

## **HUNTING HARVEST STATISTICS**

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## 2015 SMALL GAME HUNTER MAIL SURVEY

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### INTRODUCTION

The Minnesota Department of Natural Resources (DNR), Division of Fish and Wildlife, Wildlife Research unit annually conducts a mail survey of small game hunters. The small game mail survey was initiated in 1976 as a means to gather small game harvest information, which is used to inform our constituency and guide decisions about hunting regulations and season structure.

### METHODS

A postcard survey (Fig. 1) was mailed in early March and respondents who returned it within three weeks were eliminated from follow-up mailings. The sampling frame consisted of individuals who purchased a small game hunting license (any type) for the 2015-16 small game hunting season (N=258,216). A stratified random sample (n=7,000, 2.7%), allocated proportionally by license type, was drawn from the Minnesota DNR electronic database. Small game license types included the following: Resident Senior Citizen, Resident Youth, Resident Adult, Resident Individual Sport, Resident Combination Sport, Resident Lifetime, Resident Lifetime Sport, Nonresident Youth, and Nonresident Adult. For analysis, license types were pooled into "Resident" (N= 251,453) and "Nonresident" (N= 6,763) (Fig. 2). A free youth license was added to the sampling frame for 2010-13 but that license has since been discontinued. Estimates for those years have been recalculated without the youth license so that harvest estimates and license sales are comparable among years. The percent of respondents who said they hunted or did not hunt is reported in Table 1. License sales and survey response rate are shown in Figure 2.

Recipients were asked if they hunted small game in 2015-16 and if not, they were instructed to return the survey. Respondents who hunted were asked: (1) total number of days they hunted small game, (2) number bagged by species, (3) number of days hunted by species and (4) the county in which they hunted most for each species listed. Returned surveys were checked for completeness, consistency, and biological practicability. Dual key-entry and quality control checks were used to minimize transcription errors. Data was tabulated using Viking Data Entry VDE+ software and analyzed using R programming language (ver. 3.1.2 (2014-10-31); R Development Core Team [RDCT] 2014).

### RESULTS

Of the 7,000 mailed surveys, 174 surveys were undeliverable; 3,485 surveys were returned for an adjusted response rate of 51%. Summaries of the top four small game species (ducks- all species, Canada geese, pheasants, and ruffed grouse) harvested in Minnesota are shown in Figure 3. License sales were fairly similar to the previous year (Fig. 2, Table 5). Estimated number of hunters increased slightly for woodcock and pheasant but declined for most other species (Table 2). Estimated harvest per active hunter (Table 3) remained relatively stable for all species. Mean harvest for successful hunters and hunter success rates also showed no statistically significant changes (Table 4). License sales and estimated hunter harvest are presented in Table 5. Estimated ring-necked pheasant harvest showed an increase to 243,176

birds, similar to 2012 levels. Ruffed grouse harvest decreased from 301,190 in 2014 to 267,997 in 2015. Duck harvest declined from 699,620 in 2014 to 663,811 in 2015 with hunters taking 8.7 ducks/active hunter compared to 9.3 in 2014. Canada goose harvest continued its downward slide to an estimated 185,012 birds harvested. Although nonresident license sales increased, the number of non-resident duck and goose hunters declined last year (Table 6). However, the harvests for ducks, grouse and pheasants were up. Once again, no nonresident hunters reported hunting or harvesting raccoons.

This project was funded in part by the Wildlife Restoration Program.



Figure 1. Sample of Small Game Hunter survey card.

Dear Small Game Hunter:

You have been selected at random from among Minnesota's small game hunting license buyers to assist us in evaluating the 2015-2016 small game hunting season (**March 2015-February 2016**). We need information to estimate the season's harvest and to help set future small game seasons. Answer only for your Minnesota 2015 hunting experience.

**YOUR RESPONSE IS NEEDED  
EVEN IF YOU DID NOT HUNT OR HARVEST SMALL GAME**

Please fill out the attached questionnaire and mail as soon as possible. A reminder will be sent to individuals not returning the questionnaire within three weeks. No envelope or stamp is necessary; just tear along the perforation and drop into a mailbox.

THANK YOU FOR YOUR COOPERATION

Lou Cornicelli, Wildlife Research Program Manager  
Division of Fish and Wildlife  
Department of Natural Resources

**2015 Small Game Hunter Report**

1. Did you hunt small game, listed below, in Minnesota this year (March 2015 - Feb 2016)?  No  Yes (Please check box)
2. Indicate the **total number of days** spent hunting small game of all species listed below, in Minnesota. \_\_\_\_\_
3. For the species you hunted indicate your harvest, number of days hunted, and county in which you hunted most for each species, even if **None** were bagged. Report only game **you personally** bagged and retrieved in Minnesota. **Do not** include birds taken on shooting preserves or game farms.

	Number You bagged	Days Hunted	County
Ducks (all species)	01	_____	_____
Coots (mud hens)	50	_____	_____
Canada geese	40	_____	_____
Other geese	41	_____	_____
Snipe (jacksnipe)	51	_____	_____
Rails and gallinules	52	_____	_____
Crows	53	_____	_____
Woodcock	60	_____	_____
Mourning Dove	65	_____	_____
Pheasants	70	_____	_____
Ruffed grouse (Forest partridge)	71	_____	_____
Spruce grouse	72	_____	_____
Sharp-tailed grouse	73	_____	_____
Hungarian (Gray) partridge	74	_____	_____
Fox squirrel	89	_____	_____
Gray squirrel	90	_____	_____
Cottontail rabbit	91	_____	_____
Jackrabbit	92	_____	_____
Snowshoe hare	93	_____	_____
Badger	35	_____	_____
Coyote (brush wolf)	97	_____	_____
Gray fox	96	_____	_____
Raccoon	94	_____	_____
Red fox	95	_____	_____

Figure 1. Number of Minnesota small game licenses sold and usable returned surveys, 1998-2015. Includes resident and non-resident licenses, and excludes duplicate and free licenses.

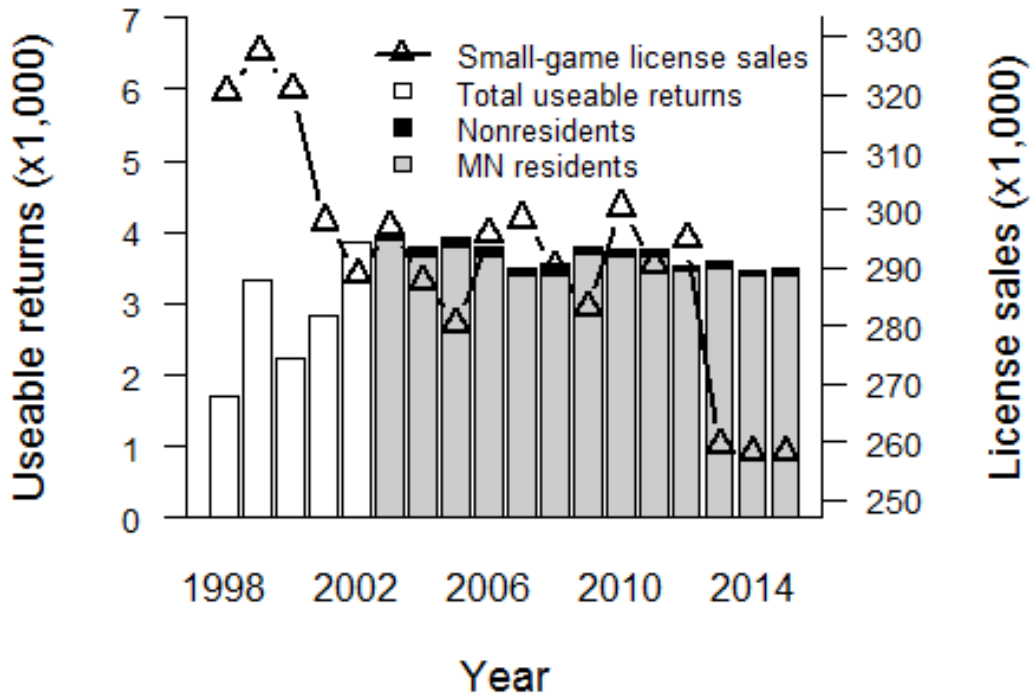


Figure 2. Summary of top four small game species harvested in Minnesota, 2002-2015.

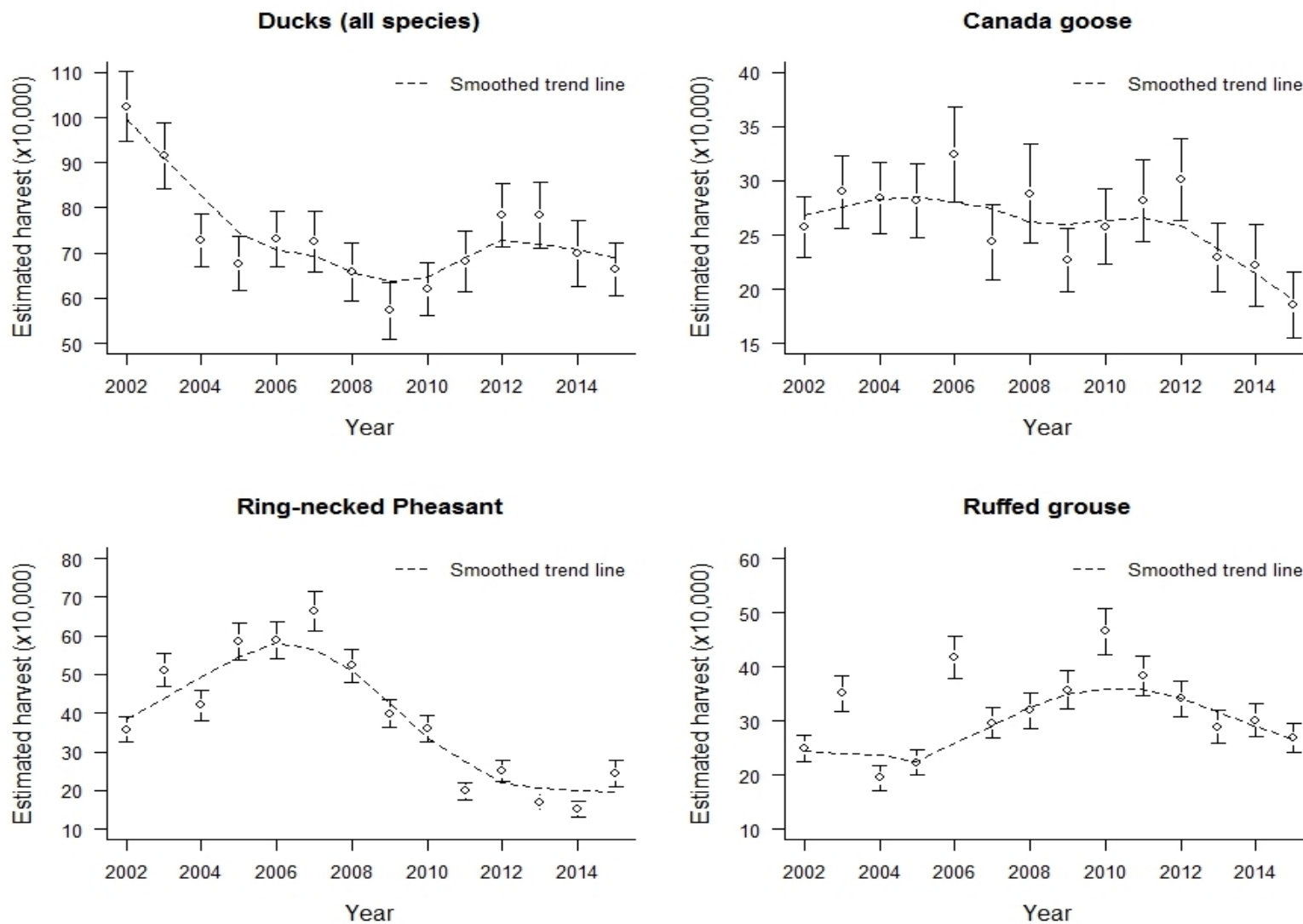


Table 1. Percent of respondents who hunted small game, 2005-06 through 2015-2016 <sup>a</sup>.

		Returns from mail survey	Projections from license sales
2005-06	Hunted	3,035 (77%)	216,000
	Did not hunt	<u>900 (23%)</u>	<u>64,156</u>
		3,935 (100.0%)	280,156
2006-07	Hunted	2,994 (79%)	233,759
	Did not hunt	<u>795 (21%)</u>	<u>62,139</u>
		3,789 (100.0%)	295,898
2007-08	Hunted	2,894 (78%)	232,505
	Did not hunt	<u>822 ( 22%)</u>	<u>65,961</u>
		3,716 (100.0%)	298,467
2008-09	Hunted	2,678 (75%)	218,753
	Did not hunt	<u>873 ( 25%)</u>	<u>71,311</u>
		3,551 (100.0%)	290,064
2009-10	Hunted	2,850 (75%)	212,126
	Did not hunt	<u>952 ( 25%)</u>	<u>70,857</u>
		3,802 (100.0%)	282,983
2010-11	Hunted	2,824 (75%)	210,129
	Did not hunt	<u>953 (25%)</u>	<u>70,911</u>
		3,777 (100.0%)	281,040
2011-12	Hunted	2,761 (74%)	214,137
	Did not hunt	<u>987 (26%)</u>	<u>76,549</u>
		3,748 (100.0%)	290,686
2012-13	Hunted	2,669 (76%)	223,808
	Did not hunt	<u>851 (24%)</u>	<u>71,360</u>
		3,520 (100%)	295,168
2013-14	Hunted	2,586 (72%)	186,317
	Did not hunt	<u>1,003 (28%)</u>	<u>72,264</u>
		3,589 (100%)	258,581
2014-15	Hunted	2,476 (72%)	185,186
	Did not hunt	<u>975 (28%)</u>	<u>72,923</u>
		3,451 (100%)	258,109
2015-16	Hunted	2,505 (72%)	185,604
	Did not hunt	<u>980 (28%)</u>	<u>72,612</u>
		3,485 (100%)	258,216

<sup>a</sup>-Includes resident and non-resident information. Excludes duplicates and free licenses (youth under 16, active-duty military and disabled veterans).

Table 2. Estimated number of statewide hunters by species, 2005-06 through 2015-16.

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12 <sup>β</sup>	2012-13 <sup>β</sup>	2013-14	2014-15	2015-16
Ducks	92,634	87,075	87,468	81,358	77,480	72,770	76,090	80,770	76,950	75,170	76,243
Canada goose	69,416	66,224	62,649	59,222	55,520	53,430	57,220	58,900	51,160	48,240	45,938
Other geese	4,628	4,529	3,695	4,411	3,280	3,650	2,710	3,830	2,810	2,770	2,520
American coot	4,129	4,529	3,454	4,166	4,090	4,610	3,480	3,990	3,820	4,410	3,261
Common snipe	1,210	2,187	1,928	1,797	1,340	1,340	1,160	1,160	1,370	820	667
Rails / gallinules	0	547	482	408	370	220	230	500	140	300	445
Crow <sup>*</sup>	11,890	10,777	8,514	10,047	10,640	9,380	10,360	11,480	8,570	7,400	7,410
American woodcock	11,035	13,510	10,843	12,171	11,760	10,790	9,430	13,310	12,030	9,650	12,596
Mourning dove <sup>γ</sup>	11,107	12,886	13,172	11,599	10,500	10,640	8,970	9,230	10,380	9,950	8,966
Ring-necked pheasant	110,852	118,703	118,311	106,763	99,440	89,140	72,840	76,950	62,110	57,590	63,350
Ruffed grouse	76,037	91,682	90,600	86,505	87,230	92,490	88,620	91,260	81,130	83,020	79,058
Spruce grouse	7,048	9,840	10,602	8,332	9,750	8,860	10,210	7,400	10,810	10,320	8,225
Sharp-tailed grouse	4,913	6,560	6,827	6,616	5,510	7,140	6,190	6,570	6,700	5,460	5,113
Gray partridge	6,265	6,013	6,667	4,411	4,240	3,720	2,400	3,080	2,450	2,540	2,075
Gray squirrel	24,563	25,459	25,863	22,382	22,260	23,740	23,280	24,710	21,690	21,240	22,303
Fox squirrel	15,094	15,619	14,779	13,233	13,180	15,630	12,060	14,220	12,030	12,790	13,411
Eastern cottontail	20,148	20,070	19,598	17,644	16,300	15,030	12,300	16,390	14,550	13,160	11,633
White-tailed jackrabbit	2,065	2,577	2,891	2,451	1,790	2,230	2,320	1,750	1,220	1,350	890
Snowshoe hare	3,346	5,545	4,257	4,574	3,500	3,800	3,250	4,820	3,750	4,560	4,076
Raccoon (Sept - Feb )	4,841	8,747	9,558	7,433	7,300	8,260	8,040	8,570	7,640	6,880	5,632
Raccoon <sup>‡</sup> (March -Aug)	2,705										
Red fox (Sept -Feb )	5,980	6,248	5,783	5,800	7,820	7,220	6,030	5,820	5,910	4,560	4,150
Red fox <sup>‡</sup> (March -Aug )	1,282										
Gray fox	997	2,030	1,928	1,879	1,790	1,640	1,390	1,580	1,730	1,050	1,186
Coyote	18,653	17,024	16,064	19,278	19,280	19,420	17,940	21,050	17,650	17,580	18,302
Badger	783	859	482	490	370	600	310	330	500	80	297

<sup>\*</sup> Crow season added in 1989. <sup>‡</sup> Raccoon and red fox season continuous May 1994 thru March 15, 2006. <sup>γ</sup> Mourning dove season added 2004. <sup>β</sup> Estimates from these years were recomputed without license type 99- free youth license to be consistent with other years of data.

Table 3. Estimated harvest per active hunter by species, 2005-06 through 2015-16.

	Estimated harvest per hunter										
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12 <sup>β</sup>	2012-13 <sup>β</sup>	2013-14	2014-15	2015-16
Ducks	7.3	8.4	8.1	8.1	7.4	8.5	9.0	9.7	10.2	9.3	8.7
Canada geese	4.1	4.9	3.9	4.9	4.1	4.8	4.9	5.1	4.5	4.6	4.0
Other geese	1.9	1.5	2.1	3.2	1.9	1.1	1.8	2.3	2.5	2.4	1.8
American coot	3.9	5.6	4.6	5.7	3.6	5.7	3.0	4.2	4.0	3.9	4.9
Common snipe	4.4	1.9	2.0	1.2	1.1	1.4	1.2	1.2	1.7	0.6	0.3
Rails/gallinules	0	2.4	5.3	0.4	0.8	0.3	1.7	0.2	0.5	0.2	2.3
Crow*	7.8	6.4	6.4	5.2	5.3	6.1	7.9	7.9	7.9	7.6	7.8
American woodcock	2.5	3.2	2.6	2.4	3.0	2.8	2.6	2.3	2.7	2.7	3.0
Mourning dove <sup>γ</sup>	7	6.7	7.7	11.4	10.5	9.4	8.2	10.0	7.8	10.4	10.8
Ring-necked pheasant	5.3	4.9	5.5	4.9	4.0	4.0	2.7	3.3	2.7	2.7	3.8
Ruffed grouse	2.9	4.5	3.2	3.7	4.1	5.0	4.3	3.7	3.6	3.6	3.4
Spruce grouse	1.4	2.7	1.7	2.0	2.0	1.7	1.8	1.6	1.2	1.4	1.2
Sharp-tailed grouse	1.3	1.8	2.0	2.1	1.7	2.4	1.9	1.6	1.1	1.6	1.6
Gray partridge	2.6	1.9	1.6	2.2	1.9	2.5	1.6	1.7	1.0	1.4	1.5
Gray squirrel	5.0	5.5	5.2	5.4	4.9	5.9	5.0	5.1	3.9	4.3	4.3
Fox squirrel	4.1	4.2	3.2	3.9	4.1	3.9	4.0	3.5	2.8	3.2	3.5
Eastern cottontail	4.5	3.9	4.0	4.5	3.5	3.6	2.8	3.9	2.8	2.9	3.6
White-tailed jackrabbit	2.7	1.6	3.3	2.6	1.5	3.2	2.2	1.1	1.5	0.8	0.8
Snowshoe hare	3.1	3.0	1.4	2.5	1.5	1.8	2.6	3.5	1.7	1.7	1.6
Raccoon (Sept - Feb )	6.0	7.2	4.9	9.7	9.1	9.4	5.5	5.6	6.1	7.7	6.8
Raccoon <sup>‡</sup> (March -Aug )	2.7										
Red fox (Sept -Feb )	1.7	1.3	1.1	0.8	1.3	1.2	1.2	1.4	0.9	0.7	0.9
Red fox <sup>‡</sup> (March -Aug )	0.9										
Gray fox	0.9	1.8	0.3	1.3	1.0	1.5	0.8	0.2	0.2	0.6	0.7
Coyote	2.1	1.2	2.1	2.4	2.4	2.3	1.9	2.5	1.3	1.0	1.9
Badger	1.2	1.3	0.3	1.0	2.0	1.0	0.8	1.0	0.6	1.0	0.5

\*Crow season added in 1989. ‡ Raccoon and red fox season continuous May 1994 thru March 15, 2006. γ Mourning dove season added 2004. β Estimates from these years were recomputed without license type 99- free youth license to be consistent with other years of data.

Table 4. Mean harvest for successful hunters and hunter success rates (%), 2005-06 through 2015-16.

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12 <sup>β</sup>	2012-13 <sup>β</sup>	2013-14	2014-15	2015-16
Ducks	8.9 (83)	9.9 (84)	9.5 (85)	9.8 (83)	9.2(80)	10.3 (83)	10.5 (85)	11.1 (87)	11.7 (87)	11.0 (85)	10.6 (82)
Canada geese	5.5 (74)	6.3 (78)	5.5 (71)	6.4 (77)	5.6 (73)	6.1 (80)	6.3 (78)	6.5 (78)	5.8 (77)	6.6 (69)	5.7 (71)
Other geese	4.5 (43)	2.7 (55)	4.2 (50)	6.3 (50)	3.5 (55)	2.6 (41)	3.4 (51)	4.4 (52)	5.5 (46)	4.3 (54)	4.0 (44)
American coot	5.1 (76)	7.2 (78)	6.3 (74)	6.9 (82)	5.5 (65)	7.2 (79)	4.4 (69)	5.2 (81)	5.2 (75)	5.0 (78)	6.7 (73)
Common snipe	4.7 (94)	2.6 (75)	2.9 (71)	1.7 (73)	1.8 (61)	2.2 (67)	1.6 (73)	2.1 (57)	2.1 (79)	1.4 (45)	1.0 (33)
Rails / gallinules	0.0 (0)*	4.3 (57)	6.4 (83)	1.0 (40)	1.3 (60)	1.0 (33)	5.0 (33)	1.0 (17)	1.0 (50)	1.0 (25)	3.5 (67)
Crow	9.1 (86)	7.2 (89)	7.3 (88)	5.9 (88)	5.9 (90)	6.7 (91)	8.9 (88)	8.8 (90)	9.4 (84)	8.7 (87)	8.3 (94)
American woodcock	3.6 (70)	3.9 (83)	3.7 (69)	3.3 (74)	4.1 (73)	3.6 (76)	3.8 (70)	3.4 (68)	3.8 (70)	4.2 (64)	4.4 (67)
Mourning dove <sup>γ</sup>	8.7 (80)	8.2 (81)	9.8 (79)	13.2 (87)	11.4 (92)	11.1 (85)	10.5 (78)	12.5 (80)	9.2 (85)	12.5 (83)	13.3 (81)
Ring-necked pheasant	7.0 (76)	6.6 (75)	7.1 (78)	6.4 (77)	5.8 (69)	5.6 (72)	4.4 (63)	4.9 (67)	4.2 (64)	4.3 (61)	5.4 (71)
Ruffed grouse	4.4 (68)	5.9 (77)	4.7 (69)	5.0 (74)	5.5 (74)	6.6 (76)	5.9 (74)	5.2 (71)	5.2 (68)	5.1 (71)	4.9 (69)
Spruce grouse	2.4 (61)	3.8 (71)	3.1 (54)	3.0 (68)	3.1 (64)	2.4 (71)	3.0 (61)	2.8 (57)	2.4 (51)	2.5 (56)	2.4 (50)
Sharp-tailed grouse	2.4 (55)	3.3 (56)	4.4 (46)	3.2 (64)	3.0 (58)	3.5 (68)	3.1 (61)	3.4 (48)	3.2 (33)	3.8 (41)	3.1 (51)
Gray partridge	5.0 (52)	2.8 (69)	3.0 (55)	3.4 (65)	3.3 (58)	4.2 (58)	3.2 (52)	3.1 (54)	2.5 (38)	4.4 (32)	2.7 (57)
Gray squirrel	5.8 (86)	6.4 (87)	5.9 (88)	6.2 (88)	5.8 (86)	7.0 (84)	6.3 (78)	6.3 (80)	5.0 (77)	5.5 (78)	5.3 (81)
Fox squirrel	5.0 (83)	5.0 (85)	3.9 (83)	4.6 (83)	4.8 (85)	4.6 (86)	5.4 (74)	4.4 (80)	3.7 (75)	4.3 (75)	4.9 (71)
Eastern cottontail	5.4 (83)	4.6 (85)	4.8 (84)	5.3 (85)	4.3 (83)	4.4 (81)	4.1 (69)	5.5 (71)	3.5 (79)	4.1 (73)	5.0 (72)
White-tailed jackrabbit	3.2 (83)	2.5 (64)	4.5 (72)	3.8 (70)	2.1 (71)	4.6 (70)	3.5 (63)	2.3 (48)	5.2 (29)	1.8 (44)	2.0 (42)
Snowshoe hare	4.6 (68)	3.8 (80)	2.2 (62)	3.5 (71)	2.6 (60)	2.6 (69)	3.8 (69)	5.0 (69)	2.9 (58)	3.0 (57)	3.0 (53)
Raccoon (Sept -Feb )	6.5 (93)	7.7 (94)	5.4 (90)	10.6 (91)	9.6 (95)	10.0 (94)	6.1 (89)	6.1 (93)	6.9 (89)	8.5 (90)	7.7 (88)
Raccoon <sup>‡</sup> (March -Aug )	3.1 (87)										
Red fox (Sept -Feb )	3.7 (46)	2.1 (60)	2.3 (46)	1.5 (49)	2.4 (54)	2.3 (54)	2.4 (49)	2.7 (50)	2.0 (44)	1.7 (41)	1.6 (57)
Red fox <sup>‡</sup> (March -Aug )	1.6 (56)										
Gray fox	1.9 (50)	2.7 (65)	1.0 (29)	3.3 (39)	2.5 (42)	4.0 (36)	2.5 (33)	1.0 (16)	1.5 (17)	2.0 (29)	1.4 (50)
Coyote	4.1 (50)	2.4 (51)	4.4 (49)	4.4 (54)	4.6 (52)	4.0 (57)	4.0 (47)	5.1 (49)	2.7 (50)	2.4 (41)	3.4 (57)
Badger	1.2 (100)	1.6 (82)	1.0 (33)	1.2 (83)	2.5 (80)	1.0 (100)	1.5 (50)	1.0 (100)	1.0 (57)	1.0 (100)	1.0 (50)

<sup>‡</sup> Raccoon and red fox season continuous May 1994 thru March 15, 2006. <sup>γ</sup> Mourning dove season added 2004. \* No hunters surveyed reported Rails/Gallinules in bag.

<sup>β</sup> Estimates from these years were recomputed without license type 99- free youth license to be consistent with other years of data.

Table 5. Statewide (resident and non-resident) small game hunting license sales and estimated hunter harvest, 2005-06 through 2015-16.

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12 <sup>β</sup>	2012-13 <sup>β</sup>	2013-14	2014-15	2015-16
Small game license sales <sup>a</sup>	280,156	295,898	298,467	290,064	282,983	282,227	271,768	264,063	258,581	258,109	258,208
State duck stamp sales	102,143	101,792	100,134	95,675	89,942	88,069	89,681	90,052	93,412	94,265	92,176
Pheasant stamp sales	117,301	129,546	129,315	123,270	110,456	104,286	86,868	90,541	77,597	74,295	77,750
Estimated harvest <sup>b</sup>											
Ducks	676,741	730,559	708,491	658,186	572,220	619,600	681,550	784,360	782,810	699,620	663,811
Canada geese	281,829	324,498	243,705	288,411	227,160	257,530	281,630	301,550	229,120	221,620	185,012
Other geese	9,025	6,658	7,723	13,895	6,250	3,940	4,800	8,820	7,130	6,510	4,448
American coot	15,938	24,909	16,061	23,871	14,810	26,340	10,520	16,720	15,130	17,050	15,861
Common snipe	5,336	4,221	3,933	2,210	1,490	1,940	1,390	1,420	2,310	520	223
Rails / gallinules	0	1,329	2,569	163	300	80	390	80	70	80	1,039
Crow	92,742	69,188	54,319	51,742	56,350	57,300	81,500	90,260	67,440	56,020	57,576
American woodcock	27,919	39,907	27,866	29,210	35,430	29,770	24,980	30,360	31,920	25,810	37,270
Mourning dove <sup>d</sup>	77,749	85,950	101,161	132,577	109,940	100,230	74,000	92,760	80,480	103,370	96,552
Ring-necked pheasant	585,299	587,580	655,443	522,071	398,130	359,400	198,500	250,140	169,100	152,800	243,176
Ruffed grouse	224,309	417,153	293,544	318,338	357,420	465,580	383,150	341,320	288,410	301,190	267,997
Spruce grouse	10,079	26,568	17,705	16,997	19,130	14,960	18,640	11,980	13,110	14,590	9,856
Sharp-tailed grouse	6,387	11,939	13,790	13,695	9,530	16,820	11,600	10,650	7,130	8,530	7,929
Gray partridge	16,289	11,545	11,000	9,660	8,040	9,150	3,950	5,160	2,380	3,590	3,187
Gray squirrel	122,078	140,788	133,194	121,534	109,790	138,920	115,840	126,110	84,010	91,250	96,400
Fox squirrel	62,187	66,068	47,736	51,079	53,970	61,690	48,100	49,750	33,940	40,840	46,383
Eastern cottontail	90,062	77,872	78,588	79,927	57,760	53,870	34,640	64,140	40,710	38,820	41,716
White-tailed jack rabbit	5,493	4,149	9,482	6,446	2,610	7,220	5,180	1,910	1,870	1,050	742
Snowshoe hare	10,406	16,801	5,789	11,343	5,360	6,770	8,430	16,800	6,200	7,860	6,374
Raccoon (Sept -Feb)	29,191	62,891	46,739	72,026	66,700	77,690	44,080	48,340	46,690	52,800	38,387
Raccoon <sup>c</sup> (Mar -Aug)	7,331										
Red fox (Sept -Feb)	10,166	7,872	6,188	4,408	10,270	8,780	7,120	7,990	5,190	3,220	3,780
Red fox <sup>c</sup> (Mar -Aug)	1,141										
Gray fox	927	3,593	559	2,443	1,860	2,380	1,160	250	430	600	816
Coyote	38,612	20,769	34,377	45,689	46,070	44,050	33,410	51,990	23,630	17,430	35,123
Badger	924	1,091	159	490	750	600	230	330	290	80	149

Harvest estimates in this table, and the number of hunters and mean take per hunter in Table 5, are calculated from different questions on the survey form. The sample used in calculations differs from one estimator to the next. This is because some respondents give specific answers to one question but not to a related one. A formula is used to calculate the total estimated take for each species that appear in this table. In most years the formula produces results rather close to those obtained by multiplying the average take per hunter times the number of hunters. However, in other years (e.g., 1985) results of the two methods are quite divergent, perhaps as a result of an unusual sample. This is being investigated further, and as a result, numbers may change somewhat in future reports. The most current report of survey findings will have the best data available at that time. A youth-free license was part of the sampling frame for the 2011-12 and 2012-13 seasons but was discontinued for 2013-14. The harvest statics for those years have been recomputed by removing the youth free license from both the sampling frame and the respondents' database. The estimates are now more comparable over time.

<sup>a</sup> Includes all types of Small game licenses. Duplicate and free licenses not included.

<sup>b</sup> Estimates based upon response of hunters to questionnaires.

<sup>c</sup> Raccoon and red fox seasons were year round from May, 1994 through March 16, 2006.

<sup>d</sup> Mourning dove season added 2004.

Table 6. Mail survey results of nonresident small game hunters, 2005-06 through 2015-16.

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<b>Nonresident licenses issued <sup>a</sup></b>	5,897	7,356	7,858	7,114	6,934	6,695	6,312	6,456	6,031	6,056	6,755
<b>Questionnaires:</b>											
Number mailed	210	185	185	226	196	163	169	166	162	165	169
Number not delivered	10	11	11	15	10	6	11	11	10	12	5
Number (percent) returned	134 (67)	115 (62)	101 (58)	89 (42)	105 (54)	107 (66)	91 (54)	71 (43)	81 (50)	70 (42)	73 (43)
<b>Estimated nonresidents and (percent) of all licensed nonresidents hunting:</b>											
Ducks	2,040 (35)	2,344 (32)	2,256 (29)	2,293 (32)	1,849 (27)	2,003 (29.9)	2,430 (38.5)	2,360 (36.6)	2,010 (33.3)	2,340 (38.6)	1,850 (27.4)
Canada goose	1,818 (31)	2,083 (28)	934 (12)	1,587(22)	726 (10)	1,314 (19.6)	1,620 (25.6)	1,360 (21.1)	1,270 (21.0)	1,300 (21.4)	650 (9.6)
Ruffed grouse	1,774 (30)	1,953 (26)	1,867 (24)	1,940 (27)	1,915 (28)	2,503 (37.4)	1,460 (23.1)	2,820 (43.7)	2,010 (33.3)	2,600 (42.9)	2,870 (42.5)
Ring-necked pheasant	2,572 (44)	3,776 (51)	2,645 (34)	3,116 (44)	1,519 (22)	2,003 (29.9)	1,780 (28.2)	1,910 (29.6)	1,420 (23.5)	1,380 (22.9)	1,480 (21.9)
Raccoon <sup>b, c</sup>	44 (0.7)	0 (0)	78 (1.0)	0 (0)	0 (0)	63 (0.9)	0 (0)	0 (0)	80 (1.2)	0 (0)	0 (0)
<b>Estimated nonresident take:</b>											
Ducks	12,149	12,173	22,718	15,463	11,755	17,055	13,840	20,380	20,410	13,060	16,863
Canada goose	3,946	3,580	3,501	5,762	3,698	6,334	4,050	2,270	3,650	2,680	1,484
Ruffed grouse	6,429	11,522	7,236	6,938	8,651	12,600	8,980	10,090	4,990	9,090	13,805
Ring-necked pheasant	13,656	16,079	17,661	10,642	6,274	8,076	4,860	6,820	3,430	3,720	6,581
Raccoon <sup>b, c</sup>	887	0	3,268	0	0	593	0	0	1,280	0	0

<sup>a</sup> Excludes duplicate licenses and nonresident shooting preserve licenses.

<sup>b</sup> In 2002, 2003, 2004, 2006, 2008, 2009, 2011, 2012, 2014, and 2015 no non-residents reported hunting/harvesting raccoons.

<sup>c</sup> In 2013 only one non-resident reported hunting/harvesting raccoons. The extrapolated estimate is not reliable.

The following information has been excerpted from: U.S. Fish and Wildlife Service. Migratory bird hunting activity and harvest during the 2014 - 2015 and 2015-16 hunting seasons. U.S. Fish and Wildlife Service, Laurel, Maryland, U.S.A. The entire report is available on-line at <http://www.fws.gov/migratorybirds/pdf/surveys-and-data/HarvestSurveys/MigratoryBirdHuntingActivityandHarvestforthe2014-15and2015-16HuntingSeasons.pdf>

Table 1. Species composition of the Minnesota waterfowl harvest, 2014 and 2015. (from: Raftovich, R.V., S.C. Chandler, and K.A. Wilkins. 2016. Migratory Bird Hunting activity and harvest during the 2014-15 and 2015-16 hunting seasons. U.S. Fish and Wildlife Service, Laurel, Maryland. USA July 2016. 63 pp).

Species	Minnesota Harvest					Mississippi Flyway Harvest		
	2014	% of Harvest	2015	% of Harvest	Percent change in Harvest 14-15	2014	2015	Percent change Harvest 14-15
Mallard	161,859	28.33	136,645	23.83	-18	1,992,886	1,695,598	-18
Domestic mallard	0	0	0	0	0	680	1,087	+37
American black duck	1,465	0.26	0	0	0	15,885	16,254	+2
Black x mallard	0	0	343	0.06	100	1,747	1,692	-3
Gadwall	12,451	2.18	17,510	3.05	+29	947,364	559,674	-69
American wigeon	7,690	1.35	8,927	1.56	+14	84,575	63,988	-32
Green-winged teal	31,859	5.58	41,199	7.19	+23	911,663	529,417	-72
Blue-winged /cinnamon teal	82,028	14.36	76,562	13.35	-7	648,805	506,316	-28
Northern shoveler	13,549	2.37	8,240	1.44	-64	294,147	155,309	-89
Northern pintail	2,563	0.45	8,240	1.44	+69	115,644	95,746	-21
Wood duck	114,620	20.06	130,465	22.75	+12	602,451	557,838	-8
Redhead	25,268	4.42	16,480	2.87	-53	122,872	86,213	-43
Canvasback	6,592	1.15	12,703	2.22	+48	43,558	30,696	-42
Greater scaup	366	0.06	2,060	0.36	+82	37,927	25,053	-51
Lesser scaup	2,563	0.45	13,046	2.28	+80	156,083	118,419	-32
Ring-necked duck	67,014	11.73	64,546	11.26	-4	250,727	183,485	-37
Goldeneye	1,099	0.19	3,777	0.66	+71	32,910	25,123	-31
Bufflehead	15,014	2.63	23,690	4.13	+37	70,647	73,064	+3
Ruddy duck	2,197	0.38	1,030	0.18	-113	20,930	4,805	-336
Scoters	0	0	0	0	0	9,309	3,100	-200
Hooded merganser	20,873	3.65	7,210	1.26	-190	54,723	37,751	-45
Other mergansers	1,465	0.26	343	0.06	-327	12,811	24,008	+47
Total Duck Harvest <sup>a</sup> (retrieved kill)	571,300 ±12%		573,400 ±13%		0	6,462,800 ±6%	4,822,700 ±6%	-34

<sup>a</sup> Sum of all species does not equal total because of rounding error.

Table 2. Top 10 states in number of **adult duck hunters**, 2015, and number of hunter-days and retrieved duck kill. (from: Raftovich, R.V., S.C. Chandler, and K.A. Wilkins. 2016. Migratory Bird Hunting activity and harvest during the 2014-15 and 2015-16 hunting seasons. U.S. Fish and Wildlife Service, Laurel, Maryland. USA July 2016. 63 pp).

<b>State</b>	<b>Number of active duck hunters</b>	<b>Duck hunter days afield</b>	<b>Total duck harvest</b>	<b>Seasonal duck harvest per hunter</b>
Texas	61,200 ± 21%	309,500 ± 17%	733,700± 12%	12.0 ± 24%
Wisconsin	57,500 ± 12%	386,200 ± 12%	449,300 ± 14%	7.8 ± 19%
Minnesota	57,100 ± 15%	365,600 ± 15%	573,400 ± 13%	10.0 ± 16%
Arkansas	48,600 ± 9%	390,300 ± 11%	945,400 ± 12%	19.4 ± 15%
Louisiana	47,000 ± 11%	308,300 ± 18%	846,300 ± 23%	18.0 ± 25%
California	46,900 ± 12%	373,700 ± 17%	1,266,300 ± 22%	27.0 ± 25%
Michigan	36,400 ± 11%	219,400 ± 14%	317,500 ± 15%	8.7 ± 19%
North Dakota	34,600 ± 7%	179,100 ± 7%	509,300 ± 8%	14.7 ± 11%
North Carolina	31,700 ± 18%	185,200 ± 24%	309,200 ± 20%	9.8 ± 27%
Missouri	30,400 ± 12%	214,800 ± 20%	408,600 ± 21%	13.4 ± 25%
Mississippi Flyway		2,702,700 ± 5%	4,822,700 ± 6%	
United States		5,496,200 ± 3%	10,992,900 ± 4%	

Table 3. Top 10 states in number of **adult goose hunters**, 2015, and number of hunter-days and retrieved goose kill. (from: Raftovich, R.V., S.C. Chandler, and K.A. Wilkins. 2016. Migratory Bird Hunting activity and harvest during the 2014-15 and 2015-16 hunting seasons. U.S. Fish and Wildlife Service, Laurel, Maryland. USA July 2016. 63 pp).

State	Number of active goose hunters	Goose hunter days afield	Total goose harvest	Seasonal goose harvest per hunter
Minnesota	43,700 ± 11%	283,600 ± 17%	143,700 ± 17%	3.3 ± 21%
Wisconsin	42,300 ± 9%	323,100 ± 14%	99,600 ± 14%	2.4 ± 16%
Michigan	37,200 ± 11%	227,500 ± 14%	159,600 ± 16%	4.3 ± 20%
Texas	29,300 ± 21%	93,300 ± 35%	92,600 ± 29%	3.2 ± 36%
California <sup>b</sup>	28,700 ± 11%	182,900 ± 16%	169,100 ± 16%	5.8 ± 19%
North Dakota	28,200 ± 6%	129,700 ± 8%	162,400 ± 13%	5.8 ± 14%
Pennsylvania	22,600 ± 17%	95,000 ± 18%	76,400 ± 26%	3.4 ± 31%
Maryland <sup>b</sup>	22,000 ± 7%	108,700 ± 10%	106,100 ± 13%	4.8 ± 15%
Illinois	21,700 ± 15%	160,700 ± 24%	90,100 ± 27%	4.1 ± 31%
Arkansas	19,800 ± 12%	110,600 ± 20%	86,800 ± 20%	4.4 ± 23%
Mississippi Flyway		1,628,200 ± 6%	913,100 ± 7%	
United States <sup>b</sup>		3,253,100 ± 4%	2,537,500 ± 4%	

<sup>b</sup>. Goose hunter statistics do not include brant hunter statistics for coastal states with brant seasons: Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Rhode Island, Virginia, California, Oregon, Washington, and Alaska.



## HUNTER ACTIVITY AND GOOSE HARVEST DURING THE AUGUST AND SEPTEMBER 2015 EARLY CANADA GOOSE HUNTS IN MINNESOTA



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Minnesota has had statewide September Canada goose seasons since 1999 and began an August Canada goose Conservation Action (hereafter August season) in 2013. The August and September Canada goose seasons in Minnesota were 8-23 August, and 5-22 September, 2015 respectively. The August Season was open in a portion of the state, the Intensive Harvest Zone (IHZ; Fig 1), and the daily bag limit was 10 Canada geese per day with no possession limit. Shooting hours were 1/2-hour before sunrise to 1/2-hour after sunset. During the September season the daily bag limit was 10 Canada geese per day in the IHZ, and 5 geese per day in the rest of the state. Shooting hours were 1/2 hour before sunrise to sunset. Taking of Canada geese was prohibited on or within 100 yards of all surface waters in the Northwest Goose Zone, in the Carlos Avery Wildlife Management Area (Anoka County) and on Swan Lake (Nicollet County). Goose hunters in both the August and September seasons were required to obtain a \$4.00 permit to participate in the seasons. This report documents results of the 2015 August and September goose hunter mail questionnaire survey (Appendix A).

### **METHODS**

In 2013 and 2014, we conducted separate hunter surveys of August and September goose seasons. The September survey also included questions pertaining to the August hunt. The estimates from two years of August surveys were similar enough to the estimates derived from the September survey questions pertaining to the August hunt that we dropped the separate August survey in 2015. Permittees were randomly selected to receive a post-season hunter survey. Questionnaires were sent to 3,100 permit holders following the September season. Questionnaires were individually numbered, and up to 3 questionnaires were mailed to individuals who had not responded. Completed questionnaires were double key-punched to reduce data-entry errors.

The questionnaire asked hunters the number of days hunted, number of geese shot and retrieved, number of geese knocked down and not retrieved, in each of the August and September goose seasons. Hunters were asked to indicate the number of days during that they hunted over water and the number of geese they shot over water during August and September. Finally, the questionnaire asked hunters a series of questions to gauge their satisfaction with the August and September Canada goose hunting seasons in Minnesota and the higher daily bag limit (10/day) used in the Intensive Harvest Zone.

We used the R programming language (ver. 2.9.2; R Development Core Team [RDCT] 2009) to summarize responses to the survey.

## RESULTS AND DISCUSSION

The DNR License Bureau reported that 27,168 Special Canada Goose Season permits were sold by 22 September, 2015. Response rate to the survey was 43%. Among those respondents, 8.3% indicated that they only hunted during the August season, 42.2% hunted in only the September season, 14.8% hunted in both seasons, and 34.7% did not hunt.

Responses from the survey indicate that 6,278 hunters participated in the August hunt (Table 1), while 15,465 participated in the September hunt (Table 2). A total of 21,743 hunters hunted during either the August and/or September early goose season. Hunters shot and retrieved 20,010 Canada geese in the IHZ during the August season, 18,604 Canada geese in the IHZ during September, and 36,272 Canada geese in the remainder of state during September 2015. The total early season Canada goose harvest was 74,886.

We asked hunters how many days they hunted over water and how many days they hunted away from water. A total of 36% of hunters statewide hunted over water in August and September. The survey indicates that 20% of the geese harvested in the two early seasons (14,921 total geese) were harvested by hunters overwater.

We asked hunters how satisfied they were (1=very low to 7=very high) relative to overall hunting experience, number of geese bagged, number of geese seen, and regulations. Results were very similar to the two previous years. Mean satisfaction in 2015 for the August season was: overall experience 4.5 (4.4 in 2014), geese bagged 3.6 (3.5 in 2014), number of geese seen 3.7 (3.9 in 2014), and regulations 4.8 (4.7 in 2014). Mean satisfaction in 2015 for the September season was: overall experience 4.7 (5.1 in 2014), geese bagged 3.8 (4.2 in 2014), number of geese seen 3.9 (4.4 in 2014), and regulations 4.9 (5.0 in 2014).

Finally we asked hunters how they felt about the 10 Canada goose daily bag limit in the Intensive Harvest zone during the August and September seasons. About 3% of respondents felt the limit was too low, 47% of respondents felt the limit was about right, 19% felt the limit was too high, and 30% of respondents had no opinion.

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## LITERATURE CITED

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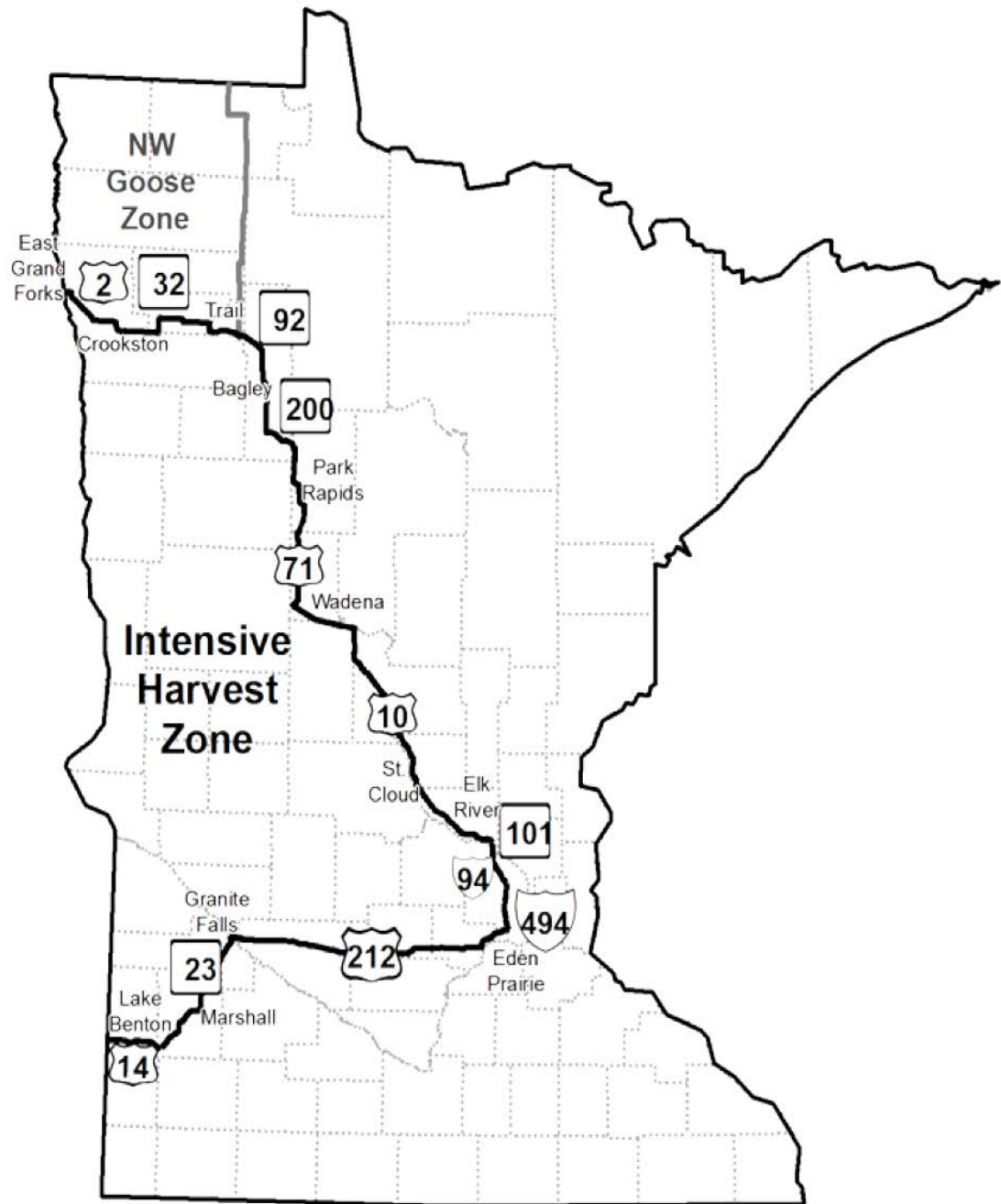


Figure 1. Intensive Harvest Zone in relation to the Northwest (NW) Goose Zone within Minnesota, 2015.

Table 1. Permit sales, hunter activity, and harvest during the August Canada Goose season in Minnesota, 2013-2015.

Parameter	2013	2014	2015
Total permits sold (through August season)	13,740	11,065	10,818
Questionnaires delivered	3,045	3,039	3,036
Useable questionnaires returned	1,400	1,335	1,307
% responding	46.0	43.9	43.1
Days hunted per active hunter	3.1	2.9	3.3
Geese shot and retrieved per active hunter	3.5	3.9	3.2
Unretrieved harvest per active hunter	0.5	1.0	0.4
% unretrieved harvest	12.8	20.4	11.1
EXPANDED:			
Active hunters	6,810	5,500	6,278
Hunter days	21,230	15,870	20,927
Retrieved harvest	23,570	21,280	20,010
Est. unretrieved harvest	3,490	1,430	2,507
Total estimated take	27,060	22,710	22,517

Table 2. Permit sales, hunter activity, and harvest during the September Canada Goose season in Minnesota, 2013-2015.

Parameter	2013	2014	2015
Total permits sold	27,778	29,603	27,168
Questionnaires delivered	3,100	3,039	3,036
Useable questionnaires returned	1,400	1,335	1,307
% responding	46.0	43.9	43.1
Days hunted per active hunter	3.9	3.3	3.6
Geese shot and retrieved per active hunter	4.8	4.1	3.5
Unretrieved harvest per active hunter	0.4	0.4	0.3
% unretrieved harvest	8.4	8.4	7.9
EXPANDED:			
Active hunters	16,840	18,760	15,465
Hunter days	64,970	61,620	56,414
Retrieved harvest	81,230	76,440	54,876
Est. unretrieved harvest	7,440	7,070	4,719
Total estimated take	88,670	83,510	59,595

Table 3. Retrieved harvest estimates by zone during the September Canada Goose season in Minnesota, 2000 – 2009. Total retrieved harvest estimates during the September Canada Goose season in Minnesota, 2010-2012. Total retrieved harvest during the August and September Canada Goose Seasons, combined, in Minnesota, 2013-15.

Year	NW	West	SE	Twin Cities Metro	Remainder	Total Geese Harvested	Number Active Hunters	Geese/ Hunter day	Geese/ Hunter	Permits Sold
2000	2,750	18,909	1,183	15,594	51,685	<b>90,121</b>	33,202	0.63	2.71	45,277
2001	2,047	27,663	538	8,164	62,608	<b>101,021</b>	28,265	0.82	3.57	40,127
2002	1,568	22,075	848	8,504	50,769	<b>83,764</b>	26,089	0.68	3.20	40,002
2003	2,805	17,779	2,357	9,890	48,157	<b>80,988</b>	30,415	0.74	2.66	42,009
2004	4,326	16,843	1,197	11,090	56,480	<b>89,936</b>	29,657	0.80	3.03	42,235
2005	4,888	15,304	1,717	11,139	61,218	<b>94,266</b>	27,865	0.89	3.38	38,051
2006	6,826	17,987	1,461	11,844	53,321	<b>91,439</b>	28,405	0.86	3.22	39,534
2007	7,948	14,952	1,469	11,702	58,243	<b>94,314</b>	25,379	0.91	3.72	37,050
2008	5,530	16,168	2,580	13,656	62,827	<b>100,748</b>	27,392	0.98	3.73	37,252
2009	4,442	10,294	2,023	12,794	48,609	<b>78,151</b>	25,189	0.85	3.10	35,418
2010						<b>107,907</b>	26,848	0.98	4.00	35,817
2011						<b>123,700</b>	26,000	1.21	4.80	34,271
2012						<b>108,300</b>	25,900	0.98	4.20	34,311
2013						<b>104,800</b>	18,570	1.25	5.64	27,778
2014						<b>97,720</b>	20,290	1.26	4.82	29,603
2015						<b>74,886</b>				27,168

Appendix A.



2015 August and / or September Special Canada Goose Season Hunter Survey



You are being asked to provide information to help us evaluate the harvest of Canada geese in Minnesota during August 8-23 or September 5-22, 2015. Your cooperation is important. Please return this survey card even if you did not hunt Canada geese. THANK YOU! Ed Bogges, Director, Division of Fish and Wildlife, MN DNR.

1. Did you hunt during the **August** 8-23 Intensive Harvest Zone Special Canada Goose season?  
 \_\_\_ Yes \_\_\_ No (Please check one.)

If YES, please continue to question 2. If NO, proceed to question 4.

2. Indicate the number of days you hunted and the total number of geese you **personally** shot and retrieved (do not include information from other members in your party).

<i>Goose Season/zone (see map for goose-zone boundaries)</i>	Number of days hunted	Total geese personally shot and retrieved	Total geese personally knocked down but <u>not</u> retrieved
<b>August 8-23 Intensive Harvest Zone</b>			

3. If you hunted geese during the 2015 **August** Canada goose season, how satisfied or dissatisfied were you with the following? (Please circle one response for each.) If you did not hunt this season please skip to question 4.

	Very dissatisfied	Moderately dissatisfied	Slightly Dissatisfied	Neither	Slightly Satisfied	Moderately satisfied	Very satisfied
Goose hunting experience	1	2	3	4	5	6	7
Goose hunting harvest	1	2	3	4	5	6	7
Goose hunting regulations	1	2	3	4	5	6	7
Number of geese seen	1	2	3	4	5	6	7

4. Did you hunt during the **September** 5-22 September Special Canada Goose season?  
 \_\_\_ Yes \_\_\_ No (Please check one.)

If YES, please continue to question 5. If NO, proceed to question 7.

5. Indicate the number of days you hunted and the total number of geese you **personally** shot and retrieved (do not include information from other members in your party).

<i>Goose Season/zone (see map for goose-zone boundaries)</i>	Number of days hunted	Total geese personally shot and retrieved	Total geese personally knocked down but <u>not</u> retrieved
<b>September 5-22 (Intensive Harvest zone)</b>			
<b>September 5-22 (Remainder of State zone)</b>			

6. If you hunted geese during the 2015 **September** Canada goose season, how satisfied or dissatisfied were you with the following? (Please circle one response for each.)

	Very dissatisfied	Moderately dissatisfied	Slightly Dissatisfied	Neither	Slightly Satisfied	Moderately satisfied	Very satisfied
Goose hunting experience	1	2	3	4	5	6	7
Goose hunting harvest	1	2	3	4	5	6	7
Goose hunting regulations	1	2	3	4	5	6	7
Number of geese seen	1	2	3	4	5	6	7

7. Did you personally hunt geese overwater (for example with decoys floating in or along the shore of a wetland or pass shooting next to a wetland) during either the August or September Canada goose season?  
 \_\_\_ Yes \_\_\_ No (If No, please proceed to Question 8.)

If Yes:

How many days did you personally hunt overwater? \_\_\_\_\_ days  
 How many geese did you personally shoot while hunting overwater? \_\_\_\_\_ geese

8. The Canada goose daily bag limit in the Intensive Harvest zone during the August and September seasons this year was 10 Canada geese per day. Which one statement describes how you feel about the daily goose bag limit used in the Intensive Harvest zone?

- The daily limit was too low.
- The daily limit was about right.
- The daily limit was too high.
- No opinion.

If you have general comments you may write them here (continue on back if necessary). If you have questions and desire a specific response, please contact your local DNR Wildlife Office or the DNR Information Center (Minnesota DNR, 500 Lafayette Road, St. Paul, MN 55155-4020, 1-888-646-6367). Thank you.

**Comments:**



## 2016 LIGHT GOOSE CONSERVATION ORDER HARVEST IN MINNESOTA

Steve Cordts, Wildlife Populations and Regulations Unit  
Margaret Dexter, Wildlife Populations and Research Unit

### INTRODUCTION

This report documents results of the 2016 Light Goose Conservation Order hunter mail questionnaire survey.

### METHODS

Minnesota held a light goose Conservation Order harvest from 1 March - 30 April 2016. Participants were required to obtain a \$3.50 permit. No other license, stamp or permit was required. Shooting hours were 1/2 hour before sunrise to 1/2 hour after sunset. There were no daily or possession limits. Use of electronic calls and unplugged shotguns was allowed.

All permit holders were sent a questionnaire after the season. Survey questions are listed in Figure 1.

### RESULTS AND DISCUSSION

A total of 1,143 permits were issued and 491 responses (43 %) to the questionnaire were obtained (Table 1). In calculating harvest estimates, we assumed that the 652 non-respondents participated in the conservation action and took light geese in the same manner as respondents. Five hundred thirty four people attempted to take light geese during the 61-day conservation order period. Active participants pursued light geese for 2,605 days and 2,121 light geese were shot and retrieved. This was an average retrieved take of 4 geese per active participant. Another 215 light geese were estimated wounded and not retrieved.

### ACKNOWLEDGEMENTS

J. Giudice, MNDNR Biometrics Unit analyzed all data for this report.

Figure 1. Light Goose Conservation Order hunter mail questionnaire, 2016.

**MINNESOTA 2016 LIGHT GOOSE HARVEST SURVEY**

For the Period of March 1 - April 30, 2016 ONLY

You are being asked to provide information to help us evaluate the harvest of light geese (snow, blue, and Ross' geese) in Minnesota during March 1 - April 30, 2016. Your cooperation is important. Please return this survey card even if you did not hunt light geese. Please answer the following questions to the best of your ability. **Answer only for your Minnesota 2016 hunting experience.** THANK YOU! Lou Cornicelli, Wildlife Research Program Manager, Division of Fish and Wildlife, MN DNR.

1. Did you hunt light geese in Minnesota during March 1 - April 30, 2016? Yes / No  
If NO, please disregard all remaining questions and return this survey card.
2. How many days did you hunt light geese in Minnesota during March 1 - April 30, 2016?  
\_\_\_\_\_
3. How many light geese did you personally shoot and retrieve in Minnesota? \_\_\_\_\_
4. How many light geese did you personally shoot, but were UNABLE to retrieve? \_\_\_\_\_

Table 1. Summary of Light Goose Conservation Order harvest in Minnesota, 2004 – 2016.

Statistic	Year												
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total permits sold	1,424	1,383	1,363	1,292	1,406	1,670	952	994	1,048	1,405	1,278	1,141	1,143
Useable returns	1,095	998	955	921	910	1,057	671	659	675	810	759	520	491
Response rate (%)	77.0	72.0	70.0	71.0	65.0	63.0	72.3	67.1	65.3	58.3	60.0	46	43
Active hunters (%)	48.5	44.7	37.3	39.8	54.9	66.0	40.8	45.7	56.9	54.9	44.0	50	47
Estimated total hunters	690	618	516	514	773	1,103	389	455	600	770	560	569	534
Estimated hunter days	3,372	2,643	2,665	2,302	3,404	4,647	1,475	1,830	2,270	3,070	2,580	2,434	2,605
Mean days/hunter	4.9	4.3	5.2	4.5	4.4	4.2	3.8	4.0	3.8	4.0	4.6	4	5
Estimated harvest (shot & retrieved)	2,735	1,395	1,360	1,786	2,409	4,366	559	1,554	2,620	2,430	2,880	3,266	2,121
Mean harvest/hunter	4.0	2.3	2.6	3.5	3.1	4.0	1.4	3.4	4.4	3.2	5.1	6	4
Estimated crippling losses	315	150	163	172	302	640	70	145	210	370	210	349	215
Percent using unplugged guns	48.2	44.0	42.3	43.6	46.7	46.8	44.9	44.2	43.0	49.4	48.8	NA	NA
Est. number hunters using unplugged guns	333	272	215	224	361	516	175	201	260	380	270	NA	NA
Est. number geese <b>shot</b> with unplugged guns	1,385	777	689	1,032	1,275	2,413	348	742	1,510	1,670	2,060	NA	NA
Est. harvest with shell 4-5-6	491	269	287	277	339	822	131	311	460	620	770	NA	NA
Percent using electronic calls	19.3	17.8	14.4	17.1	19.1	23.5	25.9	21.3	22.2	24.5	27.8	NA	NA
Est. number hunters using e-calls	133	110	73	88	148	260	101	97	130	190	160	NA	NA
Est. harvest while using e-calls	326	268	280	329	566	1,171	192	531	460	620	1,710	NA	NA
Percent hunting 1/2-hr after sunset	38.4	42.7	43.9	38.3	42.3	43.1	39.7	39.7	42.4	33.4	36.2	NA	NA
Est. number hunting after 1/2-hr sunset	265	264	223	197	326	475	154	180	250	260	200	NA	NA
Est. harvest 1/2-hr after sunset	311	242	246	209	511	713	87	238	240	260	550	NA	NA



## MINNESOTA'S WILD TURKEY HARVEST – 2016

Steve Merchant, Wildlife Populations and Regulations Manager

This report summarizes the fall 2015 and spring 2016 Minnesota wild turkey harvest information. The fall turkey season was 30 days in length (October 3- November 1) and allowed for an unlimited number of hunters to take one wild turkey of either sex.

Significant changes were made to the spring turkey season structure in 2016. The new structure for 2016 spring turkey season was intended to regulate harvest and distribute hunting pressure by allocating permits across 12 permit areas (Figure 1), however the 12 permit areas now include the entire state. Previous to 2016, much of the northcentral and northeastern portions of the state were not open to turkey hunting. There are now only 6 time periods using a quota system for the first 2 time periods. In 2015 there were 8 time periods, with the first 3 using a quota. In 2016 the first 5 time periods were all one week long, while the last time period was 14 days long, and all unsuccessful licensed turkey hunters from the previous time periods could hunt during this final time period. The first time period began on April 13, and the final time period concluded on May 31.

During spring, adult hunters interested in pursuing turkeys for the first 2 time periods were required to apply for a permit through a lottery system, but youth hunters, and for the first time licensed archery hunters, were able to purchase a permit over-the-counter, and hunt in any permit area for the entire season. Preference for this lottery system was determined by the number of years a valid but unsuccessful application had been submitted since last receiving a permit. Hunters could apply individually or in a group of up to 4 hunters. Successful applicants were notified through U.S. Mail and unsuccessful applicants were awarded a preference point.

Alternatively, firearms hunters could simply purchase a permit over-the-counter for one of the last 4 time periods. The goal of this new season structure is to provide additional quality turkey hunting opportunities while still managing hunter interference rates by maintaining 12 permit areas and 2 quota time periods.

### ***Fall 2015 Turkey Season***

The number of permits issued to hunters decreased slightly from 8,339 permits in 2014 to 8,210 in 2015 (Table 1, Figure 2). Hunters still needed to select and hunt within one of the 12 permit areas, except for youth who could hunt in all permit areas. There were 1,124 turkeys harvested during fall 2015, which was a 1% increase from 2014 (Table 1). Hunter success rates in 2015 remained similar to 2014 (13.7% vs. 13.6% respectively), and remained below the 5-year average (15%).

### ***Spring 2016 Turkey Season***

There were 49,991 permits issued during the spring season, including 11,329 general lottery and landowner permits, 11,449 youth permits, 10,343 archery permits, and 16,870 surplus over-the-counter permits (Table 6). The number of youth permits increased from 2015 by 1% (116). Archery permits increased by 105% (5291), likely a result of the expanded opportunity that allowed archers to hunt the entire season. Both lottery (- 13.4%) and surplus gun permits (- 1.9%) purchased decreased from 2015. The total number of permits purchased increased from 2015 by 7.1% (3,316), primarily as a result of archery license sales more than doubling. Hunters registered 12,313 turkeys (Tables 3, 5, and 6), which was the second highest harvest recorded and above the 5-year average (11,442; Figure 3). The winter of 2015-16 was again mild, and likely was not a significant mortality factor beyond normal winter mortality for turkeys. Spring weather was generally warm, and spring "green-up" was earlier than normal.

Table 1. Permits available and issued, applicants, registered harvest, and hunter success rates for fall wild turkey seasons 1990 – 2015, Minnesota.

Year	Permits available	Applicants	Permits issued	Registered harvest	Hunter success (%) <sup>a</sup>
1990	1,000	4,522	951	326	34
1991	2,200	2,990	2,020	552	27
1992	2,200	2,782	2,028	588	29
1993	2,400	3,186	2,094	605	29
1994	2,500	3,124	2,106	601	29
1995	2,500	3,685	2,125	648	30
1996	2,500	4,453	2,289	685	30
1997	2,580	4,574	2,378	698	29
1998	2,710	4,526	2,483	828	33
1999	2,890	5,354	2,644	865	33
2000	3,090	5,263	2,484	735	30
2001	2,870	4,501	2,262	629	28
2002	3,790	5,180	2,945	594	20
2003	3,870	5,264	2,977	889	30
2004	4,380	5,878	3,277	758	23
2005	4,410	4,542	2,978	681	23
2006	4,290	4,167	2,802	618	22
2007	4,490	4,464	2,837	695	24
2008	7,560	5,834	4,981	1,187	24
2009	9,330	7,738	5,019	1,163	23
2010	10,430	6,869	6,607	1,353	20
2011	10,430	3,538	5,382	953	18
2012	Unlimited	N/A	10,779	1,753	16
2013	Unlimited	N/A	8,193	1,078	13
2014	Unlimited	N/A	8,339	1,137	14
2015	Unlimited	N/A	8,210	1,124	14

<sup>a</sup> Success rates not adjusted for non-participation.

Table 2. Permits issued, registered harvest, and hunter success during the 2016 Minnesota Spring wild turkey season.

Permit area	Regular permits issued <sup>a</sup>	Total registered harvest <sup>b</sup>	Regular gun harvest <sup>c</sup>	Regular gun success rates
501	6,496	2,974	2,319	35.7%
502	563	194	129	22.9%
503	3,076	1,493	1,039	33.8%
504	704	361	239	33.9%
505	2,186	1,040	776	35.5%
506	1,029	409	271	26.3%
507	6,172	3,120	2,067	33.5%
508	3,166	1,453	995	31.4%
509	206	166	89	43.2%
510	1,831	1,010	621	33.9%
511	104	42	19	18.3%
512	78	50	24	30.8%

<sup>a</sup> Permits issued for the Camp Ripley disabled veterans hunt, archery, and youth permits were not included.

<sup>b</sup> Total harvest for all license types.

<sup>c</sup> All lottery, military, and surplus permit harvest, excluding youth and archery licenses.

Table 3. Permits available, permits issued, registered harvest, and relative success rates from 1978 – 2016 for all Spring wild turkey hunting seasons in Minnesota.

Year	Permits			Registered harvest	Success (%) <sup>a</sup>
	Available	Issued	Issued (%)		
1978	420	411	97.9	94	23
1979	840	827	98.5	116	14
1980	1,200	1,191	99.3	98	8
1981	1,500	1,437	95.8	113	8
1982	2,000	1,992	99.6	106	5
1983	2,100	2,079	99.0	116	6
1984	3,000	2,837	94.6	178	6
1985	2,750	2,449	89.1	323	13
1986	2,500	2,251	90.0	333	15
1987	2,700	2,520	93.3	520	21
1988	3,000	2,994	99.8	674	23
1989	4,000	3,821	95.5	930	24
1990	6,600	6,126	92.8	1,709	28
1991	9,170	8,607	93.9	1,724	20
1992	9,310	9,051	97.2	1,691	19
1993	9,625	9,265	96.3	2,082	23
1994	9,940	9,479	95.4	1,975	21
1995	9,975	9,550	95.7	2,339	25
1996	12,131	10,983	90.5	2,841	26
1997	12,530	11,610	92.7	3,302	28
1998	14,035	13,229	94.3	4,361	33
1999	18,360	16,387	89.3	5,132	31
2000	20,160	18,661	92.6	6,154	33
2001	22,936	21,404	93.3	6,383	30
2002	24,136	22,607	93.7	6,516	29
2003	25,016	22,770	91.0	7,666	34
2004	27,600	25,261	91.5	8,434	33
2005	31,748	27,638	87.1	7,800	28
2006	32,624	27,876	85.4	8,241	30
2007 <sup>b</sup>	33,976	28,320	83.4	9,412	33
2008 <sup>b</sup>	37,992	31,942	84.1	10,994	34
2009 <sup>b</sup>	42,328	36,193	85.5	12,210	34
2010 <sup>b</sup>	55,982	46,548 <sup>c</sup>	83.0	13,467	29
2011 <sup>b</sup>	Unlimited	43,521 <sup>c</sup>	N/A	10,055	23
2012 <sup>b</sup>	Unlimited	38,906 <sup>c</sup>	N/A	11,325	29
2013 <sup>b</sup>	Unlimited	34,281 <sup>c</sup>	N/A	10,390	30
2014 <sup>b</sup>	Unlimited	43,305 <sup>c</sup>	N/A	11,447	25
2015 <sup>b</sup>	Unlimited	41,623 <sup>c</sup>	N/A	11,734	28
2016 <sup>b</sup>	Unlimited	39,648 <sup>c</sup>	N/A	12,313	31

<sup>a</sup> Success rates not adjusted for non-participation

<sup>b</sup> Youth hunt data included

<sup>c</sup> Permits issued to archery hunters were not included. There were 2,462, 3,911, 4,550, 4,899, 5052, and 10,343 permits issued to archers in 2011, 2012, 2013, 2014, 2015, and 2016 respectively.

Table 4. Permits available and issued by license type (resident and non-resident) and time period for the Spring 2016 wild turkey season, Minnesota.

Time period	Permits available	General lottery <sup>a</sup>	Surplus	Youth <sup>b</sup>	Archery <sup>c</sup>
A: Apr 13-19	6,983	6,017	179	X	X
B: Apr 20-26	6,983	5,233	1,024	X	X
C: Apr 27-May 3	Unlimited	7	8,217	X	X
D: May 4-10	Unlimited	4	3,978	X	X
E: May 11-17	Unlimited	0	602	X	X
F: May 18-31	Unlimited	0	245 <sup>d</sup>	X	X
Total <sup>a</sup>	Unlimited	11,329	16,870	11,449	10,343

<sup>a</sup> Includes landowner licenses.

<sup>b</sup> Youth permits were valid for all time periods.

<sup>c</sup> Archery permits were valid for all time periods.

<sup>d</sup> Number of surplus licenses sold for this time period. Actual number of hunters in unknown because all unsuccessful hunters from previous time periods could hunt.

Table 5. Total harvest by time-period, Spring 2016 wild turkey season, Minnesota.

Time period	Total harvest	Percent harvest (%)
A	3,997	32.5
B	2,857	23.2
C	2,487	20.2
D	1,330	10.8
E	611	4.9
F	1,031	8.4
Total	12,313	100

Table 6. Total permits issued, harvest and success rate by type of permit, Spring 2016 wild turkey season, Minnesota.

	Total permits sold	Harvest	Success (%) <sup>a</sup>
Lottery	11,329	4,245	37
Surplus	16,870	4,344	26
Youth	11,449	2,243	20
Archery	10,343	1,481	14
Total	49,991	12,313	25

<sup>a</sup> Success rates not adjusted for non-participation.

# Wild Turkey Permit Areas

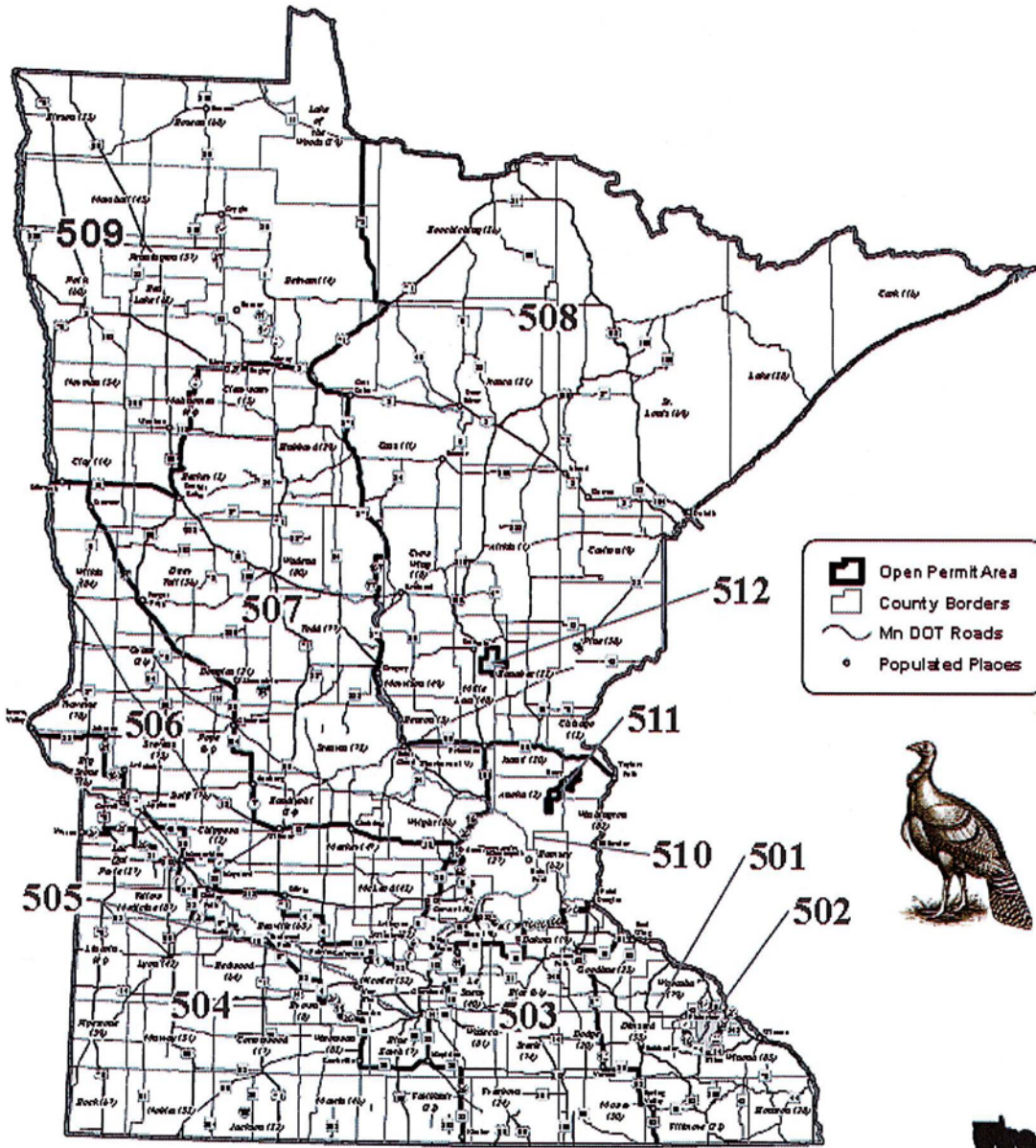


Figure 1. Permit areas open for hunting during the 2016 Spring turkey hunting season, Minnesota.

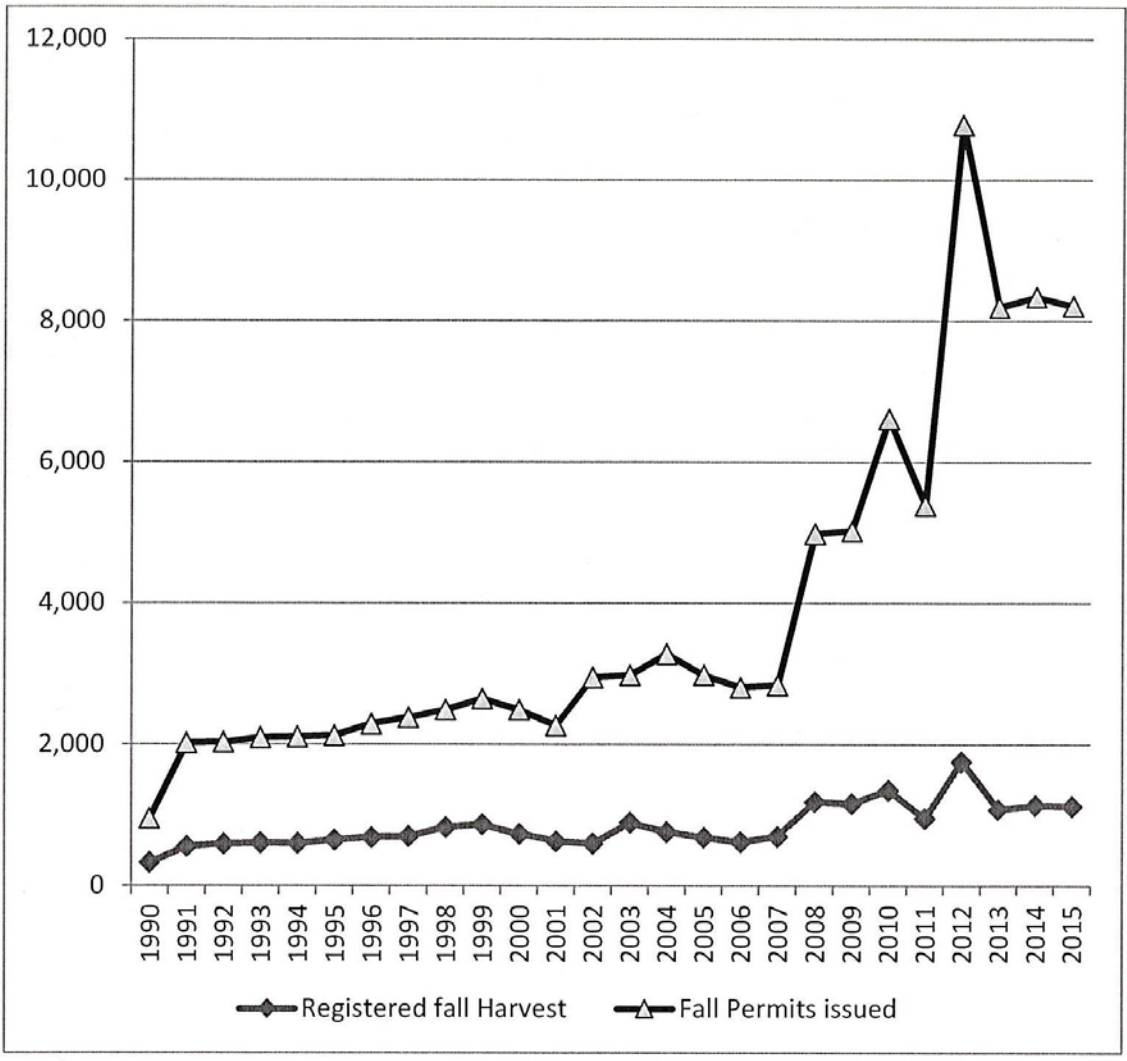


Figure 2. Permits issued and registered harvest for fall wild turkey seasons, 1990-2016, Minnesota.

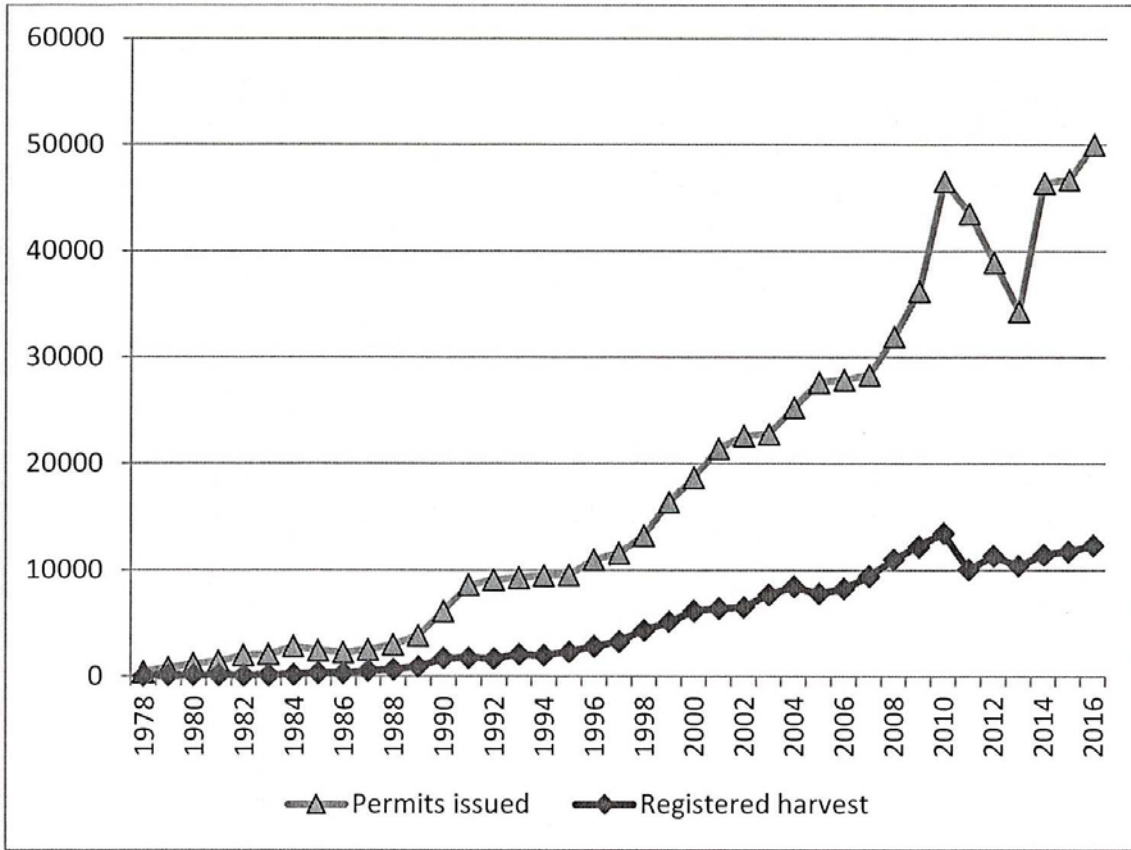


Figure 3. Permits issued and registered harvest for Spring wild turkey seasons, 1978- 2016, Minnesota.



## 2015 MINNESOTA PRAIRIE-CHICKEN HARVEST SURVEY

Charlotte Roy, Forest Wildlife Populations and Research Group

### SUMMARY OF FINDINGS

The Minnesota DNR conducts a postcard survey of Greater Prairie-chicken (*Tympanuchus cupido pinnatus*) hunters each year to estimate hunter numbers and harvest, and to evaluate hunter success and satisfaction. In 2015, 112 hunters were estimated to have gone afield and harvested 103 prairie-chickens and 22 sharp-tailed grouse (*Tympanuchus phasianellus*) during prairie-chicken hunts. Hunter success (0.55) and satisfaction (3.6 on a scale of 1-5) were similar to recent years and consistent with improvement following changes to the permit areas and season (i.e., longer length and earlier dates) in 2013. Nevertheless, we included a question this year to revisit season timing, due to comments received in recent surveys. Results indicated that hunter preferences for season timing are split, but that most respondents (56%) prefer the season to open the last Saturday of September rather than the Saturday nearest October 20 (44%), in support of the current season.

### INTRODUCTION

Prairie-chicken (*Tympanuchus cupido pinnatus*) hunting in Minnesota was closed in 1943 because of population declines resulting from habitat loss. However, hunting was reopened in 2003 because prairie-chicken populations were considered robust enough to allow a limited season. During 2003-2005, a limited-entry 5-day hunting season was opened in 7 permit areas in western Minnesota. Permits were awarded through a lottery system, with a bag and season limit of 2 prairie-chickens. In 2006, 4 new permit areas were added and the number of permits was increased in some areas. Surplus licenses were offered for sale after the lottery for the first time in 2011, and in 2013, the permit areas were revised again. These most recent changes eliminated 801A and 802A, modified 803A to include portions of the former 802A and 803A, and added 812A and 813A to expand hunting eastward (Figures 1 and 2). The number of available permits was also reduced in some permit areas to more closely reflect opportunities to harvest prairie-chickens in each permit area. The season was lengthened from 5 days to 9 days to provide hunting opportunity on >1 weekend and was moved from mid-October to open in late-September. The earlier season was an attempt to improve hunter success and satisfaction by providing hunting opportunities before pheasant season opened (to reduce hunter interference and flushing distance). These changes were based on hunter comments received by DNR Wildlife Managers during prior years and input received during a public input survey during March 2013. In 2015, the prairie-chicken season opened 26 September and closed 4 October.

Prairie-chicken hunting in Minnesota is a privilege that is only available to residents. Landowners or tenants of  $\geq 40$  acres of grassland within a permit area are eligible to apply for a landowner lottery that awards  $\leq 20\%$  of the available permits in a permit area. Extra landowner permits are then included with the regular lottery. Any landowner not receiving a permit through the landowner lottery can participate in the regular lottery. The lottery gives preference to persons that have applied for a permit unsuccessfully for the most years. Upon selection, lottery winners must purchase a prairie-chicken hunting permit before hunting. Although sharp-tailed grouse (*Tympanuchus phasianellus*) hunting is closed south of U.S. Highway 2 (i.e., in

permit areas 804A–813A), licensed prairie-chicken hunters may also take sharp-tailed grouse while hunting prairie-chickens. Harvest is documented each year in this annual report.

## **METHODS**

Lottery applicants, winners, and permit purchasers were recorded by the Electronic Licensing System (ELS). Registration of harvested birds has not been mandatory except during 2003–2006, so I determined harvest through a postcard survey. I sent a postcard to each lottery winner the week before hunting season. Three weeks later I sent another postcard to people who had not yet responded. Postcards contained 7 questions: did you purchase a permit, did you hunt, and if so, for how many days, how many prairie-chickens did you harvest, how many sharp-tailed grouse did you harvest during prairie-chicken hunts, how satisfied were you (on a scale of 1–5), and do you prefer a season opener on the last Saturday of September or the Saturday nearest October 20?

Only responses from lottery winners who purchased a hunting permit were considered in the analysis. I compared responses from the first mailing to responses from the second mailing to examine possible nonresponse bias. Corrections were made to account for harvest of non-respondents, based on the answers of respondents. I estimated the number of hunters, birds harvested, birds per harvester, and hunter success for each permit area. Average hunter satisfaction was determined for both successful and unsuccessful hunters, as well as a combined mean. Responses received prior to 21 December were included in this report.

## **RESULTS & DISCUSSION**

The combined quota for the 11 permit areas during 2015 was 126 permits, and 271 individuals applied in the lottery (Table 1). Of the 124 lottery winners, 110—including 4 landowners—later purchased a permit. Only 1 permit area (813A) had fewer applicants than permits available, and all 4 surplus permits were purchased by lottery applicants that did not win in other permit areas, for a total of 114 permit purchasers. The hunters who purchased surplus permits were not included in the survey sample.

Ninety-two permit purchasers (85%,  $n = 108$ ) responded to the survey and 2 surveys were undeliverable; 74 (69%) responded to the first mailing and 18 (17%) to the second mailing. This response rate is slightly lower than survey response rates during 2012 (95%), but similar to 2010 (84%), 2011 (90%), 2013 (83%), and 2014 (87%). In contrast to 2013, we did not detect a strong response bias between the first and second mailings. Although respondents to the first mailing were slightly more likely than respondents to the second mailing to have hunted (99% vs. 94% of respondents), they hunted a similar number of days (2.1 vs. 2.9), reported harvesting prairie-chickens at similar rates (59% vs. 47%), reported harvesting a similar number of chickens (1.0 vs. 0.8 birds per hunter) and sharp-tailed grouse (0.2 vs. 0.3 birds per hunter), and reported similar satisfaction (mean 3.7 vs. 3.4, median 4 vs. 3), with 78% and 82% of respondents reporting satisfaction scores  $\geq 3$ , respectively. Thus, I combined responses from both mailings this year for the analysis.

Ninety respondents reported that they hunted prairie-chickens (Table 2). I estimated the total number of hunters to be 112 (i.e., purchasers who went afield) after accounting for hunting by non-respondents. Hunters reported harvesting 87 prairie-chickens and total harvest after accounting for non-respondents was estimated as 103 prairie-chickens. An estimated 62 hunters bagged  $\geq 1$  chicken. Survey respondents reported harvesting 22 sharp-tailed grouse while hunting prairie-chickens from permit areas 803A, 804A, and 805A (Figure 1). Although successful hunters reported higher average satisfaction (4.2) than respondents that were not successful (2.8), satisfaction of prairie-chicken hunters was high overall.

Prairie-chicken hunter success and satisfaction during 2015 was similar to 2013 and 2014 and was consistent with improvements following season changes (Table 3). Regulations were changed in 2013 in an attempt to improve hunter success and satisfaction, and survey responses indicated that this was achieved. Write-in comments about the longer (9-day) season with 2 weekends were favorable. Write-in comments about the timing of the season in 2014 included numerous comments indicating a preference for the former, later season (15% of respondents including non-purchasers), compared to 1% of respondents that commented that they preferred the earlier season. Although the 2013 Wildlife Public Input Survey asked specifically whether a season opening on the last Saturday in September was preferred to the opener on the Saturday nearest Oct. 20, and the majority of respondents indicated a preference for the earlier season (64% respondents who expressed an opinion supported the earlier season), preferences of prairie-chicken hunters might change over time. So in 2015, we again asked hunters about their preferences for the timing of the season. In reply, 56% of respondents indicated a preference for the earlier season, and 44% preferred a later season. Supporters of the early season indicated that the birds were less wary early in the season and pheasant hunting did not affect the hunt. Reasons provided in support of a later season included cooler weather for hunters and dogs, better plumage on birds, fewer standing crops, opportunity to harvest pheasants while hunting chickens, and no conflict with the waterfowl opener. Clearly, the survey indicates that prairie-chicken hunters are split in their preferences for season timing, but that the current season meets the timing preferences of the majority of responding prairie-chicken hunters.

## **ACKNOWLEDGEMENTS**

I would like to thank Laura Gilbert for preparing and mailing the postcards and entering data. I would also like to thank Mike Larson for commenting on the report and Jason Abraham for sharing the 2013 Wildlife Public Input Survey results.

Table 1. Prairie-chicken hunt lottery applicants, winners, and hunting permit purchasers in Minnesota during 2015.

Permit area	Permits available	No. of applicants	Lottery winners		Permit purchasers <sup>a</sup>		Surplus purchasers <sup>c</sup>
			No. <sup>b</sup>	Proportion	No.	Proportion	
803A	10	21	10	0.48	10	1.00	0
804A	12	19	12	0.63	11	0.92	0
805A	12	64	14	0.22	13	0.93	0
806A	12	33	12	0.36	7	0.58	0
807A	20	31	20	0.65	18	0.90	0
808A	15	28	15	0.54	15	1.00	0
809A	15	18	15	0.83	13	0.87	0
810A	15	23	15	0.65	12	0.80	0
811A	5	11	5	0.45	5	1.00	0
812A	5	22	5	0.23	5	1.00	0
813A	5	1	1	1.00	1	1.00	4
All	126	271	124	0.46	110	0.89	4

<sup>a</sup> Lottery winners who purchased a hunting permit.

<sup>b</sup> The number of permits may exceed the quota when the last applicant selected in the lottery belongs to a hunting party.

<sup>c</sup> Number of people purchasing a surplus permit after the lottery because the permit quota was not met during the lottery.

Table 2. Prairie-chicken harvest in Minnesota during 2015.

Permit area	No. of hunters <sup>a</sup>		Birds harvested		Birds per harvester <sup>b</sup>	Success rate <sup>c</sup>
	Self-reported	Estimated	Self-reported	Estimated		
803A	7	10	10	14	1.6	0.90
804A	10	11	2	2	2.0	0.09
805A	11	12	15	16	1.6	0.83
806A	6	7	9	11	1.8	0.86
807A	15	18	17	20	1.8	0.61
808A	12	15	12	15	1.7	0.60
809A	12	13	9	10	2.0	0.38
810A	8	11	5	7	1.2	0.55
811A	3	5	0	0	NA	0
812A	5	5	8	8	1.6	1.0
813A	1	5	0	0	NA	0
All	90	112 <sup>d</sup>	87	103 <sup>d</sup>	1.7 <sup>d</sup>	0.55 <sup>d</sup>

<sup>a</sup> Permit purchasers who hunted.

<sup>b</sup> Estimated number of birds harvested per successful hunter.

<sup>c</sup> Proportion of estimated hunters harvesting  $\geq 1$  prairie-chicken.

<sup>d</sup> Assumed that non-respondents were represented by respondents.

Table 3. Summary of prairie-chicken hunting in Minnesota during 2003–2015.

Year	Permits		Hunters <sup>a</sup>	Birds harvested	Success rate <sup>b</sup>	Hunter satisfaction <sup>c</sup>
	available	Applicants				
2003	100	853	92	130	0.75	4.4
2004	101	759	87	58	0.45	3.6
2005	110	500	86	94	0.63	4.0
2006	182	512	149	109	0.49	3.6
2007 <sup>d</sup>	187	519		122	0.53	
2008	186	535	137	133	0.58	3.9
2009	186	512	143	118	0.52	3.4
2010	186	421	136	78 <sup>e</sup>	0.32	3.0
2011	186	264	138	103	0.45	3.4
2012	186	298	158	86	0.39	3.4
2013	126	277	93 <sup>f</sup>	96 <sup>f</sup>	0.60 <sup>f</sup>	3.7 <sup>f</sup>
2014	126	305	102	95	0.54	3.7
2015	126	271	112	103	0.55	3.6

<sup>a</sup> Estimated number who went hunting, not permit purchasers.

<sup>b</sup> Proportion of hunters harvesting  $\geq 1$  prairie-chicken.

<sup>c</sup> Mean on a scale of 1–5.

<sup>d</sup> A hunter survey was not conducted during 2007; results are from the Electronic Licensing System, which documented 150 permit purchasers.

<sup>e</sup> One hunter reported harvesting 10 prairie-chickens in 2010.

<sup>f</sup> Assumed that non-respondents were represented by respondents in the second mailing in 2013.

Figure 1. Prairie-chicken hunting permit area boundaries in northwestern Minnesota during 2013 – 2015 (top) compared to 2012 (bottom). County boundaries are indicated by dashed lines. Permit areas 812A and 813A were added, 801A was eliminated, and 802A and portions of 803A were combined into a revised permit area 803A.

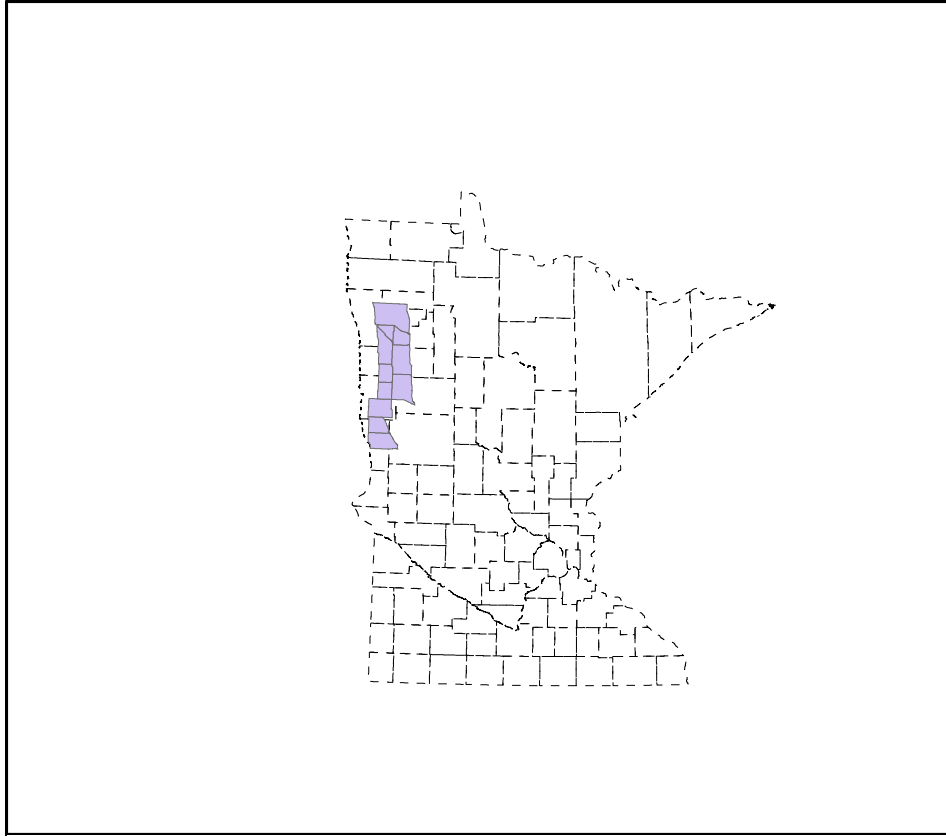


Figure 2. Northwestern location of prairie-chicken hunting permit areas within the state relative to county boundaries (dashed lines).



## 2015 MINNESOTA BEAR HARVEST REPORT

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### INTRODUCTION

The Minnesota bear range is divided into 11 bear management units (BMUs). Each has a separate quota on hunting licenses, and hunters must enter a lottery (based on preference points) to obtain a license. Outside the primary bear range, where bear depredation to crops is a primary concern, license sales are unlimited (no-quota area), and hunters can purchase licenses right up to and through the season, over the counter. In all areas the season runs from September 1 through mid-October. About 80% of hunters use bait. This report summarizes status and trends in bear hunting and harvests.

### METHODS

Successful hunters must register their bears, either electronically at designated registration stations or by internet or phone. Stations are not staffed by DNR personnel. Harvest data are a simple tally of these registrations. Hunters also are required to submit a tooth from harvested bears, which is used to estimate age, and thus harvest age structure. Tooth envelopes must be acquired at registration stations.

### RESULTS

#### *Permits, licenses, harvest, and success rates*

Permit applications for bear licenses has stabilized at 18–19,000 (Table 1). Permit availability has remained constant for the past 3 years. The low permit availability has driven up sales of no-quota licenses, which were the highest on record in 2015. The higher number of hunters combined with a high success rate resulted in a higher harvest this year than the past 2 years. Hunting success is affected by numbers of hunters (i.e., competition) (Fig. 1), food supply (affecting bears' attraction to baits), and density of bears.

#### *Quota zone permits and licenses*

The number of available quota zone permits remained the same for all Bear Management Units (BMUs, see Fig. 2), since 2013, except for a slight reduction in BMU 12 (Table 2). This was the 5th year of a system whereby licenses for the quota zone that were not purchased by permittees selected in the lottery could be purchased later as surplus. BMU 22 (BWCAW) remained under-subscribed even after these surplus sales (Table 3).

#### *Quota zone lottery*

As permit allocations have been reduced, the percentage of 1<sup>st</sup>-year applicants drawn in the lottery diminished (Table 4). In 2011, some 1<sup>st</sup>-year applicants (preference level 1) were drawn in all but 3 BMUs. In 2013–2015, 1<sup>st</sup>-year applicants were drawn only in BMU 22 (BWCAW). In 2015, no hunters with preference level 2 were drawn in 6 of 11 BMUs, and in BMU 45, no

preference level 3 hunters were drawn. This is the first time this has occurred since the lottery system was instituted in 1982.

### ***Harvest by BMU***

In 2015, most BMUs had higher harvests than in 2014, although notably BMU 13 had the lowest since 1988 and BMU 41 had a record low harvest (for the second year in a row)(Table 5). The no-quota harvest was fairly normal. The percent of the total statewide harvest contained within the no-quota zone has increased with reduction of quota zone permits, reaching a record in 2015 (27%) (Fig. 3). Most notable in 2015 was a statewide harvest sex ratio of 66% male (the highest ever); four BMUs had sex ratios exceeding 70% male.

### ***Hunting success by BMU***

Hunting success was generally higher in 2015 than in 2014 (Table 6). Success was especially high (40% or more) in BMUs 12 (following a very low success rate in 2014), 24, 25, and 31. It was also a record-high success (for second year in a row) in BMU 45. For the quota zone as a whole, success rate was highest since the last food failure year of 1995. Success rate was more normal in the no-quota zone. However, estimating success in the 3 no-quota BMUs (Fig. 2) remains difficult, as it is based on where hunters indicated they planned to hunt when they purchased their license, and many of these hunters (>100) chose places within the quota zone.

### ***Harvest by date***

During years of normal fall food abundance, about 70% of the harvest occurs during the 1<sup>st</sup> week of the bear season, and ~83% occurs by the end of the 2<sup>nd</sup> week (Table 7). In the past 3 years, a low percentage of the harvest occurred in the first week: only 58% occurred in the first week of the 2015 harvest, normally indicative of abundant foods (which was not the case, but it was especially warm).

### ***Predictions of harvest***

The 2015 harvest was about 500 bears lower than expected, based on regression of harvest as a function of hunter numbers and the fall food productivity index (Fig. 4). This regression is particularly strong (and has accurately predicted previous harvests) when only the past 15 years are considered. The 2015 under-harvest (compared to this prediction) is particularly evident for the quota zone.

### ***Harvest sex ratios***

Sex ratios of harvested bears reflect both the sex ratio of the living population (which varies with harvest pressure) as well as the relative vulnerability of the sexes to hunters (which varies with natural food conditions and hunter density). In general, harvest sex ratios favoring males (the more vulnerable sex, and hence the minority sex in the living population) provide more resilience to the population. Harvest sex ratios within BMUs varied considerably year-to-year over the past 2 decades: only BMU 51 showed a significant trend (increasing percent males)(Fig. 5). BMU 26 had >60% males in past 4 of 5 years. BMUs 12 and 13, which adjoin, showed sharply opposite trends since 2010.

### ***Harvest ages***

Long-term declining trends in median ages of harvested females were evident in BMUs 41, 24, 25, and 51 (Fig. 6). These likely contributed most to the long-term decline in the median age of harvested females statewide (Fig. 7). However, median ages of harvested females increased in nearly all BMUs in 2015, and the proportion of the harvest composed of 1–2 year-olds declined (Fig. 8). Median ages of harvested males have been relatively stable for 2 decades, but have increased the last 2 years.

### ***Submission of bear teeth for aging***

Ages of harvested bears are now used as the principal means of monitoring population trends. Although hunters are required to submit a tooth from their harvested bear, >25% have not complied. "Violation notices" were sent to non-compliant hunters in 2014, which seems to have spurred a much better compliance (81%) in 2015 (Fig. 9). A "reminder" notice was also sent in 2015 (yielding a compliance of 91%). Since 2013, hunters could register by phone or internet, and pick up a tooth envelope later: in the past, these hunters had much poorer compliance with tooth submission than hunters who registered their bear at a registration station, but their compliance improved considerably this year, for all registration methods and for all BMUs (Fig. 10).

Table 1. Bear permits, licenses, hunters, harvests, and success rates, 1995–2015.

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Permit applications	29922	30405	27353	30245	29384	29275	26824	21886	16431	16466	16153	15725	16345	17362 <sup>a</sup>	17571 <sup>a</sup>	18647 <sup>a</sup>	19184 <sup>a</sup>	18103 <sup>a</sup>	18107 <sup>a</sup>	18885 <sup>a</sup>	18422 <sup>a</sup>
Permits available	11950	12030	11370	18210	20840	20710	20710	20610	20110	16450	15950	14850	13200	11850	10000	9500	7050 <sup>b</sup>	6000	3750	3750	3700
Licenses purchased (total)	12448	12414	11440	16737	18355	19304	16510	14639	14409	13669	13199	13164	11936	10404	9892	9689	9555	8986	6589	6620	6962
Quota zone <sup>c</sup>	10304	10592	9655	14941	16563	17021	13632	12350	9833	10063	9340	9169	8905	7842	7342	7086	5684	4951	3188	3177	3257
Quota surplus/military <sup>c</sup>							235	209	2554	1356	1591	1561	526	233	77	83	1385	1070	578	583	446
No-quota zone <sup>c</sup>	2144	1822	1785	1796	1792	2283	2643	2080	2022	2238	2268	2434	2505	2329	2473	2520	2486	2965	2823	2860	3259 <sup>h</sup>
% Licenses bought																					
Of permits available <sup>d</sup>	86.2	88.0	84.9	82.0	79.5	82.2	67.0	60.9	61.6	69.4	68.5	72.3	71.4	67.7	73.4	74.6	100	100	100	100	100
Of permits issued <sup>d</sup>				84.4	87.2	83.9	69.8	66.3	65.7	68.3	67.1	68.9	70.0	67.2	73.8	74.5	80.7	82.7	85.0	84.7	87.9
Estimated no. hunters <sup>e</sup>	11600	11500	10300	14500	15900	16800	15500	13800	13600	12900	12500	12500	11300	9900	9400	9200	9100	8600	6300	6300	6600
Harvest	4956	1874	3212	4110	3620	3898	4936	1915	3598	3391	3340	3290	3172	2135	2801	2699	2131	2604	1866	1627	1971
Harvest sex ratio (%M) <sup>f</sup>	47	62	55	55	53	58	56	61	58	57	59	58	57	62	59	59	61	59	62	62	66 <sup>i</sup>
Success rate (%)																					
Total harvest/hunters <sup>g</sup>	43	16	31	28	23	23	29	14	26	26	26	26	28	21	30	29	23	30	30	26	30
Quota harvest/licenses	42	15	29	25	20	20	28	14	25	26	25	25	28	21	30	30	24	33	37	33	39 <sup>j</sup>

<sup>a</sup> Includes area 99, a designation to increase preference but not to obtain a license (2008 = 528, 2009 = 835; 2010 = 1194; 2011 = 1626; 2012 = 1907; 2013 = 2129; 2014=2377; 2015=2455).

<sup>b</sup> Permits reduced because of a new procedure in 2011 that ensures that all available licenses are purchased (see Table 2).

<sup>c</sup> Quota zone established in 1982. No-quota zone established in 1987. Surplus licenses from undersubscribed quota areas sold beginning in 2000; originally open only to unsuccessful permit applicants, but beginning in 2003, open to all. In 2011, surplus licenses offered for all lottery licenses not purchased by July 31. Free licenses for 10 and 11 year-olds were available beginning 2009.

<sup>d</sup> Quota licenses bought (including surplus)/permits available, or licenses bought (prior to surplus)/permits issued. Beginning in 2008, some permits were issued for area 99; these are no-hunt permits, just to increase preference, and are not included in this calculation. In 2011-15, all unpurchased licenses were put up for sale and were bought.

<sup>e</sup> Number of licensed hunters x percent of license-holders hunting. Percent hunting is based on data from bear hunter surveys conducted during 1981–91, 1998 (86.8%), 2001(93.9%) and 2009 (95.3%). The estimated no. of hunters in 2011-15 may be under-estimated because a large no. of people bought surplus licenses 1 month before the season, so they were more apt to hunt.

<sup>f</sup> Sex ratio as reported by hunters; hunters classify about 10% of female bears as males, so the actual harvest has a lower %M than shown here. In good food years, the harvest is more male-biased.

<sup>g</sup> Success rates in 2001–2012 were calculated as number of successful hunters/total hunters, rather than bears killed/total hunters, because no-quota hunters could take 2 bears. After 2012, hunters could take 2 bears only if they bought 2 licenses (1 quota + 1 no-quota): in 2015, 26 hunters bought 2 licenses but only 1 killed 2 bears.

<sup>h</sup> Record high number of no-quota zone licenses purchased (47% of total licenses purchased).

<sup>i</sup> Record high % males in statewide harvest.

<sup>j</sup> Highest success rate since very poor food year of 1995.

Figure 1. Relationship between licenses sold and hunting success (note inverted scale) in quota zone, 1987–2015 (no-quota zone first partitioned out in 1987). Number of licenses explains 40% of variation in hunting success during this period ( $P = 0.0002$ ). Large variation in hunting success is also attributable to food conditions.

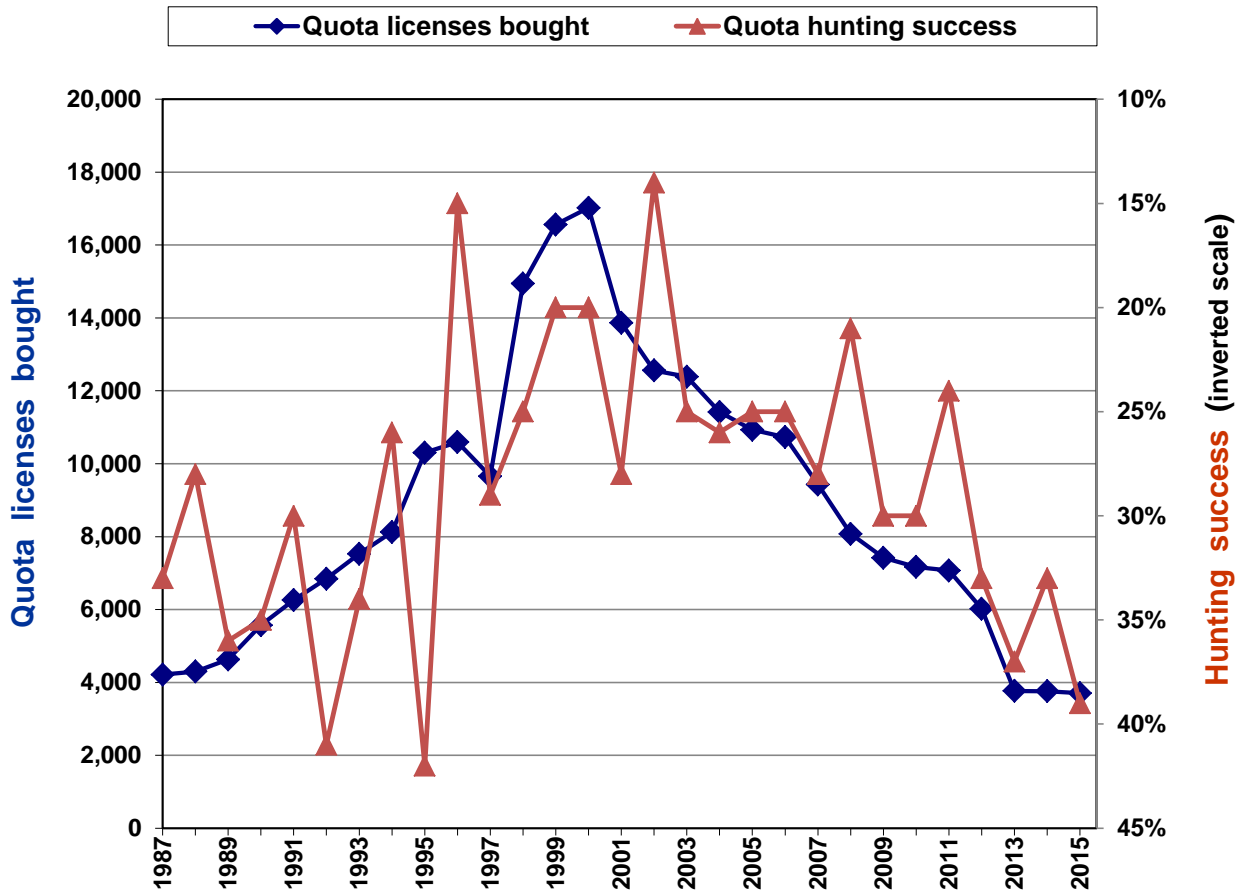


Figure. 2. Bear management units (BMUs) within quota (white) and no-quota (gray) zones. Hunters in the quota zone are restricted to a single BMU, whereas no-quota hunters can hunt anywhere within that zone.

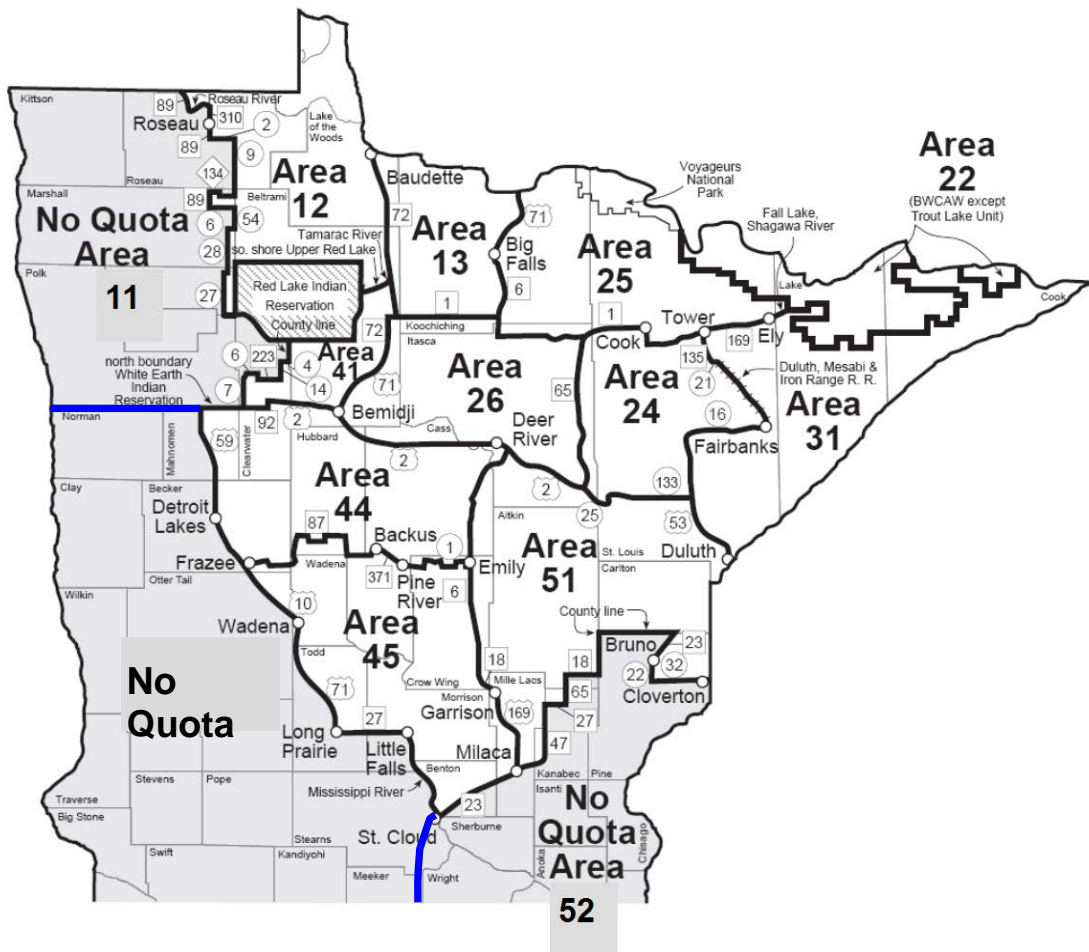


Table 2. Number of bear hunting quota area permits available, 2011–2015 (aligned with permit applications in Table 3 below; highlighted values show drop from previous year).

BMU	2015	2014	2013	2012	2011	
					After reduct. <sup>a</sup>	Before reduct.
12	150	200	200	300	350	450
13	250	250	250	400	450	600
22	50	50	50	100	100	125
24	200	200	200	300	350	500
25	500	500	500	850	900	1200
26	350	350	350	550	650	900
31	550	550	550	900	1000	1300
41	150	150	150	250	300	400
44	450	450	450	700	850	1100
45	150	150	150	200	250	400
51	900	900	900	1450	1850	2500
<b>Total</b>	3700	3750	3750	6000	7050	9475

<sup>a</sup> Beginning in 2011, all licenses not purchased by permittees were sold (Table 3). In order not to increase the number of hunters, 2011 permit allocations were reduced by the mean percentage of licenses that were purchased in each BMU in 2009–2010. The table shows the permit allocation before and after this reduction. All subsequent allocations were based on the assumption that the quota would be filled (Table 3).

Table 3. Number of quota BMU permit applicants and surplus licenses bought, 2011–2015<sup>a</sup>. Shaded values indicate undersubscribed areas (applications < permits available).

BMU	2015			2014			2013			2012			2011		
	Apps	Bought license	Surplus bought	Apps	Bought license	Surplus bought	Apps	Bought license	Surplus bought	Apps	Bought license	Surplus bought	Apps	Bought license	Surplus bought
12	612	130	20	661	164	36	707	160	44	813	244	60	834	267	84
13	692	210	40	703	218	32	664	213	37	719	325	76	751	366	84
22	48	36	9 <sup>b</sup>	65	33	17	55	36	14	83	56	43	90	71	31
24	771	171	29	875	174	26	763	170	30	888	253	47	918	294	56
25	1396	433	67	1533	424	76	1575	432	69	1625	713	137	1763	712	190
26	1650	309	42	1696	298	52	1695	303	47	1666	458	92	1894	512	139
31	2021	488	62	2257	468	82	2261	478	72	2406	758	146	2505	826	174
41	570	129	21	561	129	21	575	135	15	592	208	42	688	253	47
44	2626	402	48	2751	393	57	2682	386	65	2619	612	88	3010	697	154
45	1703	139	11	1403	127	23	1205	141	9	1135	170	30	1019	208	42
51	3878	810	90	4003	748	152	3796	734	166	3650	1154	296	4086	1478	372
<b>Total<sup>d</sup></b>	15967	3257	439	16508	3176	574	15978	3188	568	16196	4951	1057	17558	5684	1373

<sup>a</sup> Beginning in 2011, all licenses not purchased by permittees were sold as “surplus”. Surplus = Permits available (Table 2) minus Bought license (±4 to account for groups applying together). Beginning in 2008, applicants could apply for area 99 in order to increase future preference, but not buy a license; these are not included in the number of applications (Apps)(unlike Table 1, where they are included).

<sup>b</sup> Even after purchase of surplus licenses, this BMU remained undersubscribed.

Table 4. Percentage of quota BMU lottery applicants with preference level 1 (1<sup>st</sup>-year applicants), 2, and 3 who were drawn for a bear permit, 2011–2015. Blank spaces signify 100% of applicants drawn. All preference level 2 applicants were drawn, except where 0 preference level 1 applicants were drawn. Likewise, all preference level 3 applicants were drawn, except where 0 preference level 2 applicants were drawn.

BMU	2015			2014			2013			2012		2011	
	Pref 1	Pref 2	Pref 3	Pref 1	Pref 2	Pref 3	Pref 1	Pref 2	Pref 3	Pref 1	Pref 2	Pref 1	Pref 2
12	0	17		0	40		0	49		0	80	2	
13	0	56		0	72		4			33		51	
22	100			72			89			100		100	
24	0	2		0	13		0	41		0	75	14	
25	0	44		0	57		0	81		28		35	
26	0	0	51	0	0	80	0	7		0	49	0	77
31	0	0	87	0	15		0	45		0	84	11	
41	0	0	99	0	19		0	43		0	86	6	
44	0	0	18	0	0	41	0	0	68	0	28	0	55
45	0	0	0 <sup>a</sup>	0	0	30	0	0	75	0	29	0	67
51	0	0	89	0	22		0	53		1		25	

Table 5. Minnesota bear harvest tally<sup>a</sup> for 2015 by Bear Management Unit (BMU) and sex compared to harvests during 2010–2014 and record high and low harvests (since establishment of each BMU).

BMU	2015				2014	2013	2012	2011	2010	5-year mean	Record low harvest (yr)	Record high harvest (yr)
	M (%M)	F	Total	Total								
<b>QUOTA</b>												
12	37 (62)	23	60	38 <sup>d</sup>	62	82	106	95	77	38 (14)	263 (01)	
13	53 (74)	19	72 <sup>e</sup>	91	95	112	119	155	114	71 (88)	258 (95)	
22	4 (57)	3	7	5	9	8	11	9	8	3 (03)	41 (89)	
24	51 (53)	46	97	50 <sup>f</sup>	76	108	122	124	96	50 (14)	288 (95)	
25	139 (61)	88	227	168 <sup>g</sup>	197	254	317	307	249	149 (96)	584 (01)	
26	87 (72) <sup>c</sup>	34	121	117 <sup>h</sup>	121	238	167	232	175	117 (14)	513 (95)	
31	198 (64)	109	307	221	197	363	358	363	300	157 (88)	697 (01)	
41	20 (57)	15	35 <sup>i</sup>	36	40	70	54	71	54	36 (14)	201 (01)	
44	107 (68) <sup>c</sup>	51	158	170	181	188	130	248	183	130 (11)	643 (95)	
45	38 (69)	17	55	54	48	67	32	58	52	32 (11)	178 (01)	
51	195 (65)	107	302	291	349	471	288	501	380	247 (91)	895 (01)	
Total	929 (64)	512	1441	1241 <sup>j</sup>	1375	1961	1704	2163	1689	1192 (88)	4288 (01)	
<b>NO-QUOTA<sup>B</sup></b>												
11	151 (77) <sup>m</sup>	44	195	77 <sup>k</sup>	136	224	219	178	167	38 (87)	351 (05)	
10	8 (73)	3	11	8	9	14	3	11	9			
52	217 (67)	107	324	301	346	405	205	347	321	105 (02)	405 (12)	
Total	376 (71)	154	530	386	491	643	427	536	497	198 (87)	678 (95)	
<b>STATE</b>	1305 (66) <sup>c</sup>	666	1971	1627 <sup>l</sup>	1866	2604	2131	2699	2185		4956 (95)	

<sup>a</sup> Hunters receive tooth envelopes at registration stations, but the sex recorded on tooth envelopes may differ from the registered sex:

Sex shown on table is the registered sex because normally only ~70% of tooth envelopes are submitted.

Also, some tooth envelopes had no corresponding registration data. These were added to the harvest tally. The number of missing registrations was greatly in the last few years.

Year	Quota zone	No-quota zone
2010	20	8
2011	11	2
2012	6	1
2013	5	1
2014	2	1
2015	4	2

<sup>b</sup> Some hunters with no-quota licenses hunted in the quota zone, and their kills were assigned to the BMU where they apparently hunted:

2010: 14; 2011: 14; 2012: 8; 2013: 11; 2014: 4; 2015: 12.

Some quota area hunters also apparently hunted in the wrong BMU, based on the block where they said they killed a bear, but these were recorded in the BMU where they were assigned (presuming most were misreported kill locations).

<sup>c</sup> Record high % males

<sup>d</sup> Record low harvest since this area was established in 1987.

<sup>e</sup> Lowest harvest since 1988.

<sup>f</sup> Record low harvest since this area was established in 1989.

<sup>g</sup> Lowest harvest since 1996.

<sup>h</sup> Record low harvest since this area was established in 1991.

<sup>i</sup> Record low harvest since this area was established in 1990.

<sup>j</sup> Lowest since 1988 (quota—no-quota split in 1987).

<sup>k</sup> Lowest harvest since 1999.

<sup>m</sup> Highest % males since 1999.

Figure 3. Trends in statewide bear harvest and proportions of harvest in the no-quota zones, 1987–2015.

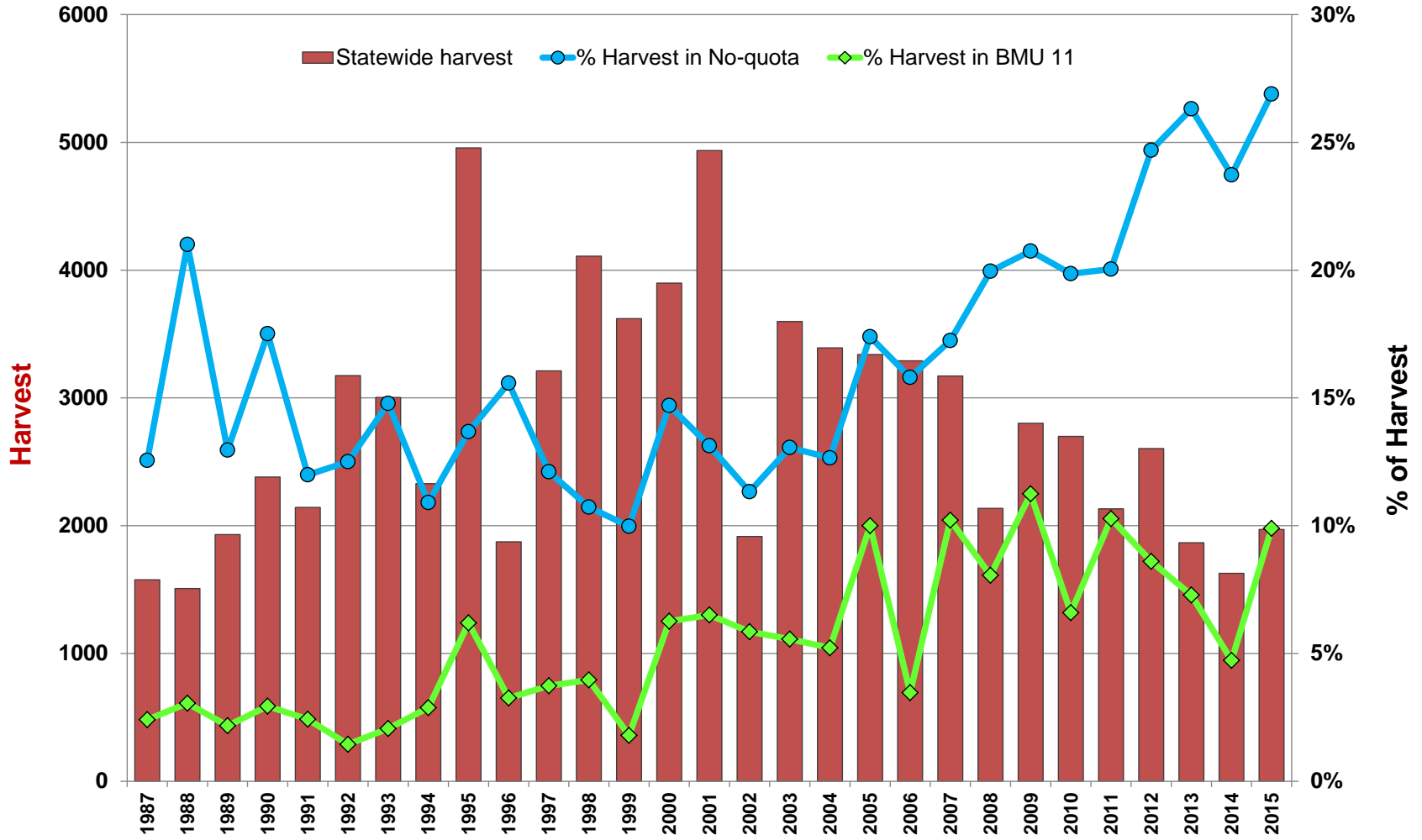


Table 6. Bear hunting success (%) by BMU, measured as the registered harvest divided by the number of licenses sold<sup>a</sup>, 2010–2015.

BMU	Max success (yr)		Mean success 2010-2014	2015	2014	2013	2012	2011	2010
12	49	(95)	27	40	19 <sup>h</sup>	30	27	30	30
13	59	(95)	32	29	36	38 <sup>d</sup>	28	26	34 <sup>c</sup>
22	21	(92)	12	13	10	18 <sup>e</sup>	8	11	14
24	45	(92)	33	48 <sup>i</sup>	25	38 <sup>e</sup>	36 <sup>e</sup>	35 <sup>e</sup>	29
25	47	(92)	34	45 <sup>e</sup>	34	39 <sup>d</sup>	30	35	34
26	59	(95)	34	34	33	34	43 <sup>d</sup>	26	34
31	55	(92)	38	56 <sup>i</sup>	40	36	40 <sup>d</sup>	36	36
41	50	(95)	24	23	24	26	28	18	25
44	43	(95)	30	35	38	40 <sup>d</sup>	27	15 <sup>f</sup>	28
45	36	(14)	27	36 <sup>i</sup>	36 <sup>i</sup>	32	33 <sup>b</sup>	13	21 <sup>d</sup>
51	39	(13)	29	33	32	39 <sup>g</sup>	32 <sup>d</sup>	16 <sup>f</sup>	27
<b>Quota</b>	42	(95)	31	39 <sup>d</sup>	33	37 <sup>d</sup>	33 <sup>d</sup>	24	30
<i>11<sup>i</sup></i>				20	9	15			
<i>10<sup>i</sup></i>				7	7	12			
<i>52<sup>i</sup></i>				15	16	19			
<b>No Quota</b>	32	(95)	17	16	13	17	20	15 <sup>f</sup>	20
<b>Statewide</b>	40	(95)	26	28	25	28	28	22	27

<sup>a</sup> Harvest/licenses instead of harvest/hunters because BMU-year-specific estimates for the proportion of license-holders that hunted are unreliable. No-quota hunters could take 2 bears during 2008-2012, so their success was calculated by whether or not they shot at least 1 bear. Statewide estimates of harvest/hunters are presented in Table 1.

<sup>b</sup> Highest success since establishment of this BMU in 1994

<sup>c</sup> Highest success since 1997 (until this year).

<sup>d</sup> Highest success since 1995 (until this year).

<sup>e</sup> Highest success since 1992 (until this year)

<sup>f</sup> Lowest success since 2002 (until this year).

<sup>g</sup> Highest success since establishment of this BMU in 1987.

<sup>h</sup> Lowest success in >20 years (same as 2006).

<sup>i</sup> Record high success.

<sup>j</sup> Since 2013, an attempt was made to differentiate the number of no-quota (NQ) hunters by BMU. When no-quota hunters bought licenses, they recorded the deer block where they anticipated hunting. In 2015, 3150 of 3259 selected blocks in (or adjacent to) NQ-BMUs 10 (5%), 11 (30%), or 52 (65%), and 8 chose NQ blocks in SE Minnesota (but none harvested a bear there); 108 chose blocks in the quota zone (12 harvested a bear there, 7 harvested a bear in the NQ zone, 89 were unsuccessful, so the location of their hunt was unknown — these were distributed in NQ-BMUs proportional to those who selected blocks there).

Table 7. Cumulative bear harvest (% of total harvest) by date, 1995–2015.

Year	Day of week for opener	Aug 22/23 – Aug 31	Sep 1 – Sep 7	Sep 1 – Sep 14	Sep 1 – Sep 30
1995	Fri		72	87	97
1996	Sun		56 <sup>a</sup>	70	87
1997	Mon		76	88	97
1998	Tue		76	87	96
1999	Wed		69	81	95
2000	Wed	57	72	82	96
2001	Wed	67	82	88	98
2002	Sun		57 <sup>a</sup>	69 <sup>a</sup>	90
2003	Mon		72	84	96
2004	Wed		68	82	95
2005	Thu		72	81	94
2006	Fri		69	83	96
2007	Sat		69	82	96
2008	Mon		58 <sup>a</sup>	71 <sup>a</sup>	92
2009	Tue		74	86	96
2010	Wed		69	84	96
2011	Thu		65	78	93
2012	Sat		68	83	96
2013	Sun		61	76	94
2014	Mon		60	75	92
2015	Tue		58 <sup>b</sup>	75	91

<sup>a</sup> The low proportion of total harvest taken during the opening week (<60%) reflects a high abundance of natural foods.

<sup>b</sup> The slow start the first week was likely due to especially warm weather.

Figure 4. Number of bears harvested vs. number predicted to be harvested based on fall food production and the number of hunters: top: statewide (1987–2015); bottom: quota zone only (2000–2015).

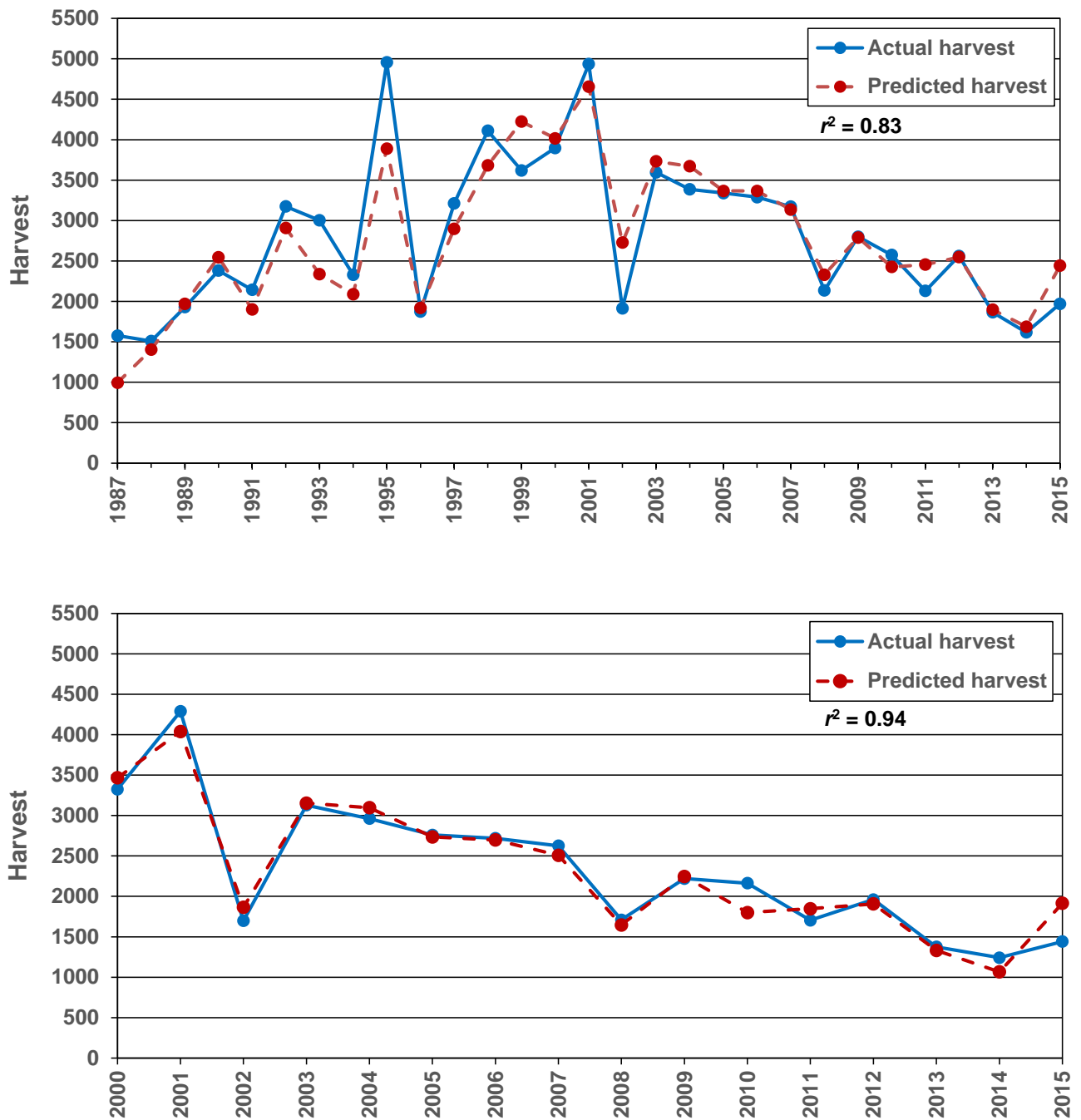


Figure 5. Sex ratios of harvested bears by BMU, 1996–2015.

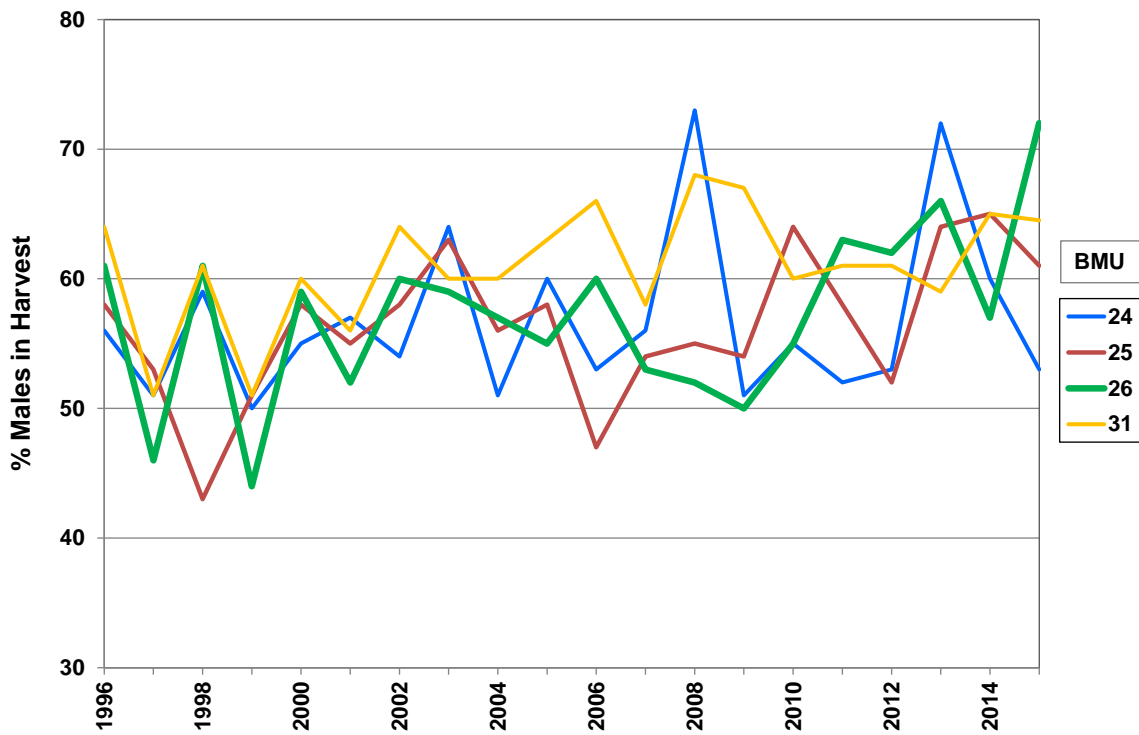
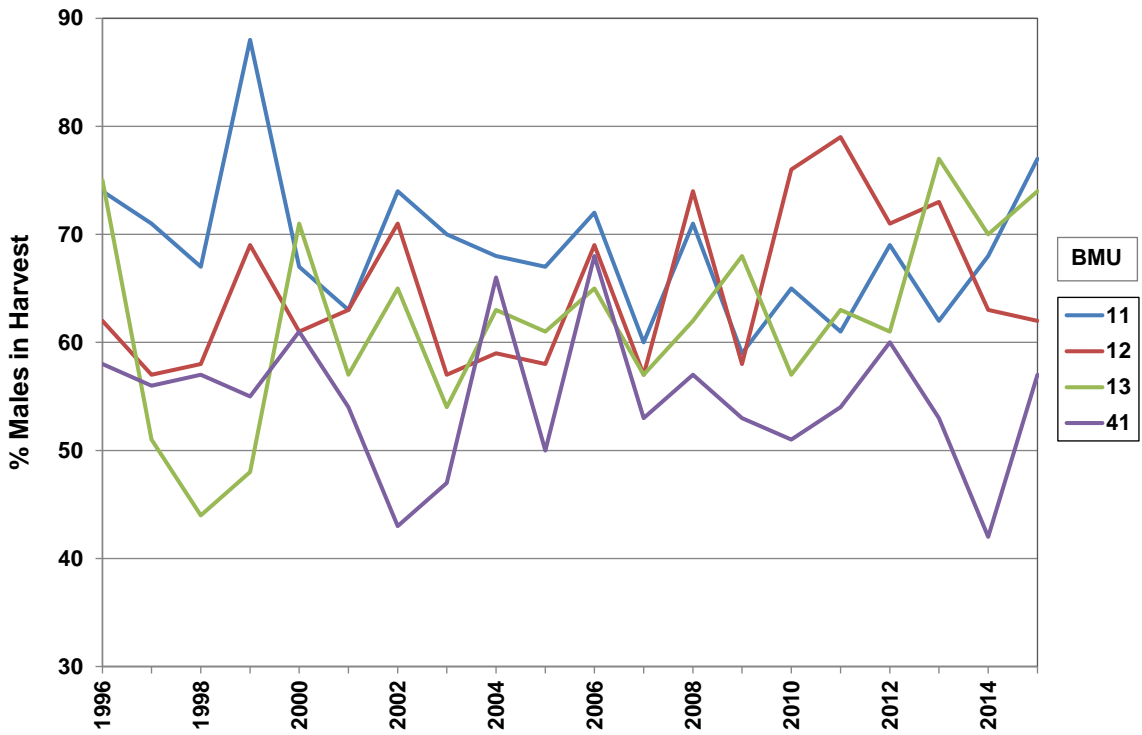


Figure 5. continued.

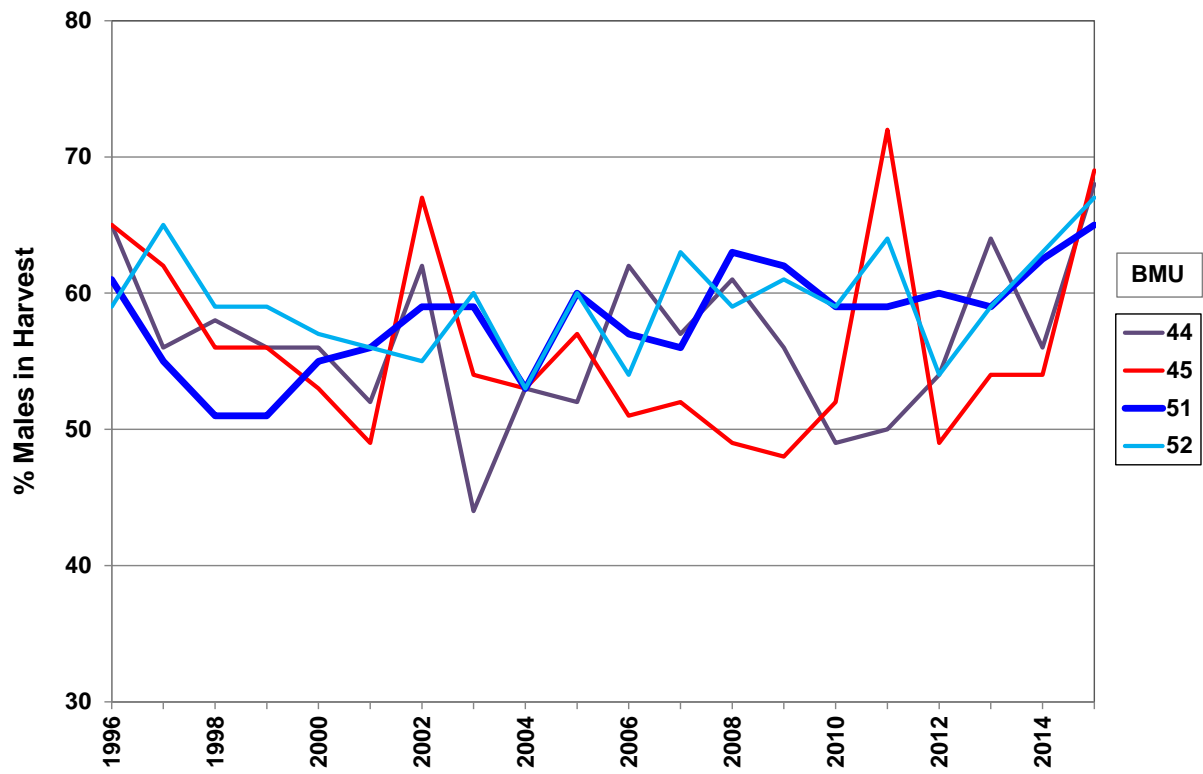


Figure 6. Median ages of harvested female bears by BMU, 1996–2015.  
 Curves with thicker lines show significant declines through time.

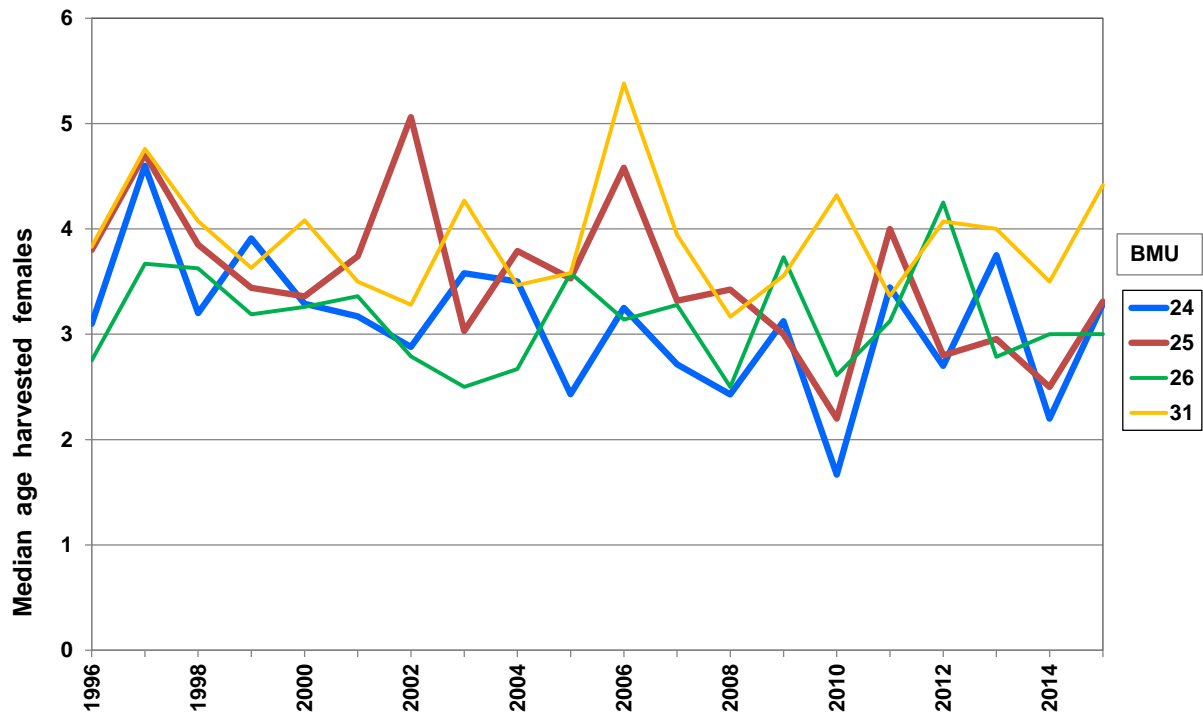
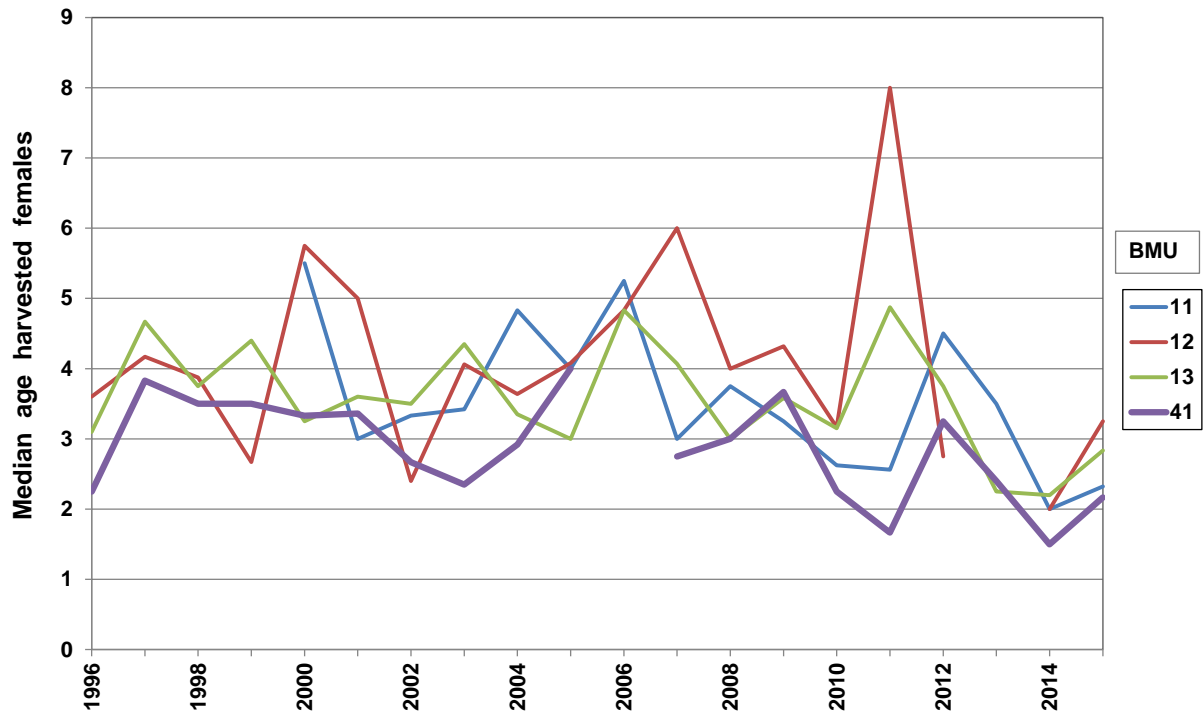


Figure 6. continued.

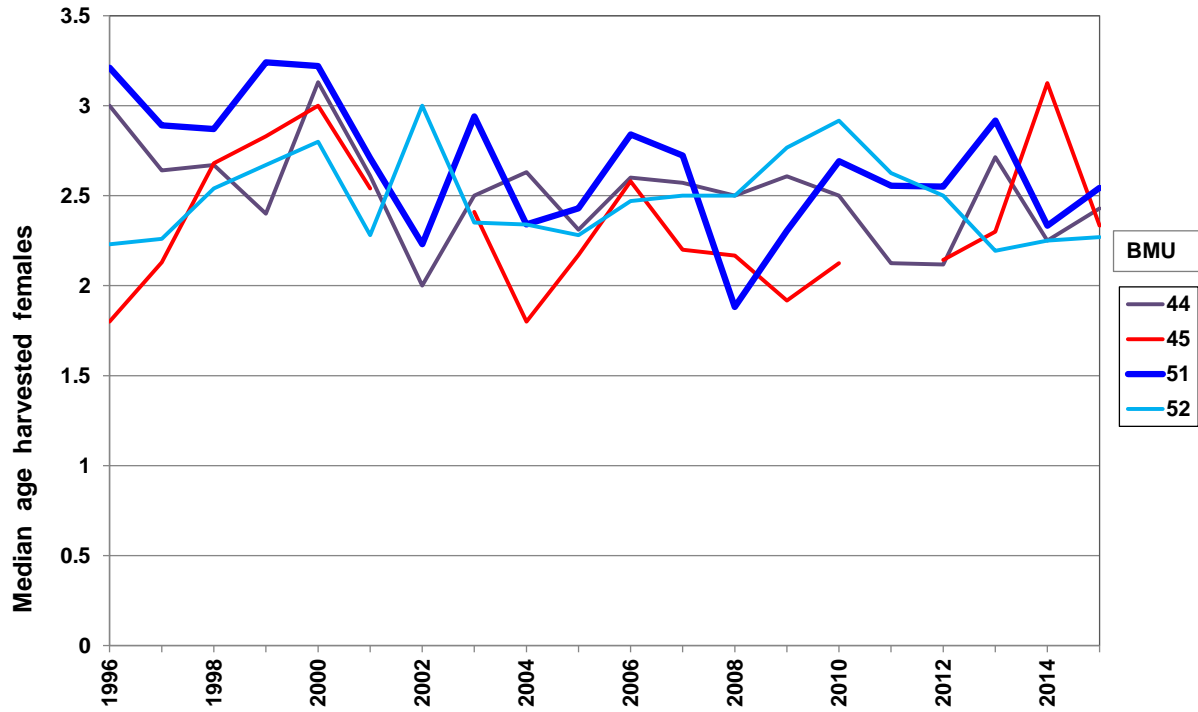


Figure 7. Statewide median ages (yrs) of harvested bears by sex, 1982–2015.

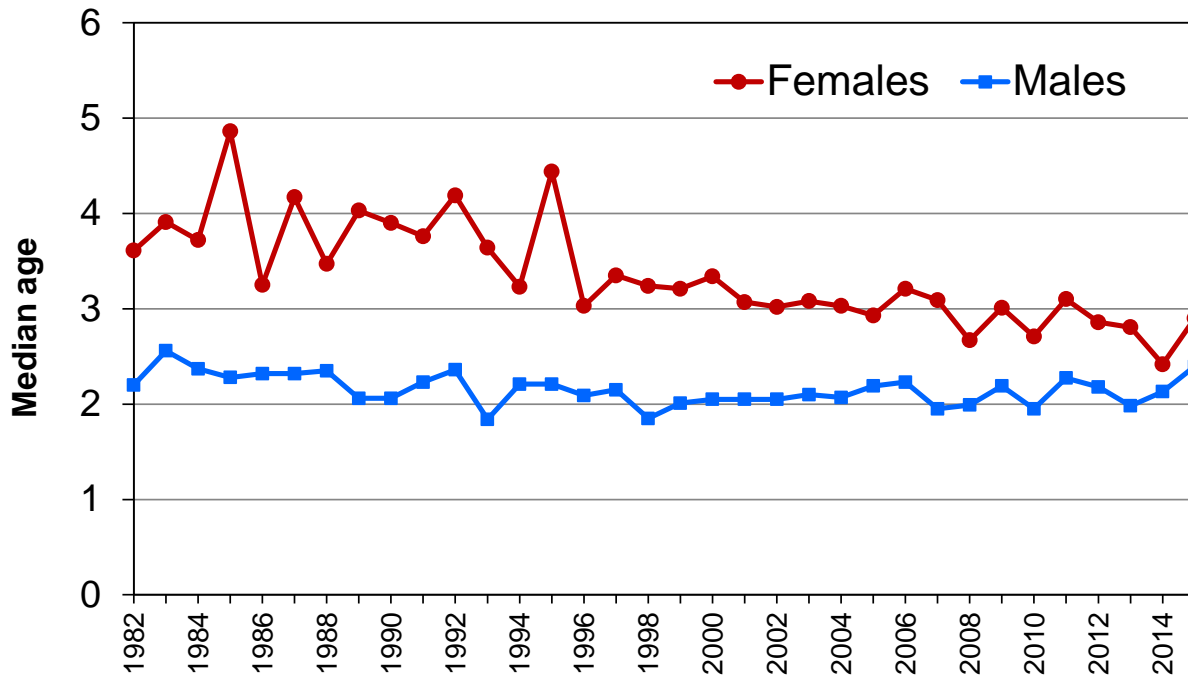


Figure 8. Statewide harvest structure: proportion of each sex in age category, 1982–2015.  
Trend lines are significant.

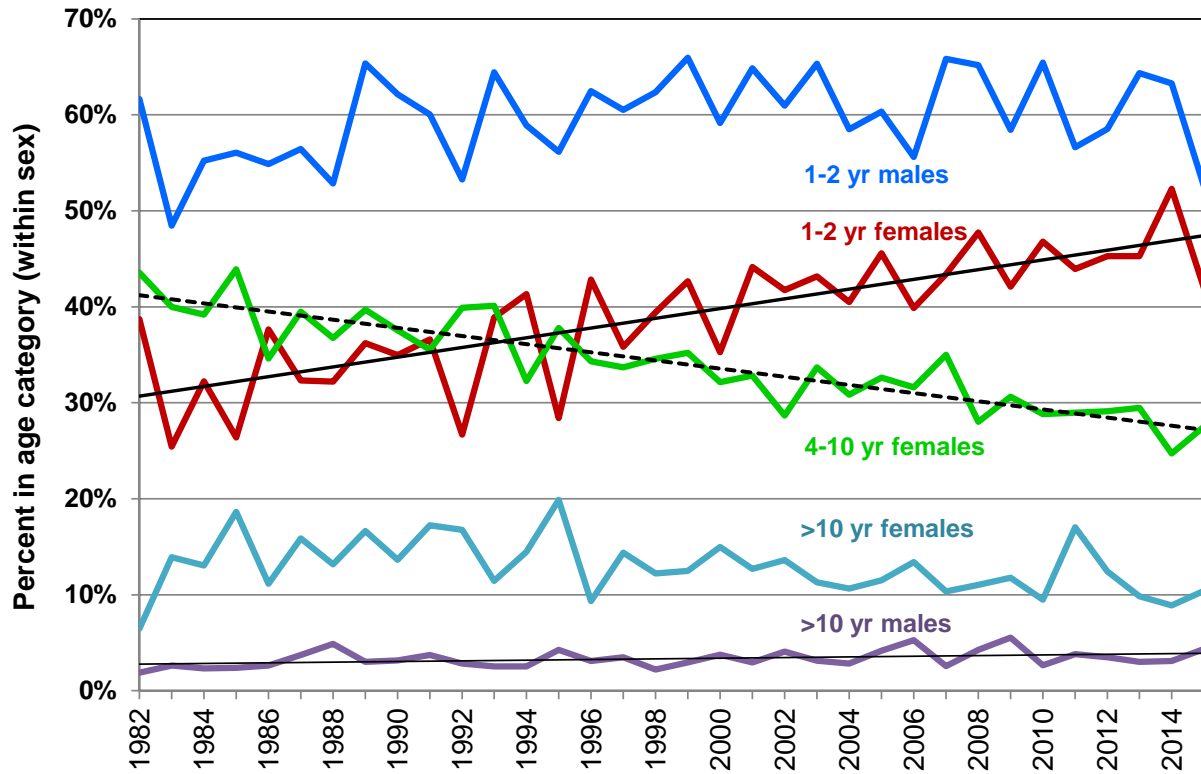


Figure. 9. Percent of hunters submitting bear teeth for aging (now vital for population monitoring, see Figs. 12–14). Cooperation levels exceeded 80% when registration stations were paid to extract teeth (this practice ended in 1993) and when non-compliant hunters were sent a reminder.

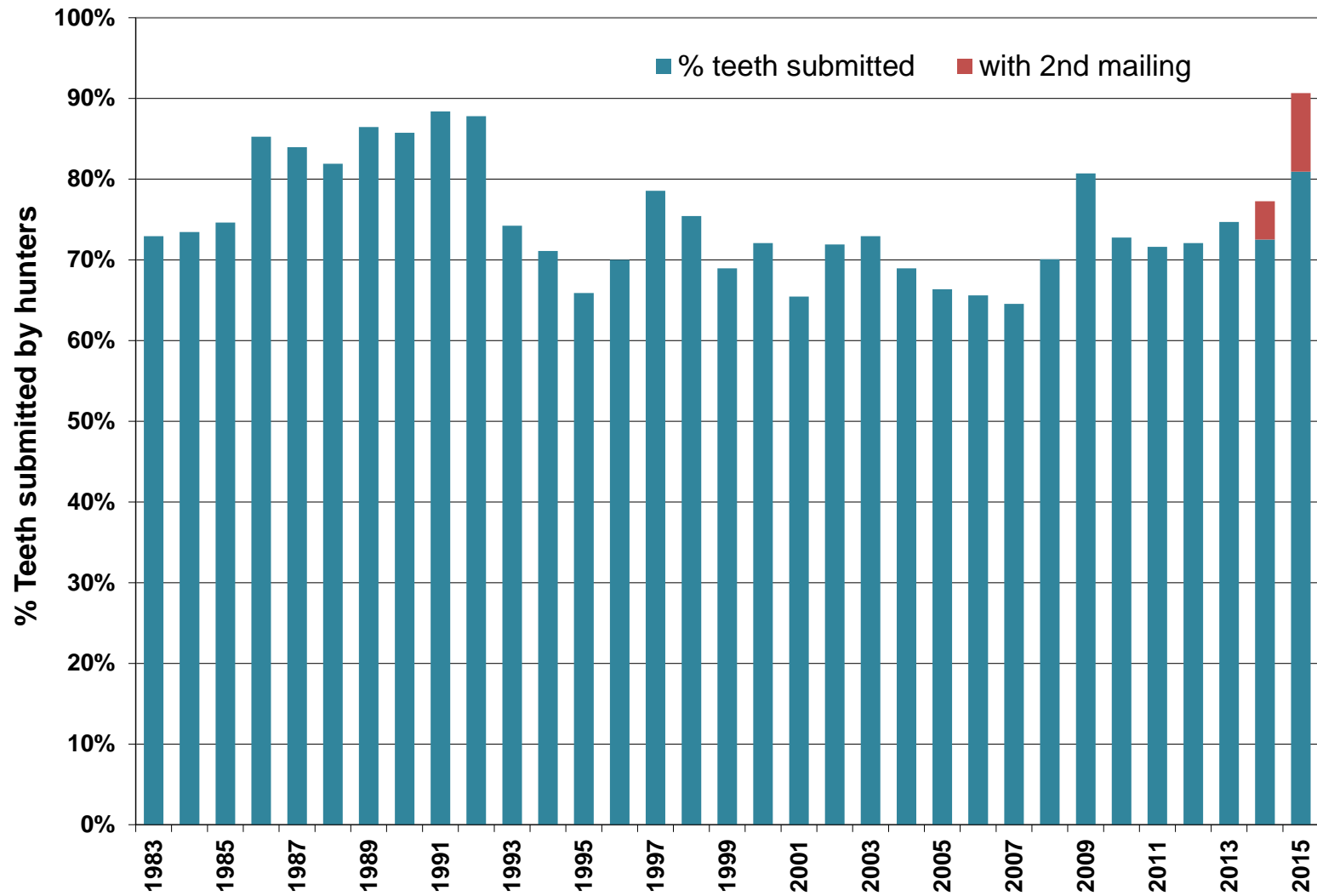
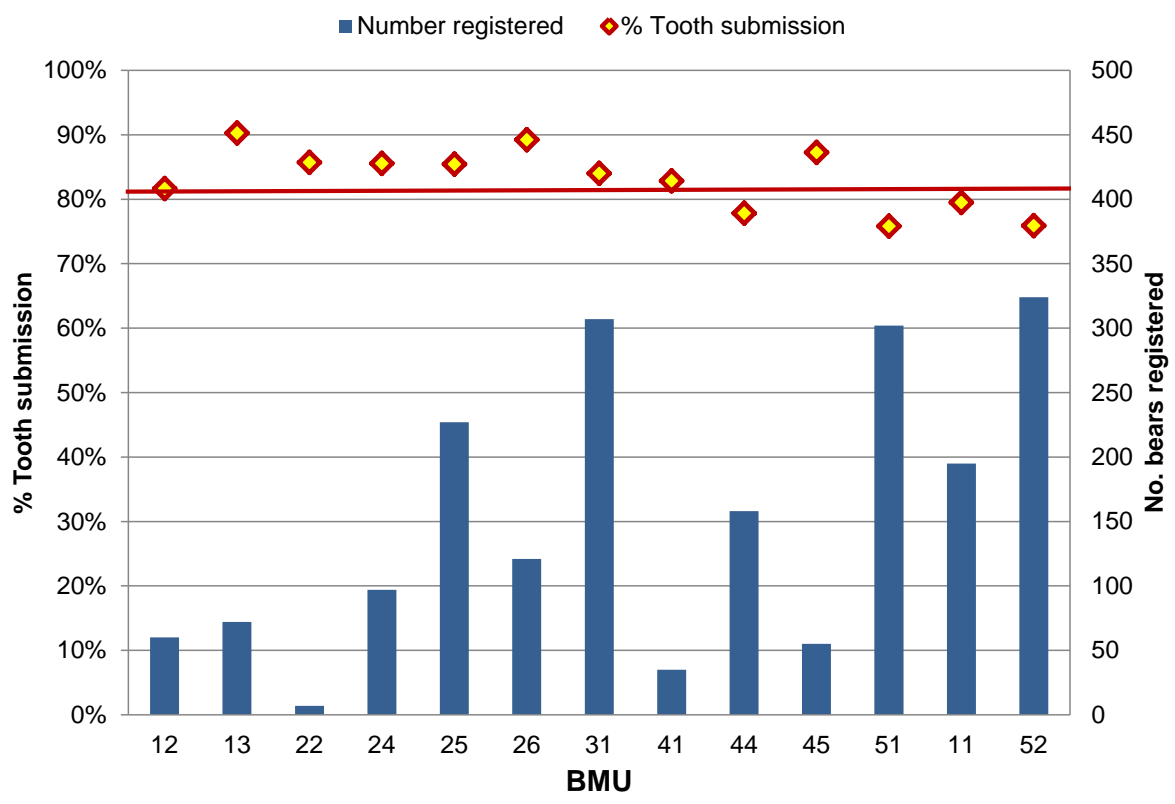
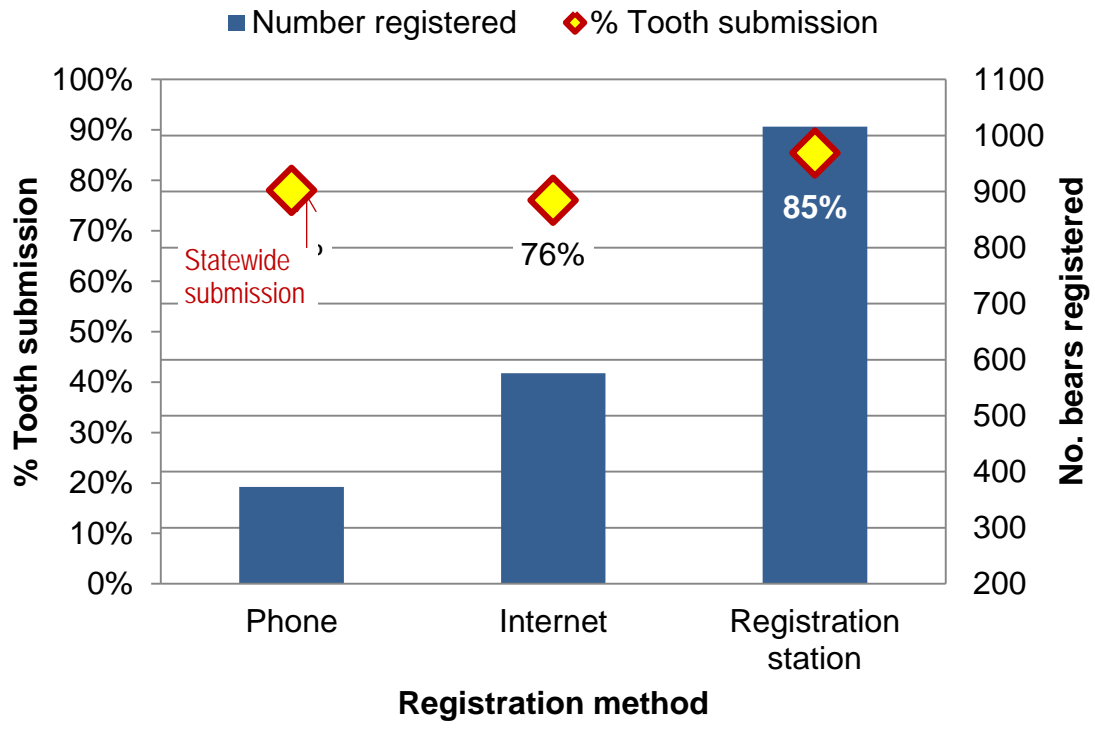


Figure 10. Percent of hunters who submitted a bear tooth in 2015 (before being mailed a reminder letter), by method of registration (top panel) and by BMU (bottom panel). Beginning in 2013, hunters could register their bear by phone or internet.





## 2015 MINNESOTA DEER HARVEST REPORT

Adam Murkowski, Big Game Program Leader, Division of Fish and Wildlife

### INTRODUCTION

The white-tailed deer may be considered Minnesota's most popular wildlife species. In 2015, nearly 450,000 hunters participated in the season. 2015 was a conservative season designed to rebuild deer numbers across much of the state. During the archery, firearms and muzzleloader seasons, hunters registered 159,343 deer.

### METHODS

Every deer taken by hunting in Minnesota must be registered. In 2015, carcass import restrictions were instituted to help prevent the spread of Chronic Wasting Disease (CWD). Deer may be registered at any of the 825 to nearly 900 "Big Game Registration" stations available throughout the state. Starting in 2011, deer could also be registered using the internet and telephone except in areas under Disease Management tag restrictions. Implementation of electronic licensing (ELS) has improved the efficiency and accuracy of deer harvest estimates and provides a more timely release of harvest information. Registered deer are recorded as adult buck, fawn buck, adult doe, or fawn doe. Additional information gathered at time of registration includes date of kill, deer permit area, and season.

### RESULTS

Outcomes of the 2015 deer harvest are presented in the following tables.

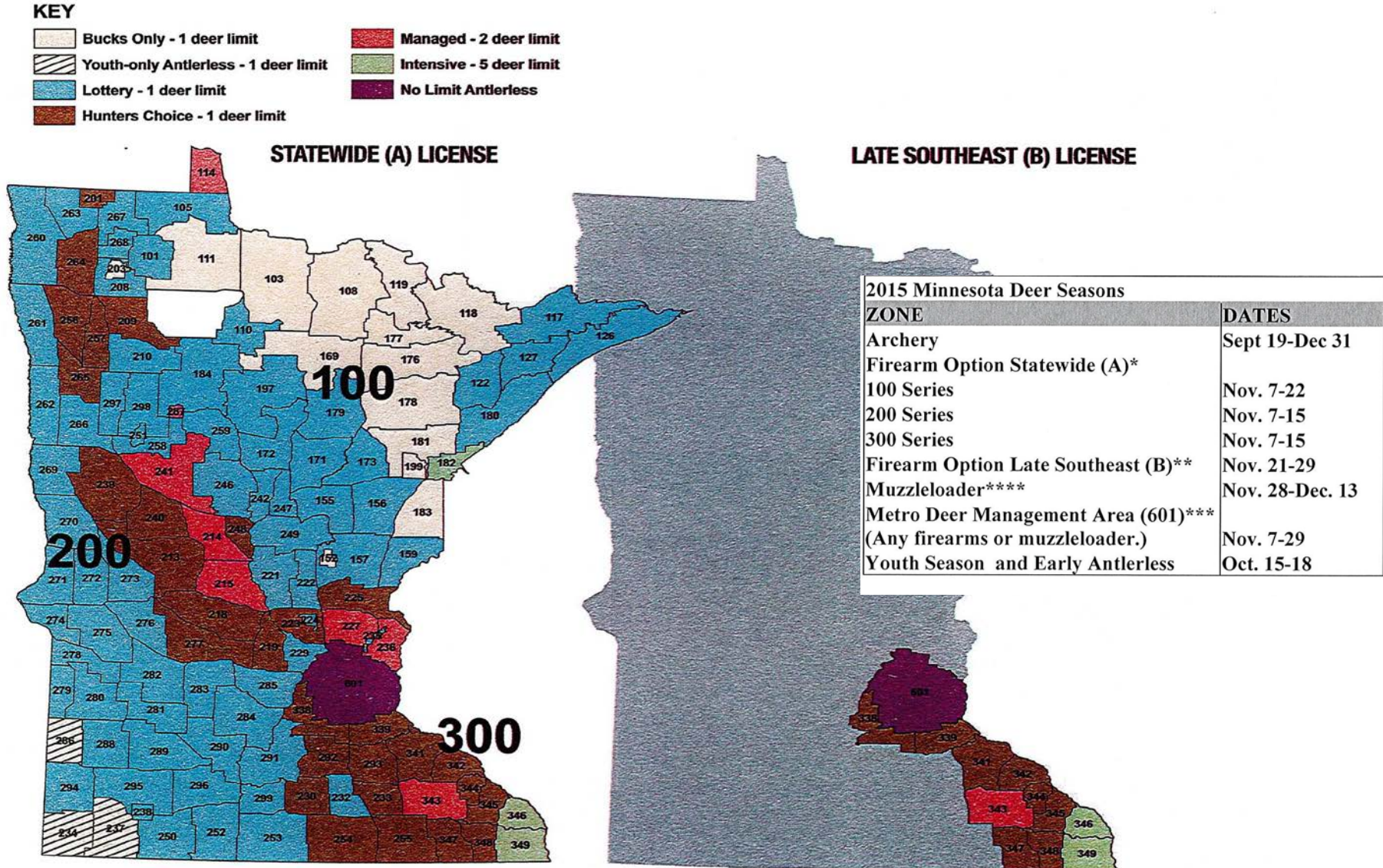


Figure 1. 2015 Firearms and Archery Deer Seasons.

Table 1. Statewide Firearms, Archery, and Muzzleloader Harvest, License Sales, and Success Rates, 2004-2015.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>REGULAR FIREARMS</b>												
Resident License Sales	309,698	291,298	299,774	285,286	376,006	377,077	379,866	382,668	391,822	391,967	374,314	371,612
Non-Resident License Sales	12,036	12,523	12,520	12,520	11,883	11,759	11,908	11,955	12,483	12,496	11,674	13,501
Bonus Permit Sales	183,186	184,566	167,343	145,522	190,156	140,920	143,763	142,049	89,750	97,402	29,642	31,065
Multi-Zone Buck License Sales	32,359	28,233	15,984	15,051	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Youth License Sales	51,347	50,501	49,599	49,242	50,397	56,678	59,726	60,943	62,949	64,748	62,488	62,333
All Season Deer License Sales	46,008	59,090	75,511	76,385	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total License Sales	634,634	626,211	620,731	584,006	628,442	586,434	595,263	597,615	557,004	566,613	478,118	448,007
Registered Buck Harvest <sup>1</sup>	116,612	95,594	95,695	97,528	85,646	83,820	88,027	76,003	84,729	70,627	70,627	83,939
Antlerless Permits Offered	30,760	28,830	18,925	18,830	32,325	60,100	60,083	15,525	32,854	36,816	26,332	31,065
Antlerless Permits Issued	24,111	25,656	18,925	18,830	32,325	60,100	60,083	15,525	32,854	36,816	26,332	31,065
Antlerless Permits App.	28,454	31,403	31,403	31,403	31,403	90,882	86,783	21,071	67,308	68,811	96,580	95,656
Registered AL Harvest <sup>1</sup>	123,278	119,363	135,981	118,860	98,147	78,525	86,077	88,197	71,140	67,885	46,030	48,758
Registered Total Harvest <sup>1</sup>	239,890	214,957	231,676	216,388	183,793	162,345	174,104	164,200	155,869	145,449	116,657	132,697
Registered % Successful <sup>2</sup>	37.8	34.3	37.3	41.7	34.8	33.8	35.9	32.9	32.0	29.7	25.3	29.6
<b>ARCHERY</b>												
Resident License Sales	50,601	50,293	49,595	52,780	87,872	88,707	91,156	90,252	95,259	92,717	92,301	93,462
Non-Resident License Sales	1,144	1,207	1,286	1,509	1,509	1,610	1,638	1,718	1,814	1,952	1,946	2,032
Youth Archery Sales	7,261	7,489	7,688	7,663	9,005	9,157	9,577	10,306	11,276	12,212	11,965	11,905
Mgmt Permit License Sales	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total License Sales	59,006	58,989	58,569	61,952	99,033	99,474	102,371	102,276	108,349	106,881	106,212	107,399
Total Harvest - All-Season License	3,489	4,563	8,284	6,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Archery Harvest	20,726	23,538	25,360	24,161	22,632	20,629	22,057	20,444	21,605	19,388	17,119	20,074
Registered % Successful <sup>2</sup>	29.2	24.6	24.8	24.3	18.5	17.5	17.8	17.0	18.8	14.5	15.3	18.7
<b>MUZZLELOADER</b>												
Total Muzzleloader License Sales	10,512	9,226	10,781	9,867	64,673	63,282	55,640	59,384	58,363	51,092	43,946	50,176
Estimated All-Season Hunters	14,168	23,293	23,293	26,813	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Muzzleloader Harvest	9,289	15,421	13,507	12,138	9,572	7,929	9,023	7,416	7,779	7,045	5,814	6,572
Registered % Successful <sup>2</sup>	37.6	47.4	39.6	28.2	13.4	11.3	14.4	11.6	12.4	12.7	12.7	7.6
Antlerless Permits Offered							5,792	1,997	1,626	2,144	1,593	1,434
Antlerless Permits App.							7,260	2,615	3,743	3,544	4,588	3,393
<b>TOTAL Registered Harvest</b>	<b>260,604</b>	<b>255,736</b>	<b>270,778</b>	<b>260,434</b>	<b>221,837</b>	<b>194,186</b>	<b>207,313</b>	<b>192,331</b>	<b>186,634</b>	<b>172,781</b>	<b>139,442</b>	<b>159,343</b>

<sup>1</sup> Does not include free landowner licenses

<sup>2</sup> Based on total license sales - does not include all-season deer

Table 2. Deer Harvest by License Type and Zone, 2015.

Season	Hunters	Harvest			Overall Success	Unique Successful Hunters <sup>3</sup>
		Bucks	Antlerless	Total		
1A	160,725	26,614	6,296	32,910	20.5%	32,923
2A	244,119	49,273	31,225	80,498	32.6%	79,618
3A	27,410	5,534	4,518	10,052	34.6%	9,493
3B	12,739	1,048	3,280	4,328	32.6%	4,155
Metro Firearm	N/A	619	559	1,178	N/A	1,044
Youth	N/A	600	590	1,190	N/A	1,190
Depredation <sup>1</sup>	N/A	0	72	72	N/A	51
Disabled/Mentored <sup>1</sup>	N/A	10	16	26	N/A	
Early Antlerless <sup>1</sup>	N/A	1	441	442	N/A	357
Free Landowner <sup>1</sup>	N/A	0	1,416	1,416	N/A	1,416
900 Series <sup>1</sup>	4,402	472	1527	1,999	25.0%	1,101
Muzzleloader	50,176	2,629	3,650	6,279	12.0%	6,031
Archery	107,399	9,264	9,689	18,953	16.5%	17,730
<b>Total<sup>2</sup></b>	<b>606,970</b>	<b>96,064</b>	<b>63,279</b>	<b>159,343</b>		<b>155,109</b>

<sup>1</sup> Includes deer taken during regular firearms, muzzleloader, and archery seasons.

<sup>2</sup> Due to the fact that a hunter can buy multiple licenses, hunter numbers and success rates are calculated using unique MDNR numbers.

<sup>3</sup> Number of individuals who harvested at least one deer. For example 51 unique persons harvested 72 antlerless deer utilizing depredation permits in 2015.

Table 3. Firearms Harvest and Harvest per Square Mile by Permit Area, 2015. Includes all firearm licenses.

Permit Area	Zone	Adult Male	Fawn Male	Adult Female	Fawn Female	Total	Area Size (sq.mi.)	Bucks/Sq. Mile	Antlerless/Sq. Mile	Total/Sq. Mile
101	1A	425	22	7	5	459	496	0.86	0.07	0.93
103	1A	696	3	3	1	703	1,824	0.38	0.00	0.39
105	1A	889	103	23	19	1,034	932	0.95	0.16	1.11
108	1A	892	9	1	0	902	1,701	0.52	0.01	0.53
110	1A	883	188	40	31	1,142	530	1.66	0.49	2.15
111	1A	441	10	3	0	454	1,440	0.31	0.01	0.32
114	1A	30	10	0	1	41	412	0.07	0.03	0.10
117	1A	44	2	0	0	46	1,129	0.04	0.00	0.04
118	1A	523	0	2	0	525	1,445	0.36	0.00	0.36
119	1A	352	4	1	1	358	946	0.37	0.01	0.38
122	1A	167	62	14	7	250	622	0.27	0.13	0.40
126	1A	265	74	12	3	354	979	0.27	0.09	0.36
127	1A	53	10	1	1	65	587	0.09	0.02	0.11
152	1A	75	8	2	0	85	62	1.22	0.16	1.38
155	1A	934	389	121	64	1,508	639	1.46	0.90	2.36
156	1A	1224	227	61	39	1,551	834	1.47	0.39	1.86
157	1A	1935	450	166	77	2,628	904	2.14	0.77	2.91
159	1A	977	176	59	28	1,240	575	1.70	0.46	2.15
169	1A	1307	12	7	3	1,329	1,202	1.09	0.02	1.11
171	1A	961	220	59	34	1,274	729	1.32	0.43	1.75
172	1A	1650	494	145	97	2,386	786	2.10	0.94	3.03
173	1A	628	127	36	26	817	617	1.02	0.31	1.32
176	1A	1269	7	5	0	1,281	1,150	1.10	0.01	1.11
177	1A	642	5	0	0	647	553	1.16	0.01	1.17
178	1A	1350	12	8	3	1,373	1,325	1.02	0.02	1.04
179	1A	1561	338	98	61	2,058	939	1.66	0.53	2.19
180	1A	554	168	39	13	774	999	0.55	0.22	0.77
181	1A	754	10	4	3	771	746	1.01	0.02	1.03
182	1A	392	287	114	60	853	280	1.40	1.65	3.05
183	1A	899	18	9	3	929	675	1.33	0.04	1.38
184	1A	2776	703	201	126	3,806	1,318	2.11	0.78	2.89
197	1A	975	135	40	27	1,177	1,343	0.73	0.15	0.88
199	1A	91	0	1	0	92	152	0.60	0.01	0.60
201	2A	136	50	15	6	207	169	0.80	0.42	1.22
203	2A	73	1	0	1	75	132	0.55	0.02	0.57
208	2A	275	33	9	8	325	379	0.73	0.13	0.86
209	2A	538	258	52	35	883	641	0.84	0.54	1.38
210	2A	827	184	68	34	1,113	635	1.30	0.45	1.75
213	2A	2310	1066	322	212	3,910	1,161	1.99	1.38	3.37
214	2A	1673	1121	441	308	3,543	566	2.96	3.30	6.26
215	2A	1432	963	452	269	3,116	730	1.96	2.31	4.27
218	2A	1063	567	202	158	1,990	912	1.17	1.02	2.18
219	2A	613	318	109	73	1,113	427	1.44	1.17	2.61
221	2A	1126	333	130	96	1,685	647	1.74	0.86	2.60
222	2A	826	299	121	76	1,322	413	2.00	1.20	3.20
223	2A	624	321	114	81	1,140	385	1.62	1.34	2.96
224	2A	89	27	9	13	138	49	1.81	1.00	2.81
225	2A	1383	677	288	161	2,509	635	2.18	1.77	3.95

Table 3. Continued.

Permit Area	Zone	Adult Male	Fawn Male	Adult Female	Fawn Female	Total	Area Size (sq.mi.)	Bucks/Sq. Mile	Antlerless/Sq. Mile	Total/Sq. Mile
227	2A	963	547	217	152	1,879	491	1.96	1.86	3.82
229	2A	257	67	17	19	360	313	0.82	0.33	1.15
230	2A	228	156	46	35	465	464	0.49	0.51	1.00
232	2A	261	54	18	11	344	380	0.69	0.22	0.90
233	2A	207	90	33	14	344	386	0.54	0.35	0.89
234	2A	206	18	6	2	232	637	0.32	0.04	0.36
235	2A	60	19	4	3	86	37	1.63	0.71	2.34
236	2A	601	379	99	73	1,152	404	1.49	1.37	2.85
237	2A	278	48	7	10	343	737	0.38	0.09	0.47
238	2A	83	17	5	6	111	98	0.85	0.29	1.14
239	2A	1584	809	275	163	2,831	1,110	1.43	1.12	2.55
240	2A	1898	891	283	207	3,279	694	2.73	1.99	4.72
241	2A	3388	2585	854	609	7,436	1,047	3.24	3.87	7.10
242	2A	575	133	50	25	783	307	1.87	0.68	2.55
246	2A	2050	487	176	122	2,835	860	2.38	0.91	3.30
247	2A	636	281	111	67	1,095	263	2.42	1.74	4.16
248	2A	401	198	71	45	715	229	1.75	1.37	3.13
249	2A	1065	402	158	82	1,707	729	1.46	0.88	2.34
250	2A	331	78	22	10	441	730	0.45	0.15	0.60
251	2A	101	25	10	2	138	68	1.48	0.54	2.03
252	2A	327	119	19	16	481	735	0.44	0.21	0.65
253	2A	395	130	23	8	556	987	0.40	0.16	0.56
254	2A	530	272	72	44	918	946	0.56	0.41	0.97
255	2A	457	200	66	31	754	774	0.59	0.38	0.97
256	2A	538	260	57	51	906	654	0.82	0.56	1.39
257	2A	399	195	63	37	694	426	0.94	0.69	1.63
258	2A	914	290	112	70	1,386	381	2.40	1.24	3.64
259	2A	1382	490	175	95	2,142	546	2.53	1.39	3.92
260	2A	463	59	14	7	543	1,252	0.37	0.06	0.43
261	2A	230	53	19	12	314	796	0.29	0.11	0.39
262	2A	215	52	18	11	296	677	0.32	0.12	0.44
263	2A	454	80	23	11	568	513	0.89	0.22	1.11
264	2A	798	414	84	44	1,340	672	1.19	0.81	1.99
265	2A	522	303	79	55	959	495	1.06	0.88	1.94
266	2A	404	76	12	8	500	625	0.65	0.15	0.80
267	2A	287	39	6	9	341	472	0.61	0.11	0.72
268	2A	330	58	10	9	407	239	1.38	0.32	1.70
269	2A	212	59	14	16	301	652	0.33	0.14	0.46
270	2A	213	41	9	8	271	758	0.28	0.08	0.36
271	2A	266	78	11	8	363	646	0.41	0.15	0.56
272	2A	197	49	7	3	256	544	0.36	0.11	0.47
273	2A	513	224	46	37	820	634	0.81	0.48	1.29
274	2A	264	77	10	9	360	381	0.69	0.25	0.95
275	2A	393	106	22	11	532	777	0.51	0.18	0.69
276	2A	612	219	52	39	922	575	1.06	0.54	1.60
277	2A	1561	820	201	150	2,732	876	1.78	1.34	3.12
278	2A	370	89	21	9	489	422	0.88	0.28	1.16
279	2A	205	108	9	11	333	346	0.59	0.37	0.96
280	2A	253	93	9	11	366	676	0.37	0.17	0.54
281	2A	492	167	40	20	719	579	0.85	0.39	1.24

Table 3. Continued.

Permit Area	Zone	Adult Male	Fawn Male	Adult Female	Fawn Female	Total	Area Size (sq.mi.)	Bucks/Sq. Mile	Antlerless/Sq. Mile	Total/Sq. Mile
282	2A	137	26	7	2	172	780	0.18	0.04	0.22
283	2A	312	61	13	9	395	640	0.49	0.13	0.62
284	2A	342	145	25	15	527	853	0.40	0.22	0.62
285	2A	419	104	29	10	562	580	0.72	0.25	0.97
286	2A	302	49	8	4	363	458	0.66	0.13	0.79
287	2A	82	83	28	16	209	51	1.62	2.51	4.12
288	2A	413	156	43	27	639	630	0.66	0.36	1.01
289	2A	248	79	13	14	354	820	0.30	0.13	0.43
290	2A	436	169	42	33	680	666	0.66	0.37	1.02
291	2A	688	248	68	37	1,041	832	0.83	0.42	1.25
292	2A	568	272	101	47	988	517	1.10	0.81	1.91
293	2A	544	230	85	45	904	512	1.06	0.70	1.77
294	2A	403	205	29	18	655	689	0.59	0.37	0.95
295	2A	524	102	26	12	664	855	0.61	0.16	0.78
296	2A	333	137	25	17	512	675	0.49	0.27	0.76
297	2A	212	24	7	5	248	449	0.47	0.08	0.55
298	2A	668	74	30	15	787	677	0.99	0.18	1.16
299	2A	285	119	27	13	444	389	0.73	0.41	1.14
338	3A	225	125	36	22	408	472	0.48	0.39	0.86
338	3B	39	58	16	6	119	472	0.08	0.17	0.25
339	3A	222	120	36	24	402	406	0.55	0.44	0.99
339	3B	33	53	18	10	114	406	0.08	0.20	0.28
341	3A	631	306	100	80	1,117	626	1.01	0.78	1.78
341	3B	128	256	76	46	506	626	0.20	0.60	0.81
342	3A	531	204	50	34	819	374	1.42	0.77	2.19
342	3B	104	200	67	42	413	374	0.28	0.83	1.10
343	3A	570	430	128	120	1,248	664	0.86	1.02	1.88
343	3B	83	204	60	58	405	664	0.13	0.49	0.61
344	3A	328	234	47	56	665	190	1.73	1.78	3.50
344	3B	41	116	30	12	199	190	0.22	0.83	1.05
345	3A	368	141	43	39	591	335	1.10	0.66	1.76
345	3B	96	159	60	28	343	335	0.29	0.74	1.02
346	3A	764	493	160	111	1,528	328	2.33	2.33	4.66
346	3B	171	325	131	89	716	328	0.52	1.66	2.18
347	3A	397	130	43	31	601	434	0.92	0.47	1.39
347	3B	77	164	36	30	307	434	0.18	0.53	0.71
348	3A	482	243	61	38	824	332	1.45	1.03	2.48
348	3B	62	173	53	31	319	332	0.19	0.77	0.96
349	3A	1016	656	178	156	2,006	499	2.04	1.98	4.02
349	3B	214	536	164	139	1,053	499	0.43	1.68	2.11
601	Metro	619	360	125	74	1,178	1,756	0.35	0.32	0.67
<b>Total</b>		<b>83,088</b>	<b>30,974</b>	<b>9,703</b>	<b>6,386</b>	<b>130,151</b>	<b>83,586</b>	<b>0.99</b>	<b>0.56</b>	<b>1.56</b>

Area size = Total land area (not water) within the DPA, area estimates were recalculated in 2014.

Table 4. Firearm Harvest using Bonus Permits, 2015.  
**Managed Permit Areas.**

Permit Area	Zone	Adult Female	Fawn Male	Fawn Female	Total
114	1A	5	0	0	5
214	2A	565	197	155	917
215	2A	451	186	132	769
227	2A	269	105	82	456
236	2A	201	56	43	300
241	2A	1,347	397	312	2,056
287	2A	49	16	9	74
343	3A	275	69	65	409
343	3B	112	32	39	183
<b>Total</b>		<b>3,274</b>	<b>1,058</b>	<b>837</b>	<b>5,169</b>

**Intensive Permit Areas**

Permit Area	Zone	Adult Female	Fawn Male	Fawn Female	Total
182	1A	171	77	41	289
346	3A	362	110	83	555
346	3B	197	69	56	322
349	3A	511	119	116	746
349	3B	320	94	99	513
<b>Total</b>		<b>1,561</b>	<b>469</b>	<b>395</b>	<b>2,425</b>

Table 5. Early Antlerless Season Harvest by Permit Area, 2015.

Permit Area	Adult Female	Fawn Male	Fawn Female	Total
346	130	36	29	195
349	159	42	42	243
<b>Total</b>	<b>289</b>	<b>78</b>	<b>71</b>	<b>438</b>

Table 6. Summary of Firearms Special Hunts, 2015. Includes regular, youth, and bonus permits.

Area	Dates	Permits Issued	Harvest				Total
			Adult Male	Adult Female	Fawn Male	Fawn Female	
900-Cascade River State Park	11/7 - 11/22	NA†*	2	1	0	1	4
901-Rice Lake NWR	11/14-11/22	40*	2	4	1	1	8
902-Saint Croix State Park	11/19 - 11/22	350*	28	68	23	16	135
903-Lake Louise State Park	11/14 - 11/15	25***	8	9	11	5	33
904-Gooseberry Falls State Park	11/7 - 11/22	50*	3	8	3	0	14
905-Split Rock Lighthouse State Park	11/7 - 11/22	30*	5	8	1	0	14
906-Tettegouche State Park	11/7 - 11/22	125*	7	10	4	2	23
907-Scenic State Park	11/7 - 11/22	30*	2	4	1	0	7
908-Hayes Lake State Park	11/7 - 11/22	50	5	3	0	0	8
909-Lake Bemidji State Park	11/7 - 11/10	30***	5	10	1	2	18
910-Zippel Bay State Park	11/7 - 11/22	55**	0	14	5	3	22
911-Judge CR Magney State Park	11/7 - 11/22	NA†*	2	1	1	0	4
912-Schoolcraft State Park	11/7 - 11/22	NA†*	2	1	0	0	3
913-Lake Carlos State Park	11/7 - 11/8	18**	1	4	2	2	9
914-William O'Brien State Park	11/14 - 11/15	50*	10	15	1	6	32
915-Lake Bronson State Park	11/7 - 11/15	30*	9	4	0	0	13
916-Maplewood State Park	11/7 - 11/10	100*	23	14	5	2	44
919-Glacial Lakes State Park	11/12 - 11/15	30**	0	6	3	0	9
920-Zumbro Falls SNA	11/7 - 11/15	12**	0	2	6	3	11
921-Forestville/Mystery Cave State Park	11/7 - 11/8	130*	37	49	17	19	122
922-Beaver Creek Valley State Park	11/7 - 11/8	20*	3	4	1	2	10
923-Zumbro Falls SNA	11/21 - 11/29	12**	0	7	2	0	9
925A-Vermillion Highlands Research (A or B)	11/7 - 11/20	20*	3	2	1	0	6
927-Whitewater State Park	11/21 - 11/22	50*	1	19	6	7	33
929-Frontenac State Park	11/21 - 11/23	60*	6	28	4	7	45
931-City of Grand Rapids	11/7 - 11/22	NA†*	10	11	8	9	38
932A-Lake Elmo Park Reserve	11/7 - 11/8	40*	5	4	2	0	11
932B-Lake Elmo Park Reserve	11/14 - 11/15	40*	4	6	5	5	20
933A-Carver Park Reserve (A or B)	11/14 - 11/15	110*	23	31	5	4	63
934-Whitewater State Game Refuge	11/21 - 11/29	75**	0	20	3	2	25
<b>Total</b>			<b>206</b>	<b>367</b>	<b>122</b>	<b>98</b>	<b>793</b>

†Unlimited permits

\*Either sex

\*\*Antlerless Only

\*\*\* Earn-A-Buck

Table 7. Free Landowner Firearms Harvest by Permit Area, 2015.

Permit Area	Adult Female	Fawn Male	Fawn Female	Total	Permit Area	Adult Female	Fawn Male	Fawn Female	Total
182	1	0	0	1	256	15	3	3	21
201	2	0	0	2	257	29	2	5	36
209	17	3	1	21	264	25	3	2	30
213	78	18	16	112	265	13	2	2	17
214	70	31	13	114	277	5	2	1	8
215	31	18	11	60	292	7	4	2	13
218	10	2	0	12	293	6	1	1	8
219	1	2	1	4	338	6	1	0	7
223	1	1	0	2	339	4	2	1	7
225	17	3	5	25	341	34	11	7	52
227	3	3	1	7	342	45	5	4	54
230	0	1	0	1	343	11	8	4	23
233	2	2	0	4	344	14	3	1	18
236	2	0	2	4	345	24	6	6	36
239	34	7	7	48	346	23	8	5	36
240	78	16	16	110	347	6	1	2	9
241	101	35	30	166	348	19	4	4	27
248	7	2	0	9	349	38	5	11	54
254	5	0	0	5	<b>Total</b>	<b>790</b>	<b>217</b>	<b>166</b>	<b>1,173</b>
255	6	2	2	10					

Table 8. Archery Harvest by Permit Area, 2015. Includes Regular, Youth, and Bonus Permits. Does not include most 900-series hunts.

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
101	11	4	0	0	15
103	7	0	0	0	7
105	23	15	1	3	42
108	26	0	0	0	26
110	24	18	1	3	46
111	7	0	0	0	7
114	1	3	0	0	4
118	11	0	0	0	11
119	9	0	0	0	9
122	7	7	0	0	14
126	5	8	2	1	16
127	2	4	0	0	6
152	4	1	0	0	5
155	54	55	10	2	121
156	58	58	7	7	130
157	126	66	18	7	217
159	68	36	9	5	118
169	30	0	1	0	31
171	20	41	13	5	79
172	65	94	22	10	191
173	18	21	5	3	47
176	38	1	0	1	40
177	17	1	1	0	19
178	62	0	0	0	62
179	93	89	16	9	207
180	31	24	3	3	61
181	38	6	1	2	47
182	111	234	59	30	434
183	42	5	0	2	49
184	198	122	25	12	357
197	27	29	4	3	63
199	3	2	1	0	6
201	4	2	1	1	8
203	1	0	0	0	1
208	8	4	1	0	13
209	32	16	0	1	49
210	28	12	4	0	44
213	328	179	22	25	554
214	124	190	41	33	388
215	219	325	63	32	639
218	172	109	19	18	318
219	149	81	12	15	257
221	120	58	17	8	203
222	88	25	8	2	123
223	198	118	26	16	358
224	17	6	4	0	27
225	170	83	17	13	283
227	294	303	45	47	689
229	67	33	12	6	118
230	39	25	1	2	67
232	33	22	4	4	63
233	41	25	7	4	77
250	58	22	3	1	84
251	7	2	2	1	12
252	40	25	7	2	74
253	69	56	8	2	135
254	88	46	3	3	140
255	112	51	17	7	187
256	24	15	0	3	42
257	22	21	3	2	48
258	44	21	7	0	72
259	54	45	10	3	112
260	12	6	1	0	19
261	24	8	2	2	36
262	50	19	4	3	76
263	19	7	0	1	27
264	26	22	1	2	51
265	23	18	3	2	46
266	25	15	2	0	42
267	7	6	2	1	16
268	14	4	1	1	20
269	34	18	3	1	56
270	18	13	0	1	32
271	22	18	0	2	42
272	17	7	1	3	28
273	65	36	6	1	108
274	30	15	4	1	50
275	35	25	3	0	63
276	71	39	0	2	112
277	222	172	26	15	435
278	52	34	1	4	91
279	15	14	0	2	31
280	14	11	2	0	27
281	68	39	7	3	117
282	20	11	2	0	33
283	51	33	3	1	88
284	54	21	0	6	81
285	106	51	6	5	168
286	32	3	1	0	36
288	57	60	4	4	125
289	35	23	1	2	61
290	70	29	2	2	103
291	183	105	13	7	308
292	89	55	7	5	156
293	110	51	8	7	176
294	45	20	3	2	70
295	70	47	5	5	127
296	33	18	0	3	54
297	12	2	0	0	14
298	19	6	0	0	25
299	52	50	10	7	119
338	61	30	4	6	101
339	58	48	7	5	118
341	213	116	18	13	360

Table 8. Continued.

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
234	36	1	0	0	37
235	22	12	2	1	37
236	246	226	43	33	548
237	36	3	2	1	42
238	12	5	0	0	17
239	103	55	9	8	175
240	106	69	8	4	187
241	229	437	46	49	761
242	93	85	14	6	198
246	107	76	8	7	198
247	83	61	13	9	166
248	50	27	8	1	86
249	79	60	11	6	156

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
342	126	47	5	6	184
343	266	400	67	53	786
344	74	23	8	13	118
345	83	41	7	7	138
346	187	233	53	37	510
347	102	38	8	8	156
348	93	42	15	3	153
349	213	281	36	70	600
601	799	1,073	231	177	2,280
970	32	31	16	10	89
971	62	25	20	7	114
<b>Total</b>	<b>9,358</b>	<b>7,540</b>	<b>1,356</b>	<b>1,002</b>	<b>19,256</b>

970 = Camp Ripley First Hunt

971 = Camp Ripley Second Hunt

Table 9. Archery Harvest using Bonus Permits by Permit Area, 2015.

Permit Area	Adult Female	Fawn Male	Fawn Female	Total
114	1	0	0	1
182	185	48	25	258
214	144	27	23	194
215	257	42	28	327
227	225	30	32	287
236	164	29	19	212
241	313	33	31	377
343	336	50	39	425
346	206	41	31	278
349	281	27	61	369
601	949	196	162	1307
<b>Total</b>	<b>3,061</b>	<b>523</b>	<b>451</b>	<b>4,035</b>

Table 10. Summary of Archery Special Hunts, 2015. Includes Regular, Youth, and Bonus Permits.

Area	Dates	Permits Issued	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
970 - Camp Ripley 1	10/15 - 10/16	2000*	32	31	16	10	89
971 - Camp Ripley 2	10/31 - 11/1	2000*	62	25	20	7	114
972 - Crow Hansen Park Reserve	10/30 - 11/1	130*	0	0	0	0	-
973 - Murphy Hanrehan Park	10/30 - 11/1	180*	0	0	1	0	1
975 - Vermillion Highlands WMA	9/19-10/30; 12/19 -12/31	60*	2	1	2	0	5
976 - City of New Ulm	10/17 - 12/31	50**	5	30	7	6	48
977 - City of Red Wing	9/19 - 12/31	NA†*	5	37	5	4	51
978 - City of Redwood Falls	10/17 - 12/31	20*	1	13	0	2	16
979 - City of Fergus Falls	9/19 - 12/31	25*	5	8	2	0	15
980 - City of Duluth	9/19 - 12/31	400***	60	185	60	52	357
981 - City of Mankato	9/19 - 12/31	40**	1	7	4	1	13
982 - City of Granite Falls	9/19 - 12/31	10**	0	0	0	0	0
983 - City of Ortonville	9/19 - 12/31	30***	0	16	1	0	17
984 - City of Canby	9/19 - 12/31	20*	0	2	0	0	2
985 - City of Bemidji	9/19 - 12/31	45***	0	9	3	3	15
986 - Carleton Game Refuge	11/26 - 12/31	40***	2	5	4	2	13
987 - Greenleaf State Recreation Area	9/19 - 12/31	NA†*	0	1	0	0	1
<b>Total</b>			<b>201</b>	<b>515</b>	<b>142</b>	<b>107</b>	<b>965</b>

\*In many cases, city archery harvest is under-reported because individuals do not use the applicable number when registering their deer.

NA† Unlimited Permits

\*Either sex

\*\* Antlerless only

\*\*\* Earn-A-Buck

Table 11. Free Landowner Archery Harvest by Permit Area, 2015.

Permit Area	Adult Female	Fawn Male	Fawn Female	Total
213	9	0	1	10
214	1	2	1	4
215	6	0	0	6
218	1	0	2	3
219	1	0	0	1
225	2	1	0	3
236	1	0	0	1
239	3	0	1	4
240	3	0	2	5
241	14	1	1	16
248	2	0	0	2
254	1	1	0	2
255	0	1	0	1
257	1	1	0	2
265	1	0	0	1
277	2	0	0	2
292	1	0	1	2
293	2	0	0	2
338	0	0	1	1
339	1	0	0	1
341	2	0	0	2
342	3	0	0	3
343	2	0	0	2
344	1	0	0	1
345	4	2	0	6
346	5	0	0	5
347	2	0	0	2
348	3	0	0	3
349	6	1	1	8
601	1	0	0	1
<b>Total</b>	<b>81</b>	<b>10</b>	<b>11</b>	<b>102</b>

Table 12. Muzzleloader Harvest by Permit Area, 2015.

Includes Regular, Muzzleloader, Youth, and Bonus permits. Does not include Park hunts.

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
101	14	1	0	0	15
103	6	0	0	0	6
105	13	7	0	0	20
108	11	1	0	0	12
110	7	1	1	0	9
111	4	1	0	0	5
114	1	0	0	0	1
118	6	0	0	0	6
119	2	0	0	0	2
122	3	1	0	0	4
126	4	1	0	0	5
127	1	1	0	0	2
155	4	7	0	2	13
156	16	6	1	1	24
157	14	17	0	3	34
159	7	4	0	0	11
169	14	0	0	0	14
171	7	3	0	1	11
172	20	10	0	1	31
173	6	4	0	1	11
176	17	2	0	0	19
177	6	0	0	0	6
178	15	1	0	0	16
179	22	9	1	1	33
180	4	8	1	2	15
181	5	0	0	0	5
182	5	19	4	1	29
183	6	0	0	0	6
184	36	16	6	1	59
197	7	1	1	0	9
201	8	7	1	3	19
203	18	8	1	0	27
208	18	3	0	0	21
209	24	15	7	2	48
210	24	5	2	0	31
213	77	115	31	14	237
214	36	103	23	19	181

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
250	43	14	1	0	58
251	3	0	0	0	3
252	25	7	2	0	34
253	39	12	5	0	56
254	46	44	5	7	102
255	30	21	10	6	67
256	17	16	6	1	40
257	11	10	2	0	23
258	19	9	2	2	32
259	32	18	6	3	59
260	21	5	0	0	26
261	13	6	2	0	21
262	25	1	1	0	27
263	25	5	1	0	31
264	39	45	4	4	92
265	21	35	11	5	72
266	26	10	0	2	38
267	20	1	2	0	23
268	21	1	2	2	26
269	30	5	3	2	40
270	20	5	2	1	28
271	24	6	2	0	32
272	11	3	0	1	15
273	20	20	4	1	45
274	22	15	4	0	41
275	32	17	2	0	51
276	25	43	2	3	73
277	91	141	21	12	265
278	37	19	0	1	57
279	30	21	3	1	55
280	16	7	1	0	24
281	30	28	6	1	65
282	7	1	0	0	8
283	19	10	0	0	29
284	24	11	2	3	40
285	30	11	0	0	41
286	35	5	1	1	42

Table 12. Continued.

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
215	49	105	38	28	220
218	47	78	10	8	143
219	27	64	14	13	118
221	26	16	6	1	49
222	9	19	4	3	35
223	33	52	8	5	98
225	31	44	9	8	92
227	46	102	25	19	192
229	15	4	0	1	20
230	16	17	4	0	37
232	14	9	2	0	25
233	15	26	8	0	49
234	12	2	0	0	14
235	0	0	0	1	1
236	25	50	17	11	103
237	24	3	0	0	27
238	3	1	0	0	4
239	28	49	13	7	97
240	40	54	12	11	117
241	62	185	44	30	321
242	11	6	1	0	18
246	35	21	2	1	59
247	14	7	0	2	23
248	8	11	3	2	24
249	12	11	6	5	34

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
287	0	9	1	1	11
288	42	23	5	2	72
289	23	10	1	2	36
290	18	25	7	4	54
291	61	34	2	5	102
292	27	51	10	4	92
293	32	42	11	11	96
294	27	14	2	1	44
295	42	19	3	0	64
296	37	17	1	3	58
297	4	2	0	0	6
298	8	2	0	0	10
299	19	13	2	1	35
338	13	33	3	2	51
339	9	13	3	3	28
341	18	54	14	13	99
342	21	42	14	8	85
343	30	59	14	9	112
344	13	28	5	4	50
345	12	17	1	2	32
346	24	100	23	17	164
347	11	35	4	1	51
348	9	22	8	5	44
349	39	144	32	25	240
601	21	39	11	3	74
<b>TOTAL</b>	<b>2,629</b>	<b>2,788</b>	<b>598</b>	<b>393</b>	<b>6,408</b>

Table 13. Muzzleloader Harvest using Bonus Permits by Permit Area, 2015.

Permit Area	Adult Female	Fawn Male	Fawn Female	Total
182	10	2	0	12
214	53	12	9	74
215	59	21	16	96
227	55	15	10	80
236	21	6	9	36
241	103	24	16	143
287	7	0	0	7
343	34	12	5	51
346	69	15	13	97
349	104	25	17	146
601	27	10	1	38
<b>TOTAL</b>	<b>542</b>	<b>142</b>	<b>96</b>	<b>780</b>

Table 14. Summary of Muzzleloader Special Hunts, 2015. Includes Regular, Youth, and Bonus Permits.

Area	Dates	Permits Issued	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
935 - Jay Cook SP <sup>1</sup>	12/5-12/9	95*	3	16	1	6	26
936 - Crow Wing SP	12/5-12/6	25*	1	6	1	1	9
937 - Soudan Mine and Lake Vermilion SP <sup>1</sup>	11/28-12/13	20*	1	4	0	0	5
938 - City of Tower	11/28-12/13	20**	0	3	1	0	4
941 - Nerstrand Big Woods SP <sup>1</sup>	12/5-12/6	50***	1	7	4	4	16
942 - Sibley State Park <sup>1</sup>	11/28 - 11/29	60**	0	10	5	1	16
943 - Myre-Big Island State Park <sup>1</sup>	11/28 - 11/30	50**	0	32	3	9	44
944 - Vermillion Highlands WMA <sup>1</sup>	11/28-12/13	20*	2	2	0	0	4
945 - Camp Ripley	11/30 - 12/2	100*	15	2	1	0	18
946 -City of Grand Rapids <sup>1</sup>	11/28-12/13	NA†	1	0	0	0	1
947 -Lake Bemidji State Park <sup>1</sup>	12/4-12/6	30*	4	2	2	2	10
<b>Total</b>			<b>28</b>	<b>84</b>	<b>18</b>	<b>23</b>	<b>153</b>

<sup>1</sup> Bonus permits available

\*\*Antlerless Only

NA† Unlimited Permits

\*Either Sex

\*\*\*Earn-A-Buck

Table 15. Free Landowner Muzzleloader Harvest by Permit Area, 2015.

Permit Area	Adult Female	Fawn Male	Fawn Female	Total
209	1	1	0	2
213	11	2	3	16
214	10	2	0	12
215	7	1	2	10
223	1	0	0	1
225	1	0	1	2
227	1	0	0	1
239	0	1	0	1
240	3	0	0	3
241	5	4	1	10
254	1	1	0	2
255	2	0	0	2
256	1	1	0	2
257	1	0	0	1
264	6	0	0	6
265	2	0	0	2
277	3	1	1	5
292	4	0	0	4
293	1	0	1	2
338	1	0	0	1
339	1	0	0	1
341	6	3	2	11
342	5	1	3	9
344	1	0	1	2
345	1	1	0	2
346	6	1	1	8
347	1	0	0	1
348	0	1	0	1
349	6	0	3	9
<b>Total</b>	<b>89</b>	<b>21</b>	<b>19</b>	<b>129</b>

Table 16. Summary of mentored\* and youth seasons, 2015.

Permit Area	Dates	Permits Issued	Harvest				Total
			Adult Male	Adult Female	Fawn Male	Fawn Female	
950 - Camp Ripley Archery	10/10-10/11	175	3	1	1	0	5
951 - Afton SP	11/7-11/8	25	8	7	1	4	20
952 - Sibley State Park	10/24 - 10/25	10	4	1	0	0	5
953 - Zipple Bay SP	10/24-10/25	20	1	1	0	0	2
954 - Lake Bemidji SP	10/16-10/18	20	0	7	1	0	8
955 - Lake Alexander Preserve	10/10 - 10/11	20	0	0	1	0	1
956 - St. Croix SP	10/31-11/1	90	7	3	2	2	14
957 - Rydell NWR	10/17-10/18	15	0	0	0	0	0
958 - Savanna Portage SP	10/24-10/25	20	2	6	0	0	8
959 - Buffalo River SP	11/7-11/8	14	0	3	0	0	3
960 - Tettegouche SP	10/17-10/18	10	0	1	0	0	1
961 - Itasca SP	10/24-10/25	75	1	2	0	0	3
963 - Kilen Woods State Park	10/24 - 10/25	5	0	1	0	0	1
964 - Savann Portage SP II	10/31 - 11/1	20	1	0	0	1	2
965 - Banning SP	10/31-11/1	6	0	3	0	0	3
966 - Blue Mounds SP	11/21-11/22	10	1	1	0	0	2
967 - Camden SP	10/31-11/1	15	2	1	0	0	3
968 - Lake Shetek SP	10/24-10/25	12	7	0	0	0	7
159 - St Croix SP Adult	10/31-11/1	13	1	0	0	0	1
<b>Total</b>		<b>575</b>	<b>38</b>	<b>38</b>	<b>6</b>	<b>7</b>	<b>89</b>

\* Includes special youth and adult mentored hunts

**Youth Deer Season - October 15 - 18, unlimited permits.**

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
101	10	7	3	3	23
105	43	30	13	5	91
111	8	18	3	0	29
114	0	1	1	0	2
201	9	6	0	0	15
203	1	0	2	1	4
208	17	13	5	2	37
209	21	25	1	3	50
256	33	15	3	4	55
257	28	16	6	5	55
260	19	12	2	2	35
263	23	9	2	1	35
264	41	39	6	0	86
267	13	2	4	3	22
268	14	12	5	6	37
338	10	6	0	0	16
339	14	8	5	3	30
341	51	29	9	9	98
342	32	26	5	6	69
343	35	24	6	8	73
344	22	10	11	7	50
345	19	6	5	3	33
346	30	25	8	5	68
347	23	16	4	4	47
348	26	9	3	2	40
349	42	9	5	3	59
601	11	8	2	0	21
<b>Total</b>	<b>595</b>	<b>381</b>	<b>119</b>	<b>85</b>	<b>1180</b>

Table 17. Total Deer Harvest by Permit Area, 2015. Includes all license types, permits, and special hunts.

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
101	460	34	10	8	512
103	709	3	3	1	716
105	968	155	37	27	1,187
108	929	10	1	0	940
110	914	207	42	34	1,197
111	460	29	6	0	495
114	32	14	1	1	48
117	44	2	0	0	46
118	540	0	2	0	542
119	363	4	1	1	369
122	177	70	14	7	268
126	274	83	14	4	375
127	56	15	1	1	73
152	79	9	2	0	90
155	992	452	131	68	1,643
156	1,298	291	69	47	1,705
157	2,075	533	184	87	2,879
159	1,053	216	68	33	1,370
169	1,351	12	8	3	1,374
171	988	264	72	40	1,364
172	1,735	598	167	109	2,609
173	652	152	41	30	875
176	1,324	10	5	1	1,340
177	665	6	1	0	672
178	1,427	13	8	3	1,451
179	1,676	436	115	71	2,298
180	589	200	43	18	850
181	797	16	5	5	823
182	508	540	177	91	1,316
183	947	23	9	5	984
184	3,010	841	232	139	4,222
197	1,009	165	45	30	1,249
199	94	2	2	0	98
201	157	65	17	10	249
203	93	9	3	2	107
208	318	53	15	10	396
209	615	314	60	41	1,030

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
289	306	112	15	18	451
290	524	223	51	39	837
291	932	387	83	49	1,451
292	684	378	118	56	1,236
293	686	324	104	63	1,177
294	475	239	34	21	769
295	637	168	34	17	856
296	403	172	26	23	624
297	228	28	7	5	268
298	695	82	30	15	822
299	356	182	39	21	598
338	348	252	59	36	695
339	336	242	69	45	692
341	1,041	761	217	161	2,180
342	814	526	141	97	1,578
343	984	1,119	275	248	2,626
344	478	412	101	92	1,083
345	578	404	124	86	1,192
346	1,177	1,306	411	288	3,182
347	610	384	96	74	1,164
348	672	495	141	80	1,388
349	1,524	1,785	457	435	4,201
601	1,450	1,480	369	254	3,553
900	2	1	0	1	4
901	2	4	1	1	8
902	28	68	23	16	135
903	8	9	11	5	33
904	3	8	3	0	14
905	5	8	1	0	14
906	7	10	4	2	23
907	2	4	1	0	7
908	5	3	0	0	8
909	5	10	1	2	18
910	0	14	5	3	22
911	2	1	1	0	4
912	2	1	0	0	3
913	1	4	2	2	9

Table 17. Continued.

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
210	880	201	74	34	1,189
213	2,715	1,360	375	251	4,701
214	1,833	1,415	505	360	4,113
215	1,700	1,393	553	329	3,975
218	1,282	754	231	184	2,451
219	789	463	135	101	1,488
221	1,273	410	153	105	1,941
222	923	343	133	81	1,480
223	855	491	148	102	1,596
224	106	33	13	13	165
225	1,584	804	314	182	2,884
227	1,303	952	287	218	2,760
229	339	104	29	26	498
230	283	198	51	37	569
232	308	85	24	15	432
233	263	141	48	18	470
234	254	21	6	2	283
235	83	34	6	5	128
236	872	655	159	117	1,803
237	338	54	9	11	412
238	98	23	5	6	132
239	1,715	913	297	178	3,103
240	2,044	1,014	303	222	3,583
241	3,679	3,208	944	689	8,520
242	679	226	65	32	1,002
246	2,192	585	186	130	3,093
247	733	349	124	78	1,284
248	461	239	83	48	831
249	1,156	473	175	93	1,897
250	432	114	26	11	583
251	111	27	12	3	153
252	392	151	28	18	589
253	504	198	36	10	748
254	664	362	80	54	1,160
255	599	272	93	44	1,008
256	612	306	66	59	1,043
257	460	242	74	44	820
258	977	320	121	72	1,490

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
914	10	15	1	6	32
915	9	4	0	0	13
916	23	14	5	2	44
919	0	6	3	0	9
920	0	2	6	3	11
921	37	49	17	19	122
922	3	4	1	2	10
923	0	7	2	0	9
925	3	2	1	0	6
927	1	19	6	7	33
929	6	28	4	7	45
931	10	11	8	9	38
932	9	10	7	5	31
933	23	31	5	4	63
934	0	20	3	2	25
935	3	16	1	6	26
936	1	6	1	1	9
937	1	4	0	0	5
938	0	3	1	0	4
941	1	7	4	4	16
942	0	10	5	1	16
943	0	32	3	9	44
944	2	2	0	0	4
945	15	2	1	0	18
946	1	0	0	0	1
947	4	2	2	2	10
950	3	1	1	0	5
951	8	7	1	4	20
952	4	1	0	0	5
953	1	1	0	0	2
954	0	7	1	0	8
955	0	0	1	0	1
956	7	3	2	2	14
958	2	6	0	0	8
959	0	3	0	0	3
961	0	1	0	0	1
963	1	2	0	0	3
964	0	1	0	0	1

Table 17. Continued.

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
259	1,468	553	191	101	2,313
260	515	82	17	9	623
261	268	67	23	14	372
262	290	72	23	14	399
263	521	101	26	13	661
264	904	520	95	50	1,569
265	567	356	93	62	1,078
266	455	101	14	10	580
267	327	48	14	13	402
268	379	75	18	18	490
269	276	82	20	19	397
270	251	60	11	10	332
271	312	102	13	10	437
272	225	59	8	7	299
273	598	280	56	39	973
274	316	107	18	10	451
275	460	148	27	11	646
276	708	301	54	44	1,107
277	1,874	1,133	248	177	3,432
278	464	143	22	14	643
279	250	143	12	14	419
280	283	111	12	11	417
281	590	234	53	24	901
282	164	38	9	2	213
283	382	104	16	10	512
284	420	177	27	24	648
285	555	166	35	15	771
286	369	57	10	5	441
287	82	92	29	17	220
288	512	239	52	33	836

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
965	1	0	0	1	2
966	0	3	0	0	3
967	1	1	0	0	2
968	2	1	0	0	3
970	7	0	0	0	7
971	32	31	16	10	89
973	62	25	20	7	114
975	0	0	1	0	1
976	2	1	2	0	5
977	5	30	7	6	48
978	5	37	5	4	51
979	1	13	0	2	16
980	5	8	2	0	15
981	60	185	60	52	357
982	1	7	4	1	13
983	0	16	1	0	17
984	0	2	0	0	2
985	0	9	3	3	15
986	2	5	4	2	13
987	0	1	0	0	1
989	7	33	3	4	47
990	3	21	3	4	31
991	0	9	0	0	9
992	0	1	0	0	1
993	2	19	3	4	28
995	2	40	3	4	49
996	11	13	2	2	28
997	0	8	3	2	13
998	1	1	0	0	2
<b>TOTAL</b>	<b>96,064</b>	<b>42,995</b>	<b>12,117</b>	<b>8,167</b>	<b>159,343</b>

Table 18. Estimated firearm hunter numbers, density, and harvest by Permit Area, 2015.

Excludes data from all 900-series hunts.

Permit Area	Firearm Hunters	Area Size (sq mi)	Hunters / mile <sup>2</sup>	Harvest / mile <sup>2</sup>	Permit Area	Firearm Hunters	Area Size (sq mi)	Hunters / mile <sup>2</sup>	Harvest / mile <sup>2</sup>
101	2,023	496	4.1	0.9	221	5,498	642	8.6	2.7
103	2,614	1,820	1.4	0.4	222	5,043	413	12.2	3.3
105	3,995	740	5.4	1.4	223	3,498	375	9.3	3.1
108	4,219	1,651	2.6	0.5	224	693	47	14.6	2.8
110	4,158	528	7.9	2.2	225	7,597	618	12.3	4.3
111	2,126	1,438	1.5	0.3	227	5,240	472	11.1	4.1
114	213	116	1.8	0.3	229	1,548	284	5.4	1.3
117	151	927	0.2	0.0	230	1,575	452	3.5	1.1
118	2,816	1,220	2.3	0.4	232	1,274	377	3.4	0.9
119	2,605	770	3.4	0.5	233	1,053	385	2.7	0.9
122	2,061	603	3.4	0.4	234	696	636	1.1	0.4
126	1,725	941	1.8	0.4	235	592	34	17.6	2.6
127	486	564	0.9	0.1	236	3,088	370	8.3	3.2
152	715	61	11.7	1.4	237	1,060	728	1.5	0.5
155	7,585	593	12.8	2.6	238	363	95	3.8	1.2
156	8,526	825	10.3	1.9	239	7,962	919	8.7	3.2
157	12,980	673	19.3	4.0	240	7,759	643	12.1	5.2
159	6,756	571	11.8	2.2	241	14,875	996	14.9	7.7
169	6,552	1,124	5.8	1.2	242	2,620	214	12.2	3.8
171	6,643	701	9.5	1.9	246	11,152	840	13.3	3.4
172	10,523	687	15.3	3.5	247	3,650	228	16.0	5.0
173	4,872	584	8.3	1.4	248	2,156	214	10.1	3.5
176	6,495	1,113	5.8	1.2	249	6,245	715	8.7	2.5
177	3,271	480	6.8	1.3	250	1,549	713	2.2	0.6
178	7,982	1,280	6.2	1.1	251	572	55	10.4	2.7
179	9,743	862	11.3	2.4	252	1,414	715	2.0	0.7
180	4,720	977	4.8	0.8	253	2,088	974	2.1	0.6
181	4,944	708	7.0	1.1	254	2,829	929	3.0	1.0
182	2,915	267	10.9	3.4	255	1,957	774	2.5	1.0
183	6,153	663	9.3	1.4	256	2,484	654	3.8	1.4
184	14,209	1,229	11.6	3.2	257	2,030	412	4.9	1.7
197	5,475	954	5.7	1.2	258	4,308	343	12.6	4.2
199	474	148	3.2	0.6	259	7,296	490	14.9	4.5
201	591	161	3.7	1.3	260	1,897	1,249	1.5	0.4
203	241	83	2.9	0.9	261	869	795	1.1	0.4
208	1,151	414	2.8	0.8	262	1,023	677	1.5	0.4
209	2,758	639	4.3	1.4	263	1,706	512	3.3	1.1
210	4,036	615	6.6	1.9	264	3,870	669	5.8	2.1
213	9,791	1,057	9.3	3.8	265	2,167	494	4.4	2.0
214	7,502	554	13.5	6.6	266	1,867	617	3.0	0.8
215	7,154	701	10.2	4.7	267	1,062	472	2.2	0.7
218	5,743	884	6.5	2.3	268	1,268	228	5.6	1.8
219	3,801	391	9.7	2.9	269	1,348	650	2.1	0.5

Table 18. Continued.

Permit Area	Firearm Hunters	Area Size (sq mi)	Hunters/ mile <sup>2</sup>	Harvest/ mile <sup>2</sup>
270	1,083	747	1.4	0.4
271	1,125	632	1.8	0.6
272	1,135	531	2.1	0.5
273	2,949	571	5.2	1.5
274	1,148	354	3.2	1.0
275	2,031	764	2.7	0.7
276	3,200	542	5.9	1.7
277	7,060	812	8.7	3.4
278	1,964	402	4.9	1.2
279	1,304	344	3.8	1.0
280	1,474	675	2.2	0.5
281	2,557	575	4.5	1.3
282	929	778	1.2	0.2
283	1,537	613	2.5	0.7
284	1,771	837	2.1	0.6
285	2,443	549	4.5	1.1
286	1,183	446	2.7	0.8
287	597	46	13.1	4.8
288	2,064	625	3.3	1.0
289	1,131	815	1.4	0.4
290	2,368	662	3.6	1.0
291	3,990	800	5.0	1.3
292	3,104	479	6.5	2.2
293	2,598	511	5.1	1.8
294	1,536	686	2.2	1.0
295	2,296	839	2.7	0.8
296	1,841	667	2.8	0.8
297	1,048	438	2.4	0.6
298	3,473	618	5.6	1.3
299	1,571	386	4.1	1.2
338	2,153	454	4.7	1.2
339	1,894	393	4.8	1.4
341	4,963	612	8.1	2.7
342	3,666	349	10.5	3.6
343	4,633	663	7.0	2.5
344	3,252	189	17.2	4.6
345	2,824	322	8.8	3.0
346	4,481	318	14.1	8.0
347	2,907	434	6.7	2.1
348	3,211	332	9.7	3.6
349	6,166	490	12.6	6.8
601	3,013	1,625	1.9	0.8
<b>Total</b>	<b>448,007</b>	<b>78,855</b>	<b>5.7</b>	<b>1.7</b>

Note: This table excludes harvest data from all 900-series special hunts.

Area Size = Total land area (not water) within the DPA, area estimates were recalculated in 2014

Table 19. Deer harvest per square mile by season, 2015.

Permit Area	Area Size/mi <sup>2</sup>	Archery Harvest/mi <sup>2</sup>	Firearm Harvest/mi <sup>2</sup>	Muzz. Harvest/mi <sup>2</sup>	EA Harvest/mi <sup>2</sup>	Youth Harvest/mi <sup>2</sup>	Total Harvest/mi <sup>2</sup>	Rank
101	496	0.03	0.93	0.03	0.00	0.05	1.03	91
103	1,820	0.00	0.39	0.00	0.00	0.00	0.39	124
105	740	0.06	1.40	0.03	0.00	0.12	1.60	60
108	1,651	0.02	0.55	0.01	0.00	0.00	0.57	111
110	528	0.09	2.16	0.02	0.00	0.00	2.27	46
111	1,438	0.00	0.32	0.00	0.00	0.02	0.34	125
114	116	0.03	0.35	0.01	0.00	0.02	0.41	122
117	927	0.00	0.05	0.00	0.00	0.00	0.05	128
118	1,220	0.01	0.43	0.00	0.00	0.00	0.44	120
119	770	0.01	0.46	0.00	0.00	0.00	0.48	116
122	603	0.02	0.41	0.01	0.00	0.00	0.44	118
126	941	0.02	0.38	0.01	0.00	0.00	0.40	123
127	564	0.01	0.12	0.00	0.00	0.00	0.13	127
152	61	0.08	1.39	0.00	0.00	0.00	1.47	69
155	593	0.20	2.54	0.02	0.00	0.00	2.77	38
156	825	0.16	1.88	0.03	0.00	0.00	2.07	50
157	673	0.32	3.91	0.05	0.00	0.00	4.28	19
159	571	0.21	2.17	0.02	0.00	0.00	2.40	43
169	1,124	0.03	1.18	0.01	0.00	0.00	1.22	83
171	701	0.11	1.82	0.02	0.00	0.00	1.95	53
172	687	0.28	3.47	0.05	0.00	0.00	3.80	26
173	584	0.08	1.40	0.02	0.00	0.00	1.50	67
176	1,113	0.04	1.15	0.02	0.00	0.00	1.20	86
177	480	0.04	1.35	0.01	0.00	0.00	1.40	71
178	1,280	0.05	1.07	0.01	0.00	0.00	1.13	89
179	862	0.24	2.39	0.04	0.00	0.00	2.67	40
180	977	0.06	0.79	0.02	0.00	0.00	0.87	97
181	708	0.07	1.09	0.01	0.00	0.00	1.16	87
182	267	1.62	3.19	0.11	0.00	0.00	4.92	10
183	663	0.07	1.40	0.01	0.00	0.00	1.48	68
184	1,229	0.29	3.10	0.05	0.00	0.00	3.44	33
197	954	0.07	1.23	0.01	0.00	0.00	1.31	75
199	148	0.04	0.62	0.00	0.00	0.00	0.66	106
201	161	0.05	1.29	0.12	0.00	0.09	1.55	65
203	83	0.01	0.91	0.33	0.00	0.05	1.30	77
208	414	0.03	0.79	0.05	0.00	0.09	0.96	94
209	639	0.08	1.38	0.08	0.00	0.08	1.61	59
210	615	0.07	1.81	0.05	0.00	0.00	1.93	54
213	1,057	0.52	3.70	0.22	0.00	0.00	4.45	17
214	554	0.70	6.39	0.33	0.00	0.00	7.42	4
215	701	0.91	4.44	0.31	0.00	0.00	5.67	7
218	884	0.36	2.25	0.16	0.00	0.00	2.77	37
219	391	0.66	2.84	0.30	0.00	0.00	3.80	25
221	642	0.32	2.63	0.08	0.00	0.00	3.02	35
222	413	0.30	3.20	0.08	0.00	0.00	3.58	29
223	375	0.95	3.04	0.26	0.00	0.00	4.25	20
224	47	0.57	2.92	0.00	0.00	0.00	3.49	32

Table 19. Continued.

Permit Area	Area Size/mi <sup>2</sup>	Archery Harvest/mi <sup>2</sup>	Firearm Harvest/mi <sup>2</sup>	Muzz. Harvest/mi <sup>2</sup>	EA Harvest/mi <sup>2</sup>	Youth Harvest/mi <sup>2</sup>	Total Harvest/mi <sup>2</sup>	Rank
225	618	0.46	4.06	0.15	0.00	0.00	4.67	15
227	472	1.46	3.98	0.41	0.00	0.00	5.85	5
229	284	0.42	1.27	0.07	0.00	0.00	1.75	57
230	452	0.15	1.03	0.08	0.00	0.00	1.26	81
232	377	0.17	0.91	0.07	0.00	0.00	1.15	88
233	385	0.20	0.89	0.13	0.00	0.00	1.22	84
234	636	0.06	0.36	0.02	0.00	0.00	0.44	119
235	34	1.10	2.55	0.03	0.00	0.00	3.68	28
236	370	1.48	3.11	0.28	0.00	0.00	4.88	11
237	728	0.06	0.47	0.04	0.00	0.00	0.57	112
238	95	0.18	1.17	0.04	0.00	0.00	1.39	72
239	919	0.19	3.08	0.11	0.00	0.00	3.38	34
240	643	0.29	5.10	0.18	0.00	0.00	5.58	9
241	996	0.76	7.47	0.32	0.00	0.00	8.56	3
242	214	0.93	3.66	0.08	0.00	0.00	4.67	14
246	840	0.24	3.37	0.07	0.00	0.00	3.68	27
247	228	0.73	4.80	0.10	0.00	0.00	5.62	8
248	214	0.40	3.34	0.11	0.00	0.00	3.85	24
249	715	0.22	2.39	0.05	0.00	0.00	2.65	41
250	713	0.12	0.62	0.08	0.00	0.00	0.82	102
251	55	0.22	2.51	0.05	0.00	0.00	2.78	36
252	715	0.10	0.67	0.05	0.00	0.00	0.82	101
253	974	0.14	0.57	0.06	0.00	0.00	0.77	104
254	929	0.15	0.99	0.11	0.00	0.00	1.25	82
255	774	0.24	0.97	0.09	0.00	0.00	1.30	76
256	654	0.06	1.39	0.06	0.00	0.08	1.60	61
257	412	0.12	1.68	0.06	0.00	0.13	1.99	52
258	343	0.21	4.04	0.09	0.00	0.00	4.35	18
259	490	0.23	4.38	0.12	0.00	0.00	4.72	13
260	1,249	0.02	0.43	0.02	0.00	0.03	0.50	115
261	795	0.05	0.40	0.03	0.00	0.00	0.47	117
262	677	0.11	0.44	0.04	0.00	0.00	0.59	110
263	512	0.05	1.11	0.06	0.00	0.07	1.29	78
264	669	0.08	2.00	0.14	0.00	0.13	2.35	44
265	494	0.09	1.94	0.15	0.00	0.00	2.18	48
266	617	0.07	0.81	0.06	0.00	0.00	0.94	95
267	472	0.03	0.72	0.05	0.00	0.05	0.85	98
268	228	0.09	1.78	0.11	0.00	0.16	2.15	49
269	650	0.09	0.46	0.06	0.00	0.00	0.61	109
270	747	0.04	0.36	0.04	0.00	0.00	0.44	121
271	632	0.07	0.57	0.05	0.00	0.00	0.69	105
272	531	0.05	0.48	0.03	0.00	0.00	0.56	113
273	571	0.19	1.44	0.08	0.00	0.00	1.70	58
274	354	0.14	1.02	0.12	0.00	0.00	1.27	79
275	764	0.08	0.70	0.07	0.00	0.00	0.85	99
276	542	0.21	1.70	0.13	0.00	0.00	2.04	51
277	812	0.54	3.37	0.33	0.00	0.00	4.23	21

Table 19. Continued.

Permit Area	Area Size/mi <sup>2</sup>	Archery Harvest/mi <sup>2</sup>	Firearm Harvest/mi <sup>2</sup>	Muzz. Harvest/mi <sup>2</sup>	EA Harvest/mi <sup>2</sup>	Youth Harvest/mi <sup>2</sup>	Total Harvest/mi <sup>2</sup>	Rank
278	402	0.23	1.22	0.14	0.00	0.00	1.59	62
279	344	0.09	0.97	0.16	0.00	0.00	1.22	85
280	675	0.04	0.54	0.04	0.00	0.00	0.62	107
281	575	0.20	1.25	0.11	0.00	0.00	1.57	63
282	778	0.04	0.22	0.01	0.00	0.00	0.27	126
283	613	0.14	0.64	0.05	0.00	0.00	0.83	100
284	837	0.10	0.63	0.05	0.00	0.00	0.77	103
285	549	0.31	1.02	0.07	0.00	0.00	1.41	70
286	446	0.08	0.81	0.09	0.00	0.00	0.99	93
287	46	0.00	4.57	0.24	0.00	0.00	4.81	12
288	625	0.20	1.02	0.12	0.00	0.00	1.34	73
289	815	0.07	0.43	0.04	0.00	0.00	0.55	114
290	662	0.16	1.03	0.08	0.00	0.00	1.26	80
291	800	0.38	1.30	0.13	0.00	0.00	1.81	55
292	479	0.33	2.06	0.19	0.00	0.00	2.58	42
293	511	0.34	1.77	0.19	0.00	0.00	2.30	45
294	686	0.10	0.96	0.06	0.00	0.00	1.12	90
295	839	0.15	0.79	0.08	0.00	0.00	1.02	92
296	667	0.08	0.77	0.09	0.00	0.00	0.94	96
297	438	0.03	0.57	0.01	0.00	0.00	0.61	108
298	618	0.04	1.27	0.02	0.00	0.00	1.33	74
299	386	0.31	1.15	0.09	0.00	0.00	1.55	64
338	454	0.22	1.16	0.11	0.00	0.04	1.53	66
339	393	0.30	1.31	0.07	0.00	0.08	1.76	56
341	612	0.59	2.65	0.16	0.00	0.16	3.56	30
342	349	0.53	3.53	0.24	0.00	0.20	4.50	16
343	663	1.19	2.49	0.17	0.00	0.11	3.96	23
344	189	0.62	4.56	0.26	0.00	0.26	5.71	6
345	322	0.43	2.90	0.10	0.00	0.10	3.53	31
346	318	1.60	7.06	0.52	0.62	0.21	10.01	1
347	434	0.36	2.09	0.12	0.00	0.11	2.68	39
348	332	0.46	3.45	0.13	0.00	0.12	4.16	22
349	490	1.22	6.24	0.49	0.50	0.12	8.57	2
601	1,625	1.40	0.73	0.05	0.00	0.01	2.19	47
<b>Total</b>	<b>78,855</b>	<b>0.24</b>	<b>1.65</b>	<b>0.08</b>	<b>0.01</b>	<b>0.02</b>	<b>1.99</b>	

Note: This table excludes harvest data from all 900-series special hunts.

Area Size = Total land area (not water) within the DPA, area estimates were recalculated in 2014

EA harvest is reported based on total permit area; in some scenarios may be sub-unit designation

Table 20. Harvest using Depredation Permits, by Permit Area, 2015.

<b>Permit Area</b>	<b>Adult Female</b>	<b>Fawn Male</b>	<b>Fawn Female</b>	<b>Total</b>
342	7	0	1	8
343	2	0	0	2
344	1	0	0	1
345	39	7	7	53
348	6	1	1	8
<b>TOTAL</b>	<b>55</b>	<b>8</b>	<b>9</b>	<b>72</b>

Table 21. 2015 Firearm Lottery Distribution Report.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
		Total	Rejected			
101	1	124	1	124	0	24
	2	160	1	160	0	
	3	140	0	116	24	
		<b>424</b>	<b>2</b>	<b>400</b>	<b>24</b>	
105	1	342	4	342	0	148
	2	493	1	493	0	
	3	519	3	374	145	
	4	2	0	0	2	
	9	1	0	0	1	
	<b>1357</b>	<b>8</b>	<b>1209</b>	<b>148</b>		
110	1	721	4	721	0	348
	2	1156	3	836	320	
	3	18	0	0	18	
	4	10	0	0	10	
	<b>1905</b>	<b>7</b>	<b>1557</b>	<b>348</b>		
117	1	10	0	0	10	25
	2	7	0	0	7	
	3	1	0	0	1	
	4	1	0	0	1	
	<b>19</b>	<b>0</b>	<b>0</b>	<b>19</b>		
122	1	387	2	387	0	250
	2	313	0	77	236	
	3	11	0	0	11	
	4	3	0	0	3	
	<b>714</b>	<b>2</b>	<b>464</b>	<b>250</b>		
126	1	419	0	97	322	394
	2	61	0	0	61	
	3	9	0	0	9	
	4	2	0	0	2	
	<b>491</b>	<b>0</b>	<b>97</b>	<b>394</b>		
127	1	94	0	0	94	149
	2	17	0	0	17	
	3	5	0	0	5	
	4	8	0	0	8	
	5	1	0	0	1	
	<b>125</b>	<b>0</b>	<b>0</b>	<b>125</b>		
155	1	1318	7	1318	0	988
	2	2078	17	1162	916	
	3	68	0	0	68	
	4	1	0	0	1	
	5	2	0	0	2	
9	1	0	0	1		
	<b>3468</b>	<b>24</b>	<b>2480</b>	<b>988</b>		

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
156	1	1176	5	1176	0	296
	2	2008	11	1751	257	
	3	33	0	0	33	
	4	2	0	0	2	
	5	1	0	0	1	
	6	1	0	0	1	
	9	2	0	0	2	
		<b>3223</b>	16	<b>2927</b>	<b>296</b>	
157	1	4365	19	3329	1036	1479
	2	392	0	0	392	
	3	43	0	0	43	
	4	6	0	0	6	
	5	1	0	0	1	
	6	1	0	0	1	
		<b>4808</b>	19	<b>3329</b>	<b>1479</b>	
159	1	1112	6	1112	0	247
	2	1186	11	974	212	
	3	31	0	0	31	
	4	2	0	0	2	
	5	1	0	0	1	
	6	1	0	0	1	
		<b>2333</b>	17	<b>2086</b>	<b>247</b>	
171	1	891	3	891	0	295
	2	1408	10	1408	0	
	3	866	5	574	292	
	9	3	0	0	3	
		<b>3168</b>	18	<b>2873</b>	<b>295</b>	
172	1	1484	8	1484	0	986
	2	2275	6	2275	0	
	3	1834	8	853	981	
	4	5	0	0	5	
		<b>5598</b>	22	<b>4612</b>	<b>986</b>	
173	1	839	7	839	0	295
	2	1231	7	1025	206	
	3	89	1	0	89	
		<b>2159</b>	15	<b>1864</b>	<b>295</b>	
179	1	1393	10	1393	0	496
	2	2258	14	1891	367	
	3	114	4	0	114	
	4	11	0	0	11	
	5	2	0	0	2	
	6	1	0	0	1	
	9	1	0	0	1	
		<b>3780</b>	28	<b>3284</b>	<b>496</b>	

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
180	1	1083	7	466	617	789
	2	142	1	0	142	
	3	27	0	0	27	
	4	2	0	0	2	
	5	1	0	0	1	
		<b>1255</b>	<b>8</b>	<b>466</b>	<b>789</b>	
184	1	3882	20	3882	0	1969
	2	3097	22	1170	1927	
	3	37	0	0	37	
	4	3	0	0	3	
	9	2	0	0	2	
		<b>7021</b>	<b>42</b>	<b>5052</b>	<b>1969</b>	
197	1	709	6	709	0	198
	2	1178	7	1178	0	
	3	481	3	284	197	
	4	1	0	0	1	
		<b>2369</b>	<b>16</b>	<b>2171</b>	<b>198</b>	
208	1	158	1	158	0	97
	2	171	5	82	89	
	3	7	0	0	7	
	4	1	0	0	1	
		<b>337</b>	<b>6</b>	<b>240</b>	<b>97</b>	
210	1	1308	8	467	841	979
	2	119	0	0	119	
	3	17	1	0	17	
	5	2	0	0	2	
		<b>1446</b>	<b>9</b>	<b>467</b>	<b>979</b>	
221	1	2358	10	1555	803	977
	2	128	0	0	128	
	3	36	0	0	36	
	4	5	0	0	5	
	5	3	0	0	3	
	6	2	0	0	2	
		<b>2532</b>	<b>10</b>	<b>1555</b>	<b>977</b>	
222	1	1946	4	614	1332	1463
	2	106	1	0	106	
	3	21	0	0	21	
	4	4	0	0	4	
		<b>2077</b>	<b>5</b>	<b>614</b>	<b>1463</b>	
224	1	215	0	96	119	150
	2	25	0	0	25	
	3	6	0	0	6	
		<b>246</b>	<b>0</b>	<b>96</b>	<b>150</b>	

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
229	1	448	0	304	144	<b>288</b>
	2	137	1	0	137	
	3	6	0	0	6	
	4	1	0	0	1	
		<b>592</b>	<b>1</b>	<b>304</b>	<b>288</b>	
232	1	388	2	185	203	<b>242</b>
	2	29	0	0	29	
	3	9	0	0	9	
	4	1	0	0	1	
		<b>427</b>	<b>2</b>	<b>185</b>	<b>242</b>	
235	1	56	1	18	38	<b>64</b>
	2	21	0	0	21	
	3	5	0	0	5	
		<b>82</b>	<b>1</b>	<b>18</b>	<b>64</b>	
238	1	100	1	85	15	<b>47</b>
	2	30	0	0	30	
	3	2	0	0	2	
		<b>132</b>	<b>1</b>	<b>85</b>	<b>47</b>	
242	1	629	6	547	82	<b>485</b>
	2	381	1	0	381	
	3	20	0	0	20	
	4	2	0	0	2	
		<b>1032</b>	<b>7</b>	<b>547</b>	<b>485</b>	
246	1	1954	5	1954	0	<b>980</b>
	2	3153	13	2592	561	
	3	414	0	0	414	
	4	3	0	0	3	
	6	1	0	0	1	
	9	1	0	0	1	
		<b>5526</b>	<b>18</b>	<b>4546</b>	<b>980</b>	
247	1	647	3	647	0	<b>972</b>
	2	693	5	79	614	
	3	352	2	0	352	
	4	5	0	0	5	
	5	1	0	0	1	
		<b>1698</b>	<b>10</b>	<b>726</b>	<b>972</b>	
249	1	2632	17	1436	1196	<b>1474</b>
	2	225	0	0	225	
	3	50	0	0	50	
	4	2	0	0	2	
	9	1	0	0	1	
		<b>2910</b>	<b>17</b>	<b>1436</b>	<b>1474</b>	

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
250	1	329	2	329	0	<b>272</b>
	2	336	1	67	269	
	3	1	0	0	1	
	4	1	0	0	1	
	6	1	0	0	1	
		<b>668</b>	<b>3</b>	<b>396</b>	<b>272</b>	
251	1	132	1	132	0	<b>96</b>
	2	142	1	51	91	
	3	5	0	0	5	
		<b>279</b>	<b>2</b>	<b>183</b>	<b>96</b>	
252	1	356	2	215	141	<b>364</b>
	2	208	1	0	208	
	3	13	0	0	13	
	4	1	0	0	1	
	5	1	0	0	1	
		<b>579</b>	<b>3</b>	<b>215</b>	<b>364</b>	
253	1	371	2	371	0	<b>263</b>
	2	385	0	215	170	
	3	89	0	0	89	
	4	4	0	0	4	
		<b>849</b>	<b>2</b>	<b>586</b>	<b>263</b>	
258	1	905	4	905	0	<b>977</b>
	2	1213	12	251	962	
	3	14	0	0	14	
	9	1	0	0	1	
		<b>2133</b>	<b>16</b>	<b>1156</b>	<b>977</b>	
259	1	1395	6	1395	0	<b>1650</b>
	2	2103	14	854	1249	
	3	398	1	0	398	
	4	2	0	0	2	
	9	1	0	0	1	
		<b>3899</b>	<b>21</b>	<b>2249</b>	<b>1650</b>	
260	1	218	2	218	0	<b>97</b>
	2	263	2	235	28	
	3	69	0	0	69	
		<b>550</b>	<b>4</b>	<b>453</b>	<b>97</b>	
261	1	184	1	17	167	<b>236</b>
	2	69	0	0	69	
		<b>253</b>	<b>1</b>	<b>17</b>	<b>236</b>	
262	1	179	1	179	0	<b>138</b>
	2	190	1	54	136	
	3	2	0	0	2	
		<b>371</b>	<b>2</b>	<b>233</b>	<b>138</b>	

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
263	1	216	2	216	0	<b>286</b>
	2	289	2	137	152	
	3	134	2	0	134	
		<b>639</b>	<b>6</b>	<b>353</b>	<b>286</b>	
266	1	276	1	276	0	<b>143</b>
	2	380	1	293	87	
	3	56	1	0	56	
		<b>712</b>	<b>3</b>	<b>569</b>	<b>143</b>	
267	1	165	0	165	0	<b>99</b>
	2	132	0	70	62	
	3	37	0	0	37	
		<b>334</b>	<b>0</b>	<b>235</b>	<b>99</b>	
268	1	184	2	184	0	<b>97</b>
	2	166	3	166	0	
	3	119	0	22	97	
		<b>469</b>	<b>5</b>	<b>372</b>	<b>97</b>	
269	1	259	0	259	0	<b>223</b>
	2	266	3	54	212	
	3	11	0	0	11	
		<b>536</b>	<b>3</b>	<b>313</b>	<b>223</b>	
270	1	170	1	170	0	<b>91</b>
	2	187	0	132	55	
	3	36	0	0	36	
		<b>393</b>	<b>1</b>	<b>302</b>	<b>91</b>	
271	1	251	2	193	58	<b>226</b>
	2	165	0	0	165	
	3	3	0	0	3	
		<b>419</b>	<b>2</b>	<b>193</b>	<b>226</b>	
272	1	178	1	178	0	<b>97</b>
	2	202	1	166	36	
	3	60	1	0	60	
	9	1	0	0	1	
		<b>441</b>	<b>3</b>	<b>344</b>	<b>97</b>	
273	1	1005	4	122	883	<b>1222</b>
	2	319	1	0	319	
	3	16	0	0	16	
	4	4	0	0	4	
		<b>1344</b>	<b>5</b>	<b>122</b>	<b>1222</b>	
274	1	247	0	247	0	<b>215</b>
	2	246	0	70	176	
	3	38	0	0	38	
	4	1	0	0	1	
		<b>532</b>	<b>0</b>	<b>317</b>	<b>215</b>	

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
275	1	509	2	509	0	<b>234</b>
	2	309	4	106	203	
	3	27	2	0	27	
	4	4	0	0	4	
		<b>849</b>	<b>8</b>	<b>615</b>	<b>234</b>	
276	1	1047	4	380	667	<b>1109</b>
	2	424	3	0	424	
	3	18	0	0	18	
		<b>1489</b>	<b>7</b>	<b>380</b>	<b>1109</b>	
278	1	322	1	322	0	<b>177</b>
	2	396	4	396	0	
	3	193	1	18	175	
	4	2	0	0	2	
	5	0	2	0	0	
		<b>913</b>	<b>8</b>	<b>736</b>	<b>177</b>	
279	1	554	4	124	430	<b>526</b>
	2	81	0	0	81	
	3	15	0	0	15	
		<b>650</b>	<b>4</b>	<b>124</b>	<b>526</b>	
280	1	373	3	373	0	<b>182</b>
	2	183	0	16	167	
	3	12	1	0	12	
	4	2	0	0	2	
	9	1	0	0	1	
		<b>571</b>	<b>4</b>	<b>389</b>	<b>182</b>	
281	1	417	1	417	0	<b>446</b>
	2	454	2	172	282	
	3	156	1	0	156	
	4	8	0	0	8	
		<b>1035</b>	<b>4</b>	<b>589</b>	<b>446</b>	
282	1	85	0	85	0	<b>24</b>
	2	51	0	51	0	
	3	39	0	36	3	
	4	21	0	0	21	
		<b>196</b>	<b>0</b>	<b>172</b>	<b>24</b>	
283	1	251	2	251	0	<b>184</b>
	2	243	0	181	62	
	3	120	1	0	120	
	4	2	0	0	2	
		<b>616</b>	<b>3</b>	<b>432</b>	<b>184</b>	

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
284	1	368	3	368	0	283
	2	319	2	143	176	
	3	98	1	0	98	
	4	8	0	0	8	
	5	1	0	0	1	
		<b>794</b>	<b>6</b>	<b>511</b>	<b>283</b>	
285	1	1015	1	932	83	280
	2	184	0	0	184	
	3	13	1	0	13	
		<b>1212</b>	<b>2</b>	<b>932</b>	<b>280</b>	
288	1	542	4	391	151	448
	2	275	1	0	275	
	3	18	0	0	18	
	4	4	0	0	4	
		<b>839</b>	<b>5</b>	<b>391</b>	<b>448</b>	
289	1	212	0	212	0	178
	2	165	1	11	154	
	3	21	0	0	21	
	4	3	0	0	3	
		<b>401</b>	<b>1</b>	<b>223</b>	<b>178</b>	
290	1	464	4	464	0	350
	2	493	4	325	168	
	3	181	0	0	181	
	4	1	0	0	1	
		<b>1139</b>	<b>8</b>	<b>789</b>	<b>350</b>	
291	1	912	6	912	0	718
	2	842	3	266	576	
	3	138	2	0	138	
	4	2	0	0	2	
	5	1	0	0	1	
	6	1	0	0	1	
		<b>1896</b>	<b>11</b>	<b>1178</b>	<b>718</b>	
294	1	549	0	185	364	459
	2	86	0	0	86	
	3	9	0	0	9	
		<b>644</b>	<b>0</b>	<b>185</b>	<b>459</b>	
295	1	410	4	410	0	272
	2	360	5	266	94	
	3	177	2	0	177	
	4	1	1	0	1	
		<b>948</b>	<b>12</b>	<b>676</b>	<b>272</b>	

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
296	1	334	1	334	0	<b>260</b>
	2	365	3	228	137	
	3	122	0	0	122	
	5	1	0	0	1	
		<b>822</b>	<b>4</b>	<b>562</b>	<b>260</b>	
297	1	141	2	141	0	<b>96</b>
	2	147	0	69	78	
	3	18	0	0	18	
		<b>306</b>	<b>2</b>	<b>210</b>	<b>96</b>	
298	1	352	3	352	0	<b>98</b>
	2	554	4	554	0	
	3	270	2	172	98	
		<b>1176</b>	<b>9</b>	<b>1078</b>	<b>98</b>	
299	1	419	2	397	22	<b>355</b>
	2	306	2	0	306	
	3	26	0	0	26	
	4	1	0	0	1	
		<b>752</b>	<b>4</b>	<b>397</b>	<b>355</b>	
<b>TOTAL</b>		<b>95,656</b>	<b>515</b>	<b>64,771</b>	<b>30,885</b>	<b>31,065</b>

Table 22. 2015 Muzzleloader Lottery Distribution Report.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
		Total	Rejected			
101	1	6	0	6	0	1
	2	4	0	4	0	
	3	1	0	0	1	
		<b>11</b>	0	<b>10</b>	<b>1</b>	
105	1	11	1	11	0	2
	2	5	0	4	1	
	3	1	0	0	1	
		<b>17</b>	1	<b>15</b>	<b>2</b>	
110	1	4	0	4	0	2
	2	8	0	6	2	
		<b>12</b>	0	<b>10</b>	<b>2</b>	
126	1	6	0	1	5	6
	2	1	0	0	1	
		<b>7</b>	0	<b>1</b>	<b>6</b>	
127	1	1	0	0	1	1
		<b>1</b>	0	<b>0</b>	<b>1</b>	
155	1	20	0	20	0	12
	2	20	0	10	10	
	3	2	0	0	2	
		<b>42</b>	0	<b>30</b>	<b>12</b>	
156	1	21	0	21	0	4
	2	19	0	16	3	
	3	1	0	0	1	
		<b>41</b>	0	<b>37</b>	<b>4</b>	
157	1	55	0	46	9	21
	2	9	0	0	9	
	3	2	0	0	2	
	4	1	0	0	1	
	<b>67</b>	0	<b>46</b>	<b>21</b>		
159	1	17	0	17	0	3
	2	14	0	12	2	
	3	1	0	0	1	
		<b>32</b>	0	<b>29</b>	<b>3</b>	
171	1	23	0	23	0	5
	2	18	0	18	0	
	3	7	0	2	5	
		<b>48</b>	0	<b>43</b>	<b>5</b>	
172	1	27	0	27	0	14
	2	29	0	29	0	
	3	20	0	6	14	
		<b>76</b>	0	<b>62</b>	<b>14</b>	
173	1	19	0	19	0	5
	2	19	0	14	5	
		<b>38</b>	0	<b>33</b>	<b>5</b>	

Table 22. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
179	1	18	0	18	0	4
	2	12	0	8	4	
		<b>30</b>	0	<b>26</b>	<b>4</b>	
180	1	14	0	6	8	11
	2	2	0	0	2	
	3	1	0	0	1	
		<b>17</b>	0	<b>6</b>	<b>11</b>	
184	1	73	0	73	0	31
	2	32	0	6	26	
	3	4	0	0	4	
	4	1	0	0	1	
		<b>110</b>	0	<b>79</b>	<b>31</b>	
197	1	14	0	14	0	2
	2	10	0	9	1	
	3	1	0	0	1	
		<b>25</b>	0	<b>23</b>	<b>2</b>	
208	1	9	0	8	1	3
	2	2	0	0	2	
		<b>11</b>	0	<b>8</b>	<b>3</b>	
210	1	29	0	10	19	21
	2	2	0	0	2	
		<b>31</b>	0	<b>10</b>	<b>21</b>	
221	1	48	0	35	13	23
	2	7	0	0	7	
	3	3	0	0	3	
		<b>58</b>	0	<b>35</b>	<b>23</b>	
222	1	45	1	14	31	37
	2	4	0	0	4	
	3	1	0	0	1	
	4	1	0	0	1	
		<b>51</b>	1	<b>14</b>	<b>37</b>	
229	1	19	0	11	8	11
	2	3	0	0	3	
		<b>22</b>	0	<b>11</b>	<b>11</b>	
232	1	14	0	6	8	8
		<b>14</b>	0	<b>6</b>	<b>8</b>	
235	1	12	0	1	11	11
		<b>12</b>	0	<b>1</b>	<b>11</b>	
238	1	4	0	4	0	3
	2	3	0	0	3	
		<b>7</b>	0	<b>4</b>	<b>3</b>	
242	1	24	0	16	8	15
	2	7	0	0	7	
		<b>31</b>	0	<b>16</b>	<b>15</b>	

Table 22. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
246	1	68	1	68	0	<b>20</b>
	2	43	0	23	20	
		<b>111</b>	1	<b>91</b>	<b>20</b>	
247	1	16	0	16	0	<b>28</b>
	2	25	0	3	22	
	3	6	0	0	6	
		<b>47</b>	0	<b>19</b>	<b>28</b>	
249	1	40	0	25	15	<b>26</b>
	2	9	0	0	9	
	3	1	0	0	1	
	4	1	0	0	1	
		<b>51</b>	0	<b>25</b>	<b>26</b>	
250	1	32	0	32	0	<b>28</b>
	2	28	0	2	26	
	3	2	0	0	2	
		<b>62</b>	0	<b>34</b>	<b>28</b>	
251	1	6	0	6	0	<b>4</b>
	2	5	0	1	4	
		<b>11</b>	0	<b>7</b>	<b>4</b>	
252	1	39	0	16	23	<b>36</b>
	2	13	1	0	13	
		<b>52</b>	1	<b>16</b>	<b>36</b>	
253	1	56	0	56	0	<b>37</b>
	2	50	0	13	37	
		<b>106</b>	0	<b>69</b>	<b>37</b>	
258	1	25	0	25	0	<b>23</b>
	2	23	0	0	23	
		<b>48</b>	0	<b>25</b>	<b>23</b>	
259	1	60	0	60	0	<b>50</b>
	2	49	0	5	44	
	3	5	0	0	5	
	4	1	0	0	1	
		<b>115</b>	0	<b>65</b>	<b>50</b>	
260	1	9	0	9	0	<b>3</b>
	2	9	0	6	3	
		<b>18</b>	0	<b>15</b>	<b>3</b>	
261	1	11	0	0	11	<b>14</b>
	2	3	0	0	3	
		<b>14</b>	0	<b>0</b>	<b>14</b>	
262	1	15	0	15	0	<b>12</b>
	2	15	0	3	12	
		<b>30</b>	0	<b>18</b>	<b>12</b>	
263	1	19	0	15	4	<b>14</b>
	2	10	0	0	10	
		<b>29</b>	0	<b>15</b>	<b>14</b>	

Table 22. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
266	1	21	0	21	0	7
	2	13	0	7	6	
	3	1	0	0	1	
		<b>35</b>	0	<b>28</b>	<b>7</b>	
267	1	1	0	1	0	1
	2	3	0	2	1	
		<b>4</b>	0	<b>3</b>	<b>1</b>	
268	1	7	0	7	0	3
	2	3	0	3	0	
	3	5	0	2	3	
		<b>15</b>	0	<b>12</b>	<b>3</b>	
269	1	36	0	31	5	27
	2	22	0	0	22	
		<b>58</b>	0	<b>31</b>	<b>27</b>	
270	1	15	0	15	0	9
	2	19	0	10	9	
		<b>34</b>	0	<b>25</b>	<b>9</b>	
271	1	33	0	17	16	24
	2	8	0	0	8	
		<b>41</b>	0	<b>17</b>	<b>24</b>	
272	1	6	0	6	0	3
	2	7	0	4	3	
		<b>13</b>	0	<b>10</b>	<b>3</b>	
273	1	64	0	3	61	78
	2	16	0	0	16	
	3	1	0	0	1	
		<b>81</b>	0	<b>3</b>	<b>78</b>	
274	1	44	1	39	5	35
	2	28	0	0	28	
	3	2	0	0	2	
		<b>74</b>	1	<b>39</b>	<b>35</b>	
275	1	43	0	39	4	16
	2	12	0	0	12	
		<b>55</b>	0	<b>39</b>	<b>16</b>	
276	1	90	0	22	68	91
	2	23	0	0	23	
		<b>113</b>	0	<b>22</b>	<b>91</b>	
278	1	46	0	46	0	23
	2	51	0	35	16	
	3	7	0	0	7	
		<b>104</b>	0	<b>81</b>	<b>23</b>	
279	1	73	0	6	67	74
	2	5	0	0	5	
	3	2	0	0	2	
		<b>80</b>	0	<b>6</b>	<b>74</b>	

Table 22. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
280	1	34	0	32	2	<b>18</b>
	2	16	0	0	16	
		<b>50</b>	0	<b>32</b>	<b>18</b>	
281	1	59	1	57	2	<b>54</b>
	2	47	0	0	47	
	3	4	0	0	4	
	9	1	0	0	1	
		<b>111</b>	1	<b>57</b>	<b>54</b>	
282	1	4	0	4	0	<b>1</b>
	2	1	0	1	0	
	3	1	0	1	0	
	4	2	0	1	1	
		<b>8</b>	0	<b>7</b>	<b>1</b>	
283	1	27	0	27	0	<b>16</b>
	2	12	0	5	7	
	3	9	0	0	9	
		<b>48</b>	0	<b>32</b>	<b>16</b>	
284	1	22	1	22	0	<b>17</b>
	2	22	0	5	17	
		<b>44</b>	1	<b>27</b>	<b>17</b>	
285	1	77	0	60	17	<b>20</b>
	2	3	0	0	3	
		<b>80</b>	0	<b>60</b>	<b>20</b>	
288	1	61	0	35	26	<b>52</b>
	2	25	0	0	25	
	3	1	0	0	1	
		<b>87</b>	0	<b>35</b>	<b>52</b>	
289	1	22	0	22	0	<b>22</b>
	2	22	0	1	21	
	3	1	0	0	1	
		<b>45</b>	0	<b>23</b>	<b>22</b>	
290	1	71	0	71	0	<b>50</b>
	2	70	0	21	49	
	3	1	0	0	1	
		<b>142</b>	0	<b>92</b>	<b>50</b>	
291	1	102	0	102	0	<b>82</b>
	2	91	0	10	81	
	3	1	0	0	1	
		<b>194</b>	0	<b>112</b>	<b>82</b>	
294	1	41	0	12	29	<b>41</b>
	2	10	0	0	10	
	3	2	0	0	2	
		<b>53</b>	0	<b>12</b>	<b>41</b>	

Table 22. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
295	1	40	0	40	0	28
	2	41	0	22	19	
	3	9	0	0	9	
		<b>90</b>	<b>0</b>	<b>62</b>	<b>28</b>	
296	1	56	1	56	0	40
	2	50	0	13	37	
	3	3	0	0	3	
		<b>109</b>	<b>1</b>	<b>69</b>	<b>40</b>	
297	1	5	0	5	0	4
	2	5	0	2	3	
	3	1	0	0	1	
		<b>11</b>	<b>0</b>	<b>7</b>	<b>4</b>	
298	1	12	0	12	0	2
	2	11	0	10	1	
	3	1	0	0	1	
		<b>24</b>	<b>0</b>	<b>22</b>	<b>2</b>	
299	1	58	0	40	18	45
	2	27	0	0	27	
		<b>85</b>	<b>0</b>	<b>40</b>	<b>45</b>	
<b>TOTAL</b>		<b>3,393</b>	<b>8</b>	<b>1,959</b>	<b>1,434</b>	<b>1,434</b>

Table 23. 2015 Special Permit Areas for Firearms Hunters.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
		Total	Rejected			
901 - Rice Lake NWR	1	48	22	0	32	<b>40</b>
	2	23	14	0	0	
	3	1	1	0	0	
		<b>72</b>	<b>37</b>	0	<b>32</b>	
902 - Saint Croix State Park	1	441	0	290	151	<b>350</b>
	2	195	0	0	195	
	3	6	0	0	6	
	4	1	0	0	1	
		<b>643</b>	0	<b>290</b>	<b>353</b>	
903 - Lake Louise State Park	1	38	0	38	0	<b>25</b>
	2	42	0	31	11	
	3	13	0	0	13	
	4	1	0	0	1	
		<b>94</b>	0	<b>69</b>	<b>25</b>	
904 - Gooseberry Falls State Park	1	28	0	0	28	<b>50</b>
	2	6	0	0	6	
		<b>34</b>	0	<b>0</b>	<b>34</b>	
905 - Split Rock Lighthouse State Park	1	45	0	17	28	<b>30</b>
	2	2	0	0	2	
		<b>47</b>	0	<b>17</b>	<b>30</b>	
906 - Tettegouche State Park	1	93	0	0	93	<b>125</b>
	2	9	0	0	9	
	3	1	0	0	1	
		<b>103</b>	0	<b>0</b>	<b>103</b>	
907 - Scenic State Park	1	28	0	2	26	<b>30</b>
	2	7	0	0	7	
		<b>35</b>	0	<b>2</b>	<b>33</b>	
908 - Hayes Lake State Park	1	45	0	1	44	<b>50</b>
	2	2	0	0	2	
	3	4	0	0	4	
		<b>51</b>	0	<b>1</b>	<b>50</b>	
909 - Lake Bemidji State Park	1	33	0	8	25	<b>30</b>
	2	5	0	0	5	
		<b>38</b>	0	<b>8</b>	<b>30</b>	

Table 23. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
		Total	Rejected			
910 - Zippel Bay State Park	1	42	0	0	42	<b>55</b>
	2	12	0	0	12	
	3	2	0	0	2	
		<b>56</b>	0	<b>0</b>	<b>56</b>	
913 - Lake Carlos State Park	1	25	0	9	16	<b>18</b>
	2	4	0	0	4	
		<b>29</b>	0	<b>9</b>	<b>20</b>	
914 - William O'Brien State Park	1	70	0	70	0	<b>50</b>
	2	80	0	39	41	
	3	10	0	0	10	
		<b>160</b>	0	<b>109</b>	<b>51</b>	
915 - Lake Bronson State Park	1	31	0	17	14	<b>30</b>
	2	17	0	0	17	
	3	1	0	0	1	
		<b>49</b>	0	<b>17</b>	<b>32</b>	
916 - Maplewood State Park	1	136	0	136	0	<b>100</b>
	2	99	0	99	0	
	3	98	0	31	67	
	4	32	0	0	32	
	9	1	0	0	1	
		<b>366</b>	0	<b>266</b>	<b>100</b>	
919 - Glacial Lakes State Park	1	36	0	6	30	<b>30</b>
		<b>36</b>	0	<b>6</b>	<b>30</b>	
920 - Zumbro Falls SNA	1	15	0	11	4	<b>12</b>
	2	6	0	0	6	
	3	2	0	0	2	
		<b>23</b>	0	<b>11</b>	<b>12</b>	
921 - Forestville/ Mystery Cave State Park	1	136	0	82	64	<b>130</b>
	2	67	0	0	67	
	3	11	0	0	11	
		<b>214</b>	0	<b>82</b>	<b>142</b>	
922 - Beaver Creek Valley State Park	1	35	0	35	0	<b>20</b>
	2	28	0	28	0	
	3	21	0	0	21	
		<b>84</b>	0	<b>63</b>	<b>21</b>	

Table 23. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
		Total	Rejected			
923 - Zumbro Falls SNA	1	7	0	0	7	12
	2	2	0	0	2	
		<b>9</b>	0	0	<b>9</b>	
925A - Vermillion Highlands Research (A)	1	43	0	43	0	18
	2	13	0	12	1	
	3	17	0	0	17	
		<b>73</b>	0	<b>55</b>	<b>18</b>	
925B - Vermillion Highlands Research (B)	2	6	0	3	3	2
		<b>6</b>	0	<b>3</b>	<b>3</b>	
927 - Whitewater State Park	1	72	0	57	15	50
	2	36	0	0	36	
		<b>108</b>	0	<b>57</b>	<b>51</b>	
929 - Frontenac State Park	1	76	0	37	39	50
	2	21	0	0	21	
		<b>97</b>	0	<b>37</b>	<b>60</b>	
931 - City of Grand Rapids	1	42	0	0	42	59
	2	17	0	0	17	
		<b>59</b>	0	<b>0</b>	<b>59</b>	
932A - Lake Elmo Park Reserve	1	108	0	108	0	39
	2	53	0	25	28	
	3	10	0	0	10	
	5	1	0	0	1	
		<b>172</b>	0	<b>133</b>	<b>39</b>	
932B - Lake Elmo Park Reserve	1	2	0	2	0	1
	2	3	0	2	1	
		<b>5</b>	0	<b>4</b>	<b>1</b>	
933A - Carver Park Reserve	1	220	0	220	0	97
	2	144	0	80	64	
	3	29	0	0	29	
	4	6	0	0	6	
		<b>399</b>	0	<b>300</b>	<b>99</b>	
933B - Carver Park Reserve	1	26	0	26	0	13
	2	22	0	14	8	
	3	5	0	0	5	
	<b>53</b>	0	<b>40</b>	<b>13</b>		
934 - Whitewater State Game Refuge	1	74	0	9	65	75
	2	11	0	0	11	
		<b>85</b>	0	9	<b>76</b>	
<b>TOTAL</b>		<b>3,200</b>	<b>37</b>	<b>1,588</b>	<b>1,582</b>	<b>1,591</b>

Table 24. 2015 Special Permit Areas for Muzzleloader Hunts.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
		Total	Rejected			
935 - Jay Cook SP	1	147	0	130	17	<b>95</b>
	2	74	0	0	74	
	3	5	0	0	5	
		<b>226</b>	<b>0</b>	<b>130</b>	<b>96</b>	
936 - Crow Wing SP	1	35	0	35	0	<b>25</b>
	2	29	0	26	3	
	3	13	0	0	13	
	4	11	0	0	11	
	<b>88</b>	<b>0</b>	<b>61</b>	<b>27</b>		
937 - Lake Vermilion SP	1	47	0	34	13	<b>20</b>
	2	7	0	0	7	
		<b>54</b>	<b>0</b>	<b>34</b>	<b>20</b>	
938 - City of Tower	1	8	0	0	8	<b>20</b>
	2	2	0	0	2	
		<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>	
941 - Nerstrand Big Woods SP	1	115	0	115	0	<b>50</b>
	2	68	0	68	0	
	3	52	0	8	44	
	4	5	0	0	5	
	5	2	0	0	2	
	<b>242</b>	<b>0</b>	<b>191</b>	<b>51</b>		
942 - Sibley SP	1	98	0	98	0	<b>60</b>
	2	51	0	13	38	
	3	18	0	0	18	
	4	3	0	0	3	
	9	2	0	0	2	
	<b>172</b>	<b>0</b>	<b>111</b>	<b>61</b>		
943 - Myre Big Island SP	1	64	0	64	0	<b>50</b>
	2	50	0	14	36	
	3	12	0	0	12	
	4	1	0	0	1	
	9	1	0	0	1	
	<b>128</b>	<b>0</b>	<b>78</b>	<b>50</b>		
944 - Vermillion Highlands Research	1	34	0	34	0	<b>20</b>
	2	16	0	7	9	
	3	10	0	0	10	
	4	1	0	0	1	
	<b>61</b>	<b>0</b>	<b>41</b>	<b>20</b>		
946 - City of Grand Rapids	1	14	0	0	14	<b>16</b>
	2	1	0	0	1	
	3	1	0	0	1	
	<b>16</b>	<b>0</b>	<b>0</b>	<b>16</b>		
947 - Lake Bemidji SP	1	19	0	0	19	<b>30</b>
	2	7	0	0	7	
		<b>26</b>	<b>0</b>	<b>0</b>	<b>26</b>	
<b>TOTAL</b>		<b>1,023</b>	<b>0</b>	<b>646</b>	<b>377</b>	<b>386</b>
<b>GRAND TOTAL</b>		<b>103,272</b>	<b>560</b>	<b>68,964</b>	<b>34,278</b>	<b>34,476</b>



## 2015 MINNESOTA ELK HARVEST REPORT

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### INTRODUCTION

A limited number of licenses are offered to Minnesota residents to hunt elk. In 2015, there were two established zones: 1) Zone 20 - Kittson County Central and 2) Zone 30 - Kittson County Northeast (Figure 1). Zone 10 near Grygla, Minnesota, has been closed since 2013 because the population is below goal (Figure 2). In 2015, there was one regular season hunt (September 12-20). Hunts were held during the first season in both zones and during the remaining season only in zone 20. The hunt was structured to fall within the breeding season when bull elk are most vulnerable and elk can be located by vocalizations.

### METHODS

All elk hunters are required to attend a mandatory orientation session the day before the hunt begins. At this session, DNR staff also provide hunters with their license, and a kit to collect biological samples from their harvested animal. Field samples collected by the hunter include ticks (if found), whole blood, hair with skin, muscle tissue, and a small sample of lung and liver tissue. Hunters are required to register their animal in person at the local DNR office. DNR staff map the harvest location, provide a possession tag, and take the hunter-collected biological samples. DNR staff also collect lymph nodes, the obex (brain stem), and a tooth so an accurate age can be determined at a later date. DNR staff submit all biological samples to Wildlife Health for disease testing and other monitoring projects.

### RESULTS

A total of 7 licenses were available and 1,439 individuals or parties applied for the opportunity to hunt elk (Table 1). A first random drawing was held for landowners who applied for the one landowner license available in Zone 20. All remaining landowners were then placed into the general drawing for remaining elk licenses. Licenses were distributed through a second random drawing conducted per Zone. In 2015, a total of 5 elk were harvested in the zones (Table 2). Long-term elk harvest for the zones is depicted in Tables 3 and 4.

Table 1. License allocation and application numbers for three elk hunting zones, 2015.

Zone	Either-Sex	Antlerless	Bull-only	Total	Total Applicants
20 – Kittson Central	0	0	5	5	846
30 – Kittson NE	0	0	2	2	593
<b>Total</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>7</b>	<b>1,439</b>

Table 2. Distribution of the 2015 Minnesota elk harvest.

Kittson County Central Hunt Zone (20)					
Season	Bulls-only Licenses	Antlerless Licenses	Bulls taken	Antlerless taken	Total elk taken
September 12 - 20	5	0	3	0	3
<b>Total</b>	<b>5</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>

Kittson County Northeast Hunt Zone (30)			
Season	Bull-only Licenses	Bulls taken	Total elk taken
September 12 - 20	2	2	2
<b>Total</b>	<b>2</b>	<b>2</b>	<b>2</b>

Table 3. Grygla elk harvests, 1987-2015.

Year	Grygla			
	Bulls (or Either-Sex)		Antlerless	
	Permits	Harvest	Permits	Harvest
1987	2	1	2	1
1996	2	2	7 (1 alternate)	6
1997	5 (2 alternate)	1	5 (2 alternate)	2
1998	4 (2 alternate)	2	0	0
2004	1	1	4	2
2005	1	0	4	0
2006	2	2	6	2
2007	0	0	6	6
2008	2	2	10	6
2009	2	3*	12	11
2010	2	1	5	3
2011	2	2	3	0
2012	2	1	3	0
2013	Closed	0	Closed	0
2014	Closed	0	Closed	0
2015	Closed	0	Closed	0
<b>Total</b>	<b>27</b>	<b>19</b>	<b>67</b>	<b>39</b>

\*One bull was a sub-legal spike and was legally tagged as an antlerless animal.

Table 4. Kittson County elk harvests, 2008-2015.

<b>Kittson County (Combined)</b>				
<b>Year</b>	<b>Bulls (or Either-Sex)</b>		<b>Antlerless</b>	
	<b>Permits</b>	<b>Harvest</b>	<b>Permits</b>	<b>Harvest</b>
2008	1	1	10	10
2009	12	9 <sup>a</sup>	4	5
2010	1	1	3	3
2011	2	3 <sup>b</sup>	8 <sup>c</sup>	4
2012	5	4 <sup>d</sup>	13	3
2013	8	6	15	6
2014	9	6	0	0
2015	7	5	0	0
<b>Total</b>	<b>45</b>	<b>33</b>	<b>53</b>	<b>31</b>

<sup>a</sup> One additional bull (6x7) was wounded but not retrieved in 2009. It was found dead later and is counted in the total.

<sup>b</sup> One bull was a male calf and was legally tagged as an antlerless animal.

<sup>c</sup> Three unsuccessful hunters from the Grygla zone were invited to participate in the January extended season in Kittson County, however only 2 participated and were included in the number of antlerless permits issued.

<sup>d</sup> One bull was a sub-legal spike and was confiscated.

Figure 1. Kittson County Zones.

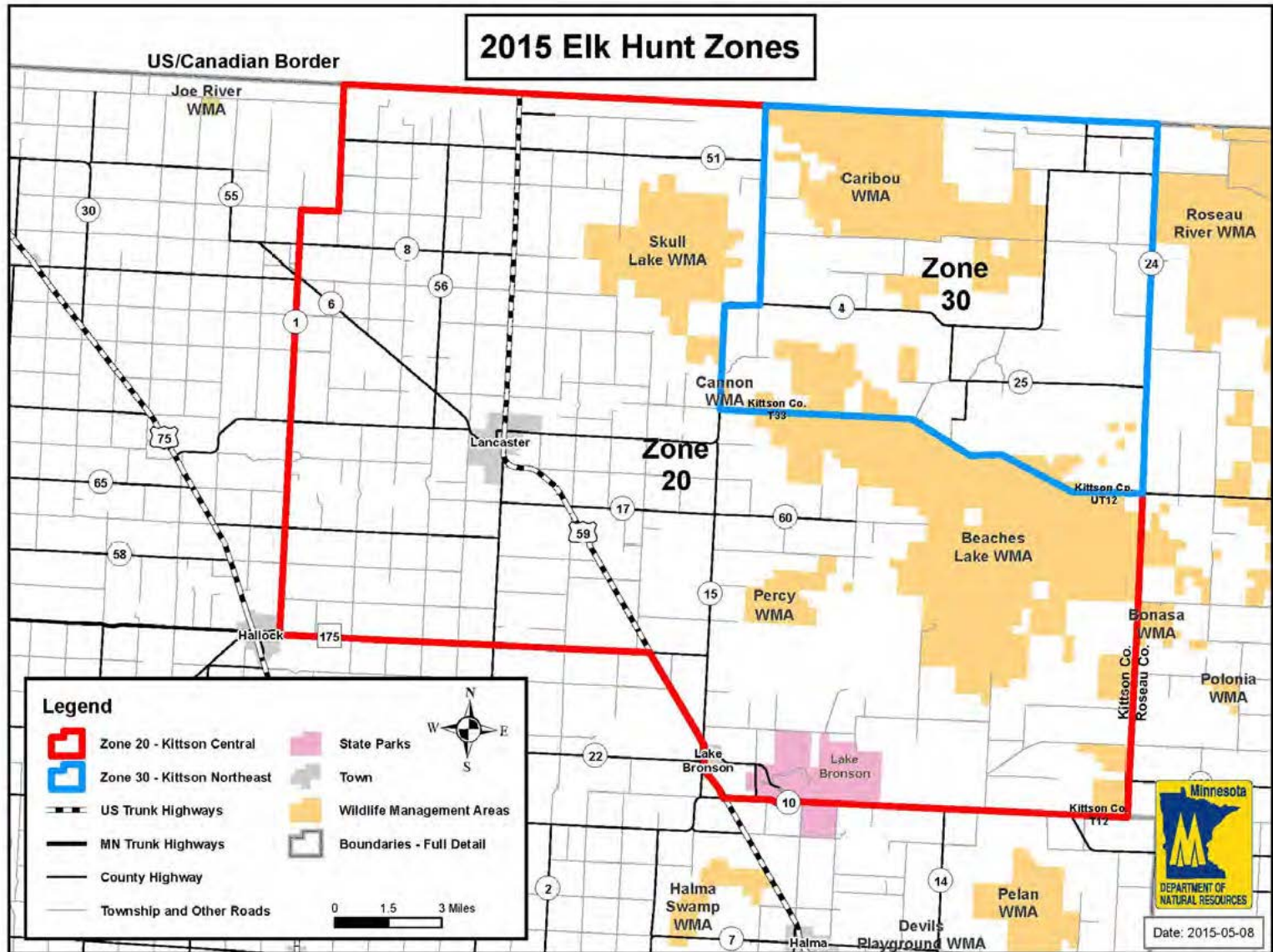
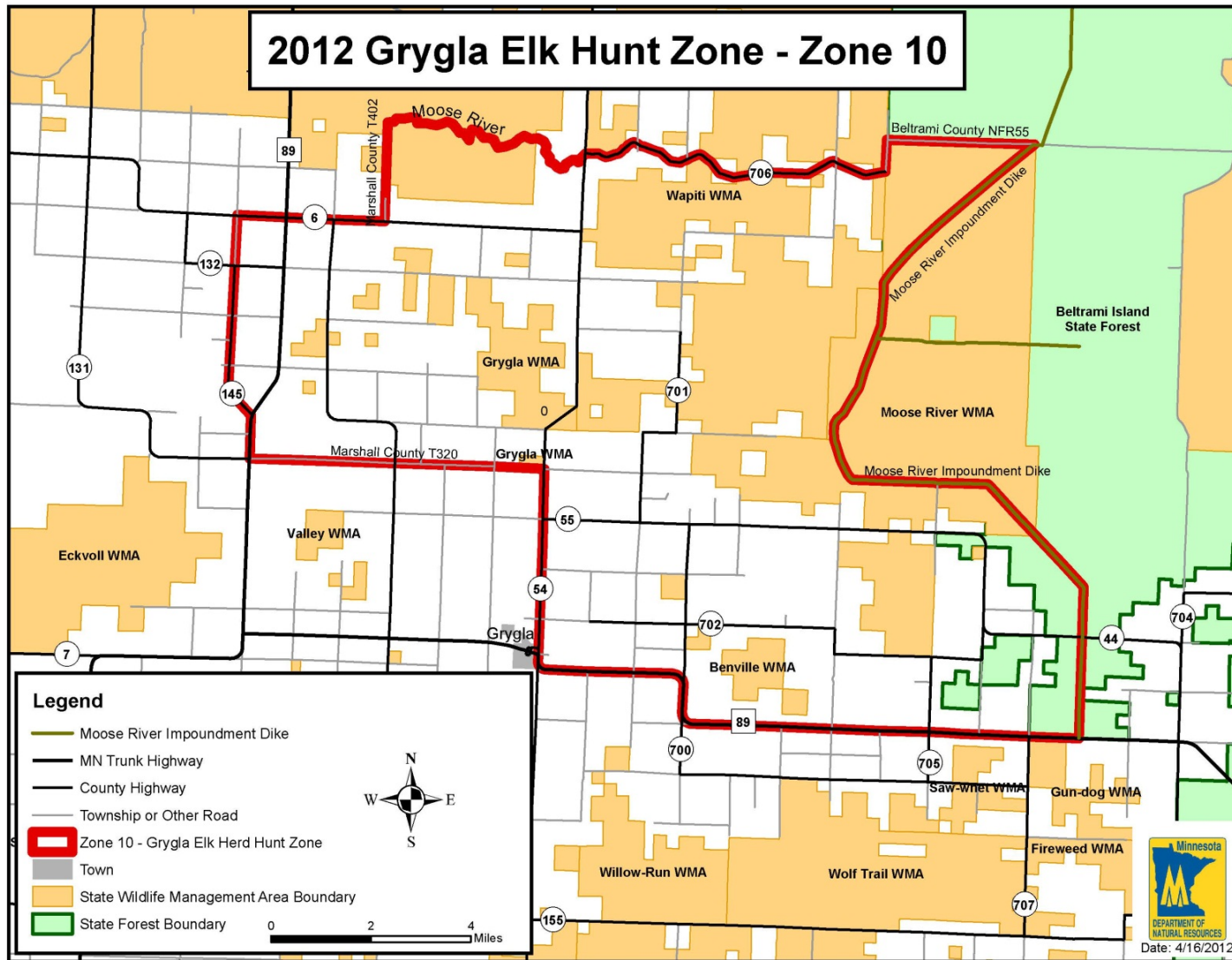


Figure 2. Grygla Elk Hunt Zone.





# MINNESOTA SANDHILL CRANE HARVEST REPORT, 2015

Margaret Dexter, Wildlife Research Unit

Two distinct populations of sandhill cranes (*Grus Canadensis*) occur in Minnesota. Sandhill cranes that breed and stage during fall in NW Minnesota are part of the Mid-continent population whereas sandhill cranes in the remainder of the state are part of the Eastern population. The Mid-continent population, including cranes in NW Minnesota is managed via a cooperative management plan with the U.S. Fish and Wildlife Service, Mississippi, Central, and Pacific Flyway Councils.

A limited season for Mid-continent sandhill cranes was opened in Minnesota's Northwest Goose Zone (Figure 1) beginning in 2010. The season was open from the first Saturday in September through the second Sunday in October for the first two years with a daily limit of 2 and a possession limit of 4 (Table 1). In 2012 the season was shifted to a week later but the limits remained the same. The possession limit increased from 4 to 6 in 2013. In 2014 limits were reduced to 1 daily and 3 in possession. There were no changes to the 2015 season. Hunters were required to purchase a \$3.00 sandhill crane permit. A sample of sandhill crane permit holders were selected to receive a harvest survey from the U.S. Fish and Wildlife Service after the season. This survey is used to monitor harvest levels and hunting activity (Table 2).

## LITERATURE CITED

- Central Flyway Webless Migratory Bird Technical Committee. 2006. Management Guidelines for the Mid-Continent Population of Sandhill Cranes. Special Report in files of the Central Flyway Representative. Denver, Colorado.
- Dubovsky, J.A. 2016. Status and harvests of sandhill cranes:Mid-Continent, Rocky Mountain, Lower Colorado River Valley and Eastern Populations. Administrative Report, U.S. Fish and Wildlife Service, Denver, Colorado. 15pp.)  
<http://www.fws.gov/migratorybirds/NewReportsPublications/PopulationStatus.html>

Table 1. Sandhill Crane season dates and limits in Minnesota, 2010 – 2015.

Year	Dates	Daily limit	Possession limit
2010	4 Sept – 10 Oct	2	4
2011	3 Sept – 9 Oct	2	4
2012	15 Sept – 21 Oct	2	4
2013	14 Sept – 20 Oct	2	6
2014	13 Sept – 19 Oct	1	3
2015	12 Sept – 18 Oct	1	3

Table 2. Sandhill crane permit sales, estimated number of active hunters and harvest for NW Minnesota, 2010-2015. (Kruse, K.L. et al. 2015).

Year	Number of Permits	Active Hunters	Harvest
2010	1,954	964	830
2011	1,342	643	765
2012	1,032	410	407
2013	1,086	485	378
2014	1,216	401	247
2015	1,199	424	212

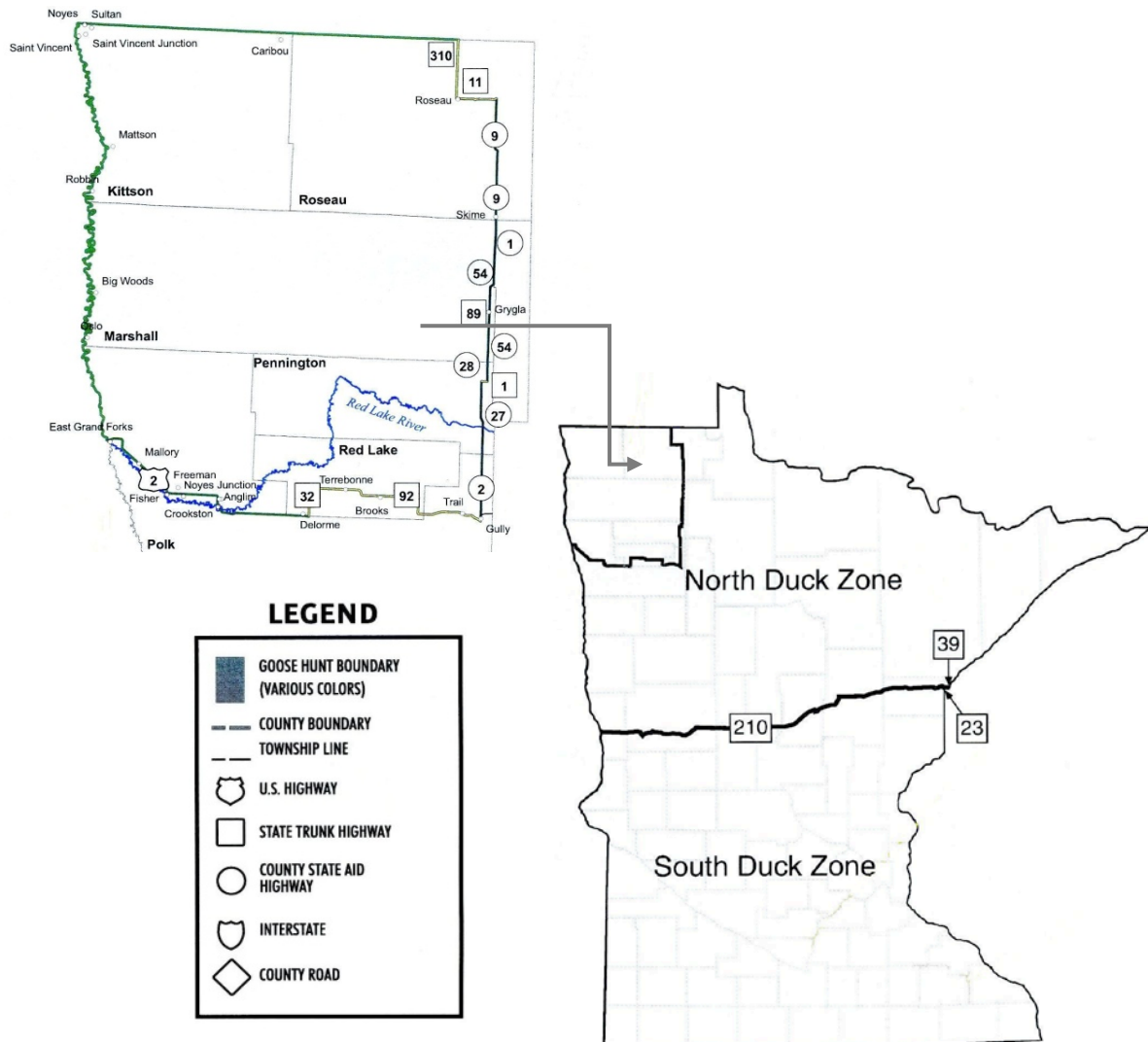


Figure 1. Sandhill crane hunting zone in Minnesota, 2010-2015.

