62
Washington	0	0	0	0.00	0.00	0.00	0.00
Wayne	6	11	8	0.73	3.75	0.43	0.34
<b>REGIONAL TOTALS</b>	<b>70</b>	<b>193</b>	<b>99</b>	<b>0.51</b>	<b>1.27</b>	<b>7.50</b>	<b>4.21</b>
<u>Northeastern</u>							
Daggett	1	2	0	0.00	0.00	0.08	0.00
Duchesne	10	32	16	0.50	0.25	1.24	0.68
Uintah	14	33	4	0.12	0.38	1.28	0.17
<b>REGIONAL TOTALS</b>	<b>25</b>	<b>67</b>	<b>20</b>	<b>0.30</b>	<b>0.31</b>	<b>2.60</b>	<b>0.85</b>
<u>Southeastern</u>							
Carbon	19	54	33	0.61	2.58	2.10	1.40
Emery	9	31	20	0.65	4.67	1.21	0.85
Grand	16	31	88	2.84	3.13	1.21	3.74
San Juan	3	6	8	1.33	4.00	0.23	0.34
<b>REGIONAL TOTALS</b>	<b>47</b>	<b>122</b>	<b>149</b>	<b>1.22</b>	<b>3.02</b>	<b>4.74</b>	<b>6.34</b>
Unknown counties	24	47	28	0.60	0.00	1.83	1.19
Mixed counties	1	1	3	3.00	0.00	0.04	0.13
<b>STATE TOTALS</b>	<b>955</b>	<b>2,572</b>	<b>2,351</b>	<b>0.91</b>	<b>2.72</b>	<b>100</b>	<b>100</b>

\*Based on county of residence.

Table 6. Summary of chukars bagged per hunter-day by region and county, 1970-74.

Region and County	1970	1971	1972	1973	1974
<u>Northern</u>					
Box Elder	1.00	1.66	0.88	1.41	1.47
Cache	1.28	0.91	0.75	0.68	0.92
Davis	0.93	0.98	0.89	1.12	1.61
Morgan	1.75	1.68	0.85	1.64	0.48
Rich	1.78	1.00	0.67	0.80	1.33
Summit	0.47	0.67	1.28	1.00	0.43
Weber	0.60	0.86	1.10	0.35	0.54
<b>REGIONAL TOTALS</b>	<b>1.09</b>	<b>1.36</b>	<b>0.90</b>	<b>1.17</b>	<b>1.19</b>
<u>Central</u>					
Juab	1.22	1.24	0.87	0.81	0.79
Salt Lake	1.15	0.77	0.64	1.01	0.55
Sanpete	0.21	0.83	0.63	1.12	0.96
Tooele	1.30	1.45	0.77	0.88	0.79
Utah	1.05	0.48	0.67	0.85	0.71
Wasatch	0.88	0.52	0.23	1.46	0.88
<b>REGIONAL TOTALS</b>	<b>1.17</b>	<b>1.04</b>	<b>0.72</b>	<b>0.90</b>	<b>0.74</b>
<u>Southern</u>					
Beaver	0.50	--	0.00	--	0.00
Garfield	2.57	0.00	0.50	0.00	1.00
Iron	2.00	1.17	1.74	0.33	0.00
Kane	0.00	2.00	0.00	--	0.00
Millard	2.10	1.63	1.33	0.96	0.52
Piute	0.42	1.15	1.29	0.58	0.29
Sevier	0.88	0.34	0.29	0.41	0.54
Washington	0.00	0.00	1.50	--	0.00
Wayne	0.44	0.80	0.87	0.00	0.73
<b>REGIONAL TOTALS</b>	<b>1.29</b>	<b>0.86</b>	<b>0.90</b>	<b>0.62</b>	<b>0.51</b>
<u>Northeastern</u>					
Daggett	0.00	0.00	0.00	0.00	0.00
Duchesne	0.29	0.88	0.59	0.71	0.50
Uintah	0.60	0.81	0.69	0.22	0.12
<b>REGIONAL TOTALS</b>	<b>0.46</b>	<b>0.82</b>	<b>0.60</b>	<b>0.40</b>	<b>0.30</b>
<u>Southeastern</u>					
Carbon	0.54	0.26	0.62	0.35	0.61
Emery	0.46	0.79	0.04	0.67	0.65
Grand	1.72	0.63	0.42	0.79	2.84
San Juan	5.00	0.11	0.25	1.46	1.33
<b>REGIONAL TOTALS</b>	<b>0.94</b>	<b>0.44</b>	<b>0.40</b>	<b>0.64</b>	<b>1.22</b>
Unknown counties	2.00	1.49	0.43	0.35	0.60
Mixed counties	0.00	--	0.00	--	3.00
<b>STATE TOTALS</b>	<b>1.12</b>	<b>1.10</b>	<b>0.79</b>	<b>0.95</b>	<b>0.91</b>



Table 7. Distribution of chukar harvest by region and county, 1970-74.

Region and County	1970	1971	1972	1973	1974
<u>Northern</u>					
Box Elder	16.49	25.52	30.59	27.24	40.28
Cache	12.09	4.69	6.44	5.44	5.70
Davis	2.35	1.78	1.96	3.00	1.57
Morgan	3.41	4.76	3.13	7.17	2.00
Rich	0.59	0.21	0.37	0.16	0.34
Summit	0.29	0.49	4.23	1.69	0.55
Weber	1.39	3.36	5.33	1.02	2.08
<b>REGIONAL TOTALS</b>	<b>36.61</b>	<b>40.80</b>	<b>52.05</b>	<b>45.72</b>	<b>52.53</b>
<u>Central</u>					
Juab	2.64	3.57	3.19	3.23	2.85
Salt Lake	6.41	3.46	5.52	6.23	3.66
Sanpete	0.15	1.01	0.74	1.14	2.21
Tooele	21.80	30.42	17.17	15.33	14.16
Utah	11.69	5.59	6.87	16.24	11.23
Wasatch	0.77	1.15	0.18	2.64	0.64
<b>REGIONAL TOTALS</b>	<b>43.46</b>	<b>45.21</b>	<b>33.66</b>	<b>44.82</b>	<b>34.75</b>
<u>Southern</u>					
Beaver	0.04	--	0.00	--	0.00
Garfield	0.66	0.00	0.06	0.00	0.30
Iron	0.37	0.24	2.02	0.08	0.00
Kane	0.00	0.07	0.00	--	0.00
Millard	5.31	4.44	3.43	2.84	1.53
Piute	0.18	0.80	0.55	0.59	0.43
Sevier	3.22	1.40	0.98	1.69	1.62
Washington	0.00	0.00	0.18	--	0.00
Wayne	0.26	0.14	1.23	0.00	0.34
<b>REGIONAL TOTALS</b>	<b>10.04</b>	<b>7.10</b>	<b>8.46</b>	<b>5.20</b>	<b>4.21</b>
<u>Northeastern</u>					
Daggett	0.00	0.00	0.00	0.00	0.00
Duchesne	0.37	0.98	1.41	0.39	0.68
Uintah	1.06	1.33	1.47	0.16	0.17
<b>REGIONAL TOTALS</b>	<b>1.43</b>	<b>2.31</b>	<b>2.88</b>	<b>0.55</b>	<b>0.85</b>
<u>Southeastern</u>					
Carbon	1.61	0.38	1.59	0.79	1.40
Emery	0.44	0.52	0.06	0.39	0.85
Grand	2.97	0.84	0.67	1.02	3.74
San Juan	0.37	0.07	0.06	0.75	0.34
<b>REGIONAL TOTALS</b>	<b>5.39</b>	<b>1.82</b>	<b>2.39</b>	<b>2.96</b>	<b>6.34</b>
Unknown counties	3.08	2.76	0.55	0.75	1.19
Mixed counties	0.00	--	0.00	--	0.13
<b>STATE TOTALS</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 8. Distribution of chukar hunting pressure by region and county, 1970-74.

Region and County	1970	1971	1972	1973	1974
<b>Northern</b>					
Box Elder	18.48	16.95	27.51	18.38	25.08
Cache	10.62	5.71	6.82	7.56	5.68
Davis	2.84	2.01	1.75	2.55	0.89
Morgan	2.18	3.13	2.92	4.16	3.77
Rich	0.37	0.23	0.44	0.19	0.23
Summit	0.70	0.81	2.63	1.61	1.17
Weber	2.59	4.29	3.85	2.77	3.54
<b>REGIONAL TOTALS</b>	<b>37.78</b>	<b>33.13</b>	<b>45.91</b>	<b>37.21</b>	<b>40.36</b>
<b>Central</b>					
Juab	2.43	3.17	2.92	3.78	3.30
Salt Lake	6.26	4.94	6.82	5.84	6.03
Sanpete	0.78	1.35	0.93	0.97	2.10
Tooele	18.81	23.24	17.67	16.51	16.41
Utah	12.55	12.99	8.08	18.23	14.42
Wasatch	0.99	2.43	0.63	1.72	0.66
<b>REGIONAL TOTALS</b>	<b>41.81</b>	<b>48.11</b>	<b>37.05</b>	<b>47.06</b>	<b>42.92</b>
<b>Southern</b>					
Beaver	0.08	--	0.10	--	0.00
Garfield	0.29	0.12	0.10	0.04	0.27
Iron	0.21	0.23	0.93	0.22	0.00
Kane	0.00	0.04	0.00	--	0.00
Millard	2.84	3.01	2.04	2.81	2.68
Piute	0.49	0.77	0.34	0.97	1.36
Sevier	4.12	4.48	2.73	3.89	2.76
Washington	0.08	0.23	0.10	--	0.00
Wayne	0.66	0.19	1.12	0.04	0.43
<b>REGIONAL TOTALS</b>	<b>8.77</b>	<b>9.07</b>	<b>7.45</b>	<b>7.97</b>	<b>7.50</b>
<b>Northeastern</b>					
Daggett	0.12	0.04	0.19	0.11	0.08
Duchesne	1.40	1.24	1.90	0.52	1.24
Uintah	1.98	1.81	1.70	0.67	1.28
<b>REGIONAL TOTALS</b>	<b>3.50</b>	<b>3.09</b>	<b>3.80</b>	<b>1.31</b>	<b>2.60</b>
<b>Southeastern</b>					
Carbon	3.33	1.62	2.04	2.13	2.10
Emery	1.07	0.73	1.22	0.56	1.21
Grand	1.93	1.47	1.27	1.24	1.21
San Juan	0.08	0.73	0.19	0.49	0.23
<b>REGIONAL TOTALS</b>	<b>6.42</b>	<b>4.56</b>	<b>4.72</b>	<b>4.42</b>	<b>4.74</b>
Unknown counties	1.73	2.05	1.02	2.02	1.83
Mixed counties	0.00	--	0.05	--	0.04
<b>STATE TOTALS</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 9. State-wide summary of chukar partridge harvest statistics, 1956-74.

Year	Total hunters	Total harvest	Hunter days afield	Chukars per hunter-day	Chukars per hunter
1956	--	--	--	--	0.91
1957	--	--	--	--	0.92
1958	11,124	19,578	25,100	0.78	1.76
1959	11,154	8,700	26,364	0.33	0.78
1960	13,252	21,733	30,610	0.71	1.64
1961	14,046	20,821	35,675	0.58	1.48
1962	11,638	33,500	35,010	0.95	2.88
1963	14,532	42,806	40,824	1.05	2.95
1964	16,090	42,974	39,971	1.08	2.67
1965	16,431	35,335	45,067	0.78	2.15
1966	17,133	61,370	54,448	1.13	3.58
1967	17,485	48,906	50,671	0.97	2.80
1968	20,744	73,218	61,402	1.19	3.53
1969	22,529	80,917	71,674	1.13	3.59
1970	18,013	56,053	49,911	1.12	3.11
1971	17,917	61,151	55,378	1.10	3.41
1972	16,685	36,925	46,502	0.79	2.21
1973	13,888	48,135	50,677	0.95	3.47
1974	16,412	44,658	48,856	0.91	2.72
<b>TOTALS</b>					
(1958-74)	269,073	736,780	768,140	0.96	2.74
<b>AVERAGES</b>					
(1958-73)	15,791	43,257	44,955	0.92	2.43

Table 10. Chukar field bag check summary, 1974.

Region and County	ALL HUNTS				COMPLETE HUNTS				Birds/100 Hrs. Hunter		
	Total Parties	Total Hunters	Total Hours	Total Birds	Birds/100 Hrs.	Total Hunts	Total Complete Hunters	Total Hours		Total Birds	
Northern											
Box Elder	74	202	1,145	329	29	57	153	887	325	37	2.12
Cache	13	24	118	19	16	12	24	117	19	16	0.79
Davis	--	--	--	--	--	--	--	--	--	--	--
Morgan	--	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>87</b>	<b>226</b>	<b>1,263</b>	<b>348</b>	<b>28</b>	<b>69</b>	<b>177</b>	<b>1,004</b>	<b>344</b>	<b>34</b>	<b>1.94</b>
Central											
Juab	10	27	127	4	3	7	19	99	3	3	0.16
Salt Lake	2	5	10	0	0	0	0	0	0	--	--
Sanpete	--	--	--	--	--	--	--	--	--	--	--
Tooele	56	133	535	110	21	26	59	378	40	11	0.68
Utah	--	--	--	--	--	--	--	--	--	--	--
Wasatch	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>68</b>	<b>165</b>	<b>672</b>	<b>114</b>	<b>17</b>	<b>33</b>	<b>78</b>	<b>477</b>	<b>43</b>	<b>9</b>	<b>0.55</b>
Southern											
Beaver											
Garfield											
Iron											
Kane											
Millard											
Piute											
Sevier											
Washington											
Wayne											
<b>REGIONAL TOTALS</b>											
Northeastern											
Daggett	--	--	--	--	--	--	--	--	--	--	--
Duchesne	1	1	2	0	--	1	1	2	0	--	--
Uintah	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>--</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>--</b>	<b>--</b>
Southeastern											
Carbon	--	--	--	--	--	--	--	--	--	--	--
Emery	2	6	4	8	200	2	6	4	8	200	1.33
Grand	5	16	57	64	112	5	16	57	64	112	4.00
San Juan	3	8	8	0	0	3	8	8	0	0	0.00
<b>REGIONAL TOTALS</b>	<b>10</b>	<b>30</b>	<b>69</b>	<b>72</b>	<b>104</b>	<b>10</b>	<b>30</b>	<b>69</b>	<b>72</b>	<b>104</b>	<b>2.40</b>
STATE TOTALS	166	422	2,006	534	27	113	286	1,552	459	30	1.60

N O D A T A

Table 11. Chukar field bag check trend as determined via field bag checks, 1970-74.

Region and County	1970		1971		1972		1973		1974	
	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter
<b>Northern</b>										
Box Elder	20	0.86	17	0.89	24	1.35	20	0.98	29	2.12
Cache	--	--	29	1.03	18	0.72	19	0.91	16	0.79
Davis	12	0.47	--	--	--	--	--	--	--	--
Morgan	37	2.86	36	1.00	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--
Summit	96	3.00	--	--	--	--	17	1.00	--	--
Weber	7	0.17	--	--	0	0	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>21</b>	<b>0.83</b>	<b>18</b>	<b>0.90</b>	<b>23</b>	<b>1.21</b>	<b>20</b>	<b>0.96</b>	<b>28</b>	<b>1.94</b>
<b>Central</b>										
Juab	20	1.08	24	1.72	11	0.78	8	0.50	3	0.16
Salt Lake	63	2.00	30	1.00	17	--	11	0.33	0	0.00
Sanpete	5	0.25	10	0.33	--	--	--	--	--	--
Tooele	38	2.35	14	1.18	6	0.60	12	0.79	21	0.68
Utah	10	0.31	--	--	19	0.43	0	0.00	--	--
Wasatch	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>21</b>	<b>0.96</b>	<b>16</b>	<b>1.28</b>	<b>8</b>	<b>0.69</b>	<b>9</b>	<b>0.62</b>	<b>17</b>	<b>0.55</b>
<b>Southern</b>										
Beaver	--	--	--	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--
Kane	27	0.75	--	--	--	--	--	--	--	--
Millard	54	3.24	33	2.93	--	--	--	--	--	--
Piute	--	--	--	--	--	--	--	--	--	--
Sevier	--	--	--	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--	--	--	--
Wayne	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>44</b>	<b>1.78</b>	<b>33</b>	<b>2.93</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Northeastern</b>										
Daggett	39	1.00	49	0.41	--	--	--	--	--	--
Duchesne	7	0.50	29	0.83	--	--	--	--	0	0.00
Uintah	15	0.55	60	0.55	17	0.50	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>15</b>	<b>0.67</b>	<b>52</b>	<b>0.45</b>	<b>17</b>	<b>0.50</b>	<b>--</b>	<b>--</b>	<b>0</b>	<b>0.00</b>
<b>Southeastern</b>										
Carbon	--	--	11	0.25	18	0.55	--	--	--	--
Emery	--	--	0	0.00	41	1.50	18	0.67	200	1.33
Grand	73	2.20	16	0.60	--	--	67	1.71	112	4.00
San Juan	--	--	--	--	--	--	--	--	0	0.00
<b>REGIONAL TOTALS</b>	<b>73</b>	<b>2.20</b>	<b>11</b>	<b>0.40</b>	<b>31</b>	<b>1.04</b>	<b>48</b>	<b>1.40</b>	<b>104</b>	<b>2.40</b>
<b>STATE TOTALS</b>	<b>23</b>	<b>0.94</b>	<b>19</b>	<b>1.05</b>	<b>15</b>	<b>0.97</b>	<b>17</b>	<b>0.91</b>	<b>27</b>	<b>1.60</b>

# SAGE GROUSE

## SUMMARY

An increased breeding population level for 1974 was indicated by both the 1973 harvest data and the 1974 strutting ground survey. Production indexes were lower than in 1973 but still slightly above average. The density index (grouse observed per 100 hours) was well above 1973 but was probably biased upward by hot, dry weather and resultant ease of observation due to concentration of grouse in wet meadow areas. The fall population was estimated to be higher than in 1973.

The 1974 harvest increased as a result of increased hunting pressure; both total hunters and hunter-days. Hunter success declined slightly but this was at least partially because proportionately more hunter-days were spent in areas having more restrictive bag limits.

The statewide grouse population trend appeared to be on the upswing or at least stable in 1974 as compared to the low of 1973.



### Strutting Ground Counts

The status of the sage grouse breeding population for 1974 as indicated by strutting ground counts is shown in Table 1 of this section. Results of this survey for 1974 compared to 1973 and the 1967-73 average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Number of grounds counted	142	+31	+158
Total grouse counted	2,482	+37	+101
Average male grouse per ground	17.5	+4	-22
Percent change from previous year (comparable grounds)	+17	--	--

Hunter success indexes for 1973 suggested an increased breeding population for 1974. This was confirmed by the strutting ground survey. Increases were evident in the Central, Southern and Northeastern regions while the Northern Region was comparable to 1973 and the Southeastern Region showed a decrease. The marked increase in strutting grounds counted reflects a continued intensive effort to inventory sage grouse habitat statewide.

### Brood Counts

Results of this survey for 1974 are found in Table 2. Long-term trends of young-adult ratios, mean brood size and sage grouse observed per 100 hours are shown in Tables 3-5. Indexes for 1974 compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total sage grouse counted	3,869	+82	+33
Young per 100 adults	160	-18	+7
Mean brood size	4.57	0	+1
Sage grouse observed per 100 hours	387	+63	+11
Total hours effort	1,001	+12	+21

Effort on sage grouse brood counts in 1974 increased over both 1973 and the average. The density index (sage grouse observed per 100 hours) was well above 1973 in all regions. The relatively dry, hot summer probably biased counts upward by concentrating grouse in wet meadow areas where they were more easily observed. Production declined from 1973 but was still slightly above average. A continued increase in population over 1973 was indicated for the fall of 1974.

### Harvest

#### Hunter Questionnaire

Results of the 1974 hunter questionnaire are shown in Table 6. Long-term trends of sage grouse bagged per hunter-day, percent of harvest and percent of pressure (hunter-days) by county are found in Tables 7-9 and total statewide harvest statistics in Table 10. The 1974 hunting season compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Sage grouse hunters	12,214	+22	+37
Sage grouse harvested	15,215	+9	+26
Hunter-days afield	23,516	+23	+69
Sage grouse per hunter	1.25	-10	-7
Sage grouse per hunter-day	0.65	-11	-26

During the 1974 season hunter success declined. The decrease was not consistent with the indicated increase in the sage grouse population. The decrease was probably at least partially due to a relatively larger proportion of hunting pressure being exerted in those areas having more restrictive daily bag limits. Total hunters and hunter-days afield increased over 1973 and resulted in an increased total harvest.

Long-term sage grouse harvest trends are shown in Figure 1.

#### Field Bag Checks

A summary of field bag check data for 1974 is shown in Table 11. Hunter success trends determined via this method since 1970 are shown in Table 12. Results of the 1974 survey compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total hunters checked	1,800	-6	-10
Total hours hunted	6,815	-6	-16
Sage grouse per hunter (complete hunts)	0.64	-12	-22
Sage grouse bagged per 100 hours	15	-12	-25
Average hours per hunter-day (complete hunts)	4.1	+2	+5
Hours hunted per grouse bagged	6.4	+14	+21

Hunter success (per day) as determined by this survey was similar to that shown by the harvest questionnaire; below both 1973 and the average. Most of the field bag check data were compiled in areas of more restrictive bag limits. The average number of hours per hunter-day was only slightly greater than both 1973 and the average. The number of hours per grouse bagged was somewhat higher than 1973 and the average.



Sage grouse bagged per hunter and per hunter-day.

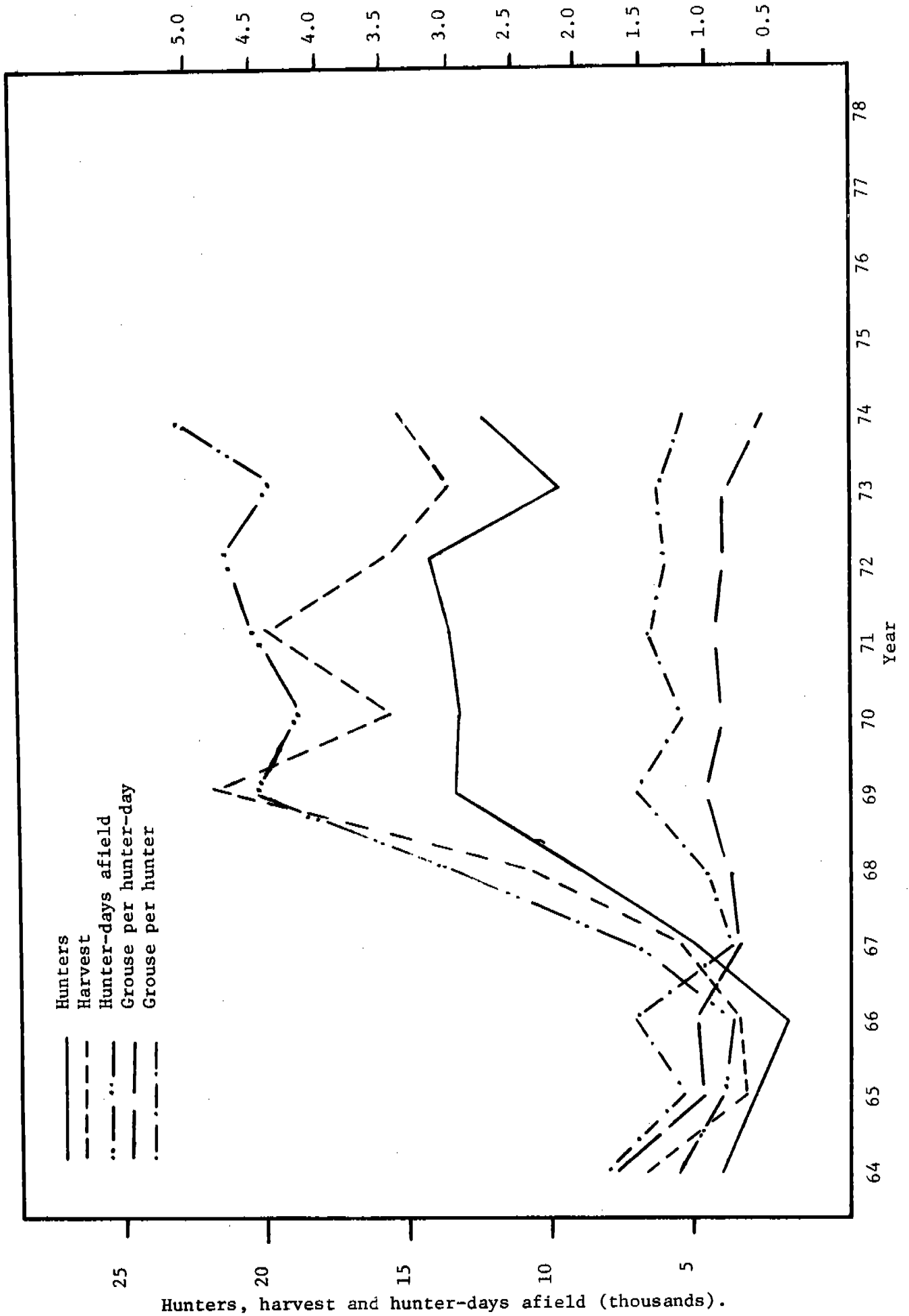


Figure 1. Statewide trend of sage grouse harvest statistics.

Table 1. Summary of sage grouse strutting ground counts by region and county, 1962-74.

Region and County	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<u>Northern Region</u>													
<u>BOX ELDER</u>													
No. strutting grounds counted	3	9	6	6	8	12	15	22	21	21	20	21	25
Total grouse counted	106	155	73	96	118	152	253	667	556	479	422	325	306
County average	35.3	17.2	12.2	16.0	14.8	12.7	16.9	30.3	26.5	22.8	21.1	15.5	12.2
(All strutting grounds)													
% Change from previous year - comparable grounds	-31.4	-37.1	-33.3	+35.7	-11.1	-33.3	+23.1	+94.1	-8.4	-14.0	-10.4	-30.0	-18.5
<u>CACHE</u>													
No. strutting grounds counted			1	1	3	2	2	2	2	3	3	2	3
Total grouse counted			24	45	30	45	59	68	57	68	57	50	44
County average			24.0	45.0	10.0	22.5	29.5	22.7	19.0	25.0	25.0	14.7	
(All strutting grounds)													
% Change from previous year - comparable grounds			+87.5	-77.8	+57.0	+31.1	+6.8	-16.3	+6.0	-14.0			
<u>MORCAY</u>													
No. strutting grounds counted					2	2	2	2	2	2	3	3	3
Total grouse counted					85	45	35	53	61	61	63	63	63
County average					42.5	22.5	17.5	17.7	20.3	21.0	21.0	21.0	21.0
(All strutting grounds)													
% Change from previous year - comparable grounds					--	-47.0	-22.2	+29.0	+15.0	+3.4			
<u>RICH</u>													
No. strutting ground counted	6	6	5	6	5	5	10	6	8	7	9	12	14
Total grouse counted	231	339	172	98	111	134	280	298	324	240	254	299	389
County average	38.5	56.5	34.4	16.3	22.2	26.8	28.0	49.7	40.5	34.3	28.2	24.9	27.8
(All strutting grounds)													
% Change from previous year - comparable grounds	-43.0	+46.7	-38.9	-48.2	+24.7	+7.2	-1.5	+84.1	-20.0	-12.0	-18.1	-13.0	+31.1
<u>SUMMIT</u>													
No. strutting grounds counted	4	3	4	4	4	4	4	5	5	5	5	5	5
Total grouse counted	129	21	51	33	33	58	71	168	185	223	152	138	113
County average	32.2	7.0	12.8	8.2	8.2	14.5	17.8	33.6	37.0	44.6	30.4	27.6	22.6
(All strutting grounds)													
% Change from previous year - comparable grounds	--	-81.9	+75.7	-35.9	0.0	+24.5	+22.8	+60.1	+10.1	+20.5	-31.8	-18.0	-18.1

Table 1. Continued

Region and County	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>REGIONAL TOTALS</b>													
No. strutting grounds counted	13	18	15	16	18	22	32	37	37	38	40	43	50
Total grouse counted	466	515	296	227	286	389	634	1263	1147	1045	938	873	915
Regional average (all strutting grounds)	35.8	28.6	19.7	14.2	15.9	17.7	19.8	34.1	31.0	27.5	23.4	20.3	18.3
% Change from previous year - comparable grounds	-39.6	-5.8	-31.2	-29.3	+6.7	+1.1	+7.9	+84.7	-9.0	-15.9	-15.8	-20.0	-1.0
<b>Southern Region</b>													
<b>GARFIELD</b>													
No. strutting grounds counted	--	--	--	--	--	6	6	10	13	14	14	14	14
Total grouse counted						117	96	213	322	351	330	166	327
County average (all strutting grounds)						19.5	16.0	21.3	24.8	25.1	23.5	11.9	23.4
% Change from previous year - comparable grounds	--	-17.9	+59.4	+31.0	-0.3	-6.8	-50.0	+114.3					
<b>WAYNE</b>													
No. strutting grounds counted	9	7	8	11	11	11	12	10	11	12	10	11	11
Total grouse counted	302	331	497	458	248	311	231	231	237	231	231	231	237
County average (All strutting grounds)	33.6	47.3	62.1	41.6	22.5	26.0	23.1	21.5					
% Change from previous year - comparable grounds	--	+3.0	+46.6	-14.6	-45.9	+18.2	-20.6	+2.6					
<b>BEAVER</b>													
No. strutting grounds counted	2	2	2	2	5	5	5	5	5	5	5	5	5
Total grouse counted	0	79	47	141	153	82	110	22.0					
County average (All strutting grounds)	0.0	39.5	23.5	28.2	30.6	16.4	22.0						
% Change from previous year - comparable grounds	--	--	-40.5	-49.4	+8.5	-46.6	+34.2						
<b>PIUTE</b>													
No. strutting grounds counted	1	0	1	1	1	1	1	1	1	1	1	1	--
Total grouse counted	2	--	6	7	7	5	0	--	--	--	--	--	--
County average (All strutting grounds)	2.0	--	6.0	7.0	7.0	5.0	--	--	--	--	--	--	--
% Change from previous year - comparable grounds	--	--	--	+16.7	0	-28.5	--	--	--	--	--	--	--

Table 1. Continued

Region and County	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>IRON</b>													
No. strutting grounds counted				5	3	4	6	7	0	9			
Total grouse counted				3	23	64	47	66	0	86			
County average (All strutting grounds)				0.6	7.7	16.0	7.8	9.3	--	9.6			
% Change from previous year - comparable grounds				--	--	-8.7	-50.0	+42.3	--	--			
<b>SEVIER</b>													
No. strutting grounds counted	1	1	1	0	1	1	1	1	1	1	1	1	1
Total grouse counted	11	0	--	--	0	0	0	0	0	0	0	0	9
County average (All strutting grounds)	11.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	--	9.0
% Change from previous year - comparable grounds	--	100	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>													
No. strutting grounds counted	17	21	24	33	38	40	31	40					
Total grouse counted	432	430	818	928	794	865	479	769					
Regional average (All strutting grounds)	25.4	20.5	34.1	28.1	20.9	21.6	15.4	19.2					
% Change from previous year - comparable grounds	--	-3.5	+75.4	-4.8	-30.3	+6.7	-40.0	+49.1					
<b>Central Region</b>													
<b>SANPETE</b>													
No. strutting grounds counted							2	1	2	2			
Total grouse counted							13	2	0	0			
County average (All strutting grounds)							6.5	2.0	--	--			
% Change from previous year - comparable grounds							--	-75.0	--	--			
<b>TOOELE</b>													
No. strutting grounds counted	2	3	3	4	5	5	5	5					
Total grouse counted	44	96	74	92	128	60	95	95					
County average (All strutting grounds)	22.0	32.0	24.7	23.0	25.6	12.0	19.0	19.0					
% Change from previous year - comparable grounds	--	+59.1	-22.9	-16.2	0.0	-34.8	+43.3	--					
<b>WASATCH</b>													
No. strutting grounds counted				2	2	2	2	2					
Total grouse counted				100	70	102	52	99					
County average (All strutting grounds)				50.0	35.0	51.0	26.0	49.5					
% Change from previous year - comparable grounds				--	-30.0	+45.7	-49.0	+90.4					

Table 1. Continued

Region and County	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>REGIONAL TOTALS</b>													
No. strutting grounds counted									5	8	8	9	9
Total grouse counted									174	175	232	112	194
Regional average (All strutting grounds)									34.8	21.9	29.0	12.4	21.6
% Change from previous year - comparable grounds									-22.9	-24.1	+15.2	-42.1	+64.7
<b>Northeastern Region</b>													
<b>DAGGETT</b>													
No. strutting grounds counted									1	4	4	5	4
Total grouse counted									26	37	26	41	53
County average (All strutting grounds)									26.0	9.2	6.5	8.2	13.2
% Change from previous year - comparable grounds									--	-38.5	-28.0	+31.0	-5.4
<b>DUCHESNE</b>													
No. Strutting grounds counted									2	3	5	5	11
Total grouse counted									27	27	74	43	172
County average (All strutting grounds)									13.5	9.0	14.8	8.6	15.6
% Change from previous year - comparable grounds									--	-25.9	0.0	-40.5	+44.4
<b>UINTAH</b>													
No. strutting grounds counted						2	0	2	4	5	6	11	11
Total grouse counted						134	--	98	105	63	118	156	163
County average (All strutting grounds)						67.0	--	49.0	26.2	12.6	19.7	14.2	14.8
% Change from previous year - comparable grounds						--	--	--	-31.6	-42.0	+77.0	-25.0	+7.9
<b>REGIONAL TOTALS</b>													
No. strutting grounds counted						2	0	2	7	12	15	21	26
Total grouse counted						134	--	98	158	127	218	240	388
Regional averages (All strutting grounds)						67.0	--	49.0	22.6	10.6	14.5	11.4	14.9
% Change from previous year - comparable grounds						--	--	--	-31.6	-38.6	+32.2	-24.5	+12.5

Table 1. Continued

Region and County	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<u>Southeastern Region</u>													
<b>CARBON</b>													
No. strutting grounds counted	1	7	1	3	1	0	8						
Total grouse counted	1	45	39	58	40	0	77						
County average (All strutting grounds)	1.0	6.4	39.0	19.3	40.0	--	9.6						
% Change from previous year - comparable grounds	--	+100	--	0	+2.0	--	--						
<b>EMERY</b>													
No. strutting grounds counted	1	2	3	3	3	0	3						
Total grouse counted	5	17	8	3	11	0	2						
County average (All strutting grounds)	5.0	8.5	2.7	1.0	3.7	--	0.6						
% Change from previous year - comparable grounds	--	+60	-82	-62.5	+270.0	--	--						
<b>SAN JUAN</b>													
No. strutting grounds counted	2	3	6	6	6	4	6						
Total grouse counted	8	42	115	152	168	105	137						
County average (All strutting grounds)	4.0	14.0	19.2	25.3	28.0	26.2	22.8						
% Change from previous year - comparable grounds	--	+312	+38.1	+31.8	+10.7	+41.6	-19.2						
<b>REGIONAL TOTALS</b>													
No. strutting grounds counted	4	12	10	12	10	4	17						
Total grouse counted	14	104	121	213	219	105	216						
Regional average (All strutting grounds)	3.5	8.7	12.1	17.8	21.9	26.2	12.8						
% Change from previous year - comparable grounds	--	+193.8	+3.4	+19.8	+12.9	+41.6	-19.2						
<b>STATE TOTALS</b>													
No. strutting grounds counted	13	18	15	16	18	22	59	78	92	108	113	108	142
Total grouse counted	466	515	296	227	286	389	1112	2379	2528	2354	2472	1809	2482
State average grouse per strutting grounds	35.8	28.6	19.7	14.2	15.9	17.7	19.0	30.5	27.5	21.8	21.9	16.8	17.5
% Change from previous year - comparable grounds	-39.6	-5.8	-31.2	-29.3	+6.7	+1.1	+0.9	+81.3	-8.4	-17.0	-0.7	-26.4	+17.0

Table 2. Sage grouse summer inventory summary, 1974.

Region and County	Distinct Broods		Mixed Yng. & Adults		Total Adults	Total Yng.	Total Young/100 Ad.	Vehicle Miles	Hours Effort		Birds/100 hrs.					
	No. Ad.	Yng.	Brood	Ad.					Yng.	w/o Yng.		Adults	Yng.	Ad.	Yng.	Walk
<b>Northern</b>																
Box Elder	89	89	362	4.07	38	148	300	427	510	119	1,325	73	123	8	204	459
Cache	8	8	37	4.62	0	0	15	23	37	161	299	17	5	2	24	250
Davis	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Morgan	4	4	19	4.75	8	2	4	16	21	131	0	2	12	0	14	514*
Rich	22	22	86	3.91	13	15	31	66	101	153	312	13	0	26	39	428
Summit	11	11	55	5.00	0	0	9	20	55	275	90	4	36	0	40	188
Weber	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>134</b>	<b>134</b>	<b>559</b>	<b>4.17</b>	<b>59</b>	<b>165</b>	<b>359</b>	<b>552</b>	<b>724</b>	<b>131</b>	<b>2,026</b>	<b>109</b>	<b>176</b>	<b>36</b>	<b>321</b>	<b>398</b>
<b>Central</b>																
Juab	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Salt Lake	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sanpete	4	4	16	4.00	0	0	14	18	16	89	368	10	20	10	40	85
Tooele	12	12	63	5.25	16	53	9	37	116	314	239	6	7	10	23	665
Utah	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Wasatch	29	29	123	4.24	4	15	104	137	138	101	944	24	22	6	52	529
<b>REGIONAL TOTALS</b>	<b>45</b>	<b>45</b>	<b>202</b>	<b>4.49</b>	<b>20</b>	<b>68</b>	<b>127</b>	<b>192</b>	<b>270</b>	<b>141</b>	<b>1,551</b>	<b>40</b>	<b>49</b>	<b>26</b>	<b>115</b>	<b>402</b>
<b>Southern</b>																
Beaver	33	33	120	3.64	11	38	28	72	158	219	208	18	26	6	50	460
Garfield	17	17	92	5.41	13	25	52	82	117	143	379	21	0	12	33	603
Iron	3	3	19	6.33	6	7	47	56	26	46	314	20	5	9	34	241
Kane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Millard	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Piute	6	6	34	5.67	4	4	2	12	38	317	95	6	0	0	6	833
Sevier	1	1	4	4.00	0	0	0	1	4	400	60	1	0	0	1	500
Washington	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Wayne	23	23	108	4.70	11	36	53	87	144	166	825	47	0	22	69	335
<b>REGIONAL TOTALS</b>	<b>83</b>	<b>83</b>	<b>377</b>	<b>4.54</b>	<b>45</b>	<b>110</b>	<b>182</b>	<b>310</b>	<b>487</b>	<b>157</b>	<b>1,881</b>	<b>113</b>	<b>31</b>	<b>49</b>	<b>193</b>	<b>413</b>
<b>Northeastern</b>																
Daggett	27	27	133	4.93	0	0	23	50	133	266	190	10	24	14	48	381
Duchesne	22	22	84	3.82	10	14	29	61	98	161	862	43	21	17	81	196
Uintah	78	78	395	5.06	11	51	11	100	446	446	1,912	91	12	16	119	459
<b>REGIONAL TOTALS</b>	<b>127</b>	<b>127</b>	<b>612</b>	<b>4.82</b>	<b>21</b>	<b>65</b>	<b>63</b>	<b>211</b>	<b>677</b>	<b>321</b>	<b>2,964</b>	<b>144</b>	<b>57</b>	<b>47</b>	<b>248</b>	<b>358</b>
<b>Southeastern</b>																
Carbon	13	13	51	3.92	10	21	16	39	72	185	388	13	53	10	76	146
Emery	0	0	0	--	0	0	1	1	0	0	134	7	0	2	9	11
Grand	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	17	17	113	6.65	9	38	157	183	151	82	355	8	26	5	39	856
<b>REGIONAL TOTALS</b>	<b>30</b>	<b>30</b>	<b>164</b>	<b>5.47</b>	<b>19</b>	<b>59</b>	<b>174</b>	<b>223</b>	<b>223</b>	<b>100</b>	<b>877</b>	<b>28</b>	<b>79</b>	<b>17</b>	<b>124</b>	<b>360</b>
<b>STATE TOTALS</b>	<b>419</b>	<b>419</b>	<b>1914</b>	<b>4.57</b>	<b>164</b>	<b>467</b>	<b>905</b>	<b>1488</b>	<b>2381</b>	<b>160</b>	<b>9299</b>	<b>434</b>	<b>392</b>	<b>175</b>	<b>1001</b>	<b>387</b>

Table 3. Trend of sage grouse young per 100 adults, 1963-1974.

Region and County	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	Averages 1963-73
<b>Northern Region</b>													
Box Elder	143	104	200	93	176	162	153	62	75	83	225	119	
Cache	233	400	320	300	680	600	71	10	168	171	80	161	
Davis	--	--	--	--	--	--	--	--	--	--	--	--	
Morgan	71	0	100	50	160	--	533	400	58	600	245	131	
Rich	71	144	54	100	85	92	98	133	137	55	132	153	
Summit	156	267	243	140	89	133	121	211	158	173	146	275	
Weber	--	550	411	--	650	--	208	--	325	144	500	--	
<b>Regional Totals</b>	<b>113</b>	<b>120</b>	<b>171</b>	<b>129</b>	<b>159</b>	<b>132</b>	<b>128</b>	<b>94</b>	<b>135</b>	<b>99</b>	<b>167</b>	<b>131</b>	<b>132</b>
<b>Central Region</b>													
Juab	200	--	--	400	125	600	300	117	--	1800	500	--	
Salt Lake	118	--	--	--	--	--	--	--	--	--	--	--	
Sanpete	200	159	207	427	119	0	191	84	288	177	138	89	
Tooele	--	250	286	617	200	416	395	215	188	322	318	314	
Utah	400	--	--	--	--	--	--	--	--	--	--	--	
Wasatch	50	179	450	200	101	90	89	205	212	145	68	101	
<b>Regional Totals</b>	<b>78</b>	<b>171</b>	<b>233</b>	<b>313</b>	<b>104</b>	<b>103</b>	<b>137</b>	<b>170</b>	<b>208</b>	<b>216</b>	<b>106</b>	<b>141</b>	<b>167</b>
<b>Southern Region</b>													
Beaver	100	121	46	--	173	--	169	--	250	467	329	219	
Garfield	--	112	168	141	132	263	238	107	93	93	121	143	
Iron	--	100	200	--	400	--	550	214	183	37	350	46	
Kane	--	--	--	--	--	--	470	300	--	336	450	--	
Millard	--	900	--	--	--	--	--	--	--	--	--	--	
Piute	--	--	--	--	--	--	--	--	--	--	--	317	
Sevier	--	357	350	322	98	82	107	--	--	--	500	400	
Washington	--	--	--	--	--	--	--	--	--	--	--	--	
Wayne	--	188	270	124	140	371	178	347	63	62	394	166	
<b>Regional Totals</b>	<b>100</b>	<b>138</b>	<b>169</b>	<b>161</b>	<b>135</b>	<b>257</b>	<b>201</b>	<b>186</b>	<b>85</b>	<b>76</b>	<b>311</b>	<b>157</b>	<b>166</b>
<b>Northeastern Region</b>													
Daggett	400	343	242	216	145	560	493	344	168	273	150	266	
Duchesne	111	224	273	700	140	209	156	77	230	219	--	161	
Uintah	287	420	304	612	237	596	450	419	339	105	312	446	
<b>Regional Totals</b>	<b>252</b>	<b>286</b>	<b>268</b>	<b>304</b>	<b>176</b>	<b>446</b>	<b>383</b>	<b>305</b>	<b>278</b>	<b>134</b>	<b>234</b>	<b>321</b>	<b>279</b>
<b>Southeastern Region</b>													
Carbon	350	0	500	533	433	512	250	167	145	125	328	185	
Emery	--	--	0	800	--	300	164	100	--	--	--	0	
Grand	--	400	800	--	--	--	--	--	275	--	0	--	
San Juan	158	38	--	--	61	214	37	28	70	26	375	82	
<b>Regional Totals</b>	<b>186</b>	<b>50</b>	<b>350</b>	<b>600</b>	<b>94</b>	<b>369</b>	<b>64</b>	<b>30</b>	<b>81</b>	<b>56</b>	<b>340</b>	<b>100</b>	<b>202</b>
<b>STATE TOTALS</b>	<b>123</b>	<b>130</b>	<b>196</b>	<b>179</b>	<b>141</b>	<b>178</b>	<b>160</b>	<b>117</b>	<b>138</b>	<b>100</b>	<b>195</b>	<b>160</b>	<b>150</b>



Table 4. Trend of sage grouse mean brood size, 1963-1974.

Region and County	Averages												
	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1963-73
<b>Northern Region</b>													
Box Elder	4.48	3.97	4.00	3.82	4.04	3.80	5.16	4.13	4.25	3.93	4.69	4.07	
Cache	5.00	4.00	4.00	6.50	6.80	6.00	4.60	5.00	4.50	4.88	4.00	4.62	
Davis	--	--	--	--	--	--	--	--	--	--	--	--	
Morgan	2.86	--	4.00	5.00	4.00	--	5.33	4.00	5.50	6.00	4.40	4.75	
Rich	3.60	3.25	5.00	4.37	5.00	4.07	5.42	4.68	4.44	4.69	4.48	3.91	
Summit	4.67	5.33	5.66	5.25	4.47	3.94	5.91	5.00	5.58	4.73	4.56	5.00	
Weber	--	5.50	4.11	--	6.50	--	3.38	--	4.33	6.50	5.00	--	
<b>Regional Totals</b>	<b>4.12</b>	<b>4.07</b>	<b>4.54</b>	<b>4.90</b>	<b>4.43</b>	<b>3.94</b>	<b>5.18</b>	<b>4.55</b>	<b>4.98</b>	<b>4.58</b>	<b>4.55</b>	<b>4.17</b>	<b>4.53</b>
<b>Central Region</b>													
Juab	4.00	--	--	4.00	--	6.00	2.00	3.50	--	7.50	5.00	--	
Salt Lake	2.00	--	--	--	--	--	--	--	--	--	--	--	
Sanpete	5.00	3.58	6.88	5.88	5.67	--	5.40	4.50	6.00	5.33	4.75	4.00	
Tooele	--	2.50	5.00	6.17	2.00	5.75	5.62	4.44	4.19	4.81	4.90	5.25	
Utah	4.00	--	--	--	--	--	--	--	--	--	--	--	
Wasatch	4.36	5.66	4.50	5.60	5.15	4.29	4.64	4.52	2.94	3.06	4.00	4.24	
<b>Regional Totals</b>	<b>4.25</b>	<b>4.10</b>	<b>6.07</b>	<b>5.76</b>	<b>5.13</b>	<b>4.46</b>	<b>5.03</b>	<b>4.45</b>	<b>3.94</b>	<b>3.90</b>	<b>4.38</b>	<b>4.49</b>	<b>4.68</b>
<b>Southern Region</b>													
Beaver	4.93	3.83	3.83	--	4.60	--	5.44	--	5.00	3.83	4.31	3.64	
Garfield	3.82	5.52	4.44	5.10	3.50	4.10	3.86	3.67	3.73	3.25	3.50	5.41	
Iron	--	3.00	--	--	4.00	--	--	3.67	4.33	3.71	5.33	6.33	
Kane	--	--	--	--	--	--	5.00	3.00	--	4.00	4.50	--	
Millard	--	9.00	--	--	--	--	--	--	--	--	--	--	
Piute	2.31	--	--	--	--	--	--	--	--	--	--	5.67	
Sevier	4.25	4.17	4.67	4.58	5.20	4.62	4.14	--	--	--	5.00	4.00	
Washington	--	--	--	--	--	--	--	--	--	--	--	--	
Wayne	4.72	4.00	4.47	5.11	3.68	4.91	3.89	3.55	4.02	3.36	5.17	4.70	
<b>Regional Totals</b>	<b>4.24</b>	<b>4.76</b>	<b>4.49</b>	<b>4.96</b>	<b>3.89</b>	<b>4.42</b>	<b>4.07</b>	<b>3.60</b>	<b>4.10</b>	<b>3.53</b>	<b>4.72</b>	<b>4.54</b>	<b>4.26</b>
<b>Northeastern Region</b>													
Daggett	7.25	3.43	3.83	5.33	3.00	6.00	4.93	4.37	4.00	3.80	4.65	4.93	
Duchesne	4.44	4.75	3.75	7.00	5.20	4.09	5.00	5.00	5.17	5.40	--	3.82	
Uintah	5.50	4.20	6.58	6.12	5.70	6.13	4.91	4.44	5.19	4.60	4.60	5.06	
<b>Regional Totals</b>	<b>5.40</b>	<b>4.15</b>	<b>4.57</b>	<b>5.72</b>	<b>4.90</b>	<b>5.54</b>	<b>4.92</b>	<b>4.46</b>	<b>5.04</b>	<b>4.60</b>	<b>4.61</b>	<b>4.82</b>	<b>4.90</b>
<b>Southeastern Region</b>													
Carbon	--	--	5.00	5.33	4.00	5.86	2.50	5.00	4.67	4.14	3.50	3.92	
Emery	3.50	--	--	8.00	--	3.00	9.33	1.00	--	--	--	--	
Grand	--	4.00	8.00	--	--	--	--	--	--	--	--	--	
San Juan	4.75	1.25	--	--	4.00	5.00	4.20	4.29	5.10	3.93	5.67	6.65	
<b>Regional Totals</b>	<b>4.33</b>	<b>1.80</b>	<b>7.00</b>	<b>6.00</b>	<b>4.00</b>	<b>5.36</b>	<b>4.92</b>	<b>4.00</b>	<b>5.00</b>	<b>4.05</b>	<b>4.43</b>	<b>5.47</b>	<b>4.63</b>
<b>STATE TOTALS</b>	<b>4.30</b>	<b>4.28</b>	<b>4.70</b>	<b>5.19</b>	<b>4.48</b>	<b>4.50</b>	<b>4.82</b>	<b>4.28</b>	<b>4.62</b>	<b>4.16</b>	<b>4.58</b>	<b>4.57</b>	<b>4.53</b>

Table 5. Trend of sage grouse observed per 100 hours, 1967-1974.

Region and County	1967	1968	1969	1970	1971	1972	1973	1974	Averages 1967-73
<b>Northern Region</b>									
Box Elder	471	273	563	365	253	467	166	459	
Cache	390	100	90	431	229	183	150	250	
Davis	--	--	--	--	--	--	--	--	
Morgan	34	--	59	333	176	111	345	514	
Rich	27	436	678	987	228	348	298	428	
Summit	131	522	236	161	420	349	119	188	
Weber	375	--	800	--	155	92	40	--	
<b>Regional Totals</b>	<b>283</b>	<b>358</b>	<b>468</b>	<b>387</b>	<b>288</b>	<b>319</b>	<b>188</b>	<b>398</b>	<b>327</b>
<b>Central Region</b>									
Juab	180	467	200	217	0	181	30	--	
Salt Lake	--	--	--	--	--	--	--	--	
Sanpete	128	80	135	123	107	106	135	85	
Tooele	25	426	407	194	342	786	161	665	
Utah	--	--	--	0	--	--	--	--	
Wasatch	571	735	690	321	377	364	666	529	
<b>Regional Totals</b>	<b>318</b>	<b>475</b>	<b>427</b>	<b>208</b>	<b>230</b>	<b>341</b>	<b>244</b>	<b>402</b>	<b>320</b>
<b>Southern Region</b>									
Beaver	--	--	1186	--	420	486	277	460	
Garfield	--	941	646	409	604	358	258	603	
Iron	--	--	118	346	426	1133	200	241	
Kane	--	--	924	80	--	253	550	--	
Millard	--	--	--	--	--	--	--	--	
Piute	--	0	--	--	--	--	--	833	
Sevier	--	283	581	--	--	--	--	500	
Washington	--	--	--	--	--	--	--	--	
Wayne	--	691	1363	447	2061	555	742	335	
<b>Regional Totals</b>	<b>244</b>	<b>601</b>	<b>714</b>	<b>388</b>	<b>911</b>	<b>494</b>	<b>393</b>	<b>413</b>	<b>535</b>
<b>Northeastern Region</b>									
Daggett	715	388	626	414	835	346	308	381	
Duchesne	400	117	122	100	159	118	0	196	
Uintah	385	671	487	474	735	594	310	459	
<b>Regional Totals</b>	<b>444</b>	<b>313</b>	<b>361</b>	<b>319</b>	<b>523</b>	<b>349</b>	<b>233</b>	<b>358</b>	<b>363</b>
<b>Southeastern Region</b>									
Carbon	--	63	26	59	45	309	500	146	
Emery	--	22	152	33	0	--	0	11	
Grand	--	--	--	0	133	25	25	--	
San Juan	--	157	2875	653	560	775	300	856	
<b>Regional Totals</b>	<b>159</b>	<b>68</b>	<b>179</b>	<b>451</b>	<b>218</b>	<b>432</b>	<b>215</b>	<b>360</b>	<b>246</b>
<b>STATE TOTALS</b>	<b>296</b>	<b>374</b>	<b>443</b>	<b>346</b>	<b>383</b>	<b>373</b>	<b>237</b>	<b>387</b>	<b>350</b>

Table 6. Summary of sage grouse hunter success and distribution of harvest and hunting pressure by region and county, 1974.

Region and County	Hunters Reporting	Days Hunted	Birds Bagged	Birds per Hunter-day	Birds per Hunter**	% of Pressure	% of Harvest
<u>Northern</u>							
Box Elder	54	79	54	0.68	0.88	6.38	6.74
Cache	83	154	80	0.52	1.23	12.44	9.99
Davis	6	8	2	0.25	1.14	0.65	0.25
Morgan	29	47	16	0.34	3.29	3.80	2.00
Rich	62	105	55	0.52	1.50	8.48	6.87
Summit	51	81	51	0.63	1.37	6.54	6.37
Weber	31	61	43	0.70	1.06	4.93	5.37
REGIONAL TOTALS	316	535	301	0.56	1.18	43.21	37.58
<u>Central</u>							
Juab	7	11	8	0.73	1.00	0.89	1.00
*Salt Lake	14	61	13	0.21	1.16	4.93	1.62
Sanpete	7	10	5	0.50	1.00	0.81	0.62
Tooele	28	58	42	0.72	1.07	4.68	5.24
Utah	46	86	46	0.53	1.19	6.95	5.74
Wasatch	22	32	29	0.91	0.00	2.58	3.62
REGIONAL TOTALS	124	258	143	0.55	1.15	20.84	17.85
<u>Southern</u>							
Beaver	10	19	11	0.58	1.33	1.53	1.37
Garfield	23	48	39	0.81	2.09	3.88	4.87
Iron	4	9	17	1.89	2.67	0.73	2.12
Kane	1	3	2	0.67	1.60	0.24	0.25
Millard	2	2	5	2.50	0.33	0.16	0.62
Piute	7	11	6	0.55	0.50	0.89	0.75
Sevier	12	24	22	0.92	1.29	1.94	2.75
*Washington	1	1	2	2.00	2.20	0.08	0.25
Wayne	40	56	56	1.00	1.33	4.52	6.99
REGIONAL TOTALS	100	173	160	0.92	1.50	13.97	19.98
<u>Northeastern</u>							
Daggett	9	14	15	1.07	2.00	1.13	1.87
Duchesne	29	50	32	0.64	0.92	4.04	4.00
Uintah	35	60	67	1.12	1.97	4.85	8.36
REGIONAL TOTALS	73	124	114	0.92	1.66	10.02	14.23
<u>Southeastern</u>							
Carbon	15	33	25	0.76	1.40	2.67	3.12
Emery	2	3	3	1.00	0.00	0.24	0.37
Grand	0	0	0	0.00	1.00	0.00	0.00
San Juan	6	8	6	0.75	1.00	0.65	0.75
REGIONAL TOTALS	23	44	34	0.77	1.25	3.55	4.24
Unknown counties	31	94	34	0.36	0.00	7.59	4.24
Mixed counties	1	10	15	1.50	4.00	0.81	1.87
STATE TOTALS	668	1,238	801	0.65	1.25	100	100

\*Illegal areas

\*\*Based on county of residence

Table 7. Summary of sage grouse bagged per hunter-day by region and county, 1965- 74.

Region and County	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>										
Box Elder	**	**	0.76	0.42	1.44	1.21	1.12	0.73	0.59	0.68
Cache	**	**	0.36	0.51	0.65	0.30	0.65	0.44	0.64	0.52
Davis	**	**	0.00	0.25	0.92	0.00	0.41	0.67	--	0.25
Morgan	**	**	1.20	0.50	0.57	0.55	0.48	0.86	0.67	0.34
Rich	**	**	0.76	0.79	0.68	0.55	0.84	0.64	0.74	0.52
Summit	**	**	0.68	0.51	0.62	0.68	0.68	0.65	0.49	0.63
Weber	**	**	0.36	0.96	1.63	0.38	0.49	0.55	0.42	0.70
<b>Regional Totals</b>	<b>**</b>	<b>**</b>	<b>0.64</b>	<b>0.59</b>	<b>1.03</b>	<b>0.81</b>	<b>0.83</b>	<b>0.64</b>	<b>0.62</b>	<b>0.56</b>
<b>Central</b>										
Juab	**	**	**	**	**	**	**	0.50	0.63	0.73
Salt Lake	**	**	**	**	**	**	**	**	**	0.21
Sanpete	**	**	**	0.86	0.81	0.40	0.82	0.67	0.85	0.50
Tooele	**	**	**	**	**	0.32	0.83	0.35	0.55	0.72
Utah	0.43	1.00	0.18	0.35	0.83	0.44	0.88	0.91	0.74	0.53
Wasatch	**	**	**	0.91	0.72	0.68	0.40	0.35	1.00	0.91
<b>Regional Totals</b>	<b>0.43</b>	<b>1.00</b>	<b>0.18</b>	<b>0.77</b>	<b>0.79</b>	<b>0.56</b>	<b>0.79</b>	<b>0.58</b>	<b>0.72</b>	<b>0.55</b>
<b>Southern</b>										
Beaver	1.11	1.13	**	1.43	1.59	0.83	0.95	0.94	0.68	0.58
Garfield	1.63	0.67	**	1.23	1.76	1.11	1.42	1.09	1.12	0.81
Iron	0.00	0.20	**	0.77	1.08	1.45	0.53	0.67	0.50	1.89
Kane	1.00	2.00	**	0.75	1.00	1.00	0.50	1.00	1.00	0.67
Millard	1.00	--	**	0.00	--	0.57	--	0.00	--	2.50
Piute	1.00	0.89	0.67	0.92	1.24	0.75	1.38	0.41	0.82	0.55
Sevier	0.65	0.39	0.17	0.95	0.93	1.04	0.77	0.50	0.67	0.92
Washington	--	4.00	**	0.00	1.00	0.00	**	**	**	2.00
Wayne	0.83	1.18	0.80	1.52	1.28	1.44	1.15	0.86	0.68	1.00
<b>Regional Totals</b>	<b>1.12</b>	<b>1.31</b>	<b>0.48</b>	<b>1.18</b>	<b>1.39</b>	<b>1.19</b>	<b>1.11</b>	<b>0.78</b>	<b>0.79</b>	<b>0.92</b>
<b>Northeastern</b>										
Daggett	0.67	0.50	0.40	1.00	1.57	0.20	1.55	1.12	1.27	1.07
Duchesne	1.15	1.20	0.60	1.11	1.05	1.30	1.39	1.23	1.18	0.64
Uintah	0.87	1.05	1.25	1.48	1.25	0.97	0.99	0.90	1.28	1.12
<b>Regional Totals</b>	<b>0.95</b>	<b>0.80</b>	<b>0.95</b>	<b>1.29</b>	<b>1.24</b>	<b>1.02</b>	<b>1.19</b>	<b>1.03</b>	<b>1.24</b>	<b>0.92</b>
<b>Southeastern</b>										
Carbon	0.48	1.50	0.55	0.75	0.36	0.52	0.77	1.10	0.46	0.76
Emery	0.00	--	2.00	0.70	0.71	1.50	0.00	1.00	0.50	1.00
Grand	--	--	--	--	2.00	0.00	1.33	1.00	**	--
San Juan	0.00	--	2.00	0.00	1.33	1.08	1.25	2.00	0.64	0.75
<b>Regional Totals</b>	<b>0.35</b>	<b>1.50</b>	<b>0.74</b>	<b>0.70</b>	<b>0.52</b>	<b>0.73</b>	<b>0.75</b>	<b>1.25</b>	<b>0.53</b>	<b>0.77</b>
Unknown counties	0.03	2.00	0.94	0.43	--	0.76	1.06	0.28	0.56	0.36
Mixed counties	--	--	0.00	--	--	0.00	--	--	--	--
Illegal areas	1.00	1.27	0.34	0.46	2.16	0.71	1.00	0.25	0.00	1.50
<b>STATE TOTALS</b>	<b>0.83</b>	<b>0.99</b>	<b>0.65</b>	<b>0.82</b>	<b>1.09</b>	<b>0.86</b>	<b>0.93</b>	<b>0.72</b>	<b>0.73</b>	<b>0.65</b>

\*\* Closed Season.

Table 8. Distribution of sage grouse harvest by region and county, 1965-74.

Region and County	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<u>Northern</u>										
Box Elder	*	*	11.29	4.11	13.24	24.19	20.30	17.00	8.99	6.74
Cache	*	*	4.03	3.36	3.15	1.68	4.17	5.38	9.40	9.99
Davis	*	*	0.00	0.56	1.02	0.00	0.75	0.85	--	0.25
Morgan	*	*	2.42	0.75	0.74	1.55	1.18	3.54	3.95	2.00
Rich	*	*	12.90	7.10	4.35	4.01	6.20	8.92	9.13	6.87
Summit	*	*	7.66	3.55	3.06	5.43	4.49	6.66	4.50	6.37
Weber	*	*	2.02	4.67	7.87	1.29	2.46	3.26	1.50	5.37
<b>Regional Totals</b>	<b>0.00</b>	<b>0.00</b>	<b>40.32</b>	<b>24.11</b>	<b>33.43</b>	<b>38.16</b>	<b>39.53</b>	<b>45.61</b>	<b>37.47</b>	<b>37.58</b>
<u>Central</u>										
Juab	*	*	*	*	*	*	*	0.14	0.68	1.00
Salt Lake	*	*	*	*	*	*	*	*	*	*
Sanpete	*	*	*	2.24	1.20	1.03	0.96	1.42	3.13	0.62
Tooele	*	*	*	*	*	1.03	3.74	1.70	3.95	5.24
Utah	1.50	12.09	0.81	1.68	7.22	1.55	2.99	4.39	7.22	5.74
Wasatch	*	*	*	11.59	7.04	8.67	1.07	0.85	2.18	3.62
<b>Regional Totals</b>	<b>1.50</b>	<b>12.09</b>	<b>4.04</b>	<b>15.51</b>	<b>15.46</b>	<b>12.94</b>	<b>10.58</b>	<b>8.64</b>	<b>18.12</b>	<b>17.85</b>
<u>Southern</u>										
Beaver	5.00	2.20	*	3.74	2.50	2.46	1.92	2.12	1.77	1.37
Garfield	32.30	8.79	*	5.05	11.11	5.05	7.59	6.80	7.77	4.87
Iron	0.00	0.55	*	1.87	1.20	2.07	0.85	1.70	0.95	2.12
Kane	0.50	1.10	*	0.56	0.37	0.26	0.21	0.28	0.41	0.25
Millard	0.50	--	*	0.00	--	0.52	--	0.00	--	0.62
Piute	9.00	8.79	3.23	2.06	2.41	0.39	1.92	0.99	1.23	0.75
Sevier	5.50	3.85	2.02	3.55	2.31	3.23	1.82	1.98	2.18	2.75
Washington	--	2.20	*	0.00	0.19	0.00	0.21	*	*	*
Wayne	12.40	10.99	6.45	12.52	8.15	13.97	11.22	4.39	5.18	6.99
<b>Regional Totals</b>	<b>65.20</b>	<b>38.47</b>	<b>12.50</b>	<b>29.35</b>	<b>28.24</b>	<b>27.94</b>	<b>25.75</b>	<b>18.27</b>	<b>19.48</b>	<b>19.98</b>
<u>Northeastern</u>										
Daggett	1.00	1.10	0.81	1.31	3.06	0.26	1.82	2.69	1.91	1.87
Duchesne	7.40	9.89	7.26	7.29	3.80	6.73	6.84	8.36	7.90	4.00
Uintah	9.90	10.99	22.18	12.15	8.89	7.76	7.05	9.92	9.26	8.36
<b>Regional Totals</b>	<b>18.30</b>	<b>21.98</b>	<b>30.24</b>	<b>20.75</b>	<b>15.74</b>	<b>14.75</b>	<b>15.71</b>	<b>20.96</b>	<b>19.07</b>	<b>14.23</b>
<u>Southeastern</u>										
Carbon	5.50	4.95	4.44	2.24	1.11	2.07	2.88	3.12	1.63	3.12
Emery	0.00	--	0.81	1.31	0.46	0.78	0.00	0.28	0.68	0.37
Grand	--	--	--	--	0.19	0.00	0.43	0.14	*	*
San Juan	0.00	--	1.61	0.00	0.37	1.68	1.07	1.42	1.23	0.75
<b>Regional Totals</b>	<b>5.50</b>	<b>4.95</b>	<b>6.85</b>	<b>3.55</b>	<b>2.13</b>	<b>4.53</b>	<b>4.38</b>	<b>4.96</b>	<b>3.81</b>	<b>4.24</b>
Unknown counties	0.50	1.10	6.05	4.30	--	1.68	4.06	1.56	2.04	4.24
Mixed counties	--	--	0.00	--	--	0.00	--	--	--	1.87
Illegal areas	9.00	20.87	4.04	2.42	5.00	0.65	2.03	0.14	1.22	1.87
<b>STATE TOTALS</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

\*Closed Season

Table 9. Distribution of sage grouse hunting pressure by region and county, 1965-74.

Region and County	1965	1966	1967*	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>										
Box elder	**	**	9.66	8.09	9.98	17.20	16.90	16.70	11.06	6.38
Cache	**	**	7.31	5.34	5.24	4.77	5.96	8.76	10.66	12.44
Davis	**	**	0.52	1.83	1.21	0.11	1.69	0.92	--	0.65
Morgan	**	**	1.31	1.22	1.41	2.44	2.29	2.95	4.28	3.80
Rich	**	**	10.97	7.33	6.96	6.22	6.86	10.08	9.06	8.48
Summit	**	**	7.31	5.65	5.34	6.88	6.16	7.33	6.67	6.54
Weber	**	**	3.66	3.97	5.24	2.89	4.67	4.28	2.59	4.93
<b>Regional Totals</b>	<b>0.00</b>	<b>0.00</b>	<b>40.73</b>	<b>33.44</b>	<b>35.38</b>	<b>40.51</b>	<b>44.53</b>	<b>51.02</b>	<b>44.32</b>	<b>43.21</b>
<b>Central</b>										
Juab	**	**	**	**	**	**	**	0.20	0.80	0.89
Salt Lake	**	**	**	**	**	**	**	**	**	**
Sanpete	**	**	**	2.14	1.61	2.22	1.09	1.53	2.69	0.81
Tooele	**	**	**	**	**	2.77	4.17	3.46	5.28	4.68
Utah	2.98	9.92	2.87	3.97	9.48	3.00	3.18	3.46	7.17	6.95
Wasatch	**	**	**	10.38	10.58	10.88	2.49	1.73	1.59	2.58
<b>Regional Totals</b>	<b>2.98</b>	<b>9.92</b>	<b>2.87</b>	<b>16.49</b>	<b>21.67</b>	<b>19.64</b>	<b>12.52</b>	<b>10.79</b>	<b>18.43</b>	<b>20.84</b>
<b>Southern</b>										
Beaver	4.76	1.53	**	2.14	1.71	2.55	1.89	1.63	1.89	1.53
Garfield	16.07	12.21	**	3.36	6.85	3.88	4.97	4.48	5.08	3.88
Iron	0.60	3.05	**	1.98	1.21	1.22	1.49	1.83	1.39	0.73
Kane	0.60	0.76	**	0.61	0.40	0.22	0.40	0.20	0.30	0.24
Millard	0.60	--	**	0.31	--	0.78	--	0.41	--	0.16
Piute	7.74	9.16	3.13	1.83	2.12	0.44	1.29	1.73	1.10	0.89
Sevier	7.14	9.16	7.83	3.05	2.72	2.66	2.19	2.85	2.39	1.94
Washington	--	0.76	--	0.31	0.20	0.00	0.30	**	**	**
Wayne	10.71	9.16	5.22	6.72	6.96	8.32	9.05	3.67	5.58	4.52
<b>Regional Totals</b>	<b>48.22</b>	<b>45.79</b>	<b>16.18</b>	<b>20.31</b>	<b>22.18</b>	<b>20.09</b>	<b>21.57</b>	<b>16.80</b>	<b>17.93</b>	<b>13.97</b>
<b>Northeastern</b>										
Daggett	1.19	2.29	1.31	1.07	2.12	1.11	1.09	1.73	1.10	1.13
Duchesne	4.76	10.69	7.83	5.34	3.93	4.44	4.57	4.89	4.88	4.04
Uintah	9.52	11.45	11.49	6.72	7.76	6.88	6.66	7.94	5.28	4.85
<b>Regional Totals</b>	<b>15.47</b>	<b>24.43</b>	<b>20.63</b>	<b>13.13</b>	<b>13.81</b>	<b>12.43</b>	<b>12.33</b>	<b>14.56</b>	<b>11.25</b>	<b>10.02</b>
<b>Southeastern</b>										
Carbon	10.71	3.82	5.22	2.44	3.33	3.44	3.48	2.04	2.59	2.67
Emery	2.98	--	0.26	1.53	0.71	0.44	0.89	0.20	1.00	0.24
Grand	--	--	--	--	0.10	0.11	0.30	0.10	**	**
San Juan	0.60	--	0.52	0.15	0.30	1.33	0.80	0.51	1.39	0.65
<b>Regional Totals</b>	<b>14.29</b>	<b>3.82</b>	<b>6.01</b>	<b>4.12</b>	<b>4.44</b>	<b>5.33</b>	<b>5.47</b>	<b>2.85</b>	<b>5.28</b>	<b>3.55</b>
Unknown counties	10.71	0.76	4.18	8.24	--	1.89	3.58	3.97	2.69	7.59
Mixed counties	--	--	1.83	--	--	0.11	--	--	--	0.81
Illegal areas	8.35	15.26	7.57	4.27	2.52	0.77	1.89	0.41	1.40	5.01
<b>STATE TOTALS</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

\*Distribution of hunting pressure for 1967 and later based on hunter-days rather than number of hunters reporting.

\*\*Closed Season

Table 10. Statewide summary of sage grouse harvest statistics, 1951-74.

Year	Total* Hunters	Total* Harvest	Hunter Days Afield	Sage grouse per hunter-day	Sage grouse per hunter
1951	840	2,458	--	--	2.93
1952	678	2,230	--	--	3.29
1953	895	2,581	--	--	2.88
1954	802	2,510	--	--	3.13
1955	579	1,742	--	--	3.01
1956	495	1,375	--	--	2.97
1957	470	1,303	--	--	2.77
1958	567	1,797	--	--	3.17
1959	699	1,875	--	--	2.68
1960	861	2,246	--	--	2.61
1961	1,078**	1,918**	--	--	1.78**
1962***	2,382	5,352	5,097	1.05	1.89
1963	12,366	13,793	15,564	0.89	1.12
1964	4,362	6,827	5,807	1.18	1.56
1965	3,243	3,881	4,673	0.83	1.20
1966	2,612	3,962	4,006	0.99	1.52
1967	5,336	5,089	7,860	0.65	0.95
1968	9,115	11,109	13,601	0.82	1.22
1969	12,894	22,282	20,466	1.09	1.73
1970	12,036	15,877	18,506	0.86	1.32
1971	12,893	20,013	21,509	0.93	1.55
1972	13,040	15,983	22,232	0.72	1.23
1973	10,017	13,926	19,049	0.73	1.39
1974	12,214	15,215	23,516	0.65	1.25
<hr/>					
TOTALS					
(1963-74)	110,128	148,007	176,789	0.84	1.34
<hr/>					
AVERAGES					
(1963-73)	8,901	12,072	13,934	0.88	1.34

\*The number of sage grouse hunters and consequently harvest was limited by permits available from 1951 through 1962.

\*\*Estimated

\*\*\*Totals and indexes based on indiscreet data.

Table 11. Sage grouse field bag check summary, 1974.

Region and County	ALL HUNTS					COMPLETE HUNTS				
	Total Parties	Total Hunters	Total Hours	Total Birds	Birds/100 hrs.	Total Hunters	Total Hours	Total Birds	Birds/100 hrs.	Birds/Hunter
<b>Northern</b>										
Box Elder	108	280	1320	155	12	101	1241	148	12	0.57
Cache	103	245	1077	97	9	96	1032	94	9	0.42
Davis	--	--	--	--	--	--	--	--	--	--
Morgan	--	--	--	--	--	--	--	--	--	--
Rich	125	285	1276	148	12	112	1208	144	12	0.58
Summit	13	32	49	13	27	4	10	9	90	1.80
Weber	31	74	227	11	5	26	182	11	6	0.18
<b>REGIONAL TOTALS</b>	<b>380</b>	<b>916</b>	<b>3949</b>	<b>424</b>	<b>11</b>	<b>339</b>	<b>3673</b>	<b>406</b>	<b>11</b>	<b>0.51</b>
<b>Central</b>										
Juab	--	--	--	--	--	--	--	--	--	--
Salt Lake	--	--	--	--	--	--	--	--	--	--
Sanpete	--	--	--	--	--	--	--	--	--	--
Tooele	33	81	226	50	22	14	105	30	29	0.83
Utah	--	--	--	--	--	--	--	--	--	--
Wasatch	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>33</b>	<b>81</b>	<b>226</b>	<b>50</b>	<b>22</b>	<b>14</b>	<b>105</b>	<b>30</b>	<b>29</b>	<b>0.83</b>
<b>Southern</b>										
Beaver	9	22	48	13	27	8	34	11	32	0.61
Garfield	82	228	682	146	21	44	339	97	29	0.88
Iron	--	--	--	--	--	--	--	--	--	--
Kane	--	--	--	--	--	--	--	--	--	--
Millard	--	--	--	--	--	--	--	--	--	--
Piute	--	--	--	--	--	--	--	--	--	--
Sevier	--	--	--	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--	--	--	--
Wayne	91	238	978	193	20	67	805	168	21	0.98
<b>REGIONAL TOTALS</b>	<b>182</b>	<b>488</b>	<b>1708</b>	<b>352</b>	<b>21</b>	<b>119</b>	<b>1178</b>	<b>276</b>	<b>23</b>	<b>0.92</b>
<b>Northeastern</b>										
Daggett	8	18	37	11	30	5	25	8	32	0.73
Duchesne	14	38	90	13	14	5	31	4	13	0.31
Uintah	72	224	709	165	23	65	593	129	22	0.71
<b>REGIONAL TOTALS</b>	<b>94</b>	<b>280</b>	<b>836</b>	<b>189</b>	<b>23</b>	<b>75</b>	<b>649</b>	<b>141</b>	<b>22</b>	<b>0.68</b>
<b>Southeastern</b>										
Carbon	--	--	--	--	--	--	--	--	--	--
Emery	--	--	--	--	--	--	--	--	--	--
Grand	--	--	--	--	--	--	--	--	--	--
San Juan	17	35	96	33	34	16	92	33	36	1.03
<b>REGIONAL TOTALS</b>	<b>17</b>	<b>35</b>	<b>96</b>	<b>33</b>	<b>34</b>	<b>16</b>	<b>92</b>	<b>33</b>	<b>36</b>	<b>1.03</b>
<b>STATE TOTALS</b>	<b>707</b>	<b>1800</b>	<b>6815</b>	<b>1048</b>	<b>15</b>	<b>563</b>	<b>5697</b>	<b>886</b>	<b>16</b>	<b>0.64</b>



Table 12. Sage grouse hunter success trend determined by field bag checks,

Region and County	1970		1971		1972		1973		1974	
	Birds/ 100 hrs. Hunter	Birds/ Hunter	Birds/ 100 hrs. Hunter	Birds/ Hunter	Birds/ 100 hrs. Hunter	Birds/ Hunter	Birds/ 100 hrs. Hunter	Birds/ Hunter	Birds/ 100 hrs. Hunter	Birds/ Hunter
<b>Northern</b>										
Box Elder	24	1.00	19	0.99	15	0.88	19	0.75	12	0.57
Cache	35	1.10	7	0.29	7	0.31	13	0.52	9	0.42
Davis	27	0.98	--	--	--	--	--	--	--	--
Morgan	--	--	10	0.21	6	0.29	41	0.92	--	--
Rich	--	--	14	0.55	11	0.50	9	0.36	12	0.58
Summit	--	--	26	1.00	6	0.29	8	--	27	0.41*
Weber	10	0.52	9	0.38	7	0.32	3	0.15	5	0.18
<b>REGIONAL TOTALS</b>	<b>24</b>	<b>0.99</b>	<b>16</b>	<b>0.73</b>	<b>13</b>	<b>0.68</b>	<b>13</b>	<b>0.55</b>	<b>11</b>	<b>0.51</b>
<b>Central</b>										
Juab	50	--	--	--	--	--	--	--	--	--
Salt Lake	16	0.28	--	--	--	--	--	--	--	--
Sanpete	21	0.61	6	0.37	--	--	--	--	--	--
Tooele	20	2.18	16	0.68	22	0.46	20	1.27	22	0.83
Utah	26	0.77	--	--	--	--	--	--	--	--
Wasatch	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>21</b>	<b>0.61</b>	<b>13</b>	<b>0.61</b>	<b>22</b>	<b>0.46</b>	<b>20</b>	<b>1.27</b>	<b>22</b>	<b>0.83</b>
<b>Southern</b>										
Beaver	19	0.67	--	--	--	--	0	0.00	27	0.61
Garfield	20	0.50	21	0.72	20	1.22	23	0.74	21	0.88
Iron	19	0.77	34	1.02	10	0.07	133	1.33	--	--
Kane	--	--	--	--	--	--	--	--	--	--
Millard	12	0.98	--	--	--	--	--	--	--	--
Piute	32	1.32	23	1.00	12	1.20	18	0.75	--	--
Sevier	25	1.36	--	--	--	--	--	--	--	--
Washington	7	0.43	--	--	--	--	--	--	--	--
Wayne	--	--	13	0.65	13	0.73	15	1.09	20	0.98
<b>REGIONAL TOTALS</b>	<b>18</b>	<b>1.07</b>	<b>15</b>	<b>0.67</b>	<b>14</b>	<b>0.75</b>	<b>20</b>	<b>0.92</b>	<b>21</b>	<b>0.92</b>
<b>Northeastern</b>										
Daggett	--	--	38	1.14	15	1.00	20	0.25	30	0.73
Duchesne	15	0.99	29	0.86	28	2.00	31	1.29	14	0.31
Uintah	19	1.16	40	1.48	56	1.46	20	1.27	23	0.71
<b>REGIONAL TOTALS</b>	<b>17</b>	<b>1.06</b>	<b>36</b>	<b>1.24</b>	<b>37</b>	<b>1.40</b>	<b>22</b>	<b>1.17</b>	<b>23</b>	<b>0.68</b>
<b>Southeastern</b>										
Carbon	5	0.10	7	1.00	33	1.00	14	1.00	--	--
Emery	24	0.96	--	--	--	--	0	0.00	--	--
Grand	--	--	--	--	--	--	--	--	--	--
San Juan	--	--	29	1.55	--	--	59	0.71	34	1.03
<b>REGIONAL TOTALS</b>	<b>23</b>	<b>0.90</b>	<b>22</b>	<b>1.46</b>	<b>33</b>	<b>1.00</b>	<b>28</b>	<b>0.61</b>	<b>34</b>	<b>1.03</b>
<b>STATE TOTALS</b>	<b>20</b>	<b>0.97</b>	<b>17</b>	<b>0.74</b>	<b>15</b>	<b>0.71</b>	<b>17</b>	<b>0.73</b>	<b>15</b>	<b>0.64</b>

\* Sage grouse per hunter index based on all hunts.

# FOREST GROUSE

## SUMMARY

The breeding population of ruffed grouse was relatively low in 1974 while blue grouse were relatively abundant. Results of brood surveys suggested increased abundance of both ruffed grouse and blue grouse in the fall of 1974.

Results of the annual harvest questionnaire showed a record harvest of 62,438 forest grouse, a 38 percent increase over the previous record in 1973. Blue grouse comprised 51.6 percent of the total harvest and ruffed grouse 39.3 percent. The balance was reported as unidentified species. The increased harvest resulted largely from increased hunting pressure; both hunters and hunter-days. However, hunter success also improved reflecting an apparent substantial increase in ruffed grouse. The total blue grouse harvest decreased slightly from 1973.



## Brood Counts

### Ruffed Grouse

Results of the annual random brood survey for 1974 are shown in Table 1 of this section. Long-term trends of young-adult ratios, mean brood size and ruffed grouse observed per 100 hours are found in Tables 2-4. A summary of effort expended on ruffed and blue grouse brood counts combined is shown in Table 9. Survey results for 1974 compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total ruffed grouse observed	275	+77	-10
Young per 100 adults	267	-10	-15
Mean brood size	4.09	-11	-13
Ruffed grouse observed per 100 hours	28	+56	-40
Total hours effort (Forest grouse)	1,002	+14	+47

Harvest statistics for 1973 indicated a relatively low ruffed grouse breeding population for 1974.

Total effort on forest grouse brood counts was higher than both 1973 and the average. Ruffed grouse density (grouse observed per 100 hours effort) was well above 1973 but still lower than average. Indicated production was below 1973 and the average but the sample size was small. The below normal production indicated was not consistent with the increased density.

### Blue Grouse

Results of the annual random brood survey for 1974 are shown in Table 5 of this section. Long-term trends of young-adult ratios, mean brood size and blue grouse observed per 100 hours are found in Tables 6-8. Survey results for 1974 compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total blue grouse observed	907	+56	+70
Young per 100 adults	284	+20	+2
Mean brood size	4.88	+1	+4
Blue grouse observed per 100 hours	91	+38	+14
Total hours effort (Forest grouse)	1,002	+14	+47

Harvest statistics for 1973 indicated a high breeding population for 1974.

Total blue grouse observed during brood counts was well above both 1973 and the average. Production also increased. Indicated density (grouse observed per 100 hours effort) also showed an increase over 1973 and the average.

## Harvest

### Hunter Questionnaire

Results of the 1974 forest grouse (ruffed and blue grouse combined) hunter questionnaire are shown in Table 10. Long-term trends of forest grouse bagged per hunter-day, percent of harvest and percent of pressure (hunter-days) by county are found in Tables 11-13 and total statewide harvest statistics in Table 14. Harvest statistics for 1974 compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Forest grouse hunters	21,920	+25	+79
Forest grouse harvested	62,438	+38	+144
Hunter-days afield	55,258	+24	+139
Forest grouse per hunter	2.85	+11	+36
Forest grouse per hunter-day	1.13	+12	+7
Percent ruffed grouse	39.3	+148	-8
Percent blue grouse	51.6	-37	+2
Percent unidentified species	9.0	+233	+32

The increased abundance of ruffed grouse in comparison to 1973 was apparent in harvest statistics in terms of both hunter success and harvest. The harvest and hunter success for blue grouse decreased slightly. The combined harvest was 38 percent higher than the previous record in 1973. It resulted primarily from increased hunting pressure; however, the combined hunter success index was slightly higher than both 1973 and the average. The proportion of ruffed grouse in the harvest increased markedly over 1973 but was still below average. Consequently, blue grouse comprised a proportionately smaller percentage than in 1973 and slightly higher than average.

The long-term trend of forest grouse harvest statistics is shown in Figure 1.

### Field Bag Checks

A summary of field bag check data for 1974 is found in Table 15. Hunter success trends determined via this method since 1970 are shown in Table 16. Results of the 1974 survey compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total hunters checked	2,089	+48	+118
Total hours hunted	9,537	+64	+157
Forest grouse per hunter (complete hunts)	0.59	-26	-23
Forest grouse bagged per 100 hours	13	-32	-38
Average hours per hunter-day (complete hunts)	4.8	+12	+20
Hours hunted per grouse bagged	8.1	+50	+59

Hunter success indexes shown by bag checks were distinctly different from those derived from the harvest questionnaire. Both the grouse per hunter and per 100 hours indexes were lower than 1973 and the average. A possible explanation for this difference lies in the fact that the forest grouse season opened concurrent with the elk hunt and a greater proportion of the harvest probably occurred coincidental to hunting elk as well as deer later on. These hunters were not sampled in the compilation of bag check data. The average hunter spent more hours afield per day and more time was required per grouse bagged.

Forest grouse bagged per hunter and per hunter-day.

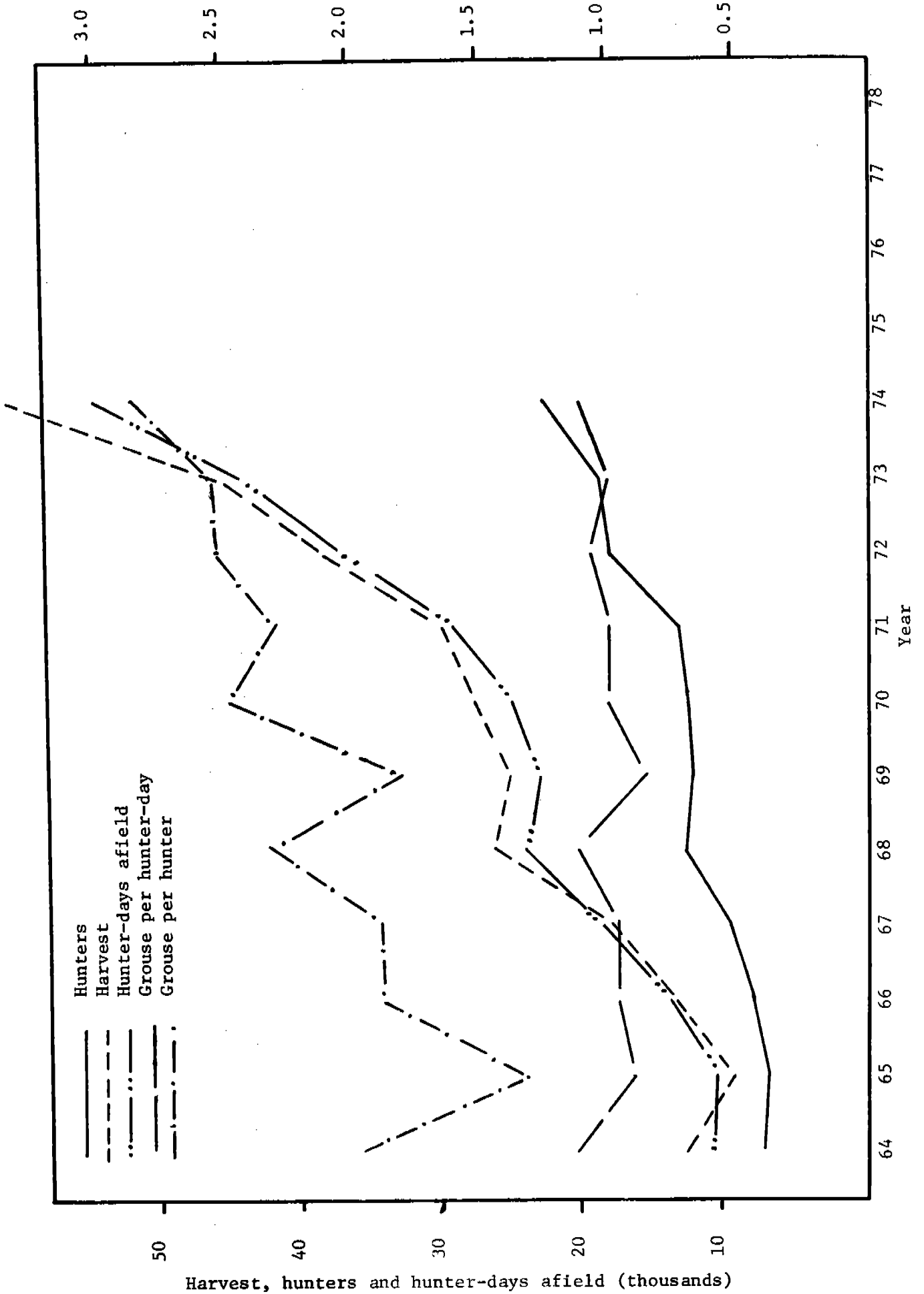


Figure 1. Statewide trends of forest grouse harvest statistics.

Table 1. Ruffed grouse summer inventory summary, 1974.

Region and County	Distinct Broods		Mean		Mixed Yng. & Ad.		Adults w/o Yng.	Total Adults	Total Young	Young/100 Ad.	Grouse/100 Hrs.
	No. Adult	Yng.	Brood	Adults	Young	Ad.					
<u>Northern</u>											
Box Elder	0	0	0	0	0	0	1	1	0	0	2
Cache	3	15	5.00	0	0	0	2	5	15	300	34
Davis	0	0	---	0	0	0	0	0	0	---	0
Morgan	6	24	4.00	0	0	0	0	6	24	400	136
Rich	---	---	---	---	---	---	---	---	---	---	---
Summit	4	20	5.00	0	0	0	4	4	20	500	185
Weber	---	---	---	---	---	---	---	---	---	---	---
<b>REGIONAL TOTALS</b>	<b>13</b>	<b>59</b>	<b>4.54</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>16</b>	<b>59</b>	<b>369</b>	<b>49</b>
<u>Central</u>											
Juab	1	4	4.00	0	0	0	0	1	4	400	250
Salt Lake	1	4	4.00	1	1	1	2	4	5	125	30
Sanpete	10	30	3.00	3	11	8	8	21	41	195	124
Tooele	0	0	---	0	0	0	0	0	0	---	0
Utah	4	17	4.25	3	8	0	0	8	25	313	73
Wasatch	---	---	---	---	---	---	---	---	---	---	---
<b>REGIONAL TOTALS</b>	<b>16</b>	<b>55</b>	<b>3.44</b>	<b>7</b>	<b>20</b>	<b>10</b>	<b>10</b>	<b>34</b>	<b>75</b>	<b>221</b>	<b>71</b>
<u>Southern</u>											
Beaver	0	0	---	0	0	0	0	0	0	---	0
Garfield	1	2	2.00	0	0	0	0	1	2	200	38
Iron	0	0	---	0	0	0	0	0	0	---	0
Kane	---	---	---	---	---	---	---	---	---	---	---
Millard	0	0	---	0	0	0	0	0	0	---	0
Piute	---	---	---	---	---	---	---	---	---	---	---
Sevier	4	20	5.00	0	0	10	14	14	20	500	8
Washington	0	0	---	0	0	0	0	0	0	---	0
Wayne	0	0	---	0	0	0	0	0	0	---	0
<b>REGIONAL TOTALS</b>	<b>5</b>	<b>22</b>	<b>4.40</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>15</b>	<b>22</b>	<b>22</b>	<b>147</b>	<b>8</b>
<u>Northeastern</u>											
Daggett	0	0	---	0	0	0	0	0	0	---	0
Duchesne	3	10	3.33	0	0	0	0	3	10	333	30
Uintah	1	6	6.00	0	0	0	1	1	6	600	16
<b>REGIONAL TOTALS</b>	<b>4</b>	<b>16</b>	<b>4.00</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>16</b>	<b>400</b>	<b>20</b>
<u>Southeastern</u>											
Carbon	5	24	4.80	0	0	0	0	5	24	480	53
Emery	1	4	4.00	0	0	0	0	1	4	400	42
Grand	---	---	---	---	---	---	---	---	---	---	---
San Juan	0	0	---	0	0	0	0	0	0	---	0
<b>REGIONAL TOTALS</b>	<b>6</b>	<b>28</b>	<b>4.67</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>28</b>	<b>467</b>	<b>26</b>
<b>STATE TOTALS</b>	<b>44</b>	<b>180</b>	<b>4.09</b>	<b>7</b>	<b>20</b>	<b>23</b>	<b>75</b>	<b>200</b>	<b>267</b>	<b>28</b>	<b>28</b>

Table 2. Trend of ruffed grouse young per 100 adults ratios, 1963-74.

Region and County	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	Average 1963-73
<b>Northern Region</b>													
Box Elder	--	--	--	--	400	0	--	--	--	--	--	0	
Cache	362	--	314	630	425	225	321	468	383	900	--	300	
Davis	300	--	--	525	600	400	0	--	--	388	--	--	
Morgan	--	240	--	200	--	--	200	400	540	--	--	400	
Rich	300	--	--	--	300	150	--	--	--	375	600	--	
Summit	--	--	0	--	--	500	333	500	514	650	333	500	
Weber	--	--	600	257	--	450	143	--	340	--	450	--	
<b>Regional Totals</b>	<b>331</b>	<b>240</b>	<b>280</b>	<b>522</b>	<b>427</b>	<b>292</b>	<b>260</b>	<b>471</b>	<b>426</b>	<b>453</b>	<b>417</b>	<b>369</b>	<b>374</b>
<b>Central Region</b>													
Juab	--	--	--	--	550	275	333	470	325	--	300	400	
Salt Lake	--	--	--	--	0	150	133	470	100	--	--	125	
Sanpete	--	--	--	--	228	259	171	300	240	329	264	195	
Tooele	--	--	--	--	--	--	--	--	--	--	--	--	
Utah	--	--	--	--	450	433	267	256	300	475	125	313	
Wasatch	--	--	--	--	450	--	--	--	--	300	--	--	
<b>Regional Totals</b>	<b>226</b>	<b>171</b>	<b>311</b>	<b>375</b>	<b>333</b>	<b>236</b>	<b>214</b>	<b>331</b>	<b>242</b>	<b>358</b>	<b>231</b>	<b>221</b>	<b>276</b>
<b>Southern Region</b>													
Beaver	--	--	--	--	--	--	97	--	200	--	--	--	
Garfield	--	--	--	--	--	--	--	--	--	--	--	200	
Iron	--	--	--	--	--	--	--	--	--	--	--	--	
Kane	--	--	--	--	0	--	--	--	--	--	--	--	
Millard	--	--	--	500	--	--	225	183	280	--	--	--	
Piute	--	--	--	--	--	--	--	--	300	--	--	--	
Sevier	560	200	225	362	243	425	400	533	221	333	311	500	
Washington	--	--	--	--	--	--	--	--	--	--	--	--	
Wayne	--	--	--	--	--	--	200	--	--	--	367	--	
<b>Regional Totals</b>	<b>560</b>	<b>200</b>	<b>225</b>	<b>378</b>	<b>189</b>	<b>425</b>	<b>139</b>	<b>300</b>	<b>235</b>	<b>333</b>	<b>325</b>	<b>147</b>	<b>300</b>
<b>Northeastern Region</b>													
Daggett	--	--	--	--	--	--	--	--	--	--	--	--	
Duchesne	457	--	--	--	--	450	800	225	--	367	--	333	
Uintah	--	--	--	--	--	0	700	250	375	--	--	600	
<b>Regional Totals</b>	<b>457</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>386</b>	<b>766</b>	<b>233</b>	<b>375</b>	<b>367</b>	<b>--</b>	<b>400</b>	<b>431</b>
<b>Southeastern Region</b>													
Carbon	--	--	--	--	--	40	--	0	--	--	--	480	
Emery	300	500	300	--	--	350	400	700	500	--	300	400	
Grand	--	--	--	--	--	--	--	--	--	--	--	--	
San Juan	--	--	257	--	--	--	--	--	--	--	--	--	
<b>Regional Totals</b>	<b>300</b>	<b>500</b>	<b>267</b>	<b>--</b>	<b>--</b>	<b>128</b>	<b>400</b>	<b>489</b>	<b>500</b>	<b>--</b>	<b>300</b>	<b>467</b>	<b>363</b>
<b>STATE TOTALS</b>	<b>306</b>	<b>212</b>	<b>285</b>	<b>468</b>	<b>335</b>	<b>268</b>	<b>219</b>	<b>372</b>	<b>308</b>	<b>385</b>	<b>297</b>	<b>267</b>	<b>314</b>



Table 3. Trend of ruffed grouse mean brood size, 1962-74.

Region and County	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	Averages 1962-73
<b>Northern Region</b>														
Box Elder	--	--	--	--	--	4.00	--	--	--	--	--	--	--	--
Cache	7.33	3.62	--	4.40	6.59	6.38	2.00	4.09	4.78	5.55	9.00	--	5.00	--
Davis	--	3.00	--	--	5.25	6.00	4.00	--	--	--	4.80	--	--	--
Morgan	--	--	4.00	--	4.00	--	--	4.67	4.00	6.75	--	--	4.00	--
Rich	5.00	3.00	--	--	--	3.00	3.00	--	--	--	3.75	6.00	--	--
Summit	--	--	--	--	--	--	5.00	6.00	5.00	6.00	6.50	5.00	5.00	--
Weber	5.33	--	--	6.00	4.50	--	4.50	2.50	--	8.00	--	4.50	--	--
<b>Regional Totals</b>	<b>6.00</b>	<b>3.31</b>	<b>4.00</b>	<b>4.66</b>	<b>6.01</b>	<b>5.82</b>	<b>4.00</b>	<b>4.30</b>	<b>4.79</b>	<b>6.09</b>	<b>5.08</b>	<b>5.00</b>	<b>4.54</b>	<b>4.92</b>
<b>Central Region</b>														
Juab	--	--	--	--	--	6.60	5.33	4.00	4.67	4.33	--	3.00	4.00	--
Salt Lake	--	--	--	--	--	--	--	4.00	4.67	4.00	--	--	4.00	--
Sanpete	--	--	--	--	--	3.89	3.54	4.67	4.64	5.50	4.67	4.60	3.00	--
Tooele	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Utah	--	--	--	--	--	4.60	4.33	3.80	7.00	3.75	4.75	5.00	4.25	--
Wasatch	--	--	--	--	--	4.50	--	--	--	--	3.00	--	--	--
<b>Regional Totals</b>	<b>--</b>	<b>4.00</b>	<b>4.08</b>	<b>5.09</b>	<b>5.00</b>	<b>4.76</b>	<b>4.00</b>	<b>4.17</b>	<b>4.78</b>	<b>4.75</b>	<b>4.55</b>	<b>4.43</b>	<b>3.44</b>	<b>4.51</b>
<b>Southern Region</b>														
Beaver	--	--	--	--	--	--	--	6.00	--	5.00	--	--	--	--
Garfield	--	--	--	--	--	--	--	--	--	--	--	--	2.00	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Kane	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Millard	--	--	--	--	5.00	--	--	2.25	--	4.67	--	--	--	--
Piute	--	--	--	--	--	--	--	--	--	3.00	--	--	--	--
Sevier	--	5.60	2.00	3.00	4.14	4.25	4.25	4.00	--	3.83	4.29	4.00	5.00	--
Washington	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Wayne	--	--	--	--	--	--	--	2.00	--	--	--	5.50	--	--
<b>Regional Totals</b>	<b>--</b>	<b>5.60</b>	<b>2.00</b>	<b>3.00</b>	<b>4.25</b>	<b>4.25</b>	<b>4.25</b>	<b>3.30</b>	<b>--</b>	<b>4.08</b>	<b>4.29</b>	<b>4.33</b>	<b>4.40</b>	<b>3.93</b>
<b>Northeastern Region</b>														
Daggett	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Duchesne	4.00	5.33	--	--	--	--	4.50	8.00	3.00	--	3.67	--	3.33	--
Uintah	--	--	--	--	--	--	--	7.00	2.50	5.00	--	--	6.00	--
<b>Regional Totals</b>	<b>4.00</b>	<b>5.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.50</b>	<b>7.67</b>	<b>2.80</b>	<b>5.00</b>	<b>3.67</b>	<b>--</b>	<b>4.00</b>	<b>4.71</b>
<b>Southeastern Region</b>														
Carbon	--	--	--	--	--	--	2.00	--	--	--	--	--	4.80	--
Emery	5.50	3.00	6.67	6.00	--	--	3.50	3.00	7.00	5.00	--	5.00	4.00	--
Grand	--	--	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	--	--	--	4.50	--	--	--	--	--	--	--	--	--	--
<b>Regional Totals</b>	<b>5.50</b>	<b>3.00</b>	<b>6.67</b>	<b>4.80</b>	<b>--</b>	<b>--</b>	<b>3.00</b>	<b>3.00</b>	<b>7.00</b>	<b>5.00</b>	<b>--</b>	<b>5.00</b>	<b>4.67</b>	<b>4.78</b>
<b>STATE TOTALS</b>	<b>5.58</b>	<b>4.10</b>	<b>4.24</b>	<b>4.32</b>	<b>5.56</b>	<b>5.33</b>	<b>4.05</b>	<b>4.24</b>	<b>4.66</b>	<b>5.16</b>	<b>4.61</b>	<b>4.58</b>	<b>4.09</b>	<b>4.70</b>

Table 4 Trend of ruffed grouse observed per 100 hours, 1967-74.

Region and County	1967	1968	1969	1970	1971	1972	1973	1974	Averages 1967-73
<b>Northern</b>									
Box Elder	--	2	--	--	--	--	--	2	
Cache	--	54	83	270	67	14	--	34	
Davis	--	31	3	--	--	244	--	0	
Morgan	--	--	58	62	128	--	--	136	
Rich	--	62	--	--	--	61	140	--	
Summit	--	40	63	42	108	100	62	185	
Weber	--	92	44	--	73	--	--	--	
<b>REGIONAL TOTALS</b>	<b>37</b>	<b>33</b>	<b>50</b>	<b>80</b>	<b>77</b>	<b>39</b>	<b>24</b>	<b>49</b>	<b>49</b>
<b>Central</b>									
Juab	206	500	158	179	142	--	33	250	
Salt Lake	--	111	20	47	16	--	0	30	
Sanpete	87	316	158	143	167	240	129	124	
Tooele	--	--	--	--	--	--	0	0	
Utah	21	61	63	32	40	37	23	73	
Wasatch	100	--	--	--	0	50	--	--	
<b>REGIONAL TOTALS</b>	<b>58</b>	<b>395</b>	<b>78</b>	<b>81</b>	<b>85</b>	<b>84</b>	<b>50</b>	<b>71</b>	<b>119</b>
<b>Southern</b>									
Beaver	--	--	314	--	250	--	--	0	
Garfield	--	--	--	--	--	--	0	38	
Iron	--	--	--	--	--	--	--	0	
Kane	--	--	--	--	--	--	0	--	
Millard	--	--	--	213	317	--	0	0	
Piute	--	--	--	--	267	--	--	--	
Sevier	--	--	--	--	28	22	10	8	
Washington	--	--	--	--	--	--	--	0	
Wayne	--	--	--	--	--	--	117	0	
<b>REGIONAL TOTALS</b>	<b>78</b>	<b>--</b>	<b>314</b>	<b>62</b>	<b>35</b>	<b>15</b>	<b>12</b>	<b>8</b>	<b>86</b>
<b>Northeastern</b>									
Daggett	--	--	--	--	0	--	0	0	
Duchesne	--	157	58	29	0	28	0	30	
Uintah	--	20	88	18	83	--	0	16	
<b>REGIONAL TOTALS</b>	<b>--</b>	<b>119</b>	<b>65</b>	<b>23</b>	<b>83</b>	<b>10</b>	<b>0</b>	<b>20</b>	<b>50</b>
<b>Southeastern</b>									
Carbon	--	61	--	5	0	--	0	53	
Emery	--	16	30	16	46	--	67	42	
Grand	--	--	--	--	--	--	0	--	
San Juan	--	--	--	--	--	--	0	0	
<b>REGIONAL TOTALS</b>	<b>--</b>	<b>17</b>	<b>30</b>	<b>12</b>	<b>46</b>	<b>--</b>	<b>28</b>	<b>26</b>	<b>86</b>
<b>STATE TOTALS</b>	<b>48</b>	<b>70</b>	<b>59</b>	<b>55</b>	<b>54</b>	<b>28</b>	<b>18</b>	<b>28</b>	<b>47</b>

Table 5. Blue grouse summer inventory summary, 1974.

Region and County	Distinct Broods No. Adult	Broods Yng.	Mean Brood	Mixed Adults	Yng. & Ad. Young	Adults w/o Yng.	Total Adults	Total Young	Young/100 Ad.	Grouse/100 Hrs.
<b>Northern</b>										
Box Elder	16	16	81	2	11	21	39	92	236	273
Cache	21	21	104	6	21	8	35	125	357	271
Davis	0	0	0	2	6	0	2	6	300	80
Morgan	13	13	60	1	6	8	22	66	300	400
Rich	--	--	--	--	--	--	--	--	--	--
Summit	0	0	0	0	0	1	1	0	0	8
Weber	4	4	25	0	0	0	4	25	625	--
<b>REGIONAL TOTALS</b>	<b>54</b>	<b>54</b>	<b>270</b>	<b>11</b>	<b>44</b>	<b>38</b>	<b>103</b>	<b>305</b>	<b>305</b>	<b>274</b>
<b>Central</b>										
Juab	0	0	0	0	0	0	0	0	--	0
Salt Lake	1	1	6	0	0	1	2	6	300	27
Sanpete	0	0	0	0	0	0	0	0	--	0
Tooele	5	5	22	2	3	7	14	25	179	144
Utah	4	4	20	0	0	5	9	20	222	64
Wasatch	2	2	10	0	0	1	3	10	333	433
<b>REGIONAL TOTALS</b>	<b>12</b>	<b>12</b>	<b>58</b>	<b>2</b>	<b>3</b>	<b>14</b>	<b>28</b>	<b>61</b>	<b>218</b>	<b>57</b>
<b>Southern</b>										
Beaver	1	1	5	0	0	0	1	5	500	300
Garfield	0	0	0	0	0	2	2	0	0	25
Iron	1	1	3	0	0	1	2	3	150	167
Kane	--	--	--	--	--	--	--	--	--	--
Millard	2	2	9	0	0	0	2	9	450	122
Piute	--	--	--	--	--	--	--	--	--	--
Sevier	18	18	106	1	25	22	41	131	320	40
Washington	2	2	7	0	0	0	2	7	350	129
Wayne	2	2	8	0	0	0	2	8	400	--
<b>REGIONAL TOTALS</b>	<b>26</b>	<b>26</b>	<b>138</b>	<b>1</b>	<b>25</b>	<b>25</b>	<b>52</b>	<b>163</b>	<b>313</b>	<b>47</b>
<b>Northeastern</b>										
Daggett	3	3	17	0	0	0	3	17	567	182
Duchesne	9	9	38	2	4	3	14	42	300	130
Uintah	5	5	25	0	0	5	10	25	250	78
<b>REGIONAL TOTALS</b>	<b>17</b>	<b>17</b>	<b>80</b>	<b>2</b>	<b>4</b>	<b>8</b>	<b>27</b>	<b>84</b>	<b>311</b>	<b>112</b>
<b>Southeastern</b>										
Carbon	5	5	17	0	0	2	7	17	243	44
Emery	0	0	0	0	0	0	0	0	--	0
Grand	2	2	3	0	0	5	7	3	43	25
San Juan	6	6	29	0	0	6	12	29	242	158
<b>REGIONAL TOTALS</b>	<b>13</b>	<b>13</b>	<b>49</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>26</b>	<b>49</b>	<b>188</b>	<b>56</b>
<b>STATE TOTALS</b>	<b>122</b>	<b>122</b>	<b>595</b>	<b>16</b>	<b>76</b>	<b>98</b>	<b>236</b>	<b>671</b>	<b>284</b>	<b>91</b>

Table 6. Trend of blue grouse young per 100 adults ratios, 1963 - 74.

Region and County	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	Averages 1963-73
<b>Northern Region</b>													
Box Elder	254	700	200	--	133	382	222	389	--	500	--	236	
Cache	333	--	200	487	350	318	154	316	245	288	192	357	
Davis	250	--	--	442	400	138	250	--	520	82	--	300	
Morgan	--	425	--	400	--	--	500	600	533	250	375	300	
Rich	--	--	500	--	333	--	--	300	--	300	--	--	
Summit	--	--	200	--	450	--	400	433	600	533	314	--	
Weber	528	--	600	567	500	500	325	--	557	68	700	625	
<b>Regional Totals</b>	<b>317</b>	<b>517</b>	<b>265</b>	<b>478</b>	<b>193</b>	<b>289</b>	<b>248</b>	<b>361</b>	<b>305</b>	<b>191</b>	<b>222</b>	<b>305</b>	<b>307</b>
<b>Central Region</b>													
Juab	--	--	--	--	300	--	383	--	--	--	50	--	
Salt Lake	--	--	--	--	0	--	175	900	67	--	0	300	
Sanpete	--	--	--	--	267	467	--	283	425	156	300	--	
Tooele	--	--	--	--	800	400	--	--	--	--	143	179	
Utah	--	--	--	--	275	267	230	314	422	375	415	222	
Wasatch	--	--	--	--	333	360	--	550	450	600	--	333	
<b>Regional Totals</b>	<b>347</b>	<b>344</b>	<b>567</b>	<b>612</b>	<b>326</b>	<b>337</b>	<b>231</b>	<b>389</b>	<b>324</b>	<b>321</b>	<b>285</b>	<b>218</b>	<b>371</b>
<b>Southern Region</b>													
Beaver	--	--	--	--	--	238	--	--	--	--	--	500	
Garfield	--	--	--	--	--	140	--	100	600	133	--	--	
Iron	--	--	--	700	--	400	8	--	267	--	--	150	
Kane	--	--	--	--	233	--	--	150	200	240	211	--	
Millard	--	--	--	--	--	--	--	--	280	67	--	450	
Piute	--	--	--	--	--	200	--	--	--	--	--	--	
Sevier	76	200	40	69	67	--	--	140	136	100	100	320	
Washington	--	--	--	0	366	--	38	170	--	271	533	350	
Wayne	--	300	--	900	--	--	182	--	--	--	--	400	
<b>Regional Totals</b>	<b>76</b>	<b>240</b>	<b>40</b>	<b>150</b>	<b>160</b>	<b>224</b>	<b>75</b>	<b>135</b>	<b>213</b>	<b>149</b>	<b>192</b>	<b>313</b>	<b>150</b>
<b>Northeastern Region</b>													
Daggett	--	--	--	--	--	150	350	--	--	286	286	567	
Duchesne	--	600	317	--	200	257	433	--	400	275	600	300	
Uintah	--	--	500	--	666	--	480	400	167	557	500	250	
<b>Regional Totals</b>	<b>--</b>	<b>600</b>	<b>343</b>	<b>--</b>	<b>555</b>	<b>186</b>	<b>414</b>	<b>400</b>	<b>225</b>	<b>339</b>	<b>344</b>	<b>311</b>	<b>379</b>
<b>Southeastern Region</b>													
Carbon	--	--	--	--	--	138	--	0	167	92	--	243	
Emery	300	--	575	--	300	250	--	450	300	--	667	--	
Grand	--	--	--	--	--	--	--	--	--	114	0	43	
San Juan	--	--	0	--	200	400	456	153	386	375	--	242	
<b>Regional Totals</b>	<b>300</b>	<b>--</b>	<b>383</b>	<b>--</b>	<b>250</b>	<b>288</b>	<b>456</b>	<b>139</b>	<b>310</b>	<b>216</b>	<b>333</b>	<b>188</b>	<b>297</b>
<b>STATE TOTALS</b>	<b>258</b>	<b>381</b>	<b>312</b>	<b>354</b>	<b>246</b>	<b>268</b>	<b>235</b>	<b>253</b>	<b>292</b>	<b>224</b>	<b>237</b>	<b>284</b>	<b>278</b>

Table 7. Trend of blue grouse mean brood size, 1962-74.

Region and County	Averages													
	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1962-73
<b>Northern Region</b>														
Box Elder	6.06	5.09	7.00	6.00	--	3.67	4.43	5.54	3.83	--	5.00	--	5.06	
Cache	--	4.28	--	2.50	6.22	4.67	4.38	3.35	4.28	5.18	5.50	4.66	4.95	
Davis	--	3.33	--	--	4.42	4.00	4.50	7.00	--	6.25	2.67	--	--	
Morgan	--	--	4.25	--	6.00	--	--	5.00	6.00	5.33	5.33	5.50	4.62	
Rich	--	--	--	5.00	--	3.33	--	--	3.00	--	4.50	--	--	
Summit	5.00	--	--	4.00	--	4.50	--	8.00	4.33	6.00	5.33	4.40	--	
Weber	3.00	5.28	--	6.00	5.67	4.00	5.00	4.75	--	6.50	4.75	7.00	6.25	
<b>Regional Totals</b>	<b>5.64</b>	<b>4.75</b>	<b>5.17</b>	<b>4.09</b>	<b>5.73</b>	<b>4.10</b>	<b>4.50</b>	<b>4.51</b>	<b>4.21</b>	<b>5.54</b>	<b>4.96</b>	<b>4.79</b>	<b>5.00</b>	<b>4.84</b>
<b>Central Region</b>														
Juab	--	--	--	--	--	3.00	--	4.60	--	--	--	1.00	--	
Salt Lake	--	--	--	--	--	--	--	4.40	9.00	2.00	--	--	6.00	
Sanpete	--	--	--	--	--	4.00	4.67	--	2.83	4.25	2.80	3.00	--	
Tooele	--	--	--	--	--	8.00	4.00	--	--	--	--	6.00	4.40	
Utah	--	--	--	--	--	5.00	3.40	4.67	5.50	4.22	4.22	5.38	5.00	
Wasatch	--	--	--	--	--	10.00	3.60	--	5.50	4.50	6.00	--	5.00	
<b>Regional Totals</b>	<b>--</b>	<b>3.88</b>	<b>4.43</b>	<b>5.67</b>	<b>6.13</b>	<b>4.78</b>	<b>3.80</b>	<b>4.54</b>	<b>4.67</b>	<b>4.00</b>	<b>4.12</b>	<b>4.54</b>	<b>4.83</b>	<b>4.59</b>
<b>Southern Region</b>														
Beaver	--	--	--	--	--	--	3.75	--	--	--	--	--	5.00	
Garfield	--	--	--	--	--	--	2.00	--	3.00	6.00	4.00	--	--	
Iron	--	--	--	--	7.00	--	4.00	--	--	8.00	--	--	3.00	
Kane	--	--	--	--	--	--	--	--	3.00	6.00	3.33	6.33	--	
Millard	--	--	--	--	--	--	--	--	--	4.67	2.00	--	4.50	
Piute	--	--	--	--	--	--	2.00	--	--	--	--	--	--	
Sevier	--	3.20	3.00	2.00	2.57	2.00	--	1.50	--	3.00	2.62	3.00	5.89	
Washington	--	--	--	--	--	6.00	--	4.00	3.40	--	4.00	5.33	3.50	
Wayne	7.00	--	3.00	--	9.00	--	--	--	--	--	--	--	4.00	
<b>Regional Totals</b>	<b>--</b>	<b>3.20</b>	<b>3.00</b>	<b>2.00</b>	<b>4.36</b>	<b>3.00</b>	<b>3.22</b>	<b>5.50</b>	<b>3.25</b>	<b>4.45</b>	<b>3.06</b>	<b>4.55</b>	<b>5.31</b>	<b>3.60</b>
<b>Northeastern Region</b>														
Daggett	--	--	--	--	--	--	--	3.50	--	--	5.00	5.00	5.67	
Duchesne	5.00	--	6.00	4.75	--	2.00	9.00	4.33	--	4.00	4.71	6.00	4.22	
Uintah	--	--	--	5.00	--	6.67	--	6.00	5.50	2.50	6.50	5.00	5.00	
<b>Regional Totals</b>	<b>5.00</b>	<b>--</b>	<b>6.00</b>	<b>4.80</b>	<b>--</b>	<b>5.50</b>	<b>9.00</b>	<b>4.46</b>	<b>5.50</b>	<b>3.00</b>	<b>5.21</b>	<b>5.20</b>	<b>4.71</b>	<b>5.37</b>
<b>Southeastern Region</b>														
Carbon	--	--	--	--	--	--	4.00	--	--	5.00	6.00	--	3.40	
Emery	7.00	3.00	--	5.75	--	6.00	5.00	--	4.50	3.00	--	6.67	--	
Grand	--	--	--	--	--	--	--	--	--	--	2.67	--	1.50	
San Juan	--	--	--	--	--	4.00	4.33	5.20	4.00	5.25	6.17	--	4.83	
<b>Regional Totals</b>	<b>7.00</b>	<b>3.00</b>	<b>--</b>	<b>5.75</b>	<b>--</b>	<b>5.00</b>	<b>4.33</b>	<b>5.20</b>	<b>4.20</b>	<b>4.82</b>	<b>5.50</b>	<b>6.67</b>	<b>3.77</b>	<b>5.13</b>
<b>STATE TOTALS</b>	<b>5.64</b>	<b>4.36</b>	<b>4.44</b>	<b>4.74</b>	<b>5.49</b>	<b>4.42</b>	<b>4.24</b>	<b>4.46</b>	<b>4.28</b>	<b>4.86</b>	<b>4.64</b>	<b>4.81</b>	<b>4.88</b>	<b>4.70</b>

Table 8. Trend of blue grouse observed per 100 hours, 1967-74.

Region and County	1967	1968	1969	1970	1971	1972	1973	1974	Averages 1967-73
<b>Northern</b>									
Box Elder	--	129	412	99	--	35	0	273	
Cache	--	192	146	198	171	133	409	271	
Davis	--	194	170	--	194	125	--	80	
Morgan	--	--	50	88	76	125	173	400	
Rich	--	--	--	33	--	39	0	--	
Summit	--	--	32	56	18	127	138	8	
Weber	--	150	364	--	153	147	--	--	
<b>REGIONAL TOTALS</b>	<b>63</b>	<b>103</b>	<b>127</b>	<b>97</b>	<b>135</b>	<b>111</b>	<b>266</b>	<b>274</b>	<b>129</b>
<b>Central</b>									
Juab	138	--	175	--	0	--	25	0	
Salt Lake	2	--	64	28	20	--	20	27	
Sanpete	68	68	--	43	34	92	39	0	
Tooele	675	500	--	--	--	--	94	144	
Utah	32	106	38	63	94	92	172	64	
Wasatch	100	87	--	260	1,100	262	--	433	
<b>REGIONAL TOTALS</b>	<b>64</b>	<b>97</b>	<b>52</b>	<b>57</b>	<b>51</b>	<b>98</b>	<b>95</b>	<b>57</b>	<b>74</b>
<b>Southern</b>									
Beaver	--	88	--	--	--	--	--	300	
Garfield	--	240	--	86	45	10	0	25	
Iron	--	143	140	15	42	--	--	167	
Kane	--	--	--	111	51	--	76	--	
Millard	--	--	--	--	317	83	0	122	
Piute	--	54	--	--	--	--	--	--	
Sevier	--	--	38	--	16	23	7	40	
Washington	--	--	86	174	--	260	--	129	
Wayne	--	--	--	--	--	--	8	--	
<b>REGIONAL TOTALS</b>	<b>116</b>	<b>102</b>	<b>56</b>	<b>162</b>	<b>29</b>	<b>37</b>	<b>18</b>	<b>47</b>	<b>75</b>
<b>Northeastern</b>									
Daggett	--	1,400	193	--	0	146	45	182	
Duchesne	10	119	33	--	13	90	13	130	
Uintah	255	--	156	41	35	87	19	78	
<b>REGIONAL TOTALS</b>	<b>51</b>	<b>210</b>	<b>150</b>	<b>41</b>	<b>18</b>	<b>104</b>	<b>27</b>	<b>112</b>	<b>86</b>
<b>Southeastern</b>									
Carbon	--	543	9	32	80	258	0	44	
Emery	29	12	--	12	31	--	77	0	
Grand	--	--	--	--	13	103	19	25	
San Juan	75	158	196	211	178	238	0	158	
<b>REGIONAL TOTALS</b>	<b>33</b>	<b>67</b>	<b>98</b>	<b>40</b>	<b>97</b>	<b>216</b>	<b>36</b>	<b>56</b>	<b>84</b>
<b>STATE TOTALS</b>	<b>67</b>	<b>101</b>	<b>84</b>	<b>71</b>	<b>71</b>	<b>95</b>	<b>66</b>	<b>91</b>	<b>80</b>

Table 9. Summary of effort expended on forest grouse brood counts, 1974.

Region and County	Vehicle Miles Traveled	Hours Effort Expended			Total
		Vehicle	Horseback	Walking	
<u>Northern</u>					
Box Elder	138	19	27	2	48
Cache	670	45	2	12	59
Davis	79	5	0	5	10
Morgan	10	1	18	3	22
Rich	0	0	0	0	0
Summit	70	3	10	0	13
Weber	0	0	0	0	0
<b>REGIONAL TOTALS</b>	<b>967</b>	<b>73</b>	<b>57</b>	<b>22</b>	<b>152</b>
<u>Central</u>					
Juab	10	2	0	0	2
Salt Lake	51	2	0	28	30
Sanpete	360	36	5	9	50
Tooele	127	6	18	3	27
Utah	376	34	0	11	45
Wasatch	0	0	0	3	3
<b>REGIONAL TOTALS</b>	<b>924</b>	<b>80</b>	<b>23</b>	<b>54</b>	<b>157</b>
<u>Southern</u>					
Beaver	0	0	0	2	2
Garfield	83	4	0	4	8
Iron	8	2	0	1	3
Kane	0	0	0	0	0
Millard	40	7	0	2	9
Piute	0	0	0	0	0
Sevier	0	0	432	0	432
Washington	26	6	0	1	7
Wayne	0	0	0	0	0
<b>REGIONAL TOTALS</b>	<b>157</b>	<b>19</b>	<b>432</b>	<b>10</b>	<b>461</b>
<u>Northeastern</u>					
Daggett	125	7	0	4	11
Duchesne	457	26	3	14	43
Uintah	508	24	8	13	45
<b>REGIONAL TOTALS</b>	<b>1,090</b>	<b>57</b>	<b>11</b>	<b>31</b>	<b>99</b>
<u>Southeastern</u>					
Carbon	498	27	28	0	55
Emery	152	10	0	2	12
Grand	754	35	0	5	40
San Juan	170	9	11	6	26
<b>REGIONAL TOTALS</b>	<b>1,574</b>	<b>81</b>	<b>39</b>	<b>13</b>	<b>133</b>
<b>STATE TOTALS</b>	<b>4,712</b>	<b>310</b>	<b>562</b>	<b>130</b>	<b>1,002</b>

Table 10. Summary of forest grouse hunter success and distribution of harvest and hunting pressure by region and county, 1974.

Region and County	Hunters Reporting	Days Hunted	Birds Bagged			Total	Birds/Day	Birds/Hunter*	% of Pressure	% of Harvest
			Ruffed	Blue	Uniden.					
<b>Northern</b>										
Box Elder	49	108	24	71	4	99	0.92	2.78	3.71	3.01
Cache	259	705	339	549	93	981	1.39	4.50	24.24	29.84
Davis	36	74	11	36	4	51	0.69	2.57	2.54	1.55
Morgan	45	84	53	54	1	108	1.29	2.57	2.89	3.29
Rich	63	149	50	76	7	133	0.89	1.00	5.12	4.05
Summit	68	149	86	42	25	153	1.03	4.17	5.12	4.65
Weber	100	226	89	168	1	258	1.14	3.13	7.77	7.85
<b>REGIONAL TOTALS</b>	<b>620</b>	<b>1,495</b>	<b>652</b>	<b>996</b>	<b>135</b>	<b>1,783</b>	<b>1.19</b>	<b>3.37</b>	<b>51.39</b>	<b>54.24</b>
<b>Central</b>										
Juab	37	89	39	67	5	111	1.25	4.00	3.06	3.38
Salt Lake	46	89	42	52	2	96	1.08	2.23	3.06	2.92
Sanpete	60	140	52	91	14	157	1.12	2.29	4.81	4.78
Tooele	22	35	8	13	2	23	0.66	2.37	1.20	0.70
Utah	181	393	196	167	42	405	1.03	2.48	13.51	12.32
Wasatch	61	150	68	62	3	133	0.89	2.56	5.16	4.05
<b>REGIONAL TOTALS</b>	<b>407</b>	<b>896</b>	<b>405</b>	<b>452</b>	<b>68</b>	<b>925</b>	<b>1.03</b>	<b>2.39</b>	<b>30.80</b>	<b>28.14</b>
<b>Southern</b>										
Beaver	6	28	2	5	0	7	0.25	0.75	0.96	0.21
Garfield	6	12	0	2	0	2	0.17	0.33	0.41	0.06
Iron	14	22	3	11	5	19	0.86	1.31	0.76	0.58
Kane	1	1	0	2	0	2	2.00	2.00	0.03	0.06
Millard	21	58	16	31	49	96	1.66	3.56	1.99	2.92
Piute	4	7	0	5	0	5	0.71	1.20	0.24	0.15
Sevier	32	71	69	25	5	99	1.39	3.79	2.44	3.01
Washington	0	0	0	0	0	0	0.00	4.75	0.00	0.00
Wayne	5	8	1	2	2	5	0.63	0.50	0.28	0.15
<b>REGIONAL TOTALS</b>	<b>89</b>	<b>207</b>	<b>91</b>	<b>83</b>	<b>61</b>	<b>235</b>	<b>1.14</b>	<b>2.53</b>	<b>7.12</b>	<b>7.15</b>
<b>Northeastern</b>										
Daggett	13	18	4	14	2	20	1.11	1.00	0.62	0.61
Duchesne	24	54	19	17	5	41	0.76	1.67	1.86	1.25
Uintah	29	59	33	48	7	88	1.49	2.23	2.03	2.68
<b>REGIONAL TOTALS</b>	<b>66</b>	<b>131</b>	<b>56</b>	<b>79</b>	<b>14</b>	<b>149</b>	<b>1.14</b>	<b>2.00</b>	<b>4.50</b>	<b>4.53</b>
<b>Southeastern</b>										
Carbon	22	56	20	19	5	44	0.79	2.00	1.93	1.34
Emery	12	30	10	12	4	26	0.87	4.50	1.03	0.79
Grand	1	2	0	1	0	1	0.50	1.00	0.07	0.03
San Juan	1	1	1	0	0	1	1.00	0.00	0.03	0.03
<b>REGIONAL TOTALS</b>	<b>36</b>	<b>89</b>	<b>31</b>	<b>32</b>	<b>9</b>	<b>72</b>	<b>0.81</b>	<b>2.41</b>	<b>3.06</b>	<b>2.19</b>
Unknown counties	41	91	58	55	10	123	1.35	0.00	3.13	3.74
Mixed counties	0	0	0	0	0	0	0.00	1.00	0.00	0.00
<b>STATE TOTALS</b>	<b>1,259</b>	<b>2,909</b>	<b>1,293</b>	<b>1,697</b>	<b>297</b>	<b>3,287</b>	<b>1.13</b>	<b>2.85</b>	<b>100</b>	<b>100</b>

\*Based on county of residence.



Table 11. Summary of forest grouse bagged per hunter-day by region and county, 1965-74.

Region and County	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>										
Box Elder	0.67	1.08	0.83	0.72	0.88	1.17	1.07	1.32	0.79	0.92
Cache	0.98	1.12	1.24	1.17	1.11	1.33	1.36	1.14	1.04	1.39
Davis	0.71	0.38	0.57	0.40	0.52	0.82	0.47	0.85	1.31	0.69
Morgan	1.33	1.77	0.57	1.59	0.50	1.55	1.40	1.73	1.25	1.29
Rich	0.93	--	1.09	0.92	0.97	1.42	1.35	1.15	1.18	0.89
Summit	0.87	1.04	0.58	1.32	0.60	1.10	0.89	0.77	1.04	1.03
Weber	0.32	1.04	0.62	1.52	0.75	1.22	1.11	1.42	0.99	1.14
REGIONAL TOTALS	0.80	1.08	0.94	1.19	0.87	1.28	1.17	1.20	1.04	1.19
<b>Central</b>										
Juab	1.14	1.67	0.73	1.36	1.00	1.38	1.21	0.50	0.69	1.25
Salt Lake	0.55	0.69	0.74	1.21	0.96	0.80	1.26	1.26	1.35	1.08
Sanpete	1.06	0.87	1.15	1.53	0.77	1.56	0.92	1.40	0.88	1.12
Tooele	0.95	0.25	0.15	1.00	0.68	0.55	0.57	0.70	0.70	0.66
Utah	1.00	1.03	0.87	1.21	0.76	1.13	1.02	1.13	1.03	1.03
Wasatch	1.09	1.07	1.21	1.37	0.68	1.29	1.36	1.00	0.95	0.89
REGIONAL TOTALS	0.88	0.93	0.87	1.31	0.77	1.24	1.08	1.10	0.98	1.03
<b>Southern</b>										
Beaver	0.00	0.00	2.00	0.67	0.50	1.00	0.80	1.00	0.93	0.25
Garfield	1.00	1.00	0.33	2.00	0.25	0.00	0.00	0.60	0.27	0.17
Iron	0.00	0.33	0.60	1.03	1.15	1.19	1.00	0.71	0.96	0.86
Kane	--	--	--	0.25	0.80	0.00	0.63	0.69	0.64	2.00
Millard	0.00	0.00	1.60	0.00	4.00	1.83	1.50	0.68	1.42	1.66
Piute	3.00	1.00	--	1.00	1.00	0.43	1.33	0.20	1.10	0.71
Sevier	0.25	1.63	1.06	1.21	1.00	1.11	0.95	0.87	1.18	1.39
Washington	--	--	1.00	1.10	0.00	0.00	1.00	--	2.00	--
Wayne	0.00	--	4.00	0.33	2.00	0.00	0.00	1.50	0.00	0.63
REGIONAL TOTALS	0.35	1.00	1.09	1.06	0.99	1.07	0.92	0.75	1.05	1.14
<b>Northeastern</b>										
Daggett	--	0.00	1.69	1.20	2.22	0.14	0.50	1.37	0.30	1.11
Duchesne	1.60	1.36	0.78	1.33	1.08	0.84	1.64	1.23	1.06	0.76
Uintah	1.00	1.00	0.56	1.04	1.26	0.88	0.52	0.40	0.85	1.49
REGIONAL TOTALS	1.27	1.14	0.98	1.19	1.37	0.73	0.96	0.93	0.83	1.14
<b>Southeastern</b>										
Carbon	0.50	1.00	1.00	0.88	1.04	1.18	0.65	1.03	1.11	0.79
Emery	0.00	0.33	2.43	2.00	0.89	1.12	0.45	1.00	0.50	0.87
Grand	3.00	--	--	1.17	0.00	0.50	1.00	0.67	0.13	0.50
San Juan	0.00	--	1.00	--	0.43	0.00	--	2.00	1.20	1.00
REGIONAL TOTALS	0.60	0.87	1.43	1.12	0.85	1.12	0.61	1.06	0.90	0.81
Unknown counties	0.83	0.35	0.82	1.30	--	0.68	1.11	0.57	1.06	1.35
Mixed counties	1.00	--	1.51	--	--	0.00	2.00	--	0.00	--
STATE TOTALS	0.83	0.99	0.99	1.22	0.87	1.20	1.10	1.09	1.01	1.13

Table 12. Distribution of forest grouse harvest by region and county, 1965-74.

Region and County	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>										
Box Elder	3.12	4.95	2.81	1.67	3.45	3.03	2.88	5.01	3.15	3.01
Cache	25.17	25.44	25.29	20.44	28.21	28.27	27.41	24.23	27.39	29.84
Davis	4.90	0.88	1.41	0.77	1.44	1.48	1.94	2.08	2.47	1.55
Morgan	1.78	4.06	0.47	4.16	1.73	2.90	3.28	4.69	3.61	3.29
Rich	3.12	--	2.93	2.18	3.65	3.03	4.62	3.19	3.27	4.05
Summit	2.90	4.95	4.92	8.20	4.61	2.96	3.62	4.31	5.91	4.65
Weber	3.34	9.72	3.40	8.20	11.80	10.24	10.52	17.09	6.54	7.85
REGIONAL TOTALS	44.33	50.00	41.22	45.61	54.89	51.90	54.29	60.60	52.35	54.24
<b>Central</b>										
Juab	1.78	1.77	0.94	1.92	1.44	3.48	2.28	0.91	1.01	3.38
Salt Lake	8.02	4.24	3.04	4.04	2.50	1.29	3.89	3.35	2.89	2.92
Sanpete	3.79	7.24	7.03	8.52	3.17	8.82	3.69	4.10	4.24	4.78
Tooele	4.45	0.35	0.59	0.64	1.25	0.39	0.80	0.37	0.80	0.70
Utah	17.59	20.49	9.25	13.26	12.67	12.04	12.73	12.14	14.35	12.32
Wasatch	5.35	2.65	6.09	6.34	3.93	4.89	6.03	3.51	4.24	4.05
REGIONAL TOTALS	40.98	36.74	26.93	34.72	24.95	30.91	29.42	24.39	27.52	28.14
<b>Southern</b>										
Beaver	0.00	0.00	0.47	0.26	0.10	0.26	0.54	0.48	0.55	0.21
Garfield	0.45	0.18	0.12	0.64	0.10	0.00	0.00	0.32	0.13	0.06
Iron	0.00	0.53	1.05	1.99	2.88	1.22	0.60	1.28	1.97	0.58
Kane	--	--	--	0.06	0.77	0.00	0.34	0.59	0.38	0.06
Millard	0.00	0.00	0.00	0.00	0.38	1.42	0.80	0.80	1.55	2.92
Piute	0.67	0.35	--	0.19	1.06	0.19	1.07	0.11	0.92	0.15
Sevier	0.22	4.59	1.99	2.63	1.92	3.80	3.49	2.56	3.61	3.01
Washington	--	--	0.12	0.70	0.00	0.00	0.07	--	0.08	--
Wayne	0.00	--	0.94	0.06	0.58	0.00	0.00	0.16	0.00	0.15
REGIONAL TOTALS	1.34	5.65	5.62	6.53	7.77	6.89	6.90	6.28	9.19	7.15
<b>Northeastern</b>										
Daggett	--	--	3.16	0.77	1.92	0.13	0.40	1.17	0.29	0.61
Duchesne	1.78	3.36	1.64	2.31	1.34	1.74	2.41	1.97	2.10	1.25
Uintah	1.34	0.88	1.17	1.73	4.61	1.80	0.74	0.64	1.17	2.68
REGIONAL TOTALS	3.12	4.24	5.97	4.80	7.87	3.67	3.55	3.78	3.56	4.53
<b>Southeastern</b>										
Carbon	0.67	2.12	1.76	2.31	2.69	5.15	1.47	1.86	3.52	1.34
Emery	0.00	0.18	1.99	1.41	1.54	0.58	0.34	0.53	0.59	0.79
Grand	0.67	--	--	0.45	0.00	0.06	0.07	0.11	0.04	0.03
San Juan	0.00	--	0.12	--	0.29	0.00	--	0.32	0.25	0.03
REGIONAL TOTALS	1.34	2.30	3.86	4.16	4.51	5.80	1.88	2.82	4.40	2.19
Unknown counties	7.57	1.06	3.28	4.16	--	0.84	3.42	2.13	2.98	3.74
Mixed counties	1.34	--	13.11	--	--	0.00	0.54	--	0.00	--
STATE TOTALS	100	100	100	100	100	100	100	100	100	100

Table 13. Distribution of forest grouse hunting pressure by region and county, 1965-74.

Region and County	1965	1966	1967*	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>										
Box Elder	3.86	4.53	3.35	2.82	3.44	3.09	2.94	4.13	4.03	3.71
Cache	18.33	21.15	20.09	21.28	22.33	25.39	22.04	23.20	26.68	24.24
Davis	5.14	3.02	2.42	2.35	2.43	2.16	4.56	2.67	1.91	2.54
Morgan	0.61	1.51	0.81	3.21	3.02	2.24	2.57	2.97	2.93	2.89
Rich	3.22	--	2.66	2.90	3.27	2.55	3.75	3.02	2.80	5.12
Summit	2.89	6.95	8.43	7.59	6.72	3.24	4.48	6.10	5.73	5.12
Weber	10.29	9.37	5.43	6.57	13.85	10.03	10.36	13.14	6.66	7.77
REGIONAL TOTALS	44.34	46.53	43.19	46.71	55.08	48.69	50.70	55.23	50.72	51.39
<b>Central</b>										
Juab	1.29	0.91	1.27	1.72	1.26	3.01	2.06	1.98	1.48	3.06
Salt Lake	12.22	8.46	4.04	4.07	2.27	1.93	3.38	2.91	2.16	3.06
Sanpete	3.54	8.16	6.00	6.81	3.61	6.79	4.41	3.20	4.88	4.81
Tooele	3.22	1.81	3.81	0.78	1.60	0.85	1.54	0.58	1.15	1.20
Utah	13.18	17.82	10.51	13.38	14.60	12.81	13.74	11.69	14.12	13.51
Wasatch	4.50	2.11	4.97	5.63	5.04	4.55	4.85	3.84	4.50	5.16
REGIONAL TOTALS	37.95	39.27	30.60	32.39	28.38	29.94	29.98	24.19	28.29	30.80
<b>Southern</b>										
Beaver	0.64	0.30	0.23	0.47	0.17	0.31	0.73	0.52	0.59	0.96
Garfield	0.32	0.30	0.35	0.39	0.34	0.23	0.44	0.58	0.47	0.41
Iron	0.32	1.21	1.73	2.32	2.18	1.23	0.66	1.98	2.08	0.76
Kane	--	--	--	0.31	0.84	0.15	0.59	0.93	0.59	0.03
Millard	0.64	0.30	0.58	0.08	0.08	0.93	0.59	1.28	1.10	1.99
Piute	0.32	0.30	--	0.23	0.92	0.54	0.88	0.58	0.85	0.24
Sevier	0.96	2.42	1.85	2.66	1.68	4.09	4.04	3.20	3.10	2.44
Washington	--	--	0.12	0.78	0.42	0.00	0.07	--	0.04	--
Wayne	0.32	--	0.23	0.23	0.25	0.23	0.22	0.12	0.00	0.28
REGIONAL TOTALS	3.52	4.83	50.8	7.51	6.88	7.72	8.23	9.19	8.82	7.12
<b>Northeastern</b>										
Daggett	--	0.30	1.85	0.78	0.76	1.08	0.88	0.93	0.98	0.62
Duchesne	1.61	2.72	2.08	2.11	1.09	2.47	1.62	1.74	1.99	1.86
Uintah	0.96	0.91	2.08	2.03	3.19	2.47	1.54	1.74	1.40	2.03
REGIONAL TOTALS	2.57	3.93	6.00	4.93	5.04	6.02	4.04	4.42	4.37	4.50
<b>Southeastern</b>										
Carbon	1.61	2.42	1.73	3.21	2.27	5.25	2.50	1.98	3.22	1.93
Emery	0.32	0.60	0.81	0.86	1.51	0.62	0.81	0.58	1.19	1.03
Grand	0.32	--	--	0.47	0.25	0.15	0.07	0.17	0.34	0.07
San Juan	0.32	--	0.12	--	0.59	0.15	--	0.17	0.21	0.03
REGIONAL TOTALS	2.57	3.02	2.66	4.54	4.62	6.17	3.38	2.91	4.96	3.06
Unknown counties	7.07	2.42	3.93	3.91	--	1.47	3.38	4.07	2.84	3.13
Mixed counties	0.96	--	8.55	--	--	0.00	0.29	--	0.00	--
STATE TOTALS	100	100	100	100	100	100	100	100	100	100

\*Distribution of hunting pressure for 1967 and later based on hunter-days rather than number of hunters reporting.

Table 14. State-wide summary of forest grouse harvest statistics, 1961-74.

Year	Total hunters	Total harvest			Hunter-days afield	Grouse/ hunter-day		Grouse per season				
		Ruffed (%)	Blue (%)	Unknown (%)		Ruffed	Blue	Ruffed	Blue	Total		
1961*	256	128 (36.3)	220 (62.3)	5 (1.4)	353	--	--	0.50	0.86	1.38		
1962**	2386	1885 (56.3)	1464 (43.7)	0 ( 0)	3349	4276	1.19	0.76	1.96	--		
1963	7425	5470 (40.2)	7372 (54.2)	766 (5.6)	13,608	12,313	0.44	0.66	1.11	0.74	0.99	1.83
1964	6487	5354 (42.2)	6685 (57.7)	652 (5.1)	12,691	10,566	0.51	0.63	1.20	0.82	1.03	1.96
1965	6005	3225 (37.2)	4924 (56.8)	520 (6.0)	8669	10,504	0.31	0.47	0.83	0.54	0.82	1.44
1966	6683	6966 (56.6)	4659 (37.8)	696 (5.7)	12,321	12,387	0.56	0.38	0.99	1.04	0.68	1.84
1967	9420	8476 (48.4)	6773 (38.6)	2277 (13.0)	17,527	17,773	0.48	0.38	0.99	0.87	0.69	1.86
1968	13,061	17,048 (52.6)	12604 (38.9)	2762 (8.5)	32,414	26,537	0.64	0.47	1.22	1.30	0.96	2.48
1969	12,523	9490 (44.1)	10419 (48.5)	1589 (7.4)	21,498	24,572	0.38	0.42	0.87	0.76	0.83	1.72
1970	12,775	15,590 (48.9)	13515 (42.4)	2793 (8.7)	31,898	26,619	0.59	0.51	1.20	1.22	1.06	2.50
1971	13,363	15,759 (49.4)	13749 (43.1)	2393 (7.5)	31,901	29,100	0.54	0.47	1.10	1.18	1.03	2.39
1972	16,640	20,648 (48.6)	19221 (45.2)	2649 (6.2)	42,518	38,940	0.53	0.49	1.09	1.24	1.16	2.56
1973	17,588	7,153 (15.8)	36846 (81.4)	1233 (2.7)	45,232	44,738	0.16	0.82	1.01	0.41	2.09	2.57
1974	21,920	24,561 (39.3)	32236 (51.6)	5642 (9.0)	62,438	55,258	0.44	0.58	1.13	1.12	1.47	2.85
TOTALS 1963-74	156,413	139,740 (42.0)	169003 (50.8)	23972 (7.2)	332,715	309,307	0.45	0.55	1.08	0.89	1.08	2.13
AVERAGES 1963-73	12,227	10,471 (42.6)	12433 (50.6)	1666 (6.8)	24,571	23,095	0.47	0.52	1.06	0.92	1.03	2.10

\*Estimated

\*\*Totals and indexes based on indiscreet data.

Table 15. Forest grouse field bag check summary, 1974.

Region and County	ALL HUNTS				COMPLETE HUNTS				Birds/100 Hrs. Hunter
	Total Parties	Total Hunters	Total Hours	Total Birds	Total Hunts	Total Hunters	Total Hours	Total Birds	
<b>Northern</b>									
Box Elder	42	78	248	60	28	50	168	48	29
Cache	559	1,170	5,883	707	534	1,120	5,666	689	12
Davis	--	--	--	--	--	--	--	--	--
Morgan	--	--	--	--	--	--	--	--	--
Rich	131	291	1,288	134	131	291	1,288	134	10
Summit	--	--	--	--	--	--	--	--	--
Weber	98	243	1,267	146	96	238	1,247	136	11
<b>REGIONAL TOTALS</b>	<b>830</b>	<b>1,782</b>	<b>8,686</b>	<b>1,047</b>	<b>789</b>	<b>1,699</b>	<b>8,369</b>	<b>1,007</b>	<b>12</b>
<b>Central</b>									
Juab	--	--	--	--	--	--	--	--	--
Salt Lake	--	--	--	--	--	--	--	--	--
Sanpete	6	12	34	13	0	0	0	0	--
Tooele	22	47	140	43	5	12	48	12	25
Utah	23	45	92	25	4	5	7	9	129
Wasatch	10	23	63	35	0	0	0	0	--
<b>REGIONAL TOTALS</b>	<b>61</b>	<b>127</b>	<b>329</b>	<b>116</b>	<b>9</b>	<b>17</b>	<b>55</b>	<b>21</b>	<b>38</b>
<b>Southern</b>									
Beaver									
Garfield									
Iron									
Kane									
Millard									
Piute									
Sevier									
Washington									
Wayne									
<b>REGIONAL TOTALS</b>									
<b>Northeastern</b>									
Daggett	3	9	12	4	3	9	12	4	33
Duchesne	10	15	32	8	4	6	11	3	27
Uintah	43	134	434	64	37	114	384	62	16
<b>REGIONAL TOTALS</b>	<b>56</b>	<b>158</b>	<b>478</b>	<b>76</b>	<b>44</b>	<b>129</b>	<b>407</b>	<b>69</b>	<b>17</b>
<b>Southeastern</b>									
Carbon	--	--	--	--	--	--	--	--	--
Emery	8	10	20	1	4	6	15	1	7
Grand	1	2	6	1	0	0	0	0	--
San Juan	6	10	18	3	6	10	18	3	17
<b>REGIONAL TOTALS</b>	<b>15</b>	<b>22</b>	<b>44</b>	<b>5</b>	<b>10</b>	<b>16</b>	<b>33</b>	<b>4</b>	<b>12</b>
<b>STATE TOTALS</b>	<b>962</b>	<b>2,089</b>	<b>9,537</b>	<b>1,244</b>	<b>852</b>	<b>1,861</b>	<b>8,864</b>	<b>1,101</b>	<b>12</b>

N O D A T A

Table 16. Forest grouse hunter success trend determined by field bag checks, 1970-74.

Region and County	1970		1971		1972		1973		1974	
	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter
<b>Northern</b>										
Box Elder	--	--	--	25	0.78	33	1.00	24	0.96	
Cache	18	0.86	21	0.80	20	0.97	18	0.80	12	0.62
Davis	--	--	--	--	--	--	--	--	--	--
Morgan	100	1.50	96	1.60	0	0.00	50	0.50	--	--
Rich	32	1.14	24	1.09	16	0.81	11	0.52	10	0.46
Summit	57	1.33	14	0.45	--	--	--	--	--	--
Weber	12	0.58	16	0.65	22	1.00	15	0.60	12	0.57
<b>REGIONAL TOTALS</b>	<b>15</b>	<b>0.75</b>	<b>21</b>	<b>0.81</b>	<b>19</b>	<b>0.94</b>	<b>17</b>	<b>0.74</b>	<b>12</b>	<b>0.59</b>
<b>Central</b>										
Juab	20	0.57	23	1.67	33	1.36	26	1.29	--	--
Salt Lake	12	0.88	0	0.00	0	0.00	75	1.12	--	--
Sanpete	38	1.29	31	0.88	26	0.88	23	0.50	38	1.08*
Tooele	17	0.67	--	--	33	1.00	9	0.40	31	1.00
Utah	16	0.33	26	0.38	27	0.69	26	1.08	27	1.80
Wasatch	--	--	50	1.33	--	--	89	2.67	56	1.52
<b>REGIONAL TOTALS</b>	<b>24</b>	<b>1.03</b>	<b>28</b>	<b>0.61</b>	<b>26</b>	<b>0.75</b>	<b>27</b>	<b>1.11</b>	<b>35</b>	<b>1.24</b>
<b>Southern</b>										
Beaver	--	--	4	0.33	--	--	0	0.00	--	--
Garfield	6	0.21	4	0.05	--	--	38	1.00	--	--
Iron	25	0.43	32	0.70	--	--	--	--	--	--
Kane	5	0.14	--	--	51	2.56	73	2.83	--	--
Millard	--	--	--	--	--	--	--	--	--	--
Piute	--	--	--	--	12	0.75	47	1.50	--	--
Sevier	--	--	50	1.28	44	1.36	400	3.00	--	--
Washington	15	0.67	--	--	--	--	--	--	--	--
Wayne	40	1.33	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>12</b>	<b>0.32</b>	<b>17</b>	<b>0.38</b>	<b>42</b>	<b>1.86</b>	<b>63</b>	<b>1.91</b>	<b>--</b>	<b>--</b>
<b>Northeastern</b>										
Daggett	0	0.00	80	1.33	21	0.57	--	--	33	0.44
Duchesne	38	1.17	50	2.00	20	0.50	28	1.44	25	0.50
Uintah	30	2.33	44	2.36	150	1.50	--	--	15	0.54
<b>REGIONAL TOTALS</b>	<b>28</b>	<b>1.87</b>	<b>49</b>	<b>2.12</b>	<b>39</b>	<b>0.85</b>	<b>28</b>	<b>1.44</b>	<b>16</b>	<b>0.53</b>
<b>Southeastern</b>										
Carbon	--	--	35	1.75	--	--	100	--	--	--
Emery	--	--	13	0.62	--	--	33	1.00	5	0.17
Grand	--	--	41	1.00	--	--	75	3.00	17	0.50*
San Juan	--	--	--	--	--	--	--	--	17	0.30
<b>REGIONAL TOTALS</b>	<b>--</b>	<b>--</b>	<b>26</b>	<b>1.00</b>	<b>--</b>	<b>--</b>	<b>55</b>	<b>1.67</b>	<b>11</b>	<b>0.25</b>
<b>STATE TOTALS</b>	<b>16</b>	<b>0.76</b>	<b>22</b>	<b>0.80</b>	<b>20</b>	<b>0.95</b>	<b>19</b>	<b>0.80</b>	<b>13</b>	<b>0.59</b>

\*Forest grouse per hunter index based on all hunts.

# QUAIL

## SUMMARY

The breeding population level for 1974 was apparently slightly higher than in 1973 (Based on 1973 harvest statistics).

Production (young per 100 adults) was higher than both 1973 and the average while the density index (quail observed per 100 hours effort) was slightly above 1973 but well below average. The fall population level was indicated to be higher than in 1973 but still below average. The greatest increase was evident in the Northeastern Region.

Quail hunter success was comparable to 1973. Total quail hunters increased slightly while hunter-days decreased. The combination of similar success and reduced total hunting pressure resulted in a lower harvest than in 1973.

Gambel's quail hunter success in Washington County was below that of last year but the total quail harvest, based on the proportion of the Statewide harvest occurring in that area, was similar to or slightly higher than 1973.



### Brood Counts

Results of the annual random brood survey for 1974 are shown in Table 1 of this section. Long-term trends of young-adult ratios, mean brood size and quail observed per 100 hours are shown in Tables 2-4. Survey results for 1974 compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total quail observed	532	+47	-55
Young per 100 adults	248	+15	+ 8
Mean brood size	6.20	-12	-13
Quail observed per 100 hours	364	+ 8	-50
Total hours effort	146	+35	-10

Harvest statistics for 1973 indicated a slightly increased Statewide breeding population level for 1974. Regionally, the Southern, Northeastern and Southeastern regions showed an increase while the Northern and Central were down.

Effort on brood counts increased in the Southern and Southeastern regions but decreased in the Northern, Central and Northeastern. Overall it was below average. Production (young per 100 adults) was higher than both 1973 and the average. The indicated density was slightly higher than 1973 but well below average. A slightly increased fall population was suggested by this survey.

Results of the annual hunter questionnaire for 1974 are shown in Table 5. Long-term trends of quail bagged per hunter-day, percent of harvest and percent of pressure (hunter-days) by county are found in Tables 6-8 and total statewide harvest statistics in Table 9.

The 1974 season compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Quail hunters	6,097	+ 8	-21
Quail harvested	12,005	-16	-47
Hunter-days afield	14,702	-17	-24
Quail per hunter	1.97	-22	-32
Quail per hunter-day	0.82	+ 1	-32

Total hunters increased slightly over 1973 but the number of hunter-days afield decreased. The reduced total pressure combined with similar hunter success per day resulted in a decreased harvest.

Gambel's quail hunter success decreased slightly in Washington County.

Long-term quail harvest statistics are shown in Figure 1.



### Gambel's Quail Studies

Annual call-count surveys, long-period waterhole counts and vegetative surveys have been conducted on the west slopes of the Beaver Dam Mountains since 1962. Trends of those surveys are shown in Tables 10-12

No quail were heard during the call-count survey compared to two last year.

Waterhole counts yielded 30 quail compared to none during the previous two years.

Vegetative surveys designed to measure the relative abundance of annual forbs using filaree (Erodium cicutarium) as the indicator species showed a relatively high plant density; in fact the highest since 1967. However, dry weather curtailed plant growth at an early stage.

Quail bagged per hunter and per hunter-day.

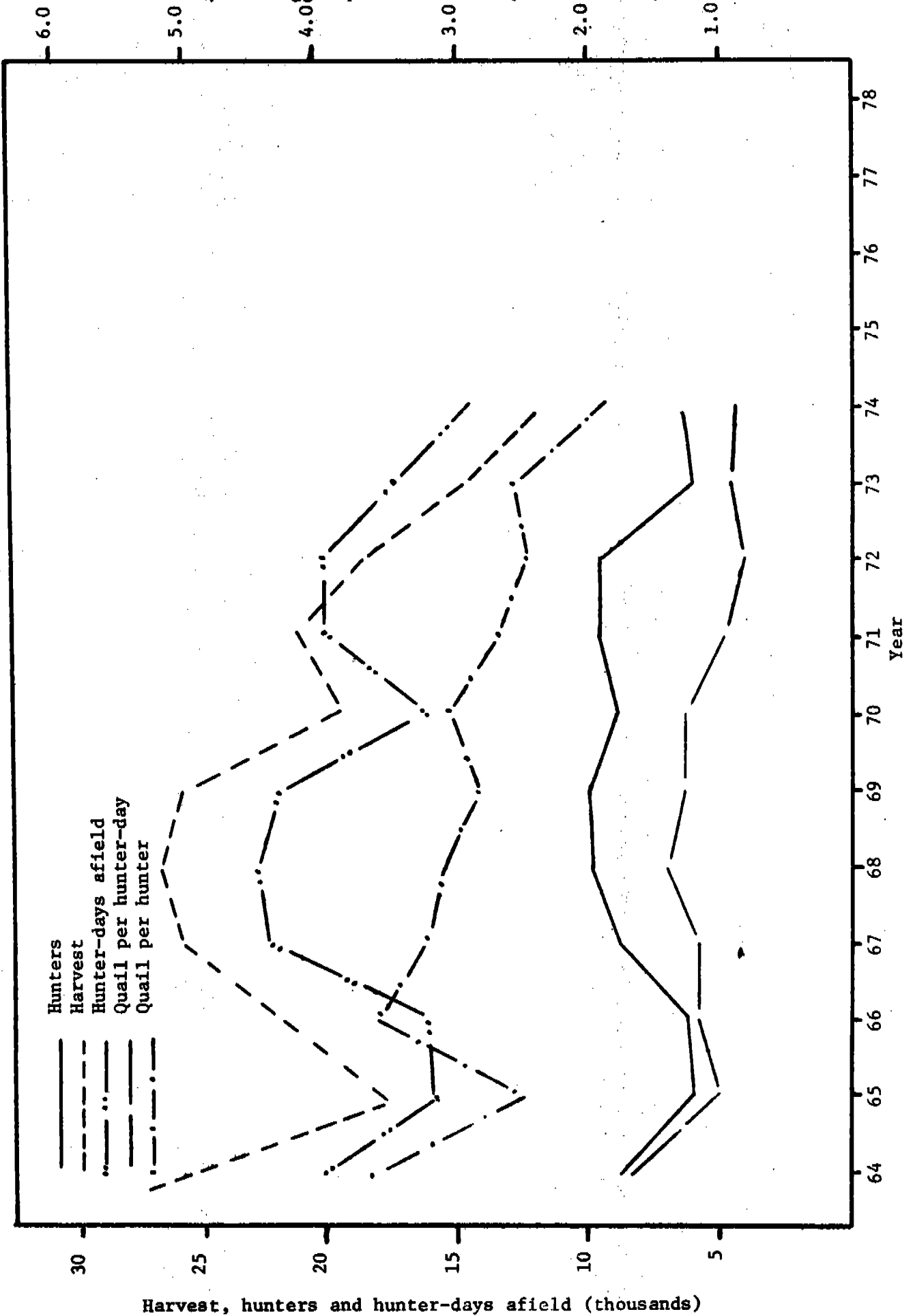


Figure 1. Statewide trend of quail harvest statistics.

Table 1. Quail summer inventory summary, 1974.

Region and County	Distinct Broods		Mixed Yng. & Adults		Adults w/o Yng.	Total Yng.	Total Adults	Total Yng. 100 Ad.	Vehicle Miles		Hours Effort		Birds/100 hrs.
	No. Ad.	Yng.	Mean Brood Ad.	Yng.					Ad. Yng.	Ad. Yng.	Yng.	Ad. Yng.	
<b>Northern</b>													
Box Elder	--	--	--	--	--	--	--	--	--	--	--	--	--
Cache	--	--	--	--	--	--	--	--	--	--	--	--	--
Davis	--	--	--	--	--	--	--	--	--	--	--	--	--
Morgan	2	2	18	9.00	3	14	0	5	32	640	24	2	4
Rich	--	--	--	--	--	--	--	--	--	--	--	--	925
Summit	--	--	--	--	--	--	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>2</b>	<b>2</b>	<b>18</b>	<b>9.00</b>	<b>3</b>	<b>14</b>	<b>0</b>	<b>5</b>	<b>32</b>	<b>640</b>	<b>24</b>	<b>2</b>	<b>4</b>
<b>Central</b>													
Juab	--	--	--	--	--	--	--	--	--	--	--	--	--
Salt Lake	1	1	5	5.00	5	9	2	8	14	175	10	2	4
Sanpete	3	3	12	4.00	3	2	2	8	14	175	16	0	16
Tooele	--	--	--	--	--	--	--	--	--	--	--	--	550
Utah	3	5	20	6.67	0	0	3	8	20	250	17	6	1
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--	138
<b>REGIONAL TOTALS</b>	<b>7</b>	<b>9</b>	<b>37</b>	<b>5.29</b>	<b>8</b>	<b>11</b>	<b>7</b>	<b>24</b>	<b>48</b>	<b>200</b>	<b>43</b>	<b>24</b>	<b>3</b>
<b>Southern</b>													
Beaver	--	--	--	--	--	--	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--
Kane	--	--	--	--	--	--	--	--	--	--	--	--	--
Millard	2	4	14	7.00	0	3	11	15	17	113	60	3	0
Piute	--	--	--	--	--	--	--	--	--	--	--	--	1067
Sevier	--	--	--	--	--	--	--	--	--	--	--	--	--
Washington	6	9	31	5.17	8	40	9	26	71	273	435	39	10
Wayne	2	4	18	9.00	0	0	17	21	18	86	358	8	5
<b>REGIONAL TOTALS</b>	<b>10</b>	<b>17</b>	<b>63</b>	<b>6.30</b>	<b>8</b>	<b>43</b>	<b>37</b>	<b>62</b>	<b>106</b>	<b>171</b>	<b>853</b>	<b>50</b>	<b>10</b>
<b>Northeastern</b>													
Daggett	4	4	21	5.25	0	0	0	4	21	525	70	8	4
Duchesne	4	4	20	5.00	0	0	2	6	20	333	80	4	4
Uintah	3	3	33	11.00	22	94	4	29	127	438	77	5	3
<b>REGIONAL TOTALS</b>	<b>11</b>	<b>11</b>	<b>74</b>	<b>6.73</b>	<b>22</b>	<b>94</b>	<b>6</b>	<b>39</b>	<b>168</b>	<b>431</b>	<b>227</b>	<b>17</b>	<b>11</b>
<b>Southeastern</b>													
Carbon	0	0	0	--	0	0	0	0	0	--	30	2	0
Emery	5	8	25	5.00	0	0	15	23	25	109	124	9	5
Grand	0	0	0	--	0	0	0	0	0	--	60	4	0
San Juan	--	--	--	--	--	--	--	--	--	--	--	--	1
<b>REGIONAL TOTALS</b>	<b>5</b>	<b>8</b>	<b>25</b>	<b>5.00</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>23</b>	<b>25</b>	<b>109</b>	<b>214</b>	<b>15</b>	<b>6</b>
<b>STATE TOTALS</b>	<b>35</b>	<b>47</b>	<b>217</b>	<b>6.20</b>	<b>41</b>	<b>162</b>	<b>65</b>	<b>153</b>	<b>379</b>	<b>248</b>	<b>1361</b>	<b>108</b>	<b>10</b>
													<b>28</b>
													<b>146</b>
													<b>343</b>
													<b>5</b>
													<b>0</b>
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													<b>14</b>
													<b>343</b>
													<b>0</b>
													<b>5</b>

Table 2. Trend of quail young per 100 adults ratios 1964-74\*

Region and County	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	Averages 1964-73
<b>Northern Region</b>												
Box Elder	500	--	500	800	--	--	--	--	--	250	--	--
Cache	0	--	--	--	--	--	--	--	--	--	--	--
Davis	--	0	175	5	1500	400	--	314	--	--	--	--
Morgan	500	50	256	141	153	94	329	300	575	400	640	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	383	--	267	--	450	--	--	--	--	--	--
Weber	--	--	264	--	600	125	0	255	111	50	--	--
<b>Regional Totals</b>	<b>250</b>	<b>83</b>	<b>275</b>	<b>83</b>	<b>273</b>	<b>183</b>	<b>230</b>	<b>290</b>	<b>254</b>	<b>230</b>	<b>640</b>	<b>215</b>
<b>Central Region</b>												
Juab	--	--	--	--	--	--	--	--	--	--	--	--
Salt Lake	629	150	--	241	230	360	173	240	114	222	175	--
Sanpete	467	350	464	262	625	327	476	440	500	174	175	--
Tooele	--	--	--	--	--	--	--	--	--	--	--	--
Utah	359	143	394	282	319	300	228	220	275	241	250	--
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--
<b>Regional Totals</b>	<b>392</b>	<b>158</b>	<b>414</b>	<b>264</b>	<b>306</b>	<b>337</b>	<b>198</b>	<b>267</b>	<b>143</b>	<b>222</b>	<b>200</b>	<b>270</b>
<b>Southern Region</b>												
Beaver	--	--	--	--	--	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	0	--	--	--	--	--	--	--	--	--	--
*Kane	--	314	--	625	--	--	1075	160	--	--	--	--
Millard	--	--	150	--	--	122	--	233	117	0	113	--
Piute	--	--	--	333	--	--	--	--	--	--	--	--
Sevier	--	--	--	--	--	--	--	--	--	--	--	--
*Washington	146	114	290	215	323	138	48	320	57	--	273	--
*Wayne	--	0	0	--	400	--	--	0	--	--	86	--
<b>Regional Totals</b>	<b>146</b>	<b>115</b>	<b>270</b>	<b>223</b>	<b>324</b>	<b>260</b>	<b>98</b>	<b>270</b>	<b>75</b>	<b>0</b>	<b>171</b>	<b>178</b>
<b>Northeastern Region</b>												
Daggett	--	--	--	--	--	--	524	267	--	0	525	--
Duchesne	140	156	100	171	183	54	0	--	--	--	333	--
Uintah	147	153	378	133	200	138	218	217	165	700	438	--
<b>Regional Totals</b>	<b>146</b>	<b>154</b>	<b>288</b>	<b>141</b>	<b>194</b>	<b>123</b>	<b>301</b>	<b>243</b>	<b>165</b>	<b>350</b>	<b>431</b>	<b>210</b>
<b>Southeastern Region</b>												
Carbon	--	--	233	220	200	114	283	125	--	533	--	--
Emery	--	--	167	--	0	--	--	50	438	--	109	--
Grand	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	--	--	--	1200	--	--	--	--	--	--	--	--
<b>Regional Totals</b>	<b>--</b>	<b>--</b>	<b>211</b>	<b>383</b>	<b>150</b>	<b>114</b>	<b>283</b>	<b>100</b>	<b>438</b>	<b>533</b>	<b>109</b>	<b>269</b>
<b>STATE TOTALS</b>	<b>261</b>	<b>148</b>	<b>303</b>	<b>202</b>	<b>302</b>	<b>229</b>	<b>200</b>	<b>255</b>	<b>171</b>	<b>216</b>	<b>248</b>	<b>229</b>

\*Washington, Kane and Wayne counties, Gambel's quail. All others California.

Table 3. Trend of quail mean brood size from 1964-74\*

Region and County	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	Averages 1959-73
<b>Northern</b>												
Box Elder	5.00	--	10.00	8.00	--	--	--	--	--	5.00	--	--
Cache	--	--	--	--	--	--	--	--	--	--	--	--
Davis	--	--	15.00	--	15.00	8.20	--	11.00	--	--	--	--
Morgan	5.00	3.50	9.00	6.00	--	4.80	7.67	12.00	11.50	8.00	9.00	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	6.67	--	8.00	--	7.00	--	--	--	--	--	--
Weber	--	--	13.00	--	12.00	4.00	--	9.33	10.00	--	--	--
<b>REGIONAL TOTALS</b>	<b>5.00</b>	<b>5.40</b>	<b>10.25</b>	<b>6.57</b>	<b>14.25</b>	<b>5.94</b>	<b>7.67</b>	<b>10.50</b>	<b>11.00</b>	<b>7.00</b>	<b>9.00</b>	<b>7.76</b>
<b>Central</b>												
Juab	--	--	--	--	--	--	--	--	--	--	--	--
Salt Lake	8.80	--	--	9.00	6.67	11.42	8.61	7.00	8.00	7.50	5.00	--
Sanpete	7.00	7.00	9.29	6.30	7.50	6.00	5.67	5.70	5.40	5.60	4.00	--
Tooele	--	--	--	--	--	--	--	--	--	--	--	--
Utah	8.09	8.24	8.38	6.80	8.24	8.75	7.85	7.43	7.17	7.36	6.67	--
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>8.14</b>	<b>8.00</b>	<b>8.65</b>	<b>6.86</b>	<b>7.91</b>	<b>9.67</b>	<b>7.98</b>	<b>6.50</b>	<b>7.18</b>	<b>6.95</b>	<b>5.29</b>	<b>7.58</b>
<b>Southern</b>												
Beaver	--	--	--	--	--	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--
*Kane	--	--	--	--	--	--	--	8.00	--	--	--	--
Millard	--	--	12.00	--	--	4.00	--	8.00	7.00	--	7.00	--
Piute	--	--	--	4.00	--	--	--	--	--	--	--	--
Sevier	--	--	--	--	--	--	--	--	--	--	--	--
*Washington	--	8.30	6.92	5.30	7.92	2.90	4.00	6.62	2.67	--	5.17	--
*Wayne	--	--	--	--	--	--	--	--	--	--	9.00	--
<b>REGIONAL TOTALS</b>	<b>--</b>	<b>8.30</b>	<b>7.11</b>	<b>5.34</b>	<b>7.92</b>	<b>3.50</b>	<b>4.00</b>	<b>7.21</b>	<b>3.75</b>	<b>--</b>	<b>6.30</b>	<b>6.48</b>
<b>Northeastern</b>												
Daggett	--	--	--	--	--	--	5.29	5.45	--	--	5.25	--
Duchesne	7.00	6.25	2.00	--	3.67	3.00	--	--	--	--	5.00	--
Uintah	7.09	9.67	9.80	6.25	4.80	6.00	5.43	5.33	5.92	7.00	11.00	--
<b>REGIONAL TOTALS</b>	<b>7.08</b>	<b>7.71</b>	<b>8.50</b>	<b>6.25</b>	<b>4.38</b>	<b>5.50</b>	<b>5.32</b>	<b>5.41</b>	<b>5.92</b>	<b>7.00</b>	<b>6.73</b>	<b>6.37</b>
<b>Southeastern</b>												
Carbon	7.50	--	7.00	3.67	3.00	4.67	--	--	--	8.00	--	--
Emery	--	--	--	--	--	--	--	2.00	9.86	--	5.00	--
Grand	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	--	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>7.50</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.00</b>	<b>9.86</b>	<b>8.00</b>	<b>5.00</b>	<b>7.74</b>
<b>STATE TOTALS</b>	<b>7.56</b>	<b>7.61</b>	<b>8.10</b>	<b>5.80</b>	<b>7.76</b>	<b>6.95</b>	<b>6.97</b>	<b>6.58</b>	<b>7.21</b>	<b>7.04</b>	<b>6.20</b>	<b>7.10</b>

\*Washington, Kane and Wayne counties Gambel's quail. All others California

Table 4. Trend of quail observed per 100 hours ratios, 1967-74\*

Region and County	1967	1968	1969	1970	1971	1972	1973	1974	Averages 1967-73
<b>Northern Region</b>									
Box Elder	--	--	--	--	--	--	175	--	--
Cache	0	0	--	--	--	--	--	--	--
Davis	727	1200	1625	0	829	--	--	--	--
Morgan	189	--	631	1200	400	1350	--	925	--
Rich	--	--	--	--	--	--	--	--	--
Summit	23	--	1100	--	--	--	--	--	--
Weber	--	65	100	86	300	271	100	--	--
<b>Regional Totals</b>	<b>141</b>	<b>577</b>	<b>657</b>	<b>550</b>	<b>471</b>	<b>511</b>	<b>330</b>	<b>925</b>	<b>462</b>
<b>Central Region</b>									
Juab	--	--	--	--	--	--	--	--	--
Salt Lake	1400	248	3684	2637	1133	2706	414	550	--
Sanpete	470	483	427	817	982	771	525	138	--
Tooele	--	--	--	--	--	--	--	--	--
Utah	2625	1351	2086	959	988	1071	1194	400	--
Wasatch	--	--	--	--	--	--	--	--	--
<b>Regional Totals</b>	<b>1418</b>	<b>1330</b>	<b>2083</b>	<b>1704</b>	<b>1030</b>	<b>1873</b>	<b>808</b>	<b>267</b>	<b>1,464</b>
<b>Southern Region</b>									
Beaver	--	--	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	--	--	--
Iron	66	--	--	--	--	--	--	--	--
*Kane	264	--	0	2350	578	--	--	--	--
Millard	--	--	1800	--	3000	118	125	1067	--
Piute	400	--	--	--	--	--	--	--	--
Sevier	--	--	--	--	--	--	--	--	--
*Washington	673	1600	322	316	600	122	--	194	--
*Wayne	--	--	--	--	33	--	--	300	--
<b>Regional Totals</b>	<b>866</b>	<b>1600</b>	<b>2122</b>	<b>420</b>	<b>708</b>	<b>90</b>	<b>125</b>	<b>254</b>	<b>848</b>
<b>Northeastern Region</b>									
Daggett	--	--	--	3017	1900	--	18	208	--
Duchesne	43	45	170	29	0	--	0	325	--
Uintah	525	514	1575	894	1120	1005	533	1950	--
<b>Regional Totals</b>	<b>146</b>	<b>118</b>	<b>794</b>	<b>628</b>	<b>769</b>	<b>303</b>	<b>47</b>	<b>739</b>	<b>401</b>
<b>Southeastern Region</b>									
Carbon	533	300	377	271	300	--	--	0	--
Emery	--	--	--	--	83	1950	0	343	--
Grand	--	--	--	--	--	--	--	0	--
San Juan	1300	--	--	--	--	--	--	--	--
<b>Regional Totals</b>	<b>750</b>	<b>300</b>	<b>377</b>	<b>271</b>	<b>181</b>	<b>1950</b>	<b>112</b>	<b>343</b>	<b>563</b>
<b>STATE TOTALS</b>	<b>525</b>	<b>887</b>	<b>1049</b>	<b>939</b>	<b>728</b>	<b>664</b>	<b>336</b>	<b>364</b>	<b>733</b>

\*Washington, Kane and Wayne counties Gambel's quail. All others California.

Table 5. Summary of quail hunter success and distribution of harvest and hunting pressure by region and county, 1974.

Region and County	Hunters Reporting	Days Hunted	Birds Bagged	Birds per Hunter-day	Birds per Hunter*	% of Pressure	% of Harvest
<u>Northern</u>							
Box Elder	7	18	15	0.83	1.33	2.33	2.37
Cache	8	10	6	0.60	0.83	1.29	0.95
Davis	21	60	42	0.70	2.04	7.75	6.65
Morgan	7	29	9	0.31	3.00	3.75	1.42
Rich	1	2	0	0.00	0.00	0.26	0.00
Summit	7	14	11	0.79	0.00	1.81	1.74
Weber	29	47	29	0.62	1.42	6.07	4.59
<b>REGIONAL TOTALS</b>	<b>80</b>	<b>180</b>	<b>112</b>	<b>0.62</b>	<b>1.68</b>	<b>23.26</b>	<b>17.72</b>
<u>Central</u>							
Juab	0	0	0	0.00	0.00	0.00	0.00
Salt Lake	37	66	62	0.94	1.72	8.53	9.81
Sanpete	5	9	8	0.89	2.00	1.16	1.27
Tooele	2	4	3	0.75	0.00	0.52	0.47
Utah	116	245	183	0.75	1.61	31.65	28.96
Wasatch	0	0	0	0.00	15.00	0.00	0.00
<b>REGIONAL TOTALS</b>	<b>160</b>	<b>324</b>	<b>256</b>	<b>0.79</b>	<b>1.72</b>	<b>41.86</b>	<b>40.51</b>
<u>Southern</u>							
Beaver	0	0	0	0.00	0.00	0.00	0.00
Garfield	0	0	0	0.00	0.00	0.00	0.00
Iron	1	1	1	1.00	1.00	0.13	0.16
Kane	0	0	0	0.00	5.00	0.00	0.00
Millard	7	18	9	0.50	1.00	2.33	1.42
Piute	1	2	0	0.00	1.00	0.26	0.00
Sevier	1	4	0	0.00	0.00	0.52	0.00
Washington	39	107	149	1.39	4.13	13.82	23.58
Wayne	1	2	5	2.50	5.00	0.26	0.79
<b>REGIONAL TOTALS</b>	<b>50</b>	<b>134</b>	<b>164</b>	<b>1.22</b>	<b>3.22</b>	<b>17.31</b>	<b>25.95</b>
<u>Northeastern</u>							
Daggett	1	2	2	1.00	0.00	0.26	0.32
Duchesne	5	10	2	0.20	2.00	1.29	0.32
Uintah	18	60	53	0.88	2.86	7.75	8.39
<b>REGIONAL TOTALS</b>	<b>24</b>	<b>72</b>	<b>57</b>	<b>0.79</b>	<b>2.80</b>	<b>9.30</b>	<b>9.02</b>
<u>Southeastern</u>							
Carbon	12	44	19	0.43	1.40	5.68	3.01
Emery	3	9	3	0.33	3.00	1.16	0.47
Grand	0	0	0	0.00	0.00	0.00	0.00
San Juan	0	0	0	0.00	0.00	0.00	0.00
<b>REGIONAL TOTALS</b>	<b>15</b>	<b>53</b>	<b>22</b>	<b>0.42</b>	<b>1.55</b>	<b>6.85</b>	<b>3.48</b>
Unknown counties	2	3	2	0.67	0.00	0.39	0.32
Mixed counties	2	8	19	2.37	0.00	1.03	3.01
<b>STATE TOTALS</b>	<b>333</b>	<b>774</b>	<b>632</b>	<b>0.82</b>	<b>1.97</b>	<b>100</b>	<b>100</b>

\* Based on county of residence.

Table 6. Summary of quail bagged per hunter-day by region and county, 1965-74.

Region and County	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>										
Box Elder	0.67	0.96	0.36	0.89	1.04	0.33	0.45	1.12	0.65	0.83
Cache	0.00	0.82	0.53	0.22	0.57	0.20	0.40	0.05	1.00	0.60
Davis	0.74	0.62	0.40	0.81	0.60	0.97	0.53	0.98	0.62	0.70
Morgan	2.35	2.75	2.10	1.56	2.22	1.68	0.83	0.50	0.67	0.31
Rich	--	--	--	--	0.29	0.00	--	1.00	--	0.00
Summit	1.71	3.13	0.93	0.65	1.00	1.50	0.58	0.67	0.80	0.79
Weber	1.31	0.85	1.33	0.76	0.95	0.66	0.91	0.74	0.32	0.62
REGIONAL TOTALS	1.19	0.95	0.96	0.90	1.00	1.00	0.67	0.79	0.57	0.62
<b>Central</b>										
Juab	0.67	2.80	0.00	0.50	0.00	0.00	0.00	--	0.00	--
Salt Lake	1.19	0.71	1.06	1.09	0.77	1.05	0.88	1.14	0.71	0.94
Sanpete	--	0.67	0.82	0.22	0.50	2.00	0.38	0.17	0.50	0.89
Tooele	0.56	1.00	0.14	0.00	0.33	3.00	0.00	0.00	0.33	0.75
Utah	1.04	1.26	1.14	1.09	1.30	1.12	0.83	0.80	0.77	0.75
Wasatch	0.00	6.00	2.00	--	0.83	1.00	0.00	0.00	2.50	--
REGIONAL TOTALS	1.06	1.19	1.06	1.06	1.14	1.12	0.80	0.82	0.76	0.79
<b>Southern</b>										
Beaver	--	--	--	3.00	--	1.33	3.00	1.50	--	--
Garfield	1.00	--	--	4.00	1.50	0.00	--	--	--	--
Iron	2.00	0.50	1.50	4.00	1.17	0.50	1.20	1.00	2.00	1.00
Kane	--	1.00	5.86	3.33	0.75	5.67	2.86	--	2.69	--
Millard	0.93	0.20	1.14	0.50	0.44	0.45	0.14	0.30	0.50	0.50
Piute	0.00	--	2.00	0.67	2.60	0.00	--	--	2.00	0.00
Sevier	0.40	2.60	1.23	0.83	1.80	0.00	0.60	0.00	0.50	0.00
Washington	2.03	2.82	1.80	2.45	1.86	1.50	1.81	1.07	1.47	1.39
Wayne	2.00	3.50	0.00	2.67	0.75	0.00	8.00	2.00	0.00	2.50
REGIONAL TOTALS	1.51	2.43	1.86	2.31	1.62	1.33	1.82	1.01	1.55	1.22
<b>Northeastern</b>										
Daggett	--	--	--	--	--	0.00	--	0.00	0.00	1.00
Duchesne	2.00	0.69	0.50	0.40	1.00	1.00	1.38	2.25	1.39	0.20
Uintah	0.76	1.12	0.69	0.71	0.54	1.22	0.53	0.38	0.78	0.88
REGIONAL TOTALS	0.95	1.02	0.59	0.67	0.60	1.17	0.83	0.44	0.93	0.79
<b>Southeastern</b>										
Carbon	0.60	1.79	1.07	1.00	0.89	1.87	0.95	0.31	0.81	0.43
Emery	1.67	3.50	0.50	0.25	0.86	1.50	1.50	0.00	0.58	0.33
Grand	0.00	0.00	--	--	3.00	0.00	--	--	0.00	--
San Juan	--	--	--	--	1.00	0.00	--	--	--	--
REGIONAL TOTALS	0.65	1.84	1.00	0.86	0.98	1.77	1.00	0.25	0.76	0.42
Unknown counties	0.11	--	1.44	0.17	--	0.00	1.12	0.80	0.27	0.67
Mixed counties	0.65	--	0.37	3.67	--	0.00	--	--	--	2.37
STATE TOTALS	1.06	1.36	1.10	1.23	1.16	1.15	0.98	0.76	0.81	0.82



Table 7. Distribution of quail harvest by region and county, 1965-74.

Region and County	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>										
Box Elder	2.42	2.49	0.71	1.82	1.97	0.11	0.51	3.70	1.46	2.37
Cache	0.00	0.86	0.78	0.29	1.26	0.11	0.61	0.14	0.79	0.95
Davis	5.95	4.40	4.47	7.22	6.64	8.15	6.09	10.84	7.55	6.65
Morgan	5.18	6.31	4.94	6.49	11.06	7.50	2.43	1.10	3.84	1.42
Rich	--	--	--	--	0.16	0.00	--	0.14	--	0.00
Summit	4.52	2.39	2.19	0.95	0.39	0.33	0.71	0.27	2.12	1.74
Weber	14.32	4.21	19.83	3.72	7.90	4.35	7.20	7.00	3.05	4.59
<b>REGIONAL TOTALS</b>	<b>32.39</b>	<b>20.66</b>	<b>32.92</b>	<b>20.50</b>	<b>29.38</b>	<b>20.54</b>	<b>17.55</b>	<b>23.18</b>	<b>18.81</b>	<b>17.72</b>
<b>Central</b>										
Juab	0.22	1.34	0.00	0.22	0.00	0.00	0.00	--	0.00	--
Salt Lake	14.65	6.41	6.82	7.59	5.69	7.28	6.49	13.58	6.36	9.81
Sanpete	--	0.38	0.71	0.15	0.16	0.22	0.51	0.55	0.40	1.27
Tooele	0.55	0.19	0.08	0.00	0.16	1.30	0.00	0.00	0.40	0.47
Utah	32.05	32.22	24.06	28.01	31.44	33.91	25.46	31.82	29.01	28.96
Wasatch	0.00	2.87	0.16	--	0.39	0.11	0.00	0.00	1.32	--
<b>REGIONAL TOTALS</b>	<b>47.47</b>	<b>43.41</b>	<b>31.82</b>	<b>35.96</b>	<b>37.84</b>	<b>42.83</b>	<b>32.45</b>	<b>45.95</b>	<b>37.48</b>	<b>40.51</b>
<b>Southern</b>										
Beaver	--	--	--	0.22	--	0.43	0.61	0.41	--	--
Garfield	0.11	--	--	0.29	0.24	0.00	--	--	--	--
Iron	1.10	0.19	0.94	0.58	0.55	0.98	0.61	0.27	1.59	0.16
Kane	--	0.19	3.21	0.73	0.47	1.85	2.03	--	4.64	--
Millard	1.54	0.19	0.63	0.44	0.87	0.54	0.10	0.41	0.13	1.42
Piute	0.00	--	0.16	0.15	1.03	0.00	--	--	0.26	0.00
Sevier	0.44	1.24	1.25	0.36	0.71	0.00	0.61	0.00	0.40	0.00
Washington	8.26	22.08	20.30	32.82	23.22	17.50	26.06	18.24	19.34	23.58
Wayne	0.22	1.34	0.00	0.58	0.24	0.00	2.43	0.55	0.06	0.79
<b>REGIONAL TOTALS</b>	<b>11.67</b>	<b>25.23</b>	<b>26.49</b>	<b>36.18</b>	<b>27.33</b>	<b>21.30</b>	<b>32.45</b>	<b>19.89</b>	<b>26.36</b>	<b>25.95</b>
<b>Northeastern</b>										
Daggett	--	--	--	--	--	0.00	--	0.00	0.00	0.32
Duchesne	1.32	0.86	1.33	0.15	0.39	1.74	2.94	1.23	3.31	0.32
Uintah	2.75	4.40	1.72	1.97	1.50	8.59	2.03	6.17	5.30	8.39
<b>REGIONAL TOTALS</b>	<b>4.07</b>	<b>5.26</b>	<b>3.06</b>	<b>2.12</b>	<b>1.90</b>	<b>10.33</b>	<b>4.97</b>	<b>7.41</b>	<b>8.61</b>	<b>9.02</b>
<b>Southeastern</b>										
Carbon	2.31	4.78	2.51	2.55	2.53	4.67	6.09	1.92	6.23	3.01
Emery	0.55	0.67	0.16	0.15	0.47	0.33	0.91	0.00	0.93	0.47
Grand	0.00	0.00	--	--	0.47	0.00	--	0.00	0.00	--
San Juan	--	--	--	--	0.08	0.00	--	0.00	--	--
<b>REGIONAL TOTALS</b>	<b>2.86</b>	<b>5.45</b>	<b>2.66</b>	<b>2.70</b>	<b>3.55</b>	<b>5.00</b>	<b>7.00</b>	<b>1.92</b>	<b>7.15</b>	<b>3.48</b>
Unknown counties	0.33	--	1.80	1.75	--	0.00	5.58	1.65	1.59	0.32
Mixed counties	1.21	--	1.25	0.80	--	0.00	--	--	--	3.01
<b>STATE TOTALS</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 8. Distribution of quail hunting pressure by region and county, 1965-74.

Region and County	1965	1966	1967*	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>										
Box Elder	3.23	3.81	2.16	2.51	2.20	0.37	1.09	2.49	1.81	2.33
Cache	1.35	1.90	1.64	1.62	2.56	0.62	1.49	1.98	0.64	1.29
Davis	6.74	7.94	12.24	10.95	12.82	9.61	11.19	8.42	9.82	7.75
Morgan	3.77	3.81	2.59	5.12	5.77	5.12	2.87	1.66	4.59	3.75
Rich	--	--	--	--	0.64	0.00	--	0.10	--	0.26
Summit	2.96	1.90	2.59	1.80	0.46	0.25	1.19	0.31	2.13	1.81
Weber	12.94	8.25	16.38	6.01	9.62	7.62	7.72	7.17	7.68	6.07
<b>REGIONAL TOTALS</b>	<b>30.99</b>	<b>27.61</b>	<b>37.59</b>	<b>28.01</b>	<b>34.07</b>	<b>23.60</b>	<b>25.54</b>	<b>22.14</b>	<b>26.68</b>	<b>23.26</b>
<b>Central</b>										
Juab	0.54	1.27	1.03	0.54	0.37	0.25	0.10	--	0.32	--
Salt Lake	14.56	12.38	7.07	8.53	8.61	7.99	7.23	9.04	7.26	8.53
Sanpete	--	0.95	0.95	0.81	0.37	0.12	1.29	2.49	0.64	1.16
Tooele	1.35	0.63	0.60	0.09	0.55	0.50	0.40	0.52	0.96	0.52
Utah	26.15	32.38	23.28	31.69	28.11	34.83	30.00	30.15	30.20	31.65
Wasatch	0.27	0.32	0.09	--	0.55	0.12	0.50	0.52	0.43	--
<b>REGIONAL TOTALS</b>	<b>42.87</b>	<b>47.93</b>	<b>33.02</b>	<b>41.65</b>	<b>38.55</b>	<b>43.82</b>	<b>39.50</b>	<b>42.72</b>	<b>39.81</b>	<b>41.86</b>
<b>Southern</b>										
Beaver	--	--	--	0.09	--	0.37	0.20	0.21	--	--
Garfield	0.27	--	--	0.09	0.18	0.00	--	--	--	--
Iron	0.81	0.63	0.69	0.18	0.55	2.25	0.50	0.21	0.64	0.13
Kane	--	0.32	0.60	0.27	0.73	0.37	0.69	--	1.39	--
Millard	1.35	1.59	0.60	1.08	2.29	1.37	0.69	1.04	0.21	2.33
Piute	0.27	--	0.09	0.27	0.46	0.00	--	--	0.11	0.26
Sevier	1.35	1.27	1.12	0.54	0.46	0.62	0.99	0.42	0.64	0.52
Washington	6.47	8.89	12.41	16.52	14.47	13.36	14.06	12.89	10.57	13.82
Wayne	0.27	0.63	0.17	0.27	0.37	0.00	0.30	0.21	0.11	0.26
<b>REGIONAL TOTALS</b>	<b>10.79</b>	<b>13.33</b>	<b>15.69</b>	<b>19.30</b>	<b>19.51</b>	<b>18.35</b>	<b>17.43</b>	<b>14.97</b>	<b>13.66</b>	<b>17.31</b>
<b>Northeastern</b>										
Daggett	--	--	--	--	--	0.00	--	0.10	0.11	0.26
Duchesne	1.08	1.59	2.93	0.45	0.46	2.00	2.08	0.42	1.92	1.29
Uintah	3.50	4.44	2.76	3.41	3.21	8.11	3.76	12.27	5.44	7.75
<b>REGIONAL TOTALS</b>	<b>4.58</b>	<b>6.03</b>	<b>5.69</b>	<b>3.86</b>	<b>3.66</b>	<b>10.11</b>	<b>5.84</b>	<b>12.79</b>	<b>7.47</b>	<b>9.30</b>
<b>Southeastern</b>										
Carbon	4.31	4.44	2.59	3.14	3.30	2.87	6.24	4.68	6.19	5.68
Emery	0.81	0.32	0.34	0.72	0.64	0.25	0.59	1.14	1.28	1.16
Grand	--	--	--	--	0.18	0.12	--	--	0.11	--
San Juan	--	--	--	--	0.09	0.00	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>5.39</b>	<b>5.08</b>	<b>2.93</b>	<b>3.86</b>	<b>4.21</b>	<b>3.25</b>	<b>6.83</b>	<b>5.82</b>	<b>7.58</b>	<b>6.85</b>
Unknown counties	4.04	--	1.38	3.05	--	0.87	4.85	1.56	4.80	0.39
Mixed counties	1.35	--	3.71	0.27	--	0.00	--	--	--	1.03
<b>STATE TOTALS</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

\*Distribution of hunting pressure for 1967 and later based on hunter-days rather than number of hunters reporting.

Table 9. State-wide summary of quail harvest statistics, 1951-73.

Year	Total Hunters	Total harvest	Hunter days afield	Quail per hunter-day	Quail per hunter
1951	3,856	6,362	7,069	0.90	1.65
1952	2,694	6,105	5,500	1.11	2.27
1953	2,676	5,753	4,494	1.28	2.15
1954	3,855	7,479	8,696	0.86	1.94
1955	---	---	---	1.17	2.10
1956	---	---	---	---	2.26
1957	---	---	---	---	1.85
1958	---	---	---	---	3.73
1959	8,554	22,854	18,174	1.26	2.67
1960	7,117	21,272	13,971	1.52	2.99
1961	9,980	27,362	25,746	1.06	2.74
1962	6,462	18,710	14,660	1.27	2.89
1963	8,059	28,088	16,383	1.71	3.49
1964	8,951	31,189	20,510	1.52	3.48
1965	6,163	17,532	16,528	1.06	2.45
1966	6,465	22,771	16,720	1.36	3.52
1967	8,455	26,187	23,806	1.10	3.10
1968	9,302	28,469	23,132	1.23	3.06
1969	9,160	26,119	22,529	1.16	2.85
1970	6,141	18,896	16,452	1.15	3.08
1971	8,039	21,082	21,595	0.98	2.62
1972	7,380	16,504	21,779	0.76	2.24
1973	5,654	14,324	17,777	0.81	2.53
1974	6,097	12,005	14,702	0.82	1.97
<b>TOTALS</b>					
(1959-74)	121,979	353,364	304,464	1.16	2.90
<b>AVERAGES</b>					
(1959-73)	7,725	22,757	19,317	1.20	2.91

Table 10. Gambel's quail call-count trends on the west slope of the Beaver Dam Mountains, Washington County, 1962-74.

Index	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Mean calls per station	2.71	1.67	0.68	--	9.2	1.23	6.08	--	0.08	1.57	0.36	0.06	0.01
Mean quail calling per station	0.41	0.22	0.15	--	1.10	0.33	1.16	--	0.08	0.37	0.11	0.03	0.01
Mean total calls-route	41.0	25.0	10.1	--	138.5	18.4	91.2	--	1.33	23.5	5.3	1.00	0.01
Mean total quail calling-route	7.0	3.3	2.3	--	17.0	5.0	17.4	--	1.33	5.5	1.7	0.40	0.01

Table 11. Gambel's quail long-period waterhole count trend on the west slope of the Beaver Dam Mountains, Washington County, 1962-74.

Index	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Total young	66	33	19	--	130	50	98	90	21	33	0	0	24
Total adults	142	45	13	--	40	30	24	40	45	8	0	0	6
Total quail	208	78	32	--	170	80	122	130	66	41	0	0	30
Young per 100 adults	46	73	146	--	325	167	408	225	47	412	--	--	400

Table 12. Trend of fillaree plants per square foot on the west slope of the Beaver Dam Mountains, 1962-74.

Area	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Vern's Wash (B-1)	0.12	0.03	0.19	0.85	--	1.89	0.39	0.10	0.10	0.07	--	0.37	2.4
Reber Wash (B-2)	0.92	0.59	0.82	2.23	--	3.35	1.07	0.32	0.17	0.00	0.00	0.43	1.1
Brick Wash (A-1)	2.80	0.28	1.02	2.02	--	1.84	0.54	0.14	0.11	0.13	0.04	0.41	2.4
Gravel Canyon (A-2)	4.60	0.46	0.46	1.36	--	4.39	0.28	1.28	0.05	0.28	0.04	0.40	1.3
AVERAGE	2.11	0.34	0.62	1.62	--	2.87	0.57	0.46	0.11	0.14	0.03	0.40	1.8

# HUNGARIAN PARTRIDGE

## SUMMARY

A breeding population level similar to 1973 or slightly lower was indicated by 1973 harvest statistics.

Brood data samples were small but it seemed apparent that production, at least in Box Elder County, was very good.

Total hunters increased but days afield decreased. Even so, a marked increase in hunter success, primarily in Box Elder County, resulted in a 23 percent increase in total Huns harvested. Daily bag and possession limits were increased from 5 and 10 to 8 and 16 Huns respectively for the 1974 season. This probably contributed to the increased success indexes but it still seems evident that the population in the primary range in Box Elder County increased in 1974. Field bag check data confirmed the increased hunter success in Box Elder County.



### Brood Counts

Results of the annual random brood counts for 1974 are shown in Table 1 of this section. Long-term trends of young-adult ratios, mean brood size and Huns observed per 100 hours are shown in Tables 2-4. Results of this survey for 1974 compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total Huns observed	180	+2	-53
Young per 100 adults	755	+37	+64
Mean brood size	11.33	+16	+23
Huns observed per 100 hours	101	-8	-63
Total hours effort	178	+11	+33

Harvest data for 1973 indicated a breeding population level for 1974 that was similar to or slightly lower than 1973.

Brood data indicated very good production; however, sample sizes were quite limited. The density index did not reflect the increased population size expected from production data. Even considering good production there was little doubt that the fall population level was well below average.

### Harvest

#### Hunter Questionnaire

Results of the annual hunter questionnaire for 1974 are shown in Table 5. Long-term trends of Huns bagged per hunter-day, percent of harvest and percent of pressure (hunter-days) by county are found in Tables 6-8 and total Statewide harvest statistics in Table 9. The 1974 season compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Hungarian partridge hunters	4,103	+15	-5
Hungarian partridge harvest	7,389	+23	-25
Hunter-days afield	10,789	-6	-2
Huns per hunter	1.80	+7	-17
Huns per hunter-day	0.68	+31	-24

The number of hunters increased but hunter-days afield decreased. Due to increased hunter success the total harvest increased but was still below average. Hunter success was up in Box Elder County, but was down in Cache, Morgan and Wasatch counties.

Long-term trends of Hungarian partridge harvest statistics are shown in Figure 1 of this section.

### Field Bag Checks

Results of this survey for 1974 are shown in Table 10. Hunter success trends determined via this method are shown in Table 11. Indexes obtained for 1974 compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total hunters checked	46	-54	-79
Total hours hunted	278	-42	-73
Huns per hunter (complete hunts)	1.28	+73	+78
Huns bagged per 100 hours	21	+75	+40
Average hours per hunter-day (complete hunts)	5.9	+9	+20
Hours hunted per Hun bagged	4.6	-38	-32

Field bag check data were compiled primarily in Box Elder County and is indicative of hunter success only in that area. A very small sample of hunters was checked. Hunter success was much higher than both 1973 and the average. The average hunter spent more hours per day with less hours required to bag one Hun.

Hungarian partridge bagged per hunter and per hunter-day.

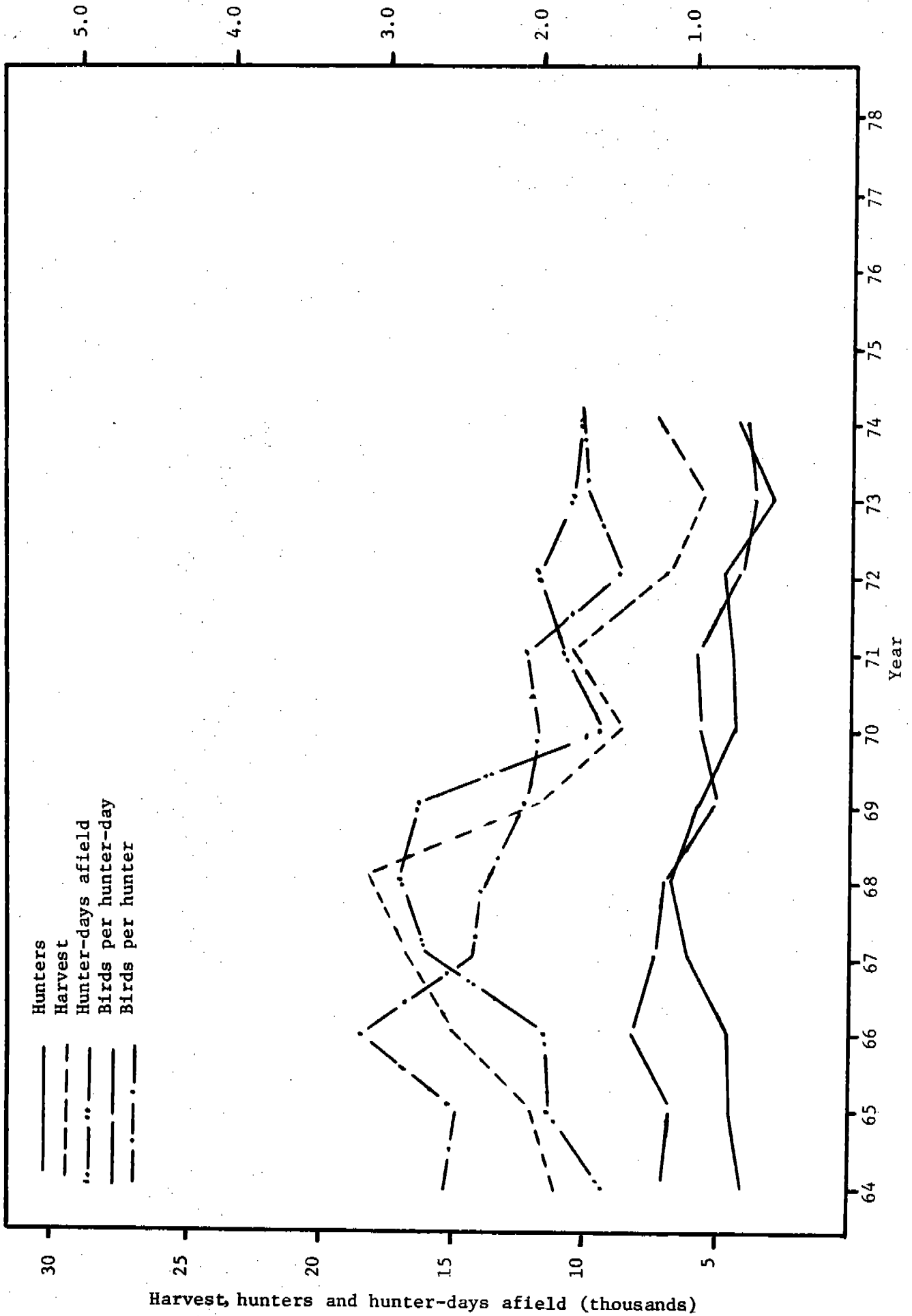


Figure 1. Statewide trend of Hungarian partridge harvest statistics.



Table 1. Hungarian partridge summer inventory summary, 1974.

Region and County	Distinct Broods		Mixed Yng. & Adults		Mean Brood	Adults w/o Yng.	Total Adults	Total Young	Young/100 Ad.	Vehicle Miles	Hours Effort		Birds/100 Hrs.		
	No. Ad.	Yng.	Ad.	Yng.							Veh.	Horse		Walk	Total
<b>Northern</b>															
Box Elder	9	12	101	4	23	0	16	124	775	1,035	51	123	2	176	80
Cache	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Davis	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Morgan	2	4	27	0	0	0	4	27	675	0	0	0	0	0	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>11</b>	<b>16</b>	<b>128</b>	<b>4</b>	<b>23</b>	<b>0</b>	<b>20</b>	<b>151</b>	<b>755</b>	<b>1,035</b>	<b>51</b>	<b>123</b>	<b>2</b>	<b>176</b>	<b>97</b>
<b>Central</b>															
Juab	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Salt Lake	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sanpete	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tooele	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Wasatch	1	1	8	0	0	0	1	8	800	14	2	0	0	2	450
<b>REGIONAL TOTALS</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>800</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>450</b>
<b>Southern</b>															
Beaver															
Garfield															
Iron															
Kane															
Millard															
Piute															
Sevier															
Washington															
Wayne															
<b>REGIONAL TOTALS</b>															
<b>Northeastern</b>															
Daggett															
Duchesne															
Uintah															
<b>REGIONAL TOTALS</b>															
<b>Southeastern</b>															
Carbon															
Emery															
Grand															
San Juan															
<b>REGIONAL TOTALS</b>															
STATE TOTALS	12	17	136	4	23	0	21	159	757	1,049	53	123	2	178	101

NOT APPLICABLE

NOT APPLICABLE

NOT APPLICABLE

Table 2. Trend of Hungarian partridge young per 100 adults ratios, 1963-74.

Region and County	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	Averages 1963-73
<b>Northern Region</b>													
Box Elder	1000	828	326	510	447	400	325	306	524	379	575	775	
Cache	--	--	--	152	875	450	--	--	--	--	--	--	
Davis	--	--	--	--	--	--	--	--	--	--	--	--	
Morgan	--	--	--	--	300	--	--	--	1400	--	500	675	
Rich	690	400	683	675	288	900	0	--	--	--	--	--	
Summit	--	--	--	--	--	--	--	--	--	--	--	--	
Weber	260	--	--	--	--	--	--	--	--	--	--	--	
<b>Regional Totals</b>	<b>653</b>	<b>776</b>	<b>380</b>	<b>395</b>	<b>449</b>	<b>421</b>	<b>319</b>	<b>306</b>	<b>553</b>	<b>379</b>	<b>560</b>	<b>755</b>	<b>472</b>
<b>Central Region</b>													
Juab	--	--	--	--	--	--	--	--	--	--	--	--	
Salt Lake	--	--	--	--	--	--	--	--	--	--	--	--	
Sanpete	--	--	--	--	--	--	--	--	--	--	--	--	
Tooele	--	--	--	--	--	--	--	--	--	--	--	--	
Utah	--	--	--	--	--	--	--	--	--	--	--	--	
Wasatch	550	390	385	270	403	442	497	414	350	800	450	800	
<b>Regional Totals</b>	<b>550</b>	<b>390</b>	<b>385</b>	<b>270</b>	<b>403</b>	<b>442</b>	<b>497</b>	<b>414</b>	<b>350</b>	<b>800</b>	<b>450</b>	<b>800</b>	<b>450</b>
<b>Southern Region</b>													
Beaver													
Garfield													
Iron													
Kane													
Millard													
Piute													
Sevier													
Washington													
Wayne													
<b>Regional Totals</b>													
<b>Northeastern Region</b>													
Daggett													
Duchesne													
Uintah													
<b>Regional Totals</b>													
<b>Southeastern Region</b>													
Carbon													
Emery													
Grand													
San Juan													
<b>Regional Totals</b>													
<b>STATE TOTALS</b>	<b>642</b>	<b>710</b>	<b>382</b>	<b>370</b>	<b>435</b>	<b>430</b>	<b>325</b>	<b>319</b>	<b>495</b>	<b>424</b>	<b>552</b>	<b>757</b>	<b>462</b>

Table 3. Trend of Hungarian partridge mean brood size from 1963-74.

Region and County	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	Averages 1963-73
<b>Northern Region</b>													
Box Elder	10.00	13.69	6.53	11.06	8.60	7.00	5.75	11.82	7.82	11.50	11.86	11.22	
Cache	--	--	--	7.00	11.67	9.00	--	--	--	--	--	--	
Davis	--	--	--	--	--	--	--	--	--	--	--	--	
Morgan	--	--	--	--	--	--	--	14.00	--	--	8.33	13.50	
Rich	9.60	8.00	13.66	13.50	7.67	9.00	--	--	--	--	--	--	
Summit	--	--	--	--	--	--	--	--	--	--	--	--	
Weber	--	--	--	--	--	--	--	--	--	--	--	--	
<b>Regional Totals</b>	<b>9.25</b>	<b>13.10</b>	<b>7.60</b>	<b>10.44</b>	<b>8.77</b>	<b>7.24</b>	<b>5.75</b>	<b>11.58</b>	<b>8.16</b>	<b>11.50</b>	<b>10.80</b>	<b>11.64</b>	<b>9.47</b>
<b>Central Region</b>													
Juab	--	--	--	--	--	--	--	--	--	--	--	--	
Salt Lake	--	--	--	--	--	--	--	--	--	--	--	--	
Sanpete	--	--	--	--	--	--	--	--	--	--	--	--	
Tooele	--	--	--	--	--	--	--	--	--	--	--	--	
Utah	--	--	--	--	--	--	--	--	--	--	--	--	
Wasatch	--	7.80	7.70	6.57	10.00	9.00	9.94	7.25	--	8.00	4.50	8.00	
<b>Regional Totals</b>	<b>--</b>	<b>7.80</b>	<b>7.70</b>	<b>6.57</b>	<b>10.00</b>	<b>9.00</b>	<b>9.94</b>	<b>7.25</b>	<b>--</b>	<b>8.00</b>	<b>4.50</b>	<b>8.00</b>	<b>7.94</b>
<b>Southern Region</b>													
Beaver													
Garfield													
Iron													
Kane													
Millard													
Piute													
Sevier													
Washington													
Wayne													
<b>Regional Totals</b>													
<b>Northeastern Region</b>													
Daggett													
Duchesne													
Uintah													
<b>Regional Totals</b>													
<b>Southeastern Region</b>													
Carbon													
Emery													
Grand													
San Juan													
<b>Regional Totals</b>													
<b>STATE TOTALS</b>	<b>9.25</b>	<b>12.32</b>	<b>7.63</b>	<b>9.59</b>	<b>9.07</b>	<b>7.93</b>	<b>6.87</b>	<b>10.50</b>	<b>8.16</b>	<b>10.33</b>	<b>9.75</b>	<b>11.33</b>	<b>9.21</b>

Table 4. Trend of Hungarian partridge observed per 100 hours, 1967 - 74.

Region and County	1967	1968	1969	1970	1971	1972	1973	1974	Average 1967-73
<b>Northern Region</b>									
Box Elder	256	261	416	210	213	133	91	80	
Cache	175	209	0	--	--	--	--	--	
Davis	--	--	--	--	--	--	--	--	
Morgan	73	--	--	--	--	--	428	--	
Rich	238	333	--	--	--	--	--	--	
Summit	--	--	--	--	--	--	--	--	
Weber	--	--	--	--	--	--	--	--	
<b>Regional Totals</b>	<b>235</b>	<b>261</b>	<b>385</b>	<b>210</b>	<b>213</b>	<b>133</b>	<b>106</b>	<b>97</b>	<b>221</b>
<b>Central Region</b>									
Juab	--	--	--	--	--	--	--	--	
Salt Lake	--	--	--	--	--	--	--	--	
Sanpete	--	--	--	--	--	--	--	--	
Tooele	--	--	--	--	--	--	--	--	
Utah	--	--	--	--	--	--	--	--	
Wasatch	777	1193	1415	720	300	450	275	450	
<b>Regional Totals</b>	<b>777</b>	<b>1193</b>	<b>1415</b>	<b>720</b>	<b>300</b>	<b>171</b>	<b>275</b>	<b>450</b>	<b>693</b>
<b>Southern Region</b>									
Beaver									
Garfield									
Iron									
Kane									
Millard									
Plute									
Sevier									
Washington									
Wayne									
<b>Regional Totals</b>									
<b>Northeastern Region</b>									
Daggett									
Duchesne									
Uintah									
<b>Regional Totals</b>									
<b>Southeastern Region</b>									
Carbon									
Emery									
Grand									
San Juan									
<b>Regional Totals</b>									
<b>STATE TOTALS</b>	<b>292</b>	<b>383</b>	<b>508</b>	<b>249</b>	<b>243</b>	<b>139</b>	<b>110</b>	<b>101</b>	<b>275</b>

Table 5. Summary of Hungarian partridge hunter success and distribution of harvest and hunting pressure by region and county, 1974.

Region and County	Hunters Reporting	Days Hunted	Birds Bagged	Birds per Hunter-day	Birds per Hunter*	% of Pressure	% of Harvest
<u>Northern</u>							
Box Elder	94	253	212	0.84	3.30	44.54	54.50
Cache	45	75	51	0.68	1.50	13.20	13.11
Davis	2	3	6	2.00	2.21	0.53	1.54
Morgan	15	32	16	0.50	1.00	5.63	4.11
Rich	5	6	2	0.33	0.00	1.06	0.51
Summit	5	12	15	1.25	6.00	2.11	3.86
Weber	11	28	7	0.25	1.76	4.93	1.80
<b>REGIONAL TOTALS</b>	<b>177</b>	<b>409</b>	<b>309</b>	<b>0.76</b>	<b>2.05</b>	<b>72.01</b>	<b>79.43</b>
<u>Central</u>							
Juab	1	1	1	1.00	0.00	0.18	0.26
Salt Lake	6	25	15	0.60	1.39	4.40	3.86
Sanpete	1	6	4	0.67	0.00	1.06	1.03
Tooele	7	26	0	0.00	0.33	4.58	0.00
Utah	11	26	9	0.35	1.25	4.58	2.31
Wasatch	11	26	11	0.42	2.33	4.58	2.83
<b>REGIONAL TOTALS</b>	<b>37</b>	<b>110</b>	<b>40</b>	<b>0.36</b>	<b>1.35</b>	<b>19.37</b>	<b>10.28</b>
<u>Southern</u>							
Beaver	0	0	0	0.00	0.00	0.00	0.00
Garfield	0	0	0	0.00	0.00	0.00	0.00
Iron	0	0	0	0.00	0.00	0.00	0.00
Kane	0	0	0	0.00	0.00	0.00	0.00
Millard	2	5	2	0.40	0.50	0.88	0.51
Piute	0	0	0	0.00	0.00	0.00	0.00
Sevier	0	0	0	0.00	0.00	0.00	0.00
Washington	0	0	0	0.00	0.00	0.00	0.00
Wayne	0	0	0	0.00	0.00	0.00	0.00
<b>REGIONAL TOTALS</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>0.40</b>	<b>0.50</b>	<b>0.88</b>	<b>0.51</b>
<u>Northeastern</u>							
Daggett	0	0	0	0.00	0.00	0.00	0.00
Duchesne	0	0	0	0.00	0.00	0.00	0.00
Uintah	2	3	1	0.33	0.00	0.53	0.26
<b>REGIONAL TOTALS</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>0.33</b>	<b>0.00</b>	<b>0.53</b>	<b>0.26</b>
<u>Southeastern</u>							
Carbon	1	1	0	0.00	0.00	0.18	0.00
Emery	0	0	0	0.00	0.00	0.00	0.00
Grand	0	0	0	0.00	0.00	0.00	0.00
San Juan	0	0	0	0.00	0.00	0.00	0.00
<b>REGIONAL TOTALS</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0.00</b>	<b>0.00</b>	<b>0.18</b>	<b>0.00</b>
Unknown counties	7	37	31	0.84	0.00	6.51	7.97
Mixed counties	1	3	6	2.00	1.00	0.53	1.54
<b>STATE TOTALS</b>	<b>227</b>	<b>568</b>	<b>389</b>	<b>0.68</b>	<b>1.80</b>	<b>100</b>	<b>100</b>

\*Based on county of residence.

Table 6. Summary of Hungarian partridge bagged per hunter-day by region and county, 1965-74.

Region and County	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>										
Box Elder	1.32	1.65	1.45	1.04	0.81	0.87	0.94	0.56	0.54	0.84
Cache	0.77	1.14	0.65	1.23	0.71	1.14	0.87	0.70	0.91	0.68
Davis	--	0.00	0.50	1.81	0.92	0.09	0.50	1.33	0.12	2.00
Morgan	--	1.00	0.00	0.96	0.68	1.00	1.24	1.14	0.58	0.50
Rich	3.22	--	1.43	0.40	0.00	0.57	1.33	0.43	1.25	0.33
Summit	0.00	0.00	0.16	0.40	2.56	0.00	1.50	0.50	0.34	1.25
Weber	0.33	0.46	0.88	1.09	0.58	0.31	0.75	0.78	0.33	0.25
REGIONAL TOTALS	1.14	1.42	1.16	1.07	0.78	0.87	0.94	0.65	0.57	0.76
<b>Central</b>										
Juab	--	2.00	0.00	3.00	0.00	0.57	0.00	0.00	1.40	1.00
Salt Lake	0.25	0.00	0.17	0.23	0.85	0.50	0.50	0.00	0.19	0.60
Sanpete	0.00	--	--	--	2.27	0.67	--	1.00	2.00	0.67
Tooele	0.00	0.20	0.41	0.00	0.62	0.81	0.20	0.17	0.06	0.00
Utah	0.37	0.23	0.25	0.57	0.22	0.56	0.17	0.15	0.38	0.35
Wasatch	1.23	0.24	1.74	1.00	0.29	1.03	0.71	0.44	0.79	0.42
REGIONAL TOTALS	0.71	0.26	0.76	0.85	0.70	0.77	0.54	0.33	0.57	0.36
<b>Southern</b>										
Beaver	--	--	--	--	--	--	--	--	0.00	0.00
Garfield	--	--	--	--	--	--	--	--	0.00	0.00
Iron	--	--	--	--	--	--	--	--	0.00	0.00
Kane	--	0.00	--	--	--	--	--	--	0.00	0.00
Millard	--	--	0.00	--	--	--	--	--	0.00	0.40
Piute	--	--	--	0.00	--	1.00	--	--	0.00	0.00
Sevier	0.00	2.00	0.00	0.00	--	--	0.60	--	1.00	0.00
Washington	--	--	0.00	0.00	--	--	1.00	--	0.00	0.00
Wayne	--	--	--	--	--	--	--	--	0.00	0.00
REGIONAL TOTALS	0.00	0.67	0.00	0.00	--	1.00	0.64	--	0.06	0.40
<b>Northeastern</b>										
Daggett	--	--	--	--	0.00	0.00	--	1.00	0.00	0.00
Duchesne	0.00	1.67	0.00	1.67	2.00	--	3.00	--	1.00	0.00
Uintah	--	--	0.25	0.00	0.00	0.00	--	0.00	0.00	0.33
REGIONAL TOTALS	0.00	1.67	0.20	1.25	0.75	0.00	3.00	0.20	0.20	0.33
<b>Southeastern</b>										
Carbon	--	--	0.00	--	1.50	1.00	0.00	0.33	0.00	0.00
Emery	--	--	--	--	--	0.00	--	--	0.00	0.00
Grand	--	--	--	--	--	1.67	--	--	0.00	0.00
San Juan	--	--	--	--	2.00	--	--	--	0.00	0.00
REGIONAL TOTALS	--	--	0.00	--	1.67	0.86	0.00	0.33	0.00	0.00
Unknown counties	0.39	--	1.12	0.82	--	0.00	1.17	1.46	0.00	0.84
Mixed counties	1.13	--	0.20	--	--	--	--	0.00	0.00	2.00
STATE TOTALS	1.03	1.34	1.06	1.02	0.77	0.84	0.85	0.60	0.52	0.68

Table 7. Distribution of Hungarian partridge harvest by region and county, 1965-74.

Region and County	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>										
Box Elder	65.93	71.06	72.51	51.76	52.93	41.40	55.45	48.15	37.22	54.50
Cache	13.47	25.11	9.97	19.08	7.93	32.42	10.91	13.58	19.24	13.11
Davis	--	0.00	0.77	4.62	2.07	0.25	0.23	2.47	0.63	1.54
Morgan	--	0.57	0.00	2.67	7.76	1.50	4.77	10.19	11.99	4.11
Rich	4.60	--	2.56	0.49	0.00	1.00	1.82	0.93	1.58	0.51
Summit	0.00	0.00	0.51	0.97	3.97	0.00	1.36	0.62	4.42	3.86
Weber	2.22	0.85	2.69	4.37	8.10	2.49	4.77	8.64	0.95	1.80
REGIONAL TOTALS	86.22	97.59	89.00	83.96	82.76	79.05	79.32	84.57	76.03	79.43
<b>Central</b>										
Juab	--	0.28	0.00	0.73	0.00	1.00	0.00	0.00	2.21	0.26
Salt Lake	0.16	0.00	0.38	0.36	1.90	1.00	0.68	0.00	2.52	3.86
Sanpete	0.00	--	--	--	8.62	0.50	--	0.62	0.63	1.03
Tooele	0.00	0.14	0.90	0.00	1.38	4.24	0.45	0.31	1.89	0.00
Utah	1.11	0.43	0.51	1.46	0.69	3.74	0.91	0.93	1.58	2.31
Wasatch	7.61	0.57	6.01	8.87	2.76	8.73	11.82	7.10	14.51	2.83
REGIONAL TOTALS	8.88	1.42	7.80	11.42	15.34	19.20	13.86	8.95	23.34	10.28
<b>Southern</b>										
Beaver	--	--	--	--	--	--	--	--	0.00	0.00
Garfield	--	--	--	--	--	--	--	--	0.00	0.00
Iron	--	--	--	--	--	--	--	--	0.00	0.00
Kane	--	0.00	--	--	--	--	--	--	0.00	0.00
Millard	--	--	0.00	--	--	--	--	--	0.00	0.51
Piute	--	--	--	0.00	--	0.25	--	--	0.00	0.00
Sevier	0.00	0.28	0.00	0.00	--	--	1.36	0.00	0.32	0.00
Washington	--	--	0.00	0.00	--	--	0.23	--	0.00	0.00
Wayne	--	--	--	--	--	--	--	0.00	0.00	0.00
REGIONAL TOTALS	0.00	0.28	0.00	0.00	0.00	0.25	1.59	0.00	0.32	0.51
<b>Northeastern</b>										
Daggett	--	--	--	--	0.00	0.00	--	0.31	0.00	0.00
Duchesne	0.00	0.71	0.00	0.61	1.03	--	2.05	--	0.32	0.00
Uintah	--	--	0.38	0.00	0.00	0.00	--	0.00	0.00	0.26
REGIONAL TOTALS	0.00	0.71	0.38	0.61	1.03	0.00	2.05	0.31	0.32	0.26
<b>Southeastern</b>										
Carbon	--	--	0.00	--	0.52	0.25	0.00	0.31	0.00	0.00
Emery	--	--	--	--	--	0.00	--	--	0.00	0.00
Grand	--	--	--	--	--	1.25	--	--	0.00	0.00
San Juan	--	--	--	--	0.34	--	--	--	0.00	0.00
REGIONAL TOTALS	0.00	0.00	0.00	--	0.86	1.50	0.00	0.31	0.00	0.00
Unknown counties	2.06	--	2.43	4.01	--	0.00	3.18	5.86	0.00	7.97
Mixed counties	2.85	--	0.38	--	--	0.00	--	0.00	0.00	1.54
STATE TOTALS	100	100	100	100	100	100	100	100	100	100

Table 8. Distribution of Hungarian partridge hunting pressure by region and county, 1965-74.

Region and County	1965	1966	1967*	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>										
Box Elder	56.65	58.45	53.13	50.93	50.27	39.96	50.49	51.68	36.24	44.54
Cache	18.45	24.20	16.30	15.94	8.64	23.85	10.68	11.75	11.04	13.20
Davis	--	1.37	1.63	2.62	1.73	2.30	0.39	1.12	2.80	0.53
Morgan	--	0.91	1.63	2.86	8.78	1.26	3.30	5.41	10.71	5.63
Rich	1.29	--	1.90	1.25	0.27	1.46	1.17	1.31	0.66	1.06
Summit	0.43	0.46	3.40	2.49	1.20	1.05	0.78	0.75	6.75	2.11
Weber	6.44	3.65	3.26	4.11	10.77	6.69	5.44	6.72	1.48	4.93
REGIONAL TOTALS	83.26	89.04	81.25	80.20	81.65	76.57	72.23	78.73	69.69	72.01
<b>Central</b>										
Juab	--	0.46	0.27	0.25	0.66	1.46	0.19	0.37	0.82	0.18
Salt Lake	0.43	0.91	2.45	1.62	1.73	1.67	1.17	1.12	7.08	4.40
Sanpete	0.43	--	--	--	2.93	0.63	--	0.37	0.16	1.06
Tooele	2.15	1.83	2.31	0.25	1.73	4.39	1.94	1.12	1.65	4.58
Utah	2.58	2.74	2.17	2.62	2.39	5.65	4.66	3.73	2.14	4.58
Wasatch	5.58	3.20	3.67	9.09	7.45	7.11	14.17	9.70	9.56	4.58
REGIONAL TOTALS	11.17	9.14	10.87	13.82	16.89	20.92	22.14	16.42	21.42	19.37
<b>Southern</b>										
Beaver	--	--	--	--	--	--	--	--	0.00	0.00
Garfield	--	--	--	--	--	--	--	--	0.00	0.00
Iron	--	--	--	--	--	--	--	--	0.00	0.00
Kane	--	0.46	--	--	--	--	--	--	0.00	0.00
Millard	--	--	0.27	--	--	--	--	--	2.80	0.88
Piute	--	--	--	0.12	--	0.21	--	--	0.00	0.00
Sevier	0.43	0.46	0.14	0.12	--	--	1.94	0.56	0.16	0.00
Washington	--	--	0.95	0.25	--	--	0.19	--	0.00	0.00
Wayne	--	--	--	--	--	--	--	0.19	0.00	0.00
REGIONAL TOTALS	0.43	0.92	1.36	0.50	0.00	0.21	2.13	0.75	2.97	0.88
<b>Northeastern</b>										
Daggett	--	--	--	--	0.40	0.21	--	0.19	0.16	0.00
Duchesne	0.86	0.91	0.41	0.37	0.40	--	0.58	--	0.16	0.00
Uintah	--	--	1.63	0.12	0.27	0.21	--	0.75	0.49	0.53
REGIONAL TOTALS	0.86	0.91	2.04	0.50	1.06	0.42	0.58	0.93	0.82	0.53
<b>Southeastern</b>										
Carbon	--	--	0.14	--	0.27	0.21	0.58	0.56	0.99	0.18
Emery	--	--	--	--	--	0.63	--	--	0.16	0.00
Grand	--	--	--	--	--	0.63	--	--	0.16	0.00
San Juan	--	--	--	--	0.13	--	--	--	0.16	0.00
REGIONAL TOTALS	0.00	0.00	0.14	0.00	0.40	1.46	0.58	0.56	1.48	0.18
Unknown counties	2.58	--	2.31	4.98	--	0.42	2.33	2.43	3.46	6.51
Mixed counties	1.72	--	2.04	--	--	0.00	--	0.19	0.16	0.53
STATE TOTALS	100	100	100	100	100	100	100	100	100	100

\*Distribution of hunting pressure for 1967 and later based on hunter-days rather than number of hunters reporting.



Table 9. State-wide summary of Hungarian partridge harvest statistics, 1955-74.

Year	Total Hunters	Total Harvest	Hunter Days Afield	Huns Per Hunter-Day	Huns Per Hunter
1955	--	--	--	--	0.39
1956	--	--	--	--	0.89
1957	--	--	--	--	0.45
1958	--	--	--	--	1.34
1959	1,846	1,820	3,354	0.54	0.99
1960	2,847	4,877	4,929	0.99	1.71
1961	3,205	3,648	6,645	0.54	1.13
1962	3,440	8,970	9,153	0.98	2.61
1963	4,676	13,343	13,291	1.00	2.85
1964	4,249	11,812	9,688	1.22	2.78
1965	4,498	12,183	11,798	1.03	2.71
1966	4,549	15,348	11,473	1.34	3.37
1967	6,321	16,049	15,105	1.06	2.54
1968	6,935	17,089	16,674	1.02	2.46
1969	5,591	11,966	15,515	0.77	2.14
1970	4,128	8,236	9,818	0.84	2.00
1971	4,276	9,407	11,011	0.85	2.20
1972	4,754	7,335	12,135	0.60	1.54
1973	3,566	6,014	11,516	0.52	1.69
1974	4,103	7,389	10,789	0.68	1.80
<b>TOTALS (1955-74)</b>	<b>68,984</b>	<b>155,486</b>	<b>172,894</b>	<b>0.90</b>	<b>2.25</b>
<b>AVERAGE (1959-73)</b>	<b>4,325</b>	<b>9,873</b>	<b>10,807</b>	<b>0.89</b>	<b>2.18</b>

Table 10. Hungarian partridge field bag check summary, 1974.

Region and County	ALL HUNTS				COMPLETE HUNTS				Birds/ Hunter
	Total Parties	Total Hunters	Total Hours	Total Birds/ 100 Hrs.	Total Hunters	Total Hours	Total Birds/ 100 Hrs.	Birds/ Hunter	
Northern									
Box Elder	17	39	230	52	23	16	49	24	1.36
Cache	--	--	--	--	--	--	--	--	--
Davis	--	--	--	--	--	--	--	--	--
Morgan	--	--	--	--	--	--	--	--	--
Rich	4	7	48	6	12	4	6	12	0.86
Summit	--	--	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>21</b>	<b>46</b>	<b>278</b>	<b>58</b>	<b>21</b>	<b>20</b>	<b>55</b>	<b>22</b>	<b>1.28</b>
Central									
Juab									
Salt Lake									
Sanpete									
Tooele									
Utah									
Wasatch									
<b>REGIONAL TOTALS</b>									
Southern									
Beaver									
Garfield									
Iron									
Kane									
Millard									
Piute									
Sevier									
Washington									
Wayne									
<b>REGIONAL TOTALS</b>									
Northeastern									
Daggett									
Duchesne									
Uintah									
<b>REGIONAL TOTALS</b>									
Southeastern									
Carbon									
Emery									
Grand									
San Juan									
<b>REGIONAL TOTALS</b>									
<b>STATE TOTALS</b>	<b>21</b>	<b>46</b>	<b>278</b>	<b>58</b>	<b>21</b>	<b>20</b>	<b>55</b>	<b>22</b>	<b>1.28</b>

N O D A T A

N O T A P P L I C A B L E

N O T A P P L I C A B L E

N O T A P P L I C A B L E

Table 11. Hungarian partridge hunter success trend determined by field bag checks, 1970-74.

Region and County	1970		1971		1972		1973		1974	
	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter	Birds/ 100 Hrs. Hunter
<u>Northern</u>										
Box Elder	11	0.69	13	0.80	16	0.78	12	0.78	23	1.36
Cache	--	--	57	1.00	15	0.42	--	--	--	--
Davis	--	--	--	--	--	--	--	--	--	--
Morgan	50	0.50	--	--	--	--	--	--	--	--
Rich	--	--	77	0.91	--	--	6	0.33	12	0.86
Summit	--	--	--	--	133	1.33	--	--	--	--
Weber	15	0.80	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>11</b>	<b>0.69</b>	<b>15</b>	<b>0.81</b>	<b>17</b>	<b>0.75</b>	<b>12</b>	<b>0.76</b>	<b>21</b>	<b>1.28</b>
<u>Central</u>										
Juab	--	--	--	--	--	--	--	--	--	--
Salt Lake	--	--	100	2.00	--	--	--	--	--	--
Sanpete	--	--	--	--	--	--	--	--	--	--
Tooele	--	--	--	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--	--	--	--
Wasatch	15	0.35	--	--	--	--	0	0.00	--	--
<b>REGIONAL TOTALS</b>	<b>15</b>	<b>0.35</b>	<b>100</b>	<b>2.00</b>	<b>--</b>	<b>--</b>	<b>0</b>	<b>0.00</b>	<b>--</b>	<b>--</b>
<u>Southern</u>										
Beaver										
Garfield										
Iron										
Kane										
Millard										
Piute										
Sevier										
Washington										
Wayne										
<b>REGIONAL TOTALS</b>										
<u>Northeastern</u>										
Daggett										
Duchesne										
Uintah										
<b>REGIONAL TOTALS</b>										
<u>Southeastern</u>										
Carbon										
Emery										
Grand										
San Juan										
<b>REGIONAL TOTALS</b>										
<b>STATE TOTALS</b>	<b>11</b>	<b>0.68</b>	<b>15</b>	<b>0.82</b>	<b>17</b>	<b>0.75</b>	<b>12</b>	<b>0.74</b>	<b>21</b>	<b>1.28</b>

NOT APPLICABLE

NOT APPLICABLE

NOT APPLICABLE

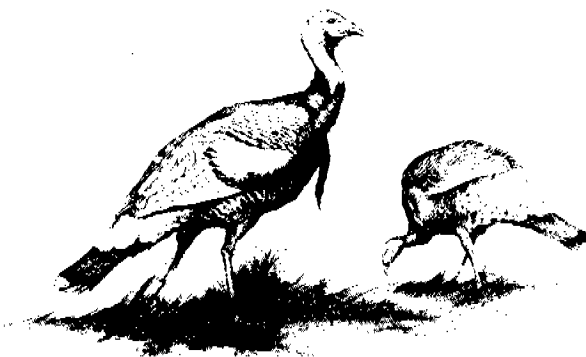
# WILD TURKEY

## SUMMARY

Hunter success and turkey observational data for the 1974 spring season indicated an increased breeding population level for 1974 in most turkey areas compared to 1973. Even so, population densities were still below average, particularly in the Southern Region.

Observational data compiled during 1974 suggested a fairly good population on the LaSal Mountains and for the newly established population on the Blue Mountains. Brood data were too limited to indicate production for 1974.

The fall hunting season was restricted to the LaSal Mountain and Blue Mountain - Elk Ridge areas. Consequently, total hunters dropped to an all-time low of 26 hunters afield. Of this number, 38 percent observed turkeys but only 12 percent were successful for a total harvest of 3 turkeys.



## Brood Counts

Annual random brood counts have been conducted each year since the introduction of turkeys into Utah in the early 1950's; however, success in finding broods has usually been poor. Sample sizes have generally been too low to meaningfully indicate relative density or production from year to year. During 1974 there were no turkey brood observations reported in the Southern Region and only 13 adults and 13 young observed in the Southeastern region.

## Harvest

### Spring Gobbler Seasons

Results of the 1974 spring season are shown in Table 1 of this section. The trend of these data since the first season in 1967 is shown in Table 2. The 1974 spring season compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u> <u>1973</u>	<u>Average</u>
Permits sold	121	-24	-44
Hunters afield	112	-17	-45
Turkeys harvested	6	--	-68
Hunter-days afield	289	- 7	-44
Percent hunter success	5	--	-50
Turkeys bagged per hunter-day	0.02	--	-50
Percent of hunters who observed turkeys	22	+120	-37
Crippling loss (loss:100 bagged)	0		--

Permit sales and hunters afield were the lowest since the initial season in 1967. Hunter success was 5 percent compared to 0 in 1973. Only 6 total turkeys were harvested. They were taken on the East Zion; Pine Valley and Blue Mountain areas. All indexes suggest an increased turkey population compared to the spring of 1973. The percentage of hunters observing turkeys increased on all areas except the LaSal Mountains.

### Fall Seasons

The 1974 fall season was restricted to the LaSal Mountain and Blue Mountain - Elk Ridge areas. A summary of the 1974 season is found in Table 3 and harvest trends for all areas are shown in Tables 4-9.

Hunter participation was extremely low with only 29 permits sold and 26 hunters afield. Three turkeys were bagged for a 12 percent success figure. Thirty eight percent of the hunters afield observed turkeys.

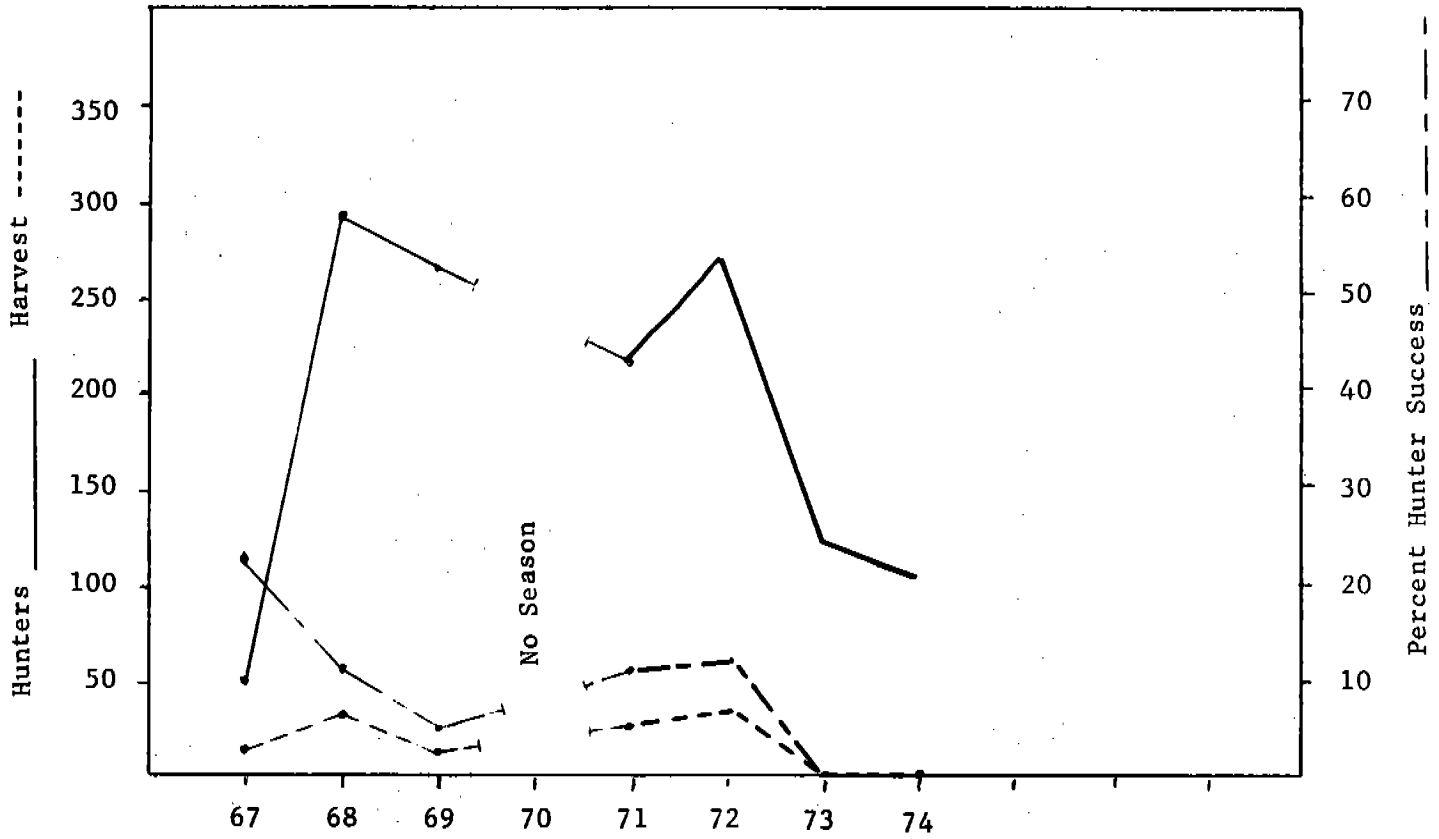


Figure 1. Wild turkey gobbler harvest trends for spring seasons.



Figure 2. Wild turkey harvest trends for fall seasons.

Table 1. Summary of the 1974 spring turkey season.

	BLUE MTN-ELK RIDGE		EAST ZION		BOULDER		LASAL		BEAVER		PINE VALLEY		MIXED UNITS		STATE TOTALS	
	Rep't	Calc	Rep't	Calc	Rep't	Calc	Rep't	Calc	Rep't	Calc	Rep't	Calc	Rep't	Calc	Rep't	Calc
Permits Sold															121	--
No hunts															8	9
Hunters afield	15	17	30	34	20	23	18	20	1	1	7	8	8	9	99	112
Hunter days	30	34	65	73	50	56	58	66	1	1	20	23	32	36	256	289
Turkeys bagged	2	2	2	2	0	0	0	0	0	0	1	1	0	0	5	6
Percent success	13	--	7	--	0	0	0	0	0	0	14	--	0	0	5	--
Turkeys bagged per hunter day	0.07	--	0.03	--	0	--	0	--	0	--	0.05	--	0	--	0.02	--
Reported crippling loss (loss/100 bagged)	0	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--
Turkeys observed	15	--	21	--	6	--	18	--	0	--	5	--	1	--	66	--
Cobblers	6	--	10	--	4	--	2	--	0	--	2	--	1	--	25	--
Hens	7	--	3	--	0	--	16	--	0	--	2	--	0	--	28	--
Unidentified	2	--	8	--	2	--	0	--	0	--	1	--	0	--	13	--
Number of hunters who saw turkeys	4	--	7	--	5	--	2	--	0	--	3	--	1	--	22	--
Percent of hunters who saw turkeys	27	--	23	--	25	--	11	--	0	--	43	--	12	--	22	--
projection factor																

Table 2. Summary of turkey harvest statistics for spring gobbler seasons, 1967-74.

Hunting Unit and Year	Hunters		Total Harvest	Hunter-days		Percent Success*	Turkeys per Hunter-day		Percent of Hunters Observing	Total Permits
	Afield			Afield			Hunter-day	Turkeys		
1967	24	9	59	38	0.15	58				
1968	130	16	364	11	0.04	48				
1969	77	4	210	6	0.02	35				
1970		NO SEASON								
1971	106	14	272	12	0.05	38				
1972	113	20	321	14	0.06	47				
1973	43	0	96	0	0.00	14				
1974	34	2	73	7	0.03	23				
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1967	17	2	43	12	0.05	75				
1968	134	15	330	10	0.05	33				
1969	141	6	300	4	0.02	16				
1970		NO SEASON								
1971	27	1	64	4	0.02	13				
1972	42	3	107	8	0.03	28				
1973	22	0	52	0	0.00	6				
1974	23	0	56	0	0.00	25				
<hr/>										
1967	6	0	16	0	0.00	33				
1968	17	0	44	0	0.00	62				
1969	39	3	102	9	0.03	24				
1970		NO SEASON								
1971	17	1	34	6	0.03	20				
1972	50	3	129	7	0.03	29				
1973	23	0	53	0	0.00	16				
1974	20	0	66	0	0.00	11				
<hr/>										
1971	27	2	54	8	0.04	39				
1972	17	2	53	13	0.04	20				
1973	17	0	34	0	0.00	7				
1974	1	0	1	0	0.00	0				
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1971	23	4	92	15	0.04	70				
1972	22	1	52	5	0.02	42				
1973	17	0	38	0	0.00	7				
1974	8	1	23	14	0.05	43				
<hr/>										
Blue Mountain - Elk Ridge	1974	17	34	13	0.07	27				



Table 2. Continued

Hunting Unit and Year	Hunters		Total Harvest	Hunter-days		Percent Success*	Turkeys per Hunter-day		Percent of Hunters Observing Turkeys	Total Permits*
	Afield	By Unit		Afield	By Unit		Hunter-day	By Unit		
1967	2					0			0	
1968	9					12			12	
1969	10					0			11	
1970		NO SEASON								
1971	15	4				15			61	
1972	25	5		89		18	0.05		50	
1973	12	0		38		0	0.00		0	
1974	9	0		36		0	0.00		12	
1967	49	11		118		22	0.09		59	52
1968	290	31		738		11	0.04		41	310
1969	267	13		612		5	0.02		22	276
1970		NO SEASON								NO SEASON
1971	215	26		576		11	0.04		38	223
1972	269	35		751		12	0.05		39	285
1973	135	0		311		0	0.00		10	150
1974	112	6		289		5	0.02		22	121
STATE AVERAGES (1967-73)	204	19		518		10	0.04		35	216

\*Based on the number of hunters bagging one or more turkeys.

\*\*Total permits are sold on a state basis and not by unit.

Table 3. Summary of the 1974 Fall Turkey Season.

Data	Blue Mtn.-Elk Ridge		La Sal		Mixed Units		State Totals	
	Rep't	Calc	Rep't	Calc	Rep't	Calc	Rep't	Calc
Permits sold	--	--	--	--	--	--	29	--
No hunts	--	--	--	--	--	--	3	--
Hunters afield	4	5	16	20	1	1	21	26
Hunter days	7	9	49	61	7	9	63	79
Turkeys bagged	1	1	1	2	0	--	2	3
Percent success*	25	20	6	10	0	--	9.5	12
Turkeys bagged per hunter day	0.14	0.11	0.020	0.03	0	--	0.03	0.04
Reported crippling loss (loss/100 bagged)	0	--	100	--	0	--	33	--
Turkeys observed	20	--	61	--	2	--	83	--
Number of hunters who saw turkeys	1	--	6	--	1	--	8	--
Percent of hunters who saw turkeys	33	--	38	--	100	--	38	--

Projection factor 1.261 (29 ÷ 23)

\* The season limit was one bird.

Table 4. Summary of Boulder Mountain wild turkey harvest data for fall hunts from 1966-74\*.

Harvest Data	1966	1967	1968	1969	1970	1971	1972	1973	1974
Hunters afield	50	22	77	45	24	20	7		
Hunter-days	132	71	195	103	77	46	17		
Turkeys bagged	11	4	37	0	2	0	0	CLOSED	SEASON
Percent success**	22	20	32	0	8	0	0		
Percent bagging two turkeys	--	--	13	0	0	0	0	CLOSED	SEASON
Birds bagged/day	0.08	0.06	0.19	0.00	0.03	0.00	0.00		
Reported crippling loss (loss:100 bagged)	9	25	18	--	0	0	0	CLOSED	CLOSED
Turkeys observed	260	55	436	0	16	0	0		
No. hunters who observed turkeys	22	8	27	0	2	0	0		
Percent of hunters who observed turkeys	44	40	38	0	10	0	0		

\*Data for 1964 and later years via mailed questionnaires.

\*\*Season bag limits from 1968-72 were two turkeys. Percent success was based on successful hunters rather than total turkeys bagged.

Table 5. Summary of East Zion wild turkey harvest data for fall hunts from 1966-74\*.

Harvest Data	1966	1967	1968	1969	1970	1971	1972	1973	1974
Hunters afield	111	113	218	137	87	90	59		
Hunter-days	266	334	569	374	203	229	154		
Turkeys bagged	31	36	127	35	43	39	10		
Percent success**	28	32	40	16	32	27	12		
Percent bagging two turkeys	--	--	19	10	16	16	4		
Birds bagged/day	0.12	0.11	0.22	0.9	0.21	0.17	0.06		
Reported crippling loss (loss:100 bagged)	6	15	15	19	5	6	12		
Turkeys observed	476	693	1661	426	469	264	96		
No. hunters who observed turkeys	43	51	122	30	30	23	11		
Percent of hunters who observed turkeys	39	50	60	25	40	31	22		

CLOSED SEASON  
CLOSED SEASON

\*Data for 1964 and later via mailed questionnaires.

\*\*Season bag limits from 1968-72 were two turkeys. Percent success was based on successful hunters rather than total turkeys bagged.

Table 6. Summary of LaSal Mountain wild turkey harvest data for fall hunts from 1966-74.

Harvest Data	1966	1967	1968	1969	1970	1971	1972	1973	1974
Hunters afield			45	17	18	13	31		20
Hunter-days			119	51	30	27	70		61
Turkeys bagged			19	1	3	5	2		2
Percent success**	SEASON	SEASON	43	7	11	18	4	SEASON	10
Percent bagging two turkeys	SEASON	SEASON	0	0	6	18	4	SEASON	--
Birds bagged/day	SEASON	SEASON	0.16	0.02	0.10	0.18	0.02	SEASON	0.03
Reported crippling loss (loss:100 bagged)	CLOSED	CLOSED	11	0	0	0	0	CLOSED	100
Turkeys observed	CLOSED	CLOSED	214	40	15	25	63	CLOSED	61
No. hunters who observed turkeys			21	1	3	3	7		6
Percent of hunters who observed turkeys			50	7	20	27	27		38

\*Data for 1964 and later via mailed questionnaires.

\*\*Season bag limits from 1969-72 were two turkeys. Percent success was based on successful hunters rather than total turkeys bagged.

Table 7. Summary of Beaver Mountain wild turkey harvest data for fall hunts from 1970-1974.

Harvest Data	1970*	1971	1972	1973	1974
Hunters afield	30	13	6		
Hunter-days	87	24	12		
Turkeys bagged	7	5	0		
Percent success	15	18	0		
Percent bagging two turkeys	8	18	0		
Birds bagged/day	0.08	0.20	0		
Reported crippling loss(loss:100 bagged)	0	0	0		
Turkeys observed	48	64	11		
No. hunters who observed turkeys	8	5	2		
Percent of hunters who observed turkeys	31	46	40		

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\*Wild turkeys were transplanted onto the Beaver Mountain during the winter of 1967-68. The first hunting season was held in 1970.

Table 8. Summary of Pine Valley Mountain wild turkey harvest data for fall hunts from 1970-1974.

Harvest Data	1970*	1971	1972	1973	1974
Hunters afield	6	32	11		
Hunter-days	21	87	19		
Turkeys bagged	3	11	0		
Percent success	50	23	0		
Percent bagging two turkeys	0	12	0		
Birds bagged/day	0.14	0.13	0		
Reported crippling loss(loss:100 bagged)	33	22	0		
Turkeys observed	16	98	0		
No. hunters who observed turkeys	4	9	0		
Percent of hunters who observed turkeys	80	35	0		

CLOSED SEASON  
CLOSED SEASON

\*Wild turkeys were transplanted onto the Pine Valley Mountain during the winter of 1967-68. The first hunting season was held in 1970.

Table 9. Summary of Blue Mountain-Elk Ridge wild turkey harvest data for the fall hunt, 1974.

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Harvest Data	1974*
Hunters afield	5
Hunter-days	9
Turkeys Bagged	1
Percent Success	20
Birds bagged/day	0.11
Reported crippling loss (loss:100 bagged)	0
Turkeys observed	20
No. hunters who observed turkeys	1
Percent of hunters who observed turkeys	20

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\*Wild turkeys were initially transplanted onto the Blue Mountains in 1957 and on Elk Ridge in 1959. These releases failed. Additional releases were made beginning in 1970 on Blue Mountain and 1972 on Elk Ridge with successful results, particularly on Blue Mountain.



Table 10. State-wide summary of wild turkey harvest data for fall hunts from 1963 through 1974\*.

Harvest Data	1963	1964	1965	1966**	1967	1968**	1969	1970	1971	1972	1973	1974	Averages (1963-73)
	Permits sold	297	229	214	192	146	368	223	197	184	124		29
Hunters afield	248	211	207	187	135	344	210	174	174	118		26	201
Hunter-days	--	362	406	471	405	883	549	418	444	303		79	471
Turkeys bagged	75	81	50	43	40	183	36	58	60	12		3	64
Percent success***	30	38	24	23	30	38	11	24	21	7		12	25
Percent bagging two turkeys	--	--	--	--	--	15	6	10	13	3		--	9
Birds bagged/day	--	0.22	0.12	0.09	0.10	0.21	0.06	0.14	0.14	0.04		0.04	0.12
Reported crippling loss (loss:100 bagged)	15	15	8	7	16	15	19	6	8	10		33	12
Turkeys observed	--	1158	730	756	748	2321	466	564	451	173		83	819
No. hunters who observed turkeys	118	127	61	68	59	171	31	47	40	21		8	74
Percent of hunters who observed turkeys	48	60	29	36	48	54	17	31	28	21		38	37

\*Data for 1963 collected by hunter checking stations, for 1964 and later via mailed questionnaire.

\*\*During 1966, 1968 and later years some hunters hunted more than one area or failed to designate areas hunted. This accounts for the difference between totals given above and combined tables of separate units in Tables 5, 6, and 7.

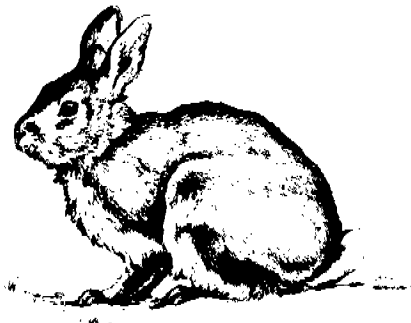
\*\*\*During 1968 the Boulder Mountain and East Zion units had two-bird season limits and the LaSal Mountain a one-bird limit; from 1969 through 1972 all areas had a two-bird limit. Hunter success was based on the number of successful hunters rather than total turkeys bagged.

# COTTONTAIL RABBIT

## SUMMARY

The 1974 breeding population was at a low level (based on 1973 harvest statistics). Summer roadside counts suggested increased production on a statewide basis and showed a marked increase in cottontails per mile; however, this index was still below average.

Harvest data for the 1974-75 season did not reflect the increase shown by roadside count data. Total hunters increased but hunter-days decreased. Hunter success was similar to 1973 and thus resulted in a decreased harvest.



### Roadside Counts

Results of the annual roadside counts for 1974 are shown in Table 1 of this section. The trend of cottontails observed per mile and young per 100 adults since 1967 is shown in Tables 2 and 3 respectively. Indexes for 1974 compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total cottontails counted	700	+94	-28
Total miles driven	2,402	+22	-6
Cottontails observed per mile	0.29	+61	-24
Young observed per 100 adults	105	+22	+2

Harvest statistics for 1973 indicated a marked reduction in the cottontail breeding population statewide for 1974.

Total miles of roadside counts increased over 1973 but was slightly below average. The cottontails per mile index increased over 1973, except in the Central and Northeastern regions where it declined; however, it was still well below average on a statewide basis. The young per 100 adult index indicated improved production in the Northern, Southern and Northeastern regions and statewide.

### Harvest

#### Hunter Questionnaire

Results of the 1974 hunter questionnaire are found in Table 4. Trends of cottontails bagged per hunter-day, percent of harvest and percent of pressure (hunter-days) by county since 1967 are found in Tables 5-7. Trend of statewide harvest statistics is found in Table 9 and Figure 2. The 1974 season compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Cottontail hunters	22,737	+13	-11
Cottontail harvest	86,506	-2	-52
Hunter-days afield	85,499	-2	-20
Cottontails per hunter	3.80	-14	-46
Cottontails per hunter-day	1.01	-1	-41

Total cottontail hunters increased but hunter-days afield decreased slightly, probably reflecting the low hunter success. Success per day was similar to last year but still well below average. The total harvest was slightly lower than 1973 due to the reduced days afield and was only about 50 percent of the average.

The cottontail questionnaire was combined with the game bird questionnaire for the first time this year; consequently, the monthly distribution of harvest and hunting pressure questions were discontinued. The trend of this information over the past six years is shown in Table 8 along with six-year averages.

### Field Bag Checks

Results of this survey for 1974 are shown in Table 10. Trend of hunter success as determined by bag checks are shown in Table 11. The 1974 season compared to 1973 and the average as follows:

	<u>1974</u>	<u>Percent change from</u>	
		<u>1973</u>	<u>Average</u>
Total hunters checked	350	+78	-28
Total hours hunted	966	+94	-27
Cottontails per hunter (complete hunts)	1.91	-11	+11
Cottontails bagged per 100 hours	45	-42	-13
Hours per hunter-day (complete hunts)	3.4	+36	+6
Hours per cottontail bagged	1.8	+50	-18

Results of this survey showed a decrease in hunter success from 1973 but still above average. The harvest questionnaire showed comparable success between 1973 and 1974. The difference is probably due to disproportionate sampling with regard to both time and area.

The average hunter-day was longer than both 1973 and the average and more time was required per cottontail bagged than in 1973 but less than the average.

Juveniles/100 Adults - - - - -

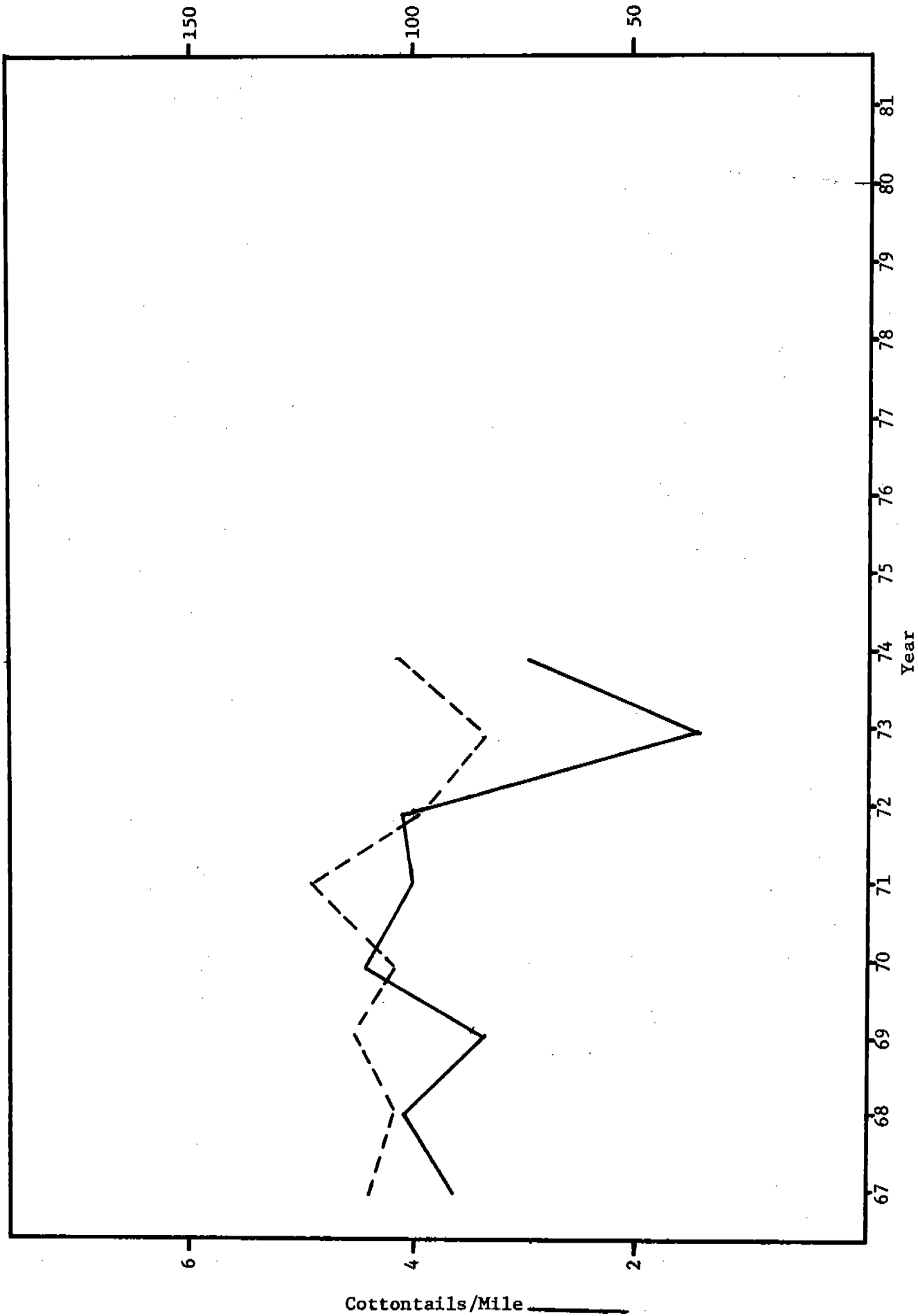


Figure 1. Cottontail Rabbit Population Indexes Trend.

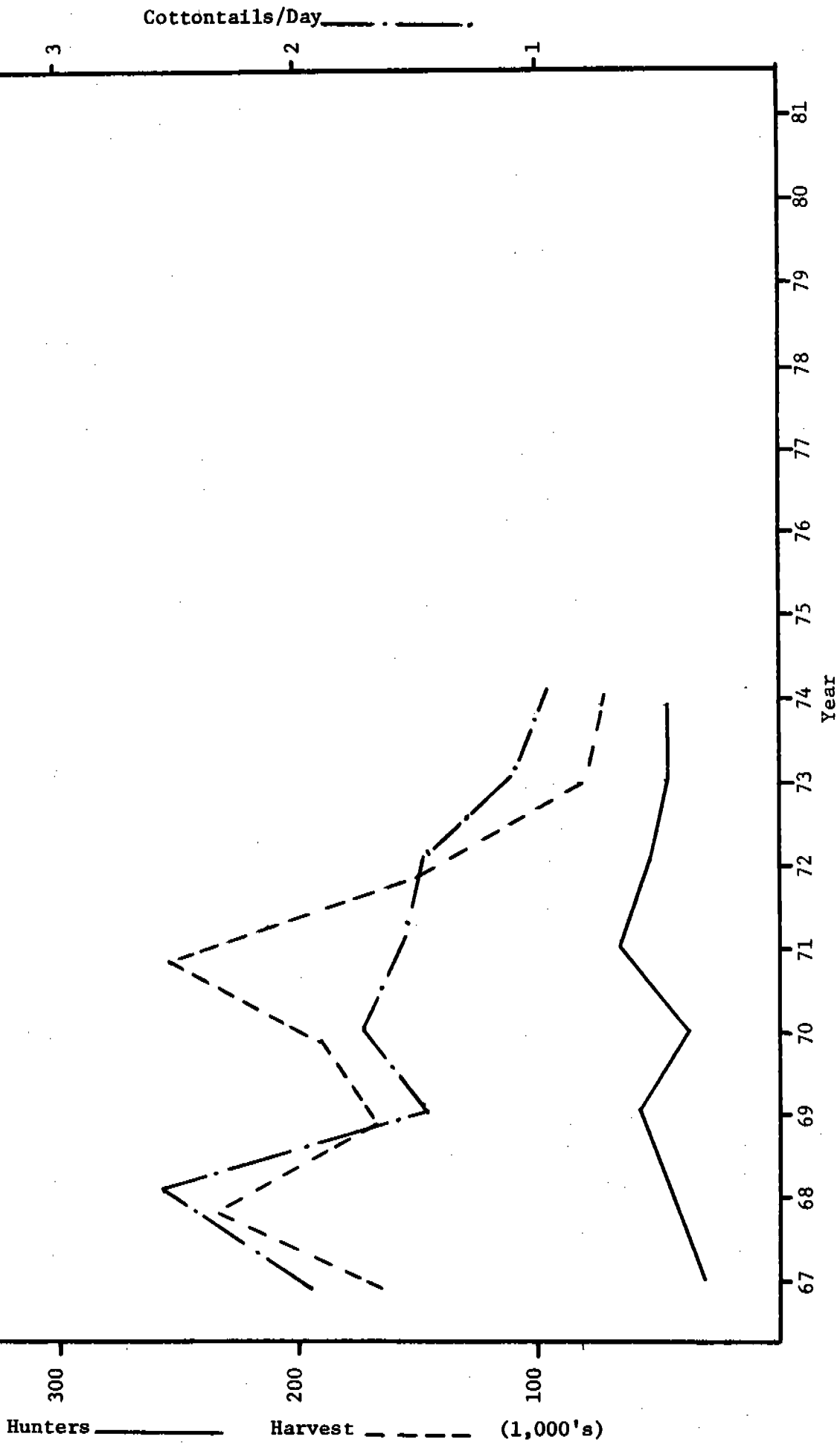


Figure 2. Cottontail Rabbit Harvest Trend

Table 1. Cottontail rabbit summer inventory summary, 1974.

Region and County	Miles Driven	Rabbits Observed		Total	Young per 100 Adults	Rabbits/Mile
		Adults	Young			
<b>Northern</b>						
Box Elder	90	26	45	91	173	1.01
Cache	--	--	--	--	--	--
Davis	--	--	--	--	--	--
Morgan	90	1	0	1	0	0.01
Rich	90	4	0	4	0	0.04
Summit	--	--	--	--	--	--
Weber	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>270</b>	<b>31</b>	<b>45</b>	<b>96</b>	<b>145</b>	<b>0.36</b>
<b>Central</b>						
Juab	--	--	--	--	--	--
Salt Lake	--	--	--	--	--	--
Sanpete	90	14	7	21	50	0.23
Tooele	90	3	2	5	67	0.06
Utah	--	--	--	--	--	--
Wasatch	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>180</b>	<b>17</b>	<b>9</b>	<b>26</b>	<b>53</b>	<b>0.14</b>
<b>Southern</b>						
Beaver	30	9	1	10	11	0.33
Garfield	179	16	9	25	56	0.14
Iron	78	2	2	5	100	0.06
Kane	90	7	14	23	200	0.26
Millard	195	11	9	20	82	0.10
Piute	90	2	0	2	0	0.02
Sevier	114	6	11	20	183	0.18
Washington	174	62	61	226	98	1.30
Wayne	90	2	1	5	50	0.06
<b>REGIONAL TOTALS</b>	<b>1,040</b>	<b>117</b>	<b>108</b>	<b>336</b>	<b>92</b>	<b>0.32</b>
<b>Northeastern</b>						
Daggett	160	15	13	38	87	0.24
Duchesne	120	13	19	35	146	0.29
Uintah	90	7	8	17	114	0.19
<b>REGIONAL TOTALS</b>	<b>370</b>	<b>35</b>	<b>40</b>	<b>90</b>	<b>114</b>	<b>0.24</b>
<b>Southeastern</b>						
Carbon	182	12	14	28	117	0.15
Emery	90	5	2	7	40	0.08
Grand	90	8	5	13	62	0.14
San Juan	180	40	56	104	140	0.58
<b>REGIONAL TOTALS</b>	<b>542</b>	<b>65</b>	<b>77</b>	<b>152</b>	<b>118</b>	<b>0.28</b>
<b>STATE TOTALS</b>	<b>2,402</b>	<b>265</b>	<b>279</b>	<b>700</b>	<b>105</b>	<b>0.29</b>

Table 2. Summary of cottontail rabbits observed per mile during summer inventory, 1967-74.

Region and County	1967	1968	1969	1970	1971	1972	1973	1974	Averages 1967-73
<b>Northern Region</b>									
Box Elder	0.36	0.78	0.50	0.76	0.43	0.37	0.06	1.01	
Cache	0	0.02	0.01	--	0.06	0.07	--	--	
Davis	--	--	--	--	--	--	--	--	
Morgan	0.02	0.17	0.10	--	0.28	--	0.14	0.01	
Rich	0.26	0.50	0.52	0.43	0.22	0.11	0.14	0.04	
Summit	0.16	0.22	0.08	0.39	--	0.13	--	--	
Weber	--	--	0.16	--	--	--	--	--	
<b>Regional Totals</b>	<b>0.19</b>	<b>0.44</b>	<b>0.23</b>	<b>0.59</b>	<b>0.31</b>	<b>0.25</b>	<b>0.09</b>	<b>0.36</b>	<b>0.30</b>
<b>Central Region</b>									
Juab	0.26	0.42	0.51	0.72	0.33	0.14	0.13	--	
Salt Lake	0.01	0	0	--	--	--	--	--	
Sanpete	0.30	0.36	0.53	0.63	0.77	0.72	0.33	0.23	
Tooele	0.07	0.34	0.28	0.28	0.22	0.14	0.02	0.06	
Utah	--	--	--	--	--	--	--	--	
Wasatch	--	--	--	--	--	--	--	--	
<b>Regional Totals</b>	<b>0.15</b>	<b>0.29</b>	<b>0.32</b>	<b>0.54</b>	<b>0.46</b>	<b>0.33</b>	<b>0.18</b>	<b>0.14</b>	<b>0.33</b>
<b>Southern Region</b>									
Beaver	0	0.23	0.36	--	0.18	0.36	0.29	0.33	
Garfield	0.15	0.25	0.48	0.48	0.33	0.29	0.12	0.14	
Iron	0.09	0.64	0.40	--	0.38	0.58	0.00	0.06	
Kane	0.67	--	--	0.71	0.17	0.60	0.32	0.26	
Millard	0.22	0.30	0.39	0.28	0.15	0.29	0.11	0.10	
Plute	0.01	0.09	0	0	0	0	--	0.02	
Sevier	0.18	0.13	0.47	0.58	0.46	0.41	0.10	0.18	
Washington	0.80	0.55	0.61	0.17	0.46	1.16	0.57	1.30	
Wayne	0.08	0.10	0.12	--	0.08	0.07	0.04	0.06	
<b>Regional Totals</b>	<b>0.27</b>	<b>0.32</b>	<b>0.35</b>	<b>0.35</b>	<b>0.25</b>	<b>0.48</b>	<b>0.19</b>	<b>0.32</b>	<b>0.32</b>
<b>Northeastern Region</b>									
Daggett	1.93	0.81	0.60	0.77	0.76	0.73	0.50	0.24	
Duchesne	1.40	0.77	0.68	0.56	0.58	0.24	0.14	0.29	
Uintah	1.00	0.98	0.84	1.56	1.39	0.97	0.14	0.19	
<b>Regional Totals</b>	<b>1.30</b>	<b>0.82</b>	<b>0.68</b>	<b>0.93</b>	<b>0.89</b>	<b>0.60</b>	<b>0.26</b>	<b>0.24</b>	<b>0.78</b>
<b>Southeastern Region</b>									
Carbon	0.05	0.64	0.13	0.13	0.24	0.20	0.46	0.15	
Emery	0.37	0.33	0.17	0.20	0.04	0.30	0.06	0.08	
Grand	0.34	0.16	--	0.14	0.53	0.66	0.07	0.14	
San Juan	0.58	0.64	0.50	0.30	0.97	0.48	--	0.58	
<b>Regional Totals</b>	<b>0.39</b>	<b>0.42</b>	<b>0.21</b>	<b>0.25</b>	<b>0.53</b>	<b>0.45</b>	<b>0.19</b>	<b>0.28</b>	<b>0.35</b>
<b>STATE TOTALS</b>									
	0.35	0.41	0.32	0.50	0.44	0.43	0.18	0.29	0.38



Table 3. Summary of cottontail rabbits young per 100 adults ratios, 1967-74.

Region and County	1967	1968	1969	1970	1971	1972	1973	1974	Averages 1967-73
<b>Northern Region</b>									
Box Elder	94	106	94	95	129	62	100	173	
Cache	--	--	0	--	0	0	--	--	
Davis	--	--	--	--	--	--	--	--	
Morgan	--	100	900	--	25	--	--	0	
Rich	125	86	186	40	80	100	50	0	
Summit	67	56	33	64	--	14	--	--	
Weber	--	--	75	--	--	--	--	--	
<b>Regional Totals</b>	<b>104</b>	<b>97</b>	<b>115</b>	<b>76</b>	<b>100</b>	<b>56</b>	<b>73</b>	<b>145</b>	<b>88</b>
<b>Central Region</b>									
Juab	175	257	239	246	171	117	100	--	
Salt Lake	--	--	0	--	--	--	--	--	
Sanpete	257	133	311	123	144	148	142	50	
Tooele	200	113	127	100	100	100	0	67	
Utah	--	--	--	--	--	--	--	--	
Wasatch	--	--	--	--	--	--	--	--	
<b>Regional Totals</b>	<b>218</b>	<b>179</b>	<b>224</b>	<b>157</b>	<b>145</b>	<b>135</b>	<b>121</b>	<b>53</b>	<b>168</b>
<b>Southern Region</b>									
Beave	--	36	56	--	14	61	92	11	
Garfield	28	85	138	103	118	86	57	56	
Iron	200	75	33	--	162	100	0	100	
Kane	129	--	--	28	50	86	44	200	
Millard	32	143	22	41	32	271	32	82	
Piute	--	0	--	--	--	--	--	0	
Sevier	157	22	360	350	390	450	200	183	
Washington	271	71	114	22	71	11	81	98	
Wayne	100	50	300	--	167	50	200	50	
<b>Regional Totals</b>	<b>115</b>	<b>75</b>	<b>85</b>	<b>68</b>	<b>93</b>	<b>64</b>	<b>67</b>	<b>92</b>	<b>81</b>
<b>Northeastern Region</b>									
Daggett	56	62	34	57	81	121	63	87	
Duchesne	142	146	148	131	150	78	160	146	
Uintah	231	117	154	203	191	141	100	114	
<b>Regional Totals</b>	<b>118</b>	<b>107</b>	<b>77</b>	<b>126</b>	<b>139</b>	<b>120</b>	<b>87</b>	<b>114</b>	<b>110</b>
<b>Southeastern Region</b>									
Carbon	150	55	122	100	53	145	250	117	
Emery	73	238	200	183	100	125	16	40	
Grand	106	7	--	160	79	297	33	62	
San Juan	45	--	166	228	215	111	--	140	
<b>Regional Totals</b>	<b>62</b>	<b>92</b>	<b>161</b>	<b>115</b>	<b>132</b>	<b>180</b>	<b>142</b>	<b>118</b>	<b>127</b>
<b>STATE TOTALS</b>	<b>106</b>	<b>96</b>	<b>110</b>	<b>102</b>	<b>123</b>	<b>99</b>	<b>86</b>	<b>105</b>	<b>103</b>

Table 4. Summary of cottontail rabbit hunter success and distribution of harvest and hunting pressure by region and county, 1974.

Region and County	Hunters Reporting	Days Hunted	Cottontails Bagged	Cottontails/Hunter-day	Cottontails per Hunter*	% of Pressure	% of Harvest
<u>Northern</u>							
Box Elder	188	503	516	1.03	3.76	11.18	11.33
Cache	25	48	54	1.12	2.59	1.07	1.19
Davis	13	29	19	0.66	2.36	0.64	0.42
Morgan	23	57	39	0.68	1.10	1.27	0.86
Rich	15	22	25	1.14	1.67	0.49	0.55
Summit	40	147	91	0.62	3.69	3.27	2.00
Weber	25	92	32	0.35	2.25	2.04	0.70
REGIONAL TOTALS	329	898	776	0.86	2.50	19.95	17.04
<u>Central</u>							
Juab	76	221	198	0.90	4.32	4.91	4.35
Salt Lake	51	155	134	0.86	3.17	3.44	2.94
Sanpete	31	79	90	1.14	6.25	1.76	1.98
Tooele	105	243	191	0.79	1.93	5.40	4.19
Utah	182	554	448	0.81	3.51	12.31	9.84
Wasatch	18	44	25	0.57	5.58	0.98	0.55
REGIONAL TOTALS	463	1,296	1,086	0.84	3.36	28.79	23.85
<u>Southern</u>							
Beaver	13	82	73	0.89	6.33	1.82	1.60
Garfield	8	22	32	1.45	3.50	0.49	0.70
Iron	14	69	42	0.61	3.58	1.53	0.92
Kane	8	28	44	1.57	6.00	0.62	0.97
Millard	62	184	211	1.15	4.65	4.09	4.63
Piute	5	13	1	0.08	0.00	0.29	0.02
Sevier	22	43	48	1.12	1.88	0.96	1.05
Washington	30	214	218	1.02	7.83	4.75	4.79
Wayne	14	53	57	1.08	7.43	1.18	1.25
REGIONAL TOTALS	176	708	726	1.03	5.14	15.73	15.94
<u>Northeastern</u>							
Daggett	24	49	83	1.69	4.33	1.09	1.82
Duchesne	82	281	405	1.44	6.74	6.24	8.89
Uintah	81	283	273	0.96	3.40	6.29	5.99
REGIONAL TOTALS	187	613	761	1.24	4.55	13.62	16.71
<u>Southeastern</u>							
Carbon	81	402	381	0.95	6.03	8.93	8.37
Emery	48	314	252	0.80	7.86	6.98	5.53
Grand	18	58	112	1.93	7.82	1.29	2.46
San Juan	30	112	237	2.12	9.69	2.49	5.20
REGIONAL TOTALS	177	886	982	1.11	7.04	19.68	21.56
Unknown counties	50	97	207	2.13	36.00	2.16	4.55
Mixed counties	2	3	16	5.33	6.00	0.07	0.35
STATE TOTALS	1,384	4,501	4,554	1.01	3.80	100	100

\*Based on county of residence.

Table 5. Summary of cottontail rabbits bagged per hunter-day by region and county, 1967-74.

Region and county	1967	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>								
Box Elder	1.81	3.54	2.29	2.62	2.28	1.48	0.90	1.03
Cache	1.35	3.00	1.87	2.00	2.02	1.71	0.52	1.12
Davis	0.78	0.27	1.10	0.56	0.60	0.57	0.85	0.66
Morgan	1.01	1.02	1.21	1.80	2.06	0.26	0.81	0.68
Rich	0.07	3.11	2.65	2.62	1.91	3.97	0.92	1.14
Summit	1.70	1.78	1.40	1.93	1.24	1.19	0.39	0.62
Weber	1.03	1.16	0.94	1.02	0.36	0.28	1.79	0.35
<b>Regional Totals</b>	<b>1.49</b>	<b>2.81</b>	<b>2.02</b>	<b>2.41</b>	<b>1.90</b>	<b>1.28</b>	<b>0.87</b>	<b>0.86</b>
<b>Central</b>								
Juab	1.89	2.58	1.74	2.38	1.75	1.14	0.70	0.90
Salt Lake	1.33	1.40	0.83	0.94	0.92	1.24	0.24	0.86
Sanpete	0.80	1.93	1.86	1.72	1.23	1.34	0.88	1.14
Tooele	1.59	1.62	1.27	1.50	1.60	1.25	0.84	0.79
Utah	1.19	1.55	1.24	1.11	1.32	1.10	0.69	0.81
Wasatch	1.21	1.39	0.59	1.80	0.95	1.26	0.68	0.57
<b>Regional Totals</b>	<b>1.34</b>	<b>1.73</b>	<b>1.30</b>	<b>1.47</b>	<b>1.41</b>	<b>1.20</b>	<b>0.73</b>	<b>0.84</b>
<b>Southern</b>								
Beaver	2.04	2.06	1.84	1.41	1.15	1.06	0.84	0.89
Garfield	2.83	2.26	0.96	0.62	2.40	1.45	2.24	1.45
Iron	1.18	2.82	1.57	0.99	1.74	1.31	0.55	0.61
Kane	4.04	3.30	0.00	0.75	0.20	1.62	1.18	1.57
Millard	2.25	2.69	1.34	2.43	2.26	1.87	1.47	1.15
Miute	4.45	1.33	1.43	1.00	0.46	0.75	2.50	0.08
Sevier	0.65	2.54	1.09	0.68	0.93	1.87	1.45	1.12
Washington	0.83	8.00	1.11	1.54	1.55	2.29	1.61	1.02
Wayne	1.50	4.00	0.79	1.39	1.58	2.15	0.74	1.08
<b>Regional Totals</b>	<b>1.95</b>	<b>2.59</b>	<b>1.23</b>	<b>1.41</b>	<b>1.45</b>	<b>1.85</b>	<b>1.19</b>	<b>1.03</b>
<b>Northeastern</b>								
Daggett	3.87	4.08	2.08	2.67	2.73	2.93	1.25	1.69
Duchesne	3.31	2.40	1.47	2.45	3.14	2.91	1.07	1.44
Uintah	3.53	3.69	1.95	2.30	1.80	1.47	1.10	0.96
<b>Regional Totals</b>	<b>3.49</b>	<b>3.39</b>	<b>1.86</b>	<b>2.38</b>	<b>2.30</b>	<b>2.15</b>	<b>1.11</b>	<b>1.24</b>
<b>Southeastern</b>								
Carbon	1.70	1.47	1.62	1.27	0.63	1.15	1.21	0.95
Emery	1.98	2.58	1.68	2.22	1.06	1.49	1.46	0.80
Grand	0.74	1.28	1.26	2.26	1.71	2.35	1.00	1.93
San Juan	3.35	2.20	1.39	2.04	2.73	2.13	2.26	2.12
<b>Regional Totals</b>	<b>2.17</b>	<b>1.83</b>	<b>1.52</b>	<b>1.85</b>	<b>1.25</b>	<b>1.61</b>	<b>1.43</b>	<b>1.11</b>
Unknown counties	0.38	1.03	0.53	1.79	1.13	0.76	0.64	2.13
Mixed counties								5.33
<b>STATE TOTALS</b>	<b>1.95</b>	<b>2.42</b>	<b>1.54</b>	<b>1.86</b>	<b>1.65</b>	<b>1.46</b>	<b>1.02</b>	<b>1.01</b>

Table 6. Distribution of cottontail rabbit harvest by region and county, 1967-74.

Region and county	1967	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>								
Box Elder	9.80	31.46	28.69	32.46	19.42	14.54	7.48	11.33
Cache	0.86	1.79	1.75	0.85	1.33	2.02	0.87	1.19
Davis	0.36	0.29	0.55	0.27	0.63	0.38	0.67	0.42
Morgan	1.23	1.11	0.63	1.12	1.81	0.54	1.28	0.86
Rich	0.67	1.44	1.89	2.05	1.65	2.41	0.70	0.55
Summit	2.36	2.33	2.59	2.10	2.29	2.51	1.28	2.00
Weber	0.53	1.07	1.45	0.60	0.21	0.36	3.62	0.70
<b>Regional Totals</b>	<b>15.81</b>	<b>39.49</b>	<b>37.58</b>	<b>39.48</b>	<b>27.35</b>	<b>22.75</b>	<b>15.88</b>	<b>17.04</b>
<b>Central</b>								
Juab	4.31	5.24	8.83	6.43	4.27	3.67	3.10	4.35
Salt Lake	2.12	1.15	1.11	1.58	0.83	1.89	0.41	2.94
Sanpete	1.16	1.10	2.78	1.32	2.09	4.10	1.94	1.98
Tooele	5.06	5.55	10.82	9.90	8.83	6.56	8.32	4.19
Utah	6.91	5.95	8.02	7.04	6.26	6.51	6.81	9.84
Wasatch	3.59	2.01	1.49	1.57	1.65	2.46	1.45	0.55
<b>Regional Totals</b>	<b>23.17</b>	<b>21.00</b>	<b>33.08</b>	<b>27.88</b>	<b>23.93</b>	<b>25.18</b>	<b>22.03</b>	<b>23.85</b>
<b>Southern</b>								
Beaver	2.89	0.49	1.26	1.47	0.68	0.31	1.04	1.60
Garfield	0.58	2.07	0.87	0.34	0.14	0.26	1.10	0.70
Iron	1.11	1.46	1.45	1.34	2.62	1.72	2.20	0.92
Kane	1.66	0.87	0.00	0.04	0.15	0.21	0.38	0.97
Millard	1.97	3.96	4.11	3.74	4.85	5.34	4.64	4.63
Plute	0.84	0.16	0.25	0.08	0.22	0.05	0.14	0.02
Sevier	0.44	1.62	1.01	0.60	1.55	1.87	2.06	1.05
Washington	0.17	0.11	2.86	2.74	2.41	4.95	7.01	4.79
Wayne	0.15	0.21	0.41	1.12	0.59	0.46	1.07	1.25
<b>Regional Totals</b>	<b>9.82</b>	<b>10.95</b>	<b>12.45</b>	<b>11.51</b>	<b>13.21</b>	<b>15.18</b>	<b>19.65</b>	<b>15.94</b>
<b>Northeastern</b>								
Daggett	5.63	6.33	2.50	0.57	1.84	2.59	2.00	1.82
Duchesne	12.29	4.41	2.17	4.69	10.20	9.84	6.38	8.89
Uintah	14.49	9.30	6.64	5.63	10.79	7.03	6.72	5.99
<b>Regional Totals</b>	<b>32.41</b>	<b>20.04</b>	<b>11.31</b>	<b>10.89</b>	<b>22.82</b>	<b>19.46</b>	<b>15.10</b>	<b>16.71</b>
<b>Southeastern</b>								
Carbon	4.26	2.48	1.86	2.38	2.47	4.85	9.22	8.37
Emery	6.93	2.70	1.30	3.01	2.33	2.10	7.65	5.53
Grand	0.34	1.03	0.61	2.13	1.60	1.66	2.87	2.46
San Juan	7.05	1.48	0.99	2.33	4.61	6.51	7.33	5.20
<b>Regional Totals</b>	<b>18.58</b>	<b>7.69</b>	<b>4.77</b>	<b>9.86</b>	<b>11.01</b>	<b>15.11</b>	<b>27.07</b>	<b>21.56</b>
Unknown counties	0.20	0.79	0.96	0.35	1.56	2.08	0.26	4.55
Mixed counties								0.35
<b>STATE TOTALS</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100</b>

Table 7. Distribution of cottontail rabbit hunting pressure by region and county, 1967-74.

Region and county	1967	1968	1969	1970	1971	1972	1973	1974
<b>Northern</b>								
Box Elder	10.57	21.53	19.24	23.09	14.03	14.43	8.44	11.18
Cache	1.23	1.44	1.44	0.80	1.09	1.73	1.71	1.07
Davis	0.90	1.89	0.77	0.90	1.73	0.96	0.80	0.64
Morgan	2.37	2.63	0.81	1.17	1.45	3.10	1.59	1.27
Rich	1.87	1.12	1.10	1.46	1.43	0.89	0.77	0.49
Summit	2.70	3.18	2.85	2.02	3.05	3.10	3.30	3.27
Weber	1.00	2.25	2.37	1.09	0.94	1.90	2.07	2.04
<b>Regional Totals</b>	<b>20.65</b>	<b>34.04</b>	<b>28.61</b>	<b>30.56</b>	<b>23.72</b>	<b>26.10</b>	<b>18.68</b>	<b>19.95</b>
<b>Central</b>								
Juab	4.44	4.91	7.79	5.04	4.03	4.73	4.51	4.91
Salt Lake	3.10	1.99	2.06	3.14	1.49	2.23	1.74	3.44
Sanpete	2.84	1.38	2.29	1.44	2.80	4.49	2.24	1.76
Tooele	6.20	8.28	13.06	12.29	9.09	7.66	10.09	5.40
Utah	11.34	9.30	9.96	11.89	7.81	8.69	10.12	12.31
Wasatch	5.77	3.50	3.89	1.62	2.88	2.86	2.18	0.98
<b>Regional Totals</b>	<b>33.69</b>	<b>29.36</b>	<b>39.09</b>	<b>35.44</b>	<b>28.09</b>	<b>30.67</b>	<b>30.89</b>	<b>28.79</b>
<b>Southern</b>								
Beaver	2.77	0.58	1.06	1.94	0.98	0.43	1.27	1.82
Garfield	0.40	2.21	1.40	1.04	0.09	0.26	0.50	0.49
Iron	1.83	1.25	1.42	2.53	2.48	1.92	4.10	1.53
Kane	0.80	0.64	0.23	0.10	1.22	0.19	0.32	0.62
Millard	1.70	3.56	4.71	2.88	3.54	4.18	3.22	4.09
Piute	0.37	0.29	0.27	0.16	0.77	0.10	0.06	0.29
Sevier	1.33	1.54	1.42	1.65	2.75	1.46	1.45	0.96
Washington	0.40	0.03	3.95	3.33	2.56	3.17	4.43	4.75
Wayne	0.20	0.13	0.81	1.52	0.62	0.31	1.48	1.18
<b>Regional Totals</b>	<b>9.81</b>	<b>10.23</b>	<b>15.30</b>	<b>15.17</b>	<b>15.01</b>	<b>12.03</b>	<b>16.82</b>	<b>15.73</b>
<b>Northeastern</b>								
Daggett	2.84	3.75	1.85	0.40	1.11	1.30	1.62	1.09
Duchesne	7.24	4.46	2.27	3.57	5.36	4.95	6.08	6.24
Uintah	8.01	6.10	5.25	4.56	9.88	7.01	6.20	6.29
<b>Regional Totals</b>	<b>18.08</b>	<b>14.31</b>	<b>9.37</b>	<b>8.53</b>	<b>16.35</b>	<b>13.26</b>	<b>13.90</b>	<b>13.62</b>
<b>Southeastern</b>								
Carbon	4.87	4.07	1.77	3.49	6.53	6.20	7.73	8.93
Emery	6.84	2.53	1.19	2.53	3.63	2.07	5.34	6.98
Grand	0.90	1.96	0.75	1.76	1.54	1.03	2.92	1.29
San Juan	4.10	1.64	1.10	2.13	2.78	4.47	3.30	2.49
<b>Regional Totals</b>	<b>16.71</b>	<b>10.20</b>	<b>4.82</b>	<b>9.92</b>	<b>14.48</b>	<b>13.76</b>	<b>19.30</b>	<b>19.68</b>
Unknown counties	1.07	1.86	2.77	0.37	2.28	4.01	0.41	2.16
Mixed counties								0.07
<b>STATE TOTALS</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100</b>

Table 8. Summary of the monthly distribution of cottontail harvest and hunting pressure each year from 1968 through 1973 and six-year averages.

Month	Percent of Harvest							Percent of Hunting Pressure						
	1968	1969	1970	1971	1972	1973	1968-73 Average	1968	1969	1970	1971	1972	1973	1968-73 Average
September	6.3	7.8	7.6	7.1	7.8	10.9	7.9	6.5	7.0	8.1	7.0	8.1	9.3	7.7
October	12.0	11.5	11.3	12.8	21.3	13.4	13.7	14.1	12.2	12.4	14.4	16.7	15.3	14.2
November	22.6	24.6	21.2	22.7	22.5	28.8	23.7	21.4	23.3	21.8	21.1	23.0	26.8	22.9
December	28.6	24.2	25.7	26.2	23.4	21.5	24.9	25.0	24.1	22.7	23.4	20.4	24.3	23.3
January	20.0	19.9	21.2	19.4	15.9	16.6	18.8	20.9	20.0	20.0	19.1	18.4	15.7	19.0
February	9.2	9.6	10.4	8.7	7.5	6.9	8.7	11.7	10.8	11.5	10.8	10.0	6.7	10.2
March	1.2	2.4	2.6	3.1	1.5	1.8	2.1	1.2	2.6	3.4	4.2	3.4	1.9	2.8

Table 9. Statewide summary of cottontail rabbit harvest statistics, 1967-74.

Year	Total Hunters	Total Harvest	Hunter Days Afield	Cottontail Per Hunter-day	Cottontails* Per Hunter
1967	23,349	181,812	92,681	1.95	7.79
1968	26,889	225,450	93,126	2.42	8.38
1969	29,760	184,034	119,596	1.54	6.18
1970	24,486	195,248	103,725	1.88	7.97
1971	30,824	239,511	145,287	1.65	7.78
1972	22,835	155,102	105,941	1.46	6.79
1973	20,109	88,603	87,036	1.02	4.41
1974	22,737	86,506	85,499	1.01	3.80
<b>TOTALS</b> (1967-74)	200,991	1,356,266	832,891	1.63	6.75
<b>AVERAGES</b> (1967-73)	25,465	181,394	106,770	1.70	7.04

\*Based on county of residence.

Table 10. Cottontail rabbit field bag check summary, 1974.

Region and County	ALL HUNTS					COMPLETE HUNTS				
	Total Parties	Total Hunters	Total Hours	Total Rabbits	Rabbits/100 Hrs.	Total Complete Hunters	Total Complete Hunts	Total Hours	Total Rabbits	Rabbits/100 Hrs. Hunter
<b>Northern</b>										
Box Elder	5	11	57	6	10	3	2	17	3	18
Cache	--	--	--	--	--	--	--	--	--	--
Davis	--	--	--	--	--	--	--	--	--	--
Morgan	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>5</b>	<b>11</b>	<b>57</b>	<b>6</b>	<b>10</b>	<b>3</b>	<b>2</b>	<b>17</b>	<b>3</b>	<b>18</b>
<b>Central</b>										
Juab	--	--	--	--	--	--	--	--	--	--
Salt Lake	1	2	3	1	33	0	0	0	0	--
Sanpete	--	--	--	--	--	--	--	--	--	--
Tooele	11	41	122	25	20	5	2	22	4	18
Utah	--	--	--	--	--	--	--	--	--	--
Wasatch	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>12</b>	<b>43</b>	<b>125</b>	<b>26</b>	<b>21</b>	<b>5</b>	<b>2</b>	<b>22</b>	<b>4</b>	<b>18</b>
<b>Southern</b>										
Beaver	--	--	--	--	--	--	--	--	--	--
Garfield	12	27	120	165	138	27	12	120	165	138
Iron	--	--	--	--	--	--	--	--	--	--
Kane	--	--	--	--	--	--	--	--	--	--
Millard	--	--	--	--	--	--	--	--	--	--
Piute	--	--	--	--	--	--	--	--	--	--
Sevier	--	--	--	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--	--	--	--
Wayne	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>12</b>	<b>27</b>	<b>120</b>	<b>165</b>	<b>138</b>	<b>27</b>	<b>12</b>	<b>120</b>	<b>165</b>	<b>138</b>
<b>Northeastern</b>										
Daggett	8	17	33	12	36	10	4	22	4	18
Duchesne	24	54	146	28	19	19	10	93	20	22
Uintah	29	60	277	99	36	56	27	262	94	36
<b>REGIONAL TOTALS</b>	<b>61</b>	<b>131</b>	<b>456</b>	<b>139</b>	<b>30</b>	<b>85</b>	<b>41</b>	<b>377</b>	<b>118</b>	<b>31</b>
<b>Southeastern</b>										
Carbon	22	48	47	47	100	45	20	46	47	102
Emery	13	36	76	13	17	16	5	38	8	21
Grand	--	--	--	--	--	--	--	--	--	--
San Juan	29	54	85	37	44	18	20	59	36	61
<b>REGIONAL TOTALS</b>	<b>64</b>	<b>138</b>	<b>208</b>	<b>97</b>	<b>47</b>	<b>79</b>	<b>45</b>	<b>143</b>	<b>91</b>	<b>64</b>
<b>STATE TOTALS</b>	<b>154</b>	<b>350</b>	<b>966</b>	<b>433</b>	<b>45</b>	<b>199</b>	<b>102</b>	<b>679</b>	<b>381</b>	<b>56</b>
										<b>1.91</b>

Region and County	1970		1971		1972		1973		1974	
	Bag/ 100 Hrs. Hunter	Bag/ Hunter	Bag/ 100 Hrs. Hunter	Bag/ Hunter	Bag/ 100 Hrs. Hunter	Bag/ Hunter	Bag/ 100 Hrs. Hunter	Bag/ Hunter	Bag/ 100 Hrs. Hunter	Bag/ Hunter
<b>Northern</b>										
Box Elder	85	2.12	--	--	10	0.38	--	--	10	1.00
Cache	--	--	--	--	100	0.50	--	--	--	--
Davis	--	--	--	--	--	--	--	--	--	--
Morgan	33	0.50	34	1.67	--	--	--	--	--	--
Rich	57	2.11	200	3.33	11	0.25	--	--	--	--
Summit	56	1.33	--	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>56</b>	<b>1.44</b>	<b>57</b>	<b>2.50</b>	<b>10</b>	<b>0.34</b>	<b>--</b>	<b>--</b>	<b>10</b>	<b>1.00</b>
<b>Central</b>										
Juab	--	--	--	--	100	1.00	--	--	--	--
Salt Lake	--	--	--	--	--	--	--	--	33	0.50*
Sanpete	15	0.54	19	0.57	--	--	--	--	--	--
Tooele	21	0.88	--	--	38	1.50	14	0.50	20	0.61*
Utah	--	--	--	--	--	--	--	--	--	--
Wasatch	21	0.75	--	--	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>16</b>	<b>0.59</b>	<b>19</b>	<b>0.57</b>	<b>40</b>	<b>1.45</b>	<b>14</b>	<b>0.50</b>	<b>21</b>	<b>0.60*</b>
<b>Southern</b>										
Beaver	--	--	--	--	--	--	--	--	--	--
Garfield	52	1.20	--	--	--	--	--	--	138	6.11
Iron	--	--	--	--	--	--	--	--	--	--
Kane	--	--	25	1.00	--	--	--	--	--	--
Millard	50	0.30	--	--	--	--	--	--	--	--
Piute	--	--	--	--	--	--	--	--	--	--
Sevier	383	3.83	--	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--	--	--	--
Wayne	--	--	38	1.50	--	--	--	--	--	--
<b>REGIONAL TOTALS</b>	<b>34</b>	<b>1.52</b>	<b>31</b>	<b>1.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>138</b>	<b>6.11</b>
<b>Northeastern</b>										
Daggett	58	1.84	119	1.58	109	1.83	--	--	36	0.40
Duchesne	31	0.95	21	0.85	101	4.32	94	4.43	19	1.05
Uintah	112	2.28	55	1.15	101	6.10	55	4.10	36	1.68
<b>REGIONAL TOTALS</b>	<b>57</b>	<b>1.72</b>	<b>57</b>	<b>1.29</b>	<b>103</b>	<b>4.05</b>	<b>78</b>	<b>4.33</b>	<b>30</b>	<b>1.39</b>
<b>Southeastern</b>										
Carbon	77	4.00	59	1.94	98	2.17	80	1.47	100	2.35
Emery	--	--	17	0.20	6	0.27	127	1.00	17	0.50
Grand	--	--	70	2.13	--	--	--	--	--	--
San Juan	33	4.00	44	1.25	78	2.32	73	1.95	44	2.00
<b>REGIONAL TOTALS</b>	<b>43</b>	<b>4.00</b>	<b>56</b>	<b>1.72</b>	<b>58</b>	<b>2.21</b>	<b>77</b>	<b>1.61</b>	<b>47</b>	<b>1.15</b>
<b>STATE TOTALS</b>	<b>42</b>	<b>1.32</b>	<b>43</b>	<b>1.20</b>	<b>58</b>	<b>2.27</b>	<b>77</b>	<b>2.15</b>	<b>45</b>	<b>1.91</b>

\*Cottontails per hunter based on all hunts.



## APPENDIX

Table 1. State-wide temperature and precipitation departures from normal as determined by averaging similar values for the seven weather divisions in Utah, 1960-74.

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
1960	Temp. -2.8	-3.7	+3.1	+0.7	0	+3.3	+1.6	-0.3	+2.4	-1.5	+1.4	-0.7
	Precip. +0.30	+0.47	-0.37	-0.26	-0.40	-0.46	-0.51	-0.65	+0.24	+0.56	+0.41	-0.81
1961	Temp. +2.59	+5.37	+1.27	+1.27	+0.47	+5.34	+1.21	+0.97	-5.56	-2.76	-3.24	-3.37
	Precip. -0.88	-0.45	+0.48	-0.32	-0.40	-0.60	-0.02	+0.80	+1.29	+0.42	+0.09	-0.27
1962	Temp. -3.44	+1.86	-4.51	+3.00	-1.87	-0.77	-2.20	-1.04	+0.27	+1.53	+4.39	+0.70
	Precip. -0.05	+1.18	-0.08	-0.30	+0.16	-0.18	-0.36	-0.81	+0.24	-0.33	-0.51	-0.84
1963	Temp. -4.71	+8.01	-0.83	-4.14	+2.87	-2.79	+0.21	+0.21	+1.64	+4.26	+2.17	-2.96
	Precip. -0.26	-0.22	-0.20	+0.84	-0.73	+0.36	-0.60	+0.89	+0.70	-0.33	+0.25	-0.83
1964	Temp. -1.81	-4.37	-6.49	-3.20	-1.80	-2.59	+1.13	-1.54	-2.46	+1.73	-3.61	-0.31
	Precip. -0.48	-0.91	+0.02	+0.54	+0.54	+0.68	-0.42	-0.28	-0.35	-0.93	+0.45	+0.97
1965	Temp. +4.07	+0.07	-3.59	-1.50	-4.03	-3.70	-2.07	-2.67	-7.20	+1.37	+5.19	-0.06
	Precip. -0.16	-0.31	-0.21	+0.89	+0.47	+0.60	+0.53	+0.45	+0.84	-0.61	+1.02	+0.71
1966	Temp. -0.21	-3.33	+1.51	-0.54	+2.54	+0.24	+0.71	+0.09	+0.53	-2.20	+3.97	-3.60
	Precip. -0.74	-0.13	-0.79	-0.48	-0.15	-0.47	-0.13	-0.26	+0.13	-0.19	-0.12	+1.10
1967	Temp. +0.47	+1.84	+3.47	-4.96	-2.34	-3.76	+0.76	+1.54	+0.06	+0.39	+3.80	-7.19
	Precip. +0.25	-0.79	-0.30	+0.14	+0.59	+1.15	+0.01	-0.27	+0.74	-0.71	-0.16	+0.54
1968	Temp. -3.33	+4.53	+2.90	-4.87	-1.80	+0.64	-0.49	-5.07	-3.10	-0.99	-0.26	-4.11
	Precip. -0.62	+0.35	-0.00	+0.59	+0.18	+0.29	+0.02	+1.05	-0.50	-0.32	-0.34	-0.09
1969	Temp. +5.36	-1.11	-4.76	+0.21	+4.14	-2.54	+0.04	+3.03	+1.80	-6.59	-0.01	+1.91
	Precip. +1.36	+1.22	-0.58	-0.22	-0.59	+1.17	+0.10	-0.21	-0.01	+0.32	-0.29	-0.45
1970	Temp. +3.04	+6.93	-1.17	-6.50	+0.09	-0.06	-0.31	+2.09	-4.70	-5.77	+2.06	-1.49
	Precip. -0.17	-0.58	+0.06	-0.05	-0.51	+0.66	+0.33	-0.03	+0.34	-0.18	+0.68	+0.02
1971	Temp. +2.96	+1.61	-0.57	-1.66	-2.97	+0.39	+0.59	+1.53	-4.61	-4.93	-2.83	-5.19
	Precip. -0.49	+0.02	-0.50	+0.28	+0.40	-0.29	-0.49	+0.58	-0.13	+1.23	-0.08	+0.65
1972	Temp. +2.71	+4.50	+6.87	-0.66	+0.60	+1.53	+0.19	-0.90	-2.47	-1.63	-2.40	-7.50
	Precip. -0.74	-0.92	-0.82	+0.08	-0.78	+0.39	-0.62	-0.11	+0.59	+2.08	+0.57	+0.30
1973	Temp. -7.59	-2.56	-2.70	-4.09	+0.54	-0.23	-1.3	-0.06	-3.20	-0.46	+0.23	+0.50
	Precip. +0.08	-0.02	+0.86	+0.27	+0.04	+0.17	+0.26	-0.17	+0.24	-0.59	+0.45	-0.24
1974	Temp. -3.87	-4.54	+5.29	-1.76	+2.27	+4.81	-0.01	-1.20	+0.34	+0.73	+1.07	-1.96
	Precip. +0.50	-0.54	-0.56	+0.12	-0.78	-0.78	+0.17	-0.73	-0.65	+0.95	-0.30	-0.43

Table 2. Number and percent of total upland game hunters afield who reported hunting each game species during 1969-74.

Species	Number of Hunters				Percent of Total							
	1969	1970	1971	1972	1973	1974	1969	1970	1971	1972	1973	1974
Pheasant	90,573	78,585	87,878	84,311	75,968	85,252	94.8	87.6	87.7	87.8	82.5	85.6
Chukars	22,529	18,013	17,917	16,685	13,888	16,412	23.6	20.1	17.9	17.4	15.1	16.5
Mourning doves	29,131	23,908	26,064	29,341	27,435	34,021	30.5	26.7	26.0	30.5	29.8	34.2
Sage grouse	12,894	12,036	12,893	13,040	10,017	12,214	13.5	13.4	12.9	13.6	10.9	12.3
Forest grouse	12,523	12,775	13,363	16,640	17,588	21,920	13.1	14.2	13.3	17.3	19.1	22.0
Quail	9,160	6,141	8,039	7,380	5,654	6,097	9.6	6.8	8.0	7.7	6.1	6.1
Hungarian partridge	5,591	4,128	4,276	4,754	3,566	4,103	5.8	4.6	4.3	4.9	3.9	4.1
Wild turkey**	477*	174	389*	351*	135	138*	0.5	0.2	0.4	0.4	0.1	0.1
Cottontail	29,760	24,486	30,824	22,835	20,109	22,737	31.2	27.3	30.8	23.8	21.8	22.8
Total Hunters	95,483	89,657	100,183	96,047	92,098	99,556						

\* Includes both spring and fall hunts.

\*\*Although wild turkey harvest was determined by separate questionnaire, it is assumed that these hunters are derived from the same group of hunters who reported hunting other upland game bird species.

Table 3. Percent of hunter trips resulting in failure to bag at least one bird, 1961-74.

Year	Pheasants		Doves		Chukars		Sage Grouse		Forest Grouse		Quail		Huns								
	Bag	Hunt. %	Bag	Hunt. %	Bag	Hunt. %	Bag	Hunt. %	Bag	Hunt. %	Bag	Hunt. %	Bag	Hunt. %							
1961	714	3204	22	51	583	9	318	59	--	--	109	383	28	72	123	59					
1962	500	2685	19	39	456	9	147	362	41	--	62	201	31	36	108	33					
1963	795	3317	24	53	691	8	248	550	45	220	468	47	188	281	67	71	305	23	59	177	33
1964	911	3115	29	60	681	9	266	568	47	45	154	29	144	229	63	94	316	30	62	150	41
1965	1165	4009	29	--	--	--	486	851	57	82	168	49	225	311	72	128	371	34	93	233	40
1966	1242	4297	29	136	1067	13	423	881	48	54	131	41	133	331	40	106	315	34	63	219	29
1967	1353	4833	28	153	1319	12	477	915	52	138	266	52	194	475	41	161	424	38	116	315	37
1968	1422	5223	27	236	1312	18	495	1095	45	185	449	41	177	665	27	171	457	37	132	347	38
1969	1897	5335	36	214	1568	14	647	1250	52	241	648	37	273	646	42	182	465	39	148	292	51
1970	1546	4686	33	193	1274	15	466	962	48	257	603	43	209	666	31	126	314	40	101	210	48
1971	1783	5049	35	210	1333	16	464	934	50	234	625	37	223	673	33	162	385	42	87	210	41
1972	1743	4617	38	270	1421	19	457	827	55	259	593	44	271	794	34	154	339	45	120	224	54
1973	1659	4699	35	209	1596	13	414	824	50	226	553	41	329	1019	32	128	311	41	97	196	49
1974	2347	5323	44	323	1951	17	511	955	54	292	668	44	388	1259	31	157	333	47	108	227	48
Averages															30	13	50	42	44	36	43
(1961-73)																					

Table 4. Regional and statewide summary of effort expended on upland game summer inventory, 1967-74.

Species	R E G I O N												STATE TOTALS	
	Northern		Central		Southern		Northeastern		Southeastern		Miles		Hours	
	Miles	Hours	Miles	Hours	Miles	Hours	Miles	Hours	Miles	Hours	Miles	Hours	Miles	Hours
Pheasant														
1967	515	--	737	--	915	--	472	--	244	--	2,883	--		
1968	646	--	888	--	694	--	446	--	257	--	2,931	--		
1969	478	--	814	--	870	--	516	--	420	--	3,098	--		
1970	451	--	878	--	672	--	526	--	290	--	2,817	--		
1971	507	--	878	--	796	--	588	--	346	--	3,115	--		
1972	469	--	963	--	752	--	535	--	297	--	3,016	--		
1973	322	--	691	--	740	--	488	--	320	--	2,561	--		
1974	479	--	819	--	848	--	508	--	317	--	2,971	--		
Quail														
1967	579	93	310	28	715	88	827	56	54	4	2,485	269		
1968	93	26	343	34	470	41	575	45	24	3	1,505	149		
1969	300	35	474	44	442	45	459	18	130	8	1,805	150		
1970	70	6	480	58	1,185	39	880	53	120	8	2,735	165		
1971	192	24	389	40	344	28	587	49	140	13	1,652	154		
1972	46	9	342	30	575	39	870	63	120	8	1,953	149		
1973	80	10	264	35	32	8	538	38	25	17	939	108		
1974	24	4	43	27	853	66	227	28	214	21	1,361	146		
Chukar														
1967	1,509	220	382	81	213	25	1,121	100	189	56	3,414	482		
1968	1,045	92	390	82	--	--	1,233	102	335	44	3,003	320		
1969	269	50	968	154	921	49	565	75	367	27	3,090	355		
1970	827	109	978	123	548	34	817	64	383	36	3,553	367		
1971	182	82	929	130	1,103	100	636	50	496	105	3,346	468		
1972	712	91	1,423	131	950	37	1,012	69	984	58	5,081	386		
1973	1,063	119	1,494	167	72	10	705	48	702	68	4,036	363		
1974	125	31	1,591	107	564	43	440	30	1,115	67	3,835	278		
Forest Grouse														
1967	759	214	967	175	396	34	756	51	319	42	3,197	515		
1968	965	143	508	86	721	54	300	28	1,132	96	3,626	407		
1969	1,659	269	1,200	205	526	100	1,010	121	654	52	5,049	747		
1970	1,189	171	572	154	958	58	1,007	86	777	137	4,503	606		
1971	1,201	240	785	173	796	249	794	77	440	89	4,016	828		
1972	1,370	212	804	103	214	260	1,346	140	351	82	4,085	797		
1973	627	127	917	105	296	429	949	147	761	72	3,550	880		
1974	967	152	924	157	157	461	1,090	99	1,574	133	4,712	1,002		



Table 5. Season framework for upland game during 1974.

Species	Season Dates	Daily Bag Limit	Possession Limit	Area Open
Pheasant	Nov. 2-17	2 cocks	4 cocks	Statewide except Utah county
	Nov. 2-6	2 cocks	4 cocks	Utah County
	Nov. 2-Dec. 1	2 cocks	4 cocks	All State and Federal lands (except in Utah County) subject to restrictions and closures imposed by administering agencies.
Mourning dove	Sept. 2-30	10	20	Statewide
Chukar	Sept. 28, 1974 to Jan. 15, 1975	8	16	Statewide except Daggett, Duchesne and Uintah counties.
	Sept. 28-Nov. 30	8	16	Daggett, Duchesne and Uintah counties.
Sage grouse	Sept. 28-Oct. 4.	2	4	Beaver, Carbon, Dagget, Duchesne, Emery, Garfield, Iron, Kane, Millard, Piute, Sanpete, Sevier, Uintah and Wayne counties. Also Utah (part) and Wasatch (part)
	Sept. 28-Oct. 4	1	2	Box Elder, Cache, Davis, Morgan, Rich, Summit, Tooele, Weber and Juab (part) counties.
	Sept. 28-Oct. 11	2	4	San Juan County
	The following counties are closed to sage grouse hunting during 1974.			Grand, Salt Lake, Washington and Wasatch and Utah except drainages of the Price River, Juab except the Sheeprock Mountains.
Forest grouse	Sept. 28-Nov. 30	4 aggregate	8 aggregate	Statewide
Quail	Nov. 2-17	5	10	Statewide except Utah and Washington counties.
	Nov. 2-6	5	10	Utah County
	Nov. 2-Dec. 15	5	10	Washington County

Table 5. (continued)

Species	Season Dates	Daily Bag Limit	Possession Limit	Area Open
Hungarian partridge	Sept. 28, 1974 to Jan. 15, 1975	8	16	Statewide except Daggett, Duchesne and Uintah counties.
	Sept. 28-Nov. 30	8	16	Daggett, Duchesne and Uintah counties.
Wild turkeys				
Spring hunt	May 4-May 19	Season limit 1 gobbler		Beaver, Garfield, Grand, Iron Kane, Piute, San Juan, Sevier, Washington (part) and Wayne counties.
Fall hunt	Sept. 28-Oct. 6	Season limit one (1) turkey of either sex		Grand and San Juan counties.
Cottontail	Sept. 28, 1974 to January 31, 1975	10	20	Statewide

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