

2015 Sharp-tailed grouse Harvest Report

The 2015 sharp-tailed grouse report provides information on the estimated harvest of mountain sharp-tailed grouse. A stratified random sample of 3,501 sharp-tailed grouse hunters was drawn from among Harvest Information Program (HIP) participants. The sample was stratified as follows:

- 1 = Not likely to hunt
- 2 = Somewhat likely to hunt
- 3 = Very likely to hunt
- 4 = Very likely to hunt \geq 3 years

The post-season survey, conducted by telephone and email, contacted 1,500 (42.8% response rate) hunters. In total, 108 respondents, or 7.2%, reported they had hunted sharp-tailed grouse in 2015 and 48 reported harvesting sharp-tailed grouse. The number of birds harvested ranged from 1 (8 respondents) to 13 (1 respondent), with 14 hunters reporting a harvest of 2 birds. Days hunted ranged from 1 (33 hunters) to 9 (2 hunters). Statewide harvest was estimated at **840 \pm 482 (357 – 1,322)**.

Comparison with 2014 survey results:

Harvest was significantly higher than 2014 when an estimated 461 \pm 163 (298 – 623) grouse were harvested. Hunter numbers in 2015, estimated at **825 \pm 319 (506 – 1,145)** were significantly higher than 2014 when 410 \pm 223 (186 – 633) reported hunting. Days hunted increased to **2,495 \pm 1,836 (631 – 4,359)** in 2015, from 1,198 \pm 871 (336 – 2060) in 2014.

Discussion

According to survey data, sharp-tailed grouse harvest increased by more than 80% between the 2014 and 2015 harvest estimates, while total hunter numbers and days hunted effectively doubled between years. This increase follows a similar increase from 2013 to 2014. While these increases in harvest estimate, hunter number and days hunted do not follow recent trends (2010-13), they appear to be very similar to increases in harvest and hunter numbers during the 2003-2005 period.

As part of this analysis, CPW calculated an estimate of average birds harvested per hunter from 1999-2015. In 2014, hunters averaged 1.0 birds per hunter, suggesting that average hunting success was lower than the long term average of 1.6 birds per hunter.

Hunter Statistics and Harvest Estimates by Strata and County

The following summary tables provide estimates of hunter numbers, days in the field and sharp-tailed grouse harvest statewide and by county. Estimates are followed by the standard error of the estimate, and 95% upper (UCI) and lower (LCI) confidence intervals around the estimate. In 2015, Colorado Parks and Wildlife attempted to reduce erroneous harvest location responses by allowing answers that correspond to mountain sharp-tailed grouse occurrence and where legal hunting seasons occur. All other location responses – for instance if a hunter said he hunted sharp-tailed grouse in Yuma County, were cached into an “Unknown” category, and eliminated from the data set.

Summary tables provide estimates of hunter numbers, days in the field and sharp-tailed grouse harvest state and by county. Estimates are followed by the standard error of the estimate, and 95% upper (UCI) and lower (LCI) confidence intervals around the estimate.

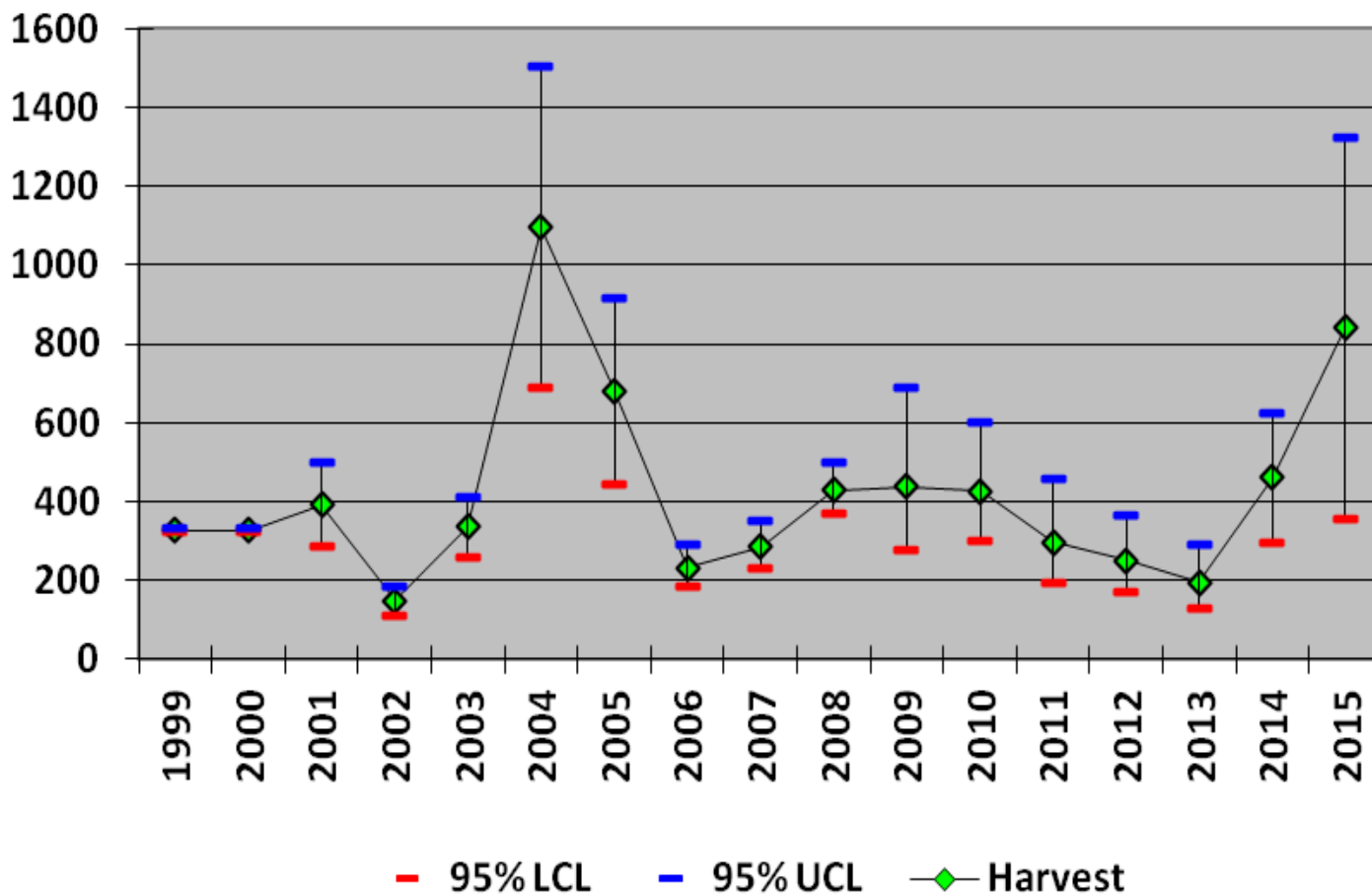
**2015 Sharp-tailed grouse harvest,
by strata**

Strata	Hunters	SE (Hunters)	LCL (Hunters)	UCL (Hunters)	Days Hunted	SE (Days Hunted)	LCL (Days Hunted)	UCL (Days Hunted)	Harvest	SE (Harvest)	LCL (Harvest)	UCL (Harvest)
Not Likely	300	113	147	612	1113	867	289	4290	171	171	33	876
Somewhat Likely	304	114	150	618	695	367	263	1837	87	87	17	444
Very Likely	155	30	107	226	505	135	302	845	356	147	164	776
Very Likely for >3 years	66	7	54	80	181	26	136	239	225	46	152	334
Total	825	163	506	1145	2495	951	631	4359	840	246	357	1322

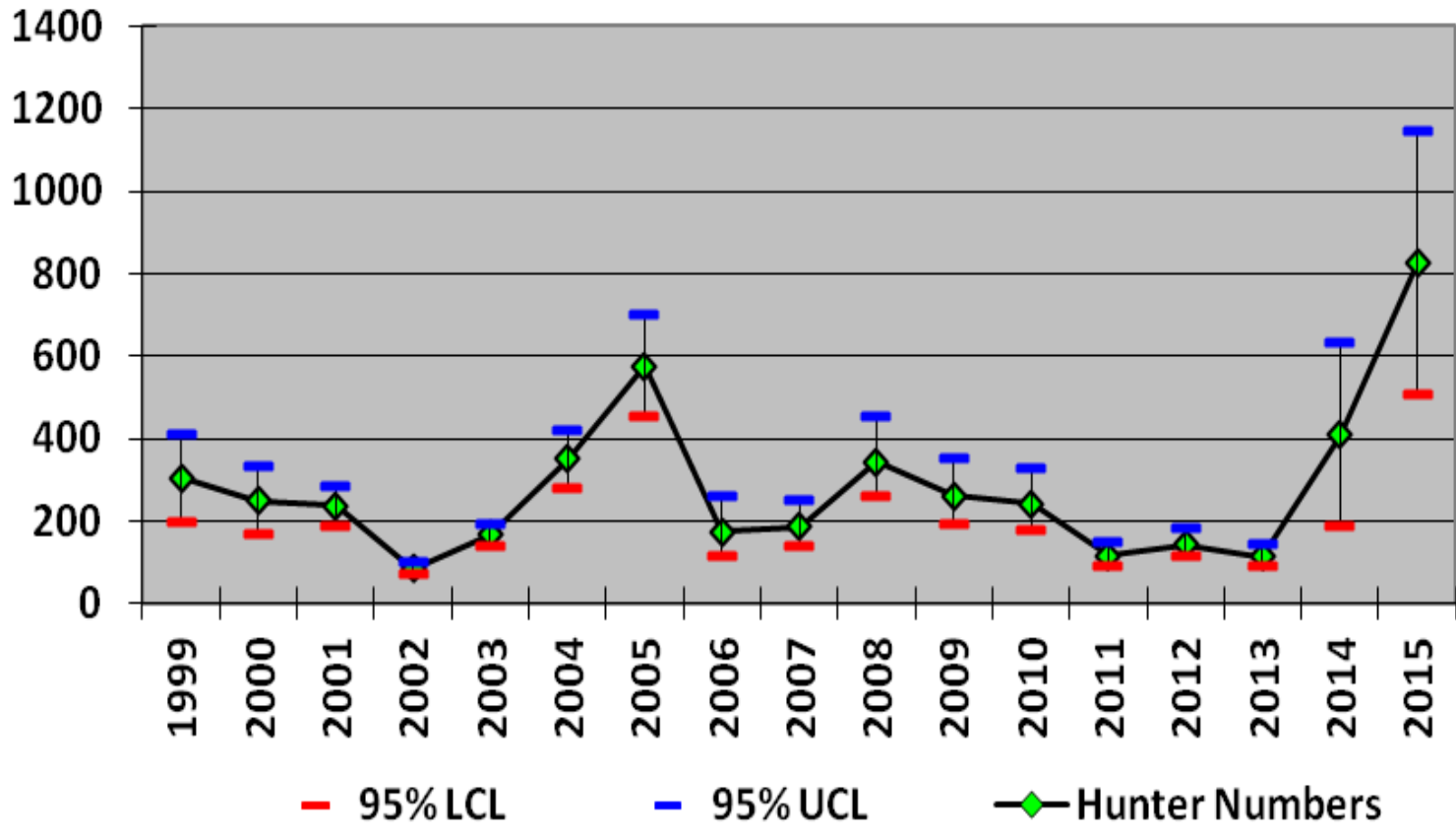
**2015 Sharp-tailed grouse harvest,
by county**

County	Hunters	SE (Hunters)	LCL (Hunters)	UCL (Hunters)	Days Hunted	SE (Days Hunted)	LCL (Days Hunted)	UCL (Days Hunted)	Harvest	SE (Harvest)	LCL (Harvest)	UCL (Harvest)
Moffat	92	46	36	234	404	308	107	1522	130	117	29	587
Rio Blanco	38	19	14	98	58	38	18	187	4	4	1	20
Routt	1523	374	948	2447	870	240	511	1480	706	218	391	1274
Unknown	1315	458	678	2552	1157	868	313	4285	0	0	NA	NA
Total	825	163	506	1145	2495	951	631	4359	840	246	357	1322

Sharp-tailed grouse Harvest Estimates, Colorado (1999-2015)



Sharp-tailed grouse Hunter Numbers Colorado (1999-2015)



Sharp-tailed grouse Hunters and Harvest
Colorado (1999-2015)

