

# Sage Grouse Harvest Report 2002

A post-season harvest survey was conducted by phone.

A stratified random sample of 3993 sage grouse hunters was drawn from among HIP participants. 2464 hunters were contacted (62% response rate).

Of those surveyed, 139 or 6% reported they had hunted sage grouse. The number of birds harvested ranged from 0 (70 respondents) to 12 (1 respondent).

86% reported being satisfied with their sage grouse hunting experience and 68% reported no crowding.

Harvest results are provided by strata, county and population.

In addition, there is a summary table of areas hunted (nearest landmark) and harvest reported by survey respondents.

***Statewide harvest estimate = 307 ± 57 (251-364).***

## **Comparison with 2001 survey results:**

Harvest was estimated to be lower than in 2001 when an estimated 782 ± 198 birds were harvested. Hunter numbers were also lower with an estimate for 2002 of 257 ± 29 as compared to an estimated 612 ± 90 in 2001. Days hunted were estimated at 577 ± 86 compared to 1461 ± 263. These differences are statistically significant at the 95% confidence level.

## **Harvest by Strata, County and Population**

Summary tables provide estimates of hunter numbers, days in the field and sage grouse harvest by strata, county and population. Estimates are followed by the standard error of the estimate, and 95% upper (UCI) and lower (LCI) confidence intervals around the estimate. For example, the estimated number of sage grouse hunters in Moffat County is 107 plus or minus 1.96(SE) or 1.96(10)=19. The range of the estimate is 88 to 125. Estimates of days in the field and harvest are interpreted the same way. State totals are given at the bottom of each column.

**(The output wraps around.)**

## Sage Grouse Harvest 2002

sgstrata	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Will not hunt	28	1.14	28	1.14
Somewhat likely	1995	80.97	2023	82.10
Very likely	441	17.90	2464	100.00

### Hunted during Season?

hunt	Frequency	Percent	Cumulative Frequency	Cumulative Percent
yes	139	5.64	139	5.64
no	2325	94.36	2464	100.00

### Table of sgstrata by Hunt

sgstrata	hunt(Hunted during season?)			Total
	yes	no		
Will not hunt	0	28		28
	0.00	1.14		1.14
	0.00	100.00		
	0.00	1.20		
Somewhat likely	45	1950		1995
	1.83	79.14		80.97
	2.26	97.74		
	32.37	83.87		
Very likely	94	347		441
	3.81	14.08		17.90
	21.32	78.68		
	67.63	14.92		
Total	139	2325		2464
	5.64	94.36		100.00

### Satisfied with Hunt?

satisfy	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Strongly Dis.	10	7.19	10	7.19
Somewhat Dis.	7	5.04	17	12.23
Slightly Dis.	3	2.16	20	14.39
Neutral	1	0.72	21	15.11
Slightly Sat.	19	13.67	40	28.78
Somewhat Sat.	37	26.62	77	55.40
Strongly Sat.	62	44.60	139	100.00

### Feel Crowded?

crowded	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Not at all	95	68.35	95	68.35
Slightly	22	15.83	117	84.17
Moderately	19	13.67	136	97.84
Extremely	3	2.16	139	100.00

### Possibly Hunting Other Species?

other	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	9	100.00	9	100.00

### Total Harvest

totharv	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	71	51.08	71	51.08
1	20	14.39	91	65.47
2	22	15.83	113	81.29
3	9	6.47	122	87.77
4	15	10.79	137	98.56
6	1	0.72	138	99.28
12	1	0.72	139	100.00

## Summary of Areas Hunted and Harvest Reported from Sample

Table of alpha by totharv

alpha(Description of hunting areas)	totharv(Total harvest)				Total
Frequency	Zero	1-3	4-6	>6	
10 MILES EAST OF BROWNS PARK	0	0	1	0	1
11 MILES WEST OF ROUTT NATIONAL FOREST	1	0	0	0	1
15 MILES NORTHWEST OF WALDEN IN UNIT 161	1	0	0	0	1
2 MILES WEST OF GREAT DIVIDE	1	0	0	0	1
25 MILES SOUTHWEST OF MEEKER	0	1	0	0	1
35 MILES NORTHWEST OF CRAIG GREAT DIVIDE	1	0	0	0	1
5 MILES NORTHEAST OF KREMMLING	0	1	0	0	1
6 MILES WEST OF COWDREY	1	0	0	0	1
ARAPAHOE NATIONAL WILDLIFE REFUGEE	0	1	0	0	1
BETWEEN MAYBELL AND MEEKER	1	0	0	0	1
BLUE MESA GUNNISON	1	0	0	0	1
Total (Continued)	71	51	16	1	139

Table of alpha by totharv

alpha(Description of hunting areas)      totharv(Total harvest)

Frequency	Zero	1-3	4-6	>6	Total
BLUE MOUNTAIN	7	3	3	0	13
CALIFORNIA PARK	2	0	0	0	2
CENTER MOUNTAIN	0	1	0	0	1
COLD SPRINGS MOUNTAIN	3	2	1	0	6
COLD SPRINGS MOUNTAIN AREA	0	1	0	0	1
COLD SPRINGS MOUNTAIN CRAIG	0	1	0	0	1
CORRAL CREEK DRAINAGE	1	0	0	0	1
CRAIG UNIT 301	0	1	0	0	1
CRAIG WEST OF HWY 13	0	1	0	0	1
DINOSAUR	0	2	0	0	2
DINOSAUR UNIT 10	0	1	0	0	1
EAST OF DELANY LAKE	0	1	0	0	1
EAST OF WALDEN	2	0	0	0	2
GORE RANCH	1	0	0	0	1
GREASEWOOD DRAINAGE	0	1	0	0	1
Total	71	51	16	1	139

(Continued)

Table of alpha by totharv

alpha(Description of hunting areas)	totharv(Total harvest)				Total
Frequency	Zero	1-3	4-6	>6	
GREAT DIVIDE	1	4	1	0	6
GREEN MOUNTAIN RESERVOIR	0	1	0	0	1
GREEN MOUNTAIN RESERVOIR KREMMLING	1	0	0	0	1
GUNNISON RAINBOW CREEK	1	0	0	0	1
HAYDEN CALIFORNIA PARK	1	0	0	0	1
HAYDEN UNIT 4	1	0	0	0	1
HOT SULPHUR SPRINGS	1	0	0	0	1
INDEPENDENCE MOUNTAIN-161	1	1	0	0	2
IRISH CANYON	1	0	0	0	1
JOHNNY MOORE MOUNTAIN	1	0	0	0	1
KREMMLING GREEN MOUNTAIN RESERVOIR UNIT 37	0	1	0	0	1
LAKE JOHN	0	1	0	0	1
LAKE JOHN AREA	1	2	0	0	3
Total (Continued)	71	51	16	1	139

Table of alpha by totharv

alpha(Description of hunting areas)      totharv(Total harvest)

Frequency	Zero	1-3	4-6	>6	Total
LAKE JOHN AREA W ALDEN	0	0	1	0	1
MAYBELL	1	0	0	0	1
MIDDLE PARK	1	0	0	0	1
MOFFAT COUNTY EA ST OF HWY 13	2	0	0	0	2
MOFFAT COUNTY EA ST OF HWY 13/6 M ILES SOUTHEAST O F BAGGS, WY	0	1	0	0	1
MOFFAT COUNTY WE ST OF HWY 13 (LA Y)	0	0	1	0	1
NEAR DINOSAUR NA TIONAL MONUMENT ON THE PLATEAU A BOVE GREEN/YAM	0	0	1	0	1
NEAR POWDERWASH	1	0	0	0	1
NORTH OF GREAT D IVIDE	0	1	0	0	1
NORTH PARK	6	5	3	0	14
NORTH PARK WALDE N	0	2	0	0	2
NORTH PARK WALDE N-WALDEN RESERVO IR	0	1	0	0	1
Total (Continued)	71	51	16	1	139

Table of alpha by totharv

alpha(Description of hunting areas)	totharv(Total harvest)				Total
Frequency	Zero	1-3	4-6	>6	
NORTHEAST OF LAK E JOHN	1	1	0	0	2
NORTHEAST OF WAL DEN	0	0	1	0	1
NORTHWEST OF CRA IG	0	0	0	1	1
NORTHWEST OF LAK E JOHN	1	0	0	0	1
NORTHWEST OF WAL DEN	0	1	0	0	1
ONE NORTH OF CRA IG-WEST OF HWY 1 3	1	0	0	0	1
OWL MOUNTAIN	1	0	0	0	1
OWL RIDGE	1	0	0	0	1
RAND	1	0	0	0	1
ROGERS RANCH	0	1	0	0	1
ROUTT NATIONAL F OREST NORTH OF H AYDEN	1	0	0	0	1
SAND POINTE	0	1	0	0	1
SOUTH OF LAKE JO HN	1	0	0	0	1
Total (Continued)	71	51	16	1	139



Table of alpha by totharv

alpha(Description of hunting areas)      totharv(Total harvest)

Frequency	Zero	1-3	4-6	>6	Total
SOUTH OF THE DIN OSAUR NATIONAL M ONUMENT	0	1	0	0	1
SOUTH OF WALDEN UNIT 171	1	0	0	0	1
SOUTHEAST OF YAM PA	1	0	0	0	1
SW OF GRANBY NEA R HOT SULPHUR SP GS SOUTH OF HWY 40 A FEW MILES	1	0	0	0	1
THE LAKE JOHN AR EA	0	0	1	0	1
UNIT 12 SOUTH OF CRAIG SOUTH OF HAYDEN	1	0	0	0	1
WALDEN	6	1	1	0	8
WALDEN ARAPAHOE WILDLIFE REFUGE	1	0	0	0	1
WALDEN LAKE JOHN	1	0	0	0	1
WALDEN LAKE JOHN AREA	1	1	0	0	2
WALDEN LAKE UNIT 161	1	0	0	0	1
WALDEN MANN DRAW	0	1	0	0	1
Total (Continued)	71	51	16	1	139

Table of alpha by totharv

alpha(Description of hunting areas)	totharv(Total harvest)				Total
Frequency	Zero	1-3	4-6	>6	
WALDEN NORTH PARK	0	1	0	0	1
WALDEN UNIT 16 BUFFALO PASS	1	0	0	0	1
WALDEN UNIT 161	0	1	0	0	1
WALDEN-SOUTH OF LAKE JOHN/KREMLING-NORTH OF MUDDY CREEK	0	1	0	0	1
WALDEN/WALDEN LAKE RESERVOIR	0	1	0	0	1
WALDEN/WALDEN RESERVOIR	0	1	0	0	1
WEST OF BLUE MOUNTAIN DINOSAUR	0	0	1	0	1
WEST OF HWY 13	2	0	0	0	2
WEST OF STEAMBOAT SPRINGS	1	0	0	0	1
WOLF CREEK	1	0	0	0	1
Total	71	51	16	1	139

Counties hunted in sample -- some are not legal!

### County Hunted

county	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Grand	8	5.71	8	5.71
Gunnison	2	1.43	10	7.14
Jackson	62	44.29	72	51.43
Moffat	58	41.43	130	92.86
Rio Blanco	1	0.71	131	93.57
Routt	7	5.00	138	98.57
Summit	2	1.43	140	100.00

### Estimated Harvest by Strata

sgstrata	Estimated Hunters	SE(Hunters)	LCI (Hunters)	UCI (Hunters)
Somewhat likely	95	10	75	115
Very likely	161	10	141	182
Total	257	15	228	285

Estimated Days Hunted	SE(Days Hunted)	LCI(Days Hunted)	UCI(Days Hunted)	Estimated Harvest	SE(Harvest)
199	27	146	252	91	15
378	35	310	446	216	25
577	44	491	663	307	29

LCI (Harvest)	UCI (Harvest)	Not Retrieved	SE(Not Ret.)	LCI(Not. Ret.)	UCI(Not. Ret.)
62	120	2	2	-1	5
167	265	2	1	-0	4
251	364	4	2	0	8

## Estimated Harvest by Counties

<b>County</b>	<b>Estimated Hunters</b>	<b>SE(Hunters)</b>	<b>LCI (Hunters)</b>	<b>UCI (Hunters)</b>	<b>Estimated Days Hunted</b>
Grand	13	3	6	19	25
Gunnison	3	2	0	7	9
Jackson	115	10	95	134	235
Moffat	107	10	88	125	270
Rio Blanco	2	2	-1	5	6
Routt	13	3	6	20	25
Summit	3	2	0	7	7
State Total	257	15	228	285	577

<b>SE(Days Hunted)</b>	<b>LCI(Days Hunted)</b>	<b>UCI(Days Hunted)</b>	<b>Estimated Harvest</b>	<b>SE(Harvest)</b>	<b>LCI (Harvest)</b>
7	12	38	4	2	0
4	1	16	0	0	0
23	190	281	137	18	102
35	200	339	158	23	113
5	-3	15	2	2	-1
8	10	41	3	2	-1
4	-0	14	3	2	-1
44	491	663	307	29	251

<b>UCI (Harvest)</b>	<b>Not Retrieved</b>	<b>SE(Not Ret.)</b>	<b>LCI(Not. Ret.)</b>	<b>UCI(Not. Ret.)</b>
8	0	0	0	0
0	0	0	0	0
172	0	0	0	0
202	4	2	0	8
5	0	0	0	0
8	0	0	0	0
8	0	0	0	0
364	4	2	0	8

### Estimated Harvest by Population

1=North Park, 2=Gunnison (closed), 3=Moffat County West  
 4=Moffat County East, 5=Middle Park, 6=Yampa (closed)  
 7=Cold Springs, 8=Blue Mountain, 9=Eagle (closed)  
 10=Piceance, 15=Glade Park/Pinyon Mesa (closed), 16=Dove Creek (closed)  
 17=Dry Creek/Miramonte (closed), 18=Crawford (closed)

Population	Estimated Hunters	SE(Hunters)	LCI (Hunters)	UCI (Hunters)
North Park	115	10	95	134
Gunnison (closed)	3	2	0	7
Moffat West	39	6	28	51
Moffat East	21	4	12	29
Middle Park	16	4	9	23
Yampa (closed)	6	2	1	10
Cold Springs	22	4	14	31
Blue Mountain	32	5	22	42
Piceance (closed)	2	2	-1	5
<b>State Total</b>	<b>257</b>	<b>15</b>	<b>228</b>	<b>285</b>

Estimated Days Hunted	SE(Days Hunted)	LCI(Days Hunted)	UCI(Days Hunted)	Estimated Harvest	SE(Harvest)
235	23	190	281	137	18
9	4	1	16	0	0
135	31	74	196	59	16
47	12	24	70	6	3
32	7	18	47	7	3
7	3	2	13	3	2
47	10	28	67	38	9
58	10	39	78	54	12
6	5	-3	15	2	2
<b>577</b>	<b>44</b>	<b>491</b>	<b>663</b>	<b>307</b>	<b>29</b>

LCI (Harvest)	UCI (Harvest)	Not Retrieved	SE(Not Ret.)	LCI(Not. Ret.)	UCI(Not. Ret.)
102	172	0	0	0	0
0	0	0	0	0	0
28	91	2	1	-0	4
-0	13	0	0	0	0
2	13	0	0	0	0
-1	8	0	0	0	0
19	56	0	0	0	0
30	78	2	2	-1	5
-1	5	0	0	0	0
<b>251</b>	<b>364</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>8</b>