

2017 Sharp-tailed grouse Harvest Report

The 2017 sharp-tailed grouse report provides information on the estimated harvest of mountain sharp-tailed grouse. A stratified random sample of 3,500 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 1,490 (42.5% response rate) hunters. In total, 21 respondents, or 1.4%, reported they had hunted sharp-tailed grouse in 2017 and 14 (67%) reported harvesting sharp-tailed grouse. Statewide harvest was estimated at **529 \pm 331 (198 – 861)**.

Comparison with 2016 survey results:

Harvest was lower than 2016 when an estimated 660 \pm 393 (267 – 1,053) grouse were harvested. Hunter numbers in 2016, estimated at **249 \pm 108 (140 – 357)** were significantly lower than 2016 when 723 \pm 284 (439 – 1008) reported hunting. Days hunted was significantly lower, 956 \pm 486 (461 – 1,452) in 2017, from 2,409 \pm 1,529 (880 – 3,937) in 2016.

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. This trend of increasing harvest did not continue in 2016.

As part of this analysis, CPW calculated an estimate of average birds harvested per hunter from 1999-2015. In 2016, hunters averaged 0.91 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.

**2017 Sharp-tailed grouse harvest,
by strata**

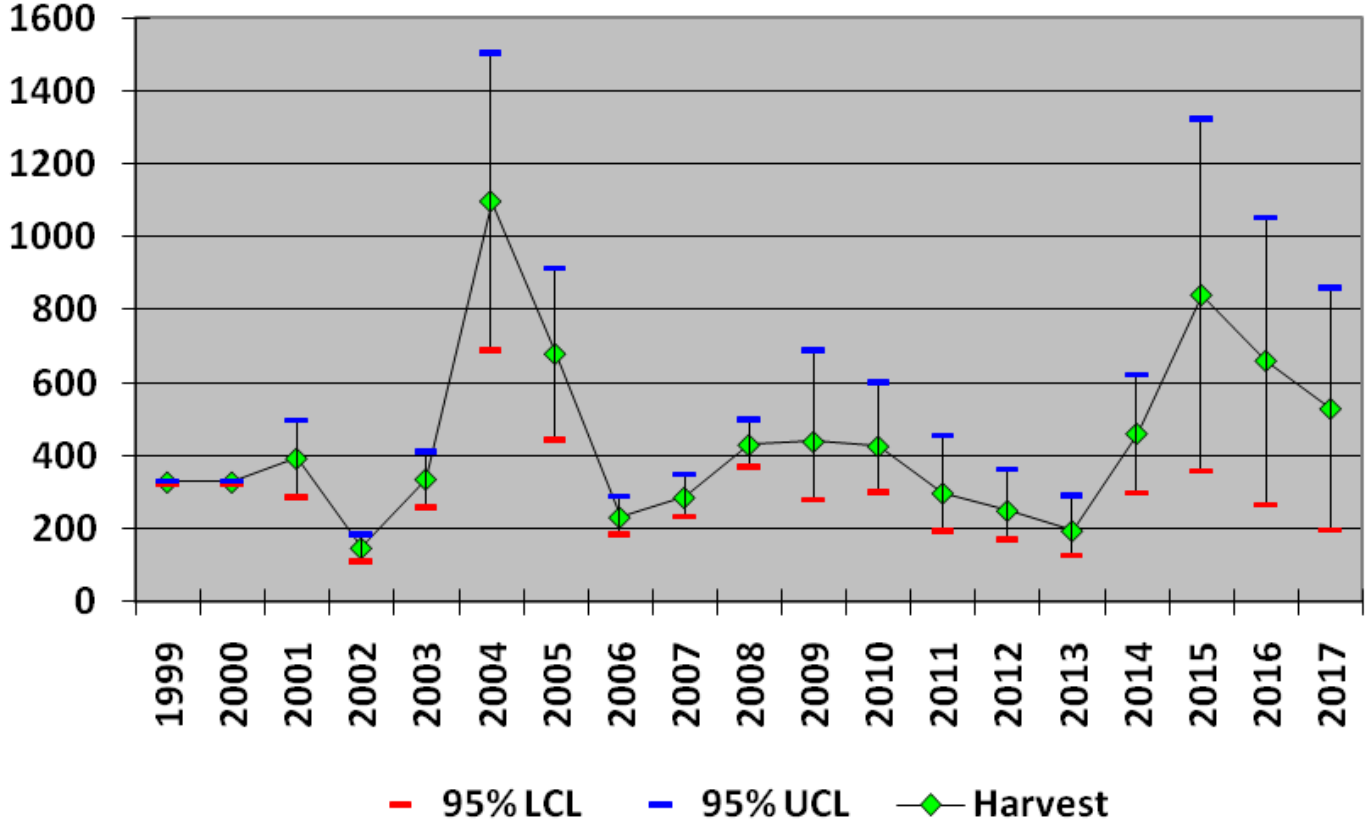
Strata	Hunters	SE (Hunters)	LCL (Hunters)	UCL (Hunters)	Days Hunted	SE (Days Hunted)	LCL (Days Hunted)	UCL (Days Hunted)	Harvest	SE (Harvest)	LCL (Harvest)	UCL (Harvest)
Not Likely	20	20	4	102	140	140	27	717	0	0	0	0
Somewhat Likely	56	32	19	159	222	136	74	671	111	64	39	317
Very Likely	126	38	71	224	353	130	176	710	164	94	58	467
Very Likely for >3 years	47	15	25	87	240	95	114	507	254	125	102	633
Total	249	55	140	357	956	253	461	1452	529	169	198	861

**2017 Sharp-tailed grouse harvest,
by county**

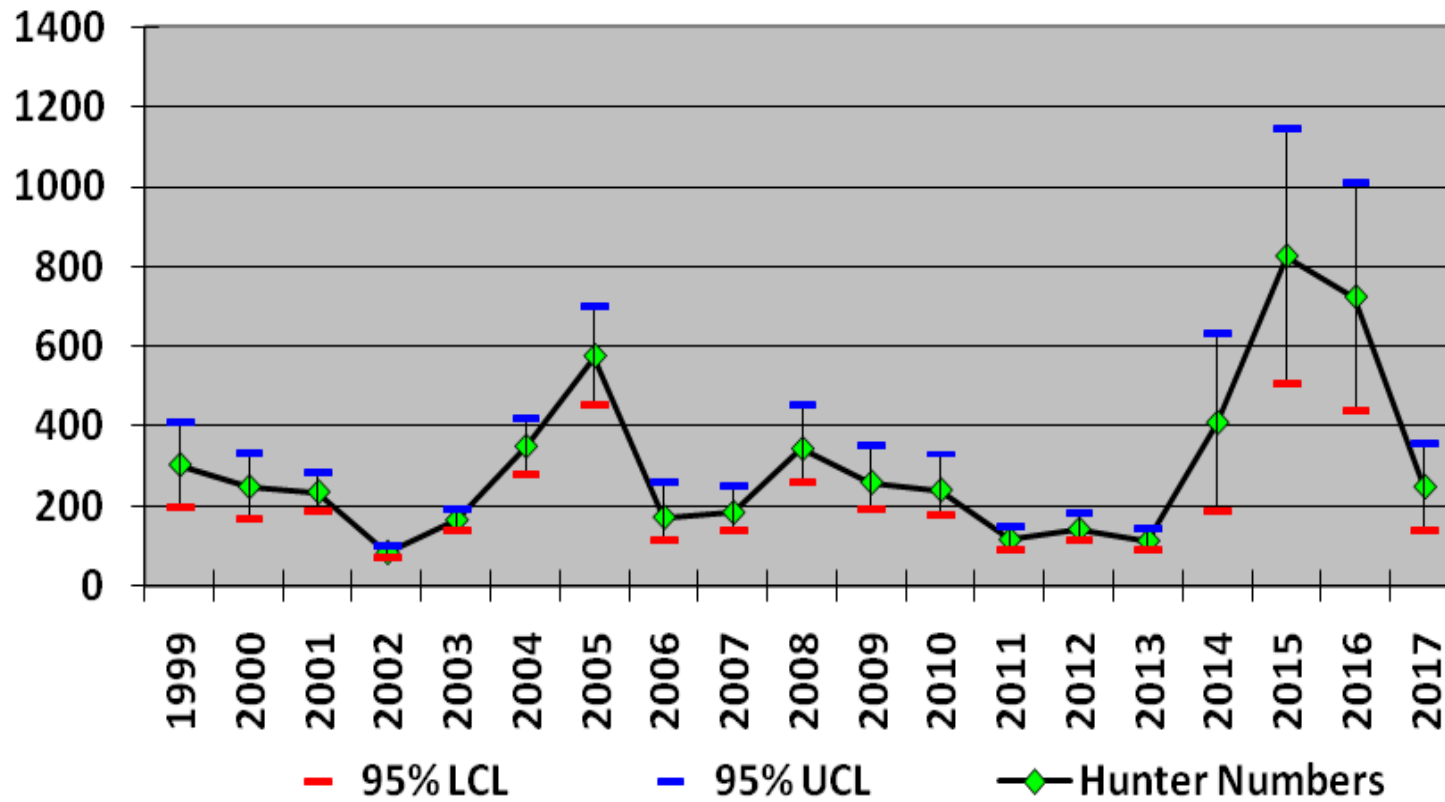
County	Hunters	SE (Hunters)	LCL (Hunters)	UCL (Hunters)	Days Hunted	SE (Days Hunted)	LCL (Days Hunted)	UCL (Days Hunted)	Harvest	SE (Harvest)	LCL (Harvest)	UCL (Harvest)
Routt	383	117	214	686	430	155	217	852	359	138	173	745
Moffat	90	36	42	191	306	137	133	708	170	98	59	486
Rio Blanco	40	40	8	205	80	80	16	409	0	0	0	0
Unknown	229	104	98	533	128	62	52	315	0	0	0	0
Total	249	55	140	357	956	253	461	1452	529	169	198	861

*Hunters could provide up to 3 counties when asked "where did you harvest sharp-tailed grouse?"

Sharp-tailed grouse Harvest Estimates, Colorado (1999-2017)



Sharp-tailed grouse Hunter Numbers Colorado (1999-2017)



Sharp-tailed grouse Hunters and Harvest
Colorado (1999-2017)

