



## Hunter Harvest Survey Regional Credibility Measures

Although the Hunter Harvest Survey (HHS) database provides a huge amount of information about regional hunting activity for many species, there are a variety of possible problems with estimates derived from HHS data. Small sample sizes, low relative harvest or hunting effort rates, imprecise estimates, and missing data all can compromise HHS results. Often, users do not take these problems into account when viewing HHS results, and use the results inappropriately.

To provide some guidance into the interpretation of HHS data, we have implemented a series of checks for some minimum criteria that we view as cause for caution. We categorize HHS results into 3 credibility categories:

	<b>Total Hunters</b>	<b>Total Days</b>	<b>Total Harvest</b>
<b>Poor</b>	> 30% of counties have < 3 records within the selected region* < 20 individual hunter responses Total Hunter PSE > 20%	> 30% of counties have < 3 records within the selected region* < 20 individual hunter responses Total Days PSE > 20% <0.1 days per hunter	> 30% of counties have < 3 records within the selected region* < 20 individual hunter responses Total Harvest PSE > 20% <0.002 animals per hunter
<b>Fair</b>	>=20 and < 30 individual hunter responses 15% < Total Hunter PSE <= 20%	>=20 and < 30 individual hunter responses 15% < Total Days PSE <= 20% <1.0 days per hunter	>=20 and < 30 individual hunter responses 15% < Total Harvest PSE <= 20% <0.02 animals per hunter
<b>Good</b>	>= 30 individual hunter responses Total Hunter PSE < 15%	>= 30 individual hunter responses Total Days PSE < 15% >= 1.0 days per hunter	>= 30 individual hunter responses Total Harvest PSE < 15% >= 0.02 animals per hunter

\*Does not apply to statewide summary

**Frequency of Hunters with Various Numbers of Kills**  
**2011-2012 Hunter Harvest Survey**  
**Region: Statewide**

**All Deer**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	122,532	50.88%	122,532	50.88%
1	54,480	22.62%	177,012	73.51%
2	29,935	12.43%	206,947	85.94%
3	14,708	6.11%	221,655	92.05%
4	8,087	3.36%	229,742	95.40%
5	5,486	2.28%	235,228	97.68%
>= 6	5,580	2.32%	240,808	100.00%

**All Squirrels**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	10,546	14.11%	10,546	14.11%
1	5,556	7.44%	16,102	21.55%
2	7,392	9.89%	23,494	31.44%
3	5,979	8.00%	29,473	39.45%
4	6,497	8.70%	35,970	48.14%
5	5,791	7.75%	41,761	55.89%
>= 6	32,958	44.11%	74,719	100.00%

**Antlered Buck**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	158,993	66.03%	158,993	66.03%
1	55,473	23.04%	214,466	89.06%
2	19,579	8.13%	234,045	97.19%
3	4,351	1.81%	238,396	99.00%
4	2,175	0.90%	240,571	99.90%
5	95	0.04%	240,666	99.94%
>= 6	142	0.06%	240,808	100.00%

**Bear**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	12,770	82.01%	12,770	82.01%
1	2,753	17.68%	15,523	99.70%
2	47	0.30%	15,570	100.00%
3	0	0.00%	15,570	100.00%
4	0	0.00%	15,570	100.00%
5	0	0.00%	15,570	100.00%
>= 6	0	0.00%	15,570	100.00%

**Bobcat**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	1,655	38.46%	1,655	38.46%
1	2,175	50.55%	3,830	89.01%
2	378	8.79%	4,208	97.80%
3	0	0.00%	4,208	97.80%
4	0	0.00%	4,208	97.80%
5	47	1.10%	4,255	98.90%
>= 6	47	1.10%	4,302	100.00%

**Button Buck**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	226,430	94.03%	226,430	94.03%
1	13,005	5.40%	239,435	99.43%
2	1,135	0.47%	240,570	99.90%
3	189	0.08%	240,759	99.98%
4	47	0.02%	240,806	100.00%
5	0	0.00%	240,806	100.00%
>= 6	0	0.00%	240,806	100.00%

**Canada Geese**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	2,926	29.39%	2,926	29.39%
1	1,713	17.20%	4,639	46.59%
2	1,534	15.41%	6,173	62.01%
3	856	8.60%	7,029	70.61%
4	500	5.02%	7,529	75.63%
5	535	5.38%	8,064	81.00%
>= 6	1,891	19.00%	9,955	100.00%

**Coyote**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	16,512	51.18%	16,512	51.18%
1	9,232	28.61%	25,744	79.79%
2	3,331	10.32%	29,075	90.12%
3	1,094	3.39%	30,169	93.51%
4	666	2.06%	30,835	95.58%
5	381	1.18%	31,216	96.76%
>= 6	1,047	3.24%	32,263	100.00%

**Crow**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	2,072	15.44%	2,072	15.44%
1	2,307	17.19%	4,379	32.63%
2	2,213	16.49%	6,592	49.12%
3	1,318	9.82%	7,910	58.95%
4	753	5.61%	8,663	64.56%
5	612	4.56%	9,275	69.12%
>= 6	4,144	30.88%	13,419	100.00%

**Doe**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	170,390	70.76%	170,390	70.76%
1	40,434	16.79%	210,824	87.55%
2	17,072	7.09%	227,896	94.64%
3	6,905	2.87%	234,801	97.51%
4	3,831	1.59%	238,632	99.10%
5	993	0.41%	239,625	99.51%
>= 6	1,182	0.49%	240,807	100.00%

**Dove**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	8,004	10.75%	8,004	10.75%
1	2,260	3.03%	10,264	13.78%
2	3,108	4.17%	13,372	17.95%
3	2,731	3.67%	16,103	21.62%
4	3,343	4.49%	19,446	26.11%
5	4,143	5.56%	23,589	31.67%
>= 6	50,898	68.33%	74,487	100.00%

**Ducks**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	6,736	19.55%	6,736	19.55%
1	2,400	6.97%	9,136	26.52%
2	2,904	8.43%	12,040	34.94%
3	1,781	5.17%	13,821	40.11%
4	2,516	7.30%	16,337	47.42%
5	1,394	4.04%	17,731	51.46%
>= 6	16,724	48.54%	34,455	100.00%

**Feral Swine**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	5,264	58.33%	5,264	58.33%
1	1,927	21.35%	7,191	79.69%
2	893	9.90%	8,084	89.58%
3	235	2.60%	8,319	92.19%
4	141	1.56%	8,460	93.75%
5	235	2.60%	8,695	96.35%
>= 6	329	3.65%	9,024	100.00%

**Fox**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	1,936	39.81%	1,936	39.81%
1	1,983	40.78%	3,919	80.58%
2	425	8.74%	4,344	89.32%
3	94	1.94%	4,438	91.26%
4	94	1.94%	4,532	93.20%
5	142	2.91%	4,674	96.12%
>= 6	189	3.88%	4,863	100.00%

**Fox Squirrel**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	1,794	35.85%	1,794	35.85%
1	1,605	32.08%	3,399	67.92%
2	519	10.38%	3,918	78.30%
3	236	4.72%	4,154	83.02%
4	283	5.66%	4,437	88.68%
5	0	0.00%	4,437	88.68%
>= 6	566	11.32%	5,003	100.00%

**Gray Squirrel**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	10,171	13.86%	10,171	13.86%
1	5,227	7.12%	15,398	20.99%
2	7,393	10.08%	22,791	31.07%
3	5,886	8.02%	28,677	39.09%
4	6,310	8.60%	34,987	47.69%
5	5,839	7.96%	40,826	55.65%
>= 6	32,538	44.35%	73,364	100.00%

**Grouse**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	3,553	61.79%	3,553	61.79%
1	935	16.26%	4,488	78.05%
2	374	6.50%	4,862	84.55%
3	281	4.88%	5,143	89.43%
4	234	4.07%	5,377	93.50%
5	94	1.63%	5,471	95.12%
>= 6	281	4.88%	5,752	100.00%

**Bobwhite Quail**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	8,184	50.29%	8,184	50.29%
1	1,101	6.76%	9,285	57.06%
2	1,388	8.53%	10,673	65.59%
3	957	5.88%	11,630	71.47%
4	526	3.24%	12,156	74.71%
5	574	3.53%	12,730	78.24%
>= 6	3,542	21.76%	16,272	100.00%

**Rabbit**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	11,605	24.36%	11,605	24.36%
1	5,991	12.57%	17,596	36.93%
2	6,652	13.96%	24,248	50.89%
3	4,340	9.11%	28,588	60.00%
4	3,397	7.13%	31,985	67.13%
5	2,264	4.75%	34,249	71.88%
>= 6	13,398	28.12%	47,647	100.00%

**Raccoon**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	2,401	17.96%	2,401	17.96%
1	2,401	17.96%	4,802	35.92%
2	2,025	15.14%	6,827	51.06%
3	1,036	7.75%	7,863	58.80%
4	612	4.58%	8,475	63.38%
5	1,083	8.10%	9,558	71.48%
>= 6	3,814	28.52%	13,372	100.00%

**Turkey**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	46,176	71.04%	46,176	71.04%
1	13,348	20.54%	59,524	91.58%
2	5,377	8.27%	64,901	99.85%
3	94	0.15%	64,995	100.00%
4	0	0.00%	64,995	100.00%
5	0	0.00%	64,995	100.00%
>= 6	0	0.00%	64,995	100.00%

**Woodcock**

<b>Number Killed</b>	<b>Number of Hunters</b>	<b>Percent of Hunters</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
0	904	32.76%	904	32.76%
1	666	24.14%	1,570	56.90%
2	428	15.52%	1,998	72.41%
3	143	5.17%	2,141	77.59%
4	95	3.45%	2,236	81.03%
5	190	6.90%	2,426	87.93%
>= 6	333	12.07%	2,759	100.00%