## 2003 Sharp-tailed Grouse Harvest Report

A post-season harvest survey was conducted by phone.
A stratified random sample of 3969 sharp-tailed grouse hunters was drawn from among HIP participants. 2090 (52\% response rate) hunters were contacted.

Of those surveyed, 85 or 4\% reported they had hunted sharptails. The number of birds harvested ranged from 0 ( 32 respondents) to 20 (1 respondent), with 17 hunters reporting a harvest of 2 birds.

68\% reported being satisfied with their sharp-tailed grouse hunting experience and 66\% reported no crowding.

## Statewide harvest was estimated at $336 \pm 77$ (259-413).

## Comparison with 2001 survey results:

Harvest was up from 2002 when an estimated $148 \pm 37$ birds were harvested.
Hunter numbers increased to $166 \pm 26$ from $85 \pm 27$ in 2002. Days hunted were also higher with an estimated $537 \pm 118$ compared to $317 \pm 92$ in 2002. These differences are statistically significant at the $95 \%$ confidence level.

Harvest results are provided by strata, county, and population.

## Harvest by Strata, County and Population

Summary tables provide estimates of hunter numbers, days in the field and sharp-tailed grouse harvest by county and population. Estimates are followed by the standard error of the estimate, and $95 \%$ upper ( UCl ) and lower ( LCl ) confidence intervals around the estimate. For example, the estimated number of sharp-tailed grouse hunters in Moffat County is 33 plus or minus 1.96 (SE) or $1.96(6)=12$. The range of the estimate is 20 to 45. 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.)

## STG Grouse Harvest 2003 Summary of Sample Data

| stgstrata | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: |
| Will not hunt | 140 | 6.70 | 140 | 6.70 |
| Somewhat likely | 1561 | 74.69 | 1701 | 81.39 |
| Very likely | 389 | 18.61 | 2090 | 100.00 |

Hunted during Season?

| hunt | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: |
| yes | 85 | 4.07 | 85 | 4.07 |
| no | 2005 | 95.93 | 2090 | 100.00 |

Table of stgstrata by Hunt

| stgstrata | hunt(Hunted during season?) |  |  |
| :---: | :---: | :---: | :---: |
| Frequency |  |  |  |
| Percent |  |  |  |
| Row Pct |  |  |  |
| Col Pct | yes | no | Total |
| Will not hunt | 0 | 140 | 140 |
|  | 0.00 | 6.70 | 6.70 |
|  | 0.00 | 100.00 |  |
|  | 0.00 | 6.98 |  |
| Somewhat likely | 26 | 1535 | 1561 |
|  | 1.24 | 73.44 | 74.69 |
|  | 1.67 | 98.33 |  |
|  | 30.59 | 76.56 |  |
| Very likely | 59 | 330 | 389 |
|  | 2.82 | 15.79 | 18.61 |
|  | 15.17 | 84.83 |  |
|  | 69.41 | 16.46 |  |
| Total | 85 | 2005 | 2090 |
|  | 4.07 | 95.93 | 100.00 |

## Satisfied with Hunt?

| satisfy | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: |
| Strongly Dis. | 8 | 9.41 | 8 | 9.41 |
| Somewhat Dis. | 8 | 9.41 | 16 | 18.82 |
| Slightly Dis. | 3 | 3.53 | 19 | 22.35 |


| Neutral | 8 | 9.41 | 27 | 31.76 |
| :--- | ---: | ---: | ---: | ---: |
| Slightly Sat. | 3 | 3.53 | 30 | 35.29 |
| Somewhat Sat. | 22 | 25.88 | 52 | 61.18 |
| Strongly Sat. | 33 | 38.82 | 85 | 100.00 |

## Feel Crowded?

| crowded | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: |
| Not at all | 56 | 65.88 | 56 | 65.88 |
| Slightly | 18 | 21.18 | 74 | 87.06 |
| Moderately | 10 | 11.76 | 84 | 98.82 |
| Extremely | 1 | 1.18 | 85 | 100.00 |

## Possibly Hunting Other Species

|  | other | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No |  | 3 | 100.00 |  | 100 |

## Total Harvest

| totharv | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 32 | 37.65 | 32 | 37.65 |
| 1 | 8 | 9.41 | 40 | 47.06 |
| 2 | 17 | 20.00 | 57 | 67.06 |
| 3 | 10 | 11.76 | 67 | 78.82 |
| 4 | 10 | 11.76 | 77 | 90.59 |
| 6 | 2 | 2.35 | 79 | 92.94 |
| 7 | 1 | 1.18 | 80 | 94.12 |
| 8 | 2 | 2.35 | 82 | 96.47 |
| 10 | 1 | 1.18 | 83 | 97.65 |
| 12 | 1 | 1.18 | 84 | 98.82 |
| 20 | 1 | 1.18 | 85 | 100.00 |

## County Hunted

| county | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: |
| Moffat | 16 | 18.18 | 16 | 18.18 |
| Rio Blanco | 3 | 3.41 | 19 | 21.59 |
| Routt | 67 | 76.14 | 86 | 97.73 |
| Unknown | 2 | 2.27 | 88 | 100.00 |

## Harvest by Strata

| stgstrataEstimated <br> Hunters |  |  | SE(Hunters) |  | UCI Estimated <br> Days <br> (Hunters) <br> Hunted |  |  |  |  |  |  | SE (Days Hunted) | LCI (Days Hunted) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Somewhat | likely | 73 |  | 11 |  | 50 |  | 95 |  | 209 |  | 49 | 113 |
| Very likely | y | 94 |  | 7 |  | 80 |  | 108 |  | 327 |  | 35 | 259 |
| Total |  | 166 |  | 13 |  | 140 |  | 193 |  | 537 |  | 60 | 418 |
| UCI (Days Hunted) | Estimated Harvest | SE(Har | vest) | LC <br> (Harv |  | (Harv |  |  |  |  |  | LCI (No Ret.) | UCI (Not Ret.) |
| 306 | 84 |  | 23 |  |  |  |  |  | 3 |  | 2 | -2 | 7 |
| 396 | 253 |  | 32 |  |  |  |  |  |  |  | 3 | 7 | 18 |
| 655 | 336 |  | 39 |  |  |  |  |  |  |  | 4 | 9 | 22 |

## Harvest by Counties



## Harvest by Population

11=North Routt 12=South Routt 13=Moffat 14=Rio Blanco

| Population | Estimated Hunters $\qquad$ | SE(Hunters) ( | $\begin{gathered} \text { LCI } \\ \text { (Hunters) } \end{gathered}$ | UCI <br> (Hunters) | Estimat Days Hunted |  | SE (Days Hunted) | LCI (Days Hunted) | UCI (Days Hunted) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unknown | 6 | 3 | -1 | 12 | 14 |  | 8 | -2 | 30 |
| North Routt | 94 | 10 | 75 | 113 | 358 |  | 55 | 250 | 465 |
| South Routt | 34 | 7 | 21 | 47 | 57 |  | 11 | 36 | 78 |
| Moffat | 24 | 5 | 15 | 34 | 49 |  | 10 | 29 | 69 |
| Rio Blanco | 7 | 3 | 1 | 14 | 39 |  | 17 | 6 | 72 |
| State Total | 166 | 13 | 140 | 193 | 537 |  | 60 | 418 | 655 |
| Estimated Harvest | SE(Harvest) | $\begin{gathered} \text { LCI } \\ \text { t) } \quad \text { (Harvest) } \end{gathered}$ | $\begin{array}{r} \text { UC } \\ ) \quad \text { (Harv } \\ \hline \end{array}$ |  | ot ieved |  | (Not t.) | LCI (Not. Ret.) | UCI(Not Ret.) |


| 0 | 0 | 0 | 0 | 0 | 0 | $\bigcirc$ | $\bigcirc$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 214 | 34 | 148 | 280 | 10 | 2 | 5 | 14 |
| 68 | 16 | 36 | 100 | 2 | 1 | -0 | 3 |
| 29 | 7 | 15 | 43 | 3 | 2 | -2 | 7 |
| 16 | 10 | -3 | 35 | 0 | 0 | 0 | 0 |
| 336 | 39 | 259 | 413 | 15 | 4 | 9 | 22 |

