

Hunting Estimates Report
2014-2015 Hunter Harvest Survey
 Date Generated: 12/09/2015
 Region: Statewide

Species	Total Hunters					Total Days				Total Harvest					Mean Days Per Hunter	Mean Harvest Per Hunter	Mean Harvest Per Day
	Total Hunters	Confidence Limits (±)	PSE	Credibility Rating	% of incidental hunters	Total Days	Confidence Limits (±)	PSE	Credibility Rating	Total Harvest	Confidence Limits (±)	PSE	Credibility Rating	% of harvest taken incidentally			
All Deer	233,582	3,201	0.007	G	0.00%	3,729,943	107,516	0.015	G	193,783	8,670	0.023	G	0.00%	15.97	0.83	0.05
Antlered/Button Buck	233,582	3,201	0.007	G	0.00%	3,729,943	107,516	0.015	G	91,857	4,494	0.025	G	0.00%	15.97	0.39	0.02
All Squirrels	60,786	3,150	0.026	G	0.44%	396,475	33,436	0.043	G	457,006	48,437	0.054	G	0.18%	6.52	7.52	1.15
Antlered Buck	233,582	3,201	0.007	G	0.00%	3,729,943	107,516	0.015	G	81,943	4,184	0.026	G	0.00%	15.97	0.35	0.02
Bear	19,977	1,955	0.050	G	0.00%	130,219	15,615	0.061	G	3,040	722	0.121	G	0.00%	6.52	0.15	0.02
Bobcat	3,792	877	0.118	G	26.76%	11,707	4,643	0.202	P	3,847	2,184	0.290	P	29.16%	3.09	1.01	0.33
Bobwhite Quail	11,644	1,515	0.066	G	0.46%	84,637	18,321	0.110	G	54,282	14,249	0.134	G	0.10%	7.27	4.66	0.64
Button Buck	233,582	3,201	0.007	G	0.00%	3,729,943	107,516	0.015	G	11,375	1,651	0.074	G	0.00%	15.97	0.05	0.00
Canada Geese	12,232	1,551	0.065	G	2.62%	61,542	10,295	0.085	G	56,136	14,727	0.134	G	1.14%	5.03	4.59	0.91
Coyote	35,254	2,525	0.037	G	10.45%	237,880	29,332	0.063	G	43,507	7,993	0.094	G	12.15%	6.75	1.23	0.18
Crow	6,882	949	0.070	G	6.67%	36,494	11,442	0.160	F	60,400	30,437	0.257	P	1.99%	5.30	8.78	1.66
Doe	233,582	3,201	0.007	G	0.00%	3,729,943	107,516	0.015	G	107,654	6,623	0.031	G	0.00%	15.97	0.46	0.03
Dove	72,590	3,355	0.024	G	0.07%	224,195	13,831	0.031	G	931,513	60,414	0.033	G	0.01%	3.09	12.83	4.15
Ducks	41,613	2,496	0.031	G	0.00%	340,309	24,609	0.037	G	548,233	60,115	0.056	G	0.00%	8.18	13.17	1.61
Feral Swine	8,493	1,301	0.078	G	2.52%	62,694	14,853	0.121	G	17,738	13,262	0.381	P	1.81%	7.38	2.09	0.28
Fox	3,953	895	0.115	G	9.46%	43,040	13,206	0.157	F	10,101	8,836	0.446	P	6.87%	10.89	2.56	0.23
Fox Squirrel	4,968	1,001	0.103	G	2.15%	34,078	13,619	0.204	P	6,371	2,483	0.199	F	1.68%	6.86	1.28	0.19
Gray Squirrel	59,878	3,132	0.027	G	0.45%	393,014	33,359	0.043	G	450,713	48,224	0.055	G	0.18%	6.56	7.53	1.15
Grouse	3,632	858	0.121	G	1.47%	21,793	6,629	0.155	F	2,532	1,720	0.347	P	2.11%	6.00	0.70	0.12
Rabbit	42,678	2,739	0.033	G	0.38%	282,267	27,237	0.049	G	227,181	27,236	0.061	G	0.16%	6.61	5.32	0.80
Raccoon	9,828	1,396	0.072	G	3.26%	163,751	36,038	0.112	G	60,544	11,558	0.097	G	1.06%	16.66	6.16	0.37
Turkey	71,522	3,338	0.024	G	0.00%	374,232	17,655	0.024	G	24,952	2,342	0.048	G	0.00%	5.23	0.35	0.07
Woodcock	2,137	660	0.158	F	7.50%	8,813	5,732	0.332	P	7,158	6,668	0.475	P	4.48%	4.13	3.35	0.81

Total # of license holders	643,165
Deceased license holder rate	0.0095455
Adj Total # of license holders	637,025
Total # of surveys sent	28,495
Undeliverables	2,344
Deceased	272
Sample size	25,879
Sample rate	4.06%
Total Survey Returns	11,615
Refused	44
Total Survey Responses	11,571
Response rate	44.71%
Total Not Responding	14,308

Active Hunter Estimate	
# of Active Hunters from Respondents	5,562
Proportion of Responding Hunters	0.4806845
Estimated Proportion of Non-responding Hunters	0.4548000
SE	0.0046447
PSE	0.0096627
Total Active Licensed Hunters	297,092
Margin of Error @ 95% CL	5,627
Active Hunter Rate within All License Holders	46.64%

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
2014-2015 Hunter Harvest Survey
Date Generated: 12/09/2015
Region: Statewide

All Deer

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	125,120	53.57%	125,120	53.57%
1	55,201	23.63%	180,321	77.20%
2	27,277	11.68%	207,598	88.88%
3	12,021	5.15%	219,619	94.02%
4	6,685	2.86%	226,304	96.88%
5	3,827	1.64%	230,131	98.52%
>= 6	3,450	1.48%	233,581	100.00%

All Squirrels

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	10,538	17.34%	10,538	17.34%
1	3,803	6.26%	14,341	23.59%
2	7,714	12.69%	22,055	36.28%
3	5,161	8.49%	27,216	44.77%
4	4,617	7.60%	31,833	52.37%
5	4,237	6.97%	36,070	59.34%
>= 6	24,716	40.66%	60,786	100.00%

Antlered Buck

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	162,047	69.37%	162,047	69.37%
1	51,158	21.90%	213,205	91.28%
2	16,280	6.97%	229,485	98.25%
3	2,965	1.27%	232,450	99.52%
4	1,078	0.46%	233,528	99.98%
5	54	0.02%	233,582	100.00%
>= 6	0	0.00%	233,582	100.00%

Antlered/Button Buck

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	156,117	66.84%	156,117	66.84%
1	53,584	22.94%	209,701	89.78%
2	18,436	7.89%	228,137	97.67%
3	3,881	1.66%	232,018	99.33%
4	1,348	0.58%	233,366	99.91%
5	216	0.09%	233,582	100.00%
>= 6	0	0.00%	233,582	100.00%

Bear

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	15,919	83.95%	15,919	83.95%
1	3,043	16.05%	18,962	100.00%
2	0	0.00%	18,962	100.00%
3	0	0.00%	18,962	100.00%
4	0	0.00%	18,962	100.00%
5	0	0.00%	18,962	100.00%
>= 6	0	0.00%	18,962	100.00%

Bobcat

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	1,517	40.00%	1,517	40.00%
1	1,950	51.43%	3,467	91.43%
2	217	5.71%	3,684	97.14%
3	0	0.00%	3,684	97.14%
4	0	0.00%	3,684	97.14%
5	0	0.00%	3,684	97.14%
>= 6	108	2.86%	3,792	100.00%

Button Buck

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	223,340	95.62%	223,340	95.62%
1	9,218	3.95%	232,558	99.56%
2	970	0.42%	233,528	99.98%
3	0	0.00%	233,528	99.98%
4	54	0.02%	233,582	100.00%
5	0	0.00%	233,582	100.00%
>= 6	0	0.00%	233,582	100.00%

Canada Geese

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	4,205	34.53%	4,205	34.53%
1	1,912	15.70%	6,117	50.22%
2	1,857	15.25%	7,974	65.47%
3	765	6.28%	8,739	71.75%
4	546	4.48%	9,285	76.23%
5	328	2.69%	9,613	78.92%
>= 6	2,567	21.08%	12,180	100.00%

Coyote

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	17,765	50.54%	17,765	50.54%
1	9,402	26.75%	27,167	77.29%
2	3,881	11.04%	31,048	88.34%
3	1,640	4.67%	32,688	93.00%
4	765	2.18%	33,453	95.18%
5	328	0.93%	33,781	96.11%
>= 6	1,367	3.89%	35,148	100.00%

Crow

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	968	14.06%	968	14.06%
1	1,326	19.27%	2,294	33.33%
2	896	13.02%	3,190	46.35%
3	860	12.50%	4,050	58.85%
4	717	10.42%	4,767	69.27%
5	287	4.17%	5,054	73.44%
>= 6	1,828	26.56%	6,882	100.00%

Doe

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	170,133	72.84%	170,133	72.84%
1	38,113	16.32%	208,246	89.15%
2	14,609	6.25%	222,855	95.41%
3	5,984	2.56%	228,839	97.97%
4	3,234	1.38%	232,073	99.35%
5	647	0.28%	232,720	99.63%
>= 6	863	0.37%	233,583	100.00%

Dove

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	8,432	11.62%	8,432	11.62%
1	2,703	3.73%	11,135	15.35%
2	3,784	5.22%	14,919	20.57%
3	3,081	4.25%	18,000	24.81%
4	3,730	5.14%	21,730	29.96%
5	4,378	6.04%	26,108	35.99%
>= 6	46,430	64.01%	72,538	100.00%

Ducks

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	6,032	14.50%	6,032	14.50%
1	2,403	5.78%	8,435	20.27%
2	3,110	7.47%	11,545	27.75%
3	3,063	7.36%	14,608	35.11%
4	2,828	6.80%	17,436	41.90%
5	1,932	4.64%	19,368	46.55%
>= 6	22,244	53.45%	41,612	100.00%

Feral Swine

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	4,249	54.11%	4,249	54.11%
1	1,667	21.23%	5,916	75.34%
2	645	8.22%	6,561	83.56%
3	484	6.16%	7,045	89.73%
4	215	2.74%	7,260	92.47%
5	215	2.74%	7,475	95.21%
>= 6	376	4.79%	7,851	100.00%

Fox

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	1,647	41.67%	1,647	41.67%
1	714	18.06%	2,361	59.72%
2	933	23.61%	3,294	83.33%
3	275	6.94%	3,569	90.28%
4	165	4.17%	3,734	94.44%
5	0	0.00%	3,734	94.44%
>= 6	220	5.56%	3,954	100.00%

Fox Squirrel

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	2,700	54.35%	2,700	54.35%
1	1,404	28.26%	4,104	82.61%
2	162	3.26%	4,266	85.87%
3	162	3.26%	4,428	89.13%
4	54	1.09%	4,482	90.22%
5	54	1.09%	4,536	91.30%
>= 6	432	8.70%	4,968	100.00%

Gray Squirrel

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	10,324	17.24%	10,324	17.24%
1	3,640	6.08%	13,964	23.32%
2	7,661	12.79%	21,625	36.12%
3	5,162	8.62%	26,787	44.74%
4	4,727	7.89%	31,514	52.63%
5	4,238	7.08%	35,752	59.71%
>= 6	24,125	40.29%	59,877	100.00%

Grouse

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	2,531	69.70%	2,531	69.70%
1	715	19.70%	3,246	89.39%
2	110	3.03%	3,356	92.42%
3	165	4.55%	3,521	96.97%
4	0	0.00%	3,521	96.97%
5	55	1.52%	3,576	98.48%
>= 6	55	1.52%	3,631	100.00%

Bobwhite Quail

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	5,354	46.19%	5,354	46.19%
1	883	7.61%	6,237	53.81%
2	941	8.12%	7,178	61.93%
3	530	4.57%	7,708	66.50%
4	647	5.58%	8,355	72.08%
5	471	4.06%	8,826	76.14%
>= 6	2,765	23.86%	11,591	100.00%

Rabbit

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	10,465	24.55%	10,465	24.55%
1	4,470	10.49%	14,935	35.04%
2	6,922	16.24%	21,857	51.28%
3	4,197	9.85%	26,054	61.13%
4	2,943	6.91%	28,997	68.03%
5	2,671	6.27%	31,668	74.30%
>= 6	10,956	25.70%	42,624	100.00%

Raccoon

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	1,466	14.92%	1,466	14.92%
1	2,118	21.55%	3,584	36.46%
2	1,738	17.68%	5,322	54.14%
3	380	3.87%	5,702	58.01%
4	489	4.97%	6,191	62.98%
5	163	1.66%	6,354	64.64%
>= 6	3,475	35.36%	9,829	100.00%

Turkey

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	51,466	72.39%	51,466	72.39%
1	14,305	20.12%	65,771	92.51%
2	5,324	7.49%	71,095	100.00%
3	0	0.00%	71,095	100.00%
4	0	0.00%	71,095	100.00%
5	0	0.00%	71,095	100.00%
>= 6	0	0.00%	71,095	100.00%

Woodcock

Number Killed	Number of Hunters	Percent of Hunters	Cumulative Frequency	Cumulative Percent
0	855	40.00%	855	40.00%
1	427	20.00%	1,282	60.00%
2	481	22.50%	1,763	82.50%
3	160	7.50%	1,923	90.00%
4	53	2.50%	1,976	92.50%
5	53	2.50%	2,029	95.00%
>= 6	107	5.00%	2,136	100.00%