HUNTING HARVEST STATISTICS

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2014 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 (Figure 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 2014-15 small game hunting season (N= 258,109). A stratified random sample (n= 7,000, 2.7%), allocated proportionally by license type was drawn from the Minnesota DNR electronic database. License type was used as strata and included the following small game license types: 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= 252,053) and "Nonresident" (N= 6,056) (Figure 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 2014-15 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, 110 surveys were undeliverable; 3,451 surveys were returned for an adjusted response rate of 50%. A summary 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 (Figure 2, Table 5). Estimated number of hunters increased slightly for ruffed grouse but declined for most other species (Table 2). Estimated harvest per active hunter (Table 3) was up for mourning doves (10.4) but relatively stable for most other species. Mean harvest for successful hunters and hunter success rates remain unchanged (Table 4). License sales and estimated hunter harvest are presented in Table 5. Ruffed grouse harvest increased from 288,410 in 2013 to 301,190 in 2014 but was less than the 2010 harvest of 465,580 which is the highest harvest in the last 10 years. Duck harvest declined from 782,810 in 2013 to 699,620 in 2014 but was still higher than harvests from 2008 to 2011. Canada goose (221,620) and Ring-necked pheasant (152,800) harvest estimates are the lowest in the last 10 years. Nonresident hunters (Table 6) showed increased license sales for ducks, geese, and ruffed grouse. Harvest was up for grouse but down for ducks, geese and raccoons (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 2014-2015 small game hunting season **(March 2014-February 2015)**. We need information to estimate the season's harvest and to help set future small game seasons. Answer only for your Minnesota 2014 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

Ed Boggess, Director
Division of Fish and Wildlife
Department of Natural Resources

2014 Small Game Hunter Report

1. Did you hunt small game, listed below, in Minnesota this year (March 2014 - Feb 2015)? ☐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			

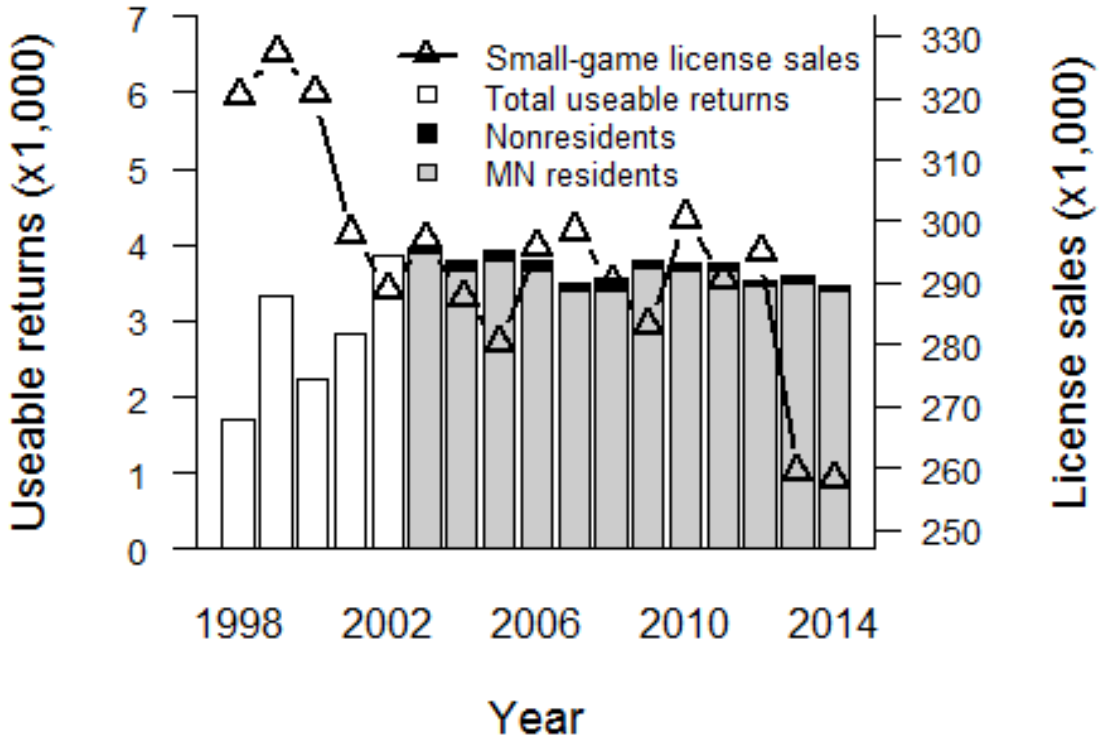

Figure 1. Number of Minnesota small game license sold and usable returned surveys, 1998-2014. Includes resident and non-resident licenses, and excludes duplicate and free licenses.

Figure 2. Summary of top four small game species harvested in Minnesota, 2002-2014.

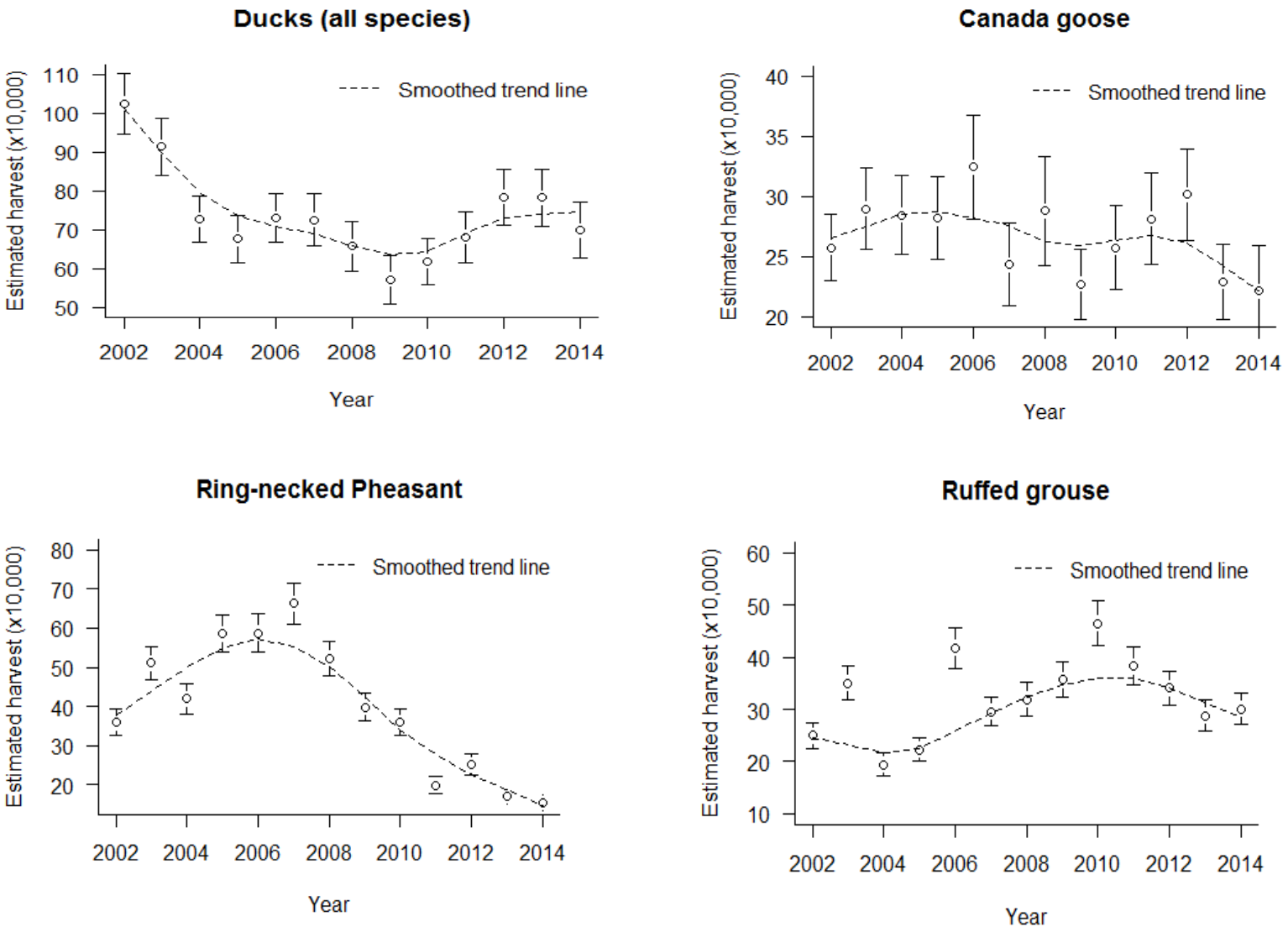

Table 1. Percent of respondents who hunted small game, 2005-06 through 2014-2015 [a].

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

[a] 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, 2002-03 through 2014-15.

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12[β]	2012-13[β]	2013-14	2014-15
Ducks	111,619	101,487	104,634	92,634	87,075	87,468	81,358	77,480	72,770	76,090	80,770	76,950	75,170
Canada goose	78,574	74,855	74,728	69,416	66,224	62,649	59,222	55,520	53,430	57,220	58,900	51,160	48,240
Other geese	5,981	7,373	5,327	4,628	4,529	3,695	4,411	3,280	3,650	2,710	3,830	2,810	2,770
American coot	4,411	3,912	5,099	4,129	4,529	3,454	4,166	4,090	4,610	3,480	3,990	3,820	4,410
Common snipe	2,243	1,429	1,902	1,210	2,187	1,928	1,797	1,340	1,340	1,160	1,160	1,370	820
Rails / gallinules	673	150	228	0	547	482	408	370	220	230	500	140	300
Crow [*]	12,859	12,263	12,404	11,890	10,777	8,514	10,047	10,640	9,380	10,360	11,480	8,570	7,400
American woodcock	11,962	12,789	12,023	11,035	13,510	10,843	12,171	11,760	10,790	9,430	13,310	12,030	9,650
Mourning dove [γ]			15,524	11,107	12,886	13,172	11,599	10,500	10,640	8,970	9,230	10,380	9,950
Ring-necked pheasant	91,284	105,023	104,406	110,852	118,703	118,311	106,763	99,440	89,140	72,840	76,950	62,110	57,590
Ruffed grouse	90,686	93,513	79,141	76,037	91,682	90,600	86,505	87,230	92,490	88,620	91,260	81,130	83,020
Spruce grouse	7,327	8,727	7,305	7,048	9,840	10,602	8,332	9,750	8,860	10,210	7,400	10,810	10,320
Sharp-tailed grouse	6,355	6,921	6,164	4,913	6,560	6,827	6,616	5,510	7,140	6,190	6,570	6,700	5,460
Gray partridge	6,579	7,975	5,327	6,265	6,013	6,667	4,411	4,240	3,720	2,400	3,080	2,450	2,540
Gray squirrel	25,494	29,190	23,438	24,563	25,459	25,863	22,382	22,260	23,740	23,280	24,710	21,690	21,240
Fox squirrel	14,878	19,936	15,372	15,094	15,619	14,779	13,233	13,180	15,630	12,060	14,220	12,030	12,790
Eastern cottontail	15,700	21,441	18,644	20,148	20,070	19,598	17,644	16,300	15,030	12,300	16,390	14,550	13,160
White-tailed jackrabbit	2,467	3,009	3,044	2,065	2,577	2,891	2,451	1,790	2,230	2,320	1,750	1,220	1,350
Snowshoe hare	5,682	5,567	4,338	3,346	5,545	4,257	4,574	3,500	3,800	3,250	4,820	3,750	4,560
Raccoon (Sept - Feb)	5,981	5,868	6,316	4,841	8,747	9,558	7,433	7,300	8,260	8,040	8,570	7,640	6,880
Raccoon[‡] (March -Aug)	3,589	4,589	3,348	2,705									
Red fox (Sept -Feb)	7,476	7,222	5,783	5,980	6,248	5,783	5,800	7,820	7,220	6,030	5,820	5,910	4,560
Red fox[‡] (March -Aug)	2,243	2,182	1,370	1,282									
Gray fox	1,271	1,505	1,674	997	2,030	1,928	1,879	1,790	1,640	1,390	1,580	1,730	1,050
Coyote	12,261	15,122	16,133	18,653	17,024	16,064	19,278	19,280	19,420	17,940	21,050	17,650	17,580
Badger	748	451	533	783	859	482	490	370	600	310	330	500	80

[*]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 3. Estimated harvest per active hunter by species, 2003-04 through 2014-15.

	Estimated harvest per hunter											
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12[β]	2012-13[β]	2013-14	2014-15
Ducks	9.0	6.9	7.3	8.4	8.1	8.1	7.4	8.5	9.0	9.7	10.2	9.3
Canada geese	3.9	3.8	4.1	4.9	3.9	4.9	4.1	4.8	4.9	5.1	4.5	4.6
Other geese	1.7	1.5	1.9	1.5	2.1	3.2	1.9	1.1	1.8	2.3	2.5	2.4
American coot	2.8	4.0	3.9	5.6	4.6	5.7	3.6	5.7	3.0	4.2	4.0	3.9
Common snipe	1.8	1.1	4.4	1.9	2.0	1.2	1.1	1.4	1.2	1.2	1.7	0.6
Rails/gallinules	0.5	0.3	0	2.4	5.3	0.4	0.8	0.3	1.7	0.2	0.5	0.2
Crow *	6.7	5.8	7.8	6.4	6.4	5.2	5.3	6.1	7.9	7.9	7.9	7.6
American woodcock	2.4	3.5	2.5	3.2	2.6	2.4	3.0	2.8	2.6	2.3	2.7	2.7
Mourning dove[γ]		6.2	7	6.7	7.7	11.4	10.5	9.4	8.2	10.0	7.8	10.4
Ring-necked pheasant	4.9	4.0	5.3	4.9	5.5	4.9	4.0	4.0	2.7	3.3	2.7	2.7
Ruffed grouse	3.8	2.5	2.9	4.5	3.2	3.7	4.1	5.0	4.3	3.7	3.6	3.6
Spruce grouse	2.1	1.3	1.4	2.7	1.7	2.0	2.0	1.7	1.8	1.6	1.2	1.4
Sharp-tailed grouse	1.7	1.7	1.3	1.8	2.0	2.1	1.7	2.4	1.9	1.6	1.1	1.6
Gray partridge	2.8	2.4	2.6	1.9	1.6	2.2	1.9	2.5	1.6	1.7	1.0	1.4
Gray squirrel	6.0	5.7	5.0	5.5	5.2	5.4	4.9	5.9	5.0	5.1	3.9	4.3
Fox squirrel	4.2	4.1	4.1	4.2	3.2	3.9	4.1	3.9	4.0	3.5	2.8	3.2
Eastern cottontail	4.3	4.6	4.5	3.9	4.0	4.5	3.5	3.6	2.8	3.9	2.8	2.9
White-tailed jackrabbit	2.4	2.3	2.7	1.6	3.3	2.6	1.5	3.2	2.2	1.1	1.5	0.8
Snowshoe hare	2.2	1.8	3.1	3.0	1.4	2.5	1.5	1.8	2.6	3.5	1.7	1.7
Raccoon (Sept - Feb)	8.5	9.0	6.0	7.2	4.9	9.7	9.1	9.4	5.5	5.6	6.1	7.7
Raccoon[‡] (March -Aug)	4.7	6.1	2.7									
Red fox (Sept -Feb)	1.8	1.1	1.7	1.3	1.1	0.8	1.3	1.2	1.2	1.4	0.9	0.7
Red fox[‡] (March -Aug)	0.6	0.6	0.9									
Gray fox	0.4	1.1	0.9	1.8	0.3	1.3	1.0	1.5	0.8	0.2	0.2	0.6
Coyote	1.3	1.1	2.1	1.2	2.1	2.4	2.4	2.3	1.9	2.5	1.3	1.0
Badger	0.7	1.0	1.2	1.3	0.3	1.0	2.0	1.0	0.8	1.0	0.6	1.0

[*]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 2014-15.

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12 [β]	2012-13 [β]	2013-14	2014-15
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)
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)
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)
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)
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)
Rails / gallinules	0.0 (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)
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)
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)
Mourning dove [γ]	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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
Raccoon [‡] (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)
Red fox [‡] (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)
Coyote	4.11 (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)
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)

[‡] Raccoon and red fox season continuous May 1994 thru March 15, 2006. [γ] Mourning dove season added 2004. * No hunters surveyed reported Rails/Gallinules in bag.
[β] 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, 2004-05 through 2014-15.

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12 [β]	2012-13 [β]	2013-14	2014-15
Small game license sales [a]	287,725	280,156	295,898	298,467	290,064	282,983	282,227	271,768	264,063	258,581	258,109
State duck stamp sales	114,003	102,143	101,792	100,134	95,675	89,942	88,069	89,681	90,052	90,483	90,376
Pheasant stamp sales	114,653	117,301	129,546	129,315	123,270	110,456	104,286	86,868	90,541	74,668	70,406
Estimated harvest [b]											
Ducks	727,206	676,741	730,559	708,491	658,186	572,220	619,600	681,550	784,360	782,810	699,620
Canada geese	284,714	281,829	324,498	243,705	288,411	227,160	257,530	281,630	301,550	229,120	221,620
Other geese	8,150	9,025	6,658	7,723	13,895	6,250	3,940	4,800	8,820	7,130	6,510
American coot	20,345	15,938	24,909	16,061	23,871	14,810	26,340	10,520	16,720	15,130	17,050
Common snipe	2,130	5,336	4,221	3,933	2,210	1,490	1,940	1,390	1,420	2,310	520
Rails / gallinules	75	0	1,329	2,569	163	300	80	390	80	70	80
Crow	71,943	92,742	69,188	54,319	51,742	56,350	57,300	81,500	90,260	67,440	56,020
American woodcock	41,479	27,919	39,907	27,866	29,210	35,430	29,770	24,980	30,360	31,920	25,810
Mourning dove [d]	96,559	77,749	85,950	101,161	132,577	109,940	100,230	74,000	92,760	80,480	103,370
Ring-necked pheasant	419,712	585,299	587,580	655,443	522,071	398,130	359,400	198,500	250,140	169,100	152,800
Ruffed grouse	194,687	224,309	417,153	293,544	318,338	357,420	465,580	383,150	341,320	288,410	301,190
Spruce grouse	9,204	10,079	26,568	17,705	16,997	19,130	14,960	18,640	11,980	13,110	14,590
Sharp-tailed grouse	10,417	6,387	11,939	13,790	13,695	9,530	16,820	11,600	10,650	7,130	8,530
Gray partridge	12,572	16,289	11,545	11,000	9,660	8,040	9,150	3,950	5,160	2,380	3,590
Gray squirrel	132,659	122,078	140,788	133,194	121,534	109,790	138,920	115,840	126,110	84,010	91,250
Fox squirrel	62,410	62,187	66,068	47,736	51,079	53,970	61,690	48,100	49,750	33,940	40,840
Eastern cottontail	86,508	90,062	77,872	78,588	79,927	57,760	53,870	34,640	64,140	40,710	38,820
White-tailed jack rabbit	6,940	5,493	4,149	9,482	6,446	2,610	7,220	5,180	1,910	1,870	1,050
Snowshoe hare	7,895	10,406	16,801	5,789	11,343	5,360	6,770	8,430	16,800	6,200	7,860
Raccoon (Sept -Feb)	56,970	29,191	62,891	46,739	72,026	66,700	77,690	44,080	48,340	46,690	52,800
Raccoon [c] (Mar –Aug)	20,456	7,331									
Red fox (Sept –Feb)	6,072	10,166	7,872	6,188	4,408	10,270	8,780	7,120	7,990	5,190	3,220
Red fox [c] (Mar –Aug)	836	1,141									
Gray fox	1,758	927	3,593	559	2,443	1,860	2,380	1,160	250	430	600
Coyote	18,230	38,612	20,769	34,377	45,689	46,070	44,050	33,410	51,990	23,630	17,430
Badger	533	924	1,091	159	490	750	600	230	330	290	80

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.

[a] Includes all types of Small game licenses. Duplicate and free licenses not included.
[b] Estimates based upon response of hunters to questionnaires.
[c] Raccoon and red fox seasons were year round from May, 1994 through March 16, 2006.
[d.] Mourning dove season added 2004.

Table 6. Mail survey results of nonresident small game hunters, 2004-05 through 2014-15.

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Nonresident licenses issued [a]	6,385	5,897	7,356	7,858	7,114	6,934	6,695	6,312	6,456	6,031	6,056
Questionnaires:											
Number mailed	182	210	185	185	226	196	163	169	166	162	165
Number not delivered	13	10	11	11	15	10	6	11	11	10	12
Number (percent) returned	114 (67)	134 (67)	115 (62)	101 (58)	89 (42)	105 (54)	107 (66)	91 (54)	71 (43)	81 (50)	70 (42)
Estimated nonresidents and (percent) of all licensed nonresidents hunting:											
Ducks	2,394 (37)	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)
Canada goose	1,368 (21)	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)
Ruffed grouse	1,824 (29)	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)
Ring-necked pheasant	2,679 (42)	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)
Raccoon [b, c]	0 (0)	44 (0.7)	0 (0)	78 (1.0)	0 (0)	0 (0)	63 (0.9)	0 (0)	0 (0)	80 (1.2)	0 (0)
Estimated nonresident take:											
Ducks	19,269	12,149	12,173	22,718	15,463	11,755	17,055	13,840	20,380	20,410	13,060
Canada goose	6,214	3,946	3,580	3,501	5,762	3,698	6,334	4,050	2,270	3,650	2,680
Ruffed grouse	7,924	6,429	11,522	7,236	6,938	8,651	12,600	8,980	10,090	4,990	9,090
Ring-necked pheasant	11,174	13,656	16,079	17,661	10,642	6,274	8,076	4,860	6,820	3,430	3,720
Raccoon [b, c]	0	887	0	3,268	0	0	593	0	0	1,280	0

[a] Excludes duplicate licenses and nonresident shooting preserve licenses.

[b] In 2002, 2003, 2004, 2006, 2008, 2009, 2011, 2012 and 2014 no non-residents reported hunting/harvesting raccoons.

[c] 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 2013 - 2014 and 2014-15 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/MigratoryBirdHuntingActivityandHarvestforthe2013-14and2014-15HuntingSeasons.pdf

Table 1. Species composition of the Minnesota waterfowl harvest, 2013 and 2014. (from: Raftovich, R.V., S.C. Chandler, and K.A. Wilkins. 2015. Migratory Bird Hunting activity and harvest during the 2013-14 and 2014-15 hunting seasons. U.S. Fish and Wildlife Service, Laurel, Maryland. USA July 2014. 68 pp).

	Minnesota Harvest					Mississippi Flyway Harvest		
Species	2013	% of Harvest	2014	% of Harvest	Percent change in Harvest 13-14	2013	2014	Percent change Harvest 13-14
Mallard	166,366	27.37	161,859	28.33	- 3	1,837,000	1,992,886	+8
Domestic mallard	0	0	0	0	0	1,277	680	-88
American black duck	0	0	1,465	0.26	+100	24,951	15,885	-57
Black x mallard	0	0	0	0	0	5,633	1,747	-222
Gadwall	15,254	2.51	12,451	2.18	-23	1,009,467	947,364	- 7
American wigeon	4,767	0.78	7,690	1.35	+38	95,602	84,575	-13
Green-winged teal	33,368	5.49	31,859	5.58	- 5	848,357	911,663	+7
Blue-winged /cinnamon teal	115,360	18.98	82,028	14.36	-41	942,908	648,805	-45
Northern shoveler	15,731	2.59	13,549	2.37	-16	355,367	294,147	-21
Northern pintail	8,104	1.33	2,563	0.45	-216	155,104	115,644	-34
Wood duck	149,681	24.63	114,620	20.06	-31	774,961	602,451	-29
Redhead	19,544	3.22	25,268	4.42	+23	121,598	122,872	+1
Canvasback	8,104	1.33	6,592	1.15	-23	76,103	43,558	-75
Greater scaup	3,814	0.63	366	0.06	-942	49,064	37,927	-29
Lesser scaup	10,011	1.65	2,563	0.45	-291	97,873	156,083	+37
Ring-necked duck	31,838	5.25	67,014	11.73	+52	240,898	250,727	+4
Goldeneye	1,430	0.24	1,099	0.19	-30	29,593	32,910	+10
Bufflehead	14,777	2.43	15,014	2.63	+2	88,370	70,647	-25
Ruddy duck	0	0	2,197	0.38	+100	8,933	20,930	-57
Scoters	0	0	0	0	0	3,091	9,309	+67
Hooded merganser	9,057	1.49	20,873	3.65	+57	45,416	54,723	+17
Other mergansers	0	0	1,465	0.26	+100	13,174	12,811	-3
Total Duck Harvest (retrieved kill)	607,800 ±14%		571,300 ±12%		- 6	6,882,900 ±8%	6,462,800 ±6%	-7

[a] Sum of all species does not equal total because of rounding error.

Table 2. Top 10 states in number of **adult duck hunters**, 2014, and number of hunter-days and retrieved duck kill, . (from: Raftovich, R.V., S.C. Chandler, and K.A. Wilkins. 2015. Migratory Bird Hunting activity and harvest during the 2013-14 and 2014-15 hunting seasons. U.S. Fish and Wildlife Service, Laurel, Maryland. USA July 2015. 68 pp).

State	Number of active duck hunters	Duck hunter days afield	Total duck harvest	Seasonal duck harvest per hunter
Texas	86,300 ± 19%	465,900 ± 22%	1,218,300± 21%	14.1 ± 28%
Louisiana	77,200 ± 6%	561,000 ± 11%	1,861,400 ± 12%	24.1 ± 14%
Minnesota	65,300 ± 9%	349,400 ± 11%	571,300 ± 12%	8.7 ± 15%
Arkansas	58,800 ± 9%	429,100 ± 13%	1,231,300 ± 14%	20.9 ± 16%
Wisconsin	53,900 ± 11%	316,000 ± 11%	414,600 ± 11%	7.7 ± 16%
California	43,000 ± 12%	309,800 ± 8%	949,200 ± 9%	22.0 ± 15%
North Dakota	37,300 ± 6%	177,500 ± 8%	545,000 ± 8%	14.6 ± 10%
North Carolina	33,700 ± 17%	191,100 ± 16%	359,000 ± 15%	10.7 ± 22%
Michigan	32,800 ± 12%	212,300 ± 13%	341,400 ± 15%	10.4 ± 19%
Missouri	32,700 ± 13%	224,900 ±17%	480,100 ±27%	10.7 ±22%
Mississippi Flyway		2,981,900 ± 5%	6,462,800 ± 6%	
United States		5,971,700 ± 3%	13,270,000 ± 4%	

Table 3. Top 10 states in number of **adult goose hunters**, 2014, and number of hunter-days and retrieved goose kill, in . (from: Raftovich, R.V., S.C. Chandler, and K.A. Wilkins. 2015. Migratory Bird Hunting activity and harvest during the 2013-14 and 2014-15 hunting seasons. U.S. Fish and Wildlife Service, Laurel, Maryland. USA July 2015. 68 pp).

State	**Number of active goose hunters**	**Goose hunter days afield**	**Total goose harvest**	**Seasonal goose harvest per hunter**
Minnesota	48,800 ± 10%	219,300 ± 13%	148,900 ± 15%	3.3 ± 18%
Wisconsin	39,700 ± 10%	220,600 ± 14%	90,400 ± 15%	2.3 ± 18%
Texas	47,500 ± 17%	155,500 ± 32%	340,400 ± 92%	7.2 ± 93%
California	38,100 ± 10%	258,700 ± 14%	215,600 ± 17%	5.6 ± 19%
Michigan	34,600 ± 12%	199,100 ± 15%	140,900 ± 16%	4.1 ± 20%
North Dakota	26,700 ± 6%	123,100 ± 8%	190,100 ± 12%	7.1 ± 13%
New York	17,000 ± 8%	89,800 ± 11%	143,800 ± 14%	8.3 ± 16%
Illinois	22,200 ± 13%	168,700 ± 17%	120,800 ± 28%	5.4 ± 31%
Maryland	19,800 ± 7%	99,800 ± 9%	120,100 ± 11%	6.1 ± 13%
Pennsylvania	20,900 ± 17%	102,300 ± 26%	109,200 ± 34%	5.2 ± 38%
Mississippi Flyway		1,419,800 ± 6%	995,200 ± 9%	
United States [b]		3,287,000 ± 4%	3,326,900 ± 11%	

[b]. 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 2014 EARLY CANADA GOOSE HUNTS IN MINNESOTA

Steve Cordts, Populations and Regulations Unit
Margaret H. Dexter, Wildlife Policy and Research Unit
John Giudice, Biometrics Unit

The August and September Canada goose seasons in Minnesota were 9-24 August, and 6-22 September, 2014 respectively. During the August season the daily bag limit was 10 Canada geese per day within a portion of the state, the Intensive Harvest Zone (IHZ; Fig 1), 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 2014 August and September goose hunter mail questionnaire survey (Appendix A).

METHODS

Permittees were randomly selected to receive a post-season hunter survey. Questionnaires were sent to 3,039 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 the two seasons that they hunted over water, and not over water, and the number of geese they shot under each scenario. 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 29,603 Special Canada Goose Season permits were sold prior through 22 September, 2014. Response rate to the survey was 44%. Among those respondents, 19% indicated that they hunted during the August season, and 63% indicated they hunted during the September season.

Responses from the survey indicate that 5,500 hunters participated in the August hunt (Table 1), while 18,760 participated in the September hunt (Table 2). A total of 20,290 hunters hunted during either the August and/or September early goose season. Hunters shot and retrieved 21,280 Canada geese during the 2014 August season, and 76,440 during the 2014 September season for a total early season estimated goose harvest of 97,720 geese (Table 3).

We asked hunters how many days they hunted overwater and how many days they hunted away from water. A total of 39% of hunters statewide hunted over water in August and September. The survey

indicates that 23% of the geese harvested in the two early seasons (22,580 total geese) were harvested by hunters overwater. These results were similar to the results obtained in the 2013 survey.

We asked hunters how satisfied they were (1=very low,…, 7=very high) relative to overall hunting experience, number of geese bagged, number of geese seen, and regulations. Mean satisfaction in 2014 for the August season was: overall experience 4.4 (4.6 in 2013), geese bagged 3.5 (3.8 in 2013), number of geese seen 3.7 (3.9 in 2013), and regulations 4.7 (5.1 in 2013). Mean satisfaction in 2014 for the September season was: overall experience 5.1 (5.2 in 2013), geese bagged 4.2 (4.3 in 2013), number of geese seen 4.4 (4.4 in 2013), and regulations 5.0 (5.1 in 2013).

Finally we asked hunters how they felt about the 10 Canada goose daily bag in the Intensive Harvest zone during the August and September seasons. About 3% of respondents felt the limit was too low, 35% of respondents felt the limit was about right, 15% felt the limit was too high, and 47% of respondents had no opinion.

This project was funded in part by the Wildlife Restoration (Pittman-Robertson) Program.

LITERATURE CITED

R Development Core Team. 2009. R: a language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. <http://www.R-project.org>. Accessed 18 January 2011.

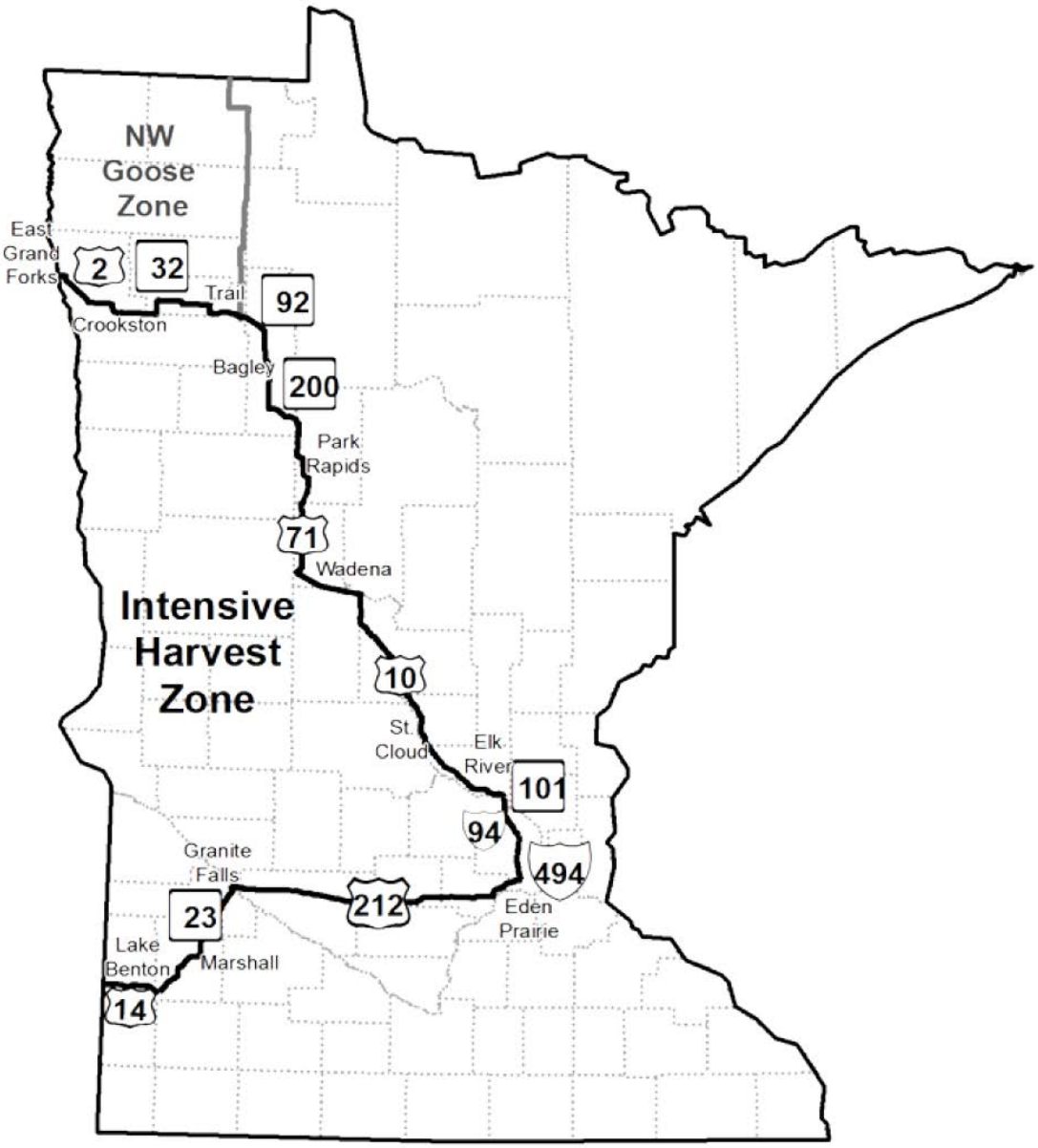

Figure 1. Intensive Harvest Zone in relation to the Northwest (NW) Goose Zone within Minnesota, 2014.

Table 1. Permit sales, hunter activity, and harvest during the August Canada Goose season (9 – 24 August) in Minnesota, 2013 and 2014.

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

Table 2. Permit sales, hunter activity, and harvest during the September Canada Goose season (6 – 22 September) in Minnesota, 2013 and 2014.

Parameter	2013	2014
Total permits sold	27,778	29,603
Questionnaires delivered	3,100	3,039
Useable questionnaires returned	1,400	1,335
% responding	46.0	63.4
Days hunted per active hunter	3.9	3.3
Geese shot and retrieved per active hunter	4.8	4.1
Unretrieved harvest per active hunter	0.4	0.4
% unretrieved harvest	8.4	8.4
EXPANDED:		
Active hunters	16,840	18,760
Hunter days	64,970	61,620
Retrieved harvest	81,230	76,440
Est. unretrieved harvest	7,440	7,070
Total estimated take	88,670	83,510

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, 2013-14.

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

APPENDIX A.

2014 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 9–24 or September 6–22, 2014. Your cooperation is important. Please return this survey card even if you did not hunt Canada geese. THANK YOU! Ed Boggess, Director, Division of Fish and Wildlife, MN DNR.

1. Did you hunt Canada geese during either the August 9-24 Intensive Harvest Zone or September 6-22, 2014 September Canada goose season? (Please check one for each month.)
August ____ Yes ____ No **September** ____ Yes ____ No

If you answered NO, to question 1, you may skip to question 7.

2. Indicate the number of days hunted, total harvest of geese, and total number of geese knocked down but not retrieved in each season and goose zone during August and September 2014.

Goose Season/zone *(see map for goose-zone boundaries)*	**Number of days hunted**	**Total geese personally shot and retrieved**	**Total geese personally knocked down but not retrieved**
August 9-24 (Intensive Harvest zone)			
September 6-22 (Intensive Harvest zone)			
September 6-22 (Remainder of State zone)			

3. 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 4.)
If Yes:
How many days did you personally hunt overwater? _____ days
How many geese did you personally shoot while hunting overwater? _____ geese

4. If you hunted geese during the 2014 **August** Canada goose season, how satisfied or dissatisfied were you with the following? (*Please circle one response for each.*) If you did not hunt during this season please skip to question 6.

	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

5. If you hunted geese during the 2014 **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

6. 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.

2015 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 2015 Light Goose Conservation Order hunter mail questionnaire survey.

METHODS

Minnesota held a light goose Conservation Order harvest from 1 March - 30 April 2015. 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. Second and third mailings were sent to non-respondents after one month had elapsed.

RESULTS AND DISCUSSION

A total of 1,141 permits were issued and 520 responses (46 %) to the questionnaire were obtained (Table 1). In calculating harvest estimates, we assumed that the 621 non-respondents participated in the conservation action and took light geese in the same manner as respondents. Five hundred sixty nine people attempted to take light geese during the 61-day conservation order period. Active participants pursued light geese for 2,434 days and 3,266 light geese were shot and retrieved. This was an average retrieved take of 6 geese per active participant. Another 349 light geese were estimated wounded and not retrieved.

ACKNOWLEDGMENTS

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

Figure 1. Light Goose Conservation Order hunter mail questionnaire, 2015.

MINNESOTA 2015 LIGHT GOOSE HARVEST SURVEY

For the Period of March 1 - April 30, 2015 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, 2015. 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 2015 hunting experience. THANK YOU! Ed Boggess, Director, Division of Fish and Wildlife, MN DNR.

1. Did you hunt light geese in Minnesota during March 1 - April 30, 2015? 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, 2015? _____

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, 2003 - 2015

	Year												
Statistic	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total permits sold	1,438	1,424	1,383	1,363	1,292	1,406	1,670	952	994	1,048	1,405	1,278	1,141
Useable returns	1,071	1,095	998	955	921	910	1,057	671	659	675	810	759	520
Response rate (%)	74.0	77.0	72.0	70.0	71.0	65.0	63.0	72.3	67.1	65.3	58.3	60.0	46
Active hunters (%)	38.5	48.5	44.7	37.3	39.8	54.9	66.0	40.8	45.7	56.9	54.9	44.0	50
Estimated total hunters	553	690	618	516	514	773	1,103	389	455	600	770	560	569
Estimated hunter days	2,600	3,372	2,643	2,665	2,302	3,404	4,647	1,475	1,830	2,270	3,070	2,580	2,434
Mean days/hunter	4.7	4.9	4.3	5.2	4.5	4.4	4.2	3.8	4.0	3.8	4.0	4.6	4
Estimated harvest (shot & retrieved)	2,005	2,735	1,395	1,360	1,786	2,409	4,366	559	1,554	2,620	2,430	2,880	3,266
Mean harvest/hunter	3.6	4.0	2.3	2.6	3.5	3.1	4.0	1.4	3.4	4.4	3.2	5.1	6
Estimated crippling losses	253	315	150	163	172	302	640	70	145	210	370	210	349
Percent using unplugged guns	50.6	48.2	44.0	42.3	43.6	46.7	46.8	44.9	44.2	43.0	49.4	48.8	NA
Est. number hunters using unplugged guns	280	333	272	215	224	361	516	175	201	260	380	270	NA
Est. number geese **shot** with unplugged guns	996	1,385	777	689	1,032	1,275	2,413	348	742	1,510	1,670	2,060	NA
Est. harvest with shell 4-5-6	401	491	269	287	277	339	822	131	311	460	620	770	NA
Percent using electronic calls	15.7	19.3	17.8	14.4	17.1	19.1	23.5	25.9	21.3	22.2	24.5	27.8	NA
Est. number hunters using e-calls	87	133	110	73	88	148	260	101	97	130	190	160	NA
Est. harvest while using e-calls	474	326	268	280	329	566	1,171	192	531	460	620	1,710	NA
Percent hunting 1/2-hr after sunset	41.2	38.4	42.7	43.9	38.3	42.3	43.1	39.7	39.7	42.4	33.4	36.2	NA
Est. number hunting after 1/2-hr sunset	228	265	264	223	197	326	475	154	180	250	260	200	NA
Est. harvest 1/2-hr after sunset	267	311	242	246	209	511	713	87	238	240	260	550	NA

MINNESOTA'S WILD TURKEY HARVEST – 2015

Steve Merchant, Wildlife Populations and Regulations Manager

This report summarizes the fall 2014 and spring 2015 Minnesota wild turkey harvest information. The fall turkey season was 30 days in length (October 4- November 2) and allowed for an unlimited number of hunters to take one wild turkey of either sex. The spring turkey season regulated harvest and distributed hunting pressure by allocating permits across 12 permit areas (Figure 1) and 8 time periods using a quota system for the first 3 time periods. The first time period began on April 15, and the final time period concluded on May 28.

During spring, adult hunters interested in pursuing turkeys for the first 3 time periods were required to apply for a permit through a lottery system but youth hunters were able purchase a permit over-the-counter, and hunt in any permit area. 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 for one of the last 5 seasons, while persons with an archery turkey license could hunt the last 5 time periods in their entirety. The goal of this system is to provide quality turkey hunting opportunities by managing hunter interference rates while allowing hunters to take the harvestable surplus of turkeys.

Fall 2014 Turkey Season

The number of permits issued to hunters increased slightly from 8139 permits in 2013 to 8,339 in 2014(Table 1, Figure 2). Hunters still needed to select and hunt within one of the twelve permit areas. There were 1,137 turkeys harvested during fall 2014, which was a 5.5 percent increase from 2013 (Table 1). Hunter success rates in 2014 remained similar to 2013 (13.6% vs. 13.2% respectively), and remain below the 5-year average (16%).

Spring 2015 Turkey Season

There were 46,675 permits issued during the spring season, including 13,085 general lottery and landowner permits, 11,333 youth permits, 5,052 archery permits, and 17,205 surplus over-the-counter permits (Table 6). The number of youth permits declined from 2014 by 7 percent (-846), while archery permits increased by three percent (153). The total number of permits purchased decline from 2014 by three percent (1529). Hunters registered 11,734 turkeys (Table 3 and 5), which was the third highest harvest recorded and above the 5-year average (10,990) (Figure 3). Success rates by license type are found in Table 6. The winter of 2014-15 was mild compared to the previous two winters, and likely was not a significant mortality factor beyond normal winter mortality. Spring weather began very favorably, and the A season harvest was near a record. However wet and sometimes cold weather hampered several of the other seasons, likely depressing effort and harvest.

Table 1. Permits available and issued, applicants, registered harvest, and hunter success rates for fall wild turkey seasons 1990 – 2014, Minnesota.

Year	Permits available	Applicants	Permits issued	Registered harvest	Hunter success (%)[a]
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

[a] Success rates not adjusted for non-participation.

Table 2. Permits issued, registered harvest, and hunter success during the 2015 Minnesota spring wild turkey season.

Permit Area	Regular Permits Issued [a]	Total Registered Harvest [b]	Regular Gun Harvest [c]	Regular Gun Success Rates
501	8124	3004	2480	30.5%
502	725	228	185	25.5%
503	3323	1432	1072	32.3%
504	797	322	243	30.5%
505	2665	1001	972	36.5%
506	1053	388	266	25.3%
507	7235	2960	2143	29.6%
508	3476	1220	879	25.3%
509	246	141	81	32.9%
510	2382	966	660	27.7%
511	134	38	27	20.1%
512	31	12	8	25.8%

[a] Permits issued for the Camp Ripley disabled veterans hunt, archery, and youth permits were not included.
[b] Total harvest for all license types. Twenty-two turkeys were registered without a permit area designation.
[c] 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 – 2015 for all spring wild turkey hunting seasons in Minnesota.

	Permits				
Year	Available	Issued	Issued (%)	Registered harvest	Success (%)[a]
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[b]	33,976	28,320	83.4	9,412	33
2008[b]	37,992	31,942	84.1	10,994	34
2009[b]	42,328	36,193	85.5	12,210	34
2010[b]	55,982	46,548[c]	83.0	13,467	29
2011[b]	Unlimited	43,521[c]	N/A	10,055	23
2012[b]	Unlimited	38,906[c]	N/A	11,325	29
2013[b]	Unlimited	34,281[c]	N/A	10,390	30
2014[b]	Unlimited	43,305[c]	N/A	11,447	25
2015[b]	Unlimited	41,623[c]	N/A	11,734	28

[a] Success rates not adjusted for non-participation

[b] Youth hunt data included

[c] Permits issued to archery hunters were not included. There were 2,462, 3,911, 4,550, 4,899, and 5052 permits issued to archers in 2011, 2012, 2013, 2014, and 2015 respectively.

Table 4. Permits available and issued by license type (resident and non-resident) and time period for the spring 2015 wild turkey season, Minnesota.

Time period	Permits available	Permits issued			
		General lottery [a]	Surplus	Youth [b]	Archery [c]
A 4/15-19	5,936	5,230	8	X	
B 4/20-24	5,936	3,383	1,834	X	
C 4/25-29	5,936	4,457	782	X	
D 4/30-5/4	Unlimited	7	8,209	X	X
E 5/5-9	Unlimited	4	2,082	X	X
F 5/10-14	Unlimited	1	923	X	X
G5/15-21	Unlimited	3	2,172	X	X
H 5/22-28	Unlimited	0	1,248	X	X
Total [a]	Unlimited	13,085	17,205	11,333	5,052

[a] includes landowner licenses.
[b] Youth permits were valid for all time periods.
[c] Archery permits were valid for time periods D-H.

Table 5 Total harvest by time-period, spring 2015 wild turkey season, Minnesota.

Time period	Total Harvest	Percent Harvest
A	3055	26.0
B	1961	16.7
C	1888	16.1
D	2491	21.2
E	811	6.9
F	327	2.8
G	732	6.2
H	469	4.0
Total	11,734	100

Table 6. 2015 Total permits issued, harvest and success rate by type of permit.

	Total Permits Sold	Harvest	Success Rate [a]
Lottery	13,085	4,579	35
Surplus	17,205	4,251	25
Youth	11,333	2,326	21
Archery	5,052	578	11
Total	46,675	11,734	25

[a] Success rates not adjusted for non-participation.

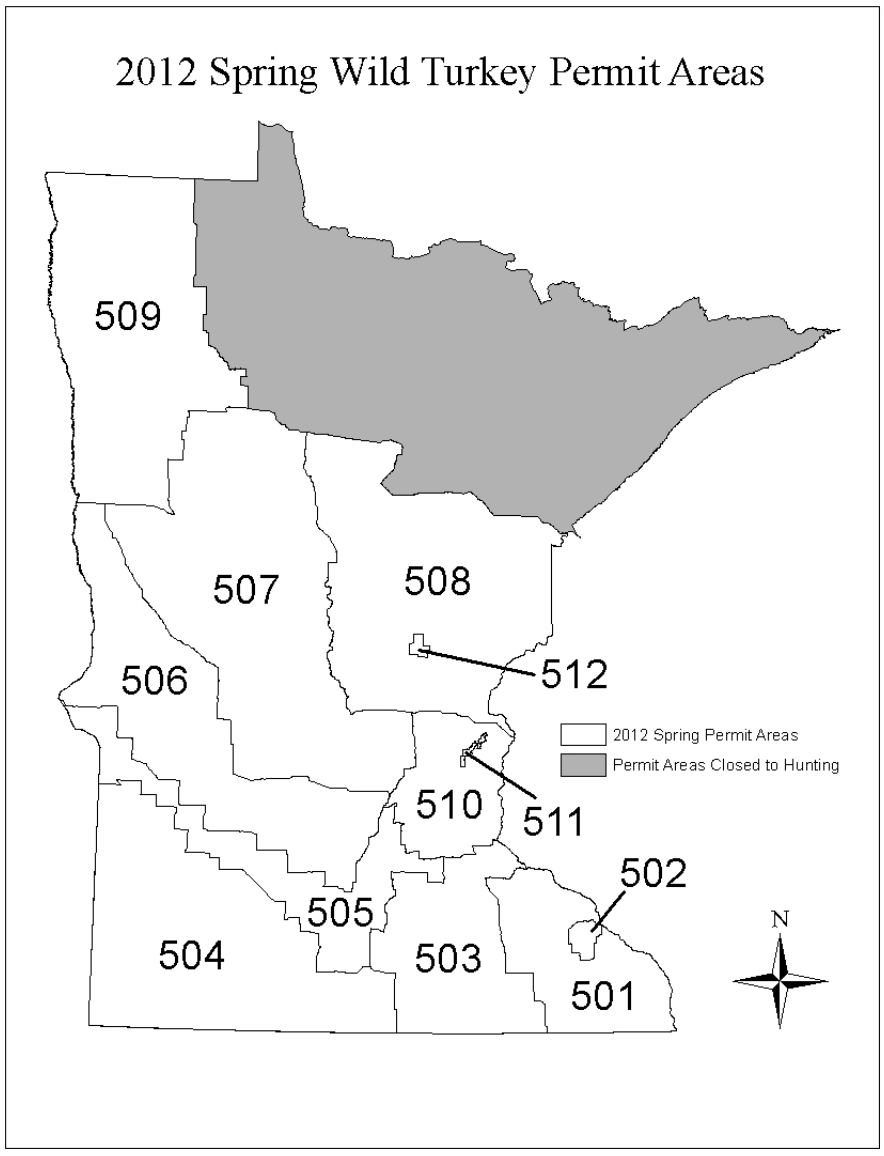

Figure 1. Permit areas open for hunting during the 2015 spring turkey hunting season, Minnesota.

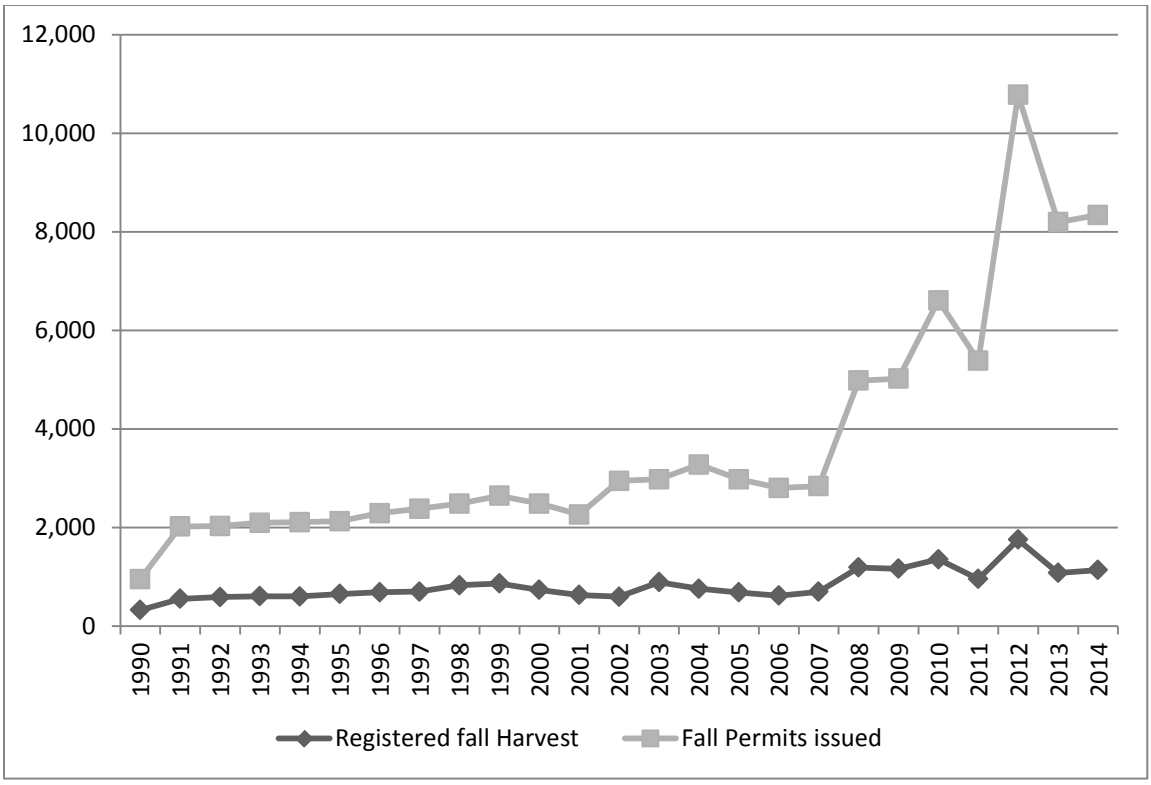

Figure 2. Permits issued and registered harvest for fall wild turkey seasons, 1990-2014, Minnesota.

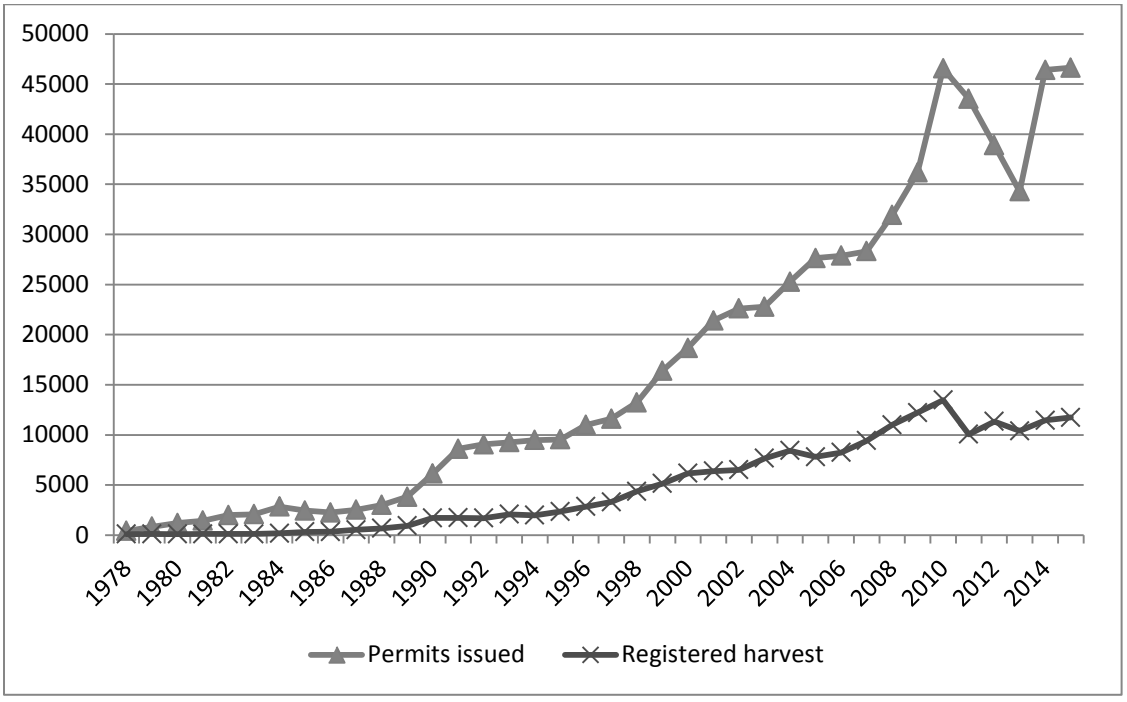

Figure 3. Permits issued and registered harvest for spring wild turkey seasons, 1978-2015, Minnesota.

2014 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. The number of hunters going afield was estimated at 102. Prairie-chicken harvest was estimated at 95 and 35 sharp-tailed grouse (*Tympanuchus phasianellus*) were reported as harvested during prairie-chicken hunts. Hunter success (0.54) and satisfaction (3.7 on a scale of 1-5) were higher than before the changes to the permit areas and season (i.e., longer length and earlier dates) in 2013.

INTRODUCTION

Prairie-chicken (*Tympanuchus cupido pinnatus*) hunting 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 (Fig. 1a,b). 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 2014, the prairie-chicken season opened 27 September and closed 5 October.

Prairie-chicken hunting in Minnesota is a privilege that is only available to residents. Landowners or tenants of ≥40 acres of grassland within a permit area are eligible to apply for a landowner lottery that awards 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., 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 6 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, and how satisfied were you (on a scale of 1-5)?

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 6 December were included in this report.

RESULTS & DISCUSSION

The combined quota for the 11 permit areas during 2014 was 126, and 305 individuals applied in the lottery (Table 1). Only 2 permit areas (804A and 813A) had fewer applicants than permits available. No surplus permits were available this year. Of the 130 lottery winners, 110 later purchased a permit, of whom, 5 were landowners.

Ninety-four permit purchasers (87%) responded to the survey and 2 surveys were undeliverable; 72 (67%) responded to the first mailing and 22 (20%) to the second mailing. This response rate is slightly lower than survey response rates during 2012 (95%), but similar to 2010 (84%), 2011 (90%), and 2013 (83%). 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 (93% vs. 86% of respondents), they hunted a similar number of days (2.3 vs. 2.3), reported harvesting prairie-chickens at similar rates (50% vs. 45%), reported harvesting a similar number of chickens (0.9 vs. 0.8 birds per hunter) and sharp-tailed grouse (0.4 vs. 0.4 birds per hunter), and reported similar satisfaction (mean 3.7 vs. 3.9, median 4 vs. 4), with 88% and 90% of respondents reporting satisfaction scores $\geq$3, respectively. Thus, I combined responses from both mailings this year for the analysis.

Eighty-six respondents reported that they hunted prairie-chickens (Table 2). I estimated the total number of hunters to be 102 (i.e., purchasers who went afield) after accounting for hunting by non-respondents. Hunters reported harvesting 77 prairie-chickens and total harvest after accounting for non-respondents was estimated as 95 prairie-chickens. An estimated 55 hunters bagged $\geq$1 chicken. Survey respondents reported harvesting 35 sharp-tailed grouse while hunting prairie-chickens from permit areas 803A, 804A, 805A, 806A, 807A, and 808A (Fig. 1). Most purchasers (88%) that responded to the survey reported a satisfaction rating $\geq$3. Although successful hunters reported higher average satisfaction (4.3) than respondents that were not successful (3.2), satisfaction of prairie-chicken hunters was high overall.

Prairie-chicken hunter success and satisfaction during 2014 was similar to 2013 and higher than the preceding years (Table 3). Regulations were changed in 2013 in an attempt to improve hunter success and satisfaction, and survey responses indicated that this was achieved by the changes. Write-in comments about the longer (9 day) season with 2 weekends were favorable, with only one survey respondent expressing opposition to this change. Write-in comments about the timing of the season 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. However, a survey question asking directly about the timing of the season should better represent the opinions of hunters, than write-in comments from a minority of respondents. The 2013 Wildlife Public Input Survey asked specifically whether a season 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). Thus, public input appears to have informed season setting and improved hunter satisfaction, although some hunters still prefer the later hunting season.

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 2014.

Permit area	Permits available	No. of applicants	Lottery winners		Permit purchasers[a]		Surplus purchasers[c]
			No.[b]	Proportion	No.	Proportion	
803A	10	25	12	0.48	9	0.75	0
804A	12	11	11	1.00	11	1.00	0
805A	12	66	13	0.20	13	1.00	0
806A	12	33	12	0.36	11	0.92	0
807A	20	42	22	0.52	20	0.91	0
808A	15	39	15	0.38	12	0.80	0
809A	15	25	16	0.64	10	0.63	0
810A	15	30	16	0.53	11	0.69	0
811A	5	9	5	0.56	5	1.00	0
812A	5	22	5	0.23	5	1.00	0
813A	5	3	3	1.00	3	1.00	0
All	126	305	130	0.43	110	0.85	0

[a] Lottery winners who purchased a hunting permit.
[b] The number of permits may exceed the quota when the last applicant selected in the lottery belongs to a hunting party.
[c] Number of people purchasing a surplus permit after the lottery because the permit quota was not met during the lottery. Surplus permits were not available in 2014.

Table 2. Prairie-chicken harvest in Minnesota during 2014.

Permit area	No. of hunters[a]		Birds harvested		Birds per harvester[b]	Success rate[c]
	Self-reported	Estimated	Self-reported	Estimated		
803A	9	9	6	6	1.5	0.44
804A	8	10	1	1	1.0	0.10
805A	10	13	14	18	1.8	0.77
806A	8	10	10	12	2.0	0.60
807A	15	17	13	15	1.7	0.53
808A	8	12	13	19	1.7	0.92
809A	9	9	4	4	2.0	0.22
810A	10	11	8	9	1.8	0.45
811A	2	3	3	5	1.7	1.0
812A	4	5	5	6	1.5	0.8
813A	3	3	0	0	NA	NA
All	86	102[d]	77	95[d]	1.7[d]	0.54[d]

[a] Permit purchasers who hunted.
[b] Estimated number of birds harvested per successful hunter.
[c] Proportion of estimated hunters harvesting ≥1 prairie-chicken.
[d] Assumed that non-respondents were represented by respondents.

Table 3. Summary of prairie-chicken hunting in Minnesota during 2003–2014.

Year	Permits available	Applicants	Hunters[a]	Birds harvested	Success rate[b]	Hunter satisfaction[c]
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[d]	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[e]	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[f]	96[f]	0.60[f]	3.7[f]
2014	126	305	102	95	0.54	3.7

[a] Estimated number who went hunting, not permit purchasers.
[b] Proportion of hunters harvesting ≥1 prairie-chicken.
[c] Mean on a scale of 1–5.
[d] A hunter survey was not conducted during 2007; results are from the Electronic Licensing System, which documented 150 permit purchasers.
[e] One hunter reported harvesting 10 prairie-chickens in 2010.
[f] Assumed that non-respondents were represented by respondents in the second mailing in 2013.

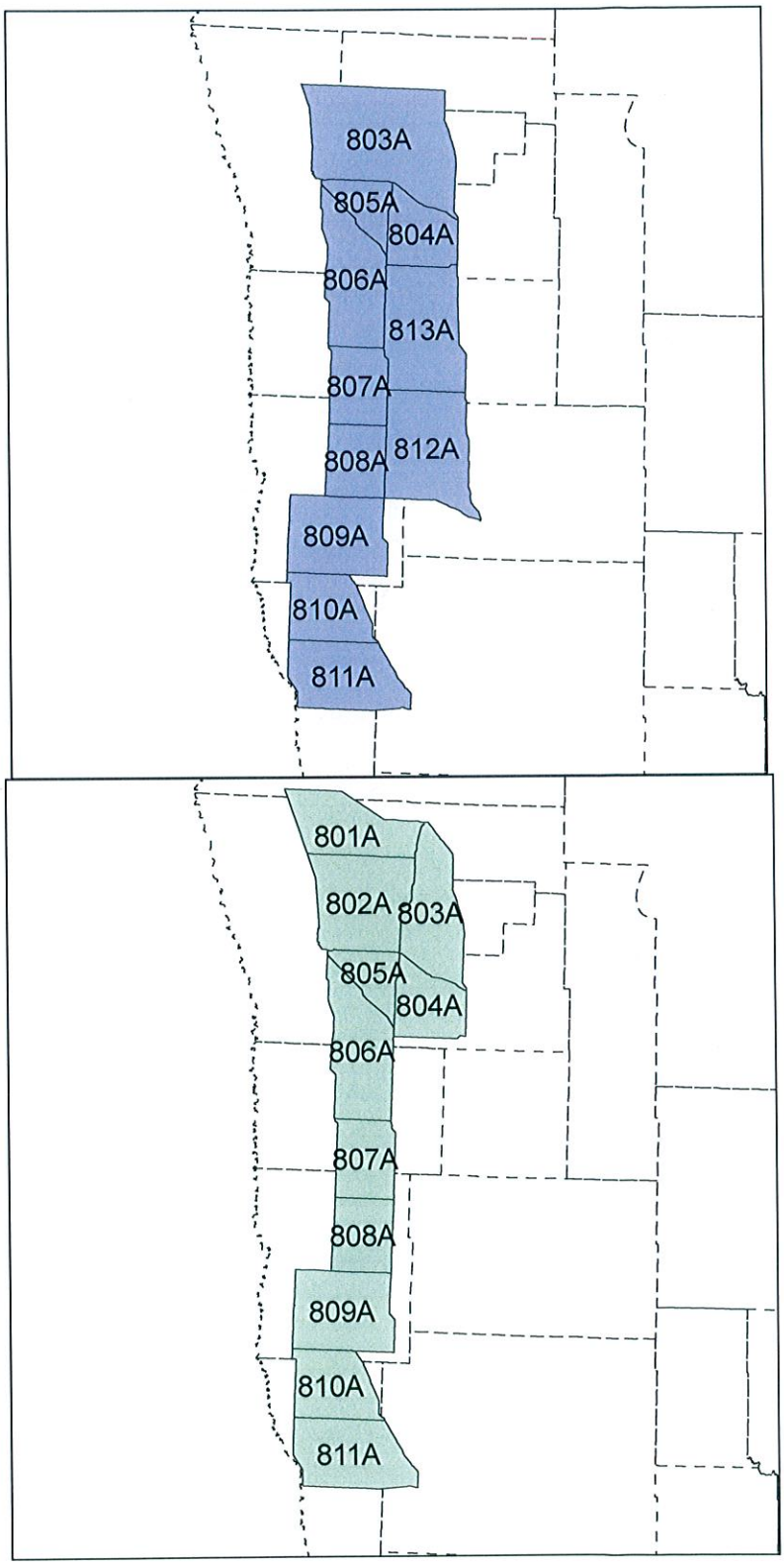

Figure 1a. Prairie-chicken hunting permit area boundaries in northwestern Minnesota during 2013 and 2014 (top) compared to 2012 (bottom). County boundaries are indicated by dashed lines. Permit areas 812A and 813A were added, 801A was eliminated, and 802A and portions of 803A were combined into a revised permit area 803A.

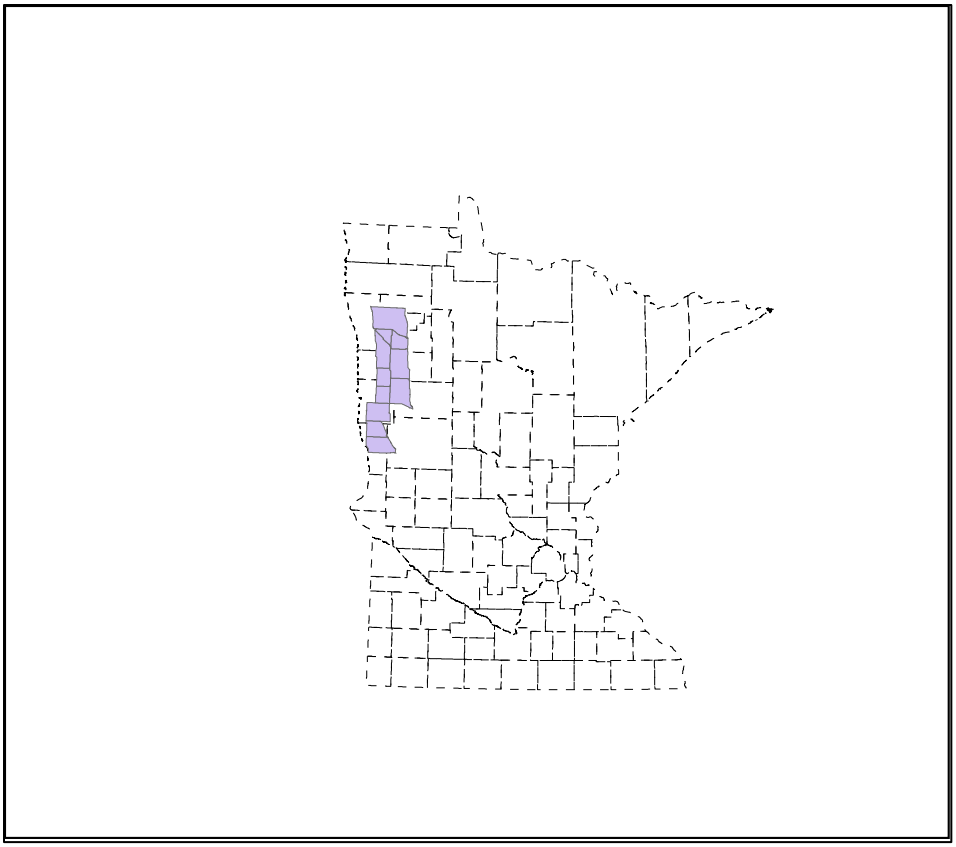

Figure 1b. Northwestern location of prairie-chicken hunting permit areas within the state relative to county boundaries (dashed lines).

2014 MINNESOTA BEAR HARVEST REPORT

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INTRODUCTION

The Minnesota bear range is divided into 11 bear management units (BMUs; Fig. 1). Each has a separate quota on hunting licenses. Outside the primary bear range, where bear depredation to crops is a primary concern, license sales are unlimited (no-quota area). 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 harvests and population size and structure.

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. We used harvest age structure accumulated since 1980 to reconstruct minimum population size (Downing population reconstruction) and thereby assess population trend.

RESULTS

Permits, licenses, harvest, and success rates

Permit applications for bear licenses has stabilized (18–19,000) at a higher level during 2010–2014 than before that, when permit availability was higher (Table 1). The reduced permit availability also seems to have driven up sales of no-quota licenses, which were the highest on record in 2012 and second highest in 2014.The estimated number of hunters in the field (6,300) was the same in 2014 as last year. The total harvest (1,627) was lower than last year (and the lowest since 1988) due to a lower hunting success. Hunting success is affected by numbers of hunters (i.e., competition; Fig. 2), food supply (affecting bears' attraction to baits), and density of bears.

Quota zone permits and licenses

The number of available quota zone permits was reduced 38% from 2012 to 2013 (Table 2); this reduction was distributed fairly uniformly across Bear Management Units (BMUs; Fig. 1). No changes were made from 2013 to 2014. This was the 4th year of a system whereby all available licenses for the quota zone were sold (those not purchased by permittees selected in the lottery were purchased later as surplus)(Table 3).

Quota zone lottery

As permit allocations have been reduced, the percentage of 1st-year applicants drawn in the lottery diminished (Table 4). In 2010, some 1st-year applicants (preference level 1) were drawn in all BMUs except one (44). In 2013 and 2014, 1st-year applicants were drawn only in BMU 22 (BWCAW). Less than 50% of 2nd-year applicants were drawn in all but 2 BMUs, and no 2nd-year applicants were drawn in 3 BMUs (26, 44, 45).

Harvest by BMU

The statewide harvest and harvest for the quota zone were the lowest since 1988. Four BMUs (12, 24, 26, 41) had record low harvests; 3 of these had record low harvests in 2013, but in each case, the harvests in 2014 were lower yet (Table 5). BMU 11 had the lowest harvest since 1999, but the no-quota zone as a whole had a fairly normal harvest. The percent of the total statewide harvest contained within the no-quota zone has increased with reduction of quota zone permits (Fig. 3).

Hunting success by BMU

Hunting success was lower in 2014 than in 2013 for all except 1 BMU (45, which had record high success this year); one BMU (12) had the lowest success in >20 years)(Table 6). With these 2 BMUs as an exception, success rates tended to be about average or above average. For the first time in 2013, hunter numbers could be estimated for the individual BMUs in the no-quota zone, based on where hunters indicated they planned to hunt when they purchased their license. This enabled a derivation of hunting success for BMUs 10, 11, and 52. This system, though, needs improvement as many no-quota hunters selected portions of the quota zone.

Harvest by date

During years of normal fall food abundance, about 70% of the harvest occurs during the 1st week of the bear season, and ~83% occurs by the end of the 2nd week. This year (and last), harvesting was delayed: only 60% in the first week and 75% after the 2nd week (Table 7).

Predictions of harvest

The 2014 bear harvest closely aligned with harvests predicted, based on regression of harvest as a function of hunter numbers and the fall food productivity index (Fig. 4). This regression is particularly high when only the past 14 years are considered (2000 – 2013).

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. Whereas sex ratios vary considerably year to year over the past 2 decades, BMUs 25, 31 and 51 showed increasing trends in percent males. BMUs 13 and 41, which adjoin, showed sharply opposite trends since 2012 (Fig. 5).

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. Conversely, median ages of harvested males have been relatively stable for at least 20 years (Fig. 7). Dramatic trends have occurred in the proportion of the female harvest aged 1–2 years (increasing) versus 4–10 years (declining)(Fig. 8).

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% do not comply (Fig. 9), and this missing sample, if somewhat different in age composition than the submitted teeth, may affect the resulting analyses. In 2013 and 2014 hunters could register by phone or internet, and pick up a tooth envelope later: these hunters had much poorer compliance with tooth submission than hunters who registered their bear at a registration station and obtained a tooth envelope at that time (Fig. 10). Compliance in tooth submission also varied considerably among BMUs. Compliance was notably poor in the no-quota zone.

Population trend

Ages of harvested bears accumulated since 1980 were used to reconstruct minimum statewide population sizes through time (i.e., the size of the population that eventually died due to hunting). This was scaled upwards (to include bears that died of other causes), using tetracycline mark–recapture estimates as a guide (Fig. 11). Whereas both the tetracycline-based and reconstructed populations showed an increase during the 1990s, followed by a decline during the 2000s, the shapes of the 2 trajectories differed.

Population reconstruction assumes equal harvest pressure through time, which is certainly not true. Notably, as harvest pressure is diminished, and fewer bears are killed (as has been the trend since 2003; see Fig. 3), ensuing population estimates will be biased low. Population reconstruction does not provide reliable estimates for the 3 most recent years, even with stable harvest pressure. However, light harvests in 2013 and 2014 should have enabled the population to increase.

Trends in harvest rates

The sex ratio of harvested bears varies by age in accordance with the relative vulnerability of the sexes. With male bears being more vulnerable to harvest than females, males always predominate among harvested 1-3 year-olds. However, older aged bears (>6 years) are always dominated by females, because there are far more of them than old males. The age at which the line fitted to these proportions crosses the 50:50 sex ratio is approximately the inverse of the harvest rate. Segregating the harvest age data into 5-year intervals showed harvest rates increasing from 1980–1999, then declining with reductions in hunter numbers (Fig. 12). Harvest rates since 2010 have been equivalent to what they were in 1980–84, when the population was increasing (Fig. 11).

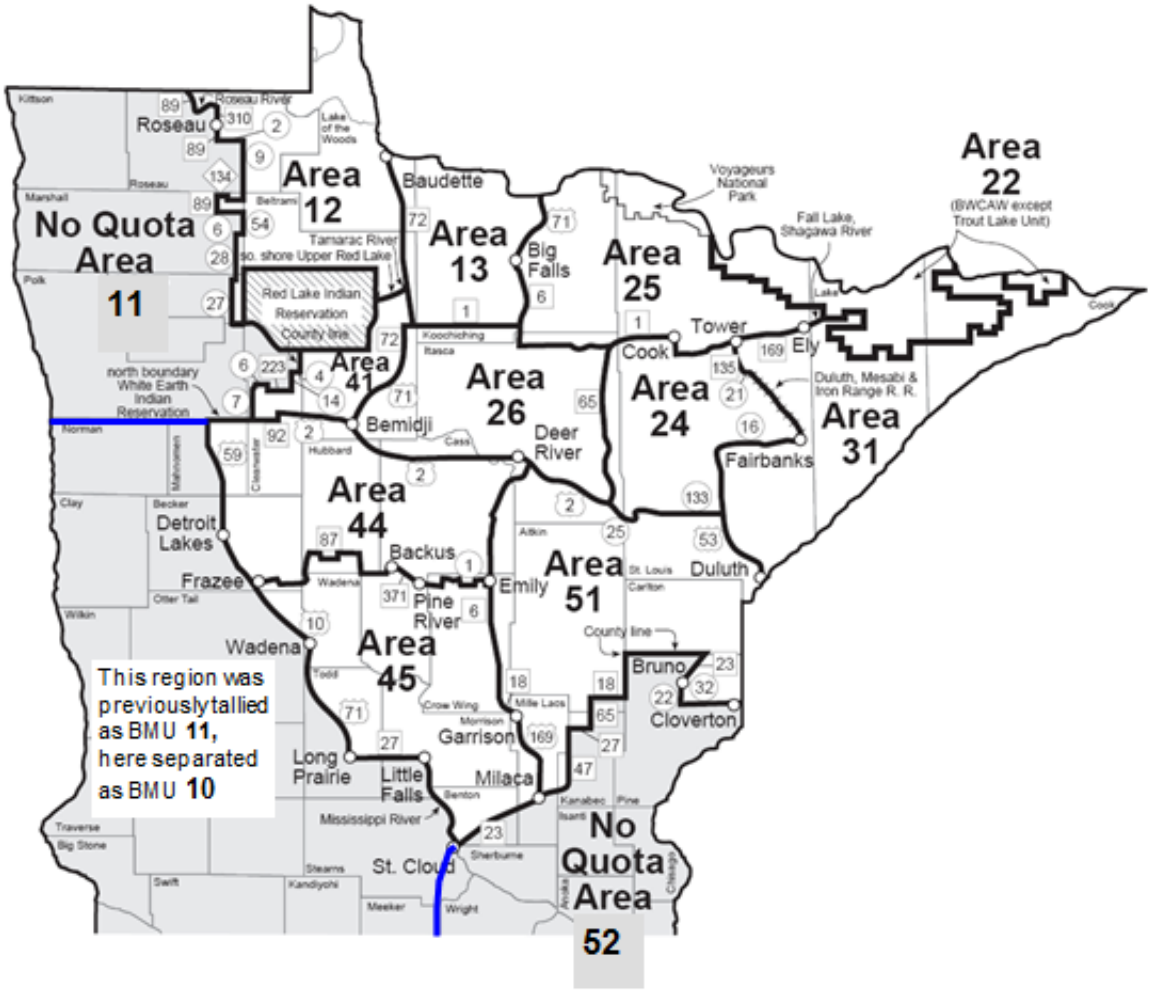


Figure 1. Bear management units (BMUs) within quota (white) and no-quota (gray) zones. Hunters in the quota zone are restricted to a single BMU, whereas no-quota hunters can hunt anywhere within that zone.

Table 1. Bear permits, licenses, hunters, harvests, and success rates, 1994–2014.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Permit applications	30127	29922	30405	27353	30245	29384	29275	26824	21886	16431	16466	16153	15725	16345	17362[a]	17571[a]	18647[a]	19184[a]	18103[a]	18107[a]	18885[a]
Permits available	9400	11950	12030	11370	18210	20840	20710	20710	20610	20110	16450	15950	14850	13200	11850	10000	9500	7050[b]	6000	3750	3750
Licenses purchased (total)	9826	12448	12414	11440	16737	18355	19304	16510	14639	14409	13669	13199	13164	11936	10404	9892	9689	9555	8986	6589	6620
Quota area [c]	8125	10304	10592	9655	14941	16563	17021	13632	12350	9833	10063	9340	9169	8905	7842	7342	7086	5684	4951	3188	3177
Quota surplus/military [c]								235	209	2554	1356	1591	1561	526	233	77	83	1385	1070	578	583
No-quota area [c]	1701	2144	1822	1785	1796	1792	2283	2643	2080	2022	2238	2268	2434	2505	2329	2473	2520	2486	2965[h]	2823	2860
% Licenses bought																					
Of permits available [d]	86.4	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
Of permits issued [d]					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
Estimated no. hunters [e]	9100	11600	11500	10300	14500	15900	16800	15500	13800	13600	12900	12500	12500	11300	9900	9400	9200	9100	8600	6300	6300
Harvest	2329	4956	1874	3212	4110	3620	3898	4936	1915	3598	3391	3340	3290	3172	2135	2801	2699	2131	2604	1866	1627
Harvest sex ratio (%M) [f]	62	47	62	55	55	53	58	56	61	58	57	59	58	57	62	59	59	61	59	62	62
Success rate (%)																					
Total harvest/hunters [g]	26	43	16	31	28	23	23	29	14	26	26	26	26	28	21	30	29	23	30	30	26
Quota harvest/licenses	26	42	15	29	25	20	20	28	14	25	26	25	25	28	21	30	30	24	33	37	33

[a] 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).

[b] Permits reduced because of a new procedure in 2011 that ensures that all available licenses are purchased (see Table 2).

[c] Quota area established in 1982. No-quota area 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.

[d] 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 2011-14, all unpurchased licenses were put up for sale, and all were bought.

[e] 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 2011-14 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.

[f] 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.

[g] 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 2014, only 1 hunter who bought 2 licenses killed 2 bears, and 12 hunters who bought 2 licenses killed 1 bear (7 Quota, 5 NQ).

[h] Record high number of no-quota area licenses purchased.

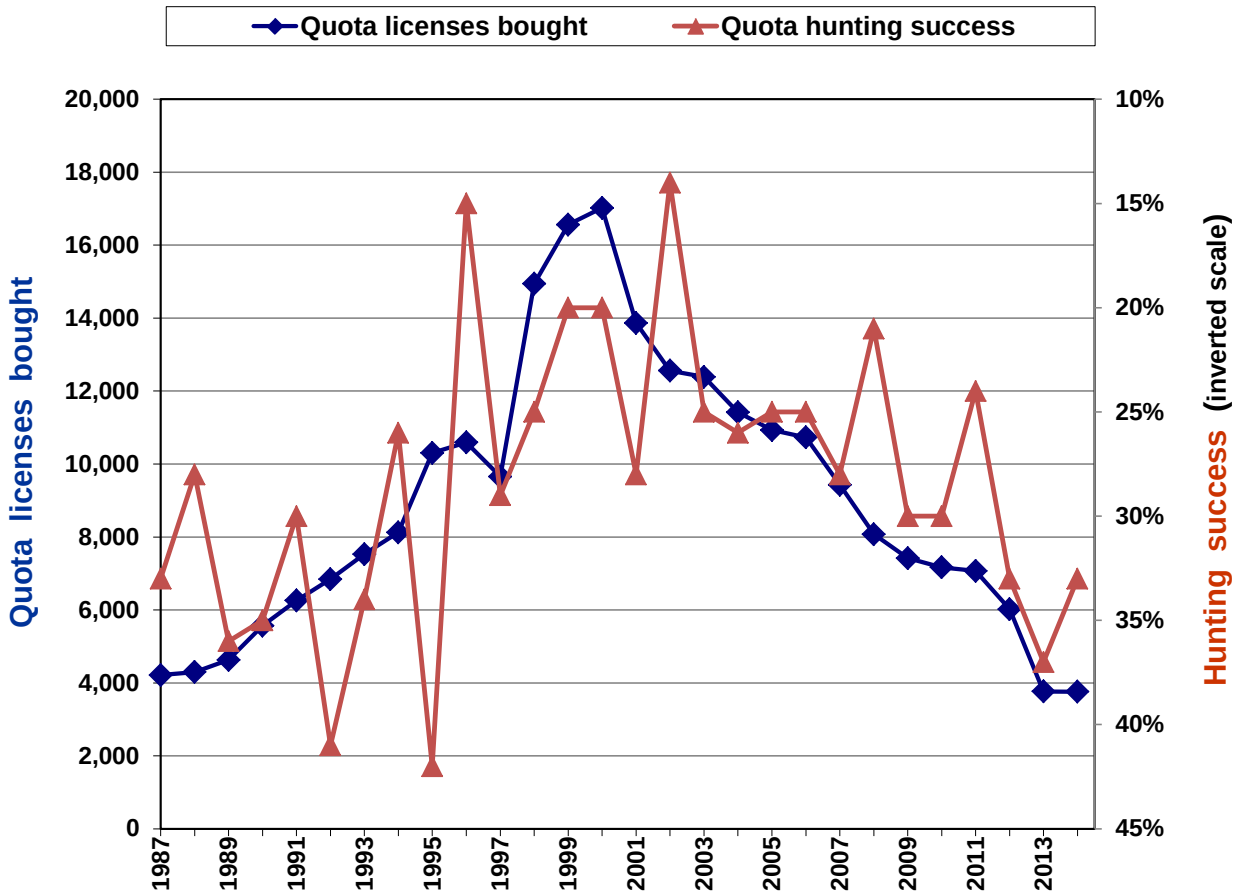


Figure 2. Relationship between licenses sold and hunting success (note inverted scale) in quota zone, 1987–2014 (non-quota zone first partitioned out in 1987). Number of licenses explains 36% of variation in hunting success during this period (P = 0.0007). Large variation in hunting success is also attributable to food conditions.

Table 2. Number of bear hunting quota area permits available, 2010–2014 (aligned with permit applications in Table 3 below; highlighted values show drop from previous year).

BMU	2014	2013	2012	2011		2010
				After reduct.[a]	Before reduct.	
12	200	200	300	350	450	450
13	250	250	400	450	600	600
22	50	50	100	100	125	100
24	200	200	300	350	500	550
25	500	500	850	900	1200	1200
26	350	350	550	650	900	900
31	550	550	900	1000	1300	1300
41	150	150	250	300	400	400
44	450	450	700	850	1100	1100
45	150	150	200	250	400	400
51	900	900	1450	1850	2500	2500
Total	3750	3750	6000	7050	9475	9500

[a] 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. In 2012 and 2013, permits were allocated based on this new procedure.

Table 3. Number of quota BMU permit applicants and surplus licenses bought, 2010–2014[a]. Shaded values indicate undersubscribed areas (applications < permits available).

BMU	2014			2013			2012			2011[b]			2010	
	Apps	Bought license	Surplus bought	Apps	Bought license	Surplus bought	Apps	Bought license	Surplus bought	Apps	Bought license	Surplus bought	Apps	Surplus
12	661	164	36	707	160	44	813	244	60	834	267	84	903	5[c]
13	703	218	32	664	213	37	719	325	76	751	366	84	753	
22	65	33	17	55	36	14	83	56	43	90	71	31	114	
24	875	174	26	763	170	30	888	253	47	918	294	56	971	
25	1533	424	76	1575	432	69	1625	713	137	1763	712	190	1811	5[c]
26	1696	298	52	1695	303	47	1666	458	92	1894	512	139	1959	
31	2257	468	82	2261	478	72	2406	758	146	2505	826	174	2414	
41	561	129	21	575	135	15	592	208	42	688	253	47	718	
44	2751	393	57	2682	386	65	2619	612	88	3010	697	154	2923	
45	1403	127	23	1205	141	9	1135	170	30	1019	208	42	937	
51	4003	748	152	3796	734	166	3650	1154	296	4086	1478	372	3950	1[c]
Total[d]	16508	3176	574	15978	3188	568	16196	4951	1057	17558	5684	1373	17453	

[a] Surplus licenses available beginning in 2001. This was discontinued in 2009 and replaced by 2nd choice lottery applicants.
[b] In 2011-14, 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).
[c] Courtesy licenses issued by Commissioner, not actual surplus.
[d] 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 this total (unlike Table 1, where they are included).

Table 4. Percentage of quota BMU lottery applicants with preference level 1 (1st-year applicants), 2, and 3 who were drawn for a bear permit, 2010–2014. 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	2014			2013			2012		2011		2010	
	Pref 1	Pref 2	Pref 3	Pref 1	Pref 2	Pref 3	Pref 1	Pref 2	Pref 1	Pref 2	Pref 1	Pref 2
12	0	40		0	49		0	80	2		23	
13	0	72		4			33		51		77	
22	72			89			100		100		88	
24	0	13		0	41		0	75	14		49	
25	0	57		0	81		28		35		60	
26	0	0	80	0	7		0	49	0	77	15	
31	0	15		0	45		0	84	11		35	
41	0	19		0	43		0	86	6		31	
44	0	0	41	0	0	68	0	28	0	55	0	90
45	0	0	30	0	0	75	0	29	0	67	24	
51	0	22		0	53		1		25		52	

Table 5. Minnesota bear harvest tally[a] for 2014 by Bear Management Unit (BMU) and sex compared to harvests during 2009–2013 and record high and low harvests (since establishment of each BMU).

	2014											
BMU	M	(%M)	F	Total	2013	2012	2011	2010	2009	5-year mean	Record low harvest (yr)	Record high harvest (yr)
QUOTA												
12	24	(63)	14	38[d]	62	82	106	95	140	97	62 (13)	263 (01)
13	64	(70)	27	91[e]	95	112	119	155	149	126	71 (88)	258 (95)
22	2	(40)	3	5	9	8	11	9	7	9	3 (03)	41 (89)
24	30	(60)	20	50[f]	76	108	122	124	151	116	76 (13)	288 (95)
25	110	(65)[m]	58	168[g]	197	254	317	307	344	284	149 (96)	584 (01)
26	67	(57)	50	117[h]	121	238	167	232	228	197	121 (13)	513 (95)
31	144	(65)	77	221	197	363	358	363	384	333	157 (88)	697 (01)
41	15	(42)[n]	21	36[i]	40	70	54	71	104	68	38 (96)	201 (01)
44	95	(56)	75	170	181	188	130	248	255	200	130 (11)	643 (95)
45	29	(54)	25	54	48	67	32	58	42	49	32 (11)	178 (01)
51	182	(63)	109	291	349	471	288	501	416	405	247 (91)	895 (01)
Total	762	(61)	479	1241[j]	1375	1961	1704	2163	2220	1885	1192 (88)	4288 (01)
NO QUOTA[B]												
11	52	(68)	25	77[k]	136	224	219	178	315	214	38 (87)	351 (05)
10[c]	7	(87)	1	8	9	14	3	11	9	9		
52	191	(63)	110	301	346	405	205	347	257	312	105 (02)	405 (12)
Total	250	(65)	136	386	491	643	427	536	581	536	198 (87)	678 (95)
STATE	1012	(62)[o]	615	1627[j]	1866	2604	2131	2699	2801	2420		4956 (95)

Table 5. Footnotes:

[a] 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 only ~70% of tooth envelopes are submitted (2011: 72%; 2012: 73%; 2013: 75% 2014: 73%).

Also, some tooth envelopes had no corresponding registration data. These were added to the harvest tally. The number of missing registrations was greatly reduced in 2011–2014.

Year	Quota area	No-quota area
2009	19	14
2010	20	8
2011	11	2
2012	6	1
2013	5	1
2014	2	1

[b] Some hunters with no-quota licenses hunted in the quota area, and their kills were assigned to the BMU where they apparently hunted: 2009: 3; 2010: 14; 2011: 14; 2012: 8; 2013: 11.; 2014: 4.

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).

[c] Previously called BMU 11b.

[d] Record low harvest since this area was established in 1987.

[e] Lowest harvest since 1991.

[f] Record low harvest since this area was established in 1989.

[g] Lowest harvest since 1996.

[h] Record low harvest since this area was established in 1991.

[i] Record low harvest since this area was established in 1990.

[j] Lowest since 1988 (quota—no-quota split in 1987).

[k] Lowest harvest since 1999.

[m] Record high %males.

[n] Record high % females

[o] Ties record high %males (equal to 2013).

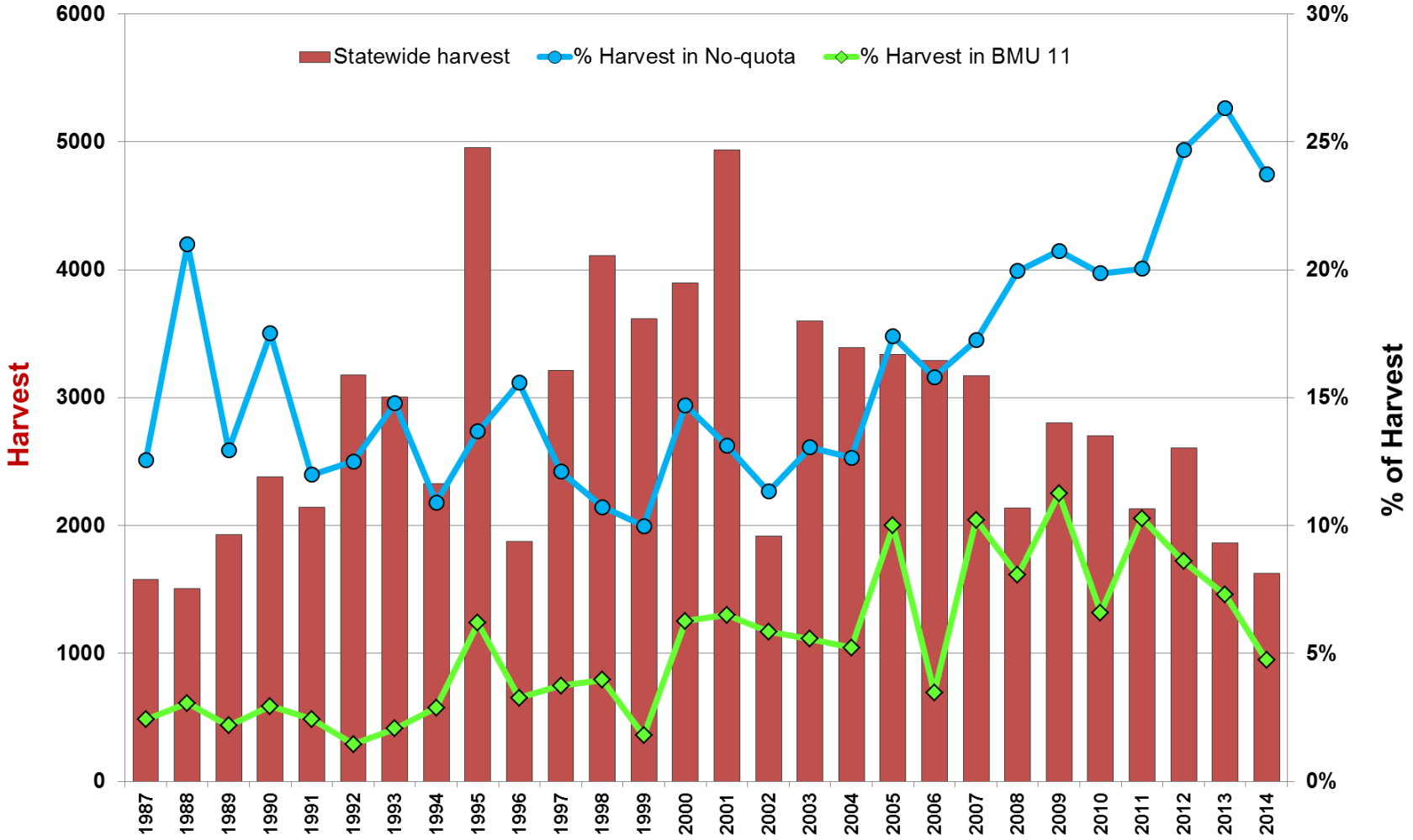


Figure 3. Trends in statewide bear harvest and proportions of harvest in the no-quota zones, 1987–2014.

Table 6. Bear hunting success (%) by BMU, measured as the registered harvest divided by the number of licenses sold[a], 2009–2014.

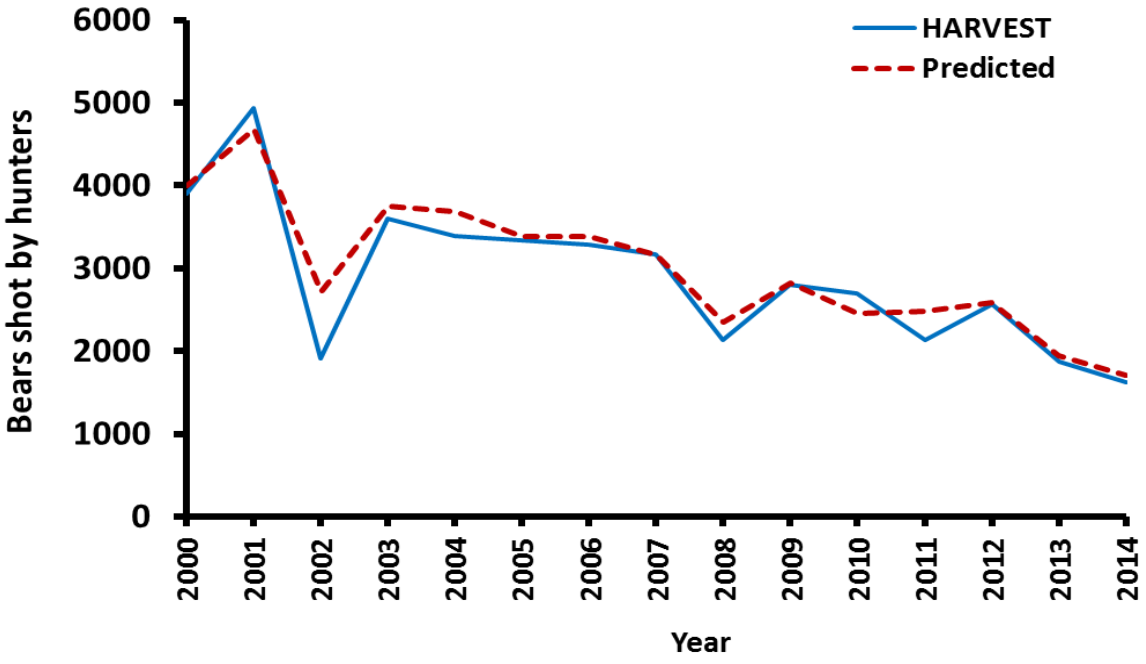
BMU	Max success (yr)		Mean success 2009-2013	2014	2013	2012	2011	2010	2009
12	49	(95)	31	19[h]	30	27	30	30	39
13	59	(95)	32	36	38[d]	28	26	34[c]	32
22	21	(92)	13	10	18[e]	8	11	14	16[c]
24	45	(92)	34	25	38[e]	36[e]	35[e]	29	31[d]
25	47	(92)	35	34	39[d]	30	35	34	36
26	59	(95)	34	33	34	43[d]	26	34	31
31	55	(92)	37	40	36	40[d]	36	36	38[c]
41	50	(95)	26	24	26	28	18	25	34
44	43	(95)	28	38	40[d]	27	15[f]	28	30
45	33	(12)	22	36[i]	32	33[b]	13	21[d]	11[f]
51	39	(13)	27	32	39[g]	32[d]	16[f]	27	23
Quota	42	(95)	*31*	*33*	*37[d]*	*33[d]*	*24*	*30*	*30*
11[j]				9	15				
10 [j]				7	12				
52 [j]				16	19				
No Quota	32	(95)	*19*	13	17	20	*15[f]*	*20*	*22*
Statewide	40	(95)	*27*	*25*	*28*	*28*	*22*	*27*	*28[c]*

[a] 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.
[b] Highest success since establishment of this BMU in 1994
[c] Highest success since 1997 (until this year).
[d] Highest success since 1995 (until this year).
[e] Highest success since 1992 (until this year)
[f] Lowest success since 2002 (until this year).
[g] Highest success since establishment of this BMU in 1987.
[h] Lowest success in >20 years (same as 2006).
[i] Record high success.
[j] In 2013 and 2014, an attempt was made to differentiate the number of no-quota hunters by BMU. When no-quota hunters bought licenses, they recorded the deer block where they anticipated hunting. Those who selected blocks in or adjacent to BMUs 10 (4%), 11 (29%), or 52 (67%) were categorized as such; those hunters who selected blocks in the quota zone(60 = 2%) were distributed in no-quota zones proportional to those who selected blocks in the no-quota zone (note: 1 of them harvested a bear in the no-quota zone, 2 harvested a bear in the quota zone, and the remainder were unsuccessful); 17 hunters chose blocks in SE Minnesota, but none harvested a bear there.

Table 7. Cumulative bear harvest (% of total harvest) by date, 1994–2014.

Year	Day of week for opener	Aug 22/23 – Aug 31	Sep 1 – Sep 7	Sep 1 – Sep 14	Sep 1 – Sep 30
1994	Thu		67	78	92
1995	Fri		72	87	97
1996	Sun		56[a]	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[a]	69	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[a]	71	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

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



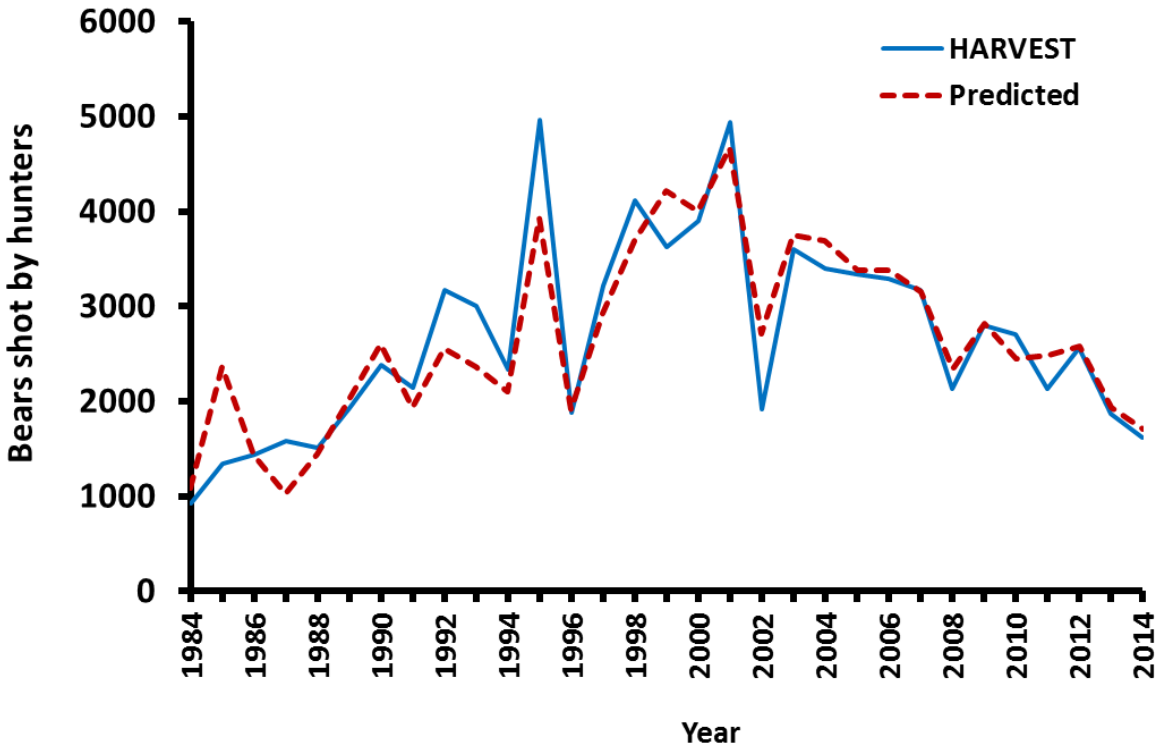


Figure 4. Number of bears harvested vs. number predicted, based on fall food production and the number of hunters: 2000–2014 (R2=0.95; top); 1984–2014 (R2=0.84; bottom).

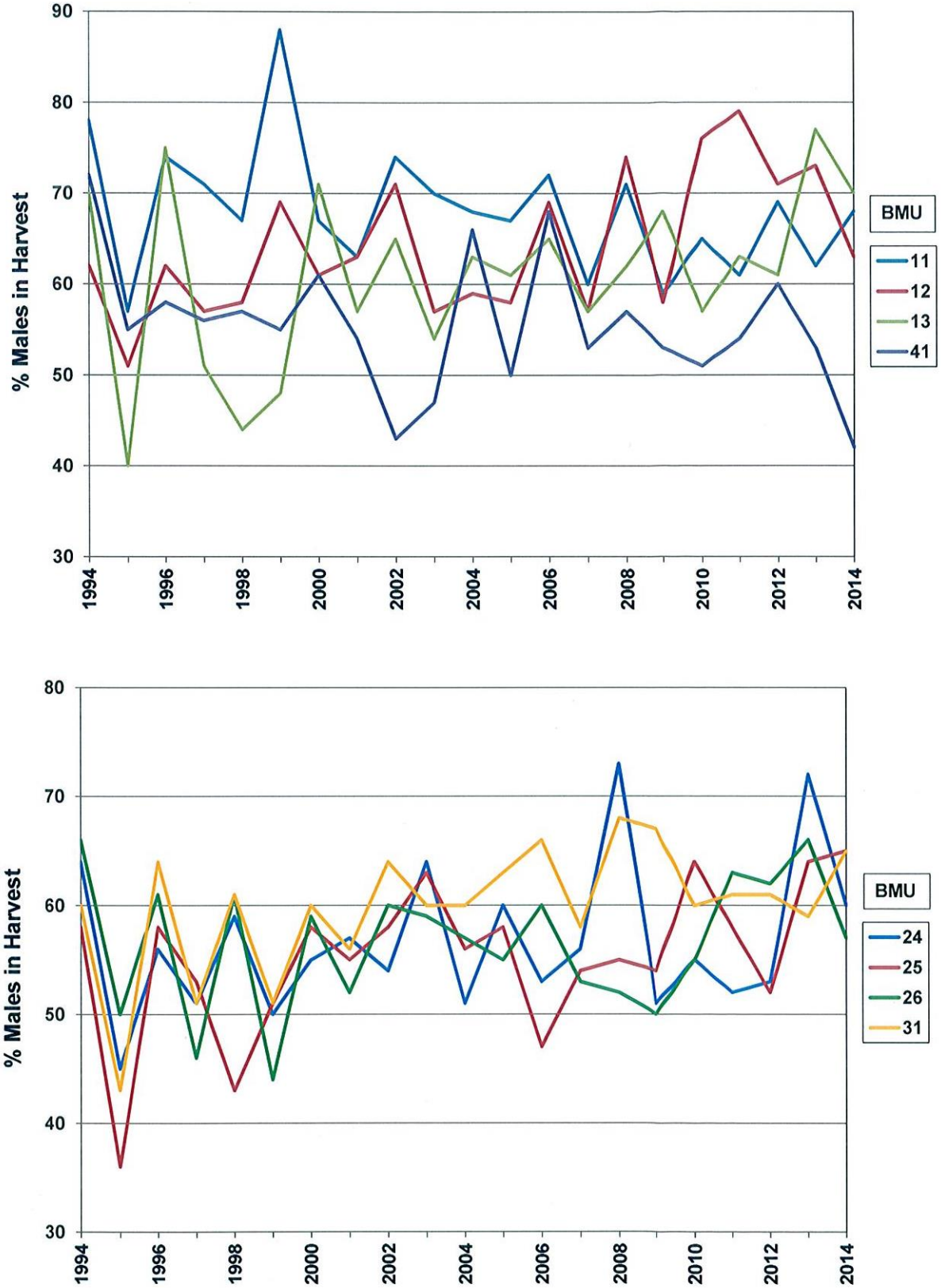


Figure5. Sex ratios of harvested bears by BMU, 1994–2014.

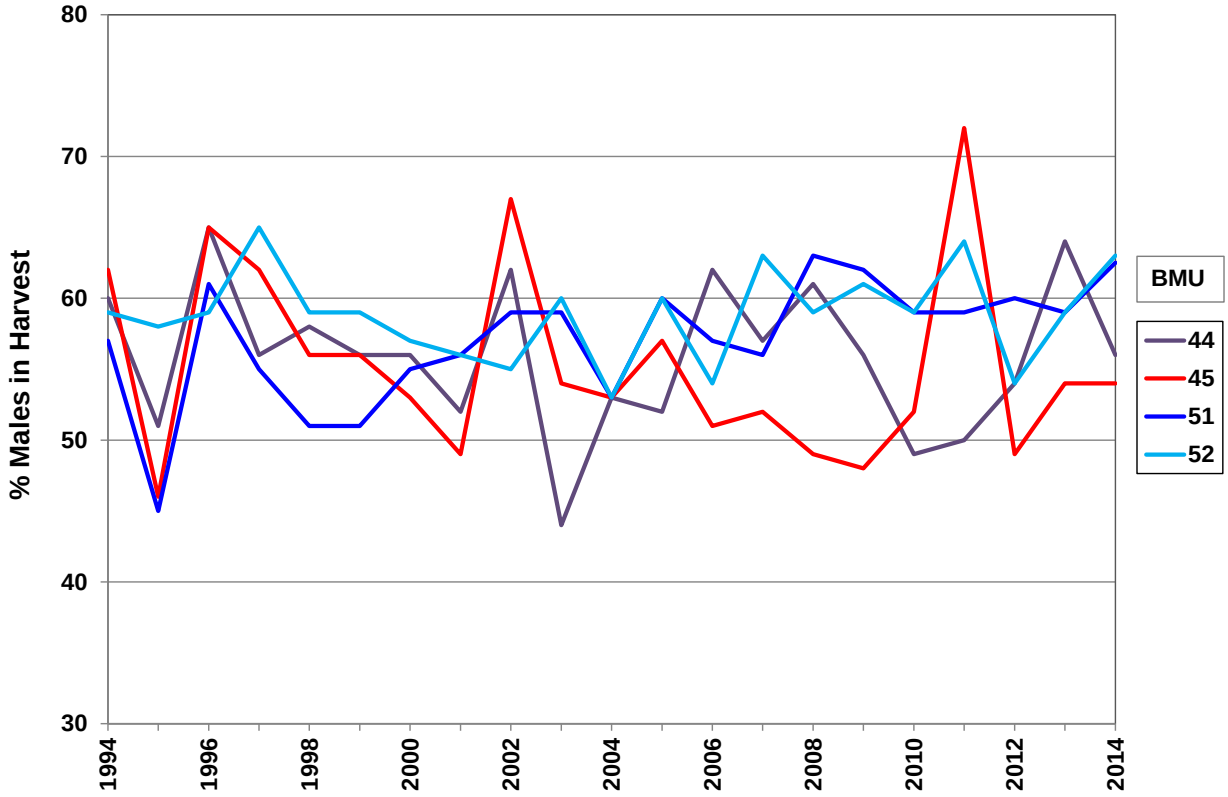


Figure 5. Continued.

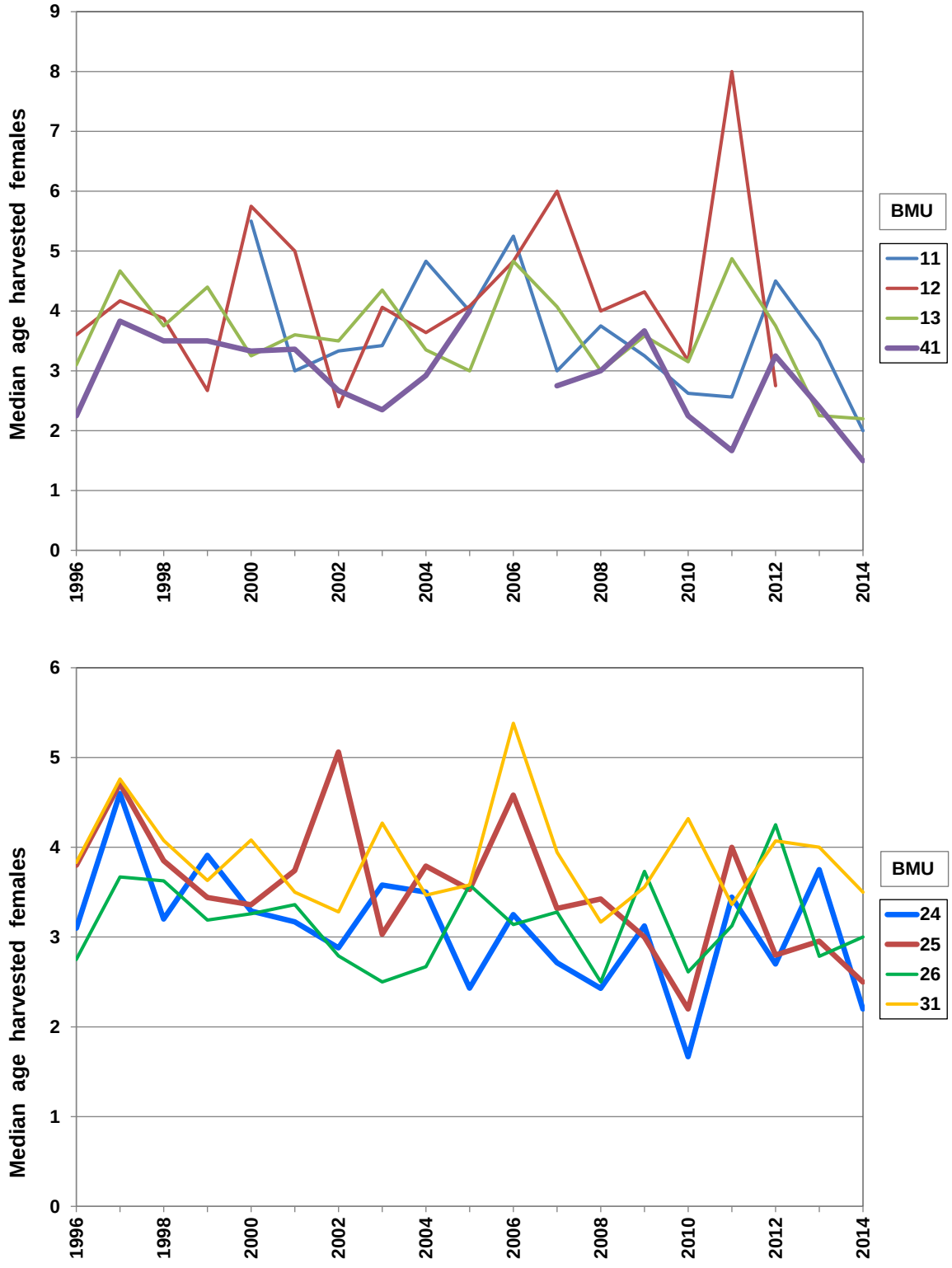


Figure 6. Median ages of harvested female bears by BMU, 1996*–2014.
Curves with thicker lines show significant declines through time.
(*note: most median ages were very high in 1995, so to view trends more accurately, graphs begin in 1996)

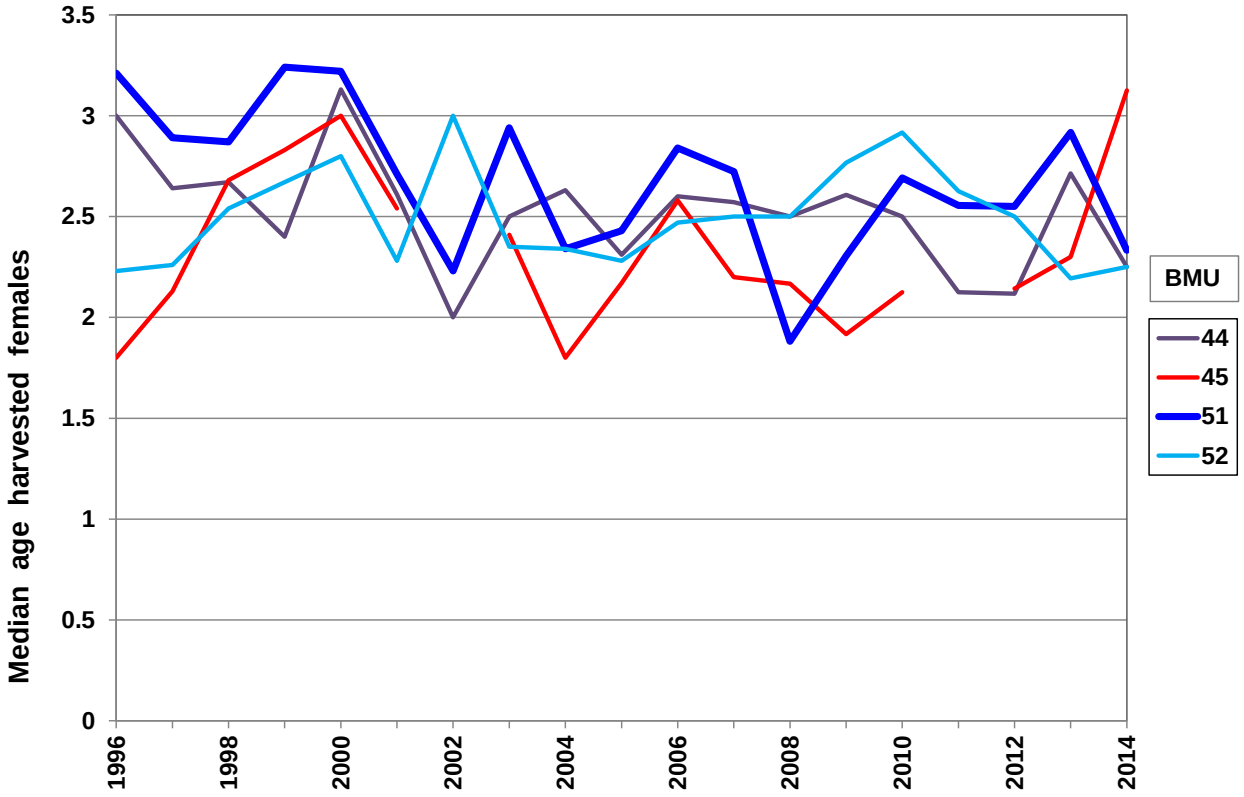


Figure 6. Continued.

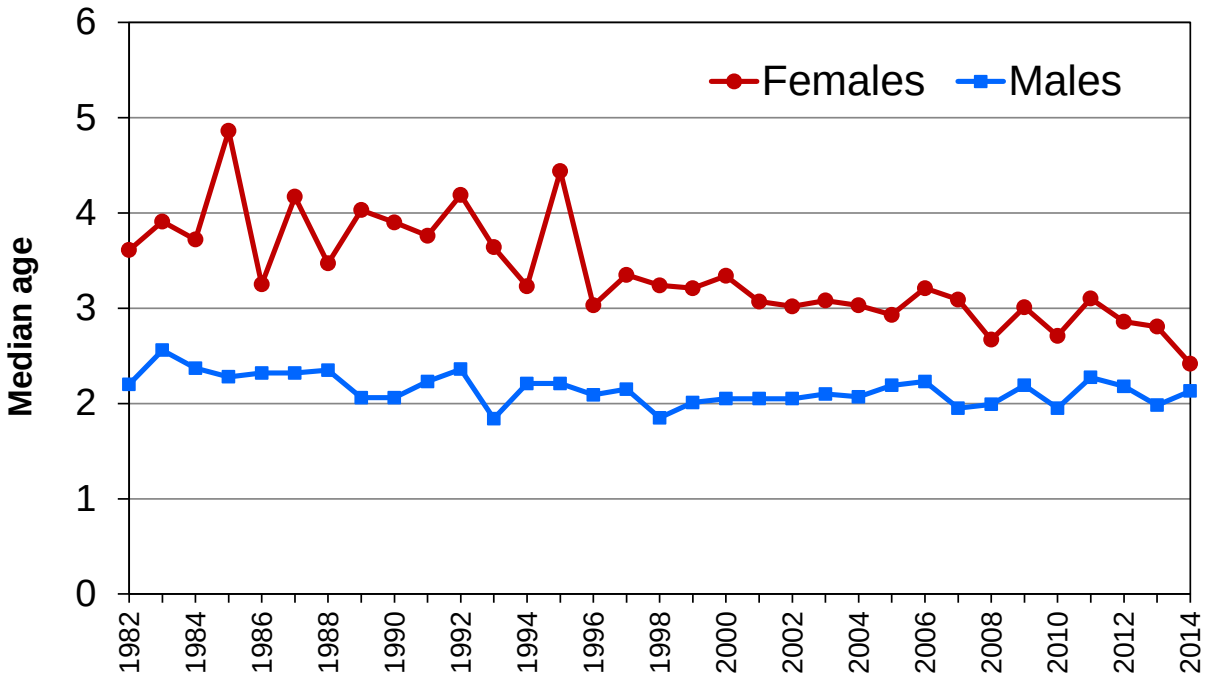


Figure 7. Statewide median ages (yrs) of harvested bears by sex, 1982–2014.

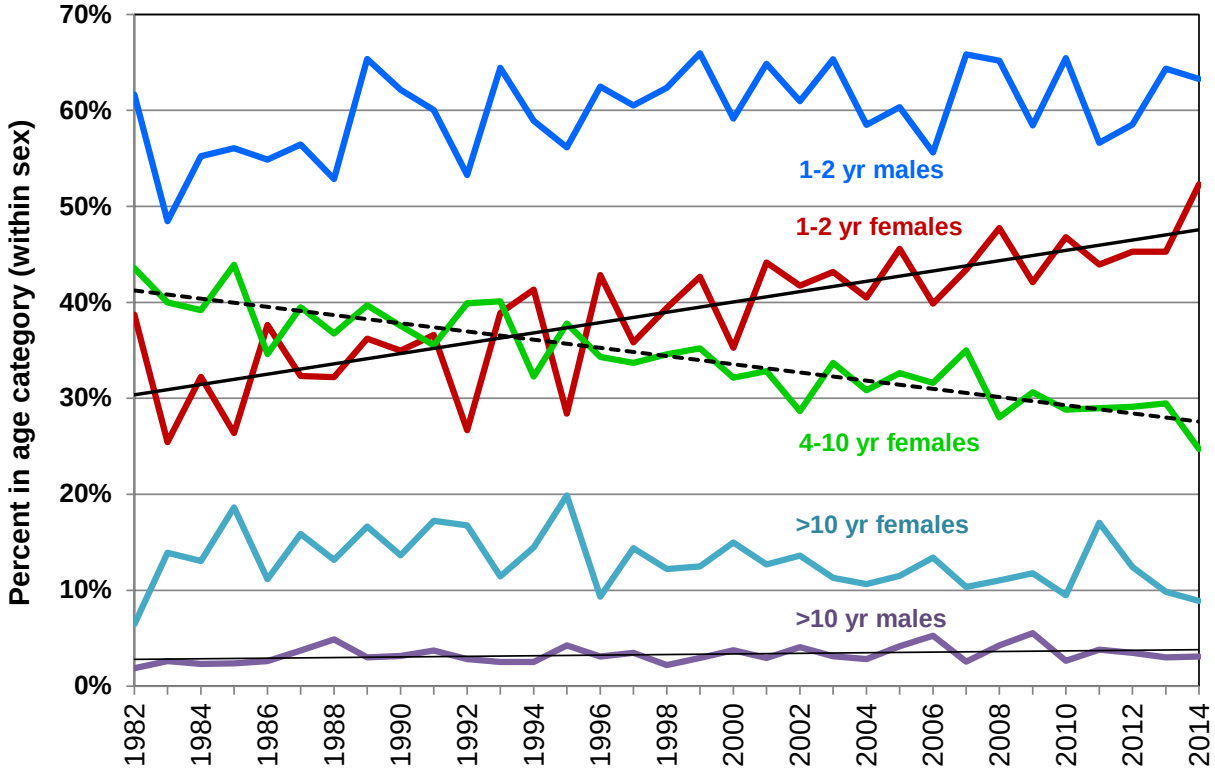


Figure 8. Statewide harvest structure: proportion of each sex in age category, 1982–2014. Trend lines are significant.

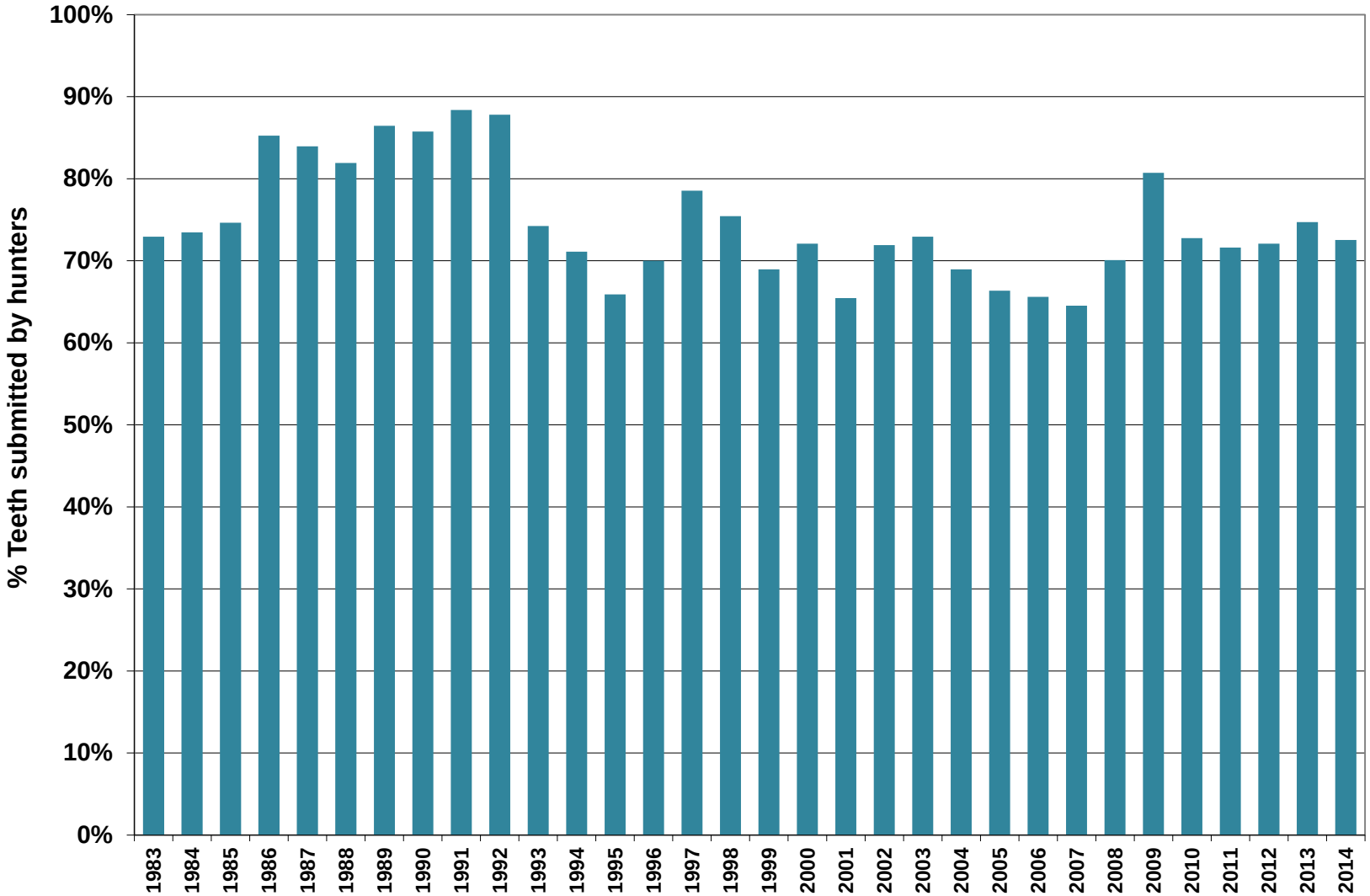


Figure 9. Percent of hunters submitting bear teeth for aging (now vital for population reconstruction, see Fig. 12). Cooperation levels exceeded 80% when registration stations were paid to extract teeth (this practice ended in 1993) and when non-compliant hunters were sent a reminder and second tooth envelope (2009).

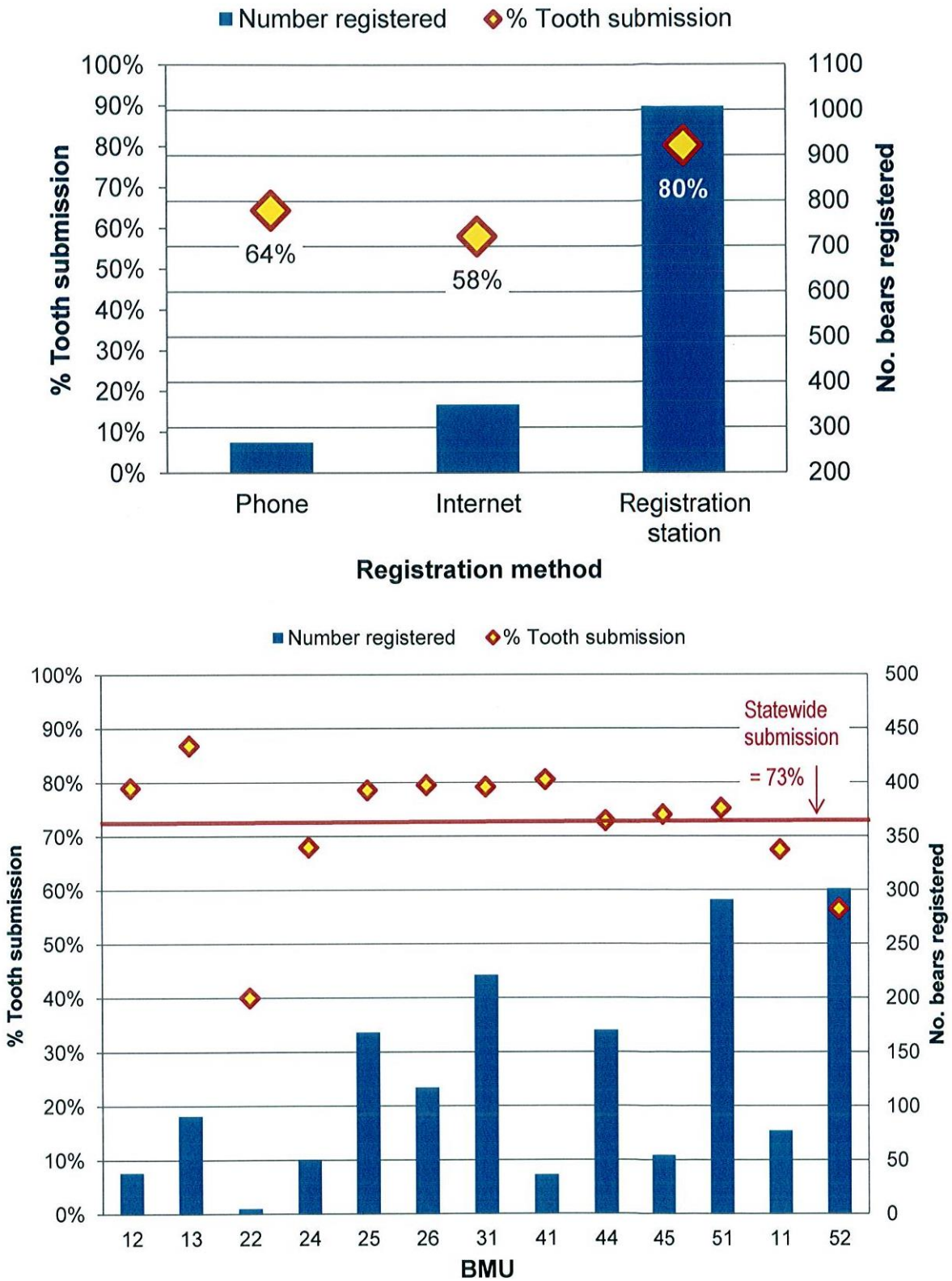


Figure 10. Percent of hunters who submitted a bear tooth in 2014, by method of registration (top panel) and by BMU (bottom panel). Beginning in 2013, hunters could register their bear by phone or internet.

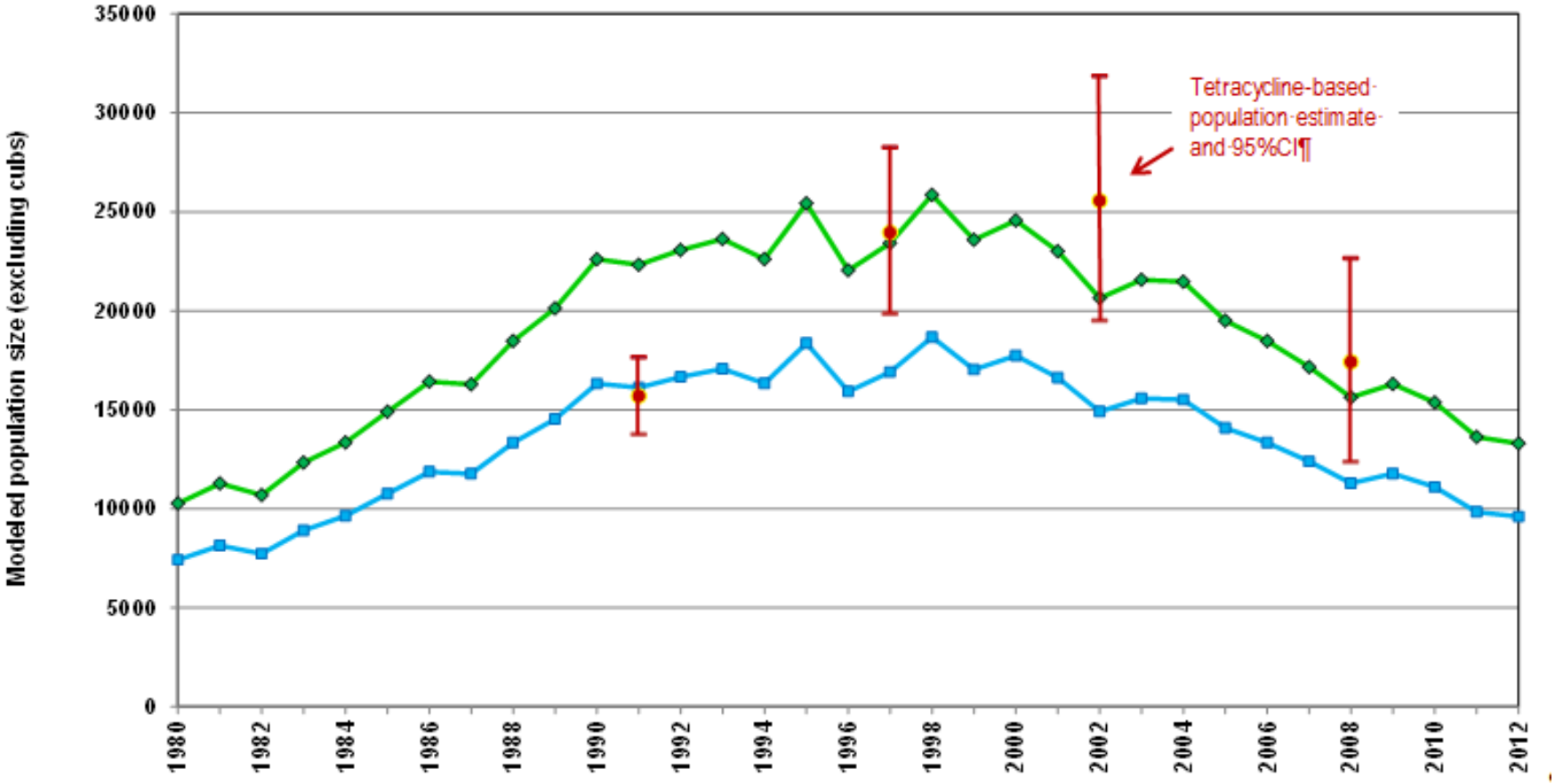


Figure 11. Statewide bear population trend derived from Downing reconstruction using the harvest age structures from 1980−2014. Curves were scaled (elevated) to various degrees to attempt to match the tetracycline-based mark–recapture estimates. Estimates beyond 2012 are unreliable using 2013 and 2014 data.

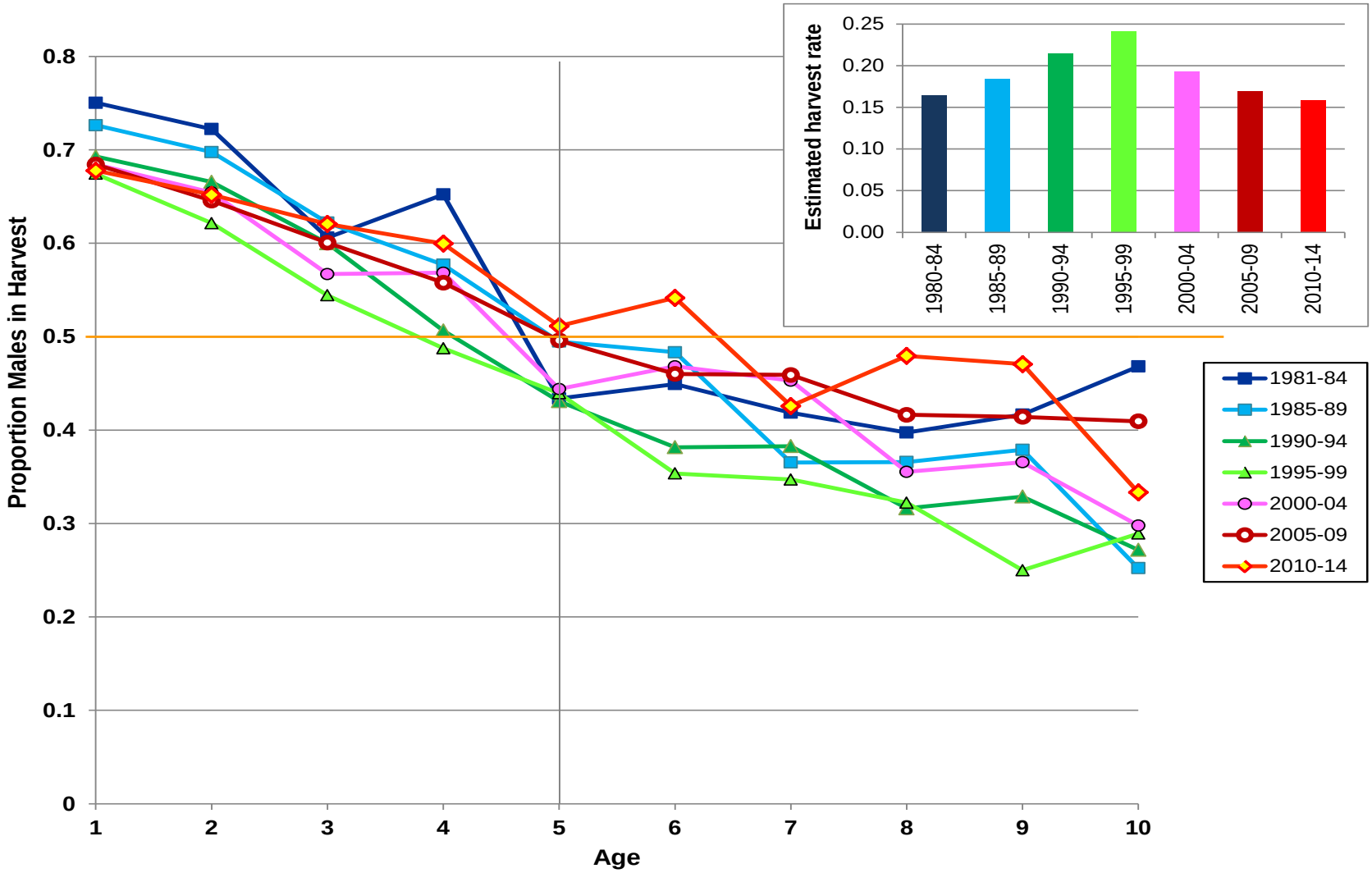


Figure 12. Trends in proportion of male bears in statewide harvest at each age, 1–10 years, grouped in 5-year time blocks, 1981–2014. Higher harvest rates result in steeper curves. Fitting a line to the data for each time block and predicting the age at which 50% of the harvest is male yields approximately the inverse of the harvest rate (derived rates shown in inset).

2014 MINNESOTA DEER HARVEST REPORT

Leslie McInenly, Big Game Program Leader, Division of Fish and Wildlife

INTRODUCTION

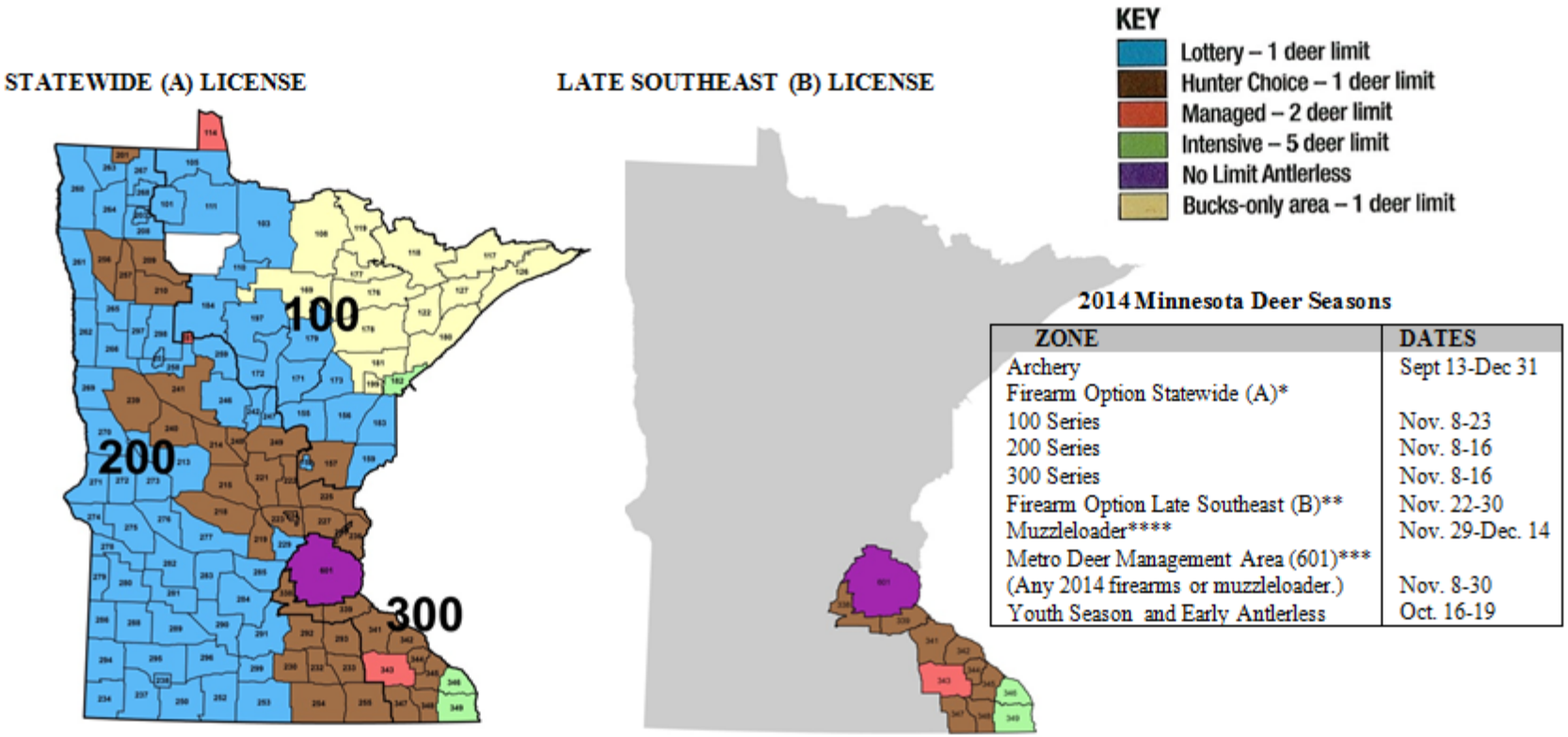
The white-tailed deer may be considered Minnesota's most popular wildlife species. In 2014, nearly 500,000 hunters participated in the season. 2014 was a conservative season designed to rebuild deer numbers across much of the state. During the archery, firearms and muzzleloader seasons, hunters registered 139,442 deer.

METHODS

Every deer taken by hunting in Minnesota must be registered. In 2014, hunters were required to register deer within 48 hours of harvest and before processing. 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 2014 deer harvest are presented in the following tables.



2014 Minnesota Deer Seasons

ZONE	DATES
Archery	Sept 13-Dec 31
Firearm Option Statewide (A)*	
100 Series	Nov. 8-23
200 Series	Nov. 8-16
300 Series	Nov. 8-16
Firearm Option Late Southeast (B)**	Nov. 22-30
Muzzleloader****	Nov. 29-Dec. 14
Metro Deer Management Area (601)***	
(Any 2014 firearms or muzzleloader.)	Nov. 8-30
Youth Season and Early Antlerless	Oct. 16-19

Figure 1. 2014 Firearms and Archery Deer Seasons.

Table 1. Statewide Firearms, Archery, and Muzzleloader Harvest, License Sales, and Success Rates, 2003-2014.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
REGULAR FIREARMS												
Resident License Sales	344,875	309,698	291,298	299,774	285,286	376,006	377,077	379,866	382,668	391,822	391,967	374,314
Non-Resident License Sales	11,334	12,036	12,523	12,520	12,520	11,883	11,759	11,908	11,955	12,483	12,496	11,674
Bonus Permit Sales	194,201	183,186	184,566	167,343	145,522	190,156	140,920	143,763	142,049	89,750	97,402	29,642
Multi-Zone Buck License Sales	32,929	32,359	28,233	15,984	15,051	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Youth License Sales	34,463	51,347	50,501	49,599	49,242	50,397	56,678	59,726	60,943	62,949	64,748	62,488
All Season Deer License Sales	30,998	46,008	59,090	75,511	76,385	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total License Sales	648,800	634,634	626,211	620,731	584,006	628,442	586,434	595,263	597,615	557,004	566,613	478,118
Registered Buck Harvest[1]	110,440	116,612	95,594	95,695	97,528	85,646	83,820	88,027	76,003	84,729	70,627	70,627
Antlerless Permits Offered	31,625	30,760	28,830	18,925	18,830	32,325	60,100	60,083	15,525	32,854	36,816	26,332
Antlerless Permits Issued	25,386	24,111	25,656	18,925	18,830	32,325	60,100	60,083	15,525	32,854	36,816	26,332
Antlerless Permits App.	30,253	28,454	31,403	31,403	31,403	31,403	90,882	86,783	21,071	67,308	68,811	96,580
Registered AL Harvest[1]	147,420	123,278	119,363	135,981	118,860	98,147	78,525	86,077	88,197	71,140	67,885	46,030
Registered Total Harvest[1]	257,860	239,890	214,957	231,676	216,388	183,793	162,345	174,104	164,200	155,869	145,449	116,657
Registered % Successful[2]	39.7	37.8	34.3	37.3	41.7	34.8	33.8	35.9	32.9	32.0	29.7	25.3
ARCHERY												
Resident License Sales	59,339	50,601	50,293	49,595	52,780	87,872	88,707	91,156	90,252	95,259	92,717	92,301
Non-Resident License Sales	1,428	1,144	1,207	1,286	1,509	1,509	1,610	1,638	1,718	1,814	1,952	1,946
Youth Archery Sales	3,748	7,261	7,489	7,688	7,663	9,005	9,157	9,577	10,306	11,276	12,212	11,965
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	60,767	59,006	58,989	58,569	61,952	99,033	99,474	102,371	102,276	108,349	106,881	106,212
Total Harvest - All-Season License	2,356	3,489	4,563	8,284	6,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Archery Harvest	21,691	20,726	23,538	25,360	24,161	22,632	20,629	22,057	20,444	21,605	19,388	17,119
Registered % Successful[2]	22.3	29.2	24.6	24.8	24.3	18.5	17.5	17.8	17.0	18.8	14.5	15.3
MUZZLELOADER												
Total Muzzleloader License Sales	9,142	10,512	9,226	10,781	9,867	64,673	63,282	55,640	59,384	58,363	51,092	43,946
Estimated All-Season Hunters	12,020	14,168	23,293	23,293	26,813	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Muzzleloader Harvest	9,466	9,289	15,421	13,507	12,138	9,572	7,929	9,023	7,416	7,779	7,045	5,814
Registered % Successful[2]	44.7	37.6	47.4	39.6	28.2	13.4	11.3	14.4	11.6	12.4	12.7	12.7
Antlerless Permits Offered								5,792	1,997	1,626	2,144	1,593
Antlerless Permits App.								7,260	2,615	3,743	3,544	4,588
TOTAL Registered Harvest	290,525	260,604	255,736	270,778	260,434	221,837	194,186	207,313	192,331	186,634	172,781	139,442

[1] Does not include free landowner licenses

[2] Based on total license sales - does not include all-season deer

Table 2. Deer Harvest by License Type and Zone, 2014.

Firearms/Zone	Hunters	Harvest			Overall Success
		Bucks	Antlerless	Total	
1	162,188	22,488	6,870	29,358	18.0%
2	239,327	41,051	29,052	70,103	29.2%
3A	27,131	4,810	4,652	9,462	31.8%
3B	12,611	998	3,374	4,372	30.5%
Metro	3,068	571	294	865	27.0%
Free Landowner[1]	4,358	0	1,522	1,522	35.1%
Depredation[1]	73	0	75	75	65.8%
Muzzleloader[2]	43,946	2,422	3,392	5,814	12.7%
Archery[3]	106,212	7,998	9,121	17,119	15.3%
TOTAL[4]	**497,838**	**81,036**	**58,406**	**139,442**	**27.0%**

[1] Includes deer taken during regular firearms, muzzleloader, and archery seasons.

[2] Includes Camp Ripley.

[3] Due to the fact that a hunter can buy multiple licenses, hunter numbers and success rates are calculated using unique MNDNR numbers.

Table 3. Firearms Harvest and Harvest per Square Mile by Permit Area, 2014. 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	307	8	21	3	339	496	0.62	0.06	0.68
103	1A	545	15	58	10	628	1,824	0.30	0.05	0.34
105	1A	749	15	94	14	872	932	0.80	0.13	0.94
108	1A	657	0	0	0	657	1,701	0.39	0.00	0.39
110	1A	684	37	157	23	901	530	1.29	0.41	1.70
111	1A	334	9	35	5	383	1,440	0.23	0.03	0.27
114	1A	30	6	12	1	49	412	0.07	0.05	0.12
117	1A	26	0	0	0	26	1,129	0.02	0.00	0.02
118	1A	433	3	0	0	436	1,445	0.30	0.00	0.30
119	1A	328	1	0	1	330	946	0.35	0.00	0.35
122	1A	231	0	0	0	231	622	0.37	0.00	0.37
126	1A	274	1	0	0	275	979	0.28	0.00	0.28
127	1A	46	0	0	0	46	587	0.08	0.00	0.08
152	1A	64	9	23	4	100	62	1.04	0.58	1.62
155	1A	949	60	276	42	1,327	639	1.49	0.59	2.08
156	1A	993	47	162	35	1,237	834	1.19	0.29	1.48
157	1A	1799	364	1270	263	3,696	904	1.99	2.10	4.09
159	1A	777	47	186	33	1,043	575	1.35	0.46	1.81
169	1A	933	0	2	2	937	1,202	0.78	0.00	0.78
171	1A	877	54	227	35	1,193	729	1.20	0.43	1.64
172	1A	1425	102	340	58	1,925	786	1.81	0.64	2.45
173	1A	549	25	130	22	726	617	0.89	0.29	1.18
176	1A	1052	1	0	1	1,054	1,150	0.92	0.00	0.92
177	1A	554	2	0	0	556	553	1.00	0.00	1.01
178	1A	1187	1	2	0	1,190	1,325	0.90	0.00	0.90
179	1A	1361	66	269	51	1,747	939	1.45	0.41	1.86
180	1A	504	1	4	0	509	999	0.50	0.01	0.51
181	1A	641	1	3	2	647	746	0.86	0.01	0.87
182	1A	393	82	377	66	918	280	1.40	1.88	3.28
183	1A	748	27	130	26	931	675	1.11	0.27	1.38
184	1A	2219	220	814	156	3,409	1,318	1.68	0.90	2.59
197	1A	727	28	107	24	886	1,343	0.54	0.12	0.66
199	1A	77	2	2	0	81	152	0.51	0.03	0.53
201	2A	94	8	50	12	164	169	0.56	0.41	0.97
203	2A	50	6	8	3	67	132	0.38	0.13	0.51
208	2A	189	8	32	6	235	379	0.50	0.12	0.62
209	2A	462	53	231	55	801	641	0.72	0.53	1.25
210	2A	677	92	362	83	1,214	635	1.07	0.85	1.91
213	2A	1982	178	513	125	2,798	1,161	1.71	0.70	2.41
214	2A	1523	375	886	289	3,073	566	2.69	2.74	5.43
215	2A	1240	285	648	186	2,359	730	1.70	1.53	3.23
218	2A	875	199	580	140	1,794	912	0.96	1.01	1.97
219	2A	478	120	321	92	1,011	427	1.12	1.25	2.37
221	2A	997	237	592	203	2,029	647	1.54	1.60	3.14
222	2A	722	168	435	115	1,440	413	1.75	1.74	3.49
223	2A	524	118	304	89	1,035	385	1.36	1.33	2.69
224	2A	70	12	47	12	141	49	1.43	1.45	2.88
225	2A	1158	247	682	177	2,264	635	1.82	1.74	3.57
227	2A	730	153	382	103	1,368	491	1.49	1.30	2.78

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
229	2A	206	19	50	13	288	313	0.66	0.26	0.92
230	2A	197	58	144	28	427	464	0.42	0.50	0.92
232	2A	228	41	113	35	417	380	0.60	0.50	1.10
233	2A	157	30	78	15	280	386	0.41	0.32	0.72
234	2A	182	13	82	10	287	637	0.29	0.16	0.45
235	2A	67	6	24	6	103	37	1.82	0.98	2.80
236	2A	526	59	267	44	896	404	1.30	0.92	2.22
237	2A	200	14	82	10	306	737	0.27	0.14	0.42
238	2A	65	3	26	2	96	98	0.67	0.32	0.98
239	2A	1313	276	857	188	2,634	1,110	1.18	1.19	2.37
240	2A	1642	310	929	301	3,182	694	2.37	2.22	4.58
241	2A	2951	657	2003	517	6,128	1,047	2.82	3.03	5.85
242	2A	480	63	171	28	742	307	1.56	0.85	2.42
246	2A	1604	120	306	83	2,113	860	1.87	0.59	2.46
247	2A	528	44	161	39	772	263	2.01	0.93	2.93
248	2A	386	78	218	78	760	229	1.69	1.64	3.33
249	2A	949	255	850	211	2,265	729	1.30	1.80	3.11
250	2A	254	13	77	11	355	730	0.35	0.14	0.49
251	2A	77	10	25	3	115	68	1.13	0.56	1.69
252	2A	254	29	114	19	416	735	0.35	0.22	0.57
253	2A	401	32	102	12	547	987	0.41	0.15	0.55
254	2A	441	77	223	59	800	946	0.47	0.38	0.85
255	2A	361	58	162	36	617	774	0.47	0.33	0.80
256	2A	423	61	253	65	802	654	0.65	0.58	1.23
257	2A	350	49	198	28	625	426	0.82	0.65	1.47
258	2A	759	59	205	55	1,078	381	1.99	0.84	2.83
259	2A	1021	77	244	67	1,409	546	1.87	0.71	2.58
260	2A	336	10	45	7	398	1,252	0.27	0.05	0.32
261	2A	188	11	36	6	241	796	0.24	0.07	0.30
262	2A	191	16	53	11	271	677	0.28	0.12	0.40
263	2A	376	12	37	10	435	513	0.73	0.12	0.85
264	2A	667	24	167	21	879	672	0.99	0.32	1.31
265	2A	466	54	177	35	732	495	0.94	0.54	1.48
266	2A	329	16	68	15	428	625	0.53	0.16	0.68
267	2A	184	5	51	4	244	472	0.39	0.13	0.52
268	2A	303	10	48	4	365	239	1.27	0.26	1.53
269	2A	181	10	68	6	265	652	0.28	0.13	0.41
270	2A	195	4	38	5	242	758	0.26	0.06	0.32
271	2A	242	15	62	9	328	646	0.37	0.13	0.51
272	2A	194	8	34	9	245	544	0.36	0.09	0.45
273	2A	441	46	178	34	699	634	0.70	0.41	1.10
274	2A	235	9	79	8	331	381	0.62	0.25	0.87
275	2A	306	26	115	19	466	777	0.39	0.21	0.60
276	2A	502	41	237	32	812	575	0.87	0.54	1.41
277	2A	1172	119	504	94	1,889	876	1.34	0.82	2.16
278	2A	322	17	73	9	421	422	0.76	0.23	1.00
279	2A	182	13	102	12	309	346	0.53	0.37	0.89
280	2A	199	14	115	10	338	676	0.29	0.21	0.50
281	2A	420	24	122	19	585	579	0.73	0.29	1.01

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	126	4	20	6	156	780	0.16	0.04	0.20
283	2A	253	9	73	8	343	640	0.40	0.14	0.54
284	2A	320	29	140	18	507	853	0.37	0.22	0.59
285	2A	324	46	164	25	559	580	0.56	0.40	0.96
286	2A	249	26	124	16	415	458	0.54	0.36	0.91
287	2A	64	33	102	26	225	51	1.26	3.18	4.44
288	2A	337	29	144	31	541	630	0.54	0.32	0.86
289	2A	209	16	58	14	297	820	0.25	0.11	0.36
290	2A	403	33	159	36	631	666	0.61	0.34	0.95
291	2A	640	66	230	53	989	832	0.77	0.42	1.19
292	2A	483	93	281	54	911	517	0.93	0.83	1.76
293	2A	407	79	223	34	743	512	0.79	0.66	1.45
294	2A	302	28	156	19	505	689	0.44	0.29	0.73
295	2A	408	18	126	17	569	855	0.48	0.19	0.67
296	2A	256	15	100	12	383	675	0.38	0.19	0.57
297	2A	146	7	27	4	184	449	0.32	0.08	0.41
298	2A	471	25	64	15	575	677	0.70	0.15	0.85
299	2A	228	26	111	21	386	389	0.59	0.41	0.99
338	3A	145	32	122	20	319	472	0.31	0.37	0.68
338	3B	29	17	44	8	98	472	0.06	0.15	0.21
339	3A	183	46	112	27	368	406	0.45	0.46	0.91
339	3B	29	12	61	19	121	406	0.07	0.23	0.30
341	3A	518	98	280	64	960	626	0.83	0.71	1.53
341	3B	111	82	208	61	462	626	0.18	0.56	0.74
342	3A	418	53	186	48	705	374	1.12	0.77	1.88
342	3B	96	60	203	37	396	374	0.26	0.80	1.06
343	3A	526	144	394	103	1,167	664	0.79	0.97	1.76
343	3B	120	86	221	59	486	664	0.18	0.55	0.73
344	3A	318	52	221	61	652	190	1.68	1.76	3.44
344	3B	47	22	129	28	226	190	0.25	0.94	1.19
345	3A	334	28	133	34	529	335	1.00	0.58	1.58
345	3B	77	51	131	36	295	335	0.23	0.65	0.88
346	3A	750	187	546	134	1,617	328	2.29	2.64	4.93
346	3B	167	115	313	129	724	328	0.51	1.70	2.21
347	3A	368	43	115	40	566	434	0.85	0.46	1.31
347	3B	74	39	117	32	262	434	0.17	0.43	0.60
348	3A	415	55	196	42	708	332	1.25	0.88	2.13
348	3B	72	37	136	29	274	332	0.22	0.61	0.82
349	3A	835	193	662	176	1,866	499	1.67	2.07	3.74
349	3B	176	147	540	141	1,004	499	0.35	1.66	2.01
601	Metro	520	38	124	22	704	1,756	0.74	1.24	1.98
Total		**69,851**	**8,727**	**28,643**	**6,668**	**113,889**	**83,586**	**0.84**	**0.55**	**1.40**

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

Table 4. Firearm Harvest using Bonus and Disease Management Permits, 2014.

Managed Permit Areas.

Permit Area	Zone	Fawn Male	Adult Female	Fawn Female	Total
114	1A	2	6	0	8
287	2A	14	59	21	94
343	3A	87	254	69	410
343	3B	43	115	34	192
Total		**146**	**434**	**124**	**704**

Intensive Permit Areas

Permit Area	Zone	Fawn Male	Adult Female	Fawn Female	Total
182	1A	57	241	42	340
346	3A	128	417	95	640
346	3B	63	185	77	325
349	3A	126	474	144	744
349	3B	85	344	99	528
Total		**459**	**1,661**	**457**	**2,577**

Table 5. Early Antlerless Season Harvest by Permit Area, 2014.

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
346	31	71	36	138
349	20	53	22	95
Total	**51**	**124**	**58**	**233**

Table 6. Summary of Firearms Special Hunts, 2014. Includes regular, youth, and bonus permits.

			Harvest				
Area	**Dates**	**Permits Issued**	**Adult Male**	**Fawn Male**	**Adult Female**	**Fawn Female**	**Total**
900 - Cascade River State Park	11/8-11/23	NA†	0	0	0	0	0
901 - Rice Lake Nat. Wildlife Refuge	11/15-11/23	40*	6	0	11	0	17
902 - St. Croix State Park	11/20-11/23	300*	30	10	32	5	77
904 - Gooseberry Falls State Park[1]	11/8-11/23	40*	1	1	9	1	12
905 - Split Rock Lighthouse State Park[1]	11/8-11/23	35*	1	3	7	1	12
906 - Tettegouche State Park[1]	11/8-11/23	135*	6	2	12	2	22
907 - Scenic State Park	11/8-11/23	30*	3	0	2	0	5
908 - Hayes Lake State Park	11/8-11/16	75*	3	1	1	1	6
909 - Lake Bemidji State Park[1]	11/8-11/11	30**	1	2	4	2	9
910 - Zippel Bay State Park[1]	11/8-11/23	55**	1	4	9	2	16
911 - Judge CR Magney State Park	11/8-11/23	N/A†	0	0	0	0	0
912 - Schoolcraft State Park	11/8-11/23	N/A*	0	0	0	1	1
913 - Lake Carlos State Park	11/8-11/9	17**	0	3	4	0	7
914 - William O'Brien State Park[1]	11/15-11/16	50*	9	3	8	2	22
916 - Maplewood State Park	11/8-11/11	100*	29	2	13	1	45
918 - Lake Alexander SNA[1]	11/8-11/16	40*	1	1	5	1	8
919 - Glacial Lakes State Park	11/13-11/16	30**	0	2	12	2	16
921 - Beaver Creek Valley State Park[1]	11/8-11/9	20#	1	0	5	1	7
924 - Whitewater State Game Refuge	11/8-11/11	50**	0	0	5	0	5
925 - Vermillion Highlands WMA[1]	11/8-11/16	20*	3	0	1	0	4
926 - Elm Creek Park Reserve[1]	11/15-11/16	150*	24	9	37	7	77
927 - Whitewater State Park[1]	11/22-11/23	50#	1	6	28	8	43
929 - Frontenac State Park - B[1]	11/22-11/24	60#	11	8	26	4	49
931 - City of Grand Rapids[1]	11/8-11/23	N/A*	9	12	25	9	55
933 - Lake Rebecca Park Reserve[1]	11/22-11/23	80*	11	9	20	6	46
934 - Whitewater State Game Refuge - B	11/22-11/30	75**	0	0	23	1	24
Total			**151**	**78**	**299**	**57**	**585**

1 Bonus permits available *Either sex **Antlerless Only *** Earn-A-Buck
#Antler Point Restriction †Buck only

Table 7. Free Landowner Firearms Harvest by Permit Area, 2014.

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
157	12	29	6	47
201	1	0	0	1
209	3	6	1	10
210	5	15	4	24
214	29	92	28	149
215	14	45	16	75
218	2	5	1	8
219	1	3	0	4
221	9	43	11	63
222	5	13	4	22
223	3	3	1	7
225	6	15	9	30
227	2	7	1	10
232	2	4	0	6
233	1	1	0	2
236	3	5	1	9
239	11	33	6	50
240	20	63	26	109
241	36	118	27	181
248	1	2	2	5
249	18	53	11	82
254	0	4	0	4
255	2	5	0	7
256	3	15	3	21
257	1	22	4	27
292	2	11	4	17
293	1	4	0	5
338	0	8	0	8
339	0	8	2	10
341	14	28	9	51
342	5	32	8	45
343	3	12	4	19
344	0	11	3	14
345	6	19	5	30
346	9	21	6	36
347	3	17	5	25
348	2	19	3	24
349	9	37	7	53
601	0	1	0	1
Total	**244**	**829**	**218**	**1,291**

Table 8. Archery Harvest by Permit Area, 2014.
Includes Regular, Youth, and Bonus Permits. Does not include most 900-series hunts.

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
101	12	0	2	0	14
103	5	0	8	1	14
105	15	1	15	0	31
108	26	0	0	0	26
110	12	3	14	1	30
111	1	0	2	0	3
114	3	0	6	0	9
117	2	0	0	0	2
118	10	0	0	0	10
119	2	0	0	0	2
122	2	0	0	0	2
126	14	0	0	0	14
152	2	0	3	0	5
155	43	6	43	10	102
156	44	7	38	5	94
157	86	15	89	7	197
159	43	2	28	0	73
169	20	0	1	0	21
171	30	6	36	3	75
172	65	10	89	8	172
173	29	2	19	3	53
176	37	0	0	0	37
177	20	0	0	0	20
178	60	0	1	0	61
179	69	13	86	5	173
180	34	0	1	0	35
181	56	0	0	1	57
182	113	47	269	30	459
183	29	7	37	4	77
184	126	21	79	9	235
197	26	3	21	1	51
199	2	0	0	0	2
201	2	0	6	0	8
208	6	0	3	0	9
209	27	0	14	0	41
210	25	3	16	2	46
213	279	25	160	18	482
214	89	14	68	12	183
215	169	27	98	16	310
218	127	19	104	16	266
219	120	14	101	11	246
221	85	15	77	11	188
222	55	10	48	8	121
223	168	35	127	14	344
224	14	3	11	1	29
225	165	24	101	11	301
227	245	26	138	13	422

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
229	62	12	36	4	114
230	29	3	26	4	62
232	35	6	22	1	64
233	48	6	22	3	79
234	21	1	12	0	34
235	18	0	14	1	33
236	187	18	97	11	313
237	22	3	14	0	39
238	8	0	3	0	11
239	96	11	67	9	183
240	99	10	70	11	190
241	199	24	165	20	408
242	94	8	72	12	186
246	69	13	67	11	160
247	58	9	70	8	145
248	39	7	30	6	82
249	86	12	64	12	174
250	47	5	24	3	79
251	2	1	2	1	6
252	38	5	18	1	62
253	74	6	58	1	139
254	84	5	42	4	135
255	87	5	50	8	150
256	15	1	17	1	34
257	18	0	19	0	37
258	42	8	24	3	77
259	40	8	46	4	98
260	14	0	10	0	24
261	16	0	10	0	26
262	33	2	18	1	54
263	7	0	6	0	13
264	25	2	8	1	36
265	18	2	13	1	34
266	18	1	8	0	27
267	8	0	7	2	17
268	5	1	3	1	10
269	25	1	22	0	48
270	14	0	9	1	24
271	27	2	11	0	40
272	10	0	4	1	15
273	58	4	29	2	93
274	31	1	13	2	47
275	35	1	21	0	57
276	50	5	38	4	97
277	175	15	171	15	376
278	45	4	31	4	84
279	16	1	10	2	29

Table 8. (Continued)

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
280	19	0	18	0	37
281	82	2	41	0	125
282	28	4	11	2	45
283	47	6	24	3	80
284	43	4	22	2	71
285	75	4	48	2	129
286	28	3	20	1	52
288	62	5	61	2	130
289	32	1	18	0	51
290	58	6	37	2	103
291	140	8	101	8	257
292	79	7	58	6	150
293	105	12	60	7	184
294	26	1	18	1	46
295	42	1	49	6	98
296	34	2	11	1	48
297	6	0	2	0	8
298	10	2	6	1	19
299	50	11	48	7	116
338	43	4	35	5	87
339	53	4	45	8	110
341	140	13	87	11	251
342	109	8	44	5	166
343	278	42	400	41	761
344	53	6	30	6	95
345	92	5	30	5	132
346	184	48	281	59	572
347	94	7	53	7	161
348	105	5	25	7	142
349	205	46	312	61	624
601	763	321	1397	253	2,734
970	24	6	34	6	70
971	28	9	27	4	68
Total	**7,998**	**1,190**	**7,005**	**926**	**17,119**

970 = Camp Ripley First Hunt
971 = Camp Ripley Second Hunt

Table 9. Archery Harvest using Bonus Permits by Permit Area, 2014.

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
114	0	4	0	4
182	39	226	27	292
343	31	329	35	395
346	41	251	54	346
349	35	289	52	376
601	289	1274	233	1796
Total	**435**	**2,373**	**401**	**3,209**

Table 10. Summary of Archery Special Hunts, 2014. Includes Regular, Youth, and Bonus Permits.

Area	Dates	Permits Issued	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
970 - Camp Ripley	10/15 - 10/16	2,000	24	34	6	6	70
971 - Camp Ripley	10/25 - 10/26	2,000	28	27	9	4	68
975 - Vermillion Highlands WMA	9/13-10/31; 12/20-12/31	60	0	6	0	1	7
976 - City of New Ulm	10/19 - 12/31	50	0	21	12	6	39
977 - City of Red Wing	9/13 - 12/31	Unl.	12	21	4	6	43
979 - City of Fergus Falls	9/13 - 12/31	25	3	12	1	0	16
980 - City of Duluth	9/13 - 12/31	400	72	239	68	65	444
981 - City of Mankato	10/11 - 12/31	40	0	2	1	0	3
982 - City of Granite Falls	9/13 - 12/31	10	1	0	0	0	1
983 - City of Ortonville	9/13 - 12/31	30	2	19	2	0	23
984 - City of Canby	9/13 - 12/31	20	0	3	0	0	3
985 - City of Bemidji	9/13 - 12/31	40	0	11	5	3	19
988 - City of Tower & Soudan Underground SP	11/29 - 12/14	10	1	4	1	0	6
990 - City of Owatonna	11/1 - 12/14	15	0	17	2	2	21
991 - East Minnesota River Refuge	9/13 - 12/31	Unl.	1	6	0	0	7
992 - City of Hallock	9/13 - 12/31	30	0	4	0	3	7
993 - City of Cook	9/13 - 12/31	25	0	3	1	1	5
995 - City of Grand Rapids	9/13 - 12/31	Unl.	1	26	9	9	45
996 - St. Croix State Park	9/29-10/31; 11/3-11/7	100	2	8	1	1	12
998 - City of Red Lake Falls	10/1 - 10/14	10	0	1	0	0	1
Total			**147**	**464**	**122**	**107**	**840**

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

Table 11. Free Landowner Archery Harvest by Permit Area, 2014.

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
157	0	2	0	2
201	0	1	0	1
210	0	2	0	2
214	1	7	0	8
215	1	8	0	9
219	0	1	0	1
221	0	2	0	2
222	0	1	0	1
223	0	1	0	1
225	0	2	0	2
232	0	1	0	1
236	0	1	0	1
239	0	2	0	2
240	0	4	1	5
241	2	12	2	16
248	0	4	0	4
249	0	4	0	4
255	0	1	0	1
256	0	1	0	1
257	0	1	0	1
292	0	3	0	3
293	0	2	0	2
341	1	4	1	6
342	1	7	0	8
343	1	3	0	4
344	0	1	0	1
345	0	4	1	5
346	0	5	0	5
347	0	2	0	2
348	1	3	0	4
349	0	5	3	8
Total	**12**	**61**	**11**	**84**

Table 12. Muzzleloader Harvest by Permit Area, 2014.
Includes Regular, Muzzleloader, Youth, and Bonus permits. Does not include Park hunts.

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
101	7	1	0	0	8
103	2	0	1	0	3
105	15	0	0	0	15
108	6	0	0	0	6
110	7	0	2	0	9
111	7	0	0	0	7
114	2	2	0	0	4
117	1	0	0	0	1
118	12	0	0	0	12
119	2	0	0	0	2
122	1	0	0	0	1
126	7	0	0	0	7
127	1	0	0	0	1
155	6	0	6	0	12
156	2	0	0	0	2
157	9	9	43	4	65
159	4	0	1	0	5
169	9	0	0	0	9
171	2	0	4	0	6
172	9	1	7	3	20
173	2	0	1	0	3
176	2	0	0	0	2
177	1	0	0	0	1
178	10	0	0	0	10
179	12	0	6	1	19
180	7	0	1	0	8
181	2	0	0	0	2
182	4	2	17	1	24
183	7	0	3	0	10
184	31	3	12	2	48
197	5	1	0	0	6
199	0	0	1	0	1
201	6	2	5	0	13
203	8	2	4	1	15
208	11	0	2	0	13
209	19	3	16	3	41
210	10	0	16	4	30
213	65	2	42	3	112
214	24	9	61	10	104
215	60	18	75	15	168
218	67	24	86	11	188
219	40	15	75	11	141
221	32	17	56	13	118
222	19	1	31	6	57
223	35	13	42	11	101
224	1	1	0	1	3
225	34	11	44	11	100

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
227	53	10	66	4	133
229	18	1	8	0	27
230	8	3	14	2	27
232	14	2	11	3	30
233	23	7	17	3	50
234	10	2	9	0	21
235	2	0	4	1	7
236	26	9	34	6	75
237	34	1	6	0	41
238	4	0	3	0	7
239	26	11	35	11	83
240	26	11	57	4	98
241	51	21	108	21	201
242	10	2	7	0	19
246	16	1	14	3	34
247	13	0	10	1	24
248	5	2	14	4	25
249	17	13	57	6	93
250	24	1	16	1	42
251	3	0	0	0	3
252	22	2	14	0	38
253	34	1	20	2	57
254	24	8	36	4	72
255	26	7	25	3	61
256	17	3	12	0	32
257	15	2	12	2	31
258	4	3	5	1	13
259	18	0	6	1	25
260	23	0	3	1	27
261	12	0	0	1	13
262	10	0	2	0	12
263	25	1	6	0	32
264	40	3	6	1	50
265	25	1	10	2	38
266	11	1	4	0	16
267	8	0	1	1	10
268	16	0	2	0	18
269	16	1	9	0	26
270	19	2	8	0	29
271	21	1	7	1	30
272	10	0	2	0	12
273	30	4	16	4	54
274	22	5	12	2	41
275	24	3	23	2	52
276	41	3	37	4	85
277	99	6	72	6	183
278	55	3	20	4	82

Table 12. (Continued).

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
279	25	2	26	0	53
280	16	1	4	0	21
281	42	2	17	1	62
282	6	0	1	0	7
283	31	3	7	1	42
284	25	3	10	0	38
285	13	7	14	1	35
286	37	2	16	3	58
287	5	1	5	2	13
288	31	6	23	3	63
289	17	1	8	0	26
290	45	2	29	5	81
291	61	8	30	4	103
292	30	7	38	5	80
293	30	14	42	1	87
294	33	1	12	4	50
295	40	4	10	0	54
296	29	3	10	2	44
297	3	2	2	0	7
298	3	0	1	0	4
299	9	2	20	2	33
338	11	6	19	0	36
339	11	2	8	1	22
341	15	8	48	10	81
342	23	12	38	5	78
343	28	11	76	12	127
344	6	4	33	7	50
345	19	3	9	4	35
346	32	22	102	22	178
347	18	2	36	0	56
348	15	4	32	2	53
349	37	37	162	32	268
601	14	3	15	2	34
TOTAL	**2,435**	**479**	**2,423**	**354**	**5,691**

Table 13. Muzzleloader Harvest using Bonus Permits by Permit Area, 2014.

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
114	2	0	0	2
182	2	12	1	15
287	1	2	0	3
343	8	43	8	59
346	17	72	17	106
349	29	121	24	174
TOTAL	**59**	**250**	**50**	**359**

Table 14. Summary of Muzzleloader Special Hunts, 2014.

Includes Regular, Youth, and Bonus Permits.

Area	Dates	Permits Issued	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
935 - Jay Cook SP[1]	12/6-12/10	120*	5	4	21	2	32
936 - Crow Wing SP	12/5-12/7	25*	1	1	1	2	5
937 - Soudan Mine and Lake Vermilion SP[1]	11/29-12/14	20*	1	0	4	0	5
938 - City of Tower[1]	11/29-12/14	20*	2	0	3	0	5
939 - Lake Shetek SP[1]	12/6-12/7	15**	0	3	5	0	8
940 - Lake Maria SP[1]	12/6-12/8	25***	1	2	10	1	14
941 - Nerstrand Big Woods SP[1]	12/6-12/7	50***	4	12	13	2	31
943 - Rice Lake SP[1]	12/6-12/7	20**	0	1	13	5	19
944 - Vermillion Highlands WMA[1]	11/29-12/14	20*	1	1	1	0	3
945 -Camp Ripley Deployed Solider[1]	12/1-12/3	100*	11	3	13	2	29
946 -City of Grand Rapids[1]	11/29-12/14	Unl.*	0	1	0	0	1
947 -Lake Bemidji State Park[1]	12/5-12/7	30*	1	1	2	0	4
Total			**27**	**29**	**86**	**14**	**156**

[1] Bonus permits available *Either Sex **Antlerless Only ***Earn-A-Buck

Table 15. Free Landowner Muzzleloader Harvest by Permit Area, 2014.

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
157	0	1	0	1
210	0	2	0	2
214	2	1	2	5
215	1	3	1	5
218	1	3	0	4
221	0	4	2	6
222	0	2	0	2
223	1	1	0	2
227	0	1	0	1
232	0	2	1	3
239	0	1	1	2
240	2	4	1	7
241	2	13	2	17
249	3	5	2	10
255	1	1	0	2

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
257	0	1	1	2
292	0	1	0	1
293	0	4	0	4
338	1	1	0	2
339	0	1	0	1
341	0	3	1	4
342	0	4	1	5
343	0	5	0	5
344	0	1	1	2
345	0	0	1	1
346	1	6	2	9
347	0	3	0	3
348	0	4	0	4
349	1	5	0	6
257	0	1	1	2
Total	**16**	**83**	**19**	**118**

Table 16. Summary of Youth Hunts and Youth Season, 2014.

Area	Dates	Permits Issued	Harvest				
			Adult Male	Adult Female	Fawn Male	Fawn Female	Total
950 - Camp Ripley Archery	10/11-10/12	175	3	5	1	1	10
951 - Afton SP	11/8-11/9	20	8	5	3	0	16
953 - Zipple Bay SP	10/18-10/19	20	0	0	1	0	1
954 - Lake Bemidji SP	10/18-10/19	20	0	1	2	0	3
955 - Lake Alexander Preserve	10/11 - 10/12	20	1	1	0	0	2
956 - St. Croix SP	11/1-11/2	90	8	4	1	0	13
957 - Rydell NWR	10/18-10/19	20	0	0	0	0	0
958 - Savanna Portage SP	10/25-10/26	25	0	2	0	0	2
959 - Buffalo River SP	11/8-11/9	14	2	3	1	0	6
960 - Tettegouche SP	10/18-10/19	10	0	1	1	0	2
961 - Itasca SP	10/25-10/26	75	1	2	1	1	5
962 - Great River SP	10/25-10/26	20	0	0	0	0	0
965 - Banning SP	11/1-11/2	6	3	0	0	0	3
966 - Blue Mounds SP	11/22-11/23	10	4	1	0	0	5
967 - Camden SP	11/1-11/2	12	2	4	1	0	7
968 - Lake Shetek SP	10/25-10/26	12	4	2	0	0	6
969 - Split Rock Creek SP	10/25-10/26	10	1	1	0	0	2
159 - St Croix SP Adult	11/1-11/2	10	0	3	0	0	3
Total		**569**	**37**	**35**	**12**	**2**	**86**

* Includes special youth and adult mentored hunts

Youth Deer Season - October 16 - 19, unlimited permits

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
101	9	6	0	2	17
105	21	28	6	1	56
111	7	5	3	0	15
114	0	2	0	0	2
201	6	1	2	0	9
203	1	1	0	1	3
208	10	8	3	2	23
209	19	18	4	1	42
256	25	15	2	5	47
257	15	8	9	2	34
260	29	20	4	3	56
263	16	9	2	4	31
264	29	23	7	6	65
267	12	12	3	3	30
268	10	7	0	1	18
338	8	6	0	1	15
339	7	4	1	0	12
341	26	26	9	6	67
342	18	7	7	9	41
343	25	4	4	3	36
344	19	12	6	6	43
345	25	10	4	3	42
346	29	10	5	4	48
347	19	9	8	1	37
348	11	9	3	1	24
349	29	13	7	7	56
601	10	1	4	0	15
Total	**435**	**274**	**103**	**72**	**884**

Table 17. Total Deer Harvest by Permit Area, 2014.

Includes all license types, permits, and special hunts.

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
101	335	29	9	5	378
103	552	67	15	11	645
105	800	137	22	15	974
108	690	0	0	0	690
110	703	173	40	24	940
111	349	42	12	5	408
114	35	20	8	1	64
117	29	0	0	0	29
118	455	0	3	0	458
119	332	0	1	1	334
122	234	0	0	0	234
126	295	0	1	0	296
127	47	0	0	0	47
152	66	26	9	4	105
155	998	325	66	52	1,441
156	1039	200	54	40	1,333
157	1894	1402	388	274	3,958
159	824	218	49	33	1,124
169	962	3	0	2	967
171	909	267	60	38	1,274
172	1499	436	113	69	2,117
173	580	150	27	25	782
176	1091	0	1	1	1,093
177	575	0	2	0	577
178	1257	3	1	0	1,261
179	1442	361	79	57	1,939
180	545	6	1	0	552
181	699	3	1	3	706
182	510	663	131	97	1,401
183	784	170	34	30	1,018
184	2376	905	244	167	3,692
197	758	128	32	25	943
199	79	3	2	0	84
201	108	62	12	12	194
203	59	13	8	5	85
208	216	45	11	8	280
209	527	279	60	59	925
210	712	394	95	89	1,290
213	2326	715	205	146	3,392
214	1636	1015	398	311	3,360
215	1469	821	330	217	2,837
218	1069	770	242	167	2,248
219	638	497	149	114	1,398
221	1114	726	270	227	2,337
222	796	514	179	129	1,618
223	727	473	166	114	1,480
224	85	58	16	14	173
225	1357	827	282	199	2,665
227	1028	586	189	120	1,923
229	286	94	32	17	429
230	234	184	64	34	516
232	277	146	49	39	511
233	228	117	43	21	409
234	213	103	16	10	342
235	88	42	7	9	146
236	739	398	86	61	1,284
237	256	102	18	10	386
238	77	32	3	2	114
239	1435	959	298	208	2,900
240	1767	1056	331	316	3,470
241	3201	2276	702	558	6,737
242	584	251	73	40	948
246	1689	387	134	97	2,307
247	599	241	53	48	941
248	432	268	90	88	878
249	1052	971	280	229	2,532
250	325	117	19	15	476
251	82	27	11	4	124
252	314	146	36	20	516
253	509	180	39	15	743
254	549	301	90	67	1,007
255	474	237	70	47	828
256	480	297	67	71	915
257	398	237	60	32	727
258	805	234	70	59	1,168
259	1079	296	85	72	1,532
260	402	78	14	11	505
261	217	46	11	7	281
262	234	73	18	12	337
263	424	58	15	14	511
264	761	204	36	29	1,030
265	509	200	57	38	804
266	358	80	18	15	471
267	212	71	8	10	301
268	334	60	11	6	411
269	222	99	12	6	339
270	228	55	6	6	295
271	290	80	18	10	398
272	214	40	8	10	272
273	529	223	54	40	846
274	288	104	15	12	419
275	365	159	30	21	575
276	593	312	49	40	994
277	1446	747	140	115	2,448
278	422	124	24	17	587
279	223	138	16	14	391
280	234	137	15	10	396
281	544	180	28	20	772

Table 17. (Continued).

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
282	160	32	8	8	208
283	331	104	18	12	465
284	388	172	36	20	616
285	412	226	57	28	723
286	314	160	31	20	525
287	69	107	34	28	238
288	430	228	40	36	734
289	258	84	18	14	374
290	506	225	41	43	815
291	841	361	82	65	1,349
292	592	377	107	65	1,141
293	542	325	105	42	1,014
294	361	186	30	24	601
295	490	185	23	23	721
296	319	121	20	15	475
297	155	31	9	4	199
298	484	71	27	16	598
299	287	179	39	30	535
338	236	226	59	34	555
339	283	230	65	55	633
341	810	649	210	152	1,821
342	664	487	142	106	1,399
343	977	1095	287	218	2,577
344	443	425	90	108	1,066
345	547	358	100	90	1,095
346	1162	1323	408	384	3,277
347	573	330	99	80	1,082
348	618	398	104	81	1,201
349	1282	1742	450	439	3,913
601	1309	1537	366	278	3,490
901	6	11	0	0	17
902	30	32	10	5	77
904	1	9	1	1	12
905	1	7	3	1	12
906	6	12	2	2	22
907	3	2	0	0	5
908	3	1	1	1	6
909	1	4	2	2	9
910	1	9	4	2	16
912	0	0	0	1	1
913	0	4	3	0	7
914	9	8	3	2	22
916	29	13	2	1	45
918	1	5	1	1	8
919	0	12	2	2	16
921	1	5	0	1	7
924	0	5	0	0	5
925	3	1	0	0	4
926	24	37	9	7	77
927	1	28	6	8	43

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
929	11	26	8	4	49
931	9	25	12	9	55
933	11	20	9	6	46
934	0	23	0	1	24
935	5	21	4	2	32
936	1	1	1	2	5
937	1	4	0	0	5
938	2	3	0	0	5
939	0	5	3	0	8
940	1	10	2	1	14
941	4	13	12	2	31
943	0	13	1	5	19
944	1	1	1	0	3
945	11	13	3	2	29
946	0	0	1	0	1
947	1	2	1	0	4
950	3	5	1	1	10
951	8	5	3	0	16
953	0	0	1	0	1
954	0	1	2	0	3
955	1	1	0	0	2
956	8	4	1	0	13
958	0	2	0	0	2
959	2	3	1	0	6
960	0	1	1	0	2
961	1	2	1	1	5
965	3	0	0	0	3
966	4	1	0	0	5
967	2	4	1	0	7
968	4	2	0	0	6
969	1	1	0	0	2
970	24	34	6	6	70
971	28	27	9	4	68
975	0	6	0	1	7
976	0	21	12	6	39
977	12	21	4	6	43
979	3	12	1	0	16
980	72	239	68	65	444
981	0	2	1	0	3
982	1	0	0	0	1
983	2	19	2	0	23
984	0	3	0	0	3
985	0	11	5	3	19
988	1	4	1	0	6
990	0	17	2	2	21
991	1	6	0	0	7
992	0	4	0	3	7
993	0	3	1	1	5
995	1	26	9	9	45
996	2	8	1	1	12

Table 17. (Continued).

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
998	0	1	0	0	1
TOTAL	**81,036**	**39,354**	**10,792**	**8,260**	**139,442**

Table 18. Estimated firearm hunter numbers, density, and harvest by Permit Area, 2014.

Excludes data from all 900-series hunts.

Permit Area	Firearm Hunters	Area Size (sq mi)	Hunters/ mile^2	Harvest/ mile^2
101	1,830	496	3.7	0.7
103	2,993	1,820	1.6	0.3
105	3,821	740	5.2	1.2
108	4,103	1,651	2.5	0.4
110	4,175	528	7.9	1.7
111	2,426	1,438	1.7	0.3
114	227	116	2.0	0.4
117	163	927	0.2	0.0
118	2,937	1,220	2.4	0.4
119	2,707	770	3.5	0.4
122	1,755	603	2.9	0.4
126	1,696	941	1.8	0.3
127	472	564	0.8	0.1
152	838	61	13.7	1.6
155	7,536	593	12.7	2.2
156	8,530	825	10.3	1.5
157	13,654	673	20.3	5.5
159	6,514	571	11.4	1.8
169	6,806	1,124	6.1	0.8
171	6,423	701	9.2	1.7
172	10,373	687	15.1	2.8
173	4,841	584	8.3	1.2
176	6,368	1,113	5.7	0.9
177	3,319	480	6.9	1.2
178	8,248	1,280	6.4	0.9
179	9,756	862	11.3	2.0
180	4,394	977	4.5	0.5
181	5,218	708	7.4	0.9
182	2,833	267	10.6	3.4
183	7,215	663	10.9	1.4
184	14,087	1,229	11.5	2.8
197	5,595	954	5.9	0.9
199	498	148	3.4	0.5
201	611	161	3.8	1.0
203	281	83	3.4	0.8
208	1,088	414	2.6	0.6
209	2,686	639	4.2	1.3
210	4,486	615	7.3	2.0
213	9,677	1,057	9.2	2.6
214	7,642	554	13.8	5.5
215	7,013	701	10.0	3.4
218	5,571	884	6.3	2.0
219	3,573	391	9.1	2.6
221	5,689	642	8.9	3.2
222	5,121	413	12.4	3.5
223	3,340	375	8.9	2.8
224	749	47	15.8	3.0
225	7,252	618	11.7	3.7
227	5,044	472	10.7	2.9
229	1,463	284	5.1	1.0
230	1,498	452	3.3	0.9
232	1,316	377	3.5	1.1
233	1,015	385	2.6	0.7
234	847	636	1.3	0.5
235	639	34	19.0	3.1
236	3,026	370	8.2	2.4
237	1,229	728	1.7	0.4
238	299	95	3.1	1.0
239	7,920	919	8.6	2.9
240	7,916	643	12.3	5.0
241	15,405	996	15.5	6.2
242	2,644	214	12.4	3.5
246	11,174	840	13.3	2.5
247	3,574	228	15.7	3.4
248	2,240	214	10.5	3.5
249	6,451	715	9.0	3.2
250	1,529	713	2.1	0.5
251	566	55	10.3	2.1
252	1,407	715	2.0	0.6
253	2,071	974	2.1	0.6
254	2,715	929	2.9	0.9
255	1,924	774	2.5	0.8
256	2,519	654	3.9	1.2
257	2,041	412	5.0	1.5
258	4,308	343	12.6	3.1
259	7,327	490	15.0	2.9
260	1,932	1,249	1.5	0.3
261	803	795	1.0	0.3
262	1,045	677	1.5	0.4
263	1,744	512	3.4	0.8
264	3,528	669	5.3	1.3
265	2,101	494	4.3	1.5
266	1,985	617	3.2	0.7
267	1,046	472	2.2	0.5
268	1,254	228	5.5	1.6
269	1,347	650	2.1	0.4

Table 18. (Continued).

Permit Area	Firearm Hunters	Area Size (sq mi)	Hunters/ mile^2	Harvest/ mile^2
270	1,022	747	1.4	0.3
271	1,092	632	1.7	0.5
272	1,117	531	2.1	0.5
273	2,812	571	4.9	1.2
274	1,123	354	3.2	0.9
275	1,939	764	2.5	0.6
276	3,104	542	5.7	1.5
277	6,454	812	8.0	2.3
278	1,942	402	4.8	1.0
279	1,195	344	3.5	0.9
280	1,447	675	2.1	0.5
281	2,431	575	4.2	1.0
282	877	778	1.1	0.2
283	1,545	613	2.5	0.6
284	1,724	837	2.1	0.6
285	2,417	549	4.4	1.0
286	1,471	446	3.3	0.9
287	642	46	14.0	4.9
288	1,863	625	3.0	0.9
289	1,018	815	1.2	0.4
290	2,273	662	3.4	1.0
291	3,900	800	4.9	1.2
292	3,053	479	6.4	1.9
293	2,623	511	5.1	1.5
294	1,360	686	2.0	0.7
295	2,158	839	2.6	0.7
296	1,866	667	2.8	0.6
297	1,095	438	2.5	0.4
298	3,351	618	5.4	0.9
299	1,540	386	4.0	1.0
338	2,104	454	4.6	0.9
339	1,862	393	4.7	1.2
341	5,116	612	8.4	2.3
342	3,876	349	11.1	3.2
343	4,742	663	7.2	2.5
344	3,218	189	17.0	4.6
345	2,859	322	8.9	2.6
346	4,670	318	14.7	7.8
347	2,901	434	6.7	1.9
348	3,319	332	10.0	3.0
349	6,320	490	12.9	6.0
601	3,082	1,625	1.9	0.5
Total	**448,545**	**78,855**	**5.7**	**1.4**

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, 2014.

Permit Area	Area Size (sq mi)	Archery Harvest/mi^2	Firearm Harvest/mi^2	Muzz. Harvest/mi^2	EA Harvest/mi^2	Youth Harvest/mi^3	Total Harvest/mi^2
101	496	0.03	0.68	0.02		0.03	0.76
103	1,820	0.01	0.35	0.00			0.35
105	740	0.04	1.18	0.02		0.08	1.32
108	1,651	0.02	0.40	0.00		0.00	0.42
110	528	0.06	1.70	0.02			1.78
111	1,438	0.00	0.27	0.00		0.01	0.28
114	116	0.08	0.42	0.03		0.02	0.55
117	927	0.00	0.03	0.00			0.03
118	1,220	0.01	0.36	0.01			0.38
119	770	0.00	0.43	0.00			0.43
122	603	0.00	0.38	0.00			0.39
126	941	0.01	0.29	0.01			0.31
127	564	0.00	0.08	0.00			0.08
152	61	0.08	1.64	0.00			1.72
155	593	0.17	2.24	0.02			2.43
156	825	0.11	1.50	0.00			1.62
157	673	0.29	5.50	0.10			5.89
159	571	0.13	1.83	0.01			1.96
169	1,124	0.02	0.83	0.01			0.86
171	701	0.11	1.70	0.01			1.82
172	687	0.25	2.80	0.03			3.08
173	584	0.09	1.24	0.01			1.34
176	1,113	0.03	0.95	0.00			0.98
177	480	0.04	1.16	0.00			1.20
178	1,280	0.05	0.93	0.01			0.99
179	862	0.20	2.03	0.02			2.25
180	977	0.04	0.52	0.01			0.57
181	708	0.08	0.91	0.00			1.00
182	267	1.72	3.44	0.09			5.24
183	663	0.12	1.40	0.02			1.54
184	1,229	0.19	2.77	0.04			3.00
197	954	0.05	0.93	0.01			0.99
199	148	0.01	0.55	0.01			0.57
201	161	0.05	1.02	0.08		0.06	1.20
203	83	0.00	0.81	0.18		0.04	1.03
208	414	0.02	0.57	0.03		0.06	0.68
209	639	0.06	1.25	0.06		0.07	1.45
210	615	0.07	1.97	0.05			2.10
213	1,057	0.46	2.65	0.11			3.21
214	554	0.33	5.55	0.19			6.06
215	701	0.44	3.36	0.24			4.05
218	884	0.30	2.03	0.21			2.54
219	391	0.63	2.58	0.36			3.57
221	642	0.29	3.16	0.18			3.64
222	413	0.29	3.48	0.14			3.91
223	375	0.92	2.76	0.27			3.94
224	47	0.61	2.98	0.06			3.66
225	618	0.49	3.66	0.16			4.31
227	472	0.89	2.90	0.28			4.08

Table 19. (Continued).

Permit Area	Area Size (sq mi)	Archery Harvest/mi^2	Firearm Harvest/mi^2	Muzz. Harvest/mi^2	EA Harvest/mi^2	Youth Harvest/mi^3	Total Harvest/mi^2
229	284	0.40	1.01	0.09			1.51
230	452	0.14	0.94	0.06			1.14
232	377	0.17	1.11	0.08			1.36
233	385	0.21	0.73	0.13			1.06
234	636	0.05	0.45	0.03			0.54
235	34	0.98	3.06	0.21			4.24
236	370	0.85	2.42	0.20			3.47
237	728	0.05	0.42	0.06			0.53
238	95	0.12	1.01	0.07			1.20
239	919	0.20	2.87	0.09			3.16
240	643	0.30	4.95	0.15			5.40
241	996	0.41	6.15	0.20			6.77
242	214	0.87	3.47	0.09			4.43
246	840	0.19	2.52	0.04			2.75
247	228	0.64	3.38	0.11			4.12
248	214	0.38	3.55	0.12			4.05
249	715	0.24	3.17	0.13			3.54
250	713	0.11	0.50	0.06			0.67
251	55	0.11	2.09	0.05			2.25
252	715	0.09	0.58	0.05			0.72
253	974	0.14	0.56	0.06			0.76
254	929	0.15	0.86	0.08			1.08
255	774	0.19	0.80	0.08			1.07
256	654	0.05	1.23	0.05		0.07	1.40
257	412	0.09	1.52	0.08		0.08	1.76
258	343	0.22	3.15	0.04			3.41
259	490	0.20	2.88	0.05			3.13
260	1,249	0.02	0.32	0.02		0.04	0.40
261	795	0.03	0.30	0.02		0.00	0.35
262	677	0.08	0.40	0.02			0.50
263	512	0.03	0.85	0.06		0.06	1.00
264	669	0.05	1.31	0.07		0.10	1.54
265	494	0.07	1.48	0.08			1.63
266	617	0.04	0.69	0.03			0.76
267	472	0.04	0.52	0.02		0.06	0.64
268	228	0.04	1.60	0.08		0.08	1.80
269	650	0.07	0.41	0.04			0.52
270	747	0.03	0.32	0.04			0.39
271	632	0.06	0.52	0.05			0.63
272	531	0.03	0.46	0.02			0.51
273	571	0.16	1.22	0.09			1.48
274	354	0.13	0.93	0.12			1.18
275	764	0.07	0.61	0.07			0.75
276	542	0.18	1.50	0.16			1.83
277	812	0.46	2.33	0.23			3.02
278	402	0.21	1.05	0.20			1.46
279	344	0.08	0.90	0.15			1.14

Table 19. (Continued).

Permit Area	Area Size (sq mi)	Archery Harvest/mi^2	Firearm Harvest/mi^2	Muzz. Harvest/mi^2	EA Harvest/mi^2	Youth Harvest/mi^3	Total Harvest/mi^2
280	675	0.05	0.50	0.03			0.59
281	575	0.22	1.02	0.11			1.34
282	778	0.06	0.20	0.01			0.27
283	613	0.13	0.56	0.07			0.76
284	837	0.08	0.61	0.05			0.74
285	549	0.24	1.02	0.06			1.32
286	446	0.12	0.93	0.13			1.18
287	46	0.00	4.92	0.28			5.21
288	625	0.21	0.87	0.10			1.18
289	815	0.06	0.36	0.03			0.46
290	662	0.16	0.95	0.12			1.23
291	800	0.32	1.24	0.13			1.69
292	479	0.31	1.90	0.17			2.38
293	511	0.36	1.45	0.17			1.98
294	686	0.07	0.74	0.07			0.88
295	839	0.12	0.68	0.06			0.86
296	667	0.07	0.57	0.07			0.71
297	438	0.02	0.42	0.02			0.45
298	618	0.03	0.93	0.01			0.97
299	386	0.30	1.00	0.09			1.39
338	454	0.19	0.92	0.08		0.03	1.22
339	393	0.28	1.24	0.06		0.03	1.61
341	612	0.41	2.32	0.13		0.11	2.97
342	349	0.48	3.15	0.22		0.12	3.97
343	663	1.15	2.49	0.19		0.05	3.89
344	189	0.50	4.63	0.26		0.23	5.63
345	322	0.41	2.56	0.11		0.13	3.20
346	318	1.80	7.37	0.56	0.43	0.15	10.31
347	434	0.37	1.91	0.13		0.09	2.50
348	332	0.43	2.96	0.16		0.07	3.62
349	490	1.27	5.85	0.55	0.19	0.11	7.98
601	1,625	1.68	0.45	0.00		0.01	2.15
Total	**78,855**	**0.22**	**1.46**	**0.07**	**0.01**	**0.00**	**1.75**

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; actual harvest density is higher due to sub-permit area designation

Table 20. Harvest using Depredation Permits, by Permit Area, 2014.

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
342	9	2	2	13
345	45	9	8	62
TOTAL	**54**	**11**	**10**	**75**

Table 21. 2014 Firearm Lottery Distribution Report.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
101	1	191	0	191	0	**24**	**0.0%**
	2	257	0	236	21		
	3	2	0	0	2		
	4	1	0	0	1		
		451	**0**	**427**	**24**		
103	1	330	2	330	0	**49**	**0.0%**
	2	336	0	336	0		
	3	422	0	388	34		
	4	10	0	0	10		
	5	4	0	0	4		
	6	1	0	0	1		
		1,103	**2**	**1,054**	**49**		
105	1	543	0	543	0	**99**	**0.0%**
	2	812	1	720	92		
	3	6	0	0	6		
	9	1	0	0	1		
		1,362	**1**	**1,263**	**99**		
110	1	1,925	2	1,705	220	**347**	**0.0%**
	2	108	0	0	108		
	3	14	0	0	14		
	4	5	0	0	5		
		2,052	**2**	**1,705**	**347**		
111	1	338	1	338	0	**49**	**0.0%**
	2	454	0	408	46		
	3	3	0	0	3		
		795	**1**	**746**	**49**		
152	1	257	0	87	170	**194**	**0.0%**
	2	21	0	0	21		
	3	3	0	0	3		
		281	**0**	**87**	**194**		
155	1	2,865	0	2,865	0	**493**	**0.0%**
	2	528	0	70	458		
	3	29	0	0	29		
	4	5	0	0	5		
	5	1	0	0	1		
		3,428	**0**	**2,935**	**493**		
156	1	3,203	5	3,190	13	**296**	**0.0%**
	2	233	0	0	233		
	3	39	0	0	39		
	4	7	0	0	7		
	5	2	0	0	2		
	5	2	0	0	2		
		3,486	**5**	**3,190**	**296**		

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	**Rejected**				
159	1	2,240	4	1,914	326	**493**	**0.0%**
	2	136	0	0	136		
	3	26	0	0	26		
	4	4	0	0	4		
	5	1	0	0	1		
		2,407	**4**	**1,914**	**493**		
171	1	1,673	1	1,673	0	**295**	**0.0%**
	2	1,479	0	1,205	274		
	3	16	1	0	16		
	4	4	0	0	4		
	5	1	0	0	1		
		3,173	**2**	**2,878**	**295**		
172	1	2,449	0	2,449	0	**492**	**0.0%**
	2	2,370	0	2,370	0		
	3	481	2	0	481		
	4	6	0	0	6		
	5	2	0	0	2		
	6	1	0	0	1		
	9	2	0	0	2		
		5,311	**2**	**4,819**	**492**		
173	1	1,762	1	1,762	0	**297**	**0.0%**
	2	379	1	107	272		
	3	18	0	0	18		
	4	6	0	0	6		
	9	1	0	0	1		
		2,166	**2**	**1,869**	**297**		
179	1	3,453	4	3,453	0	**495**	**0.0%**
	2	518	1	89	429		
	3	51	0	0	51		
	4	9	0	0	9		
	5	3	0	0	3		
	6	3	0	0	3		
		4,037	**5**	**3,542**	**495**		
183	1	2,317	0	2,317	0	**98**	**0.0%**
	2	672	0	599	73		
	3	21	2	0	21		
	4	2	0	0	2		
	5	2	1	0	2		
		3,014	**3**	**2,916**	**98**		

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
184	1	5,583	7	3,878	1,705	**2,949**	**0.0%**
	2	1,220	4	0	1,220		
	3	14	0	0	14		
	4	3	0	0	3		
	5	4	0	0	4		
	9	3	0	0	3		
		6,827	**11**	**3,878**	**2,949**		
197	1	1,561	0	1,561	0	**198**	**0.0%**
	2	862	0	683	179		
	3	16	0	0	16		
	4	2	0	0	2		
	5	1	0	0	1		
		2,442	**0**	**2,244**	**198**		
203	1	72	0	72	0	**25**	**0.0%**
	2	39	0	15	24		
	3	1	0	0	1		
		112	**0**	**87**	**25**		
208	1	325	4	263	62	**98**	**0.0%**
	2	33	0	0	33		
	3	2	0	0	2		
	5	1	0	0	1		
		361	**4**	**263**	**98**		
213	1	4,051	4	2,753	1,298	**1,936**	**0.0%**
	2	610	0	0	610		
	3	20	0	0	20		
	4	7	0	0	7		
	5	1	0	0	1		
		4,689	**4**	**2,753**	**1,936**		
229	1	423	0	193	230	**292**	**0.0%**
	2	56	0	0	56		
	3	3	0	0	3		
	4	3	0	0	3		
		485	**0**	**193**	**292**		
234	1	248	1	20	228	**273**	**0.0%**
	2	45	0	0	45		
		293	**1**	**20**	**273**		
237	1	217	0	180	37	**185**	**0.0%**
	2	128	0	0	128		
	3	18	0	0	18		
	4	2	0	0	2		
		365	**0**	**180**	**185**		

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
238	1	77	0	9	68	**96**	**0.0%**
	2	23	0	0	23		
	3	5	0	0	5		
		105	**0**	**9**	**96**		
242	1	881	1	505	376	**487**	**0.0%**
	2	96	0	0	96		
	3	11	0	0	11		
	4	4	0	0	4		
		992	**1**	**505**	**487**		
246	1	4,325	1	4,325	0	**492**	**0.0%**
	2	972	1	550	422		
	3	60	0	0	60		
	4	9	0	0	9		
	9	1	0	0	1		
		5,367	**2**	**4,875**	**492**		
247	1	845	1	845	0	**290**	**0.0%**
	2	750	0	481	269		
	3	18	0	0	18		
	4	3	0	0	3		
		1,616	**1**	**1,326**	**290**		
250	1	377	0	371	6	**267**	**0.0%**
	2	232	0	0	232		
	3	28	0	0	28		
	5	1	0	0	1		
		638	**0**	**371**	**267**		
251	1	189	0	162	27	**96**	**0.0%**
	2	69	0	0	69		
		258	**0**	**162**	**96**		
252	1	345	0	185	160	**367**	**0.0%**
	2	179	0	0	179		
	3	28	0	0	28		
		552	**0**	**185**	**367**		
253	1	423	0	423	0	**266**	**0.0%**
	2	229	0	85	144		
	3	122	0	0	122		
		774	**0**	**508**	**266**		
258	1	1,768	1	1,620	148	**490**	**0.0%**
	2	332	0	0	332		
	3	9	0	0	9		
	5	1	0	0	1		
		2,110	**1**	**1,620**	**490**		

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
259	1	2,677	1	2,677	0	**487**	**0.0%**
	2	957	0	507	450		
	3	28	0	0	28		
	4	7	0	0	7		
	5	1	0	0	1		
	9	1	0	0	1		
		3,671	**1**	**3,184**	**487**		
260	1	379	0	379	0	**97**	**0.0%**
	2	213	0	116	97		
		592	**0**	**495**	**97**		
261	1	181	0	77	104	**140**	**0.0%**
	2	36	0	0	36		
		217	**0**	**77**	**140**		
262	1	300	0	263	37	**136**	**0.0%**
	2	95	0	0	95		
	3	4	0	0	4		
		399	**0**	**263**	**136**		
263	1	357	0	357	0	**97**	**0.0%**
	2	305	1	208	97		
	3	0	1	0	0		
		662	**2**	**565**	**97**		
264	1	876	0	876	0	**492**	**0.0%**
	2	557	0	67	490		
	3	1	0	0	1		
	4	1	0	0	1		
		1,435	**0**	**943**	**492**		
265	1	611	0	327	284	**486**	**0.0%**
	2	202	0	0	202		
	3	0	1	0	0		
		813	**1**	**327**	**486**		
266	1	517	0	517	0	**140**	**0.0%**
	2	221	0	81	140		
		738	**0**	**598**	**140**		
267	1	176	0	176	0	**98**	**0.0%**
	2	140	1	44	96		
	3	1	0	0	1		
	9	1	0	0	1		
		318	**1**	**220**	**98**		
268	1	208	1	208	0	**96**	**0.0%**
	2	252	0	158	94		
	3	2	0	0	2		
		462	**1**	**366**	**96**		

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
269	1	317	1	317	0	**229**	**0.0%**
	2	238	0	13	225		
	3	3	0	0	3		
	4	1	0	0	1		
		559	**1**	**330**	**229**		
270	1	225	0	225	0	**91**	**0.0%**
	2	114	0	48	66		
	3	25	0	0	25		
		364	**0**	**273**	**91**		
271	1	291	0	172	119	**224**	**0.0%**
	2	100	0	0	100		
	3	4	0	0	4		
	4	1	0	0	1		
		396	**0**	**172**	**224**		
272	1	238	0	238	0	**97**	**0.0%**
	2	169	0	83	86		
	3	9	0	0	9		
	4	1	0	0	1		
	9	1	0	0	1		
		418	**0**	**321**	**97**		
273	1	1,166	0	343	823	**947**	**0.0%**
	2	112	0	0	112		
	3	9	0	0	9		
	4	2	0	0	2		
	5	1	0	0	1		
		1,290	**0**	**343**	**947**		
274	1	245	2	245	0	**215**	**0.0%**
	2	180	0	30	150		
	3	61	0	0	61		
	4	4	0	0	4		
		490	**2**	**275**	**215**		
275	1	461	1	292	169	**468**	**0.0%**
	2	254	2	0	254		
	3	40	0	0	40		
	4	4	0	0	4		
	5	1	0	0	1		
		760	**3**	**292**	**468**		
276	1	1,070	3	414	656	**1,015**	**0.0%**
	2	340	0	0	340		
	3	17	0	0	17		
	4	2	0	0	2		
		1,429	**3**	**414**	**1,015**		

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
277	1	2,205	0	1,268	937	**1,835**	**0.0%**
	2	869	0	0	869		
	3	27	1	0	27		
	4	2	0	0	2		
		3,103	**1**	**1,268**	**1,835**		
278	1	464	0	464	0	**174**	**0.0%**
	2	328	1	271	57		
	3	112	0	0	112		
	4	4	2	0	4		
	5	1	0	0	1		
		909	**3**	**735**	**174**		
279	1	430	0	12	418	**533**	**0.0%**
	2	100	0	0	100		
	3	15	0	0	15		
		545	**0**	**12**	**533**		
280	1	365	0	177	188	**371**	**0.0%**
	2	169	0	0	169		
	3	11	0	0	11		
	4	3	0	0	3		
		548	**0**	**177**	**371**		
281	1	486	0	486	0	**264**	**0.0%**
	2	301	0	153	148		
	3	116	0	0	116		
		903	**0**	**639**	**264**		
282	1	78	0	78	0	**23**	**0.0%**
	2	55	0	55	0		
	3	48	0	36	12		
	4	11	0	0	11		
		192	**0**	**169**	**23**		
283	1	244	0	244	0	**183**	**0.0%**
	2	162	0	143	19		
	3	160	0	0	160		
	4	4	0	0	4		
		570	**0**	**387**	**183**		
284	1	367	0	367	0	**276**	**0.0%**
	2	178	0	107	71		
	3	187	0	0	187		
	4	17	0	0	17		
	5	1	0	0	1		
		750	**0**	**474**	**276**		

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
285	1	886	1	127	759	**1,012**	**0.0%**
	2	238	1	0	238		
	3	14	0	0	14		
	4	1	0	0	1		
		1,139	**2**	**127**	**1,012**		
286	1	444	0	240	204	**353**	**0.0%**
	2	120	2	0	120		
	3	25	0	0	25		
	4	3	0	0	3		
	5	1	0	0	1		
		593	**2**	**240**	**353**		
288	1	469	1	240	229	**444**	**0.0%**
	2	184	0	0	184		
	3	23	0	0	23		
	4	7	0	0	7		
	9	1	0	0	1		
		684	**1**	**240**	**444**		
289	1	228	0	176	52	**182**	**0.0%**
	2	98	0	0	98		
	3	27	0	0	27		
	4	5	0	0	5		
		358	**0**	**176**	**182**		
290	1	498	1	498	0	**345**	**0.0%**
	2	348	0	194	154		
	3	189	0	0	189		
	4	2	0	0	2		
		1,037	**1**	**692**	**345**		
291	1	913	0	913	0	**711**	**0.0%**
	2	684	0	122	562		
	3	149	0	0	149		
		1,746	**0**	**1,035**	**711**		
294	1	410	0	29	381	**459**	**0.0%**
	2	64	0	0	64		
	3	13	0	0	13		
	4	1	0	0	1		
		488	**0**	**29**	**459**		
295	1	378	0	378	0	**267**	**0.0%**
	2	285	0	220	65		
	3	199	1	0	199		
	4	3	0	0	3		
		865	**1**	**598**	**267**		

Table 21. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
296	1	422	0	422	0	**265**	**0.0%**
	2	245	0	130	115		
	3	147	0	0	147		
	4	3	1	0	3		
		817	**1**	**552**	**265**		
297	1	206	0	206	0	**96**	**0.0%**
	2	119	0	24	95		
	3	1	0	0	1		
		326	**0**	**230**	**96**		
298	1	666	1	666	0	**98**	**0.0%**
	2	512	0	424	88		
	3	9	0	0	9		
	4	1	0	0	1		
		1,188	**1**	**1,090**	**98**		
299	1	374	1	328	46	**352**	**0.0%**
	2	239	0	0	239		
	3	67	0	0	67		
		680	**1**	**328**	**352**		
TOTAL		**93,506**	**83**	**67,180**	**26,326**	**26,326**	

Table 22. 2014 Muzzleloader Lottery Distribution Report.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	**Rejected**				
101	1	5	0	5	0	**1**	**0.0%**
	2	2	0	1	1		
		7	**0**	**6**	**1**		
103	1	5	0	5	0	**1**	**0.0%**
	2	9	0	9	0		
	3	1	0	0	1		
		15	**0**	**14**	**1**		
105	1	4	0	4	0	**1**	**0.0%**
	2	6	0	5	1		
		10	**0**	**9**	**1**		
110	1	18	0	17	1	**3**	**0.0%**
	2	1	0	0	1		
	3	1	0	0	1		
		20	**0**	**17**	**3**		
111	1	7	0	7	0	**1**	**0.0%**
	2	5	0	4	1		
		12	**0**	**11**	**1**		
152	1	8	0	2	6	**6**	**0.0%**
		8	**0**	**2**	**6**		
155	1	40	0	38	2	**7**	**0.0%**
	2	4	0	0	4		
	4	1	0	0	1		
		45	**0**	**38**	**7**		
156	1	38	0	37	1	**4**	**0.0%**
	2	2	0	0	2		
	3	1	0	0	1		
		41	**0**	**37**	**4**		
159	1	32	0	27	5	**7**	**0.0%**
	2	2	0	0	2		
		34	**0**	**27**	**7**		
171	1	33	0	33	0	**5**	**0.0%**
	2	16	0	12	4		
	3	1	0	0	1		
		50	**0**	**45**	**5**		
172	1	43	0	43	0	**8**	**0.0%**
	2	40	0	32	8		
		83	**0**	**75**	**8**		
173	1	22	0	21	1	**3**	**0.0%**
	2	2	0	0	2		
		24	**0**	**21**	**3**		
179	1	37	0	33	4	**5**	**0.0%**
	2	1	0	0	1		
		38	**0**	**33**	**5**		

Table 22. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	**Rejected**				
183	1	48	0	48	0	**2**	**0.0%**
	2	11	0	9	2		
		59	**0**	**57**	**2**		
184	1	96	0	66	30	**51**	**0.0%**
	2	19	0	0	19		
	4	2	0	0	2		
		117	**0**	**66**	**51**		
197	1	20	0	20	0	**2**	**0.0%**
	2	8	0	6	2		
		28	**0**	**26**	**2**		
208	1	7	0	5	2	**2**	**0.0%**
		7	**0**	**5**	**2**		
213	1	138	0	87	51	**64**	**0.0%**
	2	13	0	0	13		
		151	**0**	**87**	**64**		
229	1	10	0	5	5	**8**	**0.0%**
	2	2	0	0	2		
	4	1	0	0	1		
		13	**0**	**5**	**8**		
234	1	26	0	0	26	**27**	**0.0%**
	2	1	0	0	1		
		27	**0**	**0**	**27**		
237	1	16	0	12	4	**15**	**0.0%**
	2	11	0	0	11		
		27	**0**	**12**	**15**		
238	1	3	0	0	3	**4**	**0.0%**
	2	1	0	0	1		
		4	**0**	**0**	**4**		
242	1	23	0	12	11	**13**	**0.0%**
	2	2	0	0	2		
		25	**0**	**12**	**13**		
246	1	79	0	79	0	**8**	**0.0%**
	2	7	0	0	7		
	3	1	0	0	1		
		87	**0**	**79**	**8**		
247	1	34	0	34	0	**10**	**0.0%**
	2	19	0	12	7		
	3	3	0	0	3		
		56	**0**	**46**	**10**		
250	1	53	0	38	15	**33**	**0.0%**
	2	18	0	0	18		
		71	**0**	**38**	**33**		

Table 22. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	**Rejected**				
251	1	8	0	6	2	**4**	**0.0%**
	2	2	0	0	2		
		10	**0**	**6**	**4**		
252	1	30	0	13	17	**33**	**0.0%**
	2	16	0	0	16		
		46	**0**	**13**	**33**		
253	1	65	0	54	11	**34**	**0.0%**
	2	22	0	0	22		
	3	1	0	0	1		
		88	**0**	**54**	**34**		
258	1	35	0	32	3	**10**	**0.0%**
	2	7	0	0	7		
		42	**0**	**32**	**10**		
259	1	80	0	80	0	**13**	**0.0%**
	2	16	0	6	10		
	3	1	0	0	1		
	4	2		0	2		
		99	**0**	**86**	**13**		
260	1	13	0	13	0	**3**	**0.0%**
	2	3	0	0	3		
		16	**0**	**13**	**3**		
261	1	11	0	4	7	**10**	**0.0%**
	2	3	0	0	3		
		14	**0**	**4**	**10**		
262	1	28	0	24	4	**14**	**0.0%**
	2	10	0	0	10		
		38	**0**	**24**	**14**		
263	1	14	0	14	0	**3**	**0.0%**
	2	3	0	0	3		
		17	**0**	**14**	**3**		
264	1	15	0	15	0	**8**	**0.0%**
	2	8	0	0	8		
		23	**0**	**15**	**8**		
265	1	20	0	9	11	**14**	**0.0%**
	2	3	0	0	3		
		23	**0**	**9**	**14**		
266	1	34	0	34	0	**10**	**0.0%**
	2	13	0	3	10		
		47	**0**	**37**	**10**		
267	1	3	0	3	0	**2**	**0.0%**
	2	2	0	0	2		
		5	**0**	**3**	**2**		

Table 22. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
268	1	8	0	8	0	**4**	**0.0%**
	3	9	0	5	4		
		17	**0**	**13**	**4**		
269	1	28	0	25	3	**21**	**0.0%**
	2	18	0	0	18		
		46	**0**	**25**	**21**		
270	1	26	0	25	1	**9**	**0.0%**
	2	8	0	0	8		
		34	**0**	**25**	**9**		
271	1	35	0	15	20	**26**	**0.0%**
	2	5	0	0	5		
	3	1	0	0	1		
		41	**0**	**15**	**26**		
272	1	10	0	10	0	**3**	**0.0%**
	2	3	0	0	3		
		13	**0**	**10**	**3**		
273	1	61	0	15	46	**53**	**0.0%**
	2	7	0	0	7		
		68	**0**	**15**	**53**		
274	1	51	0	33	18	**35**	**0.0%**
	2	17	0	0	17		
		68	**0**	**33**	**35**		
275	1	35	0	16	19	**32**	**0.0%**
	2	13	0	0	13		
		48	**0**	**16**	**32**		
276	1	94	0	25	69	**85**	**0.0%**
	2	16	0	0	16		
		110	**0**	**25**	**85**		
277	1	189	0	91	98	**165**	**0.0%**
	2	63	0	0	63		
	3	3	0	0	3		
	9	1	0	0	1		
		256	**0**	**91**	**165**		
278	1	77	0	77	0	**26**	**0.0%**
	2	39	0	13	26		
		116	**0**	**90**	**26**		
279	1	64	0	0	64	**67**	**0.0%**
	2	3	0	0	3		
		67	**0**	**0**	**67**		
280	1	31	0	11	20	**29**	**0.0%**
	2	9	0	0	9		
		40	**0**	**11**	**29**		

Table 22. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
281	1	65	0	65	0	**36**	**0.0%**
	2	42	0	7	35		
	9	1	0	0	1		
		108	**0**	**72**	**36**		
282	1	6	0	6	0	**2**	**0.0%**
	2	2	0	2	0		
	3	3	0	2	1		
	4	1		0	1		
		12	**0**	**10**	**2**		
283	1	22	0	22	0	**17**	**0.0%**
	2	20	0	9	11		
	3	6	0	0	6		
		48	**0**	**31**	**17**		
284	1	36	0	35	1	**24**	**0.0%**
	2	17	0	0	17		
	3	6	0	0	6		
		59	**0**	**35**	**24**		
285	1	82	0	3	79	**88**	**0.0%**
	2	9	0	0	9		
		91	**0**	**3**	**88**		
286	1	62	0	23	39	**47**	**0.0%**
	2	8	0	0	8		
		70	**0**	**23**	**47**		
288	1	57	0	20	37	**56**	**0.0%**
	2	18	0	0	18		
	3	1	0	0	1		
		76	**0**	**20**	**56**		
289	1	24	0	15	9	**18**	**0.0%**
	2	9	0	0	9		
		33	**0**	**15**	**18**		
290	1	85	0	85	0	**55**	**0.0%**
	2	49	0	3	46		
	3	9	0	0	9		
		143	**0**	**88**	**55**		
291	1	122	0	105	17	**89**	**0.0%**
	2	71	0	0	71		
	3	1	0	0	1		
		194	**0**	**105**	**89**		
294	1	36	0	0	36	**41**	**0.0%**
	2	5	0	0	5		
		41	**0**	**0**	**41**		

Table 22. Continued.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
295	1	47	0	47	0	**33**	**0.0%**
	2	43	0	16	27		
	3	6	0	0	6		
		96	**0**	**63**	**33**		
296	1	60	0	59	1	**35**	**0.0%**
	2	26	0	0	26		
	3	8	0	0	8		
		94	**0**	**59**	**35**		
297	1	8	0	8	0	**4**	**0.0%**
	2	4	0	0	4		
		12	**0**	**8**	**4**		
298	1	13	0	13	0	**2**	**0.0%**
	2	5	0	3	2		
		18	**0**	**16**	**2**		
299	1	46	0	33	13	**48**	**0.0%**
	2	34	0	0	34		
	3	1	0	0	1		
		81	**0**	**33**	**48**		
TOTAL		**3,627**	**0**	**2,028**	**1,599**	**1,599**	

Table 23. 2014 Special Permit Areas for Firearms Hunters.

Special Hunt	Preference Level	Applications		Unsuccessful	Winners	Permits Available
		Total	Rejected			
901 - Rice Lake NWR	1	46	0	32	14	**40**
	2	23	0	0	23	
	3	5	0	0	5	
		74	**0**	**32**	**42**	
902 - Saint Croix State Park	1	360	0	269	91	**300**
	2	195	0	0	195	
	3	14	0	0	14	
		569	**0**	**269**	**300**	
904 - Gooseberry Falls State Park	1	44	0	22	22	**40**
	2	17	0	0	17	
	3	1	0	0	1	
		62	**0**	**22**	**40**	
905 - Split Rock Lighthouse State Park	1	34	0	3	31	**35**
	2	4	0	0	4	
		38	**0**	**3**	**35**	
906 - Tettegouche State Park	1	110	0	0	110	**135**
	2	6	0	0	6	
	3	1	0	0	1	
		117	**0**	**0**	**117**	
907 - Scenic State Park	1	33	0	10	23	**30**
	2	7	0	0	7	
		40	**0**	**10**	**30**	
908 - Hayes Lake State Park	1	32	0	0	32	**75**
	2	15	0	0	15	
		47	**0**	**0**	**47**	
909 - Lake Bemidji State Park	1	31	0	4	27	**30**
	2	2	0	0	2	
	3	1	0	0	1	
		34	**0**	**4**	**30**	
910 - Zippel Bay State Park	1	50	0	6	44	**55**
	2	11	0	0	11	
		61	**0**	**6**	**55**	
913 - Lake Carlos State Park	1	26	0	9	17	**17**
	2	2	0	0	2	
		28	**0**	**9**	**19**	
914 - William O'Brien State Park	1	143	0	143	0	**50**
	2	75	0	29	46	
	3	4	0	0	4	
		222	**0**	**172**	**50**	

Table 23. Continued.

Special Hunt	Preference Level	Applications		Unsuccessful	Winners	Permits Available
		Total	Rejected			
916 - Maplewood State Park	1	116	0	116	0	**100**
	2	117	0	117	0	
	3	100	0	39	61	
	4	37	0	0	37	
	9	2	0	0	2	
		372	**0**	**272**	**100**	
918 - Lake Alexander Woods SNA	1	30	0	21	9	**40**
	2	31	0	0	31	
		61	**0**	**21**	**40**	
919 - Glacial Lakes State Park	1	30	0	0	30	**30**
	2	1	0	0	1	
		31	**0**	**0**	**31**	
921 - Beaver Creek Valley State Park	1	76	0	76	0	**20**
	2	54	0	40	14	
	3	7	0	0	7	
		137	**0**	**116**	**21**	
924 - Whitewater State Game Refuge (A)	1	35	0	0	35	**50**
	2	5	0	0	5	
		40	**0**	**0**	**40**	
925 - Vermillion Highlands Research, Recreation, and WMA	1	45	0	45	0	**17**
	2	24	0	18	6	
	3	12	0	0	12	
		81	**0**	**63**	**18**	
925 - Vermillion Highlands Research, Recreation, and WMA	1	8	0	8	0	**3**
	2	4	0	0	4	
		12	**0**	**8**	**4**	
926 - Elm Creek Park Reserve	1	237	0	237	0	**137**
	2	152	0	52	100	
	3	38	0	0	38	
	9	1	0	0	1	
		428	**0**	**289**	**139**	
926 - Elm Creek Park Reserve	1	28	0	27	1	**13**
	2	8	0	0	8	
	3	4	0	0	4	
		40	**0**	**27**	**13**	
927 - Whitewater State Park (B)	1	82	0	78	4	**50**
	2	46	0	0	46	
	3	1	0	0	1	
	4	1	0	0	1	
		130	**0**	**78**	**52**	
929 - Frontenac State Park - B	1	64	0	32	32	**60**
	2	29	0	0	29	
		93	**0**	**32**	**61**	

Table 23. Continued.

Special Hunt	Preference Level	Applications		Unsuccessful	Winners	Permits Available
		Total	Rejected			
931 - City of Grand Rapids	1	43	0	0	43	**44**
	2	1	0	0	1	
		44	**0**	**0**	**44**	
933 - Lake Rebecca Park Reserve	1	142	0	135	7	**75**
	2	59	0	0	59	
	3	8	0	0	8	
	4	1	0	0	1	
		210	**0**	**135**	**75**	
933 - Lake Rebecca Park Reserve	1	7	0	7	0	**5**
	2	5	0	0	5	
	3	1	0	0	1	
		13	**0**	**7**	**6**	
934 - Whitewater State Game Refuge (B)	1	75	0	13	62	**75**
	2	14	0	0	14	
	3	1	0	0	1	
		90	**0**	**13**	**77**	
Total		**3,074**	**0**	**1,588**	**1,486**	**1,526**

Table 24. 2014 Special Permit Areas for Muzzleloader Hunts.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available
		Total	Rejected			
935 - Jay Cooke SP	1	102	0	85	17	**120**
	2	95	0	0	95	
	3	9	0	0	9	
		206	**0**	**85**	**121**	
936 - Crow Wing SP	1	38	0	38	0	**25**
	2	24	0	24	0	
	3	28	0	13	15	
	4	12	0	0	12	
		102	**0**	**75**	**27**	
937 - Soudan Underground Mine and Lake Vermilion SP	1	25	0	9	16	**20**
	2	4	0	0	4	
		29	**0**	**9**	**20**	
938 - City of Tower	1	7	0	0	7	**20**
		7	**0**	**0**	**7**	
939 - Lake Shetek SP	1	32	0	32	0	**15**
	2	25	0	18	7	
	3	9	0	0	9	
		66	**0**	**50**	**16**	
940 - Lake Maria SP	1	76	0	76	0	**25**
	2	45	0	45	0	
	3	26	0	2	24	
	9	1	0	0	1	
		148	**0**	**123**	**25**	
941 - Nerstrand Big Woods SP	1	109	0	109	0	**50**
	2	74	0	74	0	
	3	54	0	2	52	
		237	**0**	**185**	**52**	
943 - Rice Lake SP	1	35	0	32	3	**20**
	2	11	0	0	11	
	3	7	0	0	7	
		53	**0**	**32**	**21**	
944 - Vermilion Highlands WMA	1	27	0	27	0	**20**
	2	14	0	14	0	
	3	19	0	0	19	
	9	1	0	0	1	
		61	**0**	**41**	**20**	
946 - City of Grand Rapids	1	13	0	0	13	**16**
	2	1	0	0	1	
	3	2	0	0	2	
		16	**0**	**0**	**16**	
947 - Lake Bemidji State Park	1	30	0	6	24	**30**
	2	6	0	0	6	
		36	**0**	**6**	**30**	
TOTAL		**961**	**0**	**606**	**355**	**361**

GRAND TOTAL		**101,168**	**83**	**71,402**	**29,766**	**29,812**

2014 MINNESOTA ELK HARVEST REPORT

Leslie McInenly, Big Game Program Leader
Ruth Anne Franke, Area Wildlife Supervisor
Graham Parson, Asst. Area Wildlife Manager
Joel Huener, Wildlife Area Supervisor

INTRODUCTION

A limited number of licenses are offered to Minnesota residents to hunt elk. In 2014, 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, was closed in 2014 because the population was below goal (Figure 2). In 2014, there were two regular season hunts (September 13-21; September 27 – October 5). Hunts were held during the first season in both zones and during the remaining season only in zone 20. The hunts were structured so that they fell 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 and if successful, they must register their animal through the local DNR office. Kill locations are mapped and various data are collected, including age/sex as well as biological samples for disease testing and other monitoring projects.

RESULTS

A total of 9 licenses were available and 1167 individuals or parties applied for the opportunity to hunt elk (Table 1). A first random drawing was applied to landowners who applied for the one landowner license available in Zone 20, Season A. All remaining landowners were then placed into the general drawing for remaining elk licenses. For Zone 20, applicants were given the opportunity to select either the first or second season in which to hunt. Licenses were distributed through a second random drawing conducted per Zone and season. In 2014, a total of 6 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, 2014.

Zone	Either-Sex	Antlerless	Bull-only	Total	Total Applicants
20 – Kittson Central	0	0	7	7	890
Season A	*0*	*0*	*4*	*4*	*484*
Season B	*0*	*0*	*3*	*3*	*406*
30 – Kittson NE	0	0	2	2	277
Total	0	0	9	9	1167

Table 2. Distribution of the 2014 Minnesota elk harvest. License allocation totals represent the actual number sold, not the number authorized through rule.

Kittson County Central Hunt Zone (20)

Season	Bulls-only Licenses	Antlerless Licenses	Bulls taken	Antlerless taken	Total elk taken
September 13 - 21	4	0	3	0	3
Sept. 27 - Oct. 5	3	0	1	0	1
Total	7	0	4	0	4

Kittson County Northeast Hunt Zone (30)

Season	Bull-only Licenses	Bulls taken	Total elk taken
September 13 - 21	2	2	2
Total	2	2	2

Table 3. Grygla elk harvests, 1987-2014.

	Grygla			
	Bulls (or Either-Sex)		Antlerless	
Year	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
Total	**27**	**19**	**67**	**39**

Table 4. Kittson County elk harvests, 2008-2014.

Kittson County (Combined)

	Bulls (or Either-Sex)		Antlerless	
Year	**Permits**	**Harvest**	**Permits**	**Harvest**
2008	1	1	10	10
2009	12	9[a]	4	5
2010	1	1	3	3
2011	2	3[b]	8[c]	4
2012	5	4[d]	13	3
2013	8	6	15	6
2014	7	4	0	0
Total	**36**	**28**	**53**	**31**

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

[b] One bull was a male calf and was legally tagged as an antlerless animal.

[c] 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.

[d] One bull was a sub-legal spike and was confiscated.

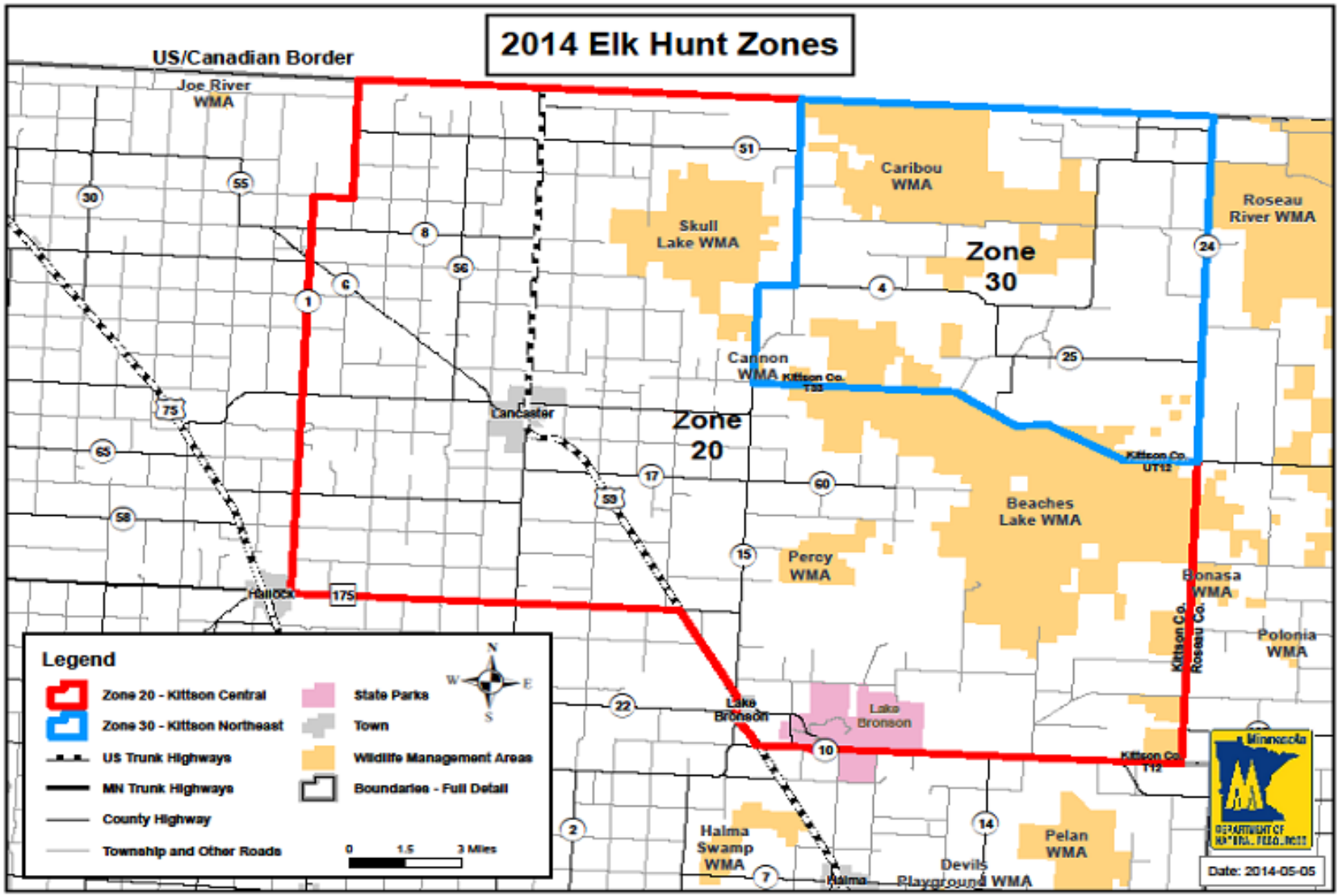


Figure 1. Kittson County Zones.

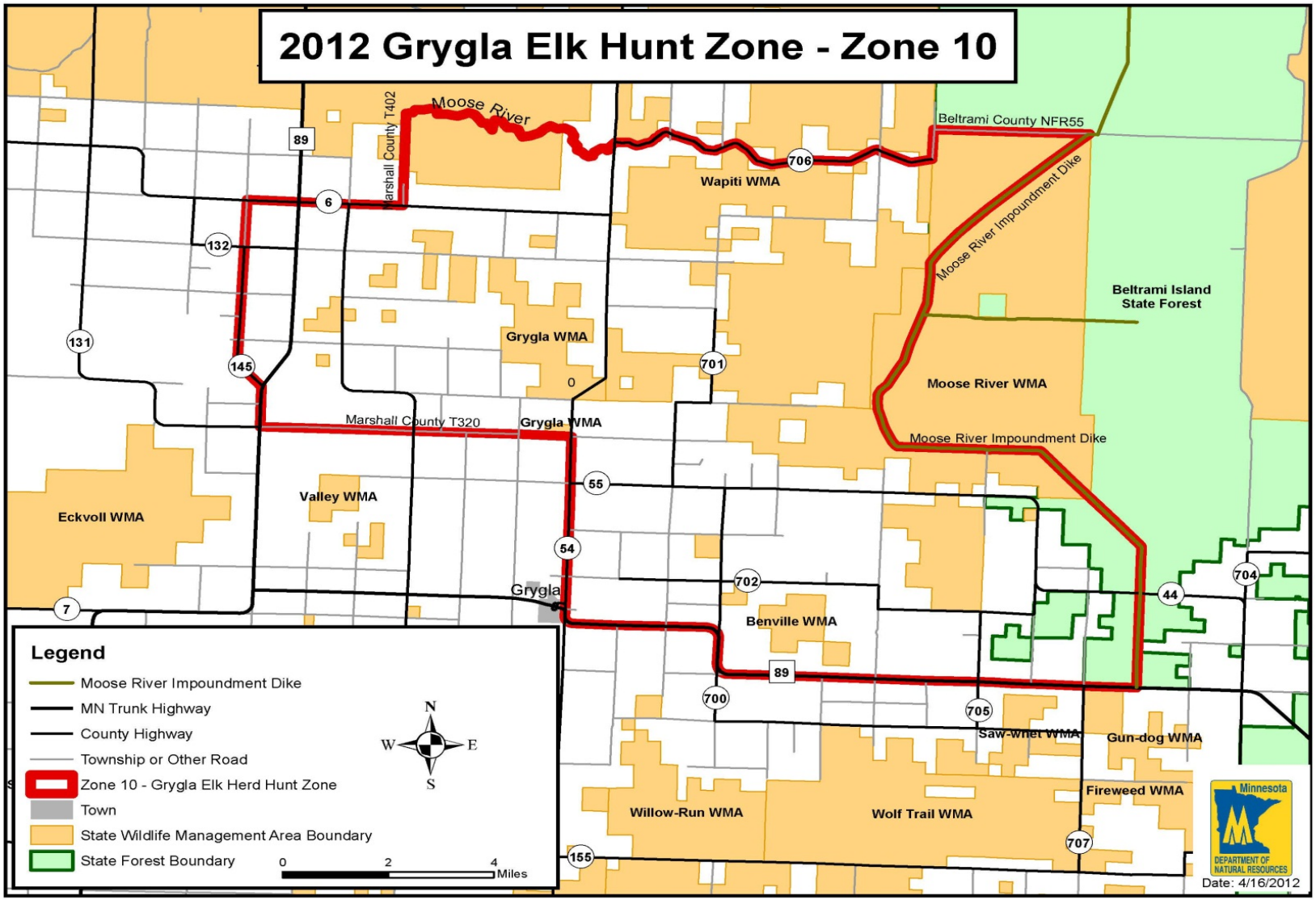


Figure 2. Grygla Elk Hunt Zone.

MINNESOTA SANDHILL CRANE HARVEST REPORT, 2014

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 reduce to 1 daily and 3 in possession. 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.

Kruse, K.L., J.A. Dubovsky, and T.R. Cooper. 2014. 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. 41pp.) http://www.fws.gov/migratorybirds/NewReportsPublications/PopulationStatus.html

Table 1. Sandhill Crane season dates and limits in Minnesota, 2010 – 2014.

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

Table 2. Sandhill crane permit sales, estimated number of active hunters and harvest for NW Minnesota, 2010-2014. (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

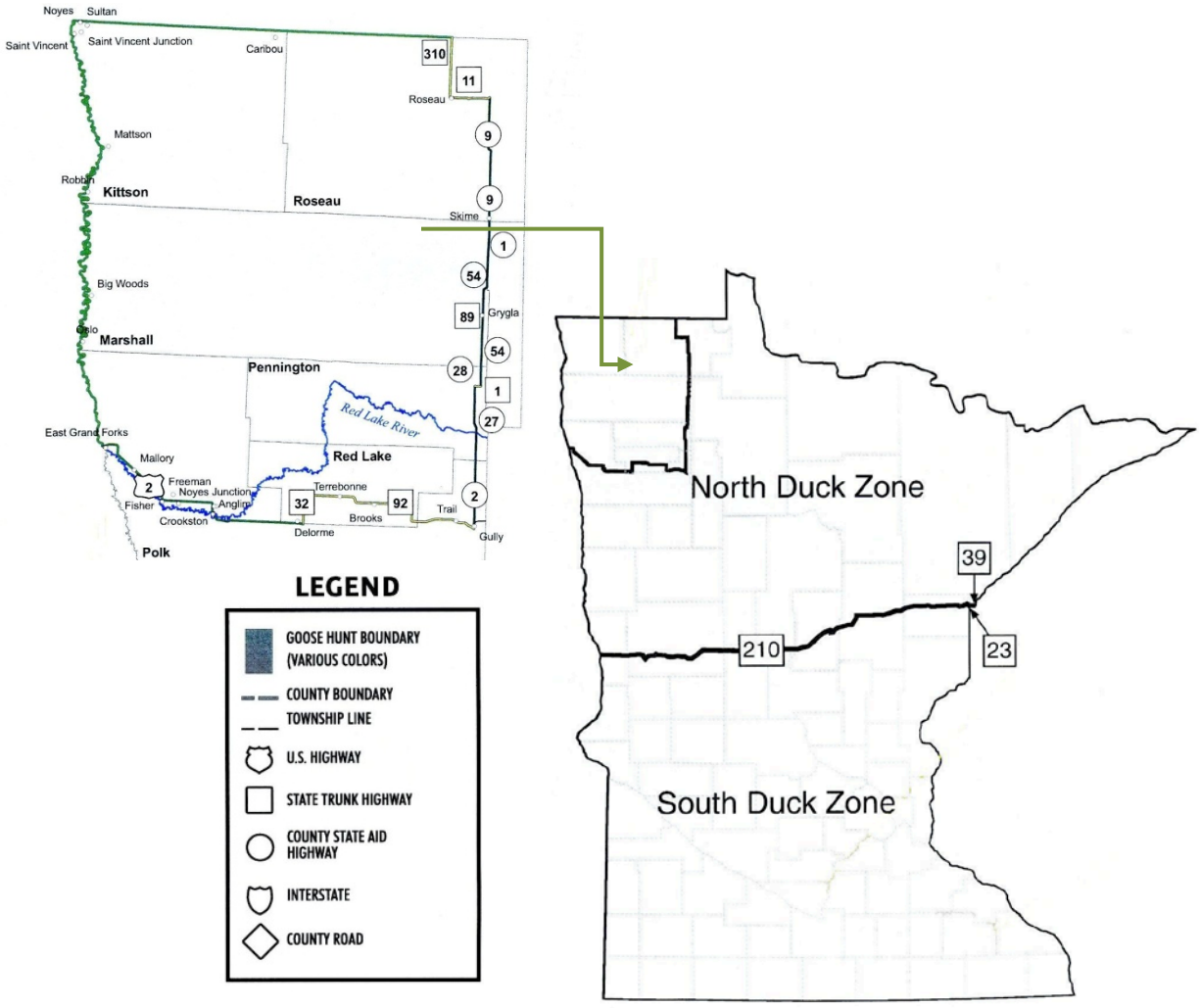


Figure 1. Sandhill crane hunting zone in Minnesota, 2010-2014.