

# UTAH UPLAND GAME ANNUAL REPORT

## 2016–17



Publication No. 17-17



# **Utah**

# **Upland Game**

# **Annual Report**

## **2016–17**

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Annual Performance Report for Federal Aid Project W-65-M-64 & 65

State of Utah  
Department of Natural Resources  
DIVISION OF WILDLIFE RESOURCES

**Gregory Sheehan**  
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*

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## **DEFINITIONS**

**General upland game:** Upland game species that can be hunted with a basic hunting or combination license and do not require any additional, species-specific permit. Upland game species in this category include American crow, chukar partridge, cottontail rabbit (desert and mountain), doves (mourning and white-winged), forest grouse (dusky and ruffed), gray (Hungarian) partridge, quail (Gambel's and California), ring-necked pheasant, and snowshoe hare.

**Special permit upland game:** Upland game species for which an additional, species-specific hunting permit is required, in addition to a basic hunting or combination license. Species in this category include band-tailed pigeon, greater sage-grouse, sandhill crane, sharp-tailed grouse, white-tailed ptarmigan, and wild turkey.

**Year:** This annual report covers the state fiscal year period July 1, 2016 through June 30, 2017 (hereafter referred to as 2016–17). All upland game surveys, inventories, and hunting seasons within this time frame are presented here. This report presents all data from the hunting seasons that were outlined in the 2016–17 Upland Game and Turkey Guidebook. Year designations in specific tables refer to the actual time frame of that survey/hunting season. For example, hunting seasons that occurred in the fall or the spring will have single year designations (e.g., 2016 or 2017, respectively), while fall/winter seasons will have an overlapping year designation (e.g., 2016–17).

## **SAGE-GROUSE AND SHARP-TAILED GROUSE DEFINITIONS**

**Lek:** Sage-grouse or sharp-tailed grouse strutting ground.

**Strutting grounds visited:** Total number of known sage-grouse or sharp-tailed grouse strutting grounds (leks) that were visited during spring counts, regardless of whether or not birds were actually present.

**Strutting grounds occupied:** Number of sage-grouse or sharp-tailed grouse strutting grounds (leks) that were active, i.e., grounds where male birds were present during spring counts.

**Average males / occupied ground:** Average number of male sage-grouse or sharp-tailed grouse that were counted at occupied or “active” grounds.

## 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 rates of mortality, 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 43<sup>rd</sup> 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-M, segments 64 & 65. Information contained herein was collected and compiled by biologists, conservation officers, wildlife managers, and upland game management staff of the Utah Division of Wildlife Resources. This report covers the 2016–17 upland game hunting seasons, 2016 fall turkey season, 2017 spring turkey seasons, as well as inventory and trend surveys that took place from July 2016 through June 2017.

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 figures.

The upland game harvest survey is designed to monitor statewide harvest trends from year to year. The more extensively a species is hunted, the more accurately the survey measures the trend data. To improve the accuracy of the indices for species that receive very little hunting pressure, have low densities, and/or a limited distribution, a unique survey is used. Each species of that type must be hunted using a special permit so that hunter information can be obtained for survey purposes. Species falling into this category include band-tailed pigeon, greater sage-grouse, sandhill crane, sharp-tailed grouse, white-tailed ptarmigan, and wild turkey.

The annual harvest report is sometimes criticized for being inaccurate and without value. However, report users must recognize that the accuracy of the survey is based on 4 basic assumptions: (1) the survey sample is completely random; (2) respondents clearly understood the question; (3) respondents recorded or remembered data accurately, and did not guess or lie; and (4) respondents correctly identified the species hunted. If those assumptions are not met, projections or harvest by county may be over-estimated due to non-response 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.

## METHODS

General upland game harvest statistics were obtained from a random sample of licensed hunters using an Internet-based survey, followed by a telephone survey to adjust for non-response bias. The sample was stratified by license type and then the data were projected by the total number of license holders within each stratum. Hunters with permits for band-tailed pigeon, greater sage-grouse, sandhill crane, sharp-tailed grouse, white-tailed ptarmigan, and wild turkey were surveyed through a separate mixed-mode web/telephone survey.

In Utah, hunters were required to purchase either a combination license or a basic hunting license before purchasing a species-specific hunting permit or before applying in any drawings. Therefore, only a fraction of hunters who purchased a license actually hunted upland game, and a much larger sample of license holders was required for the upland game harvest survey.

### Changes and Corrections

In 2016, modifications were made to the online harvest survey to help improve hunter's identification of rare species such as band-tailed pigeon and white-winged dove. Images with identifying characteristics were added to the survey, and additional follow-up was made with hunters who indicated that they harvested band-tailed pigeons. Decrease in harvest for these species in 2015 was most likely due to these changes and not an indication of a true decline.

## RESULTS

The percent of Utah residents who had any type of resident license valid for the 2016–17 upland game hunting season was 7.1% (U.S. Census Bureau's 2016 Utah population estimate: 3,051,217). 249,679 resident and nonresident hunting and combination licenses were valid for the 2016–17 Utah upland game hunting seasons. 75,221 people were randomly selected for participation in the general upland game harvest survey, representing a 30.1% sample. These hunters were sent an email inviting them to participate in the Internet-based harvest survey. Of those hunters contacted, 8,900 (11.8%) submitted an online harvest survey. A random sample of 5,914 hunters who did not respond to the Internet-based survey were contacted by telephone for the non-response bias correction survey. Survey information for turkey and other upland game species are presented in the table on the following page.

A total of 43,038 hunters went afield in 2016–17 in pursuit of various general upland game species. 11,060 hunters hunted wild turkey in spring 2017 and 875 hunters hunted wild turkey in fall 2016. Detailed information describing the upland game harvest can be found in the following tables. 2016–17 license and permit fees and number of licenses and permits sold by type are shown in Appendix C. Regulations for the 2016–17 upland game and 2017 wild turkey hunting seasons are shown in Appendix D.

Upland game survey methods and response rates, 2016–17.

Species	Survey method	Licenses / permits sold	Sample size
Band-tailed pigeon	Web/phone	136	75
General upland game	Web/phone	249679	14814
Greater sage-grouse	Web/phone	1280	506
Sandhill crane	Web/phone	135	96
Sharp-tailed grouse	Web/phone	222	135
White-tailed ptarmigan	Web/phone	327	123
Wild turkey (fall 2016)	Web/phone	1178	315
Wild turkey (spring 2017 limited entry/CWMU)	Web/phone	4538	1393
Wild turkey (spring 2017 general season)	Web/phone	8542	1240

Summary of upland game harvest statistics, Utah 2016–17.

Species	Hunters afield	Total harvest	Hunter-days afield	Bag per hunter-day	Bag per hunter per season
American crow	540	1394	6487	0.2	2.6
Band-tailed pigeon	16	0	24	0.0	0.0
California quail	1378	5739	4861	1.2	4.2
Chukar partridge	7940	52547	49900	1.1	6.6
Cottontail rabbit	12873	123302	84967	1.5	9.6
Dove	11511	134040	71686	1.9	11.6
Mourning	—	119145	—	—	—
White-winged	—	2601	—	—	—
Unknown	—	12291	—	—	—
Forest grouse	12401	47200	58971	0.8	3.8
Dusky	—	22667	—	—	—
Ruffed	—	22143	—	—	—
Unknown	—	2389	—	—	—
Gambel's quail	539	4299	3551	1.2	8.0
Gray (Hungarian) partridge	1047	6902	13973	0.5	6.6
Greater sage-grouse	888	782	1589	0.5	0.9
Ring-necked pheasant	22299	47938	78891	0.6	2.1
Sandhill crane	105	72	175	0.4	0.7
Sharp-tailed grouse	121	70	190	0.4	0.6
Snowshoe hare	1326	3407	6089	0.6	2.6
White-tailed ptarmigan	106	35	234	0.1	0.3
Wild turkey (fall 2016)	875	411	3772	0.1	0.5
Wild turkey (spring 2017 limited entry/CWMU)	3991	1552	—	—	0.4
Wild turkey (spring 2017 general season)	7075	1686	—	—	0.2

Number of general upland game hunters afield by species or species group, Utah 2007–2017.

Species	Year									
	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15	2015–16	2016–17
American crow	—	—	—	—	—	—	—	581	638	540
California quail	1848	1664	1588	1043	1082	1212	1006	1478	1201	1378
Chukar partridge	4971	6627	6562	6272	5572	5448	5527	5678	7256	7940
Cottontail rabbit	6794	8543	6517	7684	6189	6618	6519	6678	15448	12873
Dove	10017	13430	11023	11372	8891	9784	9367	8113	10451	11511
Forest grouse	8193	12189	10791	10724	7941	9915	8888	8977	11052	12401
Gambel's quail	225	804	688	557	468	495	477	**	724	539
Gray (Hungarian) partridge	1099	1475	1817	1006	918	1119	574	765	751	1047
Ring-necked pheasant	13764	16936	16798	18103	14188	14315	15838	17074	19855	22299
Snowshoe hare	550	619	766	631	634	645	568	345	1192	1326
Total hunters*	30525	37419	34271	35639	28617	29928	31330	32097	41340	43038

\*This is not the total of the columns because many upland game hunters hunted multiple species.

\*\*Included with California quail hunters.

Number of special permit upland game hunters afield by species, Utah 2007–2017.

Species	Year									
	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15	2015–16	2016–17
Band-tailed pigeon	69	63	78	51	90	70	54	44	44	16
Greater sage-grouse	1083	838	628	650	429	530	631	852	935	888
Sandhill crane	141	174	228	253	202	167	117	88	122	105
Sharp-tailed grouse	149	179	209	233	177	198	163	109	159	121
White-tailed ptarmigan	58	61	49	95	76	74	65	76	99	106
Wild turkey (fall)	—	—	—	—	—	—	—	281	597	875
Wild turkey (spring)	6831	11138	10941	8291	7055	8354	9395	10232	11155	11060

Percent of general upland game hunters afield who reported hunting each species or species group, Utah 2007–2017.

Species	Year									
	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15	2015–16	2016–17
American crow	—	—	—	—	—	—	—	1.8	1.5	1.3
California quail	6.8	6.6	6.6	4.5	5.4	5.7	4.7	4.6	3.3	3.2
Chukar partridge	16.3	17.7	19.2	17.6	19.5	19.0	17.6	17.7	17.6	18.4
Cottontail rabbit	22.3	22.8	19.0	21.6	21.6	23.1	20.8	20.8	37.4	29.9
Dove	32.8	35.9	32.2	31.9	31.1	34.2	29.9	25.3	25.3	26.7
Forest grouse	26.8	32.6	31.5	30.1	27.7	34.6	28.4	28.0	26.7	28.8
Gambel's quail	1.0	3.0	1.5	0.7	2.1	1.7	1.5	*	1.5	1.3
Gray (Hungarian) partridge	3.6	3.9	5.3	2.8	3.2	3.9	1.8	2.4	1.8	2.4
Ring-necked pheasant	45.1	45.3	49.0	50.8	49.6	50.0	50.6	53.2	48.0	51.8
Snowshoe hare	1.8	1.7	2.2	1.8	2.2	2.3	1.8	1.1	2.9	3.1

\*Included with California quail.

## **AMERICAN CROW**



## American crow harvest statistics by region and county, Utah 2016.

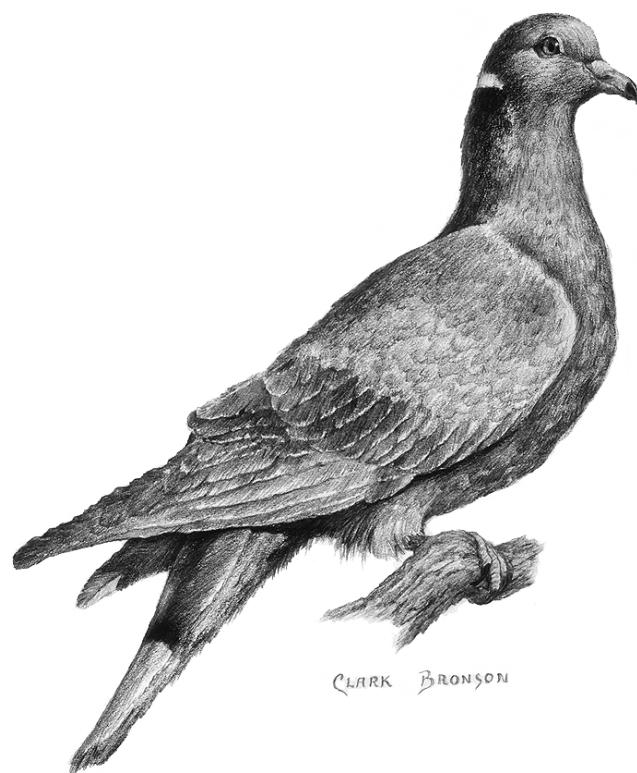
Region and county	n	Hunters afield	Hunter-days afield	Crow bagged	Crow / hunter-day	% pressure	% harvest
Northern Region							
Box Elder	2	19	21	8	0.4	0.3	0.5
Cache	1	10	41	0	0.0	0.6	0.0
Davis	2	19	73	151	2.1	1.1	10.8
Morgan	0	0	—	—	—	0.0	0.0
Rich	0	0	—	—	—	0.0	0.0
Summit	0	0	—	—	—	0.0	0.0
Weber	6	58	155	90	0.6	2.4	6.5
Regional total	11	106	290	249	0.9	4.5	17.8
Central Region							
Juab	5	48	2238	83	0.0	34.5	5.9
Salt Lake	2	19	93	8	0.1	1.4	0.5
Sanpete	1	10	52	105	2.0	0.8	7.6
Tooele	5	48	373	30	0.1	5.8	2.2
Utah	12	116	1585	226	0.1	24.4	16.2
Wasatch	0	0	—	—	—	0.0	0.0
Regional total	25	241	4341	452	0.1	66.9	32.4
Southern Region							
Beaver	1	10	207	30	0.1	3.2	2.2
Garfield	0	0	—	—	—	0.0	0.0
Iron	3	29	83	15	0.2	1.3	1.1
Kane	0	0	—	—	—	0.0	0.0
Millard	2	19	21	8	0.4	0.3	0.5
Piute	2	19	207	128	0.6	3.2	9.2
Sevier	4	39	104	60	0.6	1.6	4.3
Washington	2	19	52	151	2.9	0.8	10.8
Wayne	1	10	41	75	1.8	0.6	5.4
Regional total	15	145	715	467	0.7	11.0	33.5
Northeastern Region							
Daggett	1	10	21	15	0.7	0.3	1.1
Duchesne	5	48	425	60	0.1	6.5	4.3
Uintah	3	29	197	68	0.3	3.0	4.9
Regional total	9	87	643	143	0.2	9.9	10.3
Southeastern Region							
Carbon	1	10	155	0	0.0	2.4	0.0
Emery	1	10	290	0	0.0	4.5	0.0
Grand	1	10	41	75	1.8	0.6	5.4
San Juan	0	0	—	—	—	0.0	0.0
Regional total	3	30	486	75	0.2	7.5	5.4
Unknown	1	10	10	8	0.8	0.2	0.5
Statewide total*	56	540	6487	1394	0.2	100.0	100.0

\*Statewide totals for sample size and hunters afield are not the total of the columns because hunters hunted multiple counties.

Statewide American crow harvest statistics, Utah 2014–2016.

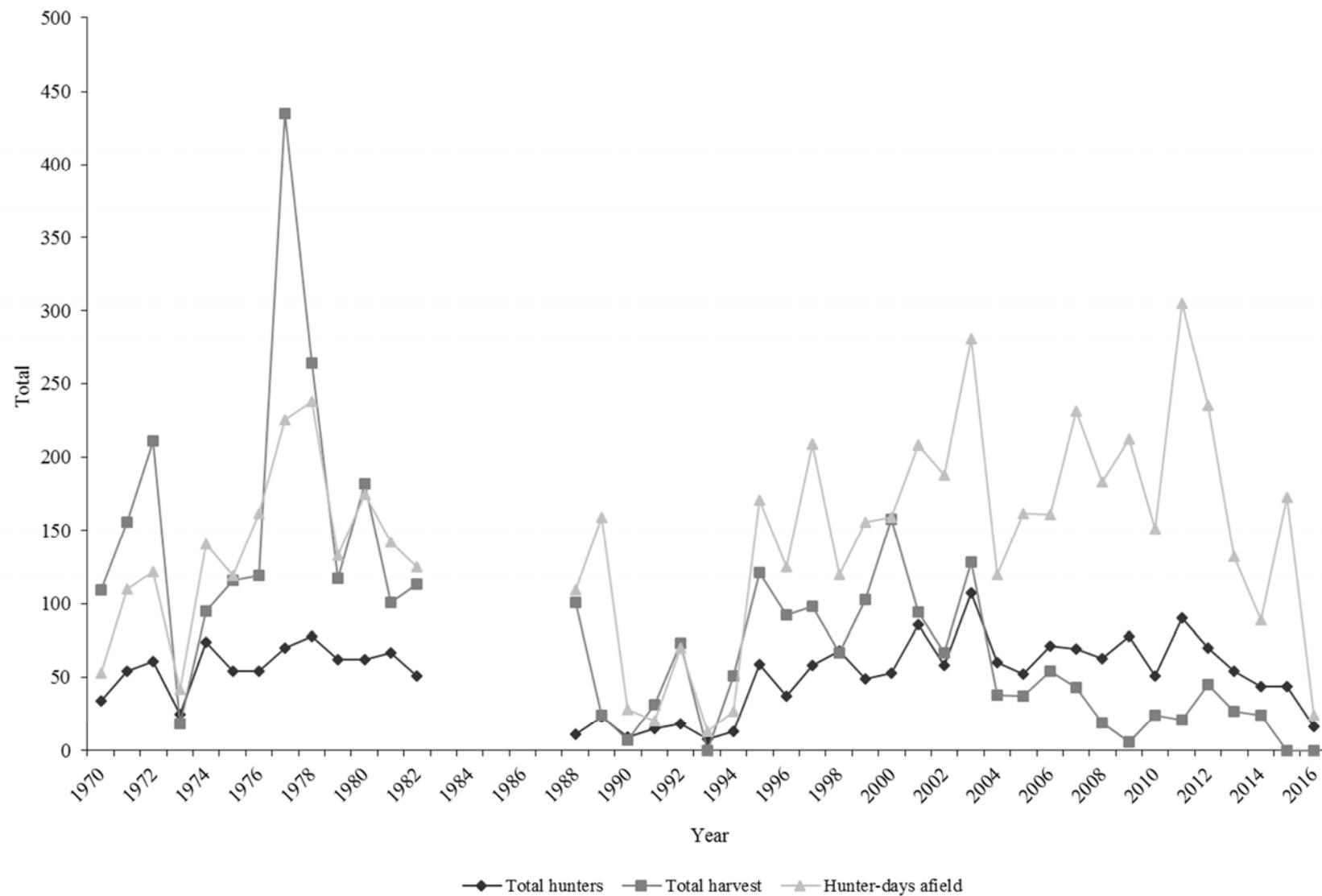
Year	Total hunters	Total harvest	Hunter-days afield	Crow / hunter-day	Crows / hunter
2014	581	4368	3265	1.3	7.5
2015	638	1821	2909	0.6	2.9
2016	540	1394	6487	0.2	2.6
Average (2014–2015)	610	3095	3087	1.0	5.2
% change from previous year	-15	-23	123	-66	-10
% change from average	-11	-55	110	-78	-50

## BAND-TAILED PIGEON



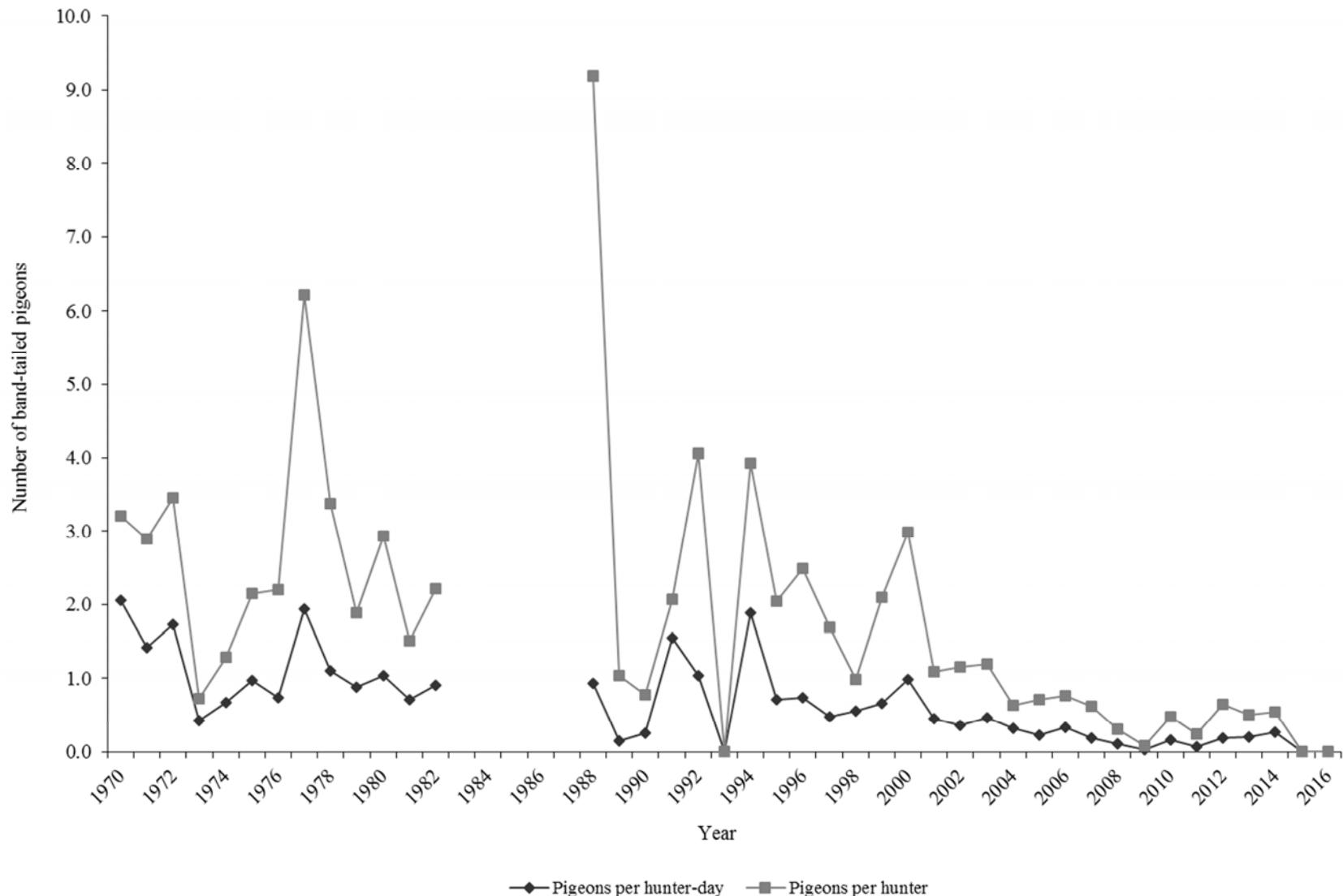
CLARK BRONSON

Statewide trends in band-tailed pigeon harvest statistics, Utah 1970–2016.



No data available 1983–1987.

Statewide trends in band-tailed pigeon hunter success, Utah 1970–2016.



No data available 1983–1987.

## Band-tailed pigeon harvest statistics by region and county, Utah 2016.

Region and county	n	Hunters afield	Hunter-days afield	Pigeons bagged	Pigeons / hunter-day	% pressure	% harvest
Northern Region							
Box Elder	0	0	—	—	—	0.0	—
Cache	0	0	—	—	—	0.0	—
Davis	0	0	—	—	—	0.0	—
Morgan	0	0	—	—	—	0.0	—
Rich	0	0	—	—	—	0.0	—
Summit	0	0	—	—	—	0.0	—
Weber	0	0	—	—	—	0.0	—
Regional total	0	0	—	—	—	0.0	—
Central Region							
Juab	0	0	—	—	—	0.0	—
Salt Lake	0	0	—	—	—	0.0	—
Sanpete	0	0	—	—	—	0.0	—
Tooele	4	7	13	0	0.0	54.2	—
Utah	2	4	4	0	0.0	16.7	—
Wasatch	0	0	—	—	—	0.0	—
Regional total	6	11	17	0	0.0	70.8	—
Southern Region							
Beaver	0	0	—	—	—	0.0	—
Garfield	0	0	—	—	—	0.0	—
Iron	2	4	4	0	0.0	16.7	—
Kane	0	0	—	—	—	0.0	—
Millard	0	0	—	—	—	0.0	—
Piute	0	0	—	—	—	0.0	—
Sevier	0	0	—	—	—	0.0	—
Washington	1	2	4	0	0.0	16.7	—
Wayne	0	0	—	—	—	0.0	—
Regional total	3	6	8	0	0.0	33.3	—
Northeastern Region							
Daggett	0	0	—	—	—	0.0	—
Duchesne	0	0	—	—	—	0.0	—
Uintah	0	0	—	—	—	0.0	—
Regional total	0	0	—	—	—	0.0	—
Southeastern Region							
Carbon	0	0	—	—	—	0.0	—
Emery	0	0	—	—	—	0.0	—
Grand	0	0	—	—	—	0.0	—
San Juan	0	0	—	—	—	0.0	—
Regional total	0	0	—	—	—	0.0	—
Unknown	0	0	—	—	—	0.0	—
Statewide total*	9	16	24	0	0.0	100.0	—

\*Statewide totals for sample size and hunters afield are not the total of the columns because hunters hunted multiple counties.

Statewide band-tailed pigeon harvest statistics, Utah 1970–2016.

Year	Total hunters	Total harvest	Hunter-days afield	Pigeons / hunter-day	Pigeons / hunter
1970	34	109	53	2.1	3.2
1971	54	156	110	1.4	2.9
1972	61	211	122	1.7	3.5
1973	25	18	42	0.4	0.7
1974	74	95	141	0.7	1.3
1975	54	116	119	1.0	2.1
1976	54	119	162	0.7	2.2
1977	70	435	225	1.9	6.2
1978	78	264	238	1.1	3.4
1979	62	117	133	0.9	1.9
1980	62	182	175	1.0	2.9
1981	67	101	142	0.7	1.5
1982*	51	113	125	0.9	2.2
1988	11	101	109	0.9	9.2
1989	23	24	159	0.2	1.0
1990	9	7	28	0.3	0.8
1991	15	31	20	1.6	2.1
1992	18	73	70	1.0	4.1
1993	8	0	13	0.0	0.0
1994	13	51	27	1.9	3.9
1995	59	121	171	0.7	2.1
1996	37	92	125	0.7	2.5
1997	58	98	209	0.5	1.7
1998	68	67	120	0.6	1.0
1999	49	103	156	0.7	2.1
2000	53	158	159	1.0	3.0
2001	86	94	208	0.5	1.1
2002	58	67	188	0.4	1.2
2003	107	128	281	0.5	1.2
2004	60	38	120	0.3	0.6
2005	52	37	162	0.2	0.7
2006	71	54	161	0.3	0.8
2007	69	43	231	0.2	0.6
2008	63	19	183	0.1	0.3
2009	78	6	212	0.0	0.1
2010	51	24	151	0.2	0.5
2011	90	21	305	0.1	0.2
2012	70	45	235	0.2	0.6
2013	54	27	132	0.2	0.5

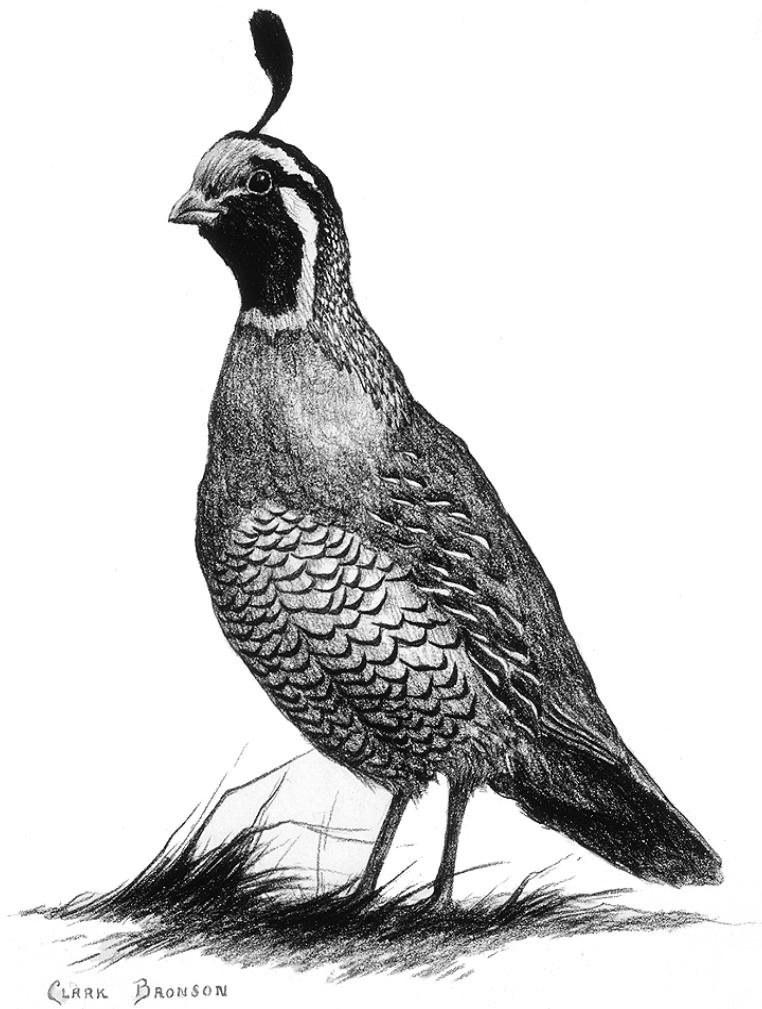
\*No data from 1983 to 1987.

Statewide band-tailed pigeon harvest statistics, Utah 1970–2016 (continued).

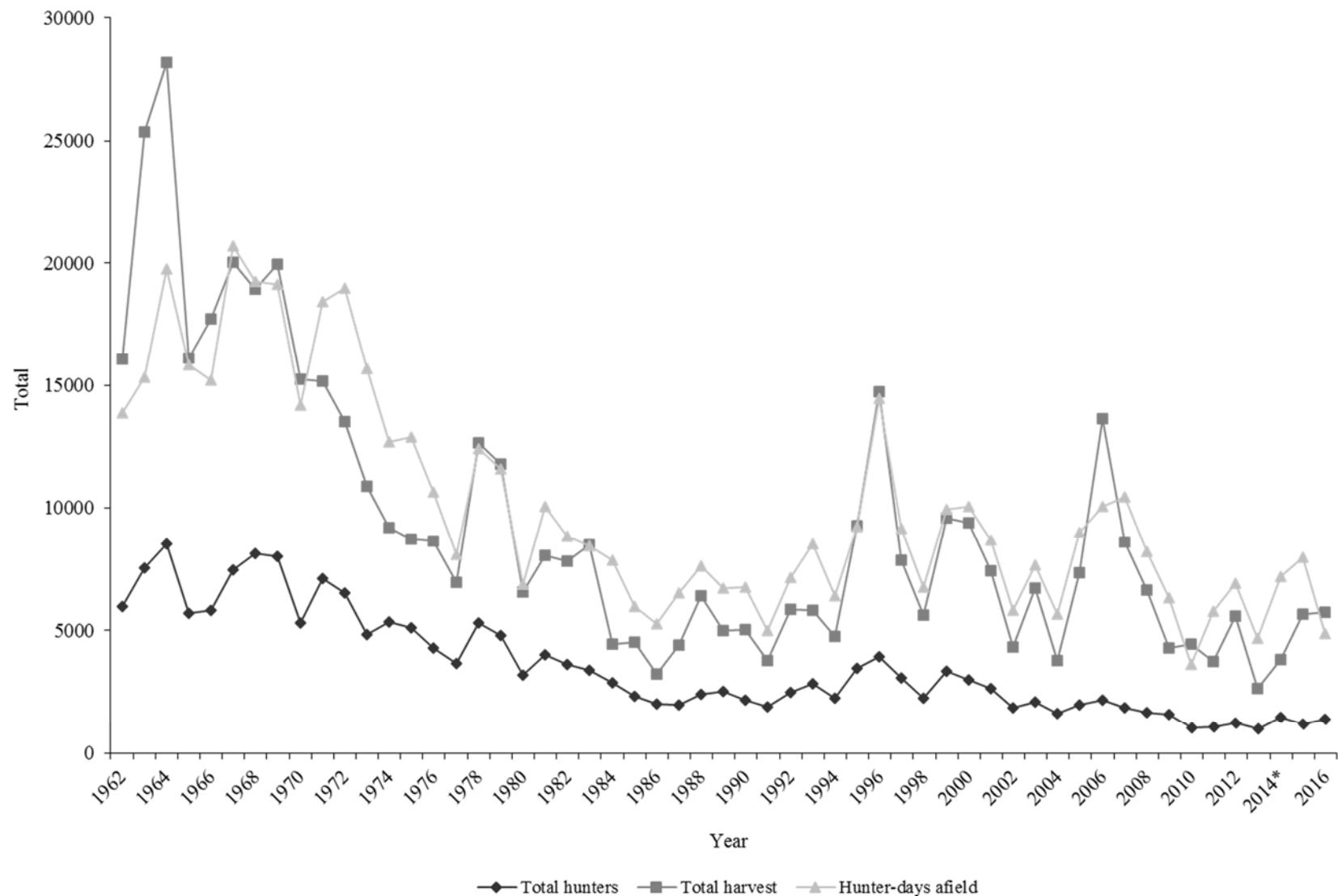
Year	Total hunters	Total harvest*	Hunter-days afield	Pigeons / hunter-day	Pigeons / hunter
2014	44	24	89	0.3	0.5
2015	44	0	173	0.0	0.0
2016	16	0	24	0.0	0.0
Average (1970–2015)	53	88	146	0.7	1.9
% change from previous year	-64	0	-86	0	0
% change from average	-70	-100	-84	-100	-100

\*Decrease in harvest in 2015 was likely due to changes in survey methodology to help hunters better identify rare upland game species. Harvest in previous years was likely biased high due to misidentification.

## CALIFORNIA QUAIL

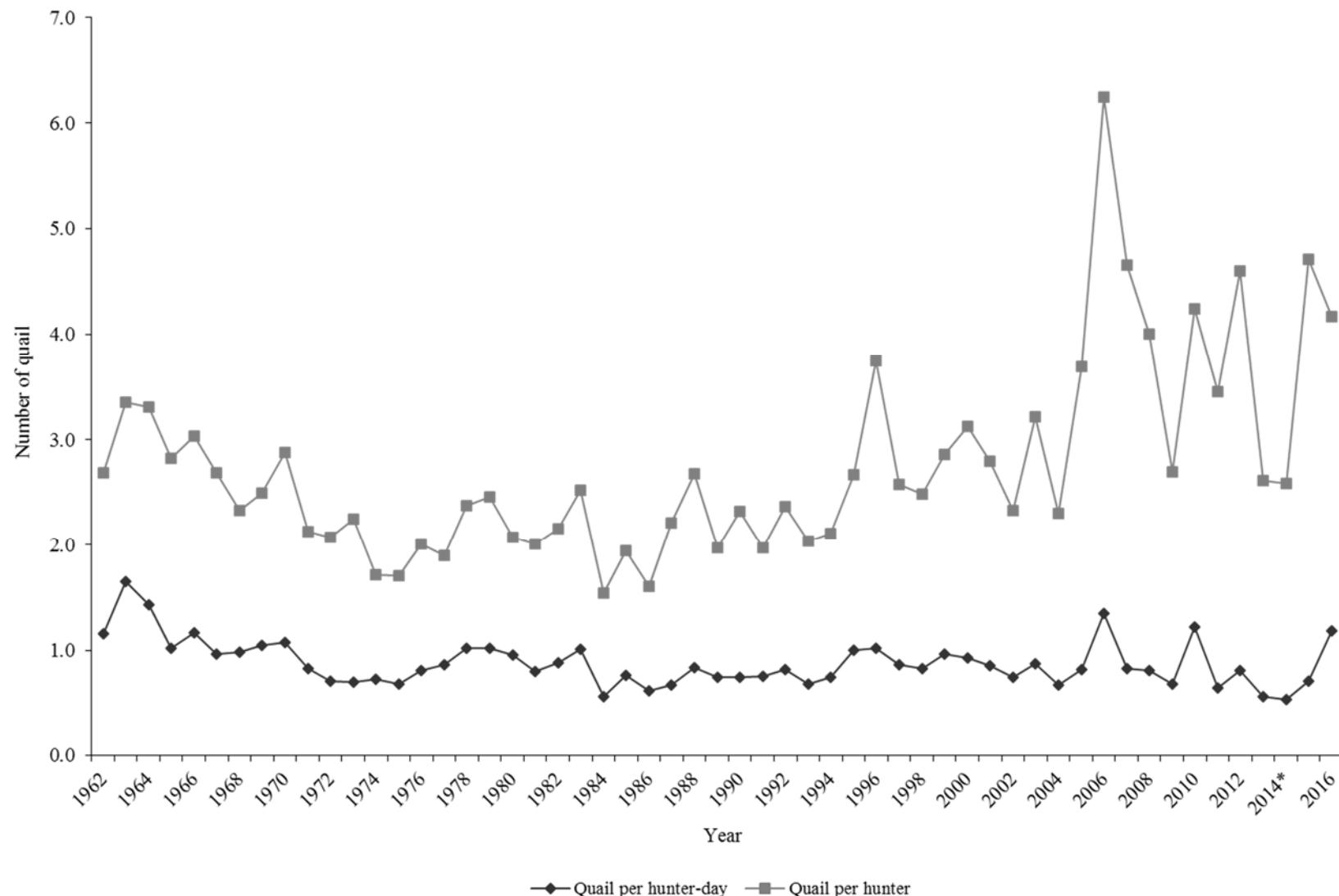


Statewide trends of California quail harvest statistics, Utah 1962–2016.



\*Includes Gambel's quail hunters and days-afield.

Statewide trends of California quail hunter success, Utah 1962–2016.



\*Includes Gambel's quail hunters and days-afield.

## California quail harvest statistics by region and county, Utah 2016.

Region and county	n	Hunters afield	Hunter-days afield	Quail bagged	Quail / hunter-day	% pressure	% harvest
Northern Region							
Box Elder	4	57	229	415	1.8	4.7	7.2
Cache	0	0	—	—	—	0.0	0.0
Davis	0	0	—	—	—	0.0	0.0
Morgan	1	14	14	36	2.6	0.3	0.6
Rich	0	0	—	—	—	0.0	0.0
Summit	0	0	—	—	—	0.0	0.0
Weber	4	57	243	162	0.7	5.0	2.8
Regional total	9	128	486	613	1.3	10.0	10.7
Central Region							
Juab	1	14	29	36	1.2	0.6	0.6
Salt Lake	1	14	14	0	0.0	0.3	0.0
Sanpete	0	0	—	—	—	0.0	0.0
Tooele	5	71	143	54	0.4	2.9	0.9
Utah	14	199	1487	1498	1.0	30.6	26.1
Wasatch	0	0	—	—	—	0.0	0.0
Regional total	21	298	1673	1588	0.9	34.4	27.7
Southern Region							
Beaver	0	0	—	—	—	0.0	0.0
Garfield	1	14	14	144	10.3	0.3	2.5
Iron	0	0	—	—	—	0.0	0.0
Kane	0	0	—	—	—	0.0	0.0
Millard	5	71	157	180	1.1	3.2	3.1
Piute	0	0	—	—	—	0.0	0.0
Sevier	3	43	129	36	0.3	2.6	0.6
Washington	0	0	—	—	—	0.0	0.0
Wayne	0	0	—	—	—	0.0	0.0
Regional total	9	128	300	360	1.2	6.2	6.3
Northeastern Region							
Daggett	0	0	—	—	—	0.0	0.0
Duchesne	16	227	600	1173	2.0	12.4	20.4
Uintah	18	256	1258	1895	1.5	25.9	33.0
Regional total	34	483	1858	3068	1.7	38.2	53.5
Southeastern Region							
Carbon	0	0	—	—	—	0.0	0.0
Emery	8	114	486	108	0.2	10.0	1.9
Grand	0	0	—	—	—	0.0	0.0
San Juan	0	0	—	—	—	0.0	0.0
Regional total	8	114	486	108	0.2	10.0	1.9
Unknown	2	28	57	0	0.0	1.2	0.0
Statewide total*	97	1378	4861	5739	1.2	100.0	100.0

\*Statewide totals for sample size and hunters afield are not the total of the columns because hunters hunted multiple counties.

Statewide California quail harvest statistics, Utah 1962–2016.

Year	Total hunters	Total harvest	Hunter-days afield	Quail / hunter-day	Quail / hunter
1962	5980	16074	13856	1.2	2.7
1963	7557	25366	15326	1.7	3.4
1964	8526	28186	19745	1.4	3.3
1965	5700	16084	15814	1.0	2.8
1966	5834	17700	15180	1.2	3.0
1967	7470	20030	20709	1.0	2.7
1968	8118	18918	19248	1.0	2.3
1969	8005	19931	19105	1.0	2.5
1970	5299	15240	14193	1.1	2.9
1971	7120	15160	18410	0.8	2.1
1972	6520	13494	18972	0.7	2.1
1973	4854	10889	15651	0.7	2.2
1974	5356	9175	12669	0.7	1.7
1975	5098	8719	12892	0.7	1.7
1976	4305	8652	10653	0.8	2.0
1977	3662	6964	8093	0.9	1.9
1978	5324	12629	12428	1.0	2.4
1979	4802	11789	11571	1.0	2.5
1980	3172	6566	6871	1.0	2.1
1981	4012	8045	10062	0.8	2.0
1982	3632	7817	8844	0.9	2.2
1983	3370	8507	8440	1.0	2.5
1984	2883	4446	7857	0.6	1.5
1985	2336	4544	5958	0.8	1.9
1986	2020	3235	5276	0.6	1.6
1987	1985	4388	6521	0.7	2.2
1988	2387	6395	7614	0.8	2.7
1989	2530	4999	6720	0.7	2.0
1990	2161	5021	6771	0.7	2.3
1991	1913	3775	5010	0.8	2.0
1992	2470	5847	7162	0.8	2.4
1993	2851	5815	8532	0.7	2.0
1994	2250	4746	6399	0.7	2.1
1995	3474	9272	9252	1.0	2.7
1996	3925	14726	14446	1.0	3.8
1997	3055	7857	9146	0.9	2.6
1998	2257	5606	6747	0.8	2.5
1999	3346	9575	9937	1.0	2.9
2000	3005	9382	10072	0.9	3.1
2001	2659	7433	8683	0.9	2.8

Statewide California quail harvest statistics, Utah 1962–2016 (continued).

Year	Total hunters	Total harvest	Hunter-days afield	Quail / hunter-day	Quail / hunter
2002	1855	4311	5807	0.7	2.3
2003	2089	6717	7672	0.9	3.2
2004	1636	3768	5648	0.7	2.3
2005	1989	7344	8996	0.8	3.7
2006	2181	13626	10070	1.4	6.2
2007	1848	8595	10434	0.8	4.7
2008	1664	6655	8213	0.8	4.0
2009	1588	4275	6314	0.7	2.7
2010	1043	4427	3634	1.2	4.2
2011	1082	3741	5790	0.6	3.5
2012	1212	5578	6917	0.8	4.6
2013	1006	2626	4663	0.6	2.6
2014	1478*	3822	7197*	0.5	2.6
2015	1201	5653	7984	0.7	4.7
2016	1378	5739	4861	1.2	4.2
Average (1951–2015)	3576	9336	10188	0.9	2.7
% change from previous year	15	2	-39	67	-12
% change from average	-61	-39	-52	35	53

\*Includes Gambel's quail hunters and days-afield.

## CHUKAR PARTRIDGE



CLARK BRONSON

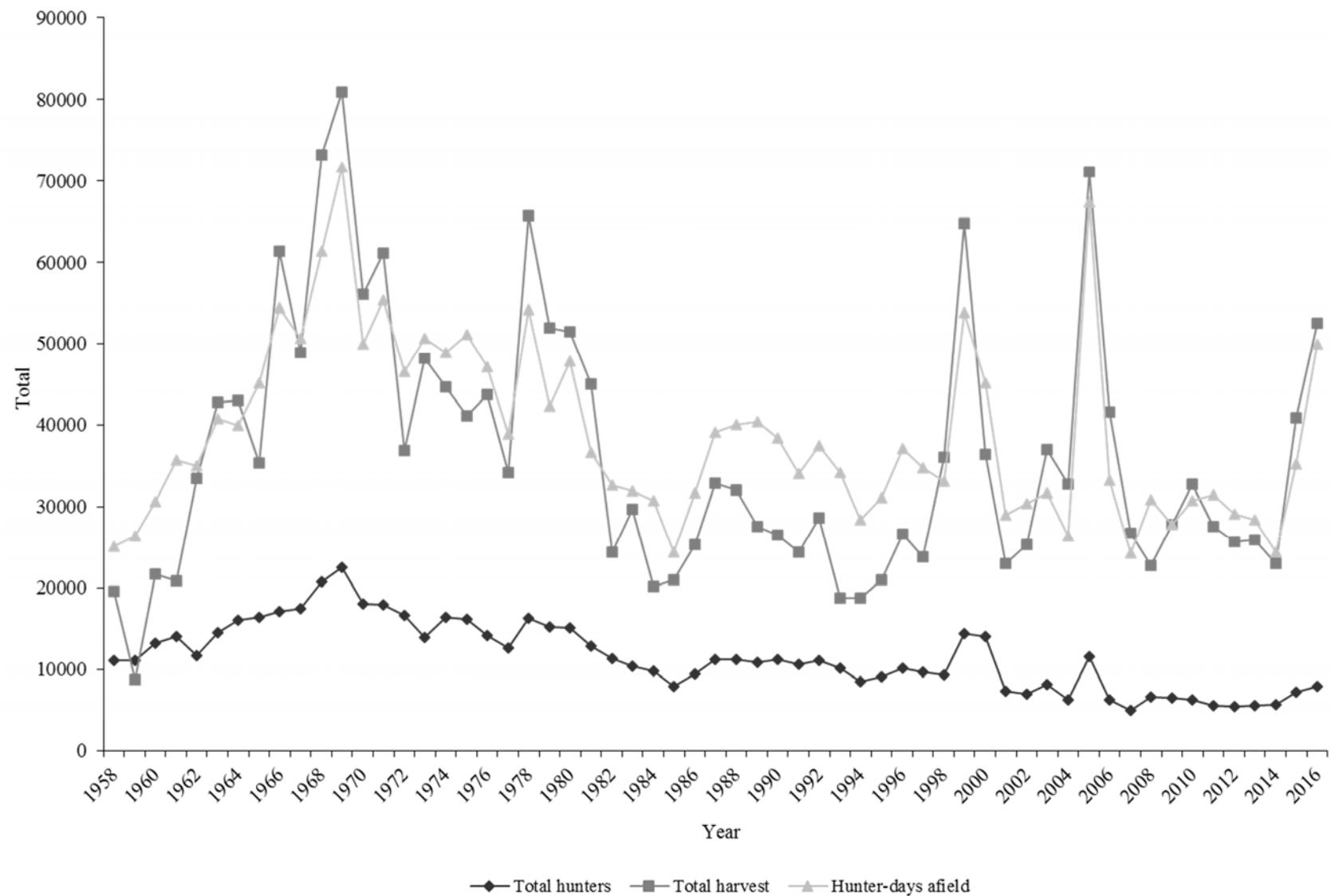
Chukar partridge aerial survey trends, Northeast Cedar Mountains, Tooele County, Utah 1996–2016.

Year	Coveys flushed	Total chukars observed	Square miles surveyed	Chukars / square mile
1996	12	103	6.5	15.9
1997	18	295	8.0	36.9
1998	52	939	8.0	117.4
1999	65	623	8.0	77.9
2000	23	96	8.0	12.0
2001	9	68	8.0	8.5
2002	5	36	8.0	4.5
2003	27	238	8.0	29.8
2004	15	167	8.0	20.9
2005	36	566	8.0	70.8
2006	50	779	8.0	97.4
2007	24	144	8.0	18.0
2008	22	94	5.0	18.8
2009	19	107	5.0	21.4
2010	6	22	5.0	4.4
2011	11	88	5.0	17.6
2012	25	229	5.0	45.8
2013	14	91	10.0	9.1
2014	27	298	12.7	23.5
2015	73	1215	12.0	101.3
2016	67	995	10.5	94.8
Average (1996–2015)	27	310	7.7	37.6
% change from previous year	-8	-18	-13	-6
% change from average	151	221	36	152

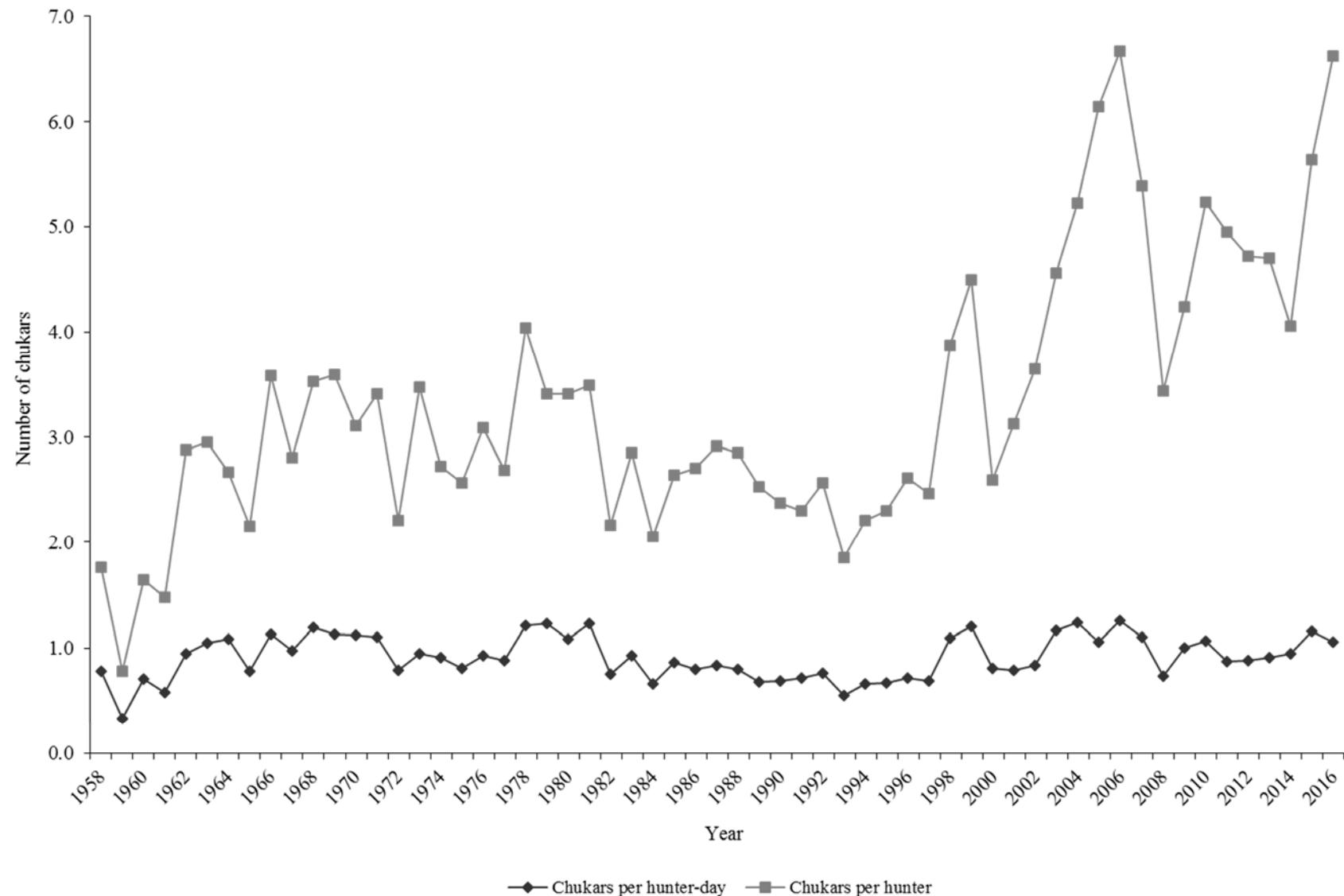
Chukar partridge aerial survey trends, Box Elder County, Utah 2009–2016.

Year	Coveys flushed	Total chukars observed	Square miles surveyed	Chukars / square mile
2009	5	41	8.5	4.8
2010	14	125	8.5	14.7
2011	19	233	8.5	27.4
2012	18	76	8.5	8.9
2013	12	133	8.5	15.6
2014	8	125	8.0	15.6
2015	16	204	8.0	25.5
2016	12	268	8.0	33.5
Average (2009–2015)	13	134	8.4	16.1
% change from previous year	-25	31	0	31
% change from average	-9	100	-4	108

Statewide trends of chukar partridge harvest statistics, Utah 1958–59 to 2016–17.



Statewide trends of chukar partridge hunter success, Utah 1958–59 to 2016–17.



## Chukar partridge harvest statistics by region and county, Utah 2016–17.

Region and county	n	Hunters afield	Hunter-days afield	Chukars bagged	Chukars / hunter-day	% pressure	% harvest
Northern Region							
Box Elder	80	1138	5444	6447	1.2	10.9	12.3
Cache	20	285	1385	1161	0.8	2.8	2.2
Davis	5	71	289	365	1.3	0.6	0.7
Morgan	8	114	327	258	0.8	0.7	0.5
Rich	3	43	212	0	0.0	0.4	0.0
Summit	5	71	192	107	0.6	0.4	0.2
Weber	10	142	558	451	0.8	1.1	0.9
Regional total	131	1864	8407	8789	1.0	16.8	16.7
Central Region							
Juab	47	669	3501	3503	1.0	7.0	6.7
Salt Lake	8	114	404	473	1.2	0.8	0.9
Sanpete	19	270	1943	1182	0.6	3.9	2.2
Tooele	131	1864	10907	14894	1.4	21.9	28.3
Utah	89	1266	6829	7135	1.0	13.7	13.6
Wasatch	7	100	539	946	1.8	1.1	1.8
Regional total	301	4283	24123	28133	1.2	48.3	53.5
Southern Region							
Beaver	21	299	1500	1332	0.9	3.0	2.5
Garfield	2	28	96	43	0.4	0.2	0.1
Iron	7	100	1520	1719	1.1	3.0	3.3
Kane	1	14	38	0	0.0	0.1	0.0
Millard	38	541	2943	5158	1.8	5.9	9.8
Piute	9	128	1058	989	0.9	2.1	1.9
Sevier	42	598	3847	2579	0.7	7.7	4.9
Washington	18	256	1731	365	0.2	3.5	0.7
Wayne	0	0	—	—	—	0.0	0.0
Regional total	138	1964	12733	12185	1.0	25.5	23.2
Northeastern Region							
Daggett	1	14	19	0	0.0	0.0	0.0
Duchesne	15	213	1000	387	0.4	2.0	0.7
Uintah	8	114	404	215	0.5	0.8	0.4
Regional total	24	341	1423	602	0.4	2.9	1.1
Southeastern Region							
Carbon	8	114	616	365	0.6	1.2	0.7
Emery	13	185	558	709	1.3	1.1	1.3
Grand	10	142	616	301	0.5	1.2	0.6
San Juan	4	57	327	43	0.1	0.7	0.1
Regional total	35	498	2117	1418	0.7	4.2	2.7
Unknown	22	313	1096	1418	1.3	2.2	2.7
Statewide total*	558	7940	49900	52547	1.1	100.0	100.0

\*Statewide totals for sample size and hunters afield are not the total of the columns because hunters hunted multiple counties.

Statewide chukar partridge harvest statistics, Utah 1958–59 to 2016–17.

Year	Total hunters	Total harvest	Hunter-days afield	Chukars / hunter-day	Chukars / hunter
1958–59	11124	19578	25100	0.8	1.8
1959–60	11154	8700	26364	0.3	0.8
1960–61	13252	21733	30610	0.7	1.6
1961–62	14046	20821	35675	0.6	1.5
1962–63	11638	33500	35010	1.0	2.9
1963–64	14532	42806	40824	1.1	3.0
1964–65	16090	42974	39971	1.1	2.7
1965–66	16431	35335	45067	0.8	2.2
1966–67	17133	61370	54448	1.1	3.6
1967–68	17485	48906	50671	1.0	2.8
1968–69	20744	73218	61402	1.2	3.5
1969–70	22529	80917	71674	1.1	3.6
1970–71	18013	56053	49911	1.1	3.1
1971–72	17917	61151	55378	1.1	3.4
1972–73	16685	36925	46502	0.8	2.2
1973–74	13888	48135	50677	1.0	3.5
1974–75	16412	44658	48856	0.9	2.7
1975–76	16156	41151	51083	0.8	2.6
1976–77	14171	43726	47143	0.9	3.1
1977–78	12691	34155	38873	0.9	2.7
1978–79	16291	65747	54239	1.2	4.0
1979–80	15210	51918	42254	1.2	3.4
1980–81	15100	51511	47778	1.1	3.4
1981–82	12907	44983	36662	1.2	3.5
1982–83	11326	24460	32691	0.8	2.2
1983–84	10418	29649	31904	0.9	2.9
1984–85	9846	20179	30715	0.7	2.1
1985–86	7930	20938	24346	0.9	2.6
1986–87	9397	25346	31672	0.8	2.7
1987–88	11276	32848	39099	0.8	2.9
1988–89	11237	32057	40088	0.8	2.9
1989–90	10910	27628	40384	0.7	2.5
1990–91	11195	26486	38463	0.7	2.4
1991–92	10577	24355	34010	0.7	2.3
1992–93	11125	28599	37463	0.8	2.6
1993–94	10128	18774	34147	0.6	1.9
1994–95	8455	18721	28389	0.7	2.2
1995–96	9097	20954	31140	0.7	2.3

Statewide chukar partridge harvest statistics, Utah 1958–59 to 2016–17 (continued).

Year	Total hunters	Total harvest	Hunter-days afield	Chukars / hunter-day	Chukars / hunter
1996–97	10197	26594	37116	0.7	2.6
1997–98	9665	23840	34711	0.7	2.5
1998–99	9283	36013	33082	1.1	3.9
1999–00	14388	64727	53842	1.2	4.5
2000–01	14056	36458	45096	0.8	2.6
2001–02	7338	22941	29032	0.8	3.1
2002–03	6944	25294	30351	0.8	3.6
2003–04	8118	37007	31696	1.2	4.6
2004–05	6265	32718	26421	1.2	5.2
2005–06	11565	71134	67373	1.1	6.2
2006–07	6245	41618	33175	1.3	6.7
2007–08	4971	26758	24291	1.1	5.4
2008–09	6627	22777	30867	0.7	3.4
2009–10	6562	27860	27858	1.0	4.2
2010–11	6272	32799	30766	1.1	5.2
2011–12	5572	27553	31431	0.9	4.9
2012–13	5448	25696	29068	0.9	4.7
2013–14	5527	25973	28437	0.9	4.7
2014–15	5678	23028	24447	0.9	4.1
2015–16	7256	40915	35264	1.2	5.6
2016–17	7940	52547	49900	1.1	6.6
Average (1958–2016)	11595	36080	38707	0.9	3.3
% change from previous year	9	28	42	-9	17
% change from average	-32	46	29	16	103

## COTTONTAIL RABBIT (Desert & Mountain)



Clark Bronson

Statewide trends of cottontail rabbit summer roadside counts, Utah 1967–2016.

Year	Miles driven	Total rabbits observed	Young / 100 adults	Rabbits / mile
1967	—	—	106	0.35
1968	—	—	96	0.41
1969	—	—	110	0.32
1970	—	—	102	0.50
1971	2702	1184	123	0.44
1972	2643	1140	99	0.43
1973	1968	361	86	0.18
1974	2402	700	105	0.29
1975	2850	635	132	0.22
1976	3068	1163	132	0.38
1977	2907	914	89	0.31
1978	2745	1303	112	0.47
1979	2486	1094	121	0.44
1980	1909	591	107	0.31
1981	2423	1234	116	0.51
1982	2102	1111	78	0.53
1983	1932	787	72	0.41
1984	1069	170	100	0.16
1985	1656	211	73	0.13
1986	1610	284	75	0.18
1987	1552	521	96	0.34
1988	1472	825	67	0.56
1989	872	408	64	0.47
1990	879	344	73	0.39
1991	558	94	64	0.17
1992	857	207	71	0.24
1993	750	84	35	0.11
1994	148	54	18	0.36
1995	444	87	114	0.20
1996	498	283	163	0.57
1997	521	127	98	0.24
1998	1401	351	88	0.25
1999	1639	442	79	0.27
2000*	1029	550	115	0.53
2010	1279	109	49	0.09
2011	997	119	53	0.12
2012	1243	248	51	0.14

\*Cottontail rabbit roadside counts were discontinued from 2001–2009.

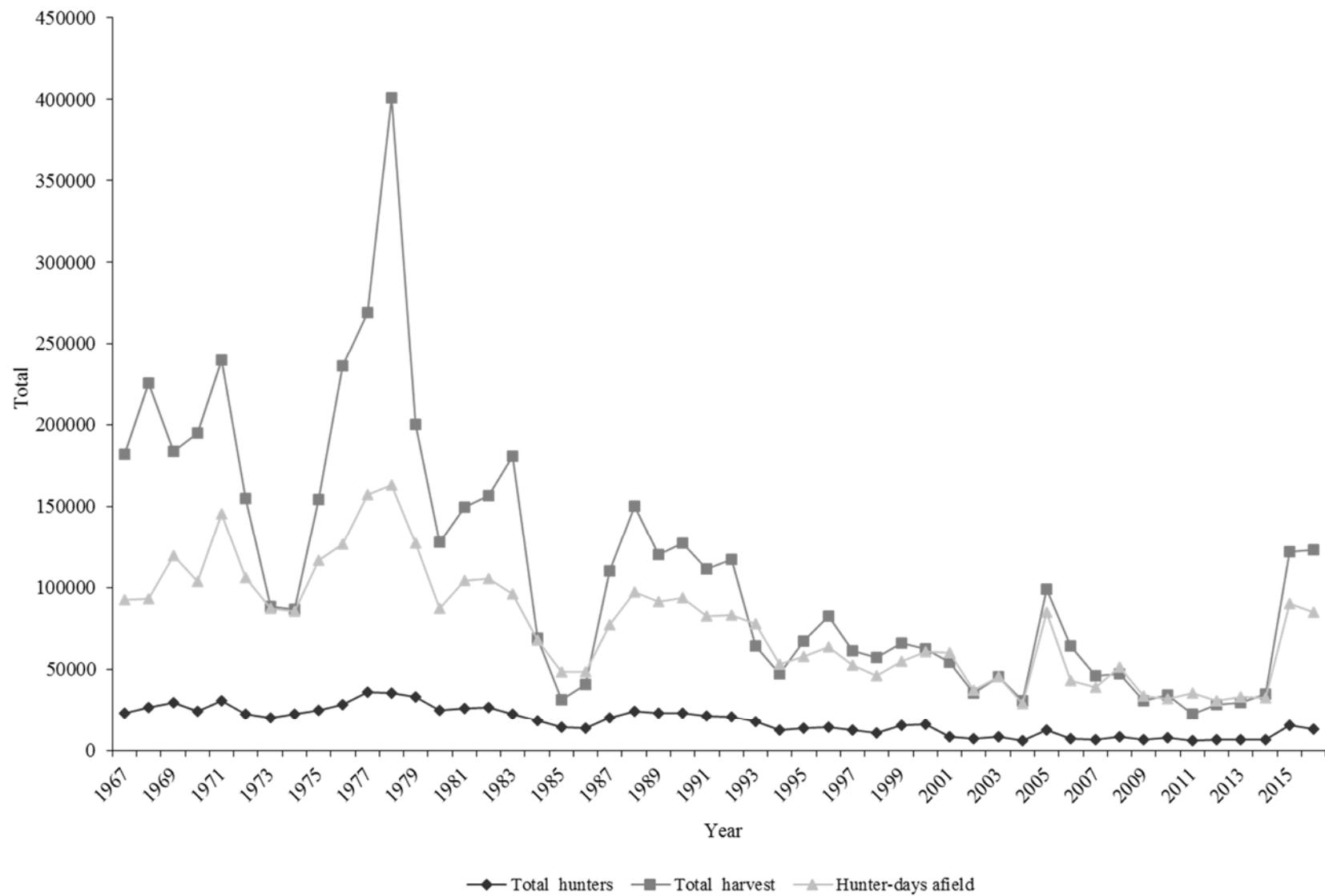
Statewide trends of cottontail rabbit summer roadside counts, Utah 1967–2016 (continued).

Year	Miles driven	Total rabbits observed	Young / 100 adults	Rabbits / mile
2013	1416	453	44	0.32
2014	1327	784	54	0.59
2015	1378	1381	55	1.00
2016	1494	1121	32	0.75
Average (1967–2015)	1145	401	74	0.33
% change from previous year	8	-19	-42	-25
% change from average	30	179	-57	124

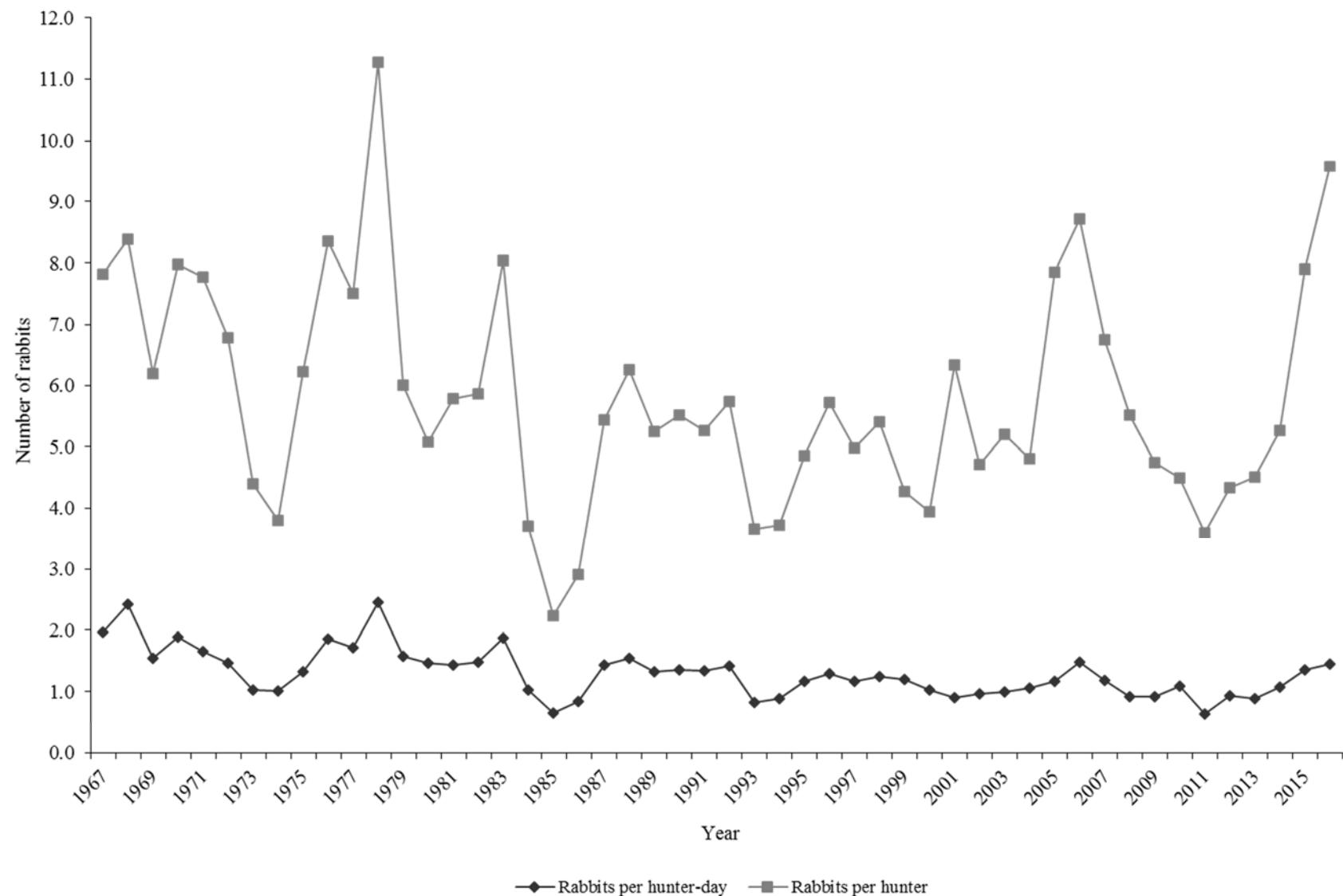
Cottontail rabbit summer roadside count summary, Utah 2016.

Region and county	Miles driven	Rabbits observed			Young / 100 adults	Rabbits / mile
		Adults	Young	Unclassified	Total	
<b>Northern Region</b>						
Box Elder	90	7	2	0	9	28.6
Cache	—	—	—	—	—	—
Davis	—	—	—	—	—	—
Morgan	—	—	—	—	—	—
Rich	90	5	5	0	10	100.0
Summit	—	—	—	—	—	—
Weber	—	—	—	—	—	—
<b>Regional total</b>	<b>180</b>	<b>12</b>	<b>7</b>	<b>0</b>	<b>19</b>	<b>58.3</b>
<b>Central Region</b>						
Juab	—	—	—	—	—	—
Salt Lake	—	—	—	—	—	—
Sanpete	90	0	2	0	2	#DIV/0!
Tooele	90	10	1	0	11	10.0
Utah	—	—	—	—	—	—
Wasatch	—	—	—	—	—	—
<b>Regional total</b>	<b>180</b>	<b>10</b>	<b>3</b>	<b>0</b>	<b>13</b>	<b>30.0</b>
<b>Southern Region</b>						
Beaver	—	—	—	—	—	—
Garfield	90	1	4	0	5	400.0
Iron	90	70	23	0	93	32.9
Kane	90	42	13	6	61	31.0
Millard	90	2	0	0	2	0.0
Piute	—	—	—	—	—	—
Sevier	93.3	7	9	4	20	128.6
Washington	—	—	—	—	—	—
Wayne	90	10	9	0	19	90.0
<b>Regional total</b>	<b>543.3</b>	<b>132</b>	<b>58</b>	<b>10</b>	<b>200</b>	<b>43.9</b>
<b>Northeastern Region</b>						
Daggett	104.4	153	39	0	192	25.5
Duchesne	90	318	102	0	420	32.1
Uintah	83.8	125	25	3	153	20.0
<b>Regional total</b>	<b>278.2</b>	<b>596</b>	<b>166</b>	<b>3</b>	<b>765</b>	<b>27.9</b>
<b>Southeastern Region</b>						
Carbon	90	7	3	0	10	42.9
Emery	132	45	18	35	98	40.0
Grand	—	—	—	—	—	—
San Juan	90	10	5	1	16	50.0
<b>Regional total</b>	<b>312</b>	<b>62</b>	<b>26</b>	<b>36</b>	<b>124</b>	<b>41.9</b>
<b>Statewide total</b>	<b>1493.5</b>	<b>812</b>	<b>260</b>	<b>49</b>	<b>1121</b>	<b>32.0</b>
						<b>0.75</b>

Statewide trends of cottontail rabbit harvest statistics, Utah 1967–68 to 2016–17.



Statewide trends of cottontail rabbit hunter success, Utah 1967–68 to 2016–17.



Cottontail rabbit harvest statistics by region and county, Utah 2016–17.

Region and county	n	Hunters afield	Hunter-days afield	Rabbits bagged	Rabbits / hunter-day	% pressure	% harvest
Northern Region							
Box Elder	97	1534	4728	7363	1.6	5.6	6.0
Cache	23	364	1868	1513	0.8	2.2	1.2
Davis	3	47	448	90	0.2	0.5	0.1
Morgan	8	127	272	474	1.7	0.3	0.4
Rich	16	253	798	1265	1.6	0.9	1.0
Summit	15	237	1304	1039	0.8	1.5	0.8
Weber	10	158	545	1175	2.2	0.6	1.0
Regional total	172	2720	9963	12919	1.3	11.7	10.5
Central Region							
Juab	56	886	5195	4133	0.8	6.1	3.4
Salt Lake	2	32	39	45	1.2	0.0	0.0
Sanpete	19	300	1265	791	0.6	1.5	0.6
Tooele	77	1218	6401	5308	0.8	7.5	4.3
Utah	92	1455	7802	9306	1.2	9.2	7.5
Wasatch	10	158	448	587	1.3	0.5	0.5
Regional total	256	4049	21150	20170	1.0	24.9	16.4
Southern Region							
Beaver	18	285	1518	1897	1.2	1.8	1.5
Garfield	8	127	662	497	0.8	0.8	0.4
Iron	24	380	2296	3207	1.4	2.7	2.6
Kane	11	174	1226	1242	1.0	1.4	1.0
Millard	18	285	2977	2846	1.0	3.5	2.3
Piute	5	79	233	587	2.5	0.3	0.5
Sevier	20	316	1985	1491	0.8	2.3	1.2
Washington	35	554	6693	7092	1.1	7.9	5.8
Wayne	12	190	409	949	2.3	0.5	0.8
Regional total	151	2390	17999	19808	1.1	21.2	16.1
Northeastern Region							
Daggett	23	364	1576	3840	2.4	1.9	3.1
Duchesne	105	1661	8892	22858	2.6	10.5	18.5
Uintah	80	1265	8678	16014	1.8	10.2	13.0
Regional total	208	3290	19146	42712	2.2	22.5	34.6
Southeastern Region							
Carbon	61	965	4942	11406	2.3	5.8	9.3
Emery	48	759	5467	7815	1.4	6.4	6.3
Grand	14	221	1343	1739	1.3	1.6	1.4
San Juan	22	348	3638	4179	1.1	4.3	3.4
Regional total	145	2293	15390	25139	1.6	18.1	20.4
Unknown	23	364	1323	2552	1.9	1.6	2.1
Statewide total*	814	12873	84967	123302	1.5	100.0	100.0

\*Statewide totals for sample size and hunters afield are not the total of the columns because hunters hunted multiple counties.

Statewide cottontail rabbit harvest statistics, Utah 1967–68 to 2016–17.

Year	Total hunters	Total harvest	Hunter-days afield	Rabbits / hunter-day	Rabbits / hunter
1967–68	23249	181812	92681	2.0	7.8
1968–69	26889	225450	93126	2.4	8.4
1969–70	29760	184034	119596	1.5	6.2
1970–71	24486	195248	103725	1.9	8.0
1971–72	30824	239511	145287	1.6	7.8
1972–73	22835	155102	105941	1.5	6.8
1973–74	20109	88603	87036	1.0	4.4
1974–75	22737	86506	85499	1.0	3.8
1975–76	24803	154182	116707	1.3	6.2
1976–77	28239	235952	126737	1.9	8.4
1977–78	35831	269263	157257	1.7	7.5
1978–79	35590	401071	163019	2.5	11.3
1979–80	33385	200223	127497	1.6	6.0
1980–81	25156	127652	87051	1.5	5.1
1981–82	25906	149765	104183	1.4	5.8
1982–83	26714	156696	105644	1.5	5.9
1983–84	22467	180767	96151	1.9	8.0
1984–85	18616	69186	67643	1.0	3.7
1985–86	14059	31397	48371	0.6	2.2
1986–87	13992	40636	48694	0.8	2.9
1987–88	20322	110411	77047	1.4	5.4
1988–89	24076	150386	97190	1.5	6.2
1989–90	22878	120075	91264	1.3	5.2
1990–91	23070	127389	93515	1.4	5.5
1991–92	21137	111407	82772	1.3	5.3
1992–93	20509	117454	83154	1.4	5.7
1993–94	17578	64400	77968	0.8	3.7
1994–95	12709	47322	53175	0.9	3.7
1995–96	13840	67295	58042	1.2	4.9
1996–97	14470	82803	63943	1.3	5.7
1997–98	12263	61109	52587	1.2	5.0
1998–99	10585	57137	45947	1.2	5.4
1999–00	15475	66142	54894	1.2	4.3
2000–01	15797	62330	60895	1.0	3.9
2001–02	8620	54506	60401	0.9	6.3
2002–03	7483	35320	36994	1.0	4.7
2003–04	8685	45210	45693	1.0	5.2
2004–05	6358	30586	28828	1.1	4.8
2005–06	12575	98827	85059	1.2	7.9

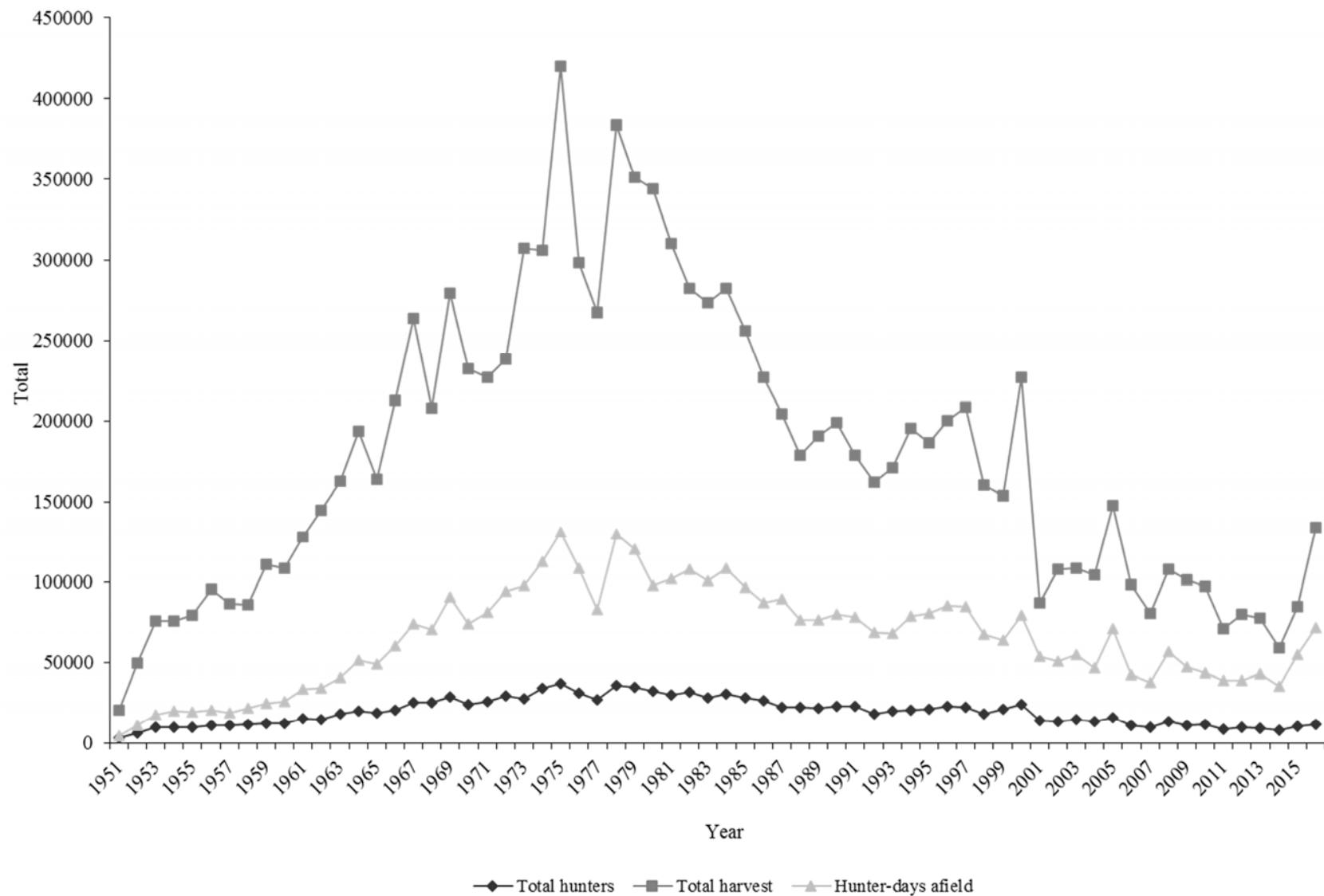
Statewide cottontail rabbit harvest statistics, Utah 1967–68 to 2016–17 (continued).

Year	Total hunters	Total harvest	Hunter-days afield	Rabbits / hunter-day	Rabbits / hunter
2006–07	7401	64476	43334	1.5	8.7
2007–08	6794	45902	38886	1.2	6.8
2008–09	8543	47077	51673	0.9	5.5
2009–10	6517	30946	34026	0.9	4.7
2010–11	7684	34532	31869	1.1	4.5
2011–12	6189	22293	35520	0.6	3.6
2012–13	6618	28665	30548	0.9	4.3
2013–14	6519	29353	33383	0.9	4.5
2014–15	6678	35120	32753	1.1	5.3
2015–16	15448	121981	90125	1.4	7.9
2016–17	12873	123302	84967	1.5	9.6
Average (1967–2016)	17707	109336	76766	1.3	5.7
% change from previous year	-17	1	-6	7	21
% change from average	-27	13	11	12	67

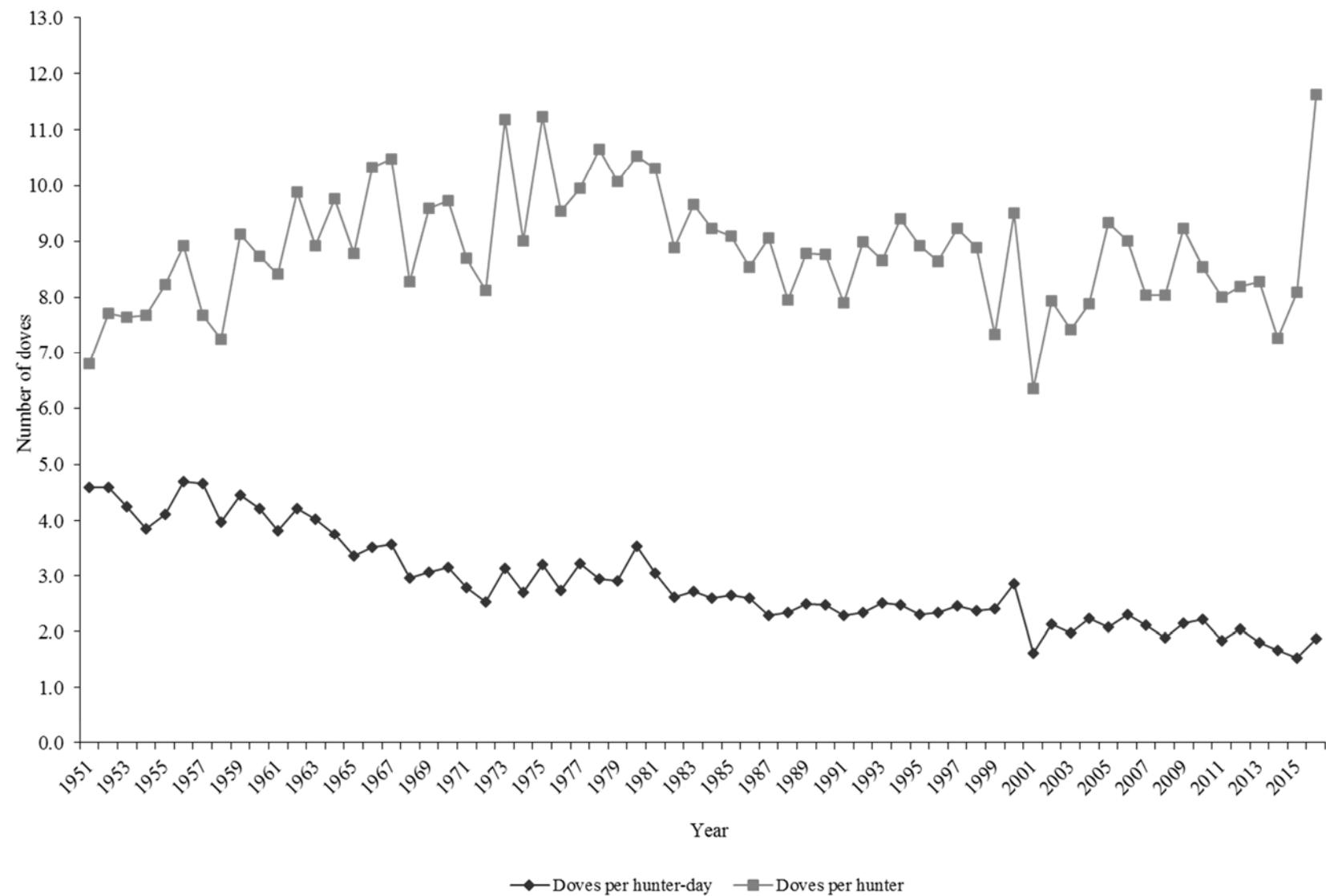
**DOVE**  
**(Mourning and White-winged)**



Statewide trends of dove (mourning and white-winged) harvest statistics, Utah 1951–2016.



Statewide trends of dove (mourning and white-winged) hunter success, Utah 1951–2016.



Dove (mourning and white-winged) harvest statistics by region and county, Utah 2016.

Region and county	n	Hunters afield	Hunter-days afield	Doves bagged	Doves / hunter-day	% pressure	% harvest
Northern Region							
Box Elder	78	1318	5742	10358	1.8	8.0	7.7
Cache	58	980	7656	13233	1.7	10.7	9.9
Davis	21	355	1984	2280	1.1	2.8	1.7
Morgan	7	118	1821	545	0.3	2.5	0.4
Rich	1	17	47	50	1.1	0.1	0.0
Summit	4	68	420	2899	6.9	0.6	2.2
Weber	63	1065	6863	14026	2.0	9.6	10.5
Regional total	232	3921	24533	43391	1.8	34.2	32.4
Central Region							
Juab	49	828	3361	9442	2.8	4.7	7.0
Salt Lake	12	203	1027	2131	2.1	1.4	1.6
Sanpete	24	406	1494	2602	1.7	2.1	1.9
Tooele	73	1234	5416	9491	1.8	7.6	7.1
Utah	138	2333	13702	27234	2.0	19.1	20.3
Wasatch	8	135	1074	595	0.6	1.5	0.4
Regional total	304	5139	26074	51495	2.0	36.4	38.4
Southern Region							
Beaver	19	321	1144	3692	3.2	1.6	2.8
Garfield	3	51	397	273	0.7	0.6	0.2
Iron	29	490	2007	3940	2.0	2.8	2.9
Kane	3	51	280	198	0.7	0.4	0.1
Millard	62	1048	4225	12663	3.0	5.9	9.4
Piute	2	34	537	1363	2.5	0.7	1.0
Sevier	29	490	4575	3940	0.9	6.4	2.9
Washington	25	423	1937	3593	1.9	2.7	2.7
Wayne	3	51	303	743	2.5	0.4	0.6
Regional total	175	2959	15405	30405	2.0	21.5	22.7
Northeastern Region							
Daggett	1	17	140	149	1.1	0.2	0.1
Duchesne	11	186	864	1933	2.2	1.2	1.4
Uintah	11	186	1541	1908	1.2	2.1	1.4
Regional total	23	389	2545	3990	1.6	3.5	3.0
Southeastern Region							
Carbon	10	169	1050	1239	1.2	1.5	0.9
Emery	9	152	794	966	1.2	1.1	0.7
Grand	1	17	47	0	0.0	0.1	0.0
San Juan	7	118	373	570	1.5	0.5	0.4
Regional total	27	456	2264	2775	1.2	3.2	2.1
Unknown	18	304	864	1982	2.3	1.2	1.5
Statewide total*	681	11511	71686	134040	1.9	100.0	100.0

\*Statewide totals for sample size and hunters afield are not the total of the columns because hunters hunted multiple counties.

Statewide dove (mourning and white-winged) harvest statistics, Utah 1951–2016.

Year	Total hunters	Total harvest	Hunter-days afield	Doves / hunter-day	Doves / hunter
1951	3007	20448	4455	4.6	6.8
1952	6420	49498	10784	4.6	7.7
1953	9887	75636	17797	4.2	7.7
1954	9901	75941	19724	3.9	7.7
1955	9653	79444	19282	4.1	8.2
1956	10744	95729	20411	4.7	8.9
1957	11298	86769	18620	4.7	7.7
1958	11853	85934	21591	4.0	7.2
1959	12142	110856	24911	4.5	9.1
1960	12440	108477	25766	4.2	8.7
1961	15192	128001	33434	3.8	8.4
1962	14663	144826	34281	4.2	9.9
1963	18258	162769	40490	4.0	8.9
1964	19829	193538	51671	3.7	9.8
1965	18710	164087	48835	3.4	8.8
1966	20594	212696	60608	3.5	10.3
1967	25161	263949	74171	3.6	10.5
1968	25105	207922	70186	3.0	8.3
1969	29131	279311	90965	3.1	9.6
1970	23908	232469	73984	3.1	9.7
1971	26064	226645	81271	2.8	8.7
1972	29341	238354	94046	2.5	8.1
1973	27435	307062	97788	3.1	11.2
1974	34021	306076	112967	2.7	9.0
1975	37378	420308	131312	3.2	11.2
1976	31293	298505	108780	2.7	9.5
1977	26905	267487	83218	3.2	9.9
1978	35985	383696	130173	2.9	10.7
1979	34903	351161	120459	2.9	10.1
1980	32627	343851	97644	3.5	10.5
1981	30060	310068	101728	3.0	10.3
1982	31756	282188	107728	2.6	8.9
1983	28258	272979	100568	2.7	9.7
1984	30573	282307	108793	2.6	9.2
1985	28183	256045	96507	2.7	9.1
1986	26583	226985	87084	2.6	8.5
1987	22553	204030	89378	2.3	9.0

Statewide dove (mourning and white-winged) harvest statistics, Utah 1951–2016 (continued).

Year	Total hunters	Total harvest	Hunter-days afield	Doves / hunter-day	Doves / hunter
1988	22457	178469	76219	2.3	7.9
1989	21696	190328	76372	2.5	8.8
1990	22700	199007	80076	2.5	8.8
1991	22632	178853	78405	2.3	7.9
1992	18021	161902	68937	2.3	9.0
1993	19725	170834	68143	2.5	8.7
1994	20743	195089	78594	2.5	9.4
1995	20896	186336	80688	2.3	8.9
1996	23180	200167	85613	2.3	8.6
1997	22594	208331	84638	2.5	9.2
1998	18030	160014	67234	2.4	8.9
1999	20926	153487	63796	2.4	7.3
2000	23916	227148	79356	2.9	9.5
2001	13715	86998	53736	1.6	6.3
2002	13619	108051	50644	2.1	7.9
2003	14625	108521	55067	2.0	7.4
2004*	13210	104105	46606	2.2	7.9
2005	15849	147903	71138	2.1	9.3
2006	10904	98159	42453	2.3	9.0
2007	10017	80554	37971	2.1	8.0
2008	13430	107929	56898	1.9	8.0
2009	11023	101608	47205	2.2	9.2
2010	11372	97155	43761	2.2	8.5
2011	8891	71217	38689	1.8	8.0
2012	9784	80150	38985	2.1	8.2
2013	9367	77618	43076	1.8	8.3
2014	8113	58962	35477	1.7	7.3
2015	10451	84634	55290	1.5	8.1
2016	11511	134040	71686	1.9	11.6
Average (1951–2015)	19473	177479	64972	2.9	8.8
% change from previous year	10	58	30	22	44
% change from average	-41	-24	10	-35	32

\*Beginning in 2004, hunters were allowed to harvest mourning doves, white-winged doves, and collared-doves. Harvest numbers do not include collared-doves.

Dove harvest by species, Utah 2006–2016.

Year	Mourning dove		White-winged dove		Collared-dove		Unknown		Total harvest
	Harvest	%	Harvest	%	Harvest	%	Harvest	%	
2006	91628	91.3	3954	3.9	2220	2.2	2577	2.6	100379
2007	73807	88.8	1948	2.3	2545	3.1	4799	5.8	83099
2008	102560	85.6	2584	2.2	11948	10.0	2785	2.3	119877
2009	96392	86.2	2650	2.4	10256	9.2	2566	2.3	111864
2010	87827	69.8	6242	5.0	28723	22.8	3086	2.5	125878
2011	67401	69.4	2017	2.1	25910	26.7	1799	1.9	97127
2012	74028	63.8	4357	3.8	35803	30.9	1764	1.5	115952
2013	70967	53.8	4249	3.2	54309	41.2	2400	1.8	131925
2014	53521	60.5	3489	3.9	29455	33.3	1952	2.2	88417
2015	82244	44.8	608*	0.3	98826	53.9	1781	1.0	183459
2016	119145	62.2	2601	1.4	57402	30.0	12291	6.4	191439
Average (2006–2015)	80038	71.4	3210	2.9	30000	23.3	2551	2.4	115798
% change from previous year	45	39	328	310	-42	-44	590	561	4
% change from average	33	-15	-23	-114	48	22	79	63	40

\*Decrease in harvest was likely due to changes in survey methodology to help hunters better identify rare upland game species. Harvest in previous years was likely biased high due to misidentification.

## **FOREST GROUSE (Dusky and Ruffed)**

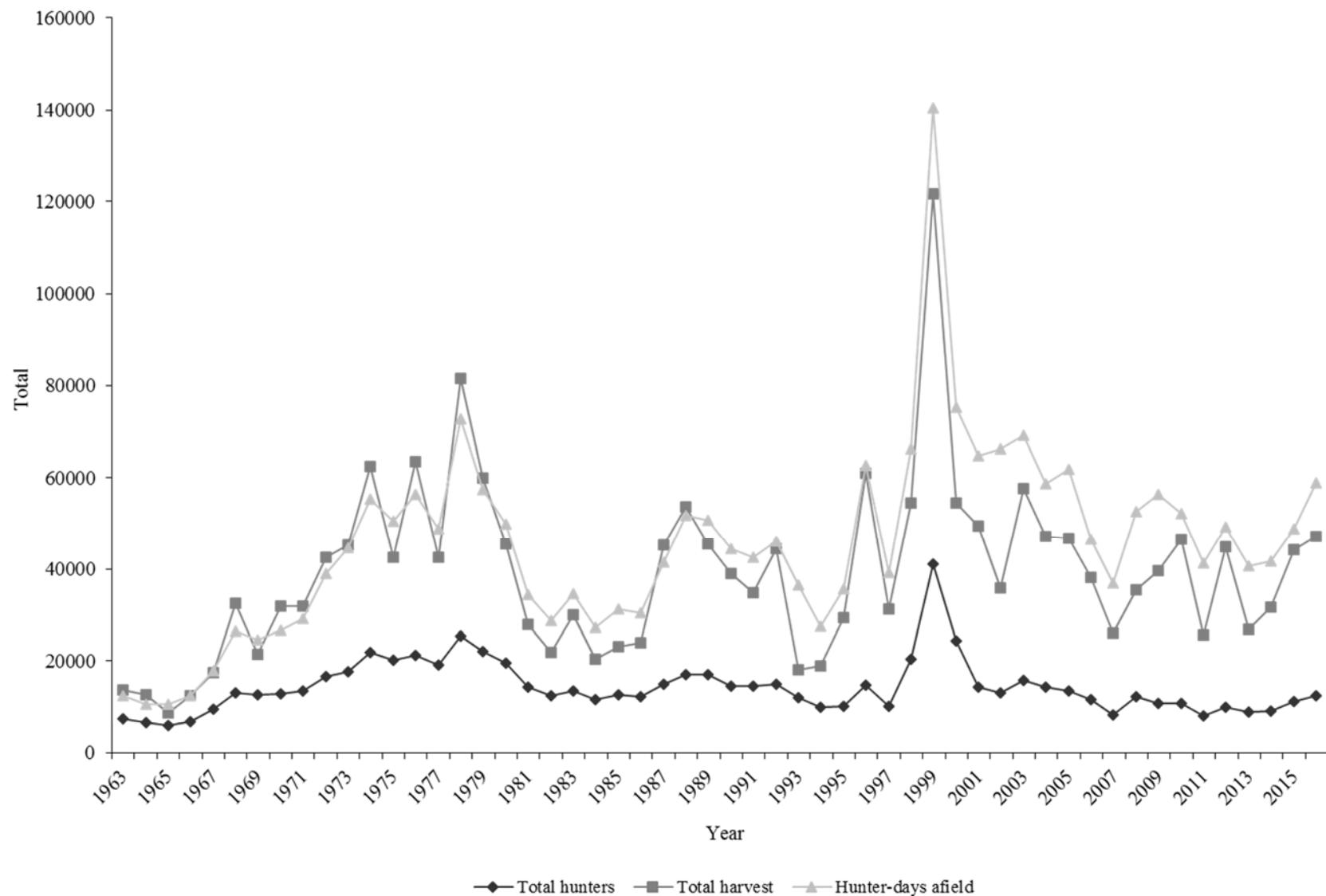


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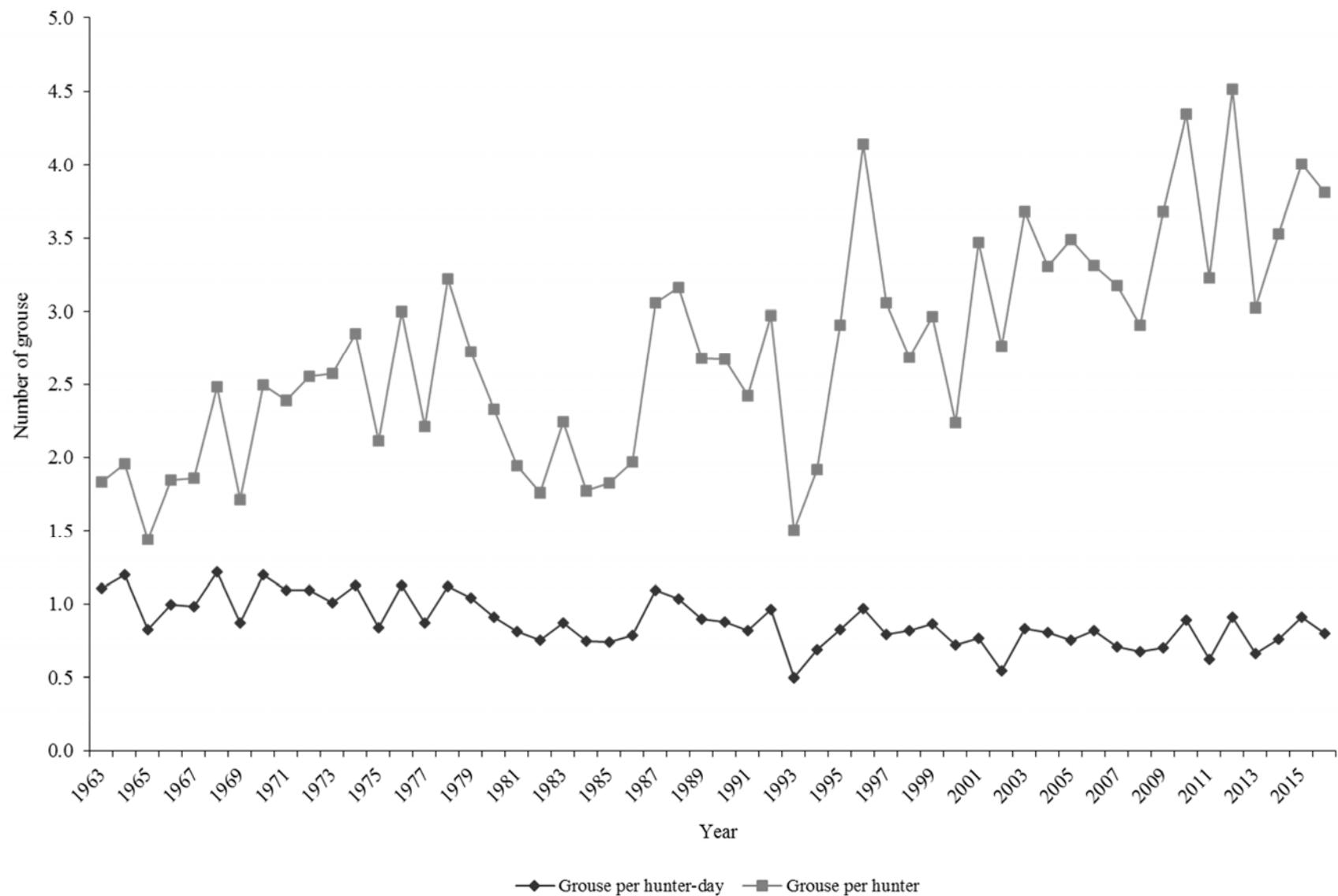


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Statewide trends of forest grouse harvest statistics, Utah 1963–2016.



Statewide trends of forest grouse hunter success, Utah 1963–2016.



Forest grouse (dusky and ruffed) harvest statistics by region and county, Utah 2016.

Region and county	n	Hunters afield	Hunter-days afield	Grouse bagged	Grouse / hunter-day	% pressure	% harvest
Northern Region							
Box Elder	27	375	927	485	0.5	1.6	1.0
Cache	184	2558	10091	8146	0.8	17.1	17.3
Davis	23	320	1015	1081	1.1	1.7	2.3
Morgan	19	264	515	466	0.9	0.9	1.0
Rich	28	389	1618	1435	0.9	2.7	3.0
Summit	86	1196	5207	4232	0.8	8.8	9.0
Weber	41	570	1618	1566	1.0	2.7	3.3
Regional total	408	5672	20991	17411	0.8	35.6	36.9
Central Region							
Juab	21	292	1324	466	0.4	2.2	1.0
Salt Lake	21	292	956	783	0.8	1.6	1.7
Sanpete	79	1098	4001	3505	0.9	6.8	7.4
Tooele	12	167	1089	447	0.4	1.8	0.9
Utah	112	1557	6002	4604	0.8	10.2	9.8
Wasatch	104	1446	6546	4772	0.7	11.1	10.1
Regional total	349	4852	19918	14577	0.7	33.8	30.9
Southern Region							
Beaver	17	236	956	802	0.8	1.6	1.7
Garfield	12	167	441	354	0.8	0.7	0.8
Iron	25	348	1191	764	0.6	2.0	1.6
Kane	9	125	279	149	0.5	0.5	0.3
Millard	16	222	515	764	1.5	0.9	1.6
Piute	12	167	1015	1547	1.5	1.7	3.3
Sevier	48	667	2810	3206	1.1	4.8	6.8
Washington	1	14	15	0	0.0	0.0	0.0
Wayne	8	111	206	112	0.5	0.3	0.2
Regional total	148	2057	7428	7698	1.0	12.6	16.3
Northeastern Region							
Daggett	18	250	986	559	0.6	1.7	1.2
Duchesne	52	723	2648	1957	0.7	4.5	4.1
Uintah	42	584	2030	1696	0.8	3.4	3.6
Regional total	112	1557	5664	4212	0.7	9.6	8.9
Southeastern Region							
Carbon	29	403	1294	969	0.7	2.2	2.1
Emery	20	278	677	671	1.0	1.1	1.4
Grand	13	181	691	280	0.4	1.2	0.6
San Juan	5	70	294	168	0.6	0.5	0.4
Regional total	67	932	2956	2088	0.7	5.0	4.4
Unknown	39	542	2015	1212	0.6	3.4	2.6
Statewide total*	892	12401	58971	47200	0.8	100.0	100.0

\*Statewide totals for sample size and hunters afield are not the total of the columns because hunters hunted multiple counties.

Statewide forest grouse (dusky and ruffed) harvest statistics, Utah 1963–2016.

Year	Total hunters	Total harvest	Hunter-days afield	Grouse / hunter-day	Grouse / hunter
1963	7425	13608	12313	1.1	1.8
1964	6487	12691	10566	1.2	2.0
1965	6005	8669	10504	0.8	1.4
1966	6683	12321	12387	1.0	1.8
1967	9420	17526	17773	1.0	1.9
1968	13061	32414	26537	1.2	2.5
1969	12523	21498	24572	0.9	1.7
1970	12775	31898	26619	1.2	2.5
1971	13363	31901	29100	1.1	2.4
1972	16640	42518	38940	1.1	2.6
1973	17588	45232	44738	1.0	2.6
1974	21920	62439	55258	1.1	2.8
1975	20102	42461	50579	0.8	2.1
1976	21186	63436	56422	1.1	3.0
1977	19188	42477	48746	0.9	2.2
1978	25318	81558	72732	1.1	3.2
1979	21993	59851	57404	1.0	2.7
1980	19511	45522	49899	0.9	2.3
1981	14329	27894	34305	0.8	1.9
1982	12384	21778	28767	0.8	1.8
1983	13414	30088	34530	0.9	2.2
1984	11511	20396	27244	0.7	1.8
1985	12646	23097	31290	0.7	1.8
1986	12117	23869	30312	0.8	2.0
1987	14831	45326	41428	1.1	3.1
1988	16947	53562	51726	1.0	3.2
1989	16987	45487	50631	0.9	2.7
1990	14591	38922	44452	0.9	2.7
1991	14421	34897	42517	0.8	2.4
1992	15000	44518	46136	1.0	3.0
1993	12029	18147	36390	0.5	1.5
1994	9827	18862	27510	0.7	1.9
1995	10088	29312	35591	0.8	2.9
1996	14702	60922	62711	1.0	4.1
1997	10206	31198	39304	0.8	3.1
1998	20310	54439	66256	0.8	2.7
1999	41041	121708	140478	0.9	3.0
2000	24338	54456	75199	0.7	2.2

Statewide forest grouse (dusky and ruffed) harvest statistics, Utah 1963–2016 (continued).

Year	Total hunters	Total harvest	Hunter-days afield	Grouse / hunter-day	Grouse / hunter
2001	14260	49412	64632	0.8	3.5
2002	13020	35949	66118	0.5	2.8
2003	15669	57633	69032	0.8	3.7
2004	14259	47130	58672	0.8	3.3
2005	13371	46631	61866	0.8	3.5
2006	11532	38201	46504	0.8	3.3
2007	8193	26012	36799	0.7	3.2
2008	12189	35408	52577	0.7	2.9
2009	10791	39702	56455	0.7	3.7
2010	10724	46598	52138	0.9	4.3
2011	7941	25607	41223	0.6	3.2
2012	9915	44787	49227	0.9	4.5
2013	8888	26889	40666	0.7	3.0
2014	8977	31688	41716	0.8	3.5
2015	11052	44255	48727	0.9	4.0
2016	12401	47200	58971	0.8	3.8
Average (1963–2015)	14187	39074	45133	0.9	2.7
% change from previous year	12	7	21	-12	-5
% change from average	-13	21	31	-9	40

Forest grouse harvest by species, Utah 1963–2016.

Year	Ruffed grouse		Dusky grouse		Unknown grouse		Total harvest
	Harvest	%	Harvest	%	Harvest	%	
1963	5470	40.2	7372	54.2	766	5.6	13608
1964	5354	42.2	6685	52.7	652	5.1	12691
1965	3225	37.2	4924	56.8	520	6.0	8669
1966	6966	56.5	4659	37.8	696	5.6	12321
1967	8476	48.4	6773	38.6	2277	13.0	17526
1968	17048	52.6	12604	38.9	2762	8.5	32414
1969	9490	44.1	10419	48.5	1589	7.4	21498
1970	15590	48.9	13515	42.4	2793	8.8	31898
1971	15759	49.4	13749	43.1	2393	7.5	31901
1972	20648	48.6	19221	45.2	2649	6.2	42518
1973	7153	15.8	36846	81.5	1233	2.7	45232
1974	24561	39.3	32236	51.6	5642	9.0	62439
1975	15750	37.1	23138	54.5	3573	8.4	42461
1976	23551	37.1	35660	56.2	4225	6.7	63436
1977	15766	37.1	23455	55.2	3256	7.7	42477
1978	30340	37.2	46651	57.2	4567	5.6	81558
1979	23156	38.7	33070	55.3	3625	6.1	59851
1980	15457	34.0	27588	60.6	2477	5.4	45522
1981	8557	30.7	17852	64.0	1485	5.3	27894
1982	7509	34.5	12138	55.7	2131	9.8	21778
1983	11366	37.8	16955	56.4	1767	5.9	30088
1984	6780	33.2	12647	62.0	969	4.8	20396
1985	8701	37.7	13416	58.1	980	4.2	23097
1986	8819	36.9	14156	59.3	894	3.7	23869
1987	15811	34.9	28068	61.9	1447	3.2	45326
1988	19100	35.7	31556	58.9	2906	5.4	53562
1989	16323	35.9	27794	61.1	1370	3.0	45487
1990	11010	28.3	26115	67.1	1797	4.6	38922
1991	12073	34.6	21310	61.1	1514	4.3	34897
1992	15017	33.7	29146	65.5	355	0.8	44518
1993	6650	36.6	11040	60.8	457	2.5	18147
1994	6908	36.6	11865	62.9	89	0.5	18862
1995	13140	44.8	16172	55.2	0	0.0	29312
1996	29567	48.5	31355	51.5	0	0.0	60922
1997	14861	47.6	16337	52.4	0	0.0	31198
1998	12586	23.1	14773	27.1	27080	49.7	54439
1999	32018	26.3	28741	23.6	60949	50.1	121708
2000	28797	52.9	24321	44.7	1338	2.5	54456

Forest grouse harvest by species, Utah 1963–2016 (continued).

Year	Ruffed grouse		Dusky grouse		Unknown grouse		Total harvest
	Harvest	%	Harvest	%	Harvest	%	
2001	24257	49.1	23905	48.4	1250	2.5	49412
2002	16253	45.2	17151	47.7	2543	7.1	35947
2003	26716	46.4	30071	52.2	846	1.5	57633
2004	22400	47.5	23923	50.8	806	1.7	47129
2005	17068	36.6	25367	54.4	4196	9.0	46631
2006	15154	39.7	21784	57.0	1263	3.3	38201
2007	12064	46.4	11990	46.1	1958	7.5	26012
2008	15305	43.2	17798	50.3	2305	6.5	35408
2009	18239	45.9	19436	49.0	2027	5.1	39702
2010	17652	37.9	25056	53.8	3890	8.3	46598
2011	11906	46.5	12399	48.4	1302	5.1	25607
2012	25680	57.3	16345	36.5	2765	6.2	44787
2013	13807	51.3	12171	45.3	913	3.4	26889
2014	17304	54.6	13367	42.2	1017	3.2	31688
2015	23825	53.8	18152	41.0	2278	5.1	44255
2016	22143	46.9	22667	48.0	2389	5.1	47200
Average (1963–2015)	15725	41.1	19924	52.1	3425	6.8	38921
% change from previous year	-7	-13	25	17	5	-2	7
% change from average	41	14	14	-8	-30	-26	21

## GAMBEL'S QUAIL



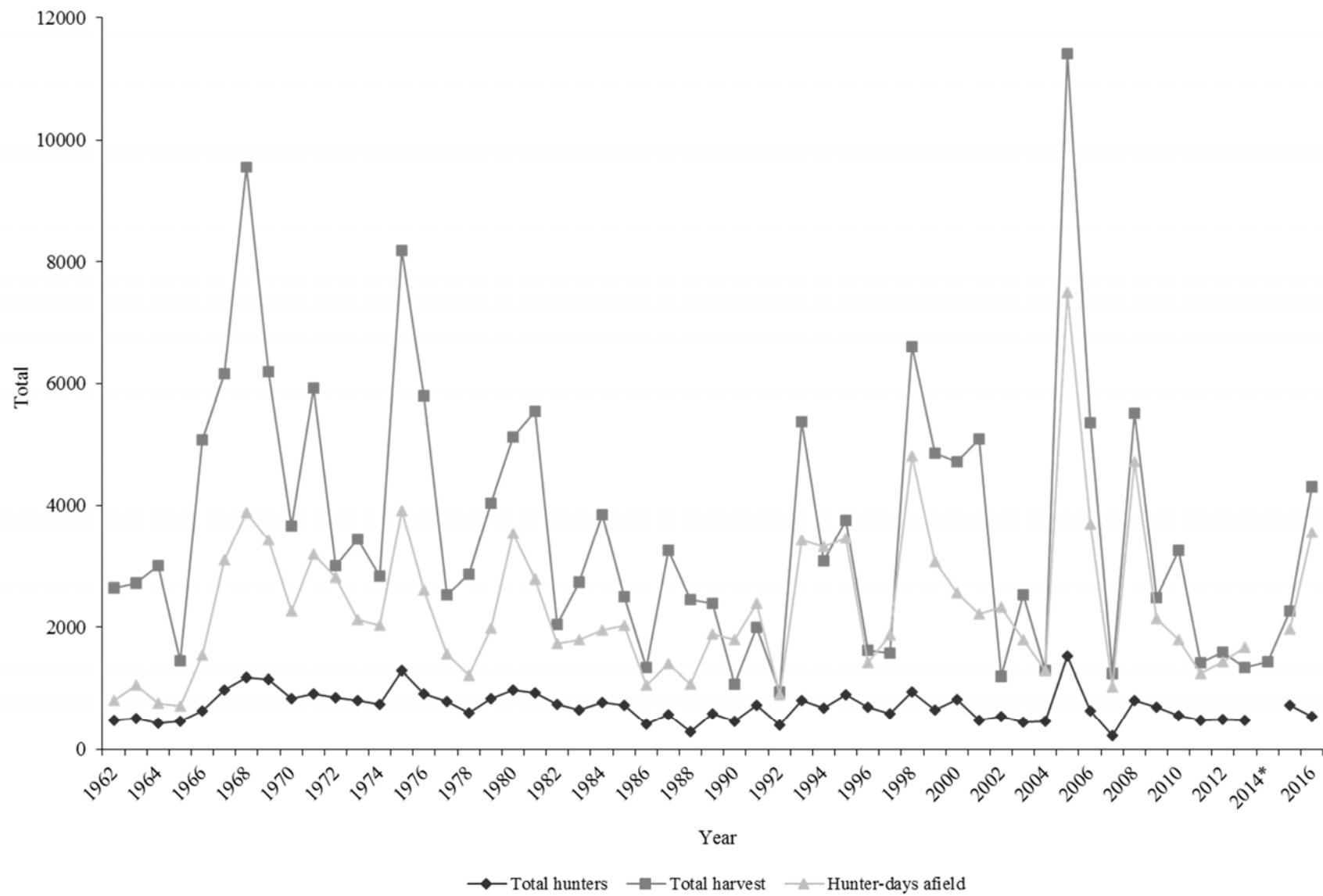
Gambel's quail waterhole trend counts, west slope of Beaver Dam Mountains, Washington County, Utah 1980–2016.

Year	Total young	Total adults	Total quail	Young / 100 adults
1980	72	52	124	138
1981	37	25	62	148
1982	85	33	118	258
1983	114	14	128	814
1984	166	86	252	193
1985	47	11	58	427
1986	163	48	211	340
1987	348	139	487	250
1988	59	47	106	126
1989	35	18	53	194
1990	33	9	42	367
1991	208	35	243	594
1992	415	128	543	324
1993	465	158	623	294
1994	135	102	237	132
1995	33	17	50	194
1996	—	—	—	—
1997	61	21	82	290
1998	236	30	266	787
1999	66	82	148	80
2000	340	61	401	557
2001	228	143	371	159
2002	—	—	—	—
2003	267	59	326	453
2004	796	199	995	400
2005	251	55	306	456
2006	135	110	245	123
2007	0	16	16	0
2008	86	35	121	246
2009	87	26	113	335
2010	51	15	66	340
2011	41	19	60	216
2012	8	8	16	100
2013	23	8	31	288

Gambel's quail waterhole trend counts, west slope of Beaver Dam Mountains, Washington County, Utah 1980–2016 (continued).

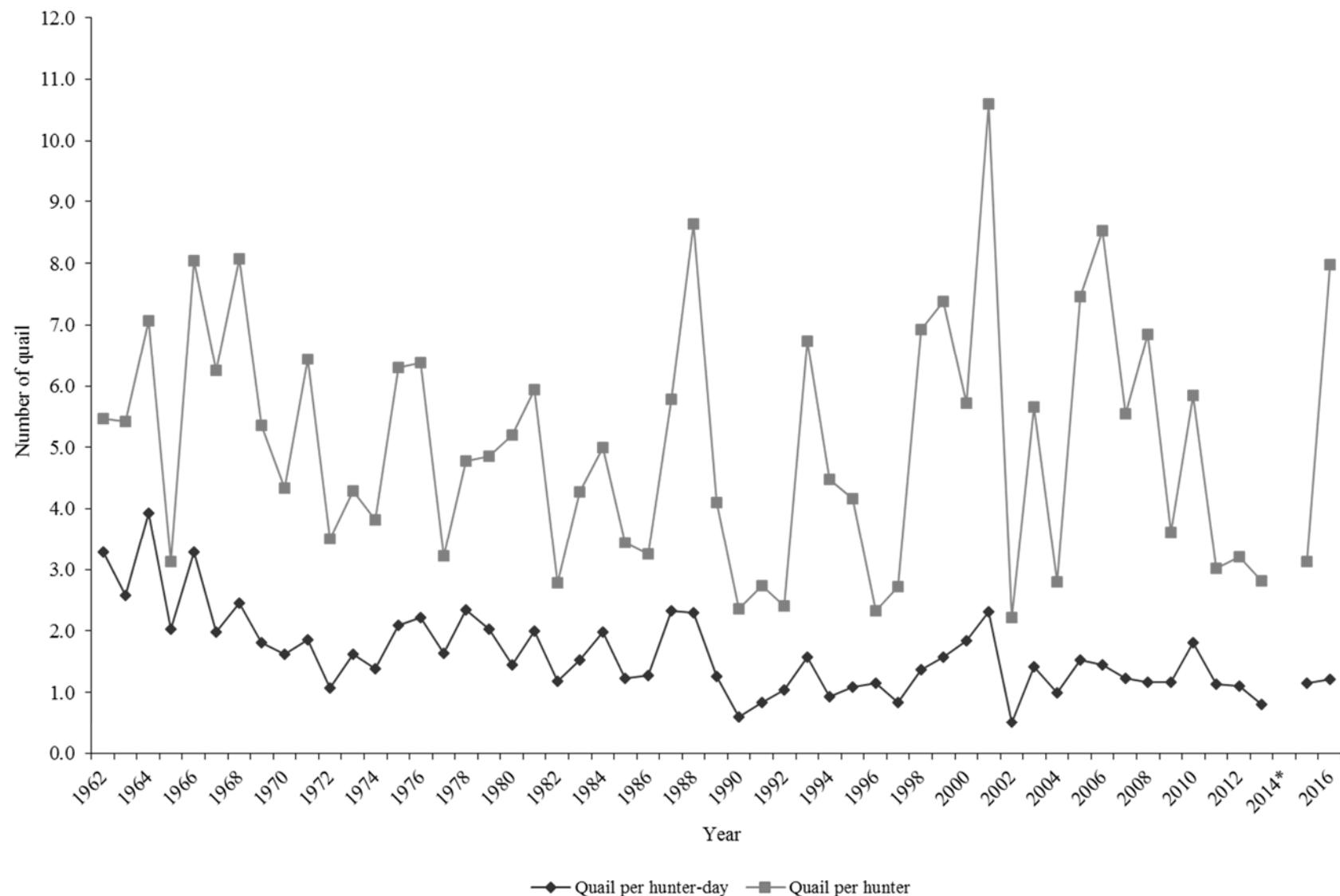
Year	Total young	Total adults	Total quail	Young / 100 adults
2014	197	61	258	323
2015	284	68	352	418
2016	189	75	264	252
Average (1980–2015)	164	57	221	305
% change from previous year	-33	10	-25	-40
% change from average	15	32	20	-17

Statewide trends of Gambel's quail harvest statistics, Utah 1962–2016.



\*No data in 2014 due to change in survey methodology.

Statewide trends of Gambel's quail hunter success, Utah 1962–2016.



\*No data in 2014 due to a change in survey methodology.

## Gambel's quail harvest statistics by region and county, Utah 2016.

Region and county	n	Hunters afield	Hunter-days afield	Quail bagged	Quail / hunter-day	% pressure	% harvest
<b>Northern Region</b>							
Box Elder	0	0	—	—	—	0.0	0.0
Cache	0	0	—	—	—	0.0	0.0
Davis	0	0	—	—	—	0.0	0.0
Morgan	0	0	—	—	—	0.0	0.0
Rich	0	0	—	—	—	0.0	0.0
Summit	0	0	—	—	—	0.0	0.0
Weber	0	0	—	—	—	0.0	0.0
<b>Regional total</b>	0	0	—	—	—	0.0	0.0
<b>Central Region</b>							
Juab	0	0	—	—	—	0.0	0.0
Salt Lake	0	0	—	—	—	0.0	0.0
Sanpete	0	0	—	—	—	0.0	0.0
Tooele	0	0	—	—	—	0.0	0.0
Utah	0	0	—	—	—	0.0	0.0
Wasatch	0	0	—	—	—	0.0	0.0
<b>Regional total</b>	0	0	—	—	—	0.0	0.0
<b>Southern Region</b>							
Beaver	0	0	—	—	—	0.0	0.0
Garfield	0	0	—	—	—	0.0	0.0
Iron	2	24	32	49	1.5	0.9	1.1
Kane	0	0	—	—	—	0.0	0.0
Millard	0	0	—	—	—	0.0	0.0
Piute	0	0	—	—	—	0.0	0.0
Sevier	0	0	—	—	—	0.0	0.0
Washington	51	611	3194	4177	1.3	90.0	97.2
Wayne	1	12	16	0	0.0	0.5	0.0
<b>Regional total</b>	54	647	3242	4226	1.3	91.3	98.3
<b>Northeastern Region</b>							
Daggett	0	0	—	—	—	0.0	0.0
Duchesne	0	0	—	—	—	0.0	0.0
Uintah	0	0	—	—	—	0.0	0.0
<b>Regional total</b>	0	0	—	—	—	0.0	0.0
<b>Southeastern Region</b>							
Carbon	0	0	—	—	—	0.0	0.0
Emery	0	0	—	—	—	0.0	0.0
Grand	0	0	—	—	—	0.0	0.0
San Juan	0	0	—	—	—	0.0	0.0
<b>Regional total</b>	0	0	—	—	—	0.0	0.0
Unknown	7	84	308	73	0.2	8.7	1.7
<b>Statewide total*</b>	45	539	3551	4299	1.2	100.0	100.0

\*Statewide totals for sample size and hunters afield are not the total of the columns because hunters hunted multiple counties.

Statewide Gambel's quail harvest statistics, Utah 1962–2016.

Year	Total hunters	Total harvest	Hunter-days afield	Quail / hunter-day	Quail / hunter
1962	482	2636	804	3.3	5.5
1963	502	2722	1057	2.6	5.4
1964	425	3003	765	3.9	7.1
1965	463	1448	714	2.0	3.1
1966	631	5071	1540	3.3	8.0
1967	985	6157	3097	2.0	6.3
1968	1184	9551	3884	2.5	8.1
1969	1155	6188	3424	1.8	5.4
1970	842	3656	2259	1.6	4.3
1971	919	5922	3185	1.9	6.4
1972	860	3010	2807	1.1	3.5
1973	800	3435	2126	1.6	4.3
1974	741	2830	2033	1.4	3.8
1975	1299	8184	3913	2.1	6.3
1976	910	5802	2608	2.2	6.4
1977	784	2532	1553	1.6	3.2
1978	600	2862	1221	2.3	4.8
1979	830	4032	1979	2.0	4.9
1980	984	5124	3529	1.5	5.2
1981	934	5541	2781	2.0	5.9
1982	736	2053	1731	1.2	2.8
1983	642	2741	1792	1.5	4.3
1984	771	3857	1948	2.0	5.0
1985	729	2507	2036	1.2	3.4
1986	412	1339	1050	1.3	3.3
1987	564	3260	1397	2.3	5.8
1988	284	2454	1068	2.3	8.6
1989	581	2385	1887	1.3	4.1
1990	453	1070	1790	0.6	2.4
1991	731	2000	2383	0.8	2.7
1992	391	941	906	1.0	2.4
1993	798	5377	3420	1.6	6.7
1994	686	3076	3322	0.9	4.5
1995	900	3751	3460	1.1	4.2
1996	697	1625	1416	1.1	2.3
1997	582	1579	1870	0.8	2.7
1998	954	6607	4815	1.4	6.9
1999	656	4847	3070	1.6	7.4
2000	823	4711	2566	1.8	5.7
2001	481	5095	2211	2.3	10.6

Statewide Gambel's quail harvest statistics, Utah 1962–2016 (continued).

Year	Total hunters	Total harvest	Hunter-days afield	Quail / hunter-day	Quail / hunter
2002	539	1197	2335	0.5	2.2
2003	448	2537	1791	1.4	5.7
2004	463	1296	1296	1.0	2.8
2005	1530	11412	7496	1.5	7.5
2006	628	5353	3701	1.4	8.5
2007	225	1249	1019	1.2	5.6
2008	804	5509	4707	1.2	6.9
2009	688	2485	2141	1.2	3.6
2010	557	3255	1794	1.8	5.8
2011	468	1410	1250	1.1	3.0
2012	495	1586	1432	1.1	3.2
2013	477	1342	1672	0.8	2.8
2014	*	1426	*	*	*
2015	724	2263	1963	1.2	3.1
2016	539	4299	3551	1.2	8.0
Average (1951–2015)	703	3580	2302	1.6	5.0
% change from previous year	-26	90	81	5	155
% change from average	-23	20	54	-26	60

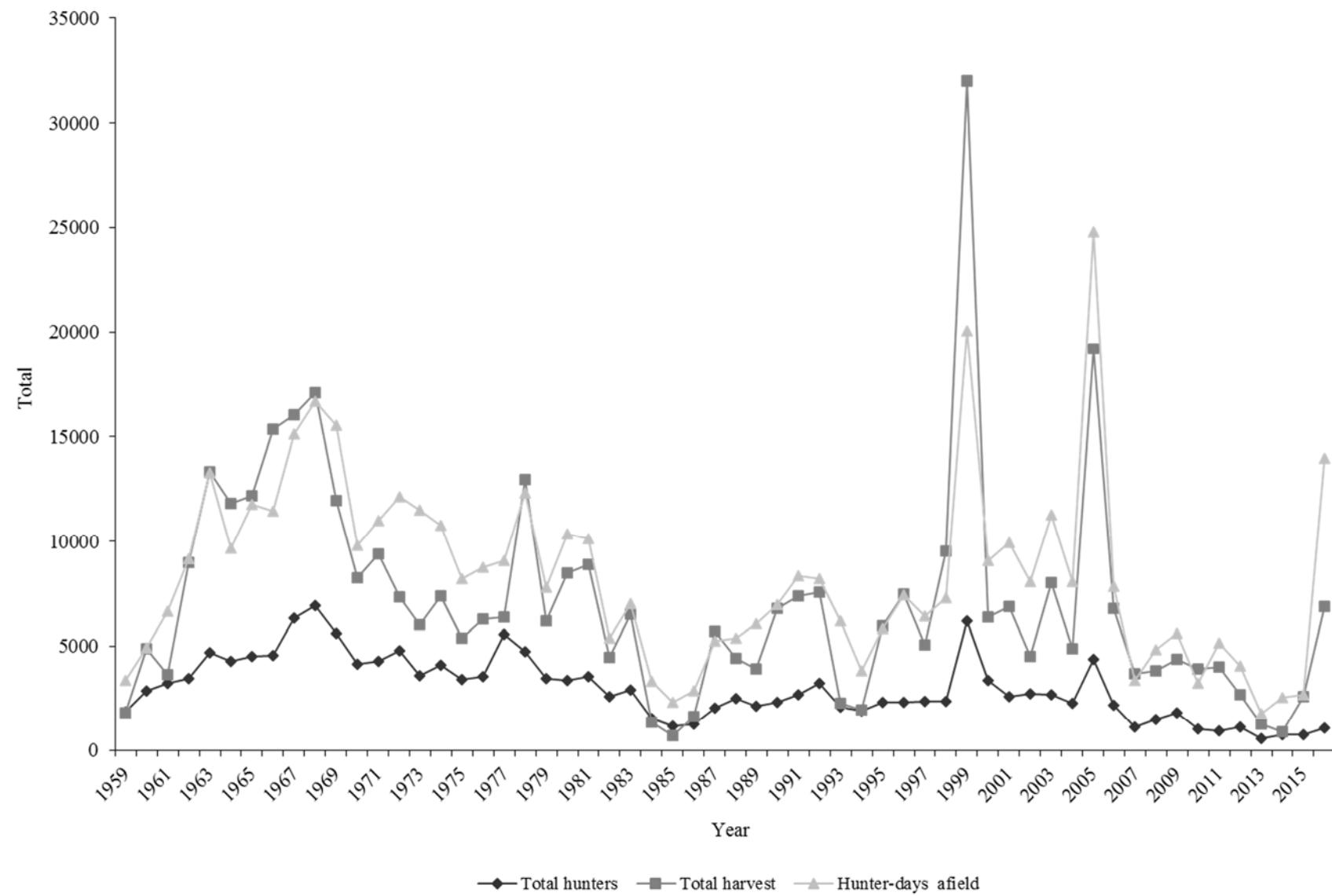
\*No data in 2014 due to a change in survey methodology.

## GRAY (HUNGARIAN) PARTRIDGE

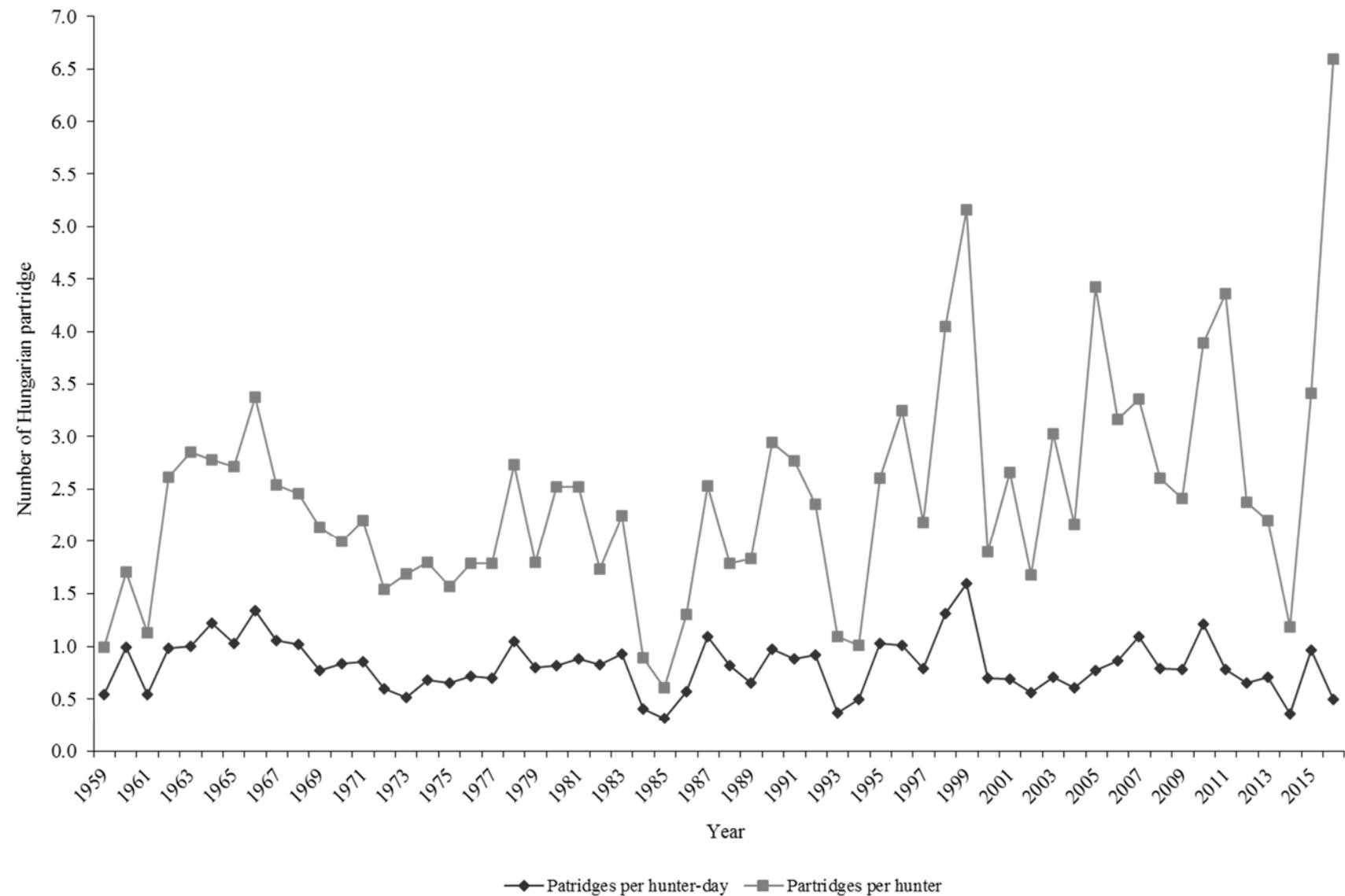


CLARK BRONSON

Statewide trends of gray (Hungarian) partridge harvest statistics, Utah 1959–60 to 2016–17.



Statewide trends of gray (Hungarian) partridge hunter success, Utah 1959–60 to 2016–17.



Gray (Hungarian) partridge harvest statistics by region and county, Utah 2016–17.

Region and county	n	Hunters afield	Hunter-days afield	Partridge bagged	Partridge / hunter-day	% pressure	% harvest
Northern Region							
Box Elder	45	589	6535	3087	0.5	46.8	44.7
Cache	24	314	5596	3258	0.6	40.1	47.2
Davis	1	13	36	43	1.2	0.3	0.6
Morgan	1	13	36	0	0.0	0.3	0.0
Rich	2	26	181	43	0.2	1.3	0.6
Summit	1	13	36	0	0.0	0.3	0.0
Weber	2	26	469	86	0.2	3.4	1.2
Regional total	76	994	12889	6517	0.5	92.2	94.4
Central Region							
Juab	0	0	—	—	—	0.0	0.0
Salt Lake	0	0	—	—	—	0.0	0.0
Sanpete	0	0	—	—	—	0.0	0.0
Tooele	0	0	—	—	—	0.0	0.0
Utah	2	26	542	300	0.6	3.9	4.3
Wasatch	0	0	—	—	—	0.0	0.0
Regional total	2	26	542	300	0.6	3.9	4.3
Southern Region							
Beaver	1	13	253	86	0.3	1.8	1.2
Garfield	1	13	72	0	0.0	0.5	0.0
Iron	1	13	36	0	0.0	0.3	0.0
Kane	0	0	—	—	—	0.0	0.0
Millard	0	0	—	—	—	0.0	0.0
Piute	0	0	—	—	—	0.0	0.0
Sevier	0	0	—	—	—	0.0	0.0
Washington	0	0	—	—	—	0.0	0.0
Wayne	0	0	—	—	—	0.0	0.0
Regional total	3	39	361	86	0.2	2.6	1.2
Northeastern Region							
Daggett	0	0	—	—	—	0.0	0.0
Duchesne	1	13	108	0	0.0	0.8	0.0
Uintah	0	0	—	—	—	0.0	0.0
Regional total	1	13	108	0	0.0	0.8	0.0
Southeastern Region							
Carbon	0	0	—	—	—	0.0	0.0
Emery	0	0	—	—	—	0.0	0.0
Grand	0	0	—	—	—	0.0	0.0
San Juan	0	0	—	—	—	0.0	0.0
Regional total	0	0	—	—	—	0.0	0.0
Unknown	2	26	72	0	0.0	0.5	0.0
Statewide total*	80	1047	13973	6902	0.5	100.0	100.0

\*Statewide totals for sample size and hunters afield are not the total of the columns because hunters hunted multiple counties.

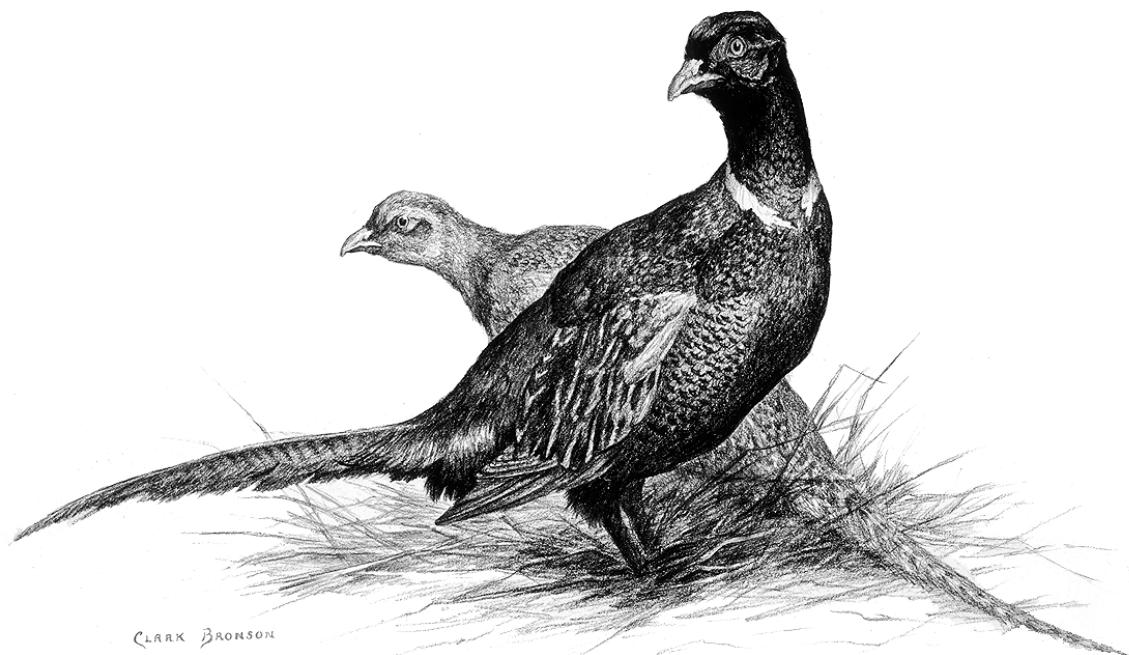
Statewide gray (Hungarian) partridge harvest statistics, Utah 1955–56 to 2016–17.

Year	Total hunters	Total harvest	Hunter-days afield	Partridge / hunter-day	Partridge / hunter
1955–56	—	—	—	—	0.4
1956–57	—	—	—	—	0.9
1957–58	—	—	—	—	0.5
1958–59	—	—	—	—	1.3
1959–60	1846	1820	3354	0.5	1.0
1960–61	2847	4877	4929	1.0	1.7
1961–62	3205	3648	6645	0.5	1.1
1962–63	3440	8970	9153	1.0	2.6
1963–64	4676	13343	13291	1.0	2.9
1964–65	4249	11812	9688	1.2	2.8
1965–66	4498	12183	11798	1.0	2.7
1966–67	4549	15348	11473	1.3	3.4
1967–68	6321	16049	15105	1.1	2.5
1968–69	6935	17089	16674	1.0	2.5
1969–70	5591	11966	15515	0.8	2.1
1970–71	4128	8236	9818	0.8	2.0
1971–72	4276	9407	11011	0.9	2.2
1972–73	4754	7335	12135	0.6	1.5
1973–74	3566	6014	11516	0.5	1.7
1974–75	4103	7389	10789	0.7	1.8
1975–76	3409	5358	8216	0.7	1.6
1976–77	3517	6287	8753	0.7	1.8
1977–78	5557	6360	9058	0.7	1.8
1978–79	4743	12969	12328	1.1	2.7
1979–80	3435	6200	7787	0.8	1.8
1980–81	3359	8466	10366	0.8	2.5
1981–82	3545	8916	10147	0.9	2.5
1982–83	2590	4475	5379	0.8	1.7
1983–84	2889	6506	6998	0.9	2.3
1984–85	1523	1360	3309	0.4	0.9
1985–86	1157	707	2314	0.3	0.6
1986–87	1257	1627	2843	0.6	1.3
1987–88	2010	5711	5246	1.1	2.5
1988–89	2471	4424	5392	0.8	1.8
1989–90	2136	3920	6035	0.7	1.8
1990–91	2305	6770	6976	1.0	2.9
1991–92	2662	7376	8367	0.9	2.8
1992–93	3198	7553	8192	0.9	2.4
1993–94	2090	2280	6194	0.4	1.1
1994–95	1899	1916	3832	0.5	1.0

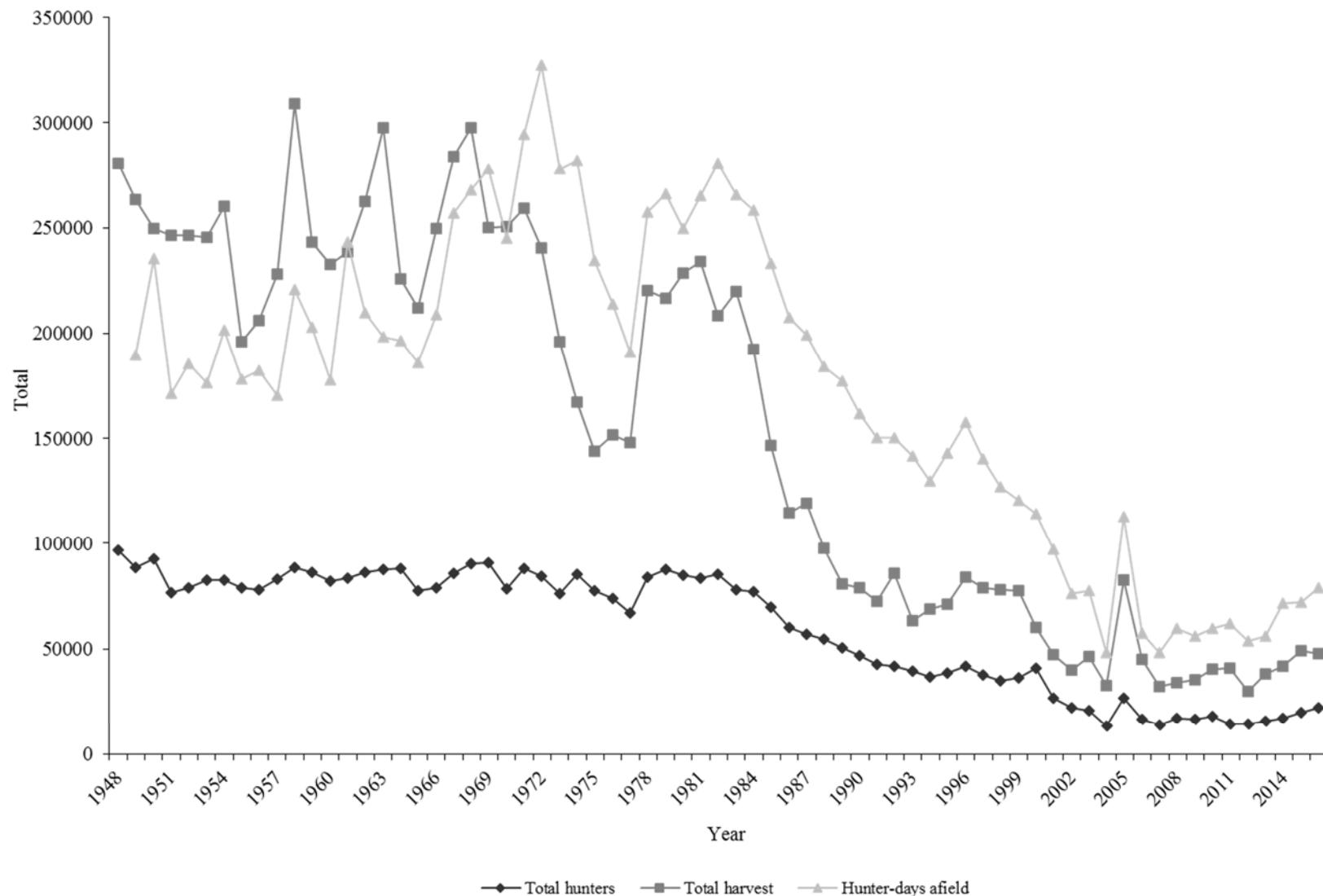
Statewide gray (Hungarian) partridge harvest statistics, Utah 1955–56 to 2016–17 (continued).

Year	Total hunters	Total harvest	Hunter-days afield	Partridge / hunter-day	Partridge / hunter
1995–96	2294	5967	5812	1.0	2.6
1996–97	2299	7455	7409	1.0	3.2
1997–98	2328	5071	6443	0.8	2.2
1998–99	2350	9515	7281	1.3	4.1
1999–00	6211	32036	20063	1.6	5.2
2000–01	3349	6355	9096	0.7	1.9
2001–02	2596	6889	9933	0.7	2.7
2002–03	2694	4520	8052	0.6	1.7
2003–04	2656	8030	11283	0.7	3.0
2004–05	2253	4877	8087	0.6	2.2
2005–06	4345	19214	24783	0.8	4.4
2006–07	2148	6798	7850	0.9	3.2
2007–08	1099	3683	3358	1.1	3.4
2008–09	1475	3834	4825	0.8	2.6
2009–10	1817	4376	5618	0.8	2.4
2010–11	1006	3920	3236	1.2	3.9
2011–12	918	4001	5152	0.8	4.4
2012–13	1119	2659	4052	0.7	2.4
2013–14	574	1263	1775	0.7	2.2
2014–15	765	904	2526	0.4	1.2
2015–16	751	2558	2665	1.0	3.4
2016–17	1047	6902	13973	0.5	6.6
Average (1955–2016)	2979	7168	8244	0.8	2.4
% change from previous year	39	170	424	-49	94
% change from average	-65	-4	69	-40	180

## RING-NECKED PHEASANT



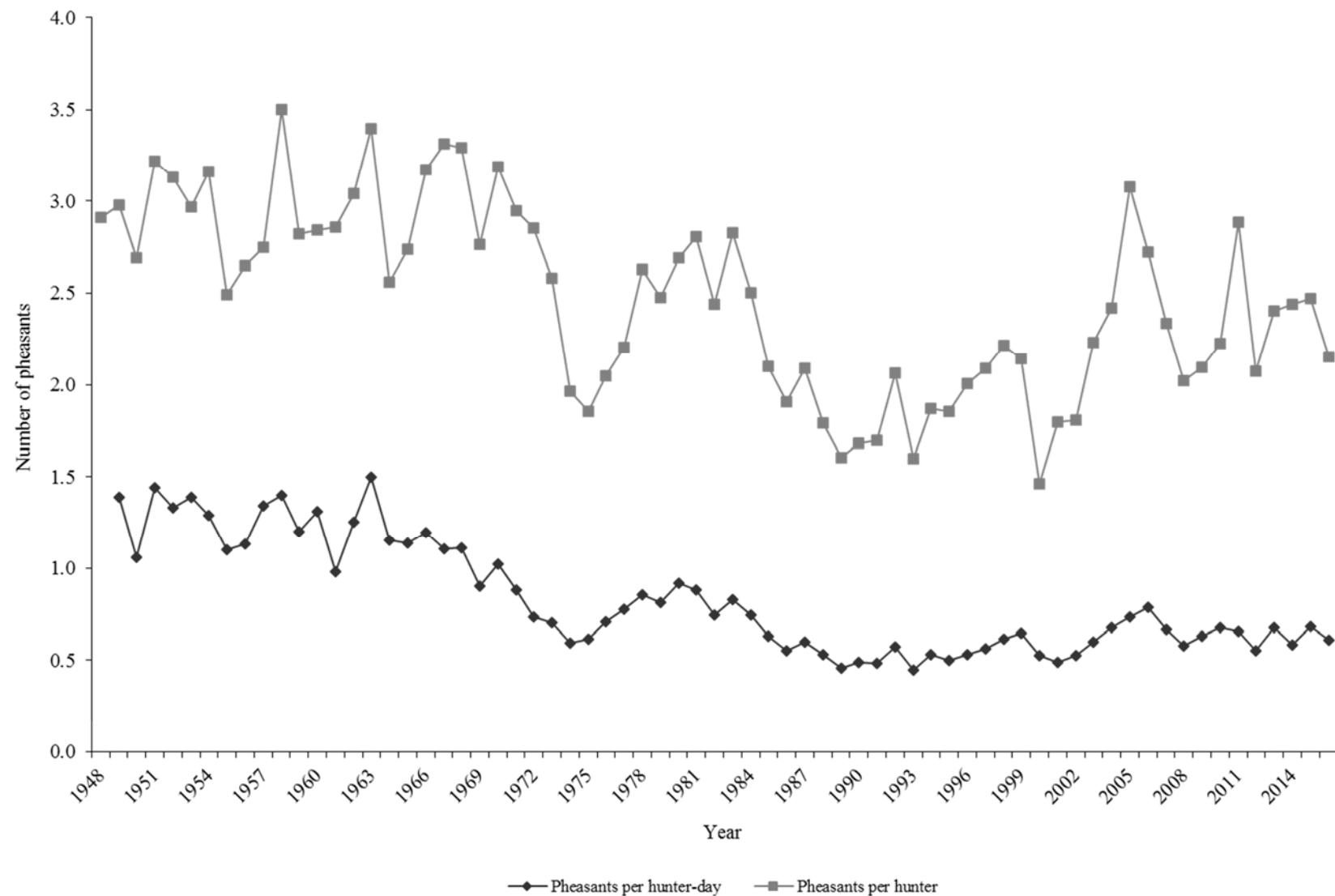
Statewide trends of ring-necked pheasant harvest statistics, Utah 1948–2016.



\*No data available for hunter-days afield in 1948.

\*\*Starting in 2001, harvest data are likely biased high due to hunters reporting harvest from commercial hunting areas.

Statewide trends of ring-necked pheasant hunter success, Utah 1948–2016.



\*No data available for hunter-days afield in 1948.

\*\*Starting in 2001, harvest data are likely biased high due to hunters reporting harvest from commercial hunting areas.

## Ring-necked pheasant harvest statistics by region and county, Utah 2016.

Region and county	n	Hunters afield	Hunter-days afield	Pheasants bagged	Pheasants / hunter-day	% pressure	% harvest
<b>Northern Region</b>							
Box Elder	247	3780	11088	7304	0.7	14.1	15.2
Cache	230	3520	12064	8937	0.7	15.3	18.6
Davis	95	1454	4387	1695	0.4	5.6	3.5
Morgan	1	15	15	0	0.0	0.0	0.0
Rich	0	0	—	—	—	0.0	0.0
Summit	1	15	15	31	2.1	0.0	0.1
Weber	156	2388	7903	3190	0.4	10.0	6.7
<b>Regional total</b>	<b>730</b>	<b>11172</b>	<b>35472</b>	<b>21157</b>	<b>0.6</b>	<b>45.0</b>	<b>44.1</b>
<b>Central Region</b>							
Juab	47	719	2118	971	0.5	2.7	2.0
Salt Lake	23	352	811	555	0.7	1.0	1.2
Sanpete	58	888	2554	2049	0.8	3.2	4.3
Tooele	115	1760	5048	2342	0.5	6.4	4.9
Utah	255	3903	12545	5563	0.4	15.9	11.6
Wasatch	4	61	180	46	0.3	0.2	0.1
<b>Regional total</b>	<b>502</b>	<b>7683</b>	<b>23256</b>	<b>11526</b>	<b>0.5</b>	<b>29.5</b>	<b>24.0</b>
<b>Southern Region</b>							
Beaver	10	153	421	170	0.4	0.5	0.4
Garfield	2	31	45	46	1.0	0.1	0.1
Iron	22	337	1142	1433	1.3	1.4	3.0
Kane	0	0	—	—	—	0.0	0.0
Millard	48	735	2284	1264	0.6	2.9	2.6
Piute	0	0	—	—	—	0.0	0.0
Sevier	62	949	2809	1664	0.6	3.6	3.5
Washington	9	138	466	123	0.3	0.6	0.3
Wayne	7	107	391	231	0.6	0.5	0.5
<b>Regional total</b>	<b>160</b>	<b>2450</b>	<b>7558</b>	<b>4931</b>	<b>0.7</b>	<b>9.6</b>	<b>10.3</b>
<b>Northeastern Region</b>							
Daggett	2	31	75	46	0.6	0.1	0.1
Duchesne	81	1240	3110	2712	0.9	3.9	5.7
Uintah	58	888	3005	2604	0.9	3.8	5.4
<b>Regional total</b>	<b>141</b>	<b>2159</b>	<b>6190</b>	<b>5362</b>	<b>0.9</b>	<b>7.8</b>	<b>11.2</b>
<b>Southeastern Region</b>							
Carbon	19	291	962	601	0.6	1.2	1.3
Emery	53	811	3801	2697	0.7	4.8	5.6
Grand	4	61	285	31	0.1	0.4	0.1
San Juan	0	0	—	—	—	0.0	0.0
<b>Regional total</b>	<b>76</b>	<b>1163</b>	<b>5048</b>	<b>3329</b>	<b>0.7</b>	<b>6.4</b>	<b>6.9</b>
Unknown	36	551	1367	1633	1.2	1.7	3.4
<b>Statewide total*</b>	<b>1457</b>	<b>22299</b>	<b>78891</b>	<b>47938</b>	<b>0.6</b>	<b>100.0</b>	<b>100.0</b>

\*Statewide totals for sample size and hunters afield are not the total of the columns because hunters hunted multiple counties.  
Harvest data are likely biased high due to possibility of hunters reporting harvest from commercial hunting areas.

Statewide ring-necked pheasant harvest statistics, Utah 1948–2016.

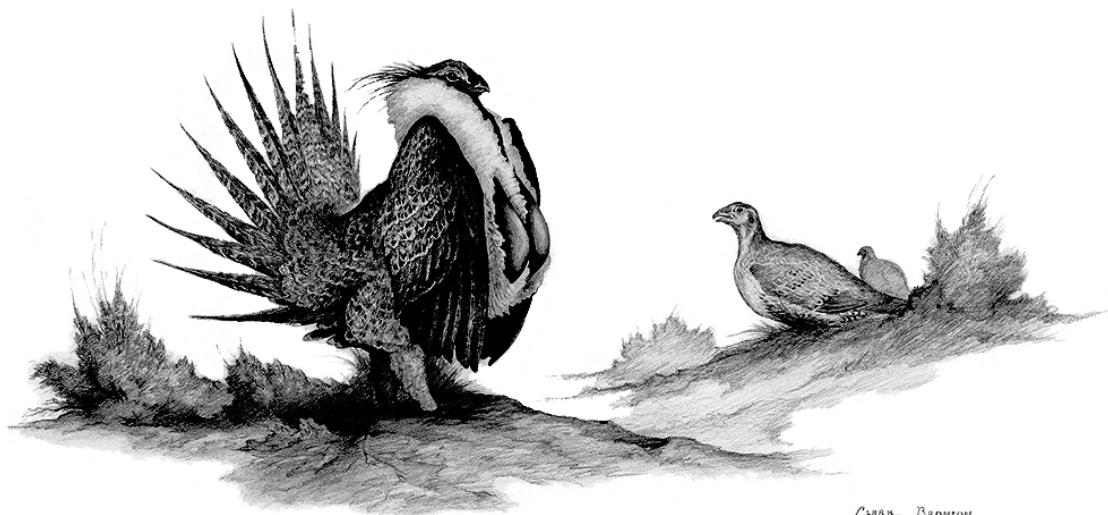
Year	Total hunters	Total harvest	Hunter-days afield	Pheasants / hunter-day	Pheasants / hunter
1948	96534	280914	—	—	2.9
1949	88369	263340	189453	1.4	3.0
1950	92724	249428	235309	1.1	2.7
1951	76576	246575	171233	1.4	3.2
1952	78773	246559	185383	1.3	3.1
1953	82595	245307	176480	1.4	3.0
1954	82370	260289	201774	1.3	3.2
1955	78793	196195	178359	1.1	2.5
1956	77826	206239	182512	1.1	2.7
1957	83025	228319	170387	1.3	2.8
1958	88290	309015	220725	1.4	3.5
1959	86268	243276	202730	1.2	2.8
1960	81976	232812	177719	1.3	2.8
1961	83493	238439	243305	1.0	2.9
1962	86336	262448	209921	1.3	3.0
1963	87647	297873	198582	1.5	3.4
1964	88242	225775	196314	1.2	2.6
1965	77409	211876	186215	1.1	2.7
1966	78721	249814	209082	1.2	3.2
1967	85664	284000	257033	1.1	3.3
1968	90453	297752	267788	1.1	3.3
1969	90573	250241	277887	0.9	2.8
1970	78585	250503	244958	1.0	3.2
1971	87878	259189	294618	0.9	2.9
1972	84311	240573	327669	0.7	2.9
1973	75968	196012	278033	0.7	2.6
1974	85252	167408	282294	0.6	2.0
1975	77566	143783	234615	0.6	1.9
1976	74029	151476	214023	0.7	2.0
1977	67195	148168	191142	0.8	2.2
1978	83800	220398	257305	0.9	2.6
1979	87462	216700	266245	0.8	2.5
1980	84868	228442	249770	0.9	2.7
1981	83408	234217	265381	0.9	2.8
1982	85368	208437	280624	0.7	2.4
1983	77847	220074	265731	0.8	2.8
1984	76840	192190	258169	0.7	2.5
1985	69889	146807	233328	0.6	2.1

Statewide ring-necked pheasant harvest statistics, Utah 1948–2016 (continued).

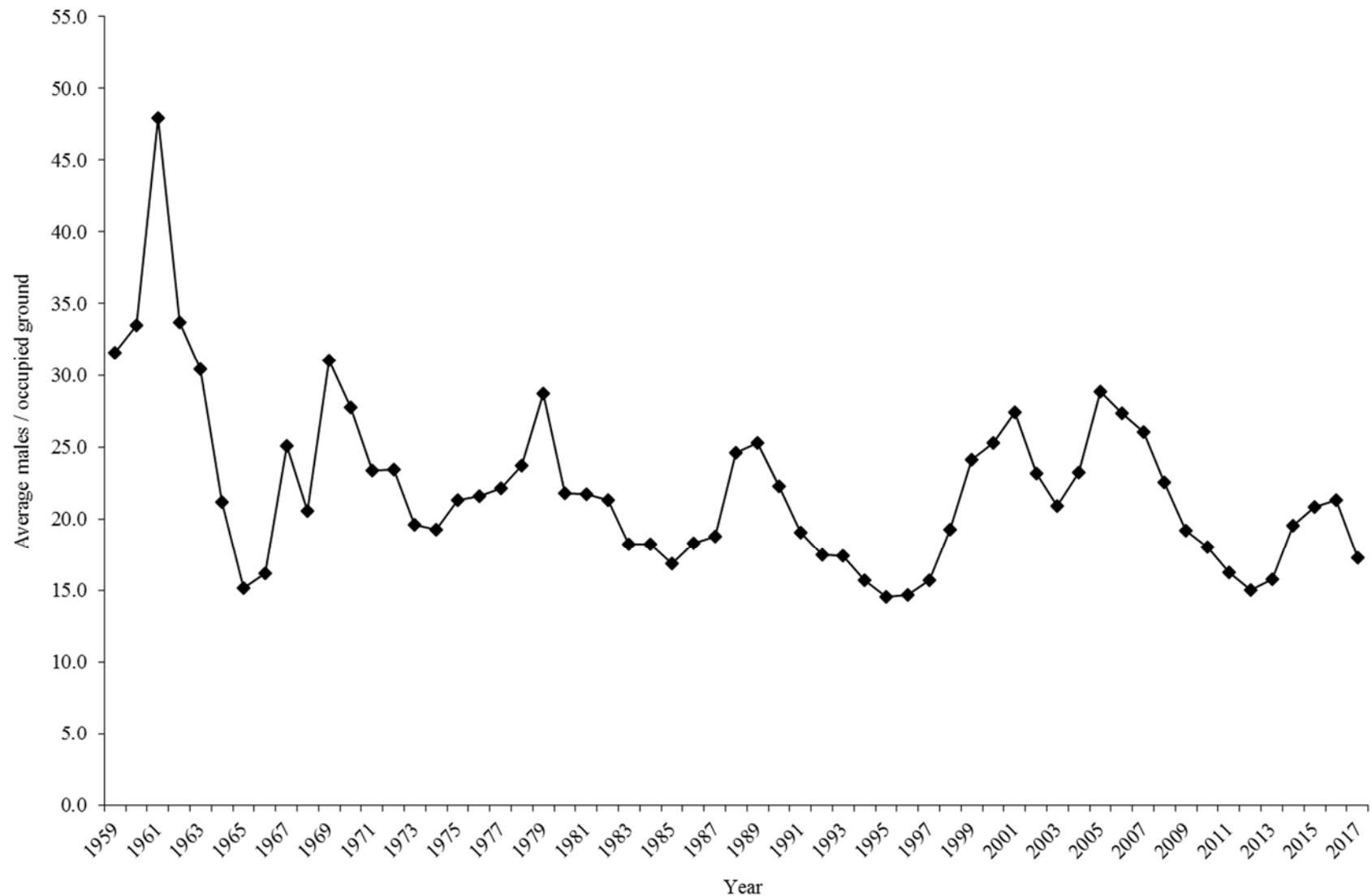
Year	Total hunters	Total harvest	Hunter-days afield	Pheasants / hunter-day	Pheasants / hunter
1986	59987	114389	207346	0.6	1.9
1987	57118	119236	199470	0.6	2.1
1988	54514	97658	184180	0.5	1.8
1989	50382	80769	177364	0.5	1.6
1990	47025	78944	161634	0.5	1.7
1991	42813	72612	150096	0.5	1.7
1992	41640	85803	150244	0.6	2.1
1993	39640	63336	141399	0.4	1.6
1994	36705	68698	129872	0.5	1.9
1995	38391	71202	142755	0.5	1.9
1996	41854	83987	157755	0.5	2.0
1997	37622	78693	140135	0.6	2.1
1998	35130	77889	126792	0.6	2.2
1999	36211	77545	120502	0.6	2.1
2000	41074	60108	114226	0.5	1.5
2001	26468	47521	97413	0.5	1.8
2002	22149	40048	76178	0.5	1.8
2003	20773	46382	77603	0.6	2.2
2004	13457	32532	48147	0.7	2.4
2005	26864	82671	112532	0.7	3.1
2006	16521	44971	57371	0.8	2.7
2007	13764	32121	48285	0.7	2.3
2008	16936	34189	59449	0.6	2.0
2009	16798	35211	55795	0.6	2.1
2010	18103	40299	59747	0.7	2.2
2011	14188	40899	62150	0.7	2.9
2012	14315	29704	53835	0.6	2.1
2013	15838	38028	56139	0.7	2.4
2014	17074	41619	71345	0.6	2.4
2015	19855	49065	72065	0.7	2.5
2016	22299	47938	78891	0.6	2.1
Average (1948–2015)	59943	156132	176029	0.8	2.5
% change from previous year	12	-2	9	-11	-13
% change from average	-63	-69	-55	-27	-13

\*Previous to 2001, harvest data are likely biased high due to possibility of hunters reporting harvest from commercial hunting areas.

## **SAGE-GROUSE** **(Greater and Gunnison)**



Statewide trends of average greater sage-grouse males per occupied strutting ground, Utah 1959–2017.



Greater sage-grouse strutting ground counts by county for the Northern Region, Utah 2008–2017.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average (2008–2016)
<b>Box Elder</b>											
Number of strutting grounds visited	63	63	59	57	86	73	62	74	77	67	68
Number of strutting grounds occupied	44	37	41	35	44	42	44	52	44	43	43
Total male grouse counted	701	329	395	381	547	577	691	871	777	755	585
Average males / occupied ground	15.9	8.9	9.6	10.9	12.4	13.7	15.7	16.8	17.7	17.6	13.5
<b>Cache</b>											
Number of strutting grounds visited	3	4	4	3	4	0	1	4	4	3	3
Number of strutting grounds occupied	2	3	4	3	4	—	0	3	4	2	3
Total male grouse counted	47	33	86	33	45	—	—	77	75	61	57
Average males / occupied ground	23.5	11.0	21.5	11.0	11.3	—	—	25.7	18.8	30.5	17.5
<b>Morgan</b>											
Number of strutting grounds visited	5	6	7	5	7	5	7	7	7	3	6
Number of strutting grounds occupied	3	4	5	2	5	4	5	5	4	1	4
Total male grouse counted	14	46	68	28	26	25	41	44	68	9	40
Average males / occupied ground	4.7	11.5	13.6	14.0	5.2	6.3	8.2	8.8	17.0	9.0	9.9
<b>Rich</b>											
Number of strutting grounds visited	46	42	46	39	45	35	44	41	41	39	42
Number of strutting grounds occupied	31	31	43	28	32	25	30	28	30	27	31
Total male grouse counted	1268	1438	1524	676	553	401	745	913	697	529	913
Average males / occupied ground	40.9	46.4	35.4	24.1	17.3	16.0	24.8	32.6	23.2	19.6	29.0
<b>Summit</b>											
Number of strutting grounds visited	5	5	4	4	4	3	4	4	6	3	4
Number of strutting grounds occupied	4	4	4	4	4	3	4	4	5	3	4
Total male grouse counted	108	72	108	102	85	63	84	107	138	62	96
Average males / occupied ground	27.0	18.0	27.0	25.5	21.3	21.0	21.0	26.8	27.6	20.7	23.9
<b>Northern Region total</b>											
Number of strutting grounds visited	122	120	120	108	146	116	118	130	135	115	124
Number of strutting grounds occupied	84	79	97	72	89	74	83	92	87	76	84
Total male grouse counted	2138	1918	2181	1220	1256	1066	1561	2012	1755	1416	1679
Average males / occupied ground	25.5	24.3	22.5	16.9	14.1	14.4	18.8	21.9	20.2	18.6	19.8

Greater sage-grouse strutting ground counts by county for the Central Region, Utah 2008–2017.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average (2008–2016)
Juab											
Number of strutting grounds visited	4	4	4	3	4	4	4	4	4	3	4
Number of strutting grounds occupied	4	4	4	1	3	4	4	4	4	2	4
Total male grouse counted	48	24	16	7	16	28	29	38	31	9	26
Average males / occupied ground	12.0	6.0	4.0	7.0	5.3	7.0	7.3	9.5	7.8	4.5	7.3
Sanpete											
Number of strutting grounds visited	—	—	—	—	—	—	—	—	—	—	—
Number of strutting grounds occupied	—	—	—	—	—	—	—	—	—	—	—
Total male grouse counted	—	—	—	—	—	—	—	—	—	—	—
Average males / occupied ground	—	—	—	—	—	—	—	—	—	—	—
Tooele											
Number of strutting grounds visited	9	8	10	8	9	10	9	9	8	10	9
Number of strutting grounds occupied	6	8	9	6	6	5	5	5	5	6	6
Total male grouse counted	72	97	108	55	53	37	59	58	60	65	67
Average males / occupied ground	12.0	12.1	12.0	9.2	8.8	7.4	11.8	11.6	12.0	10.8	10.8
Wasatch											
Number of strutting grounds visited	2	2	2	3	4	4	4	4	4	4	3
Number of strutting grounds occupied	2	2	2	3	4	4	4	4	4	4	3
Total male grouse counted	69	77	76	85	73	77	116	126	140	81	93
Average males / occupied ground	34.5	38.5	38.0	28.3	18.3	19.3	29.0	31.5	35.0	20.3	30.3
Central Region total											
Number of strutting grounds visited	15	14	16	14	17	18	17	17	16	17	16
Number of strutting grounds occupied	12	14	15	10	13	13	13	13	13	12	13
Total male grouse counted	189	198	200	147	142	142	204	222	231	155	186
Average males / occupied ground	15.8	14.1	13.3	14.7	10.9	10.9	15.7	17.1	17.8	12.9	14.5

Greater sage-grouse strutting ground counts by county for the Southern Region, Utah 2008–2017.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average (2008–2016)
<b>Beaver</b>											
Number of strutting grounds visited	7	7	7	7	7	8	6	6	6	8	7
Number of strutting grounds occupied	5	5	5	4	5	5	5	4	3	3	5
Total male grouse counted	96	74	48	41	56	50	74	69	72	53	64
Average males / occupied ground	19.2	14.8	9.6	10.3	11.2	10.0	14.8	17.3	24.0	17.7	14.6
<b>Garfield</b>											
Number of strutting grounds visited	19	22	22	22	22	27	28	28	29	30	24
Number of strutting grounds occupied	13	15	11	9	8	15	16	19	18	21	14
Total male grouse counted	411	345	173	186	253	285	376	454	429	522	324
Average males / occupied ground	31.6	23.0	15.7	20.7	31.6	19.0	23.5	23.9	23.8	24.9	23.7
<b>Iron</b>											
Number of strutting grounds visited	17	17	18	19	23	25	27	27	29	30	22
Number of strutting grounds occupied	16	15	17	13	17	19	20	24	21	25	18
Total male grouse counted	293	263	231	173	203	210	281	246	277	276	242
Average males / occupied ground	18.3	17.5	13.6	13.3	11.9	11.1	14.1	10.3	13.2	11.0	13.7
<b>Kane</b>											
Number of strutting grounds visited	3	3	3	3	3	3	3	3	3	3	3
Number of strutting grounds occupied	1	1	1	0	1	1	1	1	1	1	1
Total male grouse counted	3	2	1	—	4	12	11	12	15	22	8
Average males / occupied ground	3.0	2.0	1.0	—	4.0	12.0	11.0	12.0	15.0	22.0	7.5
<b>Millard</b>											
Number of strutting grounds visited	—	—	—	—	—	—	—	—	—	—	—
Number of strutting grounds occupied	—	—	—	—	—	—	—	—	—	—	—
Total male grouse counted	—	—	—	—	—	—	—	—	—	—	—
Average males / occupied ground	—	—	—	—	—	—	—	—	—	—	—

Greater sage-grouse strutting ground counts by county for the Southern Region, Utah 2008–2017 (continued).

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average (2008–2016)
Piute											
Number of strutting grounds visited	4	6	5	7	7	7	7	8	8	8	7
Number of strutting grounds occupied	4	6	5	5	6	6	6	7	7	7	6
Total male grouse counted	112	117	70	57	74	82	119	157	148	139	104
Average males / occupied ground	28.0	19.5	14.0	11.4	12.3	13.7	19.8	22.4	21.1	19.9	18.0
Sevier											
Number of strutting grounds visited	1	1	1	1	2	1	2	2	2	2	1
Number of strutting grounds occupied	1	1	1	0	2	1	2	1	2	1	1
Total male grouse counted	15	5	8	—	16	30	21	23	18	16	17
Average males / occupied ground	15.0	5.0	8.0	—	8.0	30.0	10.5	23.0	9.0	16.0	13.6
Wayne											
Number of strutting grounds visited	26	27	27	27	27	29	30	28	27	31	28
Number of strutting grounds occupied	23	23	21	19	17	20	21	19	19	23	20
Total male grouse counted	805	522	462	516	481	614	742	703	681	568	614
Average males / occupied ground	35.0	22.7	22.0	27.2	28.3	30.7	35.3	37.0	35.8	24.7	30.4
Southern Region total											
Number of strutting grounds visited	77	83	83	86	91	100	103	102	104	112	92
Number of strutting grounds occupied	63	66	61	50	56	67	71	75	71	81	64
Total male grouse counted	1735	1328	993	973	1087	1283	1624	1664	1640	1596	1370
Average males / occupied ground	27.5	20.1	16.3	19.5	19.4	19.1	22.9	22.2	23.1	19.7	21.1

Greater sage-grouse strutting ground counts by county for the Northeastern Region, Utah 2008–2017.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average (2008–2016)
Daggett											
Number of strutting grounds visited	14	12	12	12	12	12	13	12	13	13	12
Number of strutting grounds occupied	7	7	6	6	7	5	7	10	9	10	7
Total male grouse counted	87	54	68	44	52	48	93	148	201	145	88
Average males / occupied ground	12.4	7.7	11.3	7.3	7.4	9.6	13.3	14.8	22.3	14.5	11.8
Duchesne											
Number of strutting grounds visited	16	15	19	20	20	15	17	15	14	12	17
Number of strutting grounds occupied	6	7	7	7	8	9	12	12	12	9	9
Total male grouse counted	102	86	106	106	140	140	206	219	237	166	149
Average males / occupied ground	17.0	12.3	15.1	15.1	17.5	15.6	17.2	18.3	19.8	18.4	16.4
Uintah											
Number of strutting grounds visited	42	45	42	43	50	57	60	65	61	61	52
Number of strutting grounds occupied	23	21	20	18	29	38	43	50	48	46	32
Total male grouse counted	272	233	241	218	389	557	849	1085	1123	577	552
Average males / occupied ground	11.8	11.1	12.1	12.1	13.4	14.7	19.7	21.7	23.4	12.5	15.6
Wasatch											
Number of strutting grounds visited	2	2	3	2	3	2	3	5	5	2	3
Number of strutting grounds occupied	0	1	0	1	3	2	3	5	3	1	2
Total male grouse counted	—	2	—	10	15	18	39	45	42	19	24
Average males / occupied ground	—	2.0	—	10.0	5.0	9.0	13.0	9.0	14.0	19.0	8.9
Northeastern Region total											
Number of strutting grounds visited	74	74	76	77	85	86	93	97	93	88	84
Number of strutting grounds occupied	36	36	33	32	47	54	65	77	72	66	50
Total male grouse counted	461	375	415	378	596	763	1187	1497	1603	907	808
Average males / occupied ground	12.8	10.4	12.6	11.8	12.7	14.1	18.3	19.4	22.3	13.7	14.9

Greater sage-grouse strutting ground counts by county for the Southeastern Region, Utah 2008–2017.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average (2008–2016)
Carbon											
Number of strutting grounds visited	17	18	18	21	19	18	18	21	19	20	19
Number of strutting grounds occupied	12	13	11	11	9	10	10	15	15	14	12
Total male grouse counted	173	188	119	115	118	139	156	260	299	248	174
Average males / occupied ground	14.4	14.5	10.8	10.5	13.1	13.9	15.6	17.3	19.9	17.7	14.4
Emery											
Number of strutting grounds visited	2	2	3	3	2	3	2	3	3	3	3
Number of strutting grounds occupied	2	1	1	0	2	1	1	2	2	3	1
Total male grouse counted	19	5	11	—	12	15	22	44	22	24	19
Average males / occupied ground	9.5	5.0	11.0	—	6.0	15.0	22.0	22.0	11.0	8.0	12.7
Sevier											
Number of strutting grounds visited	1	2	1	2	2	2	2	2	2	2	2
Number of strutting grounds occupied	1	2	1	2	1	1	2	2	2	2	2
Total male grouse counted	17	18	37	29	27	33	26	27	72	49	32
Average males / occupied ground	17.0	9.0	37.0	14.5	27.0	33.0	13.0	13.5	36.0	24.5	22.2
Utah											
Number of strutting grounds visited	0	0	1	3	3	3	3	4	4	4	2
Number of strutting grounds occupied	—	—	1	3	2	2	3	2	2	2	2
Total male grouse counted	—	—	3	60	53	47	71	57	43	28	48
Average males / occupied ground	—	—	3.0	20.0	26.5	23.5	23.7	28.5	21.5	14.0	21.0
Southeastern Region total											
Number of strutting grounds visited	20	22	23	29	26	26	25	30	28	29	25
Number of strutting grounds occupied	15	16	14	16	14	14	16	21	21	21	16
Total male grouse counted	209	211	170	204	210	234	275	388	436	349	260
Average males / occupied ground	13.9	13.2	12.1	12.8	15.0	16.7	17.2	18.5	20.8	16.6	15.6

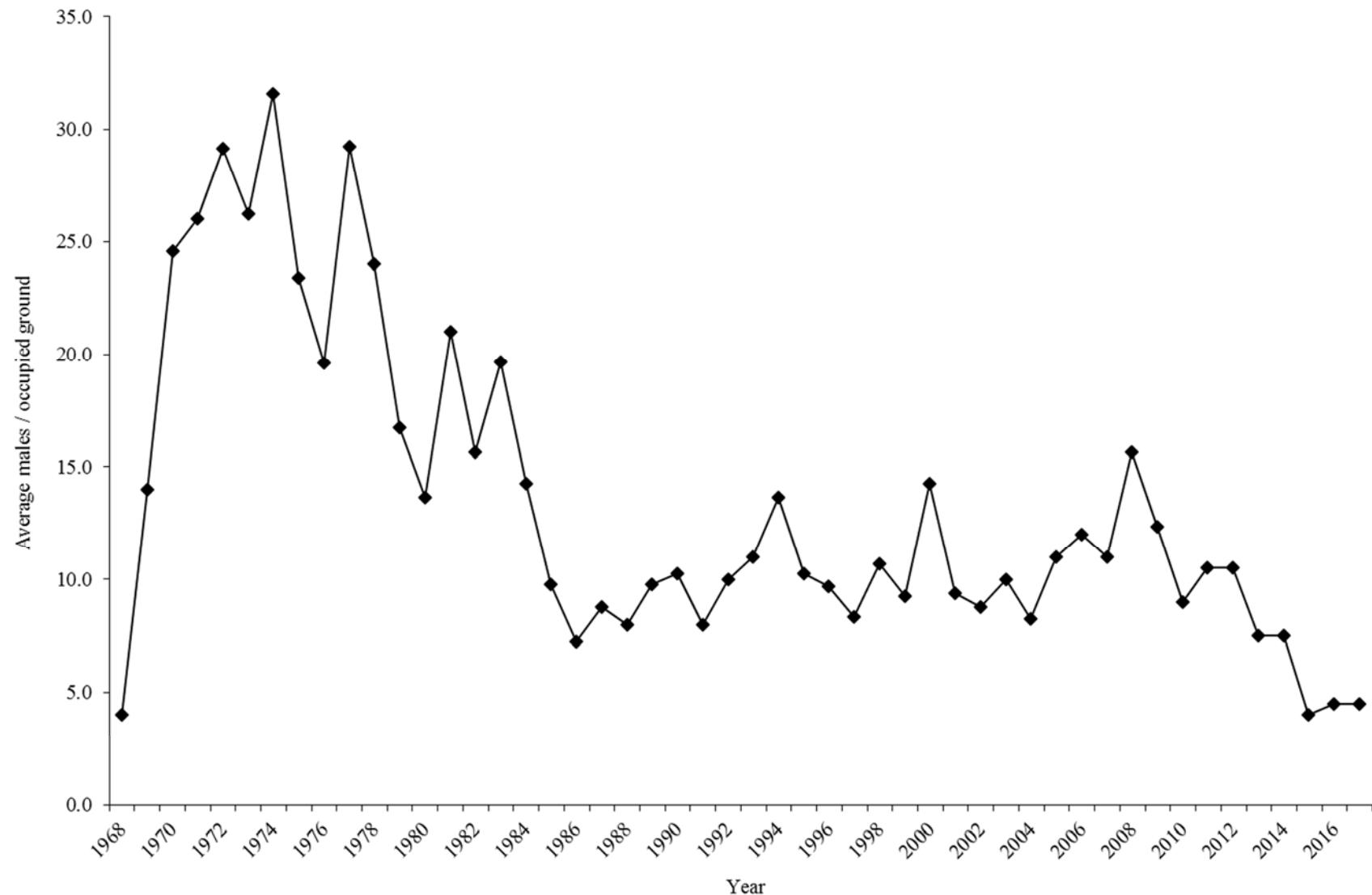
Statewide trends of greater sage-grouse strutting ground counts, Utah 1959–2017.

Year	Number of grounds visited	Number of occupied grounds	Total male grouse counted	Average male grouse / occupied ground
1959	14	14	442	31.6
1960	16	16	536	33.5
1961	13	13	623	47.9
1962	13	13	438	33.7
1963	19	19	578	30.4
1964	14	14	296	21.1
1965	15	15	227	15.1
1966	20	19	307	16.2
1967	45	39	978	25.1
1968	63	55	1131	20.6
1969	82	76	2356	31.0
1970	98	92	2555	27.8
1971	119	98	2289	23.4
1972	122	104	2434	23.4
1973	109	89	1745	19.6
1974	145	122	2345	19.2
1975	125	102	2176	21.3
1976	128	112	2420	21.6
1977	157	135	2991	22.2
1978	135	110	2611	23.7
1979	124	96	2757	28.7
1980	111	83	1811	21.8
1981	168	124	2695	21.7
1982	113	92	1958	21.3
1983	130	103	1879	18.2
1984	57	40	728	18.2
1985	133	99	1672	16.9
1986	113	92	1685	18.3
1987	115	94	1765	18.8
1988	175	102	2506	24.6
1989	138	104	2630	25.3
1990	152	118	2626	22.3
1991	136	122	2320	19.0
1992	118	99	1728	17.5
1993	84	68	1182	17.4
1994	114	84	1318	15.7
1995	91	65	945	14.5
1996	142	96	1410	14.7
1997	166	108	1693	15.7
1998	160	109	2101	19.3
1999	172	117	2821	24.1

Statewide trends of greater sage-grouse strutting ground counts, Utah 1959–2017 (continued).

Year	Number of grounds visited	Number of occupied grounds	Total male grouse counted	Average male grouse / occupied ground
2000	183	138	3489	25.3
2001	171	120	3285	27.4
2002	225	138	3196	23.2
2003	226	159	3327	20.9
2004	243	183	4244	23.2
2005	243	185	5337	28.8
2006	280	218	5965	27.4
2007	302	224	5833	26.0
2008	308	210	4732	22.5
2009	312	210	4030	19.2
2010	318	220	3959	18.0
2011	314	180	2922	16.2
2012	365	219	3291	15.0
2013	345	221	3488	15.8
2014	356	248	4851	19.6
2015	376	278	5783	20.8
2016	378	266	5672	21.3
2017	362	256	4423	17.3
Average (1959–2016)	157.1	115.3	2467.4	22.3

Statewide trends of average Gunnison sage-grouse males per occupied strutting ground, Utah 1959–2017.



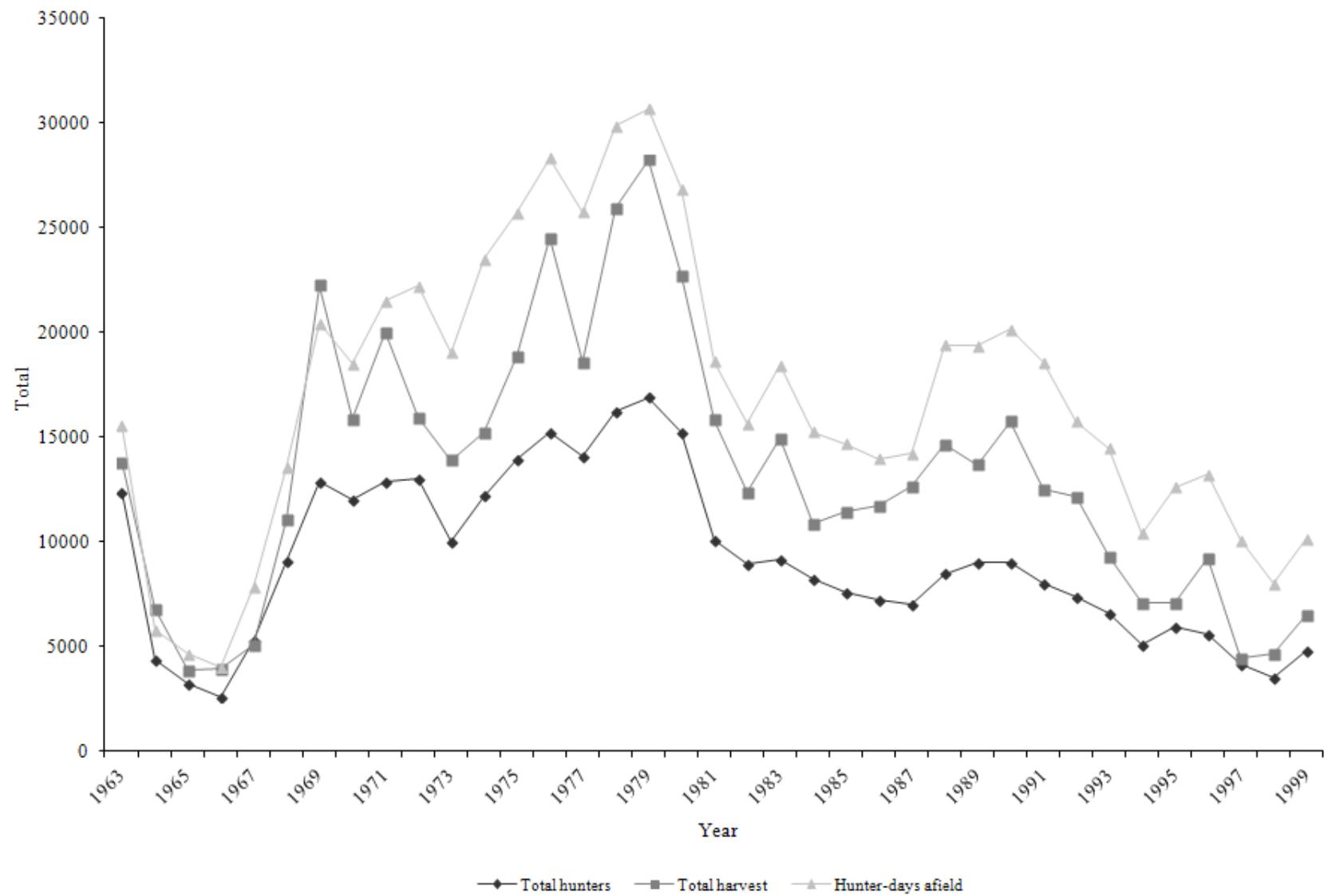
Statewide trends of Gunnison sage-grouse strutting ground counts, Utah 1968–2017.

Year	Number of grounds visited	Number of occupied grounds	Total male grouse counted	Average male grouse / occupied ground
1968	2	2	8	4.0
1969	3	3	42	14.0
1970	6	5	123	24.6
1971	6	6	156	26.0
1972	6	6	175	29.2
1973	6	4	105	26.3
1974	6	5	158	31.6
1975	6	5	117	23.4
1976	6	5	98	19.6
1977	5	4	117	29.3
1978	5	4	96	24.0
1979	4	4	67	16.8
1980	5	3	41	13.7
1981	4	3	63	21.0
1982	4	3	47	15.7
1983	4	3	59	19.7
1984	4	4	57	14.3
1985	4	4	39	9.8
1986	4	4	29	7.3
1987	4	4	35	8.8
1988	4	4	32	8.0
1989	4	4	39	9.8
1990	4	4	41	10.3
1991	4	4	32	8.0
1992	4	4	40	10.0
1993	4	4	44	11.0
1994	4	3	41	13.7
1995	4	4	41	10.3
1996	4	3	29	9.7
1997	4	3	25	8.3
1998	4	3	32	10.7
1999	5	4	37	9.3
2000	5	4	57	14.3
2001	5	5	47	9.4
2002	5	4	35	8.8
2003	5	3	30	10.0
2004	5	4	33	8.3
2005	5	3	33	11.0
2006	4	2	24	12.0
2007	5	4	44	11.0
2008	5	3	47	15.7

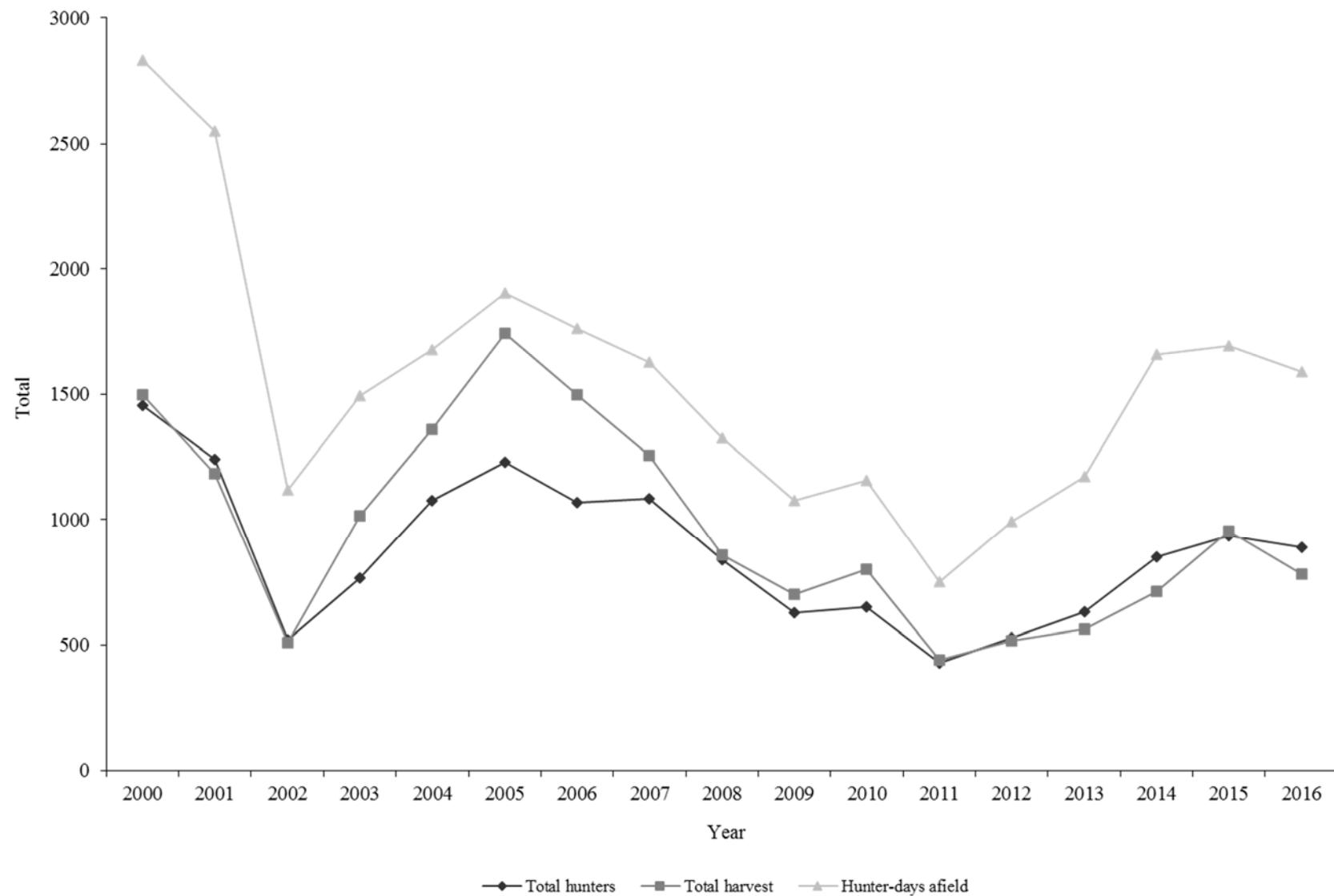
Statewide trends of Gunnison sage-grouse strutting ground counts, Utah 1968–2017 (continued).

Year	Number of grounds visited	Number of occupied grounds	Total male grouse counted	Average male grouse / occupied ground
2009	4	3	37	12.3
2010	4	2	18	9.0
2011	4	2	21	10.5
2012	4	2	21	10.5
2013	4	2	15	7.5
2014	4	2	15	7.5
2015	4	3	12	4.0
2016	4	2	9	4.5
2017	4	2	9	4.5
Average (1959–2016)	4.5	3.6	52.3	13.5

Statewide trends of Greater sage-grouse harvest statistics, Utah 1963–1999.

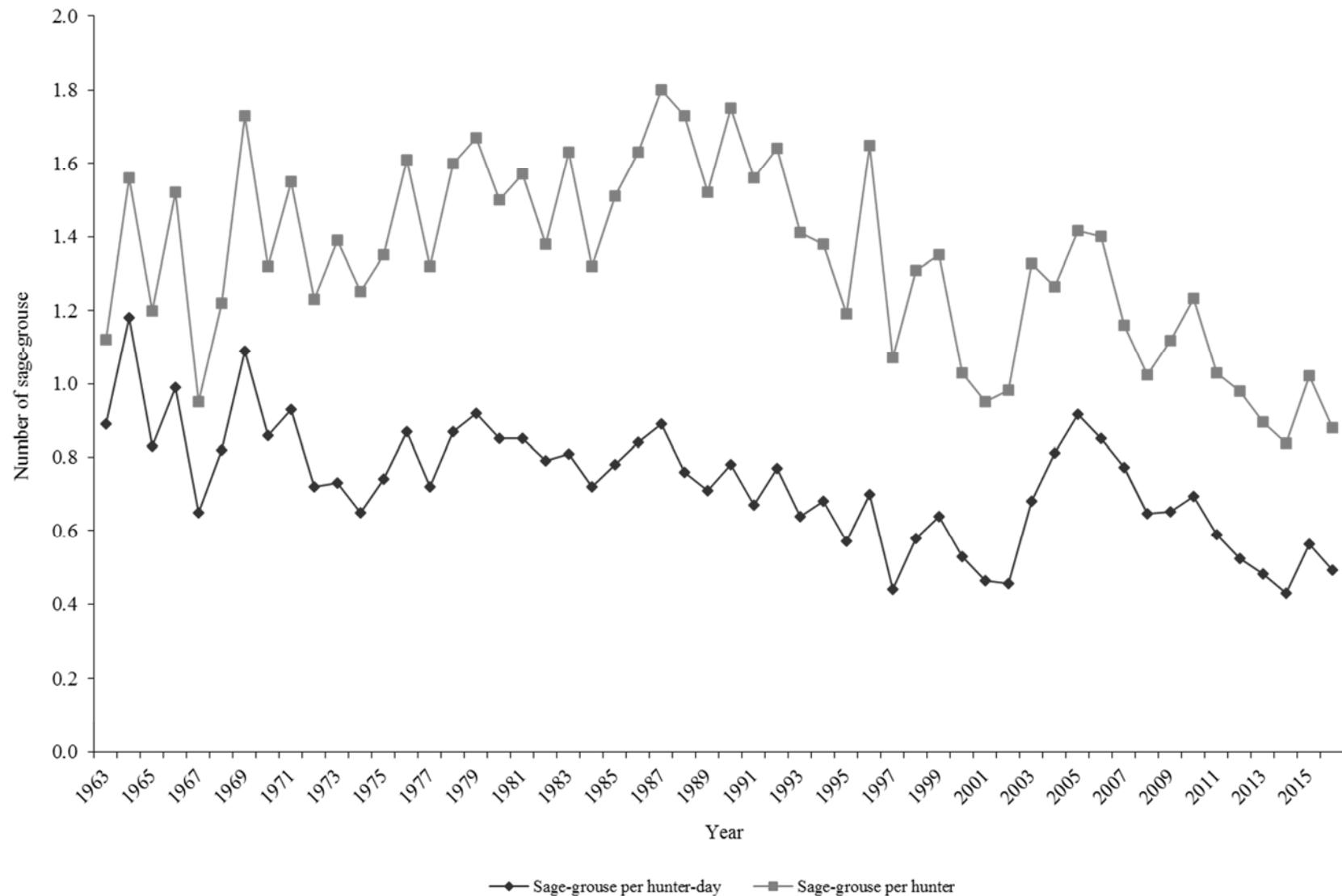


Statewide trends of Greater sage-grouse harvest statistics, Utah 2000–2016.



\*Beginning in 2000, a special permit was required to hunt sage-grouse, and permits were limited beginning in 2002.

Statewide trends of Greater sage-grouse hunter success, Utah 1963–2016.



\*Beginning in 2000, a special permit was required to hunt sage-grouse, and permits were limited beginning in 2002.

### Greater sage-grouse harvest statistics by hunt unit, Utah 2016.

Hunt number	Hunt unit	Total permits	n	Hunters afield	Grouse bagged	Hunter-days afield	Grouse / hunter-day	Grouse / hunter	Percent success*
SG1000	Diamond/Blue Mtn	161	97	121	144	230	0.6	1.2	67.1
SG1001	Parker Mtn	327	133	258	297	435	0.7	1.2	63.8
SG1002	Rich County	346	140	247	161	469	0.3	0.7	39.0
SG1003	West Box Elder	446	136	262	180	455	0.4	0.7	46.3
Statewide total		1280	506	888	782	1589	0.5	0.9	53.6

\*Hunters could harvest 2 birds. Hunters were considered successful if they harvested at least 1 bird.

Statewide Greater sage-grouse harvest statistics, Utah 1951–2016.

Year	Total hunters	Total harvest	Hunter-days afield	Grouse / hunter-day	Grouse / hunter
1951	840	2458	—	—	2.9
1952	678	2230	—	—	3.3
1953	895	2581	—	—	2.9
1954	802	2510	—	—	3.1
1955	579	1742	—	—	3.0
1956	495	1375	—	—	3.0
1957	470	1303	—	—	2.8
1958	567	1797	—	—	3.2
1959	699	1875	—	—	2.7
1960	861	2246	—	—	2.6
1961*	1078	1918	—	—	1.8
1962**	2382	5352	5097	1.1	1.9
1963	12366	13793	15564	0.9	1.1
1964	4362	6827	5807	1.2	1.6
1965	3243	3881	4673	0.8	1.2
1966	2612	3962	4006	1.0	1.5
1967	5336	5089	7860	0.7	1.0
1968	9115	11109	13601	0.8	1.2
1969	12894	22282	20466	1.1	1.7
1970	12036	15877	18506	0.9	1.3
1971	12893	20013	21509	0.9	1.6
1972	13040	15983	22232	0.7	1.2
1973	10017	13926	19049	0.7	1.4
1974	12214	15215	23516	0.7	1.3
1975	13996	18916	25720	0.7	1.4
1976	15283	24541	28342	0.9	1.6
1977	14078	18615	25759	0.7	1.3
1978	16231	25938	29861	0.9	1.6
1979	16927	28280	30682	0.9	1.7
1980	15219	22770	26893	0.9	1.5
1981	10083	15857	18617	0.9	1.6
1982	8997	12383	15663	0.8	1.4
1983	9201	14949	18467	0.8	1.6
1984	8283	10921	15266	0.7	1.3
1985	7586	11466	14702	0.8	1.5

The number of sage-grouse hunters and consequently harvest was limited by permits available from 1951–1962.

\*Harvest numbers were estimated in 1961.

\*\*Totals and indices are based on indiscrete data.

Statewide Greater sage-grouse harvest statistics, Utah 1951–2016 (continued).

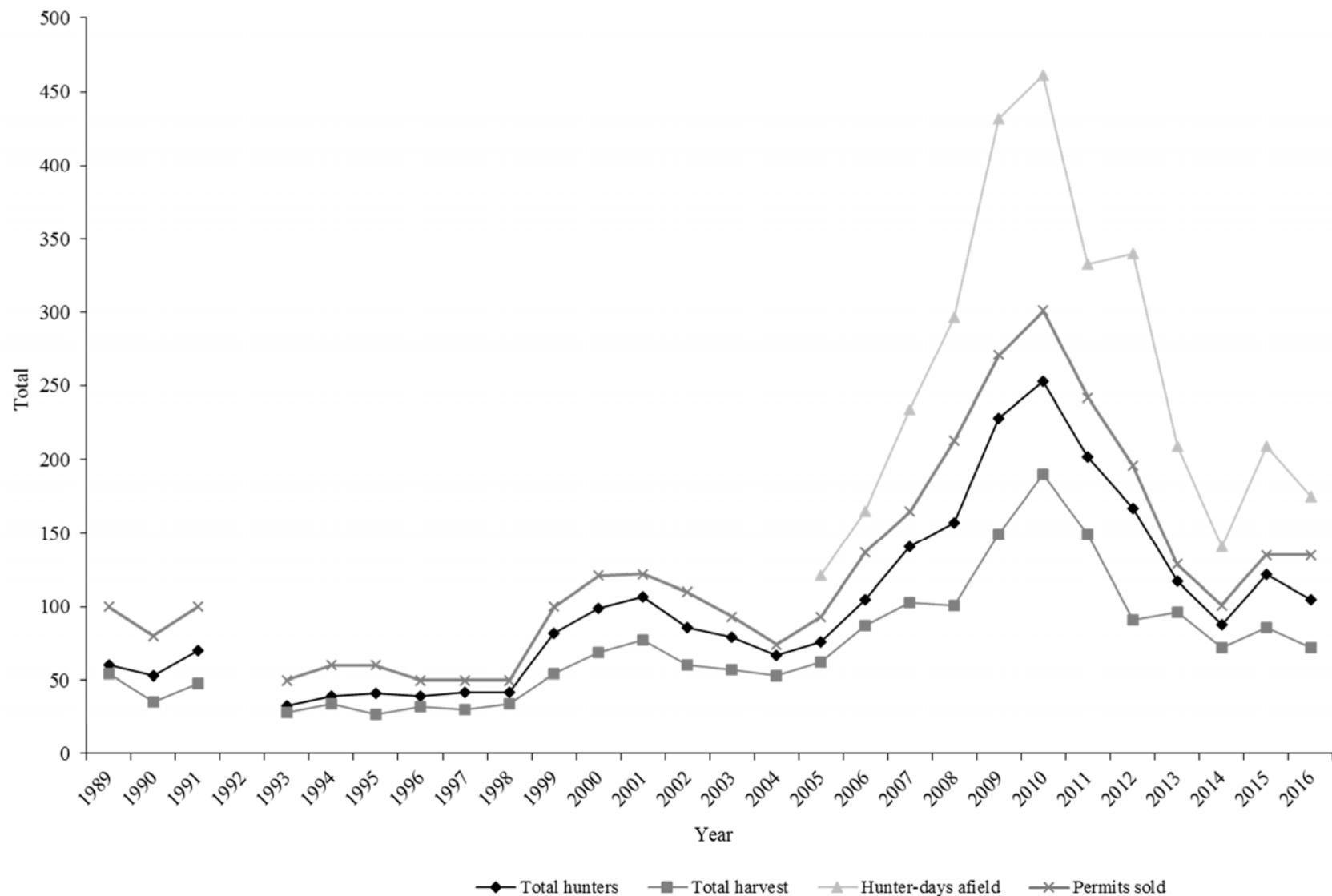
Year	Total hunters	Total harvest	Hunter-days afield	Grouse / hunter-day	Grouse / hunter
1986	7233	11766	13992	0.8	1.6
1987	7060	12673	14242	0.9	1.8
1988	8499	14692	19418	0.8	1.7
1989	9002	13710	19373	0.7	1.5
1990	9014	15784	20147	0.8	1.8
1991	8018	12542	18596	0.7	1.6
1992	7393	12156	15781	0.8	1.6
1993	6594	9311	14480	0.6	1.4
1994	5133	7084	10406	0.7	1.4
1995	5987	7133	12615	0.6	1.2
1996	5574	9220	13215	0.7	1.7
1997	4178	4489	10101	0.4	1.1
1998	3559	4676	8003	0.6	1.3
1999	4830	6503	10161	0.6	1.4
2000*	1456	1497	2829	0.5	1.0
2001	1242	1182	2552	0.5	1.0
2002	521	511	1120	0.5	1.0
2003	767	1017	1494	0.7	1.3
2004	1077	1361	1677	0.8	1.3
2005	1231	1744	1904	0.9	1.4
2006	1070	1498	1762	0.9	1.4
2007	1083	1255	1627	0.8	1.2
2008	838	857	1327	0.6	1.0
2009	628	702	1077	0.7	1.1
2010	650	802	1156	0.7	1.2
2011	429	441	749	0.6	1.0
2012	530	519	992	0.5	1.0
2013	631	565	1171	0.5	0.9
2014	852	713	1657	0.4	0.8
2015	935	954	1692	0.6	1.0
2016	888	782	1589	0.5	0.9
Average (1951–2015)	5575	8267	12170	0.7	1.6
% change from previous year	-5	-18	-6	-13	-14
% change from average	-84	-91	-87	-34	-45

\*Beginning in 2000, a special permit was required to hunt sage-grouse, and permits were limited beginning in 2002.

## SANDHILL CRANE

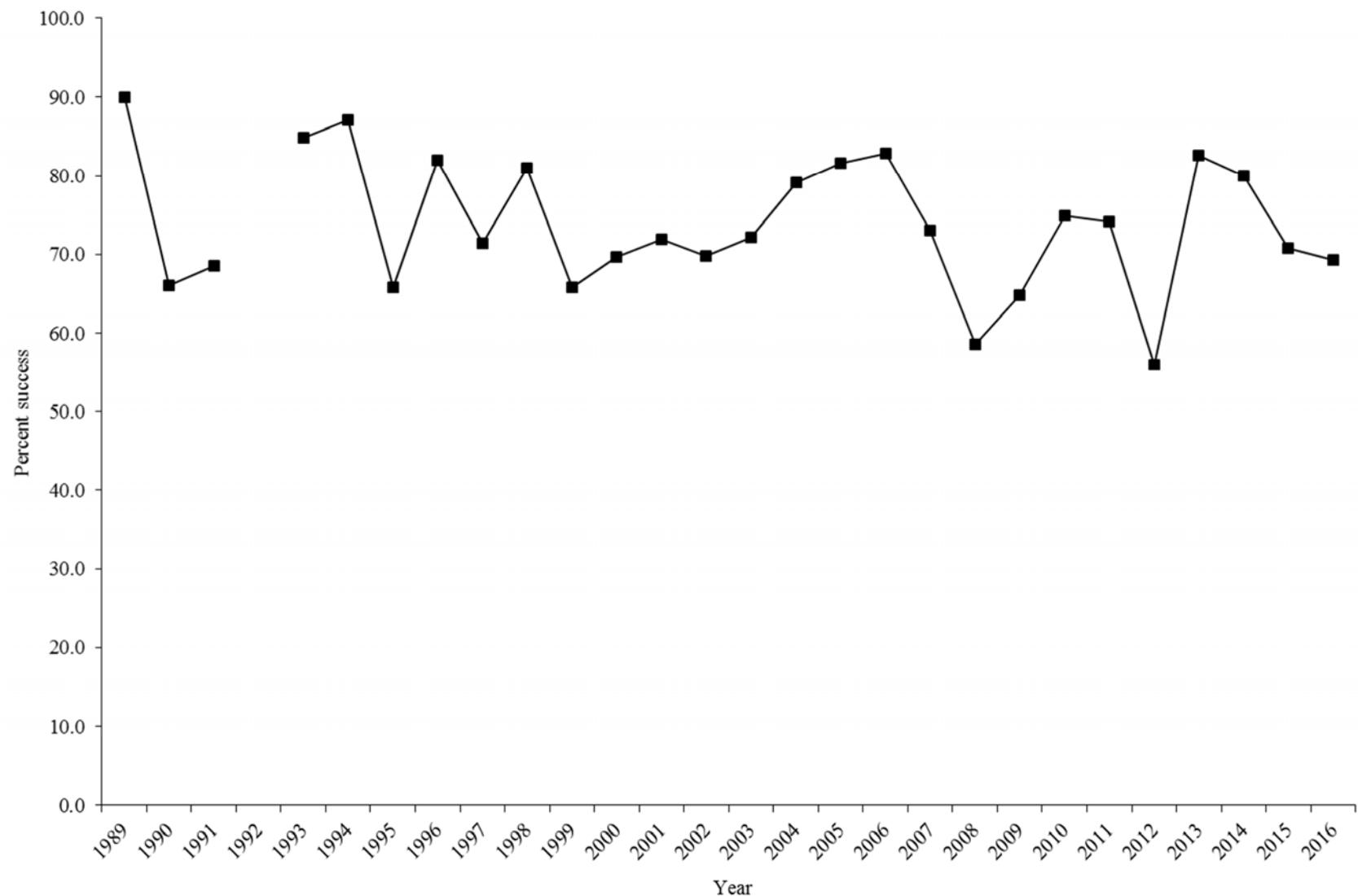


Statewide trends of sandhill crane harvest statistics, Utah 1989–2016.



\* No permits were issued in 1992.

Statewide trends of sandhill crane hunter success, Utah 1989–2016.



\*No permits were issued in 1992.

Sandhill crane harvest statistics by hunt area, Utah 2016.

Hunt number	Hunt unit	Total permits	n	Hunters afield	Adult harvest	Young harvest	Unknown harvest	Total harvest	Hunter-days afield	Crane / hunter-day	Percent success
SC1000	East Box Elder	50	34	34	25	1	0	26	49	0.5	78.3
SC1001	Cache County	50	32	42	20	5	0	25	81	0.3	59.3
SC1002	Rich County	5	3	3	3	0	0	3	8	0.4	100.0
SC1003	Uintah County early	10	9	7	1	0	0	1	8	0.1	16.7
SC1004	Uintah County middle	10	9	9	8	0	0	8	11	0.7	87.5
SC1005	Uintah County late	10	9	10	8	1	0	9	18	0.5	88.9
Total		135	96	105	65	7	0	72	175	0.4	69.3

Statewide sandhill crane harvest statistics, Utah 1989–2016.

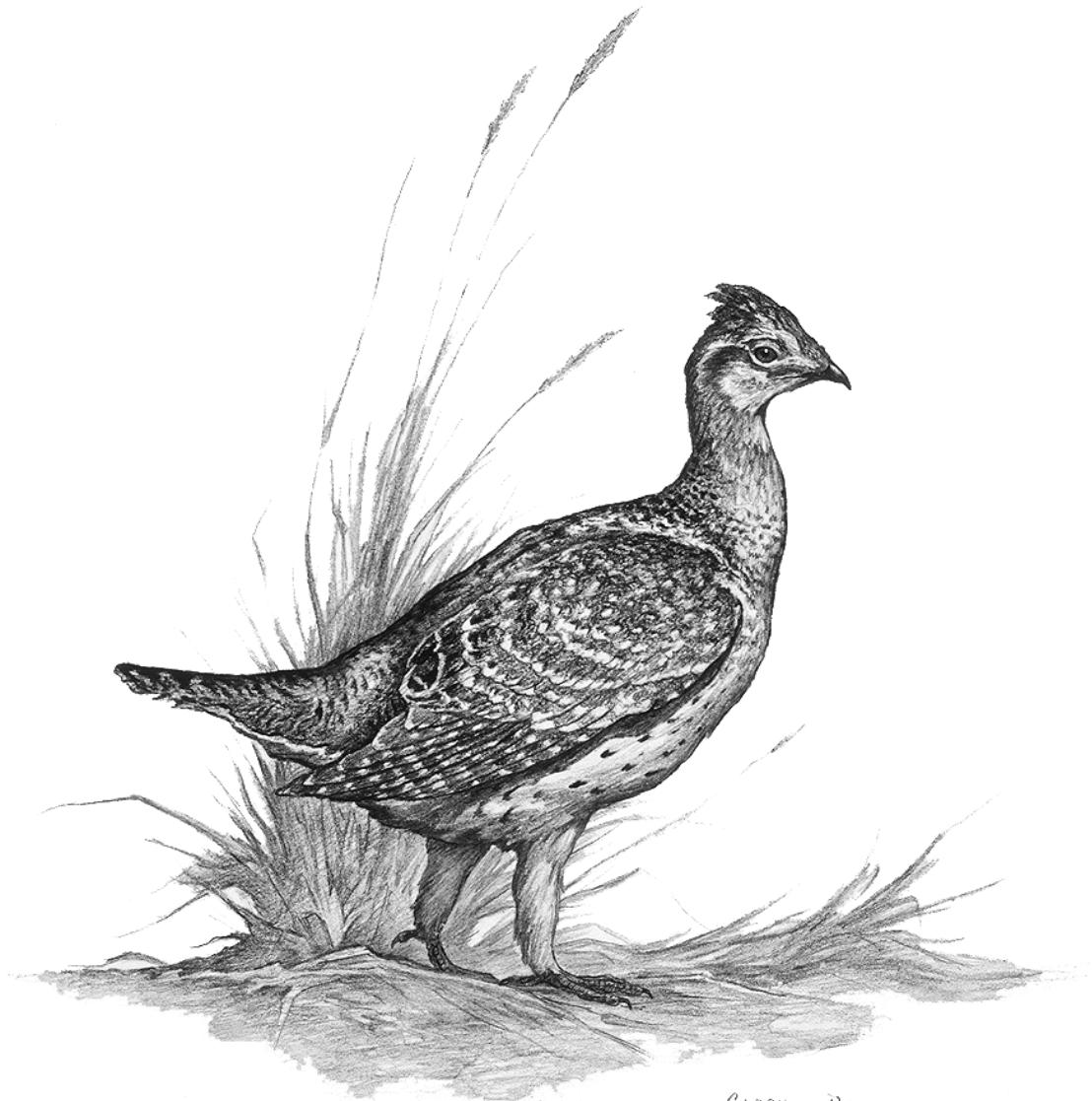
Year	Permits sold	Total hunters	Adult harvest	Young harvest	Total harvest	Hunter-days afield	Crane / hunter-day	Percent success
1989	100	60	49	5	54	—	—	90.0
1990	80	53	30	5	35	—	—	66.0
1991	100	70	44	4	48	—	—	68.6
1992	0	0	0	0	0	—	—	0.0
1993	50	33	26	2	28	—	—	84.8
1994	60	39	31	3	34	—	—	87.2
1995	60	41	26	1	27	—	—	65.9
1996	50	39	27	5	32	—	—	82.1
1997	50	42	27	3	30	—	—	71.4
1998	50	42	29	5	34	—	—	81.0
1999	100	82	47	7	54	—	—	65.9
2000	121	99	62	7	69	—	—	69.7
2001	122	107	70	7	77	—	—	72.0
2002	110	86	53	7	60	—	—	69.8
2003	93	79	50	7	57	—	—	72.2
2004	74	67	48	5	53	—	—	79.1
2005	93	76	54	8	62	121	0.5	81.6
2006	137	105	75	12	87	165	0.5	82.9
2007	165	141	94	9	103	234	0.4	73.0
2008	213	157	91	9	101*	297	0.3	58.6
2009	271	228	128	19	149**	432	0.3	64.8
2010	301	253	164	26	190	461	0.4	74.9
2011	242	202	123	26	149	333	0.4	74.2
2012	196	167	79	9	91***	340	0.3	56.0
2013	129	117	86	7	96***	209	0.5	82.6
2014	101	88	55	15	72	141	0.5	80.0
2015	135	122	75	9	86*	209	0.4	70.8
2016	135	105	65	7	72	175	0.4	69.3
Average (1989–2015)	123	100	63	9	72	267	0.4	74.0
% change from previous year	0	-14	-13	-22	-16	-16	0	-2
% change from average	10	5	3	-18	0	-35	-3	-6

\* One crane of unknown age

\*\* Two cranes of unknown age

\*\*\* Three cranes of unknown age

## SHARP-TAILED GROUSE



CLARK BRONSON

Statewide trends of average sharp-tailed grouse males per occupied strutting ground, Utah 1975–2017.



Strutting ground counts of sharp-tailed grouse by county, Utah 2008–2017.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average (2008–2016)
Antelope Island											
Number of strutting grounds visited	—	—	—	1	1	1	1	1	—	1	1
Number of strutting grounds occupied	—	—	—	1	1	1	1	1	—	0	1
Total male grouse counted	—	—	—	7	5	5	7	8	—	0	6
Average males / occupied grounds	—	—	—	7.0	5.0	5.0	7.0	8.0	—	—	6.4
Box Elder											
Number of strutting grounds visited	45	72	63	58	61	62	56	57	62	53	60
Number of strutting grounds occupied	31	38	42	40	41	34	24	27	27	19	34
Total male grouse counted	373	449	660	500	503	348	216	283	233	90	396
Average males / occupied grounds	12.0	11.8	15.7	12.5	12.3	10.2	9.0	10.5	8.6	4.7	11.4
Cache											
Number of strutting grounds visited	22	19	13	9	12	11	9	10	19	13	14
Number of strutting grounds occupied	7	8	6	6	5	6	9	9	14	13	8
Total male grouse counted	85	109	122	83	79	88	104	124	163	117	106
Average males / occupied grounds	12.1	13.6	20.3	13.8	15.8	14.7	11.6	13.8	11.6	9.0	14.2
Morgan											
Number of strutting grounds visited	2	1	2	1	—	2	1	—	—	—	2
Number of strutting grounds occupied	1	1	2	1	—	2	1	—	—	—	1
Total male grouse counted	4	3	53	45	—	17	4	—	—	—	21
Average males / occupied grounds	4.0	3.0	26.5	45.0	—	8.5	4.0	—	—	—	15.2
Weber											
Number of strutting grounds visited	—	—	1	1	1	1	1	1	1	1	1
Number of strutting grounds occupied	—	—	1	1	1	1	1	1	1	1	1
Total male grouse counted	—	—	15	8	9	11	7	22	22	12	13
Average males / occupied grounds	—	—	15.0	8.0	9.0	11.0	7.0	22.0	22.0	12.0	13.4
Statewide total											
Number of strutting grounds visited	69	92	79	70	75	77	68	69	82	68	76
Number of strutting grounds occupied	39	47	51	49	48	44	36	38	42	33	44
Total male grouse counted	462	561	850	643	596	469	338	437	418	219	530
Average males / occupied grounds	11.8	11.9	16.7	13.1	12.4	10.7	9.4	11.5	10.0	6.6	11.9

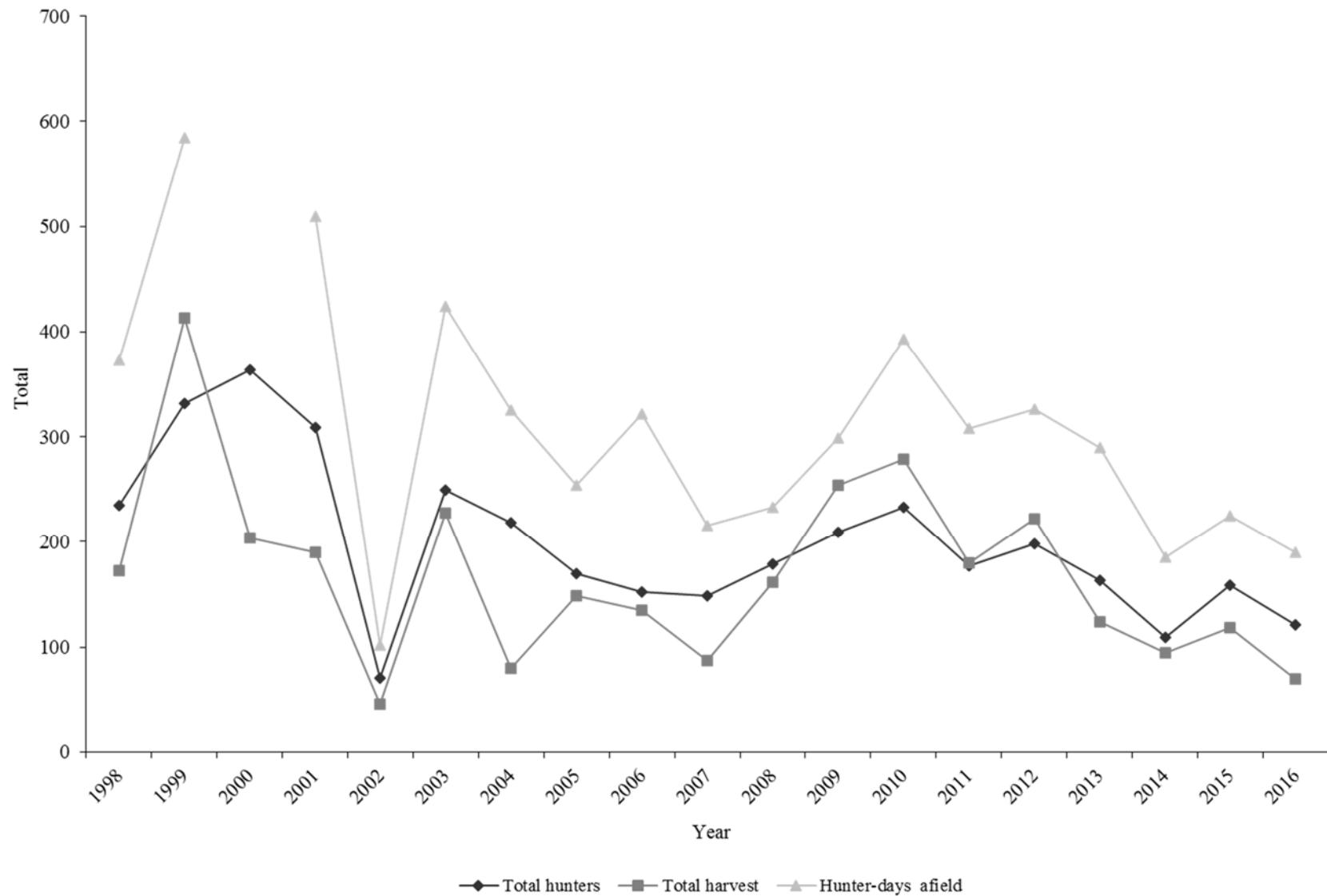
Statewide trends of sharp-tailed grouse strutting ground counts, Utah 1975–2017.

Year	Number of grounds visited	Number of occupied grounds	Total male grouse counted	Average male grouse / occupied ground
1975	4	4	79	19.8
1976	4	3	34	11.3
1977	8	7	135	19.3
1978	8	8	228	28.5
1979	17	17	187	11.0
1980	17	16	73	4.6
1981	15	15	190	12.7
1982	15	12	103	8.6
1983	7	7	98	14.0
1984	7	4	20	5.0
1985	9	9	94	10.4
1986	9	8	224	28.0
1987	10	10	230	23.0
1988	10	10	200	20.0
1989	10	10	205	20.5
1990	10	10	296	29.6
1991	26	26	482	18.5
1992	20	20	378	18.9
1993	14	14	108	7.7
1994	19	19	116	6.1
1995	12	3	37	12.3
1996	22	9	92	10.2
1997	8	5	69	13.8
1998	28	22	387	17.6
1999	45	42	772	18.4
2000	51	37	485	13.1
2001	43	21	261	12.4
2002	41	28	236	8.4
2003	76	49	628	12.8
2004	89	67	793	11.8
2005	78	58	842	14.5
2006	74	52	708	13.6
2007	75	48	786	16.4
2008	69	39	462	11.8
2009	92	47	561	11.9
2010	79	51	850	16.7
2011	70	49	643	13.1
2012	75	48	596	12.4

Statewide trends of sharp-tailed grouse strutting ground counts, Utah 1975–2017 (continued).

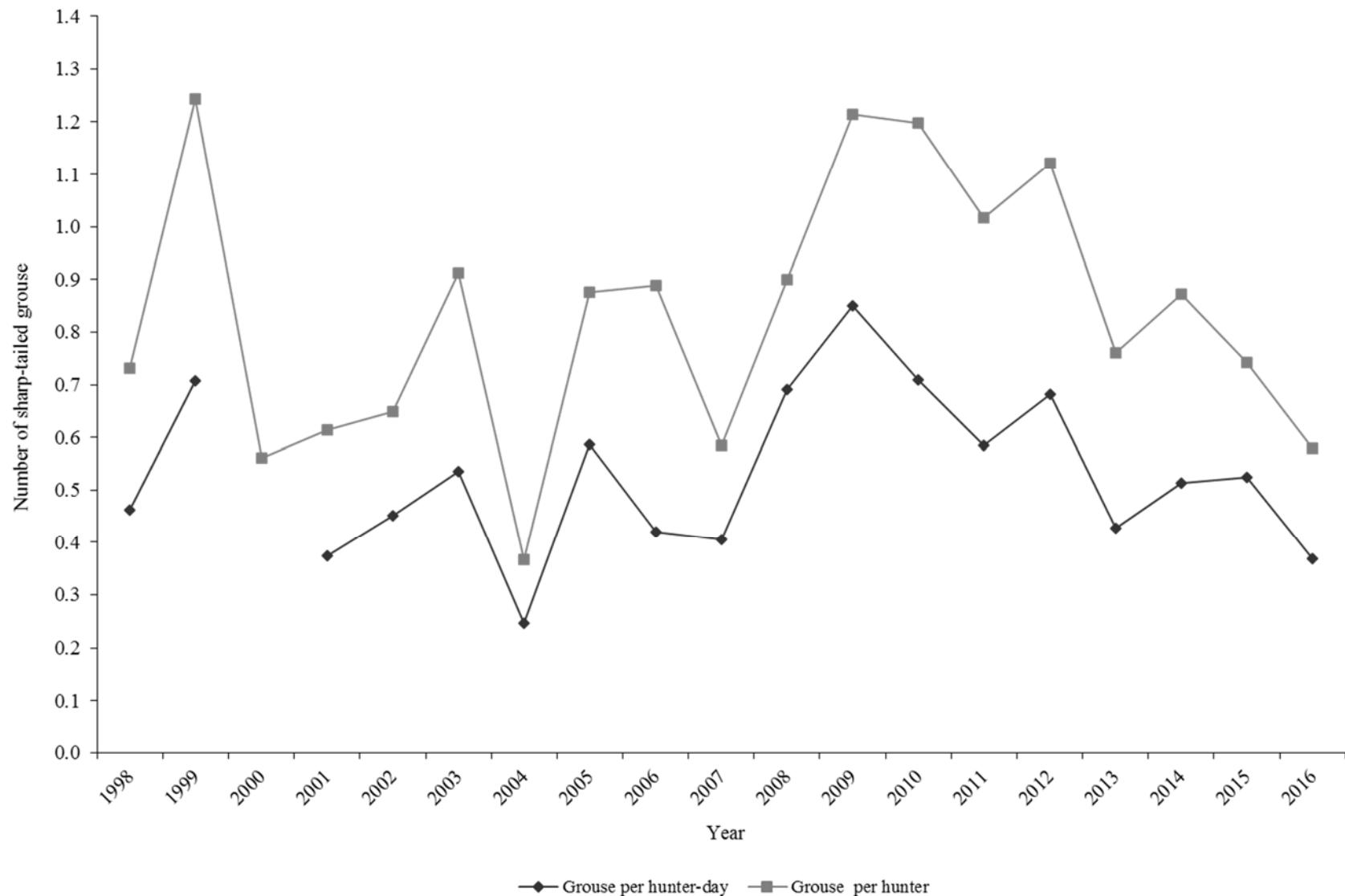
Year	Number of grounds visited	Number of occupied grounds	Total male grouse counted	Average male grouse / occupied ground
2013	77	44	469	10.7
2014	68	36	338	9.4
2015	69	38	437	11.5
2016	82	42	418	10.0
2017	68	33	219	6.6
Average (1975–2016)	37.2	25.3	341.7	14.3

Statewide trends of sharp-tailed grouse harvest statistics, Utah 1998–2016.



\*Hunter-days afield data was not collected in 2000.

Statewide trends of sharp-tailed grouse hunter success, Utah 1998–2016.



\*Hunter-days afield data was not collected in 2000.

Sharp-tailed grouse harvest statistics by hunt area, Utah 2016.

Hunt number	Hunt unit	Total permits	n	Hunters afield	Grouse bagged	Hunter-days afield	Grouse / hunter-day	Grouse / hunter	Percent success*
ST1000	Northeast Box Elder	175	105	82	40	114	0.4	0.5	32.7
ST1001	Cache	47	30	39	30	76	0.4	0.8	52.0
	Total*	222	135	121	70	190	0.4	0.6	39.2

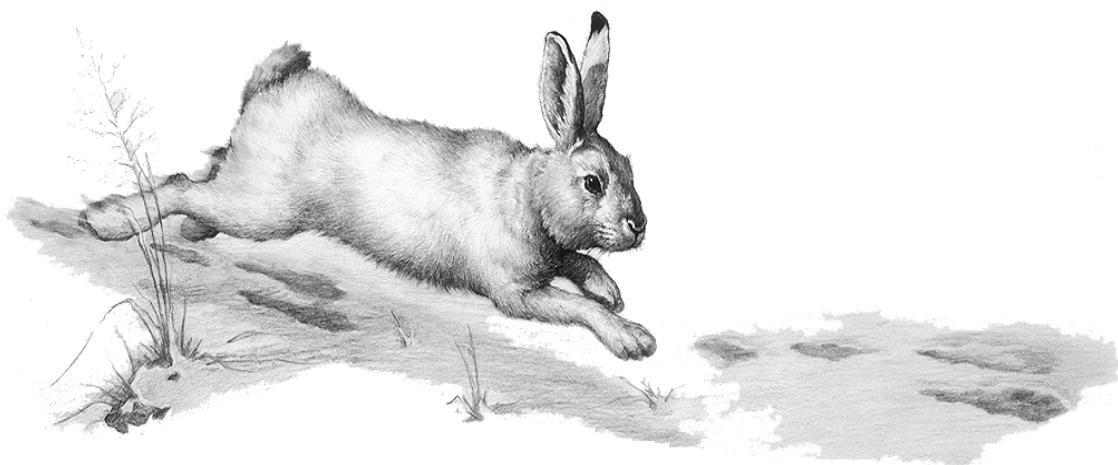
\*Hunters could harvest 2 birds. Hunters were considered successful if they harvested at least 1 bird.

Statewide sharp-tailed grouse harvest statistics, Utah 1998–2016.

Year	Permits sold	Total hunters	Total harvest	Hunter-days afield	Grouse / hunter-day	Grouse / hunter
1998	378	235	172	373	0.5	0.7
1999	381	332	413	584	0.7	1.2
2000	663	364	204	—	—	0.6
2001	673	309	190	509	0.4	0.6
2002	143	71	46	102	0.5	0.6
2003	427	249	227	424	0.5	0.9
2004	350	218	80	325	0.2	0.4
2005	339	170	149	254	0.6	0.9
2006	329	152	135	322	0.4	0.9
2007	351	149	87	215	0.4	0.6
2008	318	179	161	233	0.7	0.9
2009	324	209	254	299	0.8	1.2
2010	333	233	279	393	0.7	1.2
2011	282	177	180	308	0.6	1.0
2012	319	198	222	326	0.7	1.1
2013	243	163	124	290	0.4	0.8
2014	190	109	95	185	0.5	0.9
2015	296	159	118	225	0.5	0.7
2016	222	121	70	190	0.4	0.6
Average (1998–2015)	352	204	174	316	0.5	0.8
% change from previous year	-25	-24	-41	-16	-30	-22
% change from average	-37	-41	-60	-40	-32	-32

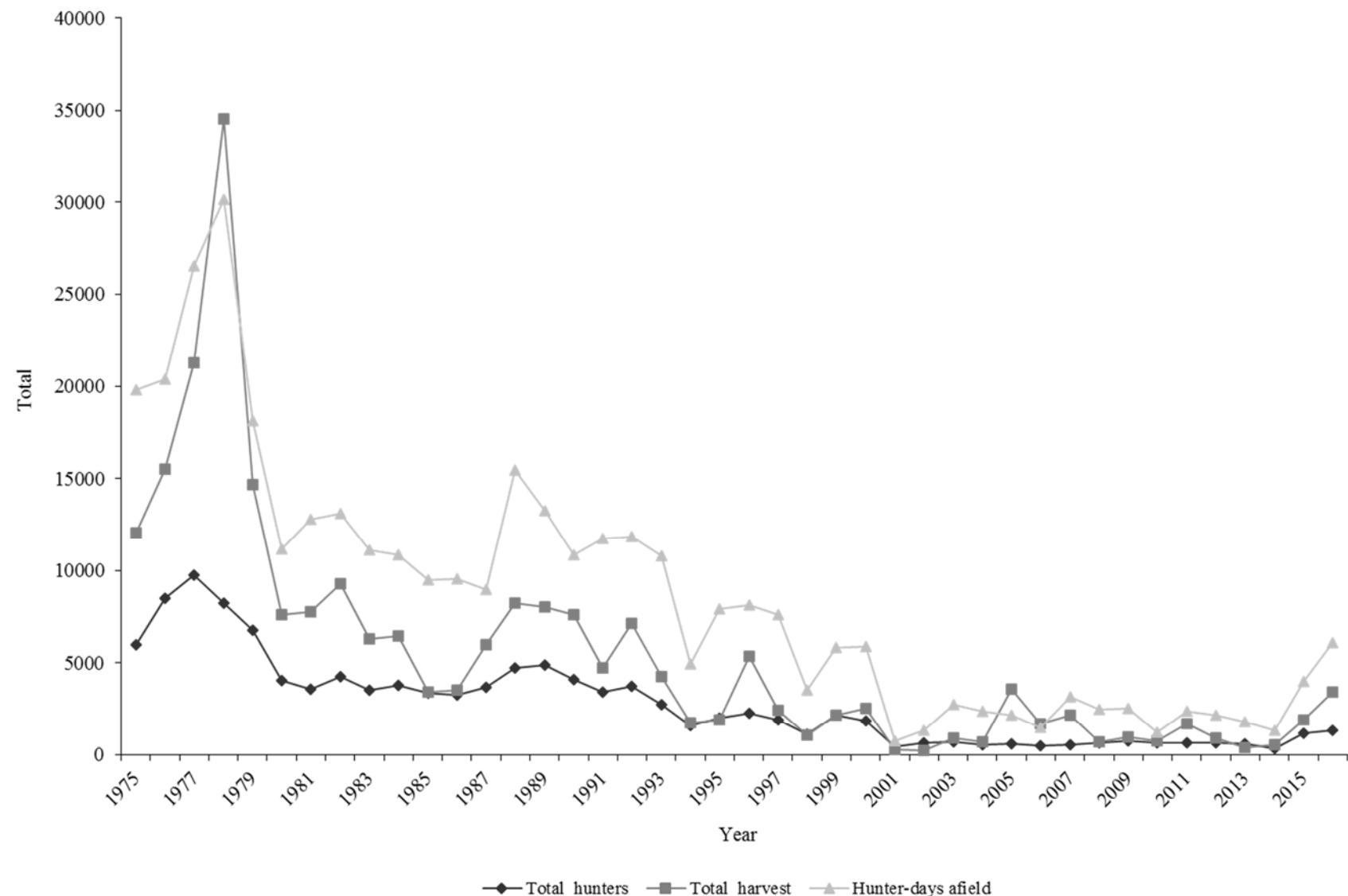
\*Hunter-days afield data was not collected in 2000.

## SNOWSHOE HARE

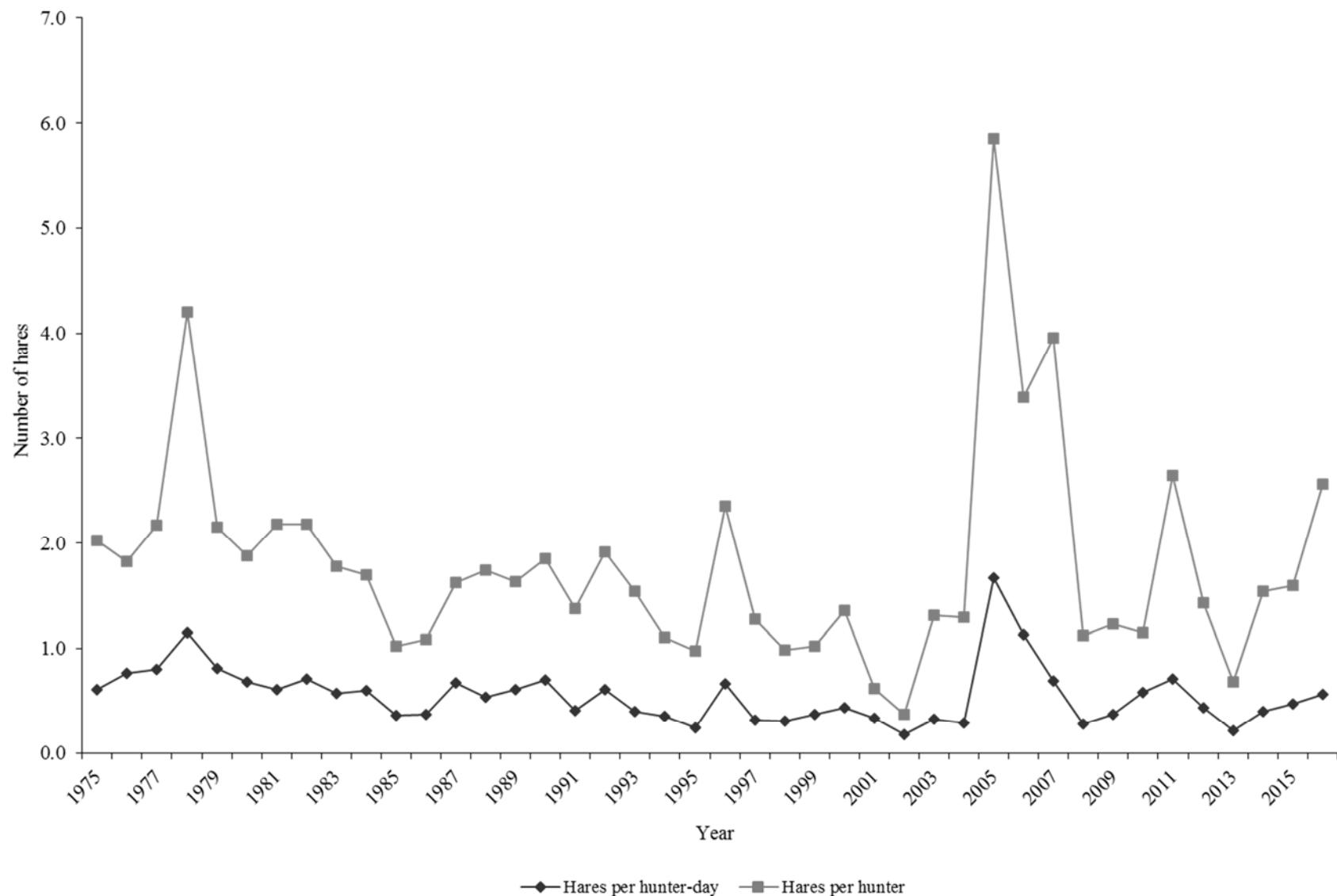


Clark Bronson

Statewide trends of snowshoe hare harvest statistics, Utah 1975–76 to 2016–17.



Statewide trends of snowshoe hare hunter success, Utah 1975–76 to 2016–17.



Snowshoe hare harvest statistics by region and county, Utah 2016–17.

Region and county	n	Hunters afield	Hunter-days afield	Hares bagged	Hares / hunter-day	% pressure	% harvest
Northern Region							
Box Elder	8	126	244	233	1.0	4.0	6.8
Cache	10	158	451	327	0.7	7.4	9.6
Davis	2	32	56	23	0.4	0.9	0.7
Morgan	1	16	38	0	0.0	0.6	0.0
Rich	3	47	132	23	0.2	2.2	0.7
Summit	8	126	902	187	0.2	14.8	5.5
Weber	2	32	56	70	1.3	0.9	2.1
Regional total	34	537	1879	863	0.5	30.9	25.3
Central Region							
Juab	1	16	56	0	0.0	0.9	0.0
Salt Lake	2	32	94	47	0.5	1.5	1.4
Sanpete	3	47	132	0	0.0	2.2	0.0
Tooele	2	32	583	303	0.5	9.6	8.9
Utah	10	158	470	443	0.9	7.7	13.0
Wasatch	4	63	338	117	0.3	5.6	3.4
Regional total	22	348	1673	910	0.5	27.5	26.7
Southern Region							
Beaver	0	0	—	—	—	0.0	0.0
Garfield	0	0	—	—	—	0.0	0.0
Iron	1	16	150	233	1.6	2.5	6.8
Kane	0	0	—	—	—	0.0	0.0
Millard	0	0	—	—	—	0.0	0.0
Piute	1	16	38	210	5.5	0.6	6.2
Sevier	2	32	38	47	1.2	0.6	1.4
Washington	0	0	—	—	—	0.0	0.0
Wayne	1	16	94	47	0.5	1.5	1.4
Regional total	5	80	320	537	1.7	5.2	15.8
Northeastern Region							
Daggett	3	47	413	23	0.1	6.8	0.7
Duchesne	9	142	695	397	0.6	11.4	11.6
Uintah	7	111	395	350	0.9	6.5	10.3
Regional total	19	300	1503	770	0.5	24.7	22.6
Southeastern Region							
Carbon	3	47	188	0	0.0	3.1	0.0
Emery	5	79	319	93	0.3	5.2	2.7
Grand	0	0	—	—	—	0.0	0.0
San Juan	0	0	—	—	—	0.0	0.0
Regional total	8	126	507	93	0.2	8.3	2.7
Unknown	5	79	207	233	1.1	3.4	6.8
Statewide total*	84	1326	6089	3407	0.6	100.0	100.0

\*Statewide totals for sample size and hunters afield are not the total of the columns because hunters hunted multiple counties.

Statewide snowshoe hare harvest statistics, Utah 1975–76 to 2016–17.

Year	Total hunters	Total harvest	Hunter-days Afield	Hares / hunter-day	Hares / hunter
1975–76	5961	12072	19770	0.6	2.0
1976–77	8502	15500	20367	0.8	1.8
1977–78	9752	21232	26535	0.8	2.2
1978–79	8205	34535	30155	1.1	4.2
1979–80	6787	14641	18115	0.8	2.2
1980–81	4048	7603	11140	0.7	1.9
1981–82	3554	7750	12782	0.6	2.2
1982–83	4245	9257	13073	0.7	2.2
1983–84	3544	6302	11088	0.6	1.8
1984–85	3796	6455	10840	0.6	1.7
1985–86	3365	3429	9494	0.4	1.0
1986–87	3277	3544	9541	0.4	1.1
1987–88	3702	6005	8947	0.7	1.6
1988–89	4725	8231	15444	0.5	1.7
1989–90	4895	8006	13233	0.6	1.6
1990–91	4095	7593	10825	0.7	1.9
1991–92	3427	4731	11742	0.4	1.4
1992–93	3732	7144	11836	0.6	1.9
1993–94	2755	4237	10774	0.4	1.5
1994–95	1565	1722	4922	0.3	1.1
1995–96	1983	1924	7891	0.2	1.0
1996–97	2276	5365	8106	0.7	2.4
1997–98	1912	2431	7628	0.3	1.3
1998–99	1093	1070	3536	0.3	1.0
1999–00	2139	2173	5831	0.4	1.0
2000–01	1855	2526	5879	0.4	1.4
2001–02	417	256	768	0.3	0.6
2002–03	658	240	1348	0.2	0.4
2003–04	686	897	2747	0.3	1.3
2004–05	525	681	2377	0.3	1.3
2005–06	612	3580	2142	1.7	5.8
2006–07	496	1683	1485	1.1	3.4
2007–08	550	2175	3149	0.7	4.0
2008–09	619	696	2489	0.3	1.1
2009–10	766	944	2532	0.4	1.2
2010–11	631	726	1243	0.6	1.2
2011–12	634	1682	2368	0.7	2.7

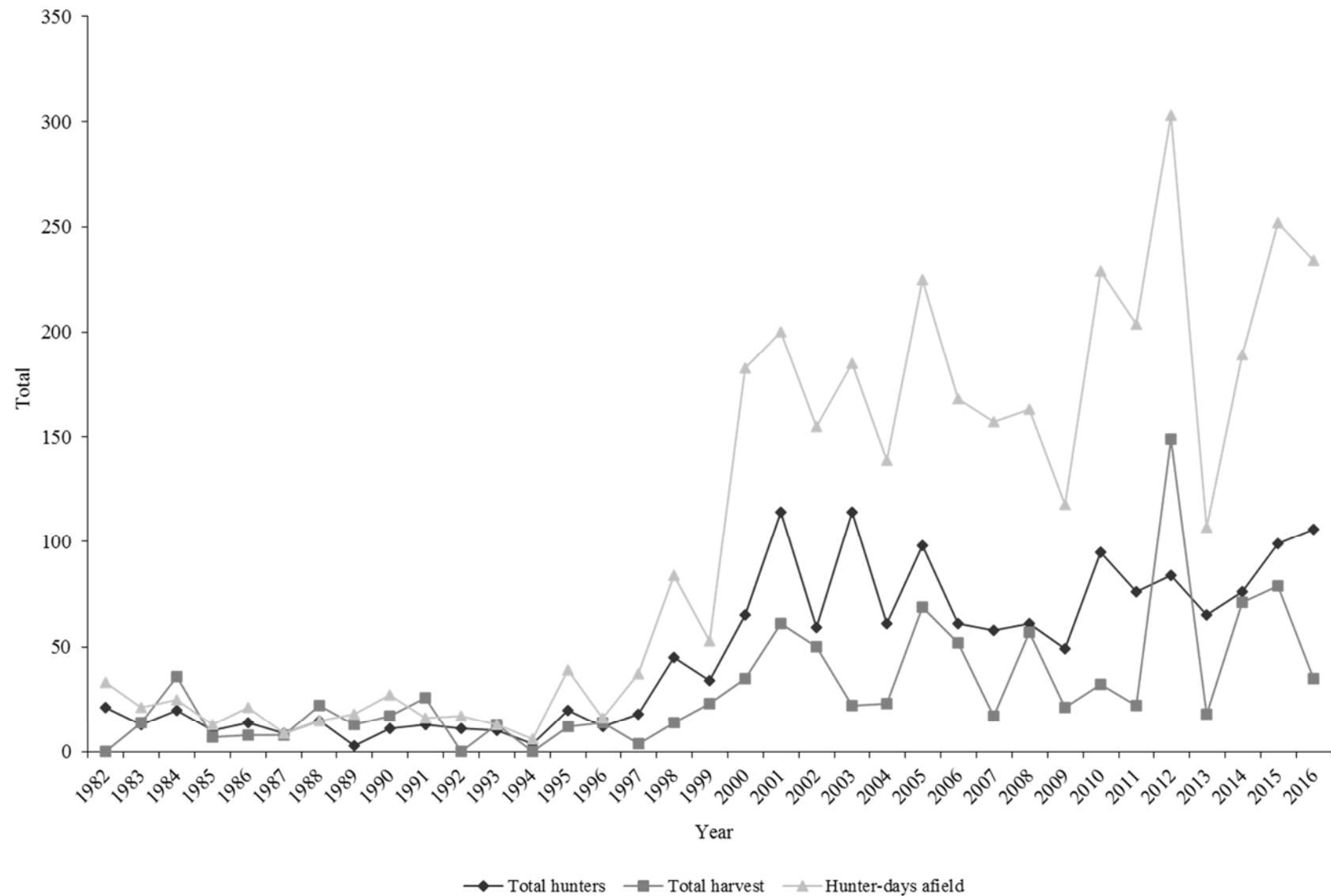
Statewide snowshoe hare harvest statistics, Utah 1975–76 to 2016–17 (continued).

Year	Total hunters	Total harvest	Hunter-days afield	Hares / hunter-day	Hares / hunter
2012–13	645	924	2147	0.4	1.4
2013–14	568	384	1777	0.2	0.7
2014–15	345	533	1333	0.4	1.5
2015–16	1192	1897	4001	0.5	1.6
2016–17	1326	3407	6089	0.6	2.6
Average (1975–2016)	2794	5434	8571	0.6	1.8
% change from previous year	11	80	52	18	61
% change from average	-53	-37	-29	1	44

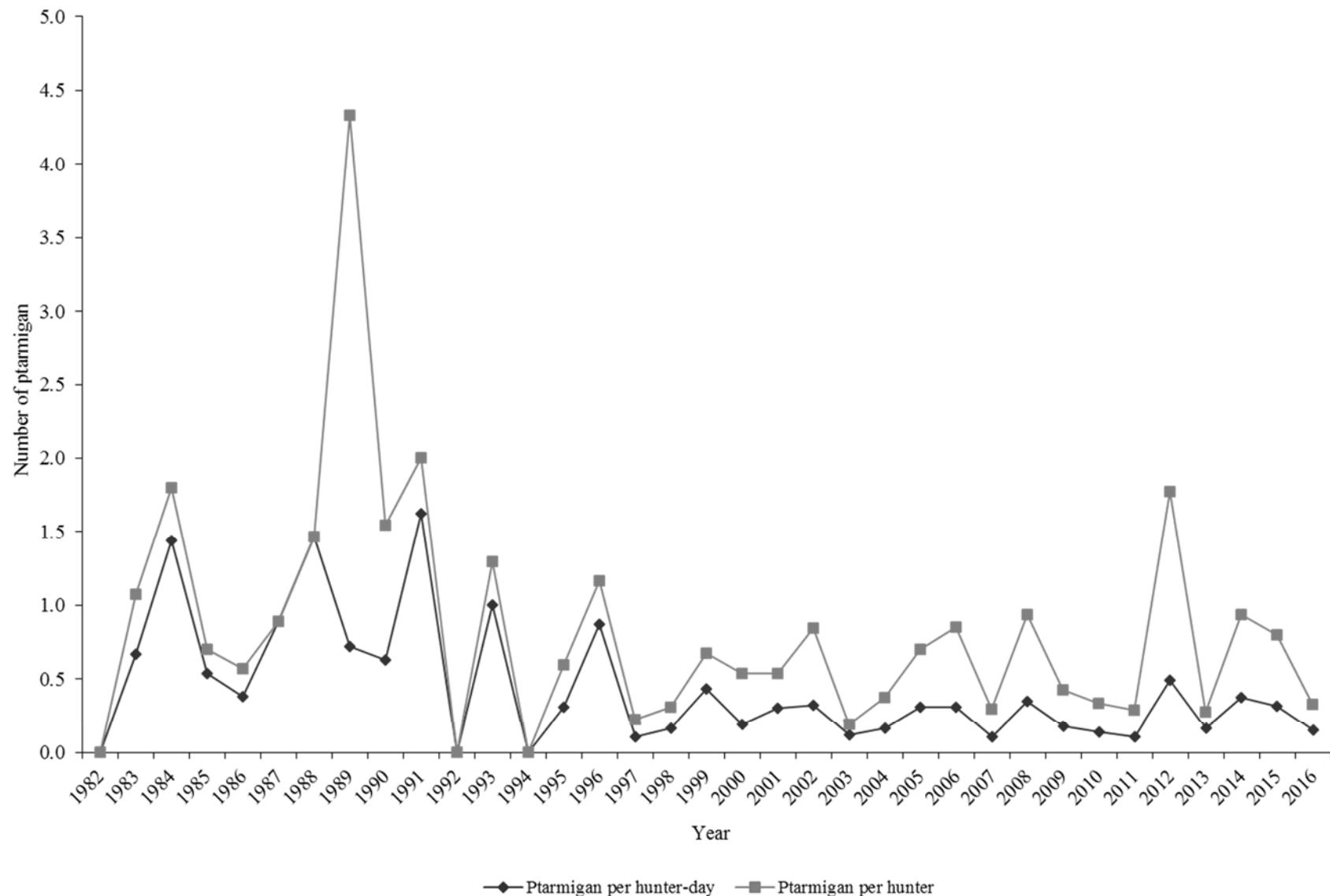
## WHITE-TAILED PTARMIGAN



Statewide trends of white-tailed ptarmigan harvest statistics, Utah 1982–2016.



Statewide trends of white-tailed ptarmigan hunter success, Utah 1982–2016.



## White-tailed ptarmigan harvest statistics by region and county, Utah 2016.

Region and county	n	Hunters afield	Hunter-days afield	Ptarmigan bagged	Ptarmigan / hunter-day	% pressure	% harvest
<b>Northern Region</b>							
Box Elder	1	3	11	0	0.00	4.7	0.0
Cache	0	0	—	—	—	0.0	0.0
Davis	0	0	—	—	—	0.0	0.0
Morgan	0	0	—	—	—	0.0	0.0
Rich	0	0	—	—	—	0.0	0.0
Summit	13	35	72	27	0.38	30.8	77.1
Weber	0	0	—	—	—	0.0	0.0
<b>Regional total</b>	<b>14</b>	<b>38</b>	<b>83</b>	<b>27</b>	<b>0.33</b>	<b>35.5</b>	<b>77.1</b>
<b>Central Region</b>							
Juab	0	0	—	—	—	0.0	0.0
Salt Lake	0	0	—	—	—	0.0	0.0
Sanpete	0	0	—	—	—	0.0	0.0
Tooele	1	3	11	0	0.00	4.7	0.0
Utah	0	0	—	—	—	0.0	0.0
Wasatch	4	11	32	0	0.00	13.7	0.0
<b>Regional total</b>	<b>5</b>	<b>14</b>	<b>43</b>	<b>0</b>	<b>0.00</b>	<b>18.4</b>	<b>0.0</b>
<b>Southern Region</b>							
Beaver	0	0	—	—	—	0.0	0.0
Garfield	0	0	—	—	—	0.0	0.0
Iron	0	0	—	—	—	0.0	0.0
Kane	0	0	—	—	—	0.0	0.0
Millard	0	0	—	—	—	0.0	0.0
Piute	0	0	—	—	—	0.0	0.0
Sevier	0	0	—	—	—	0.0	0.0
Washington	0	0	—	—	—	0.0	0.0
Wayne	0	0	—	—	—	0.0	0.0
<b>Regional total</b>	<b>0</b>	<b>0</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>0.0</b>	<b>0.0</b>
<b>Northeastern Region</b>							
Daggett	5	13	21	0	0.00	9.0	0.0
Duchesne	8	21	37	3	0.08	15.8	8.6
Uintah	9	24	32	5	0.16	13.7	14.3
<b>Regional total</b>	<b>22</b>	<b>58</b>	<b>90</b>	<b>8</b>	<b>0.09</b>	<b>38.5</b>	<b>22.9</b>
<b>Southeastern Region</b>							
Carbon	0	0	—	—	—	0.0	0.0
Emery	0	0	—	—	—	0.0	0.0
Grand	0	0	—	—	—	0.0	0.0
San Juan	0	0	—	—	—	0.0	0.0
<b>Regional total</b>	<b>0</b>	<b>0</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>0.0</b>	<b>0.0</b>
Unknown	2	5	19	0	0.00	8.1	0.0
<b>Statewide total**</b>	<b>40</b>	<b>106</b>	<b>234</b>	<b>35</b>	<b>0.15</b>	<b>100.0</b>	<b>100.0</b>

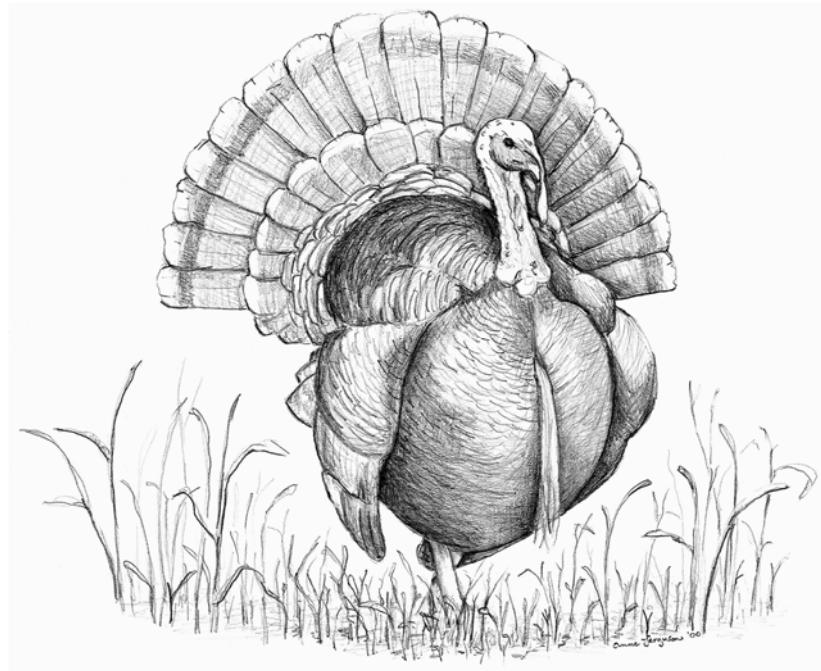
\*White-tailed ptarmigan are typically found in high elevation areas in Daggett, Duchesne, Summit, and Uintah counties.

\*\*Statewide totals for sample size and hunters afield are not the total of the columns because hunters hunted multiple counties.

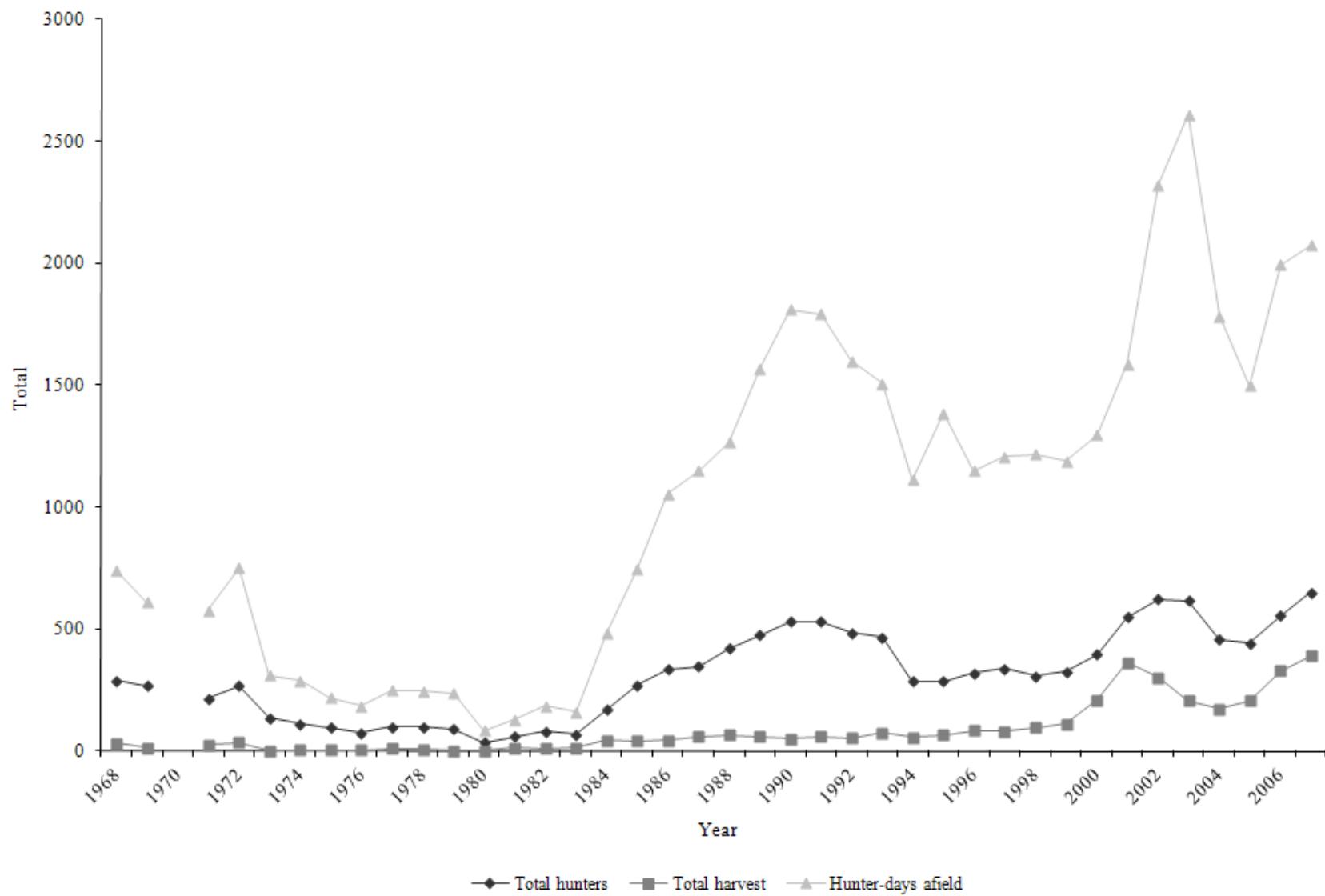
Statewide white-tailed ptarmigan harvest statistics, Utah 1982–2016.

Year	Total hunters	Total harvest	Hunter-days afield	Ptarmigan / hunter-day	Ptarmigan / hunter
1982	21	0	33	0.0	0.0
1983	13	14	21	0.7	1.1
1984	20	36	25	1.4	1.8
1985	10	7	13	0.5	0.7
1986	14	8	21	0.4	0.6
1987	9	8	9	0.9	0.9
1988	15	22	15	1.5	1.5
1989	3	13	18	0.7	4.3
1990	11	17	27	0.6	1.5
1991	13	26	16	1.6	2.0
1992	11	0	17	0.0	0.0
1993	10	13	13	1.0	1.3
1994	4	0	6	0.0	0.0
1995	20	12	39	0.3	0.6
1996	12	14	16	0.9	1.2
1997	18	4	37	0.1	0.2
1998	45	14	84	0.2	0.3
1999	34	23	53	0.4	0.7
2000	65	35	183	0.2	0.5
2001	114	61	200	0.3	0.5
2002	59	50	155	0.3	0.8
2003	114	22	185	0.1	0.2
2004	61	23	139	0.2	0.4
2005	98	69	225	0.3	0.7
2006	61	52	168	0.3	0.9
2007	58	17	157	0.1	0.3
2008	61	57	163	0.3	0.9
2009	49	21	118	0.2	0.4
2010	95	32	229	0.1	0.3
2011	76	22	204	0.1	0.3
2012	84	149	303	0.5	1.8
2013	65	18	107	0.2	0.3
2014	76	71	189	0.4	0.9
2015	99	79	252	0.3	0.8
2016	106	35	234	0.1	0.3
Average (1982–2015)	45	30	101	0.4	0.8
% change from previous year	7	-56	-7	-52	-59
% change from average	137	18	131	-67	-61

## **WILD TURKEY**



Statewide trends of spring Merriam's wild turkey harvest statistics, Utah 1968–2007.

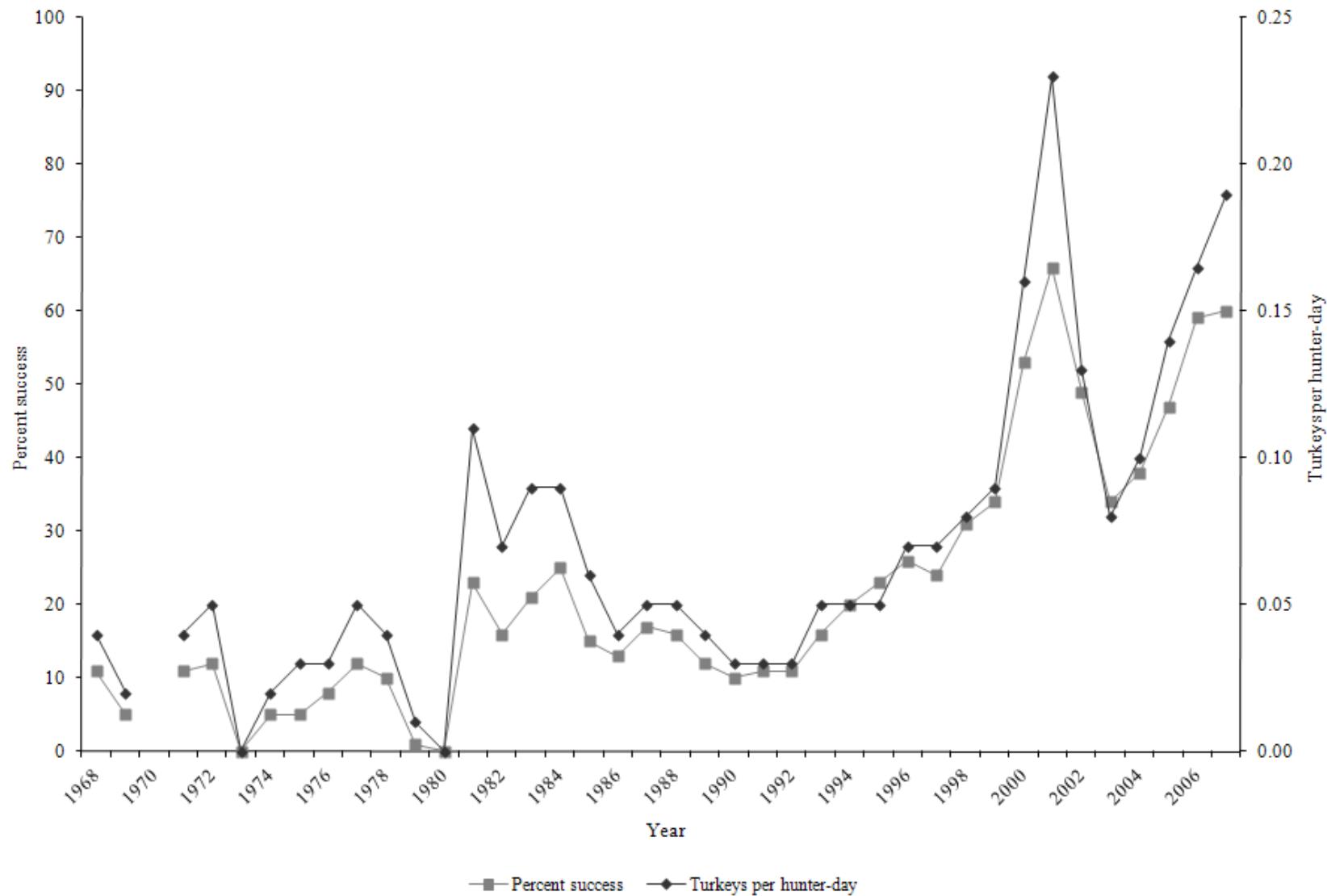


\*No spring season in 1970.

\*\*2002–2004 data does not include conservation permit information.

\*\*\*2005 data does not include conservation permit or landowner permit information.

Statewide trends of spring Merriam's wild turkey hunter success, Utah 1968–2007.



\*No spring season in 1970.

\*\*2002–2004 data does not include conservation permit information.

\*\*\*2005 data does not include conservation permit or landowner permit information.

Statewide Merriam's wild turkey spring season harvest statistics, Utah 1968–2007.

Year	Permits sold	Total hunters	Total harvest	Hunter-days afield	Percent success	Turkeys / hunter-day	% of hunters observing turkeys
1968	310	290	31	738	11	0.04	41
1969	276	267	13	612	5	0.02	22
1970*	—	—	—	—	—	—	—
1971	223	215	26	576	11	0.04	38
1972	285	269	35	751	12	0.05	39
1973	150	135	0	311	0	0.00	10
1974	121	112	6	289	5	0.02	22
1975	103	97	5	219	5	0.03	29
1976	81	74	6	185	8	0.03	32
1977	108	99	12	248	12	0.05	39
1978	116	101	9	246	10	0.04	42
1979	113	90	1	237	1	0.01	8
1980	40	35	0	84	0	0.00	17
1981	83	60	14	129	23	0.11	53
1982	91	80	12	184	16	0.07	62
1983	92	69	14	161	21	0.09	55
1984	190	169	43	482	25	0.09	72
1985	314	270	41	747	15	0.06	52
1986	362	335	43	1054	13	0.04	57
1987	384	347	60	1150	17	0.05	57
1988	490	421	66	1267	16	0.05	50
1989	527	477	59	1568	12	0.04	55
1990	579	531	52	1812	10	0.03	51
1991	587	532	59	1792	11	0.03	49
1992	538	484	53	1599	11	0.03	45

\*No spring season in 1970.

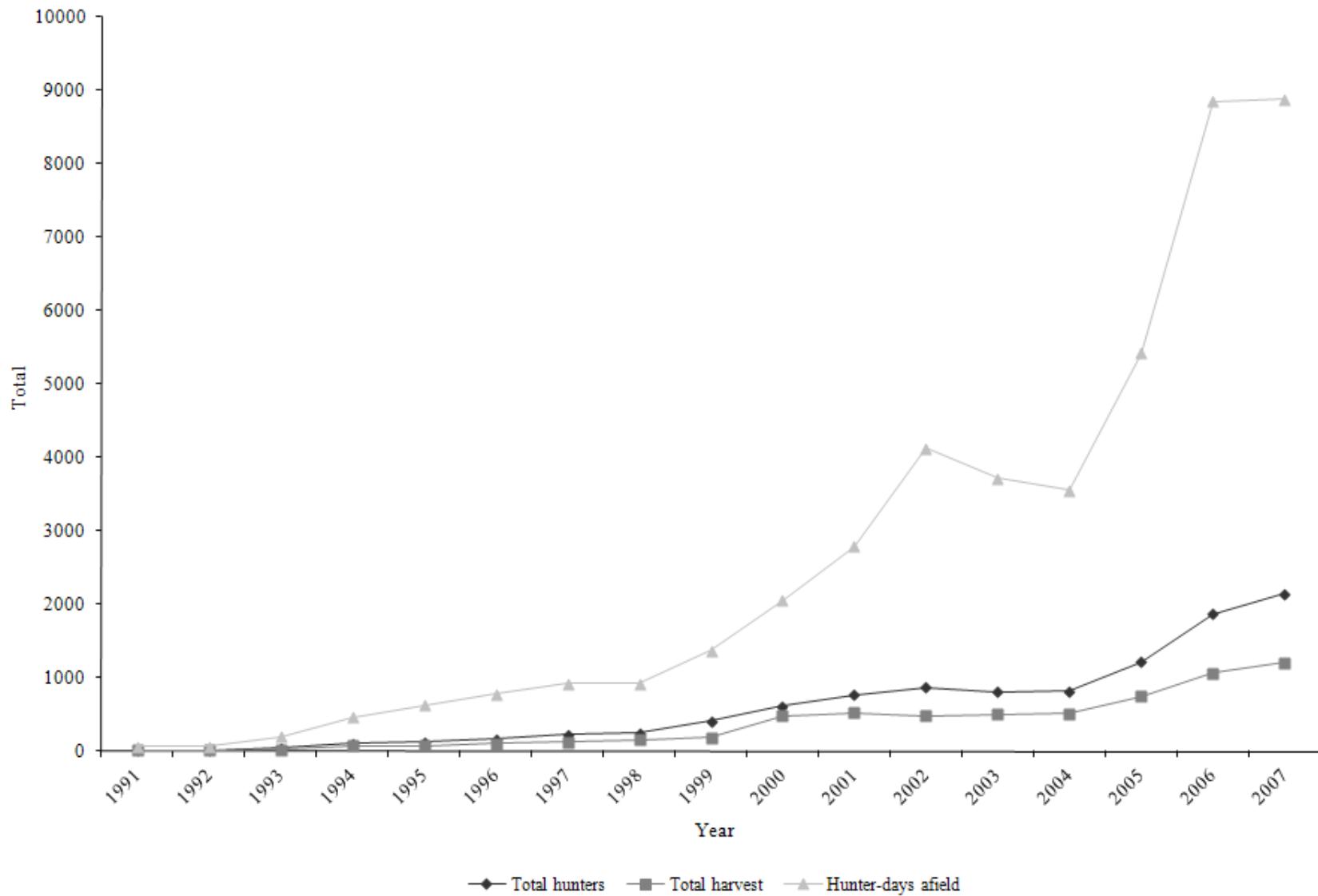
Statewide Merriam's wild turkey spring season harvest statistics, Utah 1968–2007 (continued).

Year	Permits sold	Total hunters	Total harvest	Hunter-days afield	Percent success	Turkeys / hunter-day	% of hunters observing turkeys
1993	500	466	74	1508	16	0.05	54
1994	335	285	57	1112	20	0.05	—
1995	335	287	65	1386	23	0.05	40
1996	355	320	84	1151	26	0.07	78
1997	362	339	81	1208	24	0.07	87
1998	358	309	95	1218	31	0.08	18
1999	355	327	111	1188	34	0.09	84
2000	431	396	211	1297	53	0.16	77
2001	569	548	362	1586	66	0.23	90
2002*	689	622	303	2322	49	0.13	—
2003	660	617	207	2611	34	0.08	—
2004	493	459	173	1783	38	0.10	88
2005**	561	441	208	1497	47	0.14	88
2006	633	556	329	1994	59	0.16	93
2007	713	649	390	2073	60	0.19	93
Average (1968–2006)	337	303	79	1008	21	0.07	51
% change from previous year	13	17	19	4	2	15	0
% change from average	112	114	391	106	189	191	82

\*2002–2004 data does not include conservation permit information.

\*\*2005 data does not include conservation permit or landowner permit information.

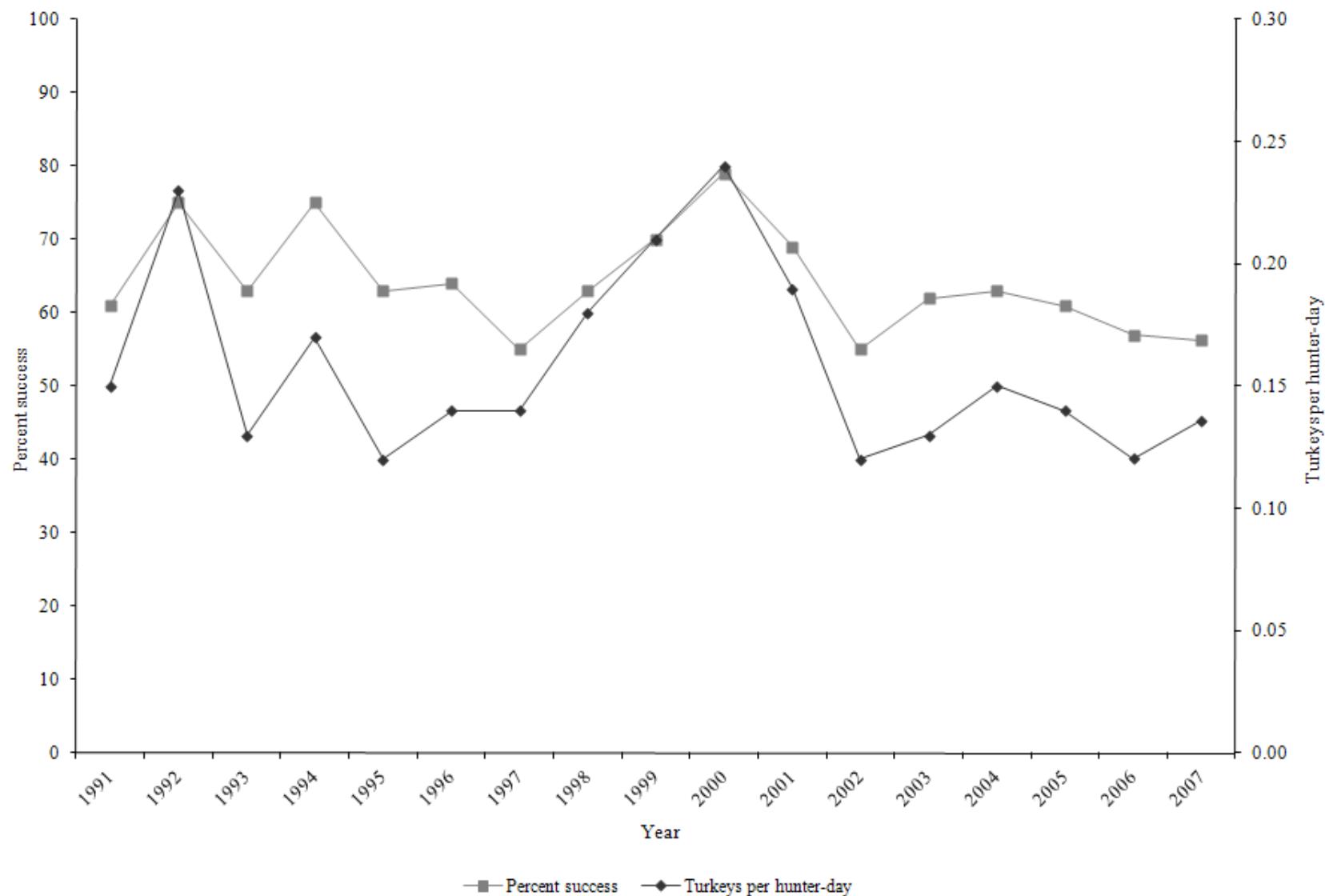
Statewide trends of spring Rio Grande wild turkey harvest statistics, Utah 1991–2007.



\*2002–2004 data does not include conservation permit information.

\*\*2005 data does not include conservation permit or landowner permit information.

Statewide trends of spring Rio Grande wild turkey hunter success, Utah 1991–2007.



\*2002–2004 data does not include conservation permit information.

\*\*2005 data does not include conservation permit or landowner permit information.

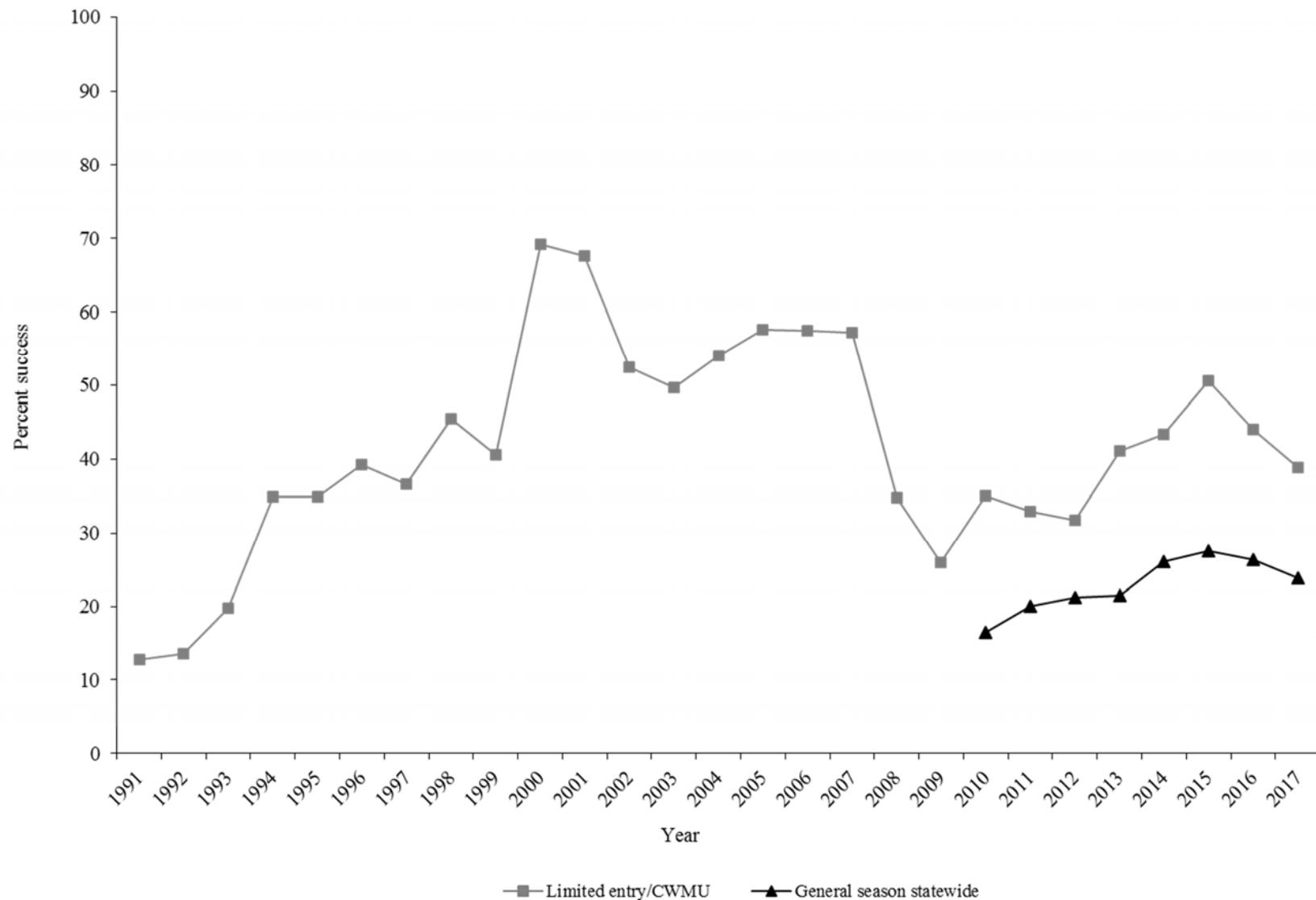
Statewide Rio Grande wild turkey harvest statistics, Utah 1991–2007.

Year	Permits sold	Total hunters	Total harvest	Hunter-days afield	Percent success	Turkeys / hunter-day	% of hunters observing turkeys
1991	20	18	11	71	61	0.15	—
1992	21	20	15	64	75	0.23	—
1993	42	41	26	200	63	0.13	—
1994	105	105	79	464	75	0.17	—
1995	135	123	78	628	63	0.12	—
1996	174	166	107	776	64	0.14	88
1997	240	229	127	920	55	0.14	82
1998	263	254	161	919	63	0.18	57
1999	398	413	189	1373	70	0.21	90
2000	631	615	488	2052	79	0.24	62
2001	812	769	529	2791	69	0.19	91
2002*	952	876	482	4131	55	0.12	—
2003	868	810	501	3720	62	0.13	—
2004	879	820	518	3559	63	0.15	96
2005**	1435	1215	745	5428	61	0.14	92
2006	2031	1873	1067	8852	57	0.12	94
2007	2304	2150	1210	8887	56	0.14	97
Average (1991–2006)	563	522	320	2247	65	0.16	84
% change from previous year	13	15	13	0	-1	13	3
% change from average	309	312	278	296	-13	-15	16

\*2002–2004 data does not include conservation permit information.

\*\*2005 data does not include conservation permit or landowner permit information.

Statewide trends of limited entry/CWMU and general season statewide wild turkey hunter success, Utah 1991–2017.



\*2002–2004 limited entry data does not include conservation permit information.

\*\*2005 limited entry data does not include conservation permit or landowner permit information.

Statewide limited-entry/CWMU wild turkey harvest statistics, Utah 1991–2017.

Year	Permits sold	Total hunters	Total harvest	Turkeys / hunter-day	Percent success
1991	607	550	70	0.0	12.7
1992	559	504	68	0.0	13.5
1993	542	507	100	0.1	19.7
1994	440	390	136	0.1	34.9
1995	470	410	143	0.1	34.9
1996	529	486	191	0.1	39.3
1997	602	568	208	0.1	36.6
1998	621	563	256	0.1	45.5
1999	753	740	300	0.1	40.5
2000	1062	1011	699	0.2	69.1
2001	1381	1317	891	0.2	67.7
2002*	1641	1498	785	0.1	52.4
2003	1528	1427	708	0.1	49.6
2004	1372	1279	691	0.1	54.0
2005**	1996	1656	953	0.1	57.5
2006	2664	2429	1396	0.1	57.5
2007	3017	2799	1600	0.1	57.2
2008	7858	6831	2374	0.1	34.8
2009	13608	11138	2770	0.0	26.0
2010	3055	2640	925	—	35.0
2011	3104	2629	865	—	32.9
2012	3035	2594	824	—	31.8
2013	3068	2566	1054	—	41.1
2014	3081	2661	1155	—	43.4
2015	3517	2918	1476	—	50.6
2016	4143	3602	1583	—	43.9
2017	4538	3991	1552	—	38.9
Average (1991–2016)	2471	2143	855	0.1	41.6
% change from previous year	10	11	-2	—	-12
% change from average	84	86	82	—	-7

\*2002–2004 do not include conservation permit information.

\*\*Does not include conservation permit or landowner permit information.

Statewide general-season wild turkey harvest statistics, Utah 2010–2017.

Year	Permits sold	Total hunters	Total Harvest	Percent success
2010	10118	8301	1363	16.4
2011	6528	5662	1136	20.1
2012	5275	4506	953	21.1
2013	6588	5788	1241	21.4
2014	7812	6734	1759	26.1
2015	8514	7314	2017	27.6
2016	8586	7522	1978	26.3
2017	8542	7075	1686	23.8
Average (1991–2016)	7632	6547	1492	22.7
% change from previous year	-1	-6	-15	-9
% change from average	12	8	13	5

Wild turkey fall harvest statistics by hunt area and region, Utah 2016.

Hunt area	Region	n	Hunters afield	Male harvest	Female harvest	Total harvest	Total days afield	Percent success
Cache, East	Northern	19	71	19	15	33	235	47.4
Cache, West	Northern	33	123	30	30	60	440	48.5
Croydon	Northern	9	33	15	11	26	66	77.8
Mantua	Northern	8	30	7	4	11	98	37.5
Morgan	Northern	20	74	15	15	30	266	40.0
Ogden Valley	Northern	13	48	19	7	26	137	53.8
Wasatch Front	Northern	9	33	7	0	7	238	22.2
Unknown	Northern	2	7	0	0	0	21	0.0
Northern region total*		150	420	112	82	193	1606	46.0
Alton/North Fork	Southern	7	26	4	15	19	82	71.4
Antimony	Southern	0	0	—	—	—	—	—
Boulder City	Southern	4	15	4	4	8	34	50.0
Enterprise	Southern	12	45	4	8	11	439	25.0
Escalante	Southern	6	23	11	11	23	58	100.0
Fillmore	Southern	30	113	45	19	68**	305	60.0
Kanosh	Southern	11	41	11	11	23	104	54.5
North Ash Creek	Southern	2	8	8	0	8	40	100.0
Oak City	Southern	12	45	15	0	15	86	33.3
Parowan/Summit	Southern	18	68	8	11	19	366	27.8
Pinto	Southern	14	53	11	8	19	189	35.7
Scipio	Southern	3	11	8	0	8	44	66.7
Tropic	Southern	1	4	0	0	0	8	0.0
Unknown	Southern	1	4	0	0	0	4	0.0
Southern region total*		165	455	128	86	218	2166	47.9

\*Total permits sold was 558 for the northern region and 620 for the southern region. Statewide totals for sample size and hunters afield are not the total of the columns because hunters hunted multiple areas. Total regional sample size includes those surveyed who did not hunt.

\*\*Includes 4 turkeys of unknown sex.

Wild turkey spring harvest statistics by hunt, Utah 2017.

Hunt number	Hunt unit	Total permits	n	Hunters afield	Total harvest	Days afield public land	Days afield private land	Percent success
TK1003	Limited entry central region	591	192	536	219	2126	410	40.8
TK1004	Limited entry northeastern region	464	163	390	176	1224	604	45.3
TK1005	Limited entry northern region	744	253	591	174	1791	850	29.4
TK1006	Limited entry southeastern region	579	207	515	257	1738	400	50.0
TK1007	Limited entry southern region	2151	571	1951	723	6584	1220	37.1
—	General season statewide							
TK1009	Folley Ridge CWMU	9	7	8	3	—	20	33.3

## **APPENDIX A**

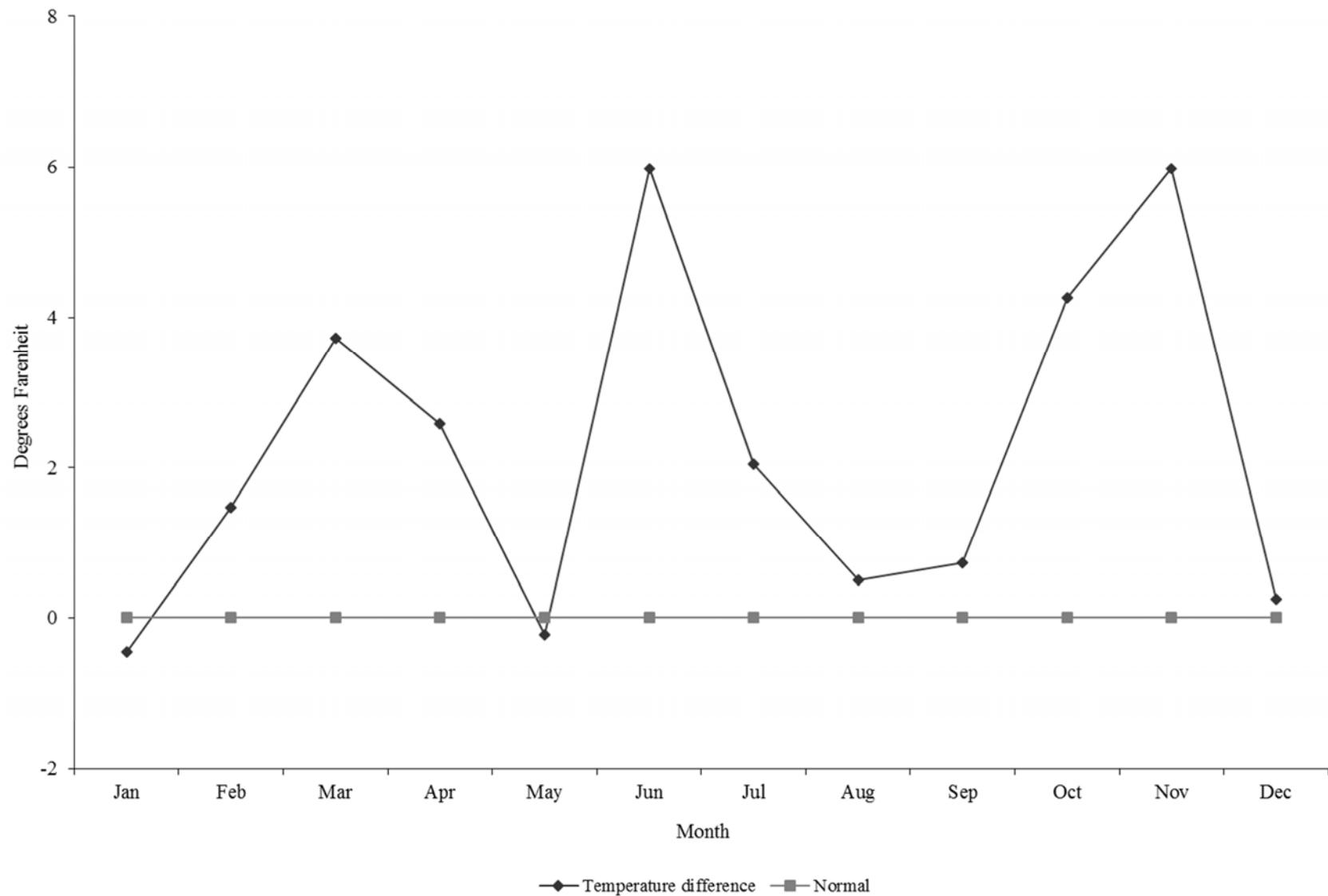
### **WEATHER CONDITIONS**

Weather data used in this report are from the NOAA periodical entitled “Climatological Data Annual Summary Utah 2016.”

Comparison of monthly average temperatures (°F) to normal temperature, by weather division, Utah 2016.

Weather Division	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>No.1 Western</b>													
Normal	26.7	32.6	40.7	47.6	56.4	66.2	73.8	72.1	62.0	49.6	36.6	27.6	49.3
2016	26.3	31.1	44.6	50.6	57.1	71.5	75.9	73.1	62.7	53.8	41.4	26.1	51.2
Departure	-0.4	-1.5	3.9	3.0	0.7	5.3	2.1	1.0	0.7	4.2	4.8	-1.5	1.9
<b>No.2 Dixie</b>													
Normal	39.4	44.5	50.1	56.9	65.9	75.9	81.6	79.8	72.3	60.7	47.2	39.7	59.5
2016	40.1	49.1	54.1	60.0	66.8	83.2	84.1	80.6	73.1	65.1	53.1	40.2	62.5
Departure	0.7	4.6	4.0	3.1	0.9	7.3	2.5	0.8	0.8	4.4	5.9	0.5	3.0
<b>No.3 North Central</b>													
Normal	26.5	31.6	40.3	47.6	56.6	66.3	73.9	72.3	62.4	50.4	37.2	28.0	49.4
2016	26.0	31.7	43.8	50.9	56.5	71.5	76.0	73.6	63.0	54.3	43.6	26.7	51.5
Departure	-0.5	0.1	3.5	3.3	-0.1	5.2	2.1	1.3	0.6	3.9	6.4	-1.3	2.0
<b>No.4 South Central</b>													
Normal	26.8	31.6	38.2	44.6	53.5	63.1	69.8	67.9	59.7	48.3	36.0	28.0	47.3
2016	27.1	33.0	42.8	47.5	53.2	69.6	72.0	68.4	60.0	53.3	41.4	27.4	49.6
Departure	0.3	1.4	4.6	2.9	-0.3	6.5	2.2	0.5	0.3	5.0	5.4	-0.6	2.3
<b>No.5 Northern Mountains</b>													
Normal	21.3	24.9	32.8	40.4	49.4	58.3	65.1	63.7	55.0	44.2	31.3	22.5	42.4
2016	20.2	27.2	36.3	43.2	48.9	63.5	67.1	64.7	56.4	48.6	38.5	22.8	44.8
Departure	-1.1	2.3	3.5	2.8	-0.5	5.2	2.0	1.0	1.4	4.4	7.2	0.3	2.4
<b>No.6 Uintah Basin</b>													
Normal	18.0	24.4	37.5	46.5	55.9	65.2	71.6	69.6	60.2	47.8	32.8	21.0	45.9
2016	16.1	27.0	41.4	49.0	55.0	71.3	73.0	69.6	61.1	51.3	39.5	24.5	43.7
Departure	-1.9	2.6	3.9	2.5	-0.9	6.1	1.4	0.0	0.9	3.5	6.7	3.5	-2.2
<b>No.7 Southeast</b>													
Normal	28.0	34.7	43.1	50.7	60.1	70.5	76.5	74.4	65.4	53.0	39.1	29.8	52.1
2016	27.7	35.5	45.7	51.2	58.7	76.8	78.5	73.3	65.8	57.4	44.6	30.6	53.8
Departure	-0.3	0.8	2.6	0.5	-1.4	6.3	2.0	-1.1	0.4	4.4	5.5	0.8	1.7
<b>State averages</b>													
Normal	26.7	32.0	40.4	47.8	56.8	66.5	73.2	71.4	62.4	50.6	37.2	28.1	49.4
2016	26.2	33.5	44.1	50.3	56.6	72.5	75.2	71.9	63.2	54.8	43.2	28.3	51.7
Departure	-0.5	1.5	3.7	2.6	-0.2	6.0	2.0	0.5	0.7	4.3	6.0	0.2	2.2

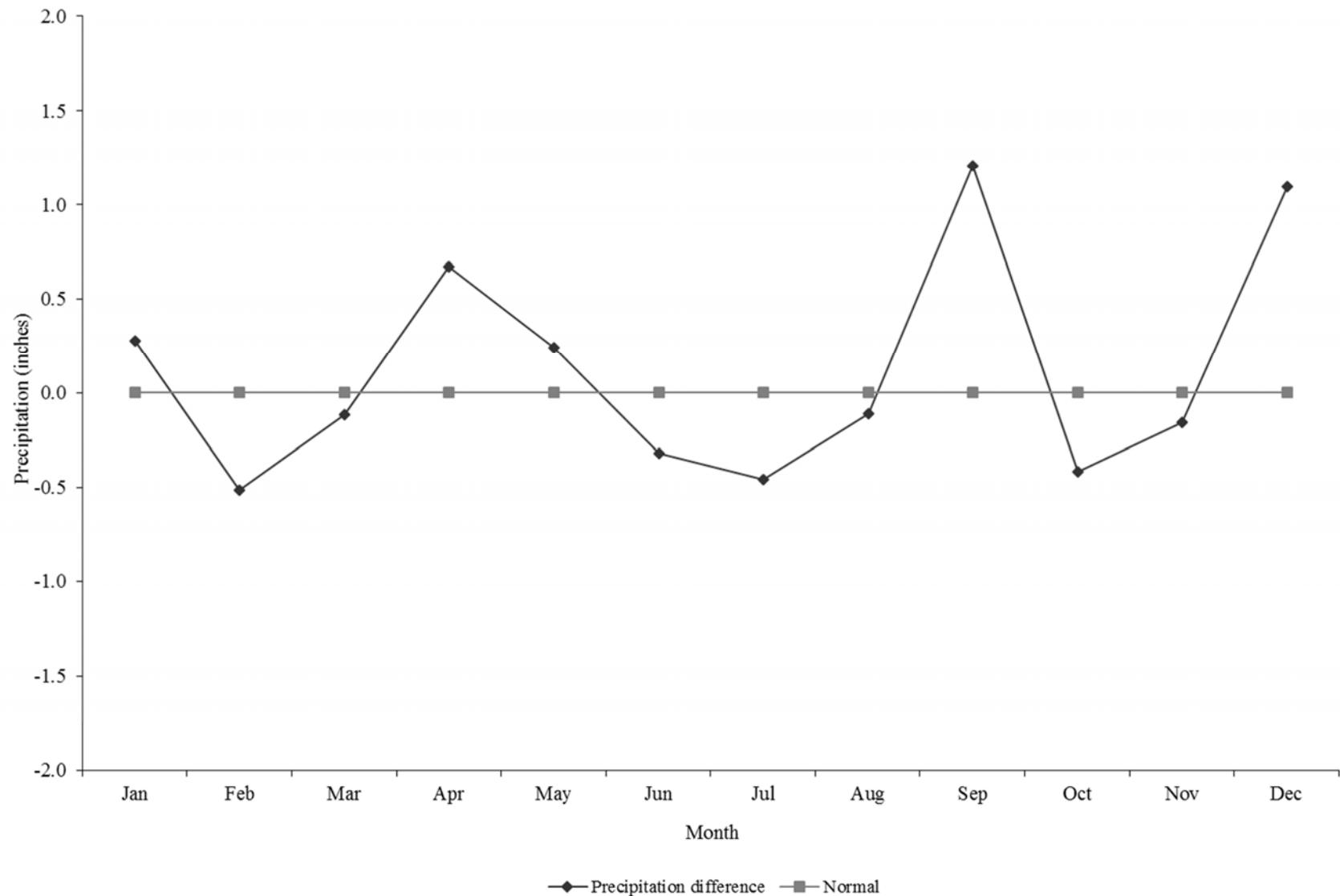
Temperature ( $^{\circ}\text{F}$ ) departure from normal, Utah 2016.



Comparison of monthly average precipitation (inches) to normal precipitation, by weather division, Utah 2016.

Weather Division	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>No.1 Western</b>													
Normal	0.6	0.7	0.9	0.9	1.1	0.6	0.7	0.8	0.8	1.0	0.7	0.5	9.2
2016	1.0	0.5	0.7	1.6	0.9	0.5	0.1	0.2	1.3	0.5	0.3	1.3	9.0
Departure	0.4	-0.2	-0.2	0.7	-0.2	-0.1	-0.6	-0.6	0.5	-0.5	-0.3	0.9	-0.2
<b>No.2 Dixie</b>													
Normal	1.6	1.6	2.0	0.9	0.7	0.3	0.9	1.1	0.9	1.0	1.1	0.8	12.9
2016	1.9	0.6	0.8	2.5	0.4	0.4	0.4	2.5	1.7	0.5	0.9	3.0	15.5
Departure	0.3	-1.0	-1.2	1.7	-0.3	0.1	-0.6	1.3	0.8	-0.5	-0.2	2.1	2.6
<b>No.3 North Central</b>													
Normal	1.6	1.6	1.9	1.9	2.2	1.1	0.9	1.0	1.4	1.8	1.5	1.4	18.2
2016	2.4	0.9	2.6	2.5	2.2	0.5	0.1	0.2	3.2	1.8	1.6	2.6	20.5
Departure	0.8	-0.7	0.8	0.6	0.1	-0.6	-0.8	-0.8	1.8	0.0	0.0	1.3	2.4
<b>No.4 South Central</b>													
Normal	1.2	1.2	1.4	1.1	1.1	0.6	1.0	1.4	1.2	1.3	1.1	0.9	13.4
2016	1.4	0.8	0.9	1.6	1.0	0.3	0.8	1.4	1.9	0.5	0.9	1.7	13.0
Departure	0.2	-0.4	-0.5	0.5	-0.1	-0.3	-0.2	0.0	0.8	-0.9	-0.2	0.9	-0.3
<b>No.5 Northern Mountains</b>													
Normal	2.0	1.9	2.0	1.9	2.0	1.1	1.1	1.2	1.6	1.9	1.9	1.7	20.1
2016	2.4	1.0	2.5	2.4	3.0	0.5	0.2	0.4	2.8	2.2	1.7	3.6	22.6
Departure	0.4	-0.8	0.5	0.5	1.0	-0.6	-0.9	-0.8	1.2	0.3	-0.2	1.9	2.5
<b>No.6 Uintah Basin</b>													
Normal	0.5	0.5	0.6	0.8	1.0	0.6	0.7	0.8	0.9	1.1	0.5	0.4	8.5
2016	0.3	0.2	0.9	1.2	2.1	0.1	0.5	0.5	3.6	0.5	0.5	0.8	11.4
Departure	-0.2	-0.3	0.3	0.4	1.1	-0.5	-0.2	-0.3	2.7	-0.6	-0.1	0.4	2.9
<b>No.7 Southeast</b>													
Normal	0.8	0.7	0.9	0.7	0.8	0.4	0.9	1.0	1.0	1.3	0.8	0.6	9.8
2016	1.0	0.5	0.4	1.1	0.8	0.2	1.0	1.4	1.7	0.5	0.7	0.9	9.8
Departure	0.1	-0.2	-0.5	0.3	0.0	-0.3	0.0	0.4	0.7	-0.8	-0.1	0.3	0.0
<b>State averages</b>													
Normal	1.2	1.1	1.4	1.2	1.3	0.7	0.9	1.0	1.1	1.3	1.1	0.9	13.1
2016	1.5	0.6	1.3	1.8	1.5	0.4	0.4	0.9	2.3	0.9	0.9	2.0	14.6
Departure	0.3	-0.5	-0.1	0.7	0.2	-0.3	-0.5	-0.1	1.2	-0.4	-0.2	1.1	1.4

Precipitation (inches) departure from normal, Utah 2016.



## **APPENDIX B**

### **HUNTER HARVEST SURVEY RESPONSE SUMMARY**

General upland game harvest mail questionnaire returns, Utah 1962–63 to 2000–01.

Year	Questionnaires mailed	Total surveys returned	% returned	Total usable returns	% usable	% of license holders who did not hunt
1962–63	10068	4122	40.9	3433	34.1	22.0
1963–64	11058	5062	45.8	4325	39.1	21.0
1964–65	10718	4840	45.2	4180	39.0	23.0
1965–66	11917	6232	52.3	—	—	34.0
1966–67	13131	5734	43.7	5734	43.7	34.6
1967–68	12012	5764	48.0	5764	48.0	25.1
1968–69	14068	6138	43.6	6138	43.6	25.6
1969–70	15036	6429	42.8	6429	42.8	28.0
1970–71	14730	6639	45.1	6639	45.1	38.8
1971–72	15149	—	43.2	—	—	—
1972–73	15272	—	—	6399	41.9	—
1973–74	17572	—	—	7999	45.5	—
1974–75	27379	9157	33.4	8027	29.3	—
1975–76	26657	10880	40.8	9132	34.3	—
1976–77	21250	7889	37.1	6226	29.3	—
1977–78	20984	9329	44.5	8099	38.6	—
1978–79	24733	7575	30.6	6529	26.4	—
1979–80	27616	10498	38.0	9274	33.6	26.4
1980–81	27952	9857	35.3	8496	30.4	33.1
1981–82	13925	7941	57.0	6367	45.7	31.4
1982–83	22609	10167	45.0	8734	38.6	27.0
1983–84	23430	10324	44.1	9497	40.5	28.7
1984–85	12026	6455	53.7	6324	52.6	31.1
1985–86	10772	5904	54.8	5843	54.2	35.2
1986–87	11103	5329	48.0	5256	47.3	34.2
1987–88	10022	4294	42.8	4272	42.6	30.1
1988–89	15350	6650	43.3	6527	42.5	35.6
1989–90	12894	5135	39.8	5105	39.6	36.7
1990–91	12236	5264	43.0	5175	42.3	39.1
1991–92	15054	6419	42.6	6212	41.3	42.7
1992–93	16472	6207	37.7	5977	36.3	45.0
1993–94	16534	6293	38.1	5442	32.9	42.6
1994–95	15526	5433	35.0	5131	33.0	45.1
1995–96	14777	4951	33.5	4866	32.9	41.7
1996–97	14088	4090	29.0	4028	28.6	36.2
1997–98	13689	4488	32.8	4338	31.7	40.0
1998–99	14497	5536	38.2	3862	26.6	43.5
1999–00	14630	6082	41.6	5426	37.1	39.6
2000–01	14181	5020	35.4	4555	32.1	37.4

General upland game survey type and sample size, Utah 2001–02 to 2016–17.

Year	Survey type	Sample size	Total licenses	% of license holders who did not hunt
2001–02	Telephone	2500	83883	43.6
2002–03	Telephone	2501	79036	40.9
2003–04	Telephone	2500	77058	35.3
2004–05	Telephone	2500	77160	42.2
2005–06	Telephone	2500	76491	33.6
2006–07	Telephone	2501	82639	50.5
2007–08*	Telephone	4978	124349	75.5
2008–09	Web/Phone	14324	182846	76.7
2009–10	Web/Phone	12571	187925	81.8
2010–11	Web/Phone	14752	186163	80.9
2011–12	Web/Phone	16248	181590	84.2
2012–13	Web/Phone	17888	183275	83.7
2013–14	Web/Phone	19353	194042	83.9
2014–15	Web/Phone	16359	230826	86.1
2015–16	Web/Phone	22551	242740	83.0
2016–17	Web/Phone	14814	249679	82.8

\*As of July 1, 2007, the 365-day small game license was renamed a basic hunting license, and all hunters were required to obtain a basic hunting license before applying for or obtaining any other Utah hunting permit.

## **APPENDIX C**

### **LICENSE SALES**

Cost of Utah hunting licenses/permits and total licenses/permits sold, Utah 2016–17.

License/permit type	Fee (dollars)	Licenses/permits sold
Resident 365-day hunting license (age 13 and under)	\$11	7006
Resident 365-day hunting license (ages 14–17)	\$16	1033
Resident 365-day hunting license (age 65 and older)	\$25	739
Resident 365-day hunting license (ages 18–64)	\$34	5200
Resident multi-year hunting license (ages 18–64)	\$33 per year, up to five years	Included above
Resident 365-day combination license (ages 14–17)	\$20	16313
Resident 365-day combination license (age 65 and older)	\$29	14809
Resident 365-day combination license (ages 18–64)	\$38	154026
Resident multi-year combination license (ages 18–64)	\$37 per year, up to five years	Included above
Nonresident 3-day small game hunting license (any age)	\$32	473
Nonresident 365-day hunting license (age 17 and under)	\$25	792
Nonresident 365-day hunting license (age 18 and older)	\$65	21916
Nonresident multi-year hunting license (age 18 and older)	\$64 per year, up to five years	Included above
Nonresident 365-day combination license (age 17 and under)	\$29	630
Nonresident 365-day combination license (age 18 and older)	\$85	9724
Nonresident multi-year combination license (age 18 and older)	\$84 per year, up to five years	Included above
Resident lifetime hunting/fishing license*	—	4440
Resident Hunter Education completion license	—	12448
Nonresident Hunter Education completion license	—	130
Band-tailed pigeon permit	\$0	136
Greater sage-grouse permit	\$0	1280
Sandhill crane permit	\$15	135
Sharp-tailed grouse permit	\$0	222
White-tailed ptarmigan permit	\$0	327
Resident wild turkey limited-entry permit	\$35	4379
Resident wild turkey general-season permit	\$35	8291
Resident wild turkey CWMU permit	\$35	9
Nonresident wild turkey limited-entry permit	\$100	150
Nonresident wild turkey general-season permit	\$100	251
Nonresident wild turkey CWMU permit	\$100	0

\*No longer available for purchase.

## **APPENDIX D**

**PERMIT NUMBERS, SEASON DATES,  
BAG AND POSSESSION LIMITS, AND AREAS OPEN**

Upland game and turkey season dates, bag and possession limits, and areas open, Utah 2016–17 (2016–17 Utah Upland Game & Turkey Guidebook).

#### American crow

- Season dates: September 1–September 30, 2016 and December 1, 2016–February 28, 2017
- Falconry season dates: September 1–September 30, 2016 and December 1, 2016–February 28, 2017
- Areas open: Statewide.
- Bag limit: 10
- Possession limit: 30

#### Band-tailed pigeon

- Season dates: September 1–September 14, 2016
- Falconry season dates: September 1–December 16, 2016
- Areas open: Statewide.
- Bag limit: 2
- Possession limit: 6
- Notes: Requires a free permit in addition to your hunting license.

#### California and Gambel's quail

- Season dates: November 5–December 31, 2016
- Youth hunt: October 15–October 17, 2016
- Areas open: Statewide.
- Bag limit: 5
- Possession limit: 15
- Notes: Limits singly or in combination.

#### Chukar partridge

- Season dates: September 24, 2016–February 15, 2017
- Youth hunt: September 17–September 19, 2016
- Areas open: Statewide.
- Bag limit: 5
- Possession limit: 15
- Notes: Antelope Island is closed to all upland game hunting.

#### Collared-dove (Eurasian and African)

- Season dates: Year round
- Areas open: Statewide.
- Bag limit: No limit
- Possession limit: No limit
- Notes: Collared-doves may be hunted without a license, year round. Collared-doves taken during the dove season will not count as part of the combined dove bag and possession limits if they remain unplucked during transport.

Upland game and turkey season dates, bag and possession limits, and areas open, Utah 2016–17 (continued).

Cottontail rabbit (desert and mountain)

- Season dates: September 1, 2016–February 28, 2017
- Areas open: Statewide.
- Bag limit: 10
- Possession limit: 30

Dusky and ruffed grouse

- Season dates: September 1–December 31, 2016
- Areas open: Statewide.
- Bag limit: 4
- Possession limit: 12
- Notes: Limits singly or in combination.

Gray (Hungarian) partridge

- Season dates: September 24, 2016–February 15, 2017
- Youth hunt: September 17–September 19, 2016
- Areas open: Statewide.
- Bag limit: 5
- Possession limit: 15

Greater sage-grouse

- Season dates: September 24–October 16, 2016
- Areas open: Diamond, Blue Mountain (SG1000); Parker Mountain (SG1001); Rich County (SG1002) and West Box Elder County (SG1003)
- Possession limit: Only 2 birds of either sex may be taken during the entire season.
- Notes: Greater sage-grouse permit required.
- 

Jackrabbit (black-tailed and white-tailed)

- Season dates: Year round
- Areas open: Statewide.
- Bag limit: No limit
- Possession limit: No limit
- Notes: May be hunted without a license.

Upland game and turkey season dates, bag and possession limits, and areas open, Utah 2016–17 (continued).

Mourning dove and white-winged dove

- Season dates: September 1–October 30, 2016
- Falconry season dates: September 1–December 16, 2016
- Areas open: Statewide.
- Bag limit: 15
- Possession limit: 45
- Falconry bag limit: 3
- Falconry possession limit: 9
- Notes: Limits singly or in combination. Collared-doves should remain fully feathered so they can be distinguished from mourning and white-winged doves.

Ring-necked pheasant (General season)

- Season dates: November 5–November 20, 2016
- Youth hunt: October 15–October 17, 2016
- Areas open: Statewide.
- Bag limit: 2 male birds
- Possession limit: 6 male birds
- Notes: Only males may be harvested. The Goshen Warm Springs WMA in Utah County is closed to all hunting.
- 

Ring-necked pheasant (Extended season)

- Season dates: November 21–December 4, 2016
- Areas open: All state and federal lands, including private land leased by or managed by the Division, which may be subject to restrictions and closures imposed by administering agencies. All other private lands are closed.
- Bag limit: 2 male birds
- Possession limit: 6 male birds
- Notes: Only males may be harvested. The Goshen Warm Springs WMA in Utah County is closed to all hunting.

Scaled quail

- Season dates and bag limit: Closed statewide

Sandhill crane (multiple counties)

- Season dates: September 3–11, 2016
- Areas open: East Box Elder County (SC1000), Cache County (SC1001) and Rich County (SC1002)
- Possession limit: Only 1 bird of either sex may be taken during the entire season.
- Notes: Sandhill crane permit required. Harold Crane, Public Shooting Grounds and Salt Creek Waterfowl Management Areas are closed to sandhill crane hunting. Bear River National Wildlife Refuge is closed to sandhill crane hunting.

Upland game and turkey season dates, bag and possession limits, and areas open, Utah 2016–17 (continued).

Sandhill crane (Uintah County)

- Season dates: September 17–25, 2016 (early), September 28–October 6, 2016 (middle) and October 8–16, 2016 (late)
- Areas open: Uintah County. There are three hunts: early (SC1003), middle (SC1004), and late (SC1005).
- Possession limit: Only 1 bird of either sex may be taken during the entire season.
- Notes: Sandhill crane permit required.

Sharp-tailed grouse

- Season dates: September 24–October 16, 2016
- Areas open: Northeast Box Elder County (ST1000) and Cache County (ST1001)
- Possession limit: Only 2 birds of either sex may be taken during the entire season.
- Notes: Sharp-tailed grouse permit required. This hunt is comprised of all or largely private property. Hunters should acquire written permission from the landowner before obtaining a permit for this hunt.

Snowshoe hare

- Season dates: September 1, 2016–March 15, 2017
- Areas open: Statewide.
- Bag limit: 5
- Possession limit: 15

White-tailed ptarmigan

- Season dates: August 27–October 31, 2016
- Areas open: Statewide.
- Bag limit: 4
- Possession limit: 12
- Notes: Requires a free permit in addition to a hunting license.

Wild turkey (Fall general-season hunts)

- Season dates: November 1, 2016–January 16, 2017 (Northern) and November 1, 2016–January 31, 2017 (Southern)
- Areas open: Select areas within the Northern Region and within the Southern Region. Some of these hunts are comprised of all or largely private property.
- Bag limit: 1 turkey of either sex
- Possession limit: 1 turkey of either sex
- Notes: Permits for the fall 2016 general-season hunts will be sold at [wildlife.utah.gov](http://wildlife.utah.gov) and from license agents and Division offices.

Upland game and turkey season dates, bag and possession limits, and areas open, Utah 2016–17 (continued).

Wild turkey (Limited-entry hunts)

- Season dates: April 8–April 27, 2017
- Areas open: Central (TK1003), Northeastern (TK1004), Northern (TK1005), Southeastern (TK1006), and Southern (TK1007) regions.
- Bag limit: 1 bearded turkey
- Possession limit: 1 bearded turkey
- Notes: The limited-entry hunt requires a permit distributed through Utah's turkey drawing. If you are a youth with a limited-entry permit and you don't harvest during the limited-entry season, you may continue to hunt during the youth hunt and the spring general-season hunt.

Wild turkey (Spring general-season hunt)

- Season dates: May 1–May 31, 2017
- Youth hunt: April 28–April 30, 2017
- Areas open: Statewide.
- Bag limit: 1 bearded turkey
- Possession limit: 1 bearded turkey
- Notes: Spring general-season permits may be purchase over the counter.

Wild turkey (CWMU hunts)

- Season dates: The CWMU operator establishes the number of hunting days within the timeframe established by the Utah Wildlife Board for turkey hunting on CWMUs, April 8–May 31, 2017.
- Areas open: Folley Ridge (TK1009), Missouri Flat (TK1010) and New Harmony (TK1011).
- Bag limit: 1 bearded turkey
- Possession limit: 1 bearded turkey
- Notes: The CWMU hunt requires a permit distributed through Utah's turkey drawing.