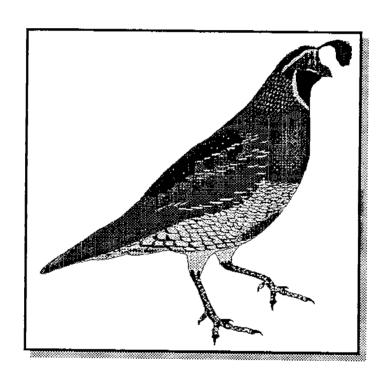
UTAH UPLAND GAME ANNUAL REPORT 1995



UTAH DIVISION OF WILDLIFE
RESOURCES
DEPARTMENT OF NATURAL RESOURCES
PUBLICATION NO. 96-4

UTAH

UPLAND GAME

Annual Report

1995

Prepared by:

Dean L. Mitchell Upland Game Program Coordinator

and

Linda Rawley Wildlife Resources Specialist

Greg Evans
Wildlife Section Data Coordinator/Data Processing

PUBLICATION NO. 96-4

Annual Performance Report for Federal Aid Project W-65-R-43 Job A-4

Utah Department of Natural Resources

DIVISION OF WILDLIFE RESOURCES

An Equal Opportunity Employer

Robert G. Valentine Director

"FINDING OUT HOW MANY THERE ARE LEFT IS THE LEAST OF THE PURPOSES OF GAME CENSUS.

MEASURING THE RESPONSE OF GAME POPULATIONS
TO CHANGES - DELIBERATE OR ACCIDENTAL IN THEIR ENVIRONMENT IS THE BIG PURPOSE.

CONTINUOUS CENSUS IS THE YARDSTICK OF SUCCESS OR FAILURE IN CONSERVATION."

ALDO LEOPOLD 1932

TABLE OF CONTENTS

	<u>Page</u>
Abstract	. 1
Objectives	. 1
Procedures	. 1
Recommendations	. 2
Introduction	. 3
Pheasant	. 11
Migratory Upland Game Birds	. 35
Mourning Dove	. 35
Band-tailed Pigeon	. 54
Chukar Partridge	. 59
Sage Grouse	. 78
Forest Grouse	. 105
Quail	. 132
Hungarian Partridge	. 148
Wild Turkey	. 163
Sharp-tailed Grouse	. 175
White-tailed Ptarmigan	. 178
Rabbits and Hares	. 184
Cottontail Rabbit	. 185
Snowshoe Hare	. 201
Appendix A: Weather Conditions	. 210
Appendix B: License Sales	. 215
Appendix C: DWR Summer Survey Effort	. 219
Appendix D: Season Dates, Bag Limits, Areas Open - 1995	. 224
Appendix E: Summary Harvest Questionnaire Returns	. 232

ANNUAL PERFORMANCE REPORT

RESEARCH PROJECT SEGMENT (Inventory)

State: <u>UTAH</u> Project Title: <u>Statewide Wildlife</u>

Management, Investigations

and Surveys

Project No.: $\underline{W-65-R}$ Segment No.: 43

Job Title: Statewide Upland Game Inventory and Management

Job No.: A-4

Period Covered: October 1, 1994 to September 30, 1995

Abstract: This report identifies progress and accomplishments of Segment No. 43 objectives, 1994-95. Results of annual inventory and harvest surveys and long-term trends of population indices derived by each method are included in the Utah Upland Game Annual Report 1994. Data obtained in 1994 are compared to 1993 and long-term averages.

Project Statement Objectives:

- 1. To conduct efficient annual breeding and production surveys.
- 2. To determine annual harvest, hunters, and hunter-days and bag per hunter.
- 3. To describe and map all known sage and sharp-tailed grouse leks.
- 4. To describe and map all mourning dove, pheasant and cottontail survey routes.
- 5. To assess the impact of a federal migratory permit on small game license sales and mourning dove harvest estimates.
- 6. To evaluate Utah's upland game survey techniques in comparison to most recent research and develop the most cost effective and efficient survey methods.
- 7. To evaluate the feasibility of confidence intervals for Utah's small game harvest estimates.
- 8. Study the feasibility of combing Nongame rabbit surveys with Game Management surveys.
- 9. Evaluate the value of adding more dove call routes.
- 10. Explore the benefits of telephone survey to assess upland game hunter success.

Progress Statement and Summary of Work Completed During The Segment For Each Objective:

1. To conduct efficient annual breeding and production surveys.

Ongoing Objective. 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, 1994 through February 10, 1995, as snow cover conditions allowed. Indices 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 22 on permanently established routes. Indices 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 nationwide survey administered by the U. S. 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, 1995.

Random brood counts were conducted on chukar and Hungarian partridge, forest grouse (ruffed and blue), sage grouse, sharp-tailed grouse, wild turkey and quail from June 15-August 22. Indices derived for each species include mean brood size, young per 100 adults and birds observed per 100 hours of effort.

Sage grouse strutting ground counts and sharp-tailed grouse dancing ground counts were conducted from March 15-May 15. Total cocks counted, average cocks per ground and percent change from 1993 for comparable grounds were determined on a county basis.

The Gambel's quail long period waterhole counts were completed in July and August. Limited valley quail random brood counts were made in several counties.

Cottontail rabbit roadside counts were conducted over pre-established routes between July 15 and August 22. Indices derived include rabbits per mile and young per 100 adults.

2. To determine annual harvest, hunters, and hunter-days and bag per hunter.

Ongoing Objective. Harvest questionnaires were mailed to determine the harvest of upland game birds, cottontail rabbit, and snowshoe hare. A sample of eligible licensees from the current year's (1994) resident small game license file and 1994 combination license file was used. The modified computerized pull-apart mailer was again used to obtain harvest data. Separate questionnaires were mailed to all ptarmigan, band-tailed pigeon and wild turkey permittees. Indices derived include total hunters, hunter-days, total harvest and hunter success per day, plus success for each season.

The upland game questionnaires were processed by the Division of Wildlife Resources Public Services Section. Wild turkey, band-tailed pigeon and ptarmigan questionnaires were analyzed separately by Wildlife Section personnel.

Upland game hunters were checked at checking stations, and random field checks were made during each hunting season. Indices 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 using wing samples collected at checking stations.

3. To describe and map all known sage and sharp-tailed grouse leks.

<u>Completed Objective.</u> Described and mapped all known sage grouse and sharp-tailed grouse leks and dancing grounds.

4. To describe and map all mourning dove, pheasant and cottontail survey routes.

Completed Objective. Described and mapped all mourning dove, pheasant
and cottontail routes.

5. To assess the impact of a federal migratory permit on small game license sales and mourning dove harvest estimates.

Completed Objective. Reviewed implementation strategies used by other states who have already implemented the federal migratory bird permit program. Waterfowl Program Coordinator and Division's Information Systems Analyst attended training sponsored by the U.S. Fish and Wildlife Service pertaining to implementation of the federal migratory bird permit. Objective #5 has been completed to the extent possible until implementation of the federal migratory permit in Utah in 1998.

6. To evaluate Utah's upland game survey techniques in comparison to most recent research and develop the most cost effective and efficient survey methods.

<u>Completed Objective</u>. A survey of other states upland game inventory and survey techniques has been completed. Based on survey results, Utah collects more inventory and survey data on upland game than most surrounding western states. Formal recommendations for adding new surveys and deleting less valuable surveys for Utah's upland game will be provided as part of Grant Proposal renewal in 1996.

7. To evaluate the feasibility of confidence intervals for Utah's small game harvest estimates.

We have completed a literature review for estimates and techniques, prepared some options and consulted with two statisticians at the University of Utah. The preferred option is to use some sort of

automated data recording system such as SCANTRON and code the data directly into a Statistical Analysis System (SAS) data set. SAS would be used to obtain confidence intervals. Currently the data set is nontransferable and the reprogramming costs too great to use the DWR Information Systems Services. We are attempting to identify and contract for the best automated data recording system. If the SAS data set is used the Harvest Report must be comparable to the present report. More consultation will take place during Segment No. 44 with a new biometrician that is working in DWR's Wildlife Section.

8. Study the feasibility of combing Nongame rabbit surveys with Game Management surveys.

<u>Completed Objective.</u> We have visited with the furbearer biologist about combining the surveys. They have determined to drop their fall rabbit spotlight count because of a lack of correlation with bobcat recruitment and trap success. Therefore, we cannot combine the surveys and will continue to survey our summer roadside counts for cottontail recruitment and fall hunter success using current methodology.

9. Evaluate the value of adding more dove call routes.

Completed Objective. Discussion has been made with Dave Dolton of the U.S. Fish and Wildlife Service concerning this indicating only moderate improvement in precision by adding 5 routes to our present 15. Rather than adding new routes, significant time was spent during Segment No. 43 in relocating existing routes into more representative habitat areas for doves. We will continue to "fine tune" dove routes in Utah into the future to ensure that routes capture a true picture of mourning dove breeding populations throughout the state.

10. Explore the benefits of telephone survey to assess upland game hunter success.

Completed Objective. Based on implications to Utah when the federal migratory bird harvest permit is implemented in 1998, we will hold hold off on a telephone survey to assess upland game harvest. Between now and 1998, we will consult closely with the Wildlife Section biometrician to determine the feasibility and cost of a telephone survey versus the pull-apart mail questionnaire currently in use.

Location of Work Performed: Statewide.

Costs Incurred:

Recommendations: This project should be continued for the purpose of determining trends of upland game population 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.

This is the twenty-fifth edition of this Annual Upland Game Report. It is an annual performance report of 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, wildlife managers and the upland game management staff of the Utah 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. A separate section is devoted to each species of upland game in Utah. Data are 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 1995, a total of 55,159 Utah sportsmen spent 389,511 days afield in pursuit of various upland game species (Table 1). The harvest of upland game totaled 403,421 animals. The proportion of the total upland game hunters which pursued each species is shown in Table 2 and the percentage failing to bag at least one bird (from general mail questionnaire) of each species in Table 3.

In 1995, Utah upland game hunters were again required to purchase an Upland Game Habitat Stamp in order to pursue pheasants, mourning doves, chukar partridge, sage grouse, forest grouse, quail, Hungarian partridge, cottontail rabbit and snowshoe hare. Funds derived from the Upland Game Habitat Stamp will be used to purchase, develop and protect critical upland game habitat throughout Utah.

The regulations for 1995 upland game hunting seasons are shown in Appendix D.

GENERAL HARVEST QUESTIONNAIRE

Harvest statistics were obtained from a random sample of licensed hunters by their response to a hunter questionnaire. The combined upland game bird and rabbit-hare questionnaire was again used.

A total of 14,777 upland game questionnaires, a 15.51 percent sample, were mailed. Of the total, 839 (5.68%) questionnaires were undeliverable. Of the 13,938 questionnaires delivered, 4,866 (34.91%) useable upland game questionnaires were returned. Of those, 2,029 purchased a license but did not hunt upland game. By dividing the total of 95,229 eligible licensees by the usable returns (4,866), a projection factor of 19.570282 is derived.

The 1995 hunter questionnaire sample size was greater than 10 percent of the total hunter population, so a follow-up questionnaire was not sent to those who failed to return the first one. A high rate of return is desirable in order to obtain an adequate sample of harvest estimates in counties where hunting pressure and harvest are limited. Extremely small samples from these counties tend to over-estimate the harvest and thus bias the results. Although harvest, number of hunters and days-afield may be over-estimated where small samples are obtained, harvest per hunter-day should be relatively precise.

995.	
r 19	
e e	
air	
onn	
esti	
du	
st statistics from the general mail questionnaire for 1995	
ᆱ	
ner	
ge	۱
the	
mo.	1
s fr	
stic	
tati	
st s	ı
Z Z	
f ha	
<u>o</u> >	,
nar	
E I	
์	
e 1	
[ab]	
_	

Table 1. Summaly of Halvest Statistics Hom the general man questionname for 1999.	אמטו טומווטוו		ic general man	questionina	.000
	Hunters	Total	Hunter-Days	Bag Per	Bag Per Hunter
Species	Afield	Harvest	Afield	Hunter-Day	For Season
Pheasant	38,391	71,202	142,755	0.50	1.85
Mourning Dove	20,896	186,336	80,688	2.31	8.92
Band-Tailed Pigeon	59	121	171	0.71	2.05
Chukar Partridge	6,097	20,954	31,140	0.67	2.30
Sage Grouse	5,987	7,133	12,615	0.57	1.19
Forest Grouse	10,088	29,312	35,591	0.82	2.91
Quail	4,374	13,023	12,712	1.02	2.98
Hungarian Partridge	2,294	2,967	5,812	1.03	2.60
Wild Turkey					
Merriam's	296	64	1,427	0.05	0.22
Rio Grande	123	78	628	0.12	0.63
Sharp-Tailed Grouse	ł	i	1 1	ł	i
White-Tailed Ptarmigan	20	12	39	0.31	09'0
Cottontail Rabbit	13,840	67,295	58,042	1.16	4.86
Snowshoe Hare	1,983	1,924	7,891	0.24	0.97
Total	1	403,421	389,511	1	1
Total hunters afield for all species of upland game =	l species of	f upland g	ame =	55,159	

percent of total upland game hunters afield who reported hunting each species during 1988-95. Table 2.

Nimber of Him				Number of Hun	Hunters							Percent of Total	CEA			
	1000	1080	1990	1991	1992	1993	1994	1995	1988	1989	1990	1991	1992	1993	1994.	1995
Species	2000	2000	47 006	40 043	44 840	10 640	36 785	38 394	77.70	75.20	72.50	69.14	71.27	66.52	74.12	9.60
Pheasant	4-0,40	200,00	C70'14	44,0	1,01	2,00			:							
Mourning Dove	22.457	21.696	22.700	22.632	18.021	19,725	20,743	20,896	16.00	16.30	17.30	36,55	30,85	33.10	41.89	37.88
	i		ď	¥	4	. α	~~	ō.	0.01	0.03	0.03	0.02	0.03	0.0	0.03	0.11
Band-Falled Pigeon	=	3	b	2	2		2 !	3				00 27	70 07	71.00	47.03	70.40
Chukar	11.237	10,910	11,195	10,577	11,125	10,128	8,455	9,097	32.00	32.40	25.00	20.7	13.04	20.7	0.5	4.0
Cade Groups	944 X	9 002	9.014	8.018	7,393	6.594	5,133	5,987	12.10	13.40	13.90	12.95	12.65	11.07	10.37	10.85
Saye Glouse	20.04	2000	14 504	14 424	15,000	12 030	4 827	10 088	24.20	25.40	22.50	23.29	25.67	20.19	19.85	18,29
Forest Grouse	9,0	0,000	- co(+)	1	2,00	2,010	1	2								•
- Figure C	2 R71	3.111	2.614	2.644	2.861	3.649	2.936	4,374	3.80	4.60	4.00	4.27	4.90	6.12	5,93	7.93
Cual.	- ·	•	í				000	7000	02.0	000	60.0	90 F	K 47	2.67	50.5	4 18
Hungarian Partridge	2,471	2,136	2,305	7,662	3,198	7,090	6691	7,234	06.6	3.50	3.00	7.7	ř	2	9	2
Wild Turkey*														!	;	i
Al conjunction	101	477	534	633	484	466	285	296	09.0	0.70	0.80	98.0	0.83	0.78	0.58	0.54
	7	-	3	5		:						000	60.0	700	40.0	0 00
Rio Grande				\$	20	4	105	123				0.03	6.03	0.0	17.0	77.0
Sharn-Tailed Grouse*	:	ì	ł	;	:	:	;	:	;	!	:	:	:	:	:	1
White Tailed Diamidan*	Ť.	647	Ŧ	5	-	o	4	20	0.02	0.01	0.02	0.02	0.02	0.02	0.04	0.04
VIIII C I allegar Lanningan	24 070	020 00	22 070	24 427	20 509	17.578	12 709	13.840	34.30	34.20	35.60	34.13	35.10	29.50	25.67	25.09
Cottoniail Kappit	010,42	27,012	679,62	2,13	50,00	5	2,1	2				1		5		000
Snowshoe Hare	4,725	4,895	4,095	3,427	3,732	2,755	1,565	1,983	6.70	7.30	6.30	5.03	6.39	4.02	3.10	2.00
Total Hunters**	70.142	67,017	64,868	61,922	58,423	9,590	49,518	55,159								
state and principle of the state of the stat	in hollan an	4 001102	ad tailed p	ממני מססט		tailed ntarming		was defer	n harvest was determined by senarate	senarate						

*Atthough wild turkey, sharp-tailed grouse, band-tailed pigeon and white-tailed ptarmigan harvest was determined by questionnaires, it is assumed that these hunters are derived from the same group of hunters who reported hunting other upland game bird species.

**This is not the total of the columns because many upland game hunters hunted more than one species.

95.
5
ģ
49
Ď,
÷
e
듣
<u></u>
SB
<u>-e</u>
aŧ
ğ
ã
2
ø,
5
<u>=</u>
Ξ
=
Ĕ
₹
S
흔
Š
Ξ
Ξ
돧
5
드
5
Ξ
8
들
ā
က
<u>a</u>
횰
Ë

anie 3.		Dhactart Dhactart Manning III Idilule to bag at least one b	173 153	E FILLING	Mourning Date	מאל מינ	במסו הייי	1			Sade Granes	931		Forest Grouss	asito		Olizij	ľ	linnaria	Hundarian Partridge	
•	9	Linding		4	Hinding	2		Cilural		S S	Hinting	196	NA.	Hinting	2	N	Hinfind		N S	Hinting	,
,	§ 6		ì	2 ,		3	2		*	2 2	Tring	è	2 }	Tuning	à	2 2	Tring	à	2 6	Tring	76
Year	Bag	Trips	%	Bag	Trips	5E	Bag	Trips	20	Rad	Iribs	%	gad	sdill	ę	pad	sdiri	2	Dag	sdii	۶ :
1961	714	3,204	22	5	583	ø,	318	539	53	:	ı	ŀ	:	:	ŀ	109	383	28	7.5	123	23
1962	200	2,685	19	39	456	თ	147	362	#1	;	!	:	;	}	:	62	201	돐	36	108	ဗ္ဗ
1963	795	3,317	24	53	691	œ	248	550	45	220	468	47	188	281	67	Σ	302	23	23	177	ဗ္ဗ
1964	911	3,115	59	2	681	9	266	568	47	45	154	53	1	229	63	94	316	30	62	120	4
1965	1,165	4,009	59	;	;	ı	486	851	22	87	168	49	225	311	72	128	371	34	93	233	9
1966	1,242	4,297	59	136	1,067	5	523	881	48	54	131	4	133	334	4	106	315	34	83	219	59
1967	1,353	4,833	28	153	1,319	12	477	915	52	138	266	29	194	475	4	161	424	38	116	315	37
1968	1.422	5,223	27	236	1.312	8	495	1,095	45	185	449	4	177	665	27	171	457	39	132	347	88
1969	1.897	5,335	36	214	1.568	4	647	1,250	62	241	648	37	273	656	42	182	465	39	148	292	51
1970	1.546	4,686	33	193	1.274	5	466	962	48	257	603	43	209	999	31	126	314	40	101	210	48
1971	1.783	5,049	35	210	1,333	16	464	934	90	234	625	37	223	673	33	162	382	42	87	210	4
1972	1.743	4,617	38	270	1,421	9	457	827	55	269	593	4	271	794	34	154	339	45	120	224	54
1973	1,659	4,699	35	209	1,596	5	414	824	20	226	553	4	329	1,019	32	128	311	41	97	196	49
1974	2,347	5,323	4	323	1,951	17	511	955	54	292	899	4	388	1,259	31	157	333	47	108	227	48
1975	2,472	5,604	4	329	2,554	5	607	1,105	55	374	901	42	535	1,354	40	177	406	4	121	220	22
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	4
1977	1,874	5,175	36	295	1,967	15	511	943	54	394	972	41	528	1,388	38	125	299	42	106	247	₩
1978	1,507	4,858	31	279	1,986	*	343	882	39	301	853	35	419	1,419	30	103	306	충	82	246	35
1979	2,222	7,024	32	343	2,671	5	628	1,150	46	400	1,215	33	585	1,691	35	130	403	32	1 3	243	49
1980	1,684	5,867	59	258	2,145	12	458	1,008	45	392	944	42	501	1,283	39	87	254	핝	72	506	36
1981	1,305	4,637	28	239	1,558	5	302	699	45	184	493	37	297	741	5	97	241	40	24	172	33
1982	1,768	6,725	26	363	2,338	16	406	824	49	269	620	43	325	919	35	128	292	4	83	176	5
1983	1,645	7,153	23	348	2,381	15	362	880	+	294	729	40	300	1,118	27	105	310	핝	82	225	36
1984	1,245	4,643	27	274	1,711	16	287	548	52	202	436	46	270	640	42	*	189	4	51	92	67
1985	1,207	4,017	30	221	1,600	15	208	426	49	161	376	43	228	929	36	61	148	4	32	54	92
1986	1,211	3,615	33	224	1,476	15	237	537	4	139	368	ထ	221	299	33	28	125	46	36	5	92
1987	863	2,837	30	140	1,047	13	194	537	36	90	307	59	143	671	7	46	7	T	34	94	35
1988	1,372	3,953	35	244	1,625	1 0	308	77	9	187	557	34	224	1,184	19	63	171	37	73	164	47
1989	1,126	2,985	38	184	1,184	16	263	614	5	183	468	39	257	961	27	89	160	43	53	108	4
1990	886	2,745	36	161	1,234	5	282	632	45	162	483	34	233	810	39	54	132	4	46	117	39
1991	1,062	2,461	43	202	1,301	16	309	809	5	198	461	43	262	879	32	69	152	45	29	153	4
1992	908	2,760	33	156	1,150	4	298	701	43	169	432	39	208	696	7	89	168	4	29	186	36
1993	1,035	2,086	20	194	1,038	19	354	533	99	191	347	55	346	633	22	82	192	4	72	130	89
1994	88	2,088	43	230	1,180	19	278	481	28	148	292	51	243	559	43	64	167	38	78	108	7.5
1995	919	2,452	37	224	1,286	7	259	554	47	169	347	49	277	790	35	92	241	39	54	123	4
AVERAGES	ES					:						;			;			;			3
(1961-94)			33			4			49			38			32			35			9

The upland game questionnaire is designed to monitor statewide harvest trend from year to year. The more extensively a species is hunted, the more accurately the questionnaire measures the trend data. In an effort to improve the accuracy of indices for species which receive very little hunting pressure and harvest, and which have low densities and limited distribution, a unique questionnaire for that species is mailed to the permit holder. This method has been used for band-tailed pigeon, wild turkey, sharp-tailed grouse and white-tailed ptarmigan.

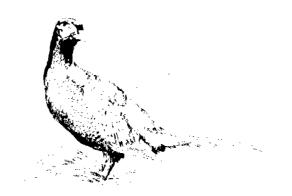
The annual harvest report is sometimes criticized for being inaccurate and without value. However, report users must recognize that the accuracy of the questionnaire is based on some basic assumptions. These assumptions are: (1) the returned useable sample is a completely random sample, (2) respondents recorded data correctly, i.e., they clearly understood the questionnaire, (3) respondents recorded data accurately, did not guess or lie, and (4) respondents correctly identified species hunted. If these assumptions are not met, projections of harvest by county may be over-estimated due to nonrespondent or memory biases. Extreme caution should be used in the interpretation of estimated harvest and hunters for specific species in specific counties. Rather, the long-term trend in these indices should be used in managing the populations.

Presently, the Upland Game Annual Report contains the best data available and therefore constitutes the basic facts of upland game management. Although this report has its limitations, the trend data is valuable in making professional judgments regarding upland game populations and harvest.

The annual report is used in wildlife planning. It can be used to establish relative importance among species and for developing new resources through transplants or habitat developments. It points out areas of needed research by indicating problems and possible causes. It documents population trends and it combines all this inventory information into one easily accessible publication. Thus it is used extensively by federal land management agencies in envIronmental impact statements and management plans. It will become increasingly more important in developing management plans and assessing impacts on wildlife habitat.

RING-NECKED PHEASANT

SUMMARY



The 1994-95 winter was fairly mild. Temperatures were above normal in December through March, while precipitation was below normal in December and February. Because the most limiting factor for pheasants in Utah is significant winter cover adjacent to winter food sources, survival of pheasant brood stock was good.

Weather conditions during the nesting season, however, were questionable in 1995. Statewide monthly average temperatures were below normal (April-July). Average precipitation was above normal across several climatic subdivisions (March-June). Pheasants observed on roadside routes was below 1994, but hens appeared to have more young.

Above normal precipitation March-June delayed small grain emergence and normal hay mowing operations by two-three weeks. Vigorous weedy growth and delayed hay mowing because of above normal precipitation resulted in high pheasant chick survival.

Harvest statistics compiled from the questionnaire indicated a slight increase in success compared to 1994. Harvest increased 4 percent from 1994, but remained 65 percent below the long-term average. Opening weekend success was up compared to the previous year based upon field bag check data.

The pheasant hunt is the second most popular hunt in Utah. Mule deer hunting ranks first. Despite its popularity among Utah sportsmen, Utah's pheasant population continues to decline steadily. Primary reasons for population declines are due to outright losses of critical habitat and degradation of remaining habitat.

The Conservation Reserve Program (CRP), begun in 1985, has done little for Utah pheasant populations. Most CRP lands in Utah are in dryland farming areas. Pheasants prefer irrigated agricultural areas.

In 1992, the Utah Legislature authorized an Upland Game Habitat Stamp. Seventy-two percent of the funds generated by the stamp are to be used on pheasant habitat projects. Since 1992, funds have been used to acquire critical wintering habitat for pheasants in Myton and Richfield, develop food plots on private lands and transplant wild birds from urbanized areas.

Winter Sex Ratio Counts

Winter sex ratio counts provide an index as to how harvest of roosters only is affecting the pheasant populations. In Utah, one rooster for every two, three or four hens is most common. One rooster for every ten hens is biologically acceptable in that one rooster can easily service ten hens in the wild. Based on this biological concept, hunting of rooster pheasants only does not appear to be affecting the population.

Results of the survey for the winter of 1994-95 and long-term trends are shown in Tables 1, 2 and Figure 1 of this section. Statewide comparisons to the winter of 1993-94 and the 10-year (1985-94) average are as follows:

	Winter of	Percent change from 1993-94	Percent change from <u>Average</u>
Total pheasants counted (roadside)	70	-78	-94
Hens per cock	2.33	-39	-25
Pheasants observed per 100 hours	737	+15	-34
Total hours effort (roadside)	10	-83	-91

The winter sex ratio count sample decreased 78 percent in 1995. However, density estimates can be biased due to the non-random nature of the survey technique if effort is minimal as in 1995. The hen-cock ratio decreased 39 percent from 1994, and was 25 percent below the long-term average. Effort to collect winter sex ratio data decreased 83 percent from 1994. Effort was expended only in the Central Region.

Roadside Counts

A summary of summer roadside pheasant counts for 1995 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 and Figure 2. Summer 1995 survey results compared to 1994 and the previous 10-year (1985-94) average follow:

	<u> 1995</u>	Percent change from 1994	Percent change from Average
Total pheasants observed	390	-39	-70
Total miles driven	889	-6	-48
Pheasants per mile	0.44	-35	-40
Average brood size	5.24	+12	+4
Young per hen	4.44	+56	+17
Percent of hens with young	76	+10	Ö

Total pheasants observed decreased 39 percent and pheasants per mile decreased 35 percent. Percent of hens with young increased 10 percent while average brood size increased 12 percent.

Less pheasants were observed on roadside counts in 1995 than in 1994. However, reproductive success per adult hen was up from the previous year. Higher than normal precipitation during the nesting season (March-June) stimulated a vigorous growth of vegetative cover. Thick cover may have resulted in less birds being observed on roadside counts in 1995.

Harvest

Hunter Questionnaire

Results of the hunter questionnaire for 1995 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. A comparison of 1995 harvest statistics to 1994 and the previous 47-year average follow:

		Percent change from	Percent change from
	<u> 1995</u>	<u>1994</u>	<u>Average</u>
Pheasant hunters	38,391	+5	-49
Pheasants harvested	71,202	+4	-65
Hunter-days afield	142,755	+10	-33
Pheasants per hunter-day	0.50	-6	-45
Pheasants per hunter	1.85	-1	-29

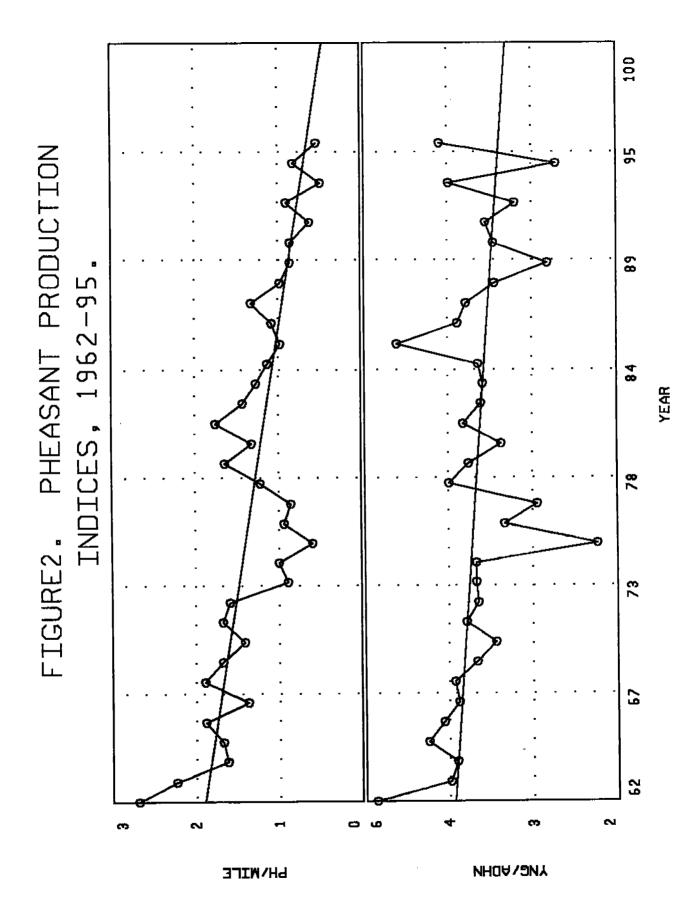
Ninety percent confidence interval for overall pheasant harvest is +/-4315.42. Standard deviation is 0.910047.

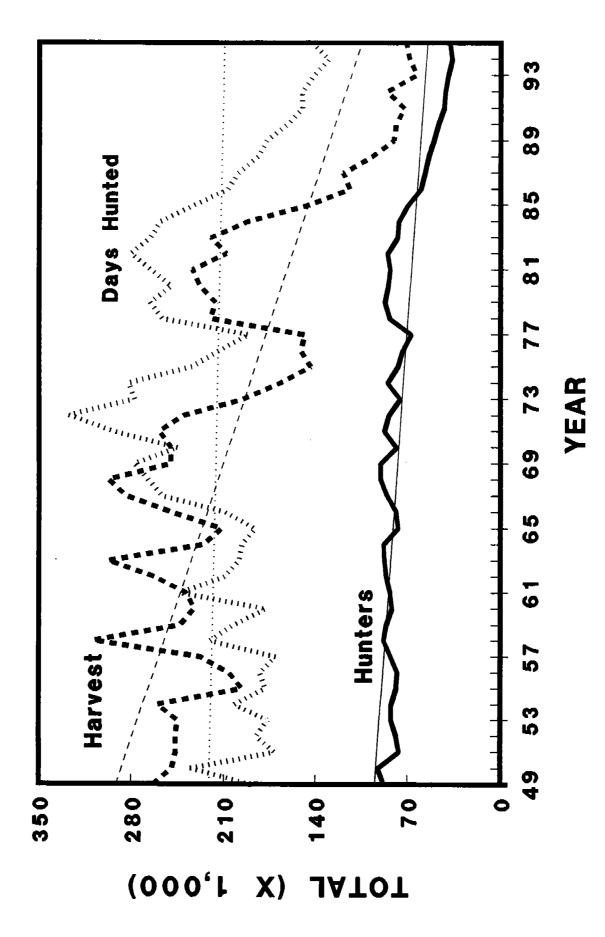
Total hunters increased 5 percent from 1994 and remained 49 percent below the long-term average. Total harvest increased 4 percent from 1994. Hunter success (pheasants per hunter-day) decreased 6 percent from 1994. Pheasants per hunter decreased 1 percent and remains 29 percent below the long-term average.

Long-term trends (1948-95) of total hunters, hunter-days, harvest and hunter success are shown in Figures 3 and 4. Generally, the recent trend is toward less hunter-days with declines in total pheasants harvested and hunter success. We believe this is the result of the accumulated effects of loss of quantity and quality of habitat due to urbanization, flooding, modern agricultural practices, and habitat fragmentation resulting in increased predation.

Utah County accounted for one-quarter of the entire pheasant harvest, while Box Elder County accounted for 14 percent and Cache County for 11.55 percent.

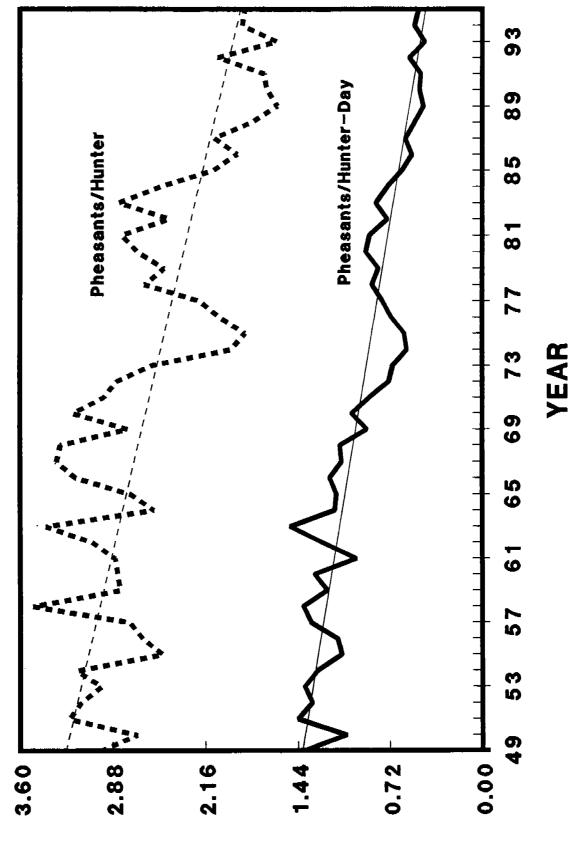
100 PHEASANT WINTER SEX RATIO 95 90 1965-95. YEAR INDICES, 75 FIGURE1. **6**5 ĹΩ ø 3000 1333 200 2167 8\100HB HENCOCK



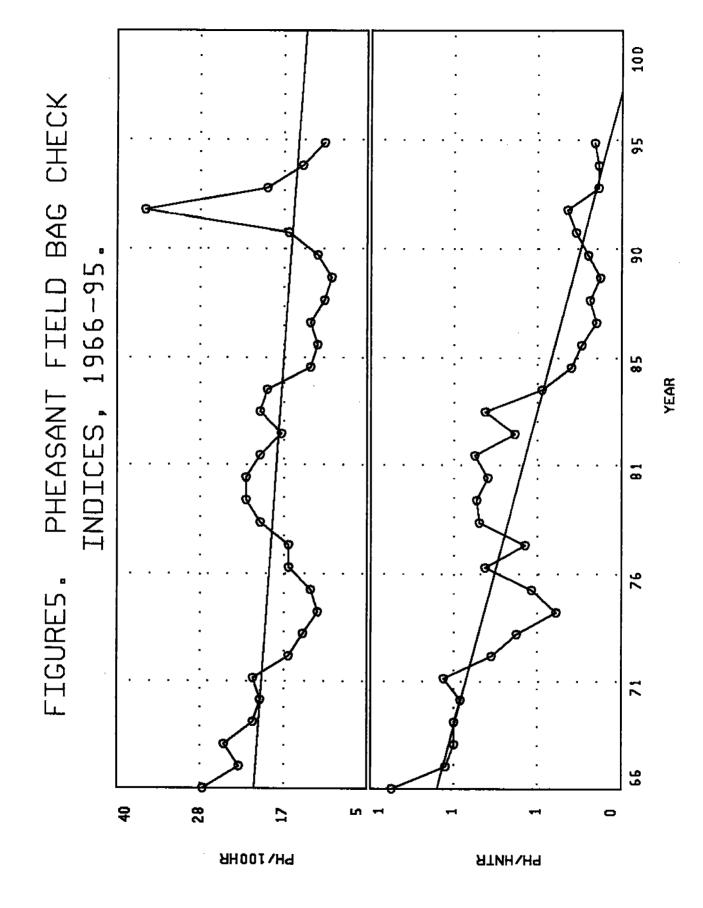


Statewide trends of pheasant harvest statistics, 1949-95. Figure 3.

PHEASANTS PER HUNTER AND PER DAY



Statewide trends of pheasant hunter success rates, 1949-95. Figure 4.



Field Bag Checks

Field bag checks provide an index of opening day or weekend hunter harvest success rates.

A summary of pheasant field bag check data for 1995 is shown in Table 14. The hunter success trend determined via bag checks since 1990 is found in Table 15 and Figure 5. A comparison of 1995 data, on a statewide basis, to 1994 and the previous 10-year (1985-94) average follow:

	<u>1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Total hunters checked	634	+222	-62
Total hours hunted	1,891	+334	-59
Pheasants per hunter	•		
(complete hunts)	0.33	+6	-10
Pheasants bagged per 100 hours	11	- 21	-29
Average hours per hunter-day			
(complete hunts)	2.98	+35	+14
Hours hunted per pheasant bagged (complete hunts)	8.96	+27	+23

Hunting pressure was up in most of Utah in 1995.

In 1995, hunters spent 35 percent more time afield on an average day. Hours hunted per pheasant bagged increased 27 percent.

1994-95.	
ratio counts.	
ter sex	
ummary of pheasant win	
ä	
Table 1.	

Region and				Hens∤	Cocks				Hens	Cocks	Venicle	Hour	Hours of Effort	Ę	100 Hours of
County	Cocks	Hens	Total	Cock	100 Hens	Cocks	Hens	Total	Cock	100 Hens	Miles	Vehicle	Walk	Total	Road Obs.
Northern Region															
Box Elder	ı	1	t	1	ı	ı	ı	1	1	1	;	1	:	1	ı
Cache	ı	:	ı	ı	1	;	1	ŀ					1	1	1 1
Davis	ı	ı	ı	1	1	ı	1	:	1	1	: 1	: 1		! !	! ;
Morgan	1	:	1	ı	١	١ ١		!	I	1	I	ŧ	ı	ı	ı
Dich				ŀ	ı	ł	ı	ı	ı	:	ı	1	:	ı	:
	ı	:	1	ı	ı	1	ı	1	ı	:	:	1	ı	:	1
	t	1	1	ı	:	1	ı	:	ı	1	1	1	1	1	ı
Weber	1	1		1		ı	ı	ı	ı	1	ı	1	:	ŧ	:
REGIONAL TOTALS	J.		ı	:		,	:	,	,	:			,	١,	
Central Region															1
Juab	ı	ı	:	ı	i	1	1	:	1	1	1	ı	1	ı	1
Saft Lake	1	:	ı	1	1	ī	ı	1	1		ı	1	i	١	: 1
Sanpete	ı		1	1	ı	1	;	:	i	1	ı		:	ı	1
Tooele	ı	1	1	;	1	ı	ı	ı	ı	1	I	: 1		1 :	1
Utah	21	49	20	2.33	43	1	:		١ ١	1	2	Ę	}	Ę	737
Wasatch	ı	: :	: 1	:	! !	1		۱ ا	: 1	۱ ۱	3 1	2 :)	2 :	2
REGIONAL TOTALS	21	49	92	2.33	43	647	2	78	7.87	13	Og C	۽	ءاد	5	727
Southern Region										2	3	2	•		
Beaver	•	ï	1	;	ı	ı	;	ı	ı	ı	ı	:	ı	ı	ı
Iron	ı	ı	ı	:	ı	ı	1	:	,	1	ı	ı	ı	ı	,
Kane	ı	;	ı	:	1	1	ı	:	ı	1	ı	ı	1	1	ı
Millard	1	1	ľ	ı	ı	•	1	ı	ı	:	ı	ı	ı	ı	ı
Plute	1	ı	ı	:	ı	:	:	ı	:	:	1	ŧ	1	1	1
Sevier	ı	1	ı	ı	ı	1	:		ı	ı	ı	1	1	ı	ı
Washington	ı	ı	ŧ	ı	ı	:	ı	1	1	1	ı	ı	;	ı	ı
Wayne	1	ŧ	t	:	1	ı	1	1	ı	:	ı	J	ı	ı	ı
REGIONAL TOTALS	1	1	;	1		,	 		,		 -	1	ı	١,	
Northeastern Region						[
Daggett	ı	:	1	1	1	1	1	1	1	ı	1	1	ı	1	1
Duchesne	1	:	ı	:	1	1	:	1	:	1	1	1	ı	:	1
Uintah	1	ı	:	ı	1	1	ı	1	ı	ı	ı	1	ı	:	:
REGIONAL TOTALS	1	1	ı	;	:	,	١.	,	,	;	1	١,	١,	,	.
Southeastern Region															
Carbon	1	ı	1	ı	ı	1	:	:	ŀ	ı	ı	1	ı	ı	:
Emery	:	ı	ı	:	:	ı	1	1	ı	ı	1	:	1	ı	1
Grand	:	:	:	:	ı	1	t	1	ı	1	1	:	ı	ı	ı
San Juan	1	ı	ı	1	:	ı	1	ı	ŧ	1	ı	:	1	:	ı
REGIONAL TOTALS	1	:												l	
				I	•	ı	ı	:	ı	:		ı	:	ı	ı

ts, 1989-95	
ratto count	
winter sex	
f pheasant	
. Trend of	
Table 2	

1989-90	1989-90		1990-91		1991-92		1992.93		4001.04		4004 04			
Region and	Hene/	Sirds.	Henst	Birds/	Hens/	Sirds/	Henst	Birds/	Hense	Birds	Henst	Birds/	Average	
County	Cock	100 Hr	Cock	100 Hr	Cock	100 Hr	Cock	100 H	Cock	100 Hr	Cock	100 Hr	1989-1994	
Northern Region														
Sox Elder	3.60	533	2.47	ı	ı	1	ı	ı	,	ı	ı	1		
Cache	1.30	253	3,43	ı	ı	1	ı	1	ı	1	1	t		
Davis	55.	143	6.90	1,347	1,38	317	ı	1	1	1	1	1		
Morgan	ı	1	ı	ı	1	ı	:	ı	•	ı	ı	ı		
Rich	1	1	ı	ı	ı	ı	1	1	ı	ı	ı	ı		
Summit	1	ī	1	ı		t	ı	:	ı	1	1	1		
Weber	3.30	30	3.11		4.52	1,055	2.33	333	ı	ı		ı		
REGIONAL TOTALS	2.10	321	3.48	4,183	3.66	¥	2.33	333			1		2.89	1408
Central Region														
Juab	2.10	1,100	3.56	2,050	ı	ı	ı	1	ı	ı	ı	1		
Salt Lake	1.30	533	1.73	009	0.25	200	140	989	1	,	ı	ı		
Sanpete	ı	1	ı	ı	4.82	640	ı	ı	0.50	6	ı	ı		
Tooele	0.80	2,600	ı	ı	2.50	2,100	3.30	ı	ı	1	:	ı		
Utah	2,60	1,016	4.96	1,787	1.89	2,329	1.82	ı	3.91	974	2,33	Ē		
Wasatch	ı	1	1	I	1	1	-	1	1	1	1	1		
REGIONAL TOTALS	1.70	1,119	4.22	1,541	2.27	1,706	2,24	18,857	3.81	7.2	2,33	757	2.85	173
Southern Region							i							
Beaver	1	i	1	ı	τ	1	1	ı	ı	ı	ı	ı		
Iron	ı	1	ı		ı		ı	ı	J	ı	ı	ı		
Kane	ı	•		1	1	t	ı	ı	ı	ı	1	1		
Millard	1	1	2.21	2,033	1	1	2.87	908	1	ı	•	1		
Piete	ī	;	ı	1	1	ı	ı		1	1	1	1		
Sevier	3	ı	t	1	1	1	ı	ı	1	ı	ı	1		
Washington	1	1	1	ı	1	ı	ı	ı	ı	1	1	1		
Wayne	1	2	1	1	1	ī		ı	ı	1	ı	1		
REGIONAL TOTALS	1	ı	2.21	2,033	1		2.87	908	ı	 	ı	ı	127	208
Northeastern Region														
Daggett	ı	1	ı	1	ı	ı	1	,	1	ı	•	1		
Duchesne	0.80	920	4.75	200	1.24	525	0.89	1,700	1	ı	1	1		
Untah	1.20	222	1.03	1,600	141	1,382	2.00	1,500	ı	1	1	ı		
REGIONAL TOTALS	1,10	099	1.12	728	1.37	1,021	1.29	1,600	1	1	1	,	1,22	1.002
Southeastern Region														
Carbon	ı	ı	ı	1	ı	ı	1	1	1	1	t	ı		
Emery	1	t	ı	ı	ı	ı	ı	1	1	1	1	1		
Orand	t	ı	1	ı	ı	ı	ı	ı	1	ı	ı	ı		
San Juan	•	1	1		-	-	ı	ι	ı	1	ı	ı		
REGIONAL TOTALS	1	1	ī	ı	-	ı	î	ı		,	1	,		.
STATE TOTALS	1.70	682	2.65	1,468	2.15	1,293	2.28	1,864	3,81	149	2,33	737	2.52	1.170
													-	:

				Distinct	net	Mixed		Adolls win	إ									
Region and	ş	Total		Bennde	ţ	4			2	,				i	:	;		,
County	Routes		Total	Hens	Hens Young	Henser.	Young	Tourke	Kene		Total Voing	Total	Total	Pheas./	Young	Mean	Young/	%Hens
Northern Region		ı					R			11211	1	1	4 61668.			0000	Ad. Men	Wroung
Box Elder	m	5	60	6	20	-	en	4	67		23	4	2	0.23	44	R 87	900	Ē
Cache	ŧ	•	ı	ı	1	:		. 1	, 1	. :	; 1		ı	;	2 1	<u> </u>	9	5 1
Davis	ı	:	1	ı	:	1		:	1	1	1	1		۱ ا	1 1	1 1	1	1
Morgan	1	1	1	1	ı	:	1	:	;	: 1	۱ ا		۱ ا	1 1	1	1	ı	ľ
Rich	ı	t	:	ŧ	:	:		: 1	: 1	1 1	1 1	! !	1	I	ţ	;	1	1
Summit	1	:	ı	:	;	1	! !	!	}	1	I	:		ı	ı	ı	1	ı
Weber	:	1	:		: 1	۱ 1	i 1	1		:	ı	;	1	ı	ĭ	ı	:	:
REGIONAL TOTALS	•	150			5				. .	ı	۱ ۱	ا.	•		-	ا	ا:	1
Central Region	•	3	,	•	3	-	,	4	p	_	23	4	됧	0.23	0.16	6.67	3.29	22
leah.	•	7	•	•	•	•	•	,		•	,	,	1					
Salt 1 also	-	ţ	-	-	ŧ	>	-	-	-	-	4	-	φ	0.16	0.12	4.00 0.00	4.00	0
ar Land		ı	1	;	1	1	ı	ŧ	1	:	:	:	1	1	ı	:	1	1
Sanpete	m	170	•	φ	36	0	19	10	•	9	3	6	92	0.38	0.32	6.83	9.00	100
Tooele	* -	36	0	0	0	•	0	0	0	•	0	0	0	0.00	1	1		ļ
Çah	ಣ	215	27	27	132	4	22	÷	o	40	25	÷	205	95.0	0.73	7 80	2 OK	2
Wasatch	,	ı	1	:	;	:	1	: 1		: 1		: 1	1		;	9	9	2
REGIONAL TOTALS	-	464	34	종	171	4	4	16	•	47	242	4	27.K	0.64	- 0	1 60	1 2	
Southern Region																		5
Beaver	ı	:	ŧ	1	1	:	:	:	ı	1	:	1	1	ī	ı	:	1	1
Garfield	•	:	1	1	ı	:	,	ı	1	:	:	:	;		ı		1	1
<u></u>	:	1	1	1	:	1	1	1	:	:	1	:	:	1	ı	ı	ı	,
Kane	1	:	ı	1	:	1	1	,	:	ı	ı	:	1	1	ı	;	ı	ı
Millard	1	1	;	ı	1	:	1	:	1	ı	ı	,	,	:	1	ı	ı	1
Plute	ı	1	:	1	1	:	ı	:	1	ı	1		ı	ı	1	:	ı	ı
Sevier	ı	1	1	1	1	ı	1	ı		ı	,	t		ı	1	ı	:	1
Washington	1	ı	ı	t	ı	1	·	ı	,	,	ı	ı	;	ı	ı	1	: 1	۱ ۱
Wayne	;	1	1	ı	ı	ı	:	ł	1	:	:	:	ı	:	:	1	1	' 1
REGIONAL TOTALS		_		1	1	:		,	,		1	,	,	,				1
Northeastern Region																		
Daggett	ı	ı	1	ı	ı	•	1	ı	:	ı	:	٠.	1	:	ı	,	1	ı
Duchesne	2	143.4	•	•	۰	7	22	6	4	9	22	ю	33	0.23	0.15	1	3.67	8
Uintah	~	142	4	4	24	2	12	9	0	•	36	•	4	0.34	0.25	6.00	8.00	1
REGIONAL TOTALS	4	286	4	4	24	4	¥	Ŧ	4	12	89	£	æ	0.28	0.20	909	4.83	67
Southeastern Region											ļ							
Carbon	ı	;		1	ï	:	:	:	1	ı	;	1	:	1	ı	:	1	:
Emery	ı	ı	ı	ı	1	t	ı	ŧ	:	1	i	1		1	ı	1	1	1
Grand	:	1	:	1	:	ľ	ı	:	1	:	1	:	ı	ı	1	1	:	1
San Juan	•		1	t	:	,	1	ı	ı	:	1	1	,	1	1	ı	ı	1
REGIONAL TOTALS		:	-	•	1		1	ı	ı	ı	1		,		,			
STATE TOTALS	16	889	41	++	215	6	78	31	16	96	293	<u>چ</u>	390	0.44	0.33	£ 24	444	4
									:					4	3,1%	14TA	1	2

Table 4. Trend of pheasants observed per mile during summer roadside pheasant counts, 1986-96.

County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region												
Box Elder	0.91	0.44	0.81	0.63	0.19	0.32	0.21	99'0	0.34	0.72	0.23	
Cache	0.03	0.0	0.29	0.13	0.23	0.09	0.41	0.59	1.09	1	:	
Davis	0.71	1.02	1.3	0.7	0.41	0.48	0.39	0.16	0.01	ı	ı	
Morgan	1	I	1	1	:	:	ı	ı	:	1	1	
Rich	ı	1	:	:		ı	2	1	:	t	:	
Summit	ı	1	1	1	1	ı	ı	:	:	1	1	
Weber	ı	. 98'0	1	1	0.62	1.26	0.48	1.06	:	1	ı	
REGIONAL TOTALS	9,0	0.43	0.71	0.4	0.3	0.42	0.35	99'0	0.24	0.72	0.23	0.48
Central Region												
Juah	0.48	0.71	:	0.38	9.0	9.14	ı	0.77	91.0	0.14	0.16	
Salt Lake	0.46	2.1	1.08	1	1	1.26	1.24		0.31	ı	ı	
Sanpete	1.87	1.16	1.63	1.18	1.7	1.23	98'0	0.67	0.36	0.53	0.38	
Tooele	1	0.2	90'0	0.15	1	0.17	99'0	0.14	ı	0.27	0.00	
Utah	1	2.13	2.35	8	· -	1.46	99.0	2.66	0.93	1.58	96'0	
Wasatch	1	1	1	1	1	1	1	1	1	1	1	
REGIONAL TOTALS	1.35	1.61	1.79	1.42	1.6	1.09	0,73	1.79	94.0	0.92	0.61	1.27
Southern Region												
Beaver	0.63	0.23	0.08	0.17	1	1	:	ı	1	1	1	
Garfield		ı	1	ı	ı	ï	1	1	1	ı	:	
Iron	0.08	0.0	1	:	ı	ı	1	1	1	1	1	
Kane	1	1	1	ı	ï	1	1	1	1	ı	1	
Millard	2.27	96.0	0.67	0.67	t	0.34	0.38	ı	1.38	1	ı	
Plute	ı	1	1	:	1	1	ı	ı	:	1	ı	
Sevier	0.62	1.82	1,96	1.3	1	i	ı	ı	1	ŀ	ı	
Washington	0.13	1.3	0.47	0.22	90.0	ı	1	ı	1	ı	1	
Wayne	0.39	0.38	ī	ı	;			•	,	1	1	
REGIONAL TOTALS	1.25	1.07	1.4	0.78	90.0	0.34	0.38	:	1.38	,	1	0.84
Northeastern Region											-	
Daggett	ı	ı	1	ı	1	1	ı	ı	:	1	ı	
Duchesne	0.16	7	0.38	99.0	0.39	0.93	0.69	0.22	0.14	0.22	0.23	
Uintah	0.36	0.48	0.65	0.45	0.24	0.62	0.29	0.18	0.18	0.36	0.34	
REGIONAL TOTALS	0.22	0.45	0.45	0.64	0.32	0.71	0.61	0.17	0.16	0.28	0.28	0.38
Southeastern Region												
Carbon	0.12	0.26	1	1	1	1	1	ı	1	1	1	
Emery	0.83	0.73	0.72	1.06	-	0.61	0.28	99.0	0.38	ı	:	
Grand	ı	:	1	ı	:	1	1	ī	1	1	i	
San Juan	1	:	2	'	1	1	-		•			
REGIONAL TOTALS	0.59	0.61	0.72	90.	-	0.61	0.28	99.0	0.38	1	1	0.66
STATE TOTALS	0.81	8.0	=	0.81	0.71	0.71	0.61	0.76	0.40	89.0	77.0	0.73

1986-95.	
it counts,	
pheasan	
roadside	
summer	
le during	
ed per mi	
) observe	
of young	
6. Trend	
Table	

Region and						Year						Average
County	1986	1986	1987	1988	1989	1990	1991	1992	1993	1994	1996	1985-94
Northern Region												
Box Elder	99'0	0.29	0.62	0.39	0.16	0.27	0.14	0.41	0.28	0.52	0.15	
Cache	0.02	0.00	0.25	0.09	0.14	90.0	0.23	0.42	0.94		ı	
Davis	0.36	0.85	0.98	0.62	0.22	0.31	0.26	0.04	ı	1	1	
Morgan	1	i	ï	ı	ı	1	1	1	ı	t	ł	
Rich	1	:	ı	ı		ı	ı	1	ı	ı	i	
Summit	1	1	:	ı	;	1	1	ı	1	ı	;	•
Weber	1	0.76	:	ı	0.39	0.97	0.30	0.77	1	ı	:	
REGIONAL TOTALS	0.33	0.32	0.55	0.28	0.20	0.32	0.21	0.41	0.19	0.62	0.16	0.33
Central Region												
Juab	0.39	0.67	ı	0.17	80.0	0.09	1	0.62	0.08	0.08	0.12	
Salt Lake	0.31	1.62	0.79	1	ı	0.97	0.93	ı	0.24	1	,	
Sanpete	1.64	0.90	1.23	96.0	1.30	0.91	0.67	0.53	0.28	0.34	0.32	
Tooele	ı	90.0	0.07	0.07	ı	0.10	0.53	0.11	:	0.10	1	
Utah	;	1.68	1.81	1.67	1.00	1.15	0.49	1.97	0.69	1,12	0.72	
Wasatch	1	1	1	ı	1	1	ı	ı	1	ı	l	
REGIONAL TOTALS	1.09	1.26	1.37	1.1	1.10	0.87	0.59	1.38	0.37	0.63	0.47	0.98
Southern Region												
Beaver	0.61	0.14	0.07	0.10	2	1	i	ı	1	1	:	
Garfield	1	ı	ı	ı	ı	ı	1	1	ı	:	ı	
Iron	90.0	1	0.00	ı	ı	ı	1	1	1	1	1	
Kane	ı	1	ı	ı	t	ı	ı	ı	ı	1	1	
Willard	0.20	0.76	1.65	0.50	ı	0.31	0.28	1	1.18	1	ı	
Plute	;	;	1	ı	1	ı	1	1	ı	1	1	
Sevier	1.26	1.48	1.64	96.0	ſ	ı	ı	1	ı	ı	ı	
Washington	ı	98'0	0.22	0.16	1	1	ı	1	ı	ı	ı	
Wayne	0.28	0.19	ı	I	1	1	ı	ı	t	1	t	
REGIONAL TOTALS	1.03	0.84	1.12	0.67	 	0.31	0.28	,	1.18	,	ı	0.59
Northeastern Region												
Daggett	ł	:	1	1	1	1	1	1	ı	ı	ï	
Duchesne	0.07	0.29	0.25	0.32	0.20	0.58	0.42	0.08	0.02	0.10	0,16	
Vintah	0.29	0.33	0.40	0.30	0.14	0.36	0.21	0.10	0.13	0.26	0.26	
REGIONAL TOTALS	0.14	0.30	0.31	0.32	0.17	97.0	0.37	90.0	0.07	0.17	0.20	0.24
Southeastern Region												
Carbon	0.02	0.15	1	ı	ı		1	1	ī	ı	1	
Emery	0.63	99.0	69.0	98.0	1.00	0.43	0.22	0.43	0.29	ı	:	
Grand	ı	I	1	ı	1	1	1	1	1	ı	1	
San Juan	1		1	t	1	1	1		1	:	ı	
REGIONAL TOTALS	0.42	0.34	0.59	0.88	1.00	0.43	0.22	0.43	0.29	ı	1	0.51
STATE TOTALS	0.60	0.61	0.79	0.63	0.62	0.48	0.38	0.66	0.30	0.48	0.33	0.54

ě.	
s, 1986-9	
86	
+	
its	
5	
CO	
Ħ	
Sa	
ea	
듄	
8	
Ä	
ğ	
ö	
ב	
욷	
Ē	
፵	
õ	
든	
₹	
ŏ	
S	
₫	
S	
ž	
=	
ē	
th	
Ξ	
ă	
ē	
4	
Ě	
5	
ļ	
Table 6. Trend of young per adult hen ratios found during surnmer roadside pheasant counts, 1985-95.	
Ę	
2	
_	
6	
품	
ē	

County	1986	1986	1987	1988	1889	1990	1991	1992	1993	1994	1995	1985-94
Northern Region												
Box Elder	3,63	2.38	4.42	2.21	7.00	5.86	1.92	3.04	4.67	3.32	3.29	
Cache	1.60	1	71.17	2.33	2.60	5.50	1.67	3.38	6.00	ı		
Davis	1.26	5.92	3.30	6.86	1.30	2.41	3.00	1.00	ı	:	ı	
Morgan	ı	2	1	1	ı	•	1	:	1	1	:	
Rich	ı	:	1	ı	. 1	ı	1		ı	1	ı	
Summit	i	ı	1	:	:	I	1	1	1	ı	ı	
Weber	ı	7.33	1	t	4.80	5.50	2.60	3,36	1	ı	1	
REGIONAL TOTALS	2.60	3.92	4.18	3.44	2.90	3.86	2.02	3.05	4.80	3.32	3.29	3.41
Central Region												
Juab	4.33	4.00	1	2.00	0.23	4.00	1	8.00	1.00	1.50	4.00	
Saft Lake	3.13	5.10	3.88	1	1	3.80	4.22	ı	10.00	ı	i	•
Sanpete	6.10	3.98	3.25	4.48	3.20	3,34	4.17	4.80	4.77	2.15	9.00	
Tooele	ł	1,60	4.00	2.00	ı	2.00	:	3.00	1	09'0	1	
Utah	1	4.16	4.18	3.94	3.80	4.31	6.41	4.22	3,76	2.95	3.85	
Wasatch	ı	1		ı	;	ı	:	,	1	ı	1	
REGIONAL TOTALS	5.61	4.18	3.89	4.00	4.70	3.92	5.27	4.28	3.92	2.63	4.61	4.23
Southern Region												
Beaver	5.11	2.60	6.00	1.80	ı	1	1	1	1	1	1	
Garffeld	1	1	ı	1	ı	:	:	ı	ı	ı	ı	
Iron	3.00	ı	1	1	ī	ı	1	ı	ı	ı	1	
Kane	1	1	1	ŧ	ı	•	1	ı	ı	ı	I,	
Millard	4.33	4.9	3.99	3.64	1	16.00	4.86	1	7.23	1	1	
Plute	ı	ı	:	ı	1	1	ı	1	1	ı	1	
Sevier	4.58	6.22	5.14	3.77	1	1	1	ī	1	1	1	
Washington	1	2.78	1.4	3.60	ı	1	ľ	r	:	t	1	
Wayne	3.17	2.43	,	1		1	ľ	ı	1	1	1	
REGIONAL TOTALS	5.92	4.43	4.32	3.61	1	16.00	4.86	1	7.23	1	1	6.77
Northeastern Region												
Daggett	ı	1	1	1	1	ı	1	ı	ı	:	:	
Duchesne	3,00	3,73	3.40	2.36	1.68	2.60	3.81	98'0	1.00	3.40	3.67	
Uintah	11.60	4.13	3.65	3.67	2.33	3.30	3,33	1.70	3,33	6.60	9.00	
REGIONAL TOTALS	6.83	3.88	3.52	2.64	2.01	2.82	3.73	1.02	2.40	6.00	4.83	3.28
Southeastern Region												
Carbon	0.50	3.00	1	1	1	ı	ı	ı	1	ı	ı	
Emery	4.17	5. 15.	6.63	6.42	3.60	3.60	2.00	6.50	3.71		1	
Grand	1	ı	1	ı	1	1	1	1	ı	1	ı	
San Juan	1	7		1	:	ı	,	ı	ī	1		
REGIONAL TOTALS	3.80	4.04	6.63	6.42	3.60	3.50	6.00	6.50	3.71	ı	1	4.80
CTATE TOTAL C	201	967	4.00	50.0	400		***		, , ,	, , ,		

Table 7. Trend of the percent of hens observed with broods during summer roadside pheasant counts, 1985-96. Region and

Region and					Year				· ;			Average
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1894	1996	1986-94
Northern Region												
Box Elder	2	8	76	\$	100	100	83	7	88	89	29	
Cache	20	ı	83	2	99	67	2	8 8	6	ı	ı	
Davis	42	9	88	%	47	90	9	•	:	1	:	
Morgan	ı	1	ı	1	ı	1	1	1	ı	ı	;	
Rich	ı	1	ı	ī	.1	1	ı	:	ı	ı	1	
Summit	1	ı	1	ı	ı	1	ſ	ı	ı	ı	:	
Weber	1	100	1	ı	100	08	60	\$	ı	ı	ı	
REGIONAL TOTALS	9	62	82	29	76	7.2	69	29	08	89	25	2
Central Region												
Juab	100	100	ı	9	9	6	ı	1	\$	2	9	
Saft Lake	63	06	88	ı	ı	67	68	:	100	1	1	
Sanpete	82	92	98	88	5	78	83	96	9	89	100	
Tooele	1	90	100	20	i	1	ı	:	1	4	:	
Utah	i	98	3	2	99	68	76	98	z	2	78	
Wasatch	3	1	1	:	ı	ı	:	1	i	1	ı	
REGIONAL TOTALS	99	2	91	82	26	81	80	87	92	89	2	11
Southern Region												
Beaver	68	8	100	\$	ı	1	1	ı	ı	:	1	
Gerffeld	1	ı	1	1	i	ı	ı	1	1	1	ı	
Iron	100	1	i	ı	ı	ı	1	1	1	t	:	
Kane	1	ı	ı	ı	1	ı	ı	1	ı	1	ı	
Millard	2	86	98	8	1	100	100	ŀ	\$8	1	ı	
Piute	1	1	ı	ı	ı	ı	1	ı	ı	1	:	
Sevier	88	87	98	89	1	ı	1	ı	ı	:	ı	
Washington	:	2	22	9	ı	1	1	1	1	ı	:	
Wayne	83	100	ı	1	1	t	1	1	ı	1	ı	
REGIONAL TOTALS	88	88	82	74	ı	100	100	ļ	85		:	98
Northeastern Region												
Daggett	ı	ı	ı	:	1	ı	1	:	ı	ı	1	
Duchesne	76	73	96	38	61	90	2	t	2	99	33	
Uintah	7.6	73	91	92	99	79	100	ı	42	100	9	
REGIONAL TOTALS	76	73	76	46	69	67	98	:	9	2	67	20
Southeastern Region												
Carbon	2	99	1	ı	1	ı	1	t	1	ı	:	
Emery	67	85	100	5	3	2	100	83	29	ī	1	
Grand	ı	1	ı	ı	ı	1	ï	1	1	:	1	
San Juan	1	1	ı	ı	l	1	ı	1	ı	ı	1	
REGIONAL TOTALS	99	91	100	100	64	19	100	83	29	ı	1	28
STATE TOTALS	62	83	87	72	75	76	7.9	98	98	69	76	76

1985-95.	
cheasants,	
size for	
e brood	
f averag	
Trend of	
able 8.	
_	

Region and					100							
County	1985	1986	1987	1988	1989	1990	1991	1892	1993	1994	1995	1985-94
Northern Region												
Box Elder	6.77	6.33	9.00	4.80	8.00	5.40	3.20	4.00	5.40	8.78	6.67	
Cache	3.00	1	4.80	4.00	4.00	4.50	5.20	4.67	6.00	1	ı	
Davis	3.50	5.12	4.	6.60	4.50	4.20	6.00	1	1	ı	1	
Morgan	1	1	ı	1	:	ı	:	1	ı	ı	:	
Rich	:	1	ı	ı	. 1	:	:	:	1	ı	ı	
Surrenit	ı	1	1	ı	1	ı	1	1	1	ı	ı	
Weber	6.33	:	1	6.50	4.30	ľ	4.33	3.94	t	ı	ı	
REGIONAL TOTALS	5.11	5.41	6.10	6.40	5.40	9.00	4.63	4.03	5.60	6.78	6.67	6.23
Central Region												
Juab	4.33	4.67	1	4.00	4.00	4.00	ı	8.00	2.00	3.00	4.00	
Salt Lake	9.00	6.70	3.80	3.80	1	9.00	4.28	1	7.00	ı	ï	
Sanpete	8.28	6.10	4.80	5.80	4.20	4.40	2.00	4.00	6.89	4.18	5.83	
Tooele	1	3.00	4.00	4.00	ı	3.00	ı	1	1	1.00	1	
Utah	ı	4.76	4.90	4.80	6.10	9.00	5.13	5.44	3.78	4.13	4.89	
Wasatch	1	1	1	1	1	ľ	t	1	1	ı	ı	
REGIONAL TOTALS	7.42	4.89	4.80	5.00	4.40	4.70	4.92	6.36	4.32	4.06	6.03	4.98
Southern Region												
Beaver	6.76	3.26	6.00	4.50	1	ŧ	ı	ı	1	1	ı	
Garfield	ı	:	ı	ı	ī	1	ı	ı	1	ı	1	
Iron	. 1	1	ı	1	1	1	:	t	1	ı	ı	
Kane	ï	1	ı	1	ı	1	ı	ì	ı	1	ı	
Millard	40.63	3.72	5.30	4.90	ı	3.80	6.40	1	ı	ı	ī	
Piute	ı	1	1	ı	ł	i	ı	t	1	1	1	
Sevier	6.17	69.9	5.80	6.60	i	ı	1	1	1	:	1	
Washington	ı	4.14	6.00	7.00	1	1	1	1	ı	ι	ı	
Wayne	3.33	2.25	ı	ľ		1	:	:	1	ı	ı	
REGIONAL TOTALS	7.36	4.70	6,60	6.30	ī	3.80	6.40	ı	1	1	ī	4.60
Northeastern Region												
Daggett	1	1	ı	ı	ı	ı	ı	1	1	1	1	
Duchesne	4.00	6.76	3.90	6.30	2.70	6.30	4.60	99.0	2.00	5.67	1	
Ulntah	6.33	6.71	4.40	6.30	4.20	4.90	3.33	3.00	4.75	6.60	6.00	
REGIONAL TOTALS	4.78	5.74	4.10	5.30	3.60	6,10	4.18	0.80	3.83	6.26	6.00	4.36
Southeastern Region												
Carbon	1.00	i	1	1	1	1	ı	1	1	1	ı	
Emery	5.20	6.89	2.00	7.10	5.70	5.60	4.50	7.00	6,50	1		
Grand	ï	;	1	ı	1	1	,	,	1	1	1	
San Juan	:	1	•	•	1	•		1	1	1	1	
REGIONAL TOTALS	4.82	5.46	6.00	7.10	5.70	5.60	4.60	7.00	6.60	1	ı	6.74
STATE TOTALS	p 74	767	6.10	6.30	4.60	4.80	4.81	3.93	6.81	4.00	76 3	202

Table 9. Summary of pheasant hunter success and distribution of harvest and hunting pressure by region and county, 1995.

REGION AND					***************************************	
COUNTY	SAMPLE SIZE*	HUNTER-DAYS AFIELD	BIRDS BAGGED	BIRDS PER HUNTER-DAY	4 OF PRESSURE	% OF HARVEST
***************************************					6 V	
NORTHERN REGION						
Box Elder	323	18,446	10,496	0.57	12.92	14.74
Cache	253	15,336	8,222	0.54	10.74	11.55
Davis	167	9,952	2,352	0.24	6.97	3.30
Morgan	3	136	19	0.14	0.10	0.03
Rich	4	77	38	0.50	0.05	0.05
Summit	3	_ 77	58	0.75	0.05	0.08
Weber	261	15,783	7,056	0.45	11.06	9.91
REGIONAL TOTALS	1,014	59,811	28,243	0.47	41.90	39.67
CENTRAL REGION						
Juab	87	3,771	2,663	0.71	2.64	3.74
Salt Lake	65	3,634	1,088	0.30	2.55	1.53
Sanpete	105	4,859	1,652	0.34	3.40	2.32
Tooele	61	2,352	1,185	0.50	1.65	1.67
Utah	491	33,025	18,097	0.55	23.13	25.42
Wasatch	8	349	524	1.50	0.25	0.74
REGIONAL TOTALS	817	47,993	25,211	0.53	33.62	35.41
SOUTHERN REGION						
Beaver	20	1,224	291	0.24	0.86	0.41
Garfield	2	77	38	0.50	0.05	0.05
Iron	15	1,069	272	0.30	0.03	0.03
Kane	0	0	0	0.00	0.00	0.00
Millard	136	7,386	4,295	0.58	5.17	6.03
Piute	4	77	38	0.50	0.05	0.05
Sevier	96	5,559	1,496	0.27	3.89	2.10
Washington	31	1,710	777	0.45	1.20	1.09
Wayne	2	155	77	0.50	0.11	0.11
REGIONAL TOTALS	306	17,261	7,289	0.42	12.09	10.24
NODELIC ACCEPTANCES		***************************************		***************************************	*********	***************************************
NORTHEASTERN REGION	_	•				
Daggett Duchesne	0 103	0	0	0.00	0.00	0.00
Uintah	81	6,395	5,773	0.90	4.48	8.11
REGIONAL TOTALS	184	4,354 10,749	2,138	0.49	3.05	3.00
TOTAL TOTAL		10,147	7,911	0.74	7.53	11.11
SOUTHEASTERN REGION						
Carbon	35	2,138	758	0.35	1.50	1.06
Emery	76	3,712	1,516	0.41	2.60	2.13
Grand	7	174	0	0.00	0.12	0.00
San Juan	1	19	0	0.00	0.01	0.00
REGIONAL TOTALS	119	6,045	2,274	0.38	4.23	3.19
Unknown	12	894	272	0.30	0.63	0.38
STATE TOTALS	2,452	142,755	71,202	0.50	100.00	100.00
	-	•				200.00

^{*}Total hunter trips from questionnaire returns.

Table 10. Summary of pheasants bagged per hunter-day by region and county, 1988-95.

Region and	Year									
County	1988	1989	1990	1991	1992	1993	1994	1995		
<u>-</u>										
Northern Region										
Box Elder	0.49	0.40	0.58	0.53	0.64	0.44	0.55	0.57		
Cache	0.47	0.32	0.46	0.51	0.59	0.48	0.60	0.54		
Davis	0.32	0.28	0.26	0.34	0.29	0.21	0.34	0.24		
Morgan	1.71	0.40	(0.67)	(0.15)	(0.00)	0.00	1.06	0.14		
Rich	(0.18)	(0.17)	0.00	0.00	(0.00)	0.33	1.00	0.50		
Summit	0.00	(0.67)	0.00	(0.05)	(0.00)	0.00	0.00	0.75		
Weber	0.34	0.29	0.34	0.37	0.39	0.20	0.29	0.45		
REGIONAL TOTALS	0.40	0.32	0.42	0.44	0.50	0.33	0.46	0.47		
Central Region										
Juab	0.49	0.38	0.39	0.57	0.66	0.40	0.49	0.71		
Salt Lake	0.26	0.32	0.51	0.32	0.39	0.53	0.55	0.30		
Sanpete	0.80	0.65	0.57	0.59	0.60	0.44	0.59	0.34		
Tooele	0.31	0.29	0.36	0.44	0.24	0.15	0.33	0.50		
Utah	0.64	0.58	0.53	0.55	0.65	0.48	0.58	0.55		
Wasatch	(0.60)	(1.33)	0.00	0.68	(0.30)	0.50	2.00	1.50		
REGIONAL TOTALS	0.50	0.54	0.51	0.53	0.59	0.45	0.56	0.53		
Southern Region										
Beaver	0.41	0.39	0.68	0.55	0.38	0.28	0.39	0.24		
Garfield	2.75	0.71	0.00	0.00	(0.00)	0.00	1.00	0.50		
Iron	0.23	0.34	0.34	0.29	0.26	0.29	0.44	0.25		
Kane	0.00	0.00	0.00	0.00	(0.00)	0.00	0.00	0.00		
Millard	0.60	0.66	0.74	0.59	0.76	0.58	0.62	0.58		
Piute	0.42	1.12	(0.50)	(0.10)	(1.00)	0.25	0.63	0.50		
Sevier	0.57	0.45	0.42 0.38	0.36 0.21	0.49 0.61	0.32 0.93	0.41 0.56	0.27 0.45		
Washington	0.39 0.63	0.33 (0.46)	0.00	(0.50)	(1.14)	0.93	0.50	0.50		
Wayne REGIONAL TOTALS	0.77	0.52	0.56	0.45	0.62	0.47	0.52	0.42		
Northeastern Reg										
Daggett	(0.20)	0.00	0.00	0.00	(0.00)	1.20	0.00	0.00		
Duchesne	0.90	0.62	0.78	0.66	0.79	0.77	0.85	0.90		
Uintah	0.64	0.42	0.57	0.47 0.58	0.68 0.74	0.44 0.67	0.80 0.83	0.49 0.74		
REGIONAL TOTALS	0.56	0.53	0.69	J. 30	U . / 4	0.07	0.00			
Southeastern Reg	ion									
Carbon	0.51	0.39	0.30	0.22	0.48	0.57	0.30	0.35		
Emery	0.68	0.44	0.44	0.50	0.53	0.52	0.62	0.41		
Grand				(0.48)		0.57	0.61	0.00		
San Juan	`1.50´	(2.00)	0.00	(0.36)	(1.00)	0.00	0.00	0.00		
REGIONAL TOTALS	0.63	0.43	0.39	0.39	0.53	0.53	0.00	0.38		
Unknown Counties	0.54	0.60	0.00	0.00	0.00	1.45	0.53	0.30		
OUVIONI CONTICTES	0.54	0.00	0.00	0.00	4.		0.00	****		
STATE TOTALS	0.53	0.46	0.49	0.48	0.57	0.45	0.67	0.50		

^()Data may be biased because small sample size inflated county harvest beyond reasonable estimate for known pheasant populations.

Table 11. Percentage distribution of pheasant harvest by region and county, 1988-95.

Region and	Year									
County	1988	1989	1990	1991	1992	1993	1994	1995		
Northern Region										
Box Elder	8.30	7.65	12.70	11.67	12.59	9.93	12.03	14.74		
Cache	5.09	4.01	7.53	9.68	9.76	8.04	11.72	11.55		
Davis	5.48	4.80	3.96	4.38	2.92	2.82	3.89	3.30		
Morgan	0.20	0.15	(0.21)				0.44	0.03		
Rich	(0.03)	(0.03)		`0.00′	(0.00)		0.05	0.05		
Summit	0.00	(0.05)	0.00	0.02	(0.00)	0.00	0.00	0.08		
Weber	7.42	7.40	8.39	(8,03)		5.13	5.55	9.91		
REGIONAL TOTALS	26.55	24.09	32.79	33.85	31.86	25.98	33.67	39.67		
Central Region										
Juab	1.94	1.69	2.09	2.47	3.21	2.16	3.05	3.74		
Salt Lake	2.18	2.67	4.30	2.23	2.51	2.76	2.00	1.53		
Sanpete	10.63	10.76	7.92	5.94	5.70	4.32	5.81	2.32		
Tooele	2.20	2.03	2.19	1.72	1.24	0.93	1.10	1.67		
Utah	25.83	27.35	23.44	27.43	28.75	24.51	25.18	25.42		
Wasatch	(0.15)	(0.51)	0.00	0.50	(0.06)	0.06	0.05	0.74		
REGIONAL TOTALS	42.96	45.02	39.94	40.30	41.47	34.74	37.18	35.41		
Southern Region										
Beaver	0.56	0.36	0.73	0.69	0.31	0.48	0.74	0.41		
Garfield	0.18	0.13	0.00	0.00	(0.00)	0.00	0.03	0.05		
Iron	0.25	0.62	0.50	0.55	0.21	0.39	0.72	0.38		
Kane	0.00	0.00	0.00	0.00	(0.00)	0.00	0.00	0.00		
Millard Piute	6.03	7.99	8.71	7.62	8.04	7.71	7.72	6.03		
Sevier	0.18 6.34	0.74	(0.08)	(0.02)	(0.19)	0.06	0.13	0.05		
Washington	0.22	5.75 1.05	3.94	3.62	3.83	4.53	3.79	2.10		
Wayne	0.08	(0.15)	0.78 0.00	0.43	0.46	2.52	1.64	1.09		
REGIONAL TOTALS	13.88	16.80	14.73	(0.02) 12.96	(0.17) 13.19	0.06 15.75	0.20 14.99	0.11 10.24		
Northeadam Design						***************************************	***************************************			
Northeastern Region										
Daggett	(0.05)	0.00	0.00	0.00	(0.00)	0.18	0.00	0.00		
Duchesne Uintah	6.34	5.86	5.71	5.73	5.97	8.49	4.40	8.11		
REGIONAL TOTALS	3.91 10.30	3.16 9.01	3.15 8.86	3.07	3.58	2.40	3.38	3.00		
	40.00	2.04	0.00	8.79	9,55	11.07	7.78	11.11		
Southeastern Region										
Carbon	1.48	1.90	0.76	0.84	1.28	2.19	1.00	1.06		
Emery	3.93	2.88	2.76	2.92	2.44	5.10	4.96	2.13		
Grand	(0.01)		(0.16)	(0.24)	(0.14)		0.36	0.00		
San Juan	0.10	(0.15)	0.00	(0.10)	0.06)	0.00	0.00	0.00		
REGIONAL TOTALS	5.53	5.01	3.68	4.10	3.94	7.41	6.32	3.19		
Unknown Counties	0.75	0.08	0.00	0.00	0.00	5.04	0.05	0.38		
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		

^()Data may be biased because small sample size inflated county harvest beyond reasonable estimate for known pheasant populations.

Table 12. Percentage distribution of pheasant hunting pressure by county, 1988-95.

Region and				Yea	r				
County	1988	1989	1990	1991	1992	1993	1994	1995	
Northern Region									
Box Elder	8.91	8.77	10.67	10.66	11.21	10.00	11.49	12.92	
Cache	5.69	5.68	7.98	9.18	9.40	7.55	10.33	10.74	
Davis	8.95	7.85	7.32	6.31	5.78	6.01	6.06	6.97	
Morgan	0.06	0.18	(0.15)		(0.07)	0.15	0.22	0.10	
Rich	0.09	(0.07)	(0.01)		(0.00)	0.08	0.03	0.05	
Summit	0.09	(0.04)	(0.01)		(0.00)	0.01	0.01	0.05	
Weber	11.42	11.59	12.13	10.47	9.64	11.34	10.23	11.06	
REGIONAL TOTALS	35.24	34.17	38.29	37.10	36.11	35.14	38.37	41.90	
Central Region									
-	2.11	2.02	2.61	2.11	2.79	2.41	3.26	2.64	
Juab Salt Lake	4.54	3.84	4.11	3.41	3.71	2.35	1.91	2.55	
	7.04	7.55	6.81	4.87	5.44	4.41	5.24	3.40	
Sanpete Tooele	3.80	3.17	2.95	1.91	2.99	2.71	1.75	1.65	
Tooele Utah	21.42	21.39	21.57	24.00	25.12	22.66	22.98	23.13	
Wasatch	•	(0.18)		0.36	(0.12)		0.01	0.25	
REGIONAL TOTALS			38.06		40.18	34.59	35.15	33.62	
TO TO THE PARTY OF									
Southern Region									
Beaver	0.72	0.42	0.52	0.61	0.47	0.78	1.02	0.86	
Garfield	0.03	0.08	(0.08)	0.01	(0.00)	0.00	0.01	0.05	
Iron	0.58	0.83	0.71	0.92	0.45	0.60	0.85	0.75	
Kane	0.00	(0.01)	0.00	0.00	(0.02)		0.00	0.00	
Millard	5.29	5.52	5.74	6.27	6.06	5.97	6.58	5.17	
Piute	0.23	0.30	(0.08)	(0.12)			0.11	0.05	
Sevier	5.91	5.79	4.58	4.86	4.48	6.25	4.89	3.89	
Washington	0.29	1.47	1.02	1.01	0.43	1.21	1.56	1.20	
Wayne	0.07	(0.15)	, ,	, ,			0.19	0.11	
REGIONAL TOTALS	13.16	14.58	12.80	13.82	12.10	15.01	15.20	12.09	
Northeastern Region									
-	(0.13)	(0.01)	(0.01)	0.00	(0.00)	0.07	0.00	0.00	
Daggett Duchesne	3.74	4.27	3.55	4.22	4.33	4.95	2.73	4.48	
Uintah	3.22	3.41	2.71	3.16	2.99	2.43	2.23	3.05	
REGIONAL TOTALS	7.10	7.70	6,28	7.38	7.32	7.45	4,97	7.53	
	\$500\$60.000.000.00 0.00 0.7	····	000000000000000000000000000000000000000	>00000000000000000000000000000000000000		· · · · · · · · · · · · · · · · · · ·	000000000000000000000000000000000000000	****************	
Southeastern Regio	n								
Carbon	1.92	1.76	1.54	2.21	1.51	1.73	1.75	1.50	
Emery	3.71	3.05	2.99	2.80	2.63	4.37	4.21	2.60	
Grand	0.25	0.04		(0.24)			0.31	0.12	
San Juan	0.03			(0.13)			0.00	0.01	
REGIONAL TOTALS	4.57	5.34	4.57	5.04	4.23	6.25	6.27	4.23	
Holmorm Counties	0.09	0.74	0.06	0.00	0.05	1.56	0.04	0.63	
Unknown Counties	0.09	V./4	0.00	0.00	0.03	1.50	0.04	0.03	
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

^()Data may be biased because sample size inflated county harvest beyond reasonable estimate for known pheasant populations.

Table 13. Statewide summary of pheasant harvest statistics, 1948-95.

	Total	Total	sant harvest stati Hunter-Days	Phoneonte Der	Pheasants Per
Year	Hunters	Harvest	Afield		
1948	96,534	280,914	Vileid	Hunter-Day	Hunter
1949	88,369	263,340	400.450	-	2.91
1950			189,453	1.39	2.98
1951	92,724 76, 576	249,428	235,309	1.06	2.69
	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	
1967	85,664	284,000	257,033		3.17
1968	90,453		•	1.10	3.32
1969		297,752 250,244	267,788	1.11	3.29
1970	90,573	250,241	277,887	0.90	2.76
1971	78,585	250,503	244,958	1.02	3.19
	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
1977	67,195	148,168	191,142	0.78	2.21
1978	83,800	220,398	257,305	0.86	2.63
1979	87,462	216,700	266,245	0.81	2.48
1980	84,868	228,442	249,770	0.91	2.69
1981	83,408	234,217	265,381	0.88	2.81
1982	85,368	208,437	280,624	0.74	2.44
1983	77,847	220,074	265,731	0.83	2.83
1984	76,840	192,190	258,169	0.74	2.50
1985	69,889	146,807	233,328	0.63	
1986	59,987	114,389	207,346	0.55	2.10
1987	57,118	119,236	199,470		1.91
1988	54,514	97,658	184,180	0.60	2.09
1989	50,382	80,769		0.53	1.79
1990	47,025	·	177,364	0.46	1.60
1991	47,025 42,813	78,944	161,634	0.49	1.68
1992	-	72,612	150,096	0.48	1.70
	41,640	85,803	150,244	0.57	2.06
1993	39,640	63,336	141,399	0.45	1.60
1994	36,705	68,698	129,872	0.53	1.87
1995	<u> 38,39</u> 1	71,202	142,755	0.50	1.85
Totals				-	
<u>(1948-95)</u>	<u>3,611,138</u>	9,603,510	10,126,456		_
Averages				-· 	
<u>(1948-94) </u>	76,016	202,815	212,419	0.91	2.59
					

1995.	
bag check summary,	
g check	
t field ba	
Pheasant fi	
Table 14.	

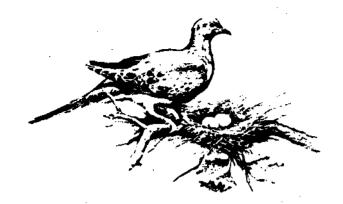
Region and Total Total County Total To	All Hunts Total Total Hours Blrds 1,181 97 1,181 87 1,505 135 1,506 135	Birds/ 100 Hr 1 m 1 1 1 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1	Complete Hunts To The Transfer of the Transfer	Total Hunters 361 361	Total T. Hours B. 1,181	Dirds Potal Birds 97 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 H	Birds/ Hunter
Region and lotal lotal County Parties Hunters n Region Region Region Region Region NAL TOTALS ALTOTALS ALTOT		100 1 1 1 2 1 1 2 1 1 2 1 1	Hunts 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Hunters 361 361 1 148 1 148	Fours 1, 181 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	100 100 11111	Hunter Hunter 1 0.27 0.27 0.32
County Parties Hunters		1	Hunts 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	361 361 361 148	Fours 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8pmg 1.6e 1.1.1.1.5e 1.1.1.85	190 1 0 1 1 1 1 1 0 1 1 1 1 2 2 2 2 2 2 2 2	Hunter 1 0.27 0.32 0.32
rn Region transport wal TOTALS astern Region transport wal TOTALS astern Region transport wal TOTALS astern Region wal TOTALS astern Region			1111111 1111212	361	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	166 1 1 1 1 1 1 6 1 1 1 1 1 2	1 00 1 1 1 1 2	0.27
t			1111111 111121212	361	1 6 1 1 1 1 1 6 1 1 1 1 1 8 8	1.60 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	0.27
NAL TOTALS		e 1 1 1 1 00 1 1 1 1 00 1 00 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	361	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u>76</u> 1 1 1 1 8 2 1 1 1 1 8 3 4 1 1 1 1 1 8 4 1 1 1 1 1 1 1 1 1 1 1 1		0.27
WAL TOTALS 361 Region		1 1 1 1 0 1 0 1	111111 1111212	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 26 1 1 1 1 3		0.32
NAL TOTALS			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 2 1 1 1 2	111100 11112	1 1 1 20 22
NAL TOTALS			1 1 1 1 1 1 1 1 2 1 2 1 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 8 8 4	1 1	1 1 1 0 1 1 1 1 2	0.32
NAL TOTALS		1 1 00 1 1 1 1 00 1 00 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	361	1 1 84	1 1 76 1 1 1 1 8	1 1 00 1 1 1 1 2	0.32
Region			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	148	1,181	1 78 1 1 1 8	1 0 11115	1 1 1 2 2 2 2 2 2 3 2 3 3 3 3 3 3 3 3 3
Region 361 ke		w 1 1 m m 1	1 1 1 1 1 22 1 22 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1,181	76 11118	m 11115	1 1 1 0.32
Region		11110101	1 1 1 1 22 1 25 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11112	1119	11112	1 1 1 1 60
te		1 1 1 0 1 0 1	7 1 1 2 1 2 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 88	1113	11115	0.32
te		1 1 6 1 6 1	1 1 1 25 1 55 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 85	1112	1112	0.32
## TOTALS 288 589 In Region		1 1 5 1 5 1	1 1 75 1	149	1 1 8 3	1 1 22	115	0.32
## 288 589 ### TOTALS 288 589 ### Region		1 m 1 m 1	1 25 1 25 1	149	1 84	: 8	1 2	0.32
## TOTALS 288 589 ### TOTALS 288 589 ### Region		o 1 o 1	75 - 75	149	458	84	\$	0.32
## TOTALS 288 589 ### TOTALS 288 589 ### Region		;	1 22	1 49				
### TOTALS 288 689 ###################################		6 1	76	149	:	1	1	1
In Region	1111	ı	1		458	48	10	0.32
gton	1 1 1 1	ľ	1					
gton	1 1 1			•	1	1	2	ı
gton	i i i i	ı	1	ı	i	1	ı	1
gton	1	ī	ï	ı	ı	ī	1	1
gton		ı	1	ţ	I	1	ı	1
astern Region	1	1	1	ı	1	1	1	ı
astern Region	ı	1	1	t	:	ı	1	I
t	1	1	ı	ı	1	ı	ı	1
t	1	1	ľ	1	1	ı	1	ı
t	1	1	1	,	1	1		
t	1	1	1	1		ı		1
ine 14 44 NAL TOTALS 14 44 estern Region								
14 44	1	1	ı	ı	1	;	ı	1
### TOTALS 14 44 ################################	158 11	7	က	ю	#		ω	0.20
WAL TOTALS 14 44 Bestern Region - - 89 202	1	1	:	1	1	1	t	1
estern Region – – – 89 202	158 11	7	3	9	48	-	•	0.20
89 202								
89 202	1	ı	;	ı	ı	ı	ı	t
	378 84	22	8	119	234	65	88	0.55
Grand	1	1	ı	ı	ı	ı	ı	t
San Juan	1	1	ı			ı		1
REGIONAL TOTALS 89 202 378	378 84	22	90	119	234	65	28	0.55
1.198		Ş	128	634	1,891	211	11	0.33

Table 15. Pheasant hunter success trend as determined by field check, 1990-95.

0.27 100 Hr Hunter 10 Hunter 10 0.23 40 0.57 0.00 0.38	1990		1991		1992		1993) , ,	1994		1995	
Region 18 0.27 100 1.00 1.00 1.00 1.00 1.00 1.00 1.00	_	Birds/	Birds/	Blrds/	Birds/	Birds/	Birds/	Birds/	Birds/	Birds/	Blrds/	Birds/
Region 18 0.27 100 1.00 7 0.23 40 0.57 8 0.19 0.00	100 Hr	Hunter	100 Hr	Hunter	100 H	Hunter	100 H	Hunter	100 H.	Hunter	100 Hr	Hunter
## 0.27 100 1.00 ## 0.19												
Eglon TOTALS B 0.19	81	0.27	6	1.00	1	0.30	:	0.23	:	1	1	t
Begion 13 0.27 24 0.30 LTOTALS 33 0.27 24 0.30 13 0.38		0.23	\$	0.57	:	1	12	0.63	:	ı	œ	0.27
Beglon	&	0.19	:	0.00	1	1	ı	1	ı	:	. 1	,
Fegion Totals 8 0.05 13 0.50 13 0.50 15 0.36 13 0.18 15 0.36 13 0.36 13 0.36 13 0.36 13 0.36 13 0.36 13 0.36 13 0.36 13 0.36 13 0.36 13 0.36 13 0.48 13 0.36 13 0.48 1	ı	ï	1	:	'n	1	ı	i	:	1	1	:
Figure 1.00 LTOTALS 33 0.27 24 0.30 egion 13 0.38	ı	1	ı	:	ı	ı	:	1	1	ı	1	
Pegion 13 0.27 24 0.30 egion 13 0.27 24 0.30 13 0.38	•	:	1	:	1	ı	1	ı	1	:		
Begion 13 0.27 24 0.30 13 0.38	ı	1	27	1.00	1	ı	١	1	1	1	: 1	!
## Pagion		0.27	24	0.30	1	0.30	9	82.0			a	46.0
TOTALS 13 0.38							3				•	0.64
TOTALS 13 0.38 - 17 1.05 TOTALS 17 0.40 13 0.34 TOTALS 8 0.48 - 1	ı	1	ı	ı	1	1	1	i	1	1	1	1
TOTALS 19 0.40 13 0.34	13	0.38	١	ı	1	ı		۱ ا	1 1	3 1	}	ì
TOTALS 19 0.40 13 0.34	i	:	4	1.05	<u>67</u>	0.52	. 4	, <u>S</u>	۱ ۱	1 1	1	.
TOTALS 19 0.40 13 0.34	ı	1		1	! I	1	! ₹	190		90.0	!	l
TOTALS 17 0.40 14 0.47 Region TOTALS B 0.05	19	0.40	5	0.34	3 8	0.76	: 2	38	: :	} 1	;	
Region 17 0.40 14 0.47 Region - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	i	1	:	1	ı	1	1	ı	ı	1	۱ ؛	1
Region		0.40	4	0.47	22	0.70	12	0.39	5	0.29	9	0.00
In Region									:			
TOTALS B 0.48	1	1	1	:	1	1	,	ı	1	1	ı	:
nn	ı	:	1	1	1	ı	1	1	:	1	ı	ı
TOTALS 14 0.65 13 0.36	ı	1	ı	ı	1	t	ı	:	1	ı	ı	ı
TOTALS 14 0.65 13 0.48	1	:	ı	ı	1	1	1	ı	1	ı	1	ı
TOTALS B 0.05	6 0	0.48	ı	1	:	1	1	1	:	ı	:	1
TOTALS 19 0.19 22 0.36	:	1	:	1	,	1	1	1	ı	1	ı	1
TOTALS 8 0.05	:	1	:	ı	1	ı	^	0.38	;	ı	1	ı
TOTALS B 0.05	:	:	ï	ı	1	1	1	1	ı	ı	ı	1
ToTALS B 0.05 16 0.84 13 0.50 10 0.43 TOTALS 14 0.65 13 0.48 arn Region TOTALS 9 0.19 22 0.36 TOTALS 9 0.19 22 0.36	}	1	1	1	1	1	ı	1	ı	ı	ı	1
TOTALS 14 0.65 13 0.56 17 0.78 1 1 0.78 1 1 1 0.78 1 1 1 0.48 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		0.05	:	ı	1	1	7	0.38	1	,		١,
TOTALS 9 0.19 22 0.36	5						!					
16 0.84 13 0.50 10 0.43	ı	ı	ı	ı	1	1	ı	ı	ı	1	ı	1
TOTALS 14 0.65 13 0.48 arn Region	91	0.84	1 3	0.50	16	1.13	ı	ı	ı	ı	9	0.20
TOTALS 14 0.65 13 0.48 arn Region - - - - 9 0.19 22 0.36 - - - - TOTALS 9 0.19 22 0.36		0.43	1	1	90	0.60	1	1	1	1	1	ı
arn Region		0.65	13	0.48	18	0.92	ı	ı	١,	1	9	0.20
9 0.19 22 0.36 	L 60											
9 0.19 22 0.36 	•	ı	:	ı	1	ı	i	:	t	1	,	ı
TOTALS 9 0.19 22 0.36	•	0.19	22	0.36	34	0.51	22	0.29	5	0.33	58	0.55
TOTALS 9 0.19 22 0.38	1		1	ı	ı	t	42	0.40	•	ı	1	ı
TOTALS 9 0.19 22 0.36	1	1	1	1	1	ı	ı	:	:	1	ł	•
		0.19	22	0.36	34	0.51	24	0.31	5	0.33	78	0.55
	12	0.36	16	0.42	98	0.48	19	0.31	4	0.31	11	0.33

MIGRATORY UPLAND GAME BIRDS

SUMMARY



Mourning Doves

Band-tailed Pigeons



The breeding density index decreased 39 percent in 1995, and remained 43 percent below average.

Aging of wings indicated the juvenile per 100 adult ratio increased to 96 compared to 73 in 1994. Juvenile per 100 adult ratio remains 15 percent below the long-term average. Reproductive success was only fair in 1995.

Harvest statistics derived from the questionnaire indicated a slight increase in number of hunters and slight decrease in harvest compared to 1994.

Field bag checks indicated a decrease in hunter success on opening day. Hunters who participated hunted less hours per day than the previous year, and spent more time afield per dove harvested.

A free band-tailed pigeon hunting permit was required in 1995 to obtain mailing addresses for a questionnaire. One hundred two hunters obtained permits and 59 went afield. One hundred two pigeons were harvested. The majority of the harvest occurred on the LaSal Mountains.

MOURNING DOVE

Call Count Survey

Results of the 1995 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. Indices shown in each of these tables are unweighted and consequently differ from those published in the annual <u>Mourning Dove Status Report</u> compiled by the U.S. Fish and Wildlife Service. However, indicated trends are similar (Figure 1). The following is a comparison of the results of the 1995 survey compared to 1994 and the average for the period 1964-1994:

	<u> 1995</u>	Percent change from <u>1994</u>	Percent change from <u>Average</u>
Average doves heard per route	7.00	-39	-43
Average doves seen per route	3.80	-48	-72

Coo count data (doves heard per route) indicated decreased breeding activity in late May compared to 1994, and was 43 percent below the long-term average of doves heard per route.

Harvest

Hunter Questionnaire

Information obtained from the hunter questionnaire for 1995 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 and Figures 2 and 3. The following is a comparison of the harvest statistics for 1995 compared to 1994 and the previous 44-year average:

	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Mourning dove hunters	20,896	+1	-5
Mourning doves harvested	186,336	-4	-9
Hunter-days afield	80,688	+3	+17
Mourning doves per hunter-day	2.31	- 7	-29
Mourning doves per hunter	8.92	-5	-1

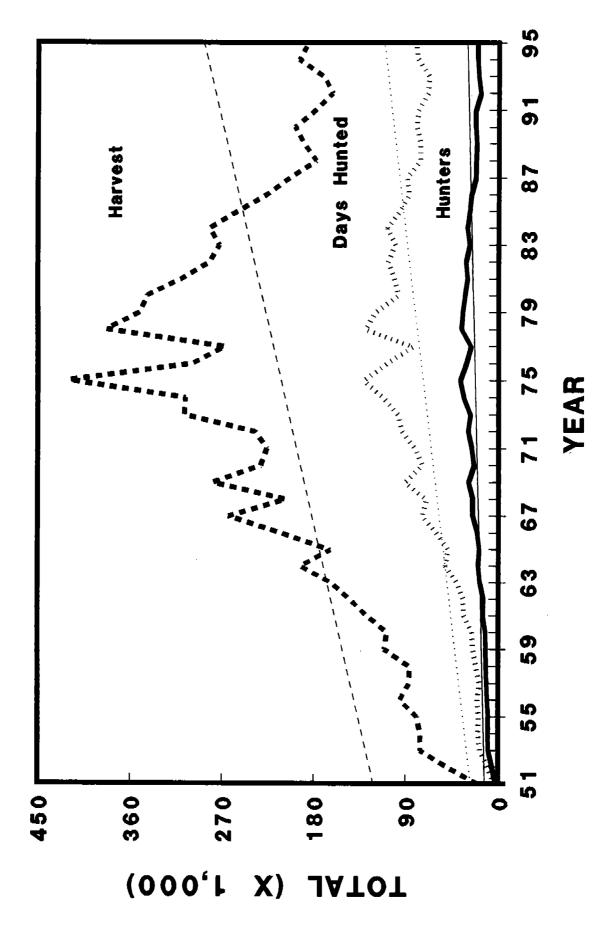
Ninety percent confidence interval for overall dove harvest is +/- 11,242.02. Standard deviation is 3.037564.

Hunter success decreased slightly from 1994. Total harvest decreased 4 percent compared to 1994. Numbers of dove hunters increased 1 percent and hunter-days afield increased 3 percent. Doves per hunter decreased 5 percent from 1994.

Long-term harvest trends are depicted in Figure 2.

93 88 83 YEAR 78 68 25 20 15 0 Ŋ **ATUOR DEB HEARD** DONES **AVERAGE**

Mourning dove breeding density index trend, 1968-95. Figure 1.



Statewide trends of mourning dove harvest statistics, 1951-95. Figure 2.

Statewide trends of mourning dove hunter success rates, 1951-95. Figure 3.

100 FIGURE4. MOURNING DOVE FIELD BAG CHECK INDICES, 1966-95. CHECK INDICES, YEAR 99 50 250 183 117 Ŧ DOV/100H **ATNH\VOO**

Field Bag Checks

A summary of field bag check data for 1995 is shown in Table 8. Hunter success trends determined via this method are shown in Table 9. Results of the 1995 survey compared to 1994 and the 10-year average (1985-94) follow:

	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Total hunters checked	522	+31	-58
Total hours hunted	2,057	+50	-55
Doves per hunter (complete hunts)	2.22	-23	-35
Doves bagged per 100 hours (complete hunts)	56	-33	-36
Average hours per hunter-day			
(complete hunts)	3.94	-16	+2
Hours hunted per dove bagged (complete hunts)	1.78	+312	+80

Field bag checks indicated an opening day decrease in hunter success. The total number of hunters checked was up 21 percent from 1994. Dove hunters spent less time afield per hunter-day than in 1994, and more time was spent per dove bagged.

Age Composition of the Harvest

A summary of the age composition of harvested mourning doves from 1985 through 1995 is contained in Table 10. Hatching dates for immature doves harvested in Utah since 1986 are shown in Table 11.

Following is a comparison of data collected in 1995 compared to 1994 and long-term averages (1966-94):

	1995	Percent change from 1994	Percent change from <u>Average</u>
Sample size	1,855	+13	-37
Immatures/100 adults	96	+32	-15
Percent hatched August 3+	56.1	+5	+45
Percent hatched July 25+	31.8	+9	-59
Percent hatched before July 25	12.1	29	-40

Sample size increased 13 percent in 1995. The 96 immatures per 100 adults in the harvest was up 32 percent from the previous year and 15 percent below the long-term average.

Reproductive success in 1995 was fair at best.

Table 1. Summary of the mourning dove call-count survey for 1995.

Region and	Route	Total Doves	Total Doves
County	Number	Heard / Route	Seen / Route
Northern Region			
Box Elder	R1500	4	6
Summit	R1020	1	0
REGIONAL TOTALS		5	6
Central Region			
Juab	R2830	23	2
REGIONAL TOTALS		23	2
Southern Region		- · · · · · · · · · · · · · · · · · · ·	
Beaver	R3820	5	4
Garfield	R1090	0	0
Iron	R4001	9	1
Millard	R3640	5	7
Sevier-Sanpete	R0370	3	18
Washington	R4311	14	3
Wayne-Sevier	R0660	. 4	1
REGIONAL TOTALS		40	34
Northeastern Region	-		
Duchesne	R0080	2	0
Uintah	R0220	5	5
REGIONAL TOTALS		7	5
Southeastern Region			
Emery	R0540	18	5
San Juan	R1171	12	5
San Juan	R1451	0	0
REGIONAL TOTALS		30	10
		· · · · · · · · · · · · · · · · · · ·	
STATE TOTALS		105	57
STATE AVERAGES		7.00	3.80
PERCENT CHANGE			
(from previous year)		-39	-48
7			

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, 1979-95.

Ear Lear	n per roug	e auring	rangom	call con		eys, 197	19/9-95.	7	of Dayon Hound Day	200	41100							
2	onie		1				adilini	200	es ueal	חובני	once							
	Number	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Northern Region																		
	R1500	6	4	∞	ı	-	0	0	-	7	0	0	-	-	4	c,	7	4
Summit	R1020	9	ĸ	4	τO	ŀ	_	4	r.	က	10	က	က	က	4	4	母.	_
REGIONAL TOTALS		15	6	12	10	-	_	4	9	5	2	3	4	4	8	6	11	2
Central Region																		
Juah	R2830	15	3	22	6	22	1 3	20	19	16	23	13	36	38	15	42	41	23
REGIONAL TOTALS		15	31	22	တ	25	19	20	19	16	23	13	36	38	15	42	41	23
Southern Region																		
	R3820	S	თ	7	13	က	9	9	4	17		14	6	:	က	-	16	10
Garfield	R1090	0	0	6	7	က	15	က	_	_	0	16	0	0	ო	7	0	0
Iron	R4001	4	40	36	21	19	31	4	56	23	70	5	12	15	56	49	4	6
Millard	R3640	4	7	9	တ	သ	14	7	7	က	ιO	4	ιΩ	80	7	7	6	2
Sevier-Sanpete R	R0370	0	က	0	0	က	ro	4	₹	က	က	7	9	7	40	7	9	က
Washington R	R4311	4	ო	9	0	14	_	0	9	7	_	9	12	4	12	16	20	4
Wayne-Sevier R	R0660	7	10	4	4	ı	17	က	7	0	က	7	S	0	က	9	0	4
REGIONAL TOTALS		53	62	82	49	47	83	- 69	45	24	45	59	49	39	59	83	92	40
Northeastern Region	i																	
Duchesne R	R0080	7	_	. 5	7	0	_	80	က	4	8	1 3	7	7	'n	7	ł	7
Uintah	R0220	ı	49	6	_	G	2	r.	50	12	9	0	7	က	7	က	7	2
REGIONAL TOTALS		7	20	32	æ	6	11	13	23	16	14	13	13	10	2	5	7	7
Southeastern Region																	1	
Emery	R0540	o,	_	22	7	1.	9	က	무	7	15	∞	7	S	ထ	7	<u>ლ</u>	8
San Juan R	R1171	28	14	38	5 6	30	21	22	99	31	37	43	31	38	34	7	∞	7
San Juan R	R1450	_	က	0	74	ĸ	~	7	0	-	7	τ-	0	က	6	_	0	0
REGIONAL TOTALS		38	24	09	25	46	74	30	70	43	54	52	33	46	51	36	21	30
STATE TOTALS		66	176	208	128	128	194	126	163	134	141	140	135	137	138	175	172	105
STATE AVERAGES		6.60	11.73	13.87	8.53	8.53	12.93	8.40	10.87	8.93	9.40	9.33	9.00	9.79	9.20	11.67	11.47	7.00
PERCENT CHANGE (from previous year)		4	78	6	85,	c	52	دن ور	29	8	١c	7	4		φ	27	7-	6 6
							!											

Table 3. Summary of mourning dove hunter success and distribution of harvest and hunting pressure by region and county, 1995.

REGION AND		unter-days	BIRDS	BIRDS PER	% OF	% OF
COUNTY	SIZE*	AFIELD	RAGGED	HUNTER-DAY	PRESSURE	HARVEST
MODPHEDM DECION						
NORTHERN REGION Box Elder	160	8,727	25,367	2.91	10.82	13.61
Cache	78	5,656	10,069	1.78	7.01	5.40
Davis	38	2,138	4,470	2.09	2.65	2.40
Morgan	10	388	1,418	3.65	0.48	0.76
Rich	3	116	97	0.83	0.14	0.05
Summit	5	174	874	5.00	0.22	0.47
Weber	78	6,123	12,673	2.07	7.59	6.80
REGIONAL TOTALS	372	23,326	54,971	2.36	28.91	29.50
CENTRAL REGION						
Juab	112	4,276	14,345	3.35	5.30	7.70
Salt Lake	37	2,235	4,354	1.95	2.77	2.34
Sanpete	36	2,546	5,792	2.27	3.16	3.11
Tooele ·	114	6,783	13,684	2.02	8.41	7.34
Utah	241	15,958	27,505	1.72	19.78	14.76
Wasatch	10	933	2,060	2.21	1.16	1.11
REGIONAL TOTALS	550	32,734	67,742	2.07	40.57	36.36
SOUTHERN REGION						
Beaver	22	1,866	5,092	2.73	2.31	2.73
Garfield	8	427	1,360	3.18	0.53	0.73
Iron	32	2,779	10,866	3.91	3.44	5.83
Kane	1	38	388	10.00	0.05	0.21
Millard	84	4,470	15,375	3.44	5.54	8.25
Piute	5	330	855	2.59 1.21	0.41	0.46 2.38
Sevier Washington	35 34	3,654 2,041	4,431 6,239	3.06	4.53 2.53	2.36 3.35
	2	2,041 174	252	1.44	2.33 0.22	0.14
Wayne REGIONAL TOTALS	223	15,783	44,863	2.64	19.56	24.08
RBGIOMAD IVIADO	44-	***,				
NORTHEASTERN REGION						
Daggett	2	174	0	0.00	0.22	0.00
Duchesne	19	1,127	2,954	2.62	1.40	1.59
Uintah	48	3,401	6,822	2.01	4.22	3.66
REGIONAL TOTALS	69	4,704	9,777	2.08	5.83	5.25
SOUTHEASTERN REGION						
Carbon	15	1,282	2,313	1.80	1.59	1.24
Emery	28	1,380	2,896	2.10	1.71	1.55
Grand	6	369	174	0.47	0.46	0.09
San Juan	8	485	2,177	4.48	0.60	1.17
REGIONAL TOTALS	57	3,518	7,561	2.15	4.36	4.06
**- 1	3.5	600	2 425	0.00	A 55	0.50
Unknown	15	622	1,418	2.28	0.77	0.76
STATE TOTALS	1,286	80,688	186,336	2.31	100.00	100.00

^{*} Total hunter trips from questionnaire returns.

Table 4. Summary of mourning doves bagged per hunter-day by region and county, 1988-95.

					••			
Region and	1988	1989	1990	1991	Year 1992	1993	1994	1995
County	1700	1707	1990	1331	1774	1223	1774	1775
Northern Pegion								
Northern Region	2 41	2 02	2 22	2 27	2 56	2 40	2 62	2 01
Box Elder	3.41	2.83	2.73	2.27	2.56	2.49	2.63 2.54	2.91
Cache	1.92	2.24	1.67	1.97	2.16 1.19	1.88 1.39	1.26	1.78 2.09
Davis	1.51	1.31	1.53	1.77 2.31		0.88	2.93	
Morgan	2.36	1.03	1.73		2.47			3.65
Rich	2.63	1.26	1.95	3.45	2.27	1.18	1.67	0.83
Summit	2.19	1.61	7.00	1.78	3.25	0.25	2.61	5.00
Weber	1.21	1.88	1.48	1.30	1.79	1.50	1.57	2.07
REGIONAL TOTALS	2.09	2.20	2.02	1.99	2.16	2.00	2,21	2.36
Central Region								
Juab	3.25	4.45	3.70	3.33	3.34	4.25	2.72	3.35
Salt Lake	1.84	2.18	2.37	2.02	2.14	1.88	2.79	1.95
Sanpete	2.75	2.40	3.06	2.69	2.06	3.21	1.78	2.27
Tooele	2.31	2.88	1.90	2.29	2.14	2.06	2.45	2.02
Utah	1.97	2.08	2.05	1.89	1.77	2.12	2.43	1.72
Wasatch	1.20	1.22	2.42	2.11	2.37	1.83	2.15	2.21
REGIONAL TOTALS	2.23	2.55	2.41	2.25	2,10	2.51	2.43	2.07
Southern Region								
Beaver	3.50	4.35	1.71	3.32	3.41	1.52	3.72	2.73
Garfield	3.86	2.27	2.34	2.40	1.67	3.50	1.47	3.18
Iron	3.71	2.91	4.38	2.80	3.96	2.42	3.60	3.91
Kane	1.71	3.11	1.00	3.03	4.05	4.09	3.00	10.00
Millard	3.01	3.54	4.42	3.13	3.30	4.40	3.20	3.44
Piute	4.17	0.00	1.45	2.50	1.33	2.83	4.50	2.59
Sevier	2.03	2.70	2.18	2.09	2.42	2.10	2.36	1.21
Washington	3.37	2.12	2.81	3.63	2.54	2.74	2.28	3.06
Wayne	2.29	3.53	0.61	0.75	2.86	1.00	2.11	1.44
REGIONAL TOTALS	2.90	3.01	3.20	2.87	3.09	2.98	2.94	2.84
		*******************************		***************************************	·····	2000000	***************************************	***************************************
Northeastern Region								
Daggett	0.00	0.25	2.00	1.00	3.25	7.00	0.00	0.00
Duchesne	2.83	1.42	1.85	2.21	2.24	2.52	3.06	2.62
Uintah	2,68	2.33	3,17	1.06	2,06	2,12	3.35	2.01
REGIONAL TOTALS	2.68	1.82	2.46	1.64	2.15	2.32	3.25	2.08
Southeastern Region	1							
Carbon	2.06	0.75	1.18	2.15	1.51	2.82	0.96	1.80
Emery Grand	2.87 2.00	1.77 2.18	2.04 4.04		3.10 0.00			2.10 0.47
San Juan	2.91	4.22	1.69	3.56	2.61	3.46	4.42	4.48
REGIONAL TOTALS	2.56	1.85	2.07	2.14	2.46	3.40	2.19	4.46 2.15
CONTENSED EVERIAL					**************************************	*****	6 • 4 7	4.17
Unknown Counties	1.30	2.86	0.00	0.00	0.00	2.40	1.50	2.28
STATE TOTALS	2.28	2.49	2.49	2.28	2.35	2.51	2.48	2.31

Table 5. Percentage distribution of mourning dove harvest by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Decies								
Northern Region		10.06						
Box Elder	10.31	12.06	9.95	9.60	9.09	11.18	12.10	13.61
Cache	2.94	4.87	3.34	5.54	7.20	4.85	5.07	5.40
Davis Marrias	3.27	2.01	2.57	2.39	1.15	0.79	1.41	2.40
Morġan Rich	0.61	0.44	0.59	0.65	0.81	0.17	1.14	0.76
	0.66	0.26	0.38	0.97	0.65	0.22	0.36	0.05
Summit	0.65	0.32	0.51	0.16	0.86	0.02	0.42	0.47
Weber	3.67	3.54	3.54	2.39	4.59	3.14	4.42	6.80
REGIONAL TOTALS	22.15	23.50	20.88	21.71	24.35	20.37	24.93	29.50
Central Region								
Juab	8.09	9.79	9.45	8.78	6.74	11.16	5.76	7.70
Salt Lake	4.37	3.56	5.71	5.00	5.15	2.59	5.24	2.34
Sanpete	4.30	4.34	3.23	4.84	3.57	4.10	3.41	3.11
Tooele	10.92	8.58	6.37	8.56	6.66	8.02	8.90	7.34
Utah	16.17	16.27	12.83	16.37	15.16	13.26	16.32	14.76
Wasatch	0.90	0.54	1.08	0.94	0.99	1.22	0.93	1.11
REGIONAL TOTALS	44.78	43.08	38.67	44.50	38.27	40.36	40.64	36.36
Southern Region								
-	1 76							
Beaver	1.76	2.28	1.29	1.94	2.10	1.81	4.02	2.73
Garfield	0.25	1.09	0.92	0.35	0.05	0.39	0.25	0.73
Iron	3.22	3.07	6.20	3.07	5.57	2.37	2.79	5.83
Kane Millard	0.33	0.64	0.07	0.91	0.98	1.00	0.08	0.21
Piute	11.73	9.92	13.35	9.29	11.80	13.31	40.87	8.25
Sevier	0.46	0.00	0.57	0.68	0.31	0.38	0.41	0.46
Washington	3.59 1.10	6.11 2.62	4.05 4.99	4.80	5.66	3.72	4-60	2.38
Wayne	0.14	0.73	0.11	5.16 0.03	1.50 0.22	5.54	2.83	3.35
REGIONAL TOTALS	22.63	26.46	31.57	26.22	28.19	0.16 28.68	0.34 26.19	0.14 24.08
		::::::::::::::::::::::::::::::::::::::	*******************		***************************************			
Northeastern Regi								
Daggett	0.00	0.02	0.06	0.01	0.14	0.08	0.00	0.00
Duchesne	1.27	0.85	1.62	2.61	1.21	1.74	0.94	1.59
Uintah	2.46	1.70	2.46	1,21	2.01	1.96	1.87	3.66
REGIONAL TOTALS	3.73	2.57	4,15	3.82	3.36	3.77	2.81	5.25
Southeastern Regi	on							
Carbon	1.67	0.44	0.41	1.24	1.16	1.07	0 50	1 24
Emery	3.70	2.23	2.85	1.16	3.64	2.28	0.59	1.24
Grand	0.18	0.26	0.96	0.18		0.34	2.80	1.55
San Juan	0.59	1.24		1.18		0.34	0.08 1.91	0.09 1.17
REGIONAL TOTALS	6.16		4.74					4.06
77-1								
Unknown counties	0.53	0.22	0.00	0.00	0.00	2.21	0.05	0.76
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 6. Percentage distribution of mourning dove hunting pressure by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
•								
Northern Region								
Box Elder	7.07	10.62	9.07	9.63	8.33	11.24	11.41	10.82
Cache	3.59	5.43	4.96	6.43	7.84	6.47	4.97	7.01
Davis	5.08	3.80	4.19	3.08	2.27	1.42	2.80	2.65
Morgan	0.61	1.06	0.85	0.64	0.77	0.47	0.96	0.48
Rich	0.59	0.52	0.49	0.64	0.67	0.47	0.54	0.14
Summit	0.70	0.49	0.18	0.20	0.62	0.22	0.40	0.22
Weber	7.11	4.70	5.94	4,19	6.03	5.24	6.98	7.59
REGIONAL TOTALS	24.77	26.62	25.67	24,83	26.53	25.54	28.05	28.91
Central Region								
Juab	5.82	5.49	6.35	6.01	4.74	6.58	5.26	5.30
Salt Lake	5.52	4.07	5.99	5.64	5.65	3.46	4.65	2.77
Sanpete	3.65	4.51	2.62	4.10	4.07	3.21	4.74	3.16
Tooele	11.08	7.41	8.33	8.54	7.32	9.76	9.13	8.41
Utah	19.18	19.53	15.52	19.75	20.08	15.70	16.69	19.78
Wasatch	1.77	1.11	1.11	1.02	0.98	1.67	1.07	1.16
REGIONAL TOTALS	47.09	42.12	39.91	45.06	42.85	40.38	41.53	40.57
Southern Degion								
Southern Region	1 10	1 20				2 22	5 60	0 31
Beaver	1.18	1.30	1.88	1.33	1.44	2.98	2.68	2.31
Garfield	0.15	1.20	0.98	0.33	0.08	0.28	0.42	0.53
Iron	2.03	2.63	3.52	2.51	3.30	2.45	1.92	3.44
Kane	0.46 9.11	0.52	0.18	0.69	0.57	0.61	0.07	0.05
Millard Piute	0.26	6.98 0.05	7.50 0.98	6.77 0.62	8.40 0.54	7.59 0.33	8.43 0.22	5.54
Sevier	4.14	5.65	4.63	5.24	5.49	4.43	4.83	0.41 4.53
Washington	0.76	3.03	4.42	3.24	1.39	5.08	3.09	2.53
Wayne	0.76	0.52	0.46	0.09	0.18	0.39	0.40	0.22
REGIONAL TOTALS	18.26	21.92	24.54	20.81	21.40	24.15	22.08	19.56
		*******************						***************************************
Northeastern Regio	n							
Daggett	0.06	0.22	0.08	0.02	0.10	0.03	0.00	0.22
Duchesne	1.05	1.49	2.18	2.68	1.26	1.73	0.76	1.40
Uintah	2.14	1.82	1.93	2.60	2.29	2.31	1.39	4.22
REGIONAL TOTALS	3.26	3.53	4.19	5.30	3.66	4.07	2.15	5.83
Southeastern Region	on							
Carbon	1.90	1.44	0.87	1.31	1.80	0.95	1.52	1.59
Emery	3.02	3.15	3.47	1.58	2.76	1.53	3.38	1.71
Grand	0.21	0.30	0.59	0.36	0.08	0.39	0.13	0.46
San Juan	0.48	0.73	0.75	0.75	0.93	0.67	1.07	0.60
REGIONAL TOTALS	5.62	5.62	5.68	3.99	5.57	3.54	3.38 0.13 1.07 6.11	4.36
Unknown counties								
								•
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 7. Statewide summary of mourning dove harvest statistics, 1951-95.

Table 7. Sta	Total	Total	g dove harvest s Hunter-Days	Doves Per	Doves Per
Year	Hunters	Harvest	Afield	Hunter-Day	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
195 5 1955	9,653	79,444	19,282	4.12	8.23
1956	10,744			4.69	8.91
1950 1957*		95,729 86.760	20,411	4.66	7.68
	11,298	86,769	18,620		
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
1977	26,905	267,487	83,218	3.21	9.94
1978	35,985	383,696	130,173	2.95	10.66
1979	34,903	351,161	120,459	2.92	10.06
1980	32,627	343,851	97,644	3.52	10.54
1981	30,060	310,068	101,728	3.05	10.34
1982**	31,756	282,188	107,728	2.62	8.89
1983	28,258	272,979	100,568	2.71	9.66
1984	30,573			2.59	9.23
1985		282,307	108,793		
	28,183	256,045	96,507	2.65	9.09
1986	26,583	226,985	87,084	2.61	8.54
1987***	22,553	204,030	89,378	2.28	9.05
1988	22,457	178,469	76,219	2.34	7.95
1989	21,696	190,328	76,372	2.49	8.77
1990	22,700	199,007	80,076	2.49	8.77
1991	22,632	178,853	78,405	2.28	7.90
1992	18,021	161,902	68,937	2.35	8.98
1993	19,725	170,834	68,143	2.51	8.66
1994	20,743	195,089	78,594	2.48	9.41
1995	20,896	186,336	80,688	2.31	8.92
Totals					
(1951-95)	990,684	9,216,865	3,118,844		
Averages					
(1951-94)	22,041	205,239	69,049	3.27	9.05
* Estimated					

^{*} Estimated.

^{**}Bag limit increased to 15.
***Bag limit reduced to 10.

Table 8. Mourning dove field bag check summary, 1995.	All Hunts	
Table 8. Mourning dove I		

			All Hunts						255		
Region and	Tota	Total	Total		Birds/	Complet	Total	Total	Total	Birds/	Birds/
County	Parties	Parties Hunters	Hours	Birds	100 Hr	Hunts	Hunts Hunters	Hours	Birds	100 Hr	Hunter
Northern Region											
Dov Elder					1		1	}	!	ŀ	;
POY FINE!	:	:	•	;	1		}	}	1	1	:
Cache	!	:	1	i	ı	:	:	:	;	:	;
Davis	1	:	1	i	:	:	:	!	:	:	1
Morgan	:	:	:	;	:	:	1	;	:	ŀ	:
Rich	ì	:	:	:	ı	1	:	ł	;	ł	;
Sammit	:	:	;	ı	ī	1	:	ł	:	í	;
Mohor											1
Webel	:	1	:	:	:	:	;	:			
REGIONAL TOTALS	I	:	:	:	:	:	;	:	;	:	:
Central Region											
Juab	;	:	:	;	;	:	:	:	ł	1	ì
Salt Lake	;	:	;	ŀ	1	1	:	ŀ	;	;	1
	ł	ł	l	ł	1		}				
Sanpete	!	:	Į	;	:	!	ì	ì	ł	;	!
Tooele	:	;	1	:	ł	;	;	!	;	;	:
Utah	ŧ	:	;	1	;	ı	;	:	:	ì	:
Wasatch	;	:	;	ì	ì	:	;	;	ł	ţ	:
REGIONAL TOTALS	:	:	:	:		:	:	:	:	:	:
Southern Region											
Bearer	:	:	;	:	ı	1	:	:	:	;	:
S. C.											
	:	•	1	:		1	•	ł	ł	}	ļ
Iron	1	;	;	!	ı	:	;	:	:	;	:
Kane	ı	1	;	ŀ	:	ł	;	:	1	;	:
Millard	ı	ı	;	ţ	;	:	:	:	;	I	:
Piute	ı	:	;	:	:	:	:	!	ı	;	:
Sevier	;	:	:	ı	1	:	1	ı	ı	:	;
Washington	:	;	;	1	i	ł	1	!	;	i	1
Wavne	:	:	i	;	ı	:	١	:	:	:	1
DECIONAL TOTALS		1	1								:
EGIONAL TOTALS	:	:	:	•		:	1	:	1	:	!
Northeastern Region											
Daggett	:	:	:	:	:	1	:	:	ı	;	1
Duchesne	ŀ	1	;	:	:	;	:	:	i	:	1
Uintah	:	:	;	:	1	:	:	ł	ì	;	ı
REGIONAL TOTALS	:	1	:	;	:	:	:	2	:	:	1
Southeastern Region											i
Carbon	;	;	1	;	;	;	;	1	:	:	1
Emery	1	36	115	94	81.74	9	11	38	46	121	2.71
Grand	:	;	:	:	;	ŧ	;	:	I	;	ı
San Juan	:	44	143	11	77.62	:	١.	13	8	44	2.57
REGIONAL TOTALS	17	79	258	205	79.46	6	24	5	84	127	2.67
EHI CHECK STATION	148	303	1 1 2	440	41 14	101	203	800	324	9	1.58
Menul Curor etation	446	5	1004	000	00 40	50	407	275	770	114	1 13
METHICHECT STATION	2	2 5	200,1	200	40.40	3 2	101	200	777	1	2 5
INIOROL CHECK STATION	9	126	603	600	92./0	Lo	301	250	cno	GR	4.00
CITACH LARAC	240	9	2 057	777		770	ccu	-	1177	•	

	1990	0	1991		1992		1993		1994		1995	
Region and County	Birds/	Birds/ Hunter	Birds/ 100 Hr	Birds/ Hunter	Birds/	Birds/ Hunter	Birds/	Birds/ Hunter	Birds/	Birds/ Hunter	Birds/	Birds/
Northern Region									3		2	
Box Elder	38	2.29	200	2.27	;	:	i	;	:	:	:	:
Cache	1	ł	;	;	:	:	:	ŀ	1	;	:	:
Davis	110	1.77	158	1.88	;	:	1	;	. :	;	:	1
Morgan	:	:	1	:	:	:	:	:	;	ŀ	:	1
Rich	:	;	;	1	ŀ	ı	:	:	;	1	1	:
Summit	:	;	;	:	;	:	:	1	;	ŀ	1	:
Weber	39	0.83	73	1.00	;	:	:	ı	:	:	;	:
REGIONAL TOTALS	42	1.93	147	1.79	;	:	:	;	:		:	
Central Region									ı			
Juab	116	4.6	3	2.49	:	:	110	5.26	:	ì	;	:
Salt Lake	;	:	14	0.50	ł	:	;	:	:	:	i	:
Sanpete	:	ŀ	;	1	;	ł	1	;	+	;	ŀ	;
Tooele	285	2	ı	:	;	;	;	;	:	ŀ	ì	ł
Utah	65	2.43	92	2.86	:	1	117	4.42	:	:	:	;
Wasatch	;	;	:	1	:	;	;	:	:	;	i	:
REGIONAL TOTALS	114	2.95	20	2.69	:	:	115	4.64	:	:	:	1
Southern Region												
Beaver	;	ŀ	ı	:	:	;	:	ı	:	;	:	:
Garfield	ı	ŀ	ł	:	;	;	1	:	;	:	:	!
Iron	;	ı	:	:	:	ì	ŀ	1	:	:	1	1
Kane	ı	1	ì	1	:	i	ł	;	:	;	i	ı
Millard	104	7.78	ì	:	:	i	•	:	i	ł	:	ı
Piute	ī	:	i	;	1	;	1	;	;	;	1	ı
Sevier	ı	;	:	:	;	1	i	1	1	;	1	1
Washington	ł	1	1	ï	ı	:	·	ï	:	;	1	:
Wayne	:	:	!	;	:	;	1	1	;	;	;	į
REGIONAL TOTALS	104	7.78	:	;	ŧ	:		:	:	:	:	1
Northeastern Region					ļ							
Dangett												

	1	ŧ	1	:	;	:	;	:	ı	ł	i	1
	ł	ı	:	:	1	;	1	ì	ł	ł	ŀ	1
	;	1	;	1	:	ï	1	;	:	i	1	:
REGIONAL TOTALS	1	:	:	:		;	:	;	:	:	١,	١.
Southeastern Region												
	:	•	ŀ	:	219	7.08	280	7.00	:	ï	:	:
	127	4	300	7.50	265	4.07	198	7.92	327	6.13	121	2.71
	:	:	:	1	:	ı	200	1.00	:	;	:	1
	129	ç	250	5.00	ı	;	:	;	164	4.05	7	2.57
REGIONAL TOTALS	127	4.9	294	7.14	235	5.46	202	6.93	193	4.64	127	2.67
EHI CHECK STATION	65	2.43	92	2.86	20	2.73	130	4.43	88	3.09	9	1.58
JEPHI CHECK STATION	104	7.78	64	2.49	84	4.01	110	5.26	127	3.79	114	4.13
HIOKOL CHECK STATION	1	:	:	1	127	3.64	141	5.21	:	;	95	4.66
STATE TOTALS	104	8	73	2.70	9	2.85	112	4.36	83	2.88	26	2.22

Region and 1985 1986 1987 1988	ľ	985		9861	1		<u>6</u>	2	1989	c.	986		1991		1942	1	1993	1001		1005	4085.04 Augrana	disarana
County	=	I/ 100A(n)	=	l/ 100A(n)	19	1/ 100A(n)	// 100A(n))A(n)	1/ 100A(m)	4(n)	1/ 100A(n)	Ē	1/ 100A(n)		1/ 1000/01	1	1/ 1000(n)	(/ 100 d/m)	Q(u)	1/ 1000/n)	17 400	V 1006/m
Northern Region															100000	2		2	7	Tankan I	2	
Box Elder	146	137	131	1,086	128	770	J		82 4	435 23	239 48	<u>.</u>	1	ı	ı	ı	ı	,	,	١		
Cache	181	45	•	. 1	325	17	1	ı				ا .		ı						١.		
Davis	92	7	1	ı	ı	1	ı				1			١						: 1		
Morgan	,	1	1	:		ı	1	ı							ı	l	ı		1	ı		
Rich	600	^		: 1		1	. :) .	1	,				ı	ı	ı	t			ı		
Summit	}	•	ı	ı	I	ı		1						t	1	ı	ı	ı		•		
Mark at	ı	;	ı	t	ı	ı	1	ı				1	!	1	ı	ı	ı		1	ı		
Webel	ı	1	1	,	•	ı	ı	1				!	1	1	ı	1	i		1	1		
REGIONAL TOTALS	38	263	131	1,086	132	787	1	1			239 487	1	•	1		ı	ı			1	128	525
Central Region													1								l	
Juab	ı	ı	1	ł	1	ı	,	ı	:	j	1	,	1	ı	•	1	1			1		
Salt Lake	ı	1	ı	,	,	:	1	,	,										l	I		
Sannoto									İ	·)	1			ı	ı	ı	ı		1	ľ		
Total	ı	ı	ı	ı	1	ı		ı		1	1	!		1	ı	ı	ı		1	,		
Loosie	;	ı	ı	ı	ſ	ı	ı	1	1	•	1		1	1	,	1	1		£	Ξ		
Utah	1	ı	ı	ı	ı	ı	1		Í	1				ı	ı	ı	,			: 1		
Wasatch	,	ı	1	i	ı	ı		1		1	1		1	1	ı	ı						
REGIONAL TOTALS	! :	,	1	ı	1	-														;		
Courthorn Dogion										•	4	1	2	1	ı	1	ı	,	3	ļ	:]
Bearier																						
	i	ı	ı	ı	ī	ı	1	1	:	,	1		I	ı	ı	1	,		1	1		
Garfreid	ı	ı	1	i	1	;	;	1	•	1	;	1	١	ı	:	;	ı	•	1	:		
Iron	ī	1	ı	ı	ı	ı			•	:	1	!	1	ı	:	:	ı	1	1	1		
Kane	1	1	ı	ı	ı	1	1		,	,		1	ı	!								
Millard	,	,	J	ı	: 1					·	1		1	ī	ı	ı	1			::		
Cinio Cinio	ı		ı	ı	t	ı	:			;	1	!	1	ı	ı	1						
9.50	ş	1	ı	:	ı	•	;	1	•	1		I	1	ı	ı	ı	1	1		1		
Sevier	1	ı	1	ı	1		1		•	1	1	1	ı	ı	ı	ı						
Washington	1	ı	1	ı	•	ı	1		1	1		1	1	,	ı	I	ı		1	ı		
Wayne	1	t	ı	1	1	ı	ı		1	1			1	ı	ı	ι		•				
REGIONAL TOTALS	1	1		,	ı			'	'			1		,				l		ŀ		
Northeastern Region																			1	ļ		
Daggett	ı	ı	ı			ı			,	1				1	ı							
Duchesne	ı	1	ı	ı	1		,		,			1	1	. 1	: (: 1	1 1		i :	I		
Uintah	ı	ı	,	,	ı	•	,								1	ì				ı		
REGIONAL TOTALS	1				ļ									•	,					1		
Southeastern Region								l													ı	
Carbon	t	1	ı	ı	1																	
Emery	ı	ı	25	29	8	187	2	187 B	85	37 79	43	. 2	95	£	5 2	ই	2 2	1 1		1 1		
Grand	1	1	1	1	ı																	
San Juan	ı	1	53	227	63	275																
REGIONAL TOTALS			S	294	63		l			ļ					ļ		l	l				20
LEHI CHECK STATION	701	1,391	137	1.396	L		l		l	l	Ì		ŀ			ı	1	ı				1 5
NEPHI CHECK STATION	107	1,678	45	1.137		1.004															1	200
THIOKOL CHECK STATIO				ı		1	1		-												110	245
STATE TOTALS	117	3,332	127	3.913	137 3	3.536	100	1.641 7	7 2454	124 127	7 1813				1					ľ	1	213
	Ĺ			2	l		1	Ĺ				ı					1				1	3

Hatched (Days)	Age			PERCE	PERCENT OF HARVEST	TARVES	ב הלד	お	2						•	SAMPLE SIZE	SIZE				
	S) P	1986	1987	1988	1989	1990	1991	1992	1993	1994	1996	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Aug 3 29	none	31.2	34.8	;	41.3	52.2	i	37.8	ı	53.7	56.1	192	155	:	8	264	ŀ	118	ï	22	37
Jul 31 32	-	35.0	21.8	:	30.1	26.7	ŀ	32.1	1	19.5	21.2	216	97	!	69	130	:	100	ł	00	₹
Jul 25 38	8	15.6	17.5	:	18.4	13.1	ŀ	10.9	:	8.8	9.01	96	78	1	36	64	ł	34	ł	4	7
Jul 18 45	က	چې د	10.6	i	9.6	4.3	i	9.3	ŧ	7.3	6.1	8	47	1	13	21	:	29	:	m	4
Jul 9 54	4	4.7	5.7	i	2.6	2.3	ı	4.5	ı	7.3	4.5	29	25	ı	LC	=	;	4	ı	60	n
Jun 30 63	ıo.	2.8	4.3	;	9.0	9.0	1	4.2	ł	0.0	1.5	11	19	ı	-	က	:	13	:	0	~
Jun 21 72	ဖ	1.3	3.8	ï	0.0	9.4	!	1.0	:	2.4	0.0	80	17	ı	0	7	;	က	;	-	0
Jun 8 85	7	6.5	7:	:	0.5	1	;	0.3		0.0	0.0	က	ĸ	:	-	;	ŀ	-	ı	0	0
May 22 102	80	0.3	0.2	:	0.0	ŧ	ı	:	:	0.0	0.0	7	←	;	•	;	;	:	;	•	0
Apr 27 127	on .	0.0	0.2	;	0.0	9.4	;	:	:	0.0	0.0	0	•	:	•	7	:	:	ł	•	0
Apr 21 133	9	0.0	0.0	:	0.0	0.0	:	:	ı	0.0	0.0	•	0	ı	•	ı	;	i	1	•	•
		100	100	:	5	100	1	100	1	100	100	615	445		196	487	,	312		41	99

BAND-TAILED PIGEON

Banding

Between 1969 and 1978, 2,649 total pigeons were banded in Utah and 975 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. Addition 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 1995 band-tailed pigeon harvest is in Table 13. Free hunting permits were required in 1995 and a questionnaire was sent to participants. Only 59 hunters obtained the band-tailed pigeon permit in 1995. Harvest trends since 1970 are shown in Figures 4 & 5 and Table 14.

	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Band-tailed pigeon hunter	59	+354	+40
Band-tailed pigeon harvest	121	+137	+4
Hunter-days afield	171	+533	+55
Pigeons per hunter-day	0.71	-63	-30
Pigeons per hunter	2.05	- 48	-26

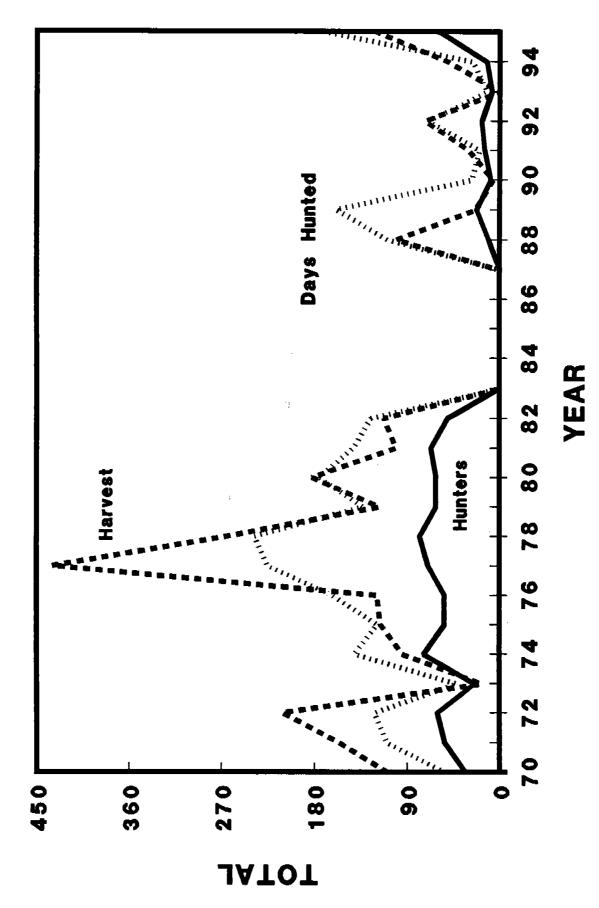
Band-tailed pigeon hunters afield increased dramatically from 1994, and was 40 percent below the long-term average.

One hundred twenty-one pigeons were reported harvested in 1995.

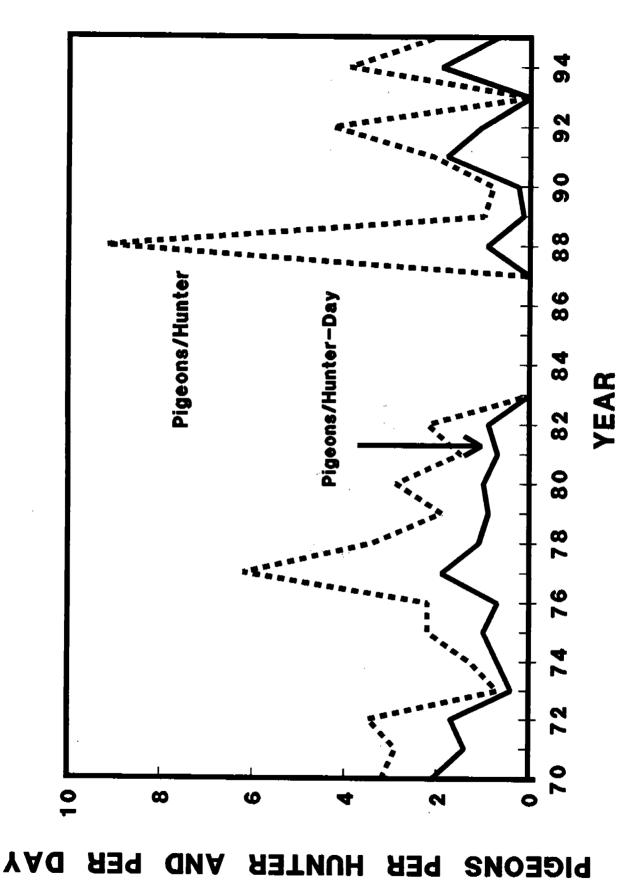
The implementation of a free hunting permit in 1995 versus a fee of \$3.00 charged for the permit in 1994 may be responsible for more hunters desiring to pursue pigeons.

Table 13. Band-tailed pigeon harvest statistics, 1995.	n harvest statistic	:s, 1995.							
	Participating	Hunters	Hunter-Days /	Affeid	Harvest	st	Pigeons/	Percent	Percent
Area Hunted	Reported	Calc.	Reported	Calc.	Reported	Calc.	Hunter-Day	Pressure*	Harvest
Beaver County	7	12	10	17	10	11	1.00	20.59	14.29
Blue Mountain-Elk Ridge	4	_	18	31	0	0	0.00	11.76	0.00
Iron County	•	7	7	ო	က	9	1.50	2.94	4.29
Kane County	4	_	18	સ	7	ಣ	0.11	11.76	2.86
LaSal Mountain	4	7	15	5 6	42	73	2.80	11.76	90.09
Washington County	_	7	ო	40	0	0	0.00	2.94	0.00
Other	13	22	33	57	13	22	0.39	38.24	18.57
Totals	34	59	66	171	20	121	0.71	100	100
*Based on hunter-days.				,					

Projection Factor = 1.72881355932 (number permits issued/number questionnaires returned)
102 PERMITS SOLD
59 QUESTIONNAIRES RETURNED



Statewide trends of band-tailed pigeon harvest statistics, 1970-95. Figure 4.



Statewide trends of band-tailed pigeon hunter success rates, 1970-95. Figure 5.

Year	Total Hunters	Total Harvest	Hunter-Days Afield	Pigeons/Hunter-Day	Pigeons/Hunter
1970	34	109	53	2.10	3.20
1971	54	156	110	1.40	2.90
1972	61	211	122	1.70	3.50
1973	25	18	42	0.40	0.70
1974	74	95	141	0.70	1.30
1975	54	116	119	1.00	2.20
1976	54	119	162	0.70	2,20
1977	70	435	226	1.90	6.20
1978	78	264	238	1.10	3.40
1979	62	117	133	0.90	1.90
1980	62	182	175	1.00	2.90
1981	67	101	142	0.70	1.50
1982	51	113	126	0.90	2.20
1983	-	-		-	
1984	-	- -	-		_
1985	_		_	_	_
1986	-		_	_	- .
1987	_	_	_	-	
1988	11	101	109	0.93	9.20
1989	23	24	159	0.15	1.00
1990	9	7	28	0.26	0.80
1991	15	31	20	1.50	2.10
1992	18	73	70	1.05	4.06
1993	8	0	13	-	_ `
1994	13	51	27	1.92	3.92
1996	59	121	171	0.71	2.05
Totals			··· ·· · · · · · · · · · · · · · · · ·		
(1970-95)	902	2,444	2,384		_
Averages			- ,		•
(1970-94)	42	116	111	1.02	2.76

CHUKARS

CHUKAR PARTRIDGE

SUMMARY



The winter of 1993-94 was mild throughout Utah. Over winter survival of chukar brood stock should have been good.

Late winter and early spring precipitation, critical to successful chukar production, was above normal.

Results of the brood survey indicated that brood production was below average. However, sample sizes were extremely small and probably represent localized conditions.

Harvest statistics from the general mail questionnaire reflected an increased harvest by 8 percent more hunters than in 1994. Hunter success (chukars per hunter-day) increased 2 percent from 1994 while time afield increased 10 percent.

In 1993, the Springville Game Farm was closed. Prior to 1993, operations at the farm provided approximately 4,000 chukars annually that were released into various areas of Utah to supplement and establish populations.

Also in 1993, the "Day-Old Chukar Chick Program" was eliminated. In addition to birds raised at the Springville Game Farm, this program provided another 1,000-2,000 birds annually for release into the wild.

Brood Counts

Results of the annual random brood survey for 1995 are shown in Table 1 of this section. Long-term trends of young per adult ratios, mean brood size and chukars observed per 100 hours are found in Tables 2-4 and Figure 1. Following are the survey results for 1995 compared to 1994 and the 10-year (1985-94) average:

	<u>1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Total chukars observed	158	-22	-66
Young per 100 adults	285	-39	-35
Mean brood size			
Chukars observed per 100 hours			
Total hours effort			

Winter and early spring precipitation (January-April) was above average over the entire state (Figure 4). Summer temperatures were below normal over most of Utah from April through July.

Effort on chukar brood counts decreased significantly in 1995 and remained well below average.

Brood count sample sizes were extremely small or nonexistent for most regions. Brood count data was reported only in the Southeastern Region. Because of extremely small sample sizes, this data can only represent localized population trends.

Harvest

Hunter Questionnaire

Results of the hunter questionnaire survey for 1995 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 and Figures 2 and 3. Following is a comparison of 1995 harvest statistics to 1994 and the previous 37-year average:

	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Chukar hunters	9,097	+8	-34
Chukars harvested	20,954	+12	-45
Hunter-days afield	31,140	+10	-25
Chukars per hunter-day	0.67	+2	-25
Chukars per hunter	2.30	+4	-15

Ninety percent confidence interval for overall chukar harvest is +/- 2,515.17. Standard deviation is 1.155777.

Chukar hunters and hunter effort increased from 1994. Chukars per hunter-day increased slightly from 1994, but remains 25 percent below the long-term average. Total harvest increased 12 percent in 1995. The Northern Region had the highest percentage of the harvest (31%) in 1995, and the Central Region had the highest percentage of hunter pressure (37%).

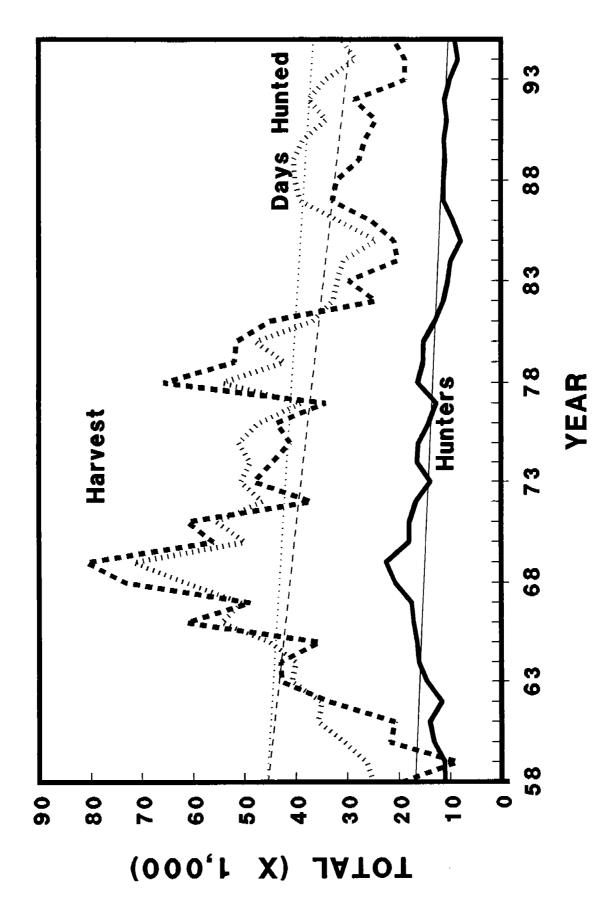
Field Bag Checks

A summary of field bag check data for 1995 is shown in Table 10. The hunter success trend determined via this method are shown in Table 11 and Figure 5. Data for the 1995 season compared to 1994 and the 10-year (1985-94) average follow:

	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Total hunters checked	64	+814	~ 57
Total hours hunted	289	+1,214	-63
Chukars per hunter (complete hunts)	2.08	-34	+51
Chukars bagged per 100 hours (complete hunts)	46	-55	+19
Average hours per hunter-day	-	•	
(complete hunts)	4.52	+44	+5
Hours hunted per chukar bagged (complete hunts)	2.17	+117	-81

Field bag check data was collected in the Central and Southeastern Regions. Sample sizes are too small to draw any meaningful conclusions.

CHUKAR PRODUCTION ES, 1967-95. FIGURE1. 0 2 CHU/100H YNG/100A



Statewide trends of chukar partridge harvest statistics, 1958-95. Figure 2.

YAG

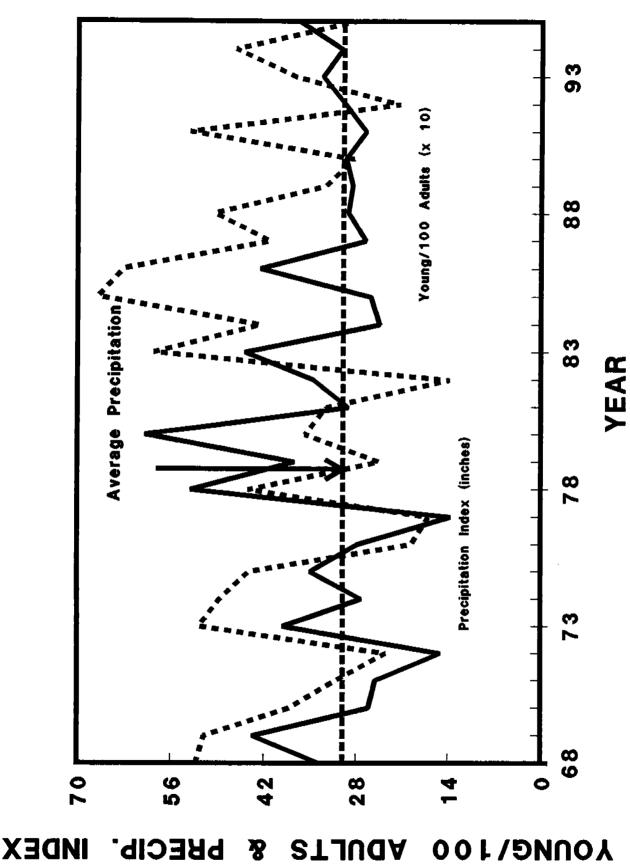
PER

QNA

Statewide trends of chukar hunter success rates, 1958-95. Figure 3.

CHNKARS

PER



early spring 1968-95. winter and production, Figure 4. Relationship between late (Jan.-April) precipitation and chukar

CHUKAR FIELD BAG CHECK IDICES, 1966-95. INDICES, FIGURES. CHU/100H **СНU/НИТВ**

Region and		Distinct Broods	∞ بـ	Mean	Mixed Young & Adults		Adults w/o	Total	Total	Total	Young/	Vehicle		Hours	Hours of Effort	+	Birds/
County	**	Adults	Adults Young	Brood	Adults Young		Young	Adults		w	=	Miles	Vehicle		Walk	Total	100 Hr
Northern Region			i														
Box Elder	:	:	;	ı	1	ŀ	ł	i	ŀ	:	:	:	:	:	:	1	:
Cache	!	:	i	!	ŀ	i	ŀ	:	i	ļ	:	:	ì	:	:	1	:
Davis	:	:	ł	ı	ı	;	1	;	i	:	:	i	;	ŀ	1	:	ı
Morgan	ŀ	ŀ	i	١	1	;	ł	:	ŀ	:	1	·	i	1	ł	1	:
Rich	1	:	:	ł	ŀ	:	ł	ï	ŧ	;	:	:	1	ł	:	1	;
Summit	1	:	1	ì	:	;	:	1	i	:	ł	:	ı	1	ł	1	:
Weber	:	į	;	:	:	:	i	;	:	;	:	;	ŧ	:	1	:	:
REGIONAL TOTALS	1	:	;	:	!	;		;	;	1	1		i	ŀ	;	;	:
Central Region																	
Juab	!	:	:	}	:	;	;	i	ł	:	:	į	;	;	1	1	l
Salt Lake	:	:	:	ì	i	;	;	:	;	:	1	;	i	ı	}	1	:
Sanpete	:	ŧ	ŧ	1	i	;	ł	;	;	1	1	:	;	i	1	i	:
Tooele	;	ŀ	ł	i	:	;	1	:	ł	;	ŀ	;	:	į	:	;	;
Utah	į	:	i	ŀ	ŀ	:	ŀ	;	;	!	!	;	;	1	;	i	;
Wasatch	:	:	1	;	:	:	:	:	:	:	:	;	1	ŧ	1	ŀ	į
REGIONAL TOTALS	1	1	:	:	:	}	:	ł	1	1	ŀ	i	ī	:	;	ı	1
Southern Region																	
Garfield	: :	1 :	: :	: :	: :	: :	1 :	: :	: :	} ;	1	: :	: :	;		i	i
Iron	: 1	: 1			1	:	1	:	:		: :	: :		1	: :	: :	: 1
Kane	ł	ŀ	ŀ	ł	:	:	;	:	:	1	;	ŀ	:	;	;	:	:
Miltard	!	;	ì	;	;	:	ì	:	i	;	ŀ	;	ŀ	i	:	:	:
Piute	:	;	:	;	ŧ	1	1	ŧ	:	;	;	:	:	ï	ŀ	ı	:
Sevier	1	ŧ	:	;	. !	;	ı	:	I	ı	;	:	ı	ı	;	1	:
Washington	:	;	ī	i	;	ŀ	:	ŀ	ï	i	i	ŀ	:	:	:	:	:
Wayne	ı	1	ì	:	i	:	ï	:	ı	:	:	·	:	1	:	:	1
REGIONAL TOTALS	!	! ! !	;	1	:	;	1	:		:	:	:	;	:	:	:	:
Northeastern Region																	
Daggett	i	1	:	ı	;	:	ı	;	:	1	i	1	í	:	:	ŧ	:
Duchesne	!	:	;	1	ì	;	:	ı	ł	ł	ł	;	1	;	:	;	ŀ
Uintah	1	1	1	:	;	;	1	:	ŧ	•	:	:	I	1	:	:	;
REGIONAL TOTALS	!	:	:	1	:	;	:	ŧ	:	1	\$	1	:	:	:	I	:
Southeastern Region																	
Carbon	!	ŀ	ŀ	1	ŀ	ŀ	;	:	:	:	:	ï	1	i	:	i	:
Emery	;	:	:	ı	1	;	:	!	:	ī	1	ï	ŧ	:	;	ï	ı
Grand	:	:	ţ	ı	4	14	0	₹	117	158	282	i	:	·	:	ı	ı
San Juan	:	:	1	1	:	:	1	ı	:	1	1		1	1	:	1	!
REGIONAL TOTALS	;	:	1	:	41	117	0	4	117	158	285	1	ŀ	:	:	:	:
									֡								

		4000
	Year	4000 4000 4000 4000 4000 4000 4000
		4000
		0007
5.		4000
its, 1985-9		1001
per 100 adults, 1985-95.		4000
r young p		4007
Table 2. Trend of chukar young per 100 adults, 1985-95.	Region and	

Region and							Year					Average
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1986-94
Northern Region	,											
Box Elder	4,200	700	283	136	1	ł	;	1	i	:	:	
Cache	. !	:	820	300	1	848	;	;	ı	;	;	
Davis	:	·	54	:	ì	400	ł	300	:	:	:	
Morgan	ł	:	!	1	:	:	:	i	;	ì	:	
Rich	:	:	:	:	:	:	ı	1	;	ļ	:	
Summit	;	:	:	ŀ	:	:	i	:	1	;	1	
Weber	;	!	:	;	:	1	1	:	;	1	1	
REGIONAL TOTALS	4,200	999	125	117		675	:	46	!		:	121
Central Region												
Juab	:	739	009	462	120	287	367	1,000	;	:	!	
Salt Lake	;	:	;	ł	:	;	ŀ	, :	:	;	:	
Sanpete	;	ł	!	ŀ	!	:	1.000	767	ł	ł	ŀ	
Tooele	550	266	535	484	263	157	4	300	:	ł	:	
Utah	300	١	875	;	472	;	1,200	ł	;	:	:	
Wasatch	;	:	1	:	1	1	1	:	1	ŀ	;	
REGIONAL TOTALS	457	642	591	468	240	566	533	650	1	ı	;	481
Southern Region				i								
Beaver	;	:	ı	1	;	:	1	ì	1	ı	!	
Garfield	ı	125	1	:	ŀ	!	ı	1	:	;	:	
Iron	:	:	:	ł	:	;	ŀ	1	ł	i	ł	
Kane	:	t	:	:	ì	ł	:	:	ŀ	;	1	
Millard	:	:	ì	220	927	:	:	1	:	ŀ	:	
Piute	;	ı	370	:	;	;	:	:	;	i	!	
Sevier	:	i	:	1	:	:	:	:	;	:	;	
Washington	:	:	:	ı	:	1	:	:	:	ŀ	:	
Wayne	;	ì	:	:	:	;	:	ı	;	:	;	
REGIONAL TOTALS	; ; ;	125	370	220	927	:	:	:			:	493
Northeastern Region										,		
Daggett	:	:	0	:	ı	:	:	:	i	1	1	
Duchesne	ì	:	0	;	:	:	1	;	;	ì	;	
Uintah	:	i	267	:	:	i	ŀ	i	i	ı	;	
REGIONAL TOTALS	1	:	267	:	:	:	1	ı	ı	ı	;	267
Southeastern Region												
Carbon	ı	1,300	1,014	009	:	:	ı	;	:	1	:	
Emery	:	ı	500	1	1	243	ı	156	533	1	;	
Grand	730	730	673	621	64	0	;	200	368	464	286	
San Juan	!	:	;	1,	200	1	1	900	;	ı	:	
REGIONAL TOTALS	408	287	631	620	93	131	1	195	373	464	286	376
STATE TOTALS	670	631	411	496	327	285	633	215	373	464	285	441

Table 3. Trend of average brood size for chukars, 1985-95.

Region and						1						Operation of
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region												10001
Box Elder	9.00	;	8.50	7,50	;	ï	1	:	;	:	:	
Cache	i	1	i	6.00	:	13.50	ı	;	ŀ	:	i	
Davis	i	:	ł	ţ	14.00	12.00	ı	3.00	i	:	:	
Morgan	;	ł	ł	ł	7,00	:	ı	ł	i	:	ŧ	
Rich	ł	1	:	i	;	:	1	I	:	ŀ	í	
Summit	:	1	!	1	1	;	ı	:	:	ł	ı	
Weber	ı	!	:	:	;	;	ł	!	:	1	ï	
REGIONAL TOTALS	9.00	:	8.50	7.00	10.50	13.00	:	3.00	:	1		B.50
Central Region												
Juab	!	7.45	8.00	6.75	5.50	4.30	:	10.00	ŀ	i	:	
Salt Lake	!	:	1	:	1	ł	;	;	;	ł	:	
Sanpete	I	ï	:	:	t	}	10.00	;	;	i	:	
Tooele	8,43	7.86	8.00	7.43	6,40	3,40	5.50	. 1	;	;	;	
Utah	10.00	i	10.50	1	3.00	:	12.00	ŀ	1	:	ł	
Wasatch	ŀ	į	;	;	1	1	ŀ	;	i	;	ï	
REGIONAL TOTALS	8,63	7.69	8.23	7.07	5.00	3.60	7.33	10.00	:	1		7 19
Southern Region												
Beaver	1	:	:	ł	I	ì	:	ì	;	ı	,	
Garfield	;	2.00	:	:	ı	ı	ì	ì	:		;	
Iron	ı	:	:	1	:	ı	;	:	;	ì	i	
Kane	;	1	ł	ŧ	:	;	:	:	;	ı	i	
Millard	1	:	:	7.75	7.50	:	:	:	;	i	:	
Piute	ı	:	2.00	ł	;	:	:	;	•	ı	ł	
Sevier	:	:	ŧ	į	:	1	í	:	:	:		
Washington	1	:	ı	:	:	:	:	:	:	ı	ŧ	
Wayne	:	ï	i	:	1	i	i	;	:	:	:	
REGIONAL TOTALS	I	:	5.00	7.75	7.50	:	:	:		:	:	6.75
Northeastern Region												
Daggett	:	;	:	ļ	1	ŀ	:	:	:	ï	;	
Duchesne	ļ	:	1	ł	i	ì	;	ŀ	ı	ı	:	
Uintah	!	:	10.00	ŀ	;	;	;	!	ı	ł	:	
REGIONAL TOTALS	:	:	10.00	1	:	;	:	1	:	:	•	10.00
Southeastern Region												
Carbon	1	12.50	29.6	6.00	:	;	;	;	:	:	1	
Emery	5.00	1	2.00	į	:	8.50	;	18.00	3.33	:	·	
Grand	9.00	;	8.57	9.11	1.00	:	:	4.00	8.00	10,67	ı	
San Juan	:	3	-	:	4.00	1	:	9.00	:	:	i	
REGIONAL TOTALS	7.67	10.40	8.25	8.95	2.50	8.50	1	10.33	29.9	10.67	:	8,10
STATE TOTALS	8.46	8.13	7.93	8.00	5.65	5.50	7.33	7.83	5.67	10.67	;	7.52

Region and												
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region					1							
Box Elder	239	168	40	236	:	;	!	30	;	:	;	
Cache	;	:	83	35	ł	294	:	67	:	:		
Davis	:	22	313	200	250	333	:	160	;	:	ŧ	
Morgan	:	ı	:	ŀ	200	i	1	:	;	;	i	
Rich	:	:	;	ł	!	ŀ	!	:	;	;	;	
Summit	i	I	:	1	:	;	ŀ	:	;	ı	:	
Weber	:	:	ł	;	:	:	:	!	;	:	;	
REGIONAL TOTALS	155	102	91	111	135	295	;	7.0	1	:		137
Central Region												
Juab	ì	2,611	850	913	200	229	200	122	ŀ	1	:	
Salt Lake	ŀ	. 1	ł	:	:	ı	1	! :	:	;	;	
Sanpete	1	1	:	:	;	i	733	2 600	;	ı	. !	
Tooele	681	1.046	1.123	653	314	365	475	400	1	;		
Utah	878	, ,	1,950	:	2,100	i	1,300	1	ı	ł	:	
Wasatch	:	ŀ		i	. 1	i	. •	;	i	!	i	
REGIONAL TOTALS	542	1,424	844	822	623	281	434	375		:	:	899
Southern Region												
Beaver	i	:	1	ŀ	:	ŀ	;	:	;	:	i	
Garfield	i	!	í	;	:	ŀ	1	1	ŀ	:	:	
Iron	i	1	:	:	:	1	1	:	:	ŀ	;	
Kane	1	:	:	:	:	ŀ	:	ł	ł	i	;	
Millard	i	ŀ	:	1,486	1,596	:	!	:	:	ŀ	;	
Piute	:	:	1,567		1	ì	ı	;	;	ł	:	
Sevier	:	:	;	ï	ı	ì	;	:	;	ŀ	;	
Washington	ŧ	;	;	i	1	:	;	;	;	:	ŧ	
Wayne	:	;	;	i	;	:	;	:	;	;	;	
REGIONAL TOTALS		1	1,567	1,486	1,596	:	:	:	:	:		1,550
Northeastern Region												
Daggett	:	;	i	1	:	;	:	;	i	;	;	
Duchesne	;	ŀ	;	;	;	ŀ	;	:	ŧ	:	i	
Uintah	i	•	826	1	;	1	;	;	:	:	;	
REGIONAL TOTALS	:	0	241	:	:	1	;	:	:	:	:	121
Southeastern Region												
Carbon	ŧ	i	7,800	350	1	ŀ	1	i	;	;	:	
Emery	833	;	771	:	i	480	:	511	158	;	:	
Grand	424	2,075	1,167	3,983	240	29	:	5	4,350	3,691	:	
San Juan	;		:		225	;	:	200	. :	. :	;	
REGIONAL TOTALS	530	2,075	1,335	3,293	225	150	1	258	2.064	3,691		1.513
	000	000)

Table 5. Summary of chukar hunter success and distribution of harvest and hunting pressure by region and county, 1995.

REGION AND COUNTY	SAMPLE I SIZE*	iunter-days Apield	BIRDS BAGGED	BIRDS PER HUNTER-DAY	% OF PRESSURE	% OF HARVEST
NORTHERN REGION						
Box Elder	111	5,384	6,006	1.12	17.29	28.66
Cache	24	1,185	311	0.26	3.81	1.48
Davis	4	116	19	0.17	0.37	0.09
Morgan	4	116	0	0.00	0.37	0.00
Rich	1	19	0	0.00	0.06	0.00
Summit	3	58	0	0.00	0.19	0.00
Weber	10	485	233	0.48	1.56	1.11
REGIONAL TOTALS	157	7,367	6,570	0.89	23.66	31.36
				•	20.00	
CENTRAL REGION						
Juab	38	1,963	1,146	0.58	6.30	5.47
Salt Lake	7	272	213	0.79	0.87	1.02
Sanpete Tooele	14 83	1,632	485	0.30	5.24	2.32
Utah	71	4,276 3,304	2,468 2,060	0.58 0.62	13.73	11.78
Wasatch	3	116	2,080	0.33	10.61 0.37	9.83 0.19
	_			0.55	0.37	0.19
REGIONAL TOTALS	216	11,565	6,414	0.55	37.14	30.61
SOUTHERN REGION						
Beaver	10	1,166	388	0.33	2 75	1 06
Garfield	4	311	388	0.33 0.00	3.75 1.00	1.86 0.00
Iron	ĺ	38	19	0.50	0.12	0.00
Kane	1	116	38	0.33	0.37	0.19
Millard	26	1,496	1,069	0.71	4.81	5.10
Piute	9	427	194	0.45	1.37	0.93
Sevier	35	4,062	1,088	0.27	13.05	5.19
Washington	2	19	19	1.00	0.06	0.09
Wayne	5	252	38	0.15	0.81	0.19
REGIONAL TOTALS	93	7,891	2,857	0.36	25.34	13.64
NORTHEASTERN REGIO	N					
Daggett	0	0	0	0.00	0.00	0.00
Duchesne	17	796	1,107	1.39	2.56	5.29
Uintah	19	738	1,088	1.47	2.37	5.19
REGIONAL TOTALS	36	1,535	2,196	1.43	4.93	10.48
COTTUE ACTEDNING OF	™		•			****************
SOUTHEASTERN REGIO	N 7	272	104	0.71	0.07	
Emery	23	1,496	194 1,438	0.71 0.96	0.87 4.81	0.93
Grand	15	680	874	1.29	2.18	6.86 4.17
San Juan	2	38	155	4.00	0.12	0.74
DECTANAL MARKET	47	8 28 8	* ***			
REGIONAL TOTALS	47	2,488	2,663	1.07	7.99	12.71
Unknown	5	291	252	0.87	0.94	1.21
STATE TOTALS	554	31,140	20,954	0.67	100 00	100.00
SINIE IVINES	204	31,140	20,554	0.67	100.00	100.00

^{*}Total hunter trips from questionnaire returns.

Table 6. Summary of chukars bagged per hunter-day by region and county, 1988-95.

Posise and				Vann				
Region and	1988	1989	1990	<u>Year</u> 1991	1992	1993	1994	1995
Councy	1700	1707	1770	1//1	1772	1770		1773
Northern Region								
Box Elder	0.63	0.54	0.89	0.78	0.86	0.37	0.72	1.12
Cache	0.58	0.73	0.51	0.37	0.89	0.28	0.03	0.26
Davis	1.65	0.42	0.79	0.76	0.38	0.25	0.21	0.17
Morgan	1.08	0.56	0.71	0.54	0.41	0.20	1.19	0.00
Rich	1.43	0.70	1.67	0.32	0.33	0.17	0.00	0.00
Summit	0.68	0.20	2.14	0.14	0.33	0.36	0.67	0.00
Weber	0.45	1.07	0.73	0.84	0.66	0.62	0.14	0.48
REGIONAL TOTALS	0.69	0.58	0.82	0.69	0.76	0.36	0.61	0.89
	nnonnonnonnoninananni			***************************************	***************************************	v000.00.00.00.00.00.00.00.00.00.00.00.00	innanannen et	200000000000000000000000000000000000000
Central Region								
Juab	0.90	0.66	0.73	0.87	0.77	0.50	0.94	0.58
Salt Lake	0.69	1.05	1.16	1.68	1.08	1.30	0.58	0.79
Sanpete	1.26	1.06	1.35	0.83	0.77	0.76	0.58	0.30
Tooele	0.82	0.69	0.77	0.70	0.76	0.41	0.65	0.58
Utah	0.64	0.78	0.67	0.79	0.65	0.53	0.84	0.62
Wasatch	1.00	0.60	0.67	0.50	0.32	1.64	0.43	0.33
REGIONAL TOTALS	0.83	0.78	0.81	0.79	0.73	0.54	0.72	0.55
Southern Region	A 3E	0.50	0.40	0.67	0.00	0.40		
Beaver	0.35	0.50	0.42	0.67	0.28	0.48	0.04	0.33
Garfield	1.13	0.63	0.00	2.50	0.00	1.33	1.78	0.00
Iron	0.00	0.00	0.25	0.18	0.44	0.00	0.80	0.50
Kane	0.00	0.00	0.00	1.50	0.00	0.29	0.00	0.33
Millard	0.95	0.57	0.62	0.55	1.35	0.51	0.55	0.71
Piute	0.30 0.67	0.54	0.29	1.00	0.18	0.39	0.20	0.45
Sevier	0.00	0.47	0.51	0.72	0.67	0.48	0.38	0.27
Washington	1.83	0.00 0.27	0.00	0.00 1.80	0.00 0.20	1.82 0.27	0.00	1.00
Wayne REGIONAL TOTALS	0.72	0.50	0.45	0.68	0.73	0.27	2.33 0.43	0.15 0.36
ABSICIAD 101ALD				0.00		****		0.30
Northeastern Region								
Daggett	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Duchesne	2.12	0.73	0.27	0.19	1.86	0.51	0.74	1.39
Uintah	0.69	2.14	0.09	0.79	0.75	0.38	0.00	1.47
REGIONAL TOTALS	1.42	1.81	0.17	0.38	0.95	0.52	0.43	1.43
***************************************	AMOUNTANA AND AND AND AND AND AND AND AND AND		****************	*****************	000000000000000000000000000000000000000	M4444444444444444444444444444444444444		5000000000000000000
Southeastern Region								
Carbon	1.29	0.42	0.16	0.46	1.25	0.56	0.80	0.71
Emery	0.95	0.29	0.50	0.43	0.88	0.41	0.63	0.96
Grand	1.26	0.92	0.56	0.38	3.40	1.61	1.83	1.29
San Juan	0.50	0.00	0.00	0.50	0.00	0.00	0.20	4.00
REGIONAL TOTALS	1.03	0.50	0.39	0.44	1.24	1.14	0.97	1.07
Unknown Counting	0.00	1 00	0.00	0.00	0.00	1 06	0.00	0.07
Unknown Counties	0.00	1.00	0.00	0.00	0.20	1.06	0.00	0.87
STATE TOTALS	0.80	0.68	0.69	0.72	0.76	0.55	0.66	0.67

Table 7. Percentage distribution of chukar harvest by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Nasthana D. P								
Northern Region	40.45							
Box Elder	10.15	13.21	18.42	23.43	17.49	8.00	15.59	28.66
Cache	2.29	4.05	4.43	1.93	4.73	2.23	0.09	1.48
Davis	1.71	0.83	0.85	1.57	1.56	0.20	0.47	0.09
Morgan	0.67	1.43	0.93	1.36	0.93	0.61	2.35	0.00
Rich	0.52	0.53	1.17	0.64	0.19	0.10	0.00	0.00
Summit	0.88	0.08	1.17	0.14	0.06	0.91	0.19	0.00
Weber	0.26	1.13	1.48	1.93	1.31	2.63	0.19	1.11
REGIONAL TOTALS	16.51	21.25	28.44	31.00	26.26	14.68	18.87	31.36
Central Region								
Juab	7.18	5.33	5.13	8.57	6.97	5.57	4.41	5.47
Salt Lake	1.87	3.15	2.87	3.00	5.10	3.04	1.31	1.02
Sanpete	7.96	9.83	8.08	6.07	4.73	7.19	5.63	2.32
Tooele	24.63	19.67	28.21	15.29	17.67	14.17	17.28	11.78
Utah	9.06	15.09	10.26	16.86	15.99	10.93	20.09	9.83
Wasatch	0.20	0.23	0.16	0.93	0.37	2.33	0.28	0.19
REGIONAL TOTALS	50.93	53.30	54.70	50.71	50.84	43.22	49.02	30.61
	******************************	•		***************	*******************************			***************************************
Southern Region								
Beaver	1.09	1.05	2.18	3.00	0.44	1.11	0.09	1.86
Garfield	0.46	0.75	0.00	0.36	0.00	1.62	1.50	0.00
Iron	0.00	0.00	0.31	0.14	0.25	0.00	0.38	0.09
Kane	0.00	0.00	0.00	0.21	0.00	0.40	0.00	0.19
Millard	8.22	4.65	3.11	3.21	5.48	4.96	3.47	5.10
Piute	0.52	1.13	0.85	1.00	0.19	0.91	0.75	0.93
Sevier	8.80	5.26	4.74	5.79	7.47	9.31	6.95	5.19
Washington	0.00	0.00	0.00	0.00	0.00	2.02	0.00	0.09
Wayne REGIONAL TOTALS	0.57 19.68	0.30	0.00	0.64 14.36	0.06	0.30	0.66	0.19
REGIONAL ICIALS	13.00	13.14	11.19	14.30	13.88	20.65	13.80	13.64
Northeastern Region								
Daggett	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00
Duchesne	1.87	0.60	0.78	0.43	0.81	2.23	1.30	5.29
Uintah	0.57	5.78	0.16	0.79	1.49	0.30	0.00	5.19
REGIONAL TOTALS	2.44	6.38	0.93	1.21	2.30	2.83	1.31	10.48
Cauthacatam Dagian	uuu ononnoonaanaanahhiilissa				neen teknes ken et in 1990 on in		annoneroninenteletet (1000pt 1000)	
Southeastern Region	0 00		0.60	0.06				
Carbon	0.93 7.18	1.13	0.62	0.86	1.87	0.91	3.38	0.93
Emery	2.23	1.35	3.73	1.14	2.68	1.52	5.26	6.86
Grand			0.39			12.55		4.17
San Juan	0.05	0.00			0.00	0.00	0.09	0.74
REGIONAL TOTALS	10.41	5.18	4.74	2.70	0.65	14.98	17.00	12.71
Unknown Counties	0.00	0.75	0.00	0.00	0.06	3.64	0.00	1.21
CMAME MOMATE	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 8. Percentage distribution of chukar hunting pressure by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Newhern Design								
Northern Region Box Elder	12 05	16 50	14 10	01 53	15 40			
Cache	12.95 3.16	16.59	14.18	21.53	15.42	12.02	14.18	17.29
Davis	0.83	3.80 1.34	5.94 0.75	3.73 1.48	4.03 3.13	4.40 0.45	1.80	3.81
Morgan	0.49	1.75	0.75	1.79	1.76	1.67	1.49 1.30	0.37 0.37
Rich	0.29	0.51	0.48	1.43	0.43	0.33	0.74	0.06
Summit	1.04	0.26	0.37	0.72	0.14	1.39	0.19	0.19
Weber	0.45	0.72	1.39	1.64	1.52	2.34	0.87	1.56
REGIONAL TOTALS	19.24	24.96	24.02	32.33		22.59	20.56	23.66
Central Region								
Juab	6.41	5.55	4.87	7.06	6.93	6.18	3.10	6.30
Salt Lake	2.16	2.05	1.71	1.28	3.61	1.28	1.49	0.87
Sanpete	5.03	6.37	4.12	5.27	4.70	5.18	6.44	5.24
Tooele	24.07	19.62	25.25	15.70	17.84	19.20	17.52	13.73
Utah	11.32	13.20	10.59	15.24	18.88	11.41	15.73	10.61
Wasatch	0.16	0.26	0.16	1.33	0.90	0.78	0.43	0.37
REGIONAL TOTALS	49.18	47.05	46.71	45.88	52.85	44.02	44.71	37.14
Southern Region								
Beaver	2.49	1.44	3.53	3.22	1.19	1.28	4.12	3.75
Garfield	0.33	0.82	0.59	0.10	0.28	0.67	0.56	1.00
Iron	0.00	0.36	0.86	0.56	0.43	0.11	0.31	0.12
Kane	0.00	0.00	0.05	0.10	0.00	0.78	0.06	0.37
Millard	6.95	5.60	3.48	4.19	3.08	5.34	4.15	4.81
Piute	1.37	1.44	2.03	0.72	0.81	1.28	2.48	1.37
Sevier	10.53	7.60	6.37	5.73	8.49	10.57	12.20	13.05
Washington	0.00	0.00	0.27	0.20	0.05	0.61	0.00	0.06
Wayne	0.24	0.77	0.05	0.26	0.24	0.61	0.19	0.81
REGIONAL TOTALS	21.94	18.03	17.23	15.09	14.56	21.26	21.36	25.34
Northeastern Region		٠						
Daggett	0.00	0.00	0.59	0.00	0.00	0.17	0.00	0.00
Duchesne	0.70	0.56	1.98	1.59	0.33	2.39	1.18	2.56
Uintah	0.66	1.85	1.18	0.72	1.52	0.45	0.62	2.37
REGIONAL TOTALS	1.37	2.41	3.75	2.30		3.01	1.80	4.93
Southeastern Region			www.mecomonicoscoccijii(i)		***************************************			
Carbon	0.58	1 05	2 60	1 22	,	0.00		
		1.85	2.68	1.33	1.14	0.89	2.79	0.87
Emery	6.03	3.18	5.14	1.89	2.32	2.06	5.51	4.81
Grand San Juan	1.41 0.08	2.00 0.00	0.48 0.00	0.66	0.47 0.14	4.29	2.97	2.18
REGIONAL TOTALS	8.11	7.04	8.29	0.51 4.40	4.08	0.00 7.23	0.31 11.58	0.12 7. 99
Unknown Counties	0.12	0.51	0.00	0.00	0.24	1.89	0.00	0.94
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 9.	Statewide summar	y of chukar	partridge harvest	statistics.	1958-95.

	Total	Total	Hunter-Days	Chukars Per	Chukars Per
Year	Hunters	Harvest	Afield	Hunter-Day	Hunter
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, 9 06	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
1977	12,691	34,155	38,873	0.88	2.69
1978	16,291	65,747	54,239	1.21	4.04
1979	15,210	51,918	42,254	1.23	3.41
1980	15,100	51,511	47,778	1.08	3.41
1981	12,907	44,983	36,662	1.23	3.49
1982	11,326	24,460	32,691	0.75	2.16
1983	10,418	29,649	31,904	0.93	2.85
1984	9,846	20,179	30,715	0.66	2.05
1985	7,930	20,938	24,346	0.86	2.64
1986	9,397	25,346	31,672	0.80	2.70
1987	11,276	32,848	39,099	0.84	2.91
1988	11,237	32,057	40,088	0.80	2.85
1989	10,910	27,628	40,384	0.68	2.53
1990	11,195	26,486	38,463	0.69	2.37
1991	10,577	24,355	34,010	0.72	2.30
1992	11,125	28,599	37,463	0.76	2.57
1993	10,128	18,774	34,147	0.55	1.85
1994	8,455	18,721	28,389	0.66	2.21
1995	9,097	20,954	31,140	0.67	2.30
Totals					
(1958-95)	505,419	1,400,011	1,529,543		_
Averages					
(1958-94)	13,805	38,369	41,699	0.89	2.70

		All Hunts	ınts					Complete Hunts	e Hunts		
Region and County	Total Parties	Total Hunters	Total Hours	Totai Birds	Birds/ 100 Hr	Complet Hunts	t Total Hunters	Total Hours	Total Birds	Birds/ 100 Hr	Błrds/ Hunter
Northern Region											
Box Elder	ı	1	:	ı	ŀ	1	1	1	;	:	:
Cache	i	ı	ì	:	ŀ	:	ı	:	:	:	;
Davis	:	1	1	:	ŧ	:	ŀ	;	ł	:	ì
Morgan	:	1	ı	ı	:	:	ı	:	ŀ	:	1
Rich	1	ı	;	ľ	;	:	ſ	:	ı	:	ł
Summit	:	1	ŀ	ı	;	;	;	;	ł	ı	:
Mohor											
Webel	1	1	•		:	•	i	•		•	•
Application Design	:	:	:	:	:	:	:	:	:	:	:
Central Region											
Juab	ŀ	;	1	:	1	I	1	;	:	1	1
Salt Lake	:	ì	1	:	;	1	:	1	:	ł	1
Sanpete	1	;	:	:	ł	!	ł	:	!	:	1
Tooele	1	;	:	;	1	ı	;	;	ŧ	1	ł
Utah	7	<u>6</u>	99	G	16	ĸ	12	49	đ	48	0.75
Wasatch	ł	;	:	ł	ŀ	ł	ı	ı	:	:	;
REGIONAL TOTALS	-	6	26	6	16	ıcı	12	67	6	18	0.75
Southern Region						,					
Deaver	:	:	}	i	:	1	I	ŀ	:	ı	I
Garrierd	:	!	ŀ	ł	:	}	ŀ	:	ŧ	ı	:
Iron	:	!	ŀ	ł	!	ł	!	1	:	ŀ	!
Kane	!	ł	ı	:	;	1	;	ŀ	:	:	ŀ
Millard	i	:	1	:	:	;	1	1	:	1	:
Plute	ì	1	ł	:	1	1	1	;	:	:	;
Sevier	ł	:	ł	:	;	;	ŀ	ł	ŀ	:	ŀ
Washington	ł	:	:	1	;	:	1	ŧ	;	1	;
Wavne	ŀ	ł	ŀ	;	ł	1	1	!	•	:	:
REGIONAL TOTALS	;	1				;		1			:
Northeastern Region						}					
Daquett	:	1	;	í	ŀ	ŀ	ŀ	:	ŀ	ı	;
Duchesne	ł	:	;	ł	i	í	ŀ	;	ł	:	:
Uintah	;	:	;	i	ŀ	1	:	:	ŀ	:	:
REGIONAL TOTALS	:	1	:	i	:	1	;	:		!	:
Southeastern Region											
Carbon	:	:	:	1	;	;	:	:	;	:	;
Emerv	15	33	137	06	99	<u>.</u>	33	137	6	99	2.73
Grand	2. 2	2	233	8 8	30	ć	5 5	103	2		1 79
San luan	i	;	}	2	;	2 :	2	2		3	•
PEGIONAL TOTALS	2	2	27.0	180	9	36	54	076	164	2	0, 0

1897 1892	1990		1991		1992		1993		1994		1995	
Region and County	Birds/ 100 Hr	Birds/ Hunter										
Northern Region												
Box Elder	133	6.9	:	ı	ı	:	;	:	;	;	1	!
Cache	1	:	ı	:	1	ï	;	:	:	1	i	;
Davis	ŀ	1	1	ł	ì	:	ì	:	;	ı	i	ŀ
Morgan	1	ł	ı	ł	:	ŀ	:	:	:	í	:	ŧ
Rich	;	ŀ	ļ	ŀ	:	:	;	ł	:	1	:	1
Summit	ł	;	i	ľ	:	:	ŀ	ŀ	ŀ	ŀ	ì	:
Weber	ı	ŀ	1	ł	:	:	ŀ	ł	,	i	i	ł
REGIONAL TOTALS	133	4.00		;	:	1	,	:	:	:	;	1
Central Region							i				i	
Juab	116	7.00	29	2.00	ŀ	ł	ŀ	ŀ	;	;	1	:
Salt Lake	ŀ	1	ì	:	:	;	;	ł	;	;	:	:
Sanpete	ļ	1	53	1.25	1	į	ì	į	;	;	i	:
Tooele	;	;	-	0.07	;	1	;	1	;	ŀ	:	1
Utah	9	2.00	29	2.00	i	1	:	:	:	ŀ	8	0.75
Wasatch	:	1	ı	;	i	:	:	;	i	1	: 1	1
REGIONAL TOTALS	48	1.36	13	0.70	:	:		;	:	:	18	0.75
Southern Region Beaver	;	i	i	;		1		1				
Garfield		i	:	1	;	: :	۱ ۱	: :		: :	: :	: :
Iron	;	i	:	;	:	:	ı	ï	:	ì	:	:
Kane	;	ŀ	;	:	:	1	:	:	;	:	:	!
Millard	1	i	:	:	;	:	:	;	:	1	ļ	:
Piute	1	1	:	:	:	:	:	ł	:	1	:	:
Sevier	1	:	1	;	ł	ł	;	i	:	1	:	;
Washington	1	;	:	:	;	ı	ı	:	:	i	;	:
Wayne	1		-	1	:	:	:	;	:	:	:	:
REGIONAL TOTALS	ł	!	:	1	ŀ	:	1	:	1	1	1	:
Northeastern Region												
Daggett	1	ı j	;	;	i	i	ı	!	ŧ	;	ŀ	:
Duchesne	38	1.50	ţ	;	ŀ	;	i	1	;	:	:	:
Uintah	•	1	:	:	;	;	:	1	;	:	ł	ı
REGIONAL TOTALS	38	1.50	:	:	ı	:	i	:	ţ	1	ł	!
Southeastern Region												
1001	;		:	;	: {	;	;	:	:	ļ	1 ;	ij
Emery	55	1.00	:	:	n G	1./4	:	:	:	ŀ	99	2.73
Grand	1	ŀ	1	ł	:	1	41	2.36	102	3,14	33	1.79
San Juan	1	:	;	1	:	!	:	:	:	:	:	ı
REGIONAL TOTALS	33	1.00	:	:	29	1.74	41	2.36	102	3.14	52	2.38
ひこくとくし コトベトひ	•	•	•									

SAGE GROUSE

SAGE GROUSE

SUMMARY



Strutting ground count surveys indicated a 19 percent decrease in the average male grouse attendance from 1994.

Brood surveys showed decreased production per 100 adults throughout the state. Birds observed per 100 hours decreased 82 percent from 1994, and was 68 percent below average. Reproductive efforts in 1995 were fair. Summer brood survival was poor however. Below average temperatures from April through July combined with above average precipitation from March through June may have contributed.

Harvest was 35 percent below the long-term average.

Age ratios derived from wings indicated a 23 percent decrease in young per 100 adults and a 83 percent increase in young per 100 adult hens. Hunter numbers increased 17 percent in 1995 but remain 19 percent below the long-term average.

Since 1959, numerous new strutting grounds have been discovered throughout Utah. However, average number of male grouse per ground has declined drastically. A decline in the average number of grouse per ground seems to be representative of Utah sage grouse populations.

Recent DNA and physiological studies indicate that two distinct species of sage grouse exist in Utah. The smaller species is located south and east of the Colorado River.

Declines in sage grouse populations are attributed to loss and changes in sage brush habitats throughout the West. Spraying, urban and industrial development, burning and overgrazing by domestic livestock have altered critical sage grouse habitat.

Based on studies conducted in Utah in the early 1970s, estimated harvest of the sage grouse population was 20 percent (within the harvestable surplus). The amount of pressure on sage grouse populations was more than double what it is currently. Hunting pressure at current levels is not affecting populations.

There is much discussion about the status and future of sage grouse at the "Western States" level. Utah should place high priority on collecting as much annual biological data as possible on sage grouse populations in order to make the best management decisions possible.

Strutting Ground Counts

The status of the sage grouse breeding population for 1995, as indicated by strutting ground counts, is shown in Table 1 and Figure 1 of this section. Results of this survey for 1995 compared to 1994 and the 1967-94 average follow:

	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Number of grounds counted	131	+8	+20
Total male grouse counted	1,230	- 8	-38
Average male grouse per ground	. 9	-19	-50
Percent change from previous year			
(comparable grounds)			

Access for spring 1995 strutting ground counts was generally good in most regions of the state. The numbers of male grouse observed decreased 8 percent statewide and average number of males per ground decreased 19 percent.

Brood Counts

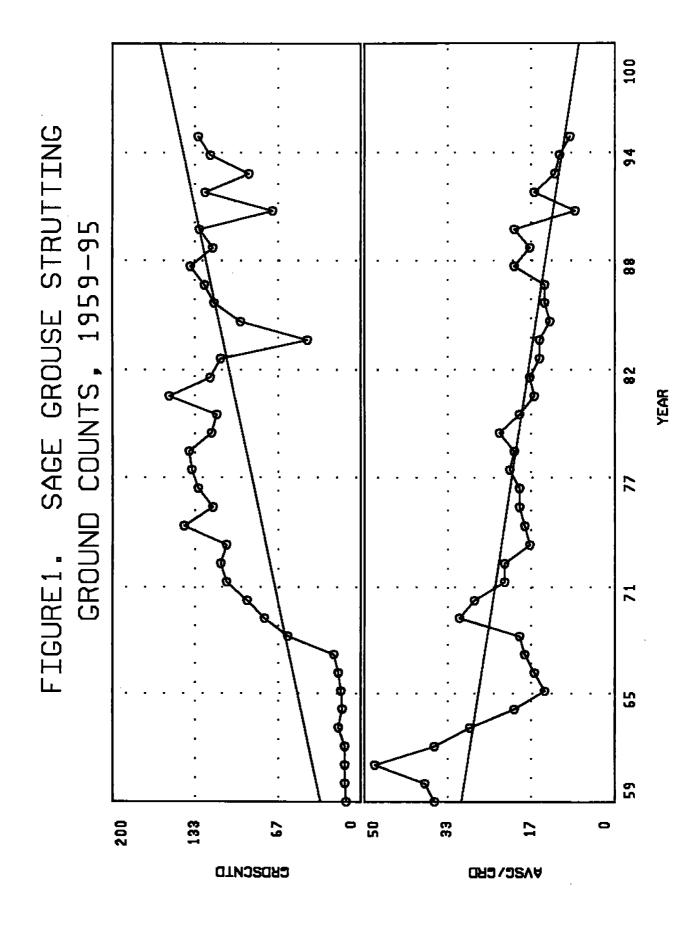
Results of the summer inventory survey for 1995 are found in Table 2. Long-term trends of young per adult ratios, mean brood size and sage grouse observed per 100 hours are shown in Tables 3-5 and Figure 2. Indices for 1995 are compared to 1994 and the previous 10-year (1985-94) average as follows:

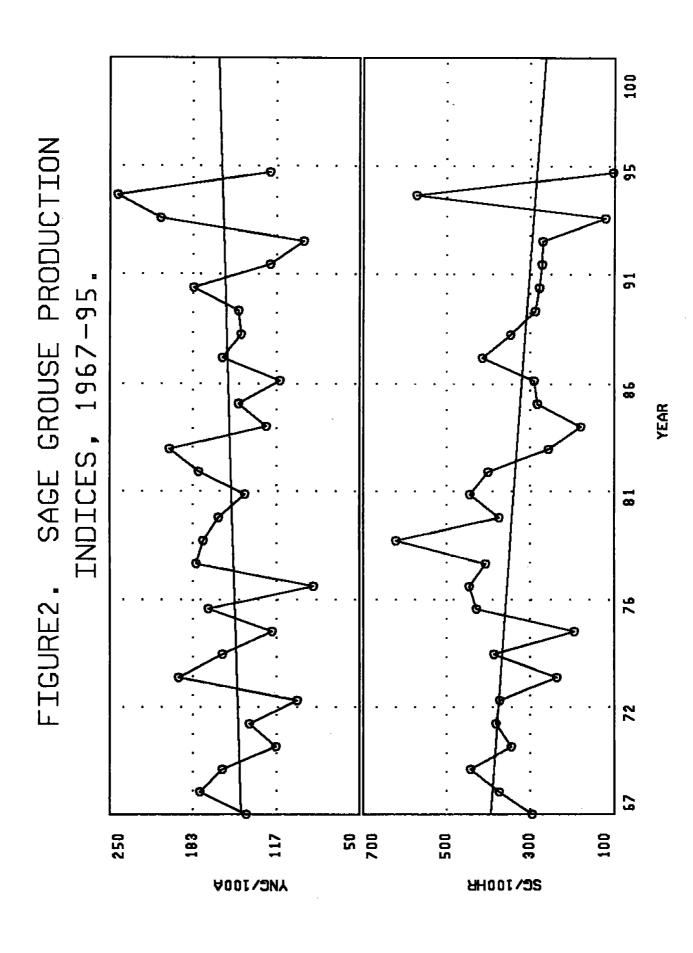
	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Total sage grouse counted	113	-61	-88
Young per 100 adults	122	- 50	-22
Mean brood size	4.43	-9	+2
Sage grouse observed per 100 hours	102	-82	-68
Total hours effort	111	+118	-60

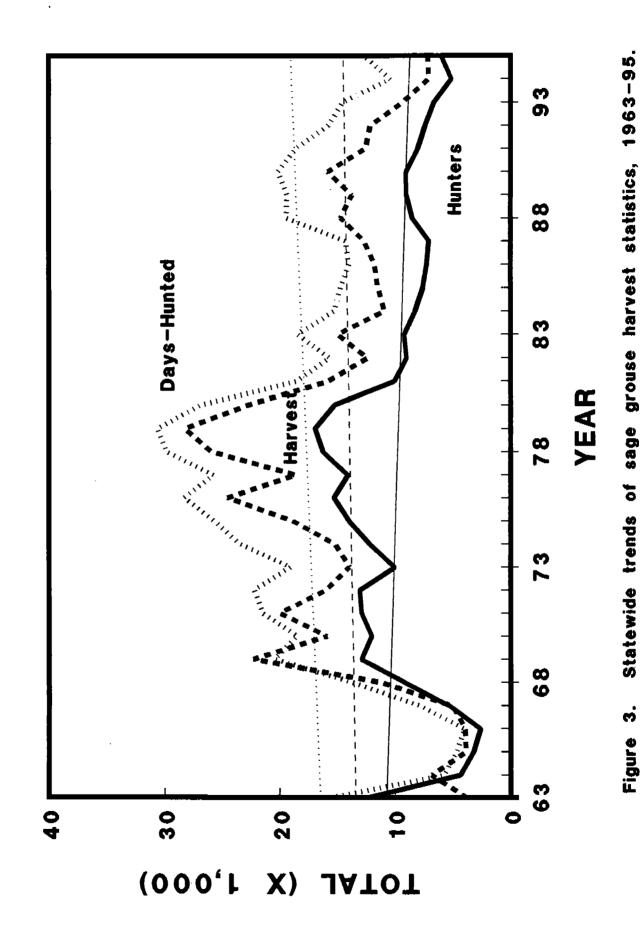
The effort devoted to sage grouse brood counts was 60 percent below average, and the total number of grouse counted was 88 percent below average.

Total sage grouse counted decreased 61 percent in 1995, while production of young per 100 adults decreased 50 percent. The average brood size was 2 percent above the 10-year average.

Above average precipitation in March-June and below normal temperatures during the nesting season may have hindered sage grouse reproductive efforts in 1995.







93 Sage Grouse/Hunter 88 Sage Grouse/Hunter-Day 83 YEAR 78 73 68 63 0.00 2.00 1.60 0.80 0.40 1.20

PER

НОИТЕР

GBONZE

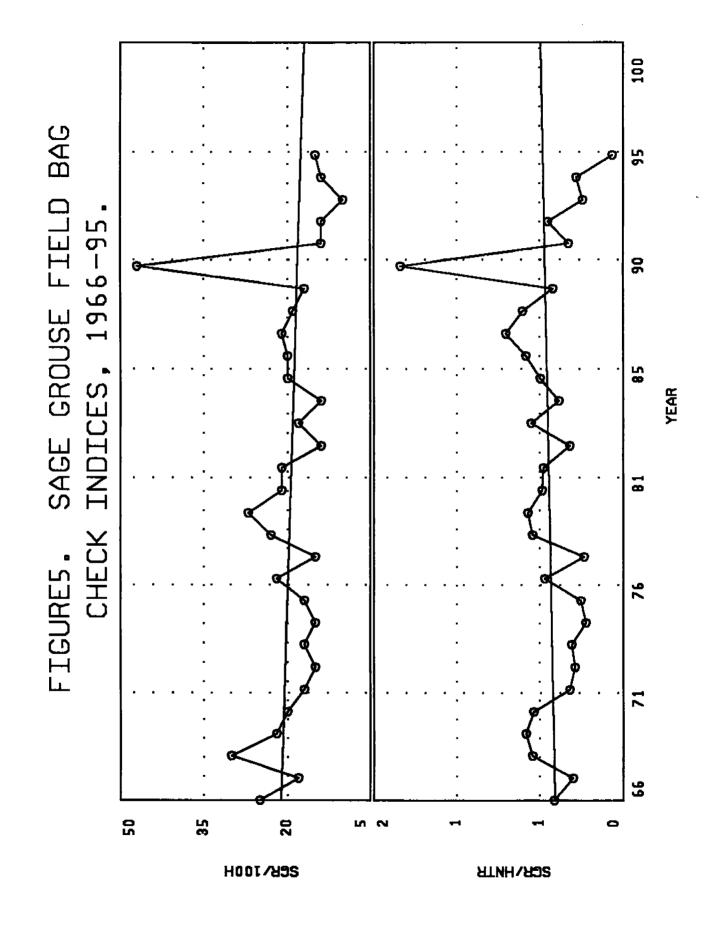
YAd

DEB

QNA

Statewide trends of sage grouse hunter success rates, 1963-95. Figure 4.

SAGE



Harvest

Hunter Questionnaire

Results of the 1995 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 results of the 1995 hunting season compared to 1994 and the previous 45-year average follow:

	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Sage grouse hunters	5,987	+17	-19
Sage grouse harvested	7,133	+1	-35
Hunter-days afield	12,615	+21	-4
Sage grouse per hunter-day	0.57	-16	-7
Sage grouse per hunter	1.19	-14	-35

Ninety percent confidence interval for overall sage grouse harvest is +/-1,086.38. Standard deviation is 0.871344.

Sage grouse per hunter-day success rate decreased 16 percent in 1995. Total statewide harvest increased 1 percent, and there was a 17 percent increase in total sage grouse hunters. Twenty-six percent of the harvest and 40 percent of the hunting pressure still occurred in the Northern Region.

Long-term sage grouse harvest trends are shown in Figures 3 and 4.

Field Bag Checks

A summary of field bag check data for 1995 is shown in Table 11. Hunter success trends determined via this method are shown in Table 12 and Figure 5. Results of the 1995 survey compared to 1994 and the 10-year (1985-94) average follow:

	<u>1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Total hunters checked	250	-58	-71
Total hours hunted	600	-80	- 86
Sage grouse per hunter			
(complete hunts)	0.48	-31	-51
Sage grouse bagged per 100 hours	20	+43	+6
Average hours per hunter-day			
(complete hunts)	2.40	- 52	-54
Hours hunted per grouse bagged (complete hunts)	4.95	- 55	-23

Hunter success rates from field bag checks showed decreased success on the opening weekend of 1995. Sage grouse bagged per 100 hours increased 43 percent. Average hours per hunter day decreased 52 percent from 1994. Average hours per grouse bagged decreased 55 percent.

Sex and Age Composition of the Harvest

A summary of the sex and age composition of harvested sage grouse in 1995 is found in Table 13 and the trend from 1992-95 in Table 14.

Following are data derived from wing surveys in 1995 compared to 1994 and the 1985-94 average:

	<u>1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Sample size	545	-34	-35
Percent males	43	+10	+8
Percent females	57	- 7	-5
Young per 100 adults	119	-23	-19
Young per 100 hens (adult)	185	+83	-6

Analysis of wings collected at checking stations during the 1995 season indicates that statewide production was up 83 percent compared to 1994, and was 6 percent below the long-term average.

This data substantiates that brood survival over the summer of 1995 was poor when compared to brood count data collected earlier in the year.

Table 1. Summary of sage grouse strutting ground counts by region and county, 1985-95. Region and		Ì				Year			İ		
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Northern Region							1				
Box Elder											
No. Strutting Grounds Counted	32	9	4	5	7	20	16	13	8	4	4
Total Male Grouse Counted	309	288	314	419	343	327	:	307	250	220	134
County Average (all strutting grounds)	10	29	18	78	સ	23	21	24	1	16	34
% Change From Previous Year - Comparable Grounds	7	1	77	33	7	-17	÷	6		-53	7
Cache											
No. Strutting Grounds Counted	0	7	-	-	7	;	ł	m	;	2	2
Total Male Grouse Counted	1	•	0	6	10	ŀ	ï	77	ì	ı ot	: 6
County Average (all strutting grounds)	I	4	•	σ.	· cc	:	,	, c	į	. LC	
% Change From Previous Year - Comparable Grounds	:	٠ ;	. :	100	8	:	i	· ;	:	• }	, ;
Mordan											
No. Strutting Grounds Counted	ო	က	7	~	!	;	ŀ	_	;	;	—
Total Male Grouse Counted	33	22	56	19	ŧ	:	:	39	:	ŀ	24
County Average (all strutting grounds)	Ŧ	7	13	19	i	1	ŀ	55	:	1	24
% Change From Previous Year - Comparable Grounds	1,000	-33	8	-5	;	i	;	; ;	1	1	90
Rich											;
No. Strutting Grounds Counted	1 8	7	12	n	9	49	22	14	4	53	26
Total Male Grouse Counted	399	296	431	319	281	863	710	372	314	325	273
County Average (all strutting grounds)	22	27	36	53	47	41	32	27	19	7	
% Change From Previous Year - Comparable Grounds	49	-28	53	우	ĸ	۲,	-18	-38	5	46	:
Summit											
No. Strutting Grounds Counted	0	7	~	10	:	:	ŀ	က	;	_	€0
Total Male Grouse Counted	ł	23	25	17	;	:	ı	0	:	5	:
County Average (all strutting grounds)	:	က	4	7	ł	:	;	;	:	.	:
% Change From Previous Year - Comparable Grounds	;	:	65	-32	;	:	:	:	:	-29	;
REGIONAL TOTALS											
No. Strutting Grounds Counted	53	33	40	33	19	39	38	34	22	46	14
Total Male Grouse Counted	741	637	806	783	639	1,190	710	745	564	569	440
Average Grouse Per Ground (all strutting grounds)	14	19	20	74	34	동	27	56	8	4	8
% Change From Previous Year - Comparable Grounds	27	φ	16	7	40	ì	-15	-15	-53	-33	ı

Table 1 (continued)			
Region and	Year		
County	1985 1986 1987 1988 1989 1990 1991 1992	1004	1995
Central Region	700	1	000
Juab			
No. Strutting Grounds Counted			•
Total Male Grouse Counted	0 14 14 4 15 6		- ,
County Average (all strutting grounds)			- ,
% Change From Previous Year - Comparable Grounds	14 14 14 14	-	- 5
Sanpete	. 001 60- 17- 00		3
No. Strutting Grounds Counted			
Total Male Grouse Counted		:	ŀ
County Average (all strutting grounds)		:	:
% Change From Previous Year - Comparable Grounds		:	:
Togele		:	:
No. Strutting Grounds Counted	* * * * * * * * * * * * * * * * * * *	•	•
Total Male Grouse Counted	82 96 89 77 91 82 100	. :	. 5
County Average (all strutting grounds)	16 19 18 15 18 16 26	4 ~	4 ~
% Change From Previous Year - Comparable Grounds	130 140 17 - 75 17 20 17 25 27	, {	° c
Wasatch	70 01- 07	7	>
No. Strutting Grounds Counted	2 2 2 2 2 2 3 3 3	•	,
Total Male Grouse Counted	117 54 52 44 51 11 49	, 2	4 2
County Average (all strutting grounds)	32 59 27 26 72 8 57 77	1 5	1 :
% Change From Previous Year - Comparable Grounds	205 -54 -4 -19 18 -75 300	<u> </u>	<u> </u>
REGIONAL TOTALS		7	
No. Strutting Grounds Counted	10 7 10 10 10 9	7	-
Total Male Grouse Counted	118 199 150 155 132 146 108 154 56	. ¥	- 5
Average Grouse Per Ground (all strutting grounds)	18 17 16 13 15 12 17	} \c	ĸ
% Change From Previous Year - Comparable Grounds	77 38 11 45 77	, (>

Peaplon and Peaplon and	Table 1 (continued)											
1965 1986 1986 1987 1988 1989 1990 1991 1992 1993 1994 57 14 4 4 3 2 3 1 4	Region and	- 1		1	Year			- (
3 4 4 3 5 2 - 3 1 4 45 55 52 46 71 33 - 68 49 57 15 14 16 14 16 41 19 49 57 - 22 -5 -7 -7 - -54 47 - 152 175 251 126 24 211 77 145 - 13 19 21 26 24 35 23 50 78 16 22 16 24 36 24 35 24 13 16 22 16 19 21 20 24 36 24 36 24 36 74 13 16 22 11 12 22 2 1 3 41 13 16 22 14 14<		ı	1986	1987	1988	1989	- 1		1992	1993	1994	1995
3 4 4 3 5 2 - 3 1 4 15 14 13 15 14 16 41 19 49 14	Southern Region											
3 4 4 3 5 2 - 3 1 4 4 5 2 - 3 1 4 4 5 2 - 3 1 4 4 6 49 57 14 16 41 19 68 49 57 14 14 16 41 14	Beaver	1										
45 55 52 46 71 33 68 49 57 15 14 15 14 16 41 19 49 14	No. Strutting Grounds Counted	m	4	4	67	10	7	;	67	•	4	~
15 14 13 15 14 16 41 19 49 14	Total Male Grouse Counted	45	V	22	46	7.	<u>ج</u>	ì	8	. 97	. 23	· C
15		? *	;	; ;	}		3 9	1 3	3 4	? :	5 ;	5 .
152 -5 -7 - -54 47 - 152 175 251 126 244 - 211 77 145 - 19 19 31 16 24 - 21 77 145 - 19 19 31 16 24 - 23 11 13 16 22 16 19 21 20 52 21 41 13 16 22 16 19 21 20 52 21 41 13 16 22 16 19 21 20 52 21 41 13 16 22 16 19 21 20 52 21 41 13 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Courny Average (all struking grounds)	2	d	2 '	2	4	2	41	-	4	4	2 0
1 8 9 8 8 10 - 9 6 11 - 152 175 251 126 244 - 211 77 145 - 19 19 31 16 24 - 23 50 78 81 131 64 111 127 50 - 43 41 13 16 22 16 19 21 20 - 43 41 13 - 49 -11 -13 14 20 52 24 0 - 49 -11 -13 14 - -36 24 0 - - 49 -11 -13 - -36 24 0 - - - - - - -36 24 0 - - - - - - - -	% Change From Previous Year - Comparable Grounds	:	22	•?	:	-	:	1	-54	44	ı	<u>,</u>
1 8 8 8 10 - 9 6 11 - 152 175 251 126 244 - 211 77 145 - 13 19 31 16 24 35 21 23 11 13 16 22 11 127 50 - 43 41 39 16 22 16 19 21 20 52 24 13 - 49 -11 -13 14 - - -36 24 0 - - 49 -11 -13 14 - - -36 24 0 - - 49 -11 -13 14 - - -36 24 0 - - - - - - - - - - - - - - -	Garfield											
152 175 251 126 244 — 271 77 145 - 19 19 31 16 24 35 23 11 13 81 131 64 16 6 3 — 2 1 3 16 22 16 19 21 20 52 21 41 13 - 49 -11 -13 14 — -36 24 0 - - 49 -11 -13 14 — -36 24 0 - - - - - - -36 24 0 - - - - - - - -36 24 0 - <t< td=""><td>No. Strutting Grounds Counted</td><td>:</td><td>•</td><td>6</td><td>œ</td><td>Φ</td><td>10</td><td>ì</td><td>6</td><td>9</td><td>Ŧ</td><td>-</td></t<>	No. Strutting Grounds Counted	:	•	6	œ	Φ	10	ì	6	9	Ŧ	-
5 6 4 6 6 3 23 23 11 133 1 13 19 31 16 24 50 - 23 -50 78 16 13 11 127 50 - 23 41 13 16 13 14 - - - 26 24 0 - 49 -11 -13 14 - - -36 24 0 - - 49 -11 -13 14 - - -36 24 0 - - -49 -11 -13 14 - - -36 24 0 - -	Total Male Ground	;	152	17.5	25.1	126	77		. 5	. [146	130
5 6 4 6 6 3 - 2 1 13 16 22 16 19 21 20 52 21 41 13 16 22 16 19 21 20 52 21 41 13 16 22 16 19 21 20 52 21 41 13 1 22 16 19 21 20 52 21 41 13 1 22 16 19 21 20 52 21 41 13 1 24 31 14 36 24 0 1 22 14 30 11 1 1 1 14 10 6 1 1 2 2 2 2 2 2 2 2 3 3 2 2 2 2 1 2 3 3 3 3 3		I	2 5	2 (; ;	3 :	;	: :	- ;	: :	? :	3 :
5 6 4 6 6 3 - 23 -50 78 81 131 64 111 127 50 - 43 41 39 16 22 16 19 21 20 52 21 41 13 - 49 -11 -13 14 - -36 24 0 - - 49 -11 -13 14 - -36 24 0 - </td <td>County Average (all strutting grounds)</td> <td></td> <td><u>5</u></td> <td>5</td> <td><u></u></td> <td>9</td> <td>74</td> <td>5</td> <td>23</td> <td>=</td> <td>~</td> <td>ر دی</td>	County Average (all strutting grounds)		<u>5</u>	5	<u></u>	9	74	5	23	=	~	ر دی
5 6 4 6 6 3 - 2 1 3 16 22 16 111 127 50 - 43 41 39 16 22 16 19 21 20 52 21 41 13 1 49 -11 -13 14 - 36 24 0 1 -11 -13 14 - 36 24 0 1 -11 -13 14 - 36 24 0 1 -14 -16 -	% Change From Previous Year - Comparable Grounds	•	5	0	74	ş	:	ı	-53	ද	78	0
5 6 4 6 6 3 - 2 1 3 16 22 16 19 21 20 52 21 41 13	181											
81 131 64 111 127 50 - 43 41 39 16 22 16 19 21 20 52 24 0 - 49 -11 -13 14 - - -36 24 0 - - 49 -17 -13 14 - - -36 24 0 - <	No Ottotation Organization	14	4	•	ú	4	·		ç	•	٠	•
81 131 64 111 127 50 - 43 41 39 16 19 21 20 52 24 0 - 49 -11 -13 14 - -36 24 0 - - - - - - -30 11 1 - - - - - - - - 24 0 -<		• i	٠;	t ;		, ,	,	ı	٠,	- :	?	4 ;
16 22 16 19 21 20 52 21 41 13 - 49 .11 .13 14 - .36 24 0 - - - 14 - .36 24 0 - - - - .30 11 1 - - - - .41 - .30 11 1 - - - - - .41 .10 6 1 1 .11 .11 .11 .11 .11 .11 .11 .11 .11 .12 .11 .12 .11 .12 .11 .12 .11 .12 .11 .11 .11 .12 .12 .11 .12 .11 .12 .11 .12 .12 .11 .12 .12 .11 .12 .11 .12 .12 .11 .12 .12 .11 .12 .12 .12 .12 .12 .12 .12 .12 .12 .12	iorai Male Grouse Counted	6 2	131	4	111	127	2	i	5	4	33	5 8
1 49 -11 -13 14 - -36 24 0 1 - - - 41 - - 3 2 2 2 1 - - - - - - - 2 2 2 2 - - - - - - - 2 2 2 2 - <td< td=""><td>County Average (all strutting grounds)</td><td>16</td><td>22</td><td>9</td><td>13</td><td>7</td><td>2</td><td>22</td><td>7</td><td>4</td><td>£</td><td>~</td></td<>	County Average (all strutting grounds)	16	22	9	13	7	2	22	7	4	£	~
1 1	% Change From Previous Year - Comparable Grounds	ı	49	.	<u>ئ</u>	7	ı	:	-36	24	0	-14
1 1	Kane											
1 1	No Strutting Grounds Counted			i		ç			,	·	ç	,
1 1	Total Control of Contr	ı	:	:	:	۷ :	:	:	» ;	١;	4	,
1 1	lotal Male Grouse Counted	\$	ì	:	!	4	1	ŧ	2	7	_	7
1 1 -	County Average (all strutting grounds)	:	;	:	:	7	i	4	은	ဖ	_	
1 1	% Change From Previous Year - Comparable Grounds	;	i	:	:	1	:	:	-28	9	0	0
1 1	Millard											
2 3 -	No Strutting Grounds Counted	*	-	ļ	1	!	;					
2 3 -	Total Male Control	- c	- •	ŀ	ł	ł	:	:	1	:	ı	:
2 3	Total male Groune Countied	7	9 1	ŀ	ì	!	:	;	;	:	;	ŀ
	County Average (all strutting grounds)	2	m	;	:	1	:	1	;	•	:	:
	% Change From Previous Year - Comparable Grounds	P	33	:		!	;	:	:	:	:	:
- 2 - 2 - 1 3 - 1 - 0 - 0 - - 20 22 - 11 - 1 0 - - 20 22 - 11 - 1 1 1 1 1 1 1 11 - 1	Sevier											
	No. Strutting Grounds Counted	i	7	:	8	1	ł	_	e	:	_	_
	Total Male Grouse Counted		0	ŀ	0	:	;	20	22	ł	÷	12
13 13 13 14 10 16 12 8 1100 10 10 10 10 10 10 10 10 10 10 10 1	County Average (all strutting grounds)	:	:	ì	:	:	:	5	_	:	7	1
13 13 13 13 10 16 12 8 120 182 326 268 259 367 289 163 9 14 25 21 26 23 22 20 -15 79 -18 21 34 30 32 34 25 17 32 10 29 391 461 473 734 633 596 387 663 178 416 19 14 16 23 19 24 31 17 18 12 12 13 48 -18 -35 -10 234	% Change From Previous Year - Comparable Grounds	i	1	i	:	;	;	ì	. ;	•	1100	ا ح
13 13 13 13 10 16 12 8 120 182 326 268 259 367 289 163 120 182 21 26 23 22 163 13 14 25 21 26 23 22 20 21 34 26 17 32 10 29 391 461 473 734 633 596 387 663 178 416 19 14 16 23 19 24 31 17 18 12 10 12 18 1 17 18 12	Wavne										2	,
21 34 30 32 34 25 17 32 10 29 31 12 12 12 12 10 18 12 12 11 13 48 -18	No Strutting Grounds Counted	;	٤.	5	57	5	Ę	4	1,	;	00	7,
21 34 30 32 34 25 17 32 10 29 31 416 419 14 16 23 19 48 -18	Total Male Grouse Counted	. 1	5 5	182	3.5	36.8	250	767	280		, 4	306
21 34 30 32 34 25 17 32 10 29 391 461 473 734 633 596 387 663 178 416 419 14 16 23 19 24 31 17 18 12 12 13 48 -18 35 -10 234	County Account (all studies arounds)	ı	2 0	<u> </u>	3 2	3 5	3 5	3 8	3 6	:	3 5	3 5
21 34 30 32 34 25 17 32 10 29 391 461 473 734 633 596 387 663 178 416 419 14 16 23 19 24 31 17 18 12 12 13 48 -1835 -10 234	County Average (an straining grounds)	;	, ;	± ;		7	9	3	77	ŀ	₹ '	<u> </u>
21 34 30 32 34 25 17 32 10 29 391 461 473 734 633 596 387 663 178 416 19 14 16 23 19 24 31 17 18 12 12 13 48 -1835 -10 234	% Change From Previous Year - Comparable Grounds	***	9	2	2 2	:		1	:	;	÷]2
21 34 30 32 34 25 17 32 10 29 391 461 473 734 633 596 387 663 178 416 19 14 16 23 19 24 31 17 18 12 12 13 48 1835 -10 234	REGIONAL TOTALS											
391 461 473 734 633 596 387 663 178 416 . 19 14 16 23 19 24 31 17 18 12 12 13 48 .1835 -10 234	No. Strutting Grounds Counted	21	34	စ္တ	32	34	25	1	32	9	53	35
19 14 16 23 19 24 31 17 18 12 12 13 48 -1835 -10 234	Total Male Grouse Counted	391	461	473	734	633	596	387	663	178	416	442
12 13 48 .1835 -10 234	Average Grouse Per Ground (all strutting grounds)	- 61	7	16	23	6	24	3	17	8	12	-
	% Change From Previous Year - Comparable Grounds	:	12	5	48	ec	:	: 1	57	19	234	:
	* No county have no fractile therein a county made in Waven County and the fact and								;			

_	
Ξ	
•	
•	
•	
Ō	
ŏ	
ŏ	-
ŏ	
Ξ	
_	
•	
•	
•	
•	
Ō	
ŏ	
_	
Ξ	
7	
_	
•	
•	
•	
Ō	
Š	
_	
<u> </u>	

Table 1 (continued)										
Region and			Year							
County	1985 1986	1987		1989	1990	1991	1992	1993	1007	1005
stern Region		1					400	200	1004	000
Daggett										
No. Strutting Grounds Counted		ď	ď	r	ď		ú	¢	,	4
Total Male Grouse Counted		, %	¥	- 26	;	•	, c	٠ .	? c	י פ
County Average (all strutting grounds)		3 =	} ~	3 -	;	!	<u>-</u> •	<u>.</u>	= •	3 ,
% Change From Previous Year - Comparable Grounds)	1 4	1 0	ŧ ?	- ?	1	3	n 1	4 9	o ;
Duchesne		2	=	;	**	:	•	ا.	7	2
No. Strutting Grounds Counted	13 14	77	1	÷	4		9	4	•	4
Total Male Grouse Counted	Ī	12	- σ	. ¥	2 2	:	5 5	9 6	, f	n \$
County Average (all strutting grounds)		-	, -	? -	<u>.</u>	:	<u> </u>	5 6	٠ آ	₹.
% Change From Previous Year - Comparable Grounds		. 2.	- 6	167	, ç	:	٥	, 5	4 <u>7</u>	; ه
Grand		!	3	3	7	:	:	•	7	4
No. Strutting Grounds Counted			•						,	
Total Male Grouse Counted		:	4 (ł	:	ŧ	;	1	-	:
County Average (all sevieties areas as)		:	o.	:	:	:	;	1	0	:
County Average (all strutting grounds)		:	m	!	1	;	i	;	ı	;
% Change From Previous Year - Comparable Grounds		;	0	:			;	:	;	;
Uintah										
No. Strutting Grounds Counted		4	22	20	20	;	23	22	2,	20
Total Male Grouse Counted	•	159	468	266	32		7R7	1 5	200	100
County Average (all strutting grounds)		=	2	£	¥		;	2 0	ş ;	<u> </u>
% Change From Previous Year - Comparable Grounds	: : : :	2,4	· 4	¥ 5	2 ⊂	۱ :	2	5	1 -	- 6
Wasatch			3		•	3		5	1	?
No. Strutting Grounds Counted		1	·	·					•	·
Total Male Grouse Counted		1 1	٤ ،	٤ ،	}	ı	:	:	4 0	2 0
County Average (all strutting grounds)		1 1	; ;	;	1	ı	:	ì	۰ -	י מ
% Change From Previous Year - Comparable Grounds		1	- 5		1	:	ŀ	:	÷ ;	ۍ <u>د</u>
REGIONAL TOTALS			2	,	ا!		:		=	2
No. Strutting Grounds Counted		34	37	40	41	:	44	ΨV	22	43
Total Male Grouse Counted		289	550	380	536	t I	÷ = =	3 5	25	1 5
Average Grouse Per Ground (all strutting grounds)	11 10	6	5	2	£ 5	!!	} .c	† -	1	
% Change From Previous Year - Comparable Grounds		, T	4	2.	ه :		,	, ;	, 5	٠ ;
		-	5	?	c	:	ï	7	<u>•</u>	77.

Table 1 (continued)		j								
Region and			χ	Year						
County	1985	1986 1	1987 19	1988 1	1989 1	1990 19	1991 1992	1993	3 1994	1995
Southeastern Region										
Carbon										
No. Strutting Grounds Counted	ı									
Total Male Grouse Counted	;									
County Average (all strutting grounds)	ı	16			8		3			
% Change From Previous Year - Comparable Grounds	;		-27 1	142		· 38	. 1	1 46	-79	:
Emery										
No. Strutting Grounds Counted	_		7	2		CVI			2	~
Total Male Grouse Counted	12	7			28		7 7	m		0
County Average (all strutting grounds)	12									0
% Change From Previous Year - Comparable Grounds	ı									-250
San Juah										
No. Strutting Grounds Counted	4									
Total Male Grouse Counted	39	29	35	32	39		12 40			
County Average (all strutting grounds)	2									
% Change From Previous Year - Comparable Grounds	-29					·,	-22 25	5 5	۲-	ņ
REGIONAL TOTALS										
No. Strutting Grounds Counted	4									ဖ
Total Male Grouse Counted	33			_						4
Average Grouse Per Ground (all strutting grounds)	2	9	8	15	16	<u>د</u>	თ	~	တ	~
% Change From Previous Year - Comparable Grounds	-29									:
STATE TOTALS										
No. Strutting Grounds Counted										
Total Male Grouse Counted	١.	`		_		_		_		8 1,230
Average Grouse Per Ground (all strutting grounds)	5	4	14	23	1	20	18 16	12	7	
% Change From Previous Year - Comparable Grounds										:

Distinct		Disting		-	Adicod Varian	Jane				-						_
Region and		Brands	; 4	Mean	& Adults		Adults w/	Total	Total	Young/	Young/ Vehicle		Hours of Effort	Feffort		Birds/
County	#	Adults	Adults Young	Brood		E E	Young	Adults	Young	100 Adult	t Miles	Vehicle Horse	Horse		Total	100 Hr
Northern Region																
Box Elder	0	0	0	:	0	0	-	-	0	:	117		12		23	4
Cache	ľ	:	1	:	:	:	:	;	:	:	!	:	:	:	;	ŀ
Davis	ŧ	i	:	ŀ	:	:	ł	i	:	:	:	ı	;	:	ł	;
Morgan	:	:	1	:	1	1	:	:	:	:	1	:	:	ŀ	i	ı
Rich	က	'n	9	5.33	ı	:	36	33	16	4	:	:	75	:	76	2
Summit	i	:	:	;	:	;	:	;	:	:	:	:	i	1	:	1
Weber	:	1	:	:	:	;	;	;	:	1	;	:	;	;	:	:
REGIONAL TOTALS	3	က	16	5.33	•	0	37	40	16	6	117	8	87	n	86	57
Central Region									1							
Juab	:	1	:	;	:	i	;	:	:	:	;	:	:	;	ı	1
Salt Lake	ŀ	;	:	:	;	i	i	1	:	;	:	1	:	ì	i	:
Sanpete	;	ł	ŧ	;	:	i	i	1	:	;	;	:	:	;	:	•
Tooele	:	;	ŀ	1	:	i	i	1	:	;		:	:	:	ł	;
Utah	ı	1	1	ł	:	ŧ	;	;	:	:	i	;	:	;	:	;
Wasatch	I	:	ŀ	:	:	:	:	ŀ	:	:	:	ł	!	:	:	ŀ
REGIONAL TOTALS	;	:	:	:	1	1	;	ŀ	:	ł	:	:	:	:	:	;
Southern Region																
Beaver	:	:	:	;	;	;	1	:	:	1	1	:	;	t	:	1
Garfield	:	:	:	;	ŧ	ï	:	1	1	!	:	:	;	ŀ	:	ŀ
Iron	:	1	ŀ	:	:	;	;	:	:	i	ŀ	;	ì	!	ì	ł
Kane	1	ı	ı	:	:	;	;	:	:	:	:	:	ŀ	;	ı	i
Millard	:	ı	ł	:	:	;	;	:	:	;	ì	ŀ	i	:	;	:
Piute	:	:	:	1	;	;	;	:	ı	;	1	:	:	:	ŀ	1
Sevier	ı	:	1	1	ł	:	į	:	ı	1	1	1	:	:	:	ı
Washington	ı	:	;	1	:	i	;	ŧ	ı	;	:	:	:	ı	1	:
Wayne	:	•	;	:	:	:	:	;	;	:	;	1	:	;	:	:
REGIONAL TOTALS		:	:	:		:	1	:	:	:	:	:	:		1	:
Northeastern Region	1	1														
Daggett	6	LO.	7	4.20	0	0	m	∞	71	263	22	4	I	:	4	829
Duchesne	: <	: •	1 ;	, !	; •	; •	: 1	: :	1 ;	: }	: }	; (: (: •	1 3	: }
UINIAN REGIONAL TOTALS	۽ م	2	67 48	4.12	-	9 0	, ;	5 2	22 46	192	167	* = =	7	9	2 5	288
Southeastern Region									2					,		
Carbon	1	:	1	!	1	1	:	:	ı	1	:	ı	1	1	1	:
Emery	1	;	:	:	i	:	:	:	;	1	:	:	ï	ı	:	1
Grand	:	:	;	:	1	:	:	;	:	:	:	:	ł	1	:	ı
San Juan	1	:	;	;	:	:	:		:	:	:	:	:	:		;
REGIONAL TOTALS	1	:	:	i	1	1	:	:	:	;	;	:	:			:
STATE TOTALS	4	4	62	4.43	0	-	37	51	62	122	274	19	68	62	111	102

1985-95.	
0 adults,	
g per 10	
nd of sage grouse young per 100 adult	
sage gro	
rend of	Pac ac
Table 3. 1	Doolo
- 1	

,)
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region						i						
Box Elder	265	178	94	108	167	267	161	143	92	94	:	
Cache	1	ŀ	ł	:	;	200	:	i	:	I	ł	
Davis	1	ı	1	ŀ	ì	;	ł	ŀ	;	1	1	
Morgan	300	!	200	ı	117	ì	ŀ	;	ł	ı	ı	
Rich	96	91	116	153	ł	100	29	125	217	433	4	
Summit	400	167	20	;	1	1	ł	ŀ	ŀ	ı	ŧ	
Weber	ŀ	ı	1	ŀ	;	;	ł	ţ	;	ı	ŀ	
REGIONAL TOTALS	130	103	115	135	156	235	93	132	133	145	40	138
Central Region												
Juab	:	ı	;	380	250	196	:	450	450	ŀ	;	
Salt Lake	1	1	:	ł	ı	ï	ł	ł	ł	ł	;	
Sanpete	ſ	ţ	ì	1	ŀ	ŀ	ł	ŀ	ł	ì	ŀ	
Tooele	125	106	207	100	194	110	287	300	300	156	;	
Utah	;	;	ł	150	;	!	1.200	;	ł	;	;	
Wasatch	43	200	209	300	}	667	1	129	350	1	;	
REGIONAL TOTALS	64	120	209	135	177	166	344	148	357	156	;	188
Southern Region												
Beaver	43	ì	35	1	1	1	ł	ŀ	ŀ	ļ	i	
Garfield	229	125	144	144	40	ક	129	ŀ	ł	ţ	ł	
Iron	i	250	198	146	155	264	100	í	ŀ	!	ŀ	
Kane	;	ŀ	400	ŀ	}	;	1	ŀ	!	ł	;	
Millard	ŀ	ł	ľ	;	;	i	ŀ	ł	ŀ	ł	1	
Piute	ł	ŀ	38	;	ŀ	ŀ	ł	:	i	ı	1	
Sevier	:	ı	ł	;	525	ŀ	500	;	ŧ	!	1	
Washington	:	1	ŀ	ŀ	1	ı	;	1	:	ł	:	
Wayne	152	4	455	86	1	168	478	43	ł	ŀ	ī	
REGIONAL TOTALS	137	105	216	127	135	154	128	40	ı	ì	1	130
Northeastern Region												
Daggett	170	199	124	181	433	533	650	190	i	009	263	
Duchesne	297	180	137	288	217	009	160	i	260	i	ŀ	
Uintah	261	127	192	164	148	352	114	278	200	263	192	
REGIONAL TOTALS	255	131	159	172	155	374	161	246	380	532	418	256
Southeastern Region												
Carbon	400	133	150	1	56	33	200	33	200	i	:	
Emery	:	;	ŀ	ı	1	1	ŀ	ŀ	ŀ	ì	ì	
Grand	ł	ŀ	ŀ	:	:	;	ŀ	34	ŀ	20	!	
San Juan	88	09	1	200	20	20	200	50	ł	ŀ	i	•
REGIONAL TOTALS	122	81	150	200	25	88	160	34	200	20	1	114
STATE TOTALS	147	114	460	145	447	ver	007	į				

Region and	erage proou	SIZE TOT SA	ge grouse,	963-93.		Voar						- 12
,						-						200
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region												
Rox Fider	2.3	1 57	2 8 8	72.00	2 00	30.7	7	.,	,			

25 3.71 4.17 3.67 5.00	Region and						Year						Average
the Region 1	County	1985	1986	1987	1988		1990	1991	1992	1993	1994	1995	1985-94
lder 5.31 3.57 3.86 33.80 4.25 3.71 4.17 3.67 5.00 In 3.00 5.00 4.27 7.00 3.00 4.54 2.40 4.33 5.33 Int	Northern Region												
tit	Box Elder	5.31	3.57	3.88	33.80	3.80	4.25	3.71	4.17	3.67	5.00	:	
Integral 3.96 5.08 5.09 4.27 7.00 2.00 3.00 4.54 2.40 4.33 5.33 14 14 14 14 14 14 14 14 14 14 14 14 14	Cache	1	:	1	;	:	5.00	ı	1	1	1	ŀ	
the 3.60	Davis	ı	ŀ	;	:	;	1	1	ŀ	;	1	ł	
If Region	Morgan	3.00	:	5.00	ŀ	7.00	:	:	ŀ	ł	i	ł	
It	Rich	3.96	5.08	5.00	4.27	;	2.00	3.00	4.54	2.40	4.33	5.33	
Hegion	Summit	ł	4.00	5.00	4.00	ŀ	ŀ	:	;	ı		1	
Albert Potals 4.39 4.74 4.82 4.17 4.30 3.67 3.36 4.36 3.09 4.50 5.33 Albert	Weber	:	ŀ	ì	:	1	:	;	ł	;	;	ŀ	
arke	REGIONAL TOTALS	4.39	4.74	4.82	4.17	4.30	3.67	3,36	4.36	3.09	4.50	5.33	4.14
the the state of t	Central Region				ļ								
Hete 3.29 3.25 3.60 3.50 3.00 3.13 3.83 3.00 3.00 4.00	Juab	ł	i	;	6.33	4.00	4.75	ł	ł	ł	1	;	
te	Salt Lake	1	;	ŀ	;	ŀ	ŀ	ł	ł	ŀ	ŀ	;	
State Stat	Sanpete	}	;	ı	i	ŀ	ł	ŀ	:	:	1	ł	
th Region 5.00 5.00 6.94 6.00 6.97 12.00 5.00 4.67 4.00 4.00	Tooele	3.29	3.25	3.60	3.50	3.00	3.13	3.83	3.00	3.00	4.00	ŀ	
Cich 5.00 5.00 5.00 4.67 4.00 <th< td=""><td>Utah</td><td>;</td><td>ł</td><td>ŀ</td><td>:</td><td>1</td><td>!</td><td>12.00</td><td>ŀ</td><td>;</td><td>:</td><td>:</td><td></td></th<>	Utah	;	ł	ŀ	:	1	!	12.00	ŀ	;	:	:	
Ferri Region 5.00 5.00 4.00 6.00 6.00	Wasatch	2.00	5.00	6.94	6.00	;	6.67	ŀ	5.50	7.00	ŀ	ì	
T 5.00 5.00 6.00 6.00 6.00	REGIONAL TOTALS	2.56	3.60	5.42	4.29	3.40	4.27	5.00	4.67	4.00	4.00	:	4.12
1	Southern Region												
Id 4.50 2.00 4.00 4.60 4.00 6.00	Beaver	5.00	!	5.00	1	ŀ	1	ŀ	;	1	ł	i	
Hand Totals 3.67 4.66 6.00 5.00	Garfield	4.50	2.00	4.00	4.60	ŀ	4.00	00.9	ı	1	1	ł	
Ington	iron	:	4.00	4.64	3.67	4.66	6.00	5.00	. 1	ŀ	ŀ	ı	
ngton	Kane	:	:	4.00	:	:	ı	:	ł	I	1	ł	
ngton	Millard	ł	1	1	;	ł	ł	i	:	ł	;	ł	
ngton	Plute	1	1	ŀ	:	;	ŀ	:	;	ï	;	;	
Higher Totals 3.57 6.00 6.14 6.29 4.30 5.00 3.82	Sevier	;	I	:	7.00	ŀ	ì	1	ł	1	;	;	
th sate of the control of the contro	Washington	ı	:	;	ŀ	;	1	:	ł	ŀ	;	ı	
tr sastern Region	Wayne	3.57	9'00	6.14	6.29	;	4.30	5.00	3.82	i	;	ŀ	
tt 3.00 1.00 4.00 4.45 4.30 6.00 2.00 6.00 6.00 4.20 sne 4.73 4.29 3.54 3.60 2.17 6.00 4.00 2.00 2.00 5.00 4.17 sne 5.00 5.44 5.55 4.05 5.15 5.60 2.00 4.75 5.00 5.25 4.18 4.17 4.29 3.54 4.09 4.58 5.63 2.57 4.89 4.50 5.32 4.18 4.18 4.50 4.00 4.00 4.00 2.67 4.00 4.00	REGIONAL TOTALS	4.00	4.29	4.89	4.89	4.66	4.82	5.60	3.82	;	:	:	4.62
tt 3.00 1.00 4.00 4.45 4.30 6.00 2.00 6.00 6.00 4.20 sne 4.73 4.29 3.54 3.60 2.17 6.00 4.00 2.00 2.00 5.00 4.17 5.00 5.44 5.55 4.05 5.15 5.60 2.00 4.75 5.00 5.25 4.17 1.20	Northeastern Region												
Sine 4.73 4.29 3.54 3.60 2.17 6.00 4.00 2.00 2.00 2.00	Daggett	3.00	1.00	4.00	4.45	4.30	6.00	2.00	6.00	ł	6.00	4.20	
Substitute Sub	Duchesne	4.73	4.29	3.54	3.60	2.17	6.00	4.00	:	2.00	:	:	
NAL TOTALS 4.43 4.94 4.59 4.09 4.58 5.63 2.57 4.89 4.50 5.32 4.18 astern Region 1	Uintah	5.00	5.44	5.55	4.05	5.15	5.60	2.00	4.75	5.00	5.25	4.17	
astern Region 1	REGIONAL TOTALS	4.43	4.94	4.59	4.09	4.58	5.63	2.57	4.89	4.50	5.32	4.18	4.55
an 3.50 3.00 2.00 2.67 4.00 2.00 3.00	Southeastern Region												
an 3.50 3.00 2.00 2.00 2.00 3.67 4.00 2.00 2.00 1.50	Carbon	4.00	4.00	1.50	ŀ	4.50	ľ	6.00	2.67	4.00	ŀ	:	
an 3.50 3.00 - 2.00 - 2.00 2.00 - 2.00 - 3.0	Emery	ŀ	:	1	1	:	i	ł	1	ı	ı	1	
ALS 3.50 3.00 2.00 2.00 2.00	Grand	ŀ	:	1	1	;	!	ŀ	4.00	ł	2.00	;	
ALS 3.67 3.40 1.50 3.67 4.00 2.80 4.00 2.00 4.04 4.53 4.86 4.29 4.37 4.71 3.70 4.21 3.68 4.86 4.43	San Juan	3.50	3.00	1	•	2.00	:	2.00	2.00	i	1	ł	
4.04 4.53 4.86 4.29 4.37 4.71 3.70 4.21 3.68 4.86 4.43	REGIONAL TOTALS	3.67	3.40	1.50		3.67	1	4.00	2.80	4.00	2.00	:	4.31
	STATE TOTALS	4.04	4.53	4.86	4.29	4.37	4.71	3.70	4.21	3.68	4.86	4.43	4.33

	ı
	Į
	Į
	ļ
	į
s, 1985-95.	Į
ä	ĺ
٦ï.	į
S	
œi.	
₹.	ı
≕	
•	
'n	
=	١
∍	
0	
_	
=	
0	
0	
ź	
=	ì
Ÿ	
о.	
	ł
ਹ	
Φ	
>	
_	Į
ø	
S	
ö	
ᆽ	
v	
Ø1	
75	
×	
_	
0	
-	
0	
-	
=	
Ō,	
æ	
S	
	Į
≍	
•	
77	
×	
*	
'n	
_	
_	١
Table 5. Trend of sage grouse observed per 100 hours, 19	
٠.:	Į
-7	1
ø	
=	
Ω	
æ	

Region and						Year						Average
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region												
Box Elder	380	304	475	694	431	303	102	146	118	413	₹	
Cache	1	ı	0	က	;	126	ŀ	1	ŀ	;	:	
Davis	ŀ	i	ł	ı	ł	:	ł	:	1	;	ŀ	
Morgan	19	ł	19	1	100	ŀ	ŀ	:	ł	ł	ŀ	
Rich	288	282	364	287	ł	4	304	261	83	1	73	
Summit	ŀ	21	480	300	:	;	1	:	1	ł	:	
Weber	;	1	:	ŀ	ŀ	ì	1	:	:	:	ŀ	
REGIONAL TOTALS	186	198	251	27.1	64	78	155	197	103	613	22	212
Central Region												
Juab	0	i	ł	150	311	323	ŀ	367	367	ì	ŀ	
Salt Lake	ı	ŀ	ł	ŀ	i	1	1	;	ŀ	ŀ	1	
Sanpete	1	1	ł	ł	:	;	ł	;	1	ŀ	ŀ	
Tooele	242	746	742	150	252	150	414	100	133	263	I	
Utah	ŀ	ı	1	125			1,300	1	:	ı	ł	
Wasatch	267	92	792	27	19	209	. 1	254	45	ı	ł	
REGIONAL TOTALS	244	310	776	118	154	200	338	248	100	263	1	275
Southern Region												
Beaver	429	ŀ	575	ŀ	;		ł	ľ	i	I	;	
Garfield	295	225	275	452	207	661	320	ŀ	1	ŀ	1	
Iron	;	466	1,331	1,517	1,000	589	400	!	1	1	1	
Kane	:	ı	200	;	ı	I	i	!	!	;	1	
Millard	:	1	;	;	1	ļ	1	i	ł	!	ŀ	
Piute	ł	316	ŀ	1	1	ŧ	ł	i	ļ	1		
Sevier	ł	1	;	417	ı	:	150	829	1	1	ı	
Washington	:	:	:	ŀ	1	:	i	į	ł	ŀ	:	
Wayne	358	344	793	542	1	900	511	411	:	ŀ	1	
REGIONAL TOTALS	342	300	732	574	705	781	314	402	:	1	1	519
Northeastern Region												
Daggett	284	114	492	474	168	585	1,000	580	:	1,400	829	
Duchesne	325	165	382	141	123	350	81	;	900	ŀ	:	
Uintah	888	813	642	830	1,191	566	1,500	523	3,000	636	388	
REGIONAL TOTALS	490	474	509	589	741	533	356	539	1,600	1,463	429	729
Southeastern Region												
Carbon	ł	200	28	!	125	685	90	377	377	:	1	
Emery	ľ	ŀ	ŀ	!	ł	i	}	ì	:	:	:	
Grand	ŀ	ŀ	:	;	;	;	I	267	:	240	l	
San Juan	231	400	:	1	150	120	100	300	:	1	:	
REGIONAL TOTALS	235	271	28	:	129	386	100	239	56	80	:	211
STATE TOTALS	274	291	415	347	288	279	273	272	122	572	102	143

Table 6. Summary of sage grouse hunter success and distribution of harvest and hunter pressure by region and county, 1995.

			1		/	/
REGION AND	Sample e	iunter-days	BIRDS	BIRDS PER	& OF	% OF
COUNTY	SIZE*	AFIELD	BAGGED	Hunter-day	PRESSURE	Harvest
NORTHERN REGION						
BOX ELDER	53	1,768	699	0.40	14.02	9.81
Cache**	22	796	213	0.40	6.32	3.00
Davis**	10	427	252	0.59	3.39	3.54
Morgan**	2	155	0	0.00	1.23	0.00
Rich	49	1,360	641	0.47	10.79	8.99
Summit**	4	155	19	0.13	1.23	0.27
Weber**	11	388	58	0.15	3.08	0.82
REGIONAL TOTALS	151	5,053	1,885	0.37	40.06	26.43
CENTRAL REGION						
Juab**	3	174	330	1.89	1.39	4.63
Salt Lake**	1	174	330	0.00	0.15	0.00
Sanpete**	12	485	97	0.00	3.85	1.36
Tooele**	6	194	194	1.00	1.54	2.73
Utah**	14	505	369	0.73	4.01	5.18
Wasatch**	. 8	272	155	0.57	2.16	2.18
regional Totals	44	1,652	1,146	0.69	13:10	16.08
		******************************	************************	***************************************	***************************************	*******************************
SOUTHERN REGION	•	001	220		0.01	
Beaver Garfield	8	291 427	330	1.13	2.31	4.63
Garileid Iron	10 12	427 524	155 155	0.36 0.30	3.39 4.16	2.18 2.18
Kane **	12	38	38	1.00	0.31	0.55
Millard**	10	233	369	1.58	1.85	5.18
Piute	7	136	19	0.14	1.08	0.27
Sevier	11	505	19	0.14	4.01	0.27
Washington**	0	0	0	0.00	0.00	0.00
Wayne	20	563	427	0.76	4.47	6.00
REGIONAL TOTALS	79	2,721	1,516	0.76	21.57	21.26
NORTHEASTERN REGION						
Daggett	10	330	311	0.94	2.62	4.36
Duchesne	5	155	116	0.75	1.23	1.64
Uintah REGIONAL TOTALS	45 60	1,866 2,352	1,593 2,021	0.85 0.86	14.79 18.64	22.35 28.34
		•	•			
SOUTHEASTERN REGION	2	100			1 00	
Carbon**	3	136	233	1.71	1.08	3.27
Emery**	1	38	0	0.00	0.31	0.00
Grand**	1	194	116	0.60	1.54	1.64
San Juan** RECIONAL TOTALS	2 7	252 622	0 349	0.00 0.5 6	2.00 4.93	0.00 4.91
		•		•	•	***
Unknown	6	213	213	1.00	1.69	3.00
STATE TOTALS	347	12,615	7,133	0.57	100.00	100.00

^{*} Total hunter-trips from questionnaire returns.

^{**}Closed to sage grouse hunting in 1995.

Table 7. Summary of sage grouse bagged per hunter-day by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
-								
Northern Region								
Box Elder	0.78	0.94	0.92	0.55	0.96	0.79	0.79	0.40
Cache	0.47*	0.45*	0.58	0.32*	0.55*	0.21*	0.50*	0.27*
Davis	0.00*	0.72*	0.25*	0.18*	0.60*	0.08*	0.00*	0.59*
Morgan	0.36*	0.50*	0.33*	0.93*	0.71*	0.00*	0.19*	0.00*
Rich	0.81	0.63	0.85	1.01	0.82	0.79	0.53	0.47
Summit	0.57*	0.71*	0.77*	0.67*	1.38*	0.56*	0.44*	0.13*
Weber	0.64*	0.27*	0.43*	0.34*	0.55*	0.50*	0.08*	0.15*
REGIONAL TOTALS	0.66	0.69	0.75	0.66	0.80	0.59	0.54	0.37

Central Region								
Juab	0.88*	0.22*	0.20*	0.54*	0.17*	0.22*	2.71*	1.89*
Salt Lake	0.50*	0.30*	0.00*	0.70*	0.00*	0.20*	0.00*	0.00*
Sanpete	0.23*	0.61*	1.00*	0.44*	0.22*	0.33*	0.45*	0.20*
Tooele	0.27	0.41*	1.15*	0.35*	0.65*	1.07*	1.83*	1.00*
Utah	0.42	0.33	0.39	0.86*	0.96*	0.27*	0.56*	0.73*
Wasatch	0.48*	1.50*	0.55*	0.47*	0.70*	0.46*	0.80*	0.57*
REGIONAL TOTALS	0.36	0.42	0.52	0.53	0.68	0.59	1.16	0.69
	***************************************		***************************************		***************************************			300000000000000000000000000000000000000
Southern Region								
Beaver	0.76	0.42	0.38	0.29	0.83	1.00	0.47	1.13
Garfield	1.17	1.14	0.74	0.52	0.96	0.90	1.11	0.36
Iron	0.61	0.62	0.58	0.93	0.64	0.53	1.29	0.30
Kane	1.00	0.75	0.54	0.67	0.71	0.00	1.25	1.00*
Millard	0.00*	0.09*	3.14*	1.27*	0.80*	4.00*	0.67*	1.58*
Piute	0.95	1.87	0.50	1.00	1.71	1.13	0.78	0.14
Sevier	0.67	0.39	1.08	0.39	0.49	0.36	0.54	0.04
Washington	0.00*	0.00*	1.63*	2.00*	1.00*	0.00*	0.00*	0.00*
Wayne	1.30	1.05	1.04	1.03	0.92	0.66	0.79	0.76
REGIONAL TOTALS	0.91	0.86	0.92	0.78	0.79	0.70	0.81	0.56
***************************************	990000000000000000000000000000000000000	******************************				qc	**************	0000000000000000
Northeastern Region								
Daggett	1.20	0.33*	0.73	0.48	0.60	0.67	0.25	0.94
Duchesne	1.00	1.14	1.19	0.67	0.36	1.29	0.00	0.75
Uintah	1.12	0.98	0.87	0.71	0.87	0.73	0.83	0.85
REGIONAL TOTALS	1.11	0.93	0.89	0.68	0.76	0.79	0.72	0.86
***************************************	20000-2000-200000000000000	***********************		•••••	*******************	>>>>>>>		*************
Southeastern Region								
Carbon	1.04	0.44	0.29	0.50	0.64	0.36	0.00*	1.71*
Emery	0.77	0.95	0.20*	0.88*	0.60*	1.00*	0.80*	0.00*
Grand	0.00	1.50	1.11	0.00	1.33	4.00	1.00*	0.60*
San Juan	10.00	0.00*	0.00*	0.57*	0.00*	0.00*	0.00*	0.00*
REGIONAL TOTALS	1.40	0.63	0.47	0.59	0.77	0.71	0.50	0.56

Unknown counties	1.63	0.00	0.00	0.00	0.00	0.47	0.00	1.00
		:			_			
STATE TOTALS	0.76	0.71	0.78	0.67	0.77	0.64	0.68	0.57

^{*}Closed season.

⁽⁾ Percent of bag per hunter-day in closed areas.

Table 8. Percentage distribution of sage grouse harvest by region and county, 1988-95.

Region and	_				<u>Year</u>			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Deview								
Northern Region	16 17	22 20	17 01	10 04	1 F F O	11 00		
Box Elder Cache	16.47 4.77*	22.39 2.72*	17.21 5.22	12.34	15.50	11.22	20.10	9.81
Davis	0.00*	2.72*	0.26*	2.64* 0.28*	5.12*	2.45*	3.23*	
Morgan	1.36*	1.06*	0.78*	1.80*	1.75*	0.20* 0.00*	0.00*	
Rich	12.04	11.65*	14.99	24.55	1.75* 15.79	18.57	0.74* 13.15	0.00* 8.99
Summit	1.81*	0.76*	1.30*	2.22*	1.61*	4.08*	1.99*	
Weber	2.61*	2.12*	2.48*	2.91*	1.75*	2.24*	0.50*	
REGIONAL TOTALS		43.42	42.24	46.74	43.27	38.78	39.70	26.43
Central Region								
Juab	0.79*	0.30*	0.39*	0.97*	0.15*	0.41*	4.71*	
Salt Lake	0.11*	0.45*	0.00*	0.97*	0.00*	0.20*	0.00*	
Sanpete	1.25*	2.57*	1.17*	0.97*	0.73*	0.61*	1.24*	
Tooele	1.81	2.27	1.96*	0.97*	1.90*	5.92*	5.46*	
Utah	2.15	3.18	2.09	1.66*	7.75*	0.61*	2.23*	
Wasatch	1.81*	0.91	0.78*	1.25*	1.02*	1.22*	0.99*	
REGIONAL TOTALS	7.95	9.68*	6.39	6.80	11.55	8.98	14.64	16.08
Southern Region								
Beaver	1.81	0.76	0.65	0.28	2.19	2.24	2.23	4.63
Garfield	3.86	8.62	7.17	2.36	3.51	3.88	5.21	2.18
Iron	1.59	2.42	1.43	1.94	3.65	4.29	5.46	2.18
Kane	0.11	0.45	0.91	0.28	0.73	0.00	1.24	0.55*
Millard	0.00*	0.15*	2.87*	2.64*	0.58*	4.08*	1.99*	5.18*
Piute	2.04	4.24	0.65	2.77	1.75	1.84	3.47	0.27
Sevier	5.00	1.97	6.78	3.05	2.92	4.08	3.23	0.27
Washington	0.00*	0.00*	1.69*	0.55*	0.29*	0.00*	0.00*	
Wayne	8.40	6.51	6.39	10.13	7.02	6.33	4.71	6.00
REGIONAL TOTALS	22.84	25.11	28.55	24.00	22.66	26.74	27.54	21.26
Northeastern Regio	n							
Daggett	2.04	0.76*	3.78	1.39	1.32	1.63	0.50	4.36
Duchesne	2.61	3.63	4.82	2.77	1.46	3.67	0.00	1.64
Uintah	17.61	12.41	11.80	14.98	16.37	13.67	14.64	22.35
REGIONAL TOTALS		16.79	20.47	19.14	19.15	18.98	15.14	28.34
Courth contains Du					***************************************	***************************************		************
Southeastern Regio		1 66	0.01	1 00				
Carbon	2.95	1.66	0.91	1.80	1.32	0.82	0.00*	
Emery Grand	1.13 0.00	2.87 0.45	0.13*	0.97*	0.88*	0.41*	1.99*	
San Juan	2.27	0.45	1.30 0.00*	0.00 0.55*	1.17	0.82 0.00*	0.99*	
REGIONAL TOTALS	5.36		2.35	3.33	0.00* 3.36		0.00* 2.98	
*************************************	******************		***************************************				***************************************	******************
Unknown countie								3.00
Closed areas	(14.51)	(14.52)	(13.81)	(21.36)	(25.28)	(22.43)	(26.07)	(34.35)
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
					100.00	100.00	100.00	100.00

^{*}Closed season

^()Percent of total harvest in closed areas.

Table 9. Percentage distribution of sage grouse hunting pressure by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Design								
Northern Region								
Box Elder	15.99	16.81	14.71	15.16	12.39	9.19	17.40	14.02
Cache	7.65*		7.05	5.61*	7.21*	7.35*	4.39*	
Davis	1.63*		0.82*	1.03*	2.25*	1.71*	1.01*	
Morgan	2.83*		1.84*	1.31*	1.91*	1.18*	2.70*	
Rich Summit	11.26	13.17	13.89	16.46	14.75	15.09	16.89	10.79
	2.40*		1.33*	2.25*	0.90*	4.72*	3.04*	
Weber REGIONAL TOTALS	3.09* 44.88	5.57 44.75	4.49* 44.13	5.80* 47.62	2.48* 41.89	2.89* 42.13	4.39* 49. 83	3.08* 40.06
Central Region								
Juab	0.68*	0.96*	1.53*	1.22*	0.68*	1.18*	1.18*	
Salt Lake	0.17*	1.07*	0.51*	0.94*	0.34*	0.66*	0.00*	
Sanpete	4.12*	3.00*	0.92*	1.50*	2.59*	1.18*	1.86*	
Tooele	5.07	3.96	1.33*	1.87*	2.25*	3.54*	2.03*	
Utah	3.86	6.85	4.19	1.31*	6.19*	1.44*	2.70*	
Wasatch	2.83*	0.43*	1.12*	1.78*	1.13*	1.71*	0.84*	
REGIONAL TOTALS	16.76	16.27	9.60	8.61	13.18	9.71	8.62	13.10
Southern Region	1							
Beaver	1.80	1.28	1.33	0.65	2.03	1.44	3.21	2.31
Garfield	2.49	5.35	7.56	3.09	2.82	2.76	3.21	3.39
Iron	1.97	2.78	1.94	1.40	4.39	5.25	2.87	4.16
Kane	0.08	0.43	1.33	0.28	0.79	0.00	0.68	0.31*
Millard	0.00*		0.72*	1.40*	0.56*	0.66*	2.03*	
Piute	1.63	1.61	1.02	1.87	0.79	1.05	3.04	1.08
Sevier	5.6 7	3.53	4.90	5.33	4.62	7.35	4.05	4.01
Washington	0.42*	0.00*	0.82*	0.19*	0.23*	0.00*	0.00*	
Wayne	4.90	4.39	4.80	6.64	5.86	6.17	4.05	4.47
REGIONAL TOTALS	18.99	20.56	24.41	20.86	22.07	24.67	23.14	21.57
Northeastern Re	aion							
Daggett	1.28	1.61*	4.09	1.96	1.69	1.57	1.35	2.62
Duchesne	1.97	2.25	3.17	2.81	3.15	1.84	1.01	1.23
Uintah	11.95	8.99	10.73	14.31	14.53	12.07	1.99	14.79
REGIONAL TOTALS	15.21	12.85	17.98	19.08	19.37	15.49	14.36	18.64
	_	**********		***************************************				************
Southeastern Re	_							
Carbon	2.14	2.68	2.45	2.43	1.58	1.44	1.69	1.08*
Emery	1.11	2.14	0.51*		1.13*			
Grand	0.00		0.92	0.00	0.68			1.54*
San Juan		0.54*						
REGIONAL TOTALS	3.43	5.57	3.88	3.84	3.38	1.84	4.05	4.93
Unknown counties	0.68	0.00	0.00	0.00	0.11	6.17	0.00	1.69
Closed areas	(25.82)	(23.57)	(15.94)	(26.29)	(29.85)	(28.48)	(25.16)	(35.44)
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
*Closed season			-			 -		

^{*}Closed season

^()Percent of total pressure in closed areas.

Table 10. Statewide summary of sage grouse harvest statistics, 1951-95.

	Total	Total	Hunter-Days		Sage Grouse Pe
Year	Hunters*	Harvest*	Afield	Per Hunter-Da	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	3,793	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	1.73
1971	12,893	20,013	21,509		
1972	13,040	15,983	22,232	0.93	1.55
1973				0.72	1.23
1974	10,017	13,926	19,049	0.73	1.39
	12,214	15,215	23,516	0.65	1.25
1975	13,996	18,916	25,720	0.74	1.35
1976 1077	15,283	24,541	28,342	0.87	1.61
1977	14,078	18,615	25,759	0.72	1.32
1978	16,231	25,938	29,861	0.87	1.60
1979	16,927	28,280	30,682	0.92	1.67
1980	15,219	22,770	26,893	0.85	1.50
1981	10,083	15,857	18,617	0.85	1.57
1982	8,997	12,383	15,663	0.79	1.38
1983	9,201	14,949	18,467	0.81	1.63
1984	8,283	10,921	15,266	0.72	1.32
1985	7,586	11,466	14,702	0.78	1.51
1986	7,233	11,766	13,992	0.84	1.63
1987	7,060	12,673	14,242	0.89	1.80
1988	8,499	14,692	19,418	0.76	1.73
1989	9,002	13,710	19,373	0.71	1.52
1990	9,014	15,784	20,147	0.78	1.75
1991	8,018	12,542	18,596	0.67	1.56
1992	7,393	12,156	15,781	0.77	1.64
1993	6,594	9,311	14,480	0.64	1.41
1994	5,133	7,084	10,406	0.68	1.38
1995	5,987	7,133	12,615	0.57	1.19
Totals		-,			
(1951-95)	330,291	486,831	590,908		_
Average	· · · · · · · · · · · · · · · · · · ·	• • •			······································
1951-94)	7,371	10,902	13,143	0.61	1.82

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

^{**} Estimated.

^{***} Totals and indices based on indiscrete data.

	Com
Table 11. Sage grouse field bag check summary, 1995.	All Hunts

			AL Links							_	-
Region and	Total	Total	Total	Total	Birde/	Complete	Total	Total Tota	Total	Rirds!	Rirde/
County	Parties	Hunters	Hours	Birds	16 F	Hunts	_	Hours	Birds	100 H	Hunter
Northern Degion											
Roy Fider	44	129	328	7	23	F.4	129	308	75	23	2
	;	ì	;	•	ì	;	ì	}		ì	
Cache	ŀ	ŀ	:	:	ì	ł	:	ŀ	;	:	!
Davis	:	:	i	:	;	:	1	1	ı	1	:
Morgan	i	;	:	;	:	i	1	:	i	ì	:
Rich (173	87	166	29	17	173	87	166	53	1	0.33
Summit	i	:	i	:	ì	:	:	:	1	;	:
Weher	1	:	;	;	:	:	,	:	i	1	;
SIATOT IAN	200	246	VOV	707	24	200	246	AGA	404	24	07.0
Central Region	144	2	1	2	-	144	2	100	5	4	P
de id	1	į	;	;	i	;	1	1	ļ	;	1
	!	:	!	ŀ	:	•	•	1	;	•	:
Salt Lake	l	:	i	;	ì	:	:	1	1	:	1
Sanpete	i	:	i	:	;	;	ı	1	:	ł	!
Tooele	1	;	i	;	:	;	ţ	ı	:	1	ŀ
Utah	1	ı	;	:	;	:	1	1	:	ł	:
Wasatch	ł	:	:	;	:	;	;	i	;	ł	f
REGIONAL TOTALS	1	;	:	!	:	:	ı	1	:	1	:
Southern Region											
Beaver	1	:	ı	:	:	;	1	ı	:	1	i
Garfield	ŀ	ţ	:	:	;	:	ı	ł	ł	1	:
Iron	ł	ŀ	:	f	:	:	ł	;	ł	1	:
Kane	1	i	ł	:	;	:	ŀ	ł	1	:	;
Millard	i	ı	1	:	:	:	ł	1	:	:	:
Piute	1	;	f	:	:	:	:	:	1	:	;
Sevier	1	;	:	:	:	:	1	!	1	:	:
Washington	1	ŀ	!	:	:		;	,	ı	:	;
Wavne	1	24	397	24	œ		74	379	24	"	0.42
VAL TOTALS	:	57	397	77	G	:	75	379	24	9	0.42
Northeastern Region				i							
Daggett	9	16	4	•	•	9	\$	4	0	0	00'0
Duchesne	i	ŀ	ł	:	ł	:	:	:	i	i	•
		6	62	17	27	œ	8	62	17	27	0.94
NAL TOTALS	16	34	106	17	16	15	34	106	17	16	0.50
Southeastern Region											
Carbon	i	ļ	1	i	;	ł	ı	ł	;	;	;
Emery	ı	ŀ	ŀ	1	1	:	1	1	ŀ	:	ŀ
Grand	ì	1	1	:	;	i	;	i	;	;	:
San Juan	i	ł	ł	i	1	;	ı	;	;	ŀ	:
LTOTALS	1	ı	:	:	:	1	;	:	1	;	:

7001	000		20		1		200		1994			
Region and County	Birds/ 100 Hr	Birds/ Hunter	Birds/ 100 Hr	Birds/ Hunter	Birds/ 100 Hr	Birds/ Hunter	Birds/ 100 Hr	Birds/ Hunfer	Birds/ 100 Hr	Birds/ Hunter	Birds/	Birds/ Hunter
Northern Region												
Box Elder	22	1.77	Ξ	0.83	49	1.43	#	0.99	77	96.0	23	9.58
Cache	1	1	100	2.00	;	;	ŀ	:	:	i	1	ŧ
Davis	:	;	:	00'0	:	:	ı	:	:	1	ï	i
Morgan	i	;	:	:	1	;	i	i	:	;	ı	i
Rich	5	29.0	க்	0.37	ø	0.52	65	0.28	∞	0.51	11	0.33
Summit	!	i	:	:	;	:	:	:	:	1	: :	ı
Weber	:	;	!	1	;	ı	:	:	;	ı	!	!
REGIONAL TOTAL	20	1.24	9	0.62	15	0.99	9	0.73	5	0.80	21	0.48
Central Region												
Juab	ı	;	;	ł	:	ł	1	:	:	ł	ł	1
Salt Lake	ï	;	;	ı	:	1	:	1	:	;	ł	1
Sanpete	;	:	ŀ	:	ł	1	ŀ	;	;	ł	ł	•
Tooele	;	1	ŀ	:	!	ı	:	;	:	!	;	1
Utah	1	;		:	:	:	;	i	:	:	;	:
Wasatch	!	:	:	!	1	i	ŀ	i	:	ŀ	:	:
REGIONAL TOTAL	;		1	1	!	;	1	 	:	;	:	:
Southern Region									ļ			
Garffold	;	:	:	ŀ	1	:	;	:	ŀ	:	:	:
	:	:	:	i	ŀ	:	:	ı	;	:	:	!
ron Y	:	ŀ	!	:	:	!	:	1	ı	:	!	:
Kane .	ł	1	!	:	;	:	:	1	;	i	;	ı
Millard	ŀ	ı	:	:	:	;	ı	1	:	1	!	ı
Prute	1	ļ	:	;	:	:	:	;	:	ŀ	:	;
Sevier	:	;	ï	1	;	:	:	1	:	!	1	;
Washington	:	:	:	;	:	:	:	:	1	:	;	;
Wayne	23	0.81	21	1.02	7	0.44	_	0.43	7	0,30	9	0.42
REGIONAL TOTAL	23	0.81	21	1.02	_	0.44	7	0.43	7	0.30	9	0.42
Northeastern Region												
Daggett	17	0.67	32	1.04	:	1	1	ŀ	:	:	0	0.0
Duchesne	20	1.00	5	0.50	;	:	!	i	:	;	:	:
Vintah	27	98.0	40	1.11	56	0.81	20	0.50	23	0.78	27	0.94
REGIONAL TOTAL	26	0.83	8	1.01	26	0.81	9	0.50	23	0.78	16	0,50
Southeastern Region		!										
Carbon	13	0.67	ı	1	36	1.43	:	:	:	;	:	;
Emery	;	;	1	;	1	:	;	:	ï	1	;	1
Grand	;	;	;	:	8	2.40	4	0.43	;	1	;	!
San Juan		:	1	1			:	;	1	:	1	:
REGIONAL TOTAL	13	29.0	:	1	32	1.83	17	0.43	:	1	:	:
STATE TOTALS	47	1.83	14	0.75	14	0.88	ę	0.66	44	0.70	45	0.47

Table 13. Sex and age composition of harvested sage grouse, 1995.

Table 13. Sex and age	compo		of harvest	ed sage				1				
Region and		Adults			Yearlin			<u>Immatur</u>		Sample	Young/	Young/
County	М	F	Total	М	F	Total	М	F	Total	Size	100 Hens	100 Adults
Northern Region												
Box Elder	5	8	13	17	7	24	10	15	25	62	167	68
Cache						_					-	
Davis										_	_	
Morgan						_	-		_	_		
Rich	22	58	80	10	28	38	85	107	192	310	235	163
Summit						_					-	deal.
Weber										-	<u></u>	
REGIONAL TOTALS	27	66	93	27	35	62	95	122	217	372	215	140
Central Region												
Juab								_			_	_
Salt Lake						_						
Sanpete				_	-		_				_	_
Tooele									_		_	
Utah					_	_		_	_	_	77	
Wasatch	_			_	_	_		_	_	-		
REGIONAL TOTALS												_
Southern Region												<u> </u>
Beaver							_		_	_	_	
Garfield						_					_	
Iron						_		_				
Kane										-		
Millard								_	_		_	_
Piute					_	_						***
Sevier			****		**			_	***			-
Washington				_				-	_		_	_
Wayne	2	0	2	22	32	54	26	19	45	101	141	80
REGIONAL TOTALS	$\frac{\overline{2}}{2}$	0	2	22	32	54	26	19	45	101	141	80
Northeastern Region	=_											
Daggett								_	_			
Duchesne												
Uintah	11	27	38				25	9	34	72	126	89
REGIONAL TOTALS	11	27	38	0	0	0	25	9	34	72	126	89
Southeastern Region						<u>_</u>					120	
Carbon								***				
Emery									_			_
Grand	· <u>-</u>		 						_			_
												_
San Juan							-		-			
REGIONAL TOTALS	40	0.2	422		 67	446	446	 4E0	206	 EAE	405	110
STATE TOTALS	40	93	133	49	67	116	146	150	296	545	185	119

Table 14. Sex and age composition of harvested sage grouse from 1992-95.	Compos	Iton of	Parvester	Sage gro	TI BSM	700 III											,					
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		766	2				993	-			1994	- 1				1995				Average 1992-94	1992-94	
Dus Holfax		Hatio			è	ŝ	Sex Ratio %		Young/	-,	Sex Ratio %			Young/	Sei	Sex Ratio %	Young	a' Young'	Sex Ratio %	tho %		Vouce
County	_	=		- 1		E	u u	100H	100A	-	Ş	ŀ	100H		=	4		1	2		,	4004
Northern Region													1		ŀ							4004
Box Elder	237	47 5	3 167	7 87		174 39	9 61	150	100	183	\$						167	89				
Cache	ı		1	İ	•	1		1	1	ı							1	} ı				
Davis	:		1	1		1	1	ı	,	1							•	ı				
Morgan		'	1	1		1	1	1	ı	1								1				
Rich	238	34	66 220	9 129		195		235	178	340	5	3	235	183	240 30		225	ış				
Summit	1	'	'			1		} '	2 1	;							3	3				
Weber	ı								ļ	ı							ı	t				
REGIONAL TOTALS	475	4n GA	102	•		350	2	450	100		1						1		!			
Central Region								200	100	493		ĺ		-			212	140	405 40	8	186	115
litah																						
6014 1 of c			1	ı	•			ı	ı	1	ı						1	1				
oar Lake	ı			•	•	,	1	1	J	ı	,				1	1	•	ı				
Sanpete	1		1	1	•	1	:	1	1	ı	1					1	1	•				
Tooele	ı			1	ı	1		ı	ı	,	,	ı		ı	1		ı					
Utah	ı			1	ı	'	1	ı	ı	ı	1						1					
Wasatch	,	,		1	1			,			:						•					
REGIONAL TOTALS								3		•	1			ĺ			ı	1				
Southern Region					•		'		1	1		i					1		1	1	,	ı
Beaver																						
00100		1		ı	1			ı	ı	1							ı	i				
				1	t			ı	ı	1					1	1		1				
FOR				1	8			189	157	ı					1		1	,				
7876		1		1	1		1	1	1	ı							1	ı				
Milard				1	1		1	1	ı	ı							ı	,				
Piute		1		ı	1	•	1	1	ı	ı							1					
Sevier	,	•		•	ı		ı	ı	ı	1							ı	ı				
Washington				ı	'			J	ı	1							1	1 1				
Wayne	292 3	35 65	5 138	103	179			155	124	161							1	ទ				
REGIONAL TOTALS	292 3					32	86	163	131	19	3	200	156	445	101	3 5	1	8 8	1	2	.,,	100
Northeastern Region				l				3		2		Ì				ļ	Ī	20	SC OL7	5	74	105
Daggett	116 5	57 43	3 233	141	1		1	ı	1	1		,	,					1				
Duchesne			1	ī	•		1	1	ı	,								! ;				
Uintah	2	40 60	100	_	~	•		100	100	ı					12	. 5	1 25	1 8				
REGIONAL TOTALS				=			Ę	400	100	1							200	60				
Southeastern Region												ļ					2	h	97 70	7)	202	118
Carbon	42	36	92	62	Ŧ	1 27	R	100	83	1							1	1				
Emery	1	1	1	•	1	1	1	1	1	ı							: 1					
Grand	,	1	1	:	•		ı	•	ı	ı							1 1					
San Juan																	•	1				
REGIONAL TOTALS	42 64	1 2	1 2	1 8		1 5	1	1 8	1 8	1			1	ا ا		1	1		١			
STATE TOTAL S	١.							901	€.	1	i			ł	Ì		1	-	27 32	25	88	22
SIMIE IOIALS	ı	ł			620		မှ	155	116	55			6 4				185	119		60	170	414
																			1	Š	2	1

FOREST GROUSE

FOREST GROUSE

SUMMARY





Brood count data for forest grouse provided small sample sizes. Efforts to collect brood count data have dwindled over the past few years. No meaningful information could be derived for ruffed grouse. Total blue grouse and blue grouse observed per 100 hours increased from 1994.

Total harvest increased from 18,862 in 1994 to 29,312 in 1995, a 55 percent increase. Total hunters and days afield also increased. Ruffed grouse comprised 45 percent of the harvest while blue grouse comprised 55 percent.

Forest grouse populations continue to rebound from the devastating winter of 1992-93.

Brood Counts

Ruffed Grouse

Results of the annual random brood survey for 1995 are shown in Table 1 of this section. Long-term trends of young per 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 1995 compared to 1994 and the previous 10-year average (1985-1994) follow:

		Percent change from	Percent change from
	<u> 1995</u>	<u>1994</u>	Average
Total ruffed grouse observed			
Young per 100 adults			
Mean brood size			
Ruffed grouse observed per 100 hours			
Total hours effort			

No brood count data for ruffed grouse was collected in 1995.

Blue Grouse

Results of the annual random brood survey for 1995 are shown in Table 5 of this section. Long-term trends of young per adult ratios, mean brood size and blue grouse observed per 100 hours are found in Tables 6-8. Survey results for 1995 compared to 1994 and the previous 10-year average (1985-94) follow:

	<u>1995</u>	Percent change from 1994	Percent change from Average
Total blue grouse observed	11	-89	-96
Young per 100 adults	267	+60	+12
Mean brood size	2.67	-28	-28
Blue grouse observed per 100 hours	157	- 59	+10
Total hours effort (forest grouse)	7	- 72	-97

The 1995 summer surveys on blue grouse indicated that production increased 60 percent from 1994 and was 12 percent above average. Efforts to collect blue grouse brood information decreased 72 percent in 1995.

Harvest

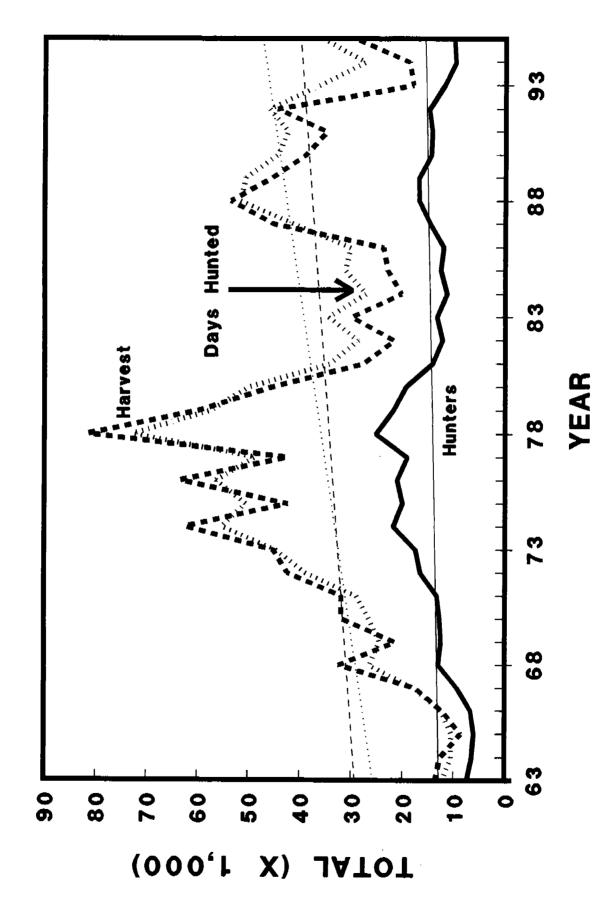
Hunter Questionnaire

Results of the 1995 blue grouse, ruffed grouse and combined hunter questionnaire are shown in Table 10, 11 and 12 respectively. 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 13-15 and total statewide harvest statistics in Table 16 and Figures 1 and 2. Forest grouse season length, bag limits and harvest statistics, 1963-1995 are listed in Table 17. Harvest statistics for 1995 compared to 1994 and the previous 10-year (1985-94) average follow:

	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Forest grouse hunters	10,088	+3	-30
Forest grouse harvested	29,312	+55	-16
Hunter-days afield	35,591	+29	-3
Forest grouse per hunter-day	0.82	+21	-13
Forest grouse per hunter	2.91	+52	+27
Percent ruffed grouse	44.83	+22	+16
Percent blue grouse	55.17	-12	-1
Percent unidentified			

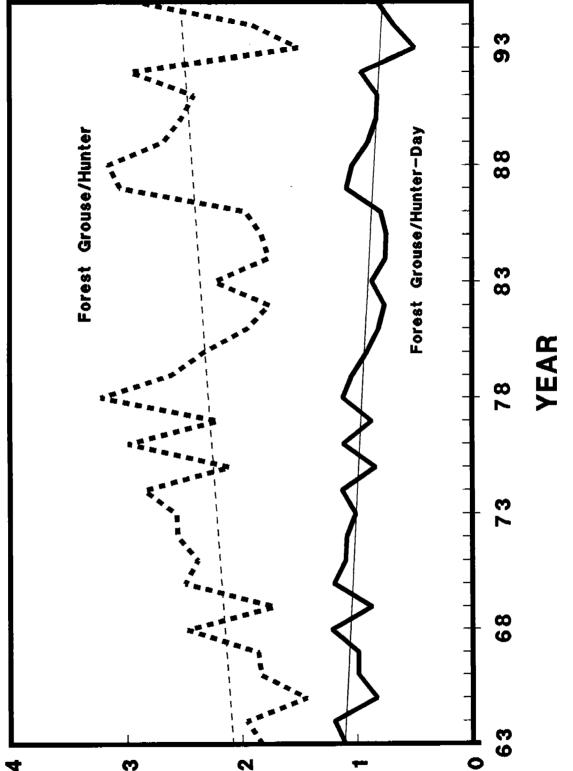
Ninety percent interval for overall forest grouse harvest is \pm - 2,050.50. Standard deviation is 0.887394.

Total harvest increased 55 percent from 1994 and was 16 percent below average. Overall, hunter success (grouse per hunter-day) increased 21 percent in 1995, but remains 13 percent below average. The number of grouse harvested per hunter was 27 percent above average. Hunter pressure increased, but remains 30 percent below the long-term average.



Statewide trends of forest grouse harvest statistics, 1963-95. Figure 1.

Statewide trends of forest grouse hunter success rates, 1963-95. 68 Figure 2. 63 0 2 n 4 **FOREST CBONSE YAQ** PER **QNA** PER



Field Bag Checks

A summary of field bag check data for 1995 is shown in Table 18. Hunter success trends determined via this method are shown in Table 19.

Results of the 1995 survey compared to 1994 and the 10-year (1985-94) average follow:

	1995	Percent change from 1994	Percent change from Average
Total hunters checked	299	-5	-41
Total hours hunted	1,238	-2	-33
Forest grouse per hunter (complete hunts)	0.42	-21	-34
Forest grouse bagged per 100 hours	10	-23	-59
Average hours per hunter-day (complete hunts)	4.14	+4	+38
Hours hunted per grouse bagged (complete hunts)	9.90	+103	+133

Sex and Age Composition of the Harvest

Sex and age composition of the harvest as determined from wings is shown in Table 20 and 21.

Following are data derived from blue grouse wing surveys in 1995 compared to 1994:

•	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Sample Size	72	-52	
Percent Males	33	-27	
Percent Females	66	+20	
Young per 100 adults	300	+33	
Young per 100 hens (adult)	540	-9	

Following are data derived from ruffed grouse wing surveys in 1995 compared to 1994:

	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Sample Size	77	+64	
Percent Males			
Percent Females			
Young per 100 adults	267	+25	
Young per 100 hens (adult)			

		Distinct	•••		Mixed	Βū										
Region and		Broods	S	Mean	& Adults		Adults w/	Total	Total	Young/	41.		Hours of Effort			Birds/
County	#	Adults	Adults Young	Brood	Adults	Adults Young	Young	Adults	Young	100 Adult Miles		Vehicle	Vehicle Horse Walk		Total	100 F
Northern Region																
Box Elder	:	ı	ı	:	ł	I	:	!	1	ı	;	:	:	:	:	:
Cache	:	:	1	ŧ	:	i	:	ł	;	;	:	:	;	:	;	:
Davis	ı	;	:	1	;	:	;	!	;	:	:	:	:	:	:	:
Morgan	i	;	:	1	;	:	;	:	;	:	:	:	;	;	!	;
Rich	1	ı	ŧ	1	:	:	ŀ	!	:	1	;	1	1	1		
Summit		1	:	;	;	;	1			1		ł	l	:	1	!
				!		;	ł	l	:	ł	:	:	:	ŀ	:	!
Weber	:	:	1	:	:	:	:	ï	:	:	:	;	;	:	:	:
REGIONAL TOTALS	1	1	:	:	:	:	;	;	1	ı	:	i	:	:	:	ł
Central Region																
Juah	;	i	1	;	:	;	;	;	:	ł	,	;	;	!	;	1
Salt Lake	ì	:	;	;	:	:	:	;	1	ŀ	1	: ;	:	i	;	ļ
												;	!	:	ł	i
Sampere	ŀ	:	:	ì	:	:	:	ŀ	:	ŀ	ţ	;	:	;	:	:
Tooele	:	:	;	;	:	!	ŀ	;	;	;	ı	ţ	;	ı	;	:
Utah	ï	;	;	;	:	:	;	;	:	:	:	:	:	ì	ł	!
Wasatch	1	1	:	1	:	:	ŀ	ŀ	:	ï	ì	:	:	ŧ	:	;
REGIONAL TOTALS	:	:	:	 :	;	:	i	:			1		١,	;	1	
Southern Region																
Beaver	;	:	I	:	;		:	:	1	;	i	,	!	;	ŀ	
Garfield	;	:	ł	:	į	:	ŀ	;	1	;	;	: 1	!!	1 1	;	l
l con	!	,	,	;	ł	1	;	;				l	ł	ł	:	1
Kana		l	;	ļ	l	I	:	ł	ł	ł	:	:	:	:	i	1
	ï	ŀ	:	:	;	:	:	:	ì	:	ŀ	1	ı	;	i	:
Millard	:	:	:	:	l	ı	ŀ	:	:	1	;	i	:	:	:	:
Piute	:	:	:	:	:	:	:	ŀ	i	:	:	:	ï	;	ı	:
Sevier	:	ŀ	;	ł	:	:	ı	ı	i	:	1	:	:	ì	:	;
Washington	:	1	:	;	ı	:	ł	1	1	:	;	:	:	i	:	;
Wayne	;	;	i	;	:	:	;	;	1	:	i	:	:	ı	;	;
REGIONAL TOTALS	ŀ	:	:	:	:	1	ı	:	1	:	1	:	:	:		:
Northeastern Region																
Daggett	:	;	:	ï	:	:	i	ŧ	;	:	:	:	:	:	:	i
Duchesne	i	1	:	:	i	1	;	1	;	:	:	1	:	;	;	ï
Uintah	1	:	:	;	;	:	:	:	ı	1	;		;	1	ı	•
REGIONAL TOTALS	:	:	:		i	:	:	:	:	:	;		:		,	:
Southeastern Region																
Carbon	:	;	:	;	i	:	;	ï	:	1	1	:	1	i	ŀ	;
Emery	;	:	ı	:	:	ŀ	!	ŀ	:	i	:	:	:	:	;	ł
Grand	:	:	:	;	:	ï	1	ï	:	i	:	;	:	;	;	;
San Juan	;	:	:	ì	1	!	1	:	!	;	:	;	;	1	1	!
REGIONAL TOTALS		;		;	:	:	:		:	1	;				:	:

Region and						Year						Average
County	1986	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region												
Box Elder	:	433	150	20	:	300	250	400	:	:	:	
Cache	350	100	300	267	300	150	225	167	:	;	1	
Davis	:	ł	:	136	1	:	:	217	;	i	1	
Morgan	;	;	:		;			:			1	
Rich	667	200	1 1	796	ł	;	:	:	1	:	!	
#####	5 6	3	1	5	: }	: }	;	ſ	ı	:	ł	
Surminit	200	400	200	;	300	450	400	:	:	;	ŀ	
Weber	150	;	380	220	:	1	700	467	:	;	ł	
REGIONAL TOTALS	308	300	337	141	300	300	365	277	:	1	:	290
Central Region				}								
Juab	1	ŀ	i	1	ŀ	ı	;	ı	;	;	1	
Salt Lake	ŀ	150	0	1	ŀ	:	;	1	;	: :	:	
Sannete	8.700	; ;		1	ł	;	902	400	ļ	ł	!	
Toolele	: : i				1	I	200	2	:	:	:	
2 4	:	: 9	: 6	: }	: }	ļ	;	: }	:	:	1	
Clan	:	460	320	300	300	!	:	5	100	1	;	
Wasatch	:	:	:	:	:	280	;	1	;	1	;	
REGIONAL TOTALS	700	322	320	300	300	280	300	250	100	1	:	319
Southern Region												
Beaver	:	;	:	;	1	;	1	ı	:	ì	:	
Garfield	;	;	:	;	i	ľ	ı	1	;	ŀ	:	
ron	ł	1	;	ł	:	!	ı	ì	;	ŀ	:	
Kane	:	}	;	ï	;	;	;	ł	1	;	:	
Millard	:	;	;	:	;	ł	1	:	:	:	:	
Piute	:	ì	:	:	;	ŀ	:	;	1	ı	;	
Sevier	1	:	:	450	;	;	;	;	1	į	;	
Washington	ì	:	:	·	:				: :	:	: :	
Wayne	;	:	ï	ï	:	333	1	:	:	:		
REGIONAL TOTALS	:		;	460	:	333		1				103
Northeastern Region												3
Daggett	;	:	i	:	150	ı	1	:	:	400	:	
Duchesne	i	:	:	:	400	900	:	:	;	:	:	
Uintah	ı	:	400	ł	267	009	;	ì	:	;	1	
REGIONAL TOTALS	1	:	400	ŀ	250	009	:		1	400		413
Southeastern Region											1	:
Carbon	;	:	ŧ	:	;	ŧ	:	·	:	:	1	
Emery	;	:	300	;	:	ı	:	ı	:	;	:	
Grand	ı	;	ı	:	:	i	1	1	:	;	:	
San Juan	:	:	;	ŀ	ı	;	i	ŀ	i	:	:	
REGIONAL TOTALS	:		300	:		;	1	1				200
A 14 TO T 1 1											:	

3						Year						Average
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region												
Box Elder	i	2.00	3,00	3.00	ł	3.00	5.00	4.00	ŀ	ŀ	:	
Cache	3,50	1.00	3.14	4.00	3.00	3.00	3.00	5.00	;	i	;	
Davis	ı	:	:	4.00	:	1	:	4.33	ŀ	ŀ	:	
Morgan	i	:	ł	ł	ł	ı	3.33	:	!	1	;	
Rich	6.67	3.00	;	ł	3.00	;	ŀ	;	;	ŀ	ł	
Summit	3.33	4.00	2.00	;	3.00	4.50	4.00	1	!	i	;	
Mohor	3.00	:	4.75	3.67	:		2.00	4.67	!	;	;	
DECIONAL TOTALS	N V	2 60	303	3.64	3 00	375	4 43	4 50	1	: 1	:	3.75
Control Dogion	•	3	3		200		2					3
cantal region												
Juan	t	ł	ı	¦	!	ŀ	:	:	:	i	:	
Salt Lake	1	:	!	:	:	!	1	ŀ	1	;	:	
Sanpete	7.00	;	!	;	ì	1	3.00	4.00	ł	;	:	
Tooele	1	ŀ	!	;	ŧ	!	ł	1	:	ì	1	
Utah	ı	4.60	3.20	3.00	3.00	1	ł	1.00	1.00	:	:	
Wasatch	;	;	:	i	!	4.70	:	ł	;	1	ı	
REGIONAL TOTALS	7.00	4.60	3,20	3.00	3.00	4.70	3.00	2.50	1,00	:	:	3,56
Southern Region											:	
Beaver	1	:	;	;	:	•	:	i	:	;	;	
Garfield	:	;	:	i	:	:	:	ı	:	ï	;	
Iron	;	:	!	;	:	!	:	:	:	;	:	
Kane	i	į	1	i	:	}	1	1	;	:	:	
Millard	ī	:	:	:	ŀ	;	:	1	:	ì	:	
Piute	ı	;	:	;	:	1	!	;	!	;	:	
Sevier	1	;	!	4.50	:	,	:	:	!	ı	:	
Washington	1	;	:	;	:	1	:	:	:	ı	:	
Wayne	ì	;	1	ł	1	2.00	!	ŀ	:	i	:	
REGIONAL TOTALS	:	:	;	4.50	:	5.00	:	1	:	:	1	4.75
Northeastern Region											:	
Daggett	ı	;	:	;	3.00		:	:	1	4.00	:	
Duchesne	i	;	;	;	4.00	00.9	ŀ	ł	1	ì	:	
Uintah	1	i	4.00	:	4.00	6.00	!	!	!	i	!	
REGIONAL TOTALS	1		4.00	1	3.75	6.00	ı	1	:	4.00	1	4.44
Southeastern Region											1	
Carbon	ì	;	1	:	1	:	:	!	1	:	i	
Emery	3	i	3.00	:	ŀ	;	:	;	ı	:	ı	
Grand	1	:	:	:	ŀ	1	:	!	1	;	;	
San Juan	:	:	:	:	:	1	:	:	:	:	;	
REGIONAL TOTALS	:	1	3.00	1	;	1	1	ı	;	1	1	3.00
STATE TOTALS	4.70	3.60	3.75	3,71	3.30	4.75	4.00	4.10	1.00	4.00	:	3.69

Legion and						Year						Average
County	1986	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region												
Box Elder	•	80	3	100	:	64	29	45	:	;	;	
Cache	17	20	28	17	46	ĸ	76	40	i	;	;	
Davis	;	ŀ	ı	114	ŀ	i	:	26	1	ŀ	;	
Morgan	8	ŀ	ļ	:	ŀ	ì	20	¦ :	;	i	;	
Rich	1,150	53	ŀ	20	1	ŀ	1	:	;	:	ł	
Summit	52	36	006	: :	σ	40	90	!	. ¦	;		
Weher	2	;	787	170	,	}	2 6	ţ	1	ł	:	
COLORISE TOTALS	4 6	: 3	707	0 2	:	:	07	0/1	:	:	:	
KEGIONAL IOI ALS	56	30	26	62	22	13	32	47	:	:	:	36
Central Region									ı		:	
Juab	i	1	1	;	:	;	;	:	;	:	:	
Salt Lake	;	167	;	;	:	ł	:	i	;	;	:	
Sanpete	160	1	:	;	ŀ	;	12	38	i	;	,	
Tooele	;	ł	!	;	;	í	! :	; ;	;	;	1	
Utah	;	400	50	133	133	1		£	7	: :	1	
Wasatch	:	} ;	7.	<u>}</u>	2	de.		2	<u>1</u>	i	l	
REGIONAL TOTALS	4	00	2 5	433	433	P		: 5	1	:	•	4
Southern Region	2	3	3	3	2	9	٥	2	-	:		20
Beaver	:	:	;	;	:	:	i	ļ	1	4	1	
Garfield	;	;	ł	;	1		1	1 :		1	ŀ	
Iron	ŀ	: :	: :	: :	1 :	;	1	!	:	:	:	
Kane	i	1	1	1		}	1	l	I	:	ŀ	
Lilloyd	}	ŀ	!	ſ	:	!	:	;	:	!	!	
	:	:	1	ŀ	:	:	Į.	;	ı	:	ŀ	
Plate	1	1	:	1	;	:	:	;	:	ı	1	
Sevier	ŀ	:	;	138	:	:	!	;	:	ŀ	:	
Washington	:	ì	;	:	ł	;	;	ī	:	:	1	
Wayne	1		t	:	i	1	;	:	:	1	:	
REGIONAL TOTALS	:	1		138	i	433	1	:	:	1		286
Northeastern Region												
Daggett	ï	i	:	:	109	;	;	;	:	20	:	
Ouchesne	:	;	4	:	33	175	:	;	ı	;	:	
Uintah	;	:	89	!	28	180	1	ı	;	1	:	
REGIONAL TOTALS	:	:	28	:	78	105	i			20	:	50
Southeastern Region											.	;
Carbon	:	;	:	ï	:	ŀ	:	;	;	1	:	
Emery	:	:	400	3	1	:	:	:	:	:	;	
Grand	:	:	:	ŀ	;	ì	:	;	ı	:	ı	
San Juan	:	:	1	;	:	:	;	:	:	1	1	
REGIONAL TOTALS	;	:	400	:	:	:						909
									:	:	:	2

		Distinct	_	;	Mixed Young			,	i							
Region and	-	Broods	ا ر	Mean	& Adults		Adults w/	Total	Total	Young/	en,		- 1			Birds/
County	*	Adults	Adults Young	Brood	Adults Young	omud	Young	Adults	Young	100 Adult Miles		Vehicle	Horse	Walk	Total	190 14
Northern Region																
Box Elder	ï	ï	ï	:	:	:	1	;	:	:	:	:	i	i	:	i
Cache	i	;	;	:	:	:	;	;	:	!	:	1	;	ł	1	i
Davis	:	;	;	:	:	;	ŀ	:	1	ŀ	:	:	ı	:	:	;
Morgan	;	:	i	ł	:	:	ı	;	;	1	;	1	i	:	:	;
Rich	i	:	ì	ł	:	;	1	;	:	!	;	1	:	:	:	:
Summit	:	;	;	:	:	:	;	;	:	!	:	ŧ	;	;	:	;
Weher	;	;	;	;	:	;	;	:	;	;	:	:	:	;	:	1
REGIONAL TOTALS	:			!	:	:		:	١,	,	,	;	:	:	;	:
Central Region																
Juab	;	i	i	:	:	:	ì	:	:	1	:	ï	:	:	1	:
Salt Lake	;	1	ì	;	:	;	i	;	:	:	:	ŧ	ŧ	÷	1	:
Sanpete	ı	i	1	:	;	ŧ	1	:	;	ł	;	;	ŀ	:	ı	:
Tooele	;	ŀ	i	;	ŧ	;	;	;	:	1	:	1	:	;	;	;
Utah	i	ı	:	;	;	;	ì	;	:	1	:	1	:	i	;	:
Wasatch	ŧ	;	1	;	:	;	ļ	:	:	1	;	:	:	:	ŀ	:
REGIONAL TOTALS	1	:	;	;	:	:	1	:	1	:	:	:	:	1	1	:
Southern Region																
Beaver	1	ŀ	:	į	;	;	:	:	:	ı	:	;	:	:	;	ŧ
Garfield	:	;	1	:	÷	:	1	:	:	1	:	i	:	;	i	1
Iron	:	:	ŀ	:	:	:	ı	:	:	!	:	ì	:	;	;	ı
Kane	:	I	;	÷	:	:	1	:	:	1	:	ì	;	:	ï	ï
Millard	;	:	:	:	:	;	ı	:	:	1	:	;	:	:	:	;
Piute	:	:	:	i	:	ŧ	:	:	:	!	:	1	:	ļ	:	ſ
Sevier	:	:	;	i	;	;	:	:	:	1	:	;	:	;	ı	ı
Washington	:	;	ł	:	:	:	:	:	i	:	:	ï	:	:	ı	ï
Wayne	:	:	:	:	1	ŧ	:	:	2	•	:	:	1	:	:	:
REGIONAL TOTALS	:	:	;	:	2	:	:	:	:	1	:	1	1	;	:	ı
Northeastern Region	,	•			,											
Daggett	-	-	, -	9.	0	0	0	-	_	9	2	Ψ-	•	:	-	200
Duchesne	; •	;	: 1	: }	: 4	: •	: •	: -	1 1	1	1 !	; •	:	:	:	:
Uintah	7	7	٠,	3.50	5	۰	اء	7	-	320	2	_ ,	7	62	9	150
REGIONAL TOTALS	~	2	20	7.67	o	5	0	2	80	267	25	7	2	۳,	_	157
Southeastern Region																
Carbon	:	i	:	;	:	1	:	}	ţ	1	;	ŀ	:	:	i	:
Emery	:	i	ĭ	;	ı		I	ŀ	:	:	:	;	:	:	ı	ſ
Grand	i	i	:	;	:	•	1	;	:	:	:	:	:	:	;	:
San Juan	:	i	1		ľ	:	;	ŀ	:	:	:	:	1	:	:	;
REGIONAL TOTALS	:	;	:	;	1		:	:	ı	;	:	١.		:	:	,

1986 1986 1987 1988 1989 1990 1991 1992 1994 1996	Region and						Year						Averag
NALTOTALS 150	County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
der 157 100 1700 144 400 200 173 1700 144 400 200 173 1700 145 410 200 173 1700 145 410 200 180 1700 145 170 145 170 145 170 145 170 145 170 145 170 145 170 170 170 170 170 170 170 170 170 170	Northern Region												
187 187 180	Box Elder	ŀ	100	:	;	700	1 4 4	400	200	ł	173	!	
183 150 222 248 200 480 260 180	Cache	167	:	300	363	257	300	600	80		;	:	
1	Davis	183	150	222	248	200	480	260	180	:	:	:	
He 150	Morgan	900	:	433	;	:	i	!	;	:	:	;	
He He He He He He He He	Rich	1	350		ì	;	;	909	400	;	1	;	
Region 0 180 380 400 186 100 173 Region 0 180 700 710 173 Region 0 180 700 710 710 Region 0 180 700 710 710 Region 0 180 700 710 710 Region 188 187 218 650 650 276 271 300 410 Ithe 176 236 237 486 317 286 170 710 Interpretation 200 245 133 149 235 100 Interpretation 200 245 60 Ithe 170 230 230 316	Summit	450	ŀ	200	;	200	178	155	;	:	!	:	
NAL TOTALS 268 222 300 279 244 292 277 207 173 Region	Weber	400	;	380	400	:	!	186	100	:	:	:	
Region	REGIONAL TOTALS	269	222	300	279	244	292	27.7	207	!	173		25.1
NAL TOTALS Section S	Central Region												
Itelant	Juab	0	180	:	:	;	200	1	;	;	140	ı	
The color of the	Salt Lake	;	i	;	;	:	<u></u>	ŀ	:	;	: 1	:	
168 167 218 650 650 276 231 300 440 176	Sanpete	!	;	900	;	80	i	;		į	1		
Title Titl	Tooele	168	167	218	650	650	976	23.1	300		Ş	l ;	
NAL TOTALS 167 169 273 486 317 286 194 80 60 76 NAL TOTALS 200 267 133 109	Utah	17.5	: :	256	267	267	286	170		l	2 4	ı	
NAL TOTALS	Wasafch	<u>:</u> :	:	3 :	:	Ž į	201	•	1 5	: \$	2	:	
The color of the	REGIONAL TOTALS		160	27.4	707	247	306	104		3	: 1	:	0.40
d 200 267 133 109	Southern Region	5	3	3	2	2	007	***	00	90	e	:	017
d 200 245 160 23	Beaver	200	267	133	109	;	1	:	;	;	:	:	
100 100	Garfield	200	245	160	:	23	:	:	!	;	ï	:	
255 500 475 250	Iron	:	;	300	ŀ	. :	:	;	ł	;	:	;	
300 200 426 60	Kane	255	200	475	250	!	;	1	ı	ł	1	:	
390 300 300	Millard	300	200	425	9	:	:	1	;	ł	!	١	
Indextry 417	Piute	300	300	i	;	:	:	;	;	:	!	ı	
Secondary Seco	Sevier	417	:	150	06	:	;	:	:	:	:	:	
ANAL TOTALS 282 279 230 118 23 246	Washington	;	233	533	:	;	;	:	:	:	:	:	
astern Region	Wayne	900	;	350	375	ŧ	;	246	1	:	;	:	
site - 282 331 318 364 233 - 600 - 100 t - 228 129 190 - 600 - 600 - 100 NAL TOTALS - 236 305 254 268 223 - 400 - 267 astern Region	REGIONAL TOTALS	282	279	230	118	23	;	246	:	:	:	3	196
t - 282 331 318 364 233 600 100 sine 228 129 190 600 800 200 350 NAL TOTALS 236 305 254 268 223 400 267 astern Region 400 100 600 600 267 an 360 260 600 350 AAL TOTALS 206 300 440 200 756 774 338 249 240 200	Northeastern Region												
NAL TOTALS	Daggett	1	282	331	318	364	233	:	009	i	:	100	
ASILTOTALS 236 305 254 268 223 600 350 astern Region 150 500 400 100 267 astern Region 160 500 600 500 267 400 100 600 600 600	Duchesne	ì	228	129	190	ŀ	009	;	800	200	:	:	
NAL TOTALS 236 254 268 223 400 267 astern Region 150 500	Uintah	:	140 041	200	233	138	09	ł	ı	909	:	350	
astern Region 160 500 600	REGIONAL TOTALS	:	236	305	254	268	223	1	400	:		267	281
an 160 500 600	Southeastern Region												
an 200 260 227 300 200 286 289 200 300 280 200 200 200 200 200 200 200 200 2	Carbon	150	200	:	;	:	:	:	200	:	:	ı	
an 300 260 227 300 200 286 289 200 200 300 500 233 167	Emery	1	;	400	100	;	ı	:	:	1	١	:	
ALS 206 300 140 200 76 500 233 167	Grand	200	260	:	227	300	:	200	286	289	200	:	
ALS 206 300 140 200 76 360 284 240 200	San Juan	300	:	300	213	300	;	200	233	167	} ;	;	
228 226 368 207 226 274 238 343 324 467 367	REGIONAL TOTALS	206	300	140	200	2.6	,	350	284	240	200		222
	STATE TOTALS	229	226	268	207	226	27.4	238	243	201	167	796	227

1985-95.		
grouse,		
ize for blue gr	I	
size fo	I	
brood	I	
Frend of average brood size for blue grouse, 1		
. Trend of a		•
Table 7.		c

Region and	7					Year						Average
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region												
Box Elder	:	2.00	:	;	7.00	3.20	4.00	2.00	;	3.80	ì	
Cache	3.33	i	3.67	3.63	3.60	3.70	4.50	4.00	;	ł	:	
Davis	3.67	3.00	2.83	4.00	4.50	6.50	4.33	3.00	i	;	:	
Morgan	9.00	i	4.33	;	1	:	:	i	i	i	:	
Rich	1	i		ţ	;	1	6,00	9.00	:	1	:	
Summit	4.50	ţ	5.00	ı	3.00	4.00	3.40	:	;	;	:	
Weber	5.33	4.00	4.75	4.00	1	ł	3.25	;	i	:	;	
REGIONAL TOTALS	4.73	3.25	3.88	3.84	3.86	4.30	4.05	4.31	;	3,80	:	4.00
Central Region											1	
Juab	0.00	:	ŧ	;	1	7.00	;	:	;	3.50	1	
Salt Lake	:	;	:	l	;	!	1	1	ŀ	1	;	
Sanpete	:	;	9.00	;	2.00	ŀ	;	;	:	i	ï	
Tooele	3.38	3.20	3.43	6.00	6,00	3.13	3.60	3.00	:	2.00	i	
Utah	3.50	;	3.45	5.00	5.00	5.00	3.22	ŀ	:	3.00	;	
Wasatch	:	:	:	ı	:	;	ì	1.00	3.00	:	:	
REGIONAL TOTALS	3.43	3.20	3.62	4.67	4.20	4.00	3.36	2.00	3.00	3.00	:	3.45
Southern Region											;	
Beaver	2.00	2.67	4.00	4.00	ŧ	;	:	;	ı	ı	;	
Garfield	ł	4.50	3.29	ŀ	:	ì	:	1	;	:	;	
Iron	ł	:	3,50	:	;	:	1	;	i	ŀ	;	
Kane	:	1.00	4.75	4.00	:	:	:	;	:	!	ŧ	
Millard	4.00	4.00	4.25	1.50	1	3.00	ı	;	;		;	
Piute	3.00	3.00		:	1	!	ŀ	;	:	1	ì	
Sevier	4.16	!	4.57	2.33	;	1	ł	;	:	1	i	
Washington	ŀ	3.50	5.33	:	:	:	:	:	:	:	i	
Wayne	6.00	:	3.50	3.76	;	:	4.67	1	:	:	;	
REGIONAL TOTALS	3.21	3.53	4.12	2.71	;	3.00	4.57	:	;	;		3.52
Northeastern Region						i						
Daggett	:	3,75	4.71	3.20	3.89	3.50	1	00.9	;	;	1,00	
Duchesne	1	3.25	2.50	2.50	i	00.9	1	8,00	2.00	ŀ	:	
Uintah	1	4.00	5.00	3.50	2.20	1	:	i	00'9	;	3.50	
REGIONAL TOTALS	:	3.56	4.52	3.00	3.29	4.33	;	6.67	4.00	:	2.67	4.20
Southeastern Region											•	
Carbon	3.00	5.00	:	1	1	:	ŀ	5.00	:	;	ı	
Emery	:	I	4.00	4.00	:	;	ł	ï	:	ı	;	
Grand	3.00	3.25	ł	2.78	3.00	ŀ	2.00	4.38	3.17	4.00	;	
San Juan	3.00	:	3.00	3.00	3.00	:	5.00	3.50	2.50	:	:	
REGIONAL TOTALS	3.00	3.60	3.50	2.93	3.00	1	3.50	4.13	2.90	4.00	:	3.40
STATE TOTALS	3.56	3.44	4.00	3,22	3.61	4.19	3.88	4.29	2.91	3.69	2.67	3,68

County						Year						Average
	1986	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985.94
Northern Region												
Box Elder	i	20	•	:	:	200	21	136	:	750	:	
Cache	77	1	Σ	99	114	108	165	45	;	:	:	
Davis	94	20	232	300	120	426	98	112	;	:	:	
Morgan	23	4	29	:	11		:	:	:	:	:	
Rich	ı	53	0	٥	ŀ	ı	175	62	:	;	:	
Summit	38	;	006		21	101	2	<u> </u>	!	;	: :	
Weber	167	100	267	99	; ;	:		40	: 1	: 1	1 ;	
REGIONAL TOTALS	28	27	109	6	79	133	6	C.		750		466
Central Region		i			2	2	3	3		3	: 	3
Juab	30	156	=	1	;	800	1	;	,	900	ł	
Salt Lake	; ;	<u></u>	400	٠ ا	:	} ;	: :	; ;	: :	3	: :	
Sanpete	:	;	1400		14	4		23	25		1	
Topele	536	444	206	1 000	7000	233		3 5	3	96	:	
Utah	165	;	229	367	367	7 2	3.18	20 1	! :	3 5	:	
Wasatch	:	ŀ	-	} }	·	•	2	i a	180	3	:	
REGIONAL TOTALS	103	726	. 2	603	C.	1	400	2	2 2		:	,
Southern Region			5	8	4	2	3	17	07	:	; -	100
Beaver	33	137	175	16.4	i						ŀ	
Garfield	122	141	. 1	2	: :	, e	ı	i	:	1	:	
Iron	! :	:	1 200		ł	3	ŀ	:	•	:	ŀ	
Kana	5	130	204.	,	;	ł	:	;	:	1	!	
Manie	2.5	/07	200	/7!	!	i	i	}	ł	:	!	
Millard	133 1	200	625	100	1	:	ŀ	:	1	:	:	
Flute	29	266	;	!	;	:	!	;	1	1	•	
Sevier	155	:	275	738	i	;	ŀ	1	:	;	:	
Washington	:	333	820	ł	:	:	!	ı	;	:	;	
Wayne	700	:	450	476	;	:	2,250	;	;	ï	;	
REGIONAL TOTALS	140	178	309	247	:	200	2,250	:	:	:	;	554
Northeastern Region									1			
Daggett	ı	300	1,255	230	265	786	ı	1,400	:	:	200	
Duchesne	ŀ	61	\$	121	ı	175	i	225	120	:	:	
	:	009	92	37	48	320	ł	!	3.600	9	150	
REGIONAL TOTALS		126	286	120	96	46	I	200	370	~	157	194
Southeastern Region												
Carbon	33	09	:	:	;	:	:	240	:	ł	;	
Emery	;	:	200	ı	:	:	:	:	:	,	;	
Grand	360	120	300	:	88	:	300	540	875	467	ı	
San Juan	63	:	400	1	400	. :	009	009	467	:	;	
REGIONAL TOTALS	123	96	400	:	85		450	480	113	467		77.6
STATE TOTALS	404	440	100									

Table 9. Summary of effort expended on forest grouse brood counts, 1995.

Region and	Vehicle		Hours of	Effort	
County	Miles	Vehicle	Horse	Walk	Total
Northern Region					
Box Elder					
Cache					
Davis		m			
Morgan				_	_
Rich					
Summit			,	_	
Weber					_
REGIONAL TOTALS					
Central Region					
Juab				-	_
Salt Lake				***	_
Sanpete					_
Tooele					
Utah					_
Wasatch		~~		_	_
REGIONAL TOTALS					<u>-</u>
Southern Region					
Beaver				_	
Garfield				_	-
Iron				_	-
Kane				-	_
Millard				_	
Piute			-		
				-	_
Sevier					_
Washington					_
Wayne					
REGIONAL TOTALS	-			-	
Northeastern Region					_
Daggett	10	1		-	1
Duchesne				_	
Uintah	<u>15</u>	1	2	3	6
REGIONAL TOTALS	25	2	2	3	7
Southeastern Region					
Carbon				-	
Emery					-
Grand				_	-
San Juan					
REGIONAL TOTALS	-			_	-
STATE TOTALS	25	2	2	3	7

Table 10. Summary of blue grouse hunter success and distribution of harvest and hunting pressure by region and county, 1995.

NORTHERN REGION Box Elder	REGION AND COUNTY	Sample Size*	HUNTER-DAYS AFTELD	BIRDS BAGGED	BIRDS PER HUNTER-DAY	% OF	\$ OF
Box Elder				LAGGOD	BUNLER-DAY	FRESSURE	BARVEST
Cache 59 4,976 3,479 0.70 26.78 21.52 Davis 8 330 505 1.53 1.78 3.13 Morgan 2 58 97 1.67 0.31 0.60 Rich 5 194 136 0.70 1.05 0.84 Summit 19 1,477 933 0.63 7.95 5.77 Weber 20 1,555 1,749 1.13 8.37 10.82 REGIONAL TOTALS 126 9,408 7,736 0.82 50.63 47.83 CENTRAL REGION Jub 6 252 252 1.00 1.36 1.56 Salt Lake 6 233 136 0.58 1.26 0.84 Sanpete 15 738 50.68 3.97 3.13 Tocele 7 466 641 1.38 2.51 3.97 Utah 20 1,146 1,146 1.00 6.17 7.09 Wasatch 25 1,496 1,049 0.70 8.05 6.49 REGIONAL TOTALS 79 4,334 3,732 0.86 23.33 23.08 SOUTHERN REGION Beaver 9 330 349 1.06 1.78 2.16 Garfield 3 272 174 0.64 1.46 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 1.26 1.56 Millard 2 155 116 0.75 0.84 0.72 Piute 3 330 311 0.94 1.78 1.78 1.92 Sevier 14 1.166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 1 9 58 3.00 0.10 0.36 REGIONAL TOTALS 56 3,651 2,818 0.92 16.42 17.43 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 59 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 6 170 38 0.00 0.00 0.00 0.00 Grand 3 186 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48							
Davis 8 330 505 1.53 1.78 3.13 Morgan 2 58 97 1.67 0.31 0.60 Rich 5 194 136 0.70 1.05 0.84 Summit 19 1,477 933 0.63 7.95 5.77 Weber 20 1,555 1,749 1.13 8.37 10.82 REGIONAL TOTALS 126 9,408 7,736 0.82 50.63 47.83 CENTRAL REGION Juab 6 252 252 1.00 1.36 1.56 Salt Lake 6 233 166 0.58 1.26 0.84 Sanpete 15 738 505 0.68 3.97 3.13 Tocele 7 466 641 1.38 2.51 3.97 Utah 20 1,146 1,146 1.00 6.17 7.09 Wasatch 25 1,496 1,049 0.70 8.05 6.49 REGIONAL TOTALS 79 4.334 3.732 0.86 SOUTHERN REGION Beaver 9 330 349 1.06 1.78 2.16 Garfield 3 272 174 0.64 1.46 1.08 Iron 10 485 466 0.64 1.46 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 1.26 1.56 Millard 2 155 116 0.75 0.84 0.72 Piute 3 330 311 0.94 1.78 1.92 Sevier 14 1,166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 19 58 3.00 0.10 0.36 NORTHEASTERN REGION Daggett 5 349 291 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Daggett 5 349 291 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.00 Carbon 1 0 38 0.00 0.00 0.00 Carbon 1 0 38 0.00 0.00 0.00 Carbon 1 0 38 0.00 0.00 0.00 Carbon 2 1.64 1.64 1.66 0.75 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.00 Carbon 1 0 38 0.00 0.00 0.00 Carbon 2 1.06 0.00 Carbon 1 0 38 0.00 0.00 0.00 Carbon 1 0 38 0.00 0.00 0.00 Carbon 1 0 0 38 0.00 0.00 0.00 Carbon 1 0 0 0 0 0 0.00 0.00 Carbon 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48	·· · · - -						
Morgan 2 50 97 1.67 0.31 0.60 Rich 5 194 136 0.70 1.05 0.84 Summit 19 1,477 933 0.63 7.95 5.77 Weber 20 1,555 1,749 1.13 8.37 10.82 REGIONAL TOTALS 126 9.408 7.736 0.62 50.63 47.82 CENTRAL REGION Jub 6 252 252 1.00 1.36 1.56 Salt Lake 6 233 136 0.58 1.26 0.84 Sanpete 15 738 505 0.68 3.97 3.13 Tooele 7 466 641 1.38 2.51 3.97 Utah 20 1,146 1,146 1.00 6.17 7.09 Wasatch 25 1,496 1,049 0.70 8.05 6.49 REGIONAL TOTALS 75 4.334 3.732 0.86 23.33 23.68 SOUTHERN REGION Beaver 9 330 349 1.06 1.78 2.16 Garfield 3 272 174 0.64 1.46 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 1.26 1.56 Millard 2 155 116 0.75 0.84 0.72 Piute 3 330 311 0.94 1.78 1.92 Sevier 14 1,166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 1 9 58 3.00 0.10 0.36 REGIONAL TOTALS 50 349 291 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 50 349 291 0.83 1.88 1.80 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 NORTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.00 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.00 Carbon 1 0 0 0 0 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 9 44 0.44 REGIONAL TOTALS 9 44 0.44 REGIONAL TOTALS 9 44 0.44 REGIONAL TOTALS 9 6 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00 0.00 0.00 REGIONAL TOTALS 9 0.00	-						
Rich							
Summit 19							
Weber							
CENTRAL REGION	_ _						
CENTRAL REGION Juab 6 252 252 1.00 1.36 1.56 Salt Lake 6 233 136 0.58 1.26 0.84 Sanpete 15 738 505 0.68 3.97 3.13 Tooele 7 466 641 1.38 2.51 3.97 Utah 20 1,146 1,146 1.00 6.17 7.09 Wasatch 25 1,496 1,049 0.70 8.05 6.49 REGIONAL TOTALS 79 4.334 3.732 0.86 23.33 23.68 SOUTHERN REGION Beaver 9 330 349 1.06 1.78 2.16 Garfield 3 272 174 0.64 1.46 1.08 Lron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 1.26 1.56 Millard 2 155 116 0.75 0.84 0.72 Piute 3 330 311 0.94 1.78 1.92 Sevier 14 1,166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 50 3.051 2.818 0.92 16.42 17.43 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1.321 1.613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 231 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48							
Juab 6 252 252 1.00 1.36 1.56 Salt Lake 6 233 136 0.58 1.26 0.84 Sanpete 15 738 505 0.68 3.97 3.13 Tooele 7 466 641 1.38 2.51 3.97 Utah 20 1,146 1,146 1.00 6.17 7.09 Wasatch 25 1,496 1,049 0.70 8.05 6.49 REGIONAL TOTALS 79 4.334 3.732 0.86 23.33 23.08 SOUTHERN REGION Beaver 9 330 349 1.06 1.78 2.16 Garfield 3 272 174 0.64 1.46 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 1.26 1.56 Millard 2 155 116 0.75 0.84 0.72 Piute 3 330 311 0.94 1.78 1.92 Sevier 14 1,166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 50 3.051 2.818 0.92 16.42 13.43 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Puchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.00 Carbon 1 0 38 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.55 0.48	REGIONAL TOTALS	126	9,408	7,736	0.82	50.63	47.84
Salt Lake 6 233 136 0.58 1.26 0.84 Sanpete 15 738 505 0.68 3.97 3.13 Tooele 7 466 641 1.38 2.51 3.97 Utah 20 1,146 1,146 1.00 6.17 7.09 Wasatch 25 1,496 1,049 0.70 8.05 6.49 REGIONAL TOTALS 75 4.334 3.732 0.86 23.33 23.08 SOUTHERN REGION Beaver 9 330 349 1.06 1.78 2.16 Garfield 3 272 174 0.64 1.46 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 1.26 1.56 Millard 2 155 116 0.75 0.84 0.72 Piute 3 330 311 0.94 1.78 1.92 Sevier 14 1,166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 291 0.80 1.80 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48							
Sanpete 15 738 505 0.68 3.97 3.13 Tooele 7 466 641 1.38 2.51 3.97 Utah 20 1,146 1,146 1.00 6.17 7.09 Wasatch 25 1,496 1,049 0.70 8.05 6.49 REGIONAL TOTALS 78 4,334 3,732 0.86 23.33 23.68 SOUTHERN REGION Beaver 9 330 349 1.06 1.78 2.16 Garfield 3 272 174 0.64 1.46 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 1.26 1.56 Millard 2 155 116 0.75 0.84 0.72 Piute 3 330 311 0.94 1.78 1.92 Sevier 14 1,166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 36 3,051 2,818 0.92 16.42 17.43 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 NORTHEASTERN REGION Carbon 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 3 49 231 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48							1.56
Tooele 77 466 641 1.38 2.51 3.97 Utah 20 1,146 1,146 1.00 6.17 7.09 Wasatch 25 1,496 1,049 0.70 8.05 6.49 REGIONAL TOTALS 79 4.334 3.732 0.86 23.33 23.08 SOUTHERN REGION Beaver 9 330 349 1.06 1.78 2.16 Garfield 3 272 174 0.64 1.46 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 1.26 1.56 Millard 2 155 116 0.75 0.84 0.72 Piute 3 330 311 0.94 1.78 1.92 Sevier 14 1,166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 50 3.051 2.818 0.92 16.42 17.43 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Puchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88 1.44							
Utah 20							
Wasatch 25 1,496 1,049 0.70 8.05 6.49 REGIONAL TOTALS 79 4.334 3.732 0.86 23.33 23.68 SOUTHERN REGION Beaver 9 330 349 1.06 1.78 2.16 Garfield 3 272 174 0.64 1.46 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 1.26 1.56 Millard 2 155 116 0.75 0.84 0.72 Piute 3 330 311 0.94 1.78 1.92 Sevier 14 1,166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 50 3,051 2.816 0.92 16.42 17.43 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 136 116 0.86 0.73 0.72 San Juan 3 123 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88		=					
SOUTHERN REGION SOUTHERN REGION SOUTHERN REGION Southern Region Southern R	·						
SOUTHERN REGION Seaver							
Beaver	REGIONAL TOTALS	/9	4,334	3,732	0.86	23.33	23.08
Garfield 3 272 174 0.64 1.46 1.08 Iron 10 485 466 0.96 2.62 2.88 Kane 5 233 252 1.08 1.26 1.56 Millard 2 155 116 0.75 0.84 0.72 Piute 3 330 311 0.94 1.78 1.92 Sevier 14 1,166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 50 3,051 2.818 0.92 16.42 17.43 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 38 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88							
Tron			•			1.78	2.16
Kane 5 233 252 1.08 1.26 1.56 Millard 2 155 116 0.75 0.84 0.72 Piute 3 330 311 0.94 1.78 1.92 Sevier 14 1,166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 50 3,051 2,818 0.92 16.42 17.43 NORTHEASTERN REGION 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.00 0.00 0.00 0.00						1.46	1.08
Millard 2 155 116 0.75 0.84 0.72 Piute 3 330 311 0.94 1.78 1.92 Sevier 14 1,166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 50 3.051 2.818 0.92 16.42 17.43 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 0.00 0.00 0.00 0.						2.62	2.88
Piute 3 330 311 0.94 1.78 1.92 Sevier 14 1,166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 19 58 3.00 0.10 0.36 REGIONAL TOFALS 50 3.051 2.818 0.92 16.42 17.43 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72		5					
Sevier 14 1,166 991 0.85 6.28 6.13 Washington 3 58 97 1.67 0.31 0.60 Wayne 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 50 3,051 2,818 0.92 16.42 17.43 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 0.00 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.							
Washington 3 58 97 1.67 0.31 0.60 Wayne 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 50 3,051 2,818 0.92 16.42 17.43 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48							
Wayne 1 19 58 3.00 0.10 0.36 REGIONAL TOTALS 50 3,051 2,818 0.92 16.42 17.43 NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 0.00 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88							
NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88 1.44 1.88 1.80 1.89 1.44 1.42							
NORTHEASTERN REGION Daggett 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 0 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88 1.44		_				*****	
Daggett 5 349 291 0.83 1.88 1.80 Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 0 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88 1.44	REGIONAL FOTALS	50	3,051	2,818	0.92	16.42	17.43
Duchesne 6 174 427 2.44 0.94 2.64 Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88 1.44							
Uintah 18 796 894 1.12 4.29 5.53 REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88 1.44							1.80
REGIONAL TOTALS 29 1,321 1,613 1.22 7.11 9.98 SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 0 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88 1.44						0.94	2.64
SOUTHEASTERN REGION Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 0 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88 1.44							
Carbon 1 0 38 0.00 0.00 0.24 Emery 0 0 0 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88 1.44	REGIONAL TOTALS	29	1,321	1,613	1.22	7.11	9.98
Emery 0 0 0 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88 1.44							
Emery 0 0 0 0.00 0.00 0.00 Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88 1.44	Carbon	1	0	38	0.00	0.00	0.24
Grand 3 136 116 0.86 0.73 0.72 San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88 1.44	<u>-</u>		0	0	0.00		
San Juan 3 213 77 0.36 1.15 0.48 REGIONAL TOTALS 7 349 233 0.67 1.88 1.44			136	116	0.86	0.73	
				77	0.36	1.15	0.48
Inknown 1 116 20 0.22 0.62 0.04	REGIONAL TOTALS	7	349	233	0.67	1.88	1.44
1 110 38 0.33 0.63 0.24	Unknown	1	116	38	0.33	0.63	0.24
STATE TOTALS 292 18,583 16,172 0.87 100.00 100.00	STATE TOTALS	292	18,583	16,172	0.87	100.00	100.00

^{*}Total hunter trips from questionnaire returns.

Table 11. Summary of ruffed grouse hunter success and distribution of harvest and hunting pressure by region and county, 1995.

REGION AND		unter-days	BIRDS	BIRDS PER	% OF	* OF
COUNTY	SIZE*	AFIELD	BAGGED	HUNTER-DAY	PRESSURE	Harvest
NORTHERN REGION						
Box Elder	12	660	641	0.97	3.89	4.88
Cache	60	4,781	2,565	0.54	28.12	19.53
Davis	9	330	311	0.94	1.94	2.37
Morgan	8	369	874	2.37	2.17	6.66
Rich	13	874	602	0.69	5.14	4.59
Summit	31	1,885	1,535	0.81	11.09	11.69
Weber	27	2,177	1,652	0.76	12.80	12.57
REGIONAL TOTALS	160	11,079	8,183	0.74	65.14	62.28
CENTRAL REGION						
Juab	4	291	116	0.40	1.71	0.89
Salt Lake	· 5	194	174	0.90	1.14	1.33
Sanpete	7	369	252	0.68	2.17	1.92
Tooele	5	330	155	0.47	1.94	1.18
Utah	19	1,049	602	0.57	6.17	4.59
Wasatch	19	1,302	894	0.69	7.66	6.80
REGIONAL TOTALS	59	3,537	2,196	0.62	20.80	16.72
SOUTHERN REGION				•		
Beaver	1	97	19	0.20	0.57	0.15
Garfield	1	19	38	2.00	0.11	0.30
Iron	3	136	97	0.71	0.80	0.74
Kane	3	136	97	0.71	0.80	0.74
Millard.	1	38	38	1.00	0.23	0.30
Piute	0	0	0	0.00	0.00	0.00
Sevier	6	369	388	1.05	2.17	2.96
Washington	2	58	77	1.33	0.34	0.59
Wayne	0	0	0	0.00	0.00	0.00
REGIONAL TOTALS	17	855	758	0.89	5.03	5.77
NORTHEASTERN REGION						
Daggett	5	272	194	0.71	1.60	1.48
Duchesne	5	174	272	1.56	1.03	2.07
Uintah	14	835	1,321	1.58	4.91	10.06
REGIONAL TOTALS	24	1,282	1,788	1.39	7.54	13.61
SOUTHEASTERN REGION	•					
Carbon	2	97	116	1.20	0.57	0.89
Emery	2	77	19	0.25	0.46	0.15
Grand	1	58	38	0.67	0.34	0.30
San Juan	1	19	38	2.00	0.11	0.30
REGIONAL TOTALS	6	252	213	0.85	1.49	1.63
Unknown	0	0	0	0.00	0.00	0.00
STATE TOTALS	266	17,008	13,140	0.77	100.00	100.00

^{*}Total hunter trips from questionnaire returns.

Table 12. Summary of blue and ruffed grouse hunter success and distribution of harvest and hunting pressure by region and county, 1995.

REGION AND	SAMPLE	HUNTER-DAYS	BIRDS	BIRDS PER	% of	% OF
COUNTY	SIZE*	AFIELD	BAGGED	Hunter-day	PRESSURE	HARVEST
NORTHERN REGION						
Box Elder	36	1,516	1,399	0.92	3.84	4 04
Cache	128	8,377	5,987	0.71	21.23	4.84 20.69
Davis	37	1,282	816	0.64	3.25	20.69
Morgan	20	952	1,088	1.14	2.41	3.76
Rich	23	1,127	699	0.62	2.86	2.42
Summit	50	2,507	2,429	0.97	6.35	8.40
Weber	65	3,460	2,876	0.83	8.77	9.94
REGIONAL TOTALS	359	19,224	15,297	0.80	48.72	52.86
CENTRAL REGION			***************************************			,
Juab	14	524	408	0.78	1 22	7 47
Salt Lake	19	641	330	0.78	1.33 1.63	$1.41 \\ 1.14$
Sanpete	33	1,613	777	0.48	4.09	2.69
Tooele	22	913	87 4	0.96	2.32	3.02
Utah	65	2,974	1,341	0.45	7.54	4.63
Wasatch	52	2,663	1,982	0.74	6.75	6.85
REGIONAL TOTALS	Militaria					
AEGIONAL IUTALS	205	9,330	5,714	0.61	23.65	19.75
SOUTHERN REGION						
Beaver	16	835	505	0.60	2.12	1.75
Garfield	8	485	194	0.40	1.23	0.67
Iron	19	952	738	0.78	2.41	2.55
Kane	5	233	408	1.75	0.59	1.41
Millard	8	291	174	0.60	0.74	0.60
Piute	7	388	311	0.80	0.99	1.07
Sevier	50	2,915	1,438	0.49	7.39	4.97
Washington	4	. 77	97	1.25	0.20	0.34
Wayne REGIONAL TOTALS	2	116	58	0.50	0.30	0.20
ADDIONAD IVIAUS	119	6,298	3,926	0.62	15.96	13.57
NORTHEASTERN REGION						
Daggett	15	874	485	0.56	2.22	1.68
Duchesne	23	835	719	0.86	2.12	2.48
Uintah	38	1,671	2,177	1.30	4.24	7.52
REGIONAL TOTALS	76	3,382	3,382	1.00	8.57	11.69
SOUTHEASTERN REGION						
Carbon	4	97	155	1:60	0.25	0.54
Emery	4	116	19	0.17	0.30	0.07
Grand	7	311	155	0.50	0.79	0.54
San Juan	7	272	116	0.43	0.69	0.40
REGIONAL TOTALS	22	796	447	0.56	2.02	1.54
Unknown	9	427	174	0.41	1.08	0.60
STATE TOTALS	790	39,459	28,943	0.73	100.00	100.00

^{*}Total hunter trips from questionnaire returns.

Table 13. Summary of forest grouse bagged per hunter-day by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Region		0.00	0.07	0.60		0.10	0.00	0 00
Box Elder	1.03	0.99	0.97	0.69	1.15	0.18	0.80	0.92
Cache	1.24	0.84	0.75	0.92	0.94	0.41	0.88	0.71
Davis	0.98	0.78	1.02 0.94	0.84	0.59	0.18	0.45	0.64
Morgan	0.99	1.23 0.42		0.94	1.06 0.76	0.16 0.34	0.66 0.59	1.14 0.62
Rich Summit	0.92 0.86	0.42	0.52 0.49	0.62 0.72	0.77	0.40	0.82	0.97
Weber	0.99	1.00	0.49	0.72	1.01	0.40	0.52	0.83
REGIONAL TOTALS	1.07	0.88	0.73	0.76	0.92	0.37	0.72	0.80
AND A DITTIES A DESCRIPTION OF THE PERSON OF		viv	***					
Central Region								
Juab	0.86	0.71	0.88	0.65	0.79	0.84	0.56	0.78
Salt Lake	0.87	0.77	0.81	0.55	1.00	0.41	0.87	0.52
Sanpete	0.84	0.65	0.82	0.98	0.78	0.65	0.86	0.48
Tooele	1.33	1.75	1.03	1.03	1.19	0.37	1.02	0.96
Utah	1.08	0.99	0.91	0.97	0.84	0.77	0.59	0.45
Wasatch	0.74	0.78	0.83	0.76	1.25	0.26	0.52	0.74
REGIONAL TOTALS	0.97	0.90	0.90	0.89	0.92	0.52	0.70	0.61
Southern Region								
Beaver	1.31	0.86	0.85	0.95	1.44	1.17	0.64	0.60
Garfield	1.00	1.27	0.74	0.83	0.48	0.27	0.29	0.40
Iron	1.08	0.79	0.69	0.57	0.78	0.93	0.78	0.78
Kane	1.50	1.25	0.81	0.61	1.45	1.25	0.80	1.75
Millard	1.36	1.26	1.49	0.98	1.59	0.86	0.77	0.60
Piute	1.34	1.00	1.25	1.00	0.75	1.32	0.20	0.80
Sevier	1.18	1.23	1.02	0.94	1.30	0.49	0.71	0.49
Washington	0.10	0.00	0.00	1.83	2.00	0.00	0.60	1.25
Wayne	0.25	0.76	0.86	0.59	1.29	0.71	0.45	0.50
REGIONAL TOTALS	1.16	1,13	0.99	0.87	1.19	0.71	0.64	0.62
Northeastern Region	1							
Daggett	0.65	0.42	0.81	0.97	1.03	0.85	0.58	0.56
Duchesne	0.98	0.92	0.69	0.78	0.68	0.31	0.57	0.86
Uintah	0.91	0.67	1.09	1.00	1.01	0.66	0.53	1.30
REGIONAL TOTALS	0.88	0.69	0.93	0.93	0.94	0.59	0.55	1.00
800000000000000000000000000000000000000			80,800,000		***************************************	***************************************		:::::::::::::::::::::::::::::::::::::::
Southeastern Region		0.37	0.47	0.64	0 03	0.73	0.78	1.60
Carbon	0.48	0.37	0.47	0.64	0.83	0.73	0.48	0.17
Emery	1.06	0.60	0.81 1.12	0.78 2.14	0.88 0.52	1.12	0.48	0.50
Grand San Juan	0.81 0.67	1.14 1.00	0.83	0.45	1.57	1.50	1.20	0.43
REGIONAL TOTALS	0.79	0.57	0.69	0.77	0.79	0.54	0.67	0.56
ALERT CHIEF TO THE STREET	4474	****	•••					
Unknown Counties	0.70	0.76	0.00	0.00	0.00	0.44	0.00	0.41
STATE TOTALS	1.04	0.90	0.83	0.82	0.96	0.50	0.69	0.73
	I		~			-		

Table 14. Percentage distribution of forest grouse harvest by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Region	1							
Box Elder	3.83	5.02	6.51	E E3	4 03			
Cache	21.10	15.18	15.47	5.53 17.45	4.83	1.99	6.15	4.84
Davis	3.14	1.96	3.28	2.89	17.65 2.48	12.36 0.63	19.01	20.69
Morgan	2.64	6.93	3.28	3.29	2.75	0.84	1.68 2.52	2.82
Rich	4.55	2.60	2.89	3.74	3.19	2.72	2.70	3.76 2.42
Summit	3.55	4.61	3.45	6.83	3.83	3.77	8.67	8.40
Weber	9.53	10.35	8.07	5.03	9.82	9.11	7.18	9.94
REGIONAL TOTALS	48.37	46.65	42.96	44.77	44.55	31.41	47.90	52.86
Central Region					~~~	***************************************	************************	***************************************
Juab	1.12	1.32	0.78	0.75	1.48	1 60	0.47	
Salt Lake	1.40	1.50	0.72	0.80	2.12	1.68 0.94	0.47 1.86	1.41
Sanpete	4.70	4.56	5.40	4.34	3.31	4.19	5.69	1.14 2.69
Tooele	4.17	5.02	6.68	4.04	2.52	3.98	4.94	3.02
Utah	9.47	7.62	8.74	7.48	10.38	10.47	6.90	4.63
Wasatch	3.05	5.47	2.89	4.44	4.59	3.14	4.19	6.85
REGIONAL TOTALS	23.94	25.49	25.21	21.83	24.39	24.40	24.04	19.75
Southern Region	1						••••	************
Beaver	0.65	0.82	1.61	2.59	2.08	2.20	1.68	1.75
Garfield	0.74	1.73	1.45	1.00	0.84	1.36	0.37	0.67
Iron	1.77	1.41	1.39	1.94	1.56	7.96	1.68	2.55
Kane	0.18	0.23	0.72	0.95	1.28	1.57	0.37	1.41
Millard	1.77	3.51	2.89	2.24	3.23	3.35	2.14	0.60
Piute	2.80	0.96	3.34	2.04	0.84	3.46	0.37	1.07
Sevier	10.84	9.90	7.90	10.27	10.70	6.39	8.20	4.97
Washington	0.03	0.00	0.00	0.55	0.48	0.00	0.56	0.34
Wayne REGIONAL TOTALS	0.09 18.92	0.73	1.00	0.65	0.72	1.78	0.47	0.20
AUGIORRE IVIAUS	10.72	19.92	20.31	22.23	21.72	28.06	15.84	13.57
Northeastern Re	gion							
Daggett	0.93	0.46	1.39	1.65	1.28	1.78	2.70	1.68
Duchesne	1.55	1.60	1.39	2.24	1.20	1.36	1.58	2.48
Uintah	3.64	4.33	4.90	4.99	4.67	7.12	3.91	7.52
REGIONAL TOTALS	6.14	6.38	7.68	8.87	7.15	10.26	9.20	11.69
Southeastern Re	gion							
Carbon	0.43	0.50	1.34	0.70	0.20	1.15	1.68	0.54
Emery	1.15	0.41	1.17	0.35	0.92	0.73	1.21	0.07
Grand	0.68	0.36	1.06	0.75	0.64	1.99	0.00	0.54
San Juan	0.12	0.18	0.28	0.50	0.44	0.31	1.12	0.40
REGIONAL TOTALS	2.40	1.46	3.84	2.29	2.20	4.19		1.54
Unknown Counties	0.21	0.73	0.00	0.00	0.00	1.68	0.00	0.60
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 15. Percentage distribution of forest grouse hunting pressure by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Region								
Box Elder	3.84	4.55	5.60	6.59	4.04	5.48	5.30	3.84
Cache	17.65	16.22	17.22	15.55	18.07	14.88	14.76	21.23
Davis	3.32	2.25	2.69	2.82	4.04	1.78	2.56	3.25
Morgan	2.77	5.08	2.92	2.86	2.50	2.66	2.62	2.41
Rich	5.13	5.53	4.63	4.95	4.04	3.97	3.13	2.86
Summit	4.26	4.63	5.83	7.73	4.78	4.75	7.28	6.35
Weber	9.94	9.34	9.21	8.10	9.36	8.93	9.71	8.77
	46.93	47.60	48.10	48.61	46.84	42.45	45.37	48.72
Central Region								
Juab	1.35	1.68	0.74	0.94	1.81	0.99	0.58	1.33
Salt Lake	1.67	1.76	0.74	1.19	2.04	1.15	1.47	1.63
Sanpete	5.77	6.31	5.51	3.64	4.08	3.24	4.54	4.09
Tooele	3.26	2.58	5.42	3.23	2.04	5.33	3.32	2.32
Utah	9.10	6.88	8.01	6.34	11.98	6.79	8.05	7.54
Wasatch	4.29	6.31	2.92	4.79	3.54	6.11	5.50	6.75
REGIONAL TOTALS	25.46	25.52	23.33	20.13	25.50	23.60	23.45	23.65
Southern Region								
Beaver	0.51	0.86	1.57	2.25	1.39	0.94	1.79	2.12
Garfield	0.77	1.23	1.62	0.98	1.69	2.56	0.89	1.23
Iron	1.71	1.60	1.67	2.82	1.93	4.28	1.47	2.41
Kane	0.12	0.16	0.74	1.27	0.85	0.63	0.32	0.59
Millard	1.35	2.50	1.62	1.88	1.96	1.93	1.92	0.74
Piute	2.16	0.86	2.22	1.68	1.08	1.31	1.28	0.99
Sevier	9.52	7.21	6.44	8.92	7.94	6.53	7.92	7.39
Washington	0.32	0.08	0.23	0.25	0.23	0.16	0.64	0.20
Wayne	0.38	0.86	0.97	0.90	0.54	1.25	0.70	0.30
REGIÓNAL TOTALS	16.88	15.36	17.08	20.95	17.60	19.58	16.93	15.96
N. d d D i		•••••						
Northeastern Region			2 44		1 10	1 04	2 10	2 22
Daggett	1.48	0.98	1.44	1.39 2.37	1.19 1.69	1.04 2.19	3.19 1.92	2.22 2.12
Duchesne	1.64	1.56	1.67	4.09	4.47	5.38	5.05	4.24
Uintah	4.13 7.26	5.82 8.36	3.75 6.85	7.86	7.36	8.62	10.16	8.57
REGIONAL TOTALS	J.ZD	0,00	0.00	/	/	9.02		
Southeastern Region								
Carbon	0.93	1.23	2.36	0.90	0.23	0.78	1.47	0.25
Emery	1.12	0.61	1.20	0.37	1.00	2.09	1.73	0.30
Grand	0.87	0.29	0.79	0.29	1.19	0.89	0.26	0.79
San Juan	0.19	0.16	0.28	0.90	0.27	0,10	0.64	0.69
REGIONAL TOTALS	3.12	2.29	4.63	2.45	2.70	3.86	4.09	2.02
Unknown Counties	0.32	0.86	0.00	0.00	0.00	1.88	0.00	1.08
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

	Total			Total Harvest	vest				Hunter-Davs	Grouse	Grouse/Hunter-Day	Jav	Grouse	Grouse/Hunter	
Year	Hunters	Ruffed	Percent	Blue	Percent	Unknown	Percent	Total	Affeld	Ruffed	Blue	Total	Ruffed	N and	Total
1963	7,426	6,470	40.20	7,372	54.17	766	6.63	13.608	12.313	44	9 0	1 11	0.74	9	1 02
1964	6,487	5,354	42.19	989'9	52.68	652	6.14	12,691	10.566	0.51	680	. 5	2 2	5.5	5 4
1966	6,005	3,226	37.20	4,924	26.80	620	00.9	8.669	10.604	2	0.47	. c	25.0	5 6	2.4
996	6,683	996'9	56.54	4,659	37.81	969	5.65	12,321	12.387	0.56	0.38	66	5 5	890	- 7
1967	9,420	8,476	48.36	6,773	38.65	2,277	12.99	17.526	17.773	0.48	0.38	66.0	0.87	9	186
8961	13,061	17,048	52.59	12,604	38.88	2,762	8.52	32,414	26.537	0.64	0.47	2 2	5 5	3 6	2 48
696	12,523	9,490	44.14	10,419	48.46	1,689	7.39	21.498	24.572	38	0.42	0.87	7.0	8 8	
1970	12,775	15,590	48.87	13,615	42.37	2,793	8.76	31.898	26.619	69.0	0.51	22	4 22	20.4	2 60
1971	13,363	15,769	49.40	13,749	43,10	2,393	7.50	31,901	29,100	25.0	0.47	2	118	3 5	2.00
1972	16,640	20,648	48.56	19,221	45.21	2,649	6.23	42.518	38.940	0 53	0 49	5 5	124	3,5	2.50
1973	17,588	7,153	15.81	36,846	81.46	1,233	2.73	45,232	44,738	0.16	0.82	5	0.41	9 6	2.57
1974	21,920	24,561	39.34	32,236	51.63	5.642	9.04	62,439	55,258	0.44	99	13	4 4 2 2	7 7	20.4
1975	20,102	15,750	37.09	23,138	54.49	3,573	8.41	42,461	50,579	0.31	0.45	0.84	0.78	2 5
1976	21,186	23,551	37.13	35,660	56.21	4,225	99.9	63,436	56,422	0.42	0.63	1.12	177		000
1977	19,188	15,766	37.12	23,455	55.22	3,256	7.67	42,477	48,746	0.37	0.48	0.87	0.82	122	2.2
1978	25,318	30,340	37.20	46,651	57.20	4,567	5.60	81,558	72,732	0.42	0.64	1.12	1.20	187	3 22
1979	21,993	23,156	38.69	33,070	55.25	3,625	90.9	59,851	57,404	0.40	0.58	1.04	1.05	1.50	2.61
1980	19,511	15,457	33.96	27,588	60.60	2,477	5.44	45,522	49,899	0.31	0.55	0.91	0.79	1.41	2.33
1981	14,329	8,557	30.68	17,852	64.00	1,485	5.32	27,894	34,305	0.25	0.52	0.81	0.60	1.25	1.95
786L	12,384	7,509	34.48	12,138	55.74	2,131	9.79	21,778	28,767	0.26	0.42	0.76	0.60	0.98	1.76
1993	13,414	11,356	37.78	16,955	56.35	1,767	5.87	30'088	34,530	0.33	0.49	0.87	0.84	1.26	2.24
1984	11,511	6,780	33.24	12,647	62.01	696	4.75	20,396	27,244	0.25	0.46	0.75	0.59	1.10	1.77
1985	12,646	8,701	37.67	13,416	58.09	980	4.24	23,097	31,290	0.28	0.43	0.74	69.0	1.06	1.83
1986	12,117	8,819	36.95	14,166	59.3	894	3.76	23,869	30,312	0.29	0.47	0.79	0.73	1.17	1.97
1987	14,831	15,811	34.88	28,068	61.92	1,447	3.19	45,326	41,428	0.38	99.0	1.09	1.07	1.89	3.06
996	16,947	19,100	35.66	31,656	58.91	2,906	5.43	63,562	51,726	0.37	0.61	1.04	1.13	1.86	3.16
6951	16,987	16,323	35.88	27,794	9.19	1,370	3.01	45,487	50,631	0.32	99.0	0.90	96.0	1.64	2.68
1990	14,591	11,010	28.29	26,116	67.10	1,797	4.62	38,922	44,462	0.25	0.69	0.83	0.76	1.79	2,63
1881	14,421	12,073	34.60	21,310	61.07	1,514	4.34	34,897	42,617	0.35	0.60	0.82	0.84	1.48	2,42
2881	16,000	16,017	33.73	29,146	65.47	355	0.80	44,518	46,136	0.33	0.63	96.0	1.00	1,94	2.97
500	12,029	6,650	36.66	11,040	60.84	467	2.52	18,147	36,390	0.18	0.30	0.50	99'0	0.92	1.51
1994	9,827	6,908	36.62	11,865	62.90	68	0.47	18,862	27,510	0.25	0.43	0.68	0.70	1.21	19
1895	10,088	13,140	44.83	16,172	65.17	ò	0.00	29,312	35,591	0.77	0.87	0.82	2.79	3.00	2.91
otals	:	;													
(1963-95)	472,310	431,524	:	648,795	:	63,856	:	1,144,175	1,207,918	:	:	:	;	:	:
Averages (1963-94)	14.444	13.075	3R 48	19 769	55 70	4 006	4.5	24 020	400	.					

1963-1995.	
ulations,	
s and hunt reg	
statistics	-
e harvest	1774
ffed grouse	
lue and ru	
Table 17. B	
Н	ı

aple	Total Total	Total	Total			,				
	Ruffed	Blue	Forest	Total	Total				Aggr	Aggregate
	Grouse	Grouse	Grouse	Hunters	Hunter Days		Season Length	gth	Bag	Bag Limits
Year	Harvest	Harvest	Harvest	Afield	Afield	Open	Close	Days	Daily	Possession
1963	5,470	7,372	13,608	7,425	12,313	~	~	**:	4	&
1964	5,354	6,685	12,691	6,487	10,566	9/26	10/16	7	4	∞
1965	3,225	4,924	8,669	6,005	105,074	9/25	10/22	28	4	∞
1966	996'9	4,659	12,321	6,683	12,387	9/24	10/21	28	4	\$
1967	8,476	6,773	17,526	9,420	17,773	9/23	10/31	39	4	∞
1968	17,048	12,604	32,414	13,061	26,537	9/28	10/29	32	4	∞
1969	9,490	10,419	21,498	12,523	24,572	9/27	11/02	37	4	∞
1970	15,590	13,515	31,898	12,775	26,619	9/26	11/06	42	4	∞
1971	15,759	13,749	31,901	13,363	29,100	9/25	11/30	29	4	æ
1972	20,648	19,221	42,518	16,640	38,940	9/23	11/30	69	4	æ
1973	7,153	36,846	45,232	17,588	44,738	9/22	11/30	20	₹	∞
1974	24,561	32,236	62,439	21,920	55,258	9/28	11/30	64	4	∞
1975	15,750	23,138	42,461	20,102	50,579	9/20	11/30	72	4	∞
1976	23,551	35,660	63,436	21,186	56,422	9/18	11/30	74	4	∞
1977	15,766	23,455	42,477	19,188	48,746	9/17	11/30	75	4	∞
1978	30,340	46,651	81,558	25,318	72,732	9/16	11/30	9/	4	∞
1979	23,156	33,070	59,851	21,993	57,404	9/15	11/30	11	4	œ
1980	15,457	27,588	45,522	19,511	49,899	9/20	11/30	72	4	œ
1981	8,557	17,852	27,894	14,329	34,305	9/19	11/30	73	4	∞
1982	7,509	12,138	21,778	12,384	28,767	9/18	11/30	74	4	~
1983	11,366	16,955	30,088	13,414	34,530	9/17	11/30	75	4	∞
1984	6,780	12,647	20,396	11,511	27,244	9/15	11/30	77	4	∞
1985	8,701	13,416	23,097	12,646	31,290	9/14*	11/30	78	4	∞
1986	8,819	14,156	23,869	12,117	30,312	9/13	11/30	79	4	&
1987	15,811	28,068	45,326	14,831	41,428	9/12	11/30	80	4	₩
1988	19,100	31,556	53,562	16,947	51,726	9/11	11/30	82	4	œ
1989	16,323	27,794	45,487	16,987	50,631	60/6	11/30	82	4	∞
1990	11,010	26,115	38,922	14,591	44,452	80/6	11/30	82	4	∞
1991	12,073	21,310	34,897	14,421	42,517	9/14	11/30	77	4	∞
1992	15,017	29,146	44,518	15,000	46,136	9/12	11/30	79	4	∞
1993	6,650	11,040	18,147	12,029	36,390	9/11	11/30	82	4	8
1994	806'9	11,865	18,862	9,827	27,510	9/10	11/30	81	4	ထ
1995	13,140	16,172	29,312	10,088	35,591	6/6	11/30	82	4	8
	10000	1 4 4 4h	Page Page	The Car	an in Cantombar from t	A third C	the third Coturday in Contombo	ntomphor		

* Season opener changed to the second Saturday in September from the third Saturday in September.

			HUNTS					COMPLE	COMPLETE HUNTS	TS	
County	i otal Parties	Total Hunters	Total	Total Birds	Birds/ 100 Hr	Complet	complet Total	Total	Total	Birds/	Birds/
Northern Region								2	2	141116	3
Box Elder	54	15	95	4	4	54	5	5	٧	n 27	T
Cache	107	267	1,095	119	£	107	267	1.095	119	0.45	· [
Davis	;	;		:	ŀ		; ;	1	: 1	;	: 1
Morgan	1	:	:	:	ı	ŀ	;	:	;	. ;	: 1
Rich	:	1	:	;	;	ŀ	;			}	l
Summit	:	:	;	1	: 1	:	:	ŀ	:	i	!
Weber	ŀ	:	;	1	1	ł	1	•	:	i	1
REGIONAL TOTAL	161	282	1.190	123	1	184	20.0	4 480	123	;	: 5
Central Region					2	2	707	1,130	67	4.0	2
Juab	ı	:	;	:	1		ł	3	1		
Salt Lake	ı	;	;	:	1	i i	! 1	!	:	ŀ	ł
Sanpete	ŀ	ì	ļ		ł				1	;	ł
Tooele	:	1	1	!	ł	l	!	:	!	i	;
		ŀ	ł	!	:	1	ł	ı	1	;	1
	1	:	:	:	:	:	1	:	1	ŀ	1
wasatch	;	:	:		;	:	ł	i	;	1	;
REGIONAL TOTAL	;	;	ŀ	ï	1	:	:	:	:	1	
Southern Region											
Beaver	;	:	ł	1	;	:	1	;	;	1	
Garfield	1	:	•	ŀ	ŀ	:	ŀ	;	;	ı	!
fron	1	:	1	:	;	ł	:	:	:	ı	:
Kane	1	1	;	;	;	;	;	1	1	;	
Millard	;	1	i		;	;	ŀ	I	ı	1	ŀ
Plute	ı	;	ļ	1	1	i	ŀ	ŀ	ŀ	;	:
Saylor		ŀ	;	:	:	:	!	:	ł	į	:
oeviej Mankinskas	ļ	;	ľ	:	:	:	;	:	:	:	:
wasnington	:	:	;	1	:	:	:	:	:	i	1
Wayne	:	;	:	;	:		ť	:	1	:	ŀ
REGIONAL TOTAL	:	:	:	:	:	;	ı	:		i	:
Northeastern Region											
Daggett	ဖ	9	4	7	ı,	9	16	4	2	0.13	40
Duchesne	i	1	:	ł	;	:	: 1	: ;	۱ ;) ; ;) ¦
Uintah	-	_	4	0	0	-	*	٧	_	00.0	•
REGIONAL TOTAL	7	11	84	2	4	1	17	Ψ¥	,	120	>
Southeastern Region	E							2	•	7	•
Carbon	;	1	:	;	;	i	1	:	ł	1	
Emery	ŀ	ı	;	ï	;	ł		١ :	: 1	1 :	•
Grand	1	1	;	ŀ	1	1	;	. 1	١ :	1 1	1
San Juan	!	ŀ	ŀ	:	1	: (!	ì	:	ł	ľ
REGIONAL TOTAL						:	•	•	•	:	:
		1	;	:	ł	;		1			

	0552		.66		1992		1993		1934		מממ	
Region and	Birds/		Birds/	Birds/	Birds/	Birds/	Birds/	Birds/	Birds/	1	Birds/	ŀ
County	Hunter	100 Hr	Hunter	100 Hr	Hunter	100 Hr	Hunter	100 Hr	Hunter	100 Hr	Hunter	100 Hr
Northern Region												
Box Elder	2.00	300	1.43	ಣ	ı	:	ì	:	ŀ	:	0.27	4
Cache	i	:	0.23	:	0.58	Į	:	:	0.59	¥	0.43	∞
Davis	ī	;	;	:	;	1	:	ŀ	i	:	:	:
Morgan	1	;	1	ŀ	:	1	:	:	ł	:	:	:
Rich	:	:	:	i	0.77	:	1	:	0.59	5	:	:
Summit	1	;	1	ı	1	;	ì	i	ı	ŀ	:	:
Weber	1.33	33	0.32	:	1	ı	:	;	:	ı	:	I
REGIONAL TOTALS	1.60	57	0.47	55	0.70	;	:	;	0.59	4	0.42	~
Central Region							:	;				
Linab	:	;	;	;	ŀ	ł	:	ï	1	1	:	ı
Salt Lake	i	:	;	:	!	1	:	I	ł	!	ŀ	;
Sannete	1	ŀ	:	;	;	1	ł	;	ł	ļ	;	ı
Toople	1.60	47	0.22	œ	ŀ	1	ł	1	ł	ł	ł	;
Utah	0.97	3	0.41	£	0.82	6	;	;	:	ł	ı	1
Wasafch	:	:	ı	1	1	:	;	!	i	:	1	:
REGIONAL TOTALS	1.04	33	0.36	Ξ	0.82	æ	,	:		:		:
Southern Region			l				:	:				
Beaver			;	ŀ	1	i	!	ï	;	ı	:	ı
Garfield	i		;	;	:	ì	:	;	1	i	;	:
iron i	:	;	:	:	ŀ	i	:	;	;	:	:	:
Kane	ı	!	;	:	:	;	:	:	;	1	1	;
Millard	1	:	;	:	1	:	:	;	1	•	:	;
Piute	ı	:	:	:	1	:	ŀ	:	!	:	:	:
Sevier	:	1	:	;	1	:	;	:	:	:	:	:
Washington	:	:	ŧ	ī	1	:	ŀ	;	:		:	:
Wayne	:	:	:	:	1	:	:	:	:	:	:	:
REGIONAL TOTALS	1	:	:	:	:	ı	:	:	:	:	1	:
Northeastern Region							i	:			;	ı
Daggett	09'0	ø,	2.22	43	1.14	20	1	:	:	:	0.13	co.
Duchesne	ı	1	1	1	1	: }	1	:	! }	1 1	: 6	: •
Uintah	1,95	90	3.33	111	1.50	100	;	:	0.25	7	0.00	0
REGIONAL TOTALS	1.34	30	2.50	92	1.25	23	1	2	0.25	-	0.12	4
Southeastern Region							;	:				
Carbon	1	ı	ï	ł	;	:	ï	:	:	:	:	:
Emery	1	ŧ	:	:	:	:	:	:	:	1	:	ŧ
Grand	:	1	:	:	!	:	;	:	:	:	:	;
San Juan	1		i	;	:	1	:	:	:	:	:	:
REGIONAL TOTALS	:	1	:	!	ł	ł	!	:	:	:	:	:
O LATOT DYAFO	444	60	0 0	5	77.0	1			C 4 6	4		

Table 20. Sex and age composition of harvested blue grouse, 1995.

Region and	Sample		Adults	_		Young		_ Young/	Young/
County	Size	M	F	Total	M	F	Total	100 Adult	100 Hens
Northern Region						_		· · · · ·	
Box Elder	-		_			_	_		-
Cache	-				-		_	_	
Davis	**					_			
Morgan					-		_		
Rich			-			_	*		
Summit	26	1	4	5	7	14	21	420	525
Weber	5	1	0	1	0	4	4	400	~
REGIONAL TOTALS	31	2	4	6	7	18	25	417	625
Central Region			-						
Juab	_			-		_	_		
Salt Lake	6	1	2	3	0	3	3	100	150
Sanpete						_	-		
Tooele	-			-		_	_		
Utah	21	4	1	5	6	10	16	320	1,600
Wasatch	14	1	3	4	3	7	10	` 250	333
REGIONAL TOTALS	41	6	6	12	9	20	29	242	483
Southern Region			_					274	403
Beaver				_			_		
Garfield			_	_		_		_	_
ron				_		_			-
Kane									_
Millard					_	_		-	
Piute					_	_			**
Sevier	_			_	_	_	-		
<i>N</i> ashington	_				-	_	_		_
<i>N</i> ayne					_				
REGIONAL TOTALS	 _				 -				_
Northeastern Region									
Daggett									
Duchesne	_			-	-	_		_	
Jintah	**			_	_	-			_
REGIONAL TOTALS									
Southeastern Region	-			<u> </u>				-	
soutneastern Region Carbon									
zarbon Emery							-	_	_
_	_			-	-	<u> </u>	-	_	
Grand			-	-	-				-
San Juan									
REGIONAL TOTALS									
STATE TOTALS	72	8	10	18	16	38	54	300	540

Table 21. Sex and age composition of harvested ruffed grouse, 1995.

Region and	Sample		Adults			Young		_ Young/	Young/
County	Size	M	F	Total	M	F	Total	100 Adult	100 Hens
Northern Region	- -					•			
Box Elder									
Cache									_
Davis				-	_			_	-
Morgan				-		-		-	_
Rich									
Summit	47		_	16	-		31	194	
Weber									
REGIONAL TOTALS	47			16			31	194	
Central Region									·
Juab				-			_	_	_
Salt Lake	9			3		-	6	200	_
Sanpete								_	-
Tooele				-		_			
Utah	21	-		2			19	950	
Wasatch					_			_	_
REGIONAL TOTALS	30			5			25	500	_
Southern Region					- "	·			
Beaver									
Garfield					_		-		_
Iron						-	_		
Kane							_		
Millard					_				_
Piute									
Sevier					_				
Washington							_		_
Wayne						_			
REGIONAL TOTALS					_	-		_	
Northeastern Region									
Daggett				_	_	_	-		-
Duchesne						_			-
Uintah			_	_		_	_	_	_
REGIONAL TOTALS					_	_	_		-
Southeastern Region			•						
Carbon				-	_			-	
Emery							-		-
Grand	_				_	_			
San Juan			_			_			
REGIONAL TOTALS								-	
STATE TOTALS	77		-	21			56	267	

QUAIL

SUMMARY

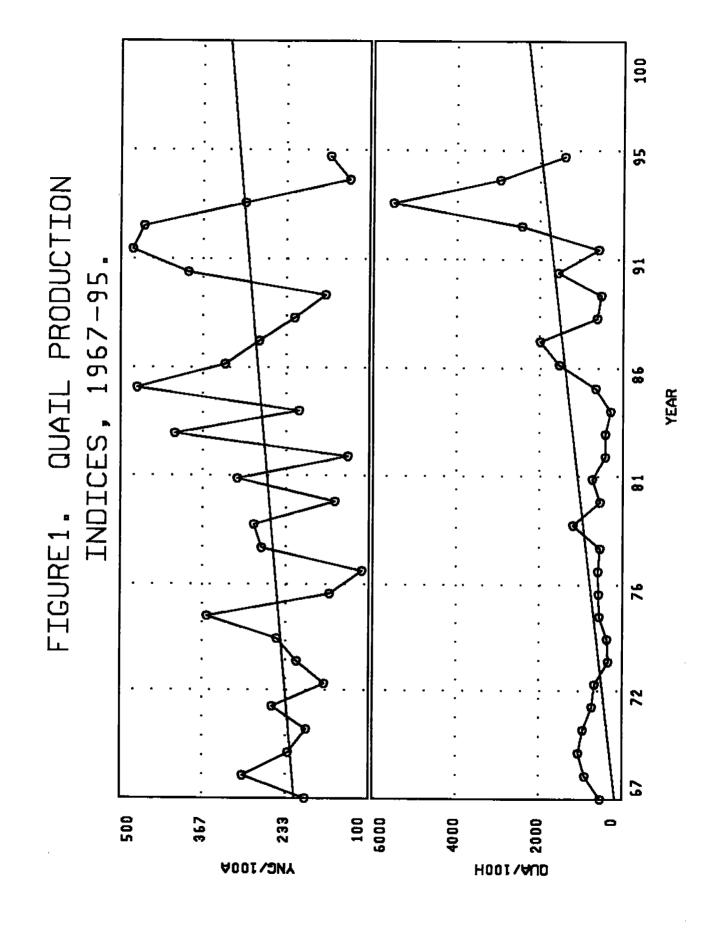


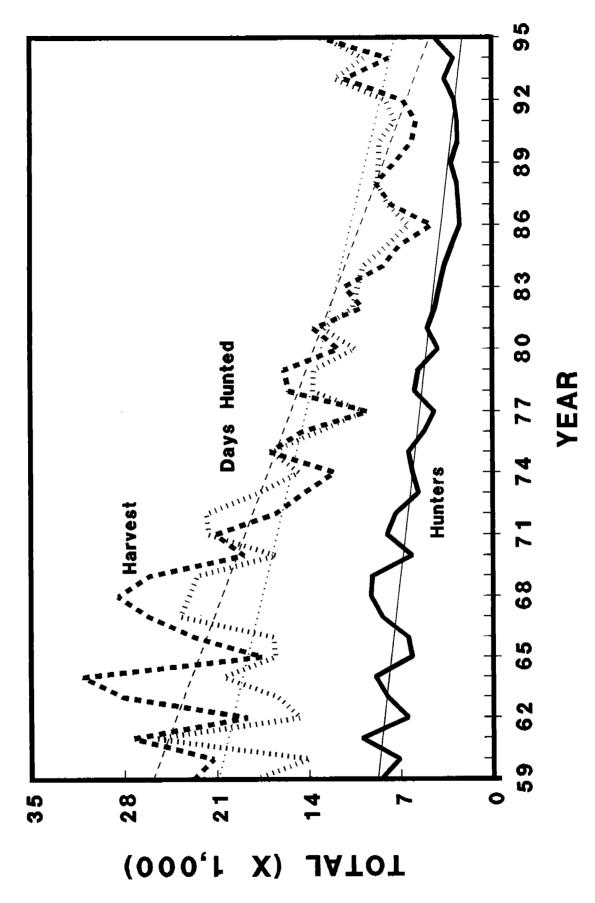


Production of California and Gambel's quail increased 23 percent from 1994. Above normal precipitation during the nesting and brood-rearing season may have contributed to increased production.

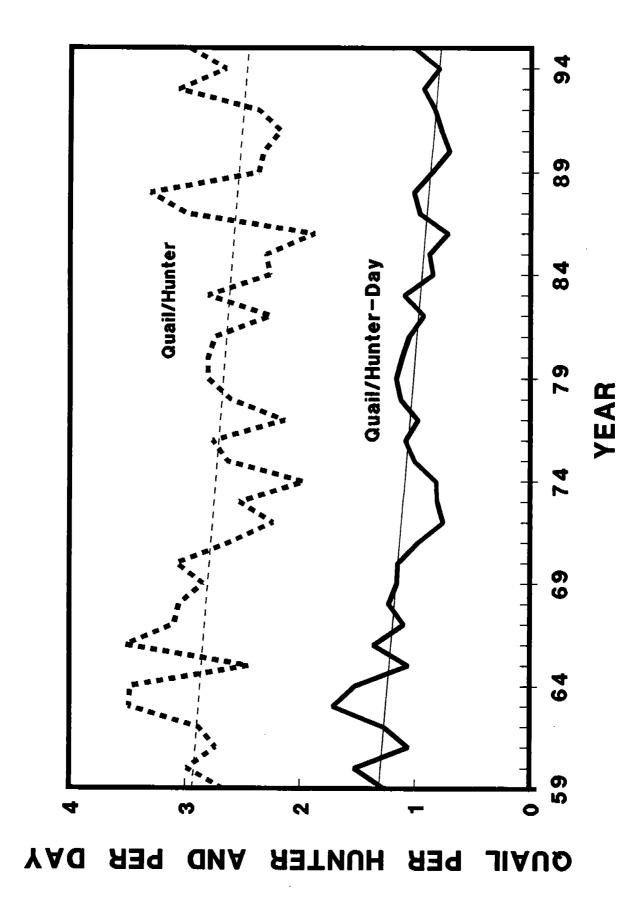
Statewide harvest statistics, when compared to 1994, showed an increase in total hunters and in total harvest. Hunter success (birds per hunter-day) increased 27 percent and remained below average statewide. Hunter-days afield increased 31 percent from 1994. The Northeastern Region accounted for 33 percent of the statewide quail harvest and 33 percent of quail hunter pressure.

California quail are found primarily in urban areas of Utah. Hunter access to these birds is limited.





1959-95. Figure 2. Statewide trends of quail harvest statistics,



Statewide trends of quail hunter success rates, 1959-95. Figure 3.

Brood Counts

Results of the annual random brood counts for quail for 1995 are shown in Table 1 of this section. Long-term trends of young per adult ratios, mean brood size and quail observed per 100 hours are shown in Tables 2-4 and Figure 1. Gambel's quail long period waterhole count trends are shown in Table 10. Survey results for 1995 compared to 1994 and the previous 10-year (1985-94) average follow:

·	1995	Percent change from 1994	Percent change from <u>Average</u>
Total quail observed	126	-47	-59
Young per 100 adults	163	+23	-50
Mean brood size	6.86	+14	-6
Quail observed per 100 hours	1,400	-53	-24
Total hours effort	. 9	+13	5 9

Brood count effort increased 1 percent in 1995. One hundred and twenty six quail were observed in 1995 which was 59 percent below average. Total hours of effort on California quail brood counts was 9 which is 59 percent below average for the last 10 years. The production index of young per 100 adults for Gambel's quail was 47 percent above what it was the previous year. Production statewide decreased to 50 percent below the long-term average.

Harvest

Results of the annual hunter questionnaire for 1995 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.

Comparison of the 1995 season to 1994 and the previous 36-year average follow:

	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Quail hunters	4,374	+49	-18
Quail harvested	13,023	+66	-10
Hunter-days afield	12,712	+31	- 5
Quail per hunter-day	1.02	+27	~3
Quail per hunter	2.98	+12	+13

Ninety percent confident interval for overall quail harvest is +/-2.743.46. Standard deviation is 2.036773.

Quail hunters increased 49 percent from 1994, but remain 18 percent below the long-term average. Quail harvest increased 66 percent from 1994.

Long-term quail harvest statistics are shown in Figures 2 and 3.

Field Bag Checks

A summary of field bag check data for 1995 is shown in Table 11. The Southeastern Region was the only region to collect data in 1995.

Distinct		Distinct	7		Mixed Young											i
Region and	4	Broods	2	Mean	& Adults		Adults w/	Total	Total	Young/	***	Makida	Hours (Hours of Effort	101	Birds/
County	#±	Adults	Adults Young	Brood	Adults	Adults Young	Young	Adults	Young	TOO Adult Miles	- 1	Venicle Horse Walk	HOTSE	MRA	5	
Northern Region																
Box Elder	:	ı	:	;	:	:	:	i	:	:	;	:	1	:	:	:
Cache	:	:	1	:	:	;	!	:	ı	:	;	:	:	:	i	:
Davis	:	į	;	;	:	;	;	:	;	:	:	ï	ı	:	:	;
Morgan	:	;	:	:	;	:	:	;	;	;	;	ì	ł	:	;	;
0.00							;	1	1			i	:	:	:	:
. מכוו	:	ı	:	;	1	:	;	ŀ	ı	ŀ	;	;	,			
Summit	1	ŀ	:	;	:	:	ŀ	i	;	:	;	;	:	:	:	:
Weber	:	:	ï	1	:	;	:	;	:	:	:	:	:	1	:	:
REGIONAL TOTAL	:	:	:	ı	:	:	;	i	1	!	:	;	1	:	1	:
Central Region																
Juab	:	;	i	;	:	:	;	1	;	1	:	:	:	1	:	:
Salt Lake	;	ŀ	ì	1	ł	:	;	ł	;	1	;	;	;	1	1	!
Sannete	:	ì	i	:	:	;	i	;	;	ł	;	ŀ	1	:	1	:
Tooele	;	ŀ	i	;	ł	:	;	;	!	1	;	;	;	ì	!	;
Utah	;	;	ŀ	;	1	;	i	i	ı	:	1	1	;	ŀ	1	;
Wasatch	;	١	ì	;	ł	ï	ı	1	;	;	:	:	;	:	:	I
REGIONAL TOTAL	:	;			۱:	:	:	:	:	:	;	:	;	;	:	:
Southern Region																
Beaver	;	i	ł	2	!	;	1	ł	:	:	;	:	:	1	ì	i
Garfield	:	ŧ	1	:	:	:	ŀ	:	;	1	ŀ	:	1	1	ŀ	1
Iron	i	:	1	:	:	:	ŀ	:	:	:	:	:	:	:	ı	•
Kane*	;	:	:	:	;	1	;	i	1	ŀ	ı	:	i	1	•	:
Millard	:	:	ı	:	:	;	;	1	:	ŧ	:	:	ł	1	:	;
Piute	;	1	1	1	:	;	;	ł	:	:	:	:	;	:	;	;
Sevier	;	:	:	1	:	1	!	1	ı	1	ı	1	;	:	:	:
Washington*	LO	2	33	9.9	0	0	7	1	33	194	1	:	:	i	4	1,250
Wayne*	;	:	1	:	:	:	;	;	:	:	:	:	;	2	!	:
REGIONAL TOTAL	160	2	33	6.60	0	0	7	17	33	194	ı	:	1	:	4	1,250
Northeastern Region	ء															
Daggett	i	ŀ	ŀ	:	;	:	:	:	i	:	:	:	1	:	ı	ı
Duchesne	ŧ	:	ŀ	1	:	:	:	:	i	;	:	:	:	:	:	1
Uintah	7	4	9	7.50	ဖ	30	21	31	45	145	88	တ	:	:	9	1,520
REGIONAL TOTAL	7	4	16	7.50	9	30	21	31	45	145	83	20	:	:	ص	1,620
Southeastern Region	Ē															
Carbon	:	;	ì	:	:	:	;	1	;	:	:	:	:	:	:	:
Emery	;	:	;	:	1	:	:	•	:	:	:	:	!	:	1	:
Grand	:	:	:	ı	1	:	:	:	;	ı	:	:	:	;	:	1
San Juan	;	1	:	:	:	;		-	:	:	:	1	1		:	:
REGIONAL TOTAL	;	:	۱,	1	:	:	:	:	:	:	:	:	1	:	:	ı
			5	3	4	20	90	40	70	127	00	L.	,	:	σ	1 400

ı,
1985-95
adults,
er 100 i
ad bund
uail yo
nd of q
2, Trer
Table :

County	4006	4004			Ì	5						
()	000	200	1987	1988	1989	1990	1991	1992	1993	1994	1005	400E 400A
Northern Region					3		3	400	000	1001	222	1363-1334
Bor Fider	:	ì	;									
		ŀ	!	:	;	:	:	:	:	:	;	
Cache	;	:	ŀ	:	;	;	;	:	!	ł	;	
Davis	;	!	ŀ	:	;	;	;	ŀ	!	!	:	
Morgan	1,050	ï	;	1	;	;	;	ì	1	ł	;	
Rich	;	1	1	ŀ	:	:	:	;	;	1		
Summit	;	ì	:	1	;	;	;		1	i	•	
Weher	;	i	1 400			1	ł	ł	ł	:	:	
DECIONAL TOTAL	0007		200	:	!	:	:	:	:	!	;	
EGIONAL IOIAL	nen'i	:	1,400	724	:	656	;	:	!	;	ı	999
Central Region												
Juab	ŀ	;	i	:	i	ŀ	:	;	1	;	ł	
Salt Lake	i	;	;	;	ł	i	;		1	1	!	
Sannete	;	1				1	!	i	:	:	!	
anjoin South		ľ	:	į	:	1	;	ł	1	:	:	
locele	;	1	:	:	;	:	;	:	:	:	;	
Utah	9	200	220	1	;	;	900	ì	;	1	;	
Wasatch	1	i	:	ı	ł	:	;	ł	;	1	:	
REGIONAL TOTAL	200	700	220	;	!	:	900	} :				630
Southern Region						ļ					!	200
Beaver	;	;	:	:	1	ŀ	;	ł	:	;		
Garfield	ı	:	;	:	i	:	:	ì	ŀ	:		
Iron	i	!	i	ţ	;	:	:	;	;		}	
Kane*	i	ŀ	;	!	ŀ	:	١	;	: :		ì	
Millard	138	4	545	790		179	,	;	1 1		;	
Piute	;	i	:	:	;	<u></u>	;	ŀ		1	•	
Sevier	;	ı		;	;			1	ł	:	:	
Washington*	571	412	250	404	101	100	ł	:	1 8	: 5	: }	
Wavno*	5	<u>.</u>	7	071	†	700	ŀ	ŀ	784	132	194	
Totalisi Totali	:	:	:	:	:	:	:	:	:	:	1	
Medional total	424	456	27.2	242	194	252	:		294	132	194	286
Not the section region												
agyen	·	:	:	1 9	:	;	: ;	:	;	ï	;	
Duchesne	:	;	ı	300	1	:	376	1	400	1	:	
Ointan	:	:	:	126	420	299	i	370	333	ı	145	
REGIONAL TOTAL	:	:		177	420	299	376	370	336	:	146	394
Southeastern Region									}			
Carbon	:	:	1	ŧ	ŀ	ł		292	ł	:	ŀ	
Emery	;	i	1	;	:	1		1	ŀ	;	:	
Grand	:	:	: :	:	ı	1	:	:	ŀ	:	;	
San Juan	:	;	;	:	:	ŀ		:	;	:		
REGIONAL TOTAL	1	1	ı	;		:		767		:	,	787
STATE TOTALS	213	473	224	276	000	204	407	469	000			

0	1001			i	
th Region The Region NAL TOTAL NAL TOTAL Section The		1992 1993	1994	1995	1985-94
her 10.50 6.33 http://dx.nom.net.com/resides/c					
ht 10.50	:	:	;	;	
10.50	;	:	:	1	
Total	;	;	:	:	
The control of the	;	;	;	;	
Harrotal 10.50 14.00 5.33 1.50 14.00 1.33 1.50 14.00 1.33 1.50	:	: :		: :	
Region					
Region 14.00 6.33 Region 7.00 7.50 11.00 ALL TOTAL 7.00 7.50 11.00 Output 1.80 12.00 11.28 Output 1.80 12.00 11.28 Output 1.80 1.80 1.20 Output 1.80 1.80 1.80 1.80 1.80 Output 1.80 1.80 1.80 1.80 1.80 Output 1.80 1.80 1.80 1.80 Output 1.80 1.80 1.80 1.80 Output 1.80 Output 1.80 Output 1.80 .	ł	:	ł	:	
Region	:	:		:	
ke		:		:	5.4
ke					
ke	:	;	•	:	
HAL TOTAL 8.56 6.64 6.16 7.22	:	;	:	:	
ANAL TOTAL 8.56 6.64 6.16 7.22 8.50 NAL TOTAL 8.56 6.64 6.16 7.22 8.50 NAL TOTAL 8.56 8.64 6.16 7.22 8.50 8.50 8.50 8.50 8.50 8.50 8.50 8.50	:	;	ŧ	:	
MAL TOTAL 7.00 7.50 11.00	;		1		
NAL TOTAL 7.00 7.50 11.00		l !	i	ļ	
MAL TOTAL 7.00 7.50 11.00	3.00	:	ŀ	}	
MAL TOTAL 7.00 7.50 11.00	;	1	i	i	
rin Region d	9.00		:		8.63
Agton* 8.43 7.85 6.59 4.64 Safern Region 8.50 4.50 AAL TOTAL 8.56 6.64 6.16 7.22 Shall TOTAL 8.50 4.50 Bastern Region 8.50 4.50 Bastern Region 8.50 4.50 Bastern Region 8.50 4.50 Bastern Region 8.50 4.50 Bastern Region 8.50 4.50					
Agton* 8.43 7.85 6.59 4.64 Safern Region 8.50 4.50 AAL TOTAL 8.56 6.64 6.16 7.22 she 8.50 4.50 Astern Region 8.50 4.50 Safern Region 8.75 4.50	;	;	ľ	;	
agton* 8.43 7.85 5.59 4.64 NAL TOTAL 8.56 6.64 6.16 7.22 stern Region 8.50 4.50 astern Region 8.50 6.64 8.50 astern Region 8.50 4.50 B.60 4.50 B	;	3	;	1	
gton* 8.43 7.86 5.69 4.64 NAL TOTAL 8.56 6.64 6.16 7.22 sine 8.50 4.50 NAL TOTAL 8.56 6.64 6.16 7.22 Sastern Region 8.50 4.50 Bastern Region 8.50 4.50 Bastern Region 8.50 4.50	 	 	!	ſ	
gton* 8.43 7.85 5.59 4.64 NAL TOTAL 8.56 6.64 6.16 7.22 sine 8.50 4.50 NAL TOTAL 8.56 4.50 Sastern Region 8.50 4.50 Sastern Region 8.50 4.50 Sastern Region 8.50 4.50 Sastern Region 8.50 4.50	:	; ;	:	ı	
9.00 1.80 12.00 11.28 region* 8.43 7.85 5.59 4.64 NAL TOTAL 8.56 6.64 6.16 7.22 t	:	:	1	ŀ	
egton* 8.43 7.85 5.59 4.64 NAL TOTAL 8.56 6.64 6.16 7.22 astern Region 9.00 sine 8.50 4.50 astern Region 8.15 4.50 astern Region 8.15 4.50 astern Region 8.15 4.50	:	:	:	:	
NAL TOTAL 8.56 6.64 6.16 7.22 stern Region 8.16 7.22 8.60 8.60 8.60 8.60 8.60 8.60 8.60 astern Region 8.15 4.60 8.450 astern Region 8.15 4.60	;	:	:	;	
### 101	;		:	ı	
astern Region	•		8.00	8 60	
astern Region					
astern Region	1	20 4	9	03.3	1 30
t	1		200	20,0	3
8.50 4.50 NAL TOTAL 8.15 4.50 astern Region 8.15 4.50			;	,	
NAL TOTAL 8.15 4.50 Astern Region 8.15 4.50			1	1	
NAL TOTAL 8.15 4.50 astern Region		4 4 4 4 6 6	!		
astern Region			:	9.	0
ascent Keglon			•	9	9.6
: : :					
	-	19.1	:	ı	
: : : : : : : : : : : : : : : : : : :			:	;	
;	;	:	;	:	
:			:	,	
			:	١,	7.67
100 040 401	Ì		:		:

	Ì
	İ
95	
ś	ı
1985-95	ı
'n	ı
Ħ	ı
욷	ı
8	ı
푼	ı
喜	
ail observed pe	
Ξ	
Se	
융	
풇	
킁	
늄	
ē	
end	
F	
¥	
×6.4.	ı

Kegion and						Year						Average
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region												
Box Elder	:	:	:	;	;	:	:	;	:	:	:	
Cache	;	:	:	;	;	١	:	:	1	!	ł	
a sing	1			1 400						ļ		
200	;	!	:	2	ţ	:	:	;	1	1	:	
Morgan	:	:	:	:	!	:	:	:	:	1	:	
Rich	:	:	:	;	!	ï	;	:	ŧ	1	:	
Summit	;	:	:	:	;	i	:	;	;	1	:	
Weber	ŀ	1	1,500	:	:	:	1	1	;	ı	ŀ	
REGIONAL TOTALS	:	:	1,500	1,100	;	:	:	:	:		:	1.300
Central Region												
Juab	;	:	;	:	i	:	;	1	:	1	ì	
Caft lake	i								1	1		
il Ldhe	:	!	:	ļ	!	:	:	1	:	ŀ	;	
Sanpete	:	!	;	;	1	:	:	1	:	ŧ	1	
Tooele	1	}	:	;	;	:	1	:	!	;	ŀ	
Utah	320	2,000	1,600	ŀ	ŀ	;	1,000	!	1	;	1	
Wasatch	!	;	:	:	ı	:	1	1	:	:	:	
REGIONAL TOTALS	320	2,000	1,600	 :			1 000		1			1 220
Southern Region) L
Beaver	:	ł	ı	:	ł	;	;	ł	ŀ	:	:	
Garfield	:	ŀ	;	1	:	;	:	:	1	:	ı	
Iron	:	!	;	;	;	ŀ	;	t	ı	:	i	
Kane*	ŀ	1	i	:	í	:	:	1	ı	:	ı	
Millard	34	867	1.303	1.271	ł	975	1	1	;	:	1	
Piute	:		. •		1	:	ı	1	١	1	١	
Sevier	:	٠	:	:	:	;	;	;	ı	1	1	
Washington*	783	1 604	2 029	530	. C.	1 050	: :	í i	7 788	2 963	1 250	
Wayne	:	:) 	;	} :	:	: :		} :) -	3	
REGIONAL TOTALS	663	1.484	1.958	527	53	1.013			7.788	2.963	1 250	2.056
Northeastern Region												
Daggett	;	ı	i	i	1	;	:	:	:	:	:	
Duchesne	ì	:	i	356	:	ì	475	;	250	:	;	
Uintah	;	1	1	1,800	37.1	767	:	4.700	3.033	:	1.520	
REGIONAL TOTALS	;	ı	:	717	37.1	191	475	4.700	1,920	:	1.520	1.492
Southeastern Region												
Carbon	;	:	;	;	ı	;	1	1,300	:	:	ŀ	
Emery	;	:	1	;	ł	;	ı	ï	;	;	;	
Grand	:	:	ı	ŀ	ł	;	:	i	i	ŧ	:	
San Juan	1	:	ŀ	i	:	:	i	:	i	:	ï	
REGIONAL TOTALS	:	1	:	1	:	1	:	1,300	:	:	:	1,300
				000		401			***			

Table 5. Summary of quail hunter success and distribution of harvest and hunting pressure by region and county, 1995.

REGION AND		Eunter-days	BIRDS	BIRDS PER	% OF	% OF
COUNTY	SIZE*	AFTELD	Bagged	HUNTER-DAY	PRESSURE	Harvest
NORTHERN REGION						
Box Elder	8	272	330	1.21	0.14	
Cache*	6	233	58	0.25	2.14	2.54
Davis	9	233 874	291	0.23	1.83 6.88	0.45
Morgan*	ő	0,4	0	0.00	0.00	2.24 0.00
Rich*	ŏ	0	Ö	0.00	0.00	
Summit*	Ö	ő	0	0.00	0.00	0.00 0.00
Weber	12	447	641	1.43	3.52	4.93
REGIONAL TOTALS	35	1,627	1,321	0.72	14.37	10.15
					• • • • • •	#V. L4
CENTRAL REGION						
Juab	3	38	0	0.00	0.31	0.00
Salt Lake	0	0	0	0.00	0.00	0.00
Sanpete* Tooele	2	77	0	0.00	0.61	0.00
Utah	2 29	38	0	0.00	0.31	0.00
Wasatch*	29 4	1,302 311	1,535	1.18	10.25	11.79
REGIONAL TOTALS	40	1,768	505	1.63	2.45	3.88
		1,7700	2,041	1.15	13.92	15.67
SOUTHERN REGION						
Beaver*	0	0	0	0.00	0.00	0.00
Garfield*	Ō	Ŏ	ŏ	0.00	0.00	0.00
Iron*	2	233	155	0.67	1.83	1.19
Kane	0	0	0	0.00	0.00	0.00
Millard	3	77	58	0.75	0.61	0.45
Piute	1	0	Ô	0.00	0.00	0.00
Sevier	б	252	38	0.15	1.99	0.30
Washington	46	3,460	3,751	1.08	27.22	28.81
Wayne*	0	0	0	0.00	0.00	0.00
REGIONAL TOTALS	58	4,023	4,004	1.00	31.65	30.75
	*******************************	***************************************				
NORTHEASTERN REGION						
Daggett	0	0	0	0.00	0.00	0.00
Duchesne Uintah	37	2,041	2,585	1.27	16.06	19.85
REGIONAL TOTALS	40	2,215	1,671	0.75	17.43	12.84
REGIONAL TOTALS	77	4,256	4,256	1.00	33.49	32.69
SOUTHEASTERN REGION						
Carbon	4	58	213	3.67	0.46	1.64
Emery	19	622	738	1.19	4.89	5.67
Grand	2	97	272	2.80	0.76	2.09
San Juan	1	38	58	1.50	0.31	0.45
REGIONAL TOTALS	26	816	1,282	1.57	6.42	9.85
Unknown	5	19	116	6.00	0.15	0.90
STATE TOTALS	241	12,712	13,023	1.02	100.00	100.00

^{*}Total hunter-trips from questionnaire returns.

^{**}Closed to quail hunting in 1995.

Table 6. Summary of quail bagged per hunter-day by region and county, 1987-94.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
N4b D								
Northern Region	0.00	0 00	0 71	0.20	1 01	0.36	0.75	1 01
Box Elder	0.80	0.90 0.20*	0.71 0.10*	0.38 0.00*	1.21 1.00*	0.36	0.75	1.21 0.25*
Cache	0.22*			0.83		0.00*	1.86*	0.25
Davis	0.74	0.67	0.15 2.00*		0.60 0.00*	1.25 0.14*	0.64	
Morgan	1.00*				0.00*	0.00*	0.00* 4.00*	
Rich Summit	1.00* 0.00*		0.00*		0.00*	0.00*	0.00*	0.00*
Weber	0.35	0.00	0.50*		0.56	0.73	0.22	1.43
REGIONAL TOTALS	0.55	0.38	0.39	0.41	0.50	0.73	0.27	0.72
REGIONAL LOIALS	0.00	U.JU	•	W.74	VVUJ	W.J.J	• • • • • •	
Central Region								
Juab	1.38	0.00	0.19	7.25	0.00	1.50	1.67	0.00
Salt Lake	1.18	0.50	0.42	2.17	1.89	0.00	1.40	0.00
Sanpete	0.80*				0.00*	1.00*	1.00*	0.00*
Tooele	1.24*				0.00*	0.00*	1.43*	
Utah	0.46	0.84	0.75	0.61	0.54	0.48	0.63	1.18
Wasatch	1.13*		0.00*		0.00*	0.00*	2.00*	
REGIONAL TOTALS	0.80	0.87	0.55	0.88	0.61	0.47	0.85	1.15
Southern Region								
Beaver	5.00	0.00	0.00	0.00	0.00	0.00	0.40*	0.00*
Garfield	5.00	0.00	0.00	0.00	0.00	0.00	0.00*	-
Iron	0.00	1.67	0.00	0.00	0.00	1.63	1.00*	
Kane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Millard	0.00	0.90	1.06	0.08	1.50	0.58	0.73	0.75
Piute	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sevier	1.50	0.00	0.00	1.80	0.47	0.43	0.50	0.15
Washington	2.30	1.26	0.60	0.84	1.04	1.57	0.93	1.08
Wayne	2.00	0.80	0.00	0.00	0.00	0.00	5.00*	
REGIONAL TOTALS	2.08	1.19	0.66	0.71	1.01	1.25	0.90	1.00
Northcostorn Posion				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Northeastern Region	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Daggett Duchesne	0.89	0.62	0.91	1.16	1.01	1.04	1.10	1.27
Uintah	0.87	0.73	0.98	0.47	0.90	0.63	0.76	0.75
REGIONAL TOTALS	0.88	0.68	0.95	0.65	0.95	0.03	0.70	1.00
5.04.08844 10.48444								
Southeastern Region								
Carbon	0.38	5.00	1.11	4.50	1.12	1.33	0.00	3.67
Emery	1.11	0.50	1.86	2.11	0.97	0.92	0.57	1.19
Grand	0.80	0.00	2.00	0.00	0.00	0.00	0.00	2.80
San Juan	0.00	8.00	0.00	0.00	0.00	0.00	0.00	1.50
REGIONAL TOTALS	0.77	2.00	1.68	2.85	1.02	0.91	0.49	1.57
Unknown counties	2.00	0.00	0.00	0.00	0.00	1.50	0.00	6.00
CMAMP MOMATC	1 02	0.06	0.71	0.78	0.84	0.94	0.80	1.02
STATE TOTALS	1.02	0.86	0.71	U. /O	0.04	0.74	0.00	1.02

*Closed Season

Table 7. Percentage distribution of quail harvest by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northam Basian								
Northern Region Box Elder	1 50							
Cache	1.50	2.53	4.05	1.51	4.45	0.68	1.35	2.54
Davis	0.37 ¹ 6.98							
Morgan	0.18	1.69 • 0.00	1.35	1.51	2.36	1.70	1.57	2.24
Rich	0.18							
Summit	0.00						· ·	
Weber	1.32	1.97	5.41	2.11				
REGIONAL TOTALS	10.56	6.46		5.12	3.67 11.78	3.74 6.28	1.80	4.93
					+4+70	9,20	8.54	10:15
Central Region								
Juab	4.15	0.00	1.69	8.74	0.00	0.51	1.12	0.00
Salt Lake	3.77	0.84	2.70	3.92	4.45	0.00	3.15	0.00
Sanpete	0.75				0.00*	0.17*		
Tooele	6.79					0.00*	2.25	0.00
Utah	9.43	21.35	16.89	17.17	12.31	8.49	10.56	11.79
Wasatch	5.09*		NAMES AND ADDRESS OF THE PARTY		0.00*	0.00*		
REGIONAL TOTALS	30.00	26.41	22.30	30.43	16.76	9,17	19.10	15.67
Southern Region								
Beaver	0.00	0.00	0.00	0.00	0.00	0.00	0.90*	
Garfield	2.83	0.00	0.00	0.00	0.00	0.00	0.00*	
Iron	1.88	1.40	0.00	0.00	0.00	2.21	2.70*	
Kane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Millard	0.00	5.34	5.74	0.90	6.28	4.41	4.94	0.45
Piute	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sevier	0.56	0.00	0.00	2.71	1.83	2.55	0.22	0.30
Washington .	27.73	32.30	17.57	34.64	13.88	48.05	39.33	28.81
Wayne REGIONAL TOTALS	0.75	1.12	0.00	0.00	0.00	0.00	1.12*	
ACCIONAL TOTALS	33.77	40.17	23.31	38.26	21.99	57.22	49.22	30.75
Northeastern Region	\							
Daggett	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00
Duchesne	6.41	9.55	7.10	6.63	18.33	9.00	0.00 7.64	0.00
Uintah	11.32	2.92	13.85	8.13	18.85	6.11	9.44	19.85 12.84
REGIONAL TOTALS	17.73	22.47	20.95	15.06	37.18	25.11	17.08	32.69
041.			~~~~		***************************************			
Southeastern Region								
Carbon	0.56	1.40	3.38	5.42	4.97	0.68	0.00	1.64
Emery Grand	1.88	0.84	17.57	5.72	7.33	7.98	6.07	5.67
San Juan	0.75	0.00	0.68	0.00	0.00	0.00	0.00	2.09
REGIONAL TOTALS	0.00 3.20	2.25	0.00	0.00	0.00	0.00	0.00	0.45
	3.40	4.49	21.62	11.15	12.31	8.66	6.07	9.85
Unknown counties	4.71	0.00	0.00	0.00	0.00	3.57	0.00	0.90
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
*Closed Season								

Table 8. Percentage distribution of quail hunting pressure by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Region				2.00	2 00	1 95	1 45	2 14
Box Elder	1.92	2.41	4.09	3.06	3.08	1.75	1.45	2.14
Cache	1.73*				1.10*	1.75*	1.27* 1.99	
Davis	9.61	2.17	6.25	1.41	3.30	1.27		6.88 0.00*
Morgan	0.19*				2.64*	1.11*	0.72*	
Rich	0.19*				0.00*	0.00*	0.18*	
Summit	0.57*				0.00*	0.00*	0.00*	0.00* 3.52
Weber	3.84	7.95	7.69	3.06	5.51	4.77	6.51 12.12	3.32 24.37
REGIONAL TOTALS	8.07	14.70	21,39	9.65	15.64	10.65	14+14	14.27
Central Region								
Juab	3.07	0.00	6.49	0.94	0.22	0.32	0.54	0.31
Salt Lake	3.26	1.45	4.57	1.41	1.98	0.64	1.81	0.00
Sanpete	0.96*	1.93*	0.24*	0.94*	0.00*	0.16*	0.18*	
Tooele	5.57*		1.20	1.65*	1.54*	0.48*	1.27*	
Utah	20.76	21.69	16.11	22.12	19.16	16.54	13.56	10.25
Wasatch	4.61*	0.00*		0.00*	0.22*	0.00*	0.72*	
regional totals	38.26	26.03	28.85	27.06	23.13	18.13	18,08	13.92
Southern Region								
Beaver	0.00	0.00	0.00	0.00	0.00	0.16	1.81	0.00*
Garfield	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00*
Iron	0.38	0.72	0.00	0.00	0.22	1.27	2.17	1.83*
Kane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Millard	2.50	5.06	3.85	8.47	3.52	7.15	5.43	0.61
Piute	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00
Sevier	0.38	0.00	0.00	1.18	3.30	5.56	0.36	1.99
Washington	12.30	21.93	20.91	34.24	11.23	28.62	34.18	27.22
Wayne	0.38	1.20	0.00	0.00	0.00	0.16	0.18	0.00*
REGIONAL TOTALS	16.52	28.92	25.00		18.28	42.93	44.12	31.65
								,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Northeastern Region							0.00	0.00
Daggett	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00
Duchesne	7.30	13.25	5.53	4.47	15.20	8.11	5.61	16.06
Uintah	13.26	15.18	10.10	13.41	17.62	9.06	9.95	17.43
REGIONAL TOTALS	20.57	28.44	15.63	18.12	32.82	17.17	15755	33.49
Southeastern Region)							
Carbon	1.53	0.24	2.16	0.94	3.74	0.48	0.54	0.46
Emery	1.73	1.45	6.73	2.12	6.39	8.11	8.50	4.89
Grand		0.00		0.00		0.32	0.90	0.76
San Juan	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.31
REGIONAL TOTALS			9.13		10.13	8,90	9.95	6,42
Unknown counties	2.30	0.00	0.00	0.24	0.00	2.23	0.18	0.15
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*Closed Season

Table 9. Statewide summary of quail harvest statistics, 1951-95.

	Total	Total	Hunter-Days	Quail Per	Quail Per
Year	Hunters	Harvest	Afield	Hunter-Day	Hunter
951	3,856	6,362	7,069	0.90	1.65
952	2,694	6,105	5,500	1.11	2.27
953	2,676	5,75 3	4,494	1.28	2.15
954	3,855	7,479	8,696	0.86	1.94
955	. ==			0.17	2.10
956			-		2.26
957				_	1.85
958				_	3.73
959	8,554	22,854	18,174	1.26	2.67
960	7,117	21,272	13,971	1.52	2.99
961	9,980	27,362	25,746	1.06	2.74
962	6,462	18,710	14,660	1.27	2.89
963	8,059	28,088	16,383	1.71	3.49
964	8,951	31,189	20,510	1.52	3.48
965	6,163	17,532	16,528	1.06	2.45
966	6,465	22,771	16,720	1.36	3.52
967	8,455	26,187	23,806	1.10	3.52 3.10
968	9,302	28,469	23,132	1.23	3.16
969	9,160	26,119	22,529	1.16	2.85
970	6,141	18,896	16,452	1.15	2.03 3.08
971	8,039	21,082	21,595	0.98	3.62
972	7,380	16,504	21,779	0.76	2.24
973	5,654	14,324	17,777	0.75	
974	6,097	12,005	14,702	0.82	2.53
975	6,397	16,903	16,805	1.01	1.97
976	5,215	14,454	13,261	1.09	2.64
977	4,446	9,496	9,646		2.77
978	5,924	15,491	-	0.98	2.14
979	5,632	15,821	13,649	1.13	2.61
980	4,156	11,690	13,550	1.17	2.81
981	4,946	13,586	10,400	1.12	2.81
982	4,368	9,870	12,843 10.575	1.06	2.75
983	4,012	11,248	10,575	0.93	2.26
984	3,654	8,303	10,232	1.10	2.81
985	3,065	7,051	9,805 7,994	0.85	2.27
986	2,432	4,574	7,994 6 226	0.88	2.30
987	2,432 2,549		6,326 7,048	0.72	1.88
988	2,549 2,671	7,648	7,918	0.97	3.00
989	2,67 1 3,111	8,849 7,384	8,682	1.02	3.31
990		7,384 6,004	8,607	0.86	2.37
991	2,614	6,091 5,775	8,561	0.71	2.33
	2,644	5,775	7,393	0.78	2.18
92	2,861	6,788	8,068	0.84	2.37
993	3,649	11,192	11,952	0.94	3.07
994	2,936	7,822	9,721	0.80	2.66
95	4,374	13,023	12,712	1.02	2.98
otals			· 		<u> </u>
951-95)	216,716	592,122	<u>548,92</u> 3		_
/erages					
951-94)	5,309	14,477	13,405	1.05	2.63

Table 10. Gambel's quail long period waterhole count trend on the west slope of the Beaver Dam Mountains, Washington County, 1977-95. These counts have been conducted since 1962.

ge	4	o.	_		_
Average	1977-94	15	29	207	34
	1995	33	11	20	194
	1994	135	102	237	132
	1993	465	158	623	294
	1992	415	128	543	324
	1991	208	35	243	594
	1990	33	6	42	367
	1989	35	8	53	194
	1988	29	47	106	126
	1987	348	139	487	250
	1986	163	48	211	340
	1985	47	-	28	427
Year	1984	166	98	252	193
	1983	114	7	128	814
	1982			118	258
	1981	37	52	62	148
	1980	72	29	124	138
	1979			330	- 1
	1977 1978 1979 1980 1981 1982 1983	29	59	98	353
	1977	:	:	1	:
	Index	Total Young	Total Adults	Total Quail	Young per 100 Adults

Parion and Total Total Total	COMP	
ALL HUNTS Parion and Total Table Total Table Total Table Total Table Tabl	Ş.	- T- V- L
Berlon and Total	Summary, 1995 ALL HUNTS	Afri Total
Region and	eld bag check	Total
-1	lable 11. Guall 16	Realon and

Negligion Total
Country Parties Hunters Hours Birds Hunter Hunts Hunter Hunter Hunter Hunter Hunter
left Region al Region ANAL TOTAL ANAL TOTAL Anal Total Anal T
Sider
Nate Part
10 10 10 10 10 10 10 10
al Region
All Frequents All Frequent
ake selection
al Region
Albert TOTAL
ate even and the even are as a second at the even are a second at the e
ate by the control of
ake ite ite ite ite ite ite ite i
tite be continued by the state of the state
by the transfer of the transfe
Coh
teh Region
State Contact Contac
NAL TOTAL
ern Region
reference of the control of the cont
ngton
ngton
ngton mgton mg
ngton
ngton
ngton
Asstern Region
ANAL TOTAL Totals Totals Totals Totals Totals Totals
Stern Regi
tt satern Regi
astern Regi
sne
NAL TOTAL
NAL TOTAL
NAL TOTAL
astern Region 1
astern Region 1 15 34 87 21 24 2 8 24 8 1.00 an
an
an
an
15 34 87 21 24 2 8 24 8 1.00 15 34 87 21 24 2 8 24 8 1.00
15 34 87 21 24 2 8 24 8 1.00 15 34 87 21 24 2
0011 0 47 0 0 7 0 0 7 0 0 0 0 0 0 0 0 0 0 0

HUNGARIAN PARTRIDGE

SUMMARY



In 1995, an attempt to collect brood data was conducted in Box Elder County. One brood was observed.

The 1995 hunt data indicated increased hunting pressure on Huns when compared to 1994. The number of Huns harvested increased 211 percent in 1995. Hunters afield increased 21 percent. Total hunters, days afield and harvest remain dramatically below the long-term average.

We expected continued improvement in Hungarian partridge populations in Box Elder County due to the large quantity of agricultural land set aside in the Conservation Reserve Program. We believe that increases in hunter success since 1985 reflect increased partridge populations as a direct result of CRP. Exceptions (declines) in 1988 and 1989 were probably due to drought. In 1993, the dramatic decrease in number of Huns harvested probably resulted because of poor over-winter survival during 1992-93.

Brood Counts

Results of the annual random brood counts for 1995 are shown in Table 1 of this section. Long-term trends of young per adult ratios, mean brood size and Huns observed per 100 hours are shown in Tables 2-4. Results of the survey for 1995 compared to 1994 and the previous 10-year (1985-94) average follow:

	1995	Percent change from 1994	Percent change from <u>Average</u>
Total Huns observed	21		-73
Young per 100 adults	2,000		+321
Mean brood size	20.00		+113
Huns observed per 100 hours	175		-10
Total hours effort	12		-66

Only the Northern Region attempted to collect brood count data. Hours of effort statewide was 66 percent below average, and only one brood was observed.

Harvest

Hunter Questionnaire

Results of the annual hunter questionnaire for 1995 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 1995 season compared to 1994 and the previous 36-year average follow:

	1995	Percent change from 1994	Percent change from Average
Washing and the last transfer			
Hungarian partridge hunters	2,294	+21	-34
Hungarian partridge harvest	5,967	+211	-19
Hunter-days afield	5,812	+52	-33
Huns per hunter-day	1.03	+106	+29
Huns per hunter	2.01	+157	+29

Ninety percent confidence interval for overall hun harvest is \pm - 991.44. Standard deviation is 1.150166.

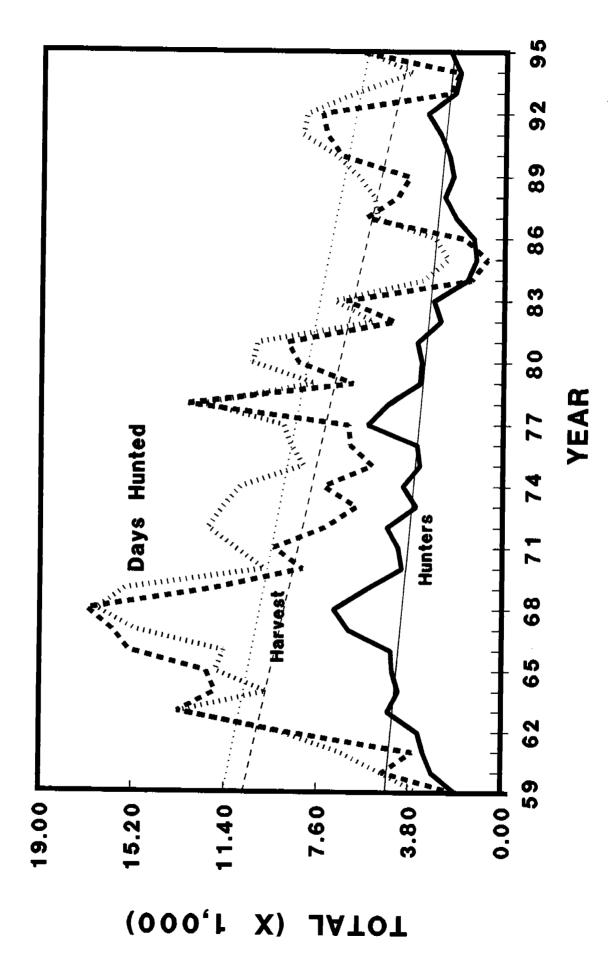
Hungarian partridge hunters and hunting pressure increased in 1995. Overall success increased 211 percent from 1994. Harvest was 19 percent below the long-term average.

Long-term Hun harvest statistics are shown in Figures 1 and 2.

Hun harvest trends increased in 1985 with the implementation of the federal Conservation Reserve Program (CRP) and continued until the severe winter of 1992-93.

Field Bag Checks

Hungarian partridge field bag check data collected in 1995 is shown in Table 10. Hunter success trends determined via this method are shown in Table 11. No data was collected in 1995.



Statewide trends of Hungarian partridge harvest statistics, 1959-95.

Statewide trends of Hungarian partridge hunter success rates, 1959-95. Figure 2.

Region and County Northern Region		(A charles									
County Northern Region		Broods	s	Mean	& Adults			ota		Young, Vehicle	Vehicle		Hours of Fffort	FFFort		Rinde/
Northern Region	#	Adults	Adults Young	Brood	Adults Young	1	Young	Adults	Young	100 Adult Miles		Vehicle	Vehicle Horse Walk	-	Total	T CE
Dov Flor							72					200	3			
בסא רומטו	-	•	20	70	0	0	0	-	20	2.000	:	:	12	:	12	176
Cache	:	:	ì	ï	1	:	:	i	:	. 1	:	:	:	:	! :	:
Davis	1	1	:	:	:	i	1	:	;	;	ì	ı	;	:	:	:
Morgan	;	:	1	,;	1	;	i	:	;	:	:	:	;	1	;	;
Rich	:	ŀ	:	:	:	:	:	:	i	1	:	1	:	ľ	:	ı
Summit	:	:	:	:	:	;	:	:	:	:	ı	:	;	;	;	1
Weber	•		:	;	2	:	:	:		:	:	;	;	ł	:	:
REGIONAL TOTAL	-	-	20	20	0	٥	٥	-	20	2,000	:	:	12	1	12	175
Central Region																
Sudi)	1	:	:	:	ŀ	:	:	:	ı	1	:	:	:	1	ı	:
an Lane	:	:	ï	:	:	:	:	:	:	ı	:	:	ł	:	:	:
Sanpere	:	:	;	ł	:	:	ł	:	:	ì	1	;	ł	:	;	:
Tooele	:	:	:	;	;	1	!	:	:	ł	;	;	:	!	1	ł
Utah	ŀ	:	:	;	1	:	:	;	:	!	;	:	:	ı	i	i
Wasatch	:	:	:	:	ï	:	ŀ	ı	;	:	1	:	;	:	i	;
REGIONAL TOTAL	:	:	:	:	:	 -		:	;	,		,	;	:	:	
Beaver Garffald																
Ion																
Kane						2	NOT Abbi ICARI E	7 O.V.								
Millard						2		11000								
Piute																
Sevier																
Washington																
Wayne																
REGIONAL TOTALS																
Northeastern Region	_															
Daggett																
Duchesne						ž	NOT APPLICABLE	ABLE								
Uintah							,									
REGIONAL TOTALS																0 8
Southeastern Region	5															
Carbon																
Emery						ž	NOT APPLICABLE	ABLE								
Grand																
San Juan																
KEGIONAL TOTALS	- 1								i							
STATE TOTALS	-	-	20	20	0	0	0	-	20	2,000	ı	ı	12	:	12	176

Region and						Year						Average
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region												:
Box Elder	ı	450	269	307	1	396	793	711	:	;	2,000	
Cache	ŧ	ł	1	400	1	433	ï	260	;	;	:	
Davis	1	1	ł	;	1	1	;	;	:	1	:	
Morgan	!	:	I	:	1	;	;	;	:	1	1	
Rich	:	1	;	:	:	:	ı	;	:	:	:	
Summit	ŀ	1	1	ŀ	:	1	;	;	!	:	1	
Weber	1	i	:	i	:	:	;	:	:	;	:	
REGIONAL TOTALS	-	450	569	324	425	400	793	550	1	:	2,000	502
Central Region												
Juab	;	ŀ	1	ť	ı	;	1	800	;	i	ì	
Sait Lake	ŀ	;	ł	ŀ	i	ì	!	:	i	:	ì	
Sanpete	ì	;	!	ŀ	;	;	;	;	ì	;	i	
Tooele	}	ŀ	ł	ł	;	:	;	;	i	ł	ŀ	
Utah	I	1	;	;	1	ì	ŀ	:	;	ì	ı	
Wasatch	;	400	!	400	;	;	:	:	:	i	:	
REGIONAL TOTALS	1	400	:	400	:	1		800	-	:		533
Southern Region												
Beaver												
Garfield												
lron								1				
Kane							NOT APPLICABLE	CABLE				
Millard												
Piute												
Sevier												
Washington												
Wayne												
REGIONAL TOTALS												
Northeastern Region												
Daggett									i	ŀ		
Duchesne									; ;	:		
Uintah									750	1		
REGIONAL TOTALS									750	;		750
Southeastern Region												
Carbon												
Emery							NOT APPLICABLE	CABLE				
Grand												
REGIONAL TOTALS								<u> </u>			!	
CTATE TOTALS		UVV	550	308	425	400	793	567	750		2 000	534
פועור וכוער	:	2	2	240	24	201	2	2	2	!	4	100

1886 1887 1888 1899 1991 1892 1993 1994 1996 1997 1894 1894 1896 1897 1894 1896 1897 1894 1896 1897 1898 1899 1891 1895 1893 1894 1896 1895	Northern Region						Year						Average
Mail Totals 15.00 11.88 8.60 8.50 8.25 12.50 9.00 20.00 1.50 1.50 1.50 1.50	Northern Region	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Color	֡֜֜֜֜֜֜֜֜֜֓֓֓֓֜֓֓֓֓֓֜֜֜֓֓֓֓֜֓֜֓֓֓֓֜֓֜֓֜֓֜												
In the state of th	3ox Elder	:	18.00	11.88	8.60	8.50	8.25	12.50	00.6	;	i	20.00	
if the control of the	ache	1	:	:	:	:	8.00	:	;	;			
if the control of the	lavis	;	i	;	!	i		1	1	!	ł	}	
It	forgan	i	:	;	;	ł		}	l	;	!	i	
It	ich.	;	٠ ;		1 :	ŀ	•	:	:	;	:	:	
MAL TOTALS	ummit		}	!	ŧ	:	:	;	:	:	:	ı	
Region R	fahar	!	:	:	;	:	ı	:	1	!	;	:	
Region 1.8		:	:	:	:	:	:	:	:	ı	1	;	
Not application Not applicable Not	entral Region		18.00	11.88	8.60	8.50	8.90	12.50	9.00	:	1	20.00	11.05
Not Applicable Not	her her	1							;				
He		:	:	;	ł	:	;	1	8.00	:	1	:	
Color Colo	ilt Lake	ł	;	:	1	1	i	;	;	1	:	:	
State Region	ınpete	;	ŀ	ł	:	1	;	ł	:	i	1	:	
th Totals	oole	ł	;	ì	1	ł	;	;	1	;	i	:	
A	ah	:	1	;	ŀ	;	;	:	;	;		1	
NAL TOTALS 4.00 8.00 -	asatch	!	4.00	i	90.8			ì	!	:	:	:	
NOT APPLICABLE 15.00 1. 15.00	COLONIAL TOTALS	!	1.00	:	7.00	:		:	:	:	:	:	
of MOT APPLICABLE NOT APPLICABLE NAL TOTALS astern Region NAL TOTALS astern Region NAL TOTALS an 15.00 NOT APPLICABLE 15.00 NOT APPLICABLE	GIONAL TOTALS	:	4.00	1	4.00	1	:	:	8.00	;	:	;	5.33
NOT APPLICABLE NOT APPLICABLE	arfield on												
NAL TOTALS astern Region t t sine NAL TOTALS astern Region Astern Region ANDT APPLICABLE an NOT APPLICABLE	inte Marci							NOT APPLI	CABLE				
NAL TOTALS astern Region t	Te .												
NAL TOTALS astern Region t sine NAL TOTALS astern Region astern Region an NOT APPLICABLE	vier												
NAL TOTALS astern Region t ine t AL TOTALS NAL TOTALS astern Region an NOT APPLICABLE	shington												
NAL TOTALS astern Region NAL TOTALS 15.00 astern Region 15.00 an 15.00 AML TOTALS 15.00													
astern Region Totals NAL TOTALS astern Region NOT APPLICABLE NAL TOTALS	IT IN TOTAL OF												
astern Keglon To astern Region NOT APPLICABLE an NOT APPLICABLE	CICINAL IOIALS												
sine 15.00 NAL TOTALS 15.00 astern Region NOT APPLICABLE an NOT APPLICABLE	rneastern Kegion												
asfern Region	ggett									1			
ASIL TOTALS 15.00 asilem Region NOT APPLICABLE an NAL TOTALS	chesne									;			
astern Region 15.00 NOT APPLICABLE NAL TOTALS	itah									45.00			
astern Region NOT APPLICABLE AN INTERIOR STATES	GIONAL TOTALS		ļ							00.01			48.00
an NAL TOTALS	utheastern Region									10.04			10.VC
an NAL TOTALS	rbon												
an NAL TOTALS	iery							NOT APPLIA	EARLE F				
ALS	and												
	GONAL TOTALS												
	CTATE TOTAL												

County 1886 1886 1887 1888 1889 1890 1891 1892 1893 1894 1896 der Region 0 96 561 438 8 538 8 73 95 8 8 7 175 NALTOTALS 0 50 435 240 58 517 327 110 8 8 8 610 In Region 1					Region and		Year						Average
NAL TOTALS September Sep	County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
der 0 96 661 438 - 653 37 96 - 175 Interpretation	orthern Region					ı !							
Region R	Box Elder	•	96	561	438	1	529	327	96	i	1	175	
It	Cache	:	:	;	1	88	538	ı	257	:	:	ł	
Inf	Davis	:	1	ł	:	:	:	ì	:	i	;	:	
In the control of the	organ	ŀ	:	1	:	•	1	;	I	;	:	:	
	Rich	;	;	:	:	!	1	1	i	:	:	ł	
A	mmit	:	:	ł	:	1	1	:	;	1	:	;	
ake	ber	:	;	!	1	:	:	:	ı	1	:	!	
al Region	GIONAL TOTALS	0	20	435	240	88	517	327	110		÷	175	221
ake	ntral Region												
ake	q.	:	1	;	!	ł	;	;	450	1	;	!	
tch	# Lake	:	ī	ŀ	ł	ŧ	;	;	:	ł	ı	:	
tch	nnete	1	1	i	ł	;	;	;	1	;	1	!	
tch	عامل	;	;	ŀ	:	;	i	ŀ	1	:	ł	ł	
tch TOTALS 500 450		ŀ	:	ı	;	1	i	ł	ŀ	:	;	!	
AL TOTALS	catch	;	500	ı	200	!	i	ı	:	i	ŀ	;	
In Region NOT APPLICABLE NOT APPLICABLE Stern Region It TOTALS Stern Region NOT APPLICABLE Stern Region NOT APPLICABLE Stern Region NOT APPLICABLE Stern Region NOT APPLICABLE	CONTAIN TOTALS		200		200	,	:	:	450	:			483
Stern Region Stern Region NOT APPLICABLE Stern Region St	uthern Region												
Ston AL TOTALS Stern Region NOT APPLICABLE S. 600 S. 6	aver												
gton VAL TOTALS sstern Region NAT APPLICABLE 8,500 astern Region NOT APPLICABLE NAT APPLICABLE 175	rfield												
gton AL TOTALS Istern Region AL TOTALS Istern Region NOT APPLICABLE 8,500 NOT APPLICABLE 110 AL TOTALS 110 AL TOTALS 110 AL TOTALS 110 AL TOTALS 110 AL TOTALS 110 AL TOTALS 110 AL TOTALS 110 AL TOTALS	_								1				
9ton MAL TOTALS Istern Region AAL TOTALS AAL TOTALS ABLE B,500 B,500 AAL TOTALS AND AAL TOTALS AAL TOTA	æ							NOT APPL	CABLE				
gton VAL TOTALS Istern Region astern Region NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE	lard												
gton MAL TOTALS Istern Region AAL TOTALS AND APPLICABLE AND APPLICABLE AND ATERNATION AND APPLICABLE AND ATERNATION A	fe												
### TOTALS Istern Region	vier												
Istern Region :	shington												
Istern Region 8,500 At TOTALS 8,500 astern Region 8,500 NOT APPLICABLE 8,500 NOT APPLICABLE 8,500 NOT APPLICABLE 8,500	vne												
	GIONAL TOTALS	ļ								i			
ne 8,500 astern Region NOT APPLICABLE NAL TOTALS NAL TOTALS NAL TOTALS 1,500	rtheastern Region												
### TOTALS ### TOTALS ### TOTALS ### TOTALS #### NOT APPLICABLE ###################################	ggett									:			
8,500 astern Region NOT APPLICABLE NAL TOTALS 1,500 1,500	chesne									;			
astern Region NOT APPLICABLE NAL TOTALS	ıtah									8,500			
astern Region NOT APPLICABLE an NAL TOTALS	GIONAL TOTALS									8,500			8,500
an NOT APPLICABLE	utheastern Region												
an NOT APPLICABLE	rbon												
an NAL TOTALS	nerv							NOT APPL	ICABLE				
ALS	and												
ALS 25 105 010 00 E44 307 440 40 415	n Juan												
	GIONAL IOTALS						1		,				

Table 5. Summary of Hungarian partridge hunter success and distribution of harvest and hunting pressure by region and county, 1995.

REGION AND	SAMPLE	HUNTER-DAY	S BIRDS	BIRDS PE	R & OF	9 OF
COUNTY	SIZE*	AFIELD	BAGGED	HUNTER-D		Harvest
NORTHERN REGION						
Box Elder	60	2,974	3,751	1.26	51.17	62.87
Cache	37	1,885	1,788	0.95	32.44	29.97
Davis	0	. 0	. 0	0.00	0.00	0.00
Morgan	0	0	0	0.00	0.00	0.00
Rich	0	0	0	0.00	0.00	0.00
Summit	1	58	58	1.00	1.00	0.98
Weber	2	213	97	0.45	3.68	1.63
REGIONAL TOTALS	100	5,131	5,695	1.11	99 .30	95.45
CENTRAL REGION						
Juab	1	19	0	0.00	0.33	0.00
Salt Lake**	ō	0	ŏ	0.00	0.00	0.00
Sanpete**	2	. 77	97	1.25	1.34	1.63
Tooele	3	38	0	0.00	0.67	0.00
Utah**	2	116	ō	0.00	2.01	0.00
Wasatch**	. 1	38	19	0.50	0.67	0.33
REGIONAL TOTALS	9	291	116	0.40	5.02	1.95
	***************************************					0000000000000000000
SOUTHERN REGION						
Beaver**	1	19	0	0.00	0.33	0.00
Garfield**	0	0	0	0.00	0.00	0.00
Iron**	0	0	0	0.00	0.00	0.00
Kane**	0	0	0	0.00	0.00	0.00
Millard**	0	0	0	0.00	0.00	0.00
Piute**	1	0	0	0.00	0.00	0.00
Sevier**	1	0	0	0.00	0.00	0.00
Washington**	0	0	0	0.00	0.00	0.00
Wayne**	0	0	0	0.00	0.00	0.00
REGIONAL TOTALS	3	19	0	0.00	0.33	0.00
NORTHEASTERN REGIO	N					
Daggett**	0	0	0	0.00	0.00	0.00
Duchesne**	2	116	19	0.17	2.01	0.33
Uintah**	2	38	0	0.00	0.67	0.00
REGIONAL TOTALS	4	155	19	0.13	2.68	0.33
SOUTHEASTERN REGIO	NT.			***************************************		
Carbon**	0	0	0	0.00	0.00	0.00
Emery**	3	116	19	0.17	2.01	0.33
Grand**	1	0	0	0.00	0.00	0.00
San Juan**		19	116	6.00	0.33	1.95
REGIONAL TOTALS	1 5	136	136	1.00	2.34	2.28
Unknown	2	77	0	0.00	1.34	0.00
STATE TOTALS	123	5,812	5,967	1.03	100.00	100.00

^{*} Total hunter-trips from questionnaire returns.

^{**} Closed to Hungarian partridge hunting in 1995.

Table 6. Summary of Hungarian partridge bagged per hunter-day by region and county, 1988-95.

Region and					_Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Region								
Box Elder	0.95	0.62	1.11	1.02	1.00	0.24	0.47	1 00
Cache	0.50	0.94	0.86	0.86	1.07	0.56	0.47	1.26 0.95
Davis	0.00	2.67	0.00	0.00	0.00	0.00	0.00	0.00
Morgan	0.00	1.33	0.00	0.00	0.04	0.57	0.00	0.00
Rich	0.00	0.00	2.13	1.35	0.76	0.53	0.80	0.00
Summit	3.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Weber	1.17	1.00	1.00	0.40	0.00	0.00	0.00	0.45
REGIONAL TOTALS	0.89	0.67	1.02	0.97	0.95	0.35	0.52	1.11
Central Region			***************************************	••••••				*****************
Juab	0.00*	0.00*	0.00*	0.00*	2.00	0.00	0.00	0 00
Salt Lake	0.09*	0.67*	0.00*	0.00*	1.00*	0.00*	0.00*	0.00 0.00*
Sanpete	0.00*	0.00*	0.00*	0.00*	0.00*	1.00*	0.00*	1.25*
Tooele	0.33	0.47	0.46	0.02	0.25	0.50	1.50	0.00
Utah	0.31*	0.00*	0.00*	0.00*	0.67*	0.13*	0.00*	0.00*
Wasatch	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.50*
REGIONAL TOTALS	0.24	0.41	0.40	0.02	0.40	0.23	0.50	0.40
Southern Region							***************************************	
Beaver	0.00	0.00*	0.00*	0.00*	2.00*	0.00*	0.00*	0 004
Garfield	0.00	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00* 0.00*
Iron	0.00	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Kane	0.00	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Millard	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Piute	0.00	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Sevier	0.00*	0.00*	3.00*	0.00*	1.67*	0.00*	0.00*	0.00*
Washington	2.14*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Wasatch	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
REGIONAL TOTALS	2.14	0.00	0.60	0.00	1.40	0.50	0.00	0.00
Northeastern Region							•	
Daggett	0.00*	0.00*	0.00*	1.25*	0.00*	0.00*	0.00*	0.00*
Duchesne	0.00	0.00*	0.00*	1.00*	0.00*	0.00*	0.00*	0.17*
Uintah	0.00	1.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
REGIONAL TOTALS	0.00	0.00	0.00	1.20	0.00	0.00	0.00	0.13
Southeastern Region				••••••••••••••••	***************************************			tacccicaticaticat ess
Carbon	0.00	0.00*	0.00*	0.00*	0.00*	0.00*	0 00+	0 00=
Emery	1.00*	0.00*	0.00*	0.00*			0.00*	0.00*
Grand	0.00		0.00*		0.00*	0.00*	0.00*	0.17*
San Juan	0.00*	1.50*	0.00*	0.00*	0.00* 0.00*	0.00* 0.00*	0.00* 0.00*	0.00*
RECEONAL TOTALS	1.00	1.50	0.00	0.00	0.00	2.00	0.00*	6.00* 1.00

Unknown Counties	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00
STATE TOTALS	0.82	0.65	0.97	0.88	0.92	0.37	0.50	1.03

*Closed Season

Table 7. Percentage distribution of Hungarian partridge harvest by region and county, 1988-95.

Danies and					Year			
Region and County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Region								
Box Elder	78.86	76.20	60.80	73.82	61.41	33.34	55.97	62.87
Cache	6.03	8.47	31.01	16.75	30.59	37.51	33.95	29.97
Davis	0.00	4.23	0.00	0.00	0.00	0.00	0.00	0.00
Morgan	0.00	2.12	0.00	0.00	0.24	3.33	0.00	0.00
Rich	0.00		5.17	6.37	3.76 0.00	7.50 0.00	7.34 0.00	0.98
Summit	2.26	0.00	0.00	0.00 1.42	0.00	0.00	0.00	1.63
Weber	2.64 89.81	2.12 93.13	0.30 97.28	98.35	96.00	81.68	97.25	95.45
REGIONAL TOTALS	07.O±	93.13						
Central Region								
Juab	0.00					0.00	0.00	0.00
Salt Lake	0.37					0.00	0.00*	0.00*
Sanpete	0.00					1.67	0.00*	1.63*
Tooele	1.88		1.82	0.24	1.18	2.50	2.75	0.00
Utah	1.88					3.33	0.00* 0.00*	0.00* 0.33*
Wasatch	0.00			0.00* 0.24	0.00* 2.35	0.00 7.50	2,75	1,95
REGIONAL TOTALS	4.15	4.76	1.04	V•2•		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Southern Region								
Beaver	0.00	0.00				0.00	0.00*	0.00*
Garfield	0.00					0.83	0.00*	0.00*
Iron	0.00					0.00	0.00*	0.00*
Kane	0.00					0.00	0.00*	
Millard	0.00					0.00	0.00*	
Piute	0.00					0.00	0.00* 0.00*	
Sevier	0.00					0.00 0.00	0.00*	
Washington	5.66 0.00					0.00	0.00*	
Wayne REGIONAL TOTALS	5.6€			0.00*		0.83	0.00	0.00
REGICHAD IDIADO	J. O.							
Northeastern Region	1							
Daggett	0.00	* 0.00	* 0.00*	1.18*		0.00	0.00*	
Duchesne	0.00	* 0.00	* 0.00*			0.00	0.00*	
Uintah	0.00					0.00	0.00*	
REGIONAL TOTALS	0.00	0.53	9.00	0.00*	0.00*	0.00	0.00	0.33
Southoactorn Pagio								
Southeastern Region Carbon	0.00	0.00	* 0.00*	0.00*	0.00*	0.00	0.00*	0.00*
Emery	0.37					1.67	0.00*	
Grand	0.00					0.00	0.00*	
San Juan	0.00					0.00	0.00*	1.95*
REGIONAL TOTALS	0.3		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			1.67	0.00	2.28
Unknown counties	0.00	0.00	0.00	0.00	0.00	8.33	0.00	0.00
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 8. Percentage distribution of Hungarian partridge hunting pressure by region and county, 1988-95.

Region and _					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Region								
Box Elder	68.42	80.42	53.10	64.04	E	F1 00	50.00	
Cache	9.90	5.84	34.81	17.26	56.41 26.25	51.23	60.09	51.17
Davis	1.23	1.03	0.00	0.42	0.87	24.85	21.10	32.44
Morgan	0.30	1.03	2.36	0.42	5.21	0.00	1.83	0.00
Rich	0.00	0.69	2.36	4.16	4.56	2.15	1.83	0.00
Summit	0.61	0.00	0.00	0.00	0.00	5.22	4.59	0.00
Weber	1.85	1.37	0.30	3.12	0.00	0.92 2.15	0.92	1.00
REGIONAL TOTALS	82.36	90.39	92.93	89.40	93,29	2.15 86.52	2.29 92.67	3.68 88.30
Central Region	,	***************************************		**********************				
Juab	0.00*		0.504					
Salt Lake	3.40*		_	0.00*	0.22	0.31	0.46	0.33
Sanpete	0.00*			0.00*	0.22*	0.31*	0.00*	0.00*
Tooele	4.64	5.16	3.84	0.00*	0.00*	0.61*	0.92*	1.34*
Utah	4.95*			9.15* 0.21*	4.34	1.84	0.92	0.67
Wasatch	1.23	1.03*		0.21*	0.65*	9.20*	0.46*	2.01*
REGIONAL TOTALS	14.24	7.56	4.43	9.36	0.00* 5.42	0.00*	0.00*	0.67*
		,,,,,		7,00	9,44	12.27	2.75	5.02
Southern Region								
Beaver	0.00*			0.21*	0.22*	0.00*	0.46*	0.33*
Garfield	0.00*			0.00*	0.00*	0.00*	0.00*	0.00*
Iron	0.00*			0.00*	0.22*	0.00*	0.00*	0.00*
Kane	0.00*			0.00*	0.00*	0.00*	0.00*	0.00*
Millard	0.00*			0.00*	0.00*	0.61*	0.00*	0.00*
Piute	0.00*			0.00*	0.00*	0.00*	0.00*	0.00*
Sevier	0.00*			0.00*	0.65*	0.00*	0.46*	0.00*
Washington	2.16*		0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Wayne	0.00*		0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
REGIONAL TOTALS	2.15	0.69	1.48	0.21	1.08	0.61	0.92	0.33
Northeastern Region	ì				***************************************	***************************************	****************	***************************************
Daggett	0.00*	0.00*	0.00*	0.83*	0.00*	0.00*	0.00*	0.00*
Duchesne	0.30*	0.00*	0.00*	0.21*	0.00*	0.00*	1.38*	2.01*
Uintah	0.00*	0.34*	0.00*	0.00*	0.22*	0.00*	1.46*	0.67*
REGIONAL TOTALS	0.29	0.34	0.00*	1.04	0.22	0,00	1.83*	2.68*
Southeastern Region	•	***************************************	***************************************					***************************************
Carbon	0.61*	0.244	0 00+			-		
Emery		0.34*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Grand	0.30* 0.00*	0.00* 0.00*	1.18*	0.00*	0.00*	0.00*	1.83*	2.01*
San Juan	0.00*	0.69*	0.00*	0.00*	0.00*	0.31*	0.00*	0.00*
REGIONAL TOTALS	0.00	1.03	0.00 1.18	0.00* 0.00	0.00* 0.00	0.00* 0.31	0.00* 1.83	0.33*
	- 7				•••	V+31	1.03	2.34
Unknown counties	0.00	0.00	0.00	0.00	0.00	0.31	0.00	1.34
STATE TOTALS	100.00	100.00	100.00 1	00.00 1	00.00	100.00	100.00 1	00.00

Table 9. State	wide summar	y of Hungarian	partridge harve	st statistics,	1955-95.

	Total	Total	Hunter-Days	Huns Per	Huns Per
Year	Hunters	Harvest	Afield	Hunter-Day	Hunter
955			-		0.39
1956			_	-	0.89
957			_		0.45
1958				-	1.34
959	1,846	1,820	3,354	0.54	0.99
1960	2,847	4,877	4,929	0.99	1.71
961	3,205	3,648	6,645	0.54	1.13
962	3,440	8,970	9,153	0.98	2.61
963	4,676	13,343	13,291	1.00	2.85
1964	4,249	11,812	9,688	1.22	2.78
965	4,498	12,183	11,798	1.03	2.71
1966	4,549	15,348	11,473	1.34	3,37
967	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	5,3 5 8	8,216	0.65	1.57
1976	3,517	6,287	8,753	0.72	1.79
1977	5,557	6,360	9,058	0.70	1.79
1978	4,743	12,969	12,328	1.05	2.73
1979	3,435	6,200	7,787	0.80	1.80
1980	3,359	8,466	10,366	0.82	2.52
1981	3,545	8,916	10,147	0.88	2.52
1982	2,590	4,475	5,379	0.83	1.73
1983	2,889	6,506	6,998	0.93	2.25
1984	1,523	1,360	3,309	0.41	0.89
1985	1,157	707	2,314	0.31	0.61
1986	1,257	1,627	2,843	0.57	1.30
1987	2,010	5,711	5,246	1.09	2.53
1988	2,471	4,424	5,392	0.82	1.79
1989	2,136	3,920	6,035	0.65	1.83
1990	2,305	6,770	6,976	0.97	2.94
1991	2,662	7,376	8,367	88.0	2.77
1992	3,198	7,553	8,192	0.92	2.36
1993	2,090	2,280	6,194	0.37	1.09
1994	1,899	1,916	3,832	0.50	1.01
1995	2,294	5,967	5,812	1.03	2.60
Totals		•	ŕ		
(1959-95)	127,030	270,634	316,438	_	
Averages	,	, .		 -	
(1959-94)	3,465	7,352	8,629	0.80	2.01

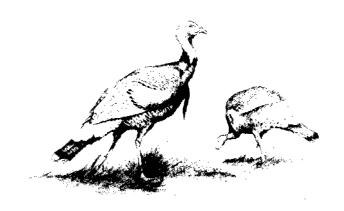
1995,
-
summary
¥
chec
Ō,
g
Ξ
무
ᆵ
partridge f
5
-
ē
Ō
뒥
ᅱ
_
ó
Ŧ
<u>e</u>
ᆲ

Region and County Northern Region Box Elder Cache Davis Morgan Rich Summit Weber Central Region Juab Salt Lake	Parties Parties	Total Hunters	Total Hours	Total	Birds/			ı	100°E	Total	Birde	
Jorthern Region Sox Elder Sache Javis Aorgan Rich Summit ReGIONAL TOTAL Central Region Juab Salt Lake		::		Birds	100 Hz		Complete Hunts	Total	Hours	Dirde Pirde	Hinton	Birds/
sox Elder Sache Javis Aorgan Rich Summit Summit Summit SedioNAL TOTAL Sentral Region Juab Salt Lake		: :					2	2	2	2	Idilici	
tache Javis Jorgan Aorgan Rich Summit Reber REGIONAL TOTAL Central Region Juab Salt Lake		:	ı	ı	:	ł	:	ì	:	:	;	:
Javis Aorgan Rich Summit Veber REGIONAL TOTAL Partral Region Juab			i	i	;	ŀ	1	;	ŀ	ł	ł	;
Aorgan Rich Summit Veber REGIONAL TOTAL Pentral Region Mutake Salt Lake		:	i	ł	;	:	ı	1	ŀ	:	;	:
tich summit veber REGIONAL TOTAL Sentral Region Vuab Salt Lake	1 1 1 1 1 1 1 1 1	ı	:	;	:	;	i	1	;	;	:	:
tummit Veber REGIONAL TOTAL Central Region Uab Salt Lake		;	;	!	:	:	;	1	;	;	!	1
Veber KEGIONAL TOTAL Sentral Region Luab Salt Lake		ŀ	:	:	:	;	ı	ŧ	ŀ	ï	:	:
REGIONAL TOTAL Sentral Region uab alt Lake		;	:	!	;	:	ł	1	;	;	ŀ	:
entral Region uab alt Lake	: : :	1	:	:	:	;			:			
uab alt Lake annete	; ;	ı	;	:		;	1	:	:	;		
alt Lake annete	:	ŀ	1	:	ŀ	ł	:	;	1	!	;	
annete		ł	!	:	;	1	;	1	1	:	: :	; ;
) · · · ·	:	ŧ	;	,	1	ì	;	;	;		; ;	: ;
Tooele	;	;	i	ŧ	ì	i	ı	;	;		¦	; ;
Utah	ł	:	;	:	ŀ	:	1	1	;		1 1	1
Wasatch	ŀ	i	í	;	i	:	;	1	۱ ا	1	!	;
REGIONAL TOTAL	1	1	1				:	! !	1	•	1	;
Southern Region Beaver Garfield												
Iron							NOT APPLICABLE	ICABLE				
Kane												
Millard												
Piute												
Sevier												
Washington												
Wayne												
REGIONAL TOTALS				1								
Northeastern Region												
Daggett												
Duchesne							NOT APPLICABLE	CABLE				
Uintah							! :					
REGIONAL TOTALS												
Southeastern Region	_											
Carbon												
Emery Grand							NOT APPLICABLE	CABLE				
San Juan												
REGIONAL TOTALS												
STATE TOTALS	1	:	:	ï	:	:		:			1	

Region and County Birds/	Birds/ Hunter	Birds/	Birds/	Birds/	Birde/	1		Directo!) John G	ı
Negion	Birds/ Hunter	Birds/	Birds	SDJIS	Į.					
Region Region Region Region AL TOTALS Region AL TOTALS AL TOTALS AL TOTALS AL TOTALS AL TOTALS AL TOTALS AL TOTALS AL TOTALS AL TOTALS	HUNGEL	1000		400 11	1	Pirds/	Birds/	400 11.		Siras/
er		100 Hr	Hunter	100 HĽ	Hunter	100 Hr	Hunter	100 H.L	Hunter	JUN HIL
er										
AL TOTALS Region Region Region Region AL TOTALS AL TOTALS AL TOTALS AL TOTALS AL TOTALS	0.55	55	1.50	20	ŀ	:	i	;	!	:
AL TOTALS	;	ł	:	1	1	1	1	:	1	ŀ
### TOTALS	ŀ	:	:	!	1	;	:	1	!	ŀ
### TOTALS	;	;	:	ł	;	ł	ŀ	;	!	:
Region Region te h TOTALS IN Region gton sal. TOTALS 1	;	;	0.55	9	:	1	;	;	ŀ	:
Region	;	ł	:	:	ı	ı	ł	:	1	:
Region Region In Region gton sal TOTALS AL TOTALS In Region	;	;	:	:	:	:	:	1	ŀ	-
Region	0.55	22	69.0	69	;	 •	:	1	ı	:
te h ALL TOTALS In Region gton sAL TOTALS		:			:	:		ŀ	1	1
te h AL TOTALS In Region Iden state of the state	ŀ	;	;	;	ł	;	:	ļ	;	1
h	ı	;	ł	:	;	1	1	:	ŀ	:
h	;	:	!	:	ł	1	1	1	;	;
h uAL TOTALS rn Region l gton uAL TOTALS	:	;	:	:	;	;	1	1	1	:
ual TOTALS rn Region	ì	;	:	1	;	ŀ	1	!	ł	1
in Region	,	1	:	;	:	1	ł	:	ı	:
uthern Region aver irfield in ine illard vier vier syne GloNAL FOTALS	:	1	:	:	:		:	:		١.
nnend nne llard uite vier ashington ayne EGIONAL TOTALS										
ine llard ute vier ashington ayne GOONAL FOTALS				NOT APPLICABLE	CABLE					
llard ute vier ashington syne GONAL FOTALS										
ute vier ashington ayne GOONAL TOTALS										
vier ashington ayne GIONAL TOTALS										
sshington ayne GOONAL TOTAŁS										
ayne GIONAL TOTALS										
GIONAL TOTALS										
Northeastern Region										
Daggett										
Duchesne				NOT APPLICABLE	JCABLE					
Uintah										
REGIONAL TOTALS										
Southeastern Region										
Carbon										
Emery				NOT APPLICABLE	.ICABLE					
Grand San Juan										
REGIONAL TOTALS										
STATE TOTALS	0.55	99	69.0	69	:	:	:	1	:	:

WILD TURKEY

SUMMARY



In 1994, the entire state went to limited entry turkey hunting for both the Merriam's and Rio Grande sub-species. Drawing odds for each of the 1995 hunts is shown in Table 6.

Merriam's Turkeys

Merriam's turkey populations remain stable. Limited entry hunting was allowed on 4 units, during a total of 6 seasons. Two units were open for early and late seasons. A total of 345 permits were sold. A fall turkey hunting season was not held in Utah in 1995. A total of 64 Merriam's turkeys were harvested in 1995. Merriam's turkey hunters experienced a 22 percent success rate.

Rio Grande Turkeys

Three hundred twenty three permits were sold in 1995. A total of 78 Rio Grande turkeys were harvested in 1995 for a success rate of 63 percent.

Sealed-Bid and Auction Permits

In 1995 a limited entry Rio Grande wild turkey sealed-bid permit was available again. Minimum bid on the permit was \$350. The permit sold for \$952.00. In addition, 3 limited entry wild turkey auction permits were available and sold for \$825.00, \$600.00 and \$525.00.

Harvest

Spring Merriam's Gobbler Season

Results of the 1995 spring season are shown in Table 1 of this section. The trend of these data since 1968 is shown in Table 2 and Figures 1 and 2. Statewide summary of fall hunt statistics is in Table 3. The 1995 spring season survey compared to 1994 and the previous 26-year average follow:

	<u>1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Permits sold	345	+3	+24
Hunters afield	296	+4	+17
Turkeys harvested	64	+12	+87
Hunter-days afield	1,427	+28	+95
Percent hunter success	22	+10	+87
Turkeys bagged per hunter-day	0.05	0	+16
Percent of hunters who observed	đ		
turkeys			

Beginning in 1994, a limited entry turkey hunting program was implemented in Utah. Total harvest increased from 57 in 1994 to 64 in 1995, which is 12 percent. Hunter success rates increased 10 percent from 1994 and were 87 percent above the long-term average.

Spring Rio Grande Gobbler Season

Results of the 1995 spring season are shown in Table 4 of this section. The trend of these data since 1991 is shown in Table 5. The 1995 spring season compared to 1994 and the previous 4-year average follows:

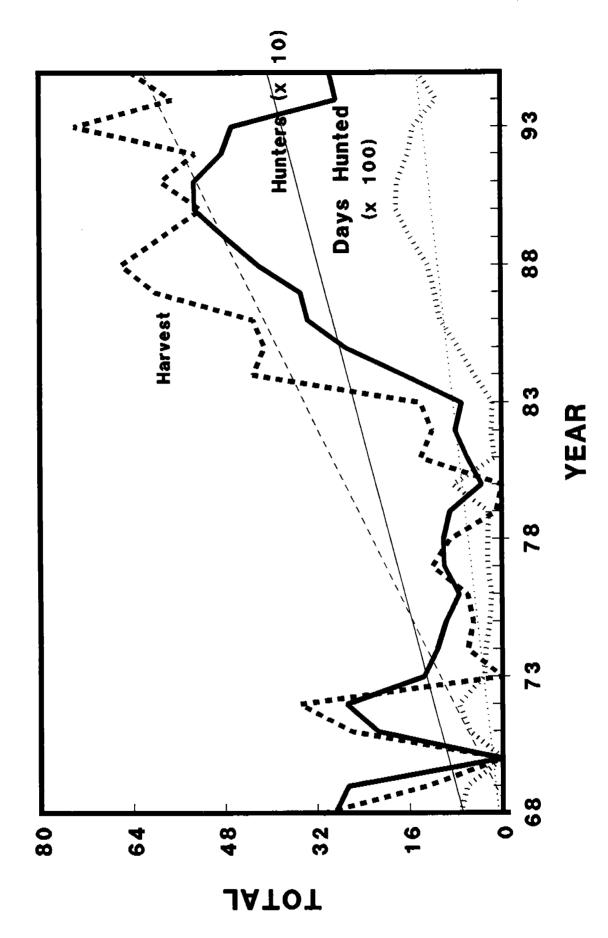
<u> 1995</u>	change from <u>1994</u>	change from <u>Average</u>
323	+29	187
123	+17	+167
78	-1	+138
628	+35	+214
63	-16	-8
0.12	-29	-30
	323 123 78 628 63	from 1995 1994 323 +29 123 +17 78 -1 628 +35 63 -16

One hundred twenty three hunters averaged 5.11 days-afield each to harvest a total of 78 turkeys. Sixty three percent of the hunters afield harvested a bird.

As other Rio Grande populations continue to grow throughout the state, more limited entry opportunities will be provided.

Brood Counts

Limited brood count data for 1995 is shown in Table 7.



Spring Merriam's wild turkey hunters, harvest, and days hunted, 1968-95.

Turkeys/Hunter/Day (x 100) 93 88 83 YEAR Bagging a Turkey 78 Percent of Hunters 68 ဖ 0 30 24 7 ∞ **TURKEYS** YAd PER **QNA** PER

Spring Merriam's wild turkey hunting success, 1968-95. Figure 2.

Table 1. Summary of the 1995 spring Merriam's turkey season.

	Boulder (early)		Boulder (late)		Unit Totals	Zlon (early)		Zlon (late)		Unit Totals	Kolob		LaSal		STATE TOTALS	TALS
Data	Rep't C	Calc	Rep*1	Calc	Cate	Rep't	Çajc	Rep't	Cak	Calc	Rep*i	35	Rep't	3 2	Ren'i	ä
Permits Sold	75		75		150	75		75		150	35		=		¥	
No Hunts	90		s		53	4		*		ü	V,				E	
Hunters Affeld	15	8	8	2	821	20	8	93	65	129	8	8	- 90	•	<u>8</u>	386
Total Hunter-Days	220.4	88	235.3	3 8	3	180.6	251	189.5	374	625	92.4	138	37	4	38	1.427
Average Hunter-Days Affeld	43	5,5	6.0	9.6	5.2	3.6	5.0	6.3	12.5	6.4	4.6	5'9	9,4	5.1	8.4	7.2
Turkeys Bagged	15	61	13	77	6	۲	2	٠	12	አ	1	-	6	e.	\$	35
Percent Success	53	1	33	1	31	2	•	ន	ı	81	w	. 1	9	. 1	: 23	; 1
Turkeys Bagged Per															l	
Hunter-Day	0.07	ı	90'0	ı		9.0	ı	90.0	ı		0.0	ı	90.0	:	90.0	ı
Reported Crippling Loss	•	ı	•	ı		6	1	•	,		0	,	-	ı		1
(Loss/100 Bagged)	0	ı	•	ı		8	1	•	ı		0	:	-	1	•	١
Turkeys Observed																
Gobblers	142	1	4	1		85	ı	75	1		13	:	92	1	35	ı
Непз	181	ı	8	ı		186	ı	8	ı		:	1	•	•	इ	
Unidenijfied	1	1	ι	1		ı	1	t	ı		1	1	. =	1	()	
Number of Hunters													,			
Who Saw Turkeys	1	ı	ι	1		ı	1	ı	1		1	٠	1	ı	1	1
Percent of Hunters																
Who Saw Turkeys	6	ı	33	ı		88	1	17	,		35	1	,	•	8	ı
Percent of Hunters															:	
Who Saw Gobblers	43		22	1		\$	1	ន	ı		15	ı	51	ı	30	,
Beard Length 0"-4" (% of Harvest)	8	ı	80	ı		37	١,	æ	 - 		-		1	1	ន	
Beard Length 4"-7" (% of Harvest)	ដ	ı	31	1		23	ı	\$	1		0	1	1	ı	11	٠
Beard Length > 7" (% of Harvest)	93	ı	31	1		8	1	83	1		81	ı	:	ı	3	:
Blunt Spur (% of Harvest)	Ħ	ı	ដ	1		20	1	ห	ı		•	1	ı	1	**	ı
Rounded Spur (% of Harwest)	36	ı	Z	ı		ĸ	٠	ĸ	1		•	,	•	i	33	1
Sharp Spur (% of Harvest)	38	,	ន	ı		X	1	9	1		Ξ		ı	1	: 5	,
															5	ا.

	Percent of Hunter
	Turkeys Per
, 1967-95.	Percent
gobbler seasons	Hunter-Days
s for spring	Total
harvest statistic	Huntera
Merrriam's turkey	
e 2. Summary o	

Year Affeld Borrest Affeld Borrest Affeld Success* Hunter-Day Obsarring Turkeys 1968 250 31 738 11 0.04 41 1969 267 13 612 5 0.02 22 1970 215 26 356 11 0.04 38 1971 215 26 35 751 12 0.05 39 1972 269 35 751 12 0.06 39 1973 112 6 289 5 0.03 22 1974 74 6 188 6 0.03 39 1978 191 9 246 10 0.04 42 1978 161 9 246 10 0.04 42 1978 161 9 246 10 0.04 42 1984 16 12 12 0.03 12 <th></th> <th></th> <th>Hunters</th> <th>Total</th> <th>Hunter-Days P</th> <th>Percent</th> <th>Turkeys Per</th> <th>Percent of Hunters</th> <th>Total</th>			Hunters	Total	Hunter-Days P	Percent	Turkeys Per	Percent of Hunters	Total
1966 299 31 738 11 0.04 41 1970 167 13 612 5 0.02 22 1970 215 26 576 11 0.04 38 1971 216 26 35 751 11 0.04 38 1973 135 0 311 0 0 0.00 39 1974 112 6 289 5 0.03 29 1975 99 12 248 112 0.05 39 1977 99 12 248 112 0.04 42 1978 101 9 246 10 0.00 17 1980 35 0 84 0 0.00 17 1981 60 14 129 25 0.01 8 1982 1983 60 14 129 25 0.00 1984 169 41 1747 15 0.06 52 1985 47 14 161 21 0.00 52 1986 421 66 1,462 11 0.04 57 1988 477 89 1,462 11 0.04 57 1990 531 52 1,4812 10 0.05 54 1994 464 53 1,4812 10 0.05 54 1994 464 53 1,386 12 0.05 54 1995 466 74 1,481 10 0.05 54 1995 466 74 1,482 10 0.05 54 1994 1995 466 74 1,389 11 0.05 54 1995 287 1,112 20 0.05 54 1995 87 1,112 20 0.05 54 1995 87 1,112 20 0.05 54 1995 87 1,112 20 0.05 54 1995 87 1,112 20 0.05 54	Hunting Unit	Year	Affeld	Hervest	Affeld	Success	Hunter-Day	Observing Turkeys	Permits**
1968 299 31 738 11 9.04 41 1970									
1969 267 13 612 5 6.02 22 1971 215 26 576 11 0.04 38 1972 269 35 751 12 0.045 39 1973 135 0 311 0 0.04 39 1974 112 6 289 5 0.05 22 1975 74 5 129 5 0.05 22 1976 74 6 185 8 0.05 22 1977 99 12 246 10 0.04 42 1978 191 9 246 10 0.04 42 1979 90 1 237 1 0.05 39 1980 35 0 84 0 0.04 42 1981 60 14 129 23 0.11 53 1982 80 12 184 16 0.07 0.05 1983 69 14 161 21 0.05 25 1984 471 66 1,567 15 0.06 57 1985 477 59 1,568 12 0.04 55 1990 531 52 1,569 11 0.03 54 1991 532 59 1,792 11 0.05 54 1993 466 74 1,508 16 0.05 60 1994 537 1,112 20 0.05 54 1995 587 1,112 20 0.05 54 1995 287 1,112 20 0.05 54 1995 287 1,112 20 0.05 54 1995 587 1,112 20 0.05 54 1995 587 1,112 20 0.05 54 1995 587 1,112 20 0.05 54 1995 587 1,112 20 0.05 54 1995 587 1,112 20 0.05 54 1995 587 1,112 20 0.05 54 1995 287 1,112 20 0.05 54 1995 287 1,112 20 0.05 54 1995 287 1,112 20 0.05 54 1995 287 1,112 20 0.05 54 1995 287 1,112 20 0.05 54 1995 287 20,447 2	STATE TOTALS	1968	290	31	738	11	9.0	4	310
1970 NO SEASON 1971 215 26 35 751 11 0.04 38 1972 269 35 751 12 0.08 39 1974 113 6 289 5 0.02 22 1975 97 5 219 5 0.03 22 1976 74 6 188 8 0.03 22 1978 90 1 246 10 0.04 42 1980 35 0 12 246 10 0.04 42 1981 60 1 227 1 0.01 42 1982 89 1 224 1 0.01 42 1981 80 1 224 1 0.01 42 1982 89 1 129 23 0.04 35 1983 69 14 161 21 0.09 22 1984 43 482 25 0.09 22 1985 270 41 747 15 0.06 27 1986 43 482 25 0.03 24 1988		1969	797	13	612	v o	0.02	ដ	276
1971 215 26 576 11 0.04 38 1972 269 35 751 12 0.05 39 1973 113 6 289 5 0.00 10 1974 112 6 289 5 0.03 22 1975 74 6 185 8 0.03 22 1977 99 12 248 12 0.05 32 1978 101 9 246 12 0.05 32 1980 35 0 84 0 0.04 42 1981 60 14 139 23 0.11 8 1982 89 12 184 16 0.07 62 1983 69 14 150 23 0.11 8 1984 160 42 147 14 16 0.09 17 1985 431 <t< td=""><td></td><td>1970</td><td></td><td></td><td></td><td>NO SEASON</td><td></td><td></td><td></td></t<>		1970				NO SEASON			
1972 269 35 751 12 0.05 39 1973 135 0 311 0 0.00 10 1974 112 6 289 5 0.03 22 1976 74 6 189 12 0.05 32 1978 101 9 246 10 0.04 42 1978 101 9 246 10 0.05 39 1978 101 9 246 10 0.05 39 1979 90 1 246 10 0.05 39 1979 90 1 246 10 0.04 42 1980 35 0 84 0 0.06 17 8 1981 60 14 161 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0<		1971	215	92	576	11	9.04	38	223
1973 135 0 311 0 0.00 10 1974 112 6 289 5 0.02 22 1976 74 6 185 8 0.03 32 1977 79 12 246 10 0.05 39 1978 101 9 246 10 0.05 39 1979 90 1 237 1 0.05 39 1970 35 0 84 0 0.04 42 1980 35 0 84 0 0.00 17 1981 60 14 161 21 0.00 17 62 1982 60 14 161 21 0.09 53 53 1983 47 60 1,47 15 0.06 57 1984 431 53 1,568 17 0.04 53 1992 4		1972	369	35	751	12	50.0	æ	285
1974 112 6 289 5 0.02 22 1975 97 5 219 5 0.03 29 1976 74 6 185 8 0.03 29 1978 101 9 246 10 0.04 42 1979 90 1 274 1 0.01 8 1980 35 0 84 0 0.04 42 1981 60 14 129 23 0.11 53 1982 80 12 84 16 0.07 62 1983 69 14 161 21 0.09 77 1984 16 16 0.07 0.09 53 1985 270 41 161 21 0.09 57 1986 43 482 25 0.09 57 57 1986 43 482 1,06		1973	135	•	311	•	0.00	20	150
1975 97 5 219 5 0.03 29 1976 74 6 185 8 0.03 32 1977 99 12 248 12 0.05 39 1978 101 9 246 10 0.04 42 1980 35 0 84 0 0.09 17 1981 60 14 129 23 0.11 53 1982 80 12 184 16 0.09 17 1983 60 14 161 21 0.09 53 1984 169 43 482 25 0.09 72 1985 169 43 482 25 0.06 53 1986 31 43 482 25 0.06 52 1986 43 482 15 0.06 52 1986 41 747 15 <		1974	112	•	289	w	0.07	22	121
1976 74 6 185 8 0.03 32 1977 99 12 248 12 0.05 39 1978 101 9 246 10 0.04 42 1979 90 1 237 1 0.01 8 1980 35 0 84 0 0.00 17 1981 60 14 129 23 0.11 53 1983 69 14 161 21 0.09 72 1986 43 1,64 15 0.09 72 1986 477 60 1,150 17 0.05 57 1987 477 59 1,267 16 0.05 57 1990 531 52 1,39 0.03 45 1991 53 1,79 11 0.03 45 1993 466 74 1,79 10 0.03 <td></td> <td>1975</td> <td>8</td> <td>*0</td> <td>219</td> <td>40</td> <td>0.03</td> <td>83</td> <td>103</td>		1975	8	*0	219	40	0.03	83	103
1977 99 12 248 12 0.05 39 1978 101 9 246 10 0.04 42 1980 35 0 84 10 0.09 17 1981 60 14 129 23 0.11 53 1982 80 12 184 16 0.07 62 1983 69 14 161 21 0.09 53 1984 169 43 482 25 0.09 52 1985 270 41 747 15 0.06 52 1986 335 43 1,654 13 0.04 57 1987 347 60 1,150 17 0.05 52 1988 421 66 1,267 16 0.05 52 1990 531 52 1,367 16 0.03 54 1991 532 39 1,792 11 0.03 45 1994 53 1,792 11 0.03 45 1994 54 1,112 20 0.05 40 1994 57 1,112 20		1976	74	•	185	90	0.03	32	88
1978 101 9 246 10 0.04 42 1979 90 1 237 1 0.01 8 1981 60 14 129 23 0.11 53 1982 80 12 184 16 0.07 62 1983 69 14 161 21 0.09 53 1984 169 43 482 25 0.09 53 1985 270 41 747 15 0.06 52 1986 335 43 1,654 13 0.04 57 1986 477 59 1,150 17 0.05 57 1988 471 59 1,267 16 0.05 57 1990 531 52 1,312 10 0.03 51 1991 53 53 1,792 11 0.03 45 1993 466 74 1,509 11 0.05 54 1994*** 28 57 1,112 20 0.05 54 1995 287 65 1,366 23 0.05 54 1995 287 <td></td> <td>1977</td> <td>8</td> <td>13</td> <td>248</td> <td>71</td> <td>0.05</td> <td>39</td> <td>108</td>		1977	8	13	248	71	0.05	39	108
1979 90 1 237 1 0.01 8 1980 35 0 84 0 0.00 17 1981 60 14 129 23 0.11 53 1982 80 12 184 16 0.07 62 1983 69 14 161 21 0.09 55 1984 169 43 462 25 0.09 52 1986 270 41 747 15 0.06 52 1986 270 41 747 15 0.06 57 1987 347 60 1,150 17 0.05 57 1988 421 66 1,267 16 0.05 57 1990 531 52 1,382 1,792 11 0.03 54 1994 53 1,792 11 0.05 54 1994 57 1,		1978	101	Φ.	246	10	9.0	7	116
1980 35 0 84 0 0.00 17 1981 60 14 129 23 0.11 53 1982 80 12 184 16 0.07 62 1983 69 14 161 21 0.09 55 1984 169 43 482 25 0.09 72 1985 270 41 747 15 0.06 52 1986 335 43 1,054 13 0.04 57 1986 335 43 1,150 17 0.05 57 1987 347 60 1,150 17 0.05 57 1988 477 59 1,568 12 0.04 55 1990 531 52 1,312 1,792 11 0.03 45 1994 53 1,599 11 0.05 9.05 9 1994		1979	8	-	237	=	0.01	\$2 0	113
1981 60 14 129 23 0.11 53 1982 80 12 184 16 0.07 62 1983 69 14 161 21 0.09 55 1984 169 43 482 25 0.09 72 1985 270 41 747 15 0.06 52 1986 335 43 1,054 13 0.04 57 1987 347 60 1,150 17 0.05 57 1988 421 66 1,267 16 0.05 57 1989 477 59 1,568 12 0.04 55 1990 531 52 1,792 11 0.03 45 1991 546 74 1,508 16 0.05 54 1994 53 1,792 11 0.03 45 1994 55 57		1980	35	•	Z	•	0.00	17	4
1982 80 12 184 16 0.07 62 1983 69 14 161 21 0.09 55 1984 169 43 482 25 0.09 72 1985 270 41 747 15 0.06 52 1986 335 43 1,054 13 0.04 57 1987 347 60 1,150 17 0.05 57 1988 421 66 1,267 16 0.05 57 1989 477 59 1,568 12 0.04 55 1990 531 52 1,912 10 0.03 49 1991 532 59 1,792 11 0.03 45 1994 53 1,598 16 0.03 54 1994 54 1,112 20 0.05 - 1994 57 1,112 0.05 <td></td> <td>1981</td> <td>8</td> <td>7</td> <td>129</td> <td>23</td> <td>0.11</td> <td>53</td> <td>22</td>		1981	8	7	129	23	0.11	53	22
1983 69 14 161 21 0.09 55 1984 169 43 482 25 0.09 72 1985 270 41 747 15 0.06 52 1986 335 43 1,054 13 0.04 57 1987 347 60 1,150 17 0.05 57 1988 421 66 1,267 16 0.05 50 1989 477 59 1,568 12 0.04 55 1990 531 52 1,912 10 0.03 51 1991 532 59 1,792 11 0.03 45 1992 466 74 1,508 16 0.03 45 1994***** 285 87 1,112 20 0.05 9 1995 287 65 1,386 23 0.05 40		1982	8	13	<u>3</u>	16	0.07	25	26
1984 169 43 482 25 0.09 72 1985 270 41 747 15 0.06 52 1986 335 43 1,054 13 0.04 57 1987 347 60 1,150 17 0.05 57 1988 421 66 1,267 16 0.05 50 1989 477 59 1,568 12 0.04 55 1990 531 52 1,812 10 0.03 51 1991 532 59 1,792 11 0.03 45 1992 466 74 1,508 16 0.03 45 1994***********************************		1983	\$	7	191	71	0.00	55	26
1985 270 41 747 15 0.06 52 1986 335 43 1,054 13 0.04 57 1987 347 60 1,150 17 0.05 57 1988 421 66 1,267 16 0.05 50 1989 477 59 1,468 12 0.04 55 1990 531 52 1,812 10 0.03 51 1991 532 59 1,792 11 0.03 45 1992 466 74 1,508 16 0.03 45 1994 53 1,112 20 0.05 54 1994 57 1,112 20 0.05 - 1994 57 1,112 20 0.05 - 1995 287 1,386 23 0.05 40 6,597 856 20,447 - -		1984	169	£	482	35	0.09	22	190
1986 335 43 1,054 13 0.04 57 1987 347 60 1,150 17 0.05 57 1988 421 66 1,267 16 0.05 57 1989 477 59 1,468 12 0.04 55 1990 531 52 1,812 10 0.03 51 1991 532 59 1,792 11 0.03 45 1992 466 74 1,508 16 0.03 54 1994**** 285 87 1,112 20 0.05 - 1995 287 1,386 23 0.05 - - 1995 287 85 20,447 - - - -		1985	270	4	747	15	9.00	23	314
1967 347 60 1,150 17 0.05 57 1988 421 66 1,267 16 0.05 50 1989 477 59 1,568 12 0.04 55 1990 531 52 1,812 10 0.03 51 1991 532 59 1,792 11 0.03 49 1992 484 53 1,599 11 0.03 45 1993 466 74 1,508 16 0.05 54 1994**** 285 87 1,112 20 0.05 - 1995 287 65 1,386 23 0.05 - 6,597 856 20,447 - - - - -		1986	33\$.	1,054	13	0.04	53	362
1988 421 66 1,267 16 0.05 50 1989 477 59 1,568 12 0.04 55 1990 531 52 1,812 10 0.03 51 1991 532 59 1,792 11 0.03 49 1992 484 53 1,599 11 0.03 45 1993 466 74 1,508 16 0.05 54 1994**** 285 87 1,112 20 0.05 - 1995 287 65 1,386 23 0.05 40 6,597 856 20,447 - - - - -		1987	34	8	1,150	17	0.05	23	364
1989 477 59 1,568 12 0.04 55 1990 531 52 1,812 10 0.03 51 1991 532 59 1,792 11 0.03 49 1992 484 53 1,599 11 0.03 45 1993 466 74 1,508 16 0.05 54 1994**** 285 87 1,112 20 0.05 - 1995 287 65 1,386 23 0.05 - 6,597 856 20,447 - - - -		1988	421	8	1,267	91	0.05	9 5	964
1990 531 52 1,812 10 0.03 51 1991 532 59 1,792 11 0.03 49 1992 484 53 1,599 11 0.03 45 1993 466 74 1,508 16 0.05 54 1994*** 285 57 1,112 20 0.05 - 1995 287 65 1,386 23 0.05 40 6,597 856 20,447 - - - -		1989	477	\$	1,568	12	0.04	35	527
1991 532 59 1,792 11 0.03 49 1992 484 53 1,599 11 0.03 45 1993 466 74 1,508 16 0.05 54 1994*** 285 57 1,112 20 0.05 - 1995 287 65 1,386 23 0.05 40 6,597 856 20,447 - - - -		1990	531	23	1,812	9	0.03	25	579
1992 484 53 1,599 11 0.03 45 1993 466 74 1,508 16 0.05 54 1994*** 285 57 1,112 20 0.05 — 1995 287 65 1,386 23 0.05 40		1991	532	£	1,792	11	0.03	\$	587
1993 466 74 1,508 16 0.05 54 1994*** 285 57 1,112 20 0.05 — 1995 287 65 1,386 23 0.05 40 6,597 856 20,447 — — —		1992	484	23	1,599	==	0.03	45	538
1994*** 285 \$7 1,112 20 0.05 — 1995 287 65 1,386 23 0.05 40 6,597 856 20,447 — — — — — — — — — — — — — — — — — —		1993	466	7	1,508	16	0.05	3.	200
1995 287 65 1,386 23 0.05 40 6,597 856 20,447		1994**	282	54	1,112	20	90.0	1	335
6,597 856 20,447		1995	287	89	1,386	23	90'0	40	335
6,597 856 20,447	STATE TOTALS								
	(1968-95)		6.597	856	20.447	1	1	ı	١

733

æ

STATE AVERAGES (1968-94)

^{*}Based on the number of hunters bagging one or more turkeys.

^{**}Total permits are sold on a statewide basis and not by unit, 1968-93. In 1994, permits were sold by unit.

^{***}Beginning in 1994, a limited entry turkey hunting program was initiated.

Table 3. Statewic	le summary of fa	ill Merriam's wi	Table 3. Statewide summary of fall Merriam's wild turkey harvest statistics, 1964-95. Pormite Hunton Hunton	atistics, 1964-95	Porcont	Turkon nor	Crimina Loss	Turkove	Porcont of Huntars
Year	Sold	Affeld	Affeld	Bagged	Success**	Hunter-Day	100 Bagged	Observed	Observing Turkeys
1964	229	211	362	18	38	0.22	15	1,158	09
1965	214	207	406	<u>\$</u>	24	0.12	e 0	730	53
1966*	192	187	47.1	43	23	0.09	7	756	36
1961	146	135	405	\$	30	0.10	16	748	\$
1968	368	344	\$83	183	38	0.21	21	2,321	54
1969	223	210	549	36	11	90.0	61	466	17
1970	197	174	418	58	74	0.14	vo	564	31
1971	184	174	44	\$	21	0.14	œ	451	87
1972	124	118	303	11	7	0.04	92	173	11
1973***	1	ı	ı	1	1	1	ı	1	1
1974	79	76	70	ю	12	0.04	33	8	38
1975	28	46	115	7	15	90.0	٠	57	76
1976	89	56	136	15	7.7	0.11	1	182	32
1977	2	83	133	7	15	90.0	•	\$	81
1978*	102	88	223	7	•	0.03	33	335	38
1979	46	36	11	၈	•	0.05	•	19	61
1980	43	35	\$	11	32	0.16	88	127	4
1981	ß	55	114	12	n	0.11	26	141	32
1982	92	20	136	11	23	90.0	10	185	47
1983	61	\$	112	15	78	0.13	•	303	\$
1984	76	%	193	78	32	0.14	14	380	\$
1985***	i	i	1	1	t	ı	ı	1	1
1986***	ı	ı	ı	ı	i	ı	1	ı	ı

Mountains a one-bird limit; from 1969 through 1972, all areas had a two-bird limit. Hunter success *Some hunters hunted more than one area or failed to designate areas hunted. This accounts for the **During 1968, the Boulder Mountain and East Zion units had two-bird season limits and the LaSal difference between totals given above and combined tables of separate units in Tables 5, 6 and 7. was based on the number of successful hunters rather than total turkeys bagged.

1 1 1

1 1 1 1 1 1 1

11111

1 1 1 1 1 1 1

1 1 1 1 1 1 1

1992***

1993***

1989***

1988***

0661 1991

1987***

9,269

4

7

0.10

682

5,622

2,340

2,560

AVERAGES

(1964-84)

TOTALS (1964-84)

1994*** 1995*** 111

169

*** No fall season.

•	Beaver (early)	arly)	Beaver (late)	te)	Unit Totals	Duchesne County	County	Emery County	unty	Grand County	unty	Milford		Morgan-Summit	ummit
Data	Rep't	Calc	Rep't	Calc	Calc	Rep't	Cate	Rep't	Cak	Rep't	Cak	Rep't	Cak	Rep't	Calc
Permits Sold	20		20		40	S		ß		w		r.		'n	
No Hunts	_		0		1	0		•		0		0		-	
Hunters Affeld	14	19	81	70	39	4	ĸ	Ŋ	v	€0	ĸ	4	ĸ	4	4
Hunter-Days	74.7	100	86	109	208	37	46	25	25	9	10	28.5	36	39	39
Turkeys Bagged	13	17	v	9	23	60	4	'n	ĸ	8	w	60	4	7	7
Percent Success	93	ŀ	78	ı	53	77	:	100	;	100	i	75	ł	<u>S</u>	1
Turkeys Bagged Per															
Hunter-Day	0.17	ŀ	0.05	i		90.0	:	0.20	•	0.50	ł	0.11	1	0.05	:
Reported Crippling Loss	~	:	0	;		0	:	0	ı	0	ı	0	:	0	ł
(Loss/100 Bagged)	0 0	ı	•	1		0	:	0	ı	0	:	0	1	0	1
Turkeys Observed							 								
Gobblers	116	:	55	:		91	;	19	1	œ	;	33	1	٠	1
Hens	207	ı	æ	ì		91	;	109	ł	36	;	28	1	15	ì
Unidentified	;	1	:	ŀ		6	:	77	i	15	i	ı	t	0	1
Percent of Hunters															
Who Saw Turkeys	100	ŀ	8/	1		:	:	:	:	ŧ	ı	100	ı	:	1
Percent of Hunters															
Who Saw Gobblers	100	:	19	;		1	;	;	ı	ı	1	18	ı	1	1
Beard Length 0"-4" (% of Harvest)	0	:	99	;		!	:	 	ı	.	1	•	ı	,	ı
Beard Length 4".7" (% of Harvest)	œ	:	20	;		;	ł	ł	ł	ł	ı	0	1	ı	ı
Beard Length > 7" (% of Harvest)	92	ı	50	:		;	1	:	:	:	ŀ	100	i	ı	1
Blunt Spur (% of Harvest)	0 0	1	8	:		1	1	ı	;	;	1	\$	1	1	J
Rounded Spur (% of Harvest)	38	:	70	;		ł	ı	ī	:	;	ì	20	ı	ŀ	ı
Charm Smir (& of Harnort)	24	,	00									47			

Rept. Chie Rept. Chie Cale Rept. Chie Rept. Chie Rept. Chie Cale Cale 10		Pine Valley (early)	(early)	Pine Valley (late)	'late)	Unit Totale	Untah County	Š	No. Utah County (early)	y (early)	No. Utah County (late)	nty (late)	Unit Totals	Weber County	ģ	STATE TOTALS	TALS
10 10 10 10 10 10 10 10	Data	Rep't	Cate	Rep't	Š	Calc	Rep'1	SE CE	Rep'i	Calc	Rep't	SE SE	Cak	Rep'	ğ	Rep't	j
18 20 8 8 9 9 9 9 9 9 9 9	Permits Sold	20		8		40	vs.		10		10		20	2		135	
18 29 18 29 40 3 5 10 10 10 10 20 20 20 20	No Hunts	0		•		•	•		•		0		•	•		C3	
1	Hunters Affeld	18	20	18	20	\$		w	10	01	01	10	50	6	s	114	133
11 12 13 13 26 2 3 6 6 4 4 10	Hunter-Days	\$	69	88	88	164	15	ĸ	4	4	ß	ន	z	16	23	2881	628
Color Colo	Turkeys Bagged	==	21	21	13	. 26	7	ĸ	v	•	4	4	10	£	v	ħ	85
Collis	Percent Success	3	ı	19	1	য়	69	1	99	1	9	1	82	100	ı	8	• •
100 11 100 12 12 13 14 1 100 13 14 14 15 15 15 15 15 15	Turkeys Bagged Per																
Loss 3 - 3 - 25 - 0 - 0 - 1 -	Hunter-Day	0.18	1	0.14	1		0.13	ı	0.15	ı	90.08	ı		0,19	1	0.12	1
14 10 10 10 10 10 10 10	Reported Crippling Loss	3	ı	60	ı		•	ι	0	1	1	ı		•	ı	œ	1
14 69	(Loss/100 Bagged)	22	ı	22	ı		-	1	•	1	Я	1		•	ı	=	ı
141 1 69 1 34 1 1 1 1 1 1 1 1 1	Turkeys Observed																
14	Gobblers	8	1	7	ı		33	ι	ı	ı	1	ı		21	ı	515	ı
160	Hens	141	1	69	ı		ੜ	:	1	:	ı	ı		73	ı	<u>7</u>	1
160	Unidentified	ı	ı	ı	ı		•	ı	ı	1	1	,		71	1	\$	ı
100 1 150 1 1 1 1 1 1 1 1 1	Percent of Hunters																
160 18 13 1 1 1 1 1 1 1 1	Who Saw Turkeys	100	1	&			•	ı	100	1	100	ı		1	1	1	ı
160 15 15 15 17 17 17 17 17	Percent of Hunters																
Harvest 18	Who Saw Gobblers	100	I	83	1		:	ı	1	ı	ı	1		•	1	1	ı
	Beard Length 0"-4" (% of Harvest)	18	1	33	ı		1	ı	ı	ı	1	ı		,			١.
lervent) 64 18 18 181) 45 36 1	Beard Length 4"-7" (% of Harvest)	91	,	90	1		ı	1	1	1	ı	ı		,	1	1	1
18 1 45 1 1 36 1 1 1 36 1 1 1 1 1 1 1 1 1 1 1 1	Beard Length > 7" (% of Harvest)	3		æ	1		•	1	ı	ı	1	ı		1	1	1	t
36	Blunt Spur (% of Herves)	91		33	1				1	,	ı	ı		ı	1	1	1
36	Rounded Spur (% of Harvest)	ŧ	•	ţ	1			1	ı	,	1	ı		ı	1	1	ı
	Sharp Spur (% of Harvest)	36	:	ผ	ı		1		,	ı	ı	ı		ı	ı	,	ı

Table 5. Summary of	Rio Grande to	irkey harvest	statistics fi	or spring gobbl	er seasons	1991-95.		
Hunters Total Hunter-Days Percent Turkeys Per		Hunters	Total	Hunter-Days	Percent	Turkeys Per	Percent of Hunters	Total
Hunting Unit	Year	Afield	Harvest	Afield	Success	Hunter-Day	Observing Turkeys	Permits
STATE TOTALS	1991	8	7	71	61	0.15	•	20
	1992	20	5	64	75	0.23	:	21
	1993	41	5 6	200	63	0.13	:	42
	1994	105	79	464	75	0.17	!	105
	1995	123	82	628	63	0.12	!	135
STATE TOTALS								
(1991-95)		307	209	1,427	1	:	:	323
STATE AVERAGES								
(1991,94)		97	33	200	9	0.47	!	47

Table 6. Summary of wild turkey limited entry hunting unit drawing odds for 1995.

Hunting Unit Name
Total
Total
Grand Total

		DISTINCT	ಕ		Mixed		DAK CURPY	,						į		
Region and		Broods	Sp :	Mean	Observations	ations	Young Total	Total	Total	Young/ Vehicle	Vehicle			Hours of Effort		Birds
County	#±	Adults	Young	RLOOG	Adult Young	voung		Adulks	roung	TOU AG	Miles	Venicle	Horse	Walk	Olai	
Northern Region Por Elder					•											
Dox Ester	:	!	!	:	:	:	:	1	:	:	:	:	:		:	:
ָם בּיבּיבּיבּיבּיבּיבּיבּיבּיבּיבּיבּיבּיב	i	:	:	;	;	:	;	;	:	ł	:	:	:	:	:	!
Davis	ı	:	:	:	:	:	:	:	:	:	;	ŧ	:	:	:	:
Morgan	ı	ŀ	:	:	:	:	;	;	;	2	:	;	ſ	:	1	:
Rich	:	:	ŀ	:	1	:	:	:	:	:	:	:	:	ı	:	:
Summit	;	:	:	;		ı	:	:	;	;	;	•	:	;	:	:
Weber	:	1	:	;	;	:	ı	:	:	:	:	;	:	ŀ	:	:
REGIONAL TOTAL	:	1	:	:	:	:	:	:	:		:	;	:	:	;	;
Central Region	:												1			
Juab	:	:	;	:	;	:	ì	ì	:	:	;	:	ì	:	:	l
Salt Lake	ŧ	:	;	i	ì	;	:	ŀ	I	1	ì	ı	ı	1	1	:
Sanpete	ŀ	;	ŀ	;	í	1	ı	ŀ	ŀ	ł	:	:	1	1	1	:
Tooele	ì	i	;	i	i	:	i	:	:	;	i	ì	ı	ł	1	;
Utah	e	က	5	5.00	4	34	0	7	49	200	:	ŧ	ł	:	;	:
Wasatch	-	-	- -	1.00	4	20	0	49	21	420	ŀ	i	ï	:	ŀ	!
REGIONAL TOTAL	4	4	16	4.00	8	54	0	12	20	583	;	;	١,	<u> </u>	1	;
Southern Region																
Beaver	ł	:	:	:	!	:	:	:	:	;	:	:	ı	l	:	!
Garfield	;	:	:	:	:	:	:	:	:	:	;	i	:	:	:	:
lron	;	:	;	:	:	:	:	;	:	;	1	1	1	!	:	:
Kane	:	ı	:	:	:	:	:	;	:	:	:	ı	ı	:	:	:
Millard	1	:	:	:	:	:	:	:	:	:	ı	ı	ı	:	:	:
Plute	:	1	:	:	ı	:	:	;	ŀ	:	:	1	i	;	1	:
Sevier	;	:	:	:	:	:	:	;	;	:	1	:	1	:	:	:
Washington	;	:	:	i	:	:	:	;	:	:	1	1	:	:	;	ı
Wayne	:	:	:		:	2	:	ı	:	i	1	:	ï	:	:	;
REGIONAL TOTAL	:	:	:	ł	:	:		1		1	:	:	:	:	:	:
Northeastern Region	_															
Daggett	:	:	:	:	:	:	:	ı	:	:	ı	:	:	:	:	:
Duchesne	ł	1	:	;	:	:	:	:	:	:	:	:	:	;	:	1
Uintah	;	:	;	:	:	:	:	1	ı	1	ı	:	!	;	ŧ	:
REGIONAL TOTAL	:	١.	:	:	:	:	;	;	:	:	:	:	;	:	:	:
Southeastern Region	_															
Carbon	;	:	ï	1	1	:	:	:	;	:	1	:	;	;	:	:
Етегу	:	:	:	1	:	1	1	1	i	1	:	:	:	;	:	!
Grand	;	ı	:	ı	ŧ	:	:	ŀ	:	:	:	:	:	;	:	;
San Juan	:	:	;	1		:	1	:	ı	1	:	:	:	:	:	:
REGIONAL TOTAL	:	:	1	:	:	:	:	1	I	:	:	:	1	:	1	:
TATE TOTAL	•	,	46	4 00	0	7.3	•	ľ	5	1						İ

SHARPTALLS

SHARP-TAILED GROUSE

SUMMARY



The Columbian sharp-tailed grouse is one of four species of grouse native to Utah. Sharptails were formerly abundant in the valley and foothill areas of northern and central Utah. Sharp-tailed grouse habitats were the most attractive areas for agricultural development and grazing. As a result, sharptail habitat was directly converted to farmland or was seriously impacted by heavy grazing.

There was no legal harvest of sharp-tailed grouse from 1980 through 1995. From 1988 through 1992, the number of birds present on active dancing grounds was substantially greater than in the previous years (Table 1.). It appears sharp-tailed grouse have made a moderate recovery in "core areas." Numbers on the fringe of their range appear to be low. Concurrent with the upswing in sharp-tailed populations has been a succession of mild winters. Since the catastrophic winter of 1983-84, all winters have been normal or milder than normal except 1988-89 and 1992-93. The winter of 1992-93 devastated sharp-tailed grouse populations. In addition, wildland fires in the summer of 1994 destroyed countless acres of sharp-tailed grouse habitat in Box Elder County.

In Box Elder County, habitat associated with existing populations of sharp-tailed grouse has been relatively unchanged since 1983 except that about 100,000 acres in Box Elder County have been entered into the Conservation Reserve Program (CRP). This may be benefitting sharp-tailed grouse populations by providing undisturbed nesting and brood-rearing cover.

We have minimal recent data on sharp-tailed grouse populations in the Cache, Weber, and Morgan County areas. By 1984, populations in these areas were at or below minimum viable population levels. Efforts have increased over the past four years to locate "new" dancing grounds in these counties (Table 1.). New "core" sharp-tailed grouse habitat areas are being attributed to CRP lands in these counties.

Sharp-tailed grouse brood count information for Box Elder County in 1995 is shown in Table 2.

	1991
	1990
	1989
	1988
	1987
Year	0 1981 1982 1982 1984 1985 1986 1987 1988 1989 1990
	1985
	1984
	1001
9-95,	1007
9-95.	1001
ınts, 197	1080
ng ground counts	4070
nmary of sharp-tailed grouse dancing ground count Dancing Ground	NA 1086 1080 1081 1082 1084 1085 1086 1
ole 1. Sur	.44

12 0 14 0 18 46 40 33 40** 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Box Elder						3	+000	200	2		3		1890	1991	1992	1993	1001	2
Hunsaker's Field (Located 1977) South While's Valley (Located 1977) South While's Valley (Located 1977) North While's Valley (Located 1977) North While's Valley (Located 1977) North While's Valley (Located 1977) North While's Valley (Located 1991) Middle Canyon (Located 1991) Middle Canyon (Located 1991) Middle Canyon (Located 1991) Middle Canyon (Located 1991) Minch Care (Located 1992) Minch Mine #		West Hills Complex (Located 1977)	ř.	4	12	c	4	0	18	46	40	33	40**	75	53**	55***	ιΩ	9	
South White's Valley (Located 1977) 0 0 0 6 0 0 2 0 6 7 3 North White's Valley #1 (Located 1987) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Hunsaker's Field (Located 1977)		. 0	! o	0	6	. 0	. 0	=	0	'n	0	:	60	32	4	7	
North White's Valley #1 (Located 1977) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		South White's Valley (Located 1977)	0	0	0	9	•	0	7	0	ø	~	m	:	2	5	:	7	
North White's Valley #2 (Located 1996) Morth White's Valley #2 (Located 1991) 7 7 19 19 14 5 9 20 20 19 16** 11 Middle Canyon (Located 1991) Howell Valley #1 (Located 1991) Four Mile Rad 1991) 6 6 6 7 9 Sunset Pass (Located 1991) Nucor (Located 1991) Nucor (Located 1991) 8 9 Wellsville-Cottonwood (Located 1991) Nucor (Located 1991) 9 -		North White's Valley #1 (Located 1977)	0	0	0	0	o	0	0	:	#	£	ţ,	:	7	φ	en	~	
Middle Canyon (Located 1991) Product Canyon (Located 1991) Howell Valley Complex (Located 1991) Howell Valley Complex (Located 1991) Howell Valley #1 (Located 1991) Howell Valley #1 (Located 1991) Microwave Tower (Located 1991) Nucor (Located 1991) Nucor (Located 1991) Nucor (Located 1991) Nucor (Located 1991) Sinson Valley #1 (Located 1991) Nucor (Located 1991) Sinson Valley #1 (Located 1991) Nucor (Located 1991) Sinson Valley #1 (Located 1991) Sinson Valley #1 (Located 1991) Sinson Valley #1 (Located 1991) Sinson Valley #1 (Located 1991) Sinson Valley #1 (Located 1991) Crow Mountain Complex (Located 1991) Crow Mountain Complex (Located 1991) Four Mile #2 (Located 1991) Four Mile #2 (Located 1991) McKenzie Flat (Located 1991) McKenzie Flat (Located 1991)		North White's Valley #2 (Located 1995)															•	ć	
Procatello Vailey Complex (Located 1997 7 19 19 14 b 9 20 20 19 19 19 19 19 19 19 1		Middle Canyon (Located 1991)	,		:	:	;		•	ě	ę	5	****	;	,	<u> </u>	7	ь с	
Blue Creek (Located 1991)		Pocatello Valley Complex (Located 197	_	-	9	<u>-</u>	-	Ф	2 00	2N	07	20	<u>.</u>	Ξ	.	₹ 1	; «	٧.	
Howell Valley #1 (Located 1991) Microwave Tower (Located 1991) Sunsor (Located 1991) Nucor (Located 1991) Nucor (Located 1991) Nucor (Located 1991) Nucor (Located 1991) Snowville-Radio Tower (Located 1991) Snowville-Radio Tower (Located 1991) Snowville-Radio Tower (Located 1991) Snowville-Radio Tower (Located 1991) Bankhead Well (Relocated 1975) Crow Mountain Complex (Located 1975) Crow Mountain Complex (Located 1975) Crow Mountain Complex (Located 1991) Four Mile #1 (Located 1991) Four Mile #2 (Located 1991) McKenzie Flat (Located 1992) Cottonwood (Located 1975) Cottonwood (Located 1975) Cottonwood (Located 1975) Cottonwood (Located 1975) Cottonwood (Located 1975) Cottonwood (Located 1975) Cottonwood (Located 1975) Cottonwood (Located 1975)		Blue Creek (Located 1991)														, ŧ		∢	
Microwave Tower (Located 1981) Nunset Pass (Located 1991) Nunset Pass (Located 1991) Nulls ville-Cottonwood (Located 1991) Snowville-Radio Tower (Located 1991) Snowville-Radio Tower (Located 1991) Snowville-Radio Tower (Located 1991) Snowville-Radio Tower (Located 1991) Snowville-Radio Tower (Located 1991) Baxter Ridge (Relocated 1975) Crow Mountain Complex (Located 1975) Crow Mountain Complex (Located 1991) Four Mile #1 (Located 1991) Four Mile #2 (Located 1991) McKenzie Flat (Located 1992) Cottonwood (Located 1992)		Howell Valley #1 (Located 1991)								•	,	•	,		5	. S	;	:	
Sunset Pass (Located 1991) Nucro (Located 1991) Nucro (Located 1991) Nucro (Located 1991) Snowville-Radio Tower (Located 1991) Snowville-Radio Tower (Located 1994) Snowville-Radio Tower (Located 1994) Bankhead Well (Relocated 1975) Crow Mountain Complex (Located 1977) Crow Mountain Complex (Located 1971) Clarkston (Located 1991) Four Mile #7 (Located 1991) Four Mile #2 (Located 1991) McKenzie Flat (Located 1992) Cottonwood (Located 1992)		Microwave Tower (Located 1987)								٥		-	מ	:	: 1	€ ‡	:	:	
Wellsville-Cottonwood (Located 1991) Snowville-Radio Tower (Located 1991) Snowville-Radio Tower (Located 1991) Johnson Canyon (Located 1975) 2 2 0 0 <t< td=""><td></td><td>Sunset Pass (Located 1991) Nucor (Located 1991)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>- †</td><td>, ‡9</td><td>: ∢</td><td>: :</td><td></td></t<>		Sunset Pass (Located 1991) Nucor (Located 1991)													- †	, ‡9	: ∢	: :	
Snowville-Radio Tower (Located 1991) Johnson Canyon (Located 1994) Bankhead Well (Relocated 1975) Baxter Ridge (Relocated 1975) Crow Mountain Complex (Located 1971) Clarkston (Located 1991) Four Mile #1 (Located 1991) Four Mile #2 (Located 1991) McKenzie Flat (Located 1992) Cottonwood (Located 1992)		Wellsville-Cottonwood (Located 1991)													.		(m	7	
Johnson Canyon (Located 1994) Bankhead Well (Relocated 1975) 2 2 0 0		Snowville-Radio Tower (Located 1991)													#.	∢	0	၌ (
Bankhead Well (Retocated 1975) 2 2 0 0 0		Johnson Canyon (Located 1994)																۵	
Baxter Ridge (Relocated 1975) 3 5 3	Cache	Bankhead Well (Retocated 1975)	7	7	0	. 0	:	:	:	;	;	:	:	ı	AN	SC	;	:	S
Crow Mountain Complex {Located 197 13 4 11 3		Baxter Ridge (Relocated 1975)	:	m	ιρ	ო	:	:	:	;	;	:	:	;	¥.	ပ္က	:	:	
High Creek (Located 1981) Clarkston (Located 1991) Four Mile #1 (Located 1991) Four Mile #2 (Located 1991) McKenzie Flat (Located 1992) Cottonwood (Located 1975) Cottonwood (Located 1975) The content of the co		Crow Mountain Complex (Located 197	3	4	Ξ	က	:	:	:	;	;	0	:	:	27**	# *	6	∞ ;	
Clarkston (Located 1991) Four Mile #1 (Located 1991) McKenzie Flat (Located 1992) Cottonwood (Located 1975) 28		High Creek (Located 1981)			-	:	:	:	:	:	:	5	:	:	77) 2 4	: <	5 5	
Four Mile #2 (Located 1991) McKenzie Flat (Located 1992) Cottonwood (Located 1975) 28		ClarkSton (Located 1991)													2	27**	ς :	<u>:</u> :	
McKenzie Flat (Located 1992) Cottonwood (Located 1975) Cottonwood (Located 1975)		Four Mile #1 (Localed 1991)													‡	i	:	:	
Cottonwood (Located 1976) 28		Four Mile #2 (Located 1931) McKenzie Flat (Located 1992)													,	m	:	:	
Cottonwood (Located 1976) 28																			
	Morgan	Cottonwood (Located 1975)	28	1	;	:	:	:	:	t	:	:	:	:	¥	2	:	:	
Deep Creek 4		Deep Creek		4	;	:	1	:	٠	;	:	:	:	:	¥	2	:	:	
		Bohman Hollow (Located 1991)													<u>;</u>	ပ္	:	:	
: : : : : : : : : : : : : : : : : : : :	Waher	Monastery (1 ocaled 1969)	en	c	G	۰	:	:	:	:	;	:	;	:	:	2	:	:	
rounds Counled 15 16 17 16 11 2 11 6 8 12 11 2	Total Groun	ds Counted	16	16	17	16	=	7	=	9	8	12	=	2	18	16	5	12	
71 24 67 31 28 6 29 84 90 80 77 86	Total Grous	e Counted	۲	24	57	3	28	w	53	84	8	80	11	8	236	210	7 9	99	
ouse/Ground 4,70 1.50 3.40 2.10 2.50 2.50 2.60 14.00 11.30 6,70 7.00 43.00 1	Average Nu	mber of Grouse/Ground	4.70	1.50	3.40	2.10	2.50	2.50	2.60	14.00	11.30	6.70	7.00	43.00	13.00	13.00	2.89	5.50	

# Abutas Young Broad Adults Young Adults Young 100 Adult Miles Vehicle Horse Walk Total 1 1 4 4.00 0 16 17 4 24 12 12 11 1 1 4 4.00 0 0 16 17 4 24 12 12 12 12 12 13 1 1 1 4 4.00 0 0 16 17 4 24 12 12 14 1 1 1 4 4.00 0 0 16 17 4 24 12 12 15 1 1 1 1 2 12 16 12 12 17 1 1 1 1 2 12 18 12 12 19 12 12 19 12 12 19 12 12 19 12 12 19 12 12 19 12 12 10 12 12 10 12 12 11 12 12 11 13 12 12 12 13 13 14 14 15 15 15 16 15 17 15 18 15 18 15 19 15 19 15 19 15 19 15 10 15	1		Distinct	، ب	Distinct Man Man	Mixed Young		Adulte we	Total	Total	Young,	Vehicle		Hours of Effort	of Effort		Birds/
Region 1 4 24 12	Region and County	#	Adulfs	Young	Brood	Adults	Young	Young	Adults	Young	•		Vehicle	Horse	Walk	Total	100 Hr
let 1 1 4 400 0 0 16 17 4 24 12 NALTOTAL 1 1 4 4.00 0 0 16 17 4 24 12 NALTOTAL 1 1 4 4.00 0 0 16 17 4 24 12 NALTOTALS INALTOTALS	Northern Region								į					Ş		ţ	ļ
NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NAT TOTALS NOT APPLICABLE NAT TOTALS NOT APPLICABLE NOT APPLICABLE NAT TOTALS NOT APPLICABLE NAT TOTALS NOT APPLICABLE NAT TOTALS NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NAT TOTALS NOT APPLICABLE NOT APPLICA	ox Elder	-	-	寸	4.00	0	0	3 2	1	4	5 7	:	:	7.	:	7	2
Not applicable Not	ıche	:	:	:	:	:	ŀ	;	:	:	:	;	1	:	:	:	!
NOT APPLICABLE NAL TOTALS THE EGION NAL TOTALS THE MAL TOTALS NAL TOTALS ANAL TOTALS	tvis	ŧ	ı	:	:	ı	ł	ŀ	ł	;	;	1	:	:	ı	:	1
NAT TOTAL The state of the sta	organ	1	1	ì	;	1	;	į	:	:	:	;	:	;	ı	:	;
NAL TOTALS The Region NOT APPLICABLE The NOT APPLICABLE NAL TOTALS The NOT APPLICABLE NAL TOTALS The NOT APPLICABLE NAL TOTALS The NOT APPLICABLE NAL TOTALS The NOT APPLICABLE NAL TOTALS The NOT APPLICABLE NAL TOTALS The NOT APPLICABLE NAL TOTALS The Note of the No	등	ı	:	:	:	;	:	;	:	:	:	;	:	ï	;	:	;
NAL TOTALS TREGION TREGION TREGION TREGION TATE A 24 12 12 TOTAPPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS THE NAL TOTALS	mmit	:	:	:	:	1	:	:	;	:	ł	:	ı	i	:	:	:
NAL TOTAL T 4 4.00 0 0 16 17 4 24 12 12 T 8 4 24 12 12 T 9 17	sber	;	:	:	;	:	i	ı	:	:	:	;	:	:	1	:	:
Region NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE	GIONAL TOTAL	-	1	4	4.00	٥	0	16	11	4	24	:	:	12	:	12	175
the not applicable In Region ALT TOTALS ALT TOTALS INOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE	ntral Region																
h NOT APPLICABLE In Region Not APPLICABLE Not APPLICABLE Stern Region Not APPLICABLE Not APPLICABLE Not APPLICABLE Not APPLICABLE Not APPLICABLE Not APPLICABLE Not APPLICABLE	au 14 I ako																
ANL TOTALS In Region NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE	il Lanc						_	NOT APPL	CABLE								
und Totals The Region In Region WAL TOTALS Istern Region NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE	nperc																
tien Region er reid d d inition te astern Region NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE ONAL TOTALS	ah																
rn Region In Region NOT APPLICABLE Igton NAL TOTALS Satern Region NAL TOTALS astern Region NAT TOTALS and TOTALS AND APPLICABLE NAT APPLICABLE NAT APPLICABLE NAT APPLICABLE NAT APPLICABLE NAT APPLICABLE	ssatch																
rn Region MOT APPLICABLE Iglon NAL TOTALS astern Region NAL TOTALS astern Region NAL TOTALS astern Region NAL TOTALS astern Region NAL TOTALS astern Region NAL TOTALS ASTERN Region NAL TOTALS ASTERN Region NAL TOTALS ASTERN Region NAL TOTALS ASTERN Region NAL TOTALS	GIONAL TOTALS																
glon NAL TOTALS astern Region NAL TOTALS astern Region NAL TOTALS astern Region NAL TOTALS astern Region NAT TOTALS astern Region NAT TOTALS astern Region NAT APPLICABLE	uthern Region																
glon NAL TOTALS astern Region NAL TOTALS astern Region NAL TOTALS astern Region NOT APPLICABLE anstern Region NOT APPLICABLE ann NOT APPLICABLE	aver																
igton NAL TOTALS astern Region NAL TOTALS astern Region NOT APPLICABLE NOT APPLICABLE NAL TOTALS and NOT APPLICABLE NOT APPLICABLE	ırfield																
igton NAL TOTALS astern Region NAL TOTALS AND TAPPLICABLE NAL TOTALS astern Region NOT APPLICABLE NOT APPLICABLE an NOT APPLICABLE	=						•		i								
lgton NAL TOTALS astern Region t sine NAL TOTALS astern Region I NOT APPLICABLE AND APPLICABLE and I NOT APPLICABLE AND APPLICABLE AND APPLICABLE AND APPLICABLE AND APPLICABLE AND APPLICABLE AND APPLICABLE	ne						-	PO! APPL	CABLE								
nyal Totals astern Region NAL TOTALS astern Region NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE	lard																
astern Region NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE	te te																
gton NAL TOTALS sstern Region NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE	vier																
sstern Region VAL TOTALS astern Region NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE	ıshington																
NOT APPLICABLE NAL TOTALS ARE TOTALS astern Region NOT APPLICABLE NOT APPLICABLE AND APPLICABLE	iyne																
stern Region t NOT APPLICABLE NAL TOTALS astern Region NOT APPLICABLE NAL TOTALS AND APPLICABLE	GIONAL TOTALS																
t NOT APPLICABLE NAL TOTALS astern Region NOT APPLICABLE an NAT APPLICABLE	rtheastern Region	_															
NOT APPLICABLE NAL TOTALS astern Region NOT APPLICABLE an AN NOT APPLICABLE	ggett							!	1								
astern Region NOT APPLICABLE an NAT APPLICABLE	chesne							NOT APPL	.KABLE								
astern Region NOT APPLICABLE an NAT APPLICABLE	ntah																
astern Region NOT APPLICABLE an NAT TOTALS	GIONAL TOTALS																
NOT APPLICABLE an NAL TOTALS	utheastern Region						l										
NOT APPLICABLE an NAL TOTALS	ırbon																
70	nery							NOT APPL	CABLE								
07 07	rand																
0) 0) 10	in Juan																
	EGIONAL TOTALS							,						5		Ş	475

PTARMIGAN

SUMMARY



The white-tailed ptarmigan (<u>Lagopus leucurus</u>) was introduced into the Uinta Mountains of northeastern Utah in 1976 with the release of birds captured in Colorado. The initial transplant consisted of 22 paired birds released in June 1976. A second release of 35 mixed young and adults was accomplished in September of that same year.

Since introduction in 1976, ptarmigan have dispersed into available habitat from the west, 100 miles to the east in the Uinta Mountains.

Breeding Territory and Brood Surveys

Surveys on the ptarmigan population continue, as time and manpower constraints allow. Two survey techniques are used. A breeding territory survey is conducted from mid- to late June. A brood survey is conducted from mid- to late August. Results of the last 10 years of survey data are found in Tables 1 and 2.

A limited spring survey of breeding territories and no summer brood survey was made in 1995.

Harvest

Thirty nine hunters obtained free permits to hunt ptarmigan in Utah in 1995 (Table 3). An estimated 20 hunters actually pursued ptarmigan and 12 birds were killed. Eleven percent of the hunters afield reported observing ptarmigan.

Many permits are obtained by sportsmen who think they might hunt during a fishing or big game hunting trip, but don't seriously plan on the ptarmigan hunt.

Table 1. Su	Table 1. Summary of white-tailed ptarmigan breeding territories (pairs), 1985-95.	ptarmiga	n breeding	territories	(pairs),	1985-95.						
County	Location	1985	1986	1987	1988	1989(2)	1990	1991	1992	1993	1994	1995
Duchesne	Painter Basin											
Duchesne	Gilbert Basin	C(1)	C(1)		20		20	20	20	20	20	
Duchesne	Atwood Basin	(Z ((Z (ď	·	ď	U	Ø.	
Duchesne	Yellowstone River	. ш –	. ш с		n 🗆 🗅		n 🗆 a	o ⇒ œ	, ⊃ α) - 2) – 2	
Summit	Henry's Fork	л ш с	лшс		< > u		ں < ؛	< > u	: > u	: > u	: > ш	
Summit	Flat Top Mountain	5	2	m	u ≻		-	ı ≻ _.	≺ د	ı >-	- د	
Summit	Lake Blanchard											
Summit	Beaver Creek											
Summit	Smith's Fork											
Summit	Burnt Fork Drainage											0
Uintah	Leidy Peak											

(1) Excessive snow cover precluded access to trail-heads during the June breeding period.

(2) Investigator was incapacitated.

8/95 8/94 1 1 1 1 1 : : : : : 8/93 1 1 1 1111 8/92 1 1 1 1 1 1 1 1 1 1 11111 8/91 200 200 0 1 1 1 1 1 8/90 - 4.00 - 00 - 00 - 00 1 1 1 1 1 1 1 1 1 8/89 2 4.00 366 4 4 : : : : : 1 1 1 1 1 1 1 1 1 1 8/87 8/25-31 (e) 3 2.33 233 6 DATE 3 217 3 6.00 120 4 Table 2. White-tailed ptarmigan brood inventory, 1985-95. 8/86 3.75 3.75 0 1 1 1 1 1 8/14-22/85 11111 Mean Brood Young/100 Adult Hens Young/100 Adult Hens Young/100 Adult Hens Young/100 Adult Hens Young/100 Adult Hens Hens w/o Broods Hens w/o Broods Hens w/o Broods Hens w/o Broods Hens w/o Broods **Atwood Basin** Painter Basin Henry's Fork Smith's Fork Yellowstone Mean Brood Mean Brood Mean Brood Mean Brood Adult Males Adult Males Adult Males **Adult Males** Adult Males Statistics

							Ì				
Area:			DATE								
Statistics	8/14-22/85	98/8	8/87	8/25-31	8/89	8/90	8/91	8/92	8/93	8/94	8/95
Elst Ton Mountain				(3							
			•	<u>)</u> ~	;	1	;	1	1	1	1
			- 6	, ;	ľ	}	i	ļ	ľ	ļ	1
Mean brood			9.00	3.5	;	i	ı	ŀ	:	:	1
Young/100 Adult Hens			906	433	:	ı	i	ı	1	:	1
Hens w/o Broods			0	Ø	:	1	:	1	ı	:	1
Adult Males			0	0	1	:	ł	1	1	:	1
Table Goods Disable Cods											
LIME E. FOTK - BIACK S FOTK											
=			;		1	:	ı	1	ı	:	ł
Mean Brood			1		1	:	ı	ł	:	ı	1
Young/100 Adult Hens			1		ı	:	i	i	1	1	1
Hens w/o Broods			i		1	;	1	:	ı	1	i
Adult Males			i		ı	:	1	ı	1	1	1
Rainbow Basin											
=	ı	ł	ı		ŀ	1	:	1	:	ı	1
Mean Brood	1	i	į		:	:	:	ı	1	ı	1
Young/100 Adult Hens	:	;	:		:	:	:	1	;	1	I
Hens w/o Broods	1	:	i		ı	1	:	i	ı	1	1
Adult Males	:	;	:		1	:	ŧ	1	ı	1	1
Gilbert Basin											
	,		ł		;	1	i	ļ	1	:	:
Moan Brood	1		١ :		1	: I	: 1	1	ŀ	1	:
Young/100 Adult Hens	:		:		ŀ	:	;	;	;	ŀ	i
Hens w/o Bronds	:		:		ı	;		;	;	ı	;
Adult Males	i		1		:	:	;	ł	:	1	1
Samuel's Draw				: :							
	ï	;	ŀ		1	ŀ	I	ŀ	;	;	:
Mean Brood	1	:	;		1	ŀ	i	:	i	1	:
Young/100 Adult Hens	ĭ	;	:		:	:	1	i	ł	:	7
Hans w/o Broads	;	}	1		1	1	,	1	ł	•	:
Adult Males	1	l J	i 1		1	۱ ا	۱ ا	l 1	: 1	١	1
	!										
Leidy Peak											
			-		1	1	1	ł	ı	ı	1
Mean Brood			2.00		ı	1	1	:	ŀ	:	:
Young/100 Adult Hens			200		ı	i	:	;	ł	ı	1
Hone wie Broods									;	1	;
Shoold Own			5 (ı	ŀ	:	:	1	ŀ	1
Adult Males			5		:	:		,		•	•

Table 2. (continued)											
Area:			DATE								
Statistics	8/14-22/85	8/86	8/87	8/25-31	8/89	8/90	8/91	8/92	8/93	8/94	8/95
East F. Black's Fork											
_			ı		1	ı	1	ì	:	1	1
Mean Brood			;		ł	1		1	! ;	l	ľ
Volume/400 Adult Lone								ı	I	:	ī
round, los Adail nells			ľ		1	ı	ı	1	:	:	ï
Hens w/o Broods			1		ı	1	ı	:	ı	ŀ	ı
Adult Males			1		1	1	1	1	1	ı	;
Joulious Creek				<u> </u>							
			~	` 0	1	:	ŀ	ı	ł	ŀ	1
Mean Brood			1.00	00'0	1	1	ŀ	1	i	:	1
Young/100 Adult Hens			300	0	ł	ı	1	ı	1	ı	t
Hens w/o Broods			0	4	ı	t	1	:	i	1	;
Adult Males			0	0	ı	ı	1	1	ł	1	1
TOTALS				(e)							
2	6	ĸ	9) ထ	7	-	-	ı	I	:	ı
Mean Brood	3.50	3.75	3,86	3.33	4.00	4.00	2.00	ı	I	:	1
Young/100 Adult Hens	350	375	236	333	366	400	200	1	ı	:	ı
Hens w/o Broods	•	0	7	19	4	0	0	:	ı	i	ı
Adult Males	0	0	0	0		0	0	ŀ	1	i	ı
Total Birds Observed	æ	19	47	45	18	40	က	:	i	1	1
e Mixed Adults				i i							

n Number of Broods

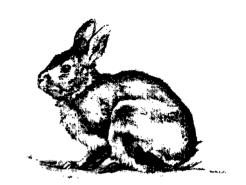
Table 3. Summary of white-tailed ptarmigan harvest staffstics, 1982-95. Estimates are calculated based upon 100 percent samples or projection factors.

r-Days Ptarmigan Bitds/Bagged Ptarmigan/Hunter Crippiling Loss/Hunter Ptarmigan/Day Crippiling Loss/Bagged Ptarmigan 13 0 0.00 0.00 0 0 0 14 1.08 0.67 0 0 25 15 36 1.80 1.44 0 - - 13 7 0.70 0.54 14 9 -										% Hunters	
leid Bagged Hunter Hunter-Day 100 Bagged Observed Ptarmigan 13 0 0.00 0.00 0 0 -		Permits	Hunters	Hunter-Days		Birds/	Ptarmigan/	Crippling Loss/	Ptarmigan		Immatures per
48 21 33 0 0.00 0.00 0 0 - 28 20 25 36 1.80 1.44 0 - - - 55 10 13 7 0.70 0.54 114 9 14 49 14 21 8 0.57 0.36 0 8 22 45 9 9 8 0.57 0.36 0 8 22 45 9 9 8 0.69 0.89 -	Year	Sold	Affeid	Affeld		Hunter	Hunter-Day	100 Bagged	Observed	Ptarmigan	
11 14 1.08 0.67 0 25 30 15 36 1.80 1.44 0 - - - 13 7 0.70 0.54 14 9 14 14 8 0.57 0.36 0 8 22 15 22 1.47 1.47 - 59 - 16 22 1.47 1.47 - 59 - 18 13 4.33 0.72 - 35 - 17 1.55 0.63 0 28 35 16 26 2.00 1.63 0 95 50 17 0 0.00 0.00 0.00 0 3 100 13 1.30 1.00 0 0 3 100 19 12 0.60 0.31 0 31 11 25.00 per permit was charged. 31 11 11 11	1982	48	21	33	0	0.00	0.00	0	0	1	1
15 36 1.80 1.44 0	1983	31	13	7	4	1.08	0.67	0	52	8	1
13 7 0.70 0.54 14 9 14 11 8 0.57 0.36 0 8 22 18 22 1.47 1.47 - 59 - 18 13 4.33 0.72 - 59 - 17 1.55 0.63 0 28 35 16 26 2.00 1.63 0 95 50 17 0 0.00 0.00 0 95 50 17 1.30 1.00 0 140 38 13 1.30 1.00 0 0 3 100 19 12 0.60 0.31 0 31 11 22.00 per permit was charged. 31 11 11 11	1984	28	20	52	38	1.80	1.44	•	1	1	:
11 8 0.57 0.36 0 8 22 8 0.89 0.89 -	1985	55	5	13	_	0.70	0.54	7	æ	7	1
8 8 0.89 0.89 - </td <td>1986</td> <td>49</td> <td>7</td> <td>24</td> <td>₩</td> <td>0.57</td> <td>0.36</td> <td>0</td> <td>∞</td> <td>22</td> <td>1</td>	1986	49	7	24	₩	0.57	0.36	0	∞	22	1
15 22 1.47 1.47 - 59 - 18 13 4.33 0.72 - 35 - 17 1.55 0.63 0 28 35 16 26 2.00 1.63 0 95 50 17 0 0.00 0.00 0 36 36 13 1.30 1.00 0 1440 38 12 0.60 0.31 0 3 100 444444 (number of permits sold/number of questionnalies returned) 31 11	1987	4	6	6	∞	0.89	0.89	:	1	1	1
18 13 4.33 0.72 35 17 1.55 0.63 0 28 16 26 2.00 1.63 0 95 17 0 0.00 0.00 0 56 13 1.30 1.00 0 140 6 0 0.00 0.00 0 3 12 0.60 0.31 0 31 444444 (number of permits sold/number of questionnaires returned)	**886	28	15	5	22	1.47	1.47	:	28	:	4.50(11)
17 1.55 0.63 0 28 16 26 2.00 1.63 0 95 17 0 0.00 0.00 0 56 13 1.30 1.00 0 140 6 0 0.00 0.00 3 19 12 0.60 0.31 0 31 444444 (number of permits sold/number of questionnaires returned) 31	1989	20	m	\$	13	4.33	0.72	:	35	:	:
16 26 2.00 1.63 0 95 17 0 0.00 0.00 0 56 13 1.30 1.00 0 140 6 0 0.00 0 3 19 12 0.60 0.31 0 31 444444 (number of permits sold/number of questionnaires returned) 12	1990	17	7	27	1	1,55	0.63	0	58	35	1
17 0 0.00 0.00 0 56 13 1.30 1.00 0 140 6 0 0.00 0.00 3 19 12 0.60 0.31 0 31 22.00 per permit was charged. 31 444444 (number of permits sold/number of questionnaires returned) 31	1991	5	13	16	5 6	2.00	1.63	0	92	20	ı
3	1992	11	=	17	0	0.00	0.00	0	26	36	1
6 0 0.00 0.00 3 19 12 0.60 0.31 0 31 22.00 per permit was charged.	1993	5	9	13	13	1.30	1.00	0	140	38	ı
19 12 0.60 0.31 0 31 31 22.00 per permit was charged. 444444 (number of permits sold/number of questionnaires returned)	1994	4	4	9	0	0.00	00.0	0	က	1 00	1
122 3	1995	38	70	33	12	0.60	0.31	0	સ	7	
1.4444	For th	e first time	a handling	122	r permit was	sharged.					
	Projec	tion Factor	n .	1.444444444	(number of p	ermits sol	d/number of q	uestionnaires retu	rned)		

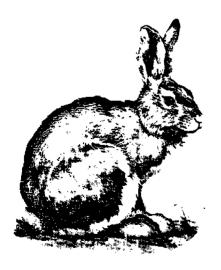
RABBITS AND HARES

SUMMARY

Cottontail Rabbits



Snowshoe Hares



Cottontail populations remain below a short term high in 1988.

Summer roadside counts indicated a decreased population density statewide, but reproduction was above 1994. Harvest statistics indicated increased hunter success, but is still 55 percent below average.

Hunter numbers increased 27 percent from the previous year and remained below average. Although efforts have been made to educate hunters in the identification of the snowshoe hare and the white-tailed jackrabbit, it is still a potential problem which could bias the snowshoe data.

COTTONTAIL RABBIT

Roadside Counts

Results of the annual roadside counts for 1995 are shown in Table 1 and Figure 1. The long-term trend of cottontails observed per mile and young per 100 adults is shown in Figure 4 and Tables 2 and 3. Indices for 1995 compared to 1994 and the previous 10-year (1985-94) average follow:

	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Total miles driven	444	+200	-57
Total cottontails counted	87	+61	-71
Cottontails observed per mile	0.20	-44	-32
Young observed per 100 adults	114	+533	+79

Production data from roadside counts indicated a decrease in the statewide cottontail population. The cottontail young per 100 adults index increased 533 percent from 1994, and was 79 percent above the long-term average. Only the Northeastern and Central regions collected roadside count data.

Harvest

Hunter Questionnaire

Results of the 1995 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 are found in Tables 5-7. Trends of statewide harvest statistics are found in Table 8 and Figures 2 and 3. Results of the 1995 season compared to 1994 and the 28-year average follow:

·	<u> 1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Cottontail hunters	13,840	+9	-42
Cottontail harvest	67,295	+42	- 55
Hunter-days afield	58,042	+9	-41
Cottontails per hunter-day	1.16	+30	-20
Cottontails per hunter	4.86	+31	-18

Ninety Percent confidence interval for overall cottontail harvest is +/- 6,058.84. Standard deviation is 1.844845.

Total hunters increased 9 percent from 1994. Total harvest increased 42 percent. Total harvest was 55 percent below average. Hunter success was 20 percent below average. Harvest data indicate a year of below average populations of cottontails. Seven years of drought and the severe winter of 1992-93 have negatively affected rabbit populations statewide.

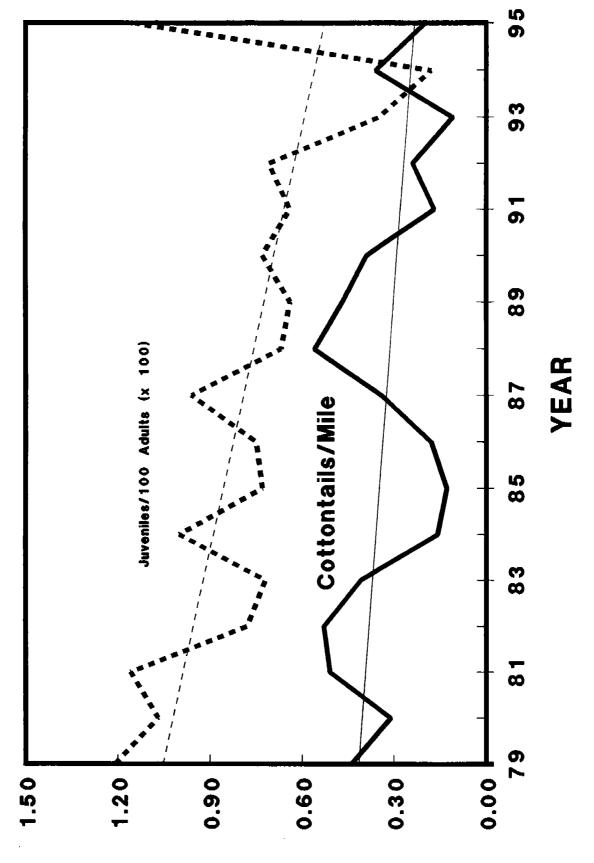
Field Bag Checks

Results of field bag checks for 1995 are shown in Table 9. Trends of hunter success as determined by bag checks are shown in Table 10. Following is a comparison of the 1995 field bag check data to 1994 and the previous 10-year (1985-94) average.

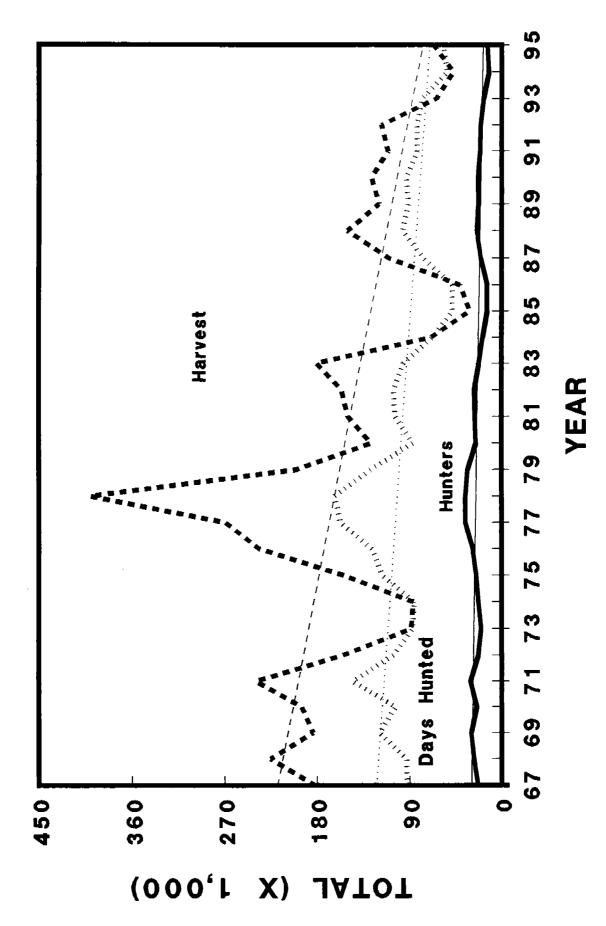
	<u>1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Total hunters checked			
Total hours hunted	- -		
Cottontails per hunter (complete hunts)			
Cottontails bagged per 100 hours			
Hours per hunter day	- -		
Hours per cottontail bagged (complete hunts)			
ICOMPTECE WANCO!			

No cottontail field bag check data was collected in 1995.

COTTONTAILS/MILE AND JUYENILES/ADULT

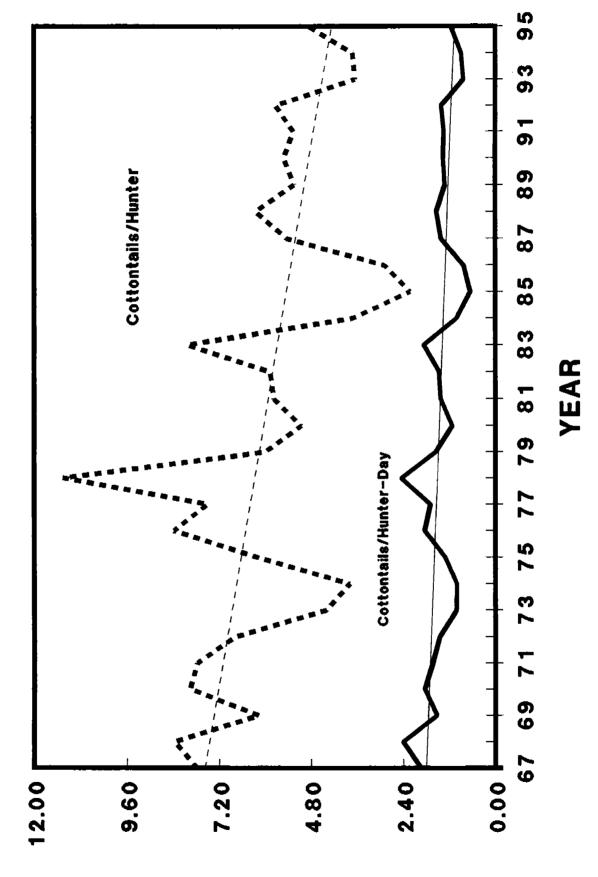


Cottontail rabbit population indices trends, 1979-95. Figure 1.



Statewide trends of cottontail rabbit harvest statistics, 1967-95. Figure 2.

COTTONTAILS PER HUNTER AND PER DAY



Statewide trends of cottontail rabbit hunter success rates, 1967-95. Figure 3.

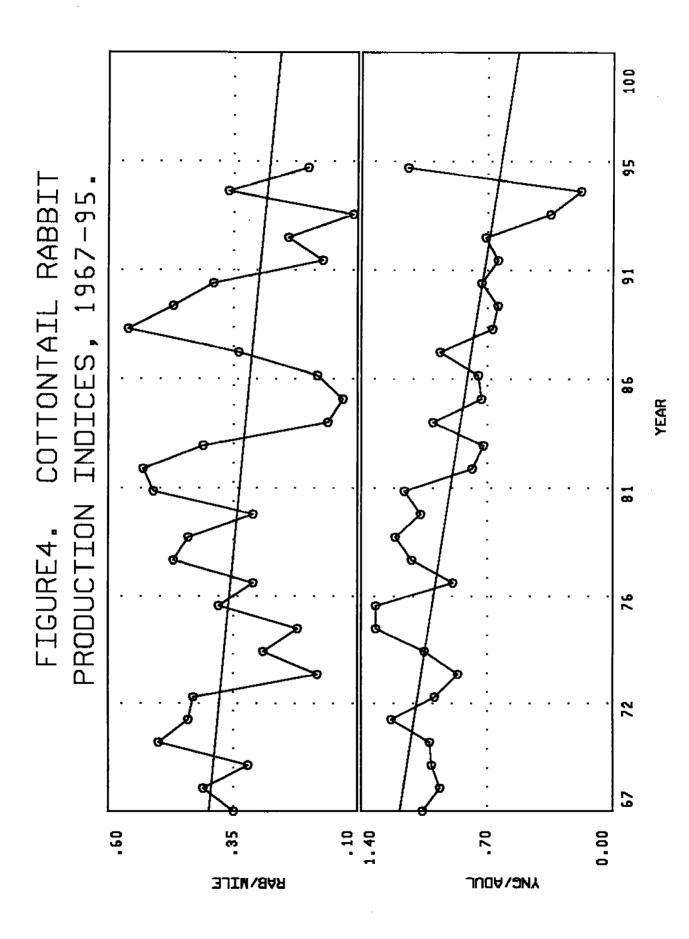


Table 1. Cottontail rabbit summer inventory summary, 1995.

Region and	Miles		Rabbits O			Young/	Rabbits/
County	Driven	Adults	Young	Unclassified	Total	100 Adults	Mile
Northern Region							
Box Elder				-			-
Cache					-	-	-
Davis	-			-			-
Morgan	-			-		-	-
Rich				-	-		_
Summit	_			-	_	-	-
Weber _				<u></u>	-	-	_
REGIONAL TOTALS							
Central Region						••	
Juab	90	1	0	0	1	0	0.01
Salt Lake	-				-	_	_
Sanpete	99	3	4	0	7	133	0.07
Tooele	53	0	1	0	1		0.02
Utah	_			_			
Wasatch				_	_		
REGIONAL TOTALS	242	4	5	0	9	125	0.04
Southern Region							
Beaver				_		_	_
Garfield					_	_	
ron						_	
Kane				-			_
Millard				_		-	_
Piute				-			_
Sevier						_	
Nashington		-		_		_	_
<i>N</i> ayne				_		-	_
REGIONAL TOTALS							
Northeastern Region				·			
Daggett	70	14	14	7	35	100	0.50
Duchesne	80	6	11	14	31	183	0.39
Jintah	53	4	2	6	12	50	0.33
REGIONAL TOTALS	203	24	27	27	78	113	0.39
Southeastern Region					70	113	0.35
Carbon							
Emery		- -		<u>-</u>		-	-
Grand						-	-
San Juan				_	_	-	-
REGIONAL TOTALS	-				-		
STATE TOTALS	444	28	32	27	87	114	

Legion and						Year	Region and Year					Average
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region												
Box Elder	1	0.02	0.03	ı	0.03	0.39	0.10	90.0	:	:	;	
Cache	;	ı	;	ì	i	ŀ	1	;	;	:	1	
Davis	;	:	;	ŀ	ŀ	:	:	1	:	:	!	
Morgan	;	;	:	;	:	1	1	:	;	:	:	
Rich	ı	0.02	ŀ	;	ı	ì	ł	ŀ	i	;	1	
Summit	ł	;	:	;	:	;	ì	;	;	;	;	
Weber	;	;	;	;	:	;	ł	;	;	;	:	
REGIONAL TOTALS	:	0.02	0.03	1	0.03	0.39	0.10	80'0	1	:	1	0.11
Central Region												
liah	0.00	0.02	0.00	0.54	0.30	0.23	ł	;	;	:	0.01	
Sattlake	:	1	ł	:	;	;	ı	ł	:	:	ŀ	
Sannete	;	;	:	0.47	0.22	0.65	0.09	0.15	0.01	;	0.07	
Tonele	00'0	0.01	0.02	0.18		ŀ	;	0.03	:	ł	0.02	
Utah	:	;	ŀ	;	I	;	;	:	;	1	;	
Wasafch	ŀ	:	:	;	!	;	:	1	:	;	;	
REGIONAL TOTALS	0.00	0.01	0.02	0.36	0.26	0,45	0.0	90.0	0.01	;	0.04	0.14
Southern Region											i)	
Beaver	0.03	0.10	0.04	90.0	ŀ	ì	;	1	:	1	!	
Garfield	90.0	0.13	1	:	:	;	;	ł	ł	ı	ł	
Iron	0.33	0.53	0.26	:	;	;	;	1	;	1	;	
Kane	0.52	0.47	0.97	1.09	1	;	;	1	1	ı	ì	
Millard	0.02	90.0	60'0	60'0	1	0.08	:	!	1	ı	:	
Piute	ŧ	90.0	0.05	ŀ	:	;	:	:	i	ı	:	
Sevier	:	;	1	ł	:	;	;	!	i	1	:	
Washington	0.23	0.12	0.12	96.0	0.33	;	:	1	ı	ł	:	
Wayne	ŀ	0.20	0.24	0.34	:	;	0.83	0.21	;	:	;	
REGIONAL TOTALS	0.19	0.24	0.27	0.33	0.33	0.08	0.83	0.21	:	:	;	0.31
Northeastern Region									!	,	i	
Daggett	0.12	0.22	99'0	0,85	0.50	0.55	!	0.28	0.07	0.07	0.50	
Duchesne	0.13	0.44	98.0	1.49	1.04	0.23	0.03	0.60	0.23	0.56	0.39	
Uintah	0.00	0.02	0.36	1.26	1.40	1,00	:	0.18	0.17	0.24	0.23	
REGIONAL TOTALS	0.09	0.25	0.65	1.18	0.91	0.57	0.03	0.38	0.16	0.36	0.39	0.46
Southeastern Region	4	9	6	77.0	76.0	5	ç	50	ç	1	1	
Caroci	9 6	9	9 6		77	100	27.0	, e	90.0	;	;	
Ciliery	9 7 2 0	080	,	5 6	0.06	9	0.05	0.13	0.20	;	1	
San bran	0.14	0.37	0.29	0.59	0.55	080	0.28	0.34	0.16	;	!	
REGIONAL TOTALS	0.13	0.17	0.38	0.36	0.32	0,36	0.24	0.26	0.14	1	·	0.26

Region and						Year						Average
County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-94
Northern Region												
Box Elder	;	0	25	1	200	200	13	29	:	:	:	
Cache	;	ı	;	1	;	;	:	;	:	;	;	
Davis	;	;	:	;	;	;	;	;	:	:	;	
Morgan	:	;	:	;	;	:	;	:	1	1	:	
Rich	;	20	;	:	;	ŀ	;	;	ı	1	:	
Summit	;	; ;	;	1	;	;	;	i	;	1	;	
Mohor	1			}	l	ł	ł	 	1	t	1	
Veneral Towns	:		:		: 3	:	: 5	:	:	:	:	į
REGIONAL TOTALS	:	20	25	:	200	200	13	29	:	:	:	/8
lush	<	•	•	ç	7						<	
	>	>	>	07	2	:	:	:	:	:	>	
Sait Lake	:	:	:	:	:	:	ı	,	ł	:	:	
Sanpete	1	;	:	88	4	40	20	20	1	:	133	
Tooele	:	ŧ	100	120	;	;	:	100	:	;	1	
Utah	;	;	ł	;	:	:	i	;	ı	1	1	
Wasatch	i	1	1	:	:	;	:	;	ł	1	:	
REGIONAL TOTALS	0	0	100	57	23	27	20	57	:	1	125	39
Southern Region												
Beaver	;	22	;	:	;	•	:	;	;	:	!	
Garfield	33	38	;	:	;	i	;	:	:	:	!	
hron	82	75	:	:	;	;	:	:	;	ı	:	
Kane	100	7	7	149	;	i	;	·	;	ŀ	:	
Millard	200	170	114	110	;	100	i	;	ı	ŧ	:	
Piute	;	:	1	:	;	1	:	:	1	;	ŀ	
Sevier	;	:	:	:	:	ŀ	:	;	;	1	:	
Washington	22	133	175	100	131	:	:	:	:	:	:	
Wayne	:	360	2100	244	:	1	369	138	:	;	:	
REGIONAL TOTALS	82	190	137	136	131	100	369	138	:	:	:	149
Northeastern Region												
Daggett	46	136	116	90	23	55	ı	68	33	:	100	
Duchesne	16	56	77	39	29	:	20	138	36	17	183	
Uintah	0	100	264	170	239	92	:	9	80	20	20	
REGIONAL TOTALS	31	28	74	46	82	28	20	98	47	18	113	99
Southeastern Region												
Carbon	;	150	567	200	400	400	:	25	;	;	:	
Emery	216	i	49	20	ŧ	:	:	;	:	ŧ	ŀ	
Grand	300	300	;	:	:	:	:	40	:	:	;	
San Juan	43	61	47	49	80	09	54	37	18	ï	ı	
REGIONAL TOTALS	88	69	100	64	110	67	100	33	18	:	:	72

Table 4. Summary of cottontail rabbit hunter success and distribution of harvest and hunting pressure by region and county, 1995.

REGION AND COUNTY	Sample Size*	HUNTER-DAYS AFIELD	BIRDS BAGGED	BIRDS PER HUNTER-DAY	% of Pressure	% OF HARVEST
NORTHERN REGION						***************************************
BOX ELDER	111	5,598	5,578	1.00	9.65	0 00
CACHE	9	485	369	0.76		8.29
DAVIS	3	194	97	0.76	0.84	0.55
MORGAN	ı 1	19	77	4.00	0.33	0.14
RICH	15	680	913		0.03	0.12
SUMMIT	7	583		1.34	1.17	1.36
WEBER	10	933	427	0.73	1.00	0.64
REGIONAL TOTALS	156		816	0.88	1.61	1.21
ABOIONAE IOINES	130	8,494	8,280	0,97	14.64	12.31
CENTRAL REGION						
JUAB	51	2,118	1,030	0.49	3.65	1.53
SALT LAKE	11	408	233	0.57	0.70	0.35
SANPETE	18	1,457	1,088	0.75	2.51	1.62
TOOELE	106	7,406	3,926	0.53	12.76	5.83
UTAH	92	5,831	3,712	0.64	10.05	5.52
WASATCH	9	1,030	213	0.21	1.77	0.32
REGIONAL TOTALS	287	18,252	10,205	0.56	31.45	15.16
SOUTHERN REGION						
BEAVER	13	1,613	622	0.39	2.78	0.92
GARFIELD	8	699	952	1.36	1.21	1.42
IRON	14	1,593	1,088	0.68	2.75	1.62
KANE	5	155	544	3.50	0.27	0.81
MILLARD	33	1,321	1,166	0.88	2.28	1.73
PIUTE	5	97	77	0.80	0.17	0.12
SEVIER	14	1,088	427	0.39	1.88	0.64
WASHINGTON	37	3,537	4,004	1.13	6.10	5.95
WAYNE	11	311	427	1.38	0.54	0.64
REGIONAL TOTALS	140	10,418	9,310	0.89	17.95	13.84

NORTHEASTERN REGION						
DAGGETT	8	213	758	3.55	0.37	1.13
DUCHESNE	75	4,898	11,760	2.40	8.44	17.48
UINTAH	73	5,228	14,501	2.77	9.01	21.55
REGIONAL TOTALS	156	10,341	27,019	2.61	17.82	40.15
SOUTHEASTERN REGION						
CARBON	29	3,460	4,101	1.19	5.96	6.09
EMERY	39	2,701	3,362	1.24	4.66	5.00
GRAND	17	1,516	1,827	1.21	2.61	2.72
SAN JUAN	24	2,002	2,274	1.14	3.45	3.38
REGIONAL TOTALS	109	9,680	11,565	1.19	15.68	17.19
UNKNOWN	12	855	913	1.07	1.47	1.36
STATE TOTALS	860	58,042	67, 295	1.16	100.00	100.00

^{*}Total hunter trips from questionnaire returns.

Table 5. Summary of cottontail rabbits bagged per hunter-day by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Region								
Box Elder	1.78	1.29	1.49	1.31	1.46	0.71	0.82	1.00
Cache	0.37	0.66	0.87	1.41	1.50	0.76	1.30	0.76
Davis	0.50	1.00	0.25	1.50	0.00	0.08	0.00	0.50
Morgan	1.50	0.17 1.37	0.43	1.53	1.08	0.33	0.47	4.00
Rich Summit	1.86 0.92	0.58	2.52 0.72	2.62 1.24	2.50 0.81	0.56 1.22	1.21 1.39	1.34 0.73
Weber	0.61	0.27	1.06	0.88	0.89	0.64	0.28	0.88
REGIONAL TOTALS	1.49	1.09	1.55	1.47	1.50	0.34	0.26	0.97
REGIONAL TOTALS	1.42	1.03	1.00	1.44	1.30	U. 11	v.,,	V.7/
Central Region								
Juab	1.52	1.52	1.55	1.68	1.54	0.83	0.64	0.49
Salt Lake	0.53	1.35	0.79	0.72	0.97	0.57	2.00	0.57
Sanpete	1.62	1.10	0.85	1.26	0.86	0.40	1.02	0.75
Tooele	1.37	1.20	1.08	1.23	1.26	0.48	0.70	0.53
Utah	1.04	0.90	0.84	0.99	1.00	0.56	0.46	0.64
Wasatch	0.99	1.50	0.69	1.06	1.70	0.83	1.57	0.21
REGIONAL TOTALS	1.27	1.18	1.03	1.24	1.19	0.57	0.67	0.56
Southern Region								
Beaver	1.44	0.41	1.17	0.69	2.44	0.67	1.50	0.39
Garfield	1.41	1.97	1.03	0.46	0.52	1.53	1.04	1.36
Iron	1.58	0.85	1.21	1.06	0.94	0.80	1.05	0.68
Kane	1.41	1.00	0.90	0.93	0.97	1.62	0.91	3.50
Millard	1.09	1.27	1.84	1.15	1.35	1.56	0.69	0.88
Piute	1.25	0.28	1.36	0.57	0.00	0.63	0.33	0.80
Sevier	1.45	0.97	1.45	0.65	1.27	0.69	0.67	0.39
Washington	2.10	0.91	0.89	0.68	1.03	1.02	1.01	1.13
Wayne	1.49	1.05	1.34	1.20	2.26	0.73	1.06	1.38
REGIONAL TOTALS	1.41	1.05	1.30	0.89	1.32	1.11	0.93	0.89
Northeastern Region								
Daggett	3.02	1.65	1.79	1.83	2.00	1.47	1.52	3.55
Duchesne	2.38	1.49	1.83	2.15	1.97	1.16	1.43	2.40
Uintah	2.32	3.16	2.41	1.61	1.74	0.82	1.55	2.77
REGIONAL TOTALS	2.40	2.13	2.10	1.86	1.87	1.04	1,51	2.61
Southeastern Region						*******************		
Carbon	1.29	0.97	1.43	1.75	1.51	0.69	0.89	1.19
Emery	1.78	0.80	1.43	1.03	1.43	0.88	0.89	1.19
Grand	2.03	1.00	1.58	1.75	1.66	1.86	1.21	1.21
San Juan	1.67	1.28	1.37	1.87	2.34	0.81	0.97	1.14
REGIONAL TOTALS	1.55	0.93	1.28	1.50	1.63	0.88	0.94	1.19
		****			***			*****
Unknown counties	1.49	2.00	0.00	0.00	0.00	1.40	0.00	1.07
STATE TOTALS	1.43	1.55	1.32	1.36	1.35	1.41	0.83	1.16

Table 6. Percentage distribution of cottontail rabbit harvest by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Region								
Box Elder	12.11	7.20	9.84	9.06	13.30	7.38	8.84	8.29
Cache	0.27	0.47	1.07	1.61	1.50	2.04	1.60	0.55
Davis	0.12	0.07	0.02	0.14	0.00	0.03	0.00	0.14
Morgan	0.19	0.03	0.05	0.41	0.65	0.12	0.56	0.12
Rich	1.05	1.92	6.07	4.14	4.31	0.56	0.85	1.36
Summit Weber	0.77 0.42	0.73 0.14	0.63 0.27	2.00 0.45	0.79 0.59	0.97 0.62	0.41 0.33	0.64 1.21
REGIONAL TOTALS	14.96	10.55	17.95	17.80	21.14	11271	12,56	12.31
REGIONAL TOTALS	14.70	10.233	1/-74	LIFOU		11.71	12,10	12.3
Central Region								
Juab	6.05	6.32	5.86	7.68	7.50	6.20	4.09	1.53
Salt Lake	0.49	0.40	0.68	0.36	1.09	0.97	0.30	0.35
Sanpete	3.74	3.70	3.34	2.80	3.39	0.97	4.09	1.62
Tooele	13.72	14.73	11.60	16.76	15.72	10.18	10.59	5.83
Utah	8.61	5.20	6.51	6.20	6.42	5.28	4.42	5.52
Wasatch	0.92	0.47	0.44	1.09	1.10	0.59	0.41	0.32
REGIONAL TOTALS	33.55	30082	28,43	34.88	35,22	24.20	23.89	15.16
Southern Region								
Beaver	0.68	0.40	0.44	0.92	1.51	0.18	3.90	0.92
Garfield	0.42	2.66	1.16	0.09	0.17	0.86	1.00	1.42
Iron	1.54	0.92	2.02	1.03	1.03	1.86	2.38	1.62
Kane	0.84	1.23	0.90	1.33	0.50	2.15	1.49	0.81
Millard	2.99	2.80	5.02	4.18	4.99	8.29	3.75	1.73
Piute	0.22	0.09	0.61	0.06	0.00	0.15	0.11	0.12
Sevier	2.28	1.66	3.07	1.75	1.79	2,27	2.23	0.64
Washington	1.90	2.69	2.02	1.34	0.94	6.96	6.24	5.95
Wayne	0.77	1.02	1.08	1.12	0.92	0.71	1.30	0.64
REGIÓNAL TOTALS	11.69	13.46	16.33	11.84	11.85	23.43	22.40	13.84
N -414 Bi			1200102113131		**** **********************************			
Northeastern Region		2 01	0 77	3 20	1 (2	2 12	1 10	1 10
Daggett	2.82	3.21	2.37	3.28 10.98	1.63 8.67	3.13 12.95	1.19 5.83	1.13 17.48
Duchesne	9.43	12.37 19.31	8.55 13.44	9.10	7,25	8.29	11.55	21.55
Uintah REGIONAL TOTALS	13.20 25.45	34.89	24.27	23236	17.55	24.37	18.57	40.15
REGIONAL TOTALS	22,43							····· T
Southeastern Region	1							
Carbon	4.65	4.56	5.83	5.04	6.05	4.22	10.25	6.09
Emery	5.91	3.78	4.20	3.26	4.13	4.19	4.20	5.00
Grand	0.74	0.26	0.66	0.66	0.73	2.69	5.60	2.72
San Juan	0.77	1.43	2.33	3.15	3.33	2.39	5.50	3.38
REGIONAL TOTALS	12.09	10.04	13.02		14.24	13.48		17.19
				0 00	0 00	2 00	^ ^^	7 76
Unknown counties	2.24	0.24	0.00	0.00	0.00	2.80	0.00	1.36
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 7. Percentage distribution of cottontail rabbit hunting pressure by region and county, 1988-95.

Region and _					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Region					_			
Box Elder	10.53	7.34	9.00	9.33	12.87	8.60	9.55	9.65
Cache	1.15	0.93	1.67	1.53	1.41	2.22	1.06	0.84
Davis	0.37		0.09	0.13	0.00	0.29	0.33	0.33
Morgan	0.20		0.15	0.36	0.85	0.29	1.06	0.03
Rich	0.87		3.28	2.12	2.44	0.83	0.63	1.17
Summit Weber	1.30		1.19	2.16	1.37	0.66	0.93	1.00
REGIONAL TOTALS	1.06	0.68	0.35	0.69	0.94	0.80	1.06	1.61
REGIONAL TOTALS	15.51	2.80	15.74	16.33	19.88	13.70	14.64	14.64
Central Region								
Juab	6.15	5.48	5.15	6,16	6.88	6.19	5.72	3.65
Salt Lake	1.46	0.39	1.17	0.67	1.58	1.41	0.13	0.70
Sanpete	3.57	4.41	5.35	2.98	5.56	2.00	3.57	2.51
Tooele	15.44	16.16	14.61	18.35	17.65	17.38	13.39	12.76
Utah	12.83	7.61	10.50	8.43	9.06	7.73	8.50	10.05
Wasatch	1.44		0.86	1.39	0.92	0.58	0.23	1.77
REGIONAL TOTALS	40.90		37.63	37.98	41.65	35.29	31.54	31.45
Southern Region								
Beaver	0.73	1.27	0.51	1.79	0.88	0.22	2.31	2.78
Garfield	0.46	1.77	1.54	0.27	0.45	0.46	0.86	1.21
Iron	1.51	1.41	2.27	1.30	1.54	1.93	2.02	2.75
Kane	0.92	1.61	1.36	1.91	0.73	1.10	1.45	0.27
Millard	4.24	2.91	3.72	4.92	5.21	4.39	4.86	2.28
Piute	0.27	0.41	0.62	0.15	0.04	0.19	0.30	0.17
Sevier	2.43	2.25	2.88	3.61	1.99	2.71	2.98	1.88
Washington	1.40	3.91	3.10	2.67	1.28	5.63	5.49	6.10
Wayne	0.80	1.27	1.10	1.26	0.58	0.80	1.09	0.54
REGIONAL TOTALS	12.81		17.10	17.89	12.70	17.43	21.36	17.95
Northeastern Region								
Daggett	1.44	2.57	1.80	2.42	1.15	1.75	0.69	0.37
Duchesne	6.13	10.91	6.36	6.87	6.22	9.26	3.64	8.44
Uintah	8.81	8.05	7.55	7.61	5.88	8.31	6.64	9,01
REGIONAL TOTALS	16.38	21.52	15.71	16.90	13.25	19.33	10.98	17.82
Southeastern Region	,							
Carbon	5.60	6.20	5.55	3.89	5.66	5.02	10.28	5.96
Emery	5.15	6.23	5.39	4.25	4.08	3.95	4.13	
Grand		0.34				1.19		4.66
San Juan	0.72	1.48		2.27	2.01	2.44		2.61 3.45
REGIONAL TOTALS				10.91	2.01	12.60	21.39	
***************************************		9,450,400 0000000000000000000000000000000					64.97	1
Unknown counties	2.33	0.16	0.00	0.00	0.15	1.66	0.10	1.47
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 8. Statewide summary of cottontail rabbit harvest statistics, 1967-95.

	Total	Total	Hunter-Days	Cottontails Per	Cottontails Per
Year	Hunters	Harvest	Afield	Hunter-Day	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
1977	35,831	269,263	157,257	1.71	7.51
1978	35,590	401,071	163,019	2.46	11.27
1979	33,385	200,223	127,497	1.57	6.00
1980	25,156	127,652	87,051	1.47	5.07
1981	25,906	149,765	104,183	1.44	5.78
1982	26,714	156,696	105,644	1.48	5.87
1983	22,467	180,767	96,151	1.88	8.05
1984	18,616	69,186	67,643	1.02	3.72
1985	14,059	31,397	48,371	0.65	2.23
1986	13,992	40,636	48,694	0.83	2.90
1987	20,322	110,411	77,047	1.43	5.43
1988	24,076	150,386	97,190	1.55	6.25
1989	22,878	120,075	91,264	1.32	5.25
1990	23,070	127,389	93,515	1.36	5.52
1991	21,137	111,407	82,772	1.35	5.27
1992	20,509	117,454	83,154	1.41	5.73
1993	17,578	64,400	77, <mark>96</mark> 8	0.83	3.66
1994	12,709	47,322	53,175	0.89	3.72
1995	13,840	67,295	58,042	1.16	4.86
Totals			<u> </u>		
(1967-95)	681,766	4,289,195	2,795,972	. ==	<u></u>
Averages		<u> </u>			
(1967-94)	23,855	150,782	97,783	1.46	5.96

1995.	
summary,	
ld bag check	
f field b	
il rabbi	
Cottonta	
Table 9.	

Rabbits 100 Hr Hunts Hunters Rabbits 100 Hr Hunts Hunters Rabbits 100 Hr Hunts Hunters Rabbits 100 Hr Hunters Rabbits 100				All Hunts					Complete Hunts	Hunts		
Country	Region and	Total	Total	Total	Total	Rabbits/	Complete	Total	Total	Total	Rabbits/	Rabbits/
The Region The	County	Parties	Hunters	Hours	Rabbits	100 Hr	Hunts	Hunters	Hours	Rabbits	Hunter	100 Hr
der n	Vorthern Region									!		
## TOTALS NAL TOTALS	3ox Elder	;	;	;	÷	:	;	:	:	;	:	:
MAL TOTALS Fregion	Cache	1	;	:	1	:	:	į	:	i	,	i
In MAL TOTALS The Region The	Javis	:	;	:	ł	:	ł	;	:	;	;	: :
MAL TOTALS	Morgan	ł	;	1	;	1	1	ì	١	;	;	: :
Region	Rich	:	:	:	;	;	;	;	į	;	;	: 1
Region	Summit	;	1	ı	;	1						ł
NAL TOTALS Region ke in NAL TOTALS In Region NAL TOTALS In Region In	Weher	}	ł	ł	;	!	:	:	ı	:	;	:
Region Region MAL TOTALS Safetin Region MAL TOTALS Safetin Region Safeti	TOTAL TOTAL	:		;	:	:	:	:	:	:	;	1
NAL TOTALS	CEGIONAL TOTALS	:	:	:	:		:	:	:	:	:	:
Feb.	entrar Region											
NAL TOTALS	can	1	;	:	:	:	:	:	:	1	:	;
ANAL TOTALS	alt Lake	;	:	:	I	i	;	;	;	;	ı	:
MAL TOTALS WALTOTALS	anpete	;	;	:	1	;	:	:	1	:	ŀ	;
MAL TOTALS In Region MAL TOTALS In Region MAL TOTALS In MAL TOTALS IN MAL T	ooele	ŀ	;	:	:	ì	1	;	ï	;	;	;
NAL TOTALS	tah	i	ŧ	i	:	ł	;	;	;	:	ł	;
### Region	Jasatch	;	:	:	;	i	:	;	:	:	;	;
MAL TOTALS	EGIONAL TOTALS	1	1	:	:	;	:		:	:	:	
glon NAL TOTALS ***ARL TOTALS ***	outhern Region	ï	:	:	:	:	;	1	:	:	:	:
gton MAL TOTALS Astern Region Astar TOTALS	eaver	;	;	;	:	ı	:	ı	:	ï	:	}
glon NAL TOTALS astern Region NAL TOTALS and And TOTALS TOTALS TOTALS TOTALS TOTALS TOTALS TOTALS TOTALS TOTALS TOTALS TOTALS	arfield	;	:	:	;	;	1	1	ŀ	i	:	;
lgton NAL TOTALS In the stern Region Astern Region And TOTALS	uo	;	:	ł	;	ŀ	!	:	:	:	:	:
astern Region	ane	1	ł	;	:	i	:	:	ŀ	;	i	ł
glon NAL TOTALS astern Region NAL TOTALS and ANAL TOTALS	illard	:	;	;	:	:	:	;	i	:	:	:
NAL TOTALS	ute	ı	ı	;	;	:	;	:	:	:	ł	:
ANAL TOTALS	evier	;	ŀ	:	:	!	;	:	:	:	:	:
astern Region	ashington	ŀ	;	i	1	1	:	ł	:	ŀ	:	:
astern Region	ayne	:	;	:	:	:	:	ŀ	:	;	:	ľ
t	EGIONAL TOTALS	:	:		:	:	:	:	:	;	:	:
the	ortheastern Region	:	!	1	:	:	;	:	:	:	;	:
ANAL TOTALS	aggett	;	!	:	:	:	:	1	ı	;	1	1
astern Region	rchesne	ı	ŀ	:	1	1	:	:	i	;	;	:
astern Region	ntah	:	:	:	1	ŀ	:	:	:	:	;	ŧ
astern Region	EGIONAL TOTALS	:	;	:	ï	;	:	:	,		ļ :	
an	outheastern Region	1	:		:	;			:	:	:	:
an	arbon	ı	1	:	:	:	;	:	:	:	:	;
an	пегу	;	;	:	:	;	:	:	;	:	;	:
ALS	rand	i	;	;	:	1	:	ł	:	ŀ		;
ALS	an Juan	;	;	:	:	ļ	:	!	:	ï	:	;
	EGIONAL TOTALS	:	;	;	;	1		;	:	:		:
	TATE TOTALS	:										

	1990		1991		1992		1993		1994		1995	
Region and	Rabbits/ Hunter	Rabbits/ 100 Hr	Rabbits/ Hunter	Rabbits/ 100 Hr	Rabbits/ Hunter	Rabbits/ 100 Hr	Rabbits/ Hunter	Rabbits/ 100 Hr	Rabbits/ Hunter	Rabbits/ 100 Hr	Rabbits/ Hunter	Rabbits/ 100 Hr
Northern Region												
Box Elder	25	1.50	313	3.57	:	;	:	ŧ	;	:	:	:
Cache	:	1	ľ	ŧ	i	;	ŀ	i	:	;	;	1
Davis	1	;	•	1	;	:	ł	:	ŀ	;	:	:
Morgan	!	ì	ŀ	;	ŀ	:	ł	1	ŀ	;	1	:
Rich	1	i	1	:	1	ľ	;	;	;	;	:	;
Summit	ŀ	i	1	:	1	:	1	;	:	ł	;	1
Weber	:	:	:	;	!	!	;	:		;	:	:
REGIONAL TOTALS	25	0.21	313	3.57	1	ŧ	:	:	-	ī	:	:
Central Region												
Juab	:	ł	:	;	1	:	:	;	:	!	;	ł
Salt Lake	ł	:	;	:	:	;	;	ŀ	:	;	1	į
Sanpete	;	ŀ	;	;	ţ	;	;	;	1	1	;	:
Tooele	ŀ	ì	;	ŀ	i	;	}	:	:	ı	:	:
Utah	i	ì	;	1	ł	1	1	;	ŀ	1	;	:
Wasatch	1	ŀ		-		;	1	I	1	1	;	:
REGIONAL TOTALS	1	;	;	;	:	;	1	:		:	i	:
Southern Region							ı	1	1	:	•	:
Beaver	1	;	;	1	1	:	1	i	1	1	ł	;
Garfield	1	i	;	ł	;	:	I	ŧ	:	:	ŧ	:
iron	!	ŀ	;	:	ı	1	ţ	ł	1	1	1	:
Kane	:	;	;	ŀ	:	;	;	ŀ	ı	ł	;	:
Millard	;	:	t	:	;	;	;	ļ	ł	ł	ł	:
Piute	;	: :	:	:	;	ŀ	1	1	1	:	:	:
Sevier	;	:	1	1	:	:	!	1	1	;	1	:
Washington	:	:	:	:	:	:	!	;	ł	:		:
Wayne	ł	1	21	1.02	:	1	:	:	1	:	:	:
REGIONAL TOTALS	ī	:	21	1.02	•	1	1	:	1	;	ţ	:
Northeastern Region							!	1	ı	!	;	:
Daggett	1	;	:	:	1.25	20	:	:	!	;	:	:
Duchesne	450	9.00	48	1,38	;	!	:	:	ŀ	!	1	:
Uintah	179	8.10	99	1,91	:	!	:	:	:	:	:	:
REGIONAL TOTALS	187	5.10	61	1.77	1.25	20	:	:	:	:	:	;
Southeastern Region							;	:	1	:	:	1
Carbon	ŧ	:	:	;	:	:	!	:	ŧ	!	;	:
Emery	!	;	;	1	ì	:	;	ŀ	ł	;	ł	:
Grand	1	;	:	ì	:	:	ŀ	:	ŀ	;	1	:
San Juan	:	:	:	:	:	!	!	:	1	1	:	:
REGIONAL TOTALS	!	;	:	:	:	:	:	:	1	;	:	:
OTATON DESER												

SNOWSHOE HARE

Harvest

Results of the 1995 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. Trend in statewide harvest statistics by year are shown in Table 15 and Figures 1 and 2. The 1995 season compared to 1994 and the 20-year average follow:

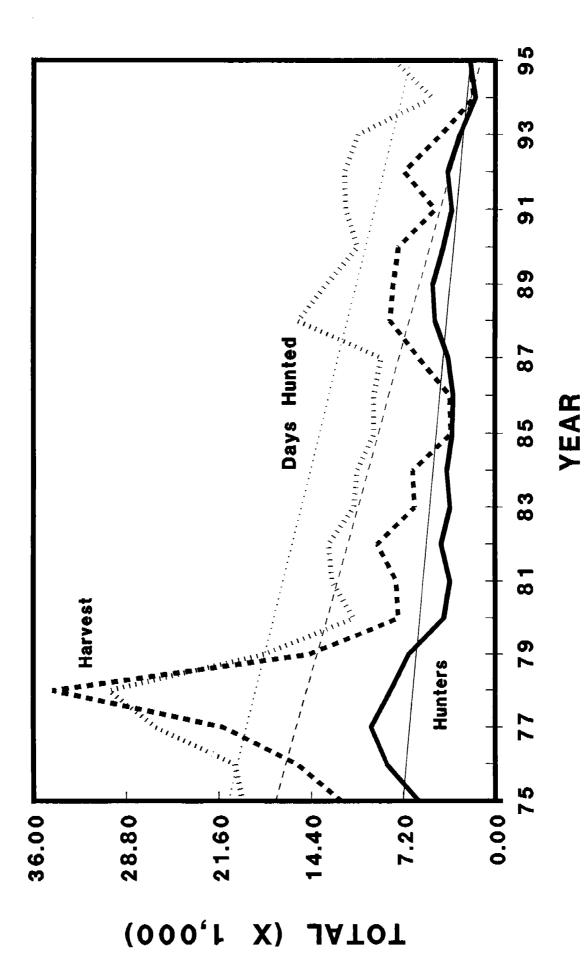
	<u>1995</u>	Percent change from 1994	Percent change from <u>Average</u>
Snowshoe hare hunters	1,983	+27	-58
Snowshoe hares harvested	1,924	+12	-80
Hunter-days afield	7,891	+60	-44
Snowshoes per hunter-day	0.24	-31	-61
Snowshoes per hunter	0.97	-12	-48

Ninety percent confidence interval for overall snowshoe hare harvest is +/-1,063.75. Standard deviation is 0.902119.

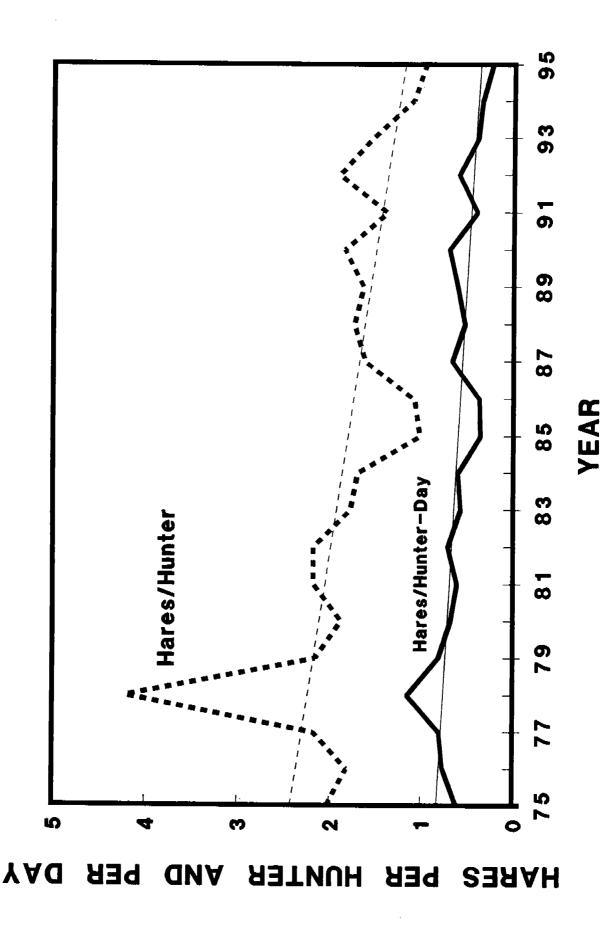
Significant misidentification of white-tailed jackrabbits as snowshoe hares was anticipated prior to mailing the harvest questionnaire following the first season in 1975. This proved to be the case as a significant harvest of snowshoe hares was reported for counties outside the known range of the species. It was assumed that the problem was statewide, not just confined to those counties. Several attempts were made in the 1970s to reduce misidentification through pictures and descriptions in leaflets and questionnaires.

Beginning in 1988, harvest questionnaires, and in 1989 the Upland Game Proclamation had drawings and descriptions of the various rabbits and hares in an attempt to reduce misidentification. We believe this has been successful.

Results of the 1995 harvest questionnaire indicates a 12 percent increase in hunter success compared to 1994. Success was well below the long-term average.



Statewide trends of snowshoe hare harvest statistics, 1975-95. Figure 1.



Statewide trends of snowshoe hare hunter success rates, 1975-95. Figure 2.

Table 11. Summary of snowshoe hare hunter success and distribution of harvest and hunting pressure by region and county, 1995.

REGION AND COUNTY	SAMPLE SIZE*	HUNTER-DAYS AFIELD	SNOWSHOE BAGGED	SNOWSHOE HUNTER-DA)	% OF PRESSURE	% OF HARVEST

NORTHERN REGION						
BOX ELDER	15	680	97	0.14	8.62	5.05
CACHE	6	369	38	0.11	4.68	2.02
DAVIS	3	97	58	0.60	1.23	3.03
MORGAN	1	19	0	0.00	0.25	0.00
RICH	9	272	58	0.21	3.45	3.03
SUMMIT	4	252	58	0.23	3.20	3.03
WEBER	5	641	583	0.91	8.13	30.31
REGIONAL TOTALS	43	2,332	894	0.38	29.56	46.47
CENTRAL REGION						
JUAB	4	505	77	0.15	6.40	4.04
SALT LAKE	3	97	0	0.00	1.23	0.00
SANPETE	11	583	291	0.50	7.39	15.15
TOOELE	11	622	233	0.38	7.88	12.12
UTAH	12	1,146	116	0.10	14.53	6.06
WASATCH	4	505	19	0.04	6.40	1.01
REGIONAL TOTALS	45	3,460	738	0.21	43.85	38.39
SOUTHERN REGION						
BEAVER	2	427	19	0.05	5.42	1.01
GARFIELD	0	0	0	0.00	0.00	0.00
IRON	0	0	0	0.00	0.00	0.00
KANE	l	58	0	0.00	0.74	0.00
MILLARD	3	38	0	0.00	0.49	0.00
PIUTE	1	0	0	0.00	0.00	0.00
SEVIER	3	291	0	0.00	3.70	0.00
WASHINGTON	0	0	0	0.00	0.00	0.00
WAYNE	2	77	0	0.00	0.99	0.00
REGIONAL TOTALS	12	694	19	0.02	11.33	1.01
NORTHEASTERN REGION						
DAGGETT	0	0	0	0.00	0.00	0.00
DUCHESNE	7	485	58	0.12	6.16	3.03
UINTAH	7	583	194	0.33	7.39	10.10
REGIONAL TOTALS	14	1,069	252	0.24	13.55	13.13
SOUTHEASTERN REGION						
CARBON	0	0	0	0.00	0.00	0.00
EMERY	3	58	19	0.33	0.74	1.01
GRAND	2	38	0	0.00	0.49	0.00
SAN JUAN	0	0	0	0.00	0.00	0.00
REGIONAL TOTALS	5	97	19	0.20	1.23	1.01
UNKNOWN	3	38	0	0.00	0.49	0.00
STATE TOTALS	122	7,891	1,924	0.24	100.00	100.00

^{*}Total hunter trips from questionnaire returns.

Table 12. Summary of snowshoe hare bagged per hunter-day by region and county, 1988-95.

Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
Northern Besie		•						_
Northern Region								
Box Elder	0.78	0.33	0.54	0.38	0.52	0.45	0.82	0.14
Cache	0.21	1.10	0.56	0.30	0.26	0.42	1.30	0.11
Davis	0.40	1.50	0.00	0.03	0.00	0.00	0.00	0.60
Morgan	0.67	0.36	0.80	2.17	0.15	0.00	0.47	0.00
Rich	0.33	0.51	0.76	1.31	1.15	0.38	1.21	0.21
Summit	0.36	0.73	1.05	0.24	0.62	0.18	0.39	0.23
Weber	0.25	0.50	0.25	0.25	1.00	1.12	0.28	0.91
REGIONAL TOTALS	0.40	0.63	0.70	0.49	0.54	0.48	0.77	0.38
Central Region								
Juab	0.17	0.00	0.53	0.50	0.38	0.00	0.64	0.15
Salt Lake	0.48	0.38	0.00	0.22	0.08	0.00	2.00	0.00
Sanpete	0.68	0.64	1.08	0.78	0.43	0.67	1.02	0.50
Tooele	0.28	0.77	0.32	0.35	0.58	0.25	0.70	0.38
Utah	0.44	0.37	0.51	0.71	0.79	0.08	0.46	0.10
Wasatch	0.77	1.00	0.17	0.22	0.48	8.67	1.57	0.10
REGIONAL TOTALS	0.50	0.65	0.55	0.45	0.55	0.44	0.67	0.04
C4L D:	нососсосного остою од драда,	MAS MASS 0000000000000000000000000000000	000000000000000000000000000000000000000	***************************************	*800000			
Southern Region								
Beaver	0.00	0.00	0.50	0.00	0.00	0.00	1.50	0.05
Garfield	0.00	0.35	0.67	1.00	0.00	0.00	1.04	0.00
Iron Kane	0.00	0.00	0.00	0.00	0.67	0.00	1.05	0.00
	0.00	0.00	0.00	0.00	0.20	0.00	0.91	0.00
Millard	1.20	1.00	0.00	0.00	0.15	0.32	0.69	0.00
Piute	3.00	0.64	0.43	0.00	1.50	0.00	0.33	0.00
Sevier	0.75	0.55	0.96	0.61	0.78	0.44	0.67	0.00
Washington	2.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00
Wayne	0.00	0.50	0.39	0.44	1.25	0.25	1.06	0.00
REGIONAL TOTALS	0.47	0.50	0.62	0.56	0.70	0.30	0.93	0.02
Northeastern Region								
Daggett	1.96	1.00	0.50	0.14	1.00	0.43	1.52	0.00
Duchesne	0.63	0.54	1.33	0.18	0.23	0.22	1.43	0.12
Uintah	0.89	0.23	0.88	0.14	1.62	0.15	1.55	0.33
REGIONAL TOTALS	1.02	0.40	1.17	0.17	0.79	0.23	1.51	0.24
Southonatorn Danier	***********************	noon kaaraa qaaqaa qaaqaa	100000000000000000000000000000000000000					***************************************
Southeastern Region	0.46	1 00						
Carbon	0.46	1.00	0.71	0.21	0.63	0.29	0.89	0.00
Emery	0.94	0.54	0.37	0.45	0.33	0.60	0.90	0.33
Grand	0.00	0.00	2.00	0.00	0.00	0.00	1.21	0.00
San Juan	1.00	1.67	0.00	0.00	1.00	0.00	0.97	0.00
REGIONAL TOTALS	0.83	0.77	0.56	0.30	0.46	0.37	0.94	0.20
Unknown counties	0.42	0.00	0.00	0.00	0.00	3.60	0.00	0.00
CM3 MW MOM3 - C	0							
STATE TOTALS	0.53	0.61	0.70	0.40	0.60	0.39	0.35	0.24

Table 13. Percentage distribution of snowshoe hare harvest by region and county, 1988-95.

Region and	_				Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
_								
Northern Region								
Box Elder	3.11	10.57	6.62	14.43	10.76	9.55	35.73	5.05
Cache	11.40	5.15	4.78	2.49	4.93	1.09	0.00	2.02
Davis	0.78	0.00	0.37	0.00	0.00	0.33	0.00	3.03
Morgan	1.04	1.08	4.78	0.50	0.00	1.06	3.06	0.00
Rich	7.77	14.09	20.22	5.72	1.35	0.63	4.08	3.03
Summit	4.15	11.11	4.41	6.47	1.35	0.93	0.00	3.03
Weber	1.30	0.27	1.84	0.50	8.52	1.06	0.00	30.31
REGIONAL TOTALS	29.54	42.28	43.02	30.10	26.91	14.64	42.88	46.47
Central Region		<u> </u>					1 00	4 04
Juab	0.00	2.71	1.47	3.23	0.00	5.72	1.02	4.04
Salt Lake	0.78	0.00	0.74	0.25	0.00	0.13	0.00	0.00
Sanpete	9.33	7.05	11.40	2.49	1.79	3.57	10.21	15.15 12.12
Tooele	8.55	3.25	8.83	7.21	8.07	13.39	2.04	
Utah	3.89	4.88	5.52	11.44	2.24	8.50	9.19 4.08	6.06 1.01
Wasatch	6.22	0.27	3.68	2.99	23.32	0.23 31.54	26.54	38,39
REGIONAL TOTALS	28.76	18.16	31.62	27.61	35.43	31.34	20.54	30,37
Southern Region					0.00	0 31	0.00	1.01
Beaver	0.00	0.27	0.00	0.00	0.00	2.31	1.02	0.00
Garfield	1.81	1.08	1.10	0.00	0.00 0.00	0.86 2.02	0.00	0.00
Iron	0.00	0.00	0.00	0.50 0.25	0.00	1.45	0.00	0.00
Kane	0.00		0.00	1.24	4.48	4.86	0.00	0.00
Millard	1.55	0.00 0.81	0.00	0.00	0.00	0.30	0.00	0.00
Piute	1.81	7.05	10.30	5.22	3.14	2.98	5.10	0.00
Sevier	2.85 0.00	0.00	0.00	0.00	0.00	5.49	1.02	0.00
Washington	4.66	3.25	1.47	9.95	1.79	1.09	6.13	0.00
Wayne REGIONAL TOTALS	2.69	12:47	12.87	17.91	9.42	21.36°	13.27	1.01
REGIONAL TOTALS	2.09	1.5	14.01					
Northeastern Region								
Daggett	0.26	0.54	1.10	1.00	5.83	0.69	0.00	0.00
Duchesne	6.74	16.26	6.25	3.73	6.28	3.64	2.04	3.03
Uintah	2.33	3.79	1.84	16.92	4.93	6.64	4.08	10.10
REGIONAL TOTALS	9.33	20.60	9.19	21.64	17.04	10.98	6.13	13.13
***************************************								900000000000000000
Southeastern Region	l							
Carbon	10.88	2.71	1.47	1.24	1.79	10.28	11.23	0.00
Emery	7.51	2.71	1.84	1.24	1.35	4.13	0.00	1.01
Grand	0.00	1.08	0.00	0.00	0.00	1.92	0.00	0.00
San Juan	1.30	0.00	0.00	0.25	0.00	5.06	0.00	0.00
REGIONAL TOTALS	19.69	6.50	3.31	2.74	3.14	21.39	11.23	1.01
		00000000000000000000000000000000000000	-p		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Unknown counties	0.00	0.00	0.00	0.00	8.07	0.10	0.00	0.00
						100 00		100.00
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 14. Percentage distribution of snowshoe hare hunting pressure by region and county, 1988-95.

*Region and					Year			
County	1988	1989	1990	1991	1992	1993	1994	1995
<u>-</u>								
Northern Region								
Box Elder	10.16		13.69		16.67	9.35	31.07	8.62
Cache Davis	12.64		6.46		5.71	4.59	0.36	4.68
Morgan	1.62 0.32		0.19 0.95		0.00	0.35	0.71	1.23
Rich	5.18		12.93		1.95 3.00	0.53 1.41	3.21 2.50	0.25 3.45
Summit	9.08		7.41		6.31	3.00	2.14	3.45
Weber	3.89		0.76		0.30	3.00	0.36	8.13
REGIONAL TOTALS	42.91	28.21	42.40		33293	22,22	40.36	29.56
_	***************************************	*********************	/S&				XXXX.12000000000000000000000000000000000	
Central Region								
Juab	2.59		3.61		5.11	0.18	2.86	6.40
Salt Lake	2.70		0.00		1.95	5.47	0.00	1.23
Sanpete Tooele	8.00 6.27		4.56 7.03		3.45	1.06	4.29	7.39
Utah	8.43		6.65		7.51 8.71	12.52 11.29	5.36	7.88
Wasatch	5.72	3.76	1.14		3.75	1.06	9.64 3.21	14.53 6.40
REGIONAL TOTALS	33.72	26.96	23.00		30.48	31.57	25.63	43.85
04b								varvanda a na a na ana ana ana ana ana ana a
Southern Region	1 02	0 60						
Beaver Garfield	1.83	0.63	0.38		0.00	0.00	0.00	5.42
Iron	0.10 0.00	3.13 0.00	1.14		0.00	1.23	1.79	0.00
Kane	0.00	0.00	0.00		0.45	0.00	0.71	0.00
Millard	0.54	0.94	0.19	0.00	0.75 5.11	5.47	0.00	0.74 0.49
Piute	0.21	1.72	1.33		0.30	0.00	0.36 0.00	0.49
Sevier	1.29	3.13	5.13		4.05	2.82	4.29	3.70
Washington	0.10	0.16	0.00		0.00	0.00	3.57	0.00
Wayne	1.18	5.64	5.89	1.33	4.80	2.82	3.57	0.99
REGIÓNAL TOTALS	5.29		14.07		15.47	12.35	14.29	11.33
Nambasatan Basia	occess researches considered con-		***************		0.0000000000000000000000000000000000000		<i></i>	· · · · · · · · · · · · · · · · · · ·
Northeastern Region		0.16	0.56	2 00				
Daggett Duchesne	2.59 5.29	0.16	0.76	3.26	0.60	5.29	0.00	0.00
Uintah	3.02	7.52 6.27	8.56 3.04	13.78 5.19	9.61	11.29	4.29	6.16
REGIONAL TOTALS	10.91	13.95	12.36	22.22	6.31 16.52	13.05 29.63	2.50 6.79	7.39 13.55
	.						U. 13	
Southeastern Region	ì							
Carbon	1.40	6.58	2.66	2.81	1.20	2.47	11.79	0.00
Emery	3.67	8.46	5.13	1.63	2.25	0.88	1.43	0.74
Grand	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.49
San Juan	0.75	0.47	0.00	0.00	0.15	0.00	0.00	0.00
REGIONAL TOTALS	5.83	5.52	∞8.17	4.44	3.60	3.35	13.21	1.23
Unknown counties	1.29	0.00	0.00	0.00	0.00	0.88	0.00	0.49
STATE TOTALS	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 15. Statewide summary of snowshoe hare harvest statistics, 1975-95.

	Total	Total	Hunter-Days	Hares Per	Hares Per
Year	Hunters	Harvest	Afield	Hunter-Day	Hunter
1975	5,961	12,072	19,770	0.61	2.03
1976	8,502	15,500	20,367	0.76	1.82
1977	9,752	21,232	26,535	0.80	2.18
1978	8,205	34,535	30,155	1.15	4.21
1979	6,787	14,641	18,115	0.81	2.16
1980	4,048	7,603	11,140	0.68	1.88
1981	3,554	7,750	12,782	0.61	2.18
1982	4,245	9,257	13,073	0.71	2.18
1983	3,544	6,302	11,088	0.57	1.78
1984	3,796	6,455	10,840	0.60	1.70
1985	3,365	3,429	9,494	0.36	1.02
1986	3,277	3,544	9,541	0.37	1.08
1987	3,702	6,005	8,947	0.67	1.62
1988	4,725	8,231	15,444	0.53	1.74
1989	4,895	8,006	13,233	0.61	1.64
1990	4,095	7,593	10,825	0.70	1.85
1991	3,427	4,731	11,742	0.40	1.38
1992	3,732	7,144	11,836	0.60	1.91
1993	2,755	4,237	10,774	0.39	1.54
1994	1,565	1,722	4,922	0.35	1.10
1995	1,983	1,924	7,891	0.24	0.97
Totals	<u></u>				
(1975-95)	95,915	191,913	288,514	<u> </u>	
Averages					
(1975-94)	4,697	9,499	14,031	0.61	1.85

APPENDICES

APPENDIX A

WEATHER CONDITIONS

Weather information used in this report (Tables 1 & 2 and Figures 1 & 2) is from the office of the Utah State Climatologist and N.O.A.A. Climatological Data Periodical.

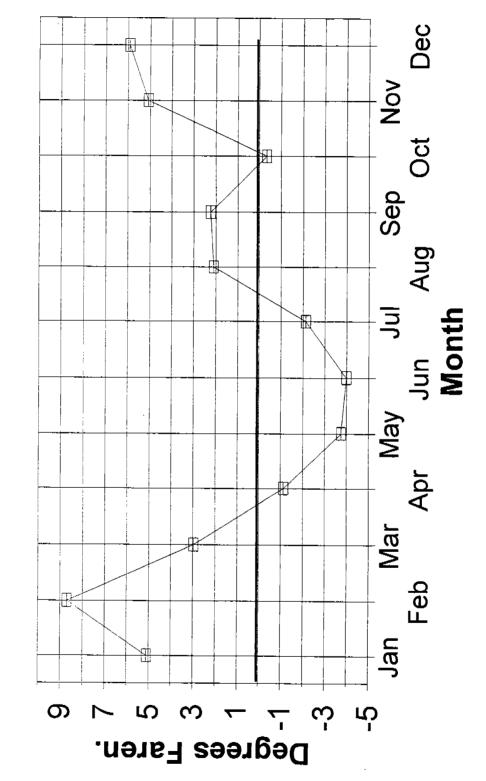
The 1994-95 winter weather was fairly mild in terms of precipitation and in terms of cold temperature. Above average precipitation fell in October and November 1994 and in January, 1995. In December 1994 and January 1995 temperatures were above average.

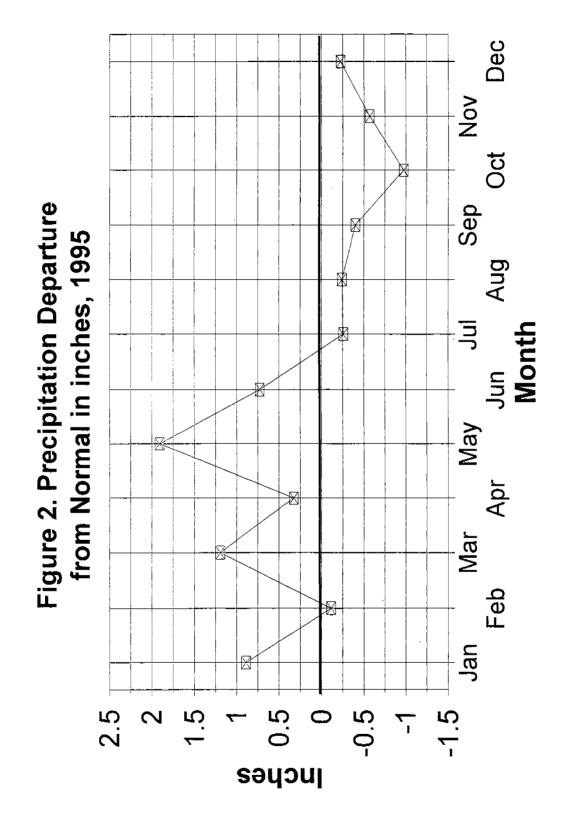
In the spring of 1995, March-June precipitation was above normal. July through August, 1995 precipitation was below normal. Temperatures were below normal April through July, 1995.

No.1 Western Normal Seb. 325 396 47.3 56.5 66.0 74.3 72.1 62.0 50.1 37.6 2 No.2 Dixe Normal Separture (degrees) Separture (deg	32.5 39.7 7.2 7.2 52.1 8.0 8.0 8.0 9.4	39.6 42.0 2.4 49.2 50.8	47.3			i						
nal ees) ral nal nal nal nal lees) ees) sin nal	-	39.6 42.0 2.4 49.2 50.8	47.3									
ees) nal nal nal nal nal nal nal nal nal nal	_	42.0 2.4 49.2 50.8 1.6	46.6	56.5	66.0	74.3	72.1	62.0	50.1	376	27.4	40.2
ees) nal nal nal nal nal lountains al sin nal sees)	40 64	2.4 49.2 50.8 1.6		53.0	61.2	71.8	73.1	63.7	48.6	42.4	, <u>,</u> ,	4.04 7.04
nal ees) ral nal nal nal nal lees) lees) sin nal	44.1 52.1 8.0 31.3 40.7 9.4	49.2 50.8 1.6	-0.7	-3.5	4.8	-2.5	1.0	1.7	.1.5 5.5	4.8	4.3	1.2
ees) ral nal nal nal nal nal nal nal al lees) sin nal	44.1 52.1 8.0 31.3 40.7 9.4	49.2 50.8 1.6										
ees) nal nal nal nal lees) ees) al al sin nal	52.1 8.0 31.3 40.7 9.4	50.8 1.6	56.6	65.7	75.6	81.7	79.4	71.9	6 09	48.0	39 5	40 2
ees) ral nal tral nal fountains al ees) sin nal	31.3 40.7 9.4	1 .6	55.1	62.6	71.7	21.1	82.5	75.1	62.8	53.8	44.3	61.5
ral nal ees) tral nal fountains al al sin nal	31.3 40.7 9.4		-1.5	-3.1	ر ق ق	-0.6	3.1	3.2	1.9	5.8	4.8	1.8
nal ees) htral nal fountains nal sin nal	31.3 40.7 9.4											
ees) htral nal fountains nal ees) sin nal	40.7 9.4	39.3	47.7	56.9	66.2	74.4	72.3	62.4	50.9	38.3	27.8	49.5
ees) nal 2 ees) fountains 2 nal 2 ees) sin 1 nal 1	9. 6	42.5	47.0	53.5	62.3	72.3	74.3	65.1	50.0	44.2	35.0	51.6
tral nal fountains nal sin nal		3.2	-0.7	-3.4	-3.9	-2.1	2.0	2.7	-0.9	5.9	7.2	2.1
ees) fountains nal ees) sin nal												
ees) fountains nal ees) sin nal	31.6	37.6	45.1	54.0	63.4	70.4	68.2	59.9	49.3	37.3	28.1	47.6
ees) nal ees) sin nal	40.0	39.6	43.3	49.5	58.2	67.9	70.0	62.0	49.5	42.4	32.6	48.7
fountains nal ees) sin nal	8.4	2.0	-1.8	-4.5	-5.2	-2.5	1.8	2.1	0.2	5.1	4.5	1.1
nal ees) sin nal ees}												
ees) sin nal ees}	24.7	31.7	40.6	49.6	58.2	65.6	63.6	54.9	44.7	32.5	22.8	42.5
ees) sin nal ees}	32.7	35.4	40.6	46.4	55.6	63.3	66.1	57.8	44.3	38.9	30.1	44.6
sin nal ees}	8.0	3.7	0.0	-3.2	-2.6	-2.3	2.5	2.9	-0.4	6.4	7.3	2.1
nal ees}												
ees}	24.0	36.3	46.8	56.2	65.3	72.2	8.69	60.2	48.3	34.0	20.5	45.8
ees}	35.6	41.2	45.3	51.9	61.7	69.4	71.4	61.8	47.1	38.1	29.1	48.2
	11.6	4.9	-1.5	-4.3	-3.6	-2.8	1.6	1.6	-1.2	4.1	8.6	2.4
No.7 Southeast												
Normal 26.9	34.2	41.9	50.5	0.09	70.1	76.7	74.2	65.2	53.4	40.2	29.5	51.9
1995 32.0	42.5	44.9	48.8	55.7	66.2	74.6	76.9	66.7	53.0	43.6	34.3	53.3
Departure (degrees) 5.1	8.3	3.0	-1.7	-4.3	-3.9	-2.1	2.7	1.5	-0.4	3.4	4.8	1.4
(0												
ıal	31.8	39.4	47.8	57.0	66.4	73.6	71.4	62.4	51.1	38.3	27.9	49.4
m	40.5	42.3	46.7	53.2	62.4	71.5	73.5	64.6	50.8	43.3	33.9	51.1
Departure (degrees) 5.1	8.7	3.0	-1.1	-3.8	-4.0	-2.1	2.1	2.2	-0.3	5.1	5.9	1.7

Wedner Division	Jan	Feb	Mar	Apr	Мау	Jun	IIIC	Mar Apr May Jun Jul Aug Sep	Sep	Oct	Nov	Dec	Total
No.1 Western													
Normal	0.53	0.58	0.85	0.89	0.98	0.71	0.73	0.83	0.79	0.81	0.68	0.58	8.96
1995	0.84	0.45	1.37	1.22	2.67	1.95	0.33	0.47	0.30	0.04	0.15	0.52	10.31
Departure (inches)	0.31	-0.13	0.52	0.33	1.69	1.24	-0.40	-0.36	-0.49	-0.77	-0.53	-0.06	1.35
No.2 Dixie													
Normal	1.32	1.29	1.67	06.0	0.63	0.31	0.90	1.19	98.0	0.78	1.19	1.01	12.05
1995	3,82	1.26	5.01	1.43	1.52	0.95	0.07	0.80	0.64	0.00	0.82	0.41	16.73
Departure (inches)	2.50	-0.03	3.34	0.53	68'0	0.64	-0.83	-0.39	-0.22	-0.78	-0.37	-0.60	4.68
No.3 North Central													
Normal	1.34	1.39	1.77	1.94	1.84	1.21	0.85	0.99	1.43	1.64	1.53	1.49	17.42
1995	2.55	1.24	3.35	1.99	4.91	2.23	0.85	0.5	0.85	0.47	0.85	1.76	21.54
Departure (inches)	1.21	-0.15	1.58	0.05	3.07	1.01	00.00	-0.49	-0.58	-1.17	-0.68	0.27	4.12
No.4 South Central													
Normal	0.98	1.01	1.37	1.07	0.98	09.0	1.07	1.38	1.18	1.05	1.07	1.02	12.78
1995	2.11	0.92	2.55	1.92	2.49	1.32	0.55	96.0	99.0	0.02	0.32	0.83	14.65
Departure (inches)	1.13	-0.09	1.18	0.85	1.51	0.72	-0.52	-0.42	-0.52	-1.03	-0.75	-0.19	1.87
No.5 Northern Mountains													
Normal	1.83	1.78	1.93	1,95	1.68	1.19	1.04	1.19	1.52	1.69	1.83	1.92	19.55
1995	2.57	1.57	3.24	1.71	4.49	2.04	1.34	0.82	1.07	0.67	1.28	2.00	22.80
Departure (inches)	0.74	-0.21	1.31	-0.24	2.81	0.85	0.30	-0.37	-0.45	-1.02	-0.55	0.08	3.25
No.6 Uintah Basin													
Normal	0.48	0.46	0.63	0.73	98.0	0.71	0.71	0.73	0.88	96'0	0.56	09.0	8.31
1995	0.38	0.46	0.22	1.05	2.92	0.91	0.63	0.92	0.63	90.0	0.10	0.09	8.37
Departure (inches)	-0.10	0.00	-0.41	0.32	2.06	0.20	-0.08	0.19	-0.25	-0.90	-0.46	-0.51	90'0
No.7 Southeast													
Normal	0.68	0.59	0.81	99.0	0.67	0,46	0.97	1.05	0.98	1.13	0.80	0.73	9.53
1995	1.12	0.42	1.64	1.12	2.01	0.89	0.70	1.22	0.67	0.01	0.17	0.18	10.15
Departure (inches)	0.44	-0.17	0.83	0.46	1.34	0.43	-0.27	0.17	-0.31	-1.12	-0.63	-0.55	0.62
STATE AVERAGES				i									
Normal	1.02	1.01	1.29	1.16	1.09	0.74	0.90	1.05	1.09	1.15	1.09	1.05	12.66
1995	1.91	0.90	2.48	1.49	3.00	1.47	0.64	0.81	0.69	0.18	0.53	0.83	14.94
Daniel Anna Carle and	0	77.0	7	(7	í	0	•	•	7	1	•	000

Figure 1. Temperature Departure from Normal, (degrees F) 1995





APPENDIX B

LICENSE SALES

Small game license sales by type and cost are listed in Table 1. The number of licenses sold for all types, except non resident small game and combination licenses, decreased slightly in 1995.

The proportion of Utah's population hunting small game is declining (Table 2). In the early 1970s about 10 percent of Utah's population was hunting small game. In 1995, only 4.0 percent of Utah's population hunted small game.

Table 3 identifies revenue generated to the Utah Division of Wildlife Resources from small game license sales. Small game program budgets run about half the revenue generated, with the other half going to support services such as law enforcement, administration, accounting, and public services.

Table 1. Statewide small game license sales information, 1954-95.

1954 12,990 \$3.50 5,170 \$2.00 561 \$15.00 79,574 \$	6.00 6.00 6.00 6.00
Year Issued Cost Issued <th< td=""><td>6.00 6.00 6.00 6.00</td></th<>	6.00 6.00 6.00 6.00
1954 12,990 \$3.50 5,170 \$2.00 561 \$15.00 79,574	6.00 6.00 6.00 6.00
	6.00 6.00 6.00
40EE 42.00E \$2.E0	6.00 6.00
	6.00 🛡
1956 12,102 \$3.50 5,735 \$2.00 524 \$15.00 80,968 \$	
1957 12,239 \$3.50 6,192 \$2.00 505 \$15.00 81,271 \$	~ ~ ~
1958 14,290 \$3.50 6,563 \$2.00 696 \$15.00 85,198 \$	6.00 🌰
1959 13,421 \$3.50 5,966 \$2.00 669 \$15.00 90,069 \$	6.00 🚄
1960 12,020 \$3.50 5,022 \$2.00 576 \$15.00 90,085 \$	6.00 💆
1961 12,177 \$3.50 6,108 \$2.00 617 \$15.00 88,180 \$	6.00 🛡
1962 12,953 \$3.50 6,536 \$2.00 607 \$15.00 91,412 \$	6.00 💣
1963 13,365 \$3.50 6,319 \$2.00 642 \$15.00 94,768 \$	6.00 🚄
1964 13,073 \$3.50 6,453 \$2.00 681 \$15.00 98,556 \$	6.00 💆
1965 12,913 \$3.50 6,755 \$2.00 716 \$15.00 100,410 \$	6.00 🗨
1966 13,854 \$3.50 7,477 \$2.00 725 \$15.00 103,849 \$	6.00 💣
	0.00
	0.00
	0.00
1970 19,564 \$4.50 15,827 \$2.50 1,009 \$20.00 100,467 \$	0.00
1971 20,681 \$4.50 16,044 \$2.50 1,000 \$20.00 102,284 \$	0.00
	0.00 🔽
1973 18,836 \$4.50 16,522 \$2.50 964 \$20.00 155,436 \$	0.00
1974 17,434 \$4.50 16,334 \$2.50 974 \$20.00 117,770 \$	0.00
1975 17,057 \$4.50 15,869 \$2.50 967 \$20.00 115,362 \$	0.00 🚄
1976 33,078 \$6.00 16,261 \$3.00 1,141 \$20.00 76,587 \$	8.00 💆
	18.00
	18.00 💣
	18.00 🚡
	23.00
1981 37,804 \$8.00 13,874 \$4.00 1,559 \$30.00 83,486 \$	23.00 🗬
1982 36,850 \$8.00 14,040 \$4.00 1,637 \$30.00 82,970 \$	23.00
1983 39,602 \$8.00 13,814 \$4.00 1,685 \$30.00 73,529 \$	23.00 🚡
1984 36,070 \$8.00 13,170 \$4.00 1,633 \$30.00 73,081 \$	23.00
	5.00
· · · · · · · · · · · · · · · · · · ·	55.00
1987 26,781 \$12.00 11,228 \$6.00 1,235 \$40.00 66,715 \$	35.00 🚡
	35.00
1989 25,845 \$12.00 5,769 \$6.00 1,422 \$40.00 74,274 \$	35.00
	35.00
1991 23,276 \$12.00 5,626 \$6.00 1,212 \$40.00 79,165 \$	35.00 🚡
	35.00
	25.00
	25.00
1995 24,219 \$12.00 4,403 \$6.00 1,379 \$40. <u>00 66,607</u> \$	25.00

Table 2. Actual (1971-1995) proportion of Utah population hunting small game.

	Utah	Resident Small Game	Proportion
Year	Population	Licenses Sold 1	Hunting Small Game
1971	1,101,000	101,421	9.2
1972	1,135,000	110,691	9.8
1973	1,169,000	115,129	9.8
1974	1,197,000	112,963	9.4
1975	1,234,000	108,636	8.8
1976	1,272,000	85,268	6.7
1977	1,316,000	86,549	6.6
1978	1,364,000	95,637	7.0
1979	1,416,000	100,116	7.1
1980	1,461,037	110,039	7.5
1981	1,524,830	103,041	6.8
1982	1,588,622	99,744	6.3
1983	1,652,415	93,303	5.6
1984	1,716,207	88,084	5.1
1985	1,780,000	94,991	5.3
1986a	1,665,000	82,777	5.0
1987a	1,678,000	85,099	5.1
1988	1,695,000	92,677	5.5
1989a	1,715,000	92,031	5.4
1990a	1,722,850	90,532	5.3
1991a	1,774,241	89,297	5.0
1992a	1,820,453	91,422	5.0
1993a	1,866,000	88,593	4.7
1994a	1,916,000	74,658	3.9
1995a	1,959,000	77,452	4.0

¹ Adjusted for waterfowl hunters subtracted from combination licenses, R.S.G. = Adjusted combination plus juvenile small game plus adult small game.

a Utah Population Estimate Committee Report for July 1 (Office of State Planning Coordinator)

Table 3. Small game license sales and income, 1971-95 (JSG=juvenile small game, RSG=adult resident small game, CMB=combination license, NRSG=nonresident small game)

<u>5</u>	ıse F			Number of	umber of Licenses Sold	Sold	Duck Stamps	Total Gro	ss Revenu	Total Gross Revenues Attributed to Small	d to Small	Game (\$)
CMB	_	VRSG	JSG(4)	RSG	CMB	NRSG	Sold(3)	JSG(4)	RSG	CMB(2)	NRSG	TOTAL(1)
4.50 10.00 2		20.00	16,044	20,681	102,284	1,000	37,588	20,055	93,064	200,557	20,000	313,676
10.00	(4	0.00	16,523	19,796	107,414	4,075	33,042	20,653	89,082	230,553	21,500	340,288
4.50 10.00 2		50.00	16,522	18,836	115,436	964	35,665	20,652	84,762	247,290	19,280	352,704
10.00	•	20.00	16,334	17,434	117,770	974	38,575	20,417	78,453	245,504	19,480	344,374
10.00	•	20.00	15,869	17,057	115,362	296	39,652	19,836	76,756	234,701	19,340	330,993
18.00	•	20.00	16,261	33,078	76,587	1,141	40,658	24,391	198,468	184,675	22,820	407,534
	•	20.00	15,795	36,473	74,600	1,270	40,319	23,692	218,838	176,204	25,400	418,734
	•	20.00	15,419	37,082	81,227	1,449	38,091	23,128	222,492	221,719	28,980	467,339
		20.00	14,200	36,721	84,450	1,575	35,255	21,300	220,326	252,862	31,500	494,488
	•	30.00	14,042	30,189	100,177	1,330	34,369	28,084	241,512	425,120	39,900	694,716
23.00	.,	90.00	13,874	37,804	83,486	1,559	32,123	27,748	302,432	331,805	46,770	661,985
23.00	(*)	00.00	14,040	36,850	82,970	1,637	34,116	28,080	294,800	315,597	49,110	638,477
23.00	••	30.00	13,814	39,602	73,529	1,685	33,642	25,620	305,249	257,670	50,134	588,539
	٠,	00'0	13,170	36,070	73,081	1,633	34,237	26,340	288,560	250,544	48,990	565,444
35.00	4	00.00	12,987	30,102	82,137	1,500	30,235	38,961	361,224	484,246	000,09	884,431
35.00	4	00'01	11,946	39,567	67,435	1,274	25,533	35,838	354,804	395,973	50,960	786,615
35.00	7	00'01	11,228	26,781	66,715	1,235	19,625	33,684	321,372	439,350	49,400	794,406
35.00	`	10.00	9,498	25,733	72,846	1,428	15,400	28,494	308,796	535,971	57,120	873,261
35.00		40.00	5,769	25,845	74,274	1,422	13,857	17,307	310,140	563,691	56,880	891,138
•		40.00	5,682	24,527	76,292	1,279	15,969	17,046	294,324	543,986	51,160	855,356
12.00 35.00		40.00	5,626	23,276	79,165	1,212	18,770	16,878	279,312	563,485	48,480	859,675
		40.00	5,431	21,852	78,940	1,195	14,801	16,293	262,224	598,417	47,800	924,734
12.00 25.00		40.00	4,887	20,899	78,030	1,150	15,223	14,661	250,788	585,989	46,000	897,438
0 25.00		40.00	4,551	25,792	59,854	1,223	15,539	13,653	309,504	413,459	48,920	785,536
12.00 25.00		40.00	4,403	24,219	66,607	1,379	17,777	13,209	290,628	455,584	55,160	814,581
1 Value does not include cougar, bear, band-tailed pigeon an	ear,	band-t	ailed pigeon	and wild tur	rkey permits	s, Upland (d wild turkey permits, Upland Game Habitat Stamp fees or commercial hunting area licenses	mp fees or	commercia	al hunting a⊩	rea license	,š

It does not include NRSG revenue-this is assumed to be primarily non-resident bear and cougar hunters.

from combination license sales when projecting revenue generated. The proportion of the combination license fee attributed 2 Combination license values are based on the assumption that all waterfowl hunters purchased only combination licenses. They may fish and hunt big game but they do not hunt any other small game. Therefore, duck stamp sales are subtracted to small game equals the resident small game license fee divided by the resident fishing license, plus the resident big game license fee, plus the resident small game license fee or \$9.33 for 1994.

3 Total Federal duck stamps sold does not include those sold during the second quarter, April-June, because persons purchasing stamps during this quarter tend not to be hunters.

4 Half of the juvenile small game license sales were attributed to waterfowl hunters. Federal duck stamps are not required of juveniles less than 16 years of age.

APPENDIX C

Surveys

Regional and statewide summary of effort expended on upland game summer surveys, 1972-95.

Generally hours spent and miles driven on upland game surveys in Utah have declined since 1972. This is the result of competing uses of time for biologists and conservation officers. In addition, the restriction to a 40 hour work week by the Federal Fair Labor and Standards Act has further eroded survey effort. When effort and results have reached a lower critical sample size, surveys have been eliminated.

Table 1. Regional and statewide summary of effort expended on upland game summer inventory, 1972-95.

REGION

1	Northern		Central		Southern	r.	Northeastern	tern	Southeastern	tern	STATE TOTALS	DTALS
Species	Miles Ho	Hours	Miles	Hours	Miles	Hours	Miles	Hours	Miles	Hours	Miles	Hours
Pheasant									;		,	
1972	469	:	963	1	752	;	535	t	297	ŧ	3,016	:
1973	322	:	691	1	740	:	488	ŀ	230	;	2,471	1
1974	479	:	819	;	848	;	508	ŧ	317	:	2,971	ŀ
1975	490	;	846	;	993	ı	515	:	393	:	3,237	:
1976	476	í	822	:	773	:	434	:	400	:	2,905	:
1977	484	;	731	;	790	:	554	:	343	:	2,902	:
1978	479	:	642	;	654	ì	512	:	588	;	2,875	:
1979	438	:	642	;	721	:	562	:	209	:	2,572	:
1980	358	;	672	;	750	;	546	:	270	;	2,596	;
1981	459	ı	525	i	801	ı	535	;	330	;	2,650	ŀ
1982	437	;	639	ì	583	;	477	ŀ	332	i	2,468	:
1983	260	:	442	i	780	ì	426	:	330	:	2,238	:
1984	444	ı	359	1	473	1	463	ł	166	;	1,905	;
1985	383		303	;	650	i	492	:	180	;	2,008	;
1986	455	;	617	1	699	:	520	:	270	;	2,531	:
1987	432		27.5	1	574	1	546	;	06	;	2,160	:
1985	727		436	: 1	604	;	469	1	96	:	1.933	:
1080	100	;	424	: :	AR.	: :	403	:	96	;	1.464	:
2007	2 2	:	200	1 1	6	;	240	,	6	;	1 454	:
1990	0 4	:	007	;	5 6	ł	376	ł	8 6	1	4 866	;
1881	094	:	0 10	:	2	;	7 0	ı	2	:	2,1	:
1882	413	:	6 i	ł	- ;	:	600	:	<u> </u>	:	0.00	:
1993	249	:	547	:	2	:	340	ŀ	08	;	905,	:
1994	180	1	468	:	ł	:	787	:	;	:	945	:
1995	150	;	454	:	:	:	285	1	:	:	883	:
Chukar				;		ļ		;	,	1	,	•
1972		91	1,423	131	920	37	1,012	69	984	90 Y	180,6	386
1973		<u>1</u> 9	1,494	167	7.5	2:	705	84 6	702	89	4,036	412
1974		स	1,591	107	564	4	440	30	1,115	67	3,835	278
1975		33	808	82	892	41	908	88	786	22	3,582	299
1976		75	964	110	465	32	727	67	687	99	3,718	350
1977		20	1,198	120	601	37	009	Σ	429	4	3,233	322
1978		28	459	42	135	4	315	23	536	52	1,804	159
1979		54	793	76	415	22	293	23	267	4	2,314	189
1980		89	1,668	124	235	12	0	0	53	9	2,239	214
1981	330	56	591	49	147	7	245	21	260	32	7	169
1982		34	571	26	475	35	260	37	5	თ	1,880	171
1983		15	190	17	20	7	488	\$	103	۲-	818	82
1984		81	303	32	1	ı	:	:	118	16	1,075	129
1985		73	453	36	;	:	i	;	174	12	863	121
1986		65	432	37	;	;	135	7	ì	:	961	116
1987	813 1	119	398	36	0	ო	305	32	175	23	1,691	213
1988		35	457	49	8	~	I	;	180	14	1,076	105
1989		17	505	30	7	œ	ı	;	1	12	765	67
1990		7	1,190	77	ı	ł	82	6 0	235	20	1,510	126
1991		0	311	18	0	0	0	0	225	=	536	79
1992	178	27	270	12	0	0	Ö	o	216	24	664	63
1993		:	:	ŀ	:	i	;	:	300	22	300	22
1994	:	:	:	ı	1	i	ŀ	ı	20	9	20	9
1995	:		:	i	:	;	:	i	:	:	:	:
2												

	Northern	_	Central		Southern	5	Morthoactern	219	Southosetorn		CT HTVI	<u>ر</u>
- colored	Male		CONTRA		2000	- 1	וופסווופס		Southeast		SIAIE IOIALS	ALS
Sado Gronso	MILES	Sunon	Miles	HOULS	Miles	Hours	Miles	Hours	Miles	Hours	Miles	Hours
197	1628	123	1 187	143	781	144	2 1 2 5	470	7000	777	6.074	č
1973	3 146	353	927	147	177	1 2	1 050	3.0	1,400	<u> </u>	7,500	76
1974	2.026	321	1.551	115	1881	193	706,-	248	200	124	300, 0	5
1975	1 254	249	. 296	133	717	326	1,004	336 336	900	7 5	0,000 0000	90,
1976	1.965	281	426	2 5	379	183	1881	222	200,1	. 4	5,637	073
1977	1.966	305	1.370	133	465	157	1 995	215	828	4	6.724	900
1978	1.408	267	541	124	490	152	1616	228	87.0	2 6	A 024	4 6
1979	1.051	150	200	132	563	143	1719	203	279	; 5	4313	200
1980	1,003	218	808	150	518	76	1.471	184	278	9	4.076	706
1981	619	194	691	66	285	57	771	163	377	65	2.743	552
1982	1,669	169	762	92	454	80	862	116	; ;	; ;	3.747	460
1983	610	158	720	164	284	51	992	125	108	10	2714	208
1984	1,411	278	283	82	289	54	530	55	15.	, ,	2,664	526
1985	2,164	169	481	74	410	4.55	999	84	106	; en	3.827	381
1986	1,024	197	281	39	169	43	948	76	146	14	2.568	28.
1987	1,939	205	172	37	286	20	1,114	124	195	. 4	3 706	434
1988	2,092	177	678	108	315	99	980		: :	: :	3.775	442
1989	465	108	360	56	46	19	557	2	167	24	1.595	268
1990	175	73	444	500	06	42	244	30	2	·	1023	241
1991	554	210	270	77	S	بر بر	90	7 2	98	· 52	0001	286
1992	;	126	96	44	265	20	193	, «	204	23	758	26.4
1993	;	82	36	32	;	¦ :	25) e-	130	23	234	5 5
1994	58	9	155	E	;	:	135	۽ ڊ		~	413	į
1995	117	86	1	: :	:	1	157	ट्ट	; ;	· :	274	- - - -
,												
Forest Grouse	ouse	;		;	•	!	,					
7/61	0/5,1	717	804	103	214	260	1,346	140	351	82	4,085	797
5/80	179	12/	91.	105	296	428	949	147	761	72	3,550	880
1974	967	152	924	157	157	461	1,090	66	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	35	1,503	216	427	27.1	1,108	140	1,127	134	5,681	1,112
1977	737	132	1,317	162	610	286	1,040	135	1,079	128	4,783	843
1978	1,300	297	1,171	129	432	219	1,083	147	626	114	4,612	906
6/61	948	\$	1,312	177	714	275	729	107	435	42	3,936	945
1961	276	201	1,250	158	160	230	202	74	592	39	2,765	702
1981	889	147	958	147	575	295	835	120	184	59	3,240	738
1982	206	7	1,488	157	;	354	742	11	:	:	2,736	969
1983	1,049	218	1,180	93	459	80	636	93	;	20	3,324	504
1984	615	157	364	9	230	78	:	:	ı	4	1,209	305
1985	858	202	436	25	564	90	ł	:	i	4	1,858	384
1986	997	127	380	₽	254	51	412	61	;	ŧ	2,043	280
1987	1,148	147	305	7.1	200	65	438	58	;	ŀ	2,091	347
1988	1,118	1	55	9	160	53	558	71	i	:	1,891	274
1989	795	109	635	69	45	m	573	75	286	33	2,334	289
1990	171	150	701	13	30	ო	185	91			1,087	357
1991	:	178	536	54	30	7	0	0	;	8	566	236
1992	362	104	167	52	0	0	5	40	105	20	644	18
1993	290	34	:	28	ì	;	4	က	243	45	574	110
1994								1				
	:	:	!	:	:	:	:	10	1	:	35	16

1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	1	Morthon		Control		Couthorn	ארפוסוא	Northoset	4,0	Couthooct	22	STATE TOTAL S	0 10.
46 9 342 30 675 39 870 63 120 8 1583 120 8 1583 120 8 1583 120 8 1 158	pecies		Hours	Miles	Hours	Miles		Miles	Hours	Miles	Hours	Miles	Hours
46 9 3 42 2 30 575 8 9 570 6 3 120 8 1,853 24 4 4 35 2 30 575 8 9 58 50 8 27 20 214 21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	tuail												
24 4 43 27 85 6 6 538 28 24 17 838 838 83 8	1972	46	တ	342	30	575	39	870	63	120	60	1,953	149
24 4 4.3 27 863 66 527 28 214 21 1361 25 107 206 29 503 62 597 44 75 10 1/482 26 1 10 206 29 503 62 597 44 76 10 1/482 26 1 10 206 29 503 62 597 44 76 10 1/482 26 1 10 10 10 10 10 10 10 10 10 10 10 10 1	1973	80	9	264	35	32	₩	538	38	25	17	939	108
27 8 10 23 841 64 584 43 230 12 1789 22 4 351 39 645 544 44 250 100 12 1789 22 4 351 39 445 42 341 46 60 16 1129 58 11 186 12 247 34 46 60 16 1129 58 11 186 12 247 34 46 60 16 1129 58 11 186 12 34 46 60 10 9 33 6 11 186 12 34 47 46 60 10	1974	24	4	43	27	853	99	227	78	214	7	1,361	146
81 10 206 29 503 62 597 44 75 10 1442 22 4 319 26 29 503 62 597 44 75 10 1442 28 11 259 16 553 61 341 46 88 17 1431 28 11 259 16 553 61 341 46 88 17 1431 28 11 26 23 240 36 41 346 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1975	27	€	107	23	841	64	594	43	230	12	1,799	150
22 4 351 359 445 42 341 26 60 16 1/2!9 28 11 180 12 2 240 36 41 346 32 15 16 1023 28 11 180 12 2 240 36 41 346 32 16 1003 29 11 180 12 2 240 36 41 346 32 16 1003 20 0 0 13 1 1 2 2 2 2 2 4 3 36 31 36 31 36 31 36 20 0 0 0 1 0 0 2 2 37 23 6 26 12	1976	8	9	206	29	503	62	597	4	75	2	1,462	155
1	1977	22	₹	351	39	445	42	341	56	09	16	1,219	127
88 11 95 7 478 41 346 32 16 6 1002 89 11 180 12 240 34 340 35 16 6 1002 89 11 180 12 240 41 394 44 61 995 8	1978	;		239	18	563	61	541	46	88	17	1,431	142
36 9 266 23 240 36 410 34 0 961 962	1979	89	Ŧ	95	7	478	14	346	32	15	9	1.002	97
88 11 180 12 229 43 36 31 0 0 3 933 6 5 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	1980	38) or	265	23	240	36	410	34	: 0		951	102
9 9 15 14 15 15 14 15 15 14 15 15 15 15 15 15 15 15 15 15 15 15 15	1981) K	· -	180	12	329	43	366	; ; ;) er	933	100
5 9	- 60	3 -	: c	7 2		25.5	2 5	47.8	- -		> <	220	200
To a series of the control of the co	1007	5 4	> 0	2 6	<u>.</u>	1 0 4	1	200	‡ %	,	o	920	101
Table 1	1995	o	D.	?	D 0	700	- S	067	94	>	>	000	2 5
Partrigge	1984	1	:	78	20	266	40	;	ï	:	:	348	φ. 2
The state of the s	1985	:	7	82	ĸ	252	33	;	;	:	:	334	40
1 1 20 2 257 29 6 12	1986	1	:	9	2	306	28	1	;	;	:	316	30
0 5 7.7 37 37 96 12 7.7 17 17 18 12 7.7 17 17 18 12 7.7 17 18 12 7.7 17 18 12 7.7 17 18 12 7.7 17 18 12 7.	1987	:	-	70	7	257	29	į	ŀ	;	:	277	32
Partridge	1988	-	40	:	ï	277	37	96	12	:	;	373	54
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1989	. !	: :	;	:	145	. e	72		1	:	217	7
Partridge	1000	!	;	;	į	24		! :	. 64	;	1	5	-
Partridge 1,255 126 1,255 127 1,454 144 155 156 157 166 17 17 17 17 17 17 17 17 17 17 17 17 17	1001	: c			· -	5 =		ğ	• <	_	5		, k
Partridge	100		۰ د	: c	- c		, c	} ;	+	, <u>5</u>		3 2	
Partridge 1,256 126 1,443 156 127 1,445 156 128 140 140 140 140 140 140 140 140 140 140	1007	•	5	•	•	•	, e	, K	. v	2		2 %	<u>-</u>
Partridge 1,255 126	100	;	:	ŀ	•	:	.	3	,	•	•	3	<u> </u>
Partridge 1,055 126 1,055 1,00	100	:	:	ł	l	ł	•	Ş	٠.	ł	!	1 6	•
Partridge 1,255 126 1,265 126 1,265 1,643 176 191 191 191 191 191 191 191 191 191 19	CR.	i	;	:	:	:	+	n o	9	:	:	n o	מ
1,265 126 1.2 1,255 1,255 1,043 1,049 1,0		Partridge											
1,643 156 12 4 1,645 1,035 176 14 2 1,049 1,035 176 14 2 1,049 940 83 113 21	1972	1,255	126	;	:	;	:	;	ŀ	:	;	71	126
1,035 176 14 2	1973	1,643	156	72	4	:	:	1	1	:	:	1,655	160
344 64 0 0 1,053 940 83 113 21 1,053 1,045 90 197 17 <	1974	1,035	176	4	7	:	:	1	;	:	;	1,049	178
940 83 113 21 1,053 1,065 90 197 17 1,270 4,065 90 197 17	1975	344	5	0	0	:	:	1	:	;	•	3 4	64
1,445 156 125 5 1,270 1,065 90 197 17 <td>1976</td> <td>940</td> <td>83</td> <td>113</td> <td>77</td> <td>:</td> <td>;</td> <td>I</td> <td>ł</td> <td>ì</td> <td>ŀ</td> <td>1,053</td> <td>104</td>	1976	940	83	113	77	:	;	I	ł	ì	ŀ	1,053	104
1,065 90 197 17 <td>1977</td> <td>1,145</td> <td>156</td> <td>125</td> <td>22</td> <td>:</td> <td>:</td> <td>;</td> <td>ì</td> <td>:</td> <td>:</td> <td>1,270</td> <td>161</td>	1977	1,145	156	125	22	:	:	;	ì	:	:	1,270	161
440 27 37 3 </td <td>1978</td> <td>1,065</td> <td>8</td> <td>197</td> <td>17</td> <td>:</td> <td>;</td> <td>;</td> <td>ì</td> <td>ŀ</td> <td>:</td> <td>1,262</td> <td>107</td>	1978	1,065	8	197	17	:	;	;	ì	ŀ	:	1,262	107
250 55 50 6 </td <td>1979</td> <td>440</td> <td>27</td> <td>37</td> <td>m</td> <td>;</td> <td>:</td> <td>i</td> <td>ł</td> <td>;</td> <td>;</td> <td>477</td> <td>30</td>	1979	440	27	37	m	;	:	i	ł	;	;	477	30
270 23 65 3 </td <td>1980</td> <td>250</td> <td>22</td> <td>20</td> <td>9</td> <td>;</td> <td>:</td> <td>;</td> <td>;</td> <td>·</td> <td>ŀ</td> <td>300</td> <td>6</td>	1980	250	22	20	9	;	:	;	;	·	ŀ	300	6
324 39	1981	270	23	65	'n	:	:	;	i	:	;	335	56
815 221 .	1982	324	95	; :	;	:	:	;	1	:	:	324	39
815 221 <td>1983</td> <td></td> <td>.</td> <td>:</td> <td>:</td> <td>:</td> <td>;</td> <td>ı</td> <td>ł</td> <td>:</td> <td>:</td> <td></td> <td>9</td>	1983		.	:	:	:	;	ı	ł	:	:		9
114 38 114 114 213 44 114 114 300 40 10 10 10 393 30 11 11 11 11 393 30 11 11 11 11 11 11 10 10 11<	1084	8. 14.	22	;	;	;	;	ì		;	;	815	221
213 44	1001	2 7	2			: :	1		. ;	; ;	¦ ¦	114	ĕ
346 30 10 1	1006	, ç	3 5	! ·	1 :	.	\	: 1	: :	1 1		77	3 7
346 30 10 1	7 000	2 6	‡ \$	I	1	1	1	ł	ł	ı	ł	2 6	Ş
340 30 10 1 1 1 1 20 320 353 30 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	000	200	5 5	; ;	١,	:	:	;	:	:	:	000) t
393 30	9961	<u>د</u> د	ر د	2	-	:	1	1	:	ı	:	370	, (
393 30	1989	ə {	- ;	ŀ	;	ŀ	:	;	;	ł	ı	- 8	- 8
1. 41 0 0 0 1. 83 40 2 1. 1. 1. 1. 40 1. 42 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	1990	393	믉 :	:	ŀ	:	:	:	:	:	;	282	<u>ئ</u> :
83 40 2 40 42 <td>1991</td> <td>:</td> <td>4</td> <td>.</td> <td>۰</td> <td>:</td> <td>:</td> <td>;</td> <td>;</td> <td>;</td> <td>;</td> <td>- !</td> <td>4</td>	1991	:	4	.	۰	:	:	;	;	;	;	- !	4
. 42	1992	;	æ	40	7	:	:	;	:	;	ì	04	
	1993	:	42	;	;	;	:	;	0.2	;	;	:	42
12 1 1 1 1 1	1994	:	∞	·	1	;	:	:	:	;	;	;	œ
	1995	i	7	;	;	;	;	ì	:	;	;	i	7

			Control		Coughon		Alendhacean	1	Carrette		POT LIVE	20.00
0010040	2	1	Centra		Souther		Northeast	ern.	Southeastern	Lia.	SIMIE ICIALS	ALS
Wild Turkey	MIRS	Sinon	MHES	nonis	Miles	Hours	Miles	Hours	Miles	Hours	Miles	Hours
1972	:	ŀ	;	;	73	62	:	;	290	54	363	116
1973	:	:	;	:	143	=	:	:	:	; ;	143	=======================================
1974	:	:	:	:	0	0	ı	;	799	64	799	64
1975	·	:	;	;	215	18	·	:	792	100	1,007	118
1976	!	:	ī	:	125	16	;	,	362	45	487	61
1977	:	:	;	:	193	29	;	ŀ	421	58	614	87
1978	ï	:	:	1	;	:	:	•	204	55	204	55
1979	;	:	:		;	:	;		190	14	190	4
1980	;	;	:	:	:	ŧ	:	;	;	;	:	ł
1981	;	;	ŀ	:	ı	;	;	;	:	;	;	;
1982	:	;	ı	;	;	;	1	;	;	ŀ	;	;
1983	:	:	;	;	i	:	:	:	:	;	;	;
1984	:	:	:	;	;	;	:	;	;	;	ŀ	;
1985	ï	:	;	;	;	:	1	ŀ	:	:	:	;
1986	ŀ	:	;	:	:	;	:	1	4	15	4	15
1987	ï	:	:	1	ŀ		ı	1	ı	;	;	;
1988	;	1	:	:	:	ì	:	:	;	;	:	;
1989	;	:	:	;	:	:	:	ŀ	;	;	:	:
1990	:	;	:	;	:	:	:	;	;	:	;	:
1991	:	:	155	89	:	:	:	ï	150	15	305	83
1992	:	:	100	16	;	:	:	ł	35	9	135	22
1993	:	:	;	:	;	:	57	က	117	6	174	12
1994	:	ŀ	;	:	;	:	ı	;	•	;	:	ı
1995	:	:	:	:	:	:	:	:	:	;	1	i
Cottontail Rabbit	Rahhit											
1972	510	1	979	;	939	;	360	;	7,7	;	2643	
1973	337	† ;	242	;	220	ł	200	i	2 6	:	5,04	ł
1074	270	:	107		1040	!	24.0	;	0.5	:	000,	1
1076	3 5	ľ	5 5	:	7,01	:	2 6	:	740	;	2,402	:
1076	200	:	107	:	1,53,1	:	040	:	717	:	2,830	ŀ
1070	200	1	767	:	1,362		300	:	526	i	3,088	:
7707	000	:	707	!	675,1	:	900	ŀ	920	:	2,907	ŀ
20.0	785	;	254	1	360,1	;	300	:	761		2,745	:
1979	270	1	270	;	903	;	400	:	280	;	2,423	;
1980	06	;	265	:	655	:	359	:	540	:	1,909	;
1981	270	:	270	:	903	;	400	1	580	;	2,423	i
1982	240	:	240	:	722	:	298	;	602	;	2,102	i
1983	06	:	90	:	822	;	340	ï	590	1	1,932	;
1984	:	:	:	;	177	;	356	i	340	:	196	;
1985	:	:	;	;	175	ŀ	631	:	400	:	450	:
1986	240	:	148	:	534	;	358	:	330	ı	1,610	;
1987	150	:	120	:	699	:	373	:	240	;	1,552	;
1988	:	;	;	;	129	:	604	:	379	1	360	i
1989	06	;	99	;	90	:	266	:	360	i	872	;
1990	150	;	62	:	97	:	210		360	;	879	;
1991	96	:	33		1	1	105	;	330	i	558	;
1992	9	:	143	:	90	1	204	i	360	;	857	:
1993	ł	ı	183	:	ï	f	207	:	360	:	750	i
1994	ł								,		9	
, , , ,	:	:	:	:	ī	:	148	:	:	:	148	;

APPENDIX D: Season dates, bag limits and areas open by upland game species, 1995.

Species	Season Dates	Daily Bag Limit	Possession Limit	Areas Open
Pheasant	Nov.4-Nov.19	9 2	4 (2 bag limits)	*Statewide, except closed areas.
	Nov.4-Dec.3	2	4 (2 bag limits)	*All state and federal land (including private land leased by the Division subject to restrictions and closures imposed by administering agencies) in Carbon, Duchesne, Emery, Grand, Juab, Millard, San Juan, Sanpete, Sevier, Tooele and Uintah counties. *In Utah County, the Powell Slough and Goshen Warm Springs Wildlife Management areas as posted and marked. *In Box Elder County, the Box Elder County Posted Hunting Unit as posted and marked.
Mourning Dove	Sept. 1-30	10	20 (2 bag limits)	*Statewide, except closed areas.
Band-Tailed Pigeon	Sept. 1-30	5	10 (2 bag limits)	*Beaver, Garfield, Grand, Iron, Kane, Millard, Piute, San Juan, Sanpete, Sevier, Utah, Washington and Wayne counties.
Chukar Partridge	Sept.16-Nov.	30 5	10 (2 bag limits)	*Beaver, Cache, Daggett, Davis, Iron, Millard, Morgan, Rich, Sanpete, Wasatch and Weber counties; *Those parts of Beaver, Box Elder, Iron, Juab, Millard, Salt Lake and Utah counties east of I-15; *That part of Sevier County north of I-70.
	Sept.16, 199		10 (2 bag limits)	*Carbon, Duchesne, Emery,

Species	Dates	aily Ba Limit		Areas Open
Sage Grouse	Sept. 9-12	2	4 (2 bag limits)	*Garfield, Iron, Piute, and Wayne counties; *That part of Beaver County south of SR-21 from Beaver on the east to the Utah- Nevada border and east of I-15.
	Sept. 9-17	2	4 (2 bag limits)	*Daggett, Grand, and Uintah counties; *That part of Sevier County south and west of I-70 and U.S89; *That part of Duchesne
		1	2 (2 bag limits)	County north and east of the Duchesne River; *That part of Box Elder County west of the Locomotive Springs- Snowville-Stone, Idaho road, Rich County.
Forest Grouse (blue and r	Sept.9-Nov.30	4	8 (2 bag limits	*Statewide, except closed areas.
Quail (California and Gambel's)	Nov.4-Nov.19	5	10 (2 bag limits)	*Box Elder, Carbon, Daggett, Davis, Emery, Grand, Juab, Kane, Millard, Piute, Salt Lake, San Juan, Sevier, Tooele, Utah, and
	Nov.4, 1994 - Dec. 31, 1995	5	10 (2 bag limits)	Weber counties. *Duchesne, Uintah, and Washington counties.
Hungarian Partridge	Sept.16-Nov.30	5	10 (2 bag limits)	*Cache, Davis, Morgan, Rich, Summit, and Weber counties; *Those portions of Box Elder and Juab counties east of I-15;
	Sept 16, 1995 Jan. 31, 1996	5	10 (2 bag limits)	*Tooele County; *That part of Box Elder and Juab counties west of I-15.

Sharp-tailed grouse

*The entire state is closed to hunting of sharp-tailed grouse.

APPENDIX D (continued)

Species	Season Dates	Daily Bag Limit	Possession Limit	Areas Open
White-tailed Ptarmigan	Sept.9-Oct.	10 4	8	*Daggett, Duchesne, Summit and Uintah counties.
Cottontail Rabbit	Sept.9, 199 Feb.29, 199		20 (2 bag limits)	*Statewide, except closed areas.
Snowshoe Hare	Sept.9, 199 Feb.29, 199		10 (2 bag limits)	*Statewide, except closed areas.

Jackrabbit (white-tailed

*Jackrabbits are not protected in Utah. They are not under Wildlife Board authority and may be hunted without a license, & black-tailed) year-round and with any weapon.

WILD TURKEY

RIO GrandE

HUNT NAME	HUNT #	SEASON DATES	# OF PERMITS	SEASON LIMIT	AREAS OPEN
Beaver (early)	101a	Apr.13- 24, 1996	20	One male	Boundary begins at the junction of I-70 and Highway SR-89; then southerly on SR-89 to the Garfield-Piute county line, then westerly along this county line to the Beaver-Iron county line; then westerly along this county line to I-15; northerly on I-15 to I-70; easterly on I-70 to SR-89.
Beaver (late)	101b	Apr.27- May 19, 1996	20	One male	
*Duchesne County	102	Apr.13- May 19, 1996	10	One male	All of Duchesne County.
*Emery County	103	Apr.6- May 19, 1996	8	One male	All of Emery County west of highway US-6 and SR-24.
*Grand County	104	Apr.6- May 19, 1996	8	One male	Boundary begins at the junction of I-70 and highway SR-128; then

HUNT NAME	HUNT #	SEASON DATES	# OF PERMITS	SEASON	ADEAS ODEN
NAME	#	DATES	PERMITS	LIMIT	AREAS OPEN south on SR-128 to a point one mile south of the Dolores River; east on a line one mile south of the Dolores River to the Utah-Colorado state line; north on the state line to I-70; west on I-70 to SR-128.
Milford	105	Apr.13- May 19, 1996	5	One male	Boundary begins at Milford, Utah; northerly on SR-257 to Negro Mag Wash; then east on Negro Mag Wash to Cunningham Wash; then south on Cunningham Wash to Wildcat Creek; then sout on Wildcat Creek to Indian Creek; then south on Indian Creek to SR-21 then west and north on SR-21 to Milford.
*Morgan- South Rich	106	Apr. 6- May 19, 1996	5	One male	Morgan, Rich, Summit, and Weber counties. Boundary begins at the junction of Interstates 84 and 80 near Echo; the northeasterly on I-80 to the Utah-Wyoming state line; north along this state line to Highway SR 16; north on SR-16 to Highway SR-39 near Woodruff; west on SR-39 to Highway SR-167 (Trappers Loop Road); south on SR-167 to Highway SR-30 at Mountai Green; West on SR-30 to I-84; east on I-84 to I-80.
*Pine Valley (earl	107a y)	Apr.13-24, 1996	20	One male	Boundary begins at the junction of I-15 and SR-56; then westerly on SR-56 to SR-18; then southerly on SR-18 to I-15; then northerly on I-15 to SR-56.

Rio Grande (c			# 65	003 00°	
HUNT NAME	HUNT #	SEASON DATES	# OF PERMITS	SEASON LIMIT	AREAS OPEN
*Pine Valley (late)	107B	Apr. 27- May 19, 1996	20	One male	
*Uintah County	108	Apr. 13- May 19, 1996	8	One male	All of Uintah county except that portion south of the White River and east of the Green River below the White River confluence.
No. Utah (early)	109a	Apr. 6-18, 1996	10	One male	That part of Utah County east of I-15, north of U.S6, and east of U.S89 from Thistle Junction south to the Utah-Sanpete county line.
No. Utah County (late)	109b	Apr. 20- May 19, 1996	15	One male	
Ogden	110	Apr. 6- May 19, 1996	10	One male	Weber, Box Elder, Cache, and Morgan counties. Beginning at Hyrum; then easterly on SR-101 to the Ant Flat Road (at Hardware Ranch); southerly on this road to SR-39; westerly and southerly on SR-39 to SR-167 (the new Trappers Loop Road); southerly on this road to I-84; westerly on I-84 to I-15; northerly on I-15 to exit 364 and U.S91; easterly and northerly on U.S91 to SR-101 easterly on this highway to Hyrum.
Abajo Mountains	111	Apr. 27- May 31, 1996	5	One male	Boundary begins at Monticello; then east on Highway U.S. 666 to the Utah-Colorado state line; south on this line to the Navajo Indian Reservation boundary; west on this boundary to South Cottonwood Creek; north along this creek and through Allen, Chippean, Deep and Mule Canyons to the causeway; north from

HUNT	HUNT	SEASON	# OF	SEASON	
NAME	#	DATES	PERMITS	LIMIT	AREAS OPEN
					the causeway through Trough Canyon to North Cottonwood Creek; north on this creek to SR-211; east on this highway to U.S191; south on this highway to Monticello.
West Pine Valley	112	Apr.13- May 21, 1996	5	One male	
Monroe Mountain	113	Apr. 13- Mary 21, 1996	5	One male	Piute and Sevier counties; boundary begin at Junction, Utah and Highway U.S89; north of U.S89 to Sigurd, Utah; south on SR-24 to Highway SR-62; south on SR-62 to the junction of SR-62 and SR-22; west on SR-62 to Junction, Utah.
MERRIAM'S					
HUNT NAME	HUNT #	SEASON DATES	# OF PERMITS	SEASON LIMIT	AREAS OPEN
Boulder Mountain (ea	201a	Apr. 27 May 7, 1996	75	One male	Boundary begins at the junction of SR-62 and SR-89 near Kingston, Utah; then southerly on SR-89 to the Pink Cliffs Road between Glendale and Cannonville; then easterly on the Pink Cliffs Road to SR-12; then easterly and northeasterly on SR-12 the Burr Trail Road; the easterly on the Burr Trail Road to the Capito Reef National Park boundary; then northerly along the park boundary; to SR-24; then westerly on SR-24 to SR-62; then southerly on SR-62 to SR-89.

HUNT NAME	HUNT #	SEASON DATES	# OF	SEASON	
		DATES	PERMITS	LIMIT	AREAS OPEN
Boulder Mountain	201b (late)	May 11- May 31, 1996	75 	One male	
*Kolob	202	Apr. 27- May 31, 1996	35	One male	Area includes everything within the following description except for Zion National Park land; boundary begins at the junction of I-15 and SR-17; then easterly on SR-17 to SR-1 to the Zion National Park's east boundary; then northerly along the east boundary to the park's north boundary; then westerly along the park's north boundary; then westerly along the park's north boundary to Deep Creek; then northerly on Deep Creek to Crystal Creek to the Cedar Mountain Road to I-15; then southerly on I-15 to SR-17.
Zion (early)	203A	Apr. 27- May 7, 1996	75	One male	Boundary begins at the junction of I-15 and SR-20; then southerly on I-15 to the Cedar Mountain Road; then southerly on the Cedar Mountain Road to Crystal Creek; then southerly on Crystal Creek to Deep Creek; then southerly on Deep Creek to the Zion National Park boundary; then easterly on the park boundary to the Washington-Kane County line; then southerly on the county line to SR-9; then easterly on SR-9 to SR-89; then northerly on SR-89 to SR-20; then westerly on SR-20 to I-15.
Zion (late)	203b	May 11- May 31, 1996	75	One male	
LaSal	204	Apr. 27- May 31, 1996	20	One male	Boundary begins at the junction of Highway

MERRIAM'S	\)				
HUNT	HUNT	SEASON	# OF	SEASON		
NAME	#	DATES	PERMITS	LIMIT	AREAS OPEN	
		<u></u>			SR-128 and Highway	

US-191; then south on this highway to Highway SR-46; east on this highway to the Lisbon Valley Road; southeast on this road to the Island Mesa Road; east on this road to the Utah-Colorado stateline; north on this state line to a point one mile south of the Dolores River; west on a line one mile south of the Dolores River to SR-128; southwest on SR-128 to U.S.-191.

^{*}Hunts comprised of all or largely private property.
Hunters should obtain written permission to access
property from the landowner before applying for the hunt.

APPENDIX E. Summary of upland game harvest questionnaire returns, 1962-95.

	Questionnaires	Total		Useable		Licensees Who
Year	Mailed	Returns	Percent	Returns	Percent	Did Not Hunt
1962	10,068	4,122	40.9	3,433	34.1	22.0%
1963	11,058	5,062	45.8	4,325	39.1	21.0%
1964	10,718	4,840	45.2	4,180	39.0	23.0%
1965	11,917	6,232	52.3		0.0	34.0%
1966	13,131	5,734	43.7	5,734	43.7	34.6%
1967	12,012	5,764	48.0	5,764	48.0	25.1%
1968	14,068	6,138	43.6	6,138	43.6	25.6%
1969	15,036	6,429	42.8	6,429	42.8	28.0%
1970	14,730	6,639	45.1	6,639	45.1	38.8%
1971	15,149		43.2		0.0	
1972	15,272			6,399	41.9	
1973	17,572			7,999	45.5	
1974	27,379	9,157	33.4	8,027	29.3	-+
1975	26,657	10,880	40.8	9,132	34.3	
1976	21,250	7,889	37.1	6,226	29.3	
1977	20,984	9,329	44.5	8,099	38.6	
1978	24,733	7,575	30.6	6,529	26.4	
1979	27,616	10,498	38.0	9,274	33.6	26.4%
1980	27,952	9,857	35.3	8,496	30.4	33.1%
1981	13,925	7,941	57.0	6,367	45.7	31.4%
1982	22,609	10,167	45.0	8,734	38.6	27.0%
1983	23,430	10,324	44.1	9,497	40.5	28.7%
1984	12,026	6,455	53.7	6,324	52.6	31.1%
1985	10,772	5,904	54.8	5,843	54.2	35.2%
1986	11,103	5,329	48.0	5,256	47.3	34.2%
1987	10,022	4,294	42.8	4,272	42.6	30.1%
1988	15,350	6,650	43.3	6,527	42.5	35.6%
1989	12,894	5,135	39.8	5,105	39.6	36.7%
1990	12,236	5,264	43.0	5,175	42.3	39.1%
1991	15,054	6,419	42.6	6,212	41.3	42.7%
1992	16,472	6,207	37.7	5,977	36.3	45.0%
1993	16,534	6,293	38.1	5,442	32.9	42.6%
1994	15,526	5,433	35.0	5,131	33.0	45.1%
1995	14,777	4,951	33.5	4,866	32.9	41.7%