

Sage Grouse Harvest 2000

A post-season harvest survey was conducted by phone.

A stratified random sample of 4000 potential sage grouse hunters was drawn from among HIP participants. 2752 hunters were contacted (69% response rate).

Of those surveyed, 187 or 7% reported they had hunted sage grouse. The number of birds harvested ranged from 0 (83 respondents) to 16 (1 respondent).

77% reported being satisfied with their sage grouse hunting experience and 78% 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 = 673 ± 145 (529-817).

Comparison with 1999 survey results:

Harvest was down from 1999 when an estimated 877 ± 4 birds were harvested. Correspondingly hunter numbers decreased from 739 ± 123 in 1999 to 434 ± 53 in 2000 and days hunted dropped from an estimated 2246 ± 18 in 1999 to 1058 ± 165 . Differences in estimated harvest, hunter numbers and days hunted are statistically significant at the 95% confidence level. The 2000 hunting season marked the first season with a closure on Gunnison sage grouse.

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 174 plus or minus 1.96(SE) or $1.96(15)=30$. The range of the estimate is 144 to 204. 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 2000

Summary of Sample Data

The FREQ Procedure

sgstrata	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Will not hunt	91	3.31	91	3.31
Somewhat likely	1700	61.77	1791	65.08
Very likely	961	34.92	2752	100.00

Hunted During Season?

hunt	Frequency	Percent	Cumulative Frequency	Cumulative Percent
yes	187	6.80	187	6.80
no	2565	93.20	2752	100.00

Table of sgstrata by Hunt

sgstrata	hunt(Hunted during season?)			Total
	yes	no		
Frequency	0	91		91
Percent	0.00	3.31		3.31
Row Pct	0.00	100.00		
Col Pct	0.00	3.55		
Will not hunt				
Frequency	40	1660		1700
Percent	1.45	60.32		61.77
Row Pct	2.35	97.65		
Col Pct	21.39	64.72		
Somewhat likely				
Frequency	147	814		961
Percent	5.34	29.58		34.92
Row Pct	15.30	84.70		
Col Pct	78.61	31.73		
Very likely				
Frequency	187	2565		2752
Percent	6.80	93.20		100.00
Total				

Satisfied with Hunt?

satisfy	Frequency	Percent	Cumulative Frequency	Cumulative Percent
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Strongly Dis.	11	5.95	11	5.95
Somewhat Dis.	12	6.49	23	12.43
Slightly Dis.	10	5.41	33	17.84
Neutral	10	5.41	43	23.24
Slightly Sat.	11	5.95	54	29.19
Somewhat Sat.	35	18.92	89	48.11
Strongly Sat.	96	51.89	185	100.00

Feel Crowded?

crowded	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Not at all	146	78.07	146	78.07
Slightly	22	11.76	168	89.84
Moderately	13	6.95	181	96.79
Extremely	6	3.21	187	100.00

Possibly Hunting Another Species?

other	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No	1	100.00	1	100.00

Total Harvest

totharv	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	83	44.39	83	44.39
1	25	13.37	108	57.75
2	33	17.65	141	75.40
3	12	6.42	153	81.82
4	25	13.37	178	95.19
5	2	1.07	180	96.26
6	1	0.53	181	96.79
7	2	1.07	183	97.86
8	2	1.07	185	98.93
13	1	0.53	186	99.47
16	1	0.53	187	100.00

Sage Grouse Harvest 2000

Summary of Areas Hunted and Harvest Reported from Sample

The FREQ Procedure

Table of alpha by totharv

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

Frequency	Zero	1-3	4-6	>6	Total
10 MILES N AND 1 0 MILES E OF MEE KER	1	0	0	0	1
10 MILES NORTH O F KREMMLING	1	0	0	0	1
10 MILES S OF WA LDEN	1	0	0	0	1
10 MILES WEST OF CAMERON PASS	0	1	0	0	1
10 N ROAD	0	1	0	0	1
2 MILES SOUTH OF MAYBELL	0	0	1	0	1
2 MILES WEST & 7 MILES NORTH OF PARSHALL	1	0	0	0	1
201	0	1	0	0	1
5 MILES FROM GRE AT DIVIDE	0	0	1	0	1
52-ABOVE RANGELY - 41-ROUND TO	1	0	0	0	1
8-9 MILES SOUTH OF BAGGS WYOMING	0	1	0	0	1
ABOVE CRAIG - BY DIVIDE	0	0	1	0	1
Total (Continued)	83	70	28	6	187

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

Frequency	Zero	1-3	4-6	>6	Total
ALONG THE WHITE RIVER	0	0	0	1	1
ARAPAHOE WILD LI FE REFUGE	1	0	0	0	1
AT LAKE JOHN IN UNIT #161	0	1	0	0	1
BETWEEN MAYBELL & CRAIG NORTH OF HWY 40	1	0	0	0	1
BETWEEN RAND & W	1	0	0	0	1

ALDEN - CLOSEST TO RAND						
BLACK MTN	1	0	0	0		1
BLM E OF IRVINE RANCH	0	1	0	0		1
BLM LAND JUST E OF IRVINE RANCH	0	1	0	0		1
BLUE MOUNTAIN	0	2	0	0		2
BROWNS PARK - CO LD SPRING MOUNTAIN	1	0	0	0		1
BY CRAIG	0	2	1	0		3
BY DINOSAUR	0	0	1	0		1
BY ILLINOIS CREEK	0	1	0	0		1
Total (Continued)	83	70	28	6		187

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

Frequency	Zero	1-3	4-6	>6	Total
BY MAYBELL	1	0	0	0	1
BY MEEKER	1	1	0	0	2
BY NORTH PARK	1	0	0	0	1
BY RAND	0	1	0	0	1
BY SAND MOUNTAIN	1	0	0	0	1
BY UNIT 3	0	1	0	0	1
BY WALDEN	1	1	1	0	3
CLOSE TO DINOSAUR	0	1	0	0	1
CLOSER TO DINOSAUR BLUE MTN	1	0	0	0	1
COLD SPRING BROWNS PARK	0	1	0	0	1
COLD SPRINGS MOUNTAIN	1	0	0	0	1
COYOTE SPRINGS	1	0	0	0	1
CRAIG - EAST 13	0	0	1	0	1
CRAIG NW 30 MILES	1	0	0	0	1
CRAIG WEST OF HWY 13	1	0	0	0	1
Total	83	70	28	6	187

(Continued)

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

Frequency	Zero	1-3	4-6	>6	Total
DELANEY BUTTES	1	0	0	0	1
DELANEY BUTTES LAKES	0	1	0	0	1
DINO - BLUE MOUNTAIN	0	1	0	0	1
DINOSAUR	2	2	0	0	4
DINOSAUR BLM LAND	1	0	0	0	1
DINOSAUR N HWY 40	0	1	0	0	1
DOUGLASS PASS	1	0	0	0	1
DUNKLEY FLATTOPS	0	1	0	0	1
E OF BLACK MTN UNIT 4	0	0	0	1	1
E OF HWY 13	0	0	0	1	1
E OF HWY 13 NEAR WYOMING BORDER	0	1	0	0	1
E OF LAKE JOHN ON BLM LAND	0	1	0	0	1
E OF OAK CREEK	0	1	0	0	1
EAST OF LAKE JOHN	1	0	0	0	1
Total (Continued)	83	70	28	6	187

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

Frequency	Zero	1-3	4-6	>6	Total
EAST OF MEEKER	1	0	0	0	1
EAST OF WALDEN	1	0	0	0	1
FEW MILES S OF W ALDEN	0	0	0	1	1
GRANBY	2	0	0	0	2
GREAT DIVIDE	4	2	2	0	8
GREEN MOUNTAIN R ESERVOIR	0	1	0	0	1
GREEN MTN RESCO	0	1	0	0	1
HAY FLATS MEADOW S	1	0	0	0	1
JUST OUTSIDE KRE MMLING	0	1	0	0	1
LAKE JOHN	0	0	1	0	1
LAKE JOHN AREA	0	0	1	0	1
LITTLE SNAKE PRO P	1	0	0	0	1
MAYBELL	0	2	1	0	3
MEEKER	0	1	1	0	2
MILK CREEK WINDY GAP	1	0	0	0	1
Total (Continued)	83	70	28	6	187

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

Frequency	Zero	1-3	4-6	>6	Total
MOFFAT, NORTH OF MAYBELLE, UNIT	0	1	0	0	1
N E OF KREMMLING	1	0	0	0	1
N E STEAMBOAT	0	1	0	0	1
N KREMMLING W HW Y 9	1	0	0	0	1
N MAYBELL	1	0	0	0	1
N OF DIVIDE	0	1	0	0	1
N OF KREMMLING C ARTER MOUNTAIN	1	0	0	0	1
N OF MAYBELL	1	0	0	0	1
N OF WOLCOTT	1	0	0	0	1
N W OF CRAIG	0	1	0	0	1
N W OF MAYBELL	0	1	0	0	1
NEAR LAKE JOHN & EAST LAKE	1	0	0	0	1
NEAR PARSHALL	0	1	0	0	1
NEAR RAND	0	1	0	0	1
NO NAME CREEK	0	0	1	0	1
NORTH CRAIG - E HWY 13	0	1	0	0	1
Total	83	70	28	6	187

(Continued)

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

Frequency	Zero	1-3	4-6	>6	Total
NORTH OF HWY 40 BY PARSHALL	1	0	0	0	1
NORTH OF MAYBELL - UNIT 3	1	0	0	0	1
NORTH PARK	1	0	0	0	1
NORTHEAST BEARS EARS	0	0	1	0	1
OUTSIDE OF WALDE N	0	1	0	0	1
OWL MTN	1	0	0	0	1
PARSHALL	1	0	0	0	1
PATH FINDER RES	1	0	0	0	1
PICEANCE CREEK	1	2	0	1	4
PRIVATE RANCH NE AR STEAMBOAT	0	1	0	0	1
RAND	0	0	1	0	1
RAND UNIT 17	0	1	0	0	1
RED DIRT RESERVO IR KREMMLING	1	0	0	0	1
S E OF KREMMLING	1	0	0	0	1
S OF WYOMING BOR DER IN GMU 5	1	0	0	0	1
Total	83	70	28	6	187

(Continued)

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

Frequency	Zero	1-3	4-6	>6	Total
SE OF DINOSAUR NATIONAL MONUMENT	1	1	0	0	2
SE WALDEN - UNIT 171	1	0	0	0	1
SERVICE BERRY DRAW	1	0	0	0	1
SNAKE RIVER	1	0	0	0	1
SOUTH OF WALDEN	1	0	0	0	1
SW OF WALDEN	0	1	0	0	1
UNIT 10	1	0	0	0	1
UNIT 10 - BLUE MOUNTAIN	0	0	1	0	1
UNIT 10 BLUE MTN	0	1	0	0	1
UNIT 12 - BY ARRESERVOIR	0	1	0	0	1
UNIT 161	1	0	0	0	1
UNIT 201	2	0	0	0	2
UNIT 201 - COLD SPRINGS	0	0	1	0	1
UNIT 201 NEAR COLD SPRING MTN	1	0	0	0	1
UNIT 211 DUFFY MTN	1	0	0	0	1
Total (Continued)	83	70	28	6	187

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

Frequency	Zero	1-3	4-6	>6	Total
UNIT 22 S W OF M EEKER	1	0	0	0	1
UNIT 28	0	1	0	0	1
UNIT 3	1	2	2	1	6
UNIT 3 - 5 W OF HWY 13 POLE GULC H & THORNBURG ON WAY TO BAGGS	0	1	0	0	1
UNIT 3 3 MILES N OF MAYBELL & 7 MLS S OF GREAT D IVIDE GRNWD RV	0	0	1	0	1
UNIT 301 - PAST GREAT DIVIDE	0	1	0	0	1
UNIT 37	1	0	0	0	1
VICINITY OF CAME RON PASS & GOULD - UNITS 6, 171 & 19	1	0	0	0	1
W OF KREMMLING	1	0	0	0	1
W OF OWL MTN WIL D LIFE AREA	0	1	0	0	1
W OF WALDEN BTWN LAKE JOHN & WAL DEN ON BLM	0	1	0	0	1
Total (Continued)	83	70	28	6	187

alpha(Description of hunting areas)	totharv(Total harvest)				Total
Frequency	Zero	1-3	4-6	>6	
WALDEN	9	8	4	0	21
WALDEN LAKE JOHN	1	0	0	0	1
WALDEN RESERVOIR	0	0	2	0	2
WALDEN SOUTH EAST 1 MILE OFF ROAD - UNIT 171	0	1	0	0	1
WEST OF CRAIG	0	1	1	0	2
WEST OF WALDEN	1	0	0	0	1
WEST OF WALDEN BAY WALDEN LAKE	1	0	0	0	1
WILDERNESS RANCH	1	0	0	0	1
WILLIAMS FORK	0	1	0	0	1
Total	83	70	28	6	187

Counties AHunted@ in Sample -- some are not open!

County Hunted

county	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Eagle	1	0.53	1	0.53
Grand	17	8.99	18	9.52
Jackson	65	34.39	83	43.92
Moffat	85	44.97	168	88.89
Rio Blanco	17	8.99	185	97.88
Routt	1	0.53	186	98.41
Summit	3	1.59	189	100.00

Harvest by Strata

<u>sgstrata</u>	<u>Estimated Hunters</u>	<u>SE(Hunters)</u>	<u>LCI (Hunters)</u>	<u>UCI (Hunters)</u>
Somewhat likely	167	23	122	211
Very likely	267	14	239	294
Total	434	27	381	486

<u>Estimated Days Hunted</u>	<u>SE(Days Hunted)</u>	<u>LCI(Days Hunted)</u>	<u>UCI(Days Hunted)</u>	<u>Estimated Harvest</u>	<u>SE(Harvest)</u>
433	74	288	579	221	62
624	40	547	702	452	40
1058	84	892	1223	673	74

<u>LCI (Harvest)</u>	<u>UCI (Harvest)</u>	<u>Not Retrieved</u>	<u>SE(Not Ret.)</u>	<u>LCI(Not. Ret.)</u>	<u>UCI(Not. Ret.)</u>
100	342	8	5	-2	18
374	530	27	7	14	40
529	817	36	8	19	52

Harvest by Counties

<u>County</u>	<u>Estimated Hunters</u>	<u>SE(Hunters)</u>	<u>LCI (Hunters)</u>	<u>UCI (Hunters)</u>	<u>Estimated Days Hunted</u>
Eagle	4	4	-3	11	8
Grand	43	9	25	61	95
Jackson	151	16	119	183	353
Moffat	174	15	144	204	403
Rio Blanco	45	10	26	64	128
Routt	8	5	-2	18	42
Summit	8	4	-0	16	28
State Total	434	27	381	486	1058

SE(Days Hunted)	LCI(Days Hunted)	UCI(Days Hunted)	Estimated Harvest	SE(Harvest)	LCI (Harvest)
7	-6	23	0	0	0
25	45	144	13	5	3
52	251	456	212	33	148
41	323	483	325	42	243
30	71	186	107	50	8
30	-17	100	8	7	-6
19	-8	64	7	4	-0
84	892	1223	673	74	529

UCI (Harvest)	Not Retrieved	SE(Not Ret.)	LCI(Not. Ret.)	UCI(Not. Ret.)
0	0	0	0	0
23	0	0	0	0
277	16	6	4	27
407	20	6	8	32
205	0	0	0	0
23	0	0	0	0
15	0	0	0	0
817	36	8	19	52

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	151	16	119	183
Moffat West	106	13	81	132
Moffat East	37	8	20	53
Middle Park	52	10	33	72
Yampa (closed)	4	4	-3	11
Cold Springs	18	4	11	26
Blue Mountain	27	5	18	36
Eagle (closed)	4	4	-3	11
Piceance (closed)	33	8	17	49
State Total	434	27	381	486

Estimated Days Hunted	SE(Days Hunted)	LCI(Days Hunted)	UCI(Days Hunted)	Estimated Harvest	SE(Harvest)
353	52	251	456	212	33
233	30	173	292	181	30
153	41	73	233	90	27
134	32	71	197	21	6
8	7	-6	23	8	7
29	7	16	42	20	7
49	9	31	67	40	9
8	7	-6	23	0	0
90	26	40	140	101	50
1058	84	892	1223	673	74

LCI (Harvest)	UCI (Harvest)	Not Retrieved	SE(Not Ret.)	LCI(Not. Ret.)	UCI(Not. Ret.)
148	277	16	6	4	27
122	240	13	5	2	23
37	143	0	0	0	0
8	33	0	0	0	0
-6	23	0	0	0	0
5	34	4	2	0	7
22	58	0	0	0	0
0	0	0	0	0	0
3	199	4	2	-1	8
529	817	36	8	19	52