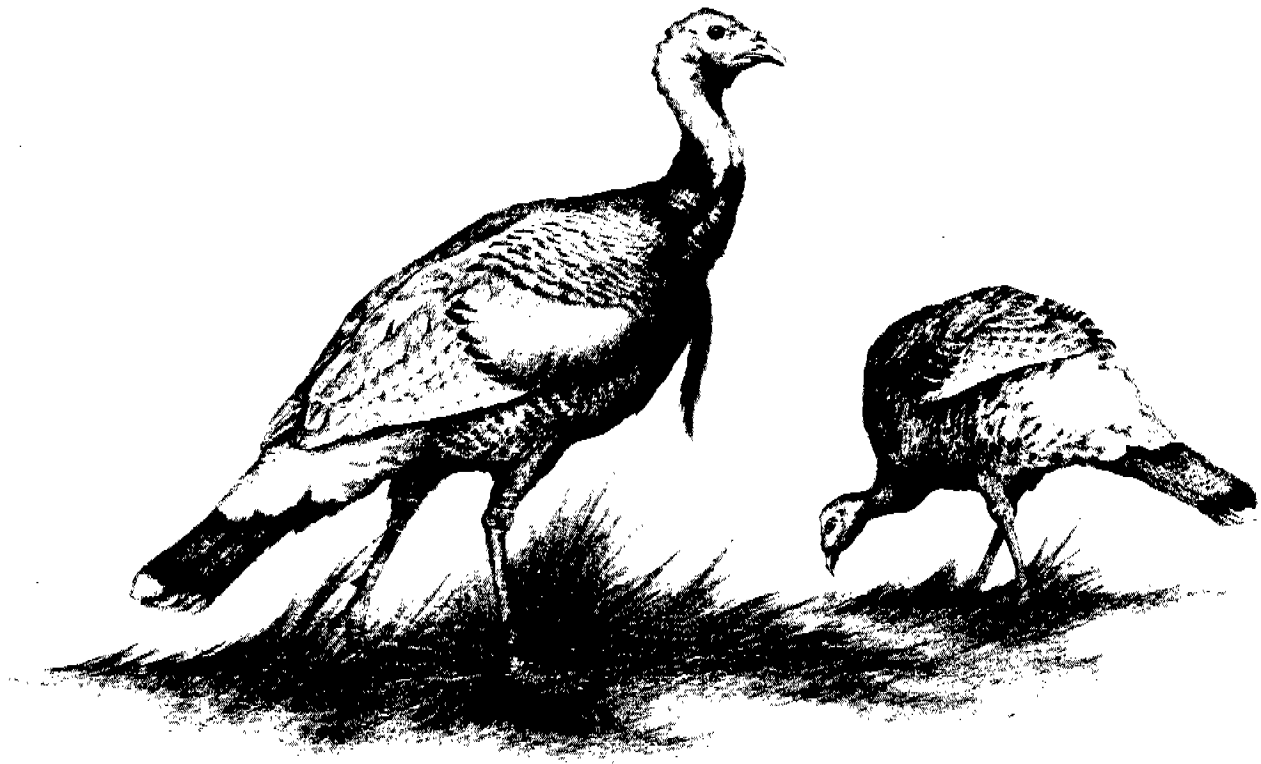


UTAH UPLAND GAME Annual Report 1976



PUBLICATION NUMBER 77-6

**Annual Performance Report for
Federal Aid Project W-65-R-D-25
Job A-4**

**STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE RESOURCES**

DONALD A. SMITH, *Director*

UTAH
UPLAND GAME
Annual Report
1976

Prepared by:
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Upland Game Supervisor

PUBLICATION NO. 77-6
Annual Performance Report for Federal Aid Project W-65-R-D-25 Job A-4

Utah State Department of Natural Resources

DIVISION OF WILDLIFE RESOURCES

An Equal Opportunity Employer

Donald A. Smith
Director

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TABLE OF CONTENTS

	<u>Page</u>
Abstract	1
Objectives	1
Procedures	1
Recommendations	2
Introduction	3
Pheasants	6
Migratory Upland Game Birds	25
Mourning Dove	26
Band-tailed Pigeons	46
Chukar Partridge	49
Sage Grouse	65
Forest Grouse	90
Quail	110
Hungarian Partridge	124
Wild Turkey	139
Rabbits and Hares	154
Cottontail Rabbit	155
Snowshoe Hare	169
Appendix	174

JOB PERFORMANCE REPORT
RESEARCH PROJECT SEGMENT
(Inventory)

State of U T A H

Project Title: Statewide Wildlife
Management Inventory

Project No. W-65-R-D-25

Job Title: Statewide Upland Game
Inventory and Management

Job No. A-4

Period Covered: January 1, 1976 to June 30, 1977

Abstract: This report includes upland game inventory and harvest data relating to the 1976-77 hunting seasons. Results of annual inventory and harvest surveys and long-term trends of indexes derived by each method are included. Data obtained in 1976 are compared to 1975 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, 1975, through February 10, 1976, 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.

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 1975 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.

Separate harvest questionnaires were used to determine the harvest of upland game birds, cottontail rabbit and snowshoe hare, band-tailed pigeon and wild turkey. An approximate 20 percent sample of eligible licensees from the previous year (1975) license file was selected for the game bird questionnaire and a 15 percent sample for the rabbit and hare questionnaire. Questionnaires were mailed to all band-tailed pigeon and wild turkey permittees. Indexes derived included total hunters, hunter-days and harvest plus hunter success per day and for each season.

The game bird and rabbit and hare questionnaires were analyzed by the University of Utah Computer Center. Wild turkey and band-tailed pigeon questionnaires were analyzed by Game Management Section personnel.

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. Additional sex and age composition data were compiled for some species.

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

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 sixth edition of this annual Upland Game Report. It is a consolidation of, and annual performance 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 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 1976, a total of 91,226 Utah sportsmen spent 624,311 days afield in pursuit of various upland game species. The harvest of upland game totaled 854,017. 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 1976 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	74,029	151,476	214,023	0.71	2.05
Mourning dove	31,293	298,505	108,780	2.74	9.54
Chukar partridge	14,171	43,726	47,143	0.93	3.09
Sage grouse	15,283	24,541	28,342	0.87	1.61
Forest grouse	21,186	63,436	56,422	1.12	2.99
Quail	5,215	14,454	13,261	1.09	2.77
Hungarian partridge	3,517	6,287	8,753	0.72	1.79
Wild turkey					
spring	74	6	185	0.03	0.08
fall	56	15	136	0.11	0.27
Band-tailed pigeon	54	119	162	0.73	2.20
Cottontail	28,239	235,952	126,737	1.86	8.39
Snowshoe hare	8,502	15,500	20,367	0.77	1.82

Total hunters afield for all species of upland game = 91,226

A total of 23,827 upland game bird questionnaires were mailed. Of this number 2,577 (10.8 percent) were non-deliverable due to address deficiencies. Of the 21,250 delivered questionnaires, 7,889 (37.1 percent) were returned. Of those returned, 1,663 (21.1 percent) did not purchase a license during 1976. Usable returns, hunts plus no hunts, totaled 6,226. When combined with a total 125,863 eligible licensees a projection factor of 20.215708 resulted. Of the total questionnaires mailed, an estimated 1,060 were inadvertently sent to resident fishing license holders, although this would not significantly bias the projection factor, since it incorporates only those who purchased a license authorizing the hunting of upland game, it undoubtedly affected the return rate and percentage shown for non-license buyers.

Rabbit and hare questionnaires were mailed to 21,900 sportsmen. Of these, 1,751 (8.0 percent) were non-deliverable, resulting in 20,149 delivered questionnaires. A return of 5,872 (29.1 percent) questionnaires was achieved. Of this number, 1,227 (20.9 percent) did not purchase a 1976 hunting license. Usable returns, hunts plus no hunts, totaled 4,604. When combined with a total 125,863 eligible licenses, a projection factor of 27.337750 resulted. The same problem with fishing licenses cited above for the upland game questionnaire was evident for the rabbit and hare questionnaire.

The year 1976 featured wide variation in weather conditions over the State. The year began with a continuation of the abnormally dry conditions which had persisted during much of the latter part of 1975. All of the climatic divisions were much below normal in accumulated moisture for January with near normal temperatures. In February, weather patterns reversed with much above normal precipitation in all areas of the State and above normal temperatures. March weather again showed a marked change as temperature and precipitation both dropped to below normal levels. During April, average temperatures warmed to just below normal while precipitation was variable but averaged slightly above normal. Conditions for game bird nesting seemed adequate for most species. In May, temperatures again climbed to above normal while precipitation dropped to a little below average levels. In June, temperatures averaged slightly below normal and precipitation dropped to well below normal while July was reversed; above normal temperature and precipitation. August was characterized by well below normal temperature and precipitation. September showed an upsurge in both temperature and precipitation to normal levels. The last three months of the year were the driest in the recorded history of the State, because of this and early moisture deficiencies, 1976 became the driest year of record since state averages were first compiled in 1892.

(Based on weather summary for 1976 compared by E. Arlo Richardson, State Climatologist)

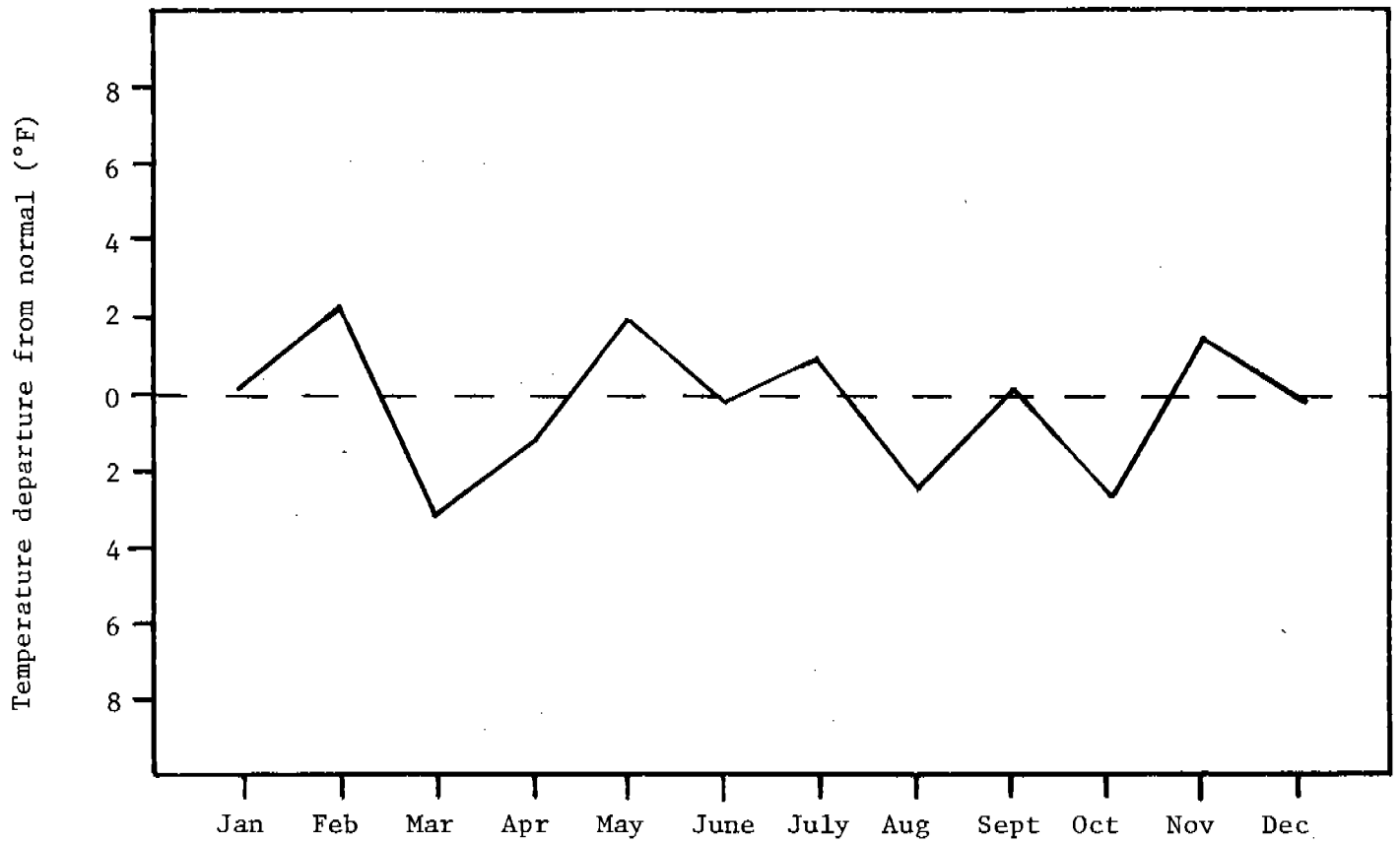


Figure 1. Monthly average temperature departure from normal, 1976.

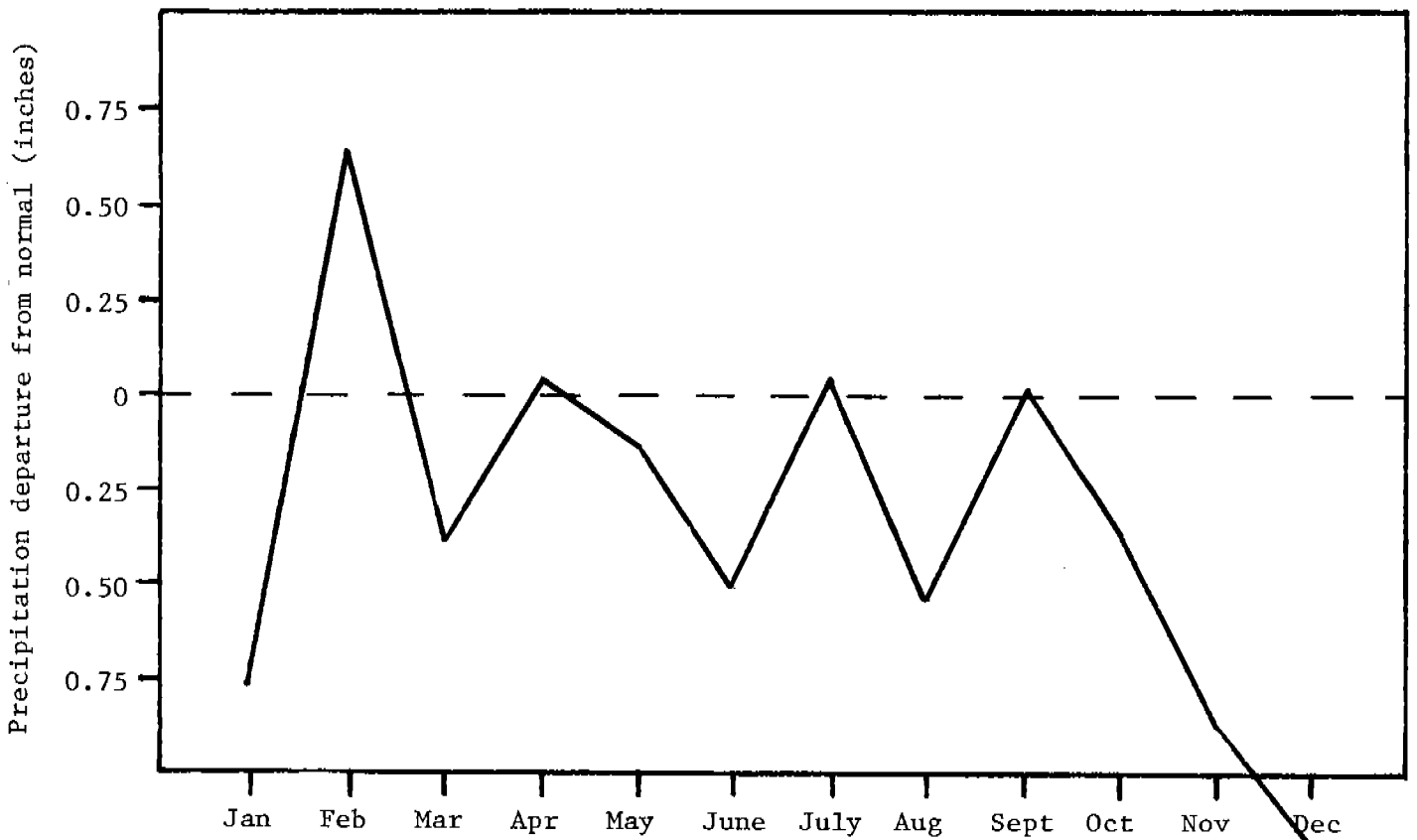


Figure 2. Monthly average precipitation departure from normal, 1976.

RING-NECKED PHEASANT

SUMMARY

The Statewide pheasant breeding population level for 1976 was higher than in 1975 but below average. Weather conditions during the critical early stages of the breeding season were slightly below normal but warmed to above normal levels in May.

Production was slightly below average but sufficient, in combination with the increased breeding population level, to produce an increased fall population level in comparison to 1975. It was still somewhat below the average.

Harvest statistics compiled both from field bag checks and the harvest questionnaire reflected the increased pheasant abundance indicated by inventory data. Although hunter pressure decreased, the total harvest increased due to increased hunter success. Improved success was evident in all regions but was most prominent in the Northeast.



Winter Sex-ratio Counts

Results of this survey for the winter of 1975-76 and long-term trends are shown in Tables 1 and 2 of this section. Comparisons to the winter of 1974-75 and the average on a statewide basis are as follows:

	<u>Winter of</u> <u>1975-76</u>	<u>Percent change from</u>	
		<u>1974-75</u>	<u>Average</u>
Total pheasants counted (roadside)	9,225	+17	-35
Hens per cock	3.2	-29	-32
Pheasants observed per 100 hours	1,156	+22	-25
Total hours effort (roadside)	798	-17	- 3

Results of this survey indicate that the breeding population was greater than in 1975 but still well below the long-term average. Hen-cock ratios were narrower than both the previous year and the average; a reflection of a decreased harvest in 1975. Assuming a pre-season sex ratio of 1.2 females per male, hunters harvested approximately 62 percent of the 1975 fall rooster population; the lowest harvest rate in many years.

Roadside Counts

A summary of pheasant roadside counts for 1976 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 1976 compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total pheasants observed	2,278	+43	-38
Total miles driven	2,905	-10	+ 2
Pheasants per mile	0.78	+59	-40
Average brood size	5.37	+12	- 2
Young per hen	3.56	+56	-13
Percent of hens with young	71	+31	- 4

April temperatures averaged somewhat higher than the extreme low of 1975 but were still below normal. May temperatures also increased to about two degrees above normal. Counting conditions were apparently near normal in most areas with most of the second crop hay and grain harvested. The hatch was reported to be relatively early.

Production increased substantially over 1975 but was still below average. It did, however, exceed the previous five-year average in 13 of 16 counties where continuous trend data were available. The density index (pheasants per mile) increased over the unusually depressed index of 1975 but was still well below average.

Increased production and an apparent increase in the breeding population resulted in an increased fall population level.

Harvest

Hunter Questionnaire

Results of the hunter questionnaire for 1976 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 1976 harvest statistics to 1975 and the average:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Pheasant hunters	74,029	- 5	-18
Pheasants harvested	151,476	+ 5	-37
Hunter-days afield	214,023	- 9	- 4
Pheasants per hunter-day	0.71	+16	-37
Pheasants per hunter	2.05	+11	-29

Total hunters decreased from 1975 to the lowest level recorded since the initiation of a harvest survey in 1948. Hunter-days afield also declined. The total harvest increased as a result of greater hunter success.

Long-term trends (1964-76) of total hunters, hunter-days, harvest and hunter success are shown in Figure 1.

Field Bag Checks

A summary of pheasant field bag check data for 1976 is shown in Table 14. The hunter success trend determined via bag check since 1966 is found in Table 15. A comparison of 1976 data on a statewide basis to 1975 and the average follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total hunters checked	4,862	- 5	+10
Total hours hunted	16,241	- 3	+ 7
Pheasants per hunter (complete hunts)	0.85	+35	- 6
Pheasants bagged per 100 hours	16	+23	-16
Average hours per hunter-day (complete hunts)	5.0	+16	+ 6
Hours hunted per pheasant bagged	5.8	-16	+ 5

The results of this survey confirm the reduction in hunting pressure and increased hunter success shown by the harvest questionnaire. The 0.85 birds per hunter index was 20 percent greater than the comparable index derived from the harvest questionnaire.

The average hunter checked spent 5.0 hours afield per hunter-day; slightly more than in 1975 but less time was required to bag a pheasant.

Pheasants bagged per hunter and per hunter-day.

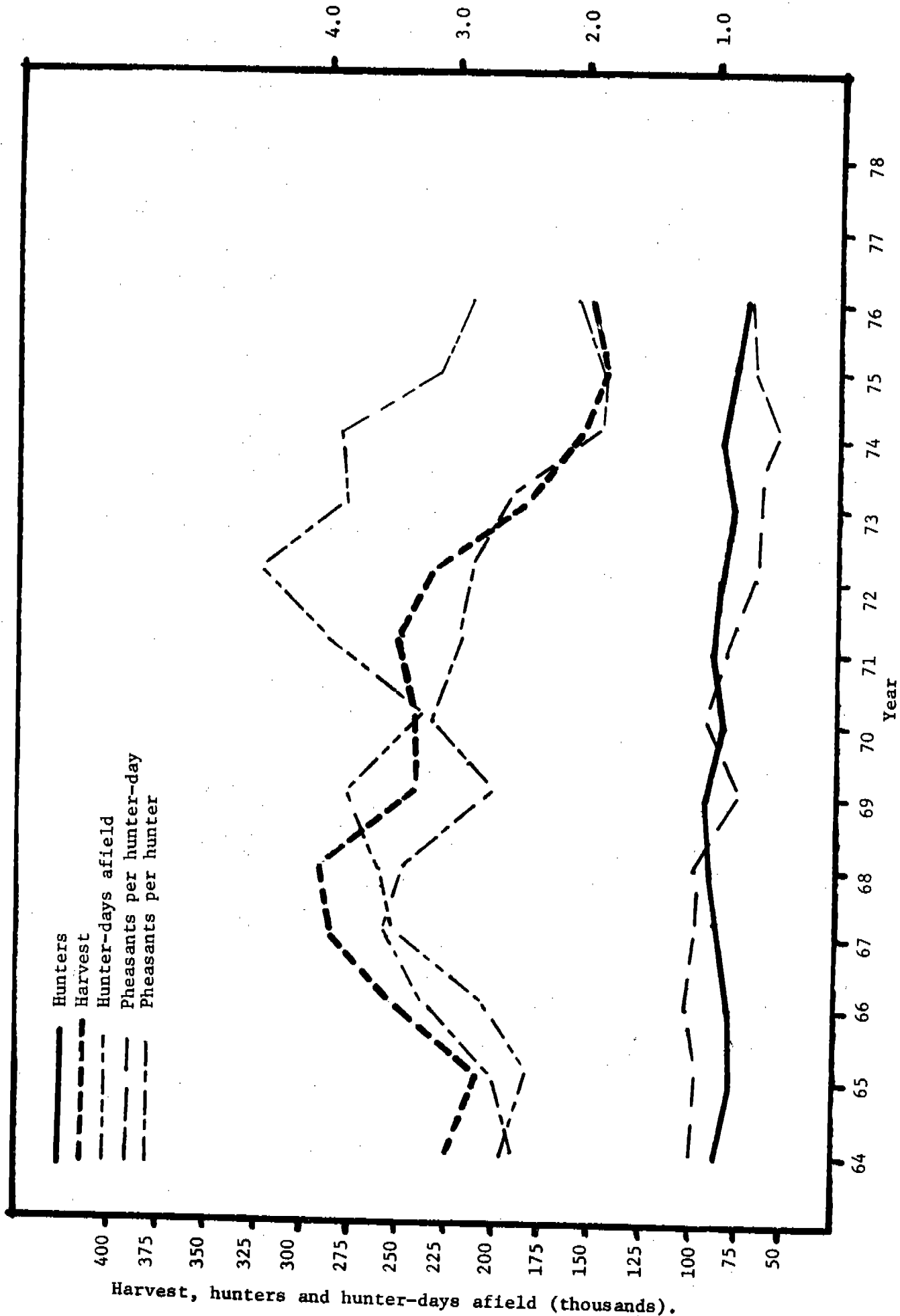


Figure 1. Statewide trend of pheasant harvest statistics.

Table 1. Summary of pheasant winter sex-ratio counts, 1975-76

Region & County	Roadside Observations				Flushing Observations				Effort Expended			Pheas. Obs 100 Hrs. Road. Obs			
	Cocks		Hens		Cocks		Hens		Hours	Vehicle					
	Total	Hens/100 Cocks	Total	Hens/100 Cocks	Total	Hens/100 Cocks	Total	Hens/100 Cocks	Vehicle	Miles	Total				
<u>Northern Region</u>															
Box Elder	87	382	469	4.4	23	2	21	23	10.5	10	256	24	3	27	1954
Cache	63	214	277	3.4	29	16	70	86	4.4	23	470	33	3	36	839
Davis	18	211	229	11.7	9	--	--	--	--	--	78	6	2	8	3817
Morgan	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Weber	65	293	358	4.5	22	6	36	42	6.0	17	285	27	2	29	1326
REGIONAL TOTALS	233	1100	1333	4.7	21	24	127	151	5.3	19	1089	90	10	100	1481
<u>Central Region</u>															
Juab	3	8	11	2.7	38	0	0	0	--	--	175	10	0	10	110
Salt Lake	478	1030	1508	2.2	46	8	38	46	4.8	21	1490	116	1	117	1300
Sanpete	231	1222	1453	5.3	19	14	20	34	1.4	70	868	72	11	83	2018
Tooele	19	72	91	3.8	26	13	138	151	10.6	9	304	16	21	37	569
Utah	648	1894	2542	2.9	34	2	4	6	2.0	50	1377	142	0	142	1790
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
REGION TOTALS	1379	4226	5605	3.1	33	37	200	237	5.4	18	4214	356	33	389	1574
<u>Southern Region</u>															
Beaver	15	21	36	1.4	71	--	--	--	--	--	157	13	0	13	277
Garfield	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	7	41	48	5.9	17	--	--	--	--	--	40	4	0	4	1200
Kane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Millard	60	240	300	4.0	25	16	49	65	3.1	33	470	33	1	34	909
Piute	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sevier	34	181	215	5.3	19	--	--	--	--	--	221	21	0	21	1024
Washington	42	178	220	4.2	24	33	81	114	2.4	41	528	37	5	42	595
Wayne	28	57	85	2.0	49	13	46	59	3.5	28	690	19	9	28	447
REGIONAL TOTALS	186	718	904	3.9	26	62	176	238	2.8	35	2106	127	15	142	712
<u>Northeastern Region</u>															
Daggett	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Duchesne	142	376	518	2.6	38	92	292	384	3.2	32	1355	78	24	102	664
Uintah	168	439	607	2.6	38	66	93	159	1.4	71	641	57	1	58	1065
REGIONAL TOTALS	310	815	1125	2.6	38	158	385	543	2.4	41	1996	135	25	160	833
<u>Southeastern Region</u>															
Carbon	23	64	87	2.8	36	1	10	11	10.0	10	421	10	8	18	870
Emery	66	105	171	1.6	63	43	93	136	2.2	46	1425	80	18	98	214
Grand	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	--	--	--	--	--	50	142	192	2.8	35	420	0	14	14	1371*
REGIONAL TOTALS	89	169	258	1.9	53	94	245	339	2.6	38	2266	90	40	130	287
STATE TOTALS	2197	7028	9225	3.2	31	375	1133	1508	3.0	33	11671	798	123	921	1156

*Based on flushing observations

Table 2. Trend of Pheasant Winter Sex-ratio Counts, 1971-76.

Region & County	1971-72		1972-73		1973-74		1974-75		1975-76		Averages 1968-75
	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.	
<u>Northern Region</u>											
Box Elder	5.2	3327	3.9	1941	5.6	1553	4.4	2074	4.4	1954	
Cache	4.1	772	9.3	912	5.9	443	3.4	575	3.4	839	
Davis	9.7	2703	11.1	2420	6.3	912	3.8	1200	11.7	3817	
Morgan	--	--	--	--	--	--	--	--	--	--	
Rich	--	--	--	--	--	--	--	--	--	--	
Summit	--	--	--	--	--	--	--	--	--	--	
Weber	8.7	2085	9.8	2995	6.1	662	13.5	725	4.5	1326	
REGIONAL TOTALS	5.6	1727	6.2	1838	5.7	980	4.5	1202	4.7	1481	5.3
<u>Central Region</u>											
Juab	3.2	284	14.9	1725	6.0	117	19.0	111	2.7	110	
Salt Lake	6.5	1651	5.0	2107	9.3	768	5.2	899	2.2	1300	
Sanpete	3.4	1838	5.8	1674	6.2	2044	6.0	1314	5.3	2018	
Tooele	5.8	2698	10.5	4631	--	--	6.6	1281	3.8	569	
Utah	5.3	1782	5.4	1432	5.2	970	5.3	1144	2.9	1790	
Wasatch	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	5.2	1818	6.6	2215	6.3	1167	5.6	1075	3.1	1574	5.5
<u>Southern Region</u>											
Beaver	7.7	538	10.4	705	3.7	540	2.7	480	1.4	277	
Garfield	0	67	--	--	--	--	--	--	--	--	
Iron	9.8	634	9.8	491	4.5	546	3.8	614	5.9	1200	
Kane	--	--	--	--	--	--	--	--	--	--	
Millard	8.0	1341	9.2	1439	3.8	663	4.1	542	4.0	909	
Piute	2.2	1733	--	--	--	--	--	--	--	--	
Sevier	6.1	1740	7.7	1505	6.4	1839	5.4	1316	5.3	1024	
Washington	1.5	416	4.8	444	1.9	1232	5.0	360	4.2	595	
Wayne	1.7	375	1.8	450	--	--	2.1	450	2.0	447	
REGIONAL TOTALS	5.3	1005	7.7	984	4.1	963	4.4	781	3.9	712	5.1
<u>Northeastern Region</u>											
Daggett	--	--	--	--	--	--	--	--	--	--	
Duchesne	1.7	847	2.3	839	3.1	507	2.5	587	2.6	664	
Uintah	3.3	1783	2.0	1795	3.0	1184	3.4	1316	2.6	1065	
REGIONAL TOTALS	2.5	1222	2.1	1219	3.0	867	2.9	827	2.6	833	2.6
<u>Southeastern Region</u>											
Carbon	1.3	857	1.8	578	3.5	169	--	--	2.8	870	
Emery	3.6	1235	3.2	1141	1.9	721	3.1	372	1.6	214	
Grand	--	--	1.8	243	4.4	270	1.9	289	--	--	
San Juan	--	--	--	--	1.7	2167	--	600	--	--	
REGIONAL TOTALS	3.3	1197	2.8	855	2.3	406	3.1	367	1.9	287	3.2
STATE TOTALS	4.9	1555	5.6	1692	4.8	981	4.5	944	3.2	1156	4.7

Table 3. Pheasant Summer Inventory Summary, 1976.

Region & County	No. Routes	Distinct Broods		Mixed Observ.	Adults w/o		Total Yng. Hens	Total Yng. Cocks	Total Yng. Pheas.	Total Brood Ad.	Yng. / Mile	Total Pheas. / Mile	Mean Brood w/Yng.	% Hens w/Yng.		
		Yng. No.	Broods		Yng. Hens	Cocks										
<u>Northern Region</u>																
Box Elder	2	150	8	46	0	12	3	11	46	12	69	0.46	0.31	5.75	4.18	73
Cache	2	150	6	35	2	10	11	2	10	11	66	0.44	0.30	5.83	4.50	80
Davis*	1	72	6	26	0	4	1	2	8	1	39	0.54	0.42	4.33	3.75	75
Morgan	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Weber	1	104	22	111	16	42	15	27	65	153	233	2.24	1.47	5.05	2.35	58
REGIONAL TOTALS	6	476	42	218	18	56	39	34	94	274	407	0.86	0.58	5.19	2.91	64
<u>Central Region</u>																
Juab	1	35	3	22	2	15	0	0	5	37	42	1.20	1.06	7.33	7.40	100
Salt Lake	2	206	11	67	2	10	14	9	22	77	113	0.55	0.37	6.09	3.50	59
Sanpete	2	187	34	200	2	9	8	4	40	209	257	1.37	1.12	5.88	5.22	90
Tooele	1	80	8	35	6	20	9	4	18	55	82	1.02	0.69	4.38	3.06	78
Utah	4	314	51	248	11	64	50	32	94	312	456	1.45	0.99	4.86	3.32	66
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	10	822	107	572	23	118	81	49	179	690	950	1.16	0.84	5.35	3.85	73
<u>Southern Region</u>																
Beaver	1	80	4	31	2	12	5	1	7	43	55	0.69	0.54	7.75	6.14	86
Garfield	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	1	72	4	21	0	1	2	0	4	22	28	0.39	0.31	5.25	5.50	100
Kane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Millard	2	288	14	97	8	2	8	5	27	99	134	0.47	0.34	6.93	3.67	81
Piute	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sevier	2	204	12	62	10	53	7	2	24	115	146	0.72	0.56	5.17	4.79	92
Washington	2	99	3	24	0	11	6	3	6	35	47	0.47	0.35	8.00	5.83	50
Wayne	1	30	1	7	3	19	4	6	10	26	40	1.33	0.87	7.00	2.60	40
REGIONAL TOTALS	9	773	38	242	23	98	32	17	78	340	450	0.58	0.44	6.37	4.36	78
<u>Northeastern Region</u>																
Daggett	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Duchesne	3	304	14	65	0	0	22	2	16	65	103	0.34	0.21	4.64	4.06	88
Uintah	2	130	19	95	10	44	18	2	31	139	188	1.45	1.07	5.00	4.48	94
REGIONAL TOTALS	5	434	33	160	10	44	40	4	47	204	291	0.67	0.47	4.85	4.34	91
<u>Southeastern Region</u>																
Carbon	2	208	1	3	12	42	14	9	22	45	81	0.39	0.22	3.00	2.05	59
Emery	3	177	7	34	0	1	24	17	24	35	83	0.47	0.20	4.86	1.46	29
Grand	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	1	15	2	7	0	0	3	2	4	7	14	0.93	0.47	3.50	1.75	50
REGIONAL TOTALS	6	400	10	44	12	43	41	28	50	87	178	0.44	0.22	4.40	1.74	44
STATE TOTALS	36	2905	230	1236	86	359	233	132	448	1595	2276	0.78	0.55	5.37	3.56	71

*Route rerun August 17-20

Table 4. Trend of pheasants observed per mile during summer roadside counts, 1966-76.

Region & County	Year											Average 1962-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	1.85	0.91	0.82	0.68	0.57	1.75	1.10	0.38	0.87	0.21	0.46	
Cache	2.30	1.50	2.20	1.46	1.90	1.98	1.10	0.36	0.48	0.68	0.44	
Davis	2.12	1.39	0.83	4.04	0.70	2.75	1.77	--	0.32	1.55	0.54	
Morgan	--	--	--	--	--	--	--	--	--	--	--	
Rich	--	--	--	--	--	--	--	--	--	--	--	
Summit	--	--	0.32	--	--	--	--	--	--	--	--	
Weber	2.48	1.67	2.00	3.18	0.71	1.82	2.44	2.36	1.77	1.23	2.24	
<u>REGIONAL TOTALS</u>	2.13	1.24	1.27	1.89	1.20	2.04	1.45	1.04	0.80	0.71	0.86	1.45
<u>Central Region</u>												
Juab	1.28	1.30	1.07	0.46	1.20	0.32	0.64	0.23	0.46	0.82	1.20	
Salt Lake	1.98	1.40	3.04	2.60	0.88	1.74	1.29	0.44	0.48	0.54	0.55	
Sanpete	2.03	1.00	2.61	2.33	3.34	2.22	3.27	1.78	1.60	0.80	1.37	
Tooele	5.96	1.40	3.70	2.82	3.18	1.69	2.52	0.07	0.87	0.17	1.02	
Utah	2.37	2.40	2.74	2.49	1.84	2.31	2.02	1.36	1.29	0.64	1.45	
Wasatch	--	--	--	--	--	--	--	--	--	--	--	
<u>REGIONAL TOTALS</u>	2.38	1.77	2.74	2.38	1.97	2.00	2.06	0.98	1.11	0.62	1.16	2.01
<u>Southern Region</u>												
Beaver	--	0.83	0.88	0.46	0.96	0.69	0.75	0.60	0.60	0.07	0.69	
Garfield	0.75	0.41	0.79	1.05	0.36	0.03	--	--	--	--	--	
Iron	0.86	0.69	--	0.73	0.87	0.77	0.51	0.56	0.53	0.19	0.39	
Kane	--	--	--	--	--	--	--	--	--	--	--	
Millard	1.48	1.19	1.61	1.68	1.01	1.15	1.09	0.57	0.79	0.41	0.47	
Plute	1.02	0.39	--	0.64	0.53	0.35	--	--	--	--	--	
Sevier	1.90	1.67	1.71	1.66	1.99	4.13	2.37	1.03	0.89	0.40	0.72	
Washington	1.89	1.49	0.99	0.67	0.29	1.32	0.92	1.12	1.34	0.47	0.47	
Wayne	--	--	--	--	--	--	--	--	0.48	0.09	1.33	
<u>REGIONAL TOTALS</u>	1.54	1.08	1.37	1.12	0.92	1.48	1.19	0.79	0.78	0.28	0.58	1.20
<u>Northeastern Region</u>												
Daggett	--	--	--	--	--	--	--	--	--	--	--	
Duchesne	0.37	0.31	0.30	0.36	0.45	0.32	0.27	0.31	0.33	0.33	0.34	
Uintah	1.40	0.47	1.14	1.27	0.66	0.82	0.74	0.61	1.33	0.54	1.45	
<u>REGIONAL TOTALS</u>	0.66	0.36	0.46	0.70	0.51	0.51	0.42	0.39	0.61	0.39	0.67	0.62
<u>Southeastern Region</u>												
Carbon	0.23	0	2.34	0.09	0.20	0.05	0.15	0.01	0	0.02	0.39	
Emery	1.12	1.21	0.32	0.69	0.83	0.55	1.32	0.64	1.06	0.88	0.47	
Grand	--	--	--	--	--	--	1.03	--	--	--	--	
San Juan	--	--	--	--	--	--	--	--	--	--	--	
<u>REGIONAL TOTALS</u>	0.82	0.84	0.93	0.39	0.57	0.31	0.76	0.34	0.64	0.60	0.44	0.79
<u>STATE TOTALS</u>	1.57	1.15	1.58	1.40	1.18	1.40	1.33	0.74	0.83	0.49	0.78	1.31

Table 5. Trend of young observed per mile during summer roadside pheasant counts, 1966-76.

Region & County	Year											Average 1962-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	1.34	0.71	0.51	0.40	0.35	1.32	0.76	0.28	0.62	0.13	0.31	
Cache	1.94	1.25	1.84	1.05	1.39	1.62	0.81	0.32	0.35	0.43	0.30	
Davis	1.59	0.95	0.65	3.11	0.54	2.25	1.28	--	0.22	0.84	0.54	
Morgan	--	--	--	--	--	--	--	--	--	--	--	
Rich	--	--	--	--	--	--	--	--	--	--	--	
Summit	--	--	0.19	--	--	--	--	--	--	--	--	
Weber	1.55	1.33	1.60	2.35	0.58	1.35	1.74	1.72	1.31	0.77	1.47	
REGIONAL TOTALS	1.60	0.99	0.97	1.37	0.86	1.62	1.04	0.77	0.59	0.43	0.58	1.07
<u>Central Region</u>												
Juab	0.90	1.10	0.90	0.27	0.95	0.18	0.50	0.17	0.38	0.71	1.06	
Salt Lake	1.44	1.00	2.14	1.91	0.61	1.31	1.04	0.32	0.32	0.35	0.37	
Sanpete	1.74	0.80	2.10	1.90	2.54	1.74	2.64	1.43	1.26	0.56	1.12	
Tooele	5.06	1.20	3.15	2.49	2.74	1.41	2.09	0.00	0.62	0.07	0.69	
Utah	1.96	1.80	2.11	1.88	1.30	1.68	1.35	1.02	0.95	0.33	0.99	
Wasatch	--	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	1.91	1.40	2.10	1.84	1.46	1.50	1.53	0.73	0.83	0.38	0.84	1.55
<u>Southern Region</u>												
Beaver	--	0.55	0.80	0.26	0.64	0.48	0.57	0.39	0.47	0.03	0.54	
Garfield	0.57	0.30	0.63	0.74	0.19	0.00	--	--	--	--	--	
Iron	0.65	0.48	--	0.53	0.55	0.62	0.39	0.51	0.46	0.08	0.31	
Kane	--	--	--	--	--	--	--	--	--	--	--	
Millard	1.19	0.86	1.39	1.32	0.84	0.90	0.87	0.48	0.57	0.27	0.34	
Piute	0.81	0.28	--	0.53	0.31	0.25	--	--	--	--	--	
Sevier	1.50	1.38	1.49	1.26	1.58	3.21	1.93	0.85	0.70	0.28	0.56	
Washington	1.27	1.03	0.71	0.46	0.17	0.95	0.65	0.72	1.03	0.26	0.35	
Wayne	--	--	--	--	--	--	--	--	0.14	0.02	0.87	
REGIONAL TOTALS	1.19	0.81	1.15	0.85	0.69	1.14	0.95	0.61	0.59	0.17	0.44	0.92
<u>Northeastern Region</u>												
Daggett	--	--	--	--	--	--	--	--	--	--	--	
Duchesne	0.27	0.19	0.20	0.25	0.27	0.21	0.15	0.18	0.21	0.23	0.21	
Uintah	1.10	0.33	0.86	0.86	0.40	0.55	0.55	0.47	1.08	0.27	1.07	
REGIONAL TOTALS	0.50	0.23	0.32	0.47	0.31	0.34	0.28	0.26	0.45	0.24	0.47	0.44
<u>Southeastern Region</u>												
Carbon	0.20	0.00	1.82	0.03	0.17	0.03	0.10	--	0.00	0.00	0.22	
Emery	0.77	0.89	0.18	0.58	0.56	0.30	0.96	0.47	0.81	0.57	0.20	
Grand	--	--	--	--	--	--	0.67	--	--	--	--	
San Juan	--	--	--	--	--	--	--	--	4.07	2.43	0.47	
REGIONAL TOTALS	0.58	0.61	0.67	0.31	0.39	0.17	0.54	0.25	0.50	0.39	0.22	0.58
STATE TOTALS	1.20	0.88	1.23	1.06	0.86	1.06	0.99	0.55	0.62	0.30	0.55	1.01

Table 6. Trend of young per adult hen ratios found during summer roadside pheasant counts 1966-76

Region & County	Year											Average 1962-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	3.15	4.02	2.07	2.00	2.19	4.02	3.26	3.23	3.19	2.44	4.18	
Cache	6.59	6.29	5.65	3.38	3.65	6.64	3.88	10.00	3.00	2.69	4.50	
Davis	3.71	2.75	4.82	4.00	4.00	5.45	3.42	--	3.00	1.53	3.75	
Morgan	--	--	--	--	--	--	--	--	--	--	--	
Rich	--	--	--	--	--	--	--	--	--	--	--	
Summit	--	--	1.75	--	--	--	--	--	--	--	--	
Weber	2.23	4.47	4.74	3.70	4.22	3.40	3.49	3.72	3.66	2.07	2.35	
REGIONAL TOTALS	2.97	4.58	3.89	3.27	3.32	5.02	3.50	3.82	3.35	2.10	2.91	3.86
<u>Central Region</u>												
Juab	3.27	6.30	5.40	3.25	4.22	2.33	4.50	4.00	5.00	6.00	7.40	
Salt Lake	3.36	3.40	3.02	3.63	2.96	4.08	4.74	3.24	2.87	2.39	3.50	
Sanpete	7.40	5.60	4.71	5.48	4.02	4.73	5.52	5.33	4.45	2.67	5.22	
Tooele	6.54	8.40	7.08	7.89	6.78	5.95	5.95	0.00	3.36	1.33	3.06	
Utah	4.51	3.80	3.94	3.85	3.69	3.28	2.71	3.33	3.58	1.62	3.32	
Wasatch	--	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	5.06	4.20	3.92	4.30	3.94	3.86	3.78	3.46	3.77	2.16	3.85	4.09
<u>Southern Region</u>												
Beaver	--	2.05	10.67	1.86	5.33	3.27	5.38	2.78	5.83	0.86	6.14	
Garfield	4.80	3.83	4.00	3.50	2.00	--	--	--	--	--	--	
Iron	6.40	2.93	--	3.21	2.53	4.43	4.54	13.67	9.50	0.86	5.50	
Kane	--	--	--	--	--	--	--	--	--	--	--	
Millard	5.70	4.91	6.10	4.58	5.89	4.62	5.65	5.75	2.91	2.52	3.67	
Piute	4.90	2.50	--	5.33	1.75	5.00	--	--	--	--	--	
Sevier	4.80	5.89	6.72	3.74	4.30	4.34	4.94	5.18	3.80	3.06	4.79	
Washington	3.00	3.33	3.42	2.88	1.50	3.45	3.50	2.62	3.89	1.94	5.83	
Wayne	--	--	--	--	--	--	--	--	0.54	0.25	2.60	
REGIONAL TOTALS	4.68	3.98	5.75	3.84	3.92	4.19	4.98	4.41	3.73	1.93	4.36	4.27
<u>Northeastern Region</u>												
Daggett	--	--	--	--	--	--	--	--	--	--	--	
Duchesne	4.70	3.21	5.92	5.00	2.51	3.50	3.00	4.06	3.71	3.73	4.06	
Uintah	5.70	4.27	4.24	3.37	2.62	3.08	4.84	5.64	5.43	1.78	4.48	
REGIONAL TOTALS	5.20	3.60	4.93	3.77	2.56	3.23	3.92	4.70	4.69	2.73	4.34	4.21
<u>Southeastern Region</u>												
Carbon	8.00	0.00	4.52	1.40	5.00	5.00	4.33	--	--	0.00	2.05	
Emery	5.30	5.17	2.46	6.78	3.55	2.25	3.34	4.70	7.46	3.96	1.46	
Grand	--	--	--	--	--	--	2.22	--	--	--	--	
San Juan	--	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	5.50	5.17	3.91	5.61	3.74	2.36	3.20	4.70	7.52	3.28	1.74	4.50
STATE TOTALS	4.40	4.20	4.25	3.94	3.68	4.09	3.93	3.95	3.95	2.28	3.56	4.08

Table 7. Trend of the percent of hens observed with broods during summer roadside pheasant counts, 1966-76.

Region & County	Year											Average 1963-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	86	88	57	58	59	75	69	62	78	78	73	
Cache	82	86	65	62	66	86	78	50	68	66	80	
Davis	76	62	91	56	82	87	85	--	100	97	75	
Morgan	--	--	--	--	--	--	--	--	--	--	--	
Rich	--	--	--	--	--	--	--	--	--	--	--	
Summit	--	--	38	--	--	--	--	--	--	--	--	
Weber	61	100	87	80	100	77	54	82	69	34	58	
REGIONAL TOTALS	78	86	66	66	68	82	70	77	74	68	64	74
<u>Central Region</u>												
Juab	100	100	100	75	100	67	100	100	100	100	100	
Salt Lake	53	71	69	76	62	66	78	71	52	45	59	
Sanpete	100	81	97	91	78	95	91	93	88	64	90	
Tooele	89	100	88	100	100	84	74	0	64	33	78	
Utah	78	66	72	74	60	69	57	62	58	42	66	
Wasatch	--	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	77	71	76	79	71	74	69	66	68	49	73	72
<u>Southern Region</u>												
Beaver	--	75	100	72	100	82	88	64	83	14	86	
Garfield	100	100	100	83	50	--	--	--	--	--	--	
Iron	71	76	--	75	59	62	54	100	80	14	100	
Kane	--	--	--	--	--	--	--	--	--	--	--	
Millard	96	74	100	77	94	81	88	100	50	48	81	
Piute	85	50	--	100	50	100	--	--	--	--	--	
Sevier	98	100	100	96	88	85	90	85	83	59	92	
Washington	65	67	92	42	67	74	62	66	78	31	50	
Wayne	--	--	--	--	--	--	--	--	8	50	40	
REGIONAL TOTALS	84	78	98	79	77	80	83	79	64	42	78	76
<u>Northeastern Region</u>												
Daggett	--	--	--	--	--	--	--	--	--	--	--	
Duchesne	95	53	92	81	44	68	68	81	76	59	88	
Uintah	84	91	65	59	42	55	84	91	100	48	94	
REGIONAL TOTALS	90	67	76	65	43	60	76	85	90	53	91	74
<u>Southeastern Region</u>												
Carbon	100	0	74	20	75	100	67	--	--	0	59	
Emery	92	86	77	94	70	42	66	76	77	65	29	
Grand	--	--	--	--	--	--	56	--	--	--	--	
San Juan	--	--	--	--	--	--	--	--	100	55	50	
REGIONAL TOTALS	96	86	75	78	71	44	64	76	86	60	44	72
STATE TOTALS	85	76	78	74	69	75	72	74	71	54	71	74

Table 8. Trend of average brood size for pheasants, 1966-76.

Region & County	Year											Average 1962-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	3.75	4.93	3.80	3.53	3.68	4.96	4.81	4.75	4.17	3.14	5.75	
Cache	6.17	5.86	6.88	5.63	7.12	8.34	5.47	5.00	4.38	4.67	5.83	
Davis	4.78	5.17	5.14	6.67	5.14	6.52	4.50	--	3.50	2.75	4.33	
Morgan	--	--	--	--	--	--	--	--	--	--	--	
Rich	--	--	--	--	--	--	--	--	--	--	--	
Summit	--	--	4.67	--	--	--	--	--	--	--	--	
Weber	3.73	3.00	5.69	5.33	3.43	4.80	6.07	6.55	7.27	5.78	5.05	
REGIONAL TOTALS	4.54	5.13	5.25	5.56	5.28	6.33	5.13	6.00	4.84	4.26	5.19	5.21
<u>Central Region</u>												
Juab	3.78	6.30	5.40	4.33	4.22	7.00	4.50	--	5.00	9.00	7.33	
Salt Lake	5.25	4.67	5.28	5.35	4.95	5.76	6.93	4.58	5.00	5.73	6.09	
Sanpete	6.39	5.18	4.68	5.13	5.52	4.94	6.11	5.92	4.59	4.72	5.88	
Tooele	--	8.38	8.10	7.89	6.78	6.81	8.07	--	6.50	4.00	4.38	
Utah	5.76	5.94	5.07	5.08	5.13	5.89	5.31	5.78	6.24	4.12	4.86	
Wasatch	--	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	5.69	5.83	5.28	5.37	5.41	5.70	5.92	5.60	5.46	4.73	5.35	5.50
<u>Southern Region</u>												
Beaver	--	4.75	10.67	--	--	5.75	6.17	4.33	8.00	6.00	7.75	
Garfield	4.78	4.25	4.00	4.25	3.00	--	--	--	--	--	--	
Iron	6.40	5.62	--	11.00	4.50	7.17	5.67	6.00	9.50	6.00	5.25	
Kane	--	--	--	--	--	--	--	--	--	--	--	
Millard	5.09	6.88	--	5.74	6.24	4.44	5.31	5.50	6.20	5.73	6.93	
Piute	5.67	5.00	--	5.00	3.50	5.00	--	--	--	--	--	
Sevier	5.88	5.35	--	4.22	5.00	5.24	5.67	6.14	4.82	4.25	5.17	
Washington	4.90	5.72	4.31	8.00	--	5.25	6.33	4.33	4.42	5.80	8.00	
Wayne	--	--	--	--	--	--	--	--	7.00	--	7.00	
REGIONAL TOTALS	5.45	5.78	5.37	5.42	5.30	5.13	5.60	5.38	5.83	5.31	6.37	5.43
<u>Northeastern Region</u>												
Daggett	--	--	--	--	--	--	--	--	--	--	--	
Duchesne	4.95	6.10	6.45	6.45	4.82	6.50	4.45	5.64	5.43	6.40	4.64	
Uintah	6.73	4.70	6.54	6.65	6.14	6.05	5.75	6.28	5.21	4.22	5.00	
REGIONAL TOTALS	5.90	5.40	6.50	6.59	5.33	6.21	5.13	5.89	5.29	5.37	4.85	5.73
<u>Southeastern Region</u>												
Carbon	6.25	--	7.50	1.00	4.00	5.00	6.50	--	--	--	3.00	
Emery	6.71	6.67	4.00	8.42	5.64	6.00	5.08	6.22	6.67	5.00	4.86	
Grand	--	--	--	--	--	--	4.00	--	--	--	--	
San Juan	--	--	--	--	--	--	--	--	6.12	--	3.50	
REGIONAL TOTALS	6.68	6.67	6.45	7.85	5.29	5.89	5.00	6.22	6.36	5.00	4.40	5.89
STATE TOTALS	5.42	5.70	5.40	5.59	5.36	5.73	5.62	5.65	5.46	4.80	5.37	5.47

Table 9. Summary of pheasant hunter success and distribution of harvest and hunting pressure by region and county, 1976.

Region and County	Hunters Reporting	Days Hunted	Birds Bagged	Birds per Hunter-day	Birds per Hunter*	% of Pressure	% of Harvest
<u>Northern Region</u>							
Box Elder	418	994	757	0.76	2.30	9.39	10.10
Cache	331	836	684	0.82	2.15	7.90	9.13
Davis	398	1,116	599	0.54	2.02	10.54	7.99
Morgan	12	23	20	0.87	2.20	0.22	0.27
Rich	2	2	0	0.00	0.50	0.02	0.00
Summit	1	1	0	0.00	0.33	0.01	0.00
Weber	518	1,512	1,004	0.66	2.40	14.28	13.40
REGIONAL TOTALS	1,680	4,484	3,064	0.68	2.22	42.35	40.89
<u>Central Region</u>							
Juab	66	158	94	0.59	1.70	1.49	1.25
Salt Lake	431	1,027	573	0.56	1.63	9.70	7.65
Sanpete	228	538	419	0.78	2.10	5.08	5.59
Tooele	116	315	225	0.71	2.18	2.98	3.00
Utah	697	1,477	1,075	0.73	2.01	13.95	14.35
Wasatch	5	13	7	0.54	2.71	0.12	0.09
REGIONAL TOTALS	1,543	3,528	2,393	0.68	1.82	33.32	31.94
<u>Southern Region</u>							
Beaver	49	132	92	0.70	1.41	1.25	1.23
Garfield	4	11	3	0.27	2.00	0.10	0.04
Iron	43	107	41	0.38	0.95	1.01	0.55
Kane	1	1	1	1.00	2.92	0.01	0.01
Millard	186	389	278	0.71	1.76	3.67	3.71
Piute	11	26	19	0.73	3.69	0.25	0.25
Sevier	182	461	335	0.73	2.03	4.35	4.47
Washington	62	176	171	0.97	3.24	1.66	2.28
Wayne	8	14	10	0.71	1.89	0.13	0.13
REGIONAL TOTALS	546	1,317	950	0.72	2.11	12.44	12.68
<u>Northeastern Region</u>							
Daggett	3	5	7	1.40	2.00	0.05	0.09
Duchesne	118	278	300	1.08	2.74	2.63	4.00
Uintah	106	294	329	1.12	3.80	2.78	4.39
REGIONAL TOTALS	227	577	636	1.10	3.39	5.45	8.49
<u>Southeastern Region</u>							
Carbon	69	132	71	0.54	1.85	1.25	0.95
Emery	103	262	175	0.67	1.71	2.47	2.34
Grand	7	19	8	0.42	2.36	0.18	0.11
San Juan	4	9	5	0.56	2.00	0.09	0.07
REGIONAL TOTALS	183	422	259	0.61	1.85	3.99	3.46
Unknown counties	115	259	191	0.74	1.66	2.45	2.55
Mixed counties	0	0	0	0.00	0.00	0.00	0.00
STATE TOTALS	4,294	10,587	7,493	0.71	2.05	100	100

*Based on county of residence.

Table 10. Summary of pheasants bagged per hunter-day by region and county, 1970-76.

Region and County	1970	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>							
Box Elder	1.25	1.18	0.85	0.85	0.69	0.83	0.76
Cache	1.29	1.09	0.85	0.87	0.70	0.79	0.82
Davis	0.69	0.67	0.54	0.50	0.47	0.52	0.54
Morgan	0.95	1.02	0.54	0.63	0.30	0.24	0.87
Rich	1.00	1.00	0.38	0.00	1.00	0.56	0.00
Summit	0.50	0.00	1.00	0.33	0.69	0.50	0.00
Weber	0.79	0.72	0.69	0.63	0.52	0.59	0.66
REGIONAL TOTALS	1.02	0.92	0.75	0.72	0.59	0.66	0.68
<u>Central Region</u>							
Juab	1.09	0.93	0.52	0.43	0.39	0.38	0.59
Salt Lake	0.76	0.59	0.55	0.61	0.44	0.47	0.56
Sanpete	1.32	1.14	0.91	0.81	0.89	0.80	0.78
Tooele	0.95	0.69	0.46	0.48	0.37	0.47	0.71
Utah	1.11	0.86	0.75	0.67	0.61	0.58	0.73
Wasatch	0.00	0.41	0.25	0.00	0.00	0.22	0.54
REGIONAL TOTALS	1.01	0.80	0.68	0.65	0.56	0.56	0.68
<u>Southern Region</u>							
Beaver	0.91	1.00	0.70	0.53	0.58	0.58	0.70
Garfield	1.00	0.95	0.50	0.88	0.44	0.21	0.27
Iron	0.69	0.75	0.63	0.45	0.55	0.43	0.38
Kane	--	3.00	--	--	--	0.33	1.00
Millard	1.18	0.99	0.81	0.86	0.65	0.73	0.71
Piute	0.79	0.93	0.39	0.77	0.88	0.40	0.73
Sevier	1.28	1.02	0.84	0.73	0.70	0.56	0.73
Washington	0.47	0.54	0.49	0.36	0.38	0.39	0.97
Wayne	1.17	0.88	0.00	1.57	1.09	0.00	0.71
REGIONAL TOTALS	1.04	0.90	0.74	0.70	0.63	0.58	0.72
<u>Northeastern Region</u>							
Daggett	0.50	0.47	1.00	0.50	0.50	2.25	1.40
Duchesne	1.22	1.19	1.09	1.15	0.83	0.76	1.08
Uintah	1.13	1.10	0.82	0.92	0.70	0.74	1.12
REGIONAL TOTALS	1.16	1.13	0.93	1.03	0.76	0.76	1.10
<u>Southeastern Region</u>							
Carbon	0.70	0.58	0.45	0.52	0.25	0.34	0.54
Emery	1.07	0.92	0.92	0.60	0.46	0.53	0.67
Grand	0.50	0.75	0.20	0.30	0.00	0.31	0.42
San Juan	2.00	0.75	--	1.08	0.94	0.31	0.56
REGIONAL TOTALS	0.94	0.76	0.73	0.57	0.42	0.46	0.61
Unknown counties	0.58	0.67	0.75	0.75	0.63	0.83	0.74
Mixed counties	4.00	--	0.00	0.75	1.95	0.00	0.00
STATE TOTALS	1.02	0.88	0.73	0.70	0.59	0.61	0.71

Table 11. Percentage distribution of pheasant harvest by region and county, 1970-76.

Region and County	1970	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>							
Box Elder	14.94	15.36	16.87	12.86	11.64	13.05	10.10
Cache	13.44	11.47	12.07	11.31	11.76	8.75	9.13
Davis	6.95	6.60	6.81	5.70	8.27	8.73	7.99
Morgan	0.34	0.36	0.37	0.38	0.24	0.09	0.27
Rich	0.01	0.01	0.03	0.00	0.05	0.06	0.00
Summit	0.01	0.00	0.02	0.04	0.10	0.01	0.00
Weber	7.54	9.15	9.21	8.31	10.26	13.21	13.40
REGIONAL TOTALS	43.24	42.95	45.39	38.60	42.31	43.91	40.89
<u>Central Region</u>							
Juab	1.65	1.50	1.31	0.87	0.96	0.69	1.25
Salt Lake	7.58	6.43	6.33	7.80	8.12	8.73	7.65
Sanpete	4.70	5.18	4.90	6.88	6.56	6.03	5.59
Tooele	1.42	2.52	1.46	1.87	1.72	1.80	3.00
Utah	15.84	15.41	14.51	15.84	14.27	14.70	14.35
Wasatch	0.00	0.10	0.01	0.00	0.00	0.02	0.09
REGIONAL TOTALS	31.19	31.13	28.52	33.26	31.65	31.97	31.94
<u>Southern Region</u>							
Beaver	0.48	0.75	0.79	0.82	0.64	0.34	1.23
Garfield	0.04	0.16	0.07	0.07	0.05	0.05	0.04
Iron	1.38	1.26	1.41	1.06	0.77	0.98	0.55
Kane	0.00	0.05	--	--	--	0.03	0.01
Millard	5.62	4.37	5.05	6.01	5.32	5.23	3.71
Piute	0.09	0.12	0.08	0.35	0.17	0.07	0.25
Sevier	4.26	4.33	4.25	4.06	5.39	4.62	4.47
Washington	0.52	1.06	0.93	0.74	0.89	1.06	2.28
Wayne	0.06	0.06	0.00	0.32	0.14	0.00	0.13
REGIONAL TOTALS	12.45	12.15	12.59	13.42	13.36	12.38	12.68
<u>Northeastern Region</u>							
Daggett	0.03	0.06	0.01	0.02	0.02	0.10	0.09
Duchesne	3.56	4.22	3.30	4.45	3.97	2.86	4.00
Uintah	4.62	4.09	3.95	4.24	4.24	4.24	4.39
REGIONAL TOTALS	8.22	8.37	7.27	8.71	8.24	8.24	8.49
<u>Southeastern Region</u>							
Carbon	1.10	1.30	1.05	1.51	0.36	0.87	0.95
Emery	3.21	2.52	3.62	2.32	1.86	2.69	2.34
Grand	0.02	0.10	0.04	0.03	0.00	0.05	0.11
San Juan	0.03	0.02	--	0.13	0.17	0.05	0.07
REGIONAL TOTALS	4.36	3.94	4.71	3.99	2.39	3.65	3.46
Unknown counties	0.44	1.45	1.52	1.99	1.59	1.04	2.55
Mixed counties	0.10	--	0.00	0.03	0.47	0.00	0.00
STATE TOTALS	100	100	100	100	100	100	100

Table 12. Percentage distribution of pheasant hunting pressure by county hunted, 1970-76.

Region and County	1970	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>							
Box Elder	12.23	11.47	14.61	10.71	9.95	9.61	9.39
Cache	10.64	9.23	10.42	9.21	9.92	6.75	7.90
Davis	10.35	8.73	9.28	8.05	10.34	10.24	10.54
Morgan	0.37	0.31	0.50	0.42	0.46	0.23	0.22
Rich	0.01	0.01	0.06	0.01	0.03	0.06	0.02
Summit	0.02	0.01	0.01	0.08	0.09	0.01	0.01
Weber	9.79	11.23	9.76	9.24	11.64	13.70	14.28
REGIONAL TOTALS	43.41	40.99	44.64	37.72	42.43	40.60	42.35
<u>Central Region</u>							
Juab	1.54	1.42	1.84	1.44	1.48	1.12	1.49
Salt Lake	10.27	9.64	8.46	8.99	11.06	11.37	9.70
Sanpete	3.63	3.99	3.95	6.00	4.39	4.62	5.08
Tooele	1.53	3.19	2.31	2.72	2.74	2.33	2.98
Utah	14.62	15.78	14.27	16.68	13.87	15.42	13.95
Wasatch	0.01	0.21	0.03	0.03	0.01	0.06	0.12
REGIONAL TOTALS	31.60	34.23	30.86	35.85	33.54	34.92	33.32
<u>Southern Region</u>							
Beaver	0.55	0.66	0.83	1.10	0.65	0.36	1.25
Garfield	0.04	0.15	0.10	0.05	0.06	0.13	0.10
Iron	2.03	1.49	1.66	1.66	0.83	1.40	1.01
Kane	0.00	0.01	--	--	--	0.06	0.01
Millard	4.86	3.89	4.60	4.95	4.89	4.42	3.67
Piute	0.12	0.11	0.16	0.32	0.11	0.10	0.25
Sevier	3.40	3.74	3.70	3.93	4.55	5.04	4.35
Washington	1.15	1.72	1.39	1.44	1.39	1.65	1.66
Wayne	0.05	0.06	0.07	0.14	0.07	0.01	0.13
REGIONAL TOTALS	12.20	11.83	12.50	13.59	12.55	13.18	12.44
<u>Northeastern Region</u>							
Daggett	0.07	0.11	0.01	0.03	0.03	0.03	0.05
Duchesne	2.99	3.13	2.22	2.72	2.83	2.29	2.63
Uintah	4.19	3.26	3.52	3.23	3.58	3.38	2.78
REGIONAL TOTALS	7.25	6.50	5.76	5.98	6.43	5.70	5.45
<u>Southeastern Region</u>							
Carbon	1.61	1.98	1.71	2.05	0.85	1.56	1.25
Emery	3.05	2.41	2.88	2.73	2.40	3.09	2.47
Grand	0.05	0.12	0.14	0.07	0.03	0.09	0.18
San Juan	0.02	0.03	--	0.08	0.11	0.09	0.09
REGIONAL TOTALS	4.73	4.54	4.73	4.93	3.40	4.82	3.99
Unknown counties	0.78	1.92	1.49	1.88	1.50	0.77	2.45
Mixed counties	0.03	--	0.03	0.03	0.14	0.00	0.00
STATE TOTALS	100	100	100	100	100	100	100

Table 13. State-wide summary of pheasant harvest statistics, 1948-1976.

Year	Total hunters	Total harvest	Hunter-days afield	Pheasants per hunter-day	Pheasants per hunter
1948	96,534	280,914	--	--	2.91
1949	88,369	263,340	189,453	1.39	2.98
1950	92,724	249,428	235,309	1.06	2.69
1951	76,576	246,575	171,233	1.44	3.22
1952	78,773	246,559	185,383	1.33	3.13
1953	82,595	245,307	176,480	1.39	2.97
1954	82,370	260,289	201,774	1.29	3.16
1955	78,793	196,195	178,359	1.10	2.49
1956	77,826	206,239	182,512	1.13	2.65
1957	83,025	228,319	170,387	1.34	2.75
1958	88,290	309,015	220,725	1.40	3.50
1959	86,268	243,276	202,730	1.21	2.82
1960	81,976	232,812	177,719	1.31	2.84
1961	83,493	238,439	243,305	0.98	2.86
1962	86,336	262,448	209,921	1.25	3.04
1963	87,647	297,873	198,582	1.50	3.40
1964	88,242	225,775	196,314	1.15	2.56
1965	77,409	211,876	186,215	1.14	2.74
1966	78,721	249,814	209,082	1.19	3.17
1967	85,664	284,000	257,033	1.10	3.32
1968	90,453	297,752	267,788	1.11	3.29
1969	90,573	250,241	277,887	0.90	2.76
1970	78,585	250,503	244,958	1.02	3.19
1971	87,878	259,189	294,618	0.88	2.95
1972	84,311	240,573	327,669	0.73	2.85
1973	75,968	196,012	278,033	0.70	2.58
1974	85,252	167,408	282,294	0.59	1.96
1975	77,566	143,783	234,615	0.61	1.85
1976	74,029	151,476	214,023	0.71	2.05
<hr/>					
TOTALS (1948-76)	2,426,246	6,935,430	6,214,401	1.12	2.86
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AVERAGES (1948-75)	84,008	242,284	222,236	1.12	2.88
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Table 14. Pheasant field bag check summary, 1976

Region & 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	
<u>Northern Region</u>										
Box Elder	186	405	947	225	24	104	540	160	30	0.74
Cache	118	302	806	106	13	52	410	60	15	0.46
Davis	78	214	563	79	14	27	244	40	16	0.51
Morgan	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--
Weber	44	112	208	20	10	11	75	9	12	0.35
REGIONAL TOTALS	426	1,033	2,524	430	17	194	1,269	269	21	0.60
<u>Central Region</u>										
Juab	16	38	58	4	7	0	--	--	--	0.11
Salt Lake	111	222	528	57	11	17	40	3	8	0.12
Sanpete	69	196	686	103	15	8	186	36	19	1.09
Tooele	69	173	338	92	27	2	9	6	67	0.53*
Utah	270	700	1,979	282	14	30	262	59	23	1.05
Wasatch	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	535	1,329	3,589	538	15	57	497	104	21	0.89
<u>Southern Region</u>										
Beaver	12	25	29	4	14	0	0	0	--	0.16*
Garfield	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--
Kane	--	--	--	--	--	--	--	--	--	--
Millard	197	555	1,697	225	13	72	568	82	14	0.44
Piute	--	--	--	--	--	--	--	--	--	--
Sevier	134	279	1,555	265	17	27	274	62	23	0.63
Washington	22	55	84	18	21	4	23	6	26	0.33*
Wayne	7	23	46	8	17	3	6	2	13	0.35
REGIONAL TOTALS	372	937	3,411	520	15	106	881	152	17	0.50
<u>Northeastern Region</u>										
Daggett	--	--	--	--	--	--	--	--	--	--
Duchesne	194	510	3,347	492	15	119	2,593	383	15	1.41
Uintah	133	356	2,091	374	18	102	1,928	340	18	1.27
REGIONAL TOTALS	327	866	5,438	866	16	221	4,521	723	16	1.34
<u>Southeastern Region</u>										
Carbon	26	62	165	15	9	0	0	0	--	0.24*
Emery	167	590	999	178	18	46	342	41	12	0.44
Grand	2	8	31	6	19	1	30	6	20	1.00
San Juan	15	37	84	7	8	12	70	7	10	0.23
REGIONAL TOTALS	210	697	1,279	206	16	59	442	54	12	0.42
STATE TOTALS	2,262	4,862	16,241	2,560	16	637	7,610	1,302	17	0.85

*Based on all hunts.

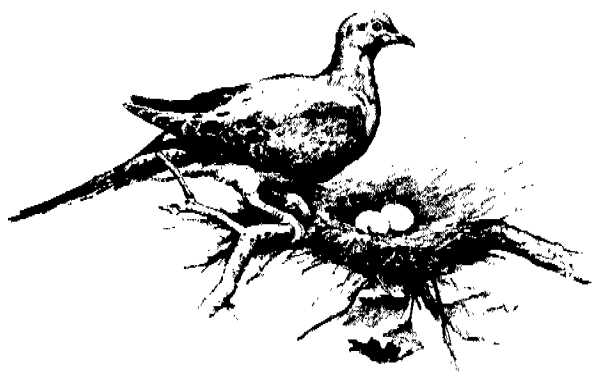
Table 15. Pheasant hunter success trend as determined by field bag check, 1971-76.

Region & County	1971		1972		1973		1974		1975		1976	
	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter
<u>Northern Region</u>												
Box Elder	10	0.30	18	1.18	13	0.51	13	0.43	18	0.52	24	0.74
Cache	21	0.63	19	0.70	16	0.69	16	0.61	15	0.61	13	0.46
Davis	16	--	16	1.12	13	0.52	11	0.55	8	0.28	14	0.51
Morgan	--	--	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--	--	--
Weber	13	0.35	18	0.65	13	0.37	14	0.54	8	0.38	10	0.35
REGIONAL TOTALS	16	0.52	18	0.59	14	0.53	14	0.47	12	0.48	17	0.60
<u>Central Region</u>												
Juab	13	2.00	--	--	6	0.80	5	0.10	16	0.28	7	0.11
Salt Lake	15	0.32	13	0.39	15	0.71	9	0.27	15	0.47	11	0.12
Sanpete	34	0.71	15	0.58	20	1.68	13	0.14	14	0.73	15	1.09
Tooele	19	0.72	10	0.64	17	0.67	10	1.67	13	0.34	27	0.53*
Utah	27	1.13	15	0.65	13	0.62	17	0.94	11	0.42	14	1.05
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	22	0.77	14	0.51	15	0.77	14	0.46	13	0.58	15	0.89
<u>Southern Region</u>												
Beaver	39	1.33	22	0.86	11	0.94	--	--	14	0.56	14	0.16*
Garfield	23	0.33	--	--	--	--	--	--	--	--	--	--
Iron	26	1.32	25	1.07	7	--	18	0.44	39	0.37	--	--
Kane	--	--	--	--	--	--	--	--	--	--	--	--
Millard	18	0.79	14	0.87	14	0.79	14	0.79	12	0.70	13	0.44
Piute	36	3.00	--	--	--	--	20	1.00	--	--	--	--
Sevier	26	1.10	24	1.30	14	0.80	16	0.30	15	0.66	17	0.63
Washington	21	0.31	14	0.31	17	0.80	--	--	15	0.29	21	0.33*
Wayne	--	--	--	--	--	--	--	--	--	--	17	0.35*
REGIONAL TOTALS	22	0.89	19	1.13	14	0.81	15	0.57	14	0.65	15	0.50
<u>Northeastern Region</u>												
Daggett	--	--	--	--	--	--	--	--	--	--	--	--
Duchesne	22	1.73	15	1.14	16	1.13	9	0.57	12	0.89	15	1.41
Uintah	24	1.36	16	0.88	15	0.89	10	0.59	13	0.71	18	1.27
REGIONAL TOTALS	23	1.56	16	1.09	16	1.03	9	0.58	12	0.81	16	1.34
<u>Southeastern Region</u>												
Carbon	15	1.00	3	0.08	6	0.15	3	0.40	14	0.54	9	0.24*
Emery	13	0.53	15	0.62	9	0.42	12	0.42	10	0.41	18	0.44
Grand	9	0.33	--	--	--	--	--	--	--	--	19	1.00
San Juan	--	--	--	--	12	0.40	15	0.62	11	0.38	8	0.23
REGIONAL TOTALS	13	0.51	14	0.54	9	0.37	11	0.46	12	0.47	16	0.42
STATE TOTALS	21	1.05	16	0.82	14	0.70	12	0.51	13	0.63	16	0.85

*Pheasants per hunter index based on all hunts.

MIGRATORY UPLAND GAME BIRDS

SUMMARY



Mourning Doves

The breeding density index increased from 1975 to about average. Weather conditions during the breeding season were considered to be adequate for nesting with no apparent detrimental extremes.

Harvest statistics derived from the questionnaire showed both reduced hunting pressure and harvest from the records set in 1975. Total hunter and hunter-days afield were both the third highest on record and the total harvest the fourth highest recorded. Hunter success was less than both 1975 and the long-term average.

Field bag checks also showed reduced pressure and hunter success. The average length of a hunter day was slightly shorter than both 1975 and the average. More time was spent per bird bagged than in 1975 but less than average.

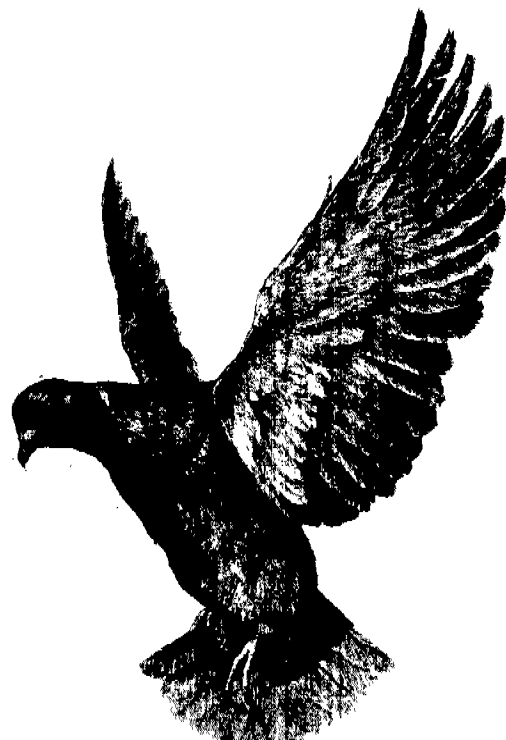
Field bag checks also showed reduced pressure and hunter success. The average length of a hunter-day was slightly shorter than both 1975 and the average. More time was spent per bird bagged than in 1975 but less than average.

The age composition of harvested doves was about average and showed only slightly fewer immatures per 100 adults than in 1976. The indicated hatching chronology for immatures bagged indicated a slightly larger than average proportion of doves in the youngest age classes. This condition usually results in decreased hunter success such as was shown this year.

Band-tailed Pigeons

During 1976, 217 band-tailed pigeons were banded raising the long-term total (since 1970) to 2,228. An additional 131 previously banded pigeons were recaptured.

Hunter participation during the 1976 season remained at an extremely low level with only 54 hunters afield; the same as in 1975. Total hunter-days increased over both 1975 and the average. Total harvest was only slightly greater than 1975 and the average.



MOURNING DOVE

Call-Count Survey

Results of the 1976 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 1976 survey to 1975 and the average for the period 1964-75:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total doves herd per route	14.9	+23	- 2
Total calls heard per route	69.5	+124	+ 7
Total doves seen per route	14.9	+20	- 9

An approximate 20-25 percent increase in the breeding population was indicated by results of the call-count survey. Weather conditions were not extreme and should not have adversely affected production.

Harvest

Hunter Questionnaire

Information obtained from the hunter questionnaire for 1976 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 1976 compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Mourning dove hunters	31,293	-16	+69
Mourning dove harvest	298,505	-29	+74
Hunter-days afield	108,780	-17	+97
Mourning doves per hunter-day	2.74	-14	-26
Mourning doves per hunter	9.54	-15	+ 7

Hunting pressure, harvest and hunter success all decreased from the record levels of 1975 but, except for the success per day index, they remained above average. The harvest was the fourth highest on record. The reduced hunting pressure probably resulted from the mid-week opening date compared to a Labor Day opening in 1975.

Long-term harvest trends are depicted in Figure 2.

Field Bag Checks

A summary of field bag check data for 1976 is shown in Table 8. Hunter success trends determined via this method are shown in Table 9. Results of the 1976 survey compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total hunters checked	1,506	-23	+ 4
Total hours hunted	4,228	-27	+ 2
Doves per hunter (complete hunts)	3.81	-21	+ 5
Doves bagged per 100 hours	97	-22	- 2
Average hours per hunter-day (complete hunts)	3.4	- 6	- 6
Hours hunted per dove bagged	0.9	+29	-18

Field bag checks corroborated the reduced hunting pressure and hunter success shown by the harvest questionnaire. Although the success rate was well below the high of 1975, it remained slightly higher than the average.

Dove hunters spent slightly less time afield per hunter day than in 1975 and slightly more time was spent per dove bagged.

Age Composition of the Harvest

A summary of the age composition of harvested mourning doves from 1966 through 1976 is contained in Table 10. Hatching dates for immature doves harvested in the Northern Region are shown in Table 11.

Following is a comparison of data collected in 1976 to 1975 and long-term averages:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Sample size	2,860	-39	- 2
Immatures/100 adults	118	- 6	- 2
Percent of immatures hatched on:			
August 3 or later	42.5	+283	+14
July 25 or later -	83.3	+23	+ 7
Before July 25 -	16.7	-48	-23

As a result of a substantially reduced harvest, fewer wings were collected for aging during the 1976 season compared to 1975. The 118 immatures per 100 adults ratio was only slightly less than both 1975 and the average. This was indicative of a near normal migration pattern during August.

The hatching chronology of harvested immatures showed a slightly greater proportion of immatures in the three youngest age classes than average. The proportion in the youngest age class was 283 percent greater than in 1975 when migration was significantly delayed by an extremely late spring.

Banding

A banding moratorium was declared for the Western Management Unit beginning in 1976 to facilitate a complete analysis of past accumulated banding data.

A summary of banding accomplished by county and region through 1975 is contained in Table 12, a summary of Statewide recovery rates through 1973 in Table 13 and a summary of recovery and return locations through 1971 in Table 14. A summary of doves recovered in Utah that were banded in other states through August, 1970 is found in Table 15.

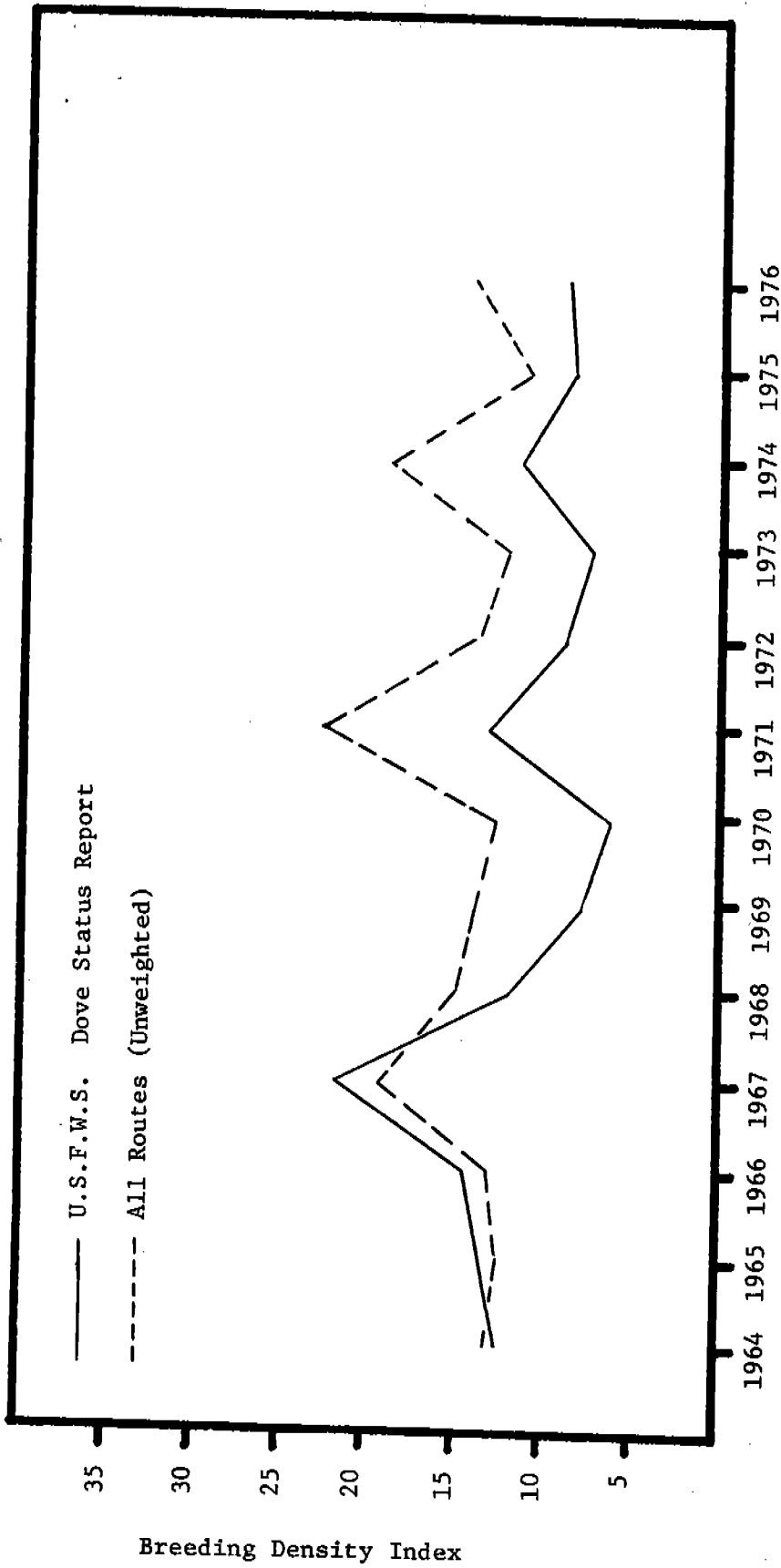


Figure 1. Mourning dove breeding density index trend, 1964-76.

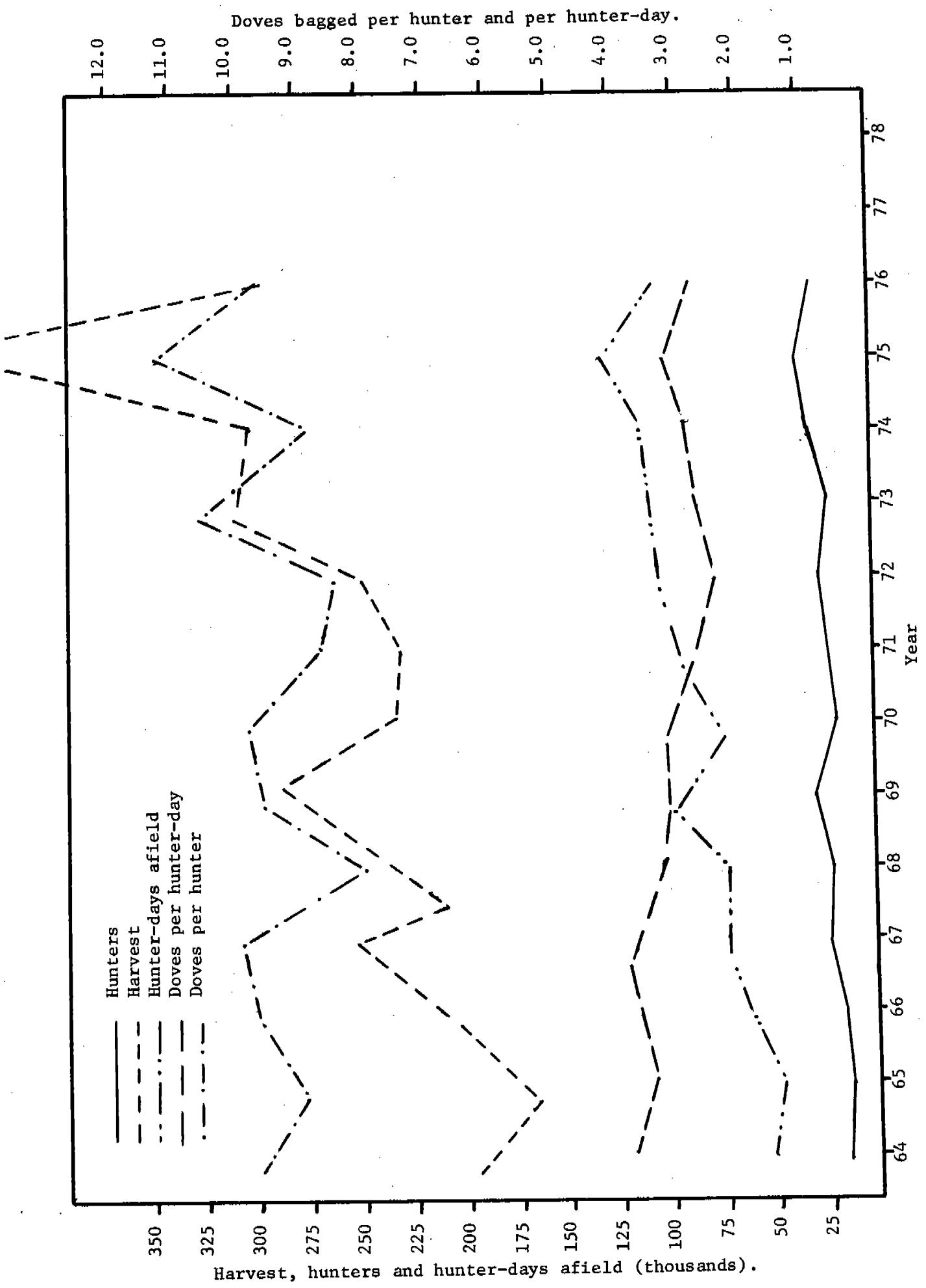


Figure 2. Statewide trends of mourning dove harvest statistics.

Table 1. Summary of the mourning dove call-count survey for 1976.

Region & County	Route Number	Total Doves Heard Per Route	Total Calls Heard Per Route	Total Doves Seen Per Route
<u>Northern Region</u>				
Summit	R1020	11	34	12
Box Elder	R1500	1	8	7
REGIONAL TOTALS		12	42	19
<u>Central Region</u>				
Juab	R2830	28	129	25
REGIONAL TOTALS		28	129	25
<u>Southern Region</u>				
Sevier-Sanpete	R0370	0	0	1
Wayne-Sevier	R0660	5	11	3
Garfield	R1090	3	5	0
Millard	R3640	6	19	17
Beaver	R3820	0	0	15
Iron	R4000	45	159	9
Washington	R4310	19	109	38
REGIONAL TOTALS		78	303	83
<u>Northeastern Region</u>				
Duchesne	R0080	11	48	17
Uintah	R0220	27	195	7
REGIONAL TOTALS		38	243	24
<u>Southeastern Region</u>				
Emery	R0540	14	57	9
San Juan	R1170	51	258	62
San Juan	R1450	2	11	1
REGIONAL TOTALS		67	326	72
STATE TOTALS		223	1,043	223
STATE AVERAGE		14.9	69.5	14.9
PERCENT CHANGE (from previous year)		+23	+124	+19.9

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, 1966-76.

Region & County	Route Number	Number Of Doves Heard Per Route										
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>												
Summit	R1020	16	10	16	7	11	10	7	3	3	3	11
Box Elder	R1500	6	2	6	3	7	4	2	5	3	5	1
REGIONAL TOTALS		22	12	22	10	18	14	9	8	6	8	12
<u>Central Region</u>												
Juab	R2830	22	42	23	8	15	32	6	17	16	13	28
REGIONAL TOTALS		22	42	23	8	15	32	6	17	16	13	28
<u>Southern Region</u>												
Sevier-Sanpete	R0370	0	7	1	0	1	1	0	0	0	0	0
Wayne-Sevier	R0660	5	12	7	2	8	11	20	11	16	7	5
Garfield	R1090	29	27	17	18	6	14	29	0	0	0	3
Millard	R3640	18	40	43	26	7	17	19	24	22	21	6
Beaver	R3820	19	9	23	9	17	12	13	6	24	0	0
Iron	R4000	13	19	13	26	15	24	20	35	103	42	45
Washington	R4310	36	40	21	38	54	64	61	26	32	37	19
REGIONAL TOTALS		120	154	125	119	108	143	162	102	197	107	78
<u>Northeastern Region</u>												
Duchesne	R0080	23	62	11	10	3	16	8	3	14	9	11
Uintah	R0220	12	17	33	38	15	66	4	18	12	7	27
REGIONAL TOTALS		35	79	44	48	18	82	12	21	26	16	38
<u>Southeastern Region</u>												
Emery	R0540	3	2	7	11	9	10	1	27	4	6	14
San Juan	R1170	1	6	7	18	33	60	24	17	41	32	51
San Juan	R1450	0	0	0	Automatic Zero	Automatic Zero	Automatic Zero	Automatic Zero	Automatic Zero	Automatic Zero	Automatic Zero	2
REGIONAL TOTALS		4	8	14	29	42	70	25	44	45	38	67
STATE TOTALS		203	295	228	214	201	341	214	192	290	182	223
STATE AVERAGES		13.5	19.7	15.2	14.3	13.4	22.7	14.3	12.8	19.3	12.1	14.9
Percent Change (from previous year)		+5	+46	-23	-6	-6	+69	-37	-10	+51	-37	+23

Table 3. Summary of mourning dove hunter success and distribution of harvest and hunting pressure by region and county, 1976.

Region & County	Hunters Reporting	Days Hunted	Birds Bagged	Birds per Hunter-Day	Birds per Hunter*	% of Pressure	% of Harvest
<u>Northern Region</u>							
Box Elder	148	408	1,450	3.55	10.37	7.58	9.82
Cache	75	274	618	2.26	9.05	5.09	4.19
Davis	61	207	319	1.54	7.33	3.85	2.16
Morgan	22	55	142	2.58	15.30	1.02	0.96
Rich	10	32	49	1.53	7.50	0.59	0.33
Summit	13	40	61	1.52	15.83	0.74	0.41
Weber	104	300	500	1.67	7.27	5.58	3.39
REGIONAL TOTALS	433	1,316	3,139	2.39	8.25	24.46	21.26
<u>Central Region</u>							
Juab	116	251	1,031	4.11	10.81	4.66	6.98
Salt Lake	157	525	1,132	2.16	8.42	9.76	7.67
Sanpete	62	249	784	3.15	9.97	4.63	5.31
Tooele	134	351	1,239	3.53	12.25	6.52	8.39
Utah	333	1,070	2,466	2.30	9.79	19.88	16.70
Wasatch	11	30	55	1.83	7.40	0.56	0.37
REGIONAL TOTALS	813	2,476	6,707	2.71	9.28	46.01	45.42
<u>Southern Region</u>							
Beaver	33	103	296	2.87	16.00	1.91	2.00
Garfield	9	18	44	2.44	24.00	0.33	0.30
Iron	38	146	649	4.45	19.65	2.71	4.40
Kane	7	46	162	3.52	11.00	0.85	1.10
Millard	64	231	874	3.78	10.79	4.29	5.92
Piute	11	63	163	2.59	13.00	1.17	1.10
Sevier	56	240	592	2.47	12.68	4.46	4.01
Washington	31	130	351	2.70	13.03	2.42	2.38
Wayne	7	30	148	4.93	25.00	0.56	1.00
REGIONAL TOTALS	256	1,007	3,279	3.26	14.40	18.71	22.21
<u>Northeastern Region</u>							
Daggett	1	1	5	5.00	0.00	0.02	0.03
Duchesne	21	49	233	4.76	11.31	0.91	1.58
Uintah	41	118	268	2.27	7.03	2.19	1.81
REGIONAL TOTALS	63	168	506	3.01	8.43	3.12	3.43
<u>Southeastern Region</u>							
Carbon	31	96	222	2.31	9.65	1.78	1.50
Emery	24	90	257	2.86	8.87	1.67	1.74
Grand	12	47	91	1.94	8.47	0.87	0.62
San Juan	16	49	110	2.24	8.40	0.91	0.74
REGIONAL TOTALS	83	282	680	2.41	9.13	5.24	4.61
Unknown counties	61	132	455	3.45	0.00	2.45	3.08
Mixed counties	0	0	0	0.00	20.00	0.00	0.00
STATE TOTALS	1,709	5,381	14,766	2.74	9.54	100.00	100.00

*Based on county of residence.

Table 4. Summary of mourning doves bagged per hunter-day by region and county, 1970-76.

Region and County	1970	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>							
Box Elder	3.60	3.85	3.16	4.25	3.34	4.74	3.55
Cache	3.27	2.62	2.23	2.29	1.92	2.62	2.26
Davis	1.56	1.64	1.30	1.43	1.30	1.70	1.54
Morgan	3.70	3.63	2.11	3.42	3.09	3.14	2.58
Rich	3.44	3.80	3.08	1.30	1.97	2.89	1.53
Summit	5.00	2.77	2.03	2.65	2.21	2.73	1.52
Weber	1.98	1.59	1.67	1.36	1.53	1.78	1.67
REGIONAL TOTALS	2.77	2.53	2.23	2.53	2.14	2.89	2.39
<u>Central Region</u>							
Juab	5.89	5.06	3.83	5.38	3.62	5.30	4.11
Salt Lake	2.18	2.03	1.81	2.36	1.88	2.35	2.16
Sanpete	3.64	3.90	2.04	2.50	3.65	2.65	3.15
Tooele	3.76	2.98	2.38	2.58	2.80	3.70	3.53
Utah	3.41	2.71	2.24	2.78	2.66	2.50	2.30
Wasatch	2.41	1.75	1.48	2.12	2.00	3.12	1.83
REGIONAL TOTALS	3.16	2.75	2.31	2.90	2.70	2.98	2.71
<u>Southern Region</u>							
Beaver	4.28	4.00	4.71	4.31	2.94	5.37	2.87
Garfield	1.33	3.25	4.93	6.03	1.79	5.35	2.44
Iron	3.72	3.41	3.35	3.96	4.65	4.09	4.45
Kane	3.00	3.53	2.60	4.98	2.83	4.92	3.52
Millard	5.83	4.45	3.84	4.63	5.14	4.73	3.78
Piute	7.67	3.60	3.54	2.00	2.00	3.30	2.59
Sevier	2.95	3.32	2.44	3.22	2.83	3.67	2.47
Washington	4.38	3.87	3.33	3.92	3.85	5.05	2.70
Wayne	2.58	3.00	2.50	6.74	2.83	4.10	4.93
REGIONAL TOTALS	4.15	3.79	3.42	4.15	3.82	4.36	3.26
<u>Northeastern Region</u>							
Daggett	7.30	5.86	2.70	0.82	2.12	4.63	5.00
Duchesne	4.54	3.00	4.91	4.73	2.80	3.55	4.76
Uintah	3.05	2.30	1.58	2.97	1.78	3.03	2.27
REGIONAL TOTALS	3.70	2.60	2.39	3.04	2.05	3.21	3.01
<u>Southeastern Region</u>							
Carbon	2.26	0.89	2.95	3.65	2.55	2.87	2.31
Emery	1.28	2.39	2.68	2.66	1.86	1.93	2.86
Grand	5.79	2.71	3.14	3.84	3.62	3.68	1.94
San Juan	2.29	3.15	3.94	4.36	4.22	3.21	2.24
REGIONAL TOTALS	2.38	1.93	3.15	3.61	2.49	2.73	2.41
Unknown counties	4.55	2.49	2.90	2.58	3.55	4.18	3.45
Mixed counties	0.00	--	10.00	0.00	3.00	--	--
STATE TOTALS	3.14	2.79	2.53	3.14	2.71	3.20	2.74

Table 5. Percentage distribution of mourning dove harvest by region and county, 1970-76.

Region and County	1970	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>							
Box Elder	10.11	9.99	10.11	7.85	9.09	9.86	9.82
Cache	5.42	4.13	4.08	3.29	3.68	3.50	4.19
Davis	3.31	2.62	1.69	1.80	2.62	1.68	2.16
Morgan	1.77	0.92	1.24	1.27	1.57	1.02	0.96
Rich	0.49	0.72	0.38	0.08	0.47	0.30	0.33
Summit	0.71	0.68	0.75	0.61	0.40	0.35	0.41
Weber	3.52	4.61	5.05	2.03	4.00	3.74	3.39
REGIONAL TOTALS	25.32	23.68	23.31	16.93	21.83	20.43	21.26
<u>Central Region</u>							
Juab	6.56	8.07	8.16	8.58	8.30	9.64	6.98
Salt Lake	12.04	11.08	8.83	7.95	6.51	8.02	7.67
Sanpete	3.63	2.65	2.13	2.51	3.61	2.10	5.31
Tooele	5.51	8.51	5.99	6.07	5.06	6.83	8.39
Utah	17.46	17.46	16.48	14.30	19.26	16.31	16.70
Wasatch	0.72	1.69	0.38	1.11	0.53	0.83	0.37
REGIONAL TOTALS	45.93	49.45	41.97	40.52	43.26	43.73	45.42
<u>Southern Region</u>							
Beaver	1.21	1.85	3.45	2.26	1.15	2.03	2.00
Garfield	0.04	0.61	0.70	1.08	0.52	0.64	0.30
Iron	4.57	2.76	3.09	5.63	3.87	3.96	4.40
Kane	0.03	0.50	0.12	1.35	0.51	0.49	1.10
Millard	6.23	5.71	4.70	8.04	8.68	5.30	5.92
Piute	0.20	0.17	0.87	0.31	0.22	0.42	1.10
Sevier	3.02	3.57	3.71	3.26	4.57	6.07	4.01
Washington	1.32	3.43	4.02	3.63	3.87	4.31	2.38
Wayne	0.27	0.17	0.09	0.79	0.11	0.66	1.00
REGIONAL TOTALS	16.88	18.77	20.76	26.37	23.48	23.89	22.21
<u>Northeastern Region</u>							
Daggett	0.64	0.39	0.26	0.20	0.11	0.34	0.03
Duchesne	0.52	0.42	1.54	1.61	1.06	1.00	1.58
Uintah	1.97	2.04	1.59	1.85	1.87	3.35	1.81
REGIONAL TOTALS	3.14	2.85	3.38	3.66	3.03	4.69	3.43
<u>Southeastern Region</u>							
Carbon	2.85	0.64	2.75	3.47	1.56	2.22	1.50
Emery	0.93	0.81	1.20	2.02	2.12	1.60	1.74
Grand	1.69	0.72	1.73	2.51	0.65	1.12	0.62
San Juan	1.13	0.98	1.95	3.18	1.20	1.70	0.74
REGIONAL TOTALS	6.60	3.15	7.62	11.18	5.54	6.64	4.61
Unknown counties	2.13	2.09	2.48	1.34	2.66	0.61	3.08
Mixed counties	0.00	--	0.47	0.00	0.19	--	--
STATE TOTALS	100	100	100	100	100	100	100

Table 6. Percentage distribution of mourning dove hunting pressure by region and county, 1970-76.

Region and County	1970	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>							
Box Elder	8.83	7.23	8.11	5.80	7.37	6.65	7.58
Cache	5.22	4.39	4.65	4.50	5.20	4.28	5.09
Davis	6.66	4.45	3.30	3.96	5.46	3.17	3.85
Morgan	1.50	0.71	1.49	1.16	1.38	1.04	1.02
Rich	0.44	0.53	0.31	0.19	0.64	0.33	0.59
Summit	0.44	0.68	0.94	0.72	0.49	0.41	0.74
Weber	5.58	8.08	7.68	4.70	7.10	6.73	5.58
REGIONAL TOTALS	28.68	26.07	26.48	21.03	27.63	22.60	24.46
<u>Central Region</u>							
Juab	3.50	4.45	5.39	5.01	6.20	5.82	4.66
Salt Lake	17.38	15.23	12.37	10.59	9.38	10.91	9.76
Sanpete	3.14	1.89	2.65	3.16	2.67	2.53	4.63
Tooele	4.61	7.97	6.38	7.37	4.89	5.90	6.52
Utah	16.10	17.94	18.66	16.12	19.61	20.89	19.88
Wasatch	0.94	2.68	0.65	1.65	0.72	0.85	0.56
REGIONAL TOTALS	45.67	50.17	46.10	43.91	43.48	46.90	46.01
<u>Southern Region</u>							
Beaver	0.89	1.29	1.86	1.65	1.06	1.21	1.91
Garfield	0.08	0.53	0.36	0.56	0.79	0.38	0.33
Iron	3.86	2.26	2.34	4.46	2.25	3.10	2.71
Kane	0.03	0.39	0.12	0.85	0.49	0.32	0.85
Millard	3.36	3.58	3.11	5.45	4.57	3.59	4.29
Piute	0.08	0.13	0.63	0.49	0.30	0.41	1.17
Sevier	3.22	3.00	3.85	3.18	4.37	5.29	4.46
Washington	0.94	2.47	3.06	2.91	2.72	2.73	2.42
Wayne	0.33	0.16	0.10	0.37	0.10	0.52	0.56
REGIONAL TOTALS	12.80	13.81	15.41	19.93	16.66	17.56	18.71
<u>Northeastern Region</u>							
Daggett	0.28	0.18	0.24	0.76	0.13	0.23	0.02
Duchesne	0.36	0.39	0.79	1.07	1.03	0.90	0.91
Uintah	2.03	2.47	2.55	1.96	2.84	3.54	2.19
REGIONAL TOTALS	2.67	3.05	3.59	3.78	4.00	4.67	3.12
<u>Southeastern Region</u>							
Carbon	3.97	2.00	2.36	2.99	1.66	2.47	1.78
Emery	2.28	0.95	1.13	2.39	3.09	2.65	1.67
Grand	0.92	0.74	1.40	2.06	0.49	0.98	0.87
San Juan	1.55	0.87	1.25	2.29	0.77	1.69	0.91
REGIONAL TOTALS	8.72	4.55	6.14	9.72	6.02	7.79	5.24
Unknown counties	1.47	2.34	2.17	1.63	2.03	0.47	2.45
Mixed counties	0.00	--	0.12	0.00	0.17	--	--
STATE TOTALS	100	100	100	100	100	100	100

Table 7. State-wide summary of mourning dove harvest statistics, 1951-76.

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
1975	37,378	420,308	131,312	3.20	11.24
1976	31,293	298,505	108,780	2.74	9.54
<hr/>					
TOTALS					
1951-1976	493,425	4,575,432	1,488,303	3.07	9.27
<hr/>					
AVERAGES					
1951-1975	18,485	171,077	55,181	3.73	8.84

*Estimated

Table 8. Mourning dove field bag check summary, 1976

Region & County	ALL HUNTS				COMPLETE HUNTS				Birds/ Hunter		
	Total Parties	Total Hunters	Total Hours	Total Birds	Birds/ 100 Hrs.	Total Complete Hunts	Total Hunters	Total Hours		Total Birds	Birds/ 100 Hrs.
<u>Northern Region</u>											
Box Elder	156	403	1,486	1,696	114	140	359	1,366	1,563	114	4.35
Cache	--	--	--	--	--	--	--	--	--	--	--
Davis	--	--	--	--	--	--	--	--	--	--	--
Morgan	--	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--	--
Weber	32	77	117	24	20	17	42	79	16	20	0.38
REGIONAL TOTALS	188	480	1,603	1,720	107	157	401	1,445	1,579	109	3.94
<u>Central Region</u>											
Juab	54	120	368	368	100	6	11	62	92	148	8.36
Salt Lake	48	95	216	108	50	21	43	112	42	38	0.98
Sanpete	37	92	184	118	64	5	12	36	24	67	1.28*
Tooele	62	131	356	141	40	1	2	12	4	33	1.08*
Utah	113	256	723	487	67	23	63	264	166	63	2.63
Wasatch	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	314	694	1,847	1,222	66	56	131	486	328	67	2.50
<u>Southern Region</u>											
Beaver	7	23	69	124	179	2	7	28	69	246	9.86
Garfield	15	30	65	64	98	12	25	56	58	104	2.32
Iron	16	33	68	162	238	6	15	34	112	329	7.47
Kane	--	--	--	--	--	--	--	--	--	--	--
Millard	40	101	262	394	150	3	8	30	52	173	3.90*
Piute	--	--	--	--	--	--	--	--	--	--	--
Sevier	6	14	14	9	64	0	0	0	0	--	0.64*
Washington	--	--	--	--	--	--	--	--	--	--	--
Wayne	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	84	201	478	753	158	23	55	148	291	197	5.29
<u>Northeastern Region</u>											
Daggett	0	0	0	0	--	0	0	0	0	--	--
Duchesne	8	15	27	31	115	6	14	16	29	181	2.07
Uintah	13	35	64	69	108	7	17	39	44	113	2.59
REGIONAL TOTALS	21	50	91	100	110	13	31	55	73	133	2.35
<u>Southeastern Region</u>											
Carbon	2	4	10	0	0	1	3	9	0	0	0.00
Emery	3	6	14	7	50	2	4	10	6	60	1.50
Grand	8	17	38	18	47	1	2	10	16	160	1.06*
San Juan	22	54	147	299	203	21	52	138	296	214	5.69
REGIONAL TOTALS	35	81	209	324	155	25	61	167	318	190	5.21
STATE TOTALS	642	1,506	4,228	4,119	97	274	679	2,301	2,589	113	3.81

*Based on all hunts.

Table 9. Mourning dove hunter success trend determined by field bag checks, 1971-76.

Region & County	1971		1972		1973		1974		1975		1976	
	Doves/ 100 hrs. Hunter	Doves/ Hunter	Doves/ 100 hrs. Hunter	Doves/ Hunter	Doves/ 100 hrs. Hunter	Doves/ Hunter	Doves/ 100 hrs. Hunter	Doves/ Hunter	Doves/ 100 hrs. Hunter	Doves/ 100 hrs. Hunter	Doves/ 100 hrs. Hunter	Doves/ Hunter
<u>Northern Region</u>												
Box Elder	70	3.43	84	3.43	85	3.41	77	3.74	120	5.34	114	4.35
Cache	106	7.00	79	1.88	33	1.00	25	1.12	76	1.69*	--	--
Davis	--	--	--	--	30	0.33	7	0.18	92	2.01	--	--
Morgan	131	3.70	45	1.20	--	--	--	--	169	5.30	--	--
Rich	67	3.00	39	0.85	55	0.80	--	--	--	--	--	--
Summit	12	0.43	--	--	--	--	--	--	--	--	--	--
Weber	33	0.37	108	2.26	83	3.50	38	1.59	34	0.67*	--	--
REGIONAL TOTALS	71	3.22	84	3.20	83	3.37	72	3.40	114	4.85	107	3.94
<u>Central Region</u>												
Juab	83	3.00	135	3.83	119	10.00	171	3.95*	178	7.53	100	8.36
Salt Lake	71	1.36	47	1.53	57	1.16	27	0.32	78	1.61	50	0.98
Sanpete	22	0.82	167	3.17	47	1.94	49	0.63	--	--	64	1.28*
Tooele	61	0.78	41	2.72	83	7.15	85	3.33	109	6.82	40	1.08*
Utah	111	5.27	82	1.38	105	3.89	45	1.06	85	3.47	67	2.63
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	70	1.58	73	1.95	80	2.51	58	0.90	104	3.35	66	2.50
<u>Southern Region</u>												
Beaver	88	--	81	1.30	150	4.50	114	6.56	181	4.40*	179	9.86
Garfield	--	--	--	--	150	1.50	100	10.00	164	4.00	98	2.32
Iron	205	5.36	300	6.60	249	7.67	--	--	204	4.95*	238	7.47
Kane	--	--	233	3.00	220	6.67	352	6.75	--	--	--	--
Millard	119	6.33	108	3.16	88	4.29	109	7.08	142	6.70	150	3.90*
Piute	92	--	--	--	200	0.66	86	1.50	--	--	--	--
Sevier	133	5.33	76	0.80	105	5.57	151	3.32*	121	5.30	64	0.64*
Washington	--	--	175	3.50	42	0.72	--	--	--	--	--	--
Wayne	--	--	93	3.50	88	1.75	100	--	--	--	--	--
REGIONAL TOTALS	124	5.86	118	4.45	119	5.19	120	6.71	148	6.05	158	5.29
<u>Northeastern Region</u>												
Daggett	152	4.20	94	2.03	20	0.75	5	0.40	12	0.00	--	--
Duchesne	--	--	69	1.85	238	6.76	98	3.92	265	5.48	115	2.07
Uintah	147	3.29	149	3.26	179	7.11	135	4.23	167	7.60	108	2.59
REGIONAL TOTALS	150	3.78	122	2.74	162	4.95	104	3.65	181	5.77	110	2.35
<u>Southeastern Region</u>												
Carbon	--	--	--	--	92	1.00	--	--	256	7.00	0	0.00
Emery	207	--	--	--	147	1.87	--	--	162	4.05	50	1.50
Grand	--	--	--	--	--	--	--	--	188	5.75	47	1.06*
San Juan	--	--	--	--	--	--	185	6.32	187	5.08	203	5.69
REGIONAL TOTALS	207	--	--	--	126	1.00	185	6.32	181	5.05	155	5.21
STATE TOTALS	82	3.07	86	3.03	92	3.51	81	3.51	124	4.81	97	3.81

*Doves per hunter index based on all hunts.

Table 10. Age composition (Immatures/100 Adults) of mourning doves harvested, 1966-76.

Region 5 County	1966		1967		1968		1969		1970		1971		1972		1973		1974		1975		1976		1966-76 Average			
	I/100A (n*)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)	I/100A (n)		
Northern Region																										
Box Elder	118	(2621)	100	(2611)	140	(2559)	119	(1753)	109	(991)	145	(963)	112	(1380)	102	(1324)	129	(1430)	123	(2830)	103	(1870)	118	(1848)	118	(1848)
Cache	85	(154)	102	(172)	157	(113)	100	(160)	--	--	100	(58)	155	(28)	100	(2)	--	--	66	(128)	114	(15)	99	(92)	99	(92)
Davis	92	(52)	800	(9)	--	--	--	--	--	--	151	(93)	41	(24)	450	(11)	250	(7)	100	(4)	--	--	137	(19)	137	(19)
Morgan	160	(117)	360	(67)	167	(76)	147	(57)	288	(101)	--	--	125	(9)	100	(10)	--	--	84	(116)	--	--	156	(65)	156	(65)
Rich	300	(80)	114	(30)	217	(76)	328	(30)	66	(10)	--	--	70	(136)	71	(24)	213	(119)	100	(26)	--	--	100	(38)	100	(38)
Summit	217	(73)	--	--	160	(39)	206	(105)	160	(39)	--	--	106	(1577)	103	(1371)	134	(1556)	118	(3104)	117	(13)	117	(13)	117	(13)
Webster	183	(51)	100	(8)	143	(2827)	120	(2128)	118	(1141)	143	(1114)	79	(86)	29	(66)	105	(88)	228	(220)	240	(136)	92	(126)	92	(126)
REGIONAL TOTALS	122	(3145)	103	(2897)	143	(43)	578	(61)	32	(139)	77	(39)	79	(74)	136	(33)	50	(9)	109	(338)	147	(42)	134	(132)	134	(132)
Central Region																										
Juab	96	(186)	56	(260)	105	(56)	--	--	111	(213)	204	(164)	57	(85)	46	(114)	185	(111)	550	(30)	222	(87)	167	(98)	167	(98)
Salt Lake	139	(303)	160	(161)	155	(56)	--	--	88	(45)	129	(16)	211	(28)	290	(82)	99	(219)	76	(202)	156	(115)	97	(144)	97	(144)
Sanpete	249	(164)	--	--	114	(188)	83	(146)	88	(139)	170	(189)	178	(153)	132	(267)	123	(261)	128	(392)	170	(278)	126	(208)	126	(208)
Tooele	68	(272)	90	(268)	82	(31)	354	(59)	88	(237)	--	--	130	(426)	101	(362)	118	(688)	128	(1182)	184	(658)	118	(657)	118	(657)
Utah	100	(234)	155	(102)	--	--	117	(503)	76	(536)	167	(408)	130	(426)	101	(362)	118	(688)	128	(1182)	184	(658)	118	(657)	118	(657)
REGIONAL TOTALS	112	(1157)	94	(791)	116	(318)	117	(503)	76	(536)	167	(408)	130	(426)	101	(362)	118	(688)	128	(1182)	184	(658)	118	(657)	118	(657)
Southern Region																										
Beaver	120	(11)	33	(145)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	176	(47)	--	--	37	(78)	37	(78)
Garfield	41	(31)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	100	(39)	100	(39)
Iron	124	(123)	38	(65)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	84	(94)	84	(94)
Kane	50	(3)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	50	(3)	50	(3)
Millard	331	(151)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	331	(151)	331	(151)
Piute	257	(25)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	257	(25)	257	(25)
Sevier	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Washington	175	(146)	--	--	83	(77)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	134	(112)	134	(112)
Wayne	--	--	--	--	83	(77)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	174	(490)	35	(210)	83	(77)	--	--	--	--	--	--	--	--	--	--	--	--	176	(47)	320	(30)	113	(171)	113	(171)
Northeastern Region																										
Daggett	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Duchesne	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Uintah	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	107	(60)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	107	(60)	107	(60)
Southeastern Region																										
Carbon	157	(54)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	233	(30)	--	--	157	(94)	157	(94)
Emery	103	(140)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	300	(84)	--	--	171	(85)	171	(85)
Grand	1078	(165)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	189	(214)	97	(274)	136	(171)	136	(171)
San Juan	500	(24)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	215	(328)	97	(274)	175	(261)	175	(261)
REGIONAL TOTALS	255	(383)	--	--	80	(124)	80	(124)	80	(124)	149	(1522)	111	(2003)	102	(1933)	136	(2440)	126	(4661)	118	(2860)	120	(2928)	120	(2928)
STATE TOTALS	130	(5238)	96	(3898)	138	(3222)	120	(2755)	103	(1677)	149	(1522)	111	(2003)	102	(1933)	136	(2440)	126	(4661)	118	(2860)	120	(2928)	120	(2928)

*n = wing sample

Table 11. Percent of harvest by hatching date of immature mourning doves in northern Utah, 1967-76.

Date Hatched	Age (Days)	Percent of Harvest by Hatch Date															Sample Size														
		1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976										
Aug. 3	29	28.6	50.6	41.7	36.1	36.2	40.8	22.2	48.3	11.1	42.5	408	832	479	224	236	322	154	428	177	409										
July 31	32	14.1	26.9	23.9	30.8	23.0	27.2	21.4	28.6	24.3	22.9	201	443	275	191	150	215	149	253	389	220										
July 25	38	18.4	11.6	17.6	17.2	17.2	15.7	18.8	14.3	32.3	17.9	263	192	202	107	112	124	131	127	517	172										
July 18	45	17.0	5.2	9.0	9.4	10.3	9.6	15.4	3.7	18.4	7.2	242	87	104	58	67	76	107	33	295	69										
July 9	54	10.9	3.1	4.0	3.9	7.8	3.9	9.9	2.3	8.6	4.0	155	51	46	24	51	31	69	20	137	38										
June 30	63	6.4	1.7	2.5	1.9	2.9	2.3	6.8	1.1	5.3	2.0	92	29	29	12	19	18	47	10	85	19										
June 21	72	4.0	0.4	0.9	0.6	1.8	0.2	3.7	1.2	--	1.0	57	7	11	4	12	2	26	11	--	10										
June 8	85	0.6	0.6	0.2	--	0.5	0.1	1.6	0.4	--	0.9	8	1	2	--	3	1	11	4	--	9										
May 22	102	--	--	--	--	0.2	--	0.1	--	--	1.7	--	--	--	--	1	--	1	--	--	16										
Apr. 27	127	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--										
Apr. 21	133	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--										
		100	100	100	100	100	100	100	100	100	100	1426	1642	1148	620	651	789	695	886	1600	962										

Table 12. Summary of mourning doves banded in Utah, 1971-75.

Region & County	1971		1972		1973		1974		1975		Totals 1961-75							
	Imm.	Adult Total	Imm.	Adult Total	Imm.	Adult Total	Imm.	Adult Total	Imm.	Adult Total	Imm.	Adult Total						
<u>Northern Region</u>																		
Box Elder	--	--	2	5	7	--	--	16	22	38	--	--	1011	2444	3455			
Cache	--	--	--	--	--	--	--	--	--	--	--	--	30	39	69			
Davis	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Morgan	22	20	45*	--	--	--	12	71	28	37	65	109	69	178*	--			
Rich	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Summit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Weber	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
REGIONAL TOTALS	22	20	45*	2	5	7	34	109	28	37	65	1150	2552	3702	--			
<u>Central Region</u>																		
Juab	64	53	117	71	151	229*	--	--	91	297	388	137	153	290	1815	3009	4887	
Salt Lake	--	--	--	--	--	--	--	--	--	--	--	--	--	--	47	214	261	
Sanpete	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Tooele	85	370	455	60	158	218	27	57	84	158	487	138	113	251	1538	2550	4113	
Utah	--	--	--	--	--	--	--	--	--	--	--	--	--	--	61	155	216	
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	149	423	572	131	309	447*	27	57	84	249	875	275	266	541	3461	5928	9477*	
<u>Southern Region</u>																		
Beaver	--	--	--	--	--	--	6	4	10	22	62	84	--	--	34	92	126	
Garfield	--	--	--	--	--	--	--	--	--	--	--	--	5	41	46	5	41	46
Iron	113	1	114	125	124	249	4	--	4	13	36	49	70	117	504	257	761	
Kane	--	--	--	--	--	--	206	17	223	--	--	--	115	66	181	407	151	558
Millard	38	13	51	15	12	27	1	56	57	88	128	216	197	125	322	589	766	1356*
Piute	166	211	377	75	15	90	--	--	--	--	--	--	3	3	6	548	668	1216
Sevier	2	0	2	--	--	--	--	--	--	--	--	--	30	199	299	34	225	329
Washington	41	2	43	37	17	55*	136	84	220	112	188	300	87	158	245	452	1408	1862*
Wayne	--	--	--	--	--	--	--	28	54	82	--	--	5	13	18	37	75	112
REGIONAL TOTALS	360	227	587	252	168	421*	353	161	514	303	428	731	512	652	1164	2650	3643	6296*
<u>Northeastern Region</u>																		
Daggett	7	28	35	39	60	99	0	137	137	0	159	159	0	68	68	54	457	511
Duchesne	7	64	71	15	128	143	1	2	3	37	71	108	34	80	114	98	371	469
Uintah	49	123	172	9	85	94	--	--	--	48	247	295	0	95	95	416	1509	1925
REGIONAL TOTALS	63	215	278	63	273	336	1	139	140	85	477	562	34	243	277	568	2337	2905
<u>Southeastern Region</u>																		
Carbon	--	--	--	--	--	--	--	--	--	58	42	100	--	--	--	66	46	112
Emery	--	--	--	--	--	--	--	--	--	153	76	229	118	107	225	310	197	507
Grand	--	--	--	--	--	--	--	--	--	--	--	--	0	1	1	52	18	70
San Juan	37	52	89	73	129	202	7	10	17	289	94	383	45	370	415	780	693	1473
REGIONAL TOTALS	37	52	89	73	129	202	7	10	17	500	212	712	163	478	641	1208	954	2162
STATE TOTALS	631	937	1571	521	884	1413	388	367	755	1212	1777	2989	1012	1676	2688	9037	15414	24542

*Includes some unclassified birds.

Table 13. 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	--
<hr/>					
TOTALS 1964-73	14,439	184	314***	.013	.026
<hr/>					
GRAND TOTALS	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 14. 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 15. 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

BAND-TAILED PIGEON

Banding

Results of banding efforts in 1976 are summarized in Table 16 and State totals since 1969 in Table 17.

During 1976, 217 pigeons were banded. An additional 131 previously banded pigeons were recaptured. Since 1969, 2,228 total pigeons have been banded in Utah and 846 recaptured. Results of banding efforts through 1972 indicated a direct recovery rate of 1.4 percent. If expanded using an assumed 30 percent band reporting rate, an estimated harvest rate of less than 5 percent of the State's pigeon population is indicated. Inclusion of an estimated 16 percent crippling loss would result in a total kill rate of from 5-10 percent; well within the harvestable surplus.

Harvest

Results of the 1976 harvest questionnaire are shown in Table 18 and harvest trends since 1970 in Table 19. A comparison of the 1976 season to 1975 and the average follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Band-tailed pigeon hunters	54	- 0	- 8
Band-tailed pigeon harvest	119	+ 3	+ 3
Hunter-days afield	162	+36	+74
Pigeons per hunter-day	0.73	-25	-40
Pigeons per hunter	2.20	+ 2	- 3

Total hunters remained the same as 1975 but hunter-days afield increased markedly. Total harvest increased slightly over 1975 and was slightly above average. Most of the 1976 harvest occurred in Beaver County.

Table 16. Results of band-tailed pigeon banding efforts in Utah during 1976.

Area	Time Period	Adults		Total	Immatures	Total Immatures/ Pigeons 100 adults	Total *
		Males	Females				
Monticello, San Juan County	June 8 - July 13	180	33	213	4	217	2 131

*Includes repeats and returns.

Table 17. Band-tailed pigeon banding trend for Utah, 1969-76.

Year	Adults		Total	Immatures	Total	Immatures/ 100 Adults	Total*
	Males	Females					
1969	147	51	198	39	237	20	7
1970	254	94	348	54	402	16	43
1971	110	52	162	79	241	49	72
1972	284	117	401	4	405	1	235
1973	263	54	317	14	331	4	
1974	87	12	99	11	110	11	78
1975	202	70	272	13	285	5	118
1976	180	33	213	4	217	2	131
Total	1,527	483	2,010	218	2,228	11	846

*Includes repeats and returns

Table 18. Band-tailed pigeon harvest statistics, 1976.

Area Hunted	Hunters	Hunter days	Harvest	Pigeons/ Hunter-day	Pigeons/ hunter	Percent of Pressure*	Percent of Harvest
Beaver County	12	40	73	1.83	6.08	24.7	61.3
Blue Mountain-Elk Ridge	14	37	5	0.14	0.36	22.8	4.2
Garfield County	1	6	5	0.83	5.00	3.7	4.2
Iron County	11	21	10	0.48	0.91	13.0	8.4
Kane County	9	31	5	0.16	0.56	19.1	4.2
LaSal Mountain	4	10	2	0.20	0.50	6.2	1.7
Millard County	1	2	0	0.00	0.00	1.2	0.0
Piute County	4	4	0	0.00	0.00	2.5	0.0
Washington County	5	9	19	2.11	3.80	5.6	16.0
Wayne County	2	2	0	0.00	0.00	1.2	0.0
Totals	63	162	119	0.73	2.20	100	100

*Based on hunter-days

Table 19. Band-tailed pigeon harvest trend, 1970-76.

Year	Total		Hunter-days afield		Pigeons per Hunter-day		Pigeons per Hunter	
	Hunters	Harvest	Hunter-days	days afield	Hunter-day	Hunter-day	Hunter	Hunter
1970	34	109	53	53	2.06	2.06	3.21	3.21
1971	54	156	110	110	1.42	1.42	2.89	2.89
1972	61	211	122	122	1.74	1.74	3.46	3.46
1973	24	15	33	33	0.45	0.45	0.62	0.62
1974	63	81	120	120	0.68	0.68	1.29	1.29
1975	54	116	119	119	0.97	0.97	2.15	2.15
1976	54	119	162	162	0.73	0.73	2.20	2.20
Totals	407	807	719	719	1.12	1.12	1.98	1.98
Averages	1970-75	59	115	93	1.22	1.22	2.27	2.27

CHUKAR PARTRIDGE

SUMMARY

The breeding population was slightly lower than both 1975 and the average on a Statewide basis. Late winter and early spring precipitation, a critical factor in successful production, was only slightly below average; indicating potentially near normal production.

Results of the brood survey indicated reduced production on a Statewide basis; however, both the young per 100 adults and mean brood size indexes strongly reflected extremely poor production in the Southeastern Region where 45 percent of the total State sample was obtained. Smaller samples in the Northern, Central and Northeastern regions indicated near or above average production. Indicated chukar density was higher than 1975 but still slightly below average.

Harvest statistics indicated an increased fall population level in all but the Southeastern Region. Hunting pressure decreased but both hunter success and the total harvest increased. The length of the average hunter-day was similar to 1975 but shorter than average. The time spent per bird bagged was less than both 1975 and the average.



Brood Counts

Results of the annual random brood survey for 1976 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 1976 compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total chukars observed	1,295	+43	- 8
Young per 100 adults	196	-56	-54
Mean brood size	7.10	0	-21
Chukars observed per 100 hours	370	+22	- 4
Total hours effort	350	+17	- 5

Harvest data for 1975 indicated decreased breeding populations for 1976 in the Northern and Central region and increased populations in the Southern, Northeastern and Southeastern regions.

Late winter and early spring precipitation was slightly below average (Figure 2). Forage conditions should have been near normal over most of the State early in the year.

Effort on chukar brood counts increased over 1975 but was a little below average. Relatively dry range conditions during the summer months, in contrast to 1975, facilitated increased chukar observations due to concentration near water sources.

Brood count sample sizes were small (fewer than 200 birds) in the Northern, Northeastern and Southern regions. Indicated production (young per 100 adults) was extremely low on a Statewide basis but primarily reflected poor production in the Southeastern Region where 45 percent of the sample was obtained. Suggested production in the Northern Region was well above average.

Chukar density indicated by the chukars observed per 100 hours effort index was higher than 1975 but probably reflected concentration of birds around water to some degree.

Harvest

Hunter Questionnaire

Results of the hunter questionnaire survey for 1976 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 1976 harvest statistics to 1975 and the average.

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Chukar hunters	14,171	-12	-11
Chukars harvested	43,726	+ 6	+ 1
Hunter-days afield	47,143	- 8	+ 4
Chukars per hunter-day	0.93	+15	+ 2
Chukars per hunter	3.09	+20	+26

Total hunters dropped below both 1975 and the long-term average. A decrease in hunter-days afield was also shown but of a lesser magnitude than shown for hunters. Daily hunter success improved over 1975 to slightly above average while success on a seasonal (per hunter) basis was well above both 1975 and the average. The increased success resulted in an increased total harvest. The improved hunter success was evident in all but 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 1976 is shown in Table 10. The hunter success trend determined via bag checks since 1970 is shown in Table 11. Data for the 1976 season compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total hunters checked	407	-25	-41
Total hours hunted	1,503	-28	-53
Chukars per hunter (complete hunts)	1.11	+17	- 4
Chukars bagged per 100 hours	24	0	0
Average hours per hunter-day (complete hunts)	4.3	0	-10
Hours hunted per chukar bagged	3.9	-13	-15

Field bag checks substantiated the reduced hunting pressure and improved hunter success shown by the harvest questionnaire. The daily hunter success rate shown was slightly higher than shown by the harvest questionnaire but this was probably due to the compilation of most bag check data early in the hunting season.

The average number of hours per hunter-day was comparable to 1975 and slightly less than the average while the time required to bag a chukar was less than both 1975 and the average.

Chukars bagged per hunter and per hunter-day.

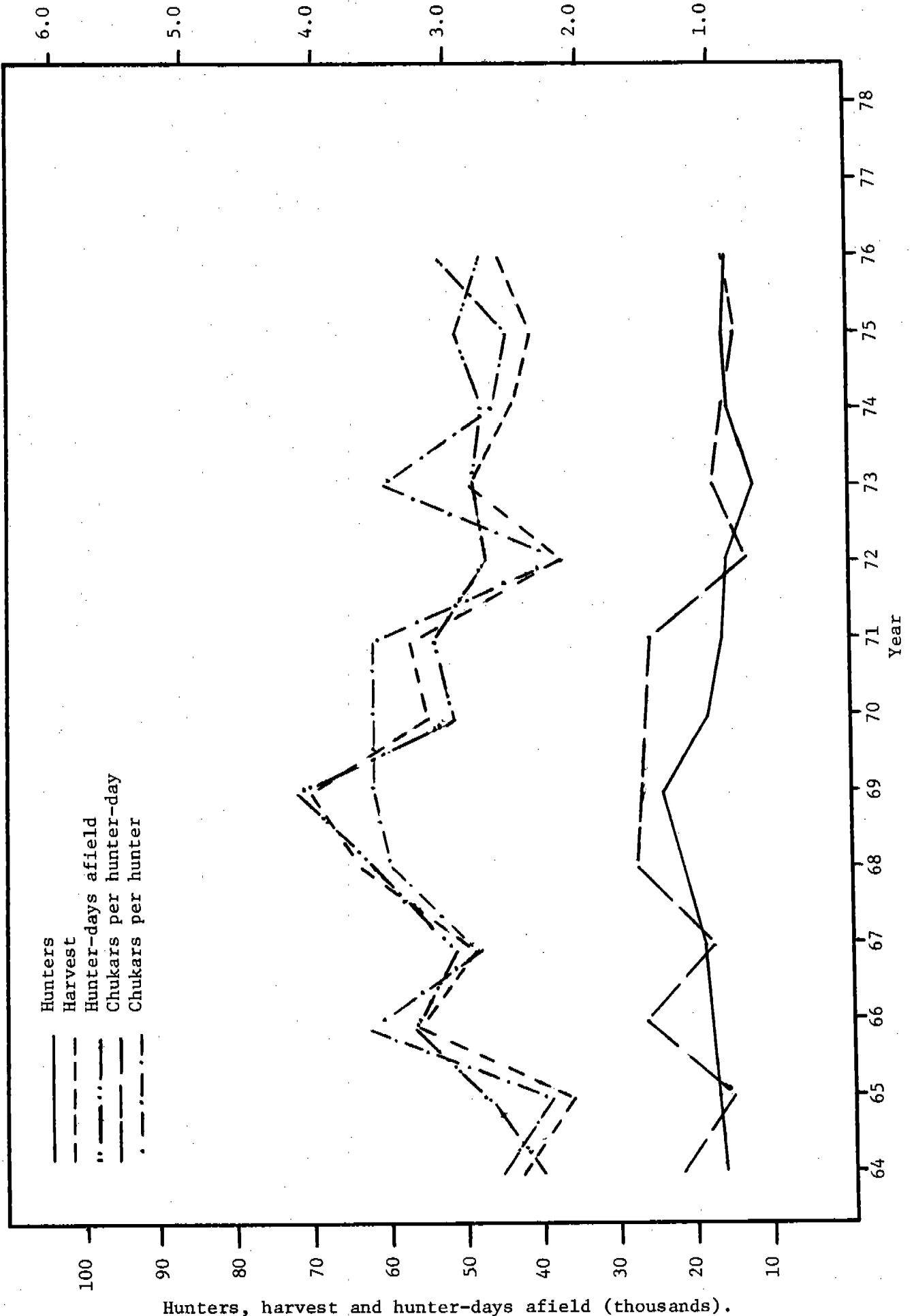


Figure 1. Statewide trends of chukar partridge harvest statistics.

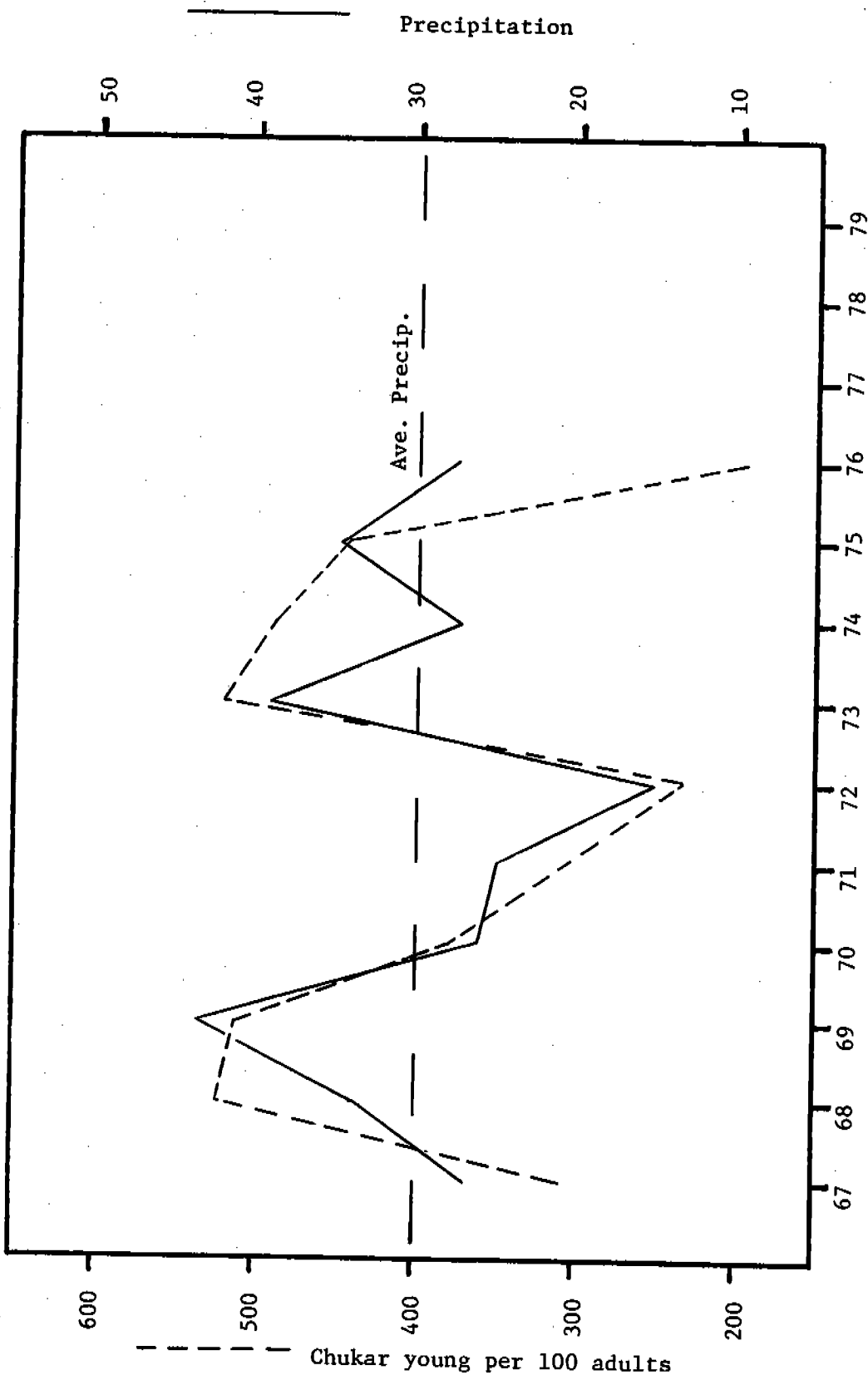


Figure 2. Relationship between late winter and early spring (Jan.-April) precipitation and chukar production.

Table 1. Chukar summer inventory summary, 1976.

Region and County	Distinct Broods		Mean Brood		Mixed Yng. & Adults		Total Yng. 100 Ad.	Total Yng.	Total Adults	w/o Yng.	Total Yng. 100 Ad.	Vehicle Miles	Hours Effort		Birds/100 hrs.		
	No. Ad.	Yng.	Yng.	Brood	Ad.	Yng.							Veh.	Horse		Walk	Total
<u>Northern Region</u>																	
Box Elder	2	2	21	10.50	11	89	110	733	15	2	110	730	45	7	8	60	208
Cache	1	1	19	19.00	0	0	19	1,900	1	0	19	130	9	0	3	12	167
Davis	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Morgan	0	0	0	--	2	1	1	--	2	0	1	15	1	0	2	3	100
Rich	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	3	3	40	13.33	13	90	130	722	18	2	130	875	55	7	13	75	197
<u>Central Region</u>																	
Juab	4	6	31	7.75	9	43	74	352	21	6	74	244	17	0	6	23	413
Salt Lake	0	0	0	--	0	0	0	--	0	0	0	20	3	0	7	10	0
Sanpete	2	2	22	11.00	6	17	39	488	8	0	39	255	21	4	5	30	157
Tooele	15	18	108	7.20	7	38	146	417	35	10	146	386	24	0	16	40	452
Utah	1	1	8	8.00	0	0	8	800	1	0	8	59	5	0	2	7	129
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	22	27	169	7.68	22	98	267	411	65	16	267	964	70	4	36	110	302
<u>Southern Region</u>																	
Beaver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Garfield	2	3	19	9.50	4	17	36	450	8	1	36	225	9	0	1	10	440
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Kane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Millard	7	7	47	6.71	33	64	111	264	42	2	111	120	13	0	2	15	1,020
Piute	0	0	0	--	0	0	0	--	0	0	0	120	7	0	0	7	0
Sevier	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Wayne	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	9	10	66	7.33	37	81	147	294	50	3	147	465	29	0	3	32	616
<u>Northeastern Region</u>																	
Daggett	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Duchesne	1	1	8	8.00	0	0	8	800	1	0	8	521	39	0	1	40	22
Uintah	3	3	23	7.67	0	0	23	766	3	0	23	206	18	6	3	27	96
REGIONAL TOTALS	4	4	31	7.75	0	0	31	775	4	0	31	727	57	6	4	67	52
<u>Southeastern Region</u>																	
Carbon	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Emery	12	12	74	6.17	0	0	74	200	37	25	74	303	28	0	2	30	370
Grand	8	8	48	6.00	79	127	175	98	179	92	175	132	11	0	1	12	2,950
San Juan	4	4	12	3.00	5	22	34	40	84	75	34	252	20	0	4	24	492
REGIONAL TOTALS	24	24	134	5.58	84	149	283	94	300	192	283	687	59	0	7	66	883
STATE TOTALS	62	68	440	7.10	156	418	858	196	437	213	858	3,718	270	17	63	350	370

Table 2. Trend of chukar young per 100 adults ratios, 1966-76.

Region & County	Year											Average 1962-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	416	360	455	600	247	529	492	760	663	842	733	
Cache	317	220	--	1011	250	258	--	488	750	550	1900	
Davis	500	0	--	1100	--	--	--	--	--	--	--	
Morgan	680	88	315	668	178	950	--	--	--	--	--	
Rich	--	--	--	--	--	--	--	--	--	--	--	
Summit	--	350	--	--	525	--	--	--	--	--	--	
Weber	600	--	--	91	--	286	--	--	--	--	--	
REGIONAL TOTALS	429	276	420	510	267	382	475	639	684	814	722	460
<u>Central Region</u>												
Juab	--	475	450	607	421	594	420	725	350	500	352	
Salt Lake	--	671	409	372	0	367	--	0	--	0	--	
Sanpete	--	368	400	194	256	171	216	0	--	--	488	
Tooele	--	--	1733	1360	922	372	154	410	356	264	417	
Utah	--	--	240	463	360	352	552	335	96	--	800	
Wasatch	--	--	--	767	--	--	--	--	--	--	--	
REGIONAL TOTALS	638	445	407	496	471	386	208	364	300	308	411	433
<u>Southern Region</u>												
Beaver	--	--	--	--	--	--	--	--	--	--	--	
Garfield	--	--	--	--	495	275	--	--	--	--	450	
Iron	--	500	--	--	--	--	--	--	--	--	--	
Kane	--	--	--	--	--	--	--	--	--	--	--	
Millard	514	--	1108	812	700	255	66	--	--	50	264	
Piute	--	--	--	--	--	550	500	--	--	500	--	
Sevier	833	--	--	--	--	--	800	--	0	--	--	
Washington	817	315	--	--	--	--	--	--	--	--	--	
Wayne	--	--	--	--	--	67	--	--	--	--	--	
REGIONAL TOTALS	608	315	1108	812	581	245	131	--	0	114	294	501
<u>Northeastern Region</u>												
Daggett	1056	436	709	1250	150	--	--	--	--	--	--	
Duchesne	--	0	515	548	--	120	--	--	--	--	800	
Uintah	1273	1075	482	463	450	678	--	--	733	--	766	
REGIONAL TOTALS	1217	485	540	575	279	479	--	--	733	--	775	577
<u>Southeastern Region</u>												
Carbon	--	--	1000	--	383	474	372	650	794	633	--	
Emery	1100	317	--	--	900	--	--	725	842	367	200	
Grand	539	367	1000	--	446	205	274	871	656	377	98	
San Juan	678	57	590	138	234	161	317	500	650	552	40	
REGIONAL TOTALS	604	269	635	138	338	226	324	712	717	437	94	430
STATE TOTALS	638	306	523	511	382	311	235	519	487	443	196	428

Table 3. Trend of chukar mean brood size from 1966-76.

Region & County	Year											Average 1962-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	--	7.53	10.09	8.00	10.59	6.17	13.23	13.00	11.00	11.00	10.50	10.50
Cache	--	8.00	--	12.00	10.00	3.43	--	13.00	7.00	--	19.00	--
Davis	--	--	--	10.50	--	--	--	--	--	--	--	--
Morgan	--	7.50	--	10.17	8.00	9.50	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	7.00	--	--	7.33	--	--	--	--	--	--	--
Weber	--	--	--	--	--	20.00	--	--	--	--	--	--
REGIONAL TOTALS	7.38	7.52	10.09	9.67	9.91	6.25	13.23	13.00	8.00	11.00	13.33	9.27
<u>Central Region</u>												
Juab	--	7.00	9.00	11.62	5.25	9.33	9.53	9.67	11.00	8.67	7.75	--
Salt Lake	--	--	11.25	16.50	--	--	--	--	--	--	--	--
Sanpete	--	7.00	6.00	--	6.67	7.00	6.00	--	--	--	11.00	--
Tooele	--	--	17.33	14.50	12.14	11.29	10.83	15.00	11.89	9.00	7.20	--
Utah	--	--	5.62	9.40	9.00	8.14	7.50	8.40	8.00	--	8.00	--
Wasatch	--	--	--	11.50	--	--	--	--	--	--	--	--
REGIONAL TOTALS	8.50	7.00	9.22	11.38	9.00	9.88	9.98	10.10	11.35	8.83	7.68	8.88
<u>Southern Region</u>												
Beaver	--	--	--	--	--	--	--	--	--	--	--	--
Garfield	--	5.00	--	--	8.20	5.00	--	--	--	--	9.50	--
Iron	--	--	--	--	--	0	--	--	--	--	--	--
Kane	--	--	--	--	--	--	--	--	--	--	--	--
Millard	--	--	15.43	9.67	--	11.50	10.00	--	--	3.00	6.71	--
Piute	--	--	--	--	--	5.50	5.67	--	--	5.00	--	--
Sevier	--	--	--	--	--	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--	--	--	--	--	--
Wayne	--	--	--	--	--	6.00	--	--	--	--	--	--
REGIONAL TOTALS	8.83	5.00	15.43	9.67	8.20	7.80	6.75	--	--	4.00	7.33	8.46
<u>Northeastern Region</u>												
Daggett	--	7.71	19.00	15.50	4.00	--	--	--	--	--	--	--
Duchesne	--	--	7.64	11.50	--	6.00	--	--	--	--	8.00	--
Uintah	--	--	--	9.00	4.50	7.00	10.00	--	6.00	--	7.67	--
REGIONAL TOTALS	10.00	7.71	8.58	12.00	4.33	6.86	10.00	--	6.00	--	7.75	8.22
<u>Southeastern Region</u>												
Carbon	--	--	10.00	--	7.67	7.29	9.29	9.00	9.50	9.00	--	--
Emery	--	7.33	--	--	9.00	--	--	12.00	9.80	12.00	6.17	--
Grand	--	9.35	10.00	--	7.20	8.33	7.20	1.00	6.25	4.00	6.00	--
San Juan	--	6.50	--	6.60	6.50	5.82	9.00	--	10.00	4.33	3.00	--
REGIONAL TOTALS	9.68	8.48	10.00	6.60	7.36	6.88	8.50	8.50	9.05	6.00	5.58	8.52
STATE TOTALS	9.27	7.91	10.16	10.47	8.34	7.81	10.08	10.65	10.00	7.12	7.10	8.99

Table 4. Trend of chukars observed per 100 hours ratios, 1967-76.

Region & County	Year											Averages 1962-75
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976		
<u>Northern Region</u>												
Box Elder	165	274	1322	386	71	374	77	468	895	208		
Cache	291	0	911	175	358	--	--	--	130	167		
Davis	50	--	600	--	--	--	--	--	--	--		
Morgan	107	--	1670	500	262	--	--	--	--	100		
Rich	0	0	--	--	--	--	--	--	--	--		
Summit	19	--	--	--	--	--	--	--	--	--		
Weber	--	--	928	--	--	--	--	--	--	--		
REGIONAL TOTALS	125	288	1196	445	132	374	119	632	640	197		439
<u>Central Region</u>												
Juab	230	367	450	197	1724	613	174	338	229	413		
Salt Lake	270	830	354	15	108	--	60	--	25	0		
Sanpete	202	48	91	371	475	527	7	0	0	157		
Tooele	--	688	730	1022	592	2044	198	730	291	452		
Utah	--	567	938	177	210	833	336	140	0	129		
Wasatch	--	0	867	0	--	--	--	--	--	--		
REGIONAL TOTALS	222	285	408	320	510	997	167	437	178	302		392
<u>Southern Region</u>												
Beaver	--	--	0	--	--	--	--	--	--	--		
Garfield	300	--	0	761	123	--	0	0	0	440		
Iron	--	--	--	--	0	--	--	--	--	--		
Kane	--	--	0	--	--	--	--	0	--	--		
Millard	--	--	3950	--	--	--	--	291	36	1020		
Piute	0	--	0	0	529	573	--	--	150	0		
Sevier	--	--	--	--	650	2400	--	--	--	--		
Washington	372	--	0	--	--	900	--	100	--	--		
Wayne	--	--	--	--	600	--	--	--	--	--		
REGIONAL TOTALS	216	--	484	1448	259	543	0	79	37	616		453
<u>Northeastern Region</u>												
Daggett	2143	741	2700	1333	0	--	0	0	0	--		
Duchesne	4	496	438	0	41	--	0	0	0	22		
Uintah	115	200	255	110	350	48	0	227	0	96		
REGIONAL TOTALS	199	433	396	82	162	16	0	83	0	52		174
<u>Southeastern Region</u>												
Carbon	288	550	--	--	1282	621	375	947	1100	--		
Emery	3550	0	0	--	--	--	194	1130	233	370		
Grand	3329	37	--	693	643	710	358	900	2277	2950		
San Juan	419	1144	438	731	321	431	800	789	721	492		
REGIONAL TOTALS	1550	284	211	816	364	541	298	915	996	883		664
STATE TOTALS	328	382	516	459	325	556	150	469	303	370		387

Table 5. Summary of chukar hunting success and distribution of harvest and hunting pressure by region and county, 1976

Region and County	Hunters Reporting	Days Hunted	Birds Bagged	Birds per Hunter-day	Birds per Hunter*	% of Pressure	% of Harvest
<u>Northern Region</u>							
Box Elder	168	538	706	1.31	3.26	23.07	32.64
Cache	60	155	109	0.70	4.06	6.65	5.04
Davis	16	56	50	0.89	2.63	2.40	2.31
Morgan	17	55	17	0.31	0.80	2.36	0.79
Rich	7	16	13	0.81	0.00	0.69	0.60
Summit	4	7	10	1.43	5.00	0.30	0.46
Weber	27	42	25	0.60	3.71	1.80	1.16
REGIONAL TOTALS	299	869	930	1.07	3.43	37.26	43.00
<u>Central Region</u>							
Juab	34	87	40	0.46	0.77	3.73	1.85
Salt Lake	28	94	51	0.54	2.78	4.03	2.36
Sanpete	13	43	15	0.35	2.00	1.84	0.69
Tooele	112	321	275	0.86	2.82	13.77	12.71
Utah	94	337	302	0.90	3.54	14.45	13.96
Wasatch	5	16	9	0.56	3.00	0.69	0.42
REGIONAL TOTALS	286	898	692	0.77	2.93	38.51	31.99
<u>Southern Region</u>							
Beaver	8	17	10	0.59	1.00	0.73	0.46
Garfield	5	10	5	0.50	5.00	0.43	0.23
Iron	3	4	3	0.75	0.00	0.17	0.14
Kane	1	5	0	0.00	0.00	0.21	0.00
Millard	23	63	55	0.87	1.78	2.70	2.54
Piute	12	33	8	0.24	1.12	1.42	0.37
Sevier	20	60	34	0.57	1.57	2.57	1.57
Washington	2	5	4	0.80	2.33	0.21	0.18
Wayne	5	19	52	2.74	13.33	0.81	2.40
REGIONAL TOTALS	79	216	171	0.79	2.29	9.26	7.91
<u>Northeastern Region</u>							
Daggett	1	2	4	2.00	0.00	0.09	0.18
Duchesne	9	22	17	0.77	0.00	0.94	0.79
Uintah	6	10	4	0.40	0.67	0.43	0.18
REGIONAL TOTALS	16	34	25	0.74	0.33	1.46	1.16
<u>Southeastern Region</u>							
Carbon	23	70	48	0.69	3.48	3.00	2.22
Emery	14	30	41	1.37	0.71	1.29	1.90
Grand	28	84	119	1.42	4.67	3.60	5.50
San Juan	5	23	10	0.43	4.00	0.99	0.46
REGIONAL TOTALS	70	207	218	1.05	3.45	8.88	10.08
Unknown counties	31	108	127	1.18	0.00	4.63	5.87
Mixed counties	0	0	0	0.00	6.00	0.00	0.00
STATE TOTALS	781	2,332	2,163	0.93	3.09	100	100

*Based on county of residence.

Table 6. Summary of chukars bagged per hunter-day by region and county, 1970-76.

Region and County	1970	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>							
Box Elder	1.00	1.66	0.88	1.41	1.47	1.20	1.31
Cache	1.28	0.91	0.75	0.68	0.92	0.64	0.70
Davis	0.93	0.98	0.89	1.12	1.61	0.31	0.89
Morgan	1.75	1.68	0.85	1.64	0.48	0.69	0.31
Rich	1.78	1.00	0.67	0.80	1.33	0.20	0.81
Summit	0.47	0.67	1.28	1.00	0.43	1.47	1.43
Weber	0.60	0.86	1.10	0.35	0.54	0.46	0.60
REGIONAL TOTALS	1.09	1.36	0.90	1.17	1.19	0.97	1.07
<u>Central Region</u>							
Juab	1.22	1.24	0.87	0.81	0.79	0.55	0.46
Salt Lake	1.15	0.77	0.64	1.01	0.55	0.76	0.54
Sanpete	0.21	0.83	0.63	1.12	0.96	0.72	0.35
Tooele	1.30	1.45	0.77	0.88	0.79	0.67	0.86
Utah	1.05	0.48	0.67	0.85	0.71	0.42	0.90
Wasatch	0.88	0.52	0.23	1.46	0.88	0.18	0.56
REGIONAL TOTALS	1.17	1.04	0.72	0.90	0.74	0.58	0.77
<u>Southern Region</u>							
Beaver	0.50	--	0.00	--	0.00	0.00	0.59
Garfield	2.57	0.00	0.50	0.00	1.00	5.00	0.50
Iron	2.00	1.17	1.74	0.33	0.00	0.00	0.75
Kane	0.00	2.00	0.00	--	0.00	0.00	0.00
Millard	2.10	1.63	1.33	0.96	0.52	0.48	0.87
Piute	0.42	1.15	1.29	0.58	0.29	0.69	0.24
Sevier	0.88	0.34	0.29	0.41	0.54	0.40	0.57
Washington	0.00	0.00	1.50	--	0.00	0.33	0.80
Wayne	0.44	0.80	0.87	0.00	0.73	2.43	2.74
REGIONAL TOTALS	1.29	0.86	0.90	0.62	0.51	0.64	0.79
<u>Northeastern Region</u>							
Daggett	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Duchesne	0.29	0.88	0.59	0.71	0.50	0.34	0.77
Uintah	0.60	0.81	0.69	0.22	0.12	1.32	0.40
REGIONAL TOTALS	0.46	0.82	0.60	0.40	0.30	0.67	0.74
<u>Southeastern Region</u>							
Carbon	0.54	0.26	0.62	0.35	0.61	0.72	0.69
Emery	0.46	0.79	0.04	0.67	0.65	1.44	1.37
Grand	1.72	0.63	0.42	0.79	2.84	1.85	1.42
San Juan	5.00	0.11	0.25	1.46	1.33	0.50	0.43
REGIONAL TOTALS	0.94	0.44	0.40	0.64	1.22	1.31	1.05
Unknown counties	2.00	1.49	0.43	0.35	0.60	0.59	1.18
Mixed counties	0.00	--	0.00	--	3.00	0.00	0.00
STATE TOTALS	1.12	1.10	0.79	0.95	0.91	0.81	0.93

Table 7. Percentage distribution of chukar harvest by region and county, 1970-76.

Region and County	1970	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>							
Box Elder	16.49	25.52	30.59	27.24	40.28	30.32	32.64
Cache	12.09	4.69	6.44	5.44	5.70	3.56	5.04
Davis	2.35	1.78	1.96	3.00	1.57	0.39	2.31
Morgan	3.41	4.76	3.13	7.17	2.00	3.71	0.79
Rich	0.59	0.21	0.37	0.16	0.34	0.08	0.60
Summit	0.29	0.49	4.23	1.69	0.55	2.31	0.46
Weber	1.39	3.36	5.33	1.02	2.08	2.03	1.16
REGIONAL TOTALS	36.61	40.80	52.05	45.72	52.53	42.40	43.00
<u>Central Region</u>							
Juab	2.64	3.57	3.19	3.23	2.85	2.23	1.85
Salt Lake	6.41	3.46	5.52	6.23	3.66	3.79	2.36
Sanpete	0.15	1.01	0.74	1.14	2.21	2.62	0.69
Tooele	21.80	30.42	17.17	15.33	14.16	13.09	12.71
Utah	11.69	5.59	6.87	16.24	11.23	6.57	13.96
Wasatch	0.77	1.15	0.18	2.64	0.64	0.23	0.42
REGIONAL TOTALS	43.46	45.21	33.66	44.82	34.75	28.53	31.99
<u>Southern Region</u>							
Beaver	0.04	--	0.00	--	0.00	0.00	0.46
Garfield	0.66	0.00	0.06	0.00	0.30	0.39	0.23
Iron	0.37	0.24	2.02	0.08	0.00	0.00	0.14
Kane	0.00	0.07	0.00	--	0.00	0.00	0.00
Millard	5.31	4.44	3.43	2.84	1.53	1.25	2.54
Piute	0.18	0.80	0.55	0.59	0.43	0.70	0.37
Sevier	3.22	1.40	0.98	1.69	1.62	2.34	1.57
Washington	0.00	0.00	0.18	--	0.00	0.04	0.18
Wayne	0.26	0.14	1.23	0.00	0.34	2.19	2.40
REGIONAL TOTALS	10.04	7.10	8.46	5.20	4.21	6.92	7.91
<u>Northeastern Region</u>							
Daggett	0.00	0.00	0.00	0.00	0.00	0.00	0.18
Duchesne	0.37	0.98	1.41	0.39	0.68	0.59	0.79
Uintah	1.06	1.33	1.47	0.16	0.17	1.29	0.18
REGIONAL TOTALS	1.43	2.31	2.88	0.55	0.85	1.88	1.16
<u>Southeastern Region</u>							
Carbon	1.61	0.38	1.59	0.79	1.40	3.17	2.22
Emery	0.44	0.52	0.06	0.39	0.85	7.93	1.90
Grand	2.97	0.84	0.67	1.02	3.74	7.89	5.50
San Juan	0.37	0.07	0.06	0.75	0.34	0.27	0.46
REGIONAL TOTALS	5.39	1.82	2.39	2.96	6.34	19.27	10.08
Unknown counties	3.08	2.76	0.55	0.75	1.19	1.02	5.87
Mixed counties	0.00	--	0.00	--	0.13	0.00	0.00
STATE TOTALS	100	100	100	100	100	100	100

Table 8. Percentage distribution of chukar hunting pressure by region and county, 1970-76.

Region and County	1970	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>							
Box Elder	18.48	16.95	27.51	18.38	25.08	20.53	23.07
Cache	10.62	5.71	6.82	7.56	5.68	4.55	6.65
Davis	2.84	2.01	1.75	2.55	0.89	1.02	2.40
Morgan	2.18	3.13	2.92	4.16	3.77	4.39	2.36
Rich	0.37	0.23	0.44	0.19	0.23	0.32	0.69
Summit	0.70	0.81	2.63	1.61	1.17	1.27	0.30
Weber	2.59	4.29	3.85	2.77	3.54	3.56	1.80
REGIONAL TOTALS	37.78	33.13	45.91	37.21	40.36	35.63	37.26
<u>Central Region</u>							
Juab	2.43	3.17	2.92	3.78	3.30	3.31	3.73
Salt Lake	6.26	4.94	6.82	5.84	6.03	4.07	4.03
Sanpete	0.78	1.35	0.93	0.97	2.10	2.96	1.84
Tooele	18.81	23.24	17.67	16.51	16.41	15.80	13.77
Utah	12.55	12.99	8.08	18.23	14.42	12.71	14.45
Wasatch	0.99	2.43	0.63	1.72	0.66	1.05	0.69
REGIONAL TOTALS	41.81	48.11	37.05	47.06	42.92	39.89	38.51
<u>Southern Region</u>							
Beaver	0.08	--	0.10	--	0.00	0.00	0.73
Garfield	0.29	0.12	0.10	0.04	0.27	0.06	0.43
Iron	0.21	0.23	0.93	0.22	0.00	0.25	0.17
Kane	0.00	0.04	0.00	--	0.00	0.00	0.21
Millard	2.84	3.01	2.04	2.81	2.68	2.10	2.70
Piute	0.49	0.77	0.34	0.97	1.36	0.83	1.42
Sevier	4.12	4.48	2.73	3.89	2.76	4.74	2.57
Washington	0.08	0.23	0.10	--	0.00	0.10	0.21
Wayne	0.66	0.19	1.12	0.04	0.43	0.73	0.81
REGIONAL TOTALS	8.77	9.07	7.45	7.97	7.50	8.80	9.26
<u>Northeastern Region</u>							
Daggett	0.12	0.04	0.19	0.11	0.08	0.10	0.09
Duchesne	1.40	1.24	1.90	0.52	1.24	1.40	0.94
Uintah	1.98	1.81	1.70	0.67	1.28	0.79	0.43
REGIONAL TOTALS	3.50	3.09	3.80	1.31	2.60	2.29	1.46
<u>Southeastern Region</u>							
Carbon	3.33	1.62	2.04	2.13	2.10	3.59	3.00
Emery	1.07	0.73	1.22	0.56	1.21	4.48	1.29
Grand	1.93	1.47	1.27	1.24	1.21	3.46	3.60
San Juan	0.08	0.73	0.19	0.49	0.23	0.45	0.99
REGIONAL TOTALS	6.42	4.56	4.72	4.42	4.74	11.98	8.88
Unknown counties	1.73	2.05	1.02	2.02	1.83	1.40	4.63
Mixed counties	0.00	--	0.05	--	0.04	0.00	0.00
STATE TOTALS	100	100	100	100	100	100	100

Table 9. State-wide summary of chukar partridge harvest statistics, 1956-76.

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
1975	16,156	41,151	51,083	0.81	2.57
1976	14,171	43,726	47,143	0.93	3.09
TOTALS (1958-76)	299,400	821,657	866,366	0.95	2.74
AVERAGES (1958-75)	15,846	43,218	45,512	0.91	2.46

Table 10. Chukar field bag check summary, 1976.

Region & 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
<u>Northern Region</u>									
Box Elder	68	156	592	158	27	144	569	158	1.10
Cache	16	36	109	20	18	36	109	20	0.56
Davis	--	--	--	--	--	--	--	--	--
Morgan	--	--	--	--	--	--	--	--	--
Rich	1	2	4	1	25	2	4	1	0.50
Summit	--	--	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	85	194	705	179	25	182	682	179	0.98
<u>Central Region</u>									
Juab	10	22	144	16	11	16	140	16	1.00
Salt Lake	--	--	--	--	--	--	--	--	--
Sanpete	--	--	--	--	--	--	--	--	--
Tooele	21	51	198	41	21	18	120	25	1.39
Utah	2	4	18	2	11	4	18	2	0.50
Wasatch	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	33	77	360	59	16	38	278	43	1.13
<u>Southern Region</u>									
Beaver	--	--	--	--	--	--	--	--	--
Garfield	4	4	3	7	233	4	3	7	1.75
Iron	--	--	--	--	--	--	--	--	--
Kane	--	--	--	--	--	--	--	--	--
Millard	20	51	188	69	37	11	54	17	1.54
Piute	--	--	--	--	--	--	--	--	--
Sevier	--	--	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--	--	--
Wayne	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	24	55	191	76	40	15	57	24	1.60
<u>Northeastern Region</u>									
Daggett	--	--	--	--	--	--	--	--	--
Duchesne	--	--	--	--	--	--	--	--	--
Uintah	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	0	0	0	0	0	0	0	0	0
<u>Southeastern Region</u>									
Carbon	--	--	--	--	--	--	--	--	--
Emery	2	5	22	2	9	2	10	2	1.00
Grand	26	70	207	42	20	12	54	25	2.08
San Juan	4	6	18	10	56	5	15	10	2.00
REGIONAL TOTALS	32	81	247	54	22	19	79	37	1.95
STATE TOTALS	174	407	1,503	368	24	254	1,096	283	1.11

NO DATA COLLECTED

Table 11. Chukar hunter success trend as determined via field bag checks, 1971-76.

Region & County	1971		1972		1973		1974		1975		1976	
	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter
<u>Northern Region</u>												
Box Elder	17	0.89	24	1.35	20	0.98	29	2.12	17	1.05	27	1.10
Cache	29	1.03	18	0.72	19	0.91	16	0.79	53	1.00	18	0.56
Davis	--	--	--	--	--	--	--	--	--	--	--	--
Morgan	36	1.00	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--	25	0.50
Summit	--	--	--	--	17	1.00	--	--	--	--	--	--
Weber	--	--	0	0	--	--	--	--	--	--	--	--
REGIONAL TOTALS	18	0.90	23	1.21	20	0.96	28	1.94	18	1.04	25	0.98
<u>Central Region</u>												
Juab	24	1.72	11	0.78	8	0.50	3	0.16	4	0.33	11	1.00
Salt Lake	30	1.00	17	--	11	0.33	0	0.00	--	--	--	--
Sanpete	10	0.33	--	--	--	--	--	--	--	--	--	--
Tooele	14	1.18	6	0.60	12	0.79	21	0.68	21	0.84	21	1.39
Utah	--	--	19	0.43	0	0.00	--	--	7	0.29*	11	0.50
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	16	1.28	8	0.69	9	0.62	17	0.55	17	0.78	16	1.13
<u>Southern Region</u>												
Beaver	--	--	--	--	--	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	--	--	--	--	233	1.75
Iron	--	--	--	--	--	--	--	--	--	--	--	--
Kane	--	--	--	--	--	--	--	--	--	--	--	--
Millard	33	2.93	--	--	--	--	--	--	22	0.72	37	1.54
Piute	--	--	--	--	--	--	--	--	100	0.50	--	--
Sevier	--	--	--	--	--	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--	--	--	--	--	--
Wayne	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	33	2.93	--	--	--	--	--	--	22	0.70	40	1.60
<u>Northeastern Region</u>												
Daggett	49	0.41	--	--	--	--	--	--	--	--	--	--
Duchesne	29	0.83	--	--	--	--	0	0.00	--	--	--	--
Uintah	60	0.55	17	0.50	--	--	--	--	--	--	--	--
REGIONAL TOTALS	52	0.45	17	0.50	--	--	0	0.00	--	--	--	--
<u>Southeastern Region</u>												
Carbon	11	0.25	18	0.55	--	--	--	--	--	--	--	--
Emery	0	0.00	41	1.50	18	0.67	200	1.33	47	1.75	9	1.00
Grand	16	0.60	--	--	67	1.71	112	4.00	53	2.73	20	2.08
San Juan	--	--	--	--	--	--	0	0.00	34	1.14	56	2.00
REGIONAL TOTALS	11	0.40	31	1.04	48	1.40	104	2.40	48	1.68	22	1.95
STATE TOTALS	19	1.05	15	0.97	17	0.91	27	1.60	24	0.95	24	1.11

*Chukars per hunter index based on all hunts.

SAGE GROUSE

SUMMARY

Harvest data for 1975 and strutting ground surveys during the spring of 1976 both indicated an increased breeding population level for 1976.

Brood surveys showed increased production in all but the Southern Region in comparison to 1975. On a statewide basis production was substantially greater than 1975 and above average. The indicated density (grouse observed per 100 hours) was more than double that of 1975 and well above average on a statewide basis. A substantially increased fall population was evident from inventory data.

Harvest statistics confirmed the apparent increase in the sage grouse population. Both field bag checks and the harvest questionnaire reflected a marked increase in hunter success. A record number of hunters, hunter-days afield and harvest was recorded.

The average length of a hunter-day was comparable to both 1975 and the average. Somewhat less time was spent per bird bagged. Wing surveys indicated that males comprised 45 percent and females 55 percent of the harvest; a slightly larger than average proportion of males. The young per 100 adults index was higher than both 1975 and the average substantiating increased production shown by brood surveys.



Strutting Ground Counts

The status of the sage grouse breeding population for 1976 as indicated by strutting ground counts is shown in Table 1 of this section. Results of this survey for 1976 compared to 1975 and the 1967-75 average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Number of grounds counted	131	+10	+41
Total grouse counted	2,460	+7	+24
Average male grouse per ground	18.8	-3	-14
Percent change from previous year (comparable grounds)	+2	--	--

Results of strutting ground counts indicate comparable or increased abundance of breeding populations in all but the Southern Region. The statewide index for comparable grounds was only slightly higher than 1975. Harvest data for 1975 showed essentially the same trend in the breeding population, both regionally and statewide, as was shown by strutting ground data.

Brood Counts

Results of this survey for 1976 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 1976 compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total sage grouse counted	4,166	+120	+43
Young per 100 adults	171	+42	+15
Mean brood size	4.89	+18	+9
Sage grouse observed per 100 hours	428	+118	+27
Total hours effort	973	+1	+13

The effort devoted to sage grouse brood counts was comparable to 1975 and above average on a statewide basis. Total grouse counted was more than double 1975 and well above average.

Increased production was indicated for all but the Southern Region but even there it was above average. Statewide production was above both 1975 and the average.

A combination of an increased breeding population level and increased production resulted in more than a 100 percent increase in sage grouse observed per 100 hours. Dry range conditions and resulting concentrations of grouse in wet areas contributed to the large number of birds observed per unit of effort. An upward trend in the sage grouse population was indicated by production data.

Harvest

Hunter Questionnaire

Results of the 1976 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 1976 hunting season compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Sage grouse hunters	15,283	+9	+60
Sage grouse harvested	24,541	+30	+91
Hunter-days afield	28,342	+10	+82
Sage grouse per hunter-day	0.87	+18	0
Sage grouse per hunter	1.61	+19	+20

The apparent upward trend in the sage grouse population shown by summer inventory data was prominently reflected in harvest statistics as record numbers of hunters, hunter-days and total harvest were recorded. Increased hunter success was evident in every region.

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

Field Bag Checks

A summary of field bag check data for 1976 is shown in Table 11. Hunter success trends determined via this method are shown in Table 12. Results of the 1976 survey compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total hunters checked	2,505	+11	+25
Total hours hunted	9,347	+14	+17
Sage grouse per hunter (complete hunts)	0.90	+34	+14
Sage grouse bagged per 100 hours	22	+29	+16
Average hours per hunter-day (complete hunts)	4.0	-2	+3
Hours hunted per grouse bagged	4.4	-28	-20

The increased hunting pressure and harvest shown by questionnaire data were reflected in field bag check data. Total hunters checked and hunter success both increased over 1975 and were above average.

The average length of a hunter-day was only slightly less than in 1975 and slightly above average while the time spent per bird bagged was considerably less than both 1975 and the average.

Sex and Age Composition of the Harvest

A summary of the sex and age composition of harvested sage grouse in 1976 is found in Table 13 and the trend from 1973-76 in Table 14.

Following is a comparison of data derived from wing surveys in 1976 to 1975 and the 1973-76 averages:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Sample size	1,513	+30	+39
Percent males	45	+18	+7
Percent females	55	-11	-5
Young per 100 adults	196	+26	+18
Young per 100 hens (adult)	305	+41	+22

During the 1976 sage grouse hunting season males comprised a slightly larger percentage of the harvest than in 1975 and females a slightly lower proportion. Indicated production was somewhat greater than both 1975 and the average. This agrees well with the increased production shown by brood surveys.

Sage grouse bagged per hunter and per hunter-day.

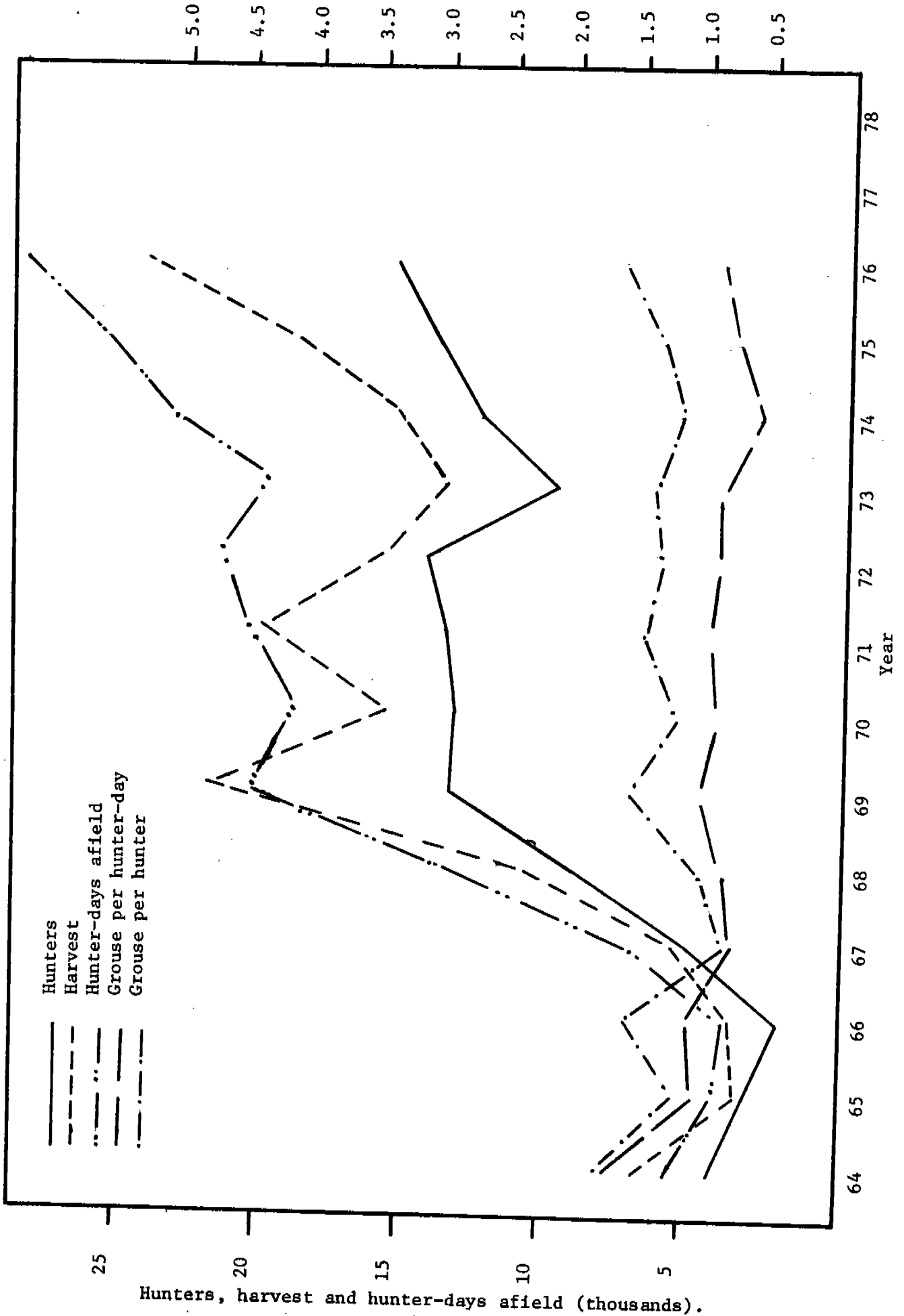


Figure 1. Statewide trend of sage grouse harvest statistics.

Table 1. Summary of sage grouse strutting ground counts by region and county, 1966-76.

Region and County	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>											
BOX ELDER											
No. strutting grounds counted	8	12	15	22	21	21	20	21	25	19	15
Total grouse counted	118	152	253	667	556	479	422	325	306	346	239
County average (All strutting grounds)	14.8	12.7	16.9	30.3	26.5	22.8	21.1	15.5	12.2	18.2	15.9
% Change from previous year - comparable grounds	-11.1	-33.3	+23.1	+94.1	-8.4	-14.0	-10.4	-30.0	-18.5	+29.1	0.0
CACHE											
No. strutting grounds counted	1	1	3	2	2	3	3	2	3	3	3
Total grouse counted	24	45	30	45	59	68	57	50	44	100	35
County average (All strutting grounds)	24.0	45.0	10.0	22.5	29.5	22.7	19.0	25.0	14.7	33.1	11.7
% Change from previous year - comparable grounds	+87.5	-77.8	+57.0	+31.1	+6.8	-16.3	+6.0	-14.0	+132.6	-68.0	
MORGAN											
No. strutting grounds counted				2	2	2	3	3	3	3	3
Total grouse counted				85	45	35	53	61	63	41	52
County average (All strutting grounds)				42.5	22.5	17.5	17.7	20.3	21.0	13.7	17.3
% Change from previous year - comparable grounds				--	-47.0	-22.2	+29.0	+15.0	+3.4	-34.7	+27.0
RICH											
No. strutting grounds counted	5	5	10	6	8	7	9	12	14	10	8
Total grouse counted	111	134	280	298	324	240	254	299	389	268	326
County average (All strutting grounds)	22.2	26.8	28.0	49.7	40.5	34.3	28.2	24.9	27.8	26.8	40.8
% Change from previous year - comparable grounds	+24.7	+7.2	-1.5	+84.1	-20.0	-12.0	-18.1	-13.0	+31.1	-32.0	+57.0

Table 1. Continued

Region and County	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
SUMMIT											
No. strutting grounds counted	4	4	4	5	5	5	5	5	5	4	6
Total grouse counted	33	58	71	168	185	223	152	138	113	88	107
County average											
(All strutting grounds)	8.2	14.5	17.8	33.6	37.0	44.6	30.4	27.6	22.6	22.0	17.8
% Change from previous year - comparable grounds	0.0	+24.5	+22.8	+60.1	+10.1	+20.5	-31.8	-18.0	-18.1	-30.0	-10.0
REGIONAL TOTALS											
No. strutting grounds counted	18	22	32	37	37	38	40	43	50	39	35
Total grouse counted	286	389	634	1263	1147	1045	938	873	915	843	759
Regional average											
(All strutting grounds)	15.9	17.7	19.8	34.1	31.0	27.5	23.4	20.3	18.3	21.6	22.7
% Change from previous year - comparable grounds	+6.7	+1.1	+7.9	+84.7	-9.0	-15.9	-15.8	-20.0	-1.0	-1.4	+8.0
Southern Region											
GARFIELD											
No. strutting grounds counted	--	6	6	10	13	14	14	14	14	14	14
Total grouse counted		117	96	213	322	351	330	166	327	233	201
County average											
(All strutting grounds)		19.5	16.0	21.3	24.8	25.1	23.5	11.9	23.4	16.6	14.3
% Change from previous year - comparable grounds	--	-17.9	+59.4	+31.0	-0.3	-6.8	-50.0	+114.3	-34.9	-13.8	
WAYNE											
No. strutting grounds counted	9	7	8	11	11	11	12	10	11	11	13
Total grouse counted	302	331	497	458	248	248	311	231	237	160	260
County average											
(All strutting grounds)	33.6	47.3	62.1	41.6	22.5	22.5	26.0	23.1	21.5	14.5	20.0
% Change from previous year - comparable grounds	--	+3.0	+46.6	-14.6	-45.9	+18.2	-20.6	+2.6	+2.6	-32.6	+2.9

Table 1. Continued

Region and County	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
BEAVER											
No. strutting grounds counted			2	2	2	5	5	5	5	6	8
Total grouse counted			0	79	47	141	153	82	110	122	108
County average (All strutting grounds)			0.0	39.5	23.5	28.2	30.6	16.4	22.0	20.3	13.5
% Change from previous year - comparable grounds			--	--	-40.5	-49.4	+8.5	-46.6	+34.2	+1.4	-31.8
PIUTE											
No. strutting grounds counted		1	0	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	0.0	-28.5	--	--	--	--
IRON											
No. strutting grounds counted			5	3	4	6	7	0	9	9	9
Total grouse counted			3	23	64	47	66	0	86	51	26
County average (All strutting grounds)			0.6	7.7	16.0	7.8	9.3	--	9.6	5.6	2.8
% Change from previous year - comparable grounds			--	--	-8.7	-50.0	+42.3	--	--	-41.1	-50.0
SEVIER											
No. strutting grounds counted		1	1	0	1	1	1	1	1	--	2
Total grouse counted		11	0	--	0	0	0	0	9	--	2
County average (All strutting grounds)		11.0	0.0	--	0.0	0.0	0.0	--	9.0	--	1.0
% Change from previous year - comparable grounds		--	100	--	--	--	--	--	--	--	--

Table 1. Continued

Region and County	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
REGIONAL TOTALS											
No. strutting grounds counted		17	21	24	33	38	40	31	40	40	47
Total grouse counted		432	430	818	928	794	865	479	769	566	608
Regional average		25.4	20.5	34.1	28.1	20.9	21.6	15.4	19.2	14.3	12.9
(All strutting grounds)											
% Change from previous year - comparable grounds	--	-3.5	+75.4	-4.8	-30.3	+6.7	-40.0	+49.1	-30.0	-12.6	
Central Region											
SANPETE											
No. strutting grounds counted						2	1	2	2	2	2
Total grouse counted						13	2	0	0	5	10
County average						6.5	2.0	--	--	2.5	5.0
(All strutting grounds)											
% Change from previous year - comparable grounds	--					--	-75.0	--	--	--	+100.0
TOOELE											
No. strutting grounds counted			2	3	3	4	5	5	5	5	5
Total grouse counted			44	96	74	92	128	60	95	59	80
County average			22.0	32.0	24.7	23.0	25.6	12.0	19.0	11.8	16.0
(All strutting grounds)											
% Change from previous year - comparable grounds	--		+59.1	-22.9	-16.2	0.0	-34.8	+43.3	-29.6	+15.0	
WASATCH											
No. strutting grounds counted				2	2	2	2	2	2	2	2
Total grouse counted				100	70	102	102	52	99	201	216
County average				50.0	35.0	51.0	51.0	26.0	49.5	100.5	108.0
(All strutting grounds)											
% Change from previous year - comparable grounds	--			-30.0	+45.7	-49.0	+90.4	+103.0	+7.0		

Table 1. Continued

Region and County	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
REGIONAL TOTALS											
No. strutting grounds counted					5	8	8	9	9	9	9
Total grouse counted					174	175	232	112	194	265	306
Regional average (All strutting grounds)					34.8	21.9	29.0	12.4	21.6	29.4	34.0
% Change from previous year - Comparable grounds					-22.9	-24.1	+15.2	-42.1	+64.7	+45.2	+12.0
Northeastern Region											
DAGGETT											
No. strutting grounds counted					1	4	4	5	4	3	3
Total grouse counted					26	37	26	41	53	30	40
County average (All strutting grounds)					26.0	9.2	6.5	8.2	13.2	10.0	13.3
% Change from previous year - comparable grounds					--	-38.5	-28.0	+31.0	-5.4	-18.7	+2.5
DUCHESNE											
No. strutting grounds counted					2	3	5	5	11	11	15
Total grouse counted					27	27	74	43	172	172	245
County average (All strutting grounds)					13.5	9.0	14.8	8.6	15.6	15.6	16.3
% Change from previous year - comparable grounds					--	-25.9	0.0	-40.5	+44.4	-4.7	-13.7
UINTAH											
No. strutting grounds counted		2	0	2	4	5	6	11	11	9	10
Total grouse counted		134	--	98	105	63	118	156	163	240	257
County average (All strutting grounds)		67.0	--	49.0	26.2	12.6	19.7	14.2	14.8	26.7	25.7
% Change from previous year - comparable grounds		--	--	--	-31.6	-42.0	+77.0	-25.0	+7.9	+28.7	+0.4

Table 1. Continued

Region and County	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
REGIONAL TOTALS											
No. strutting grounds counted	2	0	2	7	12	15	21	26	23	28	
Total grouse counted	134	--	98	158	127	218	240	388	442	542	
Regional averages											
(All strutting grounds)	67.0	--	49.0	22.6	10.6	14.5	11.4	14.9	19.2	19.4	
% Change from previous year - comparable grounds	--	--	--	-31.6	-38.6	+32.2	-24.5	+12.5	+11.8	-2.9	
Southeastern Region											
CARBON											
No. strutting grounds counted	1	7	1	3	1	8	2	5			
Total grouse counted	1	45	39	58	40	77	65	134			
County average											
(All strutting grounds)	1.0	6.4	39.0	19.3	40.0	--	9.6	32.5	26.8		
% Change from previous year - comparable grounds	--	+100	--	0	+2.0	--	--	+47.7	+83.0		
EMERY											
No. strutting grounds counted	1	2	3	3	3	3	0	3	--	1	
Total grouse counted	5	17	8	3	11	2	0	2	--	13	
County average											
(All strutting grounds)	5.0	8.5	2.7	1.0	3.7	--	0.6	--	13.0		
% Change from previous year - comparable grounds	--	+60	-82	-62.5	+270.0	--	--	--	--	--	
SAN JUAN											
No strutting grounds counted	2	3	6	6	6	6	4	6	6	6	
Total grouse counted	8	42	115	152	168	105	137	115	98		
County average											
(All strutting grounds)	4.0	14.0	19.2	25.3	28.0	26.2	22.8	19.1	16.3		
% Change from previous year - comparable grounds	--	+312	+38.1	+31.8	+10.7	+41.6	-19.2	-9.0	-14.0		

Table 1. Continued

Region and County	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
REGIONAL TOTALS											
No. strutting grounds counted			4	12	10	12	10	4	17	8	12
Total grouse counted			14	104	121	213	219	105	216	180	245
Regional average (All strutting grounds)			3.5	8.7	12.1	17.8	21.9	26.2	12.8	22.5	20.4
% Change from previous year - comparable grounds			--	+193.8	+3.4	+19.8	+12.9	+41.6	-19.2	+20.7	+20.4
STATE TOTALS											
No. strutting grounds counted	18	22	59	78	92	108	113	108	142	119	131
Total grouse counted	286	389	1112	2379	2528	2354	2472	1809	2482	2296	2460
State average grouse per strutting grounds	15.9	17.7	19.0	30.5	27.5	21.8	21.9	16.8	17.5	19.3	18.8
% Change from previous year - comparable grounds	+6.7	+1.1	+0.9	+81.3	-8.4	-17.0	-0.7	-26.4	+17.0	-3.9	+1.7

Table 2. Sage grouse summer inventory summary, 1976.

Region and County	Distinct Broods		Mean		Mixed Yng. & Adults		Adults Total		Total Young/		Vehicle		Hours Effort		Birds/ 100 hrs.	
	No. Ad. Yng.		Brood Ad.		Yng.		w/o Yng.		Yng. 100 Ad.		Miles		Horse Walk			
	No. Ad.	Yng.	Brood Ad.	Yng.	Yng.	Adults	Yng.	100 Ad.	Miles	Veh.	Horse	Walk	Total			
<u>Northern Region</u>																
Box Elder	54	54	302	5.59	22	113	90	166	415	250	985	83	40	4	127	457
Cache	4	4	25	6.25	2	9	1	7	34	486	100	8	0	2	10	410
Davis	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Morgan	12	12	51	4.25	12	3	52	76	54	71	20	3	23	4	30	433
Rich	24	24	145	6.04	32	26	106	162	171	106	460	18	0	28	46	724
Summit	15	15	75	5.00	2	9	17	34	84	247	197	19	17	8	44	268
Weber	1	1	2	2.00	0	0	0	1	2	200	203	24	0	0	24	12
REGIONAL TOTALS	110	110	600	5.45	70	160	266	446	760	170	1965	155	80	46	281	429
<u>Central Region</u>																
Juab	0	0	0	--	0	0	0	0	0	--	0	0	4	0	4	0
Salt Lake	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sanpete	12	12	68	5.67	5	19	4	21	87	414	47	2	36	3	41	263
Tooele	30	30	152	5.07	27	91	28	85	243	286	279	14	10	18	42	781
Utah	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Wasatch	40	40	188	4.70	27	66	139	206	254	123	100	10	23	1	34	1353
REGIONAL TOTALS	82	82	408	4.98	59	176	171	312	584	187	426	26	73	22	121	740
<u>Southern Region</u>																
Beaver	19	19	94	4.95	22	42	34	75	136	181	72	10	25	3	38	555
Garfield	20	20	70	3.50	44	78	21	85	148	174	85	9	92	2	103	226
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Kane	0	0	0	--	0	0	7	7	0	0	41	3	0	0	3	233
Millard	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Piute	0	0	0	--	0	0	4	4	0	0	6	1	0	3	4	100
Sevier	3	3	16	5.33	0	0	0	3	16	533	27	2	0	0	2	950
Washington	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Wayne	20	20	79	3.95	10	41	12	42	120	286	148	24	0	9	33	491
REGIONAL TOTALS	62	62	259	4.18	76	161	78	216	420	194	379	49	117	17	183	348
<u>Northeastern Region</u>																
Daggett	22	22	100	4.55	16	29	30	68	129	190	515	38	7	11	56	352
Duchesne	44	44	181	4.11	16	20	65	125	201	161	676	54	27	13	94	347
Uintah	56	56	292	5.21	22	101	80	158	393	249	690	66	6	5	77	716
REGIONAL TOTALS	122	122	573	4.70	54	150	175	351	723	206	1881	158	40	29	227	473
<u>Southeastern Region</u>																
Carbon	19	19	96	5.05	6	11	25	50	107	214	734	67	36	4	107	147
Emery	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Grand	3	3	9	3.00	0	0	33	36	9	25	40	4	0	0	4	1125
San Juan	0	0	0	--	21	27	104	125	27	22	448	31	0	19	50	304
REGIONAL TOTALS	22	22	105	4.77	27	38	162	211	143	68	1222	102	36	23	161	220
STATE TOTALS	398	398	1945	4.89	286	685	852	1536	2630	171	5873	490	346	137	973	428

Table 3. Trend of sage grouse young per 100 adults, 1966-76.

Region & County	Year											Average 1963-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	93	176	162	153	62	75	83	225	119	106	250	
Cache	300	680	600	71	10	168	171	80	161	329	486	
Davis	--	--	--	--	--	--	--	--	--	--	--	
Morgan	50	160	--	533	400	58	600	245	131	64	71	
Rich	100	85	92	98	133	137	55	132	153	94	106	
Summit	140	89	133	121	211	158	173	146	275	52	247	
Weber	--	650	--	208	--	325	144	500	--	--	200	
REGIONAL TOTALS	129	159	132	128	94	135	99	167	131	102	170	130
<u>Central Region</u>												
Juab	400	125	600	300	117	--	1800	500	--	--	--	
Salt Lake	--	--	--	--	--	--	--	--	--	--	--	
Sanpete	427	119	0	191	84	288	177	138	89	280	414	
Tooele	617	200	416	395	215	188	322	318	314	168	286	
Utah	--	--	--	--	--	--	--	--	--	--	--	
Wasatch	200	101	90	89	205	212	145	68	101	118	123	
REGIONAL TOTALS	313	104	103	137	170	208	216	106	141	138	187	163
<u>Southern Region</u>												
Beaver	--	173	--	169	--	250	467	329	219	205	181	
Garfield	141	132	263	238	107	93	93	121	143	277	174	
Iron	--	400	--	550	214	183	37	350	46	--	--	
Kane	--	--	--	470	300	--	336	450	--	--	0	
Millard	--	--	--	--	--	--	--	--	--	--	--	
Piute	--	--	--	--	--	--	--	--	317	67	0	
Sevier	322	98	82	107	--	--	--	500	400	0	533	
Washington	--	--	--	--	--	--	--	--	--	--	--	
Wayne	124	140	371	178	347	63	62	394	166	545	286	
REGIONAL TOTALS	161	135	257	201	186	85	76	311	157	287	194	174
<u>Northeastern Region</u>												
Daggett	216	145	560	493	344	168	273	150	266	51	190	
Duchesne	700	140	209	156	77	230	219	--	161	120	161	
Uintah	612	237	596	450	419	339	105	312	446	107	249	
REGIONAL TOTALS	304	176	446	383	305	278	134	234	321	97	206	268
<u>Southeastern Region</u>												
Carbon	533	433	512	250	167	145	125	328	185	116	214	
Emery	800	--	300	164	100	--	--	--	0	--	--	
Grand	--	--	--	--	--	275	--	0	--	400	25	
San Juan	--	61	214	37	28	70	26	375	82	47	22	
REGIONAL TOTALS	600	94	369	64	30	81	56	340	100	63	68	184
STATE TOTALS	179	141	178	160	117	138	100	195	160	120	171	149

Table 4. Trend of sage grouse mean brood size, 1966-1976.

Region & County	Year											Average 1963-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	3.82	4.04	3.80	5.16	4.13	4.25	3.93	4.69	4.07	3.81	5.59	
Cache	6.50	6.80	6.00	4.60	5.00	4.50	4.88	4.00	4.62	5.00	6.25	
Davis	--	--	--	--	--	--	--	--	--	--	--	
Morgan	5.00	4.00	--	5.33	4.00	5.50	6.00	4.40	4.75	3.80	4.25	
Rich	4.37	5.00	4.07	5.42	4.68	4.44	4.69	4.48	3.91	4.00	6.04	
Summit	5.25	4.47	3.94	5.91	5.00	5.58	4.73	4.56	5.00	3.75	5.00	
Weber	--	6.50	--	3.38	--	4.33	6.50	5.00	--	--	2.00	
REGIONAL TOTALS	4.90	4.43	3.94	5.18	4.55	4.98	4.58	4.55	4.17	4.03	5.45	4.46
<u>Central Region</u>												
Juab	4.00	--	6.00	2.00	3.50	--	7.50	5.00	--	--	--	
Salt Lake	--	--	--	--	--	--	--	--	--	--	--	
Sanpete	5.88	5.67	--	5.40	4.50	6.00	5.33	4.75	4.00	4.00	5.67	
Tooele	6.17	2.00	5.75	5.62	4.44	4.19	4.81	4.90	5.25	5.50	5.07	
Utah	--	--	--	--	--	--	--	--	--	--	--	
Wasatch	5.60	5.15	4.29	4.64	4.52	2.94	3.06	4.00	4.24	3.86	4.70	
REGIONAL TOTALS	5.76	5.13	4.46	5.03	4.45	3.94	3.90	4.38	4.49	4.22	4.98	4.63
<u>Southern Region</u>												
Beaver	--	4.60	--	5.44	--	5.00	3.83	4.31	3.64	3.90	4.95	
Garfield	5.10	3.50	4.10	3.86	3.67	3.73	3.25	3.50	5.41	4.18	3.50	
Iron	--	4.00	--	--	3.67	4.33	3.71	5.33	6.33	--	--	
Kane	--	--	--	5.00	3.00	--	4.00	4.50	--	--	--	
Millard	--	--	--	--	--	--	--	--	--	--	--	
Plute	--	--	--	--	--	--	--	--	5.67	1.00	--	
Sevier	4.58	5.20	4.62	4.14	--	--	--	5.00	4.00	--	5.33	
Washington	--	--	--	--	--	--	--	--	--	--	--	
Wayne	5.11	3.68	4.91	3.89	3.55	4.02	3.36	5.17	4.70	5.45	3.95	
REGIONAL TOTALS	4.96	3.89	4.42	4.07	3.60	4.10	3.53	4.72	4.54	4.27	4.18	4.28
<u>Northeastern Region</u>												
Daggett	5.33	3.00	6.00	4.93	4.37	4.00	3.80	4.65	4.93	3.25	4.55	
Duchesne	7.00	5.20	4.09	5.00	5.00	5.17	5.40	--	3.82	3.60	4.11	
Uintah	6.12	5.70	6.13	4.91	4.44	5.19	4.60	4.60	5.06	4.69	5.21	
REGIONAL TOTALS	5.72	4.90	5.54	4.92	4.46	5.04	4.60	4.61	4.82	4.24	4.70	4.84
<u>Southeastern Region</u>												
Carbon	5.33	4.00	5.86	2.50	5.00	4.67	4.14	3.50	3.92	2.67	5.05	
Emery	8.00	--	3.00	9.33	1.00	--	--	--	--	--	--	
Grand	--	--	--	--	--	--	--	--	--	4.00	3.00	
San Juan	--	4.00	5.00	4.20	4.29	5.10	3.93	5.67	6.65	3.50	--	
REGIONAL TOTALS	6.00	4.00	5.36	4.92	4.00	5.00	4.05	4.43	5.47	3.17	4.77	4.58
STATE TOTALS	5.19	4.48	4.50	4.82	4.28	4.62	4.16	4.58	4.57	4.15	4.89	4.50

Table 5. Trend of sage grouse observed per 100 hours, 1967-76.

Region & County	Year										Average 1967-75
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>											
Box Elder	471	273	563	365	253	467	166	459	187	457	
Cache	390	100	90	431	229	183	150	250	261	410	
Davis	--	--	--	--	--	--	--	--	--	--	
Morgan	34	--	59	333	176	111	345	514	140	433	
Rich	27	436	678	987	228	348	298	428	452	724	
Summit	131	522	236	161	420	349	119	188	109	268	
Weber	375	--	800	--	155	92	40	--	--	12	
REGIONAL TOTALS	283	358	468	387	288	319	188	398	204	429	319
<u>Central Region</u>											
Juab	180	467	200	217	0	181	30	--	0	0	
Salt Lake	--	--	--	--	--	--	--	--	--	--	
Sanpete	128	80	135	123	107	106	135	85	86	263	
Tooele	25	426	407	194	342	786	161	665	257	781	
Utah	--	--	--	0	--	--	--	--	--	--	
Wasatch	571	735	690	321	377	364	666	529	520	1353	
REGIONAL TOTALS	318	475	427	208	230	341	244	402	329	740	327
<u>Southern Region</u>											
Beaver	--	--	1186	--	420	486	277	460	188	555	
Garfield	--	941	646	409	604	358	258	603	112	226	
Iron	--	--	118	346	426	1133	200	241	--	--	
Kane	--	--	924	80	--	253	550	--	--	233	
Millard	--	--	--	--	--	--	--	--	--	--	
Piute	--	0	--	--	--	--	--	833	62	100	
Sevier	--	283	581	--	--	--	--	500	0	950	
Washington	--	--	--	--	--	--	--	--	--	--	
Wayne	--	691	1363	447	2061	555	742	335	209	491	
REGIONAL TOTALS	244	601	714	388	911	494	393	413	134	348	482
<u>Northeastern Region</u>											
Daggett	715	388	626	414	835	346	308	381	132	352	
Duchesne	400	117	122	100	159	118	0	196	84	347	
Uintah	385	671	487	474	735	594	310	459	386	716	
REGIONAL TOTALS	444	313	361	319	523	349	233	358	217	473	347
<u>Southeastern Region</u>											
Carbon	--	63	26	59	45	309	500	146	49	147	
Emery	--	22	152	33	0	--	--	11	0	--	
Grand	--	--	--	0	133	25	25	--	500	1125	
San Juan	--	157	2875	653	560	775	300	856	321	304	
REGIONAL TOTALS	159	68	179	451	218	432	215	360	128	220	242
STATE TOTALS	296	374	443	346	383	373	237	387	196	428	336

Table 6. Summary of sage grouse hunter success and distribution of harvest and hunting pressure by region and county, 1976

Region and County	Hunters Reporting	Days Hunted	Birds Bagged	Birds per Hunter-day	Birds per Hunter**	% of Pressure	% of Harvest
<u>Northern Region</u>							
Box Elder	58	99	101	1.02	0.96	7.06	8.32
Cache	90	179	140	0.78	1.50	12.77	11.53
Davis	16	53	23	0.43	1.86	3.78	1.89
Morgan	21	38	19	0.50	0.71	2.71	1.57
Rich	84	160	124	0.77	3.14	11.41	10.21
Summit	46	65	52	0.80	0.80	4.64	4.28
Weber	43	68	54	0.79	1.40	4.85	4.45
REGIONAL TOTALS	358	662	513	0.77	1.52	47.22	42.26
<u>Central Region</u>							
Juab	10	19	21	1.11	3.00	1.36	1.73
*Salt Lake	9	18	8	0.44	1.32	1.28	0.66
Sanpete	17	35	48	1.37	1.75	2.50	3.95
Tooele	46	80	43	0.54	2.17	5.71	3.54
Utah	30	68	32	0.47	1.69	4.85	2.64
Wasatch	43	60	48	0.80	1.33	4.28	3.95
REGIONAL TOTALS	155	280	200	0.71	1.56	19.97	16.47
<u>Southern Region</u>							
Beaver	22	47	46	0.98	2.11	3.35	3.79
Garfield	27	51	46	0.90	2.43	3.64	3.79
Iron	4	5	6	1.20	2.00	0.36	0.49
Kane	2	3	0	0.00	1.20	0.21	0.00
Millard	5	9	3	0.33	1.00	0.64	0.25
Piute	4	4	6	1.50	2.60	0.29	0.49
Sevier	18	31	24	0.77	1.53	2.21	1.98
*Washington	2	4	0	0.00	0.63	0.29	0.00
Wayne	34	53	67	1.26	1.54	3.78	5.52
REGIONAL TOTALS	118	207	198	0.96	1.73	14.76	16.31
<u>Northeastern Region</u>							
Daggett	9	16	19	1.19	1.50	1.14	1.57
Duchesne	18	22	23	1.05	2.58	1.57	1.89
Uintah	50	88	120	1.36	2.05	6.28	9.88
REGIONAL TOTALS	77	126	162	1.29	2.15	8.99	13.34
<u>Southeastern Region</u>							
Carbon	25	39	49	1.26	1.94	2.78	4.04
Emery	2	2	1	0.50	1.00	0.14	0.08
Grand	1	1	2	2.00	0.00	0.07	0.16
San Juan	0	0	0	0.00	4.00	0.00	0.00
REGIONAL TOTALS	28	42	52	1.24	1.86	3.00	4.28
Unknown counties	46	78	68	0.87	0.00	5.56	5.60
Mixed counties	1	7	21	3.00	0.00	0.50	1.73
STATE TOTALS	783	1,402	1,214	0.87	1.61	100	100

*Illegal areas

**Based on county of residence

Table 7. Summary of sage grouse bagged per hunter-day by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	1.12	0.73	0.59	0.68	0.85	1.02
Cache	0.65	0.44	0.64	0.52	0.78	0.78
Davis	0.41	0.67	--	0.25	0.60	0.43
Morgan	0.48	0.86	0.67	0.34	0.63	0.50
Rich	0.84	0.64	0.74	0.52	0.47	0.77
Summit	0.68	0.65	0.49	0.63	0.63	0.80
Weber	0.49	0.55	0.42	0.70	0.75	0.79
REGIONAL TOTALS	0.83	0.64	0.62	0.56	0.70	0.77
<u>Central Region</u>						
Juab	*	0.50	0.63	0.73	0.50	1.11
Salt Lake	*	*	*	*	*	*
Sanpete	0.82	0.67	0.85	0.50	*	1.37
Tooele	0.83	0.35	0.55	0.72	0.45	0.54
Utah	0.88	0.91	0.74	0.53	0.56	0.47
Wasatch	0.40	0.35	1.00	0.91	0.91	0.80
REGIONAL TOTALS	0.79	0.58	0.72	0.55	0.66	0.71
<u>Southern Region</u>						
Beaver	0.95	0.94	0.68	0.58	0.37	0.98
Garfield	1.42	1.09	1.12	0.81	1.16	0.90
Iron	0.53	0.67	0.50	1.89	0.57	1.20
Kane	0.50	1.00	1.00	0.67	0.00	0.00
Millard	--	0.00	--	2.50	0.00	0.33
Piute	1.38	0.41	0.82	0.55	0.94	1.50
Sevier	0.77	0.50	0.67	0.92	0.74	0.77
Washington	*	*	*	*	*	*
Wayne	1.15	0.86	0.68	1.00	0.91	1.26
REGIONAL TOTALS	1.11	0.78	0.79	0.92	0.85	0.96
<u>Northeastern Region</u>						
Daggett	1.55	1.12	1.27	1.07	0.68	1.19
Duchesne	1.39	1.23	1.18	0.64	0.94	1.05
Uintah	0.99	0.90	1.28	1.12	0.95	1.36
REGIONAL TOTALS	1.19	1.03	1.24	0.92	0.90	1.29
<u>Southeastern Region</u>						
Carbon	0.77	1.10	0.46	0.76	0.95	1.26
Emery	0.00	1.00	0.50	1.00	0.18	0.50
Grand	1.33	1.00	*	*	--	2.00
San Juan	1.25	2.00	0.64	0.75	0.67	0.00
REGIONAL TOTALS	0.75	1.25	0.53	0.77	0.82	1.24
Unknown counties	1.06	0.28	0.56	0.36	0.43	0.87
Mixed counties	--	--	--	--	--	3.00
Illegal areas	1.00	0.25	0.00	1.50	1.68	0.36
STATE TOTALS	0.93	0.72	0.73	0.65	0.74	0.87

*Closed Season.

Table 8. Percentage distribution of sage grouse harvest by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	20.30	17.00	8.99	6.74	8.58	8.32
Cache	4.17	5.38	9.40	9.99	10.73	11.53
Davis	0.75	0.85	--	0.25	0.77	1.89
Morgan	1.18	3.54	3.95	2.00	2.06	1.57
Rich	6.20	8.92	9.13	6.87	4.03	10.21
Summit	4.49	6.66	4.50	6.37	7.04	4.28
Weber	2.46	3.26	1.50	5.37	6.18	4.45
REGIONAL TOTALS	39.53	45.61	37.47	37.58	39.40	42.26
<u>Central Region</u>						
Juab	*	0.14	0.68	1.00	0.26	1.73
Salt Lake	*	*	*	*	*	*
Sanpete	0.96	1.42	3.13	0.62	*	3.95
Tooele	3.74	1.70	3.95	5.24	1.89	3.54
Utah	2.99	4.39	7.22	5.74	8.93	2.64
Wasatch	1.07	0.85	2.18	3.62	6.09	3.95
REGIONAL TOTALS	10.58	8.64	18.12	17.85	21.46	16.47
<u>Southern Region</u>						
Beaver	1.92	2.12	1.77	1.37	0.60	3.79
Garfield	7.59	6.80	7.77	4.87	6.87	3.79
Iron	0.85	1.70	0.95	2.12	1.12	0.49
Kane	0.21	0.28	0.41	0.25	0.00	0.00
Millard	--	0.00	--	0.62	0.00	0.25
Piute	1.92	0.99	1.23	0.75	1.29	0.49
Sevier	1.82	1.98	2.18	2.75	3.86	1.98
Washington	0.21	*	*	*	*	*
Wayne	11.22	4.39	5.18	6.99	7.47	5.52
REGIONAL TOTALS	25.75	18.27	19.48	19.98	21.37	16.31
<u>Northeastern Region</u>						
Daggett	1.82	2.69	1.91	1.87	1.29	1.57
Duchesne	6.84	8.36	7.90	4.00	2.75	1.89
Uintah	7.05	9.92	9.26	8.36	6.44	9.88
REGIONAL TOTALS	15.71	20.96	19.07	14.23	10.47	13.34
<u>Southeastern Region</u>						
Carbon	2.88	3.12	1.63	3.12	5.32	4.04
Emery	0.00	0.28	0.68	0.37	0.17	0.08
Grand	0.43	0.14	*	*	--	0.16
San Juan	1.07	1.42	1.23	0.75	0.69	0.00
REGIONAL TOTALS	4.38	4.96	3.81	4.24	6.18	4.28
Unknown counties	4.06	1.56	2.04	4.24	1.12	5.60
Mixed counties	--	--	--	1.87	--	1.73
Illegal areas	2.03	0.14	1.22	1.87	4.46	0.66
STATE TOTALS	100	100	100	100	100	100

*Closed Season.

Table 9. Percentage distribution of sage grouse hunting pressure by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	16.90	16.70	11.06	6.38	7.45	7.06
Cache	5.96	8.76	10.66	12.44	10.16	12.77
Davis	1.69	0.92	--	0.65	0.95	3.78
Morgan	2.29	2.95	4.28	3.80	2.40	2.71
Rich	6.86	10.08	9.06	8.48	6.25	11.41
Summit	6.16	7.33	6.67	6.54	8.27	4.64
Weber	4.67	4.28	2.59	4.93	6.06	4.85
REGIONAL TOTALS	44.53	51.02	44.32	43.21	41.54	47.22
<u>Central Region</u>						
Juab	*	0.20	0.80	0.89	0.38	1.36
Salt Lake	*	*	*	*	*	*
Sanpete	1.09	1.53	2.69	0.81	*	2.50
Tooele	4.17	3.46	5.28	4.68	3.09	5.71
Utah	3.18	3.46	7.17	6.95	11.81	4.85
Wasatch	2.49	1.73	1.59	2.58	4.92	4.28
REGIONAL TOTALS	12.52	10.79	18.43	20.84	23.99	19.97
<u>Southern Region</u>						
Beaver	1.89	1.63	1.89	1.53	1.20	3.35
Garfield	4.97	4.48	5.08	3.88	4.36	3.64
Iron	1.49	1.83	1.39	0.73	1.45	0.36
Kane	0.40	0.20	0.30	0.24	0.25	0.21
Millard	--	0.41	--	0.16	0.25	0.64
Piute	1.29	1.73	1.1	0.89	1.01	0.29
Sevier	2.19	2.85	2.39	1.94	3.85	2.21
Washington	0.30	*	*	*	*	*
Wayne	9.05	3.67	5.58	4.52	6.06	3.78
REGIONAL TOTALS	21.57	16.80	17.93	13.97	18.50	14.76
<u>Northeastern Region</u>						
Daggett	1.09	1.73	1.10	1.13	1.39	1.14
Duchesne	4.57	4.89	4.88	4.04	2.15	1.57
Uintah	6.66	7.94	5.28	4.85	4.99	6.28
REGIONAL TOTALS	12.33	14.56	11.25	10.02	8.52	8.99
<u>Southeastern Region</u>						
Carbon	3.48	2.04	2.59	2.67	4.10	2.78
Emery	0.89	0.20	1.00	0.24	0.69	0.14
Grand	0.30	0.10	*	*	0.00	0.07
San Juan	0.80	0.51	1.39	0.65	0.76	0.00
REGIONAL TOTALS	5.47	2.85	5.28	3.55	5.56	3.00
Unknown counties	3.58	3.97	2.69	7.59	1.89	5.56
Mixed counties	--	--	--	0.81	--	0.50
Illegal areas	1.89	0.41	1.40	5.01	3.85	1.57
STATE TOTALS	100	100	100	100	100	100

*Closed Season.

Table 10. Statewide summary of sage grouse harvest statistics, 1951-76.

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
1975	13,996	18,916	25,720	0.74	1.35
1976	15,283	24,541	28,342	0.87	1.61
<hr/>					
TOTALS					
(1963-75)	139,407	191,464	230,851	0.83	1.37
<hr/>					
AVERAGES					
(1963-75)	9,548	12,840	15,578	0.87	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, 1976.

Region & 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
<u>Northern Region</u>									
Box Elder	108	271	1256	245	108	271	1256	245	20 0.90
Cache	136	313	1136	155	138	316	1142	155	14 0.49
Davis	--	--	--	--	--	--	--	--	--
Morgan	9	18	46	13	6	11	21	7	33 0.64
Rich	180	472	2212	296	180	472	2212	296	13 0.63
Summit	--	--	--	--	--	--	--	--	--
Weber	16	41	189	12	16	41	189	12	6 0.29
REGIONAL TOTALS	449	1115	4839	721	448	1111	4820	715	15 0.64
<u>Central Region</u>									
Juab	9	25	22	24	8	20	17	20	118 1.00
Salt Lake	--	--	--	--	--	--	--	--	--
Sanpete	--	--	--	--	--	--	--	--	--
Tooele	66	165	391	109	38	96	207	82	40 0.85
Utah	--	--	--	--	--	--	--	--	--
Wasatch	50	137	228	78	21	63	105	62	59 0.98
REGIONAL TOTALS	125	327	641	211	67	179	329	164	50 0.92
<u>Southern Region</u>									
Beaver	--	--	--	--	--	--	--	--	--
Garfield	42	137	460	80	12	28	137	43	31 1.54
Iron	6	23	36	24	2	9	16	19	119 1.04*
Kane	--	--	--	--	--	--	--	--	--
Millard	--	--	--	--	--	--	--	--	--
Piute	--	--	--	--	--	--	--	--	--
Sevier	5	7	13	4	2	2	8	0	0 0.00*
Washington	--	--	--	--	--	--	--	--	--
Wayne	161	394	2021	486	102	294	1578	405	26 1.38
REGIONAL TOTALS	214	561	2530	594	118	333	1739	467	27 1.40
<u>Northeastern Region</u>									
Daggett	13	29	97	45	4	11	70	29	41 2.64
Duchesne	35	93	434	147	11	39	76	62	82 1.59
Uintah	111	307	693	318	66	163	414	216	52 1.33
REGIONAL TOTALS	159	429	1224	510	81	213	560	307	55 1.44
<u>Southeastern Region</u>									
Carbon	20	71	111	66	17	65	103	65	63 1.00
Emery	1	2	2	0	1	2	2	0	0 0.00
Grand	--	--	--	--	--	--	--	--	--
San Juan	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	21	73	113	66	18	67	105	65	62 0.97
STATE TOTALS	968	2505	9347	2102	732	1903	7553	1718	23 0.90

*Based on all hunts.

Table 12. Sage grouse hunter success trend determined by field bag checks, 1971-76.

Region & County	1971		1972		1973		1974		1975		1976	
	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter
<u>Northern Region</u>												
Box Elder	19	0.99	15	0.88	19	0.75	12	0.57	24	0.74	20	0.90
Cache	7	0.29	7	0.31	13	0.52	9	0.42	10	0.38	14	0.49
Davis	--	--	--	--	--	--	--	--	--	--	--	--
Morgan	10	0.21	6	0.29	41	0.92	--	--	27	0.36	28	0.64
Rich	14	0.55	11	0.50	9	0.36	12	0.58	10	0.45	13	0.63
Summit	26	1.00	6	0.29	8	--	27	0.41*	15	0.61	--	--
Weber	9	0.38	7	0.32	3	0.15	5	0.18	6	0.45	6	0.29
REGIONAL TOTALS	16	0.73	13	0.68	13	0.55	11	0.51	12	0.51	15	0.64
<u>Central Region</u>												
Juab	--	--	--	--	--	--	--	--	--	--	109	1.00
Salt Lake	--	--	--	--	--	--	--	--	--	--	--	--
Sanpete	6	0.37	--	--	--	--	--	--	--	--	--	--
Tooele	16	0.68	22	0.46	20	1.27	22	0.83	16	0.95	28	0.85
Utah	--	--	--	--	--	--	--	--	--	--	--	--
Wasatch	--	--	--	--	--	--	--	--	16	0.65	34	0.98
REGIONAL TOTALS	13	0.61	22	0.46	20	1.27	22	0.83	16	0.79	33	0.92
<u>Southern Region</u>												
Beaver	--	--	--	--	0	0.00	27	0.61	35	0.78	--	--
Garfield	21	0.72	20	1.22	23	0.74	21	0.88	25	0.26	17	1.54
Iron	34	1.02	10	0.07	133	1.33	--	--	30	1.74	67	1.04*
Kane	--	--	--	--	--	--	--	--	--	--	--	--
Millard	--	--	--	--	--	--	--	--	--	--	--	--
Piute	23	1.00	12	1.20	18	0.75	--	--	--	--	--	--
Sevier	--	--	--	--	--	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--	--	18	0.50	31	0.57*
Wayne	13	0.65	13	0.73	19	1.09	20	0.98	16	0.91	24	1.38
REGIONAL TOTALS	15	0.67	14	0.75	20	0.92	21	0.92	19	0.86	23	1.40
<u>Northeastern Region</u>												
Daggett	38	1.14	15	1.00	20	0.25	30	0.73	20	0.81	46	2.64
Duchesne	29	0.86	28	2.00	31	1.29	14	0.31	26	1.06	34	1.59
Uintah	40	1.48	56	1.46	20	1.27	23	0.71	32	1.21	46	1.33
REGIONAL TOTALS	36	1.24	37	1.40	22	1.17	23	0.68	30	1.13	42	1.44
<u>Southeastern Region</u>												
Carbon	7	1.00	33	1.00	14	1.00	--	--	17	0.31	59	1.00
Emery	--	--	--	--	0	0.00	--	--	--	--	0	0.00
Grand	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	29	1.55	--	--	59	0.71	34	1.03	21	0.67	--	--
REGIONAL TOTALS	22	1.46	33	1.00	28	0.61	34	1.03	19	0.45	58	0.97
STATE TOTALS	17	0.74	15	0.71	17	0.73	15	0.64	17	0.67	22	0.90

*Sage grouse per hunter index based on all hunts.

Table 13. Sex and age composition of harvested sage grouse, 1976.

Region & County	Sex Composition (%)															
	Males					Females					Total Sample	Male		Female		Young/ 100 Adults
	Ad. Yng. Tot.	Ad. Yng. Tot.	Ad. Yng. Tot.	Ad. Yng. Tot.	Ad. Yng. Tot.	Ad. Yng. Tot.	Ad. Yng. Tot.	Ad. Yng. Tot.	Ad. Yng. Tot.	Ad. Yng. Tot.		Ad. Yng. Tot.	Ad. Yng. Tot.	Ad. Yng. Tot.	Ad. Yng. Tot.	
<u>Northern Region</u>																
Box Elder	12	41	53	29	35	64	117	10	35	45	25	30	55	262	185	
Cache	17	43	60	21	37	58	118	14	36	51	18	31	49	381	211	
Davis	0	2	2	0	1	1	3	0	67	67	0	33	33	---	---	
Morgan	19	125	144	55	96	151	295	6	42	49	19	33	51	402	299	
Rich	0	2	2	2	2	4	6	0	33	33	33	33	67	---	---	
Summit	0	1	1	1	1	2	3	0	33	33	33	33	67	---	---	
Weber	48	214	262	108	172	280	542	9	39	48	20	32	52	357	247	
<u>REGIONAL TOTALS</u>																
<u>Central Region</u>																
Juab	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Salt Lake	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Sanpete	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Tooele	4	36	40	22	47	69	109	4	33	37	20	43	63	377	319	
Utah	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Wasatch	12	36	48	15	13	28	76	16	47	63	20	17	37	327	181	
<u>REGIONAL TOTALS</u>																
<u>Southern Region</u>																
Beaver	0	1	1	1	7	8	9	0	11	11	11	78	89	---	---	
Garifled	10	19	29	13	21	34	63	16	30	46	21	33	54	308	174	
Iron	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Kane	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Millard	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Piute	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Sevier	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Washington	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Wayne	48	80	128	89	140	229	357	13	22	36	25	39	64	247	161	
<u>REGIONAL TOTALS</u>																
<u>Northeastern Region</u>																
Daggett	4	9	13	6	9	15	28	14	32	46	21	32	54	300	180	
Duchesne	20	24	44	24	14	38	82	24	29	54	29	17	46	158	86	
Uintah	37	80	117	50	80	130	247	15	32	47	20	32	53	320	184	
<u>REGIONAL TOTALS</u>																
<u>Southeastern Region</u>																
Carbon	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Emery	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Grand	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
San Juan	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
<u>REGIONAL TOTALS</u>																
<u>STATE TOTALS</u>																
183	499	682	328	503	831	1,513	12	33	45	22	33	55	305	196		

Table 14. Sex and age composition of harvested sage grouse from 1973-76.

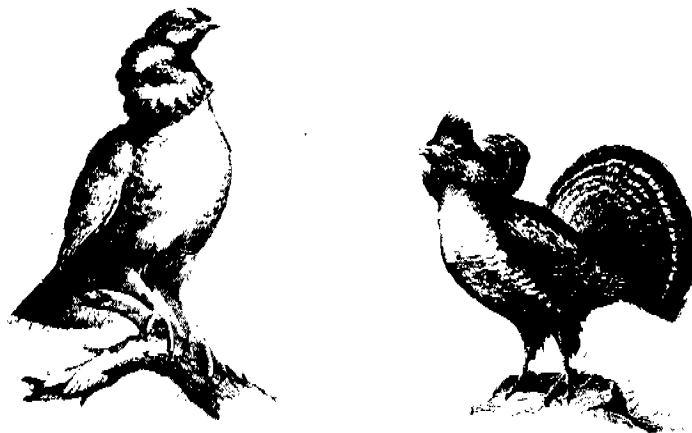
Region & County	1973				1974				1975				1976				Averages 1973-76																														
	Sex Ratio % Young**/		Sex Ratio % Young**/		Sex Ratio % Young**/		Sex Ratio % Young**/		Sex Ratio % Young**/		Sex Ratio % Young**/		Sex Ratio % Young**/		Sex Ratio % Young**/		Sex Ratio % Young**/																														
	n* Male	Female	100H	100A	n* Male	Female	100H	100A	n* Male	Female	100H	100A	n* Male	Female	100H	100A	n*	Male	Female	100H	100A																										
Box Elder	196	42	58	225	155	127	45	55	151	87	84	51	49	169	110	117	45	55	262	185	131	46	54	202	134																						
Cache	88	52	48	431	175	84	58	42	423	190	109	43	57	206	153	118	51	49	381	211	100	51	49	360	182																						
Davis	28	57	43	271	211	21	52	48	280	200	33	39	61	191	175	3	67	33	---	---	---	---	---	---	---																						
Morgan	97	48	52	425	234	98	40	60	214	158	158	44	56	241	168	295	49	51	402	299	162	45	55	320	215																						
Rich	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Summit	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Weber	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
REGIONAL TOTALS	409	47	53	294	178	330	47	53	221	132	384	45	55	209	149	542	48	52	357	247	416	47	53	270	176																						
Central Region	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Juab	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Salt Lake	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Sanpete	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Tooele	34	35	65	164	112	39	56	44	230	144	69	51	49	269	165	109	37	63	377	319	63	45	55	260	185																						
Utah	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Wasatch	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
REGIONAL TOTALS	34	35	65	164	112	39	56	44	230	144	69	51	49	269	165	109	37	63	377	319	63	45	55	260	185																						
Southern Region	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Beaver	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Garfield	133	42	58	426	280	103	36	64	178	124	120	32	68	162	131	63	46	54	308	174	105	39	61	268	177																						
Iron	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Kane	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Millard	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Plute	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Sevier	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Washington	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Wayne	269	32	68	242	183	176	31	69	173	138	204	39	61	168	140	357	36	64	247	161	252	34	66	208	156																						
REGIONAL TOTALS	402	36	64	286	209	292	33	67	171	128	324	36	64	165	136	429	37	63	260	166	362	36	64	220	160																						
Northeastern Region	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Daggett	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Duchesne	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Uintah	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
REGIONAL TOTALS	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Southeastern Region	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Carbon	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Emery	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
Grand	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
San Juan	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
REGIONAL TOTALS	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																					
STATE TOTALS	845	41	59	283	188	825	42	58	195	124	1166	38	62	217	155	1513	45	55	305	196	1087	42	58	250	166																						
*wing sample size																							---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
**young per 100 hens (adult females) and young per 100 adults.																							---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

FOREST GROUSE

SUMMARY

Judging from harvest statistics for 1975, the 1976 breeding populations of both ruffed and blue grouse were down from 1975. Production of ruffed grouse indicated by a relatively small brood sample was comparable to the 1975 but below average. Blue grouse production was substantially greater than 1975 but only slightly greater than average. The number of grouse of both species observed during brood surveys and the apparent density (grouse per 100 hours) suggested markedly increased abundance.

Harvest statistics showed a record harvest with both species increasing at proportionately the same rate. Hunters totaled slightly less than the record of 1974 but days afield exceeded the record of that year. This combined with a marked increase in hunter success resulted in the record harvest. Field bag checks confirmed the increased hunter success shown by the questionnaire.



Brood Counts

Ruffed Grouse

Results of the annual random brood survey for 1976 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 1976 compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total ruffed grouse observed	279	+ 86	- 2
Young per 100 adults	244	+ 1	-20
Mean brood size	4.12	+ 6	-10
Ruffed grouse observed per 100 hours	25	+108	-39
Total hours effort (Forest Grouse)	1,112	- 12	+42

Harvest statistics for 1975 indicated a decreased breeding population for 1976.

Effort on brood surveys decreased in comparison to 1975 but was still well above average.

Total ruffed grouse observed increased substantially over 1975 but was still slightly below average. The density index (grouse observed per 100 hours) was more than double the low value of 1975 but was also below average.

Indicated production was similar to 1975 but a little below average.

Blue Grouse

Results of the annual random brood survey for 1976 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 1976 compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total blue grouse observed	899	+118	+60
Young per 100 adults	281	+ 44	+ 3
Mean brood size	4.29	+ 6	- 8
Blue grouse observed per 100 hours	81	+145	+ 7
Total hours effort (Forest Grouse)	1,112	- 12	+42

Harvest statistics for 1975 indicated a reduced breeding population for 1976.

As a result of increased effort and apparent increased abundance, the total number of blue grouse observed was more than double that of 1975 and substantially greater than average. Indicated production was markedly greater than 1975 but only slightly higher than average.

An increased fall population level was evident from inventory data as well as from casual observations reported from the field.

Harvest

Hunter Questionnaire

Results of the 1976 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 1976 compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Forest grouse hunters	21,186	+ 5	+ 56
Forest grouse harvested	63,436	+49	+120
Hunter-days afield	56,422	+12	+104
Forest grouse per hunter-day	1.12	+33	+ 8
Forest grouse per hunter	2.99	+42	+ 38
Percent ruffed grouse	3.71	0	- 10
Percent blue grouse	56.2	+ 3	+ 10
Percent unidentified	6.7	-20	- 8

Results of the harvest questionnaire confirmed the indicated increase in forest grouse abundance shown by inventory data. The total hunter projection was the second highest on record while hunter-days afield and total harvest were the highest recorded to date. The record harvest was a result of the record hunter-day value combined with a marked increase in hunter success.

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 1976 is found in Table 15. Hunter success trends determined via this method are shown in Table 16. Results of the 1976 survey compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total hunters checked	3,011	+23	+147
Total hours hunted	11,671	+10	+134
Forest grouse per hunter (complete hunts)	0.67	+34	- 7
Forest grouse bagged per 100 hours	17	+55	- 11
Average hours per hunter-day (complete hunts)	4.1	-11	- 2
Hours hunted per grouse bagged	6.1	-34	+ 9

Field bag checks showed a marked increase in hunter success as well as increased hunting pressure; consistent with questionnaire results.

The average hunter-day was slightly shorter than 1975 and the average. Less time was required to bag a bird than in 1975 but still slightly more than average.

Forest grouse bagged per hunter and per hunter-day.

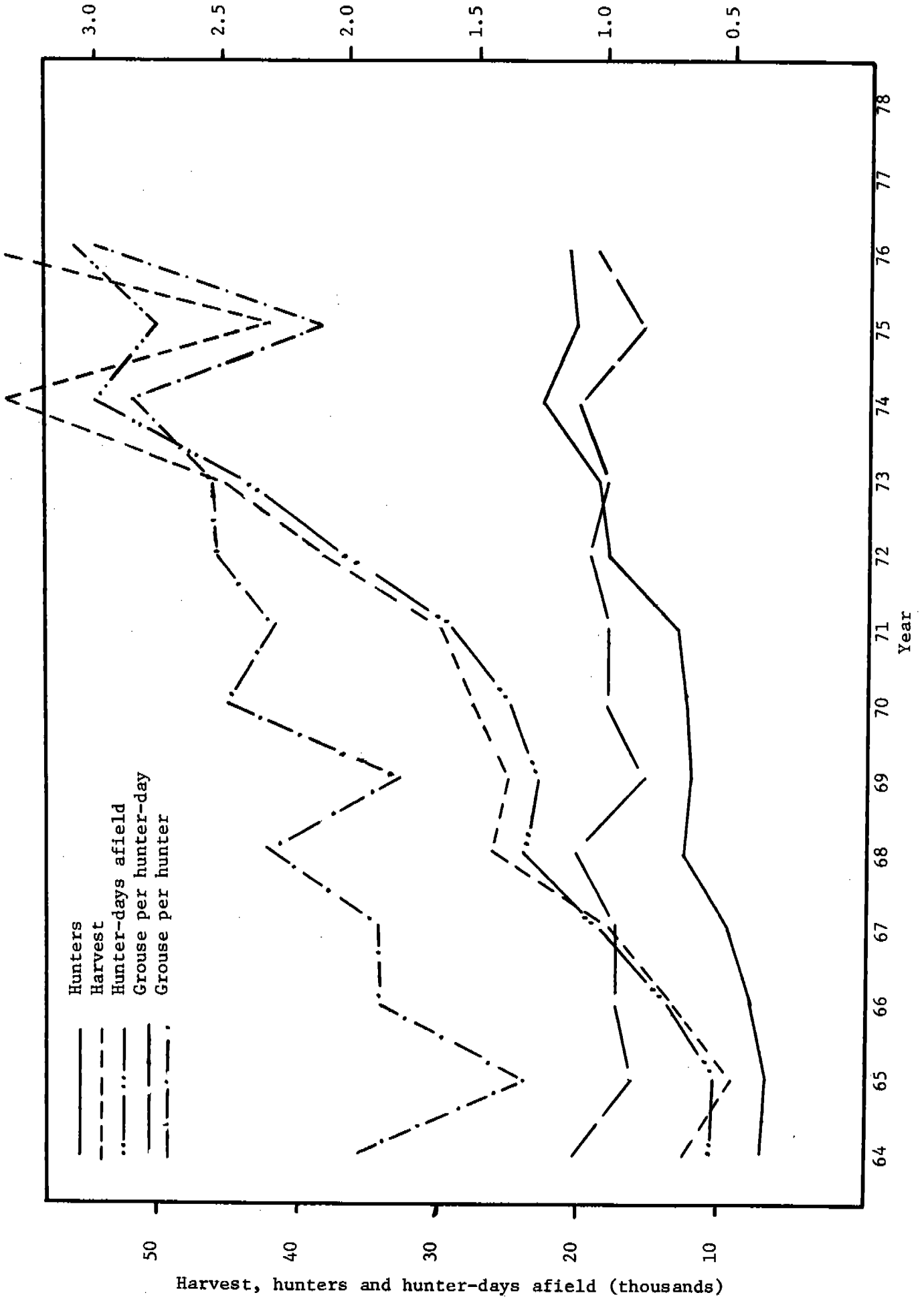


Figure 1. Statewide trends of forest grouse harvest statistics.

Table 1. Ruffed grouse summer inventory, 1976.

Region & County	Distinct Broods		Mean Brood	Mixed Yng. & Ad.		Adults w/o Yng.	Total Adults	Total Young	Young/100 Ad.	Grouse/100 Hrs.
	No. Adult	Yng.		Adults	Young					
<u>Northern Region</u>										
Box Elder	4	10	2.50	0	0	0	4	10	250	50
Cache	5	15	3.00	2	6	0	7	21	300	13
Davis	0	0	--	0	0	3	3	0	--	10
Morgan	1	5	5.00	0	0	0	1	5	500	33
Rich	1	3	3.00	0	0	0	1	3	300	27
Summit	1	4	4.00	3	6	0	4	10	250	100
Weber	0	0	--	0	0	0	0	0	--	0
REGIONAL TOTALS	12	37	3.08	5	12	3	20	49	245	20
<u>Central Region</u>										
Juab	1	2	2.00	0	0	1	2	2	100	40
Salt Lake	1	5	5.00	0	0	2	3	5	167	20
Sanpete	14	75	5.36	4	14	5	23	89	387	181
Tooele	0	0	--	0	0	0	0	0	--	--
Utah	1	2	2.00	2	3	6	9	5	56	19
Wasatch	0	0	--	0	0	0	0	0	--	0
REGIONAL TOTALS	17	84	4.94	6	17	14	37	101	273	64
<u>Southern Region</u>										
Beaver	--	--	--	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--
Kane	--	--	--	--	--	--	--	--	--	--
Millard	--	--	--	--	--	--	--	--	--	--
Piute	--	--	--	--	--	--	--	--	--	--
Sevier	0	0	--	0	0	1	1	0	0	0.5
Washington	--	--	--	--	--	--	--	--	--	--
Wayne	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	0	0	--	0	0	1	1	0	0	0.4
<u>Northeastern Region</u>										
Daggett	1	5	5.00	0	0	0	1	5	500	20
Duchesne	6	21	3.50	0	0	11	17	21	124	47
Uintah	3	15	5.00	0	0	0	3	15	500	62
REGIONAL TOTALS	10	41	4.10	0	0	11	21	41	195	44
<u>Southeastern Region</u>										
Carbon	2	7	3.50	0	0	0	2	7	350	12
Emery	--	--	--	--	--	--	--	--	--	--
Grand	--	--	--	--	--	--	--	--	--	--
San Juan	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	2	7	3.50	0	0	0	2	7	350	7
STATE TOTALS	41	169	4.12	11	29	29	81	198	244	25

Table 2. Trend of ruffed grouse young per 100 adults ratios, 1966-76.

Region & County	Year											Average	
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1962-75	1962-75
<u>Northern Region</u>													
Box Elder	--	400	0	--	--	--	--	--	0	250	250	--	250
Cache	630	425	225	321	468	383	900	--	300	329	300	--	300
Davis	525	600	400	0	--	--	388	--	--	--	--	--	--
Morgan	200	--	--	200	400	540	--	--	400	--	500	--	500
Rich	--	300	150	--	--	--	375	600	--	317	300	--	300
Summit	--	--	500	333	500	514	650	333	500	217	250	--	250
Weber	257	--	450	143	--	340	--	450	--	--	--	--	--
REGIONAL TOTALS	522	427	292	260	471	426	453	417	369	286	245	367	367
<u>Central Region</u>													
Juab	--	550	275	333	470	325	--	300	400	500	100	--	100
Salt Lake	--	0	150	133	470	100	--	--	125	--	167	--	167
Sanpete	--	228	259	171	300	240	329	264	195	233	387	--	387
Tooele	--	--	--	--	--	--	--	--	--	--	--	--	--
Utah	--	450	433	267	256	300	475	125	313	57	56	--	56
Wasatch	--	450	--	--	--	--	300	--	--	--	--	--	--
REGIONAL TOTALS	375	333	236	214	331	242	358	231	221	164	273	263	263
<u>Southern Region</u>													
Beaver	--	--	--	97	--	200	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	--	--	200	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--
Kane	--	0	--	--	--	--	--	--	--	--	--	--	--
Millard	500	--	--	225	183	280	--	--	--	--	--	--	--
Piute	--	--	--	--	--	300	--	--	--	--	--	--	--
Sevier	362	243	425	400	533	221	333	311	500	233	--	--	--
Washington	--	--	--	--	--	--	--	--	--	--	--	--	--
Wayne	--	--	--	200	--	--	--	367	--	--	--	--	--
REGIONAL TOTALS	378	189	425	139	300	235	333	325	147	233	283	283	283
<u>Northeastern Region</u>													
Daggett	--	--	--	--	--	--	--	--	--	--	500	--	500
Duchesne	--	--	450	800	225	--	367	--	333	600	124	--	124
Uintah	--	--	0	700	250	375	--	--	600	--	500	--	500
REGIONAL TOTALS	--	--	386	766	233	375	367	--	400	600	195	440	440
<u>Southeastern Region</u>													
Carbon	--	--	40	--	0	--	--	--	480	200	350	--	350
Emery	--	--	350	400	700	500	--	300	400	--	--	--	--
Grand	--	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	--	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	--	--	128	400	489	500	--	300	467	200	350	361	361
STATE TOTALS	468	335	268	219	372	308	385	297	267	241	244	304	304

Table 3. Trend of ruffed grouse mean brood size, 1966-76.

Region & County	Year											Average 1962-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	--	4.00	--	--	--	--	--	--	--	5.00	2.50	
Cache	6.59	6.38	2.00	4.09	4.78	5.55	9.00	--	5.00	3.83	3.00	
Davis	5.25	6.00	4.00	--	--	--	4.80	--	--	--	--	
Morgan	4.00	--	--	4.67	4.00	6.75	--	--	4.00	--	5.00	
Rich	--	3.00	3.00	--	--	--	3.75	6.00	--	4.75	3.00	
Summit	--	--	5.00	6.00	5.00	6.00	6.50	5.00	5.00	3.00	4.00	
Weber	4.50	--	4.50	2.50	--	8.00	--	4.50	--	--	--	
REGIONAL TOTALS	6.01	5.82	4.00	4.30	4.79	6.09	5.08	5.00	4.54	4.00	3.08	4.83
<u>Central Region</u>												
Juab	--	6.60	5.33	4.00	4.67	4.33	--	3.00	4.00	5.00	2.00	
Salt Lake	--	--	--	4.00	4.67	4.00	--	--	4.00	--	5.00	
Sanpete	--	3.89	3.54	4.67	4.64	5.50	4.67	4.60	3.00	4.50	5.36	
Tooele	--	--	--	--	--	--	--	--	--	--	--	
Utah	--	4.60	4.33	3.80	7.00	3.75	4.75	5.00	4.25	4.00	2.00	
Wasatch	--	4.50	--	--	--	--	3.00	--	--	--	--	
REGIONAL TOTALS	5.00	4.76	4.00	4.17	4.78	4.75	4.55	4.43	3.44	4.50	4.94	4.44
<u>Southern Region</u>												
Beaver	--	--	--	6.00	--	5.00	--	--	--	--	--	
Garfield	--	--	--	--	--	--	--	--	2.00	--	--	
Iron	--	--	--	--	--	--	--	--	--	--	--	
Kane	--	--	--	--	--	--	--	--	--	--	--	
Millard	5.00	--	--	2.25	--	4.67	--	--	--	--	--	
Piute	--	--	--	--	--	3.00	--	--	--	--	--	
Sevier	4.14	4.25	4.25	4.00	--	3.83	4.29	4.00	5.00	2.33	--	
Washington	--	--	--	--	--	--	--	--	--	--	--	
Wayne	--	--	--	2.00	--	--	--	5.50	--	--	--	
REGIONAL TOTALS	4.25	4.25	4.25	3.30	--	4.08	4.29	4.33	4.40	2.33	--	3.85
<u>Northeastern Region</u>												
Daggett	--	--	--	--	--	--	--	--	--	--	5.00	
Duchesne	--	--	4.50	8.00	3.00	--	3.67	--	3.33	6.00	3.50	
Uintah	--	--	--	7.00	2.50	5.00	--	--	6.00	--	5.00	
REGIONAL TOTALS	--	--	4.50	7.67	2.80	5.00	3.67	--	4.00	6.00	4.10	4.76
<u>Southeastern Region</u>												
Carbon	--	--	2.00	--	--	--	--	--	4.80	2.00	3.50	
Emery	--	--	3.50	3.00	7.00	5.00	--	5.00	4.00	--	--	
Grand	--	--	--	--	--	--	--	--	--	--	--	
San Juan	--	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	--	--	3.00	3.00	7.00	5.00	--	5.00	4.67	2.00	3.50	4.57
STATE TOTALS	5.56	5.33	4.05	4.24	4.66	5.16	4.61	4.58	4.09	3.87	4.12	4.59

Table 4. Trend of ruffed grouse observed per 100 hours, 1967-76.

Region & County	Year											Averages 1967-75
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976		
<u>Northern Region</u>												
Box Elder	--	2	--	--	--	--	--	2	54	50		
Cache	--	54	83	270	67	14	--	34	45	13		
Davis	--	31	3	--	--	244	--	0	0	10		
Morgan	--	--	58	62	128	--	136	0	0	33		
Rich	--	62	--	--	--	61	140	--	--	27		
Summit	--	40	63	42	108	100	185	46	100	100		
Weber	--	92	44	--	73	--	--	--	--	0		
REGIONAL TOTALS	37	33	50	80	77	39	24	49	41	20	48	
<u>Central Region</u>												
Juab	206	500	158	179	142	--	33	250	27	40		
Salt Lake	--	111	20	47	16	--	0	30	0	20		
Sanpete	87	316	158	143	167	240	129	124	69	181		
Tooele	--	--	--	--	--	--	0	0	0	0		
Utah	21	61	63	32	40	37	23	73	32	19		
Wasatch	100	--	--	--	0	50	--	--	0	0		
REGIONAL TOTALS	58	395	78	81	85	84	50	71	23	64	103	
<u>Southern Region</u>												
Beaver	--	--	314	--	250	--	--	0	--	--		
Garfield	--	--	--	--	--	--	0	38	0	--		
Iron	--	--	--	--	--	--	--	0	0	--		
Kane	--	--	--	--	--	--	0	--	0	--		
Millard	--	--	--	213	317	--	0	0	--	--		
Piute	--	--	--	--	267	--	--	--	0	--		
Sevier	--	--	--	--	28	22	10	8	2	--		
Washington	--	--	--	--	--	--	--	0	0	--		
Wayne	--	--	--	--	--	--	117	0	--	--		
REGIONAL TOTALS	78	--	314	62	35	15	12	8	2	--	67	
<u>Northeastern Region</u>												
Daggett	--	--	--	--	0	--	0	0	0	20		
Duchesne	--	157	58	29	0	28	0	30	11	47		
Uintah	--	20	88	18	83	--	0	16	0	62		
REGIONAL TOTALS	--	119	65	23	83	10	0	20	5	44	41	
<u>Southeastern Region</u>												
Carbon	--	61	--	5	0	--	0	53	33	12		
Emery	--	16	30	16	46	--	67	42	0	--		
Grand	--	--	--	--	--	--	0	--	0	--		
San Juan	--	--	--	--	--	--	0	0	0	--		
REGIONAL TOTALS	--	17	30	12	46	--	28	26	11	7	24	
STATE TOTALS	48	70	59	55	54	28	18	28	12	25	41	

Table 5. Blue grouse summer inventory summary, 1976.

Region & County	Distinct Broods		Mean Brood	Mixed Yng. & Ad.		Adults w/o Yng.	Total Adults	Total Young	Young/100 Ad.	Grouse/100 Hrs.
	No. Adult	Yng.		Young	Adults					
<u>Northern Region</u>										
Box Elder	4	4	23	2	7	1	7	30	429	132
Cache	27	27	121	2	8	10	39	129	331	75
Davis	1	1	4	2	5	3	6	9	150	52
Morgan	11	11	49	2	9	4	17	58	341	417
Rich	1	1	5	0	0	0	1	5	500	40
Summit	2	2	10	0	0	1	3	10	333	93
Weber	2	2	12	0	0	1	3	12	400	62
REGIONAL TOTALS	48	48	224	8	29	20	76	253	333	94
<u>Central Region</u>										
Juab	0	0	0	0	0	0	0	0	--	0
Salt Lake	6	6	30	0	0	3	9	30	333	99
Sanpete	4	4	13	0	0	0	4	13	325	27
Tooele	11	11	38	7	21	8	26	59	227	354
Utah	7	7	30	0	0	3	10	30	300	54
Wasatch	3	3	12	0	0	0	3	12	400	250
REGIONAL TOTALS	31	31	123	7	21	14	52	144	277	91
<u>Southern Region</u>										
Beaver	--	--	--	--	--	--	--	--	--	--
Garfield	0	0	0	0	1	1	1	1	100	16
Iron	--	--	--	--	--	--	--	--	--	--
Kane	--	--	--	--	--	--	--	--	--	--
Millard	--	--	--	--	--	--	--	--	--	--
Piute	2	2	4	0	0	0	2	4	200	75
Sevier	12	12	38	0	0	24	36	38	106	34
Washington	2	2	10	0	0	0	2	10	500	55
Wayne	2	2	11	0	0	2	4	11	275	375
REGIONAL TOTALS	18	18	63	0	1	27	45	64	142	40
<u>Northeastern Region</u>										
Daggett	8	8	39	0	0	0	8	39	487	157
Duchesne	15	15	69	0	0	1	16	69	431	105
Uintah	4	4	21	0	0	0	4	21	525	86
REGIONAL TOTALS	27	27	129	0	0	1	28	129	461	112
<u>Southeastern Region</u>										
Carbon	8	8	34	2	11	4	14	45	321	77
Emery	--	--	--	--	--	--	--	--	--	--
Grand	3	3	11	0	0	7	10	11	110	68
San Juan	5	5	17	0	0	6	11	17	155	108
REGIONAL TOTALS	16	16	62	2	11	17	35	73	209	81
STATE TOTALS	140	140	601	17	62	79	236	663	281	81

Table 6. Trend of blue grouse young per 100 adults ratios, 1966-76.

Region & County	Year											Average 1963-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	--	133	382	222	389	--	500	--	236	100	429	
Cache	487	350	318	154	316	245	288	192	357	356	331	
Davis	442	400	138	250	--	520	82	--	300	0	150	
Morgan	400	--	--	500	600	533	250	375	300	130	341	
Rich	--	333	--	--	300	--	300	--	--	167	500	
Summit	--	450	--	400	433	600	533	314	--	143	333	
Weber	567	500	500	325	--	557	68	700	625	0	400	
REGIONAL TOTALS	478	193	289	248	361	305	191	222	305	194	333	298
<u>Central Region</u>												
Juab	--	300	--	383	--	--	--	50	--	500	--	
Salt Lake	--	0	--	175	900	67	--	0	300	25	333	
Sanpete	--	267	467	--	283	425	156	300	--	--	325	
Tooele	--	800	400	--	--	--	--	143	179	86	227	
Utah	--	275	267	230	314	422	375	415	222	0	300	
Wasatch	--	333	360	--	550	450	600	--	333	400	400	
REGIONAL TOTALS	612	326	337	231	389	324	321	285	218	92	277	338
<u>Southern Region</u>												
Beaver	--	--	238	--	--	--	--	--	500	--	--	
Garfield	--	--	140	--	100	600	133	--	--	400	100	
Iron	700	--	400	8	--	267	--	--	150	--	--	
Kane	--	233	--	--	150	200	240	211	--	--	--	
Millard	--	--	--	--	--	280	67	--	450	--	--	
Piute	--	--	200	--	--	--	--	--	--	--	200	
Sevier	69	67	--	--	140	136	100	100	320	233	106	
Washington	0	366	--	38	170	--	271	533	350	--	500	
Wayne	900	--	--	182	--	--	--	--	400	--	275	
REGIONAL TOTALS	150	160	224	75	135	213	149	192	313	246	142	170
<u>Northeastern Region</u>												
Daggett	--	--	150	350	--	--	286	286	567	--	487	
Duchesne	--	200	257	433	--	400	275	600	300	350	431	
Uintah	--	666	--	480	400	167	557	500	250	300	525	
REGIONAL TOTALS	--	555	186	414	400	225	339	344	311	320	461	368
<u>Southeastern Region</u>												
Carbon	--	--	138	--	0	167	92	--	243	167	321	
Emery	--	300	250	--	450	300	--	667	--	--	--	
Grand	--	--	--	--	--	--	114	0	43	200	110	
San Juan	--	200	400	456	153	386	375	--	242	200	155	
REGIONAL TOTALS	--	250	288	456	139	310	216	333	188	189	209	279
STATE TOTALS	354	246	268	235	253	292	224	237	284	195	281	272

Table 7. Trend of blue grouse mean brood size, 1966-76.

Region & County	Year											Average	
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1962-75	1962-75
<u>Northern Region</u>													
Box Elder	--	3.67	4.43	5.54	3.83	--	5.00	--	5.06	3.00	5.75		
Cache	6.22	4.67	4.38	3.35	4.28	5.18	5.50	4.66	4.95	5.30	4.48		
Davis	4.42	4.00	4.50	7.00	--	6.25	2.67	--	--	--	4.00		
Morgan	6.00	--	--	5.00	6.00	5.33	5.33	5.50	4.62	3.25	4.45		
Rich	--	3.33	--	--	3.00	--	4.50	--	--	5.00	5.00		
Summit	--	4.50	--	8.00	4.33	6.00	5.33	4.40	--	2.75	5.00		
Weber	5.67	4.00	5.00	4.75	--	6.50	4.75	7.00	6.25	--	6.00		
REGIONAL TOTALS	5.73	4.10	4.50	4.51	4.21	5.54	4.96	4.79	5.00	4.25	4.67	4.81	4.81
<u>Central Region</u>													
Juab	--	3.00	--	4.60	--	--	--	1.00	--	5.00	--		
Salt Lake	--	--	--	4.40	9.00	2.00	--	--	6.00	1.00	5.00		
Sanpete	--	4.00	4.67	--	2.83	4.25	2.80	3.00	--	--	3.25		
Tooele	--	8.00	4.00	--	--	--	--	6.00	4.40	3.50	3.45		
Utah	--	5.00	3.40	4.67	5.50	4.22	4.22	5.38	5.00	--	4.29		
Wasatch	--	10.00	3.60	--	5.50	4.50	6.00	--	5.00	4.00	4.00		
REGIONAL TOTALS	6.13	4.78	3.80	4.54	4.67	4.00	4.12	4.54	4.83	3.40	3.97	4.54	4.54
<u>Southern Region</u>													
Beaver	--	--	3.75	--	--	--	--	--	5.00	--	--		
Garfield	--	--	2.00	--	3.00	6.00	4.00	--	--	6.00	--		
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	--	--	--	--	--	--	--	2.00		
Sevier	2.57	2.00	--	1.50	--	3.00	2.62	3.00	5.89	3.82	3.17		
Washington	--	6.00	--	4.00	3.40	--	4.00	5.33	3.50	--	5.00		
Wayne	9.00	--	--	--	--	--	--	--	4.00	--	5.50		
REGIONAL TOTALS	4.36	3.00	3.22	5.50	3.25	4.45	3.06	4.55	5.31	4.00	3.50	3.76	3.76
<u>Northeastern Region</u>													
Daggett	--	--	--	3.50	--	--	5.00	5.00	5.67	--	4.88		
Duchesne	--	2.00	9.00	4.33	--	4.00	4.71	6.00	4.22	7.00	4.60		
Uintah	--	6.67	--	6.00	5.50	2.50	6.50	5.00	5.00	4.50	5.25		
REGIONAL TOTALS	--	5.50	9.00	4.46	5.50	3.00	5.21	5.20	4.71	5.33	4.78	5.31	5.31
<u>Southeastern Region</u>													
Carbon	--	--	4.00	--	--	5.00	6.00	--	3.40	3.33	4.25		
Emery	--	6.00	5.00	--	4.50	3.00	--	6.67	--	--	--		
Grand	--	--	--	--	--	--	2.67	--	1.50	4.00	3.67		
San Juan	--	4.00	4.33	5.20	4.00	5.25	6.17	--	4.83	3.50	3.40		
REGIONAL TOTALS	--	5.00	4.33	5.20	4.20	4.82	5.50	6.67	3.77	3.57	3.88	4.91	4.91
STATE TOTALS	5.49	4.42	4.24	4.46	4.28	4.86	4.64	4.81	4.88	4.05	4.29	4.66	4.66

Table 8. Trend of blue grouse observed per 100 hours, 1967-76.

Region & County	Year										Averages 1967-75
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>											
Box Elder	--	129	412	99	--	35	0	273	46	132	
Cache	--	192	146	198	171	133	409	271	124	75	
Davis	--	194	170	--	194	125	--	80	10	52	
Morgan	--	--	50	88	76	125	173	400	35	417	
Rich	--	--	--	33	--	39	0	--	--	40	
Summit	--	--	32	56	18	127	138	8	83	93	
Weber	--	150	364	--	153	147	--	--	125	62	
REGIONAL TOTALS	63	103	127	97	135	111	266	274	80	94	140
<u>Central Region</u>											
Juab	138	--	175	--	0	--	25	0	27	0	
Salt Lake	2	--	64	28	20	--	20	27	14	98	
Sanpete	68	68	--	43	34	92	39	0	0	27	
Tooele	675	500	--	--	--	--	94	144	108	354	
Utah	32	106	38	63	94	92	172	64	118	54	
Wasatch	100	87	--	260	1,100	262	--	433	36	250	
REGIONAL TOTALS	64	97	52	57	51	98	95	57	29	91	67
<u>Southern Region</u>											
Beaver	--	88	--	--	--	--	--	300	--	--	
Garfield	--	240	--	86	45	10	0	25	56	16	
Iron	--	143	140	15	42	--	--	167	--	--	
Kane	--	--	--	111	51	--	76	--	0	--	
Millard	--	--	--	--	317	83	0	122	--	--	
Piute	--	54	--	--	--	--	--	--	0	75	
Sevier	--	--	38	--	16	23	7	40	21	34	
Washington	--	--	86	174	--	260	--	129	0	55	
Wayne	--	--	--	--	--	--	8	--	--	375	
REGIONAL TOTALS	116	102	56	162	29	37	18	47	21	40	66
<u>Northeastern Region</u>											
Daggett	--	1,400	193	--	0	146	45	182	0	157	
Duchesne	10	119	33	--	13	90	13	130	14	105	
Uintah	255	--	156	41	35	87	19	78	27	86	
REGIONAL TOTALS	51	210	150	41	18	104	27	112	15	112	81
<u>Southeastern Region</u>											
Carbon	--	543	9	32	80	258	0	44	35	77	
Emery	29	12	--	12	31	--	77	0	0	--	
Grand	--	--	--	--	13	103	19	25	33	68	
San Juan	75	158	196	211	178	238	0	158	53	108	
REGIONAL TOTALS	33	67	98	40	97	216	36	56	39	81	75
STATE TOTALS	67	101	84	71	71	95	66	91	33	81	76

Table 9. Summary of effort expended on forest grouse brood counts, 1976.

Region & County	Vehicle Miles Traveled	Hours Effort Expended			Total
		Vehicle	Horseback	Walking	
<u>Northern Region</u>					
Box Elder	220	13	12	3	28
Cache	725	105	106	12	223
Davis	215	15	0	14	29
Morgan	0	0	11	7	18
Rich	107	5	0	10	15
Summit	46	10	3	1	14
Weber	203	24	0	0	24
REGIONAL TOTALS	1,516	172	132	47	351
<u>Central Region</u>					
Juab	50	3	4	3	10
Salt Lake	188	14	7	19	40
Sanpete	591	49	7	6	62
Tooele	130	6	7	11	24
Utah	544	55	0	19	74
Wasatch	0	0	6	0	6
REGIONAL TOTALS	1,503	127	31	58	216
<u>Southern Region</u>					
Beaver	0	0	0	0	0
Garfield	142	10	0	11	21
Iron	--	--	--	--	--
Kane	--	--	--	--	--
Millard	--	--	--	--	--
Piute	0	0	8	0	8
Sevier	0	0	216	0	216
Washington	205	16	6	0	22
Wayne	80	4	0	0	4
REGIONAL TOTALS	427	30	230	11	271
<u>Northeastern Region</u>					
Daggett	210	15	9	6	30
Duchesne	658	42	23	16	81
Uintah	240	24	2	3	29
REGIONAL TOTALS	1,108	81	34	25	140
<u>Southeastern Region</u>					
Carbon	676	64	13	0	77
Emery	--	--	--	--	--
Grand	353	28	0	3	31
San Juan	98	24	0	2	26
REGIONAL TOTALS	1,127	116	13	5	134
STATE TOTALS	5,681	526	440	146	1,112

Table 10. Summary of forest grouse hunter success and distribution of harvest and hunting pressure by region and county, 1976.

Region & County	Hunters Reporting	Days Hunted	Birds Bagged				Birds/Day	Birds/Hunter*	% of Pressure	% of Harvest
			Ruffed	Blue	Unident.	Total				
<u>Northern Region</u>										
Box Elder	40	81	34	30	4	68	0.84	2.27	2.90	2.17
Cache	229	664	249	545	34	828	1.25	4.39	23.79	26.39
Davis	45	109	30	56	6	92	0.84	2.19	3.91	2.93
Morgan	35	97	50	35	0	85	0.88	3.87	3.48	2.71
Rich	53	127	57	37	1	95	0.75	5.00	4.55	3.03
Summit	58	117	92	51	5	148	1.26	1.75	4.19	4.72
Weber	86	194	72	218	13	303	1.56	3.26	6.95	9.66
REGIONAL TOTALS	546	1,389	584	972	63	1,619	1.17	3.24	49.77	51.59
<u>Central Region</u>										
Juab	16	44	7	41	0	48	1.09	2.50	1.58	1.53
Salt Lake	38	73	24	38	17	79	1.08	2.23	2.62	2.52
Sanpete	55	173	83	65	21	169	0.98	2.76	6.20	5.39
Tooele	27	43	17	19	8	44	1.02	3.04	1.54	1.40
Utah	146	430	228	257	41	526	1.22	3.77	15.41	16.76
Wasatch	50	100	32	73	1	106	1.06	2.40	3.58	3.38
REGIONAL TOTALS	332	863	391	493	88	972	1.13	2.88	30.92	30.98
<u>Southern Region</u>										
Beaver	15	49	22	19	2	43	0.88	3.60	1.76	1.37
Garfield	8	19	0	10	3	13	0.68	0.00	0.68	0.41
Iron	17	27	8	24	8	40	1.48	3.19	0.97	1.27
Kane	2	4	0	2	0	2	0.50	0.00	0.14	0.06
Millard	17	33	25	26	0	51	1.55	1.89	1.18	1.63
Piute	5	12	8	4	2	14	1.17	1.83	0.43	0.45
Sevier	38	76	10	34	6	50	0.66	1.85	2.72	1.59
Washington	4	6	4	2	0	6	1.00	3.67	0.21	0.19
Wayne	5	6	0	5	4	9	1.50	1.75	0.21	0.29
REGIONAL TOTALS	111	232	77	126	25	228	0.98	2.35	8.31	7.27
<u>Northeastern Region</u>										
Daggett	11	16	6	9	3	18	1.12	1.00	0.57	0.57
Duchesne	24	48	19	26	4	49	1.02	2.55	0.72	1.56
Uintah	26	61	14	29	10	53	0.87	2.30	2.19	1.69
REGIONAL TOTALS	61	125	39	64	17	120	0.96	2.36	4.48	3.82
<u>Southeastern Region</u>										
Carbon	18	40	16	30	2	48	1.20	2.38	1.43	1.53
Emery	5	8	1	11	0	12	1.50	3.00	0.29	0.38
Grand	0	0	0	0	0	0	0.00	2.00	0.00	0.00
San Juan	1	3	0	0	0	0	0.00	0.00	0.11	0.00
REGIONAL TOTALS	24	51	17	41	2	60	1.18	2.47	1.83	1.91
Unknown counties	57	131	57	68	14	139	1.06	0.00	4.69	4.43
Mixed counties	0	0	0	0	0	0	0.00	5.50	0.00	0.00
STATE TOTALS	1,131	2,791	1,165	1,764	209	3,138	1.12	2.99	100	100

*Based on county of residence.

Table 11. Summary of forest grouse bagged per hunter-day by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	1.07	1.32	0.79	0.92	1.12	0.84
Cache	1.36	1.14	1.04	1.39	1.13	1.25
Davis	0.47	0.85	1.31	0.69	0.73	0.84
Morgan	1.40	1.73	1.25	1.29	0.85	0.88
Rich	1.35	1.15	1.18	0.89	0.82	0.75
Summit	0.89	0.77	1.04	1.03	0.80	1.26
Weber	1.11	1.42	0.99	1.14	0.87	1.56
REGIONAL TOTALS	1.17	1.20	1.04	1.19	0.96	1.17
<u>Central Region</u>						
Juab	1.21	0.50	0.69	1.25	0.86	1.09
Salt Lake	1.26	1.26	1.35	1.08	0.70	1.08
Sanpete	0.92	1.40	0.88	1.12	0.65	0.98
Tooele	0.57	0.70	0.70	0.66	0.89	1.02
Utah	1.02	1.13	1.03	1.03	0.71	1.22
Wasatch	1.36	1.00	0.95	0.89	1.00	1.06
REGIONAL TOTALS	1.08	1.10	0.98	1.03	0.76	1.13
<u>Southern Region</u>						
Beaver	0.80	1.00	0.93	0.25	0.53	0.88
Garfield	0.00	0.60	0.27	0.17	0.73	0.68
Iron	1.00	0.71	0.96	0.86	0.68	1.48
Kane	0.63	0.69	0.64	2.00	0.50	0.50
Millard	1.50	0.68	1.42	1.66	0.65	1.55
Piute	1.33	0.20	1.10	0.71	0.33	1.17
Sevier	0.95	0.87	1.18	1.39	0.73	0.66
Washington	1.00	--	2.00	--	0.79	1.00
Wayne	0.00	1.50	0.00	0.63	1.00	1.50
REGIONAL TOTALS	0.92	0.75	1.05	1.14	0.68	0.98
<u>Northeastern Region</u>						
Daggett	0.50	1.37	0.30	1.11	0.50	1.12
Duchesne	1.64	1.23	1.06	0.76	0.72	1.02
Uintah	0.52	0.40	0.85	1.49	0.97	0.87
REGIONAL TOTALS	0.96	0.93	0.83	1.14	0.76	0.96
<u>Southeastern Region</u>						
Carbon	0.65	1.03	1.11	0.79	0.57	1.20
Emery	0.45	1.00	0.50	0.87	0.42	1.50
Grand	1.00	0.67	0.13	0.50	0.83	0.00
San Juan	--	2.00	1.20	1.00	0.44	0.00
REGIONAL TOTALS	0.61	1.06	0.90	0.81	0.53	1.18
Unknown counties	1.11	0.57	1.06	1.35	0.89	1.06
Mixed counties	2.00	--	0.00	--	0.00	0.00
STATE TOTALS	1.10	1.09	1.01	1.13	0.84	1.12

Table 12. Percentage distribution of forest grouse harvest by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	2.88	5.01	3.15	3.01	2.75	2.17
Cache	27.41	24.23	27.39	29.84	26.81	26.39
Davis	1.94	2.08	2.47	1.55	3.52	2.93
Morgan	3.28	4.69	3.61	3.29	5.43	2.71
Rich	4.62	3.19	3.27	4.05	3.25	3.03
Summit	3.62	4.31	5.91	4.65	4.82	4.72
Weber	10.52	17.09	6.54	7.85	8.37	9.66
REGIONAL TOTALS	54.29	60.60	52.35	54.24	54.95	51.59
<u>Central Region</u>						
Juab	2.28	0.91	1.01	3.38	1.41	1.53
Salt Lake	3.89	3.35	2.89	2.92	2.37	2.52
Sanpete	3.69	4.10	4.24	4.78	4.05	5.39
Tooele	0.80	0.37	0.80	0.70	1.84	1.40
Utah	12.73	12.14	14.35	12.32	11.24	16.76
Wasatch	6.03	3.51	4.24	4.05	6.08	3.38
REGIONAL TOTALS	29.42	24.39	27.52	28.14	27.00	30.98
<u>Southern Region</u>						
Beaver	0.54	0.48	0.55	0.21	0.69	1.37
Garfield	0.00	0.32	0.13	0.06	0.42	0.41
Iron	0.60	1.28	1.97	0.58	1.80	1.27
Kane	0.34	0.59	0.38	0.06	0.15	0.06
Millard	0.80	0.80	1.55	2.92	1.07	1.63
Piute	1.07	0.11	0.92	0.15	0.23	0.45
Sevier	3.49	2.56	3.61	3.01	4.55	1.59
Washington	0.07	--	0.08	--	0.42	0.19
Wayne	0.00	0.16	0.00	0.15	0.38	0.29
REGIONAL TOTALS	6.90	6.28	9.19	7.15	9.71	7.27
<u>Northeastern Region</u>						
Daggett	0.40	1.17	0.29	0.61	0.80	0.57
Duchesne	2.41	1.97	2.10	1.25	1.26	1.56
Uintah	0.74	0.64	1.17	2.68	2.18	1.69
REGIONAL TOTALS	3.55	3.78	3.56	4.53	4.24	3.82
<u>Southeastern Region</u>						
Carbon	1.47	1.86	3.52	1.34	1.72	1.53
Emery	0.34	0.53	0.59	0.79	0.61	0.38
Grand	0.07	0.11	0.04	0.03	0.19	0.00
San Juan	--	0.32	0.25	0.03	0.27	0.00
REGIONAL TOTALS	1.88	2.82	4.40	2.19	2.79	1.91
Unknown counties	3.42	2.13	2.98	3.74	1.30	4.43
Mixed counties	0.54	--	0.00	--	0.00	0.00
STATE TOTALS	100	100	100	100	100	100

Table 13. Percent distribution of forest grouse hunting pressure by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	2.94	4.13	4.03	3.71	2.05	2.90
Cache	22.04	23.20	26.68	24.24	19.97	23.79
Davis	4.56	2.67	1.91	2.54	4.04	3.91
Morgan	2.57	2.97	2.93	2.89	5.36	3.48
Rich	3.75	3.02	2.80	5.12	3.34	4.55
Summit	4.48	6.10	5.73	5.12	5.07	4.19
Weber	10.36	13.14	6.66	7.77	8.12	6.95
REGIONAL TOTALS	50.70	55.23	50.72	51.39	47.96	49.77
<u>Central Region</u>						
Juab	2.06	1.98	1.48	3.06	1.38	1.58
Salt Lake	3.38	2.91	2.16	3.06	2.83	2.62
Sanpete	4.41	3.20	4.88	4.81	5.23	6.20
Tooele	1.54	0.58	1.15	1.20	1.73	1.54
Utah	13.74	11.69	14.12	13.51	13.39	15.41
Wasatch	4.85	3.84	4.50	5.16	5.10	3.58
REGIONAL TOTALS	29.98	24.19	28.29	30.80	29.66	30.92
<u>Southern Region</u>						
Beaver	0.73	0.52	0.59	0.96	1.09	1.76
Garfield	0.44	0.58	0.47	0.41	0.48	0.68
Iron	0.66	1.98	2.08	0.76	2.22	0.97
Kane	0.59	0.93	0.59	0.03	0.26	0.14
Millard	0.59	1.28	1.10	1.99	1.38	1.18
Piute	0.88	0.58	0.85	0.24	0.58	0.43
Sevier	4.04	3.20	3.10	2.44	5.20	2.72
Washington	0.07	--	0.04	--	0.45	0.21
Wayne	0.22	0.12	0.00	0.28	0.32	0.21
REGIONAL TOTALS	8.23	9.19	8.82	7.12	11.97	8.31
<u>Northeastern Region</u>						
Daggett	0.88	0.93	0.98	0.62	1.35	0.57
Duchesne	1.62	1.74	1.99	1.86	1.48	1.72
Uintah	1.54	1.74	1.40	2.03	1.89	2.19
REGIONAL TOTALS	4.04	4.42	4.37	4.50	4.72	4.48
<u>Southeastern Region</u>						
Carbon	2.50	1.98	3.22	1.93	2.54	1.43
Emery	0.81	0.58	1.19	1.03	1.22	0.29
Grand	0.07	0.17	0.34	0.07	0.19	0.00
San Juan	--	0.17	0.21	0.03	0.51	0.11
REGIONAL TOTALS	3.38	2.91	4.96	3.06	4.46	1.83
Unknown counties	3.38	4.07	2.84	3.13	1.22	4.69
Mixed counties	0.29	--	0.00	--	0.00	0.00
STATE TOTALS	100	100	100	100	100	100

Table 14. State-wide summary of forest grouse harvest statistics, 1961-1976.

Year	Total hunters		Total Harvest			Hunter-days afield		Grouse/hunter-day		Grouse per season		
	Ruffed	%	Blue	%	Unknown	%	Total	Ruffed	Blue	Total	Ruffed	Blue
1961*	256	128 (36.3)	220 (62.3)	5 (1.4)	353	--	--	--	--	0.50	0.86	1.38
1962**	2,386	1,885 (56.3)	1,464 (43.7)	0 (0.0)	3,349	4,276	1.19	0.76	1.96	--	--	--
1963	7,425	5,470 (40.2)	7,372 (54.2)	766 (5.6)	13,608	12,313	0.44	0.66	1.11	0.74	0.99	1.83
1964	6,487	5,354 (42.2)	6,685 (57.7)	652 (5.1)	12,691	10,566	0.51	0.63	1.20	0.82	1.03	1.96
1965	6,005	3,225 (37.2)	4,924 (56.8)	520 (6.0)	8,669	10,504	0.31	0.47	0.83	0.54	0.82	1.44
1966	6,683	6,966 (56.6)	4,659 (37.8)	696 (5.7)	12,321	12,387	0.56	0.38	0.99	1.04	0.68	1.84
1967	9,420	8,476 (48.4)	6,773 (38.6)	2,277 (13.0)	17,526	17,773	0.48	0.38	0.99	0.87	0.69	1.86
1968	13,061	17,048 (52.6)	12,604 (38.9)	2,762 (8.5)	32,414	26,537	0.64	0.47	1.22	1.30	0.96	2.48
1969	12,523	9,490 (44.1)	10,419 (48.5)	1,589 (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)	13,515 (42.4)	2,793 (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)	13,749 (43.1)	2,393 (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)	19,221 (45.2)	2,649 (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)	36,846 (81.4)	1,233 (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)	32,236 (51.6)	5,642 (9.0)	62,439	55,258	0.44	0.58	1.13	1.12	1.47	2.85
1975	20,102	15,750 (37.1)	23,138 (54.5)	3,573 (8.4)	42,461	50,579	0.31	0.45	0.84	0.78	1.15	2.11
1976	21,186	23,551 (37.1)	35,660 (56.2)	4,225 (6.7)	63,436	56,422	0.42	0.63	1.12	1.11	1.68	2.99
TOTALS (1961-76)	187,820	181,054 (40.9)	229,485 (51.9)	31,775 (7.2)	442,314	416,308	0.43	0.55	1.05	0.91	1.15	2.22
AVERAGES												
1963-75	13,578	11,961 (41.4)	14,780 (51.2)	2,119 (7.3)	28,860	27,684	0.45	0.52	1.04	0.92	1.07	2.16

*Estimated

**Totals and indexes based on indiscreet data.

Table 15. Forest grouse field bag check summary, 1976.

Region & 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	
<u>Northern Region</u>										
Box Elder	7	22	172	30	7	22	172	30	17	1.36
Cache	695	1,538	5,882	1,050	648	1,445	5,617	1,046	19	0.72
Davis	--	--	--	--	--	--	--	--	--	--
Morgan	4	10	31	6	2	4	14	5	36	1.25
Rich	90	188	759	55	90	188	759	55	7	0.29
Summit	--	--	--	--	--	--	--	--	--	--
Weber	88	172	776	133	88	172	776	133	17	0.77
REGIONAL TOTALS	884	1,930	7,620	1,274	835	1,831	7,338	1,269	17	0.69
<u>Central Region</u>										
Juab	35	85	338	76	22	65	270	57	21	0.88
Salt Lake	--	--	--	--	--	--	--	--	--	--
Sanpete	17	39	69	10	3	7	7	1	14	0.14
Tooele	9	21	64	22	6	15	52	15	29	1.00
Utah	373	788	3,158	437	303	634	2,793	335	12	0.53
Wasatch	2	5	10	2	1	3	4	1	25	0.33
REGIONAL TOTALS	436	938	3,639	547	335	724	3,126	409	13	0.56
<u>Southern Region</u>										
Beaver	--	--	--	--	--	--	--	--	--	--
Garfield	6	7	5	4	6	7	5	4	80	0.57
Iron	--	--	--	--	--	--	--	--	--	--
Kane	--	--	--	--	--	--	--	--	--	--
Millard	--	--	--	--	--	--	--	--	--	--
Piute	--	--	--	--	--	--	--	--	--	--
Sevier	14	36	128	23	7	18	60	14	23	0.78
Washington	--	--	--	--	--	--	--	--	--	--
Wayne	1	3	24	1	1	3	24	1	4	0.33
REGIONAL TOTALS	21	46	157	28	14	28	89	19	21	0.68
<u>Northeastern Region</u>										
Daggett	3	6	32	13	1	2	14	8	57	4.00
Duchesne	7	30	103	11	2	9	31	11	35	1.22
Uintah	19	46	76	46	5	13	26	17	65	1.31
REGIONAL TOTALS	29	81	211	70	8	24	71	36	51	1.50
<u>Southeastern Region</u>										
Carbon	7	12	28	13	5	10	24	10	42	1.00
Emery	--	--	--	--	--	--	--	--	--	--
Grand	3	4	16	4	2	3	12	4	33	1.33
San Juan	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	10	16	44	17	7	13	36	14	39	1.08
STATE TOTALS	1,380	3,011	11,671	1,936	1,199	2,620	10,660	1,747	16	0.67

Table 16. Forest grouse hunter success trend determined by field bag checks, 1971-76.

Region & County	1971		1972		1973		1974		1975		1976	
	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter
<u>Northern Region</u>												
Box Elder	--	--	25	0.78	33	1.00	24	0.96	18	0.79	17	1.36
Cache	21	0.80	20	0.97	18	0.80	12	0.62	12	0.58	18	0.72
Davis	--	--	--	--	--	--	--	--	2	0.05	--	--
Morgan	96	1.60	0	0.00	50	0.50	--	--	6	0.32	19	1.25
Rich	24	1.09	16	0.81	11	0.52	10	0.46	4	0.22	7	0.29
Summit	14	0.45	--	--	--	--	--	--	--	--	--	--
Weber	16	0.65	22	1.00	15	0.60	12	0.57	7	0.40	17	0.77
REGIONAL TOTALS	21	0.81	19	0.94	17	0.74	12	0.59	10	0.48	17	0.69
<u>Central Region</u>												
Juab	23	1.67	33	1.36	26	1.29	--	--	11	0.21*	22	0.88
Salt Lake	0	0.00	0	0.00	75	1.12	--	--	--	--	--	--
Sanpete	31	0.88	26	0.88	23	0.50	38	1.08*	16	0.28*	14	0.14
Tooele	--	--	33	1.00	9	0.40	31	1.00	--	--	34	1.00
Utah	26	0.38	27	0.69	26	1.08	27	1.80	12	0.35	14	0.53
Wasatch	50	1.33	--	--	89	2.67	56	1.52	71	1.17	20	0.33
REGIONAL TOTALS	28	0.61	26	0.75	27	1.11	35	1.24	15	0.38	15	0.56
<u>Southern Region</u>												
Beaver	4	0.33	--	--	0	0.00	--	--	--	--	--	--
Garfield	4	0.05	--	--	38	1.00	--	--	50	0.33	80	0.57
Iron	32	0.70	--	--	--	--	--	--	36	1.00	--	--
Kane	--	--	51	2.56	73	2.83	--	--	20	--	--	--
Millard	--	--	--	--	--	--	--	--	24	0.80	--	--
Piute	--	--	12	0.75	47	1.50	--	--	100	2.00	--	--
Sevier	50	1.28	44	1.36	400	3.00	--	--	31	2.00	18	0.78
Washington	--	--	--	--	--	--	--	--	--	--	--	--
Wayne	--	--	--	--	--	--	--	--	--	--	4	0.33
REGIONAL TOTALS	17	0.38	42	1.86	63	1.91	--	--	26	1.13	18	0.68
<u>Northeastern Region</u>												
Daggett	80	1.33	21	0.57	--	--	33	0.44	90	2.25	41	4.00
Duchesne	50	2.00	20	0.50	28	1.44	25	0.50	0	--	11	1.22
Uintah	44	2.36	150	1.50	--	--	15	0.54	28	1.32	60	1.31
REGIONAL TOTALS	49	2.12	39	0.85	28	1.44	16	0.53	30	1.48	33	1.50
<u>Southeastern Region</u>												
Carbon	35	1.75	--	--	100	--	--	--	--	--	46	1.00
Emery	13	0.62	--	--	33	1.00	5	0.17	4	0.10*	--	--
Grand	41	1.00	--	--	75	3.00	17	0.50*	150	3.00	25	1.33
San Juan	--	--	--	--	--	--	17	0.30	67	0.80	--	--
REGIONAL TOTALS	26	1.00	--	--	55	1.67	11	0.25	11	0.30	39	1.08
STATE TOTALS	22	0.80	20	0.95	19	0.80	13	0.59	11	0.50	17	0.67

*Forest grouse per hunter index based on all hunts.

QUAIL

SUMMARY

The 1976 breeding population of California quail was estimated to be comparable to or slightly higher than 1975. That of the Gambel's quail was greater than 1975.

Production of both Gambel's and California quail decreased from 1975 to below average. Population densities were about comparable to 1975 in most areas of the State.

Harvest statistics showed increased hunter success in all but the Northern Region which was down slightly from 1975. Even so, a marked reduction in hunting pressure resulted in a decreased total harvest.



Brood Count

Results of the annual random brood survey for 1976 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 1976 compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total quail observed	885	+ 7	-18
Young per 100 adults	163	-55	-32
Mean brood size	5.58	-39	-22
Quail observed per 100 hours	571	+ 4	-15
Total hours effort	155	+ 3	- 3

Harvest statistics for 1975 indicated comparable or slightly increased breeding populations of California quail Statewide and a substantially increased breeding population of Gambel's quail in Washington County.

Gambel's quail call counts on the west slope of the Beaver Dam Mountains showed a decline from 1975 but may have been depressed by the fact that counts were conducted one week later than specified. The relatively early spring lends significance to this possibility.

Production of both Gambel's quail and California quail decreased from 1975 to a below average level. The density index (quail observed per 100 hours) indicated decreased quail abundance in the Northern and Southern regions with increased abundance elsewhere.

Populations were apparently comparable to 1975 in most areas of the State. Quail density in Washington County appeared to be less but reports from the field indicated a more widespread distribution than in several previous years.

Harvest

Results of the annual hunter questionnaire for 1976 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 1976 season compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Quail hunters	5,215	-18	-31
Quail harvested	14,454	-14	-34
Hunter-days afield	13,261	-21	-30
Quail per hunter	2.77	+ 5	- 2
Quail per hunter-day	1.09	+ 8	- 6

Total hunters and hunter-days afield decreased from 1975 to well below average. Consequently, even though hunter success was slightly higher than 1975 and near average, the total harvest declined.

Hunter success for Washington County (Gambel's quail) was higher than in 1975 but hunting pressure was down. Approximately 40 percent of the Statewide harvest was taken in Washington County. This was down from 48 percent last year. Increased hunter success was also evident for the California quail was well in all but the Northern Region which decreased slightly.

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.

Call counts showed 2.0 quail calling for the route in 1976 compared to 6.0 in 1975.

Waterhole counts yielded 114 quail compared to 165 during 1975 and 30 in 1974.

Vegetative surveys designed to measure the relative abundance of annual forbs using filaree (Erodium cicutarium) as the indicator species showed the third highest plant density since initiation of the survey in 1962.

Quail bagged per hunter and per hunter-day.

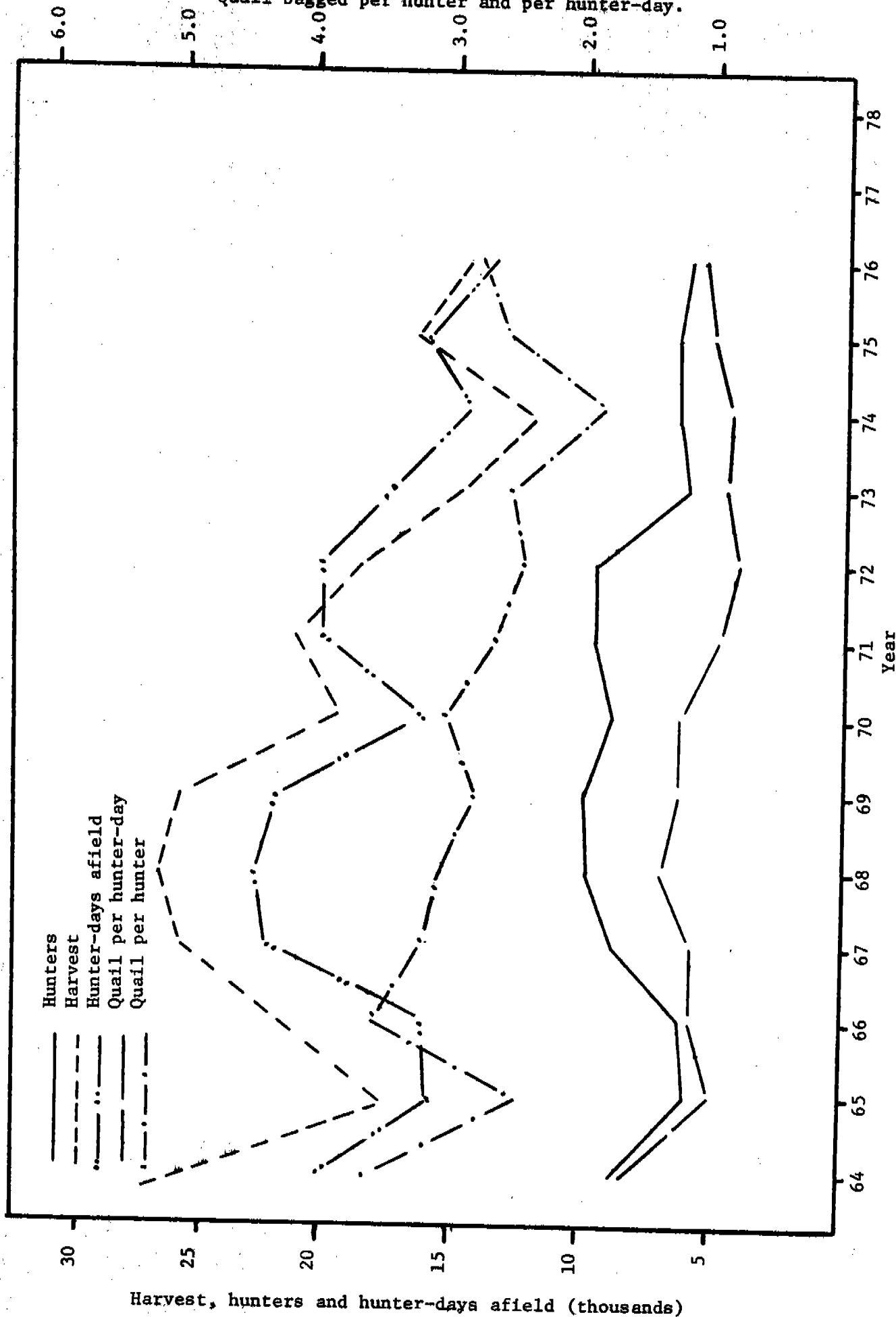


Figure 1. Statewide trend of quail harvest statistics.

Harvest, hunters and hunter-days afield (thousands)

Table 1. Quail summer inventory summary, 1976.

Region and County	Distinct Broods		Mean		Mixed Yng. & Adults		Adults w/o Yng.		Total Yng.		Vehicle Miles		Hours Effort		Birds/100 hrs.		
	No. Ad.	Yng.	Brood	Ad.	Yng.	Ad.	Yng.	100 Ad.	Yng.	Ad.	Miles	Veh.	Horse	Walk		Total	
<u>Northern Region</u>																	
Box Elder	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Cache	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Davis	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Morgan	0	0	0	3	9	0	3	9	300	3	1	0	0	1	1,200	--	
Rich	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Summit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Weber	0	0	0	--	0	2	2	0	0	78	6	0	3	9	22	--	
REGIONAL TOTALS	0	0	0	3	9	2	5	9	180	81	7	0	3	10	140	--	
<u>Central Region</u>																	
Juab	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Salt Lake	4	8	28	7.00	46	61	115	112	97	77	6	0	2	8	2,838	--	
Sanpete	5	5	29	5.80	0	0	5	29	580	68	9	0	4	13	262	--	
Tooele	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Utah	2	2	5	2.50	15	8	25	16	64	61	6	0	2	8	512	--	
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	11	15	62	5.64	61	69	145	157	108	206	21	0	8	29	1,041	--	
<u>Southern Region</u>																	
Beaver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Kane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Millard	5	10	51	10.20	0	25	35	51	146	48	3	0	0	3	2,867	--	
Plute	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sevier	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Washington	13	21	79	6.08	76	15	112	223	199	435	28	--	25	53	632	--	
Wayne	2	4	18	9.00	3	2	9	22	244	20	2	0	4	6	517	--	
REGIONAL TOTALS	20	35	148	7.40	79	42	156	296	190	503	33	0	29	62	729	--	
<u>Northeastern Region</u>																	
Daggett	1	1	6	6.00	0	0	1	6	600	255	13	0	4	17	41	--	
Duchesne	0	0	0	--	0	6	6	0	0	220	13	0	1	14	43	--	
Uintah	20	20	71	3.55	0	2	22	71	323	122	12	0	1	13	715	--	
REGIONAL TOTALS	21	21	77	3.67	0	8	29	77	265	597	38	0	6	44	241	--	
<u>Southeastern Region</u>																	
Carbon	1	2	9	9.00	0	0	2	9	450	60	4	0	1	5	220	--	
Emery	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Grand	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	0	0	0	--	0	0	0	0	--	15	5	0	0	5	0	--	
REGIONAL TOTALS	1	2	9	9.00	0	0	2	9	450	75	9	0	1	10	110	--	
STATE TOTALS	53	73	296	5.58	143	252	337	548	163	1,462	108	0	47	155	571	--	

Table 2. Trend of quail young per 100 adults ratios 1966-76*

Region & County	Year											Average 1963-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	500	800	--	--	--	--	--	250	--	--	--	--
Cache	--	--	--	--	--	--	--	--	--	--	--	--
Davis	175	5	1,500	400	--	314	--	--	--	--	--	--
Morgan	256	141	153	94	329	300	575	400	640	--	300	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	267	--	450	--	--	--	--	--	--	--	--
Weber	264	--	600	125	0	255	111	50	--	217	0	--
REGIONAL TOTALS	275	83	273	183	230	290	254	230	640	217	180	251
<u>Central Region</u>												
Juab	--	--	--	--	--	--	--	--	--	--	--	--
Salt Lake	--	241	230	360	173	240	114	222	175	154	97	--
Sanpete	464	262	625	327	476	440	500	174	175	300	580	--
Tooele	--	--	--	--	--	--	--	--	--	--	--	--
Utah	394	282	319	300	228	220	275	241	250	229	64	--
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	414	264	306	337	198	267	143	222	200	188	108	258
<u>Southern Region</u>												
Beaver	--	--	--	--	--	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--
*Kane	--	625	--	--	1,075	160	--	--	--	--	--	--
Millard	150	--	--	122	--	233	117	0	113	50	146	--
Piute	--	333	--	--	--	--	--	--	--	--	--	--
Sevier	--	--	--	--	--	--	--	--	--	--	--	--
*Washington	290	215	323	138	48	320	57	--	273	580	199	--
*Wayne	0	--	400	--	--	0	--	--	86	--	244	--
REGIONAL TOTALS	270	223	324	260	98	270	75	0	171	429	190	198
<u>Northeastern Region</u>												
Daggett	--	--	--	--	524	267	--	0	525	450	600	--
Duchesne	100	171	183	54	0	--	--	--	333	314	0	--
Uintah	378	133	200	138	218	217	165	700	438	475	323	--
REGIONAL TOTALS	288	141	194	123	301	243	165	350	431	411	265	245
<u>Southeastern Region</u>												
Carbon	233	220	200	114	283	125	--	533	--	--	450	--
Emery	167	--	0	--	--	50	438	--	109	0	--	--
Grand	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	--	1,200	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	211	383	150	114	283	100	438	533	109	0	450	251
STATE TOTALS	303	202	302	229	200	255	171	216	248	360	163	241

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

Table 3. Trend of quail mean brood size from 1966-76*.

Region & County	Year											Average 1959-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	10.00	8.00	--	--	--	--	--	5.00	--	--	--	--
Cache	--	--	--	--	--	--	--	--	--	--	--	--
Davis	--	--	15.00	8.20	--	11.00	--	--	--	--	--	--
Morgan	9.00	6.00	--	4.80	7.67	12.00	11.50	8.00	9.00	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	8.00	--	7.00	--	--	--	--	--	--	--	--
Weber	13.00	--	12.00	4.00	--	9.33	10.00	--	--	--	--	--
REGIONAL TOTALS	10.25	6.57	14.25	5.94	7.67	10.50	11.00	7.00	9.00	--	--	7.87
<u>Central Region</u>												
Juab	--	--	--	--	--	--	--	--	--	--	--	--
Salt Lake	--	9.00	6.67	11.42	8.61	7.00	8.00	7.50	5.00	6.80	7.00	--
Sanpete	9.29	6.30	7.50	6.00	5.67	5.70	5.40	5.60	4.00	6.00	5.80	--
Tooele	--	--	--	--	--	--	--	--	--	--	--	--
Utah	8.38	6.80	8.24	8.75	7.85	7.43	7.17	7.36	6.67	7.00	2.50	--
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	8.65	6.86	7.91	9.67	7.98	6.50	7.18	6.95	5.29	6.56	5.64	7.32
<u>Southern Region</u>												
Beaver	--	--	--	--	--	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--
*Kane	--	--	--	--	--	8.00	--	--	--	--	--	--
Millard	12.00	--	--	4.00	--	8.00	7.00	--	7.00	8.00	10.20	--
Piute	--	4.00	--	--	--	--	--	--	--	--	--	--
Sevier	--	--	--	--	--	--	--	--	--	--	--	--
*Washington	6.92	5.30	7.92	2.90	4.00	6.62	2.67	--	5.17	10.84	6.08	--
*Wayne	--	--	--	--	--	--	--	--	9.00	--	9.00	--
REGIONAL TOTALS	7.11	5.34	7.92	3.50	4.00	7.21	3.75	--	6.30	10.63	7.40	6.70
<u>Northeastern Region</u>												
Daggett	--	--	--	--	5.29	5.45	--	--	5.25	4.50	6.00	--
Duchesne	2.00	--	3.67	3.00	--	--	--	--	5.00	--	--	--
Uintah	9.80	6.25	4.80	6.00	5.43	5.33	5.92	7.00	11.00	10.00	3.55	--
REGIONAL TOTALS	8.50	6.25	4.38	5.50	5.32	5.41	5.92	7.00	6.73	6.86	3.67	6.43
<u>Southeastern Region</u>												
Carbon	7.00	3.67	3.00	4.67	--	--	--	8.00	--	--	9.00	--
Emery	--	--	--	--	--	2.00	9.86	--	5.00	--	--	--
Grand	--	--	--	--	--	--	--	--	--	--	--	--
San Juan	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	7.00	3.67	3.00	4.67	--	2.00	9.86	8.00	5.00	--	9.00	6.47
STATE TOTALS	8.10	5.80	7.76	6.95	6.97	6.58	7.21	7.04	6.20	9.16	5.58	7.19

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

Table 4. Trend of quail observed per 100 hours ratios, 1967-76*.

Region & County	Year										Average 1967-75	
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976		
<u>Northern Region</u>												
Box Elder	--	--	--	--	--	--	175	--	--	--	--	--
Cache	0	0	--	--	--	--	--	--	--	--	--	--
Davis	727	1,200	1,625	0	829	--	--	--	--	--	--	--
Morgan	189	--	631	1,200	400	1,350	--	925	--	--	1,200	--
Rich	--	--	--	--	--	--	--	--	--	--	--	--
Summit	23	--	1,100	--	--	--	--	--	--	--	--	--
Weber	--	65	100	86	300	271	100	--	238	22	--	--
REGIONAL TOTALS	141	577	657	550	471	511	330	925	238	140	490	
<u>Central Region</u>												
Juab	--	--	--	--	--	--	--	--	--	--	--	--
Salt Lake	1,400	248	3,684	2,637	1,133	2,706	414	550	592	2,838	--	--
Sanpete	470	483	427	817	982	771	525	138	480	262	--	--
Tooele	--	--	--	--	--	--	--	--	--	--	--	--
Utah	2,625	1,351	2,086	959	988	1,071	1,194	400	383	512	--	--
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	1,418	1,330	2,083	1,704	1,030	1,873	808	267	513	1,041	1,225	
<u>Southern Region</u>												
Beaver	--	--	--	--	--	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	--	--	--	--	--	--
Iron	66	--	--	--	--	--	--	--	--	--	--	--
*Kane	264	--	0	2,350	578	--	--	--	--	--	--	--
Millard	--	--	1,800	--	3,000	118	125	1,067	1,600	2,867	--	--
Piute	400	--	--	--	--	--	--	--	--	--	--	--
Sevier	--	--	--	--	--	--	--	--	--	--	--	--
*Washington	673	1,600	322	316	600	122	--	194	1,143	632	--	--
*Wayne	--	--	--	--	33	--	--	300	14	517	--	--
REGIONAL TOTALS	866	1,600	2,122	420	708	90	125	254	917	729	790	
<u>Northeastern Region</u>												
Daggett	--	--	--	3,017	1,900	--	18	208	157	41	--	--
Duchesne	43	45	170	29	0	--	0	325	153	43	--	--
Uintah	525	514	1,575	894	1,120	1,005	533	1,950	460	715	--	--
REGIONAL TOTALS	146	118	794	628	769	303	47	739	226	241	419	
<u>Southeastern Region</u>												
Carbon	533	300	377	271	300	--	--	0	--	220	--	--
Emery	--	--	--	--	83	1,950	0	343	17	--	--	--
Grand	--	--	--	--	--	--	--	0	--	--	--	--
San Juan	1,300	--	--	--	--	--	--	--	--	0	--	--
REGIONAL TOTALS	750	300	377	271	181	1,950	112	343	17	110	478	
STATE TOTALS	525	887	1,049	939	728	664	336	364	549	571	672	

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

Table 5. Summary of quail hunter success and distribution of harvest and hunting pressure by region and county, 1976.

Region and County	Hunters Reporting	Days Hunted	Birds Bagged	Birds per Hunter-day	Birds per Hunter*	% of Pressure	% of Harvest
<u>Northern Region</u>							
Box Elder	4	11	2	0.18	1.00	1.68	0.28
Cache	6	9	6	0.67	1.00	1.37	0.84
Davis	31	101	71	0.70	2.29	15.40	9.93
Morgan	7	15	12	0.80	2.20	2.29	1.68
Rich	0	0	0	0.00	0.00	0.00	0.00
Summit	2	6	1	0.17	3.00	0.91	0.14
Weber	17	44	23	0.52	1.20	6.71	3.22
REGIONAL TOTALS	67	186	115	0.62	1.88	28.35	16.08
<u>Central Region</u>							
Juab	1	1	0	0.00	0.00	0.15	0.00
Salt Lake	17	28	24	0.86	1.70	4.27	3.36
Sanpete	4	8	1	0.13	0.33	1.22	0.14
Tooele	1	1	0	0.00	0.00	0.15	0.00
Utah	58	104	91	0.88	2.20	15.85	12.73
Wasatch	0	0	0	0.00	1.00	0.00	0.00
REGIONAL TOTALS	81	142	116	0.82	1.94	21.65	16.22
<u>Southern Region</u>							
Beaver	4	7	3	0.43	4.50	1.07	0.42
Garfield	0	0	0	0.00	0.00	0.00	0.00
Iron	2	5	7	1.40	3.56	0.76	0.98
Kane	0	0	0	0.00	0.00	0.00	0.00
Millard	5	17	26	1.53	5.33	2.59	3.64
Piute	0	0	0	0.00	5.00	0.00	0.00
Sevier	2	3	1	0.33	1.00	0.46	0.14
Washington	45	129	287	2.22	7.67	19.66	40.14
Wayne	5	6	12	2.00	1.67	0.91	1.68
REGIONAL TOTALS	63	167	336	2.01	6.06	25.46	46.99
<u>Northeastern Region</u>							
Daggett	0	0	0	0.00	0.00	0.00	0.00
Duchesne	7	18	35	1.94	6.00	2.74	4.90
Uintah	16	43	30	0.70	2.18	6.55	4.20
REGIONAL TOTALS	23	61	65	1.07	3.20	9.30	9.09
<u>Southeastern Region</u>							
Carbon	15	30	24	0.80	1.79	4.57	3.36
Emery	4	6	2	0.33	0.00	0.91	0.28
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
REGIONAL TOTALS	19	36	26	0.72	1.67	5.49	3.64
Unknown counties	13	64	57	0.89	0.00	9.76	7.97
Mixed counties	0	0	0	0.00	0.00	0.00	0.00
STATE TOTALS	266	656	715	1.09	2.77	100	100

*Based on county of residence.

Table 6. Summary of quail bagged per hunter-day by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	0.45	1.12	0.65	0.83	0.43	0.18
Cache	0.40	0.05	1.00	0.60	0.33	0.67
Davis	0.53	0.98	0.62	0.70	0.73	0.70
Morgan	0.83	0.50	0.67	0.31	0.70	0.80
Rich	--	1.00	--	0.00	0.00	0.00
Summit	0.58	0.67	0.80	0.79	1.75	0.17
Weber	0.91	0.74	0.32	0.62	0.64	0.52
REGIONAL TOTALS	0.67	0.79	0.57	0.62	0.68	0.62
<u>Central Region</u>						
Juab	0.00	--	0.00	--	0.00	0.00
Salt Lake	0.88	1.14	0.71	0.94	1.30	0.86
Sanpete	0.38	0.17	0.50	0.89	0.50	0.13
Tooele	0.00	0.00	0.33	0.75	1.25	0.00
Utah	0.83	0.80	0.77	0.75	0.66	0.88
Wasatch	0.00	0.00	2.50	--	1.25	0.00
REGIONAL TOTALS	0.80	0.82	0.76	0.79	0.78	0.82
<u>Southern Region</u>						
Beaver	3.00	1.50	--	--	0.00	0.43
Garfield	--	--	--	--	0.00	0.00
Iron	1.20	1.00	2.00	1.00	0.23	1.40
Kane	2.86	--	2.69	--	0.00	0.00
Millard	0.14	0.30	0.50	0.50	0.36	1.53
Piute	--	--	2.00	0.00	0.00	0.00
Sevier	0.60	0.00	0.50	0.00	0.11	0.33
Washington	1.81	1.07	1.47	1.39	2.09	2.22
Wayne	8.00	2.00	0.00	2.50	3.00	2.00
REGIONAL TOTALS	1.82	1.01	1.55	1.22	1.73	2.01
<u>Northeastern Region</u>						
Daggett	--	0.00	0.00	1.00	0.00	0.00
Duchesne	1.38	2.25	1.39	0.20	0.55	1.94
Uintah	0.53	0.38	0.78	0.88	0.79	0.70
REGIONAL TOTALS	0.83	0.44	0.93	0.79	0.73	1.07
<u>Southeastern Region</u>						
Carbon	0.95	0.31	0.81	0.43	0.48	0.80
Emery	1.50	0.00	0.58	0.33	0.96	0.33
Grand	--	--	0.00	--	0.25	0.00
San Juan	--	--	--	--	0.00	0.00
REGIONAL TOTALS	1.00	0.25	0.76	0.42	0.57	0.72
Unknown counties	1.12	0.80	0.27	0.67	0.29	0.89
Mixed counties	--	--	--	2.37	0.00	0.00
STATE TOTALS	0.98	0.76	0.81	0.82	1.01	1.09

Table 7. Percentage distribution of quail harvest by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	0.51	3.70	1.46	2.37	0.29	0.28
Cache	0.61	0.14	0.79	0.95	0.19	0.84
Davis	6.09	10.84	7.55	6.65	7.30	9.93
Morgan	2.43	1.10	3.84	1.42	2.02	1.68
Rich	--	0.14	--	0.00	0.00	0.00
Summit	0.71	0.27	2.12	1.74	0.67	0.14
Weber	7.20	7.00	3.05	4.59	4.42	3.22
REGIONAL TOTALS	17.55	23.18	18.81	17.72	14.89	16.08
<u>Central Region</u>						
Juab	0.00	--	0.00	--	0.00	0.00
Salt Lake	6.49	13.58	6.36	9.81	7.49	3.36
Sanpete	0.51	0.55	0.40	1.27	0.10	0.14
Tooele	0.00	0.00	0.40	0.47	0.48	0.00
Utah	25.46	31.82	29.01	28.96	16.43	12.73
Wasatch	0.00	0.00	1.32	--	0.48	0.00
REGIONAL TOTALS	32.45	45.95	37.48	40.51	24.98	16.22
<u>Southern Region</u>						
Beaver	0.61	0.41	--	--	0.00	0.42
Garfield	--	--	--	--	0.00	0.00
Iron	0.61	0.27	1.59	0.16	0.58	0.98
Kane	2.03	--	4.64	--	0.00	0.00
Millard	0.10	0.41	0.13	1.42	0.48	3.64
Piute	--	--	0.26	0.00	0.00	0.00
Sevier	0.61	0.00	0.40	0.00	0.19	0.14
Washington	26.06	18.24	19.34	23.58	48.41	40.14
Wayne	2.43	0.55	0.06	0.79	0.29	1.68
REGIONAL TOTALS	32.45	19.89	26.36	25.95	49.95	46.99
<u>Northeastern Region</u>						
Daggett	--	0.00	0.00	0.32	0.00	0.00
Duchesne	2.94	1.23	3.31	0.32	0.58	4.90
Uintah	2.03	6.17	5.30	8.39	2.88	4.20
REGIONAL TOTALS	4.97	7.41	8.61	9.02	3.46	9.09
<u>Southeastern Region</u>						
Carbon	6.09	1.92	6.23	3.01	3.65	3.36
Emery	0.91	0.00	0.93	0.47	2.59	0.28
Grand	--	0.00	0.00	--	0.29	0.00
San Juan	--	0.00	--	--	0.00	0.00
REGIONAL TOTALS	7.00	1.92	7.15	3.48	6.53	3.64
Unknown counties	5.58	1.65	1.59	0.32	0.19	7.97
Mixed counties	--	--	--	3.01	0.00	0.00
STATE TOTALS	100	100	100	100	100	100

Table 8. Percentage distribution of quail hunting pressure by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	1.09	2.49	1.81	2.33	0.68	1.68
Cache	1.49	1.98	0.64	1.29	0.58	1.37
Davis	11.19	8.42	9.82	7.75	10.05	15.40
Morgan	2.87	1.66	4.59	3.75	2.90	2.29
Rich	--	0.10	--	0.26	0.48	0.00
Summit	1.19	0.31	2.13	1.81	0.39	0.91
Weber	7.72	7.17	7.68	6.07	6.96	6.71
REGIONAL TOTALS	25.54	22.14	26.68	23.26	22.03	28.35
<u>Central Region</u>						
Juab	0.10	--	0.32	--	0.19	0.15
Salt Lake	7.23	9.04	7.26	8.53	5.80	4.27
Sanpete	1.29	2.49	0.64	1.16	0.19	1.22
Tooele	0.40	0.52	0.96	0.52	0.39	0.15
Utah	30.00	30.15	30.20	31.65	25.12	15.85
Wasatch	0.50	0.52	0.43	--	0.39	0.00
REGIONAL TOTALS	39.50	42.72	39.81	41.86	32.08	21.65
<u>Southern Region</u>						
Beaver	0.20	0.21	--	--	0.00	1.07
Garfield	--	--	--	--	0.00	0.00
Iron	0.50	0.21	0.64	0.13	2.51	0.76
Kane	0.69	--	1.39	--	0.00	0.00
Millard	0.69	1.04	0.21	2.33	1.35	2.59
Piute	--	--	0.11	0.26	0.00	0.00
Sevier	0.99	0.42	0.64	0.52	1.74	0.46
Washington	14.06	12.89	10.57	13.82	23.29	19.66
Wayne	0.30	0.21	0.11	0.26	0.10	0.91
REGIONAL TOTALS	17.43	14.97	13.66	17.31	28.99	25.46
<u>Northeastern Region</u>						
Daggett	--	0.10	0.11	0.26	0.00	0.00
Duchesne	2.08	0.42	1.92	1.29	1.06	2.74
Uintah	3.76	12.27	5.44	7.75	3.67	6.55
REGIONAL TOTALS	5.84	12.79	7.47	9.30	4.73	9.30
<u>Southeastern Region</u>						
Carbon	6.24	4.68	6.19	5.68	7.63	4.57
Emery	0.59	1.14	1.28	1.16	2.71	0.91
Grand	--	--	0.11	--	1.16	0.00
San Juan	--	--	--	--	0.00	0.00
REGIONAL TOTALS	6.83	5.82	7.58	6.85	11.50	5.49
Unknown counties	4.85	1.56	4.80	0.39	0.68	9.76
Mixed counties	--	--	--	1.03	0.00	0.00
STATE TOTALS	100	100	100	100	100	100

Table 9. State-wide summary of quail harvest statistics, 1951-1976

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
1975	6,397	16,903	16,805	1.01	2.64
1976	5,215	14,454	13,261	1.09	2.77
TOTALS (1959-76)	133,591	384,721	334,530	1.15	2.88
AVERAGES (1959-75)	7,552	21,780	18,898	1.16	2.84

Table 10. Gambel's quail call-count trends on the west slope of the Beaver Dam Mountains, Washington County, 1971-76.

Index	1971	1972	1973	1974	1975	1976
Mean calls per station	1.57	0.36	0.06	0.00	2.55	0.76
Mean quail calling per station	0.37	0.11	0.03	0.00	0.40	0.13
Mean total calls-route	23.5	5.30	1.00	0.00	38.20	11.40
Mean total quail calling-route	5.5	1.7	0.40	0.00	6.00	2.00

Table 11. Gambel's quail long-period waterhole count trend on the west slope of the Beaver Dam Mountains, Washington County, 1971-76.

Area	1971	1972	1973	1974	1975	1976
Total young	33	0	0	24	145	61
Total adults	8	0	0	6	20	53
Total quail	41	0	0	30	165	114
Young per 100 adults	412	--	--	400	725	115

Table 12. Trend of fillaree plants per square foot on the west slope of the Beaver Dam Mountains, 1971-76.

Index	1971	1972	1973	1974	1975	1976
Vern's Wash (B-1)	0.07	--	0.37	2.40	4.46	2.99
Reber Wash (B-2)	0.00	0.00	0.43	1.10	3.21	3.36
Brick Wash (A-1)	0.13	0.04	0.41	2.40	2.90	3.38
Gravel Canyon (A-2)	0.28	0.04	0.40	1.30	0.94	1.87
AVERAGE	0.14	0.03	0.40	1.80	2.88	2.70

HUNGARIAN PARTRIDGE

SUMMARY

Decreased breeding populations for 1976 were suggested by 1975 harvest data. Limited brood data samples suggested decreased production but were too small to warrant confidence in indicating trends.

Hunting pressure, success and total harvest all increased on a statewide basis due to increases in the Northern Region. Hunting pressure and success decreased in the Central Region.



Brood Counts

Results of the annual random brood counts for 1976 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 1976 compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total Huns observed	248	+48	-22
Young per 100 adults	328	-45	-34
Mean brood size	9.70	-30	-3
Huns observed per 100 hours	238	-9	-6
Total hours effort	104	+62	-21

Harvest data for 1975 suggested a decreased breeding population level for 1976 in the Northern Region and an increased population in the Central Region.

Brood survey sample sizes were too small to accurately indicate either reproductive success or relative population density. The limited data available suggested reduced production and a lower population level.

Continued natural population dispersal was indicated by reports of birds being observed in Sanpete and Tooele counties.

Harvest

Hunter Questionnaire

Results of the annual hunter questionnaire for 1976 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 1976 season compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Hungarian partridge hunters	3,517	+3	-17
Hungarian partridge harvest	6,287	+17	-34
Hunter-days afield	8,753	+7	-18
Huns per hunter-day	0.72	+11	-16
Huns per hunter	1.79	+14	-16

Hunting pressure, both total hunters and hunter-days afield, hunter success and total harvest all increased over 1975 but were still below the long-term averages. Hunter success in the Central Region decreased.

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

Field Bag Checks

Results of this survey for 1976 are shown in Table 10. Hunter success trends determined via this method are shown in Table 11. Indexes obtained for 1976 compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total hunters checked	40	-55	-75
Total hours hunted	135	-50	-82
Huns per hunter (complete hunts)	0.24	-58	-71
Huns bagged per 100 hours	7	-46	-59
Average hours per hunter-day (complete hunts)	3.5	+3	-26
Hours hunted per Hun bagged	14.3	+134	+131

Very few hunters were checked in the field and the results obtained were in marked contrast to the harvest questionnaire. Where the questionnaire showed increased hunter success and hunting pressure, bag checks implied a decrease in both indexes. Bag check data were compiled primarily in west Box Elder County early in the season.

Hungarian partridge bagged per hunter and per hunter-day.

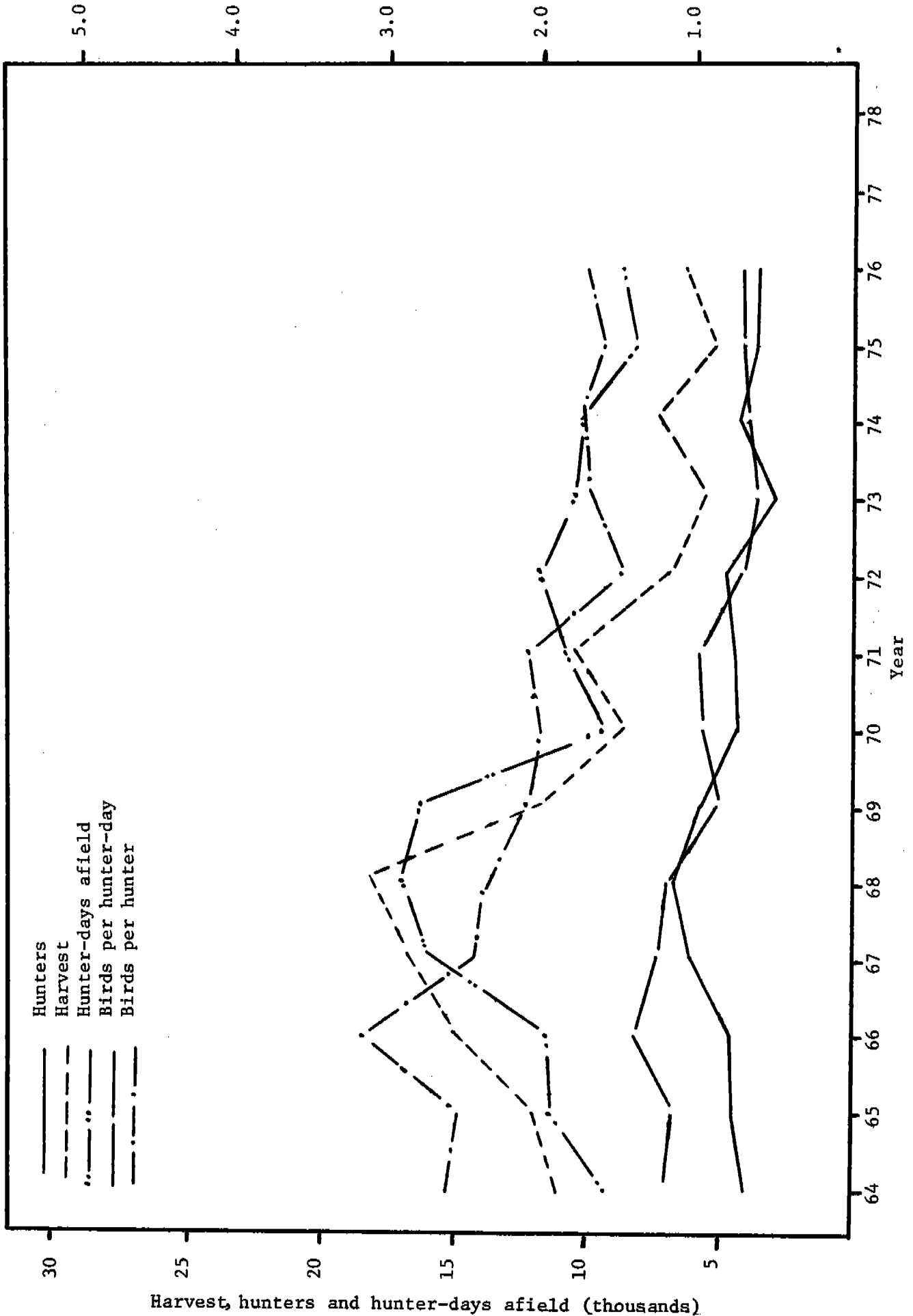


Figure 1. Statewide trend of Hungarian partridge harvest statistics.

Table 1. Hungarian partridge summer inventory summary, 1976.

Region and County	Distinct Broods		Mixed Yng. & Adults		Adults w/o Yng.	Total Yng. 100 Ad.	Total Yng.	Vehicle Miles	Hours Effort	Birds/100 hrs.						
	No. Ad.	Yng.	Brood Ad.	Yng.							Ad.	Ad.	Ad.	Miles	Walk	Total
<u>Northern Region</u>																
Box Elder	9	16	92	10.22	5	30	8	29	122	421	930	56	17	9	82	184
Cache	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Davis	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Morgan	0	0	0	--	3	16	0	3	16	533	10	1	0	0	1	1900
Rich	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	9	16	92	10.22	8	46	8	32	138	431	940	57	17	9	83	205
<u>Central Region</u>																
Juab	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Salt Lake	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sanpete	0	0	0	--	12	28	0	12	28	233	70	4	4	2	10	400
Tooele	0	0	0	--	4	22	0	4	22	550	0	0	0	1	1	2600
Utah	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Wasatch	1	2	2	2.00	0	0	8	10	2	20	43	8	0	2	10	120
REGIONAL TOTALS	1	2	2	2.00	16	50	8	26	52	200	113	12	4	5	21	371
<u>Southern Region</u>																
Beaver																
Garfield																
Iron																
Kane																
Millard																
Piute																
Sevier																
Washington																
Wayne																
NOT APPLICABLE																
<u>REGIONAL TOTALS</u>																
<u>Northeastern Region</u>																
Daggett																
Duchesne																
Uintah																
NOT APPLICABLE																
<u>REGIONAL TOTALS</u>																
<u>Southeastern Region</u>																
Carbon																
Emery																
Grand																
San Juan																
NOT APPLICABLE																
<u>REGIONAL TOTALS</u>																
STATE TOTALS	10	18	94	9.40	24	96	16	58	190	328	1053	69	21	14	104	238

Table 2. Trend of Hungarian partridge young per 100 adults ratios, 1966-76.

Region & County	Year										Average 1963-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	
<u>Northern Region</u>											
Box Elder	510	447	400	325	306	524	379	575	775	600	421
Cache	152	875	450	--	--	--	--	--	--	--	--
Davis	--	--	--	--	--	--	--	--	--	--	--
Morgan	--	300	--	--	--	1400	--	400	675	--	533
Rich	675	288	900	0	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	395	449	421	319	306	553	379	560	755	600	431
<u>Central Region</u>											
Juab	--	--	--	--	--	--	--	--	--	--	--
Salt Lake	--	--	--	--	--	--	--	--	--	--	--
Sanpete	--	--	--	--	--	--	--	--	--	--	233
Tooele	--	--	--	--	--	--	--	--	--	--	550
Utah	--	--	--	--	--	--	--	--	--	--	--
Wasatch	270	403	442	497	414	350	800	450	800	--	20
REGIONAL TOTALS	270	403	442	497	414	350	800	450	800	200	479
<u>Southern Region</u>											
Beaver											
Garfield											
Iron											
Kane											
Millard											
Piute											
Sevier											
Washington											
Wayne											
REGIONAL TOTALS											
<u>Northeastern Region</u>											
Daggett											
Duchesne											
Uintah											
REGIONAL TOTALS											
<u>Southeastern Region</u>											
Carbon											
Emery											
Grand											
San Juan											
REGIONAL TOTALS											
STATE TOTALS	370	435	430	325	319	495	424	552	757	600	328

NOT APPLICABLE

NOT APPLICABLE

NOT APPLICABLE

Table 3. Trend of Hungarian partridge mean brood size from 1966-76.

Region & County	Year											Average 1963-75
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>												
Box Elder	11.06	8.60	7.00	5.75	11.82	7.82	11.50	11.86	11.22	13.44	10.22	
Cache	7.00	11.67	9.00	--	--	--	--	--	--	--	--	
Davis	--	--	--	--	--	14.00	--	8.33	13.50	--	--	
Morgan	--	--	--	--	--	--	--	--	--	--	--	
Rich	13.50	7.67	9.00	--	--	--	--	--	--	--	--	
Summit	--	--	--	--	--	--	--	--	--	--	--	
Weber	--	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	10.44	8.77	7.24	5.75	11.58	8.16	11.50	10.80	11.64	13.44	10.22	9.94
<u>Central Region</u>												
Juab	--	--	--	--	--	--	--	--	--	--	--	
Salt Lake	--	--	--	--	--	--	--	--	--	--	--	
Sanpete	--	--	--	--	--	--	--	--	--	--	--	
Tooele	--	--	--	--	--	--	--	--	--	--	--	
Utah	--	--	--	--	--	--	--	--	--	--	--	
Wasatch	6.57	10.00	9.00	9.94	7.25	--	8.00	4.50	8.00	--	2.00	
REGIONAL TOTALS	6.57	10.00	9.00	9.94	7.25	--	8.00	4.50	8.00	--	2.00	7.88
<u>Southern Region</u>												
Beaver												
Garfield												
Iron												
Kane												
Millard												
Piute												
Sevier												
Washington												
Wayne												
REGIONAL TOTALS												
<u>Northeastern Region</u>												
Daggett												
Duchesne												
Uintah												
REGIONAL TOTALS												
<u>Southeastern Region</u>												
Carbon												
Emery												
Grand												
San Juan												
REGIONAL TOTALS												
STATE TOTALS	9.59	9.07	7.93	6.87	10.50	8.16	10.33	9.75	11.33	13.44	9.40	9.70

NOT APPLICABLE

NOT APPLICABLE

NOT APPLICABLE

Table 4. Trend of Hungarian partridge observed per 100 hours, 1967-76.

Region & County	Year										Average 1967-75
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	
<u>Northern Region</u>											
Box Elder	256	261	416	210	213	133	91	80	262	184	
Cache	175	209	0	--	--	--	--	--	--	--	
Davis	--	--	--	--	--	--	--	--	--	--	
Morgan	73	--	--	--	--	428	--	--	--	1900	
Rich	238	333	--	--	--	--	--	--	--	--	
Summit	--	--	--	--	--	--	--	--	--	--	
Weber	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	235	261	385	210	213	133	106	97	262	205	212
<u>Central Region</u>											
Juab	--	--	--	--	--	--	--	--	--	--	
Salt Lake	--	--	--	--	--	--	--	--	--	--	
Sanpete	--	--	--	--	--	--	--	--	--	400	
Tooele	--	--	--	--	--	--	--	--	--	2600	
Utah	--	--	--	--	--	--	--	--	--	--	
Wasatch	777	1193	1415	720	300	450	275	450	--	120	
REGIONAL TOTALS	777	1193	1415	720	300	171	275	450	--	371	663
<u>Southern Region</u>											
Beaver											
Garfield											
Iron											
Kane											
Millard											
Piute											
Sevier											
Washington											
Wayne											
REGIONAL TOTALS											
<u>Northeastern Region</u>											
Daggett											
Duchesne											
Uintah											
REGIONAL TOTALS											
<u>Southeastern Region</u>											
Carbon											
Emery											
Grand											
San Juan											
REGIONAL TOTALS											
STATE TOTALS	292	383	508	249	243	139	110	101	262	238	254

NOT APPLICABLE

NOT APPLICABLE

NOT APPLICABLE

Table 5. Summary of Hungarian partridge hunter success and distribution of harvest and hunting pressure by region and county, 1976.

Region and County	Hunters Reporting	Days Hunted	Birds Bagged	Birds per Hunter-day	Birds per Hunter*	% of Pressure	% of Harvest
<u>Northern Region</u>							
Box Elder	94	236	213	0.90	2.62	54.50	68.49
Cache	30	57	39	0.68	2.11	13.16	12.54
Davis	6	11	7	0.64	1.68	2.54	2.25
Morgan	9	38	11	0.29	1.00	8.78	3.54
Rich	3	11	1	0.09	0.00	2.54	0.32
Summit	1	2	0	0.00	0.00	0.46	0.00
Weber	7	13	6	0.46	1.73	3.00	1.93
REGIONAL TOTALS	150	368	277	0.75	1.89	84.99	89.07
<u>Central Region</u>							
Juab	0	0	0	0.00	0.00	0.00	0.00
Salt Lake	1	1	2	2.00	1.31	0.23	0.64
Sanpete	2	4	2	0.50	0.00	0.92	0.64
Tooele	5	10	0	0.00	0.00	2.31	0.00
Utah	8	14	7	0.50	2.00	3.23	2.25
Wasatch	4	7	0	0.00	0.00	1.62	0.00
REGIONAL TOTALS	20	36	11	0.31	1.49	8.31	3.54
<u>Southern Region</u>							
Beaver	1	2	1	0.50	0.00	0.46	0.32
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	0	0	0	0.00	0.00	0.00	0.00
Piute	0	0	0	0.00	0.00	0.00	0.00
Sevier	2	3	1	0.33	2.00	0.69	0.32
Washington	0	0	0	0.00	0.00	0.00	0.00
Wayne	0	0	0	0.00	0.00	0.00	0.00
REGIONAL TOTALS	3	5	2	0.40	2.00	1.15	0.64
<u>Northeastern Region</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	0	0.00	0.00	0.69	0.00
REGIONAL TOTALS	2	3	0	0.00	0.00	0.69	0.00
<u>Southeastern Region</u>							
Carbon	2	3	0	0.00	0.00	0.69	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
REGIONAL TOTALS	2	3	0	0.00	0.00	0.69	0.00
Unknown counties	7	18	21	1.17	0.00	4.16	6.75
Mixed counties	0	0	0	0.00	0.00	0.00	0.00
STATE TOTALS	184	433	311	0.72	1.79	100	100

*Based on county of residence

Table 6. Summary of Hungarian partridge bagged per hunter-day by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	0.94	0.56	0.54	0.84	0.69	0.90
Cache	0.87	0.70	0.91	0.68	0.66	0.68
Davis	0.50	1.33	0.12	2.00	0.40	0.64
Morgan	1.24	1.14	0.58	0.50	0.88	0.29
Rich	1.33	0.43	1.25	0.33	0.43	0.09
Summit	1.50	0.50	0.34	1.25	0.20	0.00
Weber	0.75	0.78	0.33	0.25	0.22	0.46
REGIONAL TOTALS	0.94	0.65	0.57	0.76	0.68	0.75
<u>Central Region</u>						
Juab	0.00	0.00	1.40	1.00	0.33	0.00
Salt Lake	0.50	0.00	0.19	0.60	1.67	2.00
Sanpete	--	1.00	2.00	0.67	0.00	0.50
Tooele	0.20	0.17	0.06	0.00	0.50	0.00
Utah	0.17	0.15	0.38	0.35	0.88	0.50
Wasatch	0.71	0.44	0.79	0.42	0.44	0.00
REGIONAL TOTALS	0.54	0.33	0.57	0.36	0.71	0.31
<u>Southern Region</u>						
Beaver	--	--	0.00	0.00	0.00	0.50
Garfield	--	--	0.00	0.00	0.00	0.00
Iron	--	--	0.00	0.00	0.60	0.00
Kane	--	--	0.00	0.00	0.00	0.00
Millard	--	--	0.00	0.40	0.00	0.00
Piute	--	--	0.00	0.00	0.00	0.00
Sevier	0.60	--	1.00	0.00	0.00	0.33
Washington	1.00	--	0.00	0.00	0.00	0.00
Wayne	--	--	0.00	0.00	0.00	0.00
REGIONAL TOTALS	0.64	--	0.06	0.40	0.21	0.40
<u>Northeastern Region</u>						
Daggett	--	1.00	0.00	0.00	0.00	0.00
Duchesne	3.00	--	1.00	0.00	1.00	0.00
Uintah	--	0.00	0.00	0.33	0.00	0.00
REGIONAL TOTALS	3.00	0.20	0.20	0.33	0.56	0.00
<u>Southeastern Region</u>						
Carbon	0.00	0.33	0.00	0.00	0.00	0.00
Emery	--	--	0.00	0.00	0.00	0.00
Grand	--	--	0.00	0.00	0.00	0.00
San Juan	--	--	0.00	0.00	0.00	0.00
REGIONAL TOTALS	0.00	0.33	0.00	0.00	0.00	0.00
Unknown counties	1.17	1.46	0.00	0.84	0.40	1.17
Mixed counties	--	0.00	0.00	2.00	0.00	0.00
STATE TOTALS	0.85	0.60	0.52	0.68	0.65	0.72

Table 7. Percentage distribution of Hungarian partridge harvest by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	55.45	48.15	37.22	54.50	46.97	68.49
Cache	10.91	13.58	19.24	13.11	15.45	12.54
Davis	0.23	2.47	0.63	1.54	0.61	2.25
Morgan	4.77	10.19	11.99	4.11	11.52	3.54
Rich	1.82	0.93	1.58	0.51	3.03	0.32
Summit	1.36	0.62	4.42	3.86	0.30	0.00
Weber	4.77	8.64	0.95	1.80	1.52	1.93
REGIONAL TOTALS	79.32	84.57	76.03	79.43	79.39	89.07
<u>Central Region</u>						
Juab	0.00	0.00	2.21	0.26	1.52	0.00
Salt Lake	0.68	0.00	2.52	3.86	3.03	0.64
Sanpete	--	0.62	0.63	1.03	0.00	0.64
Tooele	0.45	0.31	1.89	0.00	0.91	0.00
Utah	0.91	0.93	1.58	2.31	9.09	2.25
Wasatch	11.82	7.10	14.51	2.83	2.42	0.00
REGIONAL TOTALS	13.86	8.95	23.34	10.28	16.97	3.54
<u>Southern Region</u>						
Beaver	--	--	0.00	0.00	0.00	0.32
Garfield	--	--	0.00	0.00	0.00	0.00
Iron	--	--	0.00	0.00	0.91	0.00
Kane	--	--	0.00	0.00	0.00	0.00
Millard	--	--	0.00	0.51	0.00	0.00
Piute	--	--	0.00	0.00	0.00	0.00
Sevier	1.36	0.00	0.32	0.00	0.00	0.32
Washington	0.23	--	0.00	0.00	0.00	0.00
Wayne	--	0.00	0.00	0.00	0.00	0.00
REGIONAL TOTALS	1.59	0.00	0.32	0.51	0.91	0.64
<u>Northeastern Region</u>						
Daggett	--	0.31	0.00	0.00	0.00	0.00
Duchesne	2.05	--	0.32	0.00	1.52	0.00
Uintah	--	0.00	0.00	0.26	0.00	0.00
REGIONAL TOTALS	2.05	0.31	0.32	0.26	1.52	0.00
<u>Southeastern Region</u>						
Carbon	0.00	0.31	0.00	0.00	0.00	0.00
Emery	--	--	0.00	0.00	0.00	0.00
Grand	--	--	0.00	0.00	0.00	0.00
San Juan	--	--	0.00	0.00	0.00	0.00
REGIONAL TOTALS	0.00	0.31	0.00	0.00	0.00	0.00
Unknown counties	3.18	5.86	0.00	7.97	1.21	6.75
Mixed counties	--	0.00	0.00	1.54	0.00	0.00
STATE TOTALS	100	100	100	100	100	100

Table 8. Percentage distribution of Hungarian partridge hunting pressure by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	50.49	51.68	36.24	44.54	44.66	54.50
Cache	10.68	11.75	11.04	13.20	15.22	13.16
Davis	0.39	1.12	2.80	0.53	0.99	2.54
Morgan	3.30	5.41	10.71	5.63	8.50	8.78
Rich	1.17	1.31	0.66	1.06	1.38	2.54
Summit	0.78	0.75	6.75	2.11	0.99	0.46
Weber	5.44	6.72	1.48	4.93	4.55	3.00
REGIONAL TOTALS	72.23	78.73	69.69	72.01	76.28	84.99
<u>Central Region</u>						
Juab	0.19	0.37	0.82	0.18	2.96	0.00
Salt Lake	1.17	1.12	7.08	4.40	1.19	0.23
Sanpete	--	0.37	0.16	1.06	0.00	0.92
Tooele	1.94	1.12	1.65	4.58	1.19	2.31
Utah	4.66	3.73	2.14	4.58	6.72	3.23
Wasatch	14.17	9.70	9.56	4.58	3.56	1.62
REGIONAL TOTALS	22.14	16.42	21.42	19.37	15.61	8.31
<u>Southern Region</u>						
Beaver	--	--	0.00	0.00	0.00	0.46
Garfield	--	--	0.00	0.00	0.00	0.00
Iron	--	--	0.00	0.00	0.99	0.00
Kane	--	--	0.00	0.00	0.00	0.00
Millard	--	--	2.80	0.88	0.00	0.00
Piute	--	--	0.00	0.00	0.00	0.00
Sevier	1.94	0.56	0.16	0.00	1.78	0.69
Washington	0.19	--	0.00	0.00	0.00	0.00
Wayne	--	0.19	0.00	0.00	0.00	0.00
REGIONAL TOTALS	2.13	0.75	2.97	0.88	2.77	1.15
<u>Northeastern Region</u>						
Daggett	--	0.19	0.16	0.00	0.40	0.00
Duchesne	0.58	--	0.16	0.00	0.99	0.00
Uintah	--	0.75	0.49	0.53	0.40	0.69
REGIONAL TOTALS	0.58	0.93	0.82	0.53	1.78	0.69
<u>Southeastern Region</u>						
Carbon	0.58	0.56	0.99	0.18	0.99	0.69
Emery	--	--	0.16	0.00	0.59	0.00
Grand	--	--	0.16	0.00	0.00	0.00
San Juan	--	--	0.16	0.00	0.00	0.00
REGIONAL TOTALS	0.58	0.56	1.48	0.18	1.58	0.69
Unknown counties	2.33	2.43	3.46	6.51	1.98	4.16
Mixed counties	--	0.19	0.16	0.53	0.00	0.00
STATE TOTALS	100	100	100	100	100	100

Table 9. Statewide summary of Hungarian partridge harvest statistics, 1955-76.

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
1975	3,409	5,358	8,216	0.65	1.57
1976	3,517	6,287	8,753	0.72	1.79
<hr/>					
TOTALS (1959-76)	75,910	167,131	189,863	0.88	2.20
<hr/>					
AVERAGE (1959-75)	4,258	9,461	10,654	0.86	2.12
<hr/>					

Table 10. Hungarian partridge field bag check summary, 1976.

Region & County	ALL HUNTS			COMPLETE HUNTS			Birds/ 100 Hrs. Hunter			
	Total Parties	Total Hunters	Total Hours	Total Birds	Total Complete Hunts	Total Hunters		Total Hours	Total Birds	
<u>Northern Region</u>										
Box Elder	14	37	118	9	8	13	112	8	7	0.24
Cache	2	3	17	1	6	2	17	1	6	0.33
Davis	--	--	--	--	--	--	--	--	--	--
Morgan	--	--	--	--	--	--	--	--	--	--
Rich	--	--	--	--	--	--	--	--	--	--
Summit	--	--	--	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	16	40	135	10	7	15	129	9	7	0.24
<u>Central Region</u>										
Juab										
Salt Lake										
Sanpete										
Tooele										
Utah										
Wasatch										
REGIONAL TOTALS										
<u>Southern Region</u>										
Beaver										
Garfield										
Iron										
Kane										
Millard										
Plute										
Sevier										
Washington										
Wayne										
REGIONAL TOTALS										
<u>Northeastern Region</u>										
Daggett										
Duchesne										
Uintah										
REGIONAL TOTALS										
<u>Southeastern Region</u>										
Carbon										
Emery										
Grand										
San Juan										
REGIONAL TOTALS										
STATE TOTALS	16	40	135	10	7	15	129	9	7	0.24

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, 1971-76.

Region & County	1971		1972		1973		1974		1975		1976	
	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter	Birds/ 100 hr. Hunter
<u>Northern Region</u>												
Box Elder	13	0.80	16	0.78	12	0.78	23	1.36	12	0.60	8	0.24
Cache	57	1.00	15	0.42	--	--	--	--	10	0.40	6	0.33
Davis	--	--	--	--	--	--	--	--	--	--	--	--
Morgan	--	--	--	--	--	--	--	--	--	--	--	--
Rich	77	0.91	--	--	6	0.33	12	0.86	19	0.54	--	--
Summit	--	--	133	1.33	--	--	--	--	17	0.50	--	--
Weber	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	15	0.81	17	0.75	12	0.76	21	1.28	13	0.57	7	0.24
<u>Central Region</u>												
Juab	--	--	--	--	--	--	--	--	--	--	--	--
Salt Lake	100	2.00	--	--	--	--	--	--	--	--	--	--
Sanpete	--	--	--	--	--	--	--	--	--	--	--	--
Tooele	--	--	--	--	--	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--	--	--	--	--	--
Wasatch	--	--	--	--	0	0.00	--	--	--	--	--	--
REGIONAL TOTALS	100	2.00	--	--	0	0.00	--	--	--	--	--	--
<u>Southern Region</u>												
Beaver												
Garfield												
Iron												
Kane												
Millard												
Piute												
Seiver												
Washington												
Wayne												
REGIONAL TOTALS												
<u>Northeastern Region</u>												
Daggett												
Duchesne												
Uintah												
REGIONAL TOTALS												
<u>Southeastern Region</u>												
Carbon												
Emery												
Grand												
San Juan												
REGIONAL TOTALS												
STATE TOTALS	15	0.82	17	0.75	12	0.74	21	1.28	13	0.57	7	0.24

NOT APPLICABLE

NOT APPLICABLE

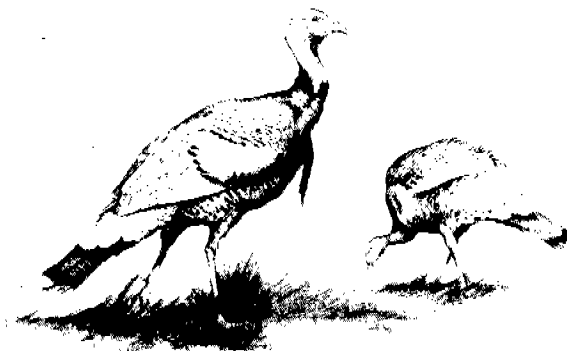
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WILD TURKEY

SUMMARY

Hunter success and turkey observational data for the 1976 spring season indicated a Statewide turkey population level slightly higher than 1975 but well below average.

Fall hunting pressure and consequently the total harvest increased over 1975 but was still at a low level. Hunter success increased sharply indicating a continued increase in the turkey population; especially in the East Zion area.



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. Harvest data for 1975 indicated an increased breeding population for 1976. No turkey brood observations were reported in 1976.

Harvest

Spring Gobbler Season

Results of the 1976 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 1976 spring season compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Permits sold	81	-21	-57
Hunters afield	74	-24	-58
Turkeys harvested	6	+20	-62
Hunter-days afield	185	-16	-59
Percent hunter success	8	+60	0
Turkeys bagged per hunter-day	0.03	0	-25
Percent of hunters who observed turkeys	32	+10	- 3

Permit sales and consequently hunters afield and total hunter-days afield decreased from 1975 and were well below average. The total harvest increased from 5 in 1975 to 6 in 1976. The proportion of hunters who reported having observed turkeys increased to about an average level. Most of the hunting pressure and harvest occurred on the East Zion area.

The trend of spring turkey harvest statistics is shown in Figure 1.

Fall Season

Results of the 1976 fall season are shown in Table 3 of this section. The trend of these data since 1964 are shown in Tables 4-9. The 1976 season compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Permits sold	68	+17	-64
Hunters afield	56	+22	-68
Turkeys harvested	15	+114	-72
Hunter-days afield	136	+18	-66
Percent hunter success	27	+80	-23
Turkeys bagged per hunter-day	0.11	+83	- 8
Percent of hunters observing turkeys	32	+23	-11

Turkey permit sales, total hunters and hunter-days afield all increased over 1975 but remained well below average.

Increased turkey abundance was indicated by a sharp increase in hunter success and an accompanying increase in the percentage of hunters who reported having observed turkeys while hunting. The total number of turkeys observed increased three times over the level of 1975 but was still well below average.

The trend of fall harvest statistics is shown in Figure 2.

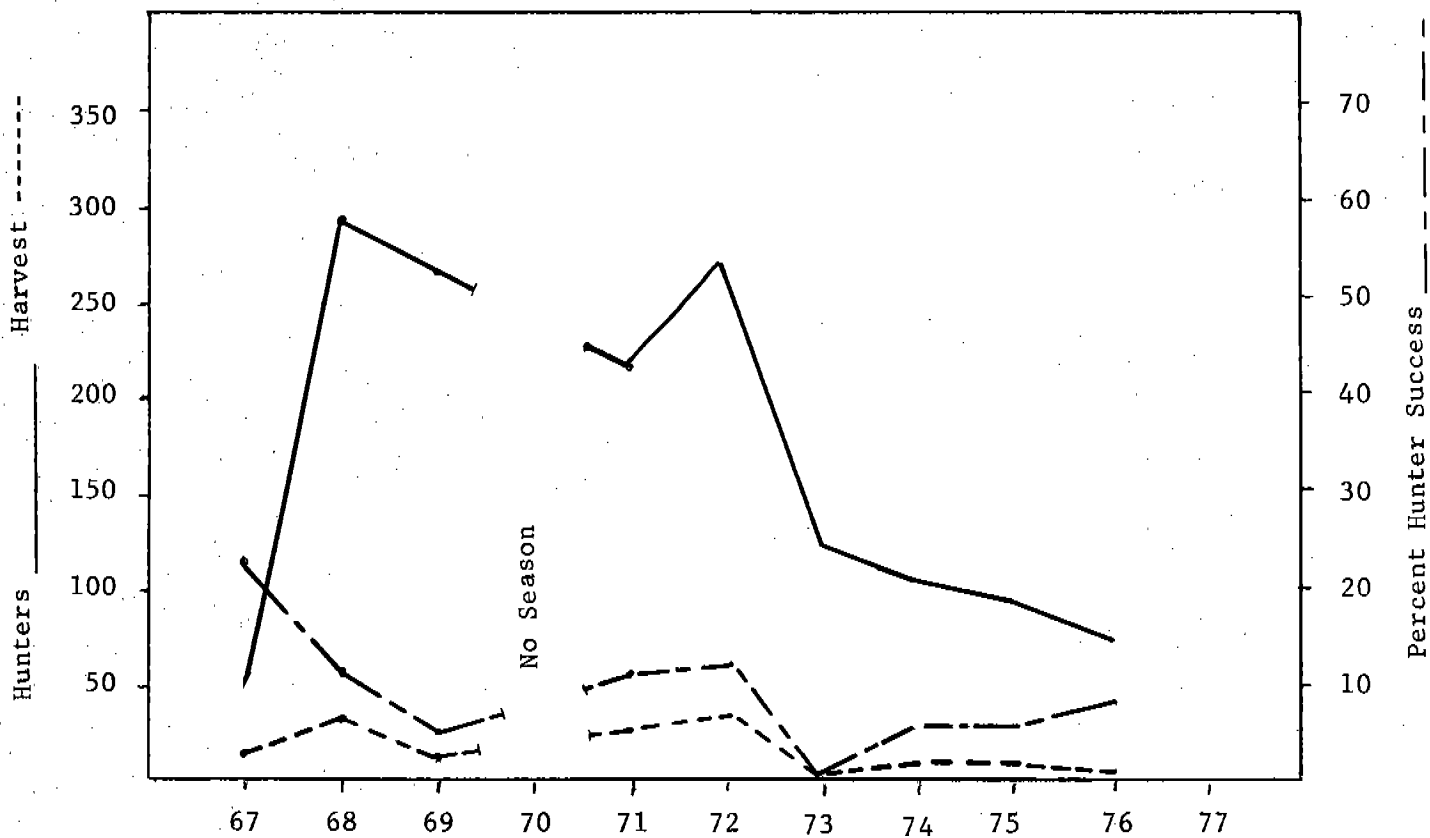


Figure 1. Wild turkey gobbler harvest trends for spring seasons.

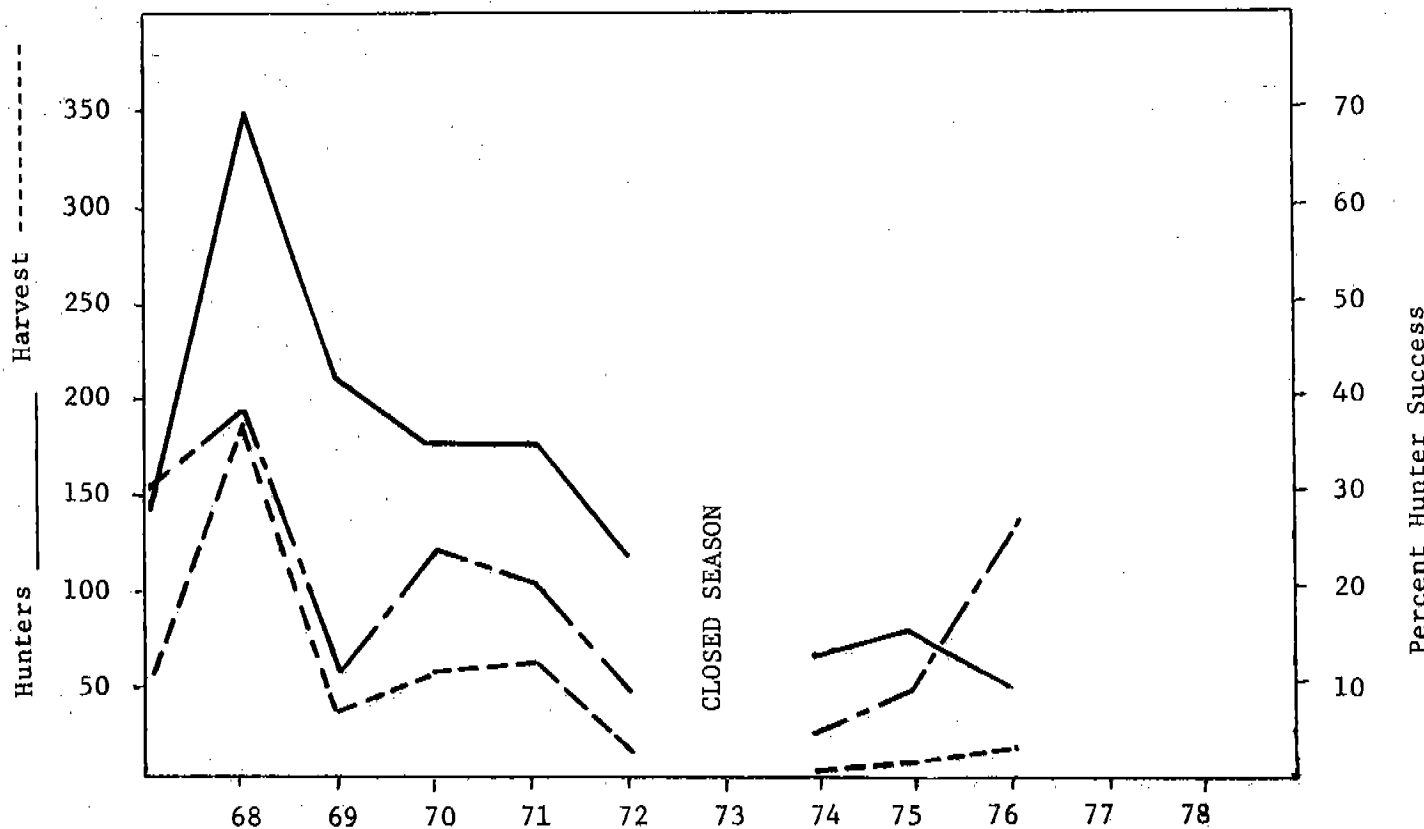


Figure 2. Wild turkey harvest trends for fall seasons.

Table 1. Summary of the 1976 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																	81
No Hunts																	
Hunters Afield	9	11	26	31	10	12	7	8	2	2	5	6	3	4	62	74	5 6
Hunter Days	19	23	61	74	21	25	21	25	7	8	11	13	14	17	154	185	
Turkeys Bagged	0	0	4	5	0	0	0	0	0	0	0	0	0	1	1	5	6
Percent Success	0	--	16	--	0	0	0	0	0	0	0	0	0	33	--	8	--
Turkeys Bagged Per Hunter Day	0	--	0.05	--	0	--	0	--	0	--	0	--	0	0.07	--	0.03	--
Reported Crippling Loss (Loss/100 Bagged)	0	--	100	--	0	--	0	--	0	--	0	--	0	--	0	--	67
Turkeys Observed	4	--	17	--	1	--	1	--	0	--	2	--	5	--	30	--	
Gobblers	1	--	9	--	1	--	0	--	0	--	0	--	4	--	15	--	
Hens	2	--	7	--	0	--	1	--	0	--	0	--	1	--	11	--	
Unidentified	1	--	1	--	0	--	0	--	0	--	2	--	0	--	4	--	
Number Of Hunters Who Saw Turkeys	3	--	10	--	1	--	1	--	0	--	2	--	3	--	20	--	
Percent Of Hunters Saw Turkeys	33	--	38	--	10	--	14	--	0	--	40	--	100	--	32	--	

Projection factor 1.20896

Table 2. Summary of turkey harvest statistics for spring gobbler seasons, 1967-76.

Hunting Unit and Year	Hunters		Total Harvest	Hunter-days		Percent Success*	Turkeys per Hunter-day	Percent of Hunters Observing Turkeys		Total Permits**
	Afield			Afield				Observing	Turkeys	
1967	24	9	9	59	38	0.15	58			
1968	130	16	16	364	11	0.04	48			
1969	77	4	4	210	6	0.02	35			
1970		NO SEASON								
1971	106	14	14	272	12	0.05	38			
1972	113	20	20	321	14	0.06	47			
1973	43	0	0	96	0	0.00	14			
1974	34	2	2	73	7	0.03	23			
1975	29	3	3	42	8	0.06	33			
1976	31	5	5	74	16	0.05	38			
1967	17	2	2	43	12	0.05	75			
1968	134	15	15	330	10	0.05	33			
1969	141	6	6	300	4	0.02	16			
1970		NO SEASON								
1971	27	1	1	64	4	0.02	13			
1972	42	3	3	107	8	0.03	28			
1973	22	0	0	52	0	0.00	6			
1974	23	0	0	56	0	0.00	25			
1975	16	1	1	34	7	0.04	8			
1976	12	0	0	25	0	0.00	10			
1967	6	0	0	16	0	0.00	33			
1968	17	0	0	44	0	0.00	62			
1969	39	3	3	102	9	0.03	24			
1970		NO SEASON								
1971	17	1	1	34	6	0.03	20			
1972	50	3	3	129	7	0.03	29			
1973	23	0	0	53	0	0.00	16			
1974	20	0	0	66	0	0.00	11			
1975	11	0	0	30	0	0.00	33			
1976	8	0	0	25	0	0.00	14			
1971	27	2	2	54	8	0.04	39			
1972	17	2	2	53	13	0.04	20			
1973	17	0	0	34	0	0.00	7			
1974	1	0	0	1	0	0.00	0			
1975	5	0	0	7	0	0.00	0			
1976	2	0	0	8	0	0.00	0			

Table 2. Continued

Hunting Unit and Year	Hunters Afield	Total Harvest	Hunter-days Afield	Percent Success*	Turkeys per Hunter-day	Percent of Hunters Observing Turkeys	Total Permits**
Pine Valley Mountains	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	
	1975 6	0	12	0	0.00	0	
	1976 6	0	13	0	0.00	40	
Blue Mountain- Elk Ridge	1974 17	2	34	13	0.07	27	
	1975 19	1	62	6	0.02	56	
	1976 11	0	23	0	0.00	33	
Mixed Units	1967 2		By Unit	0		0	
	1968 9		Unit	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	
	1975 11	0	32	0	0.00	22	
	1976 4	1	17	25	0.07	100	
STATE TOTALS	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					
	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
	1975 97	5	219	5	0.03	29	103
	1976 74	6	185	8	0.03	32	81
STATE AVERAGES(1967-75)	176	16	448	8	0.04	33	187

*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 1976 fall turkey season.

Data	Blue Mtn.-											
	Beaver Mtns.		Elk Ridge		Boulder Mtns.		East Zion		LaSal		State Totals	
	Rep't	Calc	Rep't	Calc	Rep't	Calc	Rep't	Calc	Rep't	Calc	Rep't	Calc
Permits sold	--	--	--	--	--	--	--	--	--	--	68	--
No. hunts	--	--	--	--	--	--	--	--	--	--	10	12
Hunters afield	4	5	1	1	3	4	26	31	13	15	47	56
Hunter days	15	18	2	2	8	10	48	57	41	49	114	136
Turkeys bagged	0	0	0	0	0	0	11	13	2	2	13	15
Percent success*	0	0	0	0	0	0	42	42	15	13	28	27
Turkeys bagged per hunter day	--	--	--	--	--	--	0.23	0.23	0.05	0.04	0.11	0.11
Reported crippling loss (loss/100 bagged)	0	--	0	--	0	--	8	--	0	--	7	--
Turkeys observed	0	--	0	--	0	--	137	--	45	--	182	--
Number of hunters who saw turkeys	0	--	0	--	0	--	13	--	2	--	15	--
Percent of hunters who saw turkeys	0	--	0	--	0	--	50	00	15	--	32	--

Projection factor = $(68 \div 57) = 1.193$

*The season limit was one bird

Table 4. Summary of Boulder Mountain wild turkey harvest data for fall hunts from 1966-76.

Harvest Data	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Hunters afield	50	22	77	45	24	20	7			13	4
Hunter-days	132	71	195	103	77	46	17			36	10
Turkeys bagged	11	4	37	0	2	0	0			0	0
Percent success*	22	20	32	0	8	0	0			0	0
Percent bagging two turkeys	--	--	13	00	00	00	00			--	--
Birds bagged/day	0.08	0.06	0.19	0.00	0.03	0.00	0.00			0.00	0.00
Reported crippling loss (loss:100 bagged)	9	25	18	--	0	0	0			0	0
Turkeys observed	260	55	436	0	16	0	0			0	0
No. hunters who observed turkeys	22	8	27	0	2	0	0			0	0
Percent of hunters who observed turkeys	44	40	38	0	10	0	0			0	0

*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 1966-76.

Harvest Data	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Hunters afield	111	113	218	137	87	90	59			13	31
Hunter-days	266	334	569	374	203	229	154			18	57
Turkeys bagged	31	36	127	35	43	39	10			6	13
Percent success**	28	32	40	16	32	27	12			46	42
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			0.33	0.23
Reported crippling loss (loss:100 bagged)	6	15	15	19	5	6	12			0	8
Turkeys observed	476	693	1661	426	469	264	96			36	137
No. hunters who observed turkeys	43	51	122	30	30	23	11			4	13
Percent of hunters who observed turkeys	39	50	60	25	40	31	22			44	50

*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 1968-76.

Harvest Data	1968	1969	1970	1971	1972	1973	1974	1975	1976
Hunters afield	45	17	18	13	31		20	9	15
Hunter-days	119	51	30	27	70		61	33	49
Turkeys bagged	19	1	3	5	2		2	1	2
Percent success*	43	7	11	18	4	CLOSED SEASON			
Percent bagging two turkeys	0	0	6	18	4		--	--	--
Birds bagged/day	0.16	0.02	0.10	0.18	0.02		0.03	0.03	0.04
Reported crippling loss (loss:100 bagged)	11	0	0	0	0		100	0	0
Turkeys observed	214	40	15	25	63		61	21	45
No. hunters who observed turkeys	21	1	3	3	7		6	4	2
Percent of hunters who observed turkeys	50	7	20	27	27		38	67	15

*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 1970-76.

Harvest Data	1970*	1971	1972	1973	1974	1975	1976
Hunters afield	30	13	6			5	5
Hunter-days	87	24	12			13	18
Turkeys bagged	7	5	0			0	0
Percent success**	15	18	0			0	0
Percent bagging two turkeys	8	18	0			--	--
Birds bagged/day	0.08	0.20	0	CLOSED SEASON	CLOSED SEASON	0	0
Reported crippling loss (loss:100 bagged)	0	0	0	CLOSED SEASON	CLOSED SEASON	0	0
Turkeys observed	48	64	11			0	0
No. hunters who observed turkeys	8	5	2			0	0
Percent of hunters who observed turkeys	31	46	40			0	0

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

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

Table 8. Summary of Pine Valley Mountain wild turkey harvest data for fall hunts from 1970-76.

Harvest Data	1970*	1971	1972	1973	1974	1975	1976
Hunters afield	6	32	11			0	0
Hunter-days	21	87	19			0	0
Turkeys bagged	3	11	0			0	0
Percent success	50	23	0			0	0
Percent bagging two turkeys**	0	12	0			0	0
Birds bagged/day	0.14	0.13	0	CLOSED SEASON	CLOSED SEASON	0	0
Reported crippling loss (loss:100 bagged)	33	22	0			0	0
Turkeys observed	16	98	0			0	0
No. hunters who observed turkeys	4	9	0			0	0
Percent of hunters who observed turkeys	80	35	0			0	0

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

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

Table 9. Summary of Blue Mountain-Elk Ridge wild turkey harvest data for the fall hunt, 1974-76.

Harvest Data	1974*	1975	1976
Hunters afield	5	6	1
Hunter-days	9	15	2
Turkeys bagged	1	0	0
Percent success	20	0	0
Birds bagged/day	0.11	0.00	0.00
Reported crippling loss (loss:100 bagged)	0	0	0
Turkeys observed	20	0	0
No. hunters who observed turkeys	1	0	0
Percent of hunters who observed turkeys	20	0	0

*Wild turkeys were initially transplanted onto the Blue Mountains in 1957 and on Elk Ridge in 1959. Those 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. Statewide summary of wild turkey harvest for fall hunts from 1966 through 1976.

Harvest Data	1966*	1967	1968*	1969	1970	1971	1972	1973	1974	1975	1976	AVERAGES (1963-75)
	Permits sold	192	146	368	223	197	184	124	29	58	68	188
Hunters afield	187	135	344	210	174	174	118	26	46	56	173	
Hunter-days	471	405	883	549	418	444	303	79	115	136	406	
Turkeys bagged	43	40	183	36	58	60	12	3	7	15	54	
Percent success**	23	30	38	11	24	21	7	12	15	27	22	
Percent bagging two turkeys	--	--	15	6	10	13	3	--	--	--	9	
Birds bagged/day	0.09	0.10	0.21	0.06	0.14	0.14	0.04	0.04	0.06	0.11	0.12	
Reported crippling loss (loss:100 bagged)	7	16	15	19	6	8	10	33	0	7	13	
Turkeys observed	756	748	2321	466	564	451	173	83	57	182	625	
No. hunters who observed turkeys	68	59	171	31	47	40	21	8	8	15	63	
Percent of hunters who observed turkeys	36	48	54	17	31	28	21	38	26	32	36	

*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.

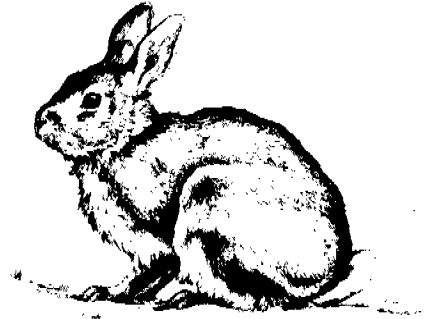
RABBITS AND HARES

SUMMARY

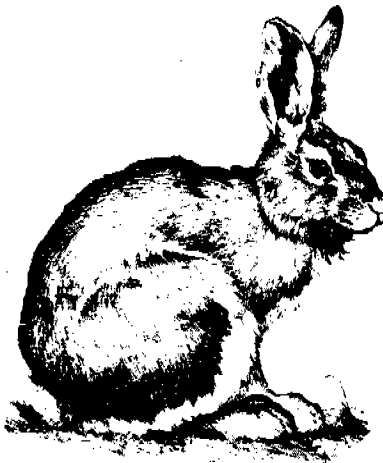
An increased breeding population level for 1976 was indicated by 1975 harvest statistics.

Summer roadside counts revealed a substantially increased population density. Harvest statistics, both the questionnaire and field bag checks, confirmed this indicated increase as hunting pressure, hunter success and harvest all increased over 1975 to an above average level.

Cottontail Rabbits



Snowshoe Hares



The 1976 snowshoe hare hunting season was the second held since the Legislature provided protected status to this species in 1975.

Harvest statistics reflected increased hunter participation, hunter success and total harvest; however, results shown are biased upward by an unknown quantity by hunter confusion of this species with the other, more abundant, varying hare the white-tailed jack-rabbit.

COTTONTAIL RABBIT

Roadside Counts

Results of the annual roadside counts for 1976 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 1976 compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total miles driven	3,068	+8	+20
Total cottontails counted	1,163	+83	+29
Cottontails observed per mile	0.38	+73	+12
Young observed per 100 adults	132	0	+25

An increased breeding population for 1976 was indicated by 1975 harvest statistics. The relatively dry, early spring of 1976 was a sharp contrast to the extremely late and wet spring of 1975.

Indicated production was comparable to 1975 and above average.

The cottontail per mile index was higher than 1975 in every region and above average in the Northern, Northeastern and Southeastern regions. The trends of indexes derived from roadside counts are shown in Figure 1.

Harvest

Hunter Questionnaire

Results of the 1976 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. Trends of statewide harvest statistics are found in Table 9 and Figure 2. The 1976 season compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Cottontail hunters	28,239	+14	+13
Cottontail harvest	235,952	+53	+41
Hunter-days afield	126,737	+9	+20
Cottontails per hunter-day	1.86	+41	+18
Cottontails per hunter	8.39	+35	+27

Harvest statistics confirmed the apparent increase in cottontail abundance shown by inventory data. A sharp increase in both hunting pressure and hunter success resulted in more than a 50-percent increase in total harvest. Hunters were especially successful in the Northeastern Region. The trends of harvest statistics are shown in Figure 2.

Field Bag Checks

Results of this survey for 1976 are shown in Table 9. Trends of hunter success as determined by bag checks are shown in Table 10. The 1976 season compared to 1975 and the average as follows:

	<u>1976</u>	<u>Percent change from</u>	
		<u>1975</u>	<u>Average</u>
Total hunters checked	593	+31	+35
Total hours hunted	1,887	+47	+57
Cottontails per hunter (complete hunts)	2.85	+58	+60
Cottontails bagged per 100 hours	60	+40	+13
Hours per hunter-day (complete hunts)	3.4	-32	+3
Hours per cottontail bagged	1.2	-57	-43

The increased hunting pressure and hunter success shown by the harvest questionnaire were also reflected in field bag check data.

The average length of a hunter-day was less than in 1975 and considerably less time was required to bag a cottontail.

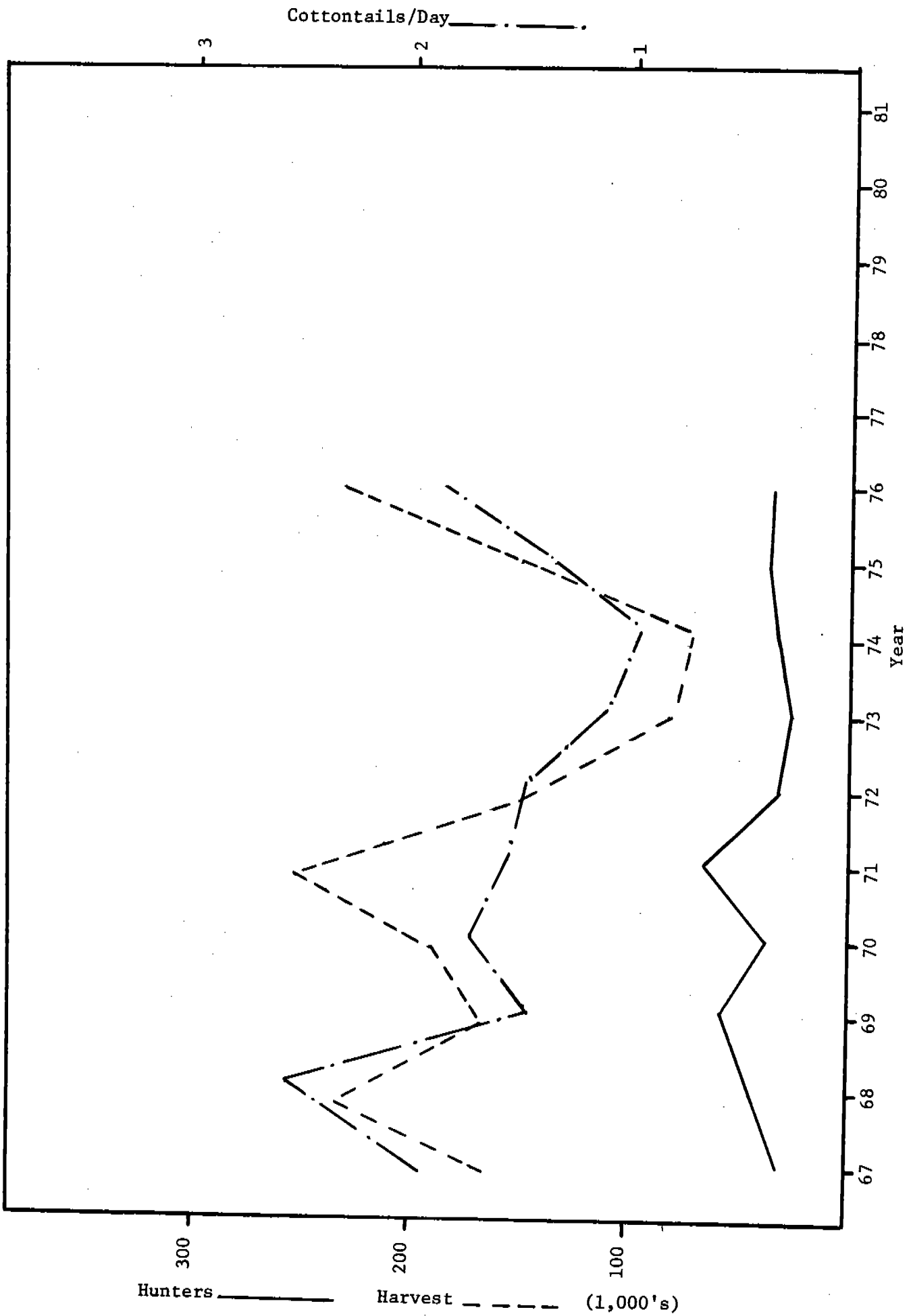


Figure 2. Cottontail Rabbit Harvest Trend

Juveniles/100 Adults - - - - -

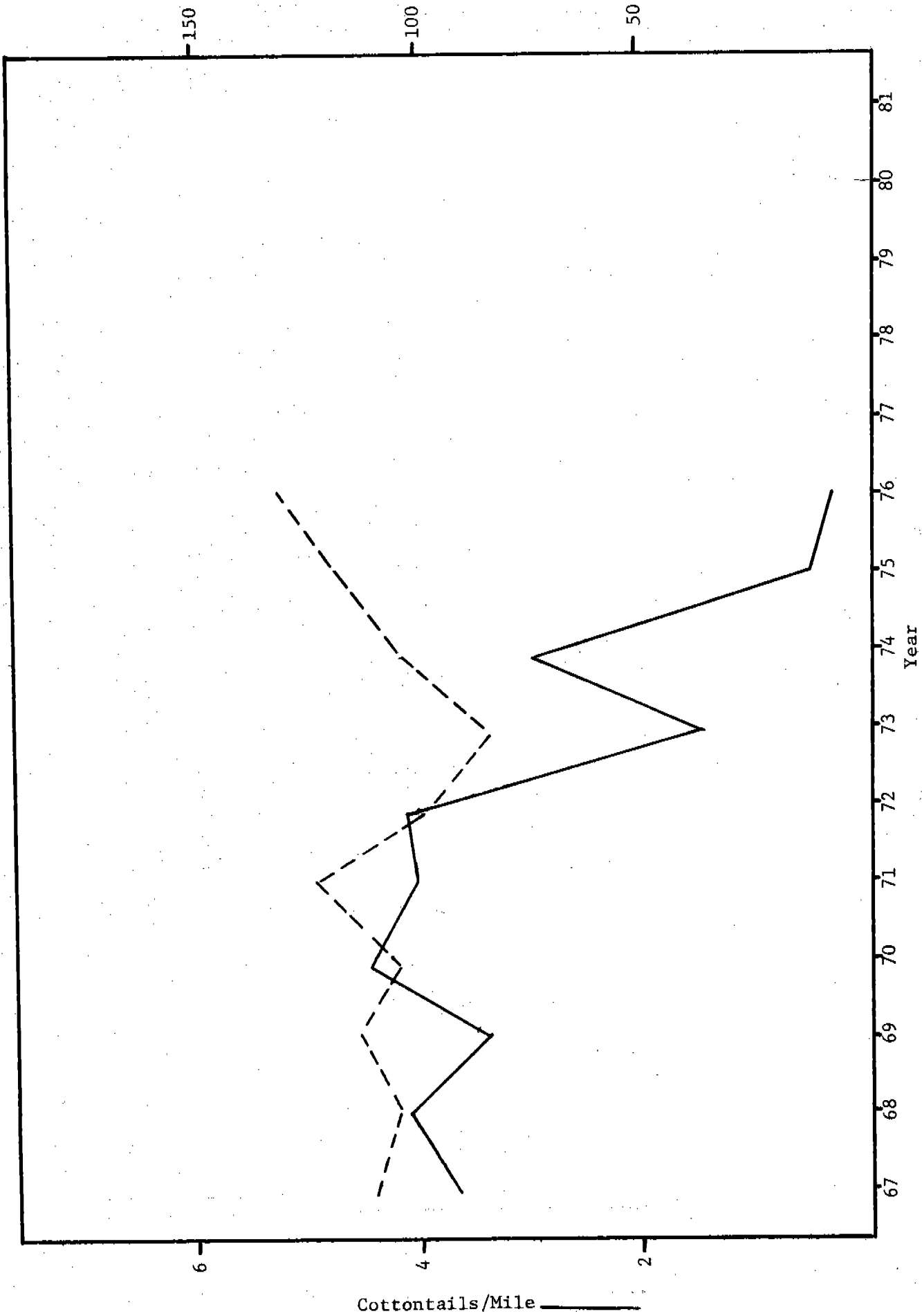


Figure 1. Cottontail Rabbit Population Indexes Trend.

Cottontails/Mile

Table 1. Cottontail rabbit summer inventory summary, 1976.

Region & County	Miles Driven	Rabbits Observed				Young per 100 Adults	Rabbits per Mile
		Adults	Young	Unclass.	Total		
<u>Northern Region</u>							
Box Elder	240	43	121	10	174	281	0.72
Cache	90	0	0	0	0	--	0.00
Davis	--	--	--	--	--	--	--
Morgan	90	4	8	3	15	200	0.17
Rich	90	20	20	1	41	100	0.46
Summit	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--
REGIONAL TOTALS	510	67	149	14	230	222	0.45
<u>Central Region</u>							
Juab	80	5	1	0	6	20	0.08
Salt Lake	--	--	--	--	--	--	--
Sanpete	90	9	23	0	32	256	0.36
Tooele	90	6	8	0	14	133	0.16
Utah	--	--	--	--	--	--	--
Wasatch	--	--	--	--	--	--	--
REGIONAL TOTALS	260	20	32	0	52	160	0.20
<u>Southern Region</u>							
Beaver	90	0	0	18	18	--	0.20
Garfield	180	31	32	8	71	103	0.39
Iron	90	10	7	2	19	70	0.21
Kane	180	47	41	0	88	87	0.49
Millard	328	35	22	0	57	63	0.17
Plute	90	4	3	0	7	75	0.08
Sevier	144	21	14	3	38	67	0.26
Washington	180	22	26	10	58	118	0.32
Wayne	90	4	10	1	15	250	0.17
REGIONAL TOTALS	1,372	174	155	42	371	89	0.27
<u>Northeastern Region</u>							
Daggett	120	29	44	8	81	152	0.68
Duchesne	90	31	55	4	90	177	1.00
Uintah	90	43	65	14	122	151	1.36
REGIONAL TOTALS	300	103	164	26	293	159	0.98
<u>Southeastern Region</u>							
Carbon	209	20	17	0	37	85	0.18
Emery	147	24	14	1	39	58	0.27
Grand	90	13	7	0	20	54	0.22
San Juan	180	39	70	12	121	179	0.67
REGIONAL TOTALS	626	96	108	13	217	112	0.35
STATE TOTALS	3,068	460	608	95	1,163	132	0.38

Table 2. Summary of cottontail rabbits observed per mile during summer inventory, 1967-76.

Region & County	Year										Average 1967-75	
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976		
<u>Northern Region</u>												
Box Elder	0.36	0.78	0.50	0.76	0.43	0.37	0.06	1.01	0.32	0.72		
Cache	0.0	0.02	0.01	--	0.06	0.07	--	--	--	0.0		
Davis	--	--	--	--	--	--	--	--	--	--		
Morgan	0.02	0.17	0.10	--	0.28	--	0.14	0.1	0.02	0.17		
Rich	0.26	0.50	0.52	0.43	0.22	0.11	0.14	0.04	0.16	0.46		
Summit	0.16	0.22	0.08	0.39	--	0.13	--	--	--	--		
Weber	--	--	0.16	--	--	--	--	--	--	--		
<u>REGIONAL TOTALS</u>	0.19	0.44	0.23	0.59	0.31	0.25	0.09	0.36	0.19	0.45	0.30	
<u>Central Region</u>												
Juab	0.26	0.42	0.51	0.72	0.33	0.14	0.13	--	0.07	0.08		
Salt Lake	0.01	0	0	--	--	--	--	--	--	--		
Sanpete	0.30	0.36	0.53	0.63	0.77	0.72	0.33	0.23	0.18	0.36		
Tooele	0.07	0.34	0.28	0.28	0.22	0.14	0.02	0.06	0.04	0.16		
Utah	--	--	--	--	--	--	--	--	--	--		
Wasatch	--	--	--	--	--	--	--	--	--	--		
<u>REGIONAL TOTALS</u>	0.15	0.29	0.32	0.54	0.46	0.33	0.18	0.14	0.09	0.20	0.28	
<u>Southern Region</u>												
Beaver	0	0.23	0.36	--	0.18	0.36	0.29	0.33	0.04	0.20		
Garfield	0.15	0.25	0.48	0.48	0.33	0.29	0.12	0.14	0.28	0.39		
Iron	0.09	0.64	0.40	--	0.38	0.58	0.00	0.06	0.09	0.21		
Kane	0.67	--	--	0.71	0.17	0.60	0.32	0.26	0.48	0.49		
Millard	0.22	0.30	0.39	0.28	0.15	0.29	0.11	0.10	0.07	0.17		
Piute	0.01	0.09	0	0	0	0	--	0.02	0.07	0.08		
Sevier	0.18	0.13	0.47	0.58	0.46	0.41	0.10	0.18	0.11	0.26		
Washington	0.80	0.55	0.61	0.17	0.46	1.16	0.57	1.30	0.56	0.32		
Wayne	0.08	0.10	0.12	--	0.08	0.07	0.04	0.06	0.03	0.17		
<u>REGIONAL TOTALS</u>	0.27	0.32	0.35	0.35	0.25	0.48	0.19	0.32	0.20	0.27	0.31	
<u>Northeastern Region</u>												
Daggett	1.93	0.81	0.60	0.77	0.76	0.73	0.50	0.24	0.24	0.68		
Duchesne	1.40	0.77	0.68	0.56	0.58	0.24	0.14	0.29	0.67	1.00		
Uintah	1.00	0.98	0.84	1.56	1.39	0.97	0.14	0.19	0.32	1.36		
<u>REGIONAL TOTALS</u>	1.30	0.82	0.68	0.93	0.89	0.60	0.26	0.24	0.43	0.98	0.69	
<u>Southeastern Region</u>												
Carbon	0.05	0.64	0.13	0.13	0.24	0.20	0.46	0.15	0.18	0.18		
Emery	0.37	0.33	0.17	0.20	0.04	0.30	0.06	0.08	0.04	0.27		
Grand	0.34	0.16	--	0.14	0.53	0.66	0.07	0.14	0.18	0.22		
San Juan	0.58	0.64	0.50	0.30	0.97	0.48	--	0.58	0.42	0.67		
<u>REGIONAL TOTALS</u>	0.39	0.42	0.21	0.25	0.53	0.45	0.19	0.28	0.22	0.35	0.33	
<u>STATE TOTALS</u>	0.35	0.41	0.32	0.50	0.44	0.43	0.18	0.29	0.22	0.38	0.34	

Table 3. Summary of cottontail rabbit young per 100 adults ratios, 1967-76.

Region & County	Year											Average 1967-75
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	
<u>Northern Region</u>												
Box Elder	94	106	94	95	129	62	100	173	144	281		
Cache	--	--	0	--	0	0	--	--	--	--		
Davis	--	--	--	--	--	--	--	--	--	--		
Morgan	--	100	900	--	25	--	--	0	--	200		
Rich	125	86	186	40	80	100	50	0	56	100		
Summit	67	56	33	64	--	14	--	--	--	--		
Weber	--	--	75	--	--	--	--	--	--	--		
REGIONAL TOTALS	104	97	115	76	100	56	73	145	120	222	98	
<u>Central Region</u>												
Juab	175	257	239	246	171	117	100	--	67	20		
Salt Lake	--	--	0	--	--	--	--	--	--	--		
Sanpete	257	133	311	123	144	148	142	50	38	256		
Tooele	200	113	127	100	100	100	0	67	100	133		
Utah	--	--	--	--	--	--	--	--	--	--		
Wasatch	--	--	--	--	--	--	--	--	--	--		
REGIONAL TOTALS	218	179	224	157	145	135	121	53	54	160	143	
<u>Southern Region</u>												
Beaver	--	36	56	--	14	61	92	11	0	--		
Garfield	28	85	138	103	118	86	57	56	77	103		
Iron	200	75	33	--	162	100	0	100	0	70		
Kane	129	--	--	28	50	86	44	200	160	87		
Millard	32	143	22	41	32	271	32	82	88	63		
Piute	--	0	--	--	--	--	--	0	20	75		
Sevier	157	22	360	350	390	450	200	183	44	67		
Washington	271	71	114	22	71	11	81	98	212	118		
Wayne	100	50	300	--	167	50	200	50	0	250		
REGIONAL TOTALS	115	75	85	68	93	64	67	92	120	89	86	
<u>Northeastern Region</u>												
Daggett	56	62	34	57	81	121	63	87	77	152		
Duchesne	142	146	148	131	150	78	160	146	258	177		
Uintah	231	117	154	203	191	141	100	114	211	151		
REGIONAL TOTALS	118	107	77	126	139	120	87	114	198	159	120	
<u>Southeastern Region</u>												
Carbon	150	55	122	100	53	145	250	117	227	85		
Emery	73	238	200	183	100	125	16	40	0	58		
Grand	106	7	--	160	79	297	33	62	47	54		
San Juan	45	--	166	228	215	111	--	140	150	179		
REGIONAL TOTALS	62	92	161	115	132	180	142	118	124	112	126	
STATE TOTALS	106	96	110	102	123	99	86	105	132	132	106	

Table 4. Summary of cottontail rabbit hunter success and distribution of harvest and hunting pressure by region and county, 1976.

Region & County	Hunters Reporting	Days Hunted	Cottontails Bagged	Cottontails/ Hunter-day	Cottontails per Hunter*	% of Pressure	% of Harvest
Northern Region							
Box Elder	153	384	626	1.63	2.95	8.27	7.22
Cache	24	81	105	1.30	2.71	1.75	1.21
Davis	8	40	82	2.05	7.53	0.86	0.95
Morgan	23	68	48	0.71	0.00	1.47	0.55
Rich	31	66	99	1.50	3.00	1.42	1.14
Summit	31	70	67	0.96	4.67	1.51	0.77
Weber	24	60	51	0.85	3.50	1.29	0.59
REGIONAL TOTALS	294	769	1,078	1.40	4.77	16.57	12.44
Central Region							
Juab	62	185	327	1.77	6.30	3.99	3.77
Salt Lake	20	46	62	1.35	7.29	0.99	0.72
Sanpete	20	66	84	1.27	3.67	1.42	0.97
Tooele	110	396	617	1.56	6.97	8.53	7.12
Utah	144	421	530	1.26	8.21	9.07	6.12
Wasatch	25	102	91	0.89	6.92	2.20	1.05
REGIONAL TOTALS	381	1,216	1,711	1.41	7.61	26.20	19.75
Southern Region							
Beaver	24	70	146	2.09	10.00	1.51	1.68
Garfield	8	45	46	1.02	7.75	0.97	0.53
Iron	20	100	119	1.19	7.12	2.15	1.37
Kane	2	2	2	1.00	1.00	0.04	0.02
Millard	36	150	251	1.67	16.57	3.23	2.90
Piute	2	5	3	0.60	0.00	0.11	0.03
Sevier	13	28	31	1.11	2.78	0.60	0.36
Washington	34	204	214	1.05	7.29	4.40	2.47
Wayne	12	93	202	2.17	23.87	2.00	2.33
REGIONAL TOTALS	151	697	1,014	1.45	9.52	15.02	11.70
Northeastern Region							
Daggett	28	85	270	3.18	12.60	1.83	3.12
Duchesne	137	492	1,629	3.31	14.76	10.60	18.80
Uintah	91	441	1,333	3.02	17.53	9.50	15.38
REGIONAL TOTALS	256	1,018	3,232	3.17	16.19	21.93	37.30
Southeastern Region							
Carbon	54	341	524	1.54	14.56	7.35	6.05
Emery	56	259	411	1.59	19.44	5.58	4.74
Grand	30	129	359	2.78	11.87	2.78	4.14
San Juan	17	85	121	1.42	6.89	1.83	1.40
REGIONAL TOTALS	157	814	1,415	1.74	14.02	17.54	16.33
Unknown counties	1	1	1	1.00	0.00	0.02	0.01
Mixed counties	17	121	180	1.49	0.00	2.61	2.08
STATE TOTALS	1,257	4,636	8,631	1.86	8.39	100	100

*Based on county of residence.

Table 5. Summary of cottontail rabbits bagged per hunter-day by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	2.28	1.48	0.90	1.03	1.25	1.63
Cache	2.02	1.71	0.52	1.12	0.31	1.30
Davis	0.60	0.57	0.85	0.66	0.21	2.05
Morgan	2.06	0.26	0.81	0.68	0.65	0.71
Rich	1.91	3.97	0.92	1.14	1.45	1.50
Summit	1.24	1.19	0.39	0.62	0.66	0.96
Weber	0.36	0.28	1.79	0.35	0.74	0.85
REGIONAL TOTALS	1.90	1.28	0.87	0.86	0.96	1.40
<u>Central Region</u>						
Juab	1.75	1.14	0.70	0.90	0.78	1.77
Salt Lake	0.92	1.24	0.24	0.86	0.94	1.35
Sanpete	1.23	1.34	0.88	1.14	0.64	1.27
Tooele	1.60	1.25	0.84	0.79	0.75	1.56
Utah	1.32	1.10	0.69	0.81	1.11	1.26
Wasatch	0.95	1.26	0.68	0.57	1.00	0.89
REGIONAL TOTALS	1.41	1.20	0.73	0.84	0.87	1.41
<u>Southern Region</u>						
Beaver	1.15	1.06	0.84	0.89	1.44	2.09
Garfield	2.40	1.45	2.24	1.45	1.00	1.02
Iron	1.74	1.31	0.55	0.61	0.84	1.19
Kane	0.20	1.62	1.18	1.57	2.31	1.00
Millard	2.26	1.87	1.47	1.15	0.70	1.67
Piute	0.46	0.75	2.50	0.08	1.14	0.60
Sevier	0.93	1.87	1.45	1.12	1.45	1.11
Washington	1.55	2.29	1.61	1.02	1.98	1.05
Wayne	1.58	2.15	0.74	1.08	1.73	2.17
REGIONAL TOTALS	1.45	1.85	1.19	1.03	1.53	1.45
<u>Northeastern Region</u>						
Daggett	2.73	2.93	1.25	1.69	0.73	3.18
Duchesne	3.14	2.91	1.07	1.44	1.86	3.31
Uintah	1.80	1.47	1.10	0.96	1.81	3.02
REGIONAL TOTALS	2.30	2.15	1.11	1.24	1.78	3.17
<u>Southeastern Region</u>						
Carbon	0.63	1.15	1.21	0.95	1.17	1.54
Emery	1.06	1.49	1.46	0.80	1.56	1.59
Grand	1.71	2.35	1.00	1.93	3.55	2.78
San Juan	2.73	2.13	2.26	2.12	1.81	1.42
REGIONAL TOTALS	1.25	1.61	1.43	1.11	1.70	1.74
Unknown counties	1.13	0.76	0.64	2.13	0.33	1.00
Mixed counties				5.33	0.00	1.49
STATE TOTALS	1.65	1.46	1.02	1.01	1.32	1.86

Table 6. Percentage distribution of cottontail rabbit harvest by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	19.42	14.54	7.48	11.33	8.37	7.22
Cache	1.33	2.02	0.87	1.19	0.35	1.21
Davis	0.63	0.38	0.67	0.42	0.17	0.95
Morgan	1.81	0.54	1.28	0.86	0.58	0.55
Rich	1.65	2.41	0.70	0.55	1.50	1.14
Summit	2.29	2.51	1.28	2.00	1.11	0.77
Weber	0.21	0.36	3.62	0.70	1.17	0.59
REGIONAL TOTALS	27.35	22.75	15.88	17.04	13.25	12.44
<u>Central Region</u>						
Juab	4.27	3.67	3.10	4.35	2.84	3.77
Salt Lake	0.83	1.89	0.41	2.94	1.28	0.72
Sanpete	2.09	4.10	1.94	1.98	1.57	0.97
Tooele	8.83	6.56	8.32	4.19	4.82	7.12
Utah	6.26	6.51	6.81	9.84	7.21	6.12
Wasatch	1.65	2.46	1.45	0.55	0.87	1.05
REGIONAL TOTALS	23.93	25.18	22.03	23.85	18.59	19.75
<u>Southern Region</u>						
Beaver	0.68	0.31	1.04	1.60	0.25	1.68
Garfield	0.14	0.26	1.10	0.70	0.31	0.53
Iron	2.62	1.72	2.20	0.92	1.26	1.37
Kane	0.15	0.21	0.38	0.97	1.61	0.02
Millard	4.85	5.34	4.64	4.63	1.09	2.90
Piute	0.22	0.05	0.14	0.02	0.16	0.03
Sevier	1.55	1.87	2.06	1.05	1.07	0.36
Washington	2.41	4.95	7.01	4.79	8.51	2.47
Wayne	0.59	0.46	1.07	1.25	1.11	2.33
REGIONAL TOTALS	13.21	15.18	19.65	15.94	15.37	11.70
<u>Northeastern Region</u>						
Daggett	1.84	2.59	2.00	1.82	0.47	3.12
Duchesne	10.20	9.84	6.38	8.89	9.56	18.80
Uintah	10.79	7.03	6.72	5.99	14.01	15.38
REGIONAL TOTALS	22.82	19.46	15.10	16.71	24.03	37.30
<u>Southeastern Region</u>						
Carbon	2.47	4.85	9.22	8.37	7.60	6.05
Emery	2.33	2.10	7.65	5.53	9.09	4.74
Grand	1.60	1.66	2.87	2.46	7.58	4.14
San Jaun	4.61	6.51	7.33	5.20	4.47	1.40
REGIONAL TOTALS	11.01	15.11	27.07	21.56	28.74	16.33
Unknown counties	1.56	2.08	0.26	4.55	0.02	0.01
Mixed counties				0.35	0.00	2.08
STATE TOTALS	100	100	100	100	100	100

Table 7. Percentage distribution of cottontail rabbit hunting pressure by region and county, 1971-76.

Region & County	1971	1972	1973	1974	1975	1976
<u>Northern Region</u>						
Box Elder	14.03	14.43	8.44	11.18	8.88	8.27
Cache	1.09	1.73	1.71	1.07	1.51	1.75
Davis	1.73	0.96	0.80	0.64	1.08	0.86
Morgan	1.45	3.10	1.59	1.27	1.18	1.47
Rich	1.43	0.89	0.77	0.49	1.36	1.42
Summit	3.05	3.10	3.30	3.27	2.23	1.51
Weber	0.94	1.90	2.07	2.04	0.08	1.29
REGIONAL TOTALS	23.72	26.10	18.68	19.95	18.33	16.57
<u>Central Region</u>						
Juab	4.03	4.73	4.51	4.91	4.80	3.99
Salt Lake	1.49	2.23	1.74	3.44	1.80	0.99
Sanpete	2.80	4.49	2.24	1.76	3.26	1.42
Tooele	9.09	7.66	10.09	5.40	8.52	8.53
Utah	7.81	8.69	10.12	12.31	8.57	9.07
Wasatch	2.88	2.86	2.18	0.98	1.16	2.20
REGIONAL TOTALS	28.09	30.67	30.89	28.79	28.11	26.20
<u>Southern Region</u>						
Beaver	0.98	0.43	1.27	1.82	0.23	1.51
Garfield	0.09	0.26	0.50	0.49	0.41	0.97
Iron	2.48	1.92	4.10	1.53	1.98	2.15
Kane	1.22	0.19	0.32	0.62	0.92	0.04
Millard	3.54	4.18	3.22	4.09	2.05	3.23
Piute	0.77	0.10	0.06	0.29	0.18	0.11
Sevier	2.75	1.46	1.45	0.96	0.98	0.60
Washington	2.56	3.17	4.43	4.75	5.67	4.40
Wayne	0.62	0.31	1.48	1.18	0.85	2.00
REGIONAL TOTALS	15.01	12.03	16.82	15.73	13.27	15.02
<u>Northeastern Region</u>						
Daggett	1.11	1.30	1.62	1.09	0.85	1.83
Duchesne	5.36	4.95	6.08	6.24	6.78	10.60
Uintah	9.88	7.01	6.20	6.29	10.24	9.50
REGIONAL TOTALS	16.35	13.26	13.90	13.62	17.86	21.93
<u>Southeastern Region</u>						
Carbon	6.53	6.20	7.73	8.93	8.57	7.35
Emery	3.63	2.07	5.34	6.98	7.70	5.58
Grand	1.54	1.03	2.92	1.29	2.82	2.78
San Jaun	2.78	4.47	3.30	2.49	3.26	1.83
REGIONAL TOTALS	14.48	13.76	19.30	19.68	22.36	17.54
Unknown counties	2.28	4.01	0.41	2.16	0.08	0.02
Mixed counties				0.07	0.00	2.61
STATE TOTALS	100	100	100	100	100	100

Table 8. Statewide summary of cottontail rabbit harvest statistics, 1967-76.

Year	Total Hunters	Total Harvest	Hunter Days Afield	Cottontail Per Hunter-day	Cottontails* Per Hunter
1967	23,249	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	1.86	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
1975	24,803	154,182	116,707	1.32	6.22
1976	28,239	235,952	126,737	1.86	8.39
TOTALS (1967-76)	254,033	1,746,440	1,076,335	1.62	6.87
AVERAGES (1967-75)	25,088	167,832	105,511	1.58	6.59

*Based on county of residence.

Table 9. Cottontail rabbit field bag check summary, 1976.

Region & County	Total Parties	Total Hunters	Total Hours	Total Rabbits	Rabbits/100 Hrs.	Total Hunts	Total Hunters	Total Hours	Total Rabbits	Rabbits/100 Hrs.	Rabbits/Hunter	
<u>Northern Region</u>												
Box Elder	8	15	56	5	9	6	10	36	4	11	0.40	
Cache	--	--	--	--	--	--	--	--	--	--	--	
Davis	--	--	--	--	--	--	--	--	--	--	--	
Morgan	--	--	--	--	--	--	--	--	--	--	--	
Rich	6	19	72	42	58	6	19	72	42	58	2.21	
Summit	--	--	--	--	--	--	--	--	--	--	--	
Weber	--	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	14	34	128	47	37	12	29	108	46	43	1.59	
<u>Central Region</u>												
Juab	1	2	40	4	10	1	2	40	4	10	2.00	
Salt Lake	1	2	2	8	400	1	2	2	8	400	4.00	
Sanpete	3	13	28	3	11	1	2	6	2	33	1.00	
Tooele	25	62	200	27	14	5	14	78	8	10	0.57	
Utah	5	13	45	3	7	5	13	45	3	7	0.23	
Wasatch	--	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	35	92	315	45	14	13	33	171	25	15	0.76	
<u>Southern Region</u>												
Beaver	--	--	--	--	--	--	--	--	--	--	--	
Garfield	4	7	7	22	314	4	7	7	22	314	3.14	
Iron	--	--	--	--	--	--	--	--	--	--	--	
Kane	--	--	--	--	--	--	--	--	--	--	--	
Millard	--	--	--	--	--	--	--	--	--	--	--	
Piute	--	--	--	--	--	--	--	--	--	--	--	
Sevier	--	--	--	--	--	--	--	--	--	--	--	
Washington	--	--	--	--	--	--	--	--	--	--	--	
Wayne	--	--	--	--	--	--	--	--	--	--	--	
REGIONAL TOTALS	4	7	7	22	314	4	7	7	22	314	3.14	
<u>Northeastern Region</u>												
Daggett	16	38	109	88	81	7	17	59	44	75	2.59	
Duchesne	52	136	476	368	77	26	58	229	234	102	4.03	
Uintah	42	82	203	319	157	18	41	101	256	253	6.24	
REGIONAL TOTALS	110	256	788	775	98	51	116	389	534	137	4.60	
<u>Southeastern Region</u>												
Carbon	17	43	125	50	40	8	21	63	46	73	2.19	
Emery	33	88	334	94	28	10	21	62	46	74	2.19	
Grand	20	40	114	54	47	19	36	106	50	47	1.39	
San Juan	23	33	76	48	63	15	22	56	44	79	2.00	
REGIONAL TOTALS	93	204	649	246	38	52	100	287	186	65	1.86	
STATE TOTALS	256	593	1,887	1,135	60	132	285	962	813	85	2.85	

Table 10. Cottontail hunter success trend determined by field bag checks, 1971-76.

Region & County	1971		1972		1973		1974		1975		1976	
	Bag/ 100 Hrs. Hunter	Bag/ 100 Hrs. Hunter	Bag/ 100 Hrs. Hunter	Bag/ 100 Hrs. Hunter	Bag/ 100 Hrs. Hunter	Bag/ 100 Hrs. Hunter	Bag/ 100 Hrs. Hunter	Bag/ 100 Hrs. Hunter	Bag/ 100 Hrs. Hunter	Bag/ 100 Hrs. Hunter	Bag/ 100 Hrs. Hunter	Bag/ 100 Hrs. Hunter
<u>Northern Region</u>												
Box Elder	--	--	10	0.38	--	--	10	1.00	10	0.48	9	0.40
Cache	--	--	100	0.50	--	--	--	--	--	--	--	--
Davis	--	--	--	--	--	--	--	--	--	--	--	--
Morgan	34	1.67	--	--	--	--	--	--	--	--	--	--
Rich	200	3.33	11	0.25	--	--	--	--	30	1.33	58	2.21
Summit	--	--	--	--	--	--	--	--	--	--	--	--
Weber	--	--	--	--	--	--	--	--	50	0.50	--	--
REGIONAL TOTALS	57	2.50	10	0.34	--	--	10	1.00	15	0.69	37	1.59
<u>Central Region</u>												
Juab	--	--	100	1.00	--	--	--	--	0	0.00	10	2.00
Salt Lake	--	--	--	--	--	--	33	0.50*	--	--	400	4.00
Sanpete	19	0.57	--	--	--	--	--	--	--	--	11	1.00
Tooele	--	--	38	1.50	14	0.50	20	0.61*	0	0.00	14	0.57
Utah	--	--	--	--	--	--	--	--	--	--	7	0.23
Wasatch	--	--	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	19	0.57	40	1.45	14	0.50	21	0.60*	0	0.00	14	0.76
<u>Southern Region</u>												
Beaver	--	--	--	--	--	--	--	--	--	--	--	--
Garfield	--	--	--	--	--	--	138	6.11	--	--	314	3.14
Iron	--	--	--	--	--	--	--	--	--	--	--	--
Kane	25	1.00	--	--	--	--	--	--	--	--	--	--
Millard	--	--	--	--	--	--	--	--	--	--	--	--
Piute	--	--	--	--	--	--	--	--	--	--	--	--
Sevier	--	--	--	--	--	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--	--	--	--	--	--
Wayne	38	1.50	--	--	--	--	--	--	--	--	--	--
REGIONAL TOTALS	31	1.25	--	--	--	--	138	6.11	--	--	314	3.14
<u>Northeastern Region</u>												
Daggett	119	1.58	109	1.83	--	--	36	0.40	59	0.44	81	2.59
Duchesne	21	0.85	101	4.32	94	4.43	19	1.05	39	1.72	77	4.03
Uintah	55	1.15	101	6.10	55	4.10	36	1.68	87	2.93	157	6.24
REGIONAL TOTALS	57	1.29	103	4.05	78	4.33	30	1.39	54	1.91	98	4.60
<u>Southeastern Region</u>												
Carbon	59	1.94	98	2.17	80	1.47	100	2.35	57	2.00	40	2.19
Emery	17	0.20	6	0.27	127	1.00	17	0.50	6	0.00	28	2.19
Grand	70	2.13	--	--	--	--	--	--	112	3.33	47	1.39
San Juan	44	1.25	78	2.32	73	1.95	44	2.00	96	2.93	63	2.00
REGIONAL TOTALS	56	1.72	58	2.21	77	1.61	47	1.15	74	2.51	38	1.86
STATE TOTALS	43	1.20	58	2.27	77	2.15	45	1.91	43	1.80	60	2.85

*Cottontails per hunter based on all hunts.

SNOWSHOE HARE

Harvest

During 1976, the second annual snowshoe hare hunting season was held statewide. Results of the 1976 hunter questionnaire are found in Table 11. Trends of snowshoe hares bagged per hunter-day, percent of harvest and percent of pressure (hunter-days) are found in Tables 12-14. The 1976 season compared to the first season in 1975 as follows:

	<u>1976</u>	<u>1975</u>	<u>Percent change</u>
Snowshoe hare hunters	8,502	5,961	+43
Snowshoe hares harvested	15,500	12,072	+28
Hunter-days afield	20,367	19,770	+ 3
Snowshoes per hunter-day	0.77	0.61	+26
Snowshoes per hunter	1.82	2.03	-10

Significant misidentification of white-tailed jackrabbits as snowshoe hares was anticipated prior to mailing the harvest questionnaire following the first season in 1975. This proved to be the case as a significant harvest was reported for Box Elder and Tooele counties; outside the known range of the species. It was assumed that the problem was Statewide, not just confined to those counties.

The 1976 harvest questionnaire was modified in an attempt to better inform respondents concerning the potential for misidentification and aid them in distinguishing between these two varying hares. Comparative reported harvests in Box Elder and Tooele counties between 1975 and 1976 suggest that this was accomplished, at least to a significant degree, but the still relatively large harvest suggests continued substantial confusion. Further refinement will be made in the 1977 harvest questionnaire in an effort to more clearly define the snowshoe hare harvest.

The estimated number of hunters increased sharply in comparison to 1975 while the number of hunter-days afield increased only slightly. The indicated total harvest also showed a marked increase. It is probable that an unknown, but probably substantial, proportion of the indicated harvest were actually white-tailed jackrabbits.

Table 11. Summary of snowshoe hare hunter success and distribution of harvest and hunting pressure by region and county, 1976.

Region & County	Hunters Reporting	Days Hunted	Snowshoes Bagged	Snowshoes/Hunter-day	Snowshoes* per Hunter	% of Pressure	% of Harvest
<u>Northern Region</u>							
Box Elder	16	30	13	0.43	0.67	3.99	2.25
Cache	35	71	58	0.82	2.07	9.45	10.03
Davis	4	5	2	0.40	1.27	0.67	0.35
Morgan	19	60	43	0.72	0.00	7.99	7.44
Rich	19	29	25	0.86	0.00	3.86	4.33
Summit	38	103	119	1.16	4.43	13.72	20.59
Weber	14	17	15	0.88	1.83	2.26	2.60
REGIONAL TOTALS	145	315	275	0.87	1.77	41.94	47.58
<u>Central Region</u>							
Juab	6	14	7	0.50	4.00	1.86	1.21
Salt Lake	5	8	10	1.25	2.09	1.07	1.73
Sanpete	9	21	6	0.29	0.00	2.80	1.04
Tooele	4	5	2	0.40	2.67	0.67	0.35
Utah	33	82	58	0.71	1.61	10.92	10.03
Wasatch	33	65	40	0.62	1.00	8.66	6.92
REGIONAL TOTALS	90	195	123	0.63	1.79	25.97	21.28
<u>Southern Region</u>							
Beaver	6	8	6	0.75	3.00	1.07	1.04
Garfield	2	3	1	0.33	0.50	0.40	0.17
Iron	1	2	0	0.00	0.00	0.27	0.00
Kane	0	0	0	0.00	0.00	0.00	0.00
Millard	1	1	0	0.00	0.00	0.13	0.00
Piute	0	0	0	0.00	0.00	0.00	0.00
Sevier	6	8	5	0.63	0.67	1.07	0.87
Washington	0	0	0	0.00	0.00	0.00	0.00
Wayne	8	15	19	1.27	1.50	2.00	3.29
REGIONAL TOTALS	24	37	31	0.84	1.00	4.93	5.36
<u>Northeastern Region</u>							
Daggett	1	5	0	0.00	0.00	0.67	0.00
Duchesne	21	61	31	0.51	0.50	8.12	5.36
Uintah	13	51	35	0.69	4.80	6.79	6.06
REGIONAL TOTALS	35	117	66	0.56	2.89	15.58	11.42
<u>Southeastern Region</u>							
Carbon	16	34	32	0.94	1.33	4.53	5.54
Emery	8	18	11	0.61	8.67	2.40	1.90
Grand	1	2	2	1.00	5.00	0.27	0.35
San Juan	2	10	19	1.90	0.00	1.33	3.29
REGIONAL TOTALS	27	64	64	1.00	3.31	8.52	11.07
Unknown counties	2	2	2	1.00	0.00	0.27	0.35
Mixed counties	3	15	6	0.40	0.00	2.00	1.04
STATE TOTALS	326	745	567	0.76	1.82	100	100

*Based on county of residence.

Table 12. Summary of snowshoe hares bagged per hunter-day by region and county, 1975-76.

Region & County	1975	1976
<u>Northern Region</u>		
Box Elder	0.79	0.43
Cache	0.49	0.82
Davis	0.07	0.40
Morgan	0.67	0.72
Rich	1.21	0.86
Summit	0.34	1.16
Weber	0.40	0.88
REGIONAL TOTALS	0.57	0.87
<u>Central Region</u>		
Juab	0.50	0.50
Salt Lake	0.85	1.25
Sanpete	0.39	0.29
Tooele	0.80	0.40
Utah	0.47	0.71
Wasatch	0.67	0.62
REGIONAL TOTALS	0.60	0.63
<u>Southern Region</u>		
Beaver	0.50	0.75
Garfield	0.00	0.33
Iron	1.00	0.00
Kane	0.00	0.00
Millard	0.00	0.00
Piute	1.00	0.00
Sevier	0.47	0.63
Washington	0.00	0.00
Wayne	1.25	1.27
REGIONAL TOTALS	0.47	0.84
<u>Northeastern Region</u>		
Daggett	1.37	0.00
Duchesne	0.69	0.51
Uintah	0.91	0.69
REGIONAL TOTALS	0.91	0.56
<u>Southeastern Region</u>		
Carbon	0.81	0.94
Emery	0.33	0.61
Grand	0.00	1.00
San Juan	0.00	1.90
REGIONAL TOTALS	0.71	1.00
Unknown counties	--	1.00
Mixed counties	--	0.40
STATE TOTALS	0.61	0.76

Table 13. Percentage distribution of snowshoe hare harvested by region and county, 1965-76.

Region & County	1975	1976
<u>Northern Region</u>		
Box Elder	15.38	2.25
Cache	9.18	10.03
Davis	0.25	0.35
Morgan	2.98	7.44
Rich	8.44	4.33
Summit	6.70	20.59
Weber	3.97	2.60
REGIONAL TOTALS	46.90	47.58
<u>Central Region</u>		
Juab	0.25	1.21
Salt Lake	2.73	1.73
Sanpete	2.98	1.04
Tooele	8.68	0.35
Utah	6.45	10.03
Wasatch	4.47	6.92
REGIONAL TOTALS	25.56	21.28
<u>Southern Region</u>		
Beaver	1.07	1.04
Garfield	0.40	0.17
Iron	0.27	0.00
Kane	0.00	0.00
Millard	0.13	0.00
Piute	0.00	0.00
Sevier	1.07	0.87
Washington	0.00	0.00
Wayne	2.00	3.29
REGIONAL TOTALS	4.93	5.36
<u>Northeastern Region</u>		
Daggett	0.67	0.00
Duchesne	8.12	5.36
Uintah	6.79	6.06
REGIONAL TOTALS	15.58	11.42
<u>Southeastern Region</u>		
Carbon	4.53	5.54
Emery	2.40	1.90
Grand	0.27	0.35
San Juan	1.33	3.29
REGIONAL TOTALS	8.52	11.07
Unknown counties	--	0.35
Mixed counties	--	1.04
STATE TOTALS	100	100

Table 14. Percentage distribution of snowshoe hare hunting pressure by region and county, 1975-76

Region & County	1975	1976
<u>Northern Region</u>		
Box Elder	11.82	3.99
Cache	11.36	9.45
Davis	2.27	0.67
Morgan	2.73	7.99
Rich	4.24	3.86
Summit	11.97	13.72
Weber	6.06	2.26
REGIONAL TOTALS	50.45	41.94
<u>Central Region</u>		
Juab	0.30	1.86
Salt Lake	1.97	1.07
Sanpete	4.70	2.80
Tooele	6.67	0.67
Utah	8.33	10.92
Wasatch	4.09	8.66
Regional Totals	26.06	25.97
<u>Southern Region</u>		
Beaver	0.30	1.07
Garfield	1.21	0.40
Iron	0.15	0.27
Kane	0.00	0.00
Millard	0.00	0.13
Piute	0.15	0.00
Sevier	2.88	1.07
Washington	0.15	0.00
Wayne	0.61	2.00
REGIONAL TOTALS	5.45	4.93
<u>Northeastern Region</u>		
Daggett	1.21	0.67
Duchesne	2.42	8.12
Uintah	3.48	6.79
REGIONAL TOTALS	7.12	15.58
<u>Southeastern Region</u>		
Carbon	8.64	4.53
Emery	2.27	2.40
Grand	0.00	0.27
San Juan	0.00	1.33
REGIONAL TOTALS	10.91	8.52
Unknown counties	--	0.27
Mixed counties	--	2.00
STATE TOTALS	100	100

APPENDIX

Table 1. Comparison of 1976 monthly average temperatures to the normal for each weather division and statewide.

Weather Division	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
No. 1 WESTERN												
Normal	25.9	31.8	38.0	47.2	56.4	64.4	74.0	72.0	62.4	50.6	37.2	28.6
1976	27.3	33.9	34.7	46.3	59.2	64.5	75.5	69.1	63.2	48.3	38.7	26.7
Departure (degrees)	+1.4	+2.1	-3.3	-0.9	+2.8	+0.1	+1.5	-2.9	+0.8	-2.3	+1.5	-1.9
No. 2 DIXIE												
Normal	39.0	44.1	49.2	57.6	66.5	75.2	82.6	80.6	73.7	62.5	48.4	40.2
1976	40.8	46.3	47.0	54.9	68.5	74.4	81.5	77.0	72.2	59.4	50.6	40.3
Departure (degrees)	+1.8	+2.2	-2.2	-2.7	+2.0	-0.8	-1.1	-3.6	-1.5	-3.1	+2.2	+0.1
No. 3 NORTH CENTRAL												
Normal	26.7	31.9	38.5	48.3	57.5	65.0	74.6	72.7	63.5	51.7	38.5	29.7
1976	25.0	30.6	33.3	47.0	59.8	64.2	75.2	69.1	64.0	49.0	39.6	28.4
Departure (degrees)	-1.7	-1.3	-5.2	-1.3	+2.3	-0.8	+0.6	-3.6	+0.5	-2.7	+1.1	-1.3
No. 4 SOUTH CENTRAL												
Normal	26.9	31.5	36.9	45.6	54.4	62.3	70.0	68.1	60.5	50.0	37.6	29.3
1976	26.8	34.9	33.6	43.9	56.5	61.9	71.2	65.9	60.3	47.1	39.0	29.3
Departure (degrees)	-0.1	+3.4	-3.3	-1.7	+2.1	-0.4	+1.2	-2.2	-0.2	-2.9	+1.4	0.0
No. 5 NORTHERN MOUNTAINS												
Normal	20.9	24.3	30.2	40.8	49.9	56.8	65.1	63.2	55.0	45.0	32.3	24.2
1976	21.3	26.1	26.9	40.5	5.15	55.6	65.7	60.9	55.5	42.6	34.0	24.8
Departure (degrees)	+0.4	+1.8	-3.3	-0.3	+1.6	-1.2	+0.6	-2.3	+0.5	-2.4	+1.7	+0.6
No. 6 UINTAH BASIN												
Normal	16.8	23.9	35.0	46.7	56.4	63.8	71.5	69.2	60.4	48.7	34.1	22.1
1976	15.6	26.1	32.8	46.7	57.8	63.5	73.9	68.4	61.5	46.2	35.0	23.8
Departure (degrees)	-1.2	+2.2	-2.2	0.0	+1.4	-0.3	+2.4	-0.8	+1.1	-2.5	+0.9	+1.7
No. 7 SOUTHEAST												
Normal	27.3	33.6	40.6	50.6	60.1	68.7	76.1	73.7	65.6	53.7	39.3	29.8
1976	27.0	38.8	39.2	50.5	61.1	68.6	77.8	72.8	65.2	51.0	40.9	29.7
Departure (degrees)	-0.3	+5.2	-1.4	-0.1	+1.0	-0.1	+1.7	-0.9	-0.4	-2.7	+1.6	-0.1
STATE AVERAGES												
Normal	26.2	31.6	38.3	48.1	57.3	65.2	73.4	71.4	63.0	51.7	38.2	29.1
1976	26.3	33.8	35.4	47.1	59.2	64.7	74.4	69.0	63.1	49.1	39.7	29.0
Departure (degrees)	+0.1	+2.2	-2.9	-1.0	+1.9	-0.5	+1.0	-2.4	+0.1	-2.6	+1.5	-0.1

Table 2. Comparison of 1976 monthly average precipitation to the normal for each weather division and statewide.

Weather Division	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
No. 1 WESTERN												
Normal	0.60	0.59	0.75	0.87	0.84	0.82	0.61	0.76	0.50	0.76	0.69	0.70
1976	0.25	0.92	0.48	0.88	0.57	0.19	0.72	0.47	0.67	0.88	0.13	0.01
Departure (inches)	-0.35	+0.33	-0.27	+0.01	-0.27	-0.63	+0.11	-0.29	+0.17	+0.12	-0.56	-0.69
No. 2 DIXIE												
Normal	1.15	1.21	1.30	0.91	0.53	0.38	0.89	0.95	0.67	0.88	0.91	1.17
1976	0.02	2.69	0.46	1.14	0.19	0.01	0.89	0.23	0.72	1.44	0.25	0.04
Departure (inches)	-1.13	+1.48	-0.84	+0.23	-0.34	-0.37	0.00	-0.72	+0.05	+0.56	-0.66	-1.13
No. 3 NORTH CENTRAL												
Normal	1.47	1.32	1.62	1.96	1.67	1.50	0.59	0.94	0.85	1.36	1.49	1.56
1976	0.73	2.19	1.37	2.13	0.85	1.16	0.99	0.81	0.61	0.91	0.17	0.07
Departure (inches)	-0.74	+0.87	-0.25	+0.17	-0.82	-0.34	+0.40	-0.13	-0.24	-0.45	-1.32	-1.49
No. 4. SOUTH CENTRAL												
Normal	1.03	0.98	1.18	1.13	0.88	0.76	0.96	1.39	0.88	1.03	0.93	1.08
1976	0.23	1.84	0.88	1.27	0.76	0.09	1.17	0.33	0.88	0.73	0.26	0.05
Departure (inches)	-0.80	+0.86	-0.30	+0.14	-0.12	-0.67	+0.21	-1.06	0.00	-0.30	-0.67	-1.03
No. 5 NORTHERN MOUNTAINS												
Normal	2.19	1.89	2.05	1.86	1.52	1.52	0.86	1.34	1.05	1.57	1.82	2.24
1976	0.90	2.20	1.25	1.48	1.32	0.88	0.72	0.57	0.87	0.57	0.07	0.05
Departure (inches)	-1.29	+0.31	-0.80	-0.38	-0.20	-0.64	-0.14	-0.77	-0.18	-1.00	-1.75	-2.19
No. 6 UINITA BASIN												
Normal	0.51	0.43	0.50	0.68	0.68	0.90	0.62	0.88	0.72	0.94	0.51	0.69
1976	0.04	0.65	0.53	1.00	0.91	0.42	0.33	0.44	0.79	0.15	0.00	0.01
Departure (inches)	-0.47	+0.22	+0.03	+0.32	+0.23	-0.48	-0.29	-0.43	+0.07	-0.79	-0.51	-0.68
No. 7 SOUTHEAST												
Normal	0.61	0.56	0.60	0.68	0.59	0.56	0.74	1.23	0.77	1.07	0.61	0.73
1976	0.11	1.06	0.46	0.67	1.23	0.11	0.83	0.49	1.09	0.22	0.04	0.00
Departure (inches)	-0.50	+0.50	-0.14	-0.01	+0.64	-0.45	+0.09	-0.74	+0.32	-0.85	-0.57	-0.73
STATE AVERAGES												
Normal	1.08	1.00	1.14	1.16	0.96	0.92	0.75	1.07	0.78	1.09	0.99	1.17
1976	0.33	1.65	0.78	1.22	0.83	0.41	0.81	0.48	0.80	0.70	0.13	0.03
Departure (inches)	-0.75	+0.65	-0.36	+0.06	-0.13	-0.51	+0.06	-0.59	+0.02	-0.39	-0.86	-1.14

Table 3. Number and percent of total upland game hunters afield who reported hunting each game species during 1971-76.

Species	Number of Hunters					Percent of Total						
	1971	1972	1973	1974	1975	1976	1971	1972	1973	1974	1975	1976
Pheasant	87,878	84,311	75,968	85,252	77,566	74,029	87.7	87.8	82.5	85.6	79.3	81.1
Chukars	17,917	16,685	13,888	16,412	16,156	14,171	17.9	17.4	15.1	16.5	16.5	15.5
Mourning Doves	26,064	29,341	27,435	34,021	37,378	31,293	26.0	30.5	29.8	34.2	38.2	34.3
Sage Grouse	12,893	13,040	10,017	12,214	13,996	15,283	12.9	13.6	10.9	12.3	14.3	16.8
Forest Grouse	13,363	16,640	17,588	21,290	20,102	21,186	13.3	17.3	19.1	22.0	20.6	23.2
Quail	8,039	7,380	5,654	6,097	6,397	5,215	8.0	7.7	6.1	6.1	6.5	5.7
Hungarian Partridge	4,276	4,754	3,566	4,103	3,409	3,517	4.3	4.9	3.9	4.1	3.5	38.6
Wild turkey**	389*	351*	135	138*	143*	130*	0.4	0.4	0.1	0.1	0.1	0.1
Cottontail	30,824	22,835	20,109	22,737	24,803	28,239	30.8	23.8	21.8	22.8	25.4	31.0
Snowshoe hare					5,961	8,502					6.1	9.3
TOTAL HUNTERS	100,183	96,047	92,098	99,556	97,808	91,226						

*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 4. Percent of hunter trips resulting in failure to bag at least one bird, 1961-76.

Year	Pheasants		Doves		Chukars		Sage Grouse		Forest Grouse		Quail		Huns								
	Bag	Hunt. %	0	Bag	Hunt. %	0	Bag	Hunt. %	0	Bag	Hunt. %	0	Bag	Hunt. %							
1961	714	3,204	22	51	583	9	318	539	59	--	--	--	109	383	28	72	123	59			
1962	500	2,685	19	39	456	9	147	362	41	--	--	--	62	201	31	36	108	33			
1963	795	3,317	24	53	691	8	248	550	45	220	468	47	188	281	67	71	305	23	59	177	33
1964	911	3,115	29	60	681	9	266	568	47	45	154	29	144	229	63	94	316	30	62	150	41
1965	1,165	4,009	29	--	--	--	486	851	57	82	168	49	225	311	72	128	371	34	93	233	40
1966	1,242	4,297	29	136	1,067	13	423	881	48	54	131	41	133	331	40	106	315	34	63	219	29
1967	1,353	4,833	28	153	1,319	12	477	915	52	138	266	52	194	475	41	161	424	38	116	315	37
1968	1,422	5,223	27	236	1,312	18	495	1,095	45	185	449	41	177	665	27	171	457	37	132	347	38
1969	1,897	5,335	36	214	1,568	14	647	1,250	52	241	648	37	273	646	42	182	465	39	148	292	51
1970	1,546	4,686	33	193	1,274	15	466	962	48	257	603	43	209	666	31	126	314	40	101	210	48
1971	1,783	5,049	35	210	1,333	16	464	934	50	234	625	37	223	673	33	162	385	42	87	210	41
1972	1,743	4,617	38	270	1,421	19	457	827	55	259	593	44	271	794	34	154	339	45	120	224	54
1973	1,659	4,699	35	209	1,596	13	414	824	50	226	553	41	329	1,019	32	128	311	41	97	196	49
1974	2,347	5,323	44	323	1,951	17	511	955	54	292	668	44	388	1,259	31	157	333	47	108	227	48
1975	2,472	5,604	44	329	2,554	13	607	1,105	55	374	901	42	535	1,354	40	177	406	44	121	220	55
1976	1,739	4,294	40	273	1,709	16	408	781	52	259	783	33	371	1,131	33	105	266	39	87	184	47
AVERAGES															31	13	50	42	43	37	43
(1961-74)																					

Table 5. Regional and statewide summary of effort expended on upland game summer inventory, 1971-76.

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																	
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	--					
1975	490	--	846	--	993	--	515	--	393	--	3,237	--					
1976	476	--	822	--	773	--	434	--	400	--	2,905	--					
Quail																	
1971	192	24	289	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					
1975	27	8	107	23	841	64	594	43	230	12	1,799	150					
1976	81	10	206	29	503	62	597	44	75	10	1,462	155					
Chukar																	
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					
1975	188	30	808	85	892	41	908	88	786	55	3,582	299					
1976	875	75	964	110	465	32	727	67	687	66	3,718	350					
Forest Grouse																	
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					
1975	1,194	199	1,287	160	775	629	1,474	136	1,476	135	6,206	1,259					
1976	1,516	351	1,503	216	427	271	1,108	140	1,127	134	5,681	1,112					

Table 5. Continued

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			
Sage Grouse																	
1971	1,743	296	909	145	1,423	98	1,465	144	1,089	128	6,629	812					
1972	1,628	323	1,187	143	751	144	2,125	170	1,280	141	6,971	921					
1973	3,146	353	927	147	1,171	116	1,952	238	496	41	7,692	895					
1974	2,026	321	1,551	115	1,881	193	2,964	248	877	124	9,299	1,001					
1975	1,254	249	963	123	714	226	1,868	236	1,098	131	5,897	965					
1976	1,965	281	426	121	379	183	1,881	227	1,222	161	5,873	973					
Hungarian Partridge																	
1971	676	85	104	18	--	--	--	--	--	--	780	103					
1972	1,255	119	126	21	--	--	--	--	--	--	1,381	139					
1973	1,643	156	12	4	--	--	--	--	--	--	1,655	160					
1974	1,035	176	14	2	--	--	--	--	--	--	1,049	178					
1975	344	64	0	0	--	--	--	--	--	--	344	64					
1976	940	83	113	21	--	--	--	--	--	--	1,053	104					
Wild Turkey																	
1971	--	--	--	--	726	73	--	--	215	28	941	101					
1972	--	--	--	--	73	62	--	--	290	54	363	116					
1973	--	--	--	--	143	11	--	--	--	--	143	11					
1974	--	--	--	--	0	0	--	--	799	64	799	64					
1975	--	--	--	--	215	18	--	--	792	100	1,007	118					
1976	--	--	--	--	125	16	--	--	362	45	487	61					
Cottontail																	
1971	338	--	330	--	1,054	--	410	--	570	--	2,702	--					
1972	510	--	279	--	939	--	360	--	555	--	2,643	--					
1973	337	--	242	--	849	--	270	--	270	--	1,968	--					
1974	270	--	180	--	1,040	--	370	--	542	--	2,402	--					
1975	330	--	231	--	1,237	--	340	--	712	--	2,850	--					
1976	510	--	260	--	1,372	--	300	--	626	--	3,068	--					

Table 6. Season framework for upland game during 1976.

Species	Season Dates	Daily Bag Limit	Possession Limit	Area Open
Pheasant	Nov. 6-14	2 cocks	4 cocks	Statewide except Utah County
	Nov. 6-10	2 cocks	4 cocks	Utah County
	Nov. 6-Dec. 5	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. 1-30	10	20	Statewide
Band-tailed Pigeon	Sept. 1-30	5	10	Grand, San Juan, Beaver, Garfield, Iron, Kane, Millard, Piute, Sevier, Washington, and Wayne counties.
Chukar	Sept. 18, 1976 to Jan. 15, 1977	5	10	Statewide except Carbon, Emery, Grand and San Juan counties.
	Sept. 18 to Jan. 15, 1977	8	16	Carbon, Emery, Grand and San Juan counties.
Sage Grouse	Sept. 18-24	3	6	Beaver, Garfield, Iron, Kane, Millard, Piute, Sevier and Wayne counties.
	Sept. 18-24	2	4	Carbon, Daggett, Duchesne, Emery, Grand, San Juan, Sanpete (part), Uintah, Utah (part), and Wasatch (part).
	Sept. 18-24	1	2	Box Elder, Cache, Davis, Morgan, Rich, Summit, Tooele, Wasatch (part), Weber and Juab (part) counties.
The following counties were closed to sage grouse hunting during 1975:				Salt Lake, Sanpete (part), Washington, Utah (part) and Juab (part).
Forest grouse	Sept. 18-Nov. 30	4 aggregate	8 aggregate	Statewide

Table 6. Continued

Species	Season Dates	Daily Bag Limit	Possession Limit	Area Open
Quail	Nov. 6-14	5	10	Statewide except Utah and Washington counties.
	Nov. 6-10	5	10	Utah County
	Nov. 6-Dec. 31	8	16	Washington County
Hungarian Partridge	Sept. 18, 1976 to Jan. 15, 1977	5	10	Statewide
Wild turkeys				
Spring hunt	May 1-May 16	Season limit 1 male turkey		Beaver, Garfield, Grand, Iron, Kane, Piute, San Juan, Sevier, Washington (part) and Wayne counties.
Fall hunt	Sept. 18-Oct. 3	Season limit one (1) turkey of either sex		Beaver, Garfield, Grand, Iron, Kane, Piute, San Juan, Sevier, Washington and Wayne counties.
Snowshoe hare	Sept. 18, 1976 to Jan. 31, 1977	5	10	Statewide
Cottontail rabbit	Sept. 18, 1976 to Jan. 31, 1977	10	20	Statewide except Box Elder, Cache, Davis, Morgan, Rich, Summit and Weber counties.
	Sept. 18, 1976 to Jan. 31, 1977	5	10	Box Elder, Cache, Davis, Morgan, Rich, Summit and Weber counties.

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