

# Sage Grouse Harvest Report 2003

A post-season harvest survey was conducted by phone.

A stratified random sample of 3999 sage grouse hunters was drawn from among HIP participants. 2217 hunters were contacted (55% response rate).

Of those surveyed, 163 or 7% reported they had hunted sage grouse. The number of birds harvested ranged from 0 (79 respondents) to 8 (1 respondent). The most frequent number of birds reported harvested was 2 (29 respondents).

71% reported being satisfied with their sage grouse hunting experience and 65% reported no crowding.

Harvest results are provided by strata, county and population.

***Statewide harvest estimate = 433 ± 73 (360-506).***

## **Comparison with 2002 survey results:**

Harvest was estimated to be higher than in 2002 when an estimated 301 ± 57 birds were harvested. Hunter numbers were also higher with an estimated 304 ± 33 in 2003 compared to an estimated 257 ± 29 in 2002. Days hunted in 2003 were estimated at 689 ± 94 as compared to 577 ± 86 in 2002. Differences in harvest are not statistically significant at the 95% confidence level, whereas differences in days hunted and hunter numbers are.

## **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 113 plus or minus 1.96(SE) or 1.96(10)=20. The range of the estimate is 93 to 133. 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 2003

sgstrata	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Will not hunt	16	0.72	16	0.72
Somewhat likely	1842	83.09	1858	83.81
Very likely	359	16.19	2217	100.00

### Hunted During Season?

hunt	Frequency	Percent	Cumulative Frequency	Cumulative Percent
yes	163	7.33	163	7.33
no	2061	92.67	2224	100.00

### Table of sgstrata by Hunt

sgstrata	hunt(Hunted during season?)		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
Will not hunt	0	16	16
	0.00	0.72	0.72
	0.00	100.00	
	0.00	0.78	
Somewhat likely	76	1766	1842
	3.43	79.66	83.09
	4.13	95.87	
	48.72	85.69	
Very likely	80	279	359
	3.61	12.58	16.19
	22.28	77.72	
	51.28	13.54	
Total	156	2061	2217
	7.04	92.96	100.00

Frequency Missing = 8

### Satisfied with Hunt?

satisfy	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Strongly Dis.	14	8.64	14	8.64
Somewhat Dis.	10	6.17	24	14.81
Slightly Dis.	8	4.94	32	19.75
Neutral	14	8.64	46	28.40
Slightly Sat.	13	8.02	59	36.42
Somewhat Sat.	36	22.22	95	58.64
Strongly Sat.	67	41.36	162	100.00

### Feel Crowded?

crowded	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Not at all	105	64.81	105	64.81
Slightly	33	20.37	138	85.19
Moderately	15	9.26	153	94.44
Extremely	9	5.56	162	100.00

### Possibly Hunting Other Species

other	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	2	100.00	2	100.00

### Total Harvest

totharv	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	79	48.47	79	48.47
1	17	10.43	96	58.90
2	29	17.79	125	76.69
3	18	11.04	143	87.73
4	13	7.98	156	95.71
5	1	0.61	157	96.32
6	5	3.07	162	99.39
8	1	0.61	163	100.00

### County Hunted

county	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Grand	23	13.37	23	13.37
Gunnison	1	0.58	24	13.95
Jackson	71	41.28	95	55.23
Mesa	3	1.74	98	56.98
Moffat	61	35.47	159	92.44
Rio Blanco	4	2.33	163	94.77
Routt	2	1.16	165	95.93
Summit	6	3.49	171	99.42
Unknown	1	0.58	172	100.00

### Harvest by Strata

sgstrata	Estimated Hunters	SE(Hunters)	LCI (Hunters)	UCI (Hunters)
Somewhat likely	148	12	125	171
Very likely	157	12	133	180
<b>Total</b>	<b>304</b>	<b>17</b>	<b>272</b>	<b>337</b>

Estimated Days Hunted	SE(Days Hunted)	LCI(Days Hunted)	UCI(Days Hunted)	Estimated Harvest	SE(Harvest)
319	34	253	385	169	22
370	34	304	436	264	30
<b>689</b>	<b>48</b>	<b>595</b>	<b>782</b>	<b>433</b>	<b>37</b>

LCI (Harvest)	UCI (Harvest)	Not Retrieved	SE(Not Ret.)	LCI(Not. Ret.)	UCI(Not. Ret.)
125	213	8	3	1	14
205	323	23	13	-1	48
<b>360</b>	<b>507</b>	<b>31</b>	<b>13</b>	<b>6</b>	<b>57</b>

### Harvest by Counties

<b>Estimated</b>					
<b>County</b>	<b>Estimated Hunters</b>	<b>SE(Hunters)</b>	<b>LCI (Hunters)</b>	<b>UCI (Hunters)</b>	<b>Days Hunted</b>
Grand	35	6	24	46	80
Gunnison	2	1	-1	5	27
Jackson	133	11	111	155	285
Mesa	4	2	0	8	6
Moffat	113	10	93	133	252
Rio Blanco	8	3	2	13	10
Routt	2	1	-1	5	6
Summit	6	2	1	10	20
Unknown	2	1	-1	5	4
<b>State Total</b>	<b>304</b>	<b>17</b>	<b>272</b>	<b>337</b>	<b>689</b>

<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>
14	52	108	33	9	15
19	-10	64	6	4	-2
28	229	341	246	29	190
2	1	10	4	2	0
27	199	304	140	22	98
4	3	17	2	1	-1
3	-0	12	2	1	-1
6	8	31	0	0	0
3	-1	9	0	0	0
<b>48</b>	<b>595</b>	<b>782</b>	<b>433</b>	<b>37</b>	<b>360</b>

<b>UCI (Harvest)</b>	<b>Not Retrieved</b>	<b>SE(Not Ret.)</b>	<b>LCI(Not. Ret.)</b>	<b>UCI(Not. Ret.)</b>
51	4	3	-1	9
14	0	0	0	0
302	8	3	2	13
8	0	0	0	0
183	20	12	-5	44
5	0	0	0	0
5	0	0	0	0
0	0	0	0	0
0	0	0	0	0
<b>507</b>	<b>31</b>	<b>13</b>	<b>6</b>	<b>57</b>

### 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)
Unknown	2	1	-1
North Park	133	11	111
Gunnison (closed)	2	1	-1
Moffat West	12	3	5
Moffat East	62	8	47
Middle Park	41	6	29
Yampa (closed)	0	0	0
Cold Springs	12	3	5
Blue Mountain	20	4	11
Piceance (closed)	6	2	1
Glade Park/Pinyon Mesa (closed)	4	2	0
<b>State Total</b>	<b>304</b>	<b>17</b>	<b>272</b>

UCI (Hunters)	Estimated Days Hunted	SE(Days Hunted)	LCI(Days Hunted)	UCI(Days Hunted)	Estimated Harvest	SE(Harvest)
5	4	3	-1	9	0	0
155	285	28	229	341	246	29
5	31	19	-6	69	6	4
18	27	9	10	45	23	12
77	152	22	109	195	68	13
53	96	16	64	127	33	9
0	4	3	-1	9	0	0
18	18	5	7	28	20	8
28	31	7	17	46	20	7
10	12	5	2	22	4	3
8	6	2	1	10	4	2
<b>337</b>	<b>689</b>	<b>48</b>	<b>595</b>	<b>782</b>	<b>433</b>	<b>37</b>

LCI (Harvest)	UCI (Harvest)	Not Retrieved	SE(Not Ret.)	LCI(Not. Ret.)	UCI(Not. Ret.)
0	0	0	0	0	0
190	302	8	3	2	13
-2	14	0	0	0	0
1	46	0	0	0	0
42	94	20	12	-5	44
15	51	4	3	-1	9
0	0	0	0	0	0
3	36	0	0	0	0
6	33	0	0	0	0

-1	9	0	0	0	0
0	8	0	0	0	0
<b>360</b>	<b>507</b>	<b>31</b>	<b>13</b>	<b>6</b>	<b>57</b>