

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:

| | Total Hunters | Total Days | Total Harvest |
|-------------|--|--|--|
| Poor | > 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 |
| Fair | >=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 |
| Good | >= 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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

| Number Killed | Number of Hunters | Percent of Hunters | Cumulative Frequency | Cumulative Percent |
|----------------------|--------------------------|---------------------------|-----------------------------|---------------------------|
| 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% |