HUNTING HARVEST STATISTICS

Division of Fish and Wildlife
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2008 SMALL GAME HUNTER MAIL SURVEY

Margaret Dexter, Wildlife Research Unit

INTRODUCTION

The Minnesota Department of Natural Resources, Division of Fish and Wildlife, Wildlife Research unit annually conducts a survey of small game hunters. Annual harvest estimates from survey data provide guidance for future hunting regulations and season structure.

METHODS

The Wildlife Research unit requested a random sample be drawn from the Electronic License System database in late February, 2009 to ensure that each license holder had an equal chance of being in the survey sample. The sample consisted of 5,996 (approximately 2%) Small Game License holders, drawn proportionately from each of the Small Game license types available.

Hunters that returned the survey questionnaire within three weeks were marked returned and eliminated from follow-up mailings. Follow-up mailings were sent to non-respondents at three week intervals. There were three follow-up mailings to non-respondents.

Completed and returned questionnaires were checked for completeness, consistency, and biological practicability. Cards were marked with numeric county codes corresponding to the hunter's written information. Data from each usable card was converted to an electronic database. Data were checked for errors, duplicate responses, and /or missing data. The following is a list of assumptions made in data coding:

1) If an individual checked the box indicating (s)he did not hunt, but harvest information was provided, it was assumed that the individual did hunt.
2) If a range was given for "number of days hunted" or "number of animals harvested", the median of the range, rounded to the nearest even integer was recorded.
3) If a hunter indicated spending time hunting for a species, but left "number bagged" blank, the # bagged was entered as missing data.
4) If a small game hunter indicated bagging a species, but left "number of days hunted" blank, then "number of days hunted" was recorded as missing data.
5) If more than one county was indicated for "county hunted in most", the first county listed was recorded. However, if the several counties listed were indicated to apply to all species hunted, then counties were recorded in sequential order in relation to species hunted.
6) If "county hunted in most" was left unanswered or not legible, the county was recorded as missing data.

Data from all usable cards were tabulated and statistically analyzed by the St. Paul staff, using SAS statistical analysis software programs.

RESULTS

Estimated number of hunters increased slightly for American coot, crow, woodcock, snowshoe hare and coyote (Table 3). Number of hunters declined for duck, Canada goose, pheasant, ruffed grouse, spruce grouse, gray partridge, squirrels, cottontails, jackrabbits, and raccoons (Table 3) even though the estimated take per hunter (Table 4) increased for all these species except pheasants and jackrabbits. Mean

harvest and hunter success rates increased slightly (Table 5) for geese, coots, doves, ruffed grouse, gray partridge, squirrels, cottontails, snowshoe hares, raccoons, gray fox, and badgers. Total estimated harvests (Table 6) increased for geese, coots, woodcock, mourning doves, ruffed grouse, fox squirrels, cottontails, snowshoe hares, raccoons, gray fox, and coyotes. Estimated harvests declined for ducks, snipe, rails, crows, pheasants, crows, spruce grouse, gray partridge, gray squirrel, jack rabbits, and red fox. Note that all estimates were based on a survey of approximately 2% of all small game license holders. Data in this report may change as a result of future verification and more comprehensive analysis.

Attached are detailed survey results. All estimates were statewide unless otherwise indicated.

ACKNOWLEDGMENTS

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

Table 1. Small game hunter response to mail surveys, 1979 - 80 through 2008 - 09.

Year	Number mailed	Number not delivered	Delivered questionnaires completed and returned	
			Number	Percent
1979 - 80	5,696	443	4,504	85.7
1980 - 81	6,434	385	4,963	82.0
1981 - 82	6,656	399	5,419	86.6
1982 - 83	5,963	266	4,792	84.1
1983 - 84	4,551	269	3,325	77.7
1984 - 85	4,096	127	3,280	82.6
1985 - 86	3,370	157	2,574	80.1
1986 - 87	4,668	208	3,623	81.2
1987 - 88	5,513	248	4,191	79.6
1988 - 89	15,388	857	11,431	78.7
1989 - 90[a]	10,893	735	7,790	76.7
1990 - 91[a]	5,000	394	3,467	75.3
1991 - 92[a]	5,050	387	3,541	75.9
1992 - 93[a]	5,000	288	3,625	76.9
1993 - 94[a]	5,011	282	3,320	70.2
1994 - 95[a]	5,000	387	3,353	72.7
1995 - 96[a]	5,000	321	3,293	70.4
1996 - 97[a]	5,000	170	3,334	69.0
1997 - 98[a]	5,000	198	3,234	67.3
1998 - 99[a]	5,000	200	3,153	65.7
1999 - 00[a]	5,001	180	3,349	69.5
2000 - 01[a]	5,000	184	3,001	62.3
2001 - 02 [a]	6,000	225	3,667	64.0
2002 - 03 [a]	6,000	363	3,862	68.5
2003 - 04[a]	6,400	381	3,972	66.0
2004 - 05[a]	6,000	356	3,823	68.0
2005 - 06 [a]	6,280	142	3,946	64.3
2006 - 07 [a]	6,000	151	3,810	65.1
2007 - 08 [a]	6,000	113	3,736	65.5
2008 – 09 [a]	5,996	183	3,551	61.1

[a] Includes resident and non-resident licenses, and excludes duplicate licenses.

Table 2. Use of small game hunter licenses, 1998-99 through 2008-2009.

		Returns from mail survey	Projections from license sales
1998-99	Hunted	2,612 (82.8%)	265,215
	Did not hunt	541 (17.2%)	55,093
		3,153 (100.0%)	320,308
1999-00	Hunted	2,689 (80.7%)	264,237
	Did not hunt	644 (19.3%)	63,194
		3,333 (100.0%)	327,431
2000-01	Hunted	2,254 (78.7%)	252,518
	Did not hunt	610 (21.3%)	68,344
		2,864 (100.0%)	320,862
2001-02	Hunted	2,849 (77.7%)	231,589
	Did not hunt	610 (21.3%)	66,466
		3,665 (100.0%)	298,055
2002-03	Hunted	2,962 (76.7%)	221,455
	Did not hunt	900 (23.3%)	67,274
		3,862 (100.0%)	288,729
2003-04	Hunted	3,085 (78.2%)	232,206
	Did not hunt	862 (21.8%)	64,733
		3,947 (100.0%)	296,939
2004-05	Hunted	2,934 (77.6%)	223,275
	Did not hunt	847 (22.4%)	64,450
		3,781 (100.0%)	287,725
2005-06	Hunted	3,035 (77.1%)	216,000
	Did not hunt	900 (22.9%)	64,156
		3,935 (100.0%)	280,156
2006-07	Hunted	2,994 (79.0%)	233,759
	Did not hunt	795 (21.0%)	62,139
		3,789 (100.0%)	295,898
2007-08	Hunted	2,894 (77.9%)	232,505
	Did not hunt	822 (22.1%)	65,961
		3,716 (100.0%)	298,467
2008-09	Hunted	2,678 (75.4%)	218,753
	Did not hunt	873 (24.6%)	71,311
		3,551 (100.0%)	290,064

Includes resident and non-resident information. Excludes duplicates.

2008 Small Game Hunter Report

1. Did you hunt small game, listed below, in Minnesota this year (March 2008 - Feb 2009)? ☐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			

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 2008-2009 small game hunting season **(March 2008-February 2009)**. We need information to estimate the season's harvest and to help set future small game seasons. Answer only for your Minnesota 2008 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

Dave Schad, Director
Division of Fish and Wildlife
Department of Natural Resources

Minnesota Department of Natural Resources
Division of Fish and Wildlife
Wildlife Research Unit
500 Lafayette Road, Box 20
St. Paul, MN 55155

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Figure 1. Sample of Small Game Hunter survey card

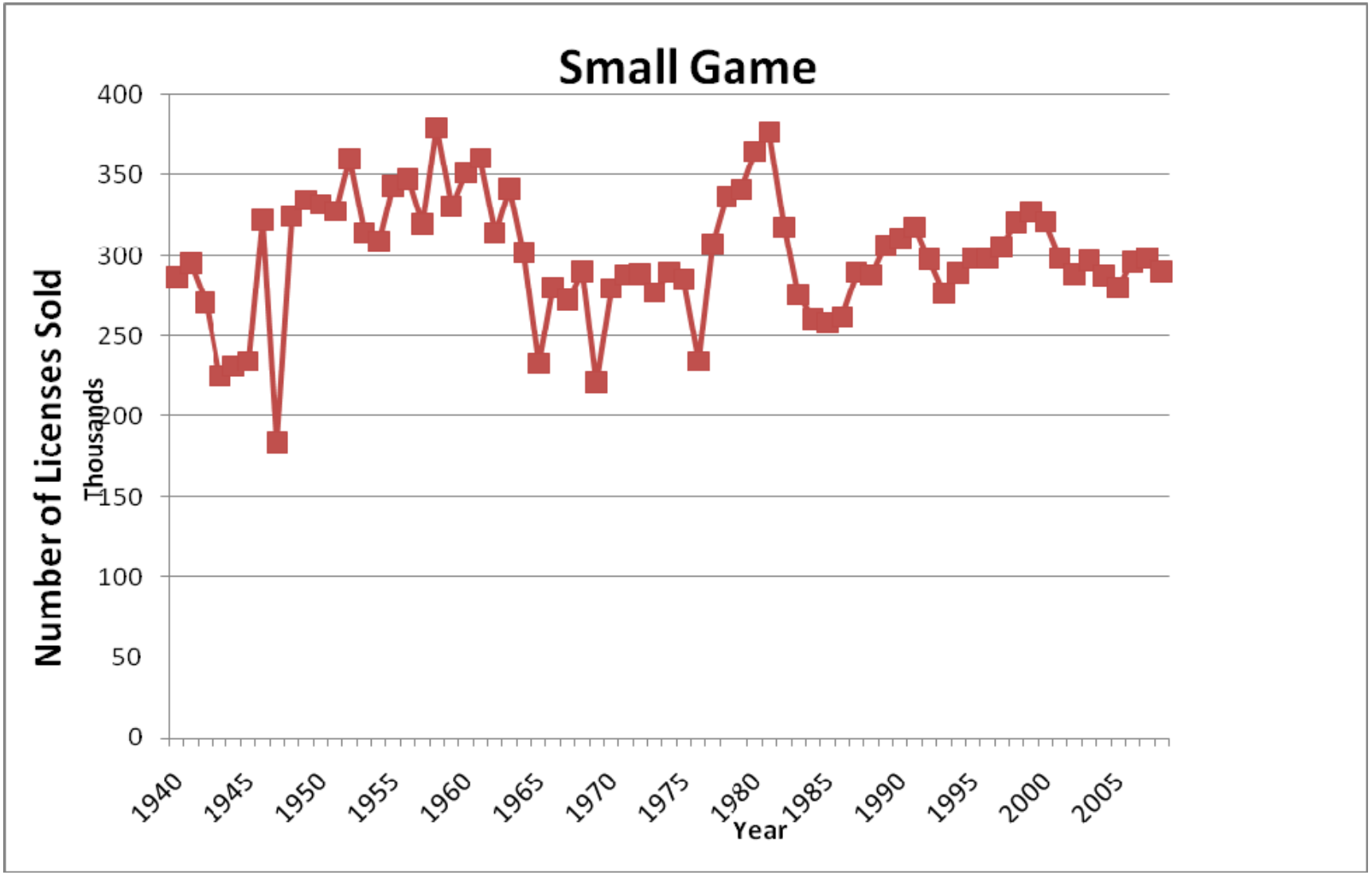

Figure 2. Number of Minnesota small game licenses sold, 1940–2008

Table 3. Estimated number of hunters (thousands) for various species, 1994-95 through 2008-09.

	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Ducks	118	119	114	122	117	122	109	109	112	101	105	92	87	87	81
Canada goose	70	73	75	79	77	80	77	76	79	75	75	69	66	63	59
Other geese	7	10	6	5	6	5	7	7	6	7	5	5	5	4	4
American coot	7	9	6	7	5	6	4	4	4	4	5	4	5	3	4
Common snipe	2	2	2	2	2	2	2	1	2	1	2	1	2	2	2
Rails / gallinules	1	1	<1	<1	<1	<1	<1	<1	1	<1	<1	0	1	<1	<1
Crow *	12	15	13	11	11	14	14	11	13	12	12	12	11	9	10
American woodcock	21	21	18	17	19	19	16	11	12	13	12	11	14	11	12
Mourning dove γ											16	11	13	13	12
Ring-necked pheasant	92	96	88	80	88	93	100	85	91	105	104	111	119	118	107
Ruffed grouse	107	116	118	127	142	139	121	101	91	94	79	76	92	91	87
Spruce grouse	12	14	11	11	11	11	9	9	7	9	7	7	10	11	8
Sharp-tailed grouse	7	8	7	8	8	8	10	8	6	7	6	5	7	7	7
Gray partridge	14	12	11	8	10	10	8	7	7	8	5	6	6	7	4
Gray squirrel	35	35	33	27	30	31	27	26	25	29	23	25	25	26	22
Fox squirrel	24	23	20	16	18	20	17	15	15	20	15	15	16	15	13
Eastern cottontail	21	23	19	14	19	18	20	17	16	21	19	20	20	20	18
White-tailed jackrabbit	4	5	4	3	3	3	2	3	2	3	3	2	3	3	2
Snowshoe hare	6	5	4	4	7	7	5	6	6	6	4	3	6	4	5
Raccoon (Sept - Feb)	10	10	10	9	9	6	6	6	6	6	6	5	9	10	7
Raccoon‡ (March -Aug)	3	5	4	3	4	3	5	4	4	5	3	3			
Red fox (Sept -Feb)	15	15	11	9	9	8	10	6	7	7	6	6	6	6	6
Red fox‡ (March -Aug)	3	4	3	2	3	2	2	3	2	2	1	1			
Gray fox	2	3	n.a.	2	2	2	1	1	1	2	2	1	2	2	2
Coyote	11	15	13	10	11	11	16	11	12	15	16	19	17	16	19
Badger	1	<1	1	1	<1	<1	1	<1	1	<1	1	1	1	<1	<1

*Crow season added in 1989. ‡ Raccoon and red fox season continuous May 1994 thru March 15, 2006. γ Mourning dove season added 2004.

Table 4. Estimated take per hunter, for respondents reporting that they hunted a particular species, 1994-95 through 2008-09.

	Estimated take per hunter														
	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Ducks	8.1	9.7	9.6	9.9	9.5	8.4	8.9	9.1	9.2	9.0	6.9	7.3	8.4	8.1	8.1
Canada geese	2.4	2.5	3.2	2.9	2.8	3.5	3.9	4.0	3.3	3.9	3.8	4.1	4.9	3.9	4.9
Other geese	0.8	0.9	1.4	2.3	1.0	1.2	2.2	1.2	1.9	1.7	1.5	1.9	1.5	2.1	3.2
American coot	3.2	3.1	3.8	4.1	4.7	4.0	2.7	4.5	4.6	2.8	4.0	3.9	5.6	4.6	5.7
Common snipe	1.3	1.6	2.8	2.6	2.9	1.6	1.3	1.3	1.5	1.8	1.1	4.4	1.9	2.0	1.2
Rails/gallinules	1.3	2.3	1.0	0.7	0.5	0.2	3.7	0.6	2.6	0.5	0.3	0	2.4	5.3	0.4
Crow *	9.4	8.5	7.3	6.6	9.3	4.4	6.9	7.7	5.6	6.7	5.8	7.8	6.4	6.4	5.2
American woodcock	3.5	3.9	3.2	3.4	3.3	2.8	2.8	2.3	2.4	2.4	3.5	2.5	3.2	2.6	2.4
Mourning dove [γ]											6.2	7	6.7	7.7	11.4
Ring-necked pheasant	3.5	4.2	3.9	3.1	3.5	3.7	3.7	3.2	3.9	4.9	4.0	5.3	4.9	5.5	4.9
Ruffed grouse	3.5	3.9	4.5	5.2	6.7	4.9	5.1	3.3	2.8	3.8	2.5	2.9	4.5	3.2	3.7
Spruce grouse	1.9	1.8	1.4	2.3	2.4	1.8	2.5	1.1	1.6	2.1	1.3	1.4	2.7	1.7	2.0
Sharp-tailed grouse	1.2	1.3	1.2	1.7	2.6	1.6	1.6	1.2	1.3	1.7	1.7	1.3	1.8	2.0	2.1
Gray partridge	1.8	2.2	2.2	1.9	2.5	1.9	2.1	1.5	1.7	2.8	2.4	2.6	1.9	1.6	2.2
Gray squirrel	5.4	4.9	4.9	4.9	5.0	4.3	5.3	5.6	5.2	6.0	5.7	5.0	5.5	5.2	5.4
Fox squirrel	4.2	4.6	3.8	4.4	3.3	3.5	3.9	4.1	4.5	4.2	4.1	4.1	4.2	3.2	3.9
Eastern cottontail	3.6	4.3	3.4	4.5	4.6	3.2	3.9	3.6	3.3	4.3	4.6	4.5	3.9	4.0	4.5
White-tailed jackrabbit	1.5	1.5	2.6	1.6	2.5	1.9	2.8	2.6	1.6	2.4	2.3	2.7	1.6	3.3	2.6
Snowshoe hare	3.2	2.0	2.3	2.0	3.5	3.1	5.2	3.3	1.9	2.2	1.8	3.1	3.0	1.4	2.5
Raccoon (Sept - Feb)	15.9	14.7	21.3	13.8	16.6	10.9	7.6	9.4	10.0	8.5	9.0	6.0	7.2	4.9	9.7
Raccoon [‡] (March -Aug)	8.0	11.3	24.4	5.1	5.8	6.4	7.8	4.4	5.4	4.7	6.1	2.7			
Red fox (Sept -Feb)	2.8	3.1	3.0	1.4	1.3	1.2	1.9	1.2	1.5	1.8	1.1	1.7	1.3	1.1	0.8
Red fox [‡] (March -Aug)	1.4	1.5	1.3	0.8	1.2	0.6	0.9	1.5	1.7	0.6	0.6	0.9			
Gray fox	0.6	1.0	n.a.	1.3	0.9	0.9	0.7	0.4	0.4	0.4	1.1	0.9	1.8	0.3	1.3
Coyote	1.1	1.8	2.3	1.6	1.3	1.3	1.8	1.1	1.2	1.3	1.1	2.1	1.2	2.1	2.4
Badger	1.4	1.4	2.1	0.9	4.3	1.1	0.8	0.6	1.7	0.7	1.0	1.2	1.3	0.3	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.

Table 5. Mean harvest for successful hunters and hunter success rates (%), 1998-99 through 2008-09.

	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Ducks	10.8 (87.8)	9.7 (86.2)	10.2 (84.9)	10.6 (85.6)	10.6 (86.7)	10.4 (86.7)	8.6 (81.1)	8.9 (82.5)	9.9 (84.4)	9.5 (85.4)	9.8 (82.8)
Canada geese	4.0 (70.9	4.7 (74.7)	5.3 (74.2)	5.3 (76.3)	4.6 (72.0)	5.1 (76.0)	5.2 (72.8)	5.5 (73.7)	6.3 (78.4)	5.5 (71.4)	6.4 (76.6)
Other geese	2.3 (44.6)	2.8 (38.2)	4.0 (54.1)	2.8 (43.8)	4.4 (42.5)	2.7 (65.3)	3.3 (45.7)	4.5 (43.1)	2.7 (55.2)	4.2 (50.0)	6.3 (50.0)
American coot	6.0 (78.8)	5.5 (73.0)	4.2 (64.7)	7.5 (60.4)	6.4 (71.2)	3.7 (76.9)	5.5 (73.1)	5.1 (75.9)	7.2 (77.6)	6.3 (74.4)	6.9 (82.4)
Common snipe	3.5 (83.3)	2.3 (66.7)	1.5 (85.0)	2.4 (52.9)	2.6 (60.0)	2.3 (78.9)	1.6 (68.0)	4.7 (94.1)	2.6 (75.0)	2.9 (70.8)	1.7 (72.7)
Rails / gallinules	1.0 (50.0)	1.0 (20.0)	3.7 (100.0)	1.5 (40.0)	3.8 (66.7)	1.0 (50.0)	1.0 (33.3)	0.0 (0.0) *	4.3 (57.1)	6.4 (83.3)	1.0 (40.0)
Crow	10.6 (87.6)	5.2 (85.5)	8.2 (84.0)	8.6 (89.4)	6.3 (89.0)	7.9 (85.3)	6.4 (90.8)	9.1 (85.6)	7.2 (89.1)	7.3 (87.7)	5.9 (87.8)
American woodcock	3.7 (87.3)	3.8 (74.6)	3.6 (80.3)	3.4 (68.3)	3.6 (65.6)	3.3 (71.8)	5.3 (64.6)	3.6 (70.3)	3.9 (82.7)	3.7 (68.9)	3.3 (73.8)
Mourning dove [γ]							7.9 (78.9)	8.7 (80.1)	8.2 (81.2)	9.8 (78.7)	13.2 (86.6)
Ring-necked pheasant	5.0 (70.9)	5.2 (69.8)	5.2 (71.9)	4.7 (66.4)	5.5 (71.7)	6.3 (77.2)	5.7 (70.0)	7.0 (75.9)	6.6 (75.3)	7.1 (78.1)	6.4 (76.7)
Ruffed grouse	8.0 (82.9)	6.3 (78.9)	6.4 (80.7)	4.8 (68.5)	4.3 (63.8)	5.1 (73.5)	3.9 (63.3)	4.4 (67.5)	5.9 (77.4)	4.7 (69.4)	5.0 (73.7)
Spruce grouse	3.4 (68.8)	2.9 (62.7)	4.1 (60.7)	2.3 (47.2)	3.4 (48.0)	3.3 (62.9)	2.3 (54.2)	2.4 (60.6)	3.8 (70.6)	3.1 (53.8)	3.0 (67.6)
Sharp-tailed grouse	4.4 (60.2)	3.4 (48.2)	3.1 (52.9)	2.4 (49.5)	3.5 (38.8)	3.3 (52.2)	3.1 (54.3)	2.4 (55.1)	3.3 (56.0)	4.4 (45.9)	3.2 (64.2)
Gray partridge	3.8 (64.2)	3.1 (62.4)	3.7 (58.6)	2.5 (58.3)	2.8 (59.1)	4.1 (68.9)	3.6 (65.7)	5.0 (52.3)	2.8 (68.8)	3.0 (55.4)	3.4 (64.8)
Gray squirrel	5.8 (86.9)	5.1 (84.7)	6.7 (84.9)	6.6 (84.4)	6.1 (86.2)	7.0 (85.3)	6.9 (82.5)	5.8 (86.1)	6.4 (87.1)	5.9 (87.6)	6.2 (87.6)
Fox squirrel	3.9 (82.7)	4.5 (79.0)	4.8 (80.5)	5.3 (77.7)	5.9 (76.4)	5.1 (82.6)	4.8 (85.1)	5.0 (82.5)	5.0 (84.5)	3.9 (82.6)	4.6 (83.3)
Eastern cottontail	5.6 (83.1)	4.0 (80.0)	4.8 (82.5)	4.7 (77.7)	4.7 (70.5)	5.2 (84.2)	5.8 (79.6)	5.4 (83.4)	4.6 (84.8)	4.8 (84.0)	5.3 (85.2)
White-tailed jackrabbit	3.2 (78.6)	2.6 (72.7)	4.1 (68.2)	5.2 (50.0)	2.7 (60.6)	3.3 (72.5)	3.0 (75.0)	3.2 (82.8)	2.5 (63.6)	4.5 (72.2)	3.8 (70.0)
Snowshoe hare	4.7 (75.4)	3.9 (79.4)	6.3 (82.6)	4.4 (75.0)	2.9 (67.1)	3.5 (60.8)	3.0 (61.4)	4.6 (68.1)	3.8 (80.3)	2.2 (62.3)	3.5 (71.4)
Raccoon (Sept - Feb)	18.1 (91.8)	11.4 (95.1)	8.0 (94.8)	10.0 (93.6)	11.6 (86.3)	9.6 (88.5)	9.9 (91.6)	6.5 (92.6)	7.7 (93.8)	5.4 (89.9)	10.6 (91.2)
Raccoon[‡] (March -Aug)	6.2 (92.5)	6.6 (96.2)	8.2 (95.1)	4.9 (90.2)	5.9 (91.7)	5.6 (85.2)	6.7 (90.9)	3.1 (86.8)			
Red fox (Sept -Feb)	2.6 (52.7)	2.4 (51.9)	3.4 (56.7)	2.7 (44.9)	3.1 (49.0)	3.5 (51.0)	2.8 (38.2)	3.7 (46.4)	2.1 (60.0)	2.3 (45.8)	1.5 (49.3)
Red fox[‡] (March -Aug)	1.8 (65.4)	1.3 (47.4)	1.9 (47.1)	2.8 (54.5)	3.6 (46.7)	1.1 (51.7)	1.4 (44.4)	1.6 (55.6)			
Gray fox	1.6 (53.3)	2.3 (40.0)	2.0 (33.3)	1.4 (26.3)	1.8 (23.5)	1.3 (30.0)	2.6 (40.9)	1.9 (50.0)	2.7 (65.4)	1.0 (29.2)	3.3 (39.1)
Coyote	2.9 (45.0)	2.5 (49.1)	3.4 (53.9)	2.4 (47.3)	3.2 (36.6)	2.7 (48.8)	2.5 (45.3)	4.11 (50.4)	2.4 (50.5)	4.4 (49.0)	4.4 (53.8)
Badger	6.5 (66.7)	1.3 (87.5)	1.0 (83.3)	1.0 (60.0)	2.8 (60.0)	1.0 (66.7)	1.2 (85.7)	1.2 (100.0)	1.6 (81.8)	1.0 (33.3)	1.2 (83.3)

[‡] 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.

Table 6. Statewide (resident and non-resident) small game hunting license sales and estimated hunter harvest, 1996-97 through 2008-09.

	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Small game license sales[a]	298,337	305,186	320,308	327,431	320,862	298,055	288,729	296,939	287,725	280,156	295,898	298,467	290,064
Federal duck stamp sales	132,738	138,331	134,098	134,138	135,884	140,980[e]	144,851[e]						
State duck stamp sales	122,634	126,009	126,488	128,245	121,709	118,590	119,677	118,757	114,003	102,143	101,792	100,134	95,675
Pheasant stamp sales	95,866	85,093	99,664	106,945	114,440	97,665	102,097	121,456	114,653	117,301	129,546	129,315	123,270
Estimated harvest[b] (thousands)													
Ducks[c]	1,098	1,206	1,119	1,021	969	990	1,024	914	727	677	731	708	658
Canada geese[c]	241	230	218	285	301	308	257	290	284	282	324	244	288
Other geese[c]	8	11	6	6	15	8	11	13	8	9	7	8	14
American coot [c]	23	29	25	25	10	17	20	11	20	16	25	16	24
Common snipe	5	4	5	3	3	2	3	3	2	5	4	4	2
Rails / gallinules	<1	<1	<1	<1	1	<1	2	<1	<1	0	1	3	<1
Crow	96	74	106	60	96	88	72	82	72	93	69	54	52
American woodcock	58	58	63	54	45	27	28	30	41	28	43	28	29
Mourning dove[f]									97	78	86	101	133
Ring-necked pheasant	341	248	309	339	375	267	358	511	420	586	588	655	522
Ruffed grouse	533	654	946	685	619	332	249	351	194	224	417	294	318
Spruce grouse	16	25	27	19	23	9	12	18	9	10	27	18	17
Sharp-tailed grouse	8	13	22	14	16	10	9	12	10	6	12	14	14
Gray partridge	24	16	24	19	17	10	11	22	13	16	11	11	10
Gray squirrel	158	131	149	132	140	146	134	175	133	122	141	133	122
Fox squirrel	75	68	57	71	65	63	67	85	62	62	66	48	51
Eastern cottontail	65	65	89	59	78	63	52	93	87	90	78	79	80
White-tailed jack rabbit	10	4	7	6	7	8	4	7	7	5	4	9	6
Snowshoe hare	10	8	25	21	27	22	11	12	8	10	17	6	11
Raccoon (Sept - Feb)	207	124	143	65	49	59	60	50	57	29	63	47	72
Raccoon[‡] (March -Aug)	99	17	2	16	36	18	19	22	20	7			
Red fox (Sept -Feb)	33	13	13	10	19	7	11	13	6	10	8	6	4
Red fox[‡] (March -Aug)	4	2	3	1	2	4	4	1	1	1			
Gray fox	n.a.	3	1	2	1	1	1	1	2	1	4	1	2
Coyote	30	16	14	13	29	12	14	20	18	39	21	34	46
Badger	1	1	1	1	1	<1	1	<1	<1	1	1	<1	<1

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] Duplicate licenses not included.
[b] Estimates based upon response of hunters to questionnaires.
[c] U.S. Fish and Wildlife Service HIP harvest estimates for 2003 are:
Ducks . . . . . 884,500 Canada geese . . . . . 282,495 Other geese 0
[d] Raccoon and red fox seasons were year round from May,1994 through March 16, 2006.
[e] Federal duck stamps sold have not been audited for non-hunting stamp purchasers. [f.] Mourning dove season added 2004.

Table 7. Mail survey results of nonresident small game hunters, 1996-97 through 2008-09.

	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Nonresident licenses issued[a]	5,488	6,361	7,155	7,572	7001	5,843	5,852	6,291	6,385	5,897	7,356	7,858	7,114
Questionnaires:													
Number mailed	51	269	200	199	98	124	130	123	182	210	185	185	226
Number not delivered	4	18	17	16	6	9	9	17	13	10	11	11	15
Number (percent) returned	32 (68)	183 (73)	117 (64)	136 (74)	56 (61)	77 (67)	75 (66)	68 (64)	114 (67)	134 (67)	115 (62)	101 (58)	89 (42)
Estimated nonresidents and (percent) of all nonresidents hunting:													
Ducks	1,209 (19)	2,331 (37)	2,874 (40)	2,505 (33)	2,375 (34)	2,727 (47)	2,263 (39)	2,498 (40)	2,394 (37)	2,040 (35)	2,344 (32)	2,256 (29)	2,293 (32)
Canada goose	686 (13)	1,113 (17)	1,468 (20)	1,225 (16)	1,500 (21)	1,169 (20)	1,092 (19)	1,388 (24)	1,368 (21)	1,818 (31)	2,083 (28)	934 (12)	1,587(22)
Ruffed grouse	2,744 (50)	2,157 (34)	3,608 (50)	3,508 (46)	3,000 (43)	1,169 (20)	2,029 (35)	2,313 (40)	1,824 (29)	1,774 (30)	1,953 (26)	1,867 (24)	1,940 (27)
Ring-necked pheasant	515 (9)	731 (11)	612 (8)	947 (13)	625 (9)	935 (16)	1,404 (24)	2,128 (36)	2,679 (42)	2,572 (44)	3,776 (51)	2,645 (34)	3,116 (44)
Raccoon	172 (3)	35 (1)	0 (0)[c]	56 (1)	250 (4)	0 (0)	0 (0)	0 (0)	0 (0)	44 (0.7)	0 (0)	78 (1.0)	0 (0)
Estimated nonresident take:													
Ducks	6,346	15,967	26,663	26,391	18,253	42,225	17,556	17,855	19,269	12,149	12,173	22,718	15,463
Canada goose	1,544	4,905	4,587	6,960	5,001	13,400	5,852	5,736	6,214	3,946	3,580	3,501	5,762
Ruffed grouse	23,153	16,072	27,886	23,384	24,003	6,622	9,207	9,437	7,924	6,429	11,522	7,236	6,938
Ring-necked pheasant	1,887	2,505	1,712	4,844	4,001	3,740	7,647	9,344	11,174	13,656	16,079	17,661	10,642
Raccoon [b]	8,061	70	0	724	3,375	0	0	0	0	887	0	3,268	0

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

[c] In 2001, 2002, 2003, 2004, 2006, and 2008 no non-residents reported hunting/harvesting raccoons.

Raccoon take per hunter			
Year	Resident	Non-resident	Number of Non-resident raccoon licenses
2000	8	13	51
2001 [b]	10	0	48
2002 [b]	11	0	46
2003 [b]	10	0	44
2004 [b]	8	0	46
2005	6	20	44
2006 [b]	8	0	53
2007	5	42	45
2008 [b]	10	0	40

The following information has been excerpted from: U.S. Fish and Wildlife Service. Migratory bird hunting activity and harvest during the 2007 and 2008 hunting seasons: preliminary estimates. U.S. Department of the Interior, Washington, D.C. U.S.A. The entire report is available on-line at http://www.fws.gov/migratorybirds/reports/reports.html

Table 1. Species composition of the Minnesota waterfowl harvest, 2006 and 2007. (from: Raftovich, R.V., K.A. Wilkins, K.D. Richkus, S.S. Williams, and H.L. Spriggs. 2009. Migratory Bird Hunting activity and harvest during the 2007 and 2008 hunting seasons: Preliminary estimates. U.S. Fish and Wildlife Service, Laurel, Maryland. USA July 2009. 63 pp).**Note:** All hunter activity and harvest estimates are preliminary, pending final counts of the number of migratory bird hunters in each state and complete audits of all survey response data.

	Minnesota Harvest					Mississippi Flyway Harvest		
Species	2007	% of Harvest	2008	% of Harvest	Percent change in Harvest 07-08	2007	2008	Percent change Harvest 07-08
Mallard	178,969	31.74	188,974	32.36	+ 5	2,514,119	2,282,091	- 10
Domestic mallard	270	0.05	0	0.00	0	3,828	3,311	- 16
American black duck	540	0.10	1,120	0.19	+ 52	38,692	29,641	- 31
Black x mallard	270	0.05	560	0.10	+ 52	5,246	5,850	+ 10
Gadwall	24,834	4.40	19,877	3.40	- 25	842,192	906,308	+ 7
American wigeon	12,417	2.20	13,718	2.35	+ 9	148,774	160,218	+ 7
Green-winged teal	49,399	8.76	61,592	10.55	+ 20	792,182	852,849	+ 7
Blue-winged /cinnamon teal	60,196	10.67	60,752	10.40	+ 1	626,720	517,937	- 21
Northern shoveler	10,798	1.91	10,079	1.73	- 7	289,071	252,481	- 14
Northern pintail	13,227	2.35	7,279	1.25	- 82	162,416	158,218	- 3
Wood duck	80,981	14.36	78,949	13.52	! 3	621,615	662,706	+ 6
Redhead	18,896	3.35	10,079	1.73	- 87	63,027	43,108	- 46
Canvasback	8,098	1.44	280	0.05	- 2792	56,432	1,234	- 4473
Greater scaup	1,890	0.34	840	0.14	- 125	21,964	24,649	+ 11
Lesser scaup	12,147	2.15	10,639	1.82	- 14	84,791	97,340	+ 13
Ring-necked duck	68,024	12.06	80,629	13.81	+ 16	241,239	251,356	+ 4
Goldeneye	9,448	1.68	11,198	1.92	+ 16	26,478	29,540	+ 10
Bufflehead	9,718	1.72	17,358	2.97	+ 44	60,383	101,118	+ 40
Ruddy duck	1,350	0.24	280	0.05	- 382	10,891	10,970	+ 1
Scoters	0	0	0	0.00	0	4,438	1,585	- 180
Hooded merganser	1,890	0.34	8,679	1.49	+ 78	38,686	38,201	- 1
Other mergansers	540	0.10	1,120	0.19	+ 52	4,670	8,139	+ 43
Total Duck Harvest (retrieved kill)	563,900 ∀ 11%		584,000 ∀ 14%		+ 3	6,719,700 ∀ 6%	6,522,900 ∀ 6%	- 3

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

Table 2. Top 10 states in number of **adult duck hunters**, 2008, and number of hunter-days and retrieved duck kill, in each (from: Raftovich, R.V., K.A. Wilkins, K.D. Richkus, S.S. Williams, and H.L. Spriggs. 2009. Migratory Bird Hunting activity and harvest during the 2007 and 2008 hunting seasons: Preliminary estimates. U.S. Fish and Wildlife Service, Laurel, Maryland. USA July 2009. 63 pp). **Note:** All hunter activity and harvest estimates are preliminary, pending final counts of the number of migratory bird hunters in each state and complete audits of all survey response data.

State	Number of active duck hunters	Duck hunter days afield	Total duck harvest	Seasonal duck harvest per hunter
Texas	72,700 ± 20%	331,600 ± 19%	760,600± 18%	10.5 ± 27%
Minnesota	71,700 ± 9%	409,900 ± 11%	584,000 ± 14%	8.1 ± 17%
Louisiana	68,800 ± 9%	608,300 ± 13%	1,750,500 ± 15%	25.4 ±17%
Arkansas	58,700 ± 9%	520,100 ± 12%	1,258,300 ± 11%	21.4 ± 14%
Wisconsin	58,500 ± 10%	360,200 ± 12%	382,500 ± 11%	6.5 ± 15%
California	58,100 ± 10%	591,300 ± 16%	1,634,300 ± 19%	28.1 ± 22%
Michigan	38,500 ± 10%	237,600 ± 12%	326,700 ± 15%	8.5 ± 18%
Illinois	33,400 ± 10%	288,500 ± 12%	404,600 ± 16%	12.1 ± 19%
Missouri	29,000 ± 12%	228,100 ± 20%	477,700 ± 35%	16.5 ± 37%
Pennsylvania	26,300 ± 16%	130,000 ± 18%	176,600 ± 37%	6.7 ± 40%
Mississippi Flyway		3,410,000 ± 4%	6,522,900 ± 6%	
United States		6,686,400 ± 3%	13,723,200 ± 4%	

Table 3. Top 10 states in number of **adult goose hunters**, 2008, and number of hunter-days and retrieved goose kill, in each (from: Raftovich, R.V., K.A. Wilkins, K.D. Richkus, S.S. Williams, and H.L. Spriggs. 2009. Migratory Bird Hunting activity and harvest during the 2007 and 2008 hunting seasons: Preliminary estimates. U.S. Fish and Wildlife Service, Laurel, Maryland. USA July 2009. 63 pp). **Note:** All hunter activity and harvest estimates are preliminary, pending final counts of the number of migratory bird hunters in each state and complete audits of all survey response data.

State	**Number of active goose hunters**	**Goose hunter days afield**	**Total goose harvest**	**Seasonal goose harvest per hunter**
Minnesota	50,500 ± 10%	275,800 ± 13%	222,900 ± 19%	4.4 ± 21%
Texas	49,400 ± 20%	170,700 ± 38%	272,400 ± 29%	5.5 ± 36%
Wisconsin	43,600 ± 11%	289,400 ± 17%	110,300 ± 13%	2.5 ± 17%
Pennsylvania	37,800 ± 11%	204,500 ± 14%	241,600 ± 26%	6.4 ± 29%
California	37,800 ± 12%	258,800 ± 19%	245,500 ± 48%	6.5 ± 50%
Michigan	37,500 ± 10%	217,200 ± 15%	173,700 ± 22%	4.6 ± 24%
Maryland	28,200 ± 7%	160,200 ± 12%	231,600 ± 13%	8.2 ± 15%
Illinois	25,600 ± 11%	221,100 ± 15%	159,500 ± 20%	6.2 ± 23%
Arkansas	21,600 ± 15%	90,900 ± 22%	137,500 ± 29%	6.4 ± 33%
North Dakota	21,300 ± 7%	94,500 ± 10%	133,600 ± 15%	6.3 ± 17%
Mississippi Flyway		1,733,800 ± 5%	1,342,900 ± 8%	
United States [b]		3,851,400 ± 4%	3,825,900 ± 5%	

HUNTER ACTIVITY AND GOOSE HARVEST DURING THE SEPTEMBER 2008 CANADA GOOSE HUNT IN MINNESOTA

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The September Canada goose season in Minnesota was 6-22 September 2008 (17 days). Beginning in 2007 and continuing in 2008, a 7-day (16 - 22 Sep) experimental season addition was added in the Northwest Goose Zone (Fig. 1). The U.S. Fish and Wildlife Service had approved the 7-day season extension in other goose zones in Minnesota after a 3-year experimental season from 1999-2001 (Maxson et al. 2003).

During the September season the daily bag limit was 5 Canada geese per day statewide, except in the Southeast Goose Zone where the daily bag was 2. 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, Southeast, and Twin Cities Metro Goose Zones, in the Carlos Avery Wildlife Management Area and in the Swan Lake Area. Within the Twin Cities Metro Zone, and goose refuges open to goose hunting, hunting was not permitted from public road right-of-ways. Goose hunters were required to obtain a $4.00 permit to participate in the September season.

This report documents results of the 2008 September goose hunter mail questionnaire survey.

METHODS

Permittees were randomly selected to receive a post-season hunter survey. Questionnaires were sent to 3,100 permittees following the 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 errors.

The questionnaire asked hunters which zone they hunted, number of days they hunted, and, for the season as a whole, number of geese taken and number of geese knocked down and not retrieved. The questionnaire also asked whether hunters hunted in the Northwest Zone during the final week of the season (16 – 22 Sep), and how many days and how many geese they shot and retrieved during that week. Finally, hunters were asked their preference of opening dates for the 2009 September goose season, either Tuesday September 1, or Saturday September 5.

Statistical Analysis Systems (SAS Institute Inc. 1999-2001, Version 8.2) computer programs were written to summarize responses to the questionnaire survey.

RESULTS AND DISCUSSION

The DNR License Bureau reported that 37,252 Special Canada Goose Season permits were sold prior to 23 September, 2008. Response rate to the survey was 55.5%. Among those respondents, 73.5% indicated that they hunted during the September season. Following the usual pattern, the majority of the hunters indicated they hunted in the Remainder zone, followed by the West, Twin Cities Metro, Northwest, and Southeast goose zones (Table 1). The Remainder and West zones are the largest zones (Fig. 1). Active hunters were afield an average of 2.9 to 3.8 days and retrieved 2.6 to 4.1 geese, depending upon their hunt zone (Table 1). Overall, the success rate for active hunters was 68.4%.

The survey estimates that 100,748 Canada geese were harvested during the 2008 September season with approximately 62% of the harvest in the Remainder Zone and 16% in the West Zone (Table 1). This harvest pattern has remained rather consistent during the 2000-2008 September seasons (Table 2). Prior to the implementation of the Harvest Information Program, the U.S. Fish and Wildlife Service adjusted their mail survey statistics by a memory and prestige response bias factor of 0.848 for geese bagged in the Mississippi Flyway (Voelzer et al. 1982:56). Multiplying September Canada goose harvest by the adjustment factor would indicate a 2008 retrieved harvest of 85,434.

Of those hunters who indicated that they hunted in the Northwest Zone, 54% reported hunting during the final week of the season, Sep 16 – 22, 2008. This equates to 738 hunters, 862 hunter days, and a retrieved harvest of 844 geese during the experimental season (Sep 16 – 22) in the Northwest zone.

Lastly, we asked hunters about their preference for opening day of the September Canada goose season in 2009. The framework dates of the season are September 1 – 22 every year. Traditionally, Minnesota has opened the September Season on the first weekend in September. In 2009, the first Saturday in September is September 5. By opening the season on September 5, the season would be 4 days shorter than opening on Tuesday, September 1. Sixty-five percent of respondents in the survey preferred to hunt on the first weekend in September, while 32% preferred opening on September 1. Three percent of respondents had no preference as to opening date.

LITERATURE CITED

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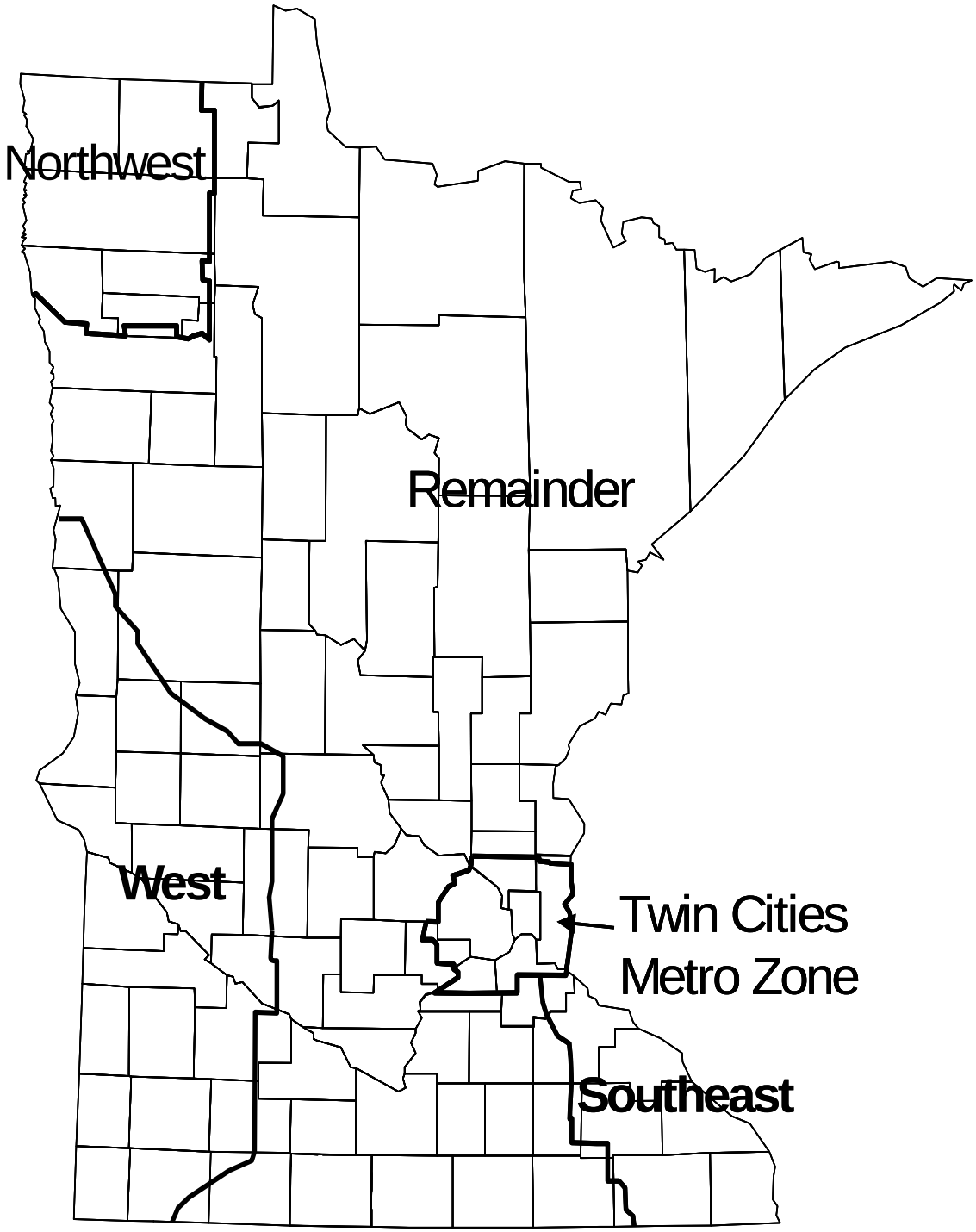

Figure 1. September season Goose Zones in Minnesota.

Table 1. Permit sales, hunter activity, and harvest[a] by zone during the September Canada Goose season (1-22 September) in Minnesota, 2008.

Parameter	Northwest	West	Southeast	Twin Cities Metro	Remainder	Total
ALL ZONES						
Total permits sold						37,252
Questionnaires delivered						3,100
Useable questionnaires returned						1,719
% responding						55.5
Active hunters						1,264
% active hunters						73.5
BY ZONE						
% Distribution of hunters by primary hunt zone	5.0	21.4	3.6	16.1	57.8	100
%successful	66.7	63.1	63.0	66.5	70.2	68.4
Days/active hunter	3.41	3.35	2.85	3.26	3.84	3.73
Geese/active hunter	4.05	2.75	2.59	3.10	3.97	3.68
Unretrieved harvest/active	0.57	0.37	0.24	0.36	0.61	0.53
% unretrieved harvest	12.4	11.9	8.5	10.4	13.3	12.5
EXPANDED:						
Active hunters	1,366	5,873	997	4,400	15,842	27,392
Hunter days	4,662	19,678	2,840	14,349	60,768	102,287
Retrieved harvest	5,530	16,168	2,580	13,656	62,827	**100,748**
Est. unretrieved harvest	781	2,189	239	1,583	9,601	14,390
Total harvest	6,310	18,356	2,818	15,238	72,427	115,138

[a]Harvest estimates not adjusted for memory/exaggeration bias.

Table 2. Retrieved harvest estimates by zone during the September Canada Goose season in Minnesota, 2000 – 2008.

Year	Northwest	West	Southeast	Twin Cities Metro	Remainder	Total
2000	2,750	18,909	1,183	15,594	51,685	**90,121**
2001	2,047	27,663	538	8,164	62,608	**101,021**
2002	1,568	22,075	848	8,504	50,769	**83,764**
2003	2,805	17,779	2,357	9,890	48,157	**80,988**
2004	4,326	16,843	1,197	11,090	56,480	**89,936**
2005	4,888	15,304	1,717	11,139	61,218	**94,266**
2006	6,826	17,987	1,461	11,844	53,321	**91,439**
2007	7,948	14,952	1,469	11,702	58,243	**94,314**
2008	5,530	16,168	2,580	13,656	62,827	**100,748**

2009 LIGHT GOOSE CONSERVATION ORDER HARVEST IN MINNESOTA

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INTRODUCTION

This report documents results of the 2009 Light Goose Conservation Order hunter mail questionnaire survey.

METHODS

Minnesota held a light goose Conservation Order harvest from 1 March - 30 April 2009. 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 Table 1. Second and third mailings were sent to non-respondents after one month had elapsed.

RESULTS AND DISCUSSION

A total of 1,670 permits was issued and 1057 responses (63.3%) to the questionnaire were obtained (Table 2). In calculating harvest estimates, we assumed that the 619 non-respondents participated in the conservation action and took light geese in the same manner as respondents (i.e., tallies were expanded by 1.58). More light geese were present in Minnesota during spring 2009 than spring 2008, and harvest was again concentrated in the southwest portion of the state with some also being taken in west-central Minnesota. One thousand one hundred and three people attempted to take light geese during the 61-day conservation order period. Active participants pursued light geese for 4,647 days and 4,366 light geese were shot and retrieved. This was an average retrieved take of 4.0 geese per active participant. Another 640 light geese were reported wounded and not retrieved.

Unplugged shotguns were used by 640 (46.8%) individuals to take 2,413 (55.3%) geese, of which 822 (34.0%) were taken with the 4^{th}, 5^{th}, or 6^{th} shell. Electronic calls were used by 260 (23.5%) participants to take 1,171 (26.8%) light geese. During the 1/2 hour after sunset period, 713 (16.3%) geese were harvested by 475 (43.1%) active hunters.

ACKNOWLEDGMENTS

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

Table 1. Questions asked on Light Goose Conservation Order hunter mail questionnaire.

1. Did you hunt light geese in Minnesota during March 1 – April 30, 2009?
2. How many days did you hunt light geese in Minnesota during March 1 – April 30, 2009?
3. In what County did you hunt light geese most often during March 1 – April 30, 2009?
4. How many light geese did you personally shoot and retrieve in Minnesota?
5. How many light geese did you personally shoot, but were UNABLE to retrieve?
6. Did you hunt light geese in Minnesota with a gun(s) that was holding more than 3 shells?
7. If yes, how many light geese did you shoot with a gun holding more than 3 shells?
8. How many light geese did you shoot and retrieve with the 4^{th}, 5^{th}, or 6^{th} shell?
9. Did you hunt light geese in Minnesota with the aid of an electronic caller?
10. If yes, how many light geese did you shoot and retrieve with the aid of an electronic caller?
11. Did you hunt light geese in Minnesota during the ½ hour after sunset period?
12. If yes, how many light geese did you shoot and retrieve during the ½ hour after sunset period?

Table 2. Summary of Light Goose Conservation Order harvest in Minnesota, 2000 - 2008

Parameter	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Total permits sold	1,982	1,128	1,997	1,438	1,424	1,383	1,363	1,292	1,406	1,670
Usable questionnaires returned	1,457	769	1,375	1,071	1,095	998	955	921	910	1,057
% Responding	73.5	68.2	68.9	74.4	76.9	72.2	70.1	71.3	64.7	63.3
Active hunters	1,461	393	1,209	553	690	618	516	514	775	1,103
% Active hunters	73.7	34.8	60.5	38.5	48.5	44.7	37.3	39.8	55.1	66.0
Total hunter days	8,244	2,112	5,517	2,600	3,372	2,643	2,665	2,302	3,415	4,647
Days/active hunter	5.6	5.4	4.6	4.7	4.9	4.3	5.2	4.5	4.4	4.2
Retrieved harvest	6,290	316	3,516	2,005	2,735	1,395	1,360	1,786	2,412	4,366
Geese/active hunter	4.3	0.8	2.9	3.6	4.0	2.3	2.6	3.5	3.1	4.0
Unretrieved harvest	904	19	637	253	315	150	163	172	288	640
No. using unplugged guns	830	193	560	280	333	272	215	224	361	516
Take w/unplugged guns	4,416	129	2,137	996	1,385	777	689	1,032	1,279	2,413
Take w/shell 4-5-6	1,316	68	615	401	491	269	287	277	339	822
No. using electronic calls	218	56	142	87	133	110	73	88	147	260
Take w/electronic calls	854	103	512	474	326	268	280	329	567	1,171
No. hunting ½ hr after sunset	696	141	550	228	265	264	223	197	326	475
Take ½ hr after sunset	1,185	43	841	267	311	242	246	209	512	713

2008 FALL WILD TURKEY HARVEST REPORT

Eric Dunton, Farmland Wildlife Populations and Research Group

Minnesota's fall turkey hunting season is managed with a quota system similar to the spring turkey hunting season. Permits are allocated across 50 permit areas (PAs; Figure 1) during 2, 5-day time periods in PAs 157-467 and 1, 30-day time period in PA 601.

Three types of permits were available to hunters: general lottery permits in which applicants or parties of up to 4 hunters applied for specific PA and time period, (2) landowner permits in which up to 20% of permits for each PA and time period were reserved for landowners or tenants who lived on 40 acres or more of land within the PA, and (3) surplus permits were offered in under-subscribed permit areas and time periods to hunters who applied in the lottery, but were unsuccessful. General lottery and landowner permits were made available based on a system of preference, which was determined by the number of years applicants submitted a valid, but unsuccessful application since last receiving a permit. If available, surplus permits could be purchased on a first-come, first-served basis. Permit holders were allowed to harvest 1 turkey of either sex during the fall season.

Fall turkey hunting opportunity was increased significantly during 2008 with the addition of 3,070 permits (68% increase from 2007) and 18 new permit areas. Almost 5,000 permits were issued in 2008, a 76% increase from 2007 (Table 1, Figure 2). Hunters registered 1,187 turkeys, a 71% increase from 2007 (Table 1, Figure 2). Hunter success averaged 24%, similar to the 5-year average (Table 1). Hunter success varied among PAs from 0% in PA 459 to 47% in PA 440 (Table 2). The majority of permits issued were general lottery (77%), followed by surplus (20%), and landowner permits (3%; Table 3).

In response to wild turkey range expansion, the number of PAs open to fall turkey hunting was increased from 33 in 2007 to 50 in 2008. Permit areas 228 and 337 were consolidated to PA 601, and 1,000 permits were available during a 30-day season. Permit areas were consolidated and the time period was extended to increase hunter participation and turkey harvest in response to an increasing number of urban/nuisance complaints in the metropolitan area. The addition of 800 permits in PA 601 plus 18 new PAs accounted for 55% of the additional permits available in 2008 and 45% of the registered harvest. Expanded permit allocation in traditional PAs accounted for the remainder of the increase in the number of hunters and registered harvest.

Table 1. Permits available, applicants, permits issued, registered harvest, and hunter success rates for fall turkey hunting seasons 1990 – 2008, Minnesota.

Year	Permits available	Applicants	Permits issued	Registered harvest	Hunter success (%)
1990	1000	4522	951	326	34
1991	2200	2990	2020	552	27
1992	2200	2782	2028	588	29
1993	2400	2186	2094	605	29
1994	2500	3124	2106	601	29
1995	2500	3685	2125	648	30
1996	2500	4453	2289	685	30
1997	2580	4574	2378	698	29
1998	2710	4526	2483	828	33
1999	2890	5354	2644	865	33
2000	3090	5263	2484	735	30
2001	2870	4501	2262	629	28
2002	3790	5180	2945	594	20
2003	3870	5264	2977	889	30
2004	4380	5878	3277	758	23
2005	4410	4542	2978	681	23
2006	4290	4167	2802	618	22
2007	4490	4464	2837	695	24
2008	7560	5834	4981	1187	24

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

Table 2. Registered harvest and hunter success rates by permit area for the 2008 fall turkey season, Minnesota.

	Registered harvest			Hunter success (%)	
Permit area	Time period A	Time period B	Total	2008	Average
157	3	7	10	26	[a]
213	6	5	11	30	[a]
214	12	10	22	29	[a]
215	30	21	51	30	[a]
221	10	5	15	19	[a]
222	10	11	21	30	[a]
223	16	11	27	18	[a]
227	12	6	18	18	24 [b]
229	4	1	5	38	[a]
236	32	28	60	26	26 [c]
239	24	35	59	22	[a]
240	23	24	47	31	[a]
248	7	6	13	32	[a]
249	0	8	8	23	[a]
262	2	2	4	29	[a]
338	25	10	35	24	23 [c]
339	13	7	20	17	20 [c]
341	36	42	78	24	25 [c]
342	23	17	40	21	22 [c]
343	42	30	72	34	29 [c]
344	17	12	29	21	21 [c]
345	7	2	9	12	18 [c]
346	30	14	44	27	24 [c]
347	15	12	27	24	26 [c]
348	26	23	49	24	25 [c]
349	22	11	33	18	22 [c]
412	2	3	5	33	33 [a]
420	5	1	6	32	33 [b]
422	2	4	6	43	39 [b]
425	6	4	10	27	28 [b]
428	1	4	5	38	[a]
431	1	1	2	17	17 [b]
433	4	2	6	29	25 [b]
440	2	5	7	47	[a]
442	30	25	55	26	26 [c]
443	10	0	10	16	17 [c]
446	5	1	6	43	38 [b]
447	0	1	1	7	5 [b]
448	3	1	4	16	24 [c]
449	4	1	5	21	32 [d]
450	0	1	1	17	14 [b]
459	0	0	0	0	[a]
461	29	23	52	28	32 [c]
462	31	11	42	26	27 [c]

Table 2 (Continued).

	Registered Harvest			Hunter success (%)	
Permit area	Time period A	Time period B	Total	2008	Average
463	2	0	2	14	[a]
464	8	6	14	30	27 [c]
465	3	2	5	10	22 [c]
466	22	9	31	28	28 [c]
467	15	9	24	27	20 [c]
601 [e]			81 [e]	17	23 [c]
Total	632	474	1187	24	

[a] Permit area was not open to fall turkey hunting prior to 2008.
[b] 2-year average.
[c] 5-year average.
[d] 4-year average.
[e] Permit areas 228 and 337 were combined in 2008 to PA 601 and the season consisted of 1, 30-day time period.

Table 3. Number of permits available and issued by permit type, time period, and permit area for the 2008 fall turkey season, Minnesota.

			General lottery		Landowner		Surplus	
Permit area	Available	Issued	Time period A	Time period B	Time period A	Time period B	Time period A	Time period B
157	50	38	12	19	5	2	0	0
213	50	37	14	14	5	4	0	0
214	100	75	39	21	3	1	0	11
215	300	168	59	48	6	0	29	26
221	120	79	37	19	1	0	5	17
222	100	70	30	30	1	0	0	9
223	200	152	66	30	1	1	12	42
227	150	98	38	28	7	2	0	23
229	20	13	8	3	0	0	0	2
236	300	231	105	81	3	1	0	41
239	300	267	84	94	1	5	22	61
240	200	152	63	25	1	3	0	60
248	50	41	20	11	1	0	0	9
249	50	35	19	15	0	1	0	0
262	20	14	8	2	0	0	0	4
338	180	145	62	58	6	1	0	18
339	180	118	52	35	1	0	8	22
341	500	331	147	116	3	1	42	22
342	350	188	107	60	3	2	11	5
343	250	210	100	80	6	4	0	20
344	200	135	59	45	0	0	18	13

Table 3. (Continued).

			General lottery		Landowner		Surplus	
Permit area	Available	Issued	Time period A	Time period B	Time period A	Time period B	Time period A	Time period B
345	180	76	32	18	1	1	12	12
346	300	166	98	29	9	1	10	19
347	150	111	42	48	4	0	9	8
348	250	205	93	81	4	5	7	15
349	450	179	80	72	3	0	15	9
412	20	15	5	9	1	0	0	0
420	40	19	5	4	2	0	6	2
422	20	14	6	7	0	1	0	0
425	40	37	15	18	3	1	0	0
428	20	13	5	6	0	2	0	0
431	20	12	5	1	2	0	2	2
433	20	21	8	11	0	0	2	0
440	20	15	7	6	0	2	0	0
442	250	213	96	93	8	6	0	10
443	100	63	37	14	0	1	0	11
446	20	14	1	7	0	0	6	0
447	20	14	9	4	0	0	0	1
448	30	25	11	13	0	0	0	1
449	30	24	12	12	0	0	0	0
450	20	6	3	1	1	0	0	1
459	20	17	7	10	0	0	0	0
461	220	184	88	79	4	2	0	11
462	220	159	80	46	6	0	1	26
463	20	14	4	5	1	0	3	1
464	70	47	23	10	0	0	0	14
465	80	49	30	8	0	0	3	8
466	160	110	52	29	2	0	14	13
467	100	88	42	32	1	3	0	10
601	1000	474 a						
Total	7560	4981	2025	1507	106	53	237	579

[a] Permits issued by for PA 601 (i.e., 1, 30-day time period) consisted of 301 General lottery, 2 Landowner, and 171 Surplus permits.

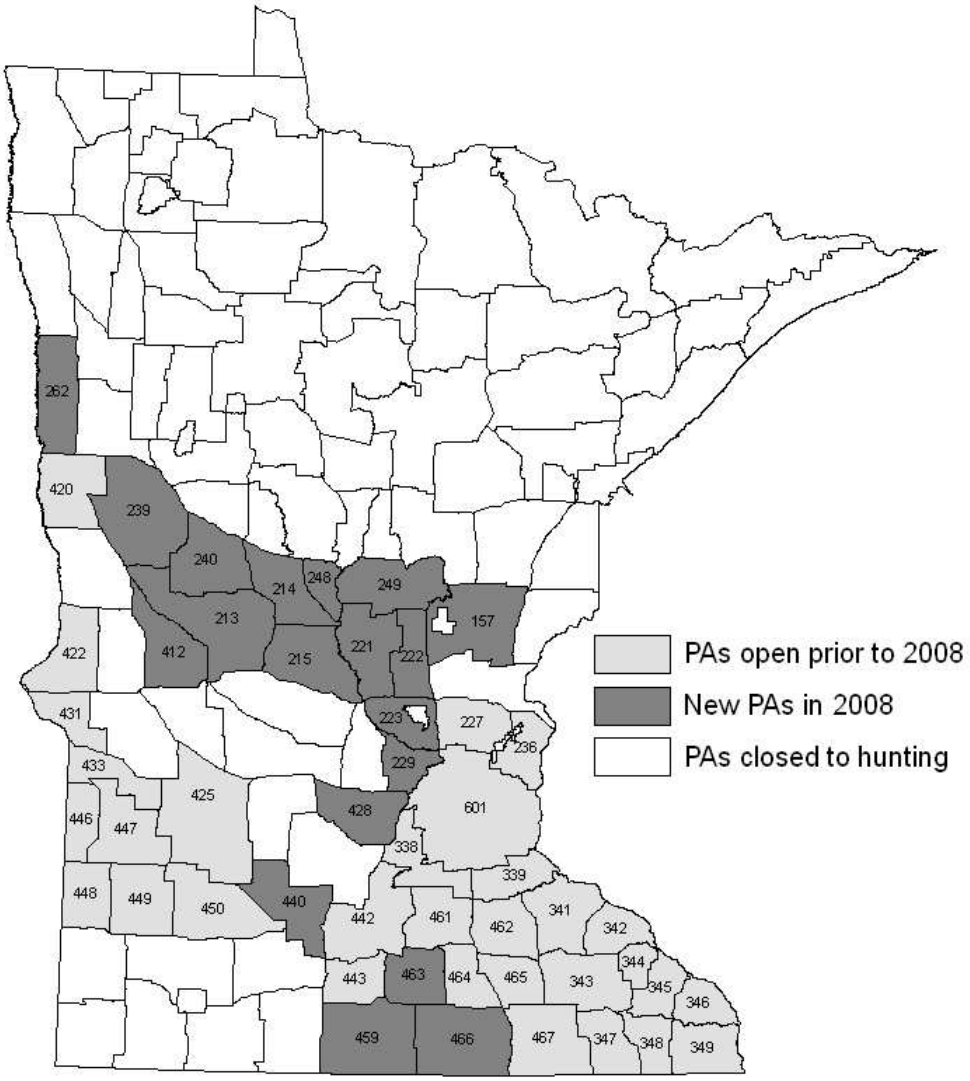

Figure 1. Permit areas (PAs) open to hunting for the 2008 fall turkey hunting season, Minnesota.

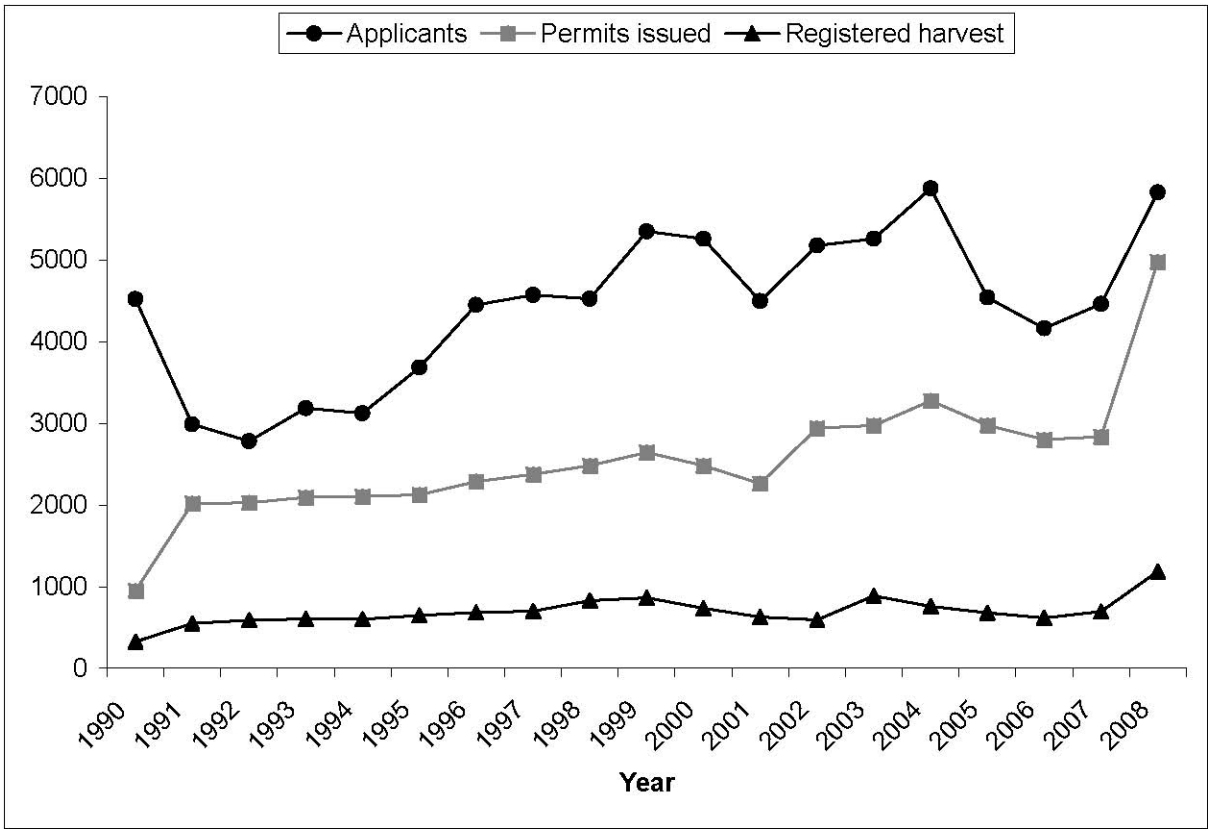

Figure 2. Applicants, permits issued, and registered harvest for fall turkey seasons 1990 2008, Minnesota.

SPRING WILD TURKEY HARVEST REPORT, 2009

Eric Dunton, Farmland Wildlife Populations and Research Group

In Minnesota, the demand for spring turkey permits exceeds the supply of permits available. To regulate harvest and distribute hunting pressure, permits are allocated across 76 permit areas (PAs) and 8 time periods using a quota system (Figure 1). Hunters interested in pursuing wild turkeys are required to apply for a permit through a drawing based on a system of preference. Preference is determined by the number of years a valid but unsuccessful application has been submitted since last receiving a permit. Hunters may apply individually or in a group of up to 4 members, and may apply for a second choice permit area and time period. Successful applicants are notified through mail, and unsuccessful applicants are awarded a preference point. The goal of this system is to provide quality turkey hunting opportunities where populations can sustain harvest.

Three types of hunting licenses were available to spring turkey hunters: (1) general lottery permit in which an applicant or a group of up to 4 hunters applied for a specific PA and time period; (2) landowner permit in which up to 20% of permits for each PA and time period were reserved for landowners or tenants who lived on 40 acres or more of land within the PA; and (3) archery permits which could be purchased for the last 2 time periods of any PA with 50 or more permits per period.

During 2009 we received 57,692 applications for 42,328 permits (Table 1, Figure 2). Over 36,000 general lottery and landowner permits were issued to hunters, and almost 4,500 were issued to archers (Table 2, Appendix A and B). Hunters registered over 12,000 turkeys, an increase of 11% from 2008 which is the highest turkey harvest on record (Table 1, Figure 2). Hunter success averaged 34%, which is above the 5-year average of 32% (Table 1). Hunter success by PA ranged from 15% (PA 423) to 64% (PA 266; Table 2). Similar to the 5-year average, hunter success rates were highest during the first 2 time periods (Table 3), but chance of drawing a permit were generally highest during the last 3-4 time periods (Appendix C).

A mentored youth hunt sponsored by non-profit organizations was held on weekends from mid April through May. During 2009, 294 youth hunters registered 118 turkeys, an increase in turkey harvest of 18% from 2008. Success averaged 40%, which was above the 2008 success rate (37%; Table 3).

At the turkey management unit (TMU) level success rates continue to be the highest across the northern units (TMUs J, K, L, M, N, O; Table 4). Turkey populations in these areas have recently been established and survey data show evidence that these populations are expanding (Dunton and Snyders 2009; Table 4). In southeastern Minnesota (TMUs A, B, C), turkey populations are well established and success rates and populations appear to be fluctuating around a stable mean (Dunton and Snyders 2009; Table 4, Figure 3).

Overall weather conditions for the 2009 spring turkey hunting season were favorable across much of the turkey range in Minnesota. April and May were relatively dry across much of Minnesota, except for the Red River Valley where major flooding occurred in late March and continued through April (Minnesota Climatology Working Group 2009). April temperatures were near average and May temperatures were below historic averages in west-central and northern Minnesota and near average in the remainder of the state (Minnesota Climatology Working Group 2009). Although favorable weather generally contributes to increased harvest, the continued increase in harvest can be partially attributed to the increase in the number of permits available (i.e., 11% increase in the number of permits available and an 11% increase in registered harvest) from 2008 and 3 new permit areas open to hunting. Increased permits and permit areas resulted in more opportunities for hunters to harvest turkeys.

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Table 1. Spring applicants, permits available and issued, and registered harvest from 1978 – 2009 for all spring wild turkey hunting seasons, Minnesota.

		Permits				
Year	Applicants	Available	Issued	Issued (%)	Registered harvest	Success (%)[a]
1978	10,740	420	411	98	94	23
1979	11,116	840	827	99	116	14
1980	9,613	1,200	1,191	99	98	8
1981	8,398	1,500	1,437	96	113	8
1982	7,223	2,000	1,992	99	106	5
1983	8,153	2,100	2,079	99	116	6
1984	7,123	3,000	2,837	95	178	6
1985	5,662	2,750	2,449	89	323	13
1986	5,715	2,500	2,251	90	333	15
1987	6,361	2,700	2,520	93	520	21
1988	8,402	3,000	2,994	99	674	23
1989	13,007	4,000	3,821	96	930	24
1990	14,326	6,600	6,126	93	1,709	28
1991	15,918	9,170	8,607	94	1,724	20
1992	16,401	9,310	9,051	97	1,691	19
1993	17,800	9,625	9,265	96	2,082	23
1994	19,853	9,940	9,479	95	1,975	21
1995	21,345	9,975	9,550	96	2,339	25
1996	23,757	12,131	10,983	91	2,841	26
1997	25,958	12,530	11,610	93	3,302	28
1998	29,727	14,035	13,229	94	4,361	33
1999	39,957	18,360	16,387	89	5,132	31
2000	42,022	20,160	18,661	93	6,154	33
2001	41,048	22,936	21,404	93	6,383	30
2002	42,415	24,136	22,607	94	6,516	29
2003	44,415	25,016	22,770	91	7,666	34
2004	48,059	27,600	25,261	92	8,434	33
2005	49,181	31,748	27,638	87	7,800	28
2006	45,704	32,624	27,876	85	8,241	30
2007[b]	52,566	33,976	28,320	83	9,412	33
2008[b]	51,000	37,992	31,942	84	10,994	34
2009[b]	57,692	42,328	36,193[c]	85	12,210	34

[a] Success rates not adjusted for non-participation

[b] Youth hunt data included

[c] 4,483 permits were issued to archery hunters and are not included in this figure.

Table 2. Permits available and issued, registered harvest, success, and historic success rates by permit area for the 2009 spring wild turkey season, Minnesota.

	Permits		2009		Historic mean[c]	
Permit Area	Available	Issued[a]	Registered harvest	Success (%)[b]	Success (%)	*n*
152	40	41	11	27	31	2
156	80	76	29	38	47	2
157	400	358	178	50	46	6
159	120	111	37	33	36	6
183	40	42	16	38	29	2
213	640	576	260	45	46	3
214	720	638	232	36	38	6
215	920	792	355	45	43	11
218	800	734	351	48	50	3
219	480	435	160	37	31	11
221	480	411	192	47	51	5
222	400	353	132	37	44	5
223	760	668	273	41	36	11
225	1320	1181	324	27	27	11
227	1200	1020	282	28	34	11
229	360	317	82	26	25	10
235	160	149	50	34	34	11
236	1200	1058	401	38	39	11
239	960	855	375	44	43	8
240	800	704	286	41	40	5
241	200	176	72	41	42	2
242[d]	40	26	10	38	38	1
243	120	99	39	39	40	2
244	360	300	115	38	34	8
246[d]	80	63	37	59	59	1
248	400	430	165	38	43	6
249	400	356	115	32	32	7
262	80	60	25	42	44	2
266[d]	40	22	14	64	64	1
338	720	623	243	39	33	9
339	680	607	232	38	35	9
341	1880	1663	612	37	34	9
342	1800	1452	387	27	27	9
343	1440	1290	542	42	41	9
344	1000	859	208	24	27	11
345	1400	1054	247	23	22	9

Table 2. Continued

	Permits		2009		Historic mean[c]	
Permit Area	Available	Issued[a]	Registered harvest	Success (%)[b]	Success (%)	*n*
346	2600	1831	385	21	25	11
347	1200	1021	326	32	27	9
348	1400	1210	296	24	25	9
349	3400	2615	509	19	24	11
412	360	327	132	40	42	3
416	120	114	47	41	39	10
417	400	375	169	45	43	3
420	120	77	23	30	37	6
421	56	31	15	48	35	2
422	160	123	61	50	46	11
423	40	27	4	15	21	2
424	80	74	14	19	32	5
425	520	485	160	33	39	6
426	40	34	11	32	24	9
427	96	80	31	39	34	9
428	280	257	109	42	43	9
431	120	107	43	40	41	11
433	96	89	43	48	51	6
440	600	540	168	31	32	11
442	1280	1141	412	36	35	11
443	680	598	191	32	32	11
446	80	71	21	30	39	5
447	80	73	20	27	27	5
448	80	72	40	56	52	6
449	80	76	35	46	47	6
450	120	101	30	30	29	11
451	120	106	47	44	47	7
454	40	36	10	28	34	5
456	40	32	6	19	11	5
457	120	104	33	32	35	11
458	80	50	17	34	30	5
459	200	175	38	22	25	11
461	1000	903	319	35	34	11
462	960	833	343	41	37	9
463	240	211	73	35	30	11
464	320	294	103	35	29	9
465	320	269	89	33	28	9

Table 2. Continued

	Permits		2009		Historic mean[c]	
Permit Area	Available	Issued[a]	Registered harvest	Success (%)[b]	Success (%)	*n*
466	640	553	170	31	32	8
467	440	418	160	38	35	8
601	1200	1057	414	39	39	10
Unknown[e]		4	4			
Total	42,328	36,193	12,210	34.0		

[a] 4,483 permits were issued to archery hunters and are not included in these figures
[b] Success rates not adjusted for non-participants
[c] Mean success rate (%) over all spring turkey seasons (*n*) between 1999 – 2009 or since a permit area boundary change occurred.
[d] New permits areas for the 2009 spring season
[e] Unknown harvest location (permit area) due to registration station error

Table 3. Permits available and issued, registered harvest, and success (2009 and mean) by time period for the 2009 spring wild turkey season, Minnesota.

	Permits		2009		
Time Period[a]	Available	Issued	Registered harvest	Success (%)[b]	1999 - 2009 mean success (%)
A	5291	4799	2222	46	43
B	5291	4748	1900	40	39
C	5291	4807	1576	33	31
D	5291	4686	1432	31	29
E	5291	4809	1634	34	33
F	5291	3950	1081	27	29
G	5291	4303	1327	31	25
H	5291	3793	911	24	24
Unknown[c]		4	9		
Youth Hunt					
W	-	1	0	0	
X	-	1	0	0	
Y	-	280	113	40	
Z	-	12	5	42	
Total		36,193	12,210		

[a] A = April 15-19, B = April 20-24, C = April 25-29, D = April 30-May 4, E = May5-9, F = May 10-14, G = May 15-21, H = May 22-28, W = May 2-3, X = April 25-26, Y = April 18-19, and Z = April 11-12
[b] Success rates not adjusted for non-participants
[c] Unknown harvest location and unknown harvest time periods due to registration station error

Table 4. Permits available and issued, registered harvest, success (2009 and mean), and mean finite rate of population change (Dunton and Snyders 2009) by Turkey Management Unit for the 2009 spring wild turkey season, Minnesota.

	Permits		2009		Mean success[e]		Mean finite rate of change[f]	
TMU[a,b]	Available	Issued	Registered harvest	Success (%)	*n*	Mean	λ	99% CI[g]
A	8800	6710	1437	21	9	24	0.99*	(0.94, 1.04)
B	1000	859	208	24	11	27	0.98	(0.89, 1.07)
C	6320	5426	1867	34	9	32	0.99	(0.91, 1.09)
D	4480	3907	1390	36	9	31	1.06*	(1.04, 1.07)
E	2000	1809	595	33	2	33	1.15*	(1.09, 1.20)
F	4600	4088	1489	36	8	35	1.03	(0.96, 1.12)
G	1040	896	297	33	5	33	1.07*	(1.02, 1.11)
H	3296	2960	1017	34	6	34	1.03	(0.95, 1.13)
I	416	371	151	41	9	37	1.08	(0.99, 1.19)
J	2080	1814	722	40	1	40	1.11	(0.96, 1.30)
K	2960	2653	1117	42	3	43	1.09	(0.99, 1.20)
L	2080	1872	814	43	3	43	1.15	(0.91, 1.45)
M	456	332	117	35	2	36	1.18	(1.01, 1.37)
N	2680	2410	946	39	1	39	1.18	(0.93, 1.51)
O	120	82	39	48	1	48	1.17	(0.70, 1.97)
P[c]	-	-	-	-	-	-	1.12	
Unknown[d]		4	4					

[a] TMU A = permits areas (345, 346, 348, 349), TMU B = permit area (344), TMU C = permit areas (341, 342, 343, 347), TMU D = permit areas (227, 235. 236, 338, 601), TMU E = permit areas (152, 156, 157, 159, 183, 225), TMU F = permit areas (339, 461, 462, 464, 465, 466, 467), TMU G = permit areas (446, 447, 448, 449, 450, 451, 454, 456, 457, 458, 459), TMU H = permit areas (431, 433, 435, 440, 442, 443), TMU I = permit areas (425, 426, 427, 428), TMU J = permit areas (154, 221, 222, 223, 224, 242, 247, 249), TMU K = permit areas (215, 218, 219, 229, 417), TMU L = permit areas (213, 239, 412, 416), TMU M = permit areas (420, 421, 422, 423, 424), TMU N = permit areas (214, 240, 241, 243, 244, 245, 246, 248), TMU O = permit areas (201, 208, 209, 210, 251, 256, 257, 260, 261, 262, 263, 264, 265, 266, 267, 268, 298), TMU P = permit areas (170, 172, 174, 181, 182, 184, 197, 199, 287).

[b] Not all permit areas are open to spring hunting

[c] TMU P currently does not have any permit areas open for turkey hunting

[d] Unknown harvest location (permit area) due to registration station error

[e] Mean success rate based on consecutive number of years hunting in permit area since a boundary change occurred or area was opened to hunting. Mean success rate based on areas open to hunting, which may not represent all areas within a TMU.

[f] Mean finite rate of change based on fall wild turkey population survey data (1999-2008 [$n = 4$ surveys]), TMU P based on 2 surveys.

[g] 85% family of confidence intervals (type I error rate controlled at $\alpha = 0.15$).

*Desired level of precision achieved

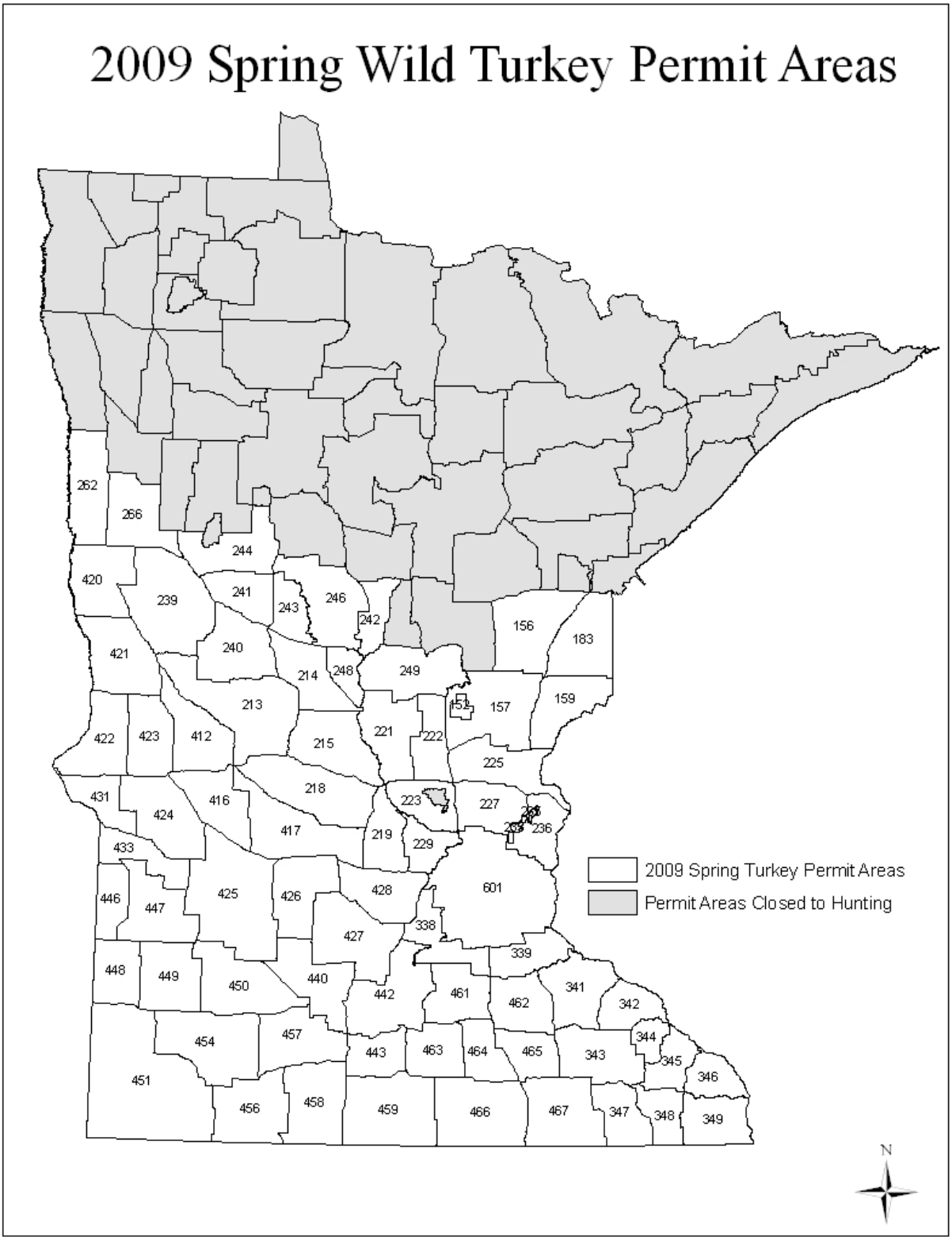


Figure 1. Permit areas open for hunting during the 2009 spring turkey hunting season, Minnesota.

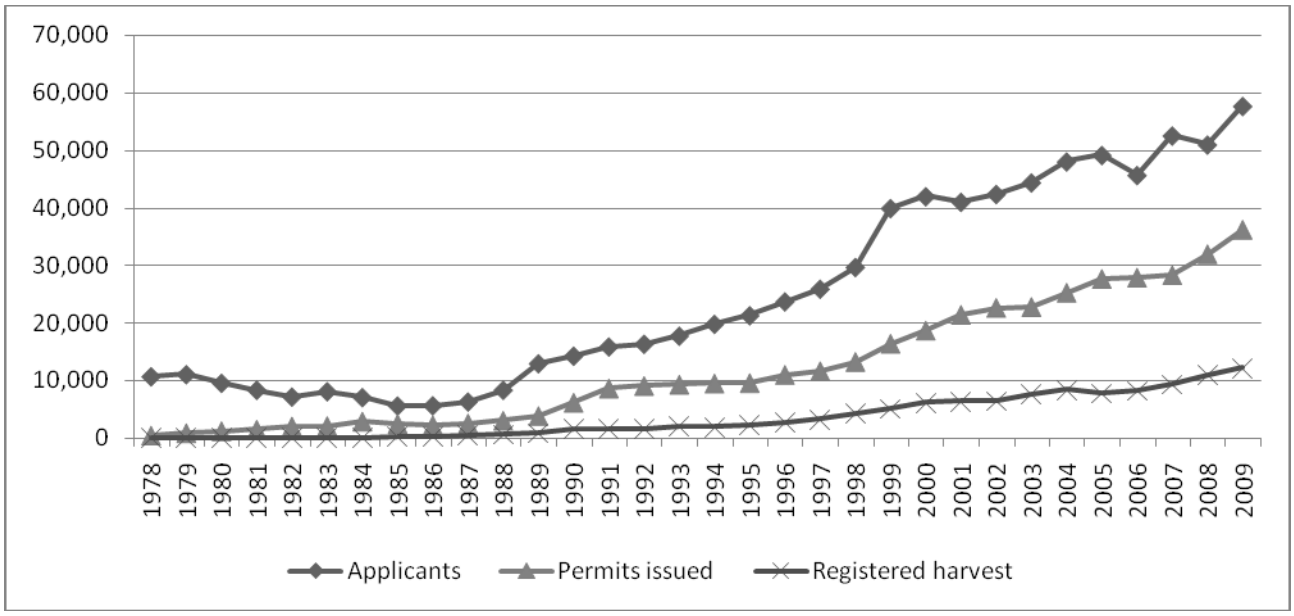


Figure 2. Applicants, permits issued, and registered harvest for the spring wild turkey seasons 1978-2008, Minnesota.

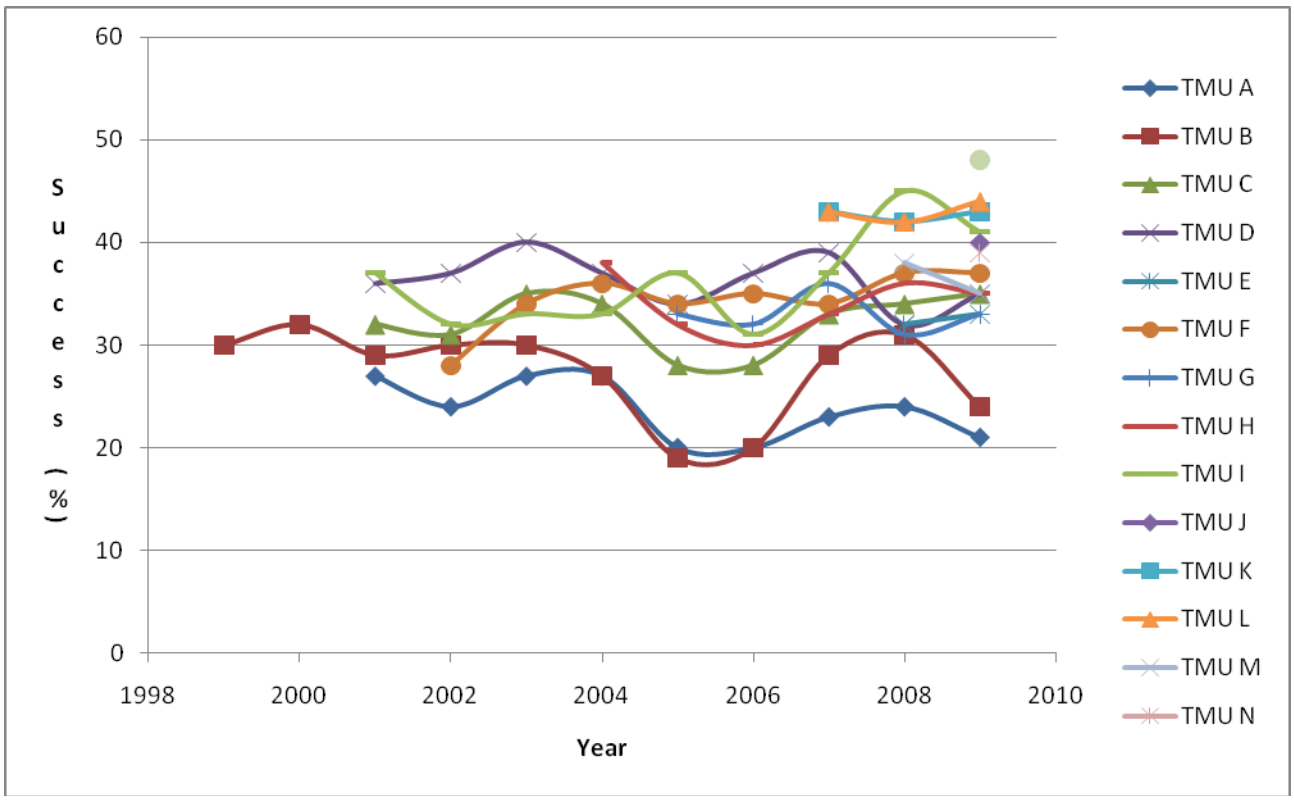


Figure 3. Mean success rate (%) for turkey management units (TMUs) based on cumulative permit area success rates since a boundary change occurred or permit areas opened for hunting, Minnesota.

Appendix A. Permits available and issued by type and permit area for the 2009 spring wild turkey season, Minnesota.

		Permits issued					
Permit Area	Permits available	General	Landowner	Second choice	Surplus	Youth	Total
152	40	28	0	2	11	-	41
156	80	55	11	10	0	-	76
157	400	266	33	56	0	3	358
159	120	91	14	6	0	-	111
183	40	39	3	0	0	-	42
213	640	436	71	61	0	8	576
214	720	366	39	134	99	-	638
215	920	584	65	137	0	6	792
218	800	575	73	70	2	14	734
219	480	314	20	83	11	7	435
221	480	292	24	89	3	3	411
222	400	246	33	53	17	4	353
223	760	487	33	118	15	15	668
225	1320	694	80	215	178	14	1181
227	1200	665	36	192	112	15	1020
229	360	186	9	66	56	-	317
235	160	130	0	9	10	-	149
236	1200	721	32	188	105	12	1058
239	960	595	73	157	15	15	855
240	800	493	55	107	34	15	704
241	200	118	12	35	11	-	176
242	40	6	0	2	18	-	26
243	120	72	11	14	2	-	99
244	360	235	21	44	0	-	300
246	80	37	12	14	0	-	63
248	400	204	36	61	129	-	430
249	400	242	21	55	31	7	356
262	80	34	0	3	23	-	60
266	40	14	1	0	7	-	22
338	720	437	50	98	38	-	623
339	680	442	32	86	44	3	607
341	1880	1,257	102	199	93	12	1663
342	1800	967	66	213	206	-	1452
343	1440	1,007	106	91	60	26	1290
344	1000	677	36	63	76	7	859
345	1400	697	52	99	202	4	1054

Appendix A. Continued

		Permits issued					
Permit Area	Permits available	General	Landowner	Second choice	Surplus	Youth	Total
346	2600	1283	90	126	326	6	1831
347	1200	677	51	155	127	11	1021
348	1400	865	58	165	117	5	1210
349	3400	1877	128	231	377	2	2615
412	360	252	24	51	0	-	327
416	120	105	9	0	0	-	114
417	400	291	39	38	0	7	375
420	120	31	3	7	36	-	77
421	56	21	0	1	9	-	31
422	160	86	3	17	17	-	123
423	40	9	0	0	18	-	27
424	80	40	0	19	15	-	74
425	520	363	45	70	0	7	485
426	40	20	2	5	7	-	34
427	96	58	8	10	4	-	80
428	280	190	19	42	6	-	257
431	120	67	4	21	15	-	107
433	96	70	9	7	3	-	89
440	600	328	31	104	67	10	540
442	1280	809	107	183	33	9	1141
443	680	386	20	107	83	2	598
446	80	52	7	4	8	-	71
447	80	48	5	9	11	-	73
448	80	45	15	9	3	-	72
449	80	64	9	3	0	-	76
450	120	64	4	16	17	-	101
451	120	56	5	25	20	-	106
454	40	31	5	0	0	-	36
456	40	24	0	4	4	-	32
457	120	55	6	22	21	-	104
458	80	20	0	3	27	-	50
459	200	128	12	35	0	-	175
461	1000	588	57	177	69	12	903
462	960	568	39	130	95	1	833
463	240	137	14	54	6	-	211
464	320	169	5	65	55	-	294
465	320	164	1	40	64	-	269

Appendix A. Continued.

		Permits issued					
Permit Area	Permits available	General	Landowner	Second choice	Surplus	Youth	Total
466	640	320	30	111	92	-	553
467	440	270	31	69	48	-	418
601	1200	747	24	153	101	32	1057
Unknown							4
Total	42,328	25,087	2,181	5,118	3,509	294	36,193

Appendix B. Permits available and issued by type and time period for the 2009 spring wild turkey season, Minnesota.

		Permits issued by type[a]				
Time Period	Permits available	General	Landowner	Second choice	Surplus	Total
A	5291	3985	784	-	30	4799
B	5291	4208	413	-	127	4748
C	5291	4255	495	-	57	4807
D	5291	4385	265	-	36	4686
E	5291	3439	88	-	1282	4809
F	5291	1536	31	2157	226	3950
G	5291	2494	67	1473	269	4303
H	5291	785	38	1488	1482	3793
Unknown						4
Total	42,328	25,087	2,181	5,118	3,509	35,899[a]

[a] Does not include youth information (see Table 3 for youth data)

Appendix C. Registered harvest, general lottery applicants, permits available (total, landowner, general lottery), and the chance of being drawn in the general lottery by permit area and time period for the 2009 spring wild turkey season, Minnesota.

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
152	A	2	5	5	0	5	100
	B	1	3	5	0	5	100
	C	2	14	5	0	5	36
	D	0	8	5	0	5	63
	E	3	6	5	0	5	72
	F	2	1	5	0	5	100
	G	1	1	5	0	5	100
	H	0	0	5	0	5	100
156	A	6	34	10	2	8	24
	B	3	18	10	2	8	44
	C	4	27	10	1	9	33
	D	3	32	10	2	8	25
	E	2	19	10	0	10	53
	F	4	3	10	1	9	100
	G	6	12	10	2	8	67
	H	1	5	10	1	9	100
157	A	36	253	50	12	38	15
	B	24	118	50	6	44	37
	C	24	183	50	8	42	23
	D	24	158	50	5	45	28
	E	17	52	50	0	50	96
	F	17	37	50	0	50	100
	G	20	38	50	1	49	100
	H	16	15	50	1	49	100
159	A	3	97	15	4	11	11
	B	7	42	15	2	13	31
	C	8	71	15	3	12	17
	D	3	42	15	3	12	29
	E	6	20	15	1	14	70
	F	3	14	15	1	14	100
	G	5	20	15	0	15	75
	H	2	9	15	0	15	100
183	A	3	18	5	1	4	22
	B	1	10	5	1	4	40
	C	2	17	5	1	4	24
	D	6	30	5	0	5	17
	E	1	21	5	0	5	24
	F	1	7	5	0	5	71
	G	1	7	5	0	5	71
	H	1	5	5	0	5	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
213	A	44	295	80	18	62	21
	B	38	195	80	15	65	33
	C	39	333	80	16	64	19
	D	32	283	80	10	70	25
	E	25	90	80	6	74	82
	F	28	49	80	1	79	100
	G	28	69	80	5	75	100
	H	22	35	80	0	80	100
214	A	38	191	90	12	78	41
	B	38	104	90	6	84	81
	C	28	169	90	12	78	46
	D	27	117	90	4	86	74
	E	31	41	90	0	90	100
	F	28	8	90	0	90	100
	G	26	21	90	0	90	100
	H	16	12	90	5	85	100
215	A	69	368	115	19	96	26
	B	60	184	115	10	105	57
	C	45	460	115	20	95	21
	D	33	293	115	8	107	37
	E	45	124	115	1	114	92
	F	33	42	115	1	114	100
	G	38	74	115	4	111	100
	H	27	33	115	2	113	100
218	A	62	399	100	20	80	20
	B	43	199	100	10	90	45
	C	50	425	100	22	78	18
	D	33	256	100	12	88	34
	E	37	120	100	2	98	82
	F	33	70	100	4	96	100
	G	47	104	100	2	98	94
	H	38	32	100	1	99	100
219	A	29	221	60	6	54	24
	B	22	140	60	6	54	39
	C	23	198	60	2	58	29
	D	21	152	60	1	59	39
	E	13	63	60	3	57	90
	F	11	9	60	0	60	100
	G	22	46	60	2	58	100
	H	14	10	60	0	60	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
221	A	31	164	60	6	54	33
	B	28	99	60	7	53	54
	C	26	197	60	3	57	29
	D	23	92	60	4	56	61
	E	25	60	60	3	57	95
	F	13	15	60	0	60	100
	G	26	31	60	1	59	100
	H	18	10	60	0	60	100
222	A	24	156	50	10	40	26
	B	21	102	50	4	46	45
	C	20	156	50	5	45	29
	D	16	105	50	5	45	43
	E	16	35	50	4	46	100
	F	12	16	50	1	49	100
	G	10	40	50	3	47	100
	H	13	9	50	1	49	100
223	A	53	407	95	12	83	20
	B	40	208	95	6	89	43
	C	44	365	95	8	87	24
	D	28	224	95	4	91	41
	E	32	92	95	1	94	100
	F	27	30	95	0	95	100
	G	19	69	95	2	93	100
	H	20	19	95	0	95	100
225	A	57	420	165	31	134	32
	B	41	251	165	17	148	59
	C	46	370	165	18	147	40
	D	39	223	165	11	154	69
	E	45	102	165	3	162	100
	F	32	52	165	0	165	100
	G	34	45	165	0	165	100
	H	26	12	165	0	165	100
227	A	54	400	150	15	135	34
	B	34	246	150	10	140	57
	C	33	318	150	5	145	46
	D	38	195	150	4	146	75
	E	36	101	150	0	150	100
	F	23	25	150	0	150	100
	G	39	56	150	2	148	100
	H	19	22	150	0	150	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
229	A	11	114	45	3	42	37
	B	13	77	45	3	42	55
	C	11	96	45	1	44	46
	D	10	49	45	1	44	90
	E	7	18	45	0	45	100
	F	7	8	45	0	45	100
	G	15	10	45	0	45	100
	H	8	3	45	1	44	100
235	A	10	81	20	0	20	25
	B	12	55	20	0	20	36
	C	6	50	20	0	20	40
	D	7	46	20	0	20	43
	E	5	21	20	0	20	95
	F	5	13	20	0	20	100
	G	3	20	20	0	20	100
	H	2	7	20	0	20	100
236	A	58	436	150	15	135	31
	B	56	232	150	5	145	63
	C	57	381	150	8	142	37
	D	53	273	150	3	147	54
	E	44	126	150	1	149	100
	F	34	49	150	0	150	30
	G	57	61	150	0	150	100
	H	37	14	150	0	150	100
239	A	69	367	120	22	98	27
	B	55	213	120	20	100	47
	C	46	359	120	13	107	30
	D	43	304	120	11	109	36
	E	45	103	120	4	116	100
	F	34	46	120	1	119	100
	G	44	76	120	2	118	100
	H	33	37	120	0	120	100
240	A	76	256	100	16	84	33
	B	46	153	100	14	86	56
	C	32	307	100	9	91	30
	D	26	203	100	12	88	43
	E	36	82	100	1	99	100
	F	24	40	100	1	99	100
	G	20	71	100	2	98	100
	H	22	18	100	0	100	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
241	A	11	59	25	0	25	42
	B	10	33	25	2	23	70
	C	16	59	25	5	20	34
	D	7	53	25	5	20	38
	E	10	13	25	0	25	100
	F	6	12	25	0	25	100
	G	4	15	25	0	25	100
	H	8	7	25	0	25	100
242	A	1	2	5	0	5	100
	B	3	0	5	0	5	100
	C	1	3	5	0	5	100
	D	1	4	5	0	5	100
	E	2	3	5	0	5	100
	F	0	0	5	0	5	100
	G	1	3	5	0	5	100
	H	1	0	5	0	5	100
243	A	7	39	15	3	12	31
	B	9	17	15	1	14	82
	C	2	41	15	3	12	29
	D	4	33	15	0	15	45
	E	6	14	15	1	14	100
	F	5	4	15	2	13	100
	G	5	9	15	1	14	100
	H	1	4	15	0	15	100
244	A	19	154	45	7	38	25
	B	20	102	45	1	44	43
	C	18	164	45	5	40	24
	D	17	110	45	5	40	36
	E	12	70	45	1	44	63
	F	14	23	45	0	45	100
	G	8	36	45	2	43	100
	H	7	14	45	0	45	100
246	A	7	25	10	1	9	36
	B	4	18	10	2	8	44
	C	4	35	10	4	6	17
	D	5	48	10	2	8	17
	E	3	15	10	3	7	47
	F	6	1	10	0	10	100
	G	3	12	10	0	10	83
	H	5	3	10	0	10	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
248	A	35	83	50	12	38	46
	B	34	55	50	4	46	84
	C	33	101	50	8	42	42
	D	17	62	50	8	42	68
	E	12	36	50	3	47	100
	F	9	9	50	1	49	100
	G	17	7	50	0	50	100
	H	8	6	50	0	50	100
249	A	15	154	50	7	43	28
	B	21	85	50	8	42	49
	C	12	154	50	2	48	31
	D	11	119	50	2	48	40
	E	19	38	50	1	49	100
	F	10	9	50	1	49	100
	G	18	42	50	0	50	100
	H	7	3	50	0	50	100
262	A	3	14	10	0	10	71
	B	3	10	10	0	10	100
	C	5	14	10	0	10	71
	D	5	8	10	0	10	100
	E	4	3	10	0	10	100
	F	3	3	10	0	10	100
	G	1	3	10	0	10	100
	H	1	0	10	0	10	100
266	A	3	4	5	0	5	100
	B	1	5	5	0	5	100
	C	1	5	5	0	5	100
	D	5	1	5	1	4	100
	E	2	2	5	0	5	100
	F	0	0	5	0	5	100
	G	2	2	5	0	5	100
	H	0	0	5	0	5	100
338	A	45	319	90	18	72	23
	B	34	219	90	12	78	36
	C	26	307	90	10	80	26
	D	35	191	90	5	85	45
	E	33	66	90	1	89	100
	F	17	38	90	0	90	100
	G	35	70	90	0	90	100
	H	17	11	90	4	86	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
339	A	32	249	85	11	74	30
	B	33	139	85	5	80	58
	C	35	240	85	8	77	32
	D	31	142	85	6	79	56
	E	30	92	85	1	84	91
	F	21	29	85	0	85	100
	G	32	73	85	0	85	100
	H	18	8	85	1	84	100
341	A	87	695	235	32	203	29
	B	89	410	235	20	215	52
	C	84	659	235	24	211	32
	D	72	465	235	13	222	48
	E	102	236	235	5	230	97
	F	57	91	235	2	233	100
	G	71	205	235	3	232	100
	H	43	46	235	3	232	100
342	A	72	408	225	33	192	47
	B	82	305	225	9	216	71
	C	55	469	225	14	211	45
	D	39	357	225	6	219	61
	E	64	124	225	1	224	100
	F	39	74	225	2	223	100
	G	25	66	225	1	224	100
	H	11	21	225	0	225	100
343	A	73	510	180	30	150	29
	B	93	352	180	14	166	47
	C	61	623	180	27	153	25
	D	61	356	180	19	161	45
	E	73	200	180	5	175	88
	F	55	112	180	0	180	100
	G	64	172	180	7	173	100
	H	48	50	180	4	176	100
344	A	38	449	125	21	104	23
	B	42	220	125	9	116	53
	C	26	349	125	3	122	35
	D	18	219	125	0	125	57
	E	28	118	125	0	125	100
	F	20	62	125	0	125	100
	G	22	128	125	3	122	95
	H	11	21	125	0	125	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
345	A	57	258	175	33	142	55
	B	43	195	175	9	166	85
	C	32	286	175	5	170	59
	D	35	208	175	3	172	83
	E	44	68	175	0	175	100
	F	15	13	175	0	175	100
	G	17	43	175	2	173	100
	H	3	16	175	0	175	100
346	A	88	472	325	45	280	59
	B	95	268	325	14	311	100
	C	40	458	325	22	303	66
	D	52	364	325	6	319	88
	E	55	156	325	2	323	100
	F	24	65	325	0	325	100
	G	26	69	325	1	324	100
	H	4	11	325	0	325	100
347	A	52	303	150	12	138	46
	B	61	224	150	8	142	63
	C	35	370	150	23	127	34
	D	41	260	150	6	144	55
	E	61	95	150	1	149	100
	F	24	44	150	0	150	100
	G	30	70	150	1	149	100
	H	17	21	150	0	150	100
348	A	66	417	175	26	149	36
	B	57	253	175	8	167	66
	C	27	435	175	16	159	37
	D	35	343	175	6	169	49
	E	41	146	175	0	175	100
	F	32	65	175	0	175	100
	G	21	94	175	0	175	100
	H	15	40	175	2	173	100
349	A	128	831	425	65	360	43
	B	93	489	425	17	408	83
	C	59	729	425	32	393	54
	D	57	512	425	10	415	81
	E	70	261	425	3	422	100
	F	37	134	425	0	425	100
	G	47	189	425	1	424	100
	H	18	57	425	0	425	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
412	A	22	127	45	7	38	30
	B	19	65	45	3	42	65
	C	15	123	45	3	42	34
	D	20	79	45	3	42	53
	E	16	52	45	7	38	73
	F	14	21	45	0	45	100
	G	16	36	45	1	44	100
	H	10	14	45	0	45	100
416	A	10	64	15	2	13	20
	B	4	44	15	2	13	30
	C	7	53	15	4	11	21
	D	3	50	15	0	15	30
	E	9	25	15	1	14	56
	F	4	30	15	0	15	20
	G	4	24	15	0	15	63
	H	6	18	15	0	15	83
417	A	31	220	50	10	40	18
	B	19	135	50	9	41	30
	C	16	251	50	9	41	16
	D	21	101	50	7	43	43
	E	19	73	50	1	49	67
	F	10	32	50	2	48	100
	G	26	61	50	0	50	82
	H	22	22	50	1	49	100
420	A	7	5	15	0	15	100
	B	2	7	15	0	15	100
	C	4	28	15	3	12	43
	D	5	7	15	0	15	100
	E	2	1	15	0	15	100
	F	0	1	15	0	15	100
	G	2	2	15	0	15	100
	H	1	3	15	0	15	100
421	A	5	9	7	0	7	78
	B	5	5	7	0	7	100
	C	2	6	7	0	7	100
	D	0	0	7	0	7	100
	E	3	2	7	0	7	100
	F	0	0	7	0	7	100
	G	0	5	7	0	7	100
	H	0	0	7	0	7	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
422	A	9	36	20	2	18	50
	B	9	9	20	1	19	100
	C	8	34	20	0	20	59
	D	11	26	20	0	20	77
	E	7	9	20	0	20	100
	F	0	1	20	0	20	100
	G	9	6	20	0	20	100
	H	8	3	20	0	20	100
423	A	0	7	5	0	5	71
	B	1	1	5	0	5	100
	C	0	4	5	0	5	100
	D	0	0	5	0	5	100
	E	3	1	5	0	5	100
	F	0	0	5	0	5	100
	G	0	0	5	0	5	100
	H	0	1	5	0	5	100
424	A	4	23	10	0	10	43
	B	2	6	10	0	10	100
	C	2	12	10	0	10	83
	D	1	14	10	0	10	71
	E	1	6	10	0	10	100
	F	1	1	10	0	10	100
	G	1	1	10	0	10	100
	H	2	0	10	0	10	100
425	A	28	211	65	14	51	24
	B	22	111	65	11	54	49
	C	14	251	65	11	54	22
	D	13	196	65	5	60	31
	E	22	72	65	2	63	88
	F	19	21	65	1	64	100
	G	21	49	65	1	64	100
	H	21	41	65	0	65	100
426	A	1	10	5	1	4	40
	B	4	4	5	1	4	100
	C	1	15	5	0	5	33
	D	1	3	5	0	5	100
	E	3	0	5	0	5	100
	F	0	4	5	0	5	100
	G	1	7	5	0	5	71
	H	0	1	5	0	5	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
427	A	2	25	12	5	7	28
	B	4	20	12	1	11	55
	C	6	27	12	0	12	44
	D	6	25	12	1	11	44
	E	5	9	12	1	11	100
	F	3	3	12	0	12	100
	G	3	10	12	0	12	100
	H	2	3	12	0	12	100
428	A	19	88	35	7	28	32
	B	13	65	35	2	33	51
	C	17	83	35	4	31	37
	D	15	66	35	3	32	48
	E	17	34	35	2	33	97
	F	11	24	35	1	34	100
	G	10	19	35	0	35	100
	H	7	5	35	0	35	100
431	A	9	30	15	1	14	47
	B	6	18	15	3	12	67
	C	6	14	15	0	15	100
	D	2	22	15	0	15	68
	E	3	7	15	0	15	100
	F	6	5	15	0	15	100
	G	5	5	15	0	15	100
	H	6	4	15	0	15	100
433	A	11	57	12	3	9	16
	B	5	43	12	2	10	23
	C	5	45	12	2	10	22
	D	7	20	12	0	12	60
	E	6	8	12	1	11	100
	F	3	8	12	0	12	100
	G	3	12	12	1	11	92
	H	3	7	12	0	12	100
440	A	42	209	75	14	61	29
	B	23	104	75	8	67	64
	C	23	166	75	6	69	42
	D	23	108	75	3	72	67
	E	16	42	75	0	75	100
	F	13	19	75	0	75	100
	G	14	25	75	0	75	100
	H	11	13	75	0	75	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
442	A	67	498	160	26	134	27
	B	56	303	160	20	140	46
	C	50	547	160	32	128	23
	D	55	304	160	12	148	49
	E	45	154	160	8	152	99
	F	43	65	160	3	157	100
	G	50	118	160	2	158	100
	H	43	31	160	4	156	100
443	A	33	156	85	11	74	47
	B	27	103	85	0	85	83
	C	29	156	85	4	81	52
	D	21	123	85	1	84	68
	E	30	50	85	1	84	100
	F	20	16	85	2	83	100
	G	21	27	85	0	85	100
	H	9	7	85	1	84	100
446	A	6	19	10	1	9	47
	B	0	16	10	1	9	56
	C	0	9	10	1	9	100
	D	3	7	10	2	8	100
	E	5	7	10	1	9	100
	F	4	8	10	1	9	100
	G	0	11	10	0	10	91
	H	3	2	10	0	10	100
447	A	3	15	10	1	9	60
	B	5	12	10	1	9	75
	C	1	22	10	1	9	41
	D	3	11	10	1	9	82
	E	4	5	10	0	10	100
	F	0	2	10	0	10	100
	G	2	6	10	1	9	100
	H	2	3	10	0	10	100
448	A	8	31	10	4	6	19
	B	6	17	10	5	5	29
	C	6	23	10	4	6	26
	D	5	23	10	1	9	39
	E	6	7	10	0	10	100
	F	4	5	10	0	10	100
	G	4	14	10	1	9	64
	H	1	3	10	0	10	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner [a]	General lottery	
449	A	5	51	10	2	8	16
	B	3	34	10	2	8	24
	C	3	49	10	2	8	16
	D	5	37	10	0	10	27
	E	3	18	10	0	10	56
	F	4	12	10	0	10	83
	G	6	12	10	3	7	58
	H	6	8	10	0	10	100
450	A	6	36	15	2	13	36
	B	5	11	15	1	14	100
	C	3	18	15	1	14	78
	D	5	11	15	0	15	100
	E	2	5	15	0	15	100
	F	5	9	15	0	15	100
	G	2	11	15	0	15	100
	H	2	1	15	0	15	100
451	A	11	31	15	1	14	45
	B	1	17	15	3	12	71
	C	9	39	15	0	15	38
	D	5	17	15	1	14	82
	E	8	3	15	0	15	100
	F	3	5	15	0	15	100
	G	5	3	15	0	15	100
	H	5	1	15	0	15	100
454	A	3	31	5	2	3	10
	B	1	16	5	0	5	31
	C	0	26	5	0	5	19
	D	0	24	5	1	4	17
	E	2	9	5	1	4	44
	F	2	8	5	0	5	63
	G	1	7	5	1	4	57
	H	1	6	5	0	5	83
456	A	1	6	5	0	5	83
	B	0	6	5	0	5	83
	C	2	6	5	0	5	83
	D	1	11	5	0	5	45
	E	2	3	5	0	5	100
	F	0	2	5	0	5	100
	G	0	2	5	0	5	100
	H	0	0	5	0	5	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
457	A	4	32	15	2	13	41
	B	5	8	15	2	13	100
	C	5	29	15	1	14	48
	D	4	17	15	0	15	88
	E	4	8	15	1	14	100
	F	6	0	15	0	15	100
	G	2	7	15	0	15	100
	H	3	0	15	0	15	100
458	A	3	18	10	0	10	56
	B	4	5	10	0	10	100
	C	4	5	10	0	10	100
	D	3	1	10	0	10	100
	E	0	1	10	0	10	100
	F	2	1	10	0	10	100
	G	1	1	10	0	10	100
	H	0	0	10	0	10	100
459	A	5	92	25	4	21	23
	B	7	37	25	3	22	59
	C	11	57	25	2	23	40
	D	5	54	25	0	25	46
	E	4	26	25	1	24	92
	F	3	4	25	0	25	100
	G	1	21	25	0	25	100
	H	2	6	25	2	23	100
461	A	61	309	125	23	102	33
	B	50	222	125	10	115	52
	C	37	382	125	15	110	29
	D	31	234	125	8	117	50
	E	44	111	125	0	125	100
	F	26	33	125	0	125	100
	G	37	54	125	1	124	100
	H	30	11	125	0	125	100
462	A	51	287	120	14	106	37
	B	54	145	120	9	111	77
	C	42	283	120	13	107	38
	D	43	192	120	1	119	62
	E	62	88	120	0	120	100
	F	26	29	120	0	120	100
	G	38	64	120	2	118	100
	H	26	22	120	0	120	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
463	A	11	89	30	6	24	27
	B	8	46	30	3	27	59
	C	8	74	30	4	26	35
	D	13	56	30	0	30	54
	E	10	25	30	1	29	100
	F	6	8	30	0	30	100
	G	9	10	30	0	30	100
	H	8	8	30	0	30	100
464	A	19	96	40	4	36	38
	B	17	56	40	0	40	71
	C	15	113	40	0	40	35
	D	11	62	40	1	39	63
	E	17	12	40	0	40	100
	F	13	5	40	0	40	100
	G	6	12	40	0	40	100
	H	5	5	40	0	40	100
465	A	11	86	40	1	39	45
	B	19	43	40	0	40	93
	C	16	79	40	0	40	51
	D	9	40	40	0	40	100
	E	14	17	40	0	40	100
	F	10	4	40	0	40	100
	G	6	8	40	0	40	100
	H	4	0	40	0	40	100
466	A	33	188	80	15	65	35
	B	25	113	80	6	74	65
	C	21	182	80	2	78	43
	D	12	94	80	3	77	82
	E	24	25	80	1	79	100
	F	12	17	80	2	78	100
	G	28	25	80	1	79	100
	H	15	5	80	0	80	100
467	A	27	142	55	12	43	30
	B	19	80	55	5	50	63
	C	24	154	55	3	52	34
	D	13	93	55	7	48	52
	E	18	41	55	0	55	100
	F	13	18	55	0	55	100
	G	24	36	55	2	53	100
	H	21	11	55	2	53	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%)[b]
				Total	Landowner[a]	General lottery	
601	A	80	522	150	7	143	27
	B	40	239	150	12	138	58
	C	46	370	150	2	148	40
	D	44	311	150	1	149	48
	E	56	115	150	0	150	100
	F	30	53	150	0	150	100
	G	59	94	150	0	150	100
	H	48	29	150	2	148	100

[a] Landowners were allotted up to 20% of the total permits available for each permit area and time period Unused landowner permits were made available in the general lottery.
[b] Chance of general lottery applicant being drawn assumes no hunter preference

PRAIRIE-CHICKEN HARVEST IN MINNESOTA DURING 2008

Michael A. Larson, Forest Wildlife Populations and Research Group

INTRODUCTION

Hunting seasons for prairie-chickens (*Tympanuchus cupido pinnatus*) in Minnesota were closed from 1943 through 2002. During October 2003 a limited-entry, 5-day hunting season for prairie-chickens was held within 7 contiguous permit areas in western Minnesota. Permits were awarded through a lottery system, and each hunter could harvest a maximum of 2 prairie-chickens. The same format was implemented for prairie-chicken hunting seasons during 2004 and 2005. The number of permit areas was increased to 11 in 2006 and remained the same during the 2007 and 2008 hunting seasons (Figure 1). The objective of this report is to document results of the 2008 prairie chicken hunting season.

METHODS

Information about the 2008 hunting season came from 2 sources. First, the Electronic Licensing System (ELS) recorded all permit applications, lottery results, and purchases of permits. Prairie-chicken hunters no longer are required to register their harvested birds in the ELS. Second, I sent a postcard survey by mail to all people who were successful in the lottery. I did not restrict the survey to hunters who purchased a prairie-chicken hunting permit because I had the postcards printed and sent a few days before the hunting season began, and some hunters may not have purchased a permit yet. Approximately 3 weeks later I sent the postcard survey a second time to hunters who had not responded to the first mailing. The survey consisted of 5 questions: (1) did you hunt?, (2) how many days did you hunt?, (3) how many prairie-chickens did you bag?, (4) how many sharp-tailed grouse did you bag while hunting for prairie-chickens?, and (5) how satisfied were you with the hunt?

RESULTS & DISCUSSION

One hundred eighty-six prairie-chicken hunting permits were available during 2008. There were 183 lottery winners, and 17 of them were landowners (Table 1). One hundred forty-four lottery winners purchased a permit. One landowner who was listed in the ELS data as a lottery winner but not a permit purchaser reported hunting, so I considered there to be 145 permit purchasers in 2008.

One hundred thirteen permit purchasers (78%) responded to the first mailing of the survey, and 22 (15%) responded to the second mailing, so the response rate was 93.1%. I assumed that the few nonrespondents would have had the same average response as all those who responded to either mailing of the survey.

Eight (6% of) purchasers who responded to the survey reported that they did not hunt, and 127 respondents reported hunting (Table 2). Hunters hunted an average of 2 days out of the 5-day season. Of an estimated 137 hunters, I estimated that 85 (62%) bagged at least 1 prairie-chicken (Table 2). Hunters reported harvesting 123 prairie-chickens, and the estimated total harvest was 141 prairie-chickens. Harvest was greater in 2008 than in any other year since the modern seasons began in 2003, and the hunter success rate was the best of any year except 2003 (Table 3). The number of applicants has been similar during the last 4 years; hunter success rates and total harvest have been more variable (Table 3).

Prairie-chicken hunters reported bagging 31 sharp-tailed grouse while hunting prairie-chickens. These sharp-tailed grouse were harvested from permit areas 801A–806A (Figure 1). The estimated harvest of sharp-tailed grouse during the prairie-chicken hunting season was 39.

The average rating for hunter satisfaction on a 1–5 scale was 3.9 (median = 4), and 86% of the 126 respondents to this question reported a satisfaction level of 3 or greater.

ACKNOWLEDGEMENTS

I appreciate the help of Laura Gilbert in preparing and mailing the survey and in data entry, and comments from Mark Lenarz helped me improve the clarity of the report.

Table 1. Results of the lottery for prairie-chicken hunting permits in Minnesota during 2008.

Permit area	Permits available	No. of applicants	Lottery winners	
			Number[a]	Proportion
801A	10	5	5	1.00
802A	10	20	12	0.60
803A	10	8	8	1.00
804A	17	24	17	0.71
805A	20	69	20	0.29
806A	17	83	17	0.20
807A	25	67	25	0.37
808A	20	41	20	0.49
809A	20	71	21	0.30
810A	27	114	27	0.24
811A	10	33	11	0.33
All	186	535	183	0.34

[a] Extra permits may be awarded in a permit area when the last applicant selected in the lottery applied as a member of a hunting party.

Table 2. Hunter harvest of prairie-chickens in Minnesota during 2008.

Permit area	No. of hunters[a]		Birds harvested		Birds per harvester[b]	Success rate[c]
	Self-reported	Estimated	Self-reported	Estimated		
801A	1	2	1	2	1.0	1.00
802A	7	9	7	10	1.7	0.67
803A	7	8	6	7	2.3	0.38
804A	15	15	20	21	1.9	0.73
805A	16	17	18	20	1.7	0.71
806A	11	12	16	20	1.8	0.92
807A	14	15	15	18	1.5	0.80
808A	14	15	15	16	1.5	0.73
809A	15	16	10	11	1.8	0.38
810A	18	18	10	10	1.4	0.39
811A	9	10	5	6	1.5	0.40
All	127	137	123	141	1.7	0.62

[a] Number of permit purchasers who actually went hunting.
[b] Estimated number of prairie-chickens harvested per successful hunter.
[c] Proportion of estimated hunters who harvested ≥1 prairie-chicken.

Table 3. Annual summary of prairie-chicken hunting results in Minnesota during 2003–2008.

Year	Permits available	Applicants	Birds harvested	Success rate[a]
2003	100	853	115	0.68
2004	101	759	51	0.37
2005	110	500	90	0.58
2006	182	512	92	0.40
2007	187	519	122	0.53
2008	186	535	141	0.62

[a] Proportion of hunters who harvested ≥1 prairie-chicken.

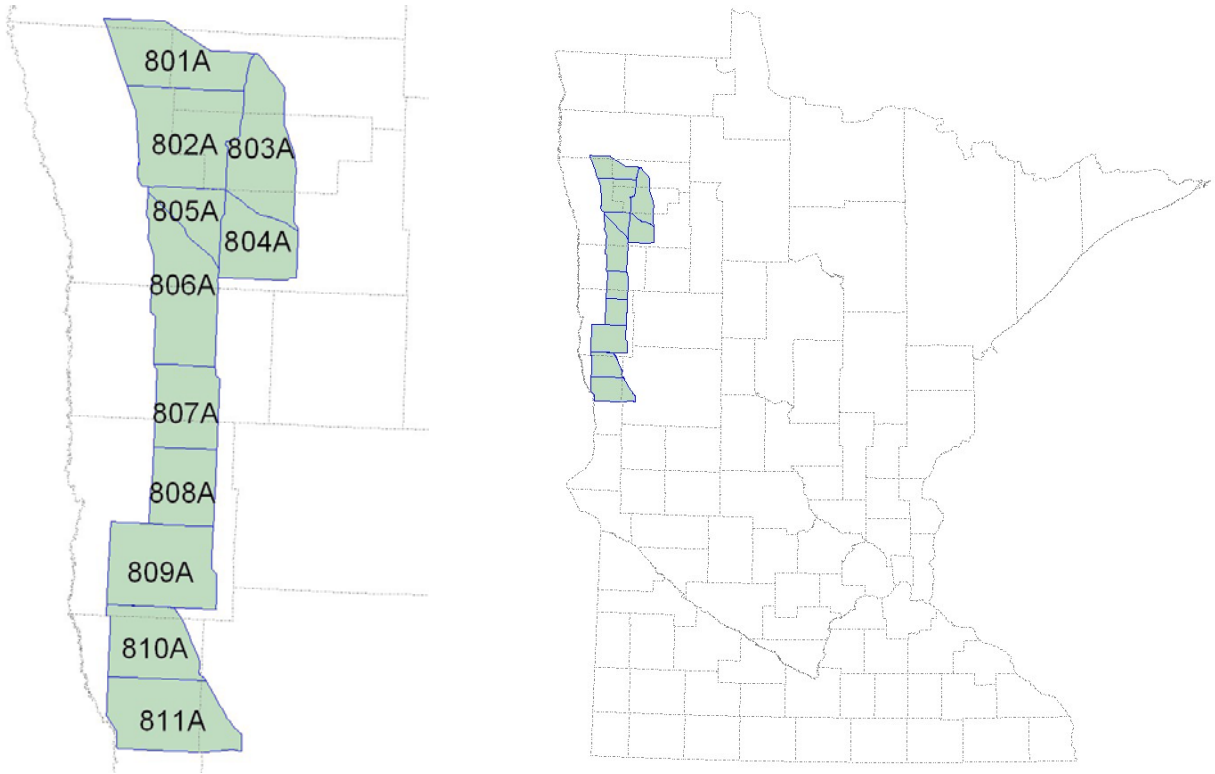


Figure 1. Map of permit areas for prairie-chicken hunting in Minnesota (left) and their location relative to counties within the state (right).

2008 MINNESOTA BEAR HARVEST REPORT

David Garshelis, Karen Noyce, Forest Wildlife Populations and Research Group

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). Hunters in this area can harvest two bears, and beginning in 2005 hunters could purchase both a quota and no-quota license. 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 at designated registration stations. Stations are not staffed by DNR personnel. Harvest data are a simple tally of these registrations, which for the most part are done electronically. Hunters also are required to submit a tooth from harvested bears (compliance ≈ 70%), which is used to estimate age. Some years, including this year, they were also requested to submit a section of rib bone (see below). Hunters receive a tooth envelope when they register their bear, and extract and submit the tooth and rib samples themselves.

We conducted our fourth tetracycline-marking population estimate in 2008. During June and July, DNR and other field personnel set out baits (bacon and ground beaver) containing capsules of tetracycline (9 500-mg capsules) across the bear range. Each bait was enclosed in a wooden box to deter small carnivores from taking it. Each box was nailed to a tree at a height of ~8 feet, and about 3 miles apart. Grease was smeared on the outside of most boxes as an added attractant. Baits were checked and removed a few weeks later. We differentiated those taken by bears from other animals based on claw marks on the tree and the condition of the bait box.

Bears that ingested baits were biomarked by the tetracycline: bones and teeth from these bears, when sectioned and examined under ultraviolet light show a characteristic yellow banding. An estimate of population size can be derived from the number of bears marked divided by the proportion marked. We estimated the proportion marked by examining bone and/or tooth samples submitted by hunters. We used the number of baits taken by bears as an initial estimate of the number marked, and then corrected this value for the number of bears that took two baits, based on the proportion of bone samples that were double-marked.

RESULTS

The number of permits available to hunters steadily increased through the 1980–1990s, peaking at 20,840 in 1999, and remaining at >20,000 for 5 years (Table 1). In 3 years, >15,000 people hunted bears (Fig. 2). However, from 2000 to 2003, the proportion of permittees who bought licenses sharply declined, from >80% to near 60%. This resulted in 7 of 11 BMUs being undersubscribed by 2003. Accordingly, available permits were reduced each year after 2003 (Table 2). In 2008, permits were reduced in 9 of 11 BMUs (Table 2), and only 2 BMUs were undersubscribed (Table 3). Possibly in response to diminished availability of permits, the number of applicants increased (Table 1).

The 2008 registered harvest (2135) was the lowest in the last 6 years; harvests during the previous 5 years had been remarkably similar (3200–3600; Table 1, Fig. 2). The 2008 harvest was below the 5-year mean in every BMU, and 4 BMUs (all in north-central and northeastern Minnesota, Fig. 1) had the lowest harvest since 1996 (Table 4). The 2008 harvest was also heavily skewed toward males (62%). Four BMUs had the highest percent males ever recorded (Table 4). A skew towards males is indicative of plentiful foods: females are disproportionately harder to attract to bait when natural foods are plentiful. Hunting success is generally low when foods are abundant, and that was the case in 2008. Statewide, success averaged 20%, compared to ~25% for more normal food years (Table 5). Also typical of a year with abundant fall foods, a higher proportion of the harvest occurred later in the season. Normally ~70% of the harvest occurs in the first week; in 2008, only 58% occurred the first week and 71% by the end of the second week (Table 6).

Two key factors, fall food abundance and hunter numbers, explain most of the year-to-year variation in the number of bears killed each year. A regression model based on these 2 factors more accurately predicts the number of females than males killed (Fig. 3). However, for each of the past 7 years, this model predicted slightly higher harvests than actually occurred, suggesting that bears are somewhat harder to harvest now than they were during the 1990s, when the population was growing.

A diminishing median age among harvested females, reflecting an increasing proportion of harvested 1–2 year-olds (Figs. 4 & 5), indicate changes in the composition of the living population, and possibly a downturn in population size.

Preliminary results from the tetracycline-marking confirm this downturn. During June–July, >3500 baits were set, but fewer bears were marked than anticipated (Table 7), due to abundant natural foods combined with less attractive baits, owing to the wooden boxes used for the first time this year. This sample was still adequate to derive a statewide population estimate. However, in all previous tetracycline surveys, the estimates derived from the first year's samples have been biased low (by 7–45%). This became evident after collecting a second or third year of samples, which tend to be much less biased than the first. We project that the eventual population estimate, after 1–2 more years of bone collections from hunters, will be <20,000 bears, or a >20% decline since 2002.

DISCUSSION

Harvests of bears remained consistently high during 2003–2007 (Fig. 2), masking an apparent decline in the population. These high harvests (>3000 bears) were due to consistently high hunting success. We do not know whether hunters invested an increasing effort. We will survey hunters in 2009 to quantify hunting effort, and compare that to the effort expended by hunters in 2001, the year of the last hunter survey. It was not until food conditions in the forest reached the high level of 2008 that hunting success markedly declined. A reduction in permits, and thus number of hunters, should reduce the harvest in the next few years, and enable the population to grow. The population is being managed at a level that provides good hunting opportunities but also socially tolerable nuisance activity. There is no target population number, but rather a range that meets these criteria. In fact, the target population is likely to fluctuate. With a smaller population size during the 1980s, nuisance activity was often intolerable (during poor food years, at least). Since 2002, nuisance complaints have been consistently low, reflecting consistently good natural food supplies as well as a change in behavior of people (better at removing attractants, such as garbage and birdseed, and also less apt to complain about bears). Thus, it is possible that the population could grow to a higher level and still be publicly acceptable.

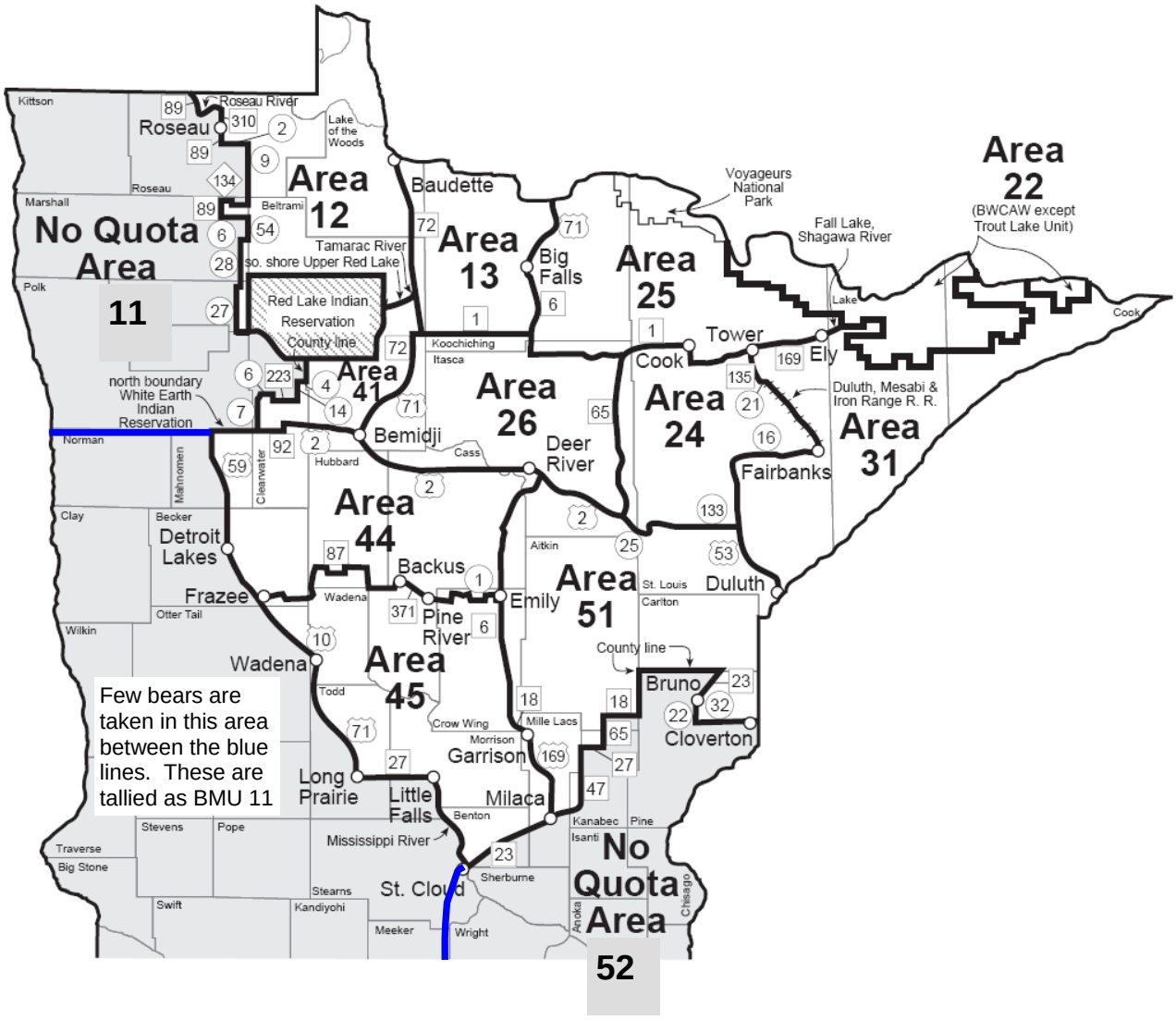


Figure. 1. Bear management units (BMUs) within quota (white) and no-quota (gray) zones. Hunters in the quota zone are restricted to a single BMU, whereas no-quota hunters can hunt anywhere within that zone.

Table 1. Bear permits, licenses, hunters, harvests, and success rates, 1990–2008.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Permit applications	24861	25890	26428	27365	30127	29922	30405	27353	30245	29384	29275	26824	21886	16431	16466	16153	15725	16345	17362[a]
Permits available	6370	7140	7920	8630	9400	11950	12030	11370	18210	20840	20710	20710	20610	20110	16450	15950	14850	13200	11850
Licenses purchased (total)	7094	7757	8485	9224	9826	12448	12414	11440	16737	18355	19304	16510	14639	14409	13669	13199	13164	11936	10404
Quota area [b]	5568	6257	6845	7528	8125	10304	10592	9655	14941	16563	17021	13632	12350	9833	10063	9340	9169	8905	7842
Quota surplus/military [b]												235	209	2554	1356	1591	1561	526	233
No-quota area [b]	1526	1500	1640	1696	1701	2144	1822	1785	1796	1792	2283	2643	2080	2022	2238	2268	2434	2505	2329
% Licenses bought [c]																			
Of permits available [c]	87.4	87.6	86.4	87.2	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
Of permits issued [c]									84.4	87.2	83.9	69.8	66.3	65.7	68.3	67.1	68.9	70.0	67.2
Estimated no. hunters [d]	6600	7200	7900	8600	9100	11600	11500	10300	14500	15900	16800	15500	13700	13500	12800	12400	12400	11200	9800
Harvest	2381	2143	3175	3003	2329	4956	1874	3212	4110	3620	3898	4936	1915	3598	3391	3340	3290	3172	2135
Harvest sex ratio (%M) [e]	52	59	50	56	62	47	62	55	55	53	58	56	61	58	57	59	58	57	62 f
Success rate (%) [g]																			
Total harvest/hunters	36	30	40	35	26	43	16	31	28	23	23	29	14	26	26	26	26	28	21
Quota harvest/licenses	35	30	41	34	26	42	15	29	25	20	20	28	14	25	26	25	25	28	21

[a] Includes 528 applicants for area 99, a designation to increase preference but not to obtain a license.

[b] 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. Total licenses = quota + quota surplus + no-quota + military (no permit needed).

[c] Quota licenses bought (including surplus)/permits available, or licenses bought (prior to surplus)/permits issued (permits issued more relevant for years when some areas were undersubscribed; see Table 3). 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.

[d] 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%), and 2001(93.9%).

[e] 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.

[f] Record high percent males in harvest (equal only to 1992)

[g] Success rates in 2001–2008 were calculated as number of successful hunters/total hunters, rather than bears killed/total hunters, because hunters could take 2 bears. In 2008, 36 hunters took more than 1 bear (34 took 2 bears on NQ license, 1 hunter took 1 quota and 1 NQ bear, and 1 hunter took 1 quota and 2 NQ bears): thus, the 2135 bears were taken by 2098 different hunters, so success = 2098/9800 = 21%.

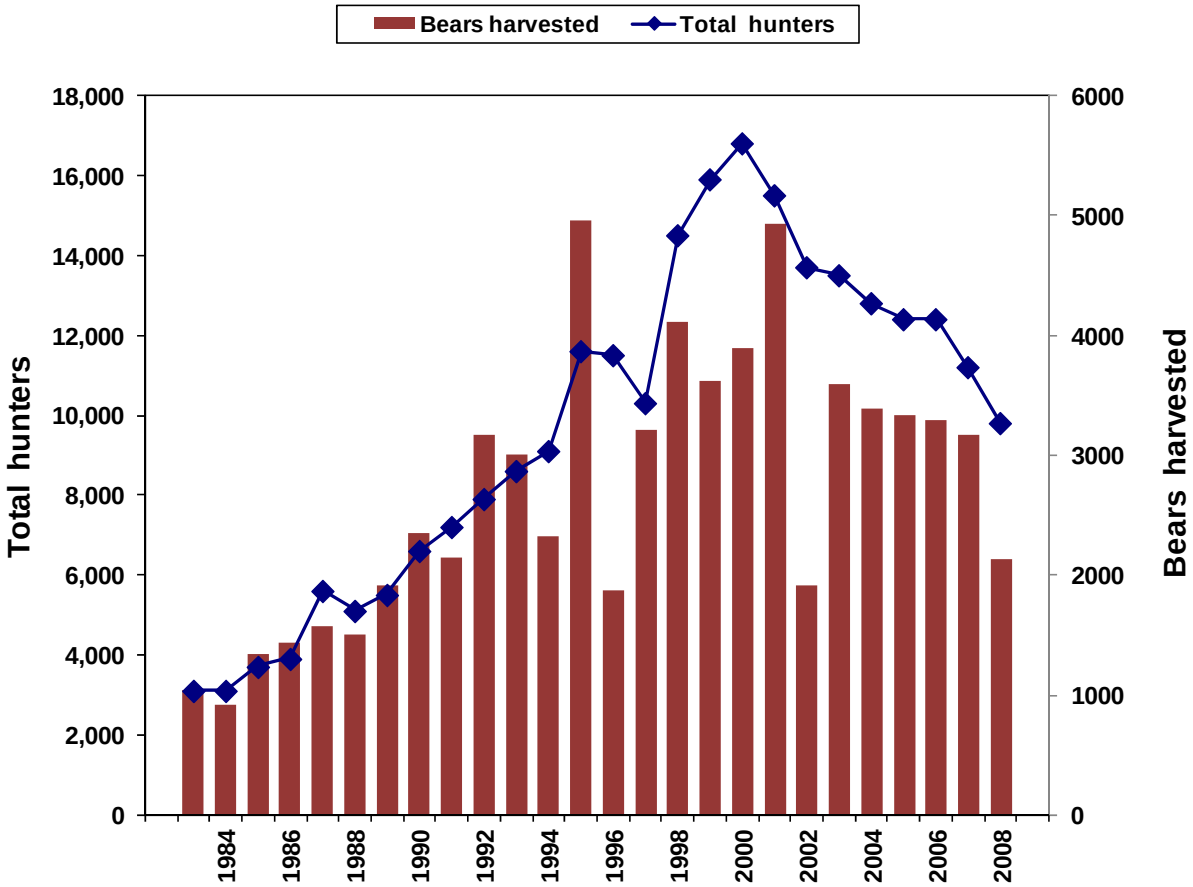


Figure 2. Bears harvested and estimated number of hunters, 1983–2008.

Table 2. Number of bear hunting permits available per year, 2004–2008 (aligned with permit applications in Table 3 below; highlighted numbers show drop from previous year).

BMU	2008	2007	2006	2005	2004
12	450	500	550	550	700
13	650	700	800	900	900
22	150	150	150	150	150
24	750	900	1000	1200	1200
25	1550	1700	1900	1900	1900
26	1150	1250	1500	1500	1500
31	1700	1900	2100	2100	2100
41	400	400	450	450	500
44	1350	1500	1700	1700	2000
45	1000	1200	1200	1500	1500
51	2700	3000	3500	4000	4000
Total	11850	13200	14850	15950	16450

Table 3. Number of bear hunting license applicants, and number and percent of available surplus licenses bought, 2004–2008. Highlighted values indicate undersubscribed.

BMU	2008		2007		2006		2005		2004	
	Apps	Surplus bought	Apps	Surplus bought	Apps	Surplus bought	Apps	Surplus bought	Apps	Surplus bought
12	857		811		1005		864		808	
13	709		745		680	120 100%	714	186 100%	670	129 56%
22	85	50 77%	87	51 81%	92	58 100%	65	46 54%	73	47 61%
24	825		742	159 100%	624	367 98%	749	270 60%	766	259 60%
25	1793	4	1799		1789	112 100%	1923		1793	111 100%
26	1999	2	2028		1915		1997		2110	
31	2388	3	2383		2290		2097	4 100%	2006	92 100%
41	656		577		683		653		601	
44	2821		2669		2838		2884		2934	
45	873	128 100%	936	266 100%	840	360 100%	927	346 60%	1092	332 81%
51	3828		3568		2969	531 100%	3276	726 100%	3613	386 100%
Total	16834	178 92%	16345	476 98%	15725	1548 ~100%	16149	1578 78%	16466	1356 78%

Table 4. Minnesota bear harvest tally[a] for 2008 by Bear Management Unit (BMU) and sex compared to harvests during 2003-2007 and record high harvests.

	2008											
BMU	M	(%M)	F	U	**Total**	**2007**	**2006**	**2005**	**2004**	**2003**	**5 year mean**	**Record high harvest** (yr)
Quota												
12	74	(74)[b]	26	1	101	124	70	165	165	174	140	263 (01)
13	80	(62)	49	0	129	163	151	205	197	185	180	258 (95)
22	5	(71)	2	0	7	15	15	8	10	3	10	41 (89)
24	73	(73)[b]	27	0	100[c]	134	194	144	212	163	169	288 (95)
25	165	(55)	133	0	298[c]	369	421	404	546	510	450	584 (01)
26	71	(52)	66	0	137[c]	315	314	285	320	303	307	513 (95)
31	168	(68)[b]	80	0	248[c]	398	482	445	484	436	449	697 (01)
41	44	(57)	33	0	77	104	40	104	83	100	86	201 (01)
44	119	(61)	77	0	196	333	192	273	283	444	305	643 (95)
45	35	(49)	37	0	72	113	118	107	118	143	120	178 (01)
51	217	(63)[b]	127	0	344	557	721	505	544	667	599	895 (01)
Total	1051	(62)	657	1	1709	2625	2718	2759[d]	2962	3128	2838	4288 (01)
No Quota[e]												
11	124	(71)	51	0	175	328	120	335	177	200	232	351 (05)
52	148	(59)	103	0	251	219	400	223	252	270	273	400 (06)
Total	272	(64)	154	0	426	547	520	581[d]	429	470	509	678 (95)
State	1323	(62)	811	1	**2135**	3172	3290[d]	3340[d]	3391	3598	3358	4956 (95)

[a] Hunters receive tooth envelopes and registration stations. The following table shows the number of tooth envelopes that had no corresponding registration slip or e-registration. These were added to the harvest tally.

Year	Quota area	No-quota area
2003	84	13
2004	96	39
2005	179	31
2006	63	15
2007	27	9
2008	23	4

[b] Highest percent males ever recorded for BMUs 24, 31 and 51; second highest for BMU 12 (76% in 1992).

[c] Lowest harvest since 1996.

[d] The estimated registered harvest, including those in which registration data were lost and no tooth envelope was received. Value does not match column total because other data on table are uncorrected for estimated lost registration data.

[e] Some hunters with no-quota licenses hunted in the quota area, and their kills were assigned to the BMU where they apparently hunted (n = 28 in 2006, 27 in 2007, 14 in 2008). Some quota area hunters also apparently hunted in the wrong BMU, based on the block where they said they killed a bear. However, some of these blocks may have been read wrong from the map, so all these were recorded in the BMU where they were assigned, not the BMU of the indicated harvest block.

Table 5. Bear hunting success (%) by BMU, measured as the registered harvest (excluding second bear) divided by the number of licenses sold[a], 2003–2008.

BMU	Mean success 2003-2007	2008		2007		2006		2005[b]		2004		2003		2002
		% Success	% 2 bears[c]	% Success	% 2 bears[c]	% Success	% 2 bears[c]	% Success	% 2 bears[c]	% Success	% 2 bears[c]	% Success	% 2 bears[c]	% Success
Quota	26	21		28		25		25		26		25		14
12	33	32		36		19		41		33		35		22
13	30	28		31		24		32		33		31		19
22	11	8		14		14		10		11		4		8
24	23	20		20		25		20		27		25		15
25	33	28 [d]		31		30		30		38		34		23
26	32	17 [d]		36		30		34		31		29		17
31	30	21 [d]		28		33		31		33		25		17
41	26	27		35		13		31		23		29		14
44	23	21		30		16		24		20		26		9
45	13	11[d]		14		14		13		12		13		4
51	23	19		27		28		18		19		21		9
No Quota	21	17 [d]	(8)	19	(11)	22	(9)	23	(9)	18	(7)	21	(10)	10
Statewide	25	20		26		25		25		25		25		13

[a] Harvest/licenses instead of harvest/hunters because BMU-year-specific estimates for the rate of hunting by licensed hunters are unreliable. Statewide estimates of harvest/hunters are presented in Table 1.

[b] For 2005, estimated registered harvest was used instead of known registered harvest due to a large loss of registration data.

[c] Percent of successful hunters that shot 2 bears; 2nd bear is not included in the calculation of hunting success. The taking of 2 bears was legal only in the no-quota area in 2002–2008.

[d] Lowest success since 2002.

Table 6. Cumulative bear harvest (% of total harvest) by date, 1990–2008.

Year	Day of week for opener	Aug 22/23 – Aug 31 (9–10 days)	Sep 1 – Sep 7 (7 days)	Sep 8 – Sep 14 (7 days)	Sep 15 – Sep 30 (16 days)
1990	Sat		69	82	96
1991	Sun		64	76	93
1992	Tue		72	86	96
1993	Wed		67	80	94
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

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

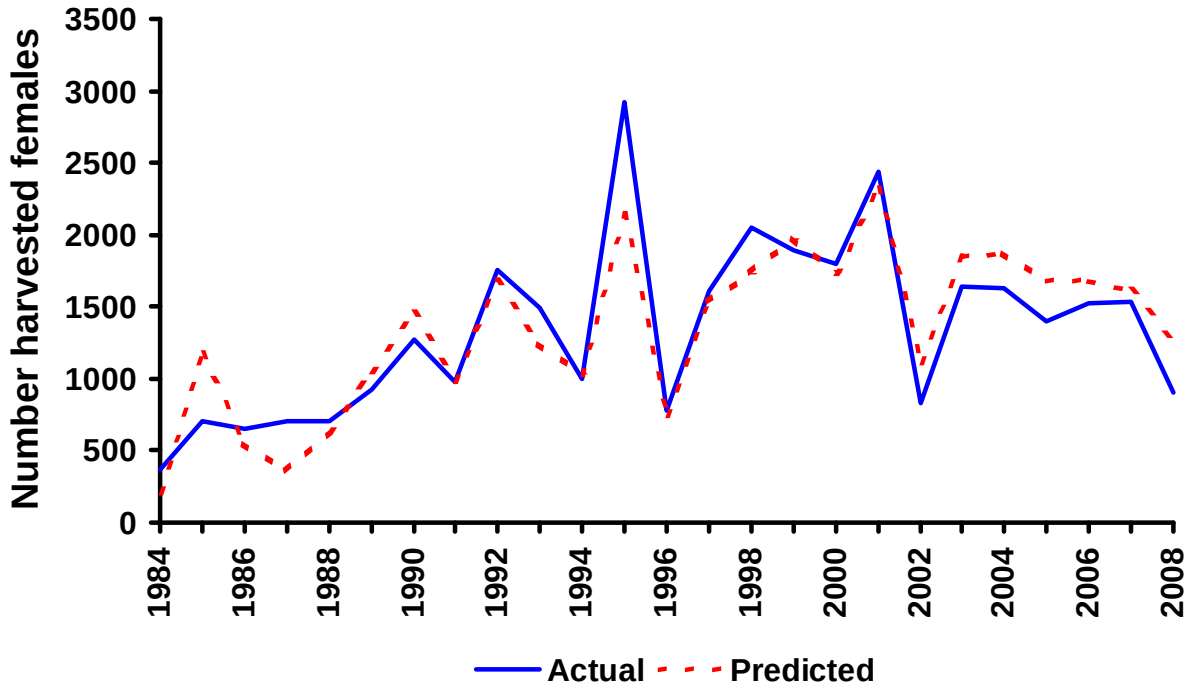


Figure 3. Number of female bears harvested vs. number predicted, based on fall food abundance and hunter numbers. Prediction for 2008 based on regression from 1984–2007 ($R^2 = 0.82$). Note that predictions exceed actual harvest for all years since 2002.

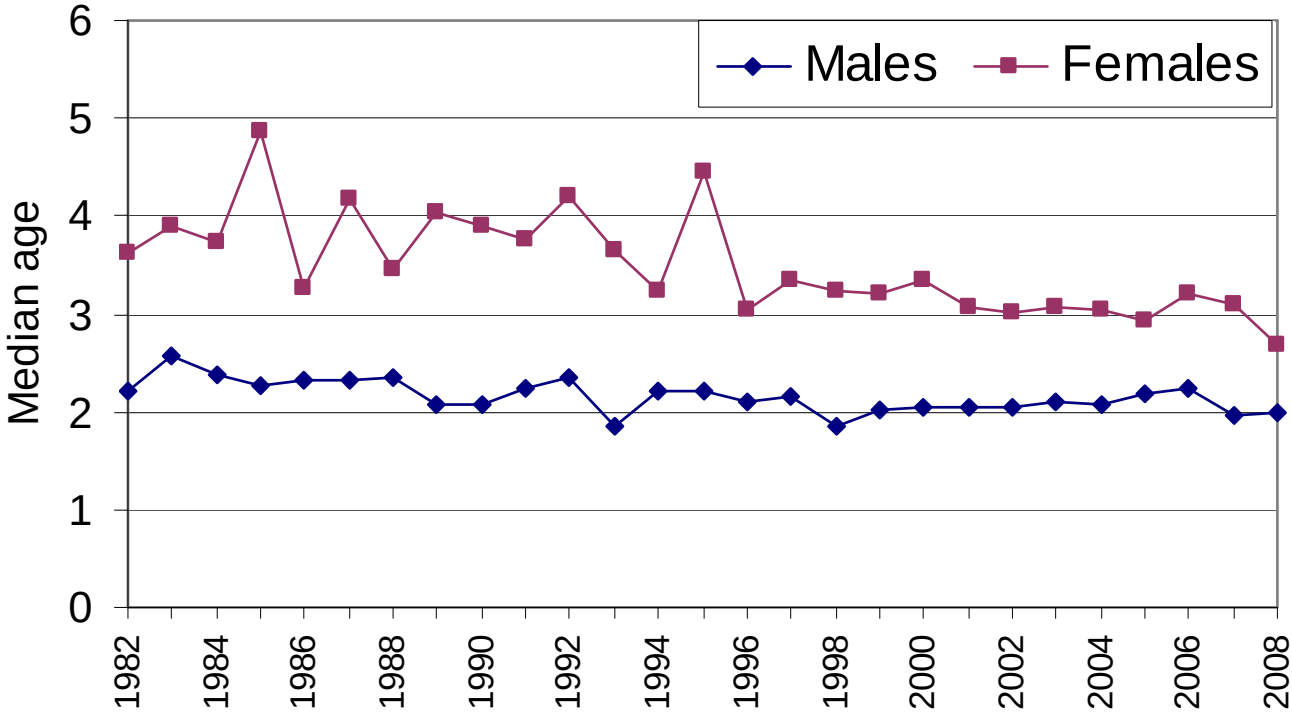


Figure 4. Statewide harvest age structure: median ages by sex, 1982–2008.

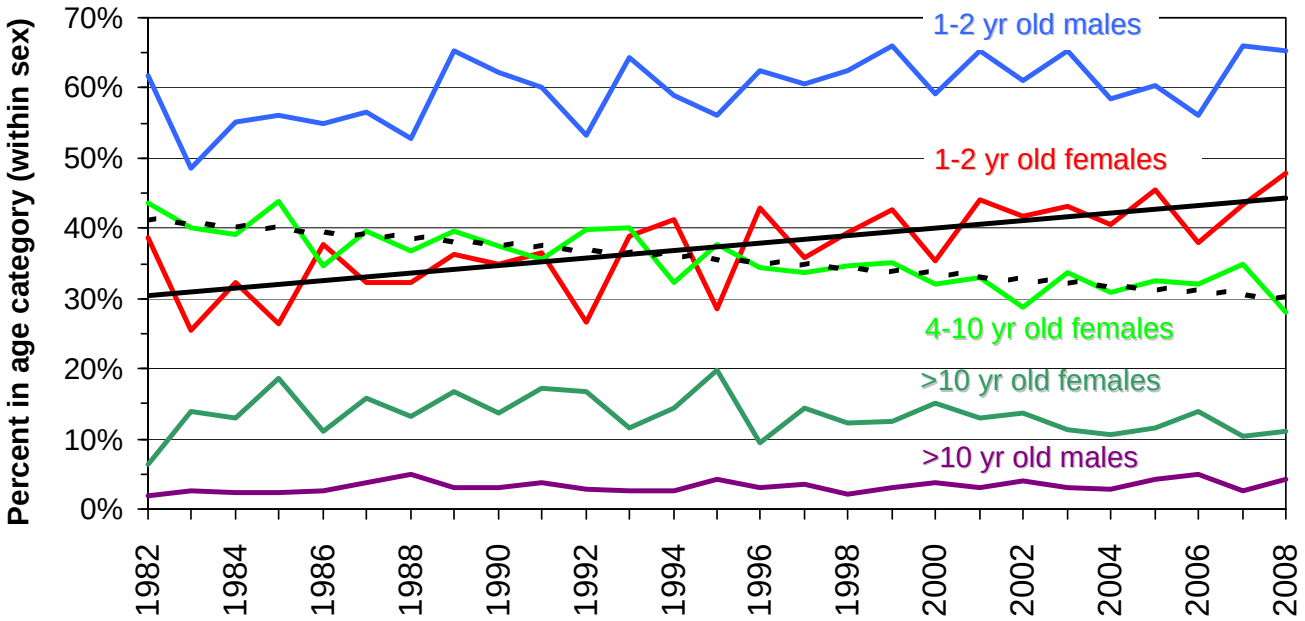


Figure 5. Statewide harvest age structure: proportion of each sex in age category, 1982–2008. Trend lines are significant, indicating a long-term change in age structure.

Table 7. Tetracycline-marking data: 1991, 1997, 2002, and 2008 (years of marking).

	1991	1997	2002	2008
Baits set	2905	2989	3122	3539
Baits eaten by bears	998	1213	707	490
Ribs/teeth checked for tetracycline [a]	1958	2611	1429	1498
Tetracycline-marked samples	122	149	56	57
(% marked)	(6.2%)	(5.7%)	(3.9%)	(3.8%)
Double-marked samples	11	10	2	2
(% double-marked)	(9.0%)	(6.7%)	(3.6%)	(3.5%)

[a] Excluding cubs, which are not counted in population estimates.

2008 Minnesota Deer Harvest Report

Lou Cornicelli, Big Game / Season Program Consultant, Division of Fish and Wildlife

INTRODUCTION

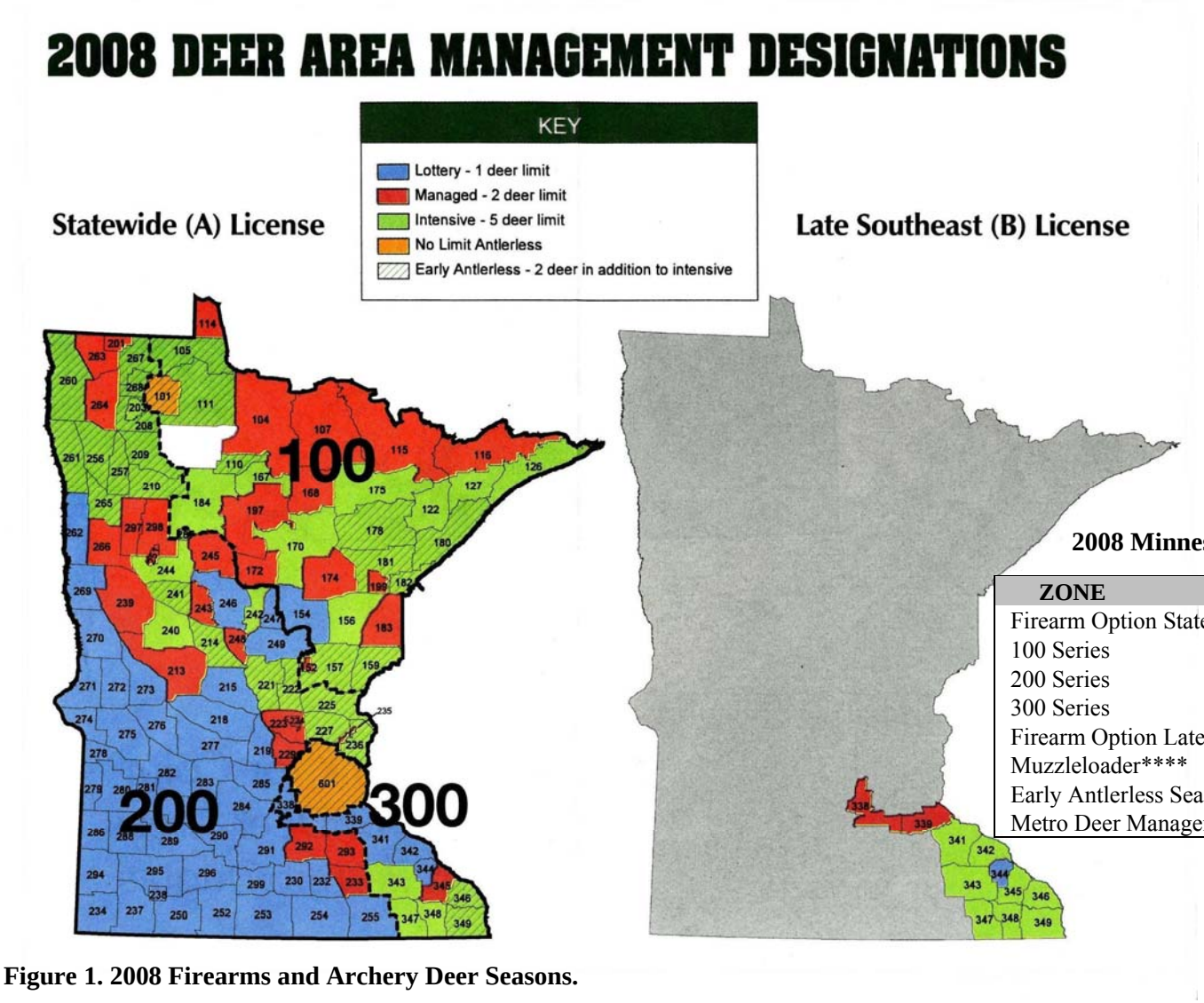
The white-tailed deer may be considered Minnesota's most popular wildlife species. Each year 500,000 hunters harvest over 200,000. In 2008, hunters registered 221,837 deer

METHODS

Every deer taken by hunting in Minnesota must be registered within 24 hours of the close of the season under which the deer was taken. Deer may be registered at any of the 825 to nearly 900 "Big Game Registration" stations available throughout the state. 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

Outcome of the 2008 deer harvest are presented in the following tables.



2008 Minnesota Firearms Deer Seasons

ZONE	DATES
Firearm Option Statewide (A)*	
100 Series	Nov. 8-23
200 Series	Nov. 8-16
300 Series	Nov. 8-14
Firearm Option Late Southeast (B)**	Nov. 22-30
Muzzleloader****	Nov. 29-Dec. 14
Early Antlerless Season***	Oct. 11-12
Metro Deer Management Area (601)***	Nov. 8-30A

Figure 1. 2008 Firearms and Archery Deer Seasons.

2008 Minnesota Archery Deer Season Dates: September 13-December 31.
Antlerless deer and legal bucks may be taken by archery, except only legal bucks may be taken in permit areas that have no either-sex permits or have youth-only either-sex permits.

Table 1. Statewide Firearms, Archery, and Muzzleloader Harvest, License Sales, and Success Rates, 1992-2008.

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
REGULAR FIREARMS																	
Resident License Sales	443,005	426,215	427,343	419,965	389,745	369,190	378,320	395,745	400,814	401,005	367,964	344,875	309,698	291,298	299,774	285,286	376,006
Non-Resident License Sales	8,033	8,498	9,190	9,339	8,535	7,830	8,852	9,970	10,595	10,972	10,835	11,334	12,036	12,523	12,520	12,520	11,883
Bonus Permit Sales	40,471	18,140	19,308	22,603	27,148	32,229	20,884	23,785	34,802	59,013	105,699	194,201	183,186	184,566	167,343	145,522	190,156
Multi-Zone Buck License Sales	5,711	16,881	24,590	29,902	38,806	42,803	44,739	43,903	42,669	41,921	35,658	32,929	32,359	28,233	15,984	15,051	N/A
Resident Youth License Sales				1,835	2,964	3,844	3,445	2,038	3,215	4,011	2,884	34,463	51,347	50,501	49,599	49,242	50,397
All Season Deer License Sales									2,384	3,986	22,125	30,998	46,008	59,090	75,511	76,385	N/A
Total License Sales	497,220	469,734	480,879	483,644	467,198	455,896	456,240	475,441	495,289	519,601	545,165	648,800	634,634	626,211	620,731	584,006	628,442
Registered Buck Harvest[1]	95,503	79,463	85,579	88,997	71,242	64,867	82,921	92,584	102,961	98,894	101,333	110,440	116,612	95,594	95,695	97,528	85,646
Antlerless Permits Offered	322,030	236,055	199,950	201,525	154,195	150,195	140,280	177,380	232,595	286,540	365,667	31,625	30,760	28,830	28,830	28,830	28,830
Antlerless Permits Issued	277,776	194,888	164,418	162,761	116,650	105,481	108,016	135,852	180,490	196,603	192,907	25,386	24,111	25,656	25,656	25,656	25,656
Antlerless Permits App.	317,947	262,402	260,086	257,653	174,329	142,260	151,148	214,597	237,571	225,341	202,086	30,253	28,454	31,403	31,403	31,403	31,403
Registered AL Harvest[1]	133,733	108,646	92,704	109,196	68,106	62,038	60,475	71,681	88,492	98,169	102,280	147,420	123,278	119,363	135,981	118,860	98,147
Registered Total Harvest[1]	229,236	188,109	178,283	198,193	139,348	126,905	143,396	164,265	191,453	197,063	203,613	257,860	239,890	214,957	231,676	216,388	183,793
Registered % Successful[2]	46.1	40	37.1	40.1	29.8	27.8	31.4	34.8	38.6	37.9	37.3	39.7	37.8	34.3	37.3	37.1	35.1
ARCHERY																	
Resident License Sales	71,946	69,434	71,409	70,056	67,058	63,499	63,826	66,226	68,947	69,608	57,532	59,339	50,601	50,293	49,595	52,780	87,872
Non-Resident License Sales	914	1,128	1,156	1,171	1,098	980	1,029	1,073	1,271	1,288	1,275	1,428	1,144	1,207	1,286	1,509	1,509
Youth Archery Sales	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3,748	7,261	7,489	7,688	7,663	9,005
Mgmt Permit License Sales	14,349	14,907	13,121	15,387	15,632	17,478	15,846	16,945	20,393	22,141	18,126	N/A	N/A	N/A	N/A	N/A	N/A
Total License Sales	87,209	85,469	85,686	86,614	83,788	81,957	80,701	84,244	90,611	93,037	76,933	60,767	59,006	58,989	58,569	61,952	99,033
Total Harvest - Archery Lic/Bonus	13,004	13,722	13,818	14,521	14,338	13,258	12,306	13,376	15,776	15,884	14,744	19,335	17,237	18,975	17,076	17,261	22,632
Total Harvest - All-Season license												2,356	3,489	4,563	8,284	6,900	N/A
Total Archery Harvest	13,004	13,722	13,818	14,521	14,338	13,258	12,306	13,376	15,776	15,884	14,744	21,691	20,726	23,538	25,360	24,161	22,632
Registered % Successful[2]	14.9	16.1	16.1	16.8	17.1	16.2	15.2	15.8	17.4	17.1	19.2	22.3	29.2	24.6	24.8	24.3	18.5
MUZZLELOADER																	
Total Muzzleloader License Sales	--	--	--	--	--	--	--	--	11,972	13,043	11,764	9,142	10,512	9,226	10,781	9,867	64,673
Estimated All-Season Hunters	--	--	--	--	--	--	--	--	--	--	--	12,020	14,168	23,293	23,293	26,813	N/A
Total Muzzleloader Harvest	828	1,097	1,725	2,452	3,367	3,164	3,152	2,928	4,548	4,494	3,505	9,466	9,289	15,421	13,507	12,138	9,572
Registered % Successful[2]									38.0	34.5	29.8	44.7	37.6	47.4	39.6	28.2	13.4
TOTAL Registered Harvest	243,068	202,928	193,826	215,166	157,317	143,327	158,854	180,569	211,777	217,452	222,050	290,525	260,604	255,736	270,778	260,434	221,837

[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, 2008.

Firearms/Zone	Hunters	Harvest			Overall Success
		Bucks	Antlerless	Total	
1	174,479	35,250	43,385	78,635	37.3%
2	226,694	42,492	43,908	86,400	33.0%
3A	21,492	4,947	3,224	8,171	33.1%
3B	18,907	2,215	6,315	9,645	41.9%
4A	40,151	7,818	4,154	11,972	28.7%
4B	20,048	5,064	3,926	8,990	42.9%
Early Season	26,934	0	5,372	5,372	17.7%
Free Landowner[1]	4,393	0	1,222	1,222	27.8%
Muzzleloader[2]	64,673	2,583	6,989	9,572	13.4%
Archery[3]	99,033	7,224	15,408	22,632	18.5%
TOTAL[4]	**482,613**	**95,511**	**126,326**	**221,837**	37.5%

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

[2] Total number of people who bought only an archery license was 10,262.

[3] Includes Camp Ripley. Total number of people who bought only an archery license was 28,293.

[4] Due to the fact that a hunter can buy multiple licenses, hunter numbers are an estimate.

Table 3. Firearms Harvest and Harvest per Square Mile by Permit Area, 2008. Includes all firearm licenses but does not include early antlerless harvest.

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	273	101	238	92	704	496	0.55	0.87	1.42
104	1A	1056	167	673	121	2,017	2,078	0.51	0.46	0.97
105	1A	923	228	762	176	2,089	740	1.25	1.58	2.82
107	1A	1522	267	997	182	2,968	1,896	0.80	0.76	1.57
110	1A	631	198	602	165	1,596	300	2.10	3.22	5.32
111	1A	732	145	422	99	1,398	1,437	0.51	0.46	0.97
114	1A	62	5	30	2	99	123	0.50	0.30	0.80
115	1A	1713	292	1037	197	3,239	1,867	0.92	0.82	1.74
116	1A	207	18	100	8	333	1,164	0.18	0.11	0.29
122	1A	575	69	275	57	976	619	0.93	0.65	1.58
126	1A	500	65	307	34	906	943	0.53	0.43	0.96
127	1A	104	5	55	6	170	561	0.19	0.12	0.30
152	1A	121	37	82	36	276	61	1.98	2.54	4.52
154	1A	1401	211	685	129	2,426	760	1.84	1.35	3.19
156	1A	1766	509	1493	385	4,153	825	2.14	2.89	5.03
157	1A	2228	780	1828	520	5,356	889	2.51	3.52	6.02
159	1A	1167	298	1018	237	2,720	568	2.06	2.73	4.79
167	1A	691	201	632	177	1,701	432	1.60	2.34	3.94
168	1A	1199	298	1068	234	2,799	723	1.66	2.21	3.87
170	1A	2575	925	2547	628	6,675	1,311	1.96	3.13	5.09
172	1A	1369	423	1580	345	3,717	451	3.04	5.21	8.25
174	1A	1207	316	939	241	2,703	835	1.45	1.79	3.24
175	1A	1817	412	1492	327	4,048	1,249	1.45	1.79	3.24
178	1A	2229	570	1705	422	4,926	1,259	1.77	2.14	3.91
180	1A	1476	227	919	140	2,762	983	1.50	1.31	2.81
181	1A	1690	375	1219	341	3,625	709	2.38	2.73	5.12
182	1A	315	72	262	60	709	269	1.17	1.47	2.64
183	1A	1368	309	960	223	2,860	663	2.06	2.25	4.31
184	1A	3253	1077	3164	1032	8,526	1,231	2.64	4.28	6.93
197	1A	967	179	659	150	1,955	975	0.99	1.01	2.01
199	1A	113	13	65	6	197	148	0.76	0.57	1.33
201	2A	93	17	47	11	168	161	0.58	0.47	1.04
203	2A	92	21	45	15	173	118	0.78	0.69	1.47
208	2A	205	55	178	45	483	379	0.54	0.73	1.28
209	2A	508	135	466	140	1,249	639	0.79	1.16	1.95
210	2A	1082	288	813	264	2,447	615	1.76	2.22	3.98
213	2A	1587	479	1065	357	3,488	1,057	1.50	1.80	3.30
214	2A	1222	508	1072	436	3,238	557	2.20	3.62	5.82
215	2A	873	216	566	178	1,833	701	1.24	1.37	2.61
218	2A	637	143	389	106	1,275	884	0.72	0.72	1.44
219	2A	418	74	180	50	722	392	1.07	0.78	1.84
221	2A	900	354	641	249	2,144	642	1.40	1.94	3.34
222	2A	775	256	523	197	1,751	413	1.88	2.36	4.24
223	2A	430	112	220	80	842	377	1.14	1.09	2.23
224	2A	109	26	71	30	236	47	2.33	2.72	5.05
225	2A	1204	321	785	270	2,580	618	1.95	2.23	4.17
227	2A	775	165	415	133	1,488	471	1.65	1.51	3.16

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	198	63	135	34	430	287	0.69	0.81	1.50
230	2A	199	29	132	22	382	452	0.44	0.40	0.85
232	2A	195	27	95	14	331	377	0.52	0.36	0.88
233	2A	190	47	135	25	397	385	0.49	0.54	1.03
234	2A	167	10	106	14	297	636	0.26	0.20	0.47
235	2A	52	12	35	8	107	32	1.62	1.71	3.34
236	2A	666	139	403	75	1,283	372	1.79	1.66	3.45
237	2A	259	20	83	15	377	728	0.36	0.16	0.52
238	2A	53	5	19	0	77	95	0.56	0.25	0.81
239	2A	1458	364	1062	308	3,192	922	1.58	1.88	3.46
240	2A	1701	629	1425	547	4,302	642	2.65	4.05	6.71
241	2A	1293	548	1068	481	3,390	417	3.10	5.03	8.14
242	2A	543	226	628	185	1,582	215	2.53	4.84	7.37
243	2A	895	247	751	230	2,123	314	2.85	3.92	6.77
244	2A	1762	701	1728	651	4,842	583	3.02	5.28	8.30
245	2A	1779	569	1625	489	4,462	583	3.05	4.60	7.66
246	2A	1545	250	727	192	2,714	772	2.00	1.52	3.52
247	2A	589	121	311	66	1,087	229	2.57	2.17	4.74
248	2A	360	118	256	69	803	212	1.70	2.09	3.79
249	2A	1060	193	495	149	1,897	502	2.11	1.67	3.78
250	2A	336	18	158	17	529	711	0.47	0.27	0.74
251	2A	57	11	58	15	141	55	1.03	1.52	2.56
252	2A	271	9	76	9	365	715	0.38	0.13	0.51
253	2A	387	36	139	18	580	974	0.40	0.20	0.60
254	2A	415	51	211	31	708	930	0.45	0.32	0.76
255	2A	350	35	129	35	549	774	0.45	0.26	0.71
256	2A	502	104	412	102	1,120	653	0.77	0.95	1.71
257	2A	416	98	385	70	969	412	1.01	1.34	2.35
260	2A	607	110	526	134	1,377	1,249	0.49	0.62	1.10
261	2A	178	33	179	34	424	795	0.22	0.31	0.53
262	2A	188	10	48	12	258	677	0.28	0.10	0.38
263	2A	369	59	222	67	717	512	0.72	0.68	1.40
264	2A	709	134	503	107	1,453	669	1.06	1.11	2.17
265	2A	455	128	493	153	1,229	494	0.92	1.57	2.49
266	2A	338	80	261	67	746	617	0.55	0.66	1.21
267	2A	201	49	136	31	417	472	0.43	0.46	0.88
268	2A	262	58	185	39	544	229	1.14	1.23	2.37
269	2A	216	18	62	9	305	650	0.33	0.14	0.47
270	2A	145	2	21	3	171	748	0.19	0.03	0.23
271	2A	163	4	19	4	190	632	0.26	0.04	0.30
272	2A	170	4	30	5	209	531	0.32	0.07	0.39
273	2A	393	40	191	33	657	572	0.69	0.46	1.15
274	2A	216	18	39	16	289	355	0.61	0.21	0.81
275	2A	328	17	57	11	413	764	0.43	0.11	0.54
276	2A	524	33	107	18	682	543	0.97	0.29	1.26
277	2A	1049	98	299	53	1,499	813	1.29	0.55	1.84
278	2A	411	32	110	20	573	401	1.03	0.40	1.43

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
279	2A	222	14	78	12	326	344	0.65	0.30	0.95
280	2A	229	11	76	7	323	675	0.34	0.14	0.48
281	2A	502	13	99	8	622	575	0.87	0.21	1.08
282	2A	111	8	37	6	162	779	0.14	0.07	0.21
283	2A	221	11	40	10	282	614	0.36	0.10	0.46
284	2A	272	18	61	11	362	838	0.32	0.11	0.43
285	2A	359	47	135	21	562	550	0.65	0.37	1.02
286	2A	311	14	58	9	392	446	0.70	0.18	0.88
287	2A	81	27	112	29	249	46	1.76	3.66	5.42
288	2A	428	23	95	15	561	625	0.69	0.21	0.90
289	2A	197	13	42	10	262	816	0.24	0.08	0.32
290	2A	425	22	150	14	611	662	0.64	0.28	0.92
291	2A	635	45	251	49	980	802	0.79	0.43	1.22
292	2A	414	99	332	72	917	480	0.86	1.05	1.91
293	2A	403	85	274	68	830	511	0.79	0.83	1.62
294	2A	246	21	75	22	364	686	0.36	0.17	0.53
295	2A	493	23	125	32	673	840	0.59	0.21	0.80
296	2A	298	16	110	19	443	666	0.45	0.22	0.66
297	2A	192	42	136	56	426	438	0.44	0.53	0.97
298	2A	690	145	406	111	1,352	618	1.12	1.07	2.19
299	2A	233	19	126	20	398	386	0.60	0.43	1.03
338	3A	193	16	41	5	255	454	0.43	0.14	0.56
338	3B	58	29	102	24	213	454	0.13	0.34	0.47
339	3A	180	12	27	6	225	394	0.46	0.11	0.57
339	3B	74	43	99	37	253	394	0.19	0.45	0.64
341	3A	533	25	90	17	665	611	0.87	0.22	1.09
341	3B	315	212	537	141	1,205	611	0.52	1.46	1.97
342	3A	471	22	86	12	591	350	1.34	0.34	1.69
342	3B	244	177	438	112	971	350	0.70	2.08	2.77
343	3A	491	101	298	67	957	662	0.74	0.70	1.44
343	3B	218	127	393	97	835	662	0.33	0.93	1.26
344	3A	394	17	66	11	488	189	2.08	0.50	2.58
344	3B	95	35	102	21	253	189	0.50	0.83	1.34
345	3A	310	51	129	42	532	326	0.95	0.68	1.63
345	3B	188	84	284	62	618	326	0.58	1.32	1.90
346	3A	664	92	329	75	1,160	319	2.08	1.56	3.64
346	3B	271	162	499	137	1,069	319	0.85	2.50	3.35
347	3A	360	94	201	44	699	434	0.83	0.78	1.61
347	3B	158	107	344	74	683	434	0.36	1.21	1.58
348	3A	499	87	367	59	1,012	332	1.50	1.55	3.05
348	3B	185	100	401	90	776	332	0.56	1.78	2.34
349	3A	852	146	452	137	1,587	492	1.73	1.49	3.23
349	3B	409	241	786	218	1,654	492	0.83	2.53	3.36
601	Metro	561	132	396	79	1,168	1,633	0.34	0.37	0.72
901		0	0	1	0	1				
902		2	2	7	0	11				
903		34	38	90	32	194				

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
904		0	5	10	0	15				
905		3	1	6	3	13				
906		3	2	1	1	7				
907		7	1	4	4	16				
908		0	0	1	0	1				
909		0	1	0	1	2				
910		1	0	0	0	1				
911		0	3	7	1	11				
912		1	6	12	6	25				
913		1	0	0	0	1				
914		18	22	38	14	92				
915		0	1	3	4	8				
916		19	7	13	6	45				
918		0	0	2	0	2				
919		30	16	56	20	122				
920		0	0	1	0	1				
921		5	1	1	0	7				
922		0	1	6	1	8				
923		0	2	3	2	7				
924		7	1	12	0	20				
925		0	0	6	2	8				
926		3	9	21	11	44				
927		8	2	18	5	33				
928		7	15	37	16	75				
929		0	6	16	5	27				
930		10	5	23	3	41				
931		5	0	6	2	13				
932		14	3	11	1	29				
933		3	2	6	1	12				
TOTAL		**85,646**	**20,549**	**61,269**	**16,329**	**183,793**				

Table 4. Firearm Bonus Permit Harvest by Permit Area, 2008
Managed Permit Areas.

Permit Area	Zone	Fawn Male	Adult Female	Fawn Female	Total
104	1A	87	390	70	547
107	1A	148	555	116	819
114	1A	2	18	1	21
115	1A	166	559	105	830
116	1A	12	61	6	79
152	1A	16	36	21	73
168	1A	148	516	100	764
172	1A	207	774	195	1,176
174	1A	161	472	141	774
183	1A	144	474	115	733
197	1A	89	352	83	524
199	1A	8	40	3	51
201	2A	12	24	5	41
213	2A	213	492	170	875
223	2A	53	115	31	199
224	2A	9	37	18	64
229	2A	27	80	17	124
233	2A	20	79	13	112
235	2A	6	19	7	32
239	2A	214	562	195	971
243	2A	120	426	127	673
245	2A	276	820	266	1,362
248	2A	65	148	42	255
251	2A	4	34	9	47
263	2A	29	117	40	186
264	2A	70	284	63	417
266	2A	46	149	36	231
292	2A	43	154	41	238
293	2A	37	135	42	214
297	2A	24	72	35	131
298	2A	79	207	67	353
345	3A	12	18	8	38
338	3B	14	37	12	63
339	3B	20	50	20	90
Total		**2,581**	**8,306**	**2,220**	**13,107**

Table 4. Firearm Bonus Permit Harvest by Permit Area, 2008.

Intensive Permit Areas

Permit Area	Zone	Fawn Male	Adult Female	Fawn Female	Total
101	1A	3	32	5	40
105	1A	179	580	124	883
110	1A	131	414	129	674
111	1A	88	264	64	416
122	1A	42	158	32	232
126	1A	45	204	23	272
127	1A	2	28	2	32
156	1A	308	960	275	1,543
157	1A	479	1067	328	1,874
159	1A	182	623	161	966
167	1A	110	380	109	599
170	1A	635	1681	442	2,758
175	1A	247	959	227	1,433
178	1A	330	1043	278	1,651
180	1A	162	646	107	915
181	1A	248	808	262	1,318
182	1A	44	180	42	266
184	1A	768	2331	786	3,885
203	2A	7	33	10	50
208	2A	37	128	36	201
209	2A	97	340	117	554
210	2A	194	565	186	945
214	2A	300	654	255	1,209
221	2A	216	410	176	802
222	2A	141	313	129	583
225	2A	172	463	176	811
227	2A	113	258	92	463
236	2A	94	280	53	427
240	2A	400	925	374	1,699
241	2A	376	755	340	1,471
242	2A	139	407	126	672
244	2A	483	1207	466	2,156
256	2A	69	289	79	437
257	2A	60	271	51	382
260	2A	76	390	95	561
261	2A	25	133	27	185
265	2A	80	324	112	516
267	2A	27	89	19	135
268	2A	44	132	28	204
287	2A	19	71	21	111
341	3A	3	5	2	10
341	3B	97	268	80	445
342	3A	0	6	1	7
342	3B	99	234	67	400
343	3A	69	221	49	339
343	3B	67	197	67	331
345	3A	19	62	22	103
345	3B	35	118	33	186
346	3A	62	248	56	366
346	3B	80	279	80	439
347	3A	59	157	31	247
347	3B	65	199	46	310
348	3A	54	260	46	360
348	3B	50	208	53	311
349	3A	94	342	102	538
349	3B	125	461	143	729
601	Metro	97	277	59	433
Total		**8,247**	**24,337**	**7,301**	**39,885**

Table 5. Early Antlerless Season Harvest by Permit Area, 2008.

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
101	6	22	7	35
105	20	88	18	126
110	19	113	29	161
111	12	63	14	89
157	74	247	76	397
159	33	128	30	191
178	107	356	124	587
180	50	169	40	259
181	62	267	85	414
182	16	73	22	111
208	5	19	4	28
209	28	105	28	161
210	41	165	64	270
214	103	176	102	381
221	59	129	65	253
222	41	74	34	149
225	54	108	56	218
227	24	43	14	81
236	19	49	17	85
241	92	195	105	392
256	28	63	20	111
257	25	55	27	107
260	17	76	19	112
261	1	34	4	39
265	29	63	29	121
267	6	17	6	29
268	3	25	8	36
346	35	86	25	146
349	38	131	69	238
601	8	30	7	45
Total	1,055	3,169	1,148	5,372

Table 6. Summary of Firearms Special Hunts, 2008. Includes regular, youth, and bonus permits.

				Harvest				
Area	Dates	Zone	Permits Issued	Adult Male	Adult Femal	Fawn Male	Fawn Female	Total
901 - Rice Lake Nat. Wildlife Refuge	11/15-11/23	1A	100*	6	2	1	0	9
902 - St. Croix State Park[1]	11/15-11/18	1A	550**	65	142	60	51	318
903 - Savanna Portage State Park[1]	11/15-11/19	1A	40***	6	12	3	4	25
904 - Gooseberry Falls State Park[1]	11/8-11/23	1A	30*	2	4	0	0	6
905 - Split Rock Lighthouse State Park[1]	11/8-11/23	1A	30*	4	2	1	0	7
906 - Tettegouche State Park[1]	11/8-11/23	1A	125*	6	12	3	2	23
907 - Scenic State Park[1]	11/8-11/23	1A	30*	0	3	1	0	4
908 - Hayes Lake State Park[1]	11/8-11/23	1A	Unl.	0	2	0	0	2
909 - Lake Bemidji State Park[1]	11/8-11/11	1A	35#	1	9	5	1	16
910 - Zippel Bay State Park[1]	11/8-11/23	1A	55#	0	4	0	0	4
911 - Judge CR Magney SP*	11/8-11/23	1A	Unl.	1	1	0	1	3
912 - Wild River State Park[1]	11/8-11/11	2A	150**	19	36	16	32	103
913 - Lake Carlos State Park[1]	11/8-11/11	2A	25#	0	11	5	2	18
914 - William O'Brien State Park[1]	11/8-11/10	2A	65*	18	23	7	6	54
915 - Lake Bronson State Park[1]	11/8-11/16	2A	30#	0	2	1	1	4
916 - Maplewood State Park[1]	11/8-11/16	2A	100**	23	55	30	20	128
917 - Rydell NWR	11/8-11/16	2A	12#	0	0	0	0	0
918 - Lake Alexander SNA[1]	11/8-11/16	2A	40*	4	2	0	0	6
919 - Buffalo River State Park[1]	11/8-11/9	3A	16#	7	11	9	3	30
920 - Glacial Lakes State Park	11/13-11/16	3A	30#	0	4	1	0	5
921 - Lake Louise State Park[1]	11/8-11/9	3A	25**	10	31	22	24	87
922 - Beaver Creek Valley State Park[1]	11/8-11/10	3A	20**	13	28	14	9	64
923 - Zumbro Falls SNA[1]	11/8-11/14	3A	12#	0	6	0	2	8
924 - Forestville/Mystery Cave SP[1]	11/22-11/24 11/28-11/30	3B	110***	0	10	3	0	13
925 - Frontenac State Park[1]	11/22-11/24	3B	50**	2	18	8	2	30
926 - Great River Bluffs SP[1]	11/22-11/24 11/28-11/30	3B	100**	14	50	11	20	95
927 - Whitewater State Park[1]	11/22-11/24	3B	50**	16	27	14	14	71
928 - Zumbro Falls SNA[1]	11/22-11/30	3B	12#	0	6	1	1	8
929 - Whitewater Refuge	11/22-11/30	3B	50#	6	5	6	2	19
930 - Lake Elmo Park Reserve	11/8-11/16	Metro	50**	0	19	5	7	31
931 - Vermillion Highlands WMA[1]	11/8-11/21	Metro	25*	8	8	2	2	20
932 - Elm Creek Park Reserve[1]	11/22-11/23	Metro	150*	28	13	33	3	77
933 - Murphy-Hanrahan Park Rsv[1]	11/29-11/30	Metro	90*	8	5	21	4	38
TOTAL				267	563	283	213	1,326

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

Table 7. Free Landowner Firearms Harvest by Permit Area, 2008.

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
101	0	3	0	3
104	2	10	4	16
105	1	9	3	13
107	1	8	2	11
110	3	6	1	10
111	1	2	1	4
115	0	3	1	4
122	0	1	1	2
156	1	7	3	11
157	11	24	7	42
159	1	2	0	3
167	0	5	0	5
168	0	4	0	4
170	3	14	0	17
172	0	4	2	6
174	3	5	2	10
175	0	8	1	9
178	1	5	1	7
180	1	3	1	5
181	2	4	0	6
182	2	1	0	3
183	1	4	1	6
184	12	36	14	62
197	2	5	2	9
203	0	1	0	1
208	1	2	3	6
209	3	10	2	15
210	5	12	5	22
213	18	28	5	51
214	19	45	19	83
221	8	15	6	29
222	5	5	1	11
223	0	2	0	2
225	8	7	10	25
227	0	2	1	3
229	1	2	0	3
233	0	2	1	3
236	0	1	2	3
239	6	29	2	37
240	15	26	11	52
241	12	27	10	49
243	5	16	9	30
244	10	22	7	39
245	4	12	1	17
248	3	3	2	8
251	0	1	0	1
256	1	7	1	9
257	5	10	2	17
260	1	11	4	16
261	0	2	0	2
263	0	3	1	4
264	2	22	4	28
265	3	10	4	17
266	2	6	3	11
267	0	4	0	4
268	3	2	1	6
292	5	8	4	17
293	2	3	1	6
297	0	5	2	7
298	2	8	4	14
341	5	15	5	25
342	8	14	1	23
343	0	11	5	16
345	0	10	1	11
345	2	1	2	5
346	8	35	6	49
347	5	7	3	15
348	3	18	2	23
349	12	37	9	58
601	0	1	0	1
TOTAL	240	693	209	1,142

Table 8. Archery Harvest by Permit Area, 2008.
Includes Regular, Youth, All-Season, and Bonus Permits.

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
101	8	1	7	0	16
104	7	3	31	1	42
105	28	8	56	6	98
107	31	5	47	6	89
110	19	11	44	5	79
111	4	0	13	1	18
114	7	2	10	2	21
115	30	4	49	3	86
116	3	2	16	2	23
122	8	0	11	3	22
126	13	8	38	6	65
127	1	0	9	0	10
152	2	0	5	2	9
154	60	10	41	4	115
156	57	35	147	23	262
157	95	43	248	35	421
159	59	25	150	18	252
167	9	9	59	8	85
168	30	8	53	11	102
170	94	53	355	55	557
172	47	16	93	16	172
174	29	14	59	3	105
175	46	18	123	15	202
178	71	35	174	23	303
180	90	28	144	22	284
181	121	39	232	38	430
182	170	109	421	97	797
183	49	10	86	10	155
184	122	55	335	64	576
197	24	4	30	1	59
199	6	2	5	0	13
201	1	0	0	0	1
203	0	0	3	0	3
208	8	1	7	0	16
209	20	7	45	5	77
210	27	9	66	13	115
213	177	42	227	30	476
214	61	41	204	32	338
215	119	19	45	4	187
218	92	10	64	13	179
219	79	11	49	7	146
221	76	45	172	37	330
222	50	24	118	19	211
223	124	33	123	29	309
224	17	2	11	4	34
225	99	45	217	51	412
227	178	54	314	54	600
229	43	18	73	17	151
230	38	5	17	0	60
232	16	4	16	2	38
233	47	12	66	15	140
234	13	1	13	0	27

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
235	7	1	15	1	24
236	218	78	319	47	662
237	25	1	13	0	39
238	4	0	1	0	5
239	62	17	85	19	183
240	81	43	266	38	428
241	61	36	241	35	373
242	104	60	336	57	557
243	48	16	77	14	155
244	87	61	251	52	451
245	77	23	121	26	247
246	36	17	30	6	89
247	54	12	41	3	110
248	37	10	51	12	110
249	58	6	44	4	112
250	30	2	19	2	53
251	1	0	1	0	2
252	37	2	16	6	61
253	55	4	40	3	102
254	54	1	31	1	87
255	67	4	32	5	108
256	16	3	43	7	69
257	13	6	29	3	51
260	26	16	49	7	98
261	14	2	25	1	42
262	21	1	10	5	37
263	4	1	10	2	17
264	15	3	14	2	34
265	20	6	45	6	77
266	23	3	22	1	49
267	6	6	20	2	34
268	5	2	24	3	34
269	25	5	5	1	36
270	22	3	7	1	33
271	21	1	11	2	35
272	13	0	3	1	17
273	34	1	14	1	50
274	17	4	16	2	39
275	21	1	23	2	47
276	35	2	16	2	55
277	147	12	86	11	256
278	53	3	34	6	96
279	9	2	12	3	26
280	18	3	14	3	38
281	48	1	33	1	83
282	9	0	6	1	16
283	21	2	13	0	36
284	36	4	15	3	58
285	61	9	34	4	108
286	18	1	15	2	36
288	59	8	33	6	106
289	15	1	12	1	29

Table 8. (Continued)

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
290	45	3	46	9	103
291	132	10	74	8	224
292	52	21	84	6	163
293	85	21	77	10	193
294	23	4	16	7	50
295	43	4	36	6	89
296	40	0	17	0	57
297	4	2	4	2	12
298	10	4	14	3	31
299	55	3	36	3	97
338	73	10	64	7	154
339	64	10	53	5	132
341	152	65	262	36	515
342	95	30	156	34	315
343	238	91	486	66	881
344	57	5	28	2	92
345	77	26	120	20	243
346	166	39	227	37	469
347	88	37	209	29	363
348	104	30	169	43	346
349	164	47	250	58	519
601	616	241	1010	188	2,055
970*	98	34	147	41	320
971**	70	31	74	16	191
Total	**7,224**	**2,214**	**11,323**	**1,871**	**22,632**

*Camp Ripley First Hunt

**Camp Ripley Second Hunt

Table 9. Archery Harvest using Bonus Permits by Permit Area, 2008.

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
101	0	4	0	4
104	2	19	0	21
105	7	46	6	59
107	2	31	5	38
110	9	35	5	49
111	0	9	1	10
114	2	7	1	10
115	2	33	1	36
116	1	7	2	10
122	0	8	2	10
126	5	35	6	46
127	0	8	0	8
152	0	4	2	6
156	29	118	23	170
157	38	199	30	267
159	21	126	16	163
167	8	47	6	61
168	7	32	6	45
170	40	269	39	348
172	9	58	9	76
174	7	44	1	52
175	14	81	9	104
178	19	130	18	167
180	23	117	16	156
181	30	177	30	237
182	99	383	87	569
183	7	58	6	71
184	48	288	54	390
197	3	17	0	20
199	0	4	0	4
201	0	0	0	0
203	0	1	0	1
208	0	6	0	6
209	5	37	5	47
210	6	54	11	71
213	30	147	21	198
214	35	169	26	230
221	37	144	31	212
222	20	89	15	124
223	17	94	23	134
235	1	12	1	14
236	65	271	42	378
239	15	62	15	92
240	39	240	33	312
241	33	211	27	271
242	50	278	54	382
243	7	61	9	77
244	52	219	45	316
245	17	78	20	115
248	8	38	10	56
251	0	1	0	1
256	3	32	6	41
224	1	6	4	11
225	33	185	44	262
227	43	268	51	362
229	11	57	12	80
233	8	57	7	72
257	4	28	3	35
260	13	39	6	58
261	2	23	1	26
263	0	8	2	10
264	2	10	1	13
265	6	41	6	53
266	3	17	1	21
267	5	19	2	26
268	2	17	2	21
292	15	64	5	84
293	16	66	5	87
297	2	2	1	5
298	2	9	3	14
338	3	47	7	57
339	8	40	5	53
341	56	229	34	319
342	23	136	30	189
343	77	440	59	576
345	24	102	18	144
346	36	197	34	267
347	32	190	27	249
348	28	155	37	220
349	38	217	49	304
601	201	902	173	1276
TOTAL	**1,566**	**8,209**	**1,404**	**11,179**

Table 10. Summary of Archery Special Hunts, 2008. Includes Regular, Youth, and Bonus Permits.

Area	Dates	Permits Issued	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
970 - Camp Ripley	10/19-10/20	2,500	102	148	34	41	325
971 - Camp Ripley	10/26-10/27	2,500	70	74	31	16	191
972 - Crow-Hassan Park Reserve	11/14-11/16	130	4	7	1	2	14
973 - Murphy-Hanrahan Park Reserve	11/14-11/16	180	10	14	3	5	32
974 - Cleary Lake	11/14-11/16	55	1	3	1	1	6
975 - Vermillion Highlands WMA	9/13 - 11/2	60	0	9	2	2	13
976 - City of New Ulm	10/11-12/31	50	1	27	0	3	31
977 - City of Red Wing	9/13 - 12/31	Unl.	No Data				0
978 - City of Sandstone	9/13 - 12/31	Unl.	No Data				0
979 - City of St. Cloud	9/13 - 12/31	50	3	5	2	3	13
980 - City of Taylors Falls	9/13 - 12/31	Unl.	No Data				0
981 - City of Mankato	10/18-12/31	40	No Data				0
982 - City of Granite Falls	9/13 - 12/31	10	0	4	0	0	4
983 - City of Ortonville	10/1 - 12/31	30	3	11	3	0	17
984 - City of Canby	9/13 - 12/31	20	1	2	0	1	4
985 - City of Bemidji	9/13 - 12/31	40	1	11	0	0	12
986 – City of Albert Lea	9/13 – 12/31	40	2	1	0	0	3
Total			198	316	77	74	665

*Total permits for this hunt was 50 and hunters could use either firearms or archery equipment.
**Total number of hunters. Permits were unlimited.

Table 11. Free Landowner Archery Harvest by Permit Area, 2008.

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
104	0	1	0	1
107	0	4	0	4
110	0	1	0	1
156	1	0	0	1
175	0	1	0	1
181	0	1	0	1
184	0	1	1	2
197	0	1	0	1
214	1	0	0	1
221	0	2	0	2
222	0	1	0	1
223	1	0	0	1
227	0	0	1	1
241	0	1	1	2
244	1	0	0	1
245	0	1	0	1
266	0	1	0	1
293	0	1	0	1
341	1	1	1	3
342	0	2	0	2
343	1	4	1	6
345	0	1	0	1
346	0	0	1	1
348	0	1	0	1
349	1	2	0	3
TOTAL	74	28	6	41

Table 12. Muzzleloader Harvest by Permit Area, 2008.
Includes Regular, Muzzleloader, Youth, All-Season, and Bonus permits.

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
101	4	3	15	2	24
104	8	3	28	3	42
105	11	8	29	5	53
107	26	7	57	7	97
110	5	3	22	2	32
111	8	4	12	5	29
114	0	0	1	0	1
115	26	10	71	11	118
116	9	4	21	4	38
122	6	0	6	3	15
126	10	3	19	2	34
127	0	1	2	0	3
152	3	2	3	0	8
154	12	4	23	5	44
156	8	10	47	8	73
157	17	10	75	11	113
159	7	5	35	1	48
167	7	2	16	4	29
168	10	4	31	4	49
170	34	29	105	20	188
172	16	15	45	8	84
174	14	7	28	2	51
175	11	9	47	10	77
178	15	9	44	10	78
180	18	10	41	6	75
181	18	7	39	4	68
182	7	2	10	4	23
183	12	6	25	3	46
184	41	32	112	24	209
197	11	3	23	4	41
199	0	2	5	1	8
201	3	2	2	0	7
203	12	1	14	4	31
208	10	7	18	0	35
209	8	3	24	3	38
210	23	6	40	9	78
213	42	26	86	10	164
214	23	32	75	23	153
215	31	9	47	14	101
218	34	11	41	6	92
219	19	9	42	7	77
221	25	28	62	23	138
222	14	16	44	10	84
223	23	16	43	9	91
224	1	0	0	0	1

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
225	27	23	59	29	138
227	46	19	79	10	154
229	7	7	22	5	41
230	5	2	13	2	22
232	16	1	16	6	39
233	23	11	32	4	70
234	17	3	13	0	33
235	2	0	8	1	11
236	32	22	93	12	159
237	34	2	26	4	66
238	4	2	3	2	11
239	37	16	62	8	123
240	28	26	88	13	155
241	23	19	72	15	129
242	15	17	52	15	99
243	15	11	39	6	71
244	44	21	119	24	208
245	39	15	87	17	158
246	19	6	28	7	60
247	14	9	20	7	50
248	13	1	15	5	34
249	19	6	35	3	63
250	36	3	25	1	65
252	30	4	24	5	63
253	53	7	61	9	130
254	45	7	44	9	105
255	35	7	31	4	77
256	13	8	24	5	50
257	6	2	9	4	21
260	35	17	73	11	136
261	13	6	22	4	45
262	13	1	8	1	23
263	14	2	10	1	27
264	13	3	24	3	43
265	19	14	33	6	72
266	23	8	27	4	62
267	9	3	4	2	18
268	6	1	10	1	18
269	17	3	14	1	35
270	15	2	3	1	21
271	22	1	10	0	33
272	11	1	6	1	19
273	14	2	9	4	29
274	17	6	20	4	47
275	33	4	40	4	81

Table 12. (Continued).

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
276	26	3	25	4	58
277	63	8	74	7	152
278	42	8	63	8	121
279	17	4	15	1	37
280	16	3	12	2	33
281	31	4	25	3	63
282	5	1	10	0	16
283	10	2	16	2	30
284	15	4	16	0	35
285	14	6	21	1	42
286	21	2	16	2	41
288	35	12	55	7	109
289	17	1	13	0	31
290	37	7	47	8	99
291	59	15	67	13	154
292	25	13	68	11	117
293	18	10	59	8	95
294	55	10	39	4	108
295	41	9	53	4	107
296	20	6	28	5	59
297	5	0	9	2	16
298	12	5	17	3	37
299	21	6	30	5	62
338	12	8	30	0	50
339	9	1	19	4	33
341	46	31	124	32	233
342	38	14	89	19	160
343	46	37	166	28	277
344	25	4	26	3	58
345	21	12	62	13	108
346	40	24	130	27	221
347	32	21	108	18	179
348	21	24	127	30	202
349	59	36	208	38	341
601	16	14	50	6	86
TOTAL	**2,583**	**1,096**	**5,004**	**889**	**9,572**

Table 13. Muzzleloader Harvest using Bonus Permits by Permit Area, 2008.

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
101	0	4	0	4
104	1	9	1	11
105	4	22	3	29
107	2	30	2	34
110	2	17	1	20
111	4	9	4	17
115	5	37	7	49
116	2	10	2	14
122	0	4	2	6
126	1	12	2	15
127	0	1	0	1
152	2	1	0	3
156	3	26	3	32
157	5	46	4	55
159	3	18	1	22
167	2	11	4	17
168	1	13	2	16
170	20	69	12	101
172	10	29	6	45
174	2	13	1	16
175	7	28	8	43
178	4	21	4	29
180	5	29	6	40
181	2	26	1	29
182	2	5	2	9
183	1	13	1	15
184	23	78	17	118
197	2	15	2	19
199	2	2	0	4
201	1	2	0	3
203	0	2	1	3
208	4	15	0	19
209	3	18	3	24
210	1	25	7	33
213	13	45	3	61
214	21	50	17	88
221	16	41	18	75
222	11	31	5	47
223	9	25	6	40
225	0	1	1	2
227	6	19	1	26
229	3	3	4	10
233	6	17	6	29
235	7	25	6	38
236	3	15	4	22
239	12	34	8	54
240	6	15	1	22
241	1	7	2	10
242	1	6	2	9
243	1	8	3	12
244	2	5	2	9
245	0	1	0	1
248	2	8	2	12
256	1	7	3	11
257	4	17	6	27
260	1	13	3	17
261	0	1	0	1
263	0	3	0	3
264	2	6	3	11
265	4	3	2	9
266	0	0	0	0
267	0	3	0	3
268	0	1	1	2
292	1	2	0	3
293	3	10	3	16
297	0	8	2	10
298	9	38	6	53
338	0	11	1	12
339	10	33	9	52
341	3	33	6	42
342	8	33	8	49
343	11	36	14	61
345	3	9	0	12
346	1	7	1	9
347	2	1	0	3
348	1	5	0	6
349	3	15	1	19
601	5	8	2	15
TOTAL	**318**	**1,319**	**271**	**1,908**

Table 14. Summary of Muzzleloader Special Hunts, 2008.
Includes Regular, Youth, All-Season, and Bonus Permits.

Area	Dates	Permits Issued	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
935 - Jay Cooke SP[1]	11/29 - 12/3	120*	12	3	15	2	32
936 - Crow Wing SP[1]	12/5 - 12/7	45*	3	8	16	4	31
937 - Soudan SP[1]	11/29 - 12/14	20*	0	3	9	1	13
938 – City of Tower	11/29 - 12/14	40*	0	1	9	1	11
939 - Interstate SP[1]	11/29 - 12/14	20**	0	0	0	0	0
940 - Lake Shetek SP[1]	12/6 - 12/7	15**	0	4	10	2	16
941 – Lake Maria SP[1]	12/6 - 12/8	25**	0	5	11	4	20
942 - Nerstrand Big Woods SP[1]	11/29 - 12/1	50*	5	3	12	1	21
943 – Rice Lake SP	11/29 – 12/1	20**	0	5	12	3	20
944 – Sibley SP	12/6 – 12/7	40**	1	6	7	3	17
945 - Vermillian Highlands WMA[1]	11/29 - 12/14	25*	0	0	4	0	4
TOTAL			21	38	105	21	185

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

Table 15. Free Landowner Muzzleloader Harvest by Permit Area, 2007.

Permit Area	Fawn Male	Adult Female	Fawn Female	Total
104	0	2	0	2
115	0	1	0	1
156	0	1	0	1
157	0	1	0	1
209	0	1	0	1
210	0	1	0	1
213	1	2	0	3
214	2	0	0	2
225	0	1	0	1
227	0	1	0	1
239	0	1	0	1
240	0	1	0	1
243	0	2	0	2
244	0	2	0	2
256	0	1	0	1
260	1	0	0	1
264	0	1	0	1
265	0	1	0	1
268	0	1	0	1
292	0	1	0	1
293	0	1	0	1
341	0	2	0	2
342	0	1	0	1
343	0	1	0	1
345	0	1	0	1
346	1	0	0	1
347	0	1	0	1
348	0	2	0	2
349	2	1	0	3
Total	**7**	**32**	**0**	**39**

Table 16. Summary of Youth Firearm Hunts and NW Youth Season, 2008.

			Harvest				
Area	**Dates**	**Permits Issued**	**Adult Male**	**Fawn Male**	**Adult Female**	**Fawn Female**	**Total**
950 – Camp Ripley Archery	10/10 – 10/12	150	1	5	2	2	10
951 – Arden Hills A	10/16 - 10/17	20	No Data				0
952 – Arden Hills B	10/18 – 10/19	20	No Data				0
953 – Whitewater Game Refuge	10/16 - 10/19	75	4	5	3	0	12
954 – Lake Bemidji SP	10/18 – 10/19	25	1	3	1	0	5
955 – Lake Alexander SNA	10/10 – 10/12	20	0	1	0	0	1
956 – St Croix SP	10/25 – 10/26	75	4	4	2	4	14
957 – Rydell NWR	10/18 - 10/19	20	No Data				0
958 – Savanna Portage SP	10/25 - 10/26	20	2	2	0	0	4
959 – Buffalo River SP	10/25 – 10/26	10	0	3	1	0	4
960 – Tettegouche SP	10/18 - 10/19	10	0	0	0	1	1

Northwest Youth Season – October 17-18, unlimited permits.

Permit Area	**Fawn Male**	**Adult Female**	**Fawn Female**	**Total**
101	9	2	0	11
105	19	4	1	24
111	2	1	1	4
201	3	0	1	4
208	8	1	1	10
209	1	0	2	3
210	1	0	1	2
244	0	0	1	1
256	4	2	1	7
260	15	2	1	18
263	6	2	3	11
264	14	5	2	21
267	5	0	1	6
268	7	0	0	7
Total	94	19	16	129

Table 17. Total Deer Harvest by Permit Area, 2008.
Includes all license types, permits, and special hunts.

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
101	291	317	116	103	827
104	1071	732	173	125	2,101
105	963	954	268	206	2,391
107	1579	1101	279	195	3,154
110	656	781	231	201	1,869
111	744	512	162	120	1,538
114	69	41	7	4	121
115	1769	1157	306	211	3,443
116	219	137	24	14	394
122	589	292	69	63	1,013
126	523	364	76	42	1,005
127	105	66	6	6	183
152	126	90	39	38	293
154	1473	749	225	138	2,585
156	1831	1687	554	416	4,488
157	2340	2398	907	642	6,287
159	1233	1331	361	286	3,211
167	707	707	212	189	1,815
168	1239	1152	310	249	2,950
170	2703	3007	1007	703	7,420
172	1432	1718	454	369	3,973
174	1250	1026	337	246	2,859
175	1874	1662	439	352	4,327
178	2315	2279	721	579	5,894
180	1584	1273	315	208	3,380
181	1829	1757	483	468	4,537
182	492	766	199	183	1,640
183	1429	1071	325	236	3,061
184	3416	3611	1164	1120	9,311
197	1002	712	186	155	2,055
199	119	75	17	7	218
201	97	52	19	12	180
203	104	62	22	19	207
208	223	230	69	50	572
209	536	641	173	178	1,528
210	1132	1085	344	351	2,912
213	1806	1378	547	397	4,128
214	1306	1527	684	593	4,110
215	1023	658	244	196	2,121
218	763	494	164	125	1,546
219	516	271	94	64	945
221	1002	1004	486	374	2,866
222	839	759	337	260	2,195
223	577	386	161	118	1,242
224	127	82	28	34	271
225	1330	1169	443	406	3,348
227	999	851	262	211	2,323
229	248	230	88	56	622
230	242	162	36	24	464

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
232	227	127	32	22	408
233	260	233	70	44	607
234	197	132	14	14	357
235	61	58	13	10	142
236	916	864	258	151	2,189
237	318	122	23	19	482
238	61	23	7	2	93
239	1557	1209	397	335	3,498
240	1810	1779	698	598	4,885
241	1377	1576	695	636	4,284
242	663	1016	303	257	2,239
243	958	867	274	250	2,349
244	1893	2098	783	728	5,502
245	1895	1833	607	532	4,867
246	1600	785	273	205	2,863
247	657	372	142	76	1,247
248	410	326	130	86	952
249	1137	574	205	156	2,072
250	402	202	23	20	647
251	58	59	11	15	143
252	338	116	15	20	489
253	495	240	47	30	812
254	514	286	59	41	900
255	452	192	46	44	734
256	535	546	145	135	1,361
257	435	478	131	104	1,148
260	668	739	162	172	1,741
261	205	260	42	43	550
262	222	66	12	18	318
263	387	248	64	73	772
264	737	555	145	114	1,551
265	494	634	177	194	1,499
266	384	310	91	72	857
267	216	182	64	42	504
268	273	251	64	51	639
269	258	81	26	11	376
270	182	31	7	5	225
271	206	40	6	6	258
272	194	39	5	7	245
273	441	214	43	38	736
274	250	75	28	22	375
275	382	120	22	17	541
276	585	148	38	24	795
277	1259	459	118	71	1,907
278	511	216	44	34	805
279	248	105	20	16	389
280	263	102	17	12	394
281	581	157	18	12	768
282	125	53	9	7	194

Table 17. (Continued).

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
283	252	69	15	12	348
284	323	92	26	14	455
285	434	190	62	26	712
286	350	89	17	13	469
287	81	112	27	29	249
288	522	183	43	28	776
289	229	67	15	11	322
290	507	243	32	31	813
291	826	392	70	70	1,358
292	491	484	133	89	1,197
293	506	410	116	86	1,118
294	324	130	35	33	522
295	577	214	36	42	869
296	358	155	22	24	559
297	201	149	44	60	454
298	712	437	154	117	1,420
299	309	192	28	28	557
338	336	238	63	36	673
339	327	198	66	52	643
341	1046	1013	333	226	2,618
342	848	769	243	177	2,037
343	993	1344	356	258	2,951
344	571	222	61	37	891
345	596	595	173	137	1,501
346	1141	1271	352	301	3,065
347	638	862	259	165	1,924
348	809	1064	241	222	2,336
349	1484	1827	508	520	4,339
601	1193	1486	395	280	3,354
901	3	9	2	0	14
902	34	90	38	32	194
903	0	10	5	0	15
904	3	6	1	3	13
905	3	1	2	1	7
906	7	4	1	4	16
907	0	1	0	0	1
908	1	0	1	1	3
909	0	7	3	1	11
910	1	12	7	6	26
911	1	0	0	0	1
912	18	38	22	14	92
913	0	3	1	4	8
914	19	13	7	6	45

Permit Area	Adult Male	Adult Female	Fawn Male	Fawn Female	Total
915	0	2	0	0	2
916	30	56	16	20	122
917	0	1	0	0	1
918	5	1	1	0	7
919	0	6	1	1	8
920	0	3	2	2	7
922	7	12	1	0	20
923	0	6	0	2	8
925	3	21	9	11	44
926	8	18	2	5	33
927	7	37	15	16	75
928	0	6	1	1	8
929	0	16	6	5	27
930	10	23	5	3	41
931	5	6	0	2	13
932	14	11	3	1	29
933	3	6	2	1	12
935	12	15	3	2	32
936	3	16	8	4	31
937	0	9	3	1	13
938	0	9	1	1	11
940	0	10	4	2	16
941	0	11	5	4	20
942	5	12	3	1	21
943	0	12	5	3	20
944	1	7	6	3	17
945	0	1	0	0	1
950	1	5	2	2	10
953	4	5	3	0	12
954	1	1	0	0	2
955	0	1	0	0	1
956	4	4	2	4	14
958	2	2	0	0	4
959	0	3	1	0	4
960	0	0	0	1	1
970	102	148	34	41	325
971	70	74	31	16	191
973	0	1	0	1	2
975	0	2	0	0	2
976	0	2	0	0	2
978	0	2	0	1	3
980	0	1	0	0	1
984	0	3	0	1	4
985	1	11	0	0	12
TOTAL	**95,511**	**81,053**	**24,986**	**20,287**	**221,837**

Table 18. Estimated firearm hunter numbers, density, and harvest by Permit Area, 2008.

Permit Area	Firearm Hunters	Area Size (sq mi)	Hunters/ mile^2	Harvest/ mile^2	Permit Area	Firearm Hunters	Area Size (sq mi)	Hunters/ mile^2	Harvest/ mile^2
101	1,719	496	3.5	1.6	223	2,656	377	7.0	2.2
104	4,439	2,078	2.1	1.0	224	737	47	15.8	5.1
105	3,849	740	5.2	3.0	225	6,667	618	10.8	4.5
107	7,106	1,896	3.7	1.6	227	4,329	471	9.2	3.3
110	2,636	300	8.8	5.9	229	1,457	287	5.1	1.5
111	3,293	1,437	2.3	1.0	230	1,374	452	3.0	0.8
114	158	123	1.3	0.8	232	1,287	377	3.4	0.9
115	7,885	1,867	4.2	1.7	233	1,081	385	2.8	1.0
116	901	1,164	0.8	0.3	234	891	636	1.4	0.5
122	1,990	619	3.2	1.6	233	1,081	385	2.8	1.0
126	2,022	943	2.1	1.0	234	891	636	1.4	0.5
127	570	561	1.0	0.3	235	446	32	13.9	3.3
152	1,000	61	16.4	4.5	236	3,232	372	8.7	3.7
154	8,553	760	11.3	3.2	237	1,113	728	1.5	0.5
156	8,776	825	10.6	5.0	238	245	95	2.6	0.8
157	12,933	889	14.5	6.5	239	7,139	922	7.7	3.5
159	7,140	568	12.6	5.1	240	7,398	642	11.5	6.7
167	3,588	432	8.3	3.9	241	5,287	417	12.7	9.1
168	7,102	723	9.8	3.9	242	2,897	215	13.5	7.4
170	13,417	1,311	10.2	5.1	243	4,564	314	14.6	6.8
172	9,092	451	20.2	8.2	244	8,153	583	14.0	8.3
174	6,445	835	7.7	3.2	245	8,870	583	15.2	7.7
175	8,547	1,249	6.8	3.2	246	9,211	772	11.9	3.5
178	10,098	1,259	8.0	4.4	247	3,541	229	15.5	4.7
180	6,231	983	6.3	3.1	248	1,943	212	9.2	3.8
181	6,944	709	9.8	5.7	249	5,413	502	10.8	3.8
182	1,828	269	6.8	3.1	250	1,507	711	2.1	0.7
183	7,146	663	10.8	4.3	251	531	55	9.6	2.6
184	13,742	1,231	11.2	6.9	252	1,223	715	1.7	0.5
197	4,796	975	4.9	2.0	253	2,003	974	2.1	0.6
199	485	148	3.3	1.3	254	2,626	930	2.8	0.8
201	332	161	2.1	1.1	255	1,727	774	2.2	0.7
203	305	118	2.6	1.5	256	2,467	653	3.8	1.9
208	1,173	379	3.1	1.4	257	1,896	412	4.6	2.6
209	2,344	639	3.7	2.2	260	2,381	1,249	1.9	1.2
210	4,340	615	7.1	4.4	261	925	795	1.2	0.6
213	8,737	1,057	8.3	3.3	262	895	677	1.3	0.4
214	6,835	557	12.3	6.5	263	1,691	512	3.3	1.4
215	6,303	701	9.0	2.6	264	3,113	669	4.7	2.2
218	4,857	884	5.5	1.4	265	2,048	494	4.1	2.7
219	2,744	392	7.0	1.8	266	2,026	617	3.3	1.2
221	4,887	642	7.6	3.7	267	1,144	472	2.4	1.0
222	4,589	413	11.1	4.6	268	1,186	229	5.2	2.6

Table 18. (Continued).

Permit Area	Firearm Hunters	Area Size (sq mi)	Hunters/ mile^2	Harvest/ mile^2
269	1,274	650	2.0	0.5
270	1,015	748	1.4	0.2
271	812	632	1.3	0.3
272	861	531	1.6	0.4
273	2,671	572	4.7	1.1
274	882	355	2.5	0.8
275	1,754	764	2.3	0.5
276	2,849	543	5.2	1.3
277	5,700	813	7.0	1.8
278	2,043	401	5.1	1.5
279	1,042	344	3.0	0.9
280	1,355	675	2.0	0.5
281	2,295	575	4.0	1.1
282	861	779	1.1	0.2
283	1,276	614	2.1	0.5
284	1,516	838	1.8	0.4
285	2,149	550	3.9	1.0
286	1,317	446	3.0	0.9
287	565	46	12.3	5.4
288	1,822	625	2.9	0.9
289	977	816	1.2	0.3
290	2,266	662	3.4	0.9
291	3,462	802	4.3	1.2
292	2,757	480	5.7	1.9
293	2,501	511	4.9	1.6
294	1,204	686	1.8	0.5
295	2,147	840	2.6	0.8
296	1,595	666	2.4	0.7
297	1,296	438	3.0	1.0
298	3,143	618	5.1	2.2
299	1,433	386	3.7	1.0
338	1,869	454	4.1	1.0
339	1,665	394	4.2	1.2
341	5,005	611	8.2	3.1
342	3,690	350	10.5	4.5
343	4,448	662	6.7	2.7
344	2,662	189	14.0	3.9
345	2,876	326	8.8	3.5
346	4,288	319	13.5	7.5
347	3,354	434	7.7	3.2
348	3,999	332	12.1	5.4
349	6,362	492	12.9	7.1
601	2,550	1,633	1.6	0.7
Total	440,805	78,929	5.6	2.4

Table 19. Deer harvest per square mile by season, 2008.

Permit Area	Area Size (sq mi)	Archery Harvest/ mi^2	Firearm Harvest/ mi^2	Muzz. Harvest/ mi^2	EA Harvest/ mi^2	Total Harvest/ mi^2
101	496	0.03	1.4	0.05	0.07	1.6
104	2,078	0.02	1.0	0.02		1.0
105	740	0.13	2.8	0.07	0.17	3.2
107	1,896	0.05	1.6	0.05		1.7
110	300	0.26	5.3	0.11	0.54	6.2
111	1,437	0.01	1.0	0.02	0.06	1.1
114	123	0.17	0.8	0.01		1.0
115	1,867	0.05	1.7	0.06		1.8
116	1,164	0.02	0.3	0.03		0.3
122	619	0.04	1.6	0.02		1.6
126	943	0.07	1.0	0.04		1.1
127	561	0.02	0.3	0.01		0.3
152	61	0.15	4.5	0.13		4.8
154	760	0.15	3.2	0.06		3.4
156	825	0.32	5.0	0.09		5.4
157	889	0.47	6.0	0.13	0.45	7.1
159	568	0.44	4.8	0.08	0.34	5.7
167	432	0.20	3.9	0.07		4.2
168	723	0.14	3.9	0.07		4.1
170	1,311	0.42	5.1	0.14		5.7
172	451	0.38	8.2	0.19		8.8
174	835	0.13	3.2	0.06		3.4
175	1,249	0.16	3.2	0.06		3.5
178	1,259	0.24	3.9	0.06	0.47	4.7
180	983	0.29	2.8	0.08	0.26	3.4
181	709	0.61	5.1	0.10	0.58	6.4
182	269	2.96	2.6	0.09	0.41	6.1
183	663	0.23	4.3	0.07		4.6
184	1,231	0.47	6.9	0.17		7.6
197	975	0.06	2.0	0.04		2.1
199	148	0.09	1.3	0.05		1.5
201	161	0.01	1.0	0.04		1.1
203	118	0.03	1.5	0.26		1.8
208	379	0.04	1.3	0.09	0.07	1.5
209	639	0.12	2.0	0.06	0.25	2.4
210	615	0.19	4.0	0.13	0.44	4.7
213	1,057	0.45	3.3	0.16		3.9
214	557	0.61	5.8	0.27	0.68	7.4
215	701	0.27	2.6	0.14		3.0
218	884	0.20	1.4	0.10		1.7
219	392	0.37	1.8	0.20		2.4
221	642	0.51	3.3	0.22	0.40	4.5
222	413	0.51	4.2	0.20	0.36	5.3
223	377	0.82	2.2	0.24		3.3
224	47	0.73	5.1	0.02		5.8

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	Total Harvest/ mi^2
225	618	0.67	4.2	0.22	0.35	5.4
227	471	1.27	3.2	0.33	0.17	4.9
229	287	0.53	1.5	0.14		2.2
230	452	0.13	0.8	0.05		1.0
232	377	0.10	0.9	0.10		1.1
233	385	0.36	1.0	0.18		1.6
234	636	0.04	0.5	0.05		0.6
235	32	0.75	3.3	0.34		4.4
236	372	1.78	3.4	0.43	0.23	5.9
237	728	0.05	0.5	0.09		0.7
238	95	0.05	0.8	0.12		1.0
239	922	0.20	3.5	0.13		3.8
240	642	0.67	6.7	0.24		7.6
241	417	0.90	8.1	0.31	0.94	10.3
242	215	2.59	7.4	0.46		10.4
243	314	0.49	6.8	0.23		7.5
244	583	0.77	8.3	0.36		9.4
245	583	0.42	7.7	0.27		8.4
246	772	0.12	3.5	0.08		3.7
247	229	0.48	4.7	0.22		5.4
248	212	0.52	3.8	0.16		4.5
249	502	0.22	3.8	0.13		4.1
250	711	0.07	0.7	0.09		0.9
251	55	0.04	2.6	0.00		2.6
252	715	0.09	0.5	0.09		0.7
253	974	0.10	0.6	0.13		0.8
254	930	0.09	0.8	0.11		1.0
255	774	0.14	0.7	0.10		0.9
256	653	0.11	1.7	0.08	0.17	2.1
257	412	0.12	2.3	0.05	0.26	2.8
260	1,249	0.08	1.1	0.11	0.09	1.4
261	795	0.05	0.5	0.06	0.05	0.7
262	677	0.05	0.4	0.03		0.5
263	512	0.03	1.4	0.05		1.5
264	669	0.05	2.2	0.06		2.3
265	494	0.16	2.5	0.15	0.24	3.0
266	617	0.08	1.2	0.10		1.4
267	472	0.07	0.9	0.04	0.06	1.1
268	229	0.15	2.4	0.08	0.16	2.8
269	650	0.06	0.5	0.05		0.6
270	748	0.04	0.2	0.03		0.3
271	632	0.06	0.3	0.05		0.4
272	531	0.03	0.4	0.04		0.5
273	572	0.09	1.1	0.05		1.3
274	355	0.11	0.8	0.13		1.1

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	Total Harvest/ mi^2
275	764	0.06	0.5	0.11		0.7
276	543	0.10	1.3	0.11		1.5
277	813	0.32	1.8	0.19		2.3
278	401	0.24	1.4	0.30		2.0
279	344	0.08	0.9	0.11		1.1
280	675	0.06	0.5	0.05		0.6
281	575	0.14	1.1	0.11		1.3
282	779	0.02	0.2	0.02		0.2
283	614	0.06	0.5	0.05		0.6
284	838	0.07	0.4	0.04		0.5
285	550	0.20	1.0	0.08		1.3
286	446	0.08	0.9	0.09		1.1
287	46	0.00	5.4	0.00		5.4
288	625	0.17	0.9	0.17		1.2
289	816	0.04	0.3	0.04		0.4
290	662	0.16	0.9	0.15		1.2
291	802	0.28	1.2	0.19		1.7
292	480	0.34	1.9	0.24		2.5
293	511	0.38	1.6	0.19		2.2
294	686	0.07	0.5	0.16		0.8
295	840	0.11	0.8	0.13		1.0
296	666	0.09	0.7	0.09		0.8
297	438	0.03	1.0	0.04		1.0
298	618	0.05	2.2	0.06		2.3
299	386	0.25	1.0	0.16		1.4
338	454	0.34	1.0	0.11		1.5
339	394	0.33	1.2	0.08		1.6
341	611	0.84	3.1	0.38		4.3
342	350	0.90	4.5	0.46		5.8
343	662	1.33	2.7	0.42		4.5
344	189	0.49	3.9	0.31		4.7
345	326	0.75	3.5	0.33		4.6
346	319	1.47	7.0	0.69	0.46	9.6
347	434	0.84	3.2	0.41		4.4
348	332	1.04	5.4	0.61		7.0
349	492	1.06	6.6	0.69	0.48	8.8
601	1,633	1.26	0.7	0.05	0.03	2.1
Total	78,929	0.28	2.3	0.12	0.07	2.8

Table 20. 2008 Antlerless Lottery Distribution Report.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
154	1	3,577	199	762	2,815	3,000	0.0%
	2	173	1	0	173		
	3	11	0	0	11		
	9	1	0	0	1		
		3,762	**200**	**762**	**3,000**		
215	1	2,466	223	0	2,466	5,000	37.2%
	2	659	4	0	659		
	3	13	2	0	13		
	4	1	0	0	1		
	9	2	0	0	2		
		3,141	**229**	**0**	**3,139**		
218	1	1,944	122	174	1,770	2,500	0.0%
	2	722	84	0	722		
	3	7	5	0	7		
	4	1	0	0	1		
		2,674	**211**	**174**	**2,500**		
219	1	971	40	0	971	1,200	4.4%
	2	170	27	0	170		
	3	6	1	0	6		
	4	1	0	0	1		
		1,148	**68**	**0**	**1,147**		
230	1	537	27	60	477	600	1.0%
	2	118	7	7	111		
	3	3	1	0	3		
	4	3	4	0	3		
		658	**39**	**67**	**594**		
232	1	474	22	1	473	700	29.0%
	2	21	1	0	21		
	3	1	0	0	1		
	4	2	0	0	2		
		498	**23**	**1**	**497**		
234	1	286	14	0	286	500	39.8%
	2	14	6	0	14		
	4	0	1	0	0		
	5	1	0	0	1		
		301	**21**	**0**	**301**		
237	1	252	8	251	1	100	1.0%
	2	134	3	39	95		
	3	3	1	0	3		
	4	0	2	0	0		
	5	1	1	0	0		
		390	**15**	**290**	**99**		
238	1	97	3	56	41	50	0.0%
	2	7	0	0	7		
	4	2	0	0	2		
		106	**3**	**56**	**50**		
246	1	4,296	287	1,452	2,844	3,000	0.0%
	2	139	1	0	139		
	3	13	0	0	13		
	4	2	0	0	2		
	9	2	0	0	2		
		4,452	**288**	**1,452**	**3,000**		

Table 20. (Continued).

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
	1	1,390	66	0	1,390		
	2	61	0	0	61		
247	3	9	0	0	9	**1,500**	**2.5%**
	4	3	0	0	3		
		1,463	**66**	**0**	**1,463**		
	1	2,564	142	148	2,416		
	2	64	0	0	64		
249	3	19	0	0	19	**2,500**	**0.0%**
	4	2	0	0	2		
		2,649	**142**	**148**	**2,501**		
	1	568	19	325	243		
	2	5	5	0	5		
250	3	0	8	0	0	**500**	**50.2%**
	4	1	1	0	1		
		574	**33**	**325**	**249**		
	1	298	7	298	0		
	2	221	7	76	145		
	3	2	4	0	2		
252	4	1	2	0	1	**150**	**0.0%**
	5	1	0	0	1		
	7	1	0	0	1		
		524	**20**	**374**	**150**		
	1	487	22	487	0		
	2	334	12	49	285		
	3	9	6	0	9		
253	4	3	1	0	3	**300**	**0.0%**
	5	2	1	0	2		
	7	1	0	0	1		
		836	**42**	**536**	**300**		
	1	889	51	0	889		
	2	47	3	0	47		
254	3	1	0	0	1	**1,900**	**50.7%**
	4	0	1	0	0		
		937	**55**	**0**	**937**		
	1	553	37	0	553		
255	2	17	0	0	17	**800**	**27.9%**
	3	7	0	0	7		
		577	**37**	**0**	**577**		
	1	211	11	145	66		
262	2	86	6	0	86	**150**	**-2.0%**
	9	1	0	0	1		
		298	**17**	**145**	**153**		
	1	488	24	293	195		
	2	52	1	0	52		
269	3	2	0	0	2	**250**	**0.0%**
	9	1	0	0	1		
		543	**25**	**293**	**250**		
	1	243	11	243	0		
270	2	74	11	48	26	**25**	**-4.0%**
		317	**22**	**291**	**26**		

Table 20. (Continued).

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
271	1	95	2	95	0	**25**	**0.0%**
	2	100	4	99	1		
	3	25	0	2	23		
	4	1	0	0	1		
		221	**6**	**196**	**25**		
272	1	165	8	165	0	**25**	**0.0%**
	2	144	7	121	23		
	3	2	0	0	2		
		311	**15**	**286**	**25**		
273	1	1,206	27	0	1,206	**2,400**	**47.3%**
	2	57	18	0	57		
	3	1	0	0	1		
		1,264	**45**	**0**	**1,264**		
274	1	102	12	102	0	**30**	**0.0%**
	2	104	1	103	1		
	3	62	1	46	16		
	4	13	0	0	13		
		281	**14**	**251**	**30**		
275	1	202	22	202	0	**30**	**0.0%**
	2	248	4	248	0		
	3	148	5	121	27		
	4	0	1	0	0		
	6	2	0	0	2		
	9	1	0	0	1		
		601	**32**	**571**	**30**		
276	1	799	31	798	1	**250**	**0.0%**
	2	507	6	266	241		
	3	7	70	0	7		
	5	1	0	0	1		
		1,314	**107**	**1,064**	**250**		
277	1	1,573	61	1,573	0	**800**	**0.0%**
	2	1,270	41	501	769		
	3	22	24	0	22		
	4	6	2	0	6		
	5	1	1	0	1		
	9	2	0	0	2		
		2,874	**129**	**2,074**	**800**		
278	1	535	20	535	0	**250**	**0.4%**
	2	527	9	300	227		
	3	18	5	0	18		
	4	1	4	0	1		
	5	1	1	0	1		
	6	1	1	0	1		
	9	1	0	0	1		
		1,084	**40**	**835**	**249**		
279	1	246	16	246	0	**150**	**0.0%**
	2	251	6	112	139		
	3	8	7	0	8		
	4	0	1	0	0		
	5	2	1	0	2		
	6	1	0	0	1		
		508	**31**	**358**	**150**		

Table 20. (Continued).

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
280	1	215	11	215	0	75	0.0%
	2	251	8	218	33		
	3	37	2	0	37		
	4	2	1	0	2		
	5	1	1	0	1		
	6	1	0	0	1		
	9	1	0	0	1		
		508	**23**	**433**	**75**		
281	1	353	11	353	0	100	0.0%
	2	442	12	442	0		
	3	109	3	17	92		
	4	4	3	0	4		
	5	3	1	0	3		
	6	1	0	0	1		
		912	**30**	**812**	**100**		
282	1	100	14	100	0	30	0.0%
	2	121	3	119	2		
	3	27	2	0	27		
	5	0	2	0	0		
	9	1	0	0	1		
		249	**21**	**219**	**30**		
283	1	150	7	150	0	30	0.0%
	2	231	6	231	0		
	3	31	1	4	27		
	4	1	1	0	1		
	5	2	0	0	2		
		415	**15**	**385**	**30**		
284	1	173	11	173	0	30	0.0%
	2	166	8	166	0		
	3	133	2	133	0		
	4	69	1	44	25		
	5	3	1	0	3		
	6	1	1	0	1		
	9	1	0	0	1		
		546	**24**	**516**	**30**		
285	1	706	29	600	106	500	0.0%
	2	367	9	0	367		
	3	18	4	0	18		
	4	4	2	0	4		
	5	3	0	0	3		
	6	2	0	0	2		
		1,100	**44**	**600**	**500**		
286	1	297	11	297	0	50	0.0%
	2	232	8	190	42		
	3	5	2	0	5		
	4	1	1	0	1		
	7	2	0	0	2		
		537	**22**	**487**	**50**		

Table 20. (Continued).

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
288	1	302	27	302	0	**50**	**0.0%**
	2	331	7	290	41		
	3	5	7	0	5		
	4	2	4	0	2		
	5	1	1	0	1		
	6	1	0	0	1		
		642	**46**	**592**	**50**		
289	1	130	7	130	0	**25**	**0.0%**
	2	100	4	100	0		
	3	64	1	40	24		
	4	1	1	0	1		
		295	**13**	**270**	**25**		
290	1	503	17	503	0	**200**	**0.0%**
	2	529	9	425	104		
	3	91	5	0	91		
	4	3	3	0	3		
	5	0	1	0	0		
	6	1	0	0	1		
	9	1	0	0	1		
		1,128	**35**	**928**	**200**		
291	1	882	37	877	5	**600**	**0.0%**
	2	752	14	249	503		
	3	82	11	0	82		
	4	6	2	0	6		
	5	1	5	0	1		
	6	2	0	0	2		
	9	1	0	0	1		
		1,726	**69**	**1,126**	**600**		
294	1	279	12	279	0	**100**	**0.0%**
	2	185	2	91	94		
	3	4	3	0	4		
	4	0	1	0	0		
	6	1	0	0	1		
	7	1	0	0	1		
		470	**18**	**370**	**100**		
295	1	579	12	579	0	**250**	**0.0%**
	2	359	19	115	244		
	3	4	5	0	4		
	4	1	4	0	1		
	5	1	1	0	1		
		944	**41**	**694**	**250**		

Table 20. (Continued).

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	% Under-Subscribed
		Total	Rejected				
	1	387	28	387	0		
	2	298	7	217	81		
	3	61	3	0	61		
296	4	4	2	0	4	**150**	**0.0%**
	5	3	4	0	3		
	6	1	2	0	1		
		754	**46**	**604**	**150**		
	1	389	15	389	0		
	2	306	1	64	242		
	3	3	3	0	3		
299	4	2	21	0	2	**250**	**0.0%**
	5	2	1	0	2		
	9	1	0	0	1		
		703	**41**	**453**	**250**		
	1	164	10	164	0		
	2	102	2	5	97		
338A	3	2	2	0	2	**100**	**0.0%**
	4	1	0	0	1		
		269	**14**	**169**	**100**		
	1	120	5	104	16		
	2	83	2	0	83		
339A	3	1	0	0	1	**100**	**0.0%**
	4	0	1	0	0		
		204	**8**	**104**	**100**		
	1	420	14	211	209		
	2	138	3	0	138		
	3	2	3	0	2		
341A	4	0	2	0	0	**350**	**0.0%**
	5	0	1	0	0		
	6	1	0	0	1		
		561	**23**	**211**	**350**		
	1	278	15	77	201		
	2	94	4	0	94		
	3	3	1	0	3		
342A	4	1	1	0	1	**300**	**0.0%**
	5	1	1	0	1		
		377	**22**	**77**	**300**		
	1	247	5	247	0		
	2	203	9	105	98		
344A	3	0	2	0	0	**100**	**0.0%**
	4	2	4	0	2		
		452	**20**	**352**	**100**		
	1	340	5	334	6		
	2	238	9	0	238		
344B	3	2	2	0	2	**250**	**0.0%**
	4	4	4	0	4		
		584	**20**	**334**	**250**		
TOTAL		**47,682**	**2,570**	**20,285**	**27,396**	**32,325**	

Table 21. 2008 Special Permit Areas for Firearms Hunters.

Special Hunt	Preference Level	Applications		Unsuccessful	Winners	Permits Available	Bonus Permits
		Total	Rejected				
901 - Rice Lake Nat. Wildlife Refuge	1	126	0	24	102	100	No
	3	1	0	0	1		
		126	**0**	**24**	**102**		
902 - St. Croix State Park	1	679	0	228	451	550	Yes
	2	96	0	0	96		
	3	4	0	0	4		
		779	**0**	**228**	**551**		
903 - Savanna Portage State Park	1	60	0	38	22	40	Yes
	2	18	0	0	18		
		78	**0**	**38**	**40**		
904 - Gooseberry Falls State Park	1	20	0	0	20	30	Yes
	2	2	0	0	2		
		22	**0**	**0**	**22**		
905 - Split Rock Lighthouse State Park	1	18	0	0	18	30	Yes
		18	**0**	**0**	**18**		
906 - Tettegouche State Park	1	53	0	0	53	125	Yes
	2	4	0	0	4		
	3	1	0	0	1		
		58	**0**	**0**	**58**		
907 - Scenic State Park	1	20	0	0	20	30	Yes
	2	5	0	0	5		
		25	**0**	**0**	**25**		
908 - Hayes Lake State Park						N/A	Yes
909 - Lake Bemidji State Park	1	37	0	2	35	35	Yes
		37	**0**	**2**	**35**		
910 - Zippel Bay State Park	1	52	0	2	50	55	Yes
	2	5	0	0	5		
		57	**0**	**2**	**55**		
911 - Judge CR Magney SP						N/A	Yes
912 - Wild River State Park	1	180	0	134	46	150	Yes
	2	103	0	0	103		
	3	3	0	0	3		
		286	**0**	**134**	**152**		
913 - Lake Carlos State Park	1	44	0	16	28	25	Yes
		44	**0**	**16**	**28**		
914 - William O'Brien State Park	1	59	0	7	52	65	Yes
	2	13	0	0	13		
	3	1	0	0	1		
		73	**0**	**7**	**66**		
915 - Lake Bronson State Park	1	14	0	0	14	30	Yes
		14	**0**	**0**	**14**		
916 - Maplewood State Park	1	187	0	187	0	100	Yes
	2	164	0	151	13		
	3	87	0	0	87		
	4	1	0	0	1		
		439	**0**	**338**	**101**		
917 - Rydell NWR	1	8	0	0	8	12	Yes
	2	1	0	0	1		
		9	**0**	**0**	**9**		
918 - Lake Alexander SNA	1	39	0	8	31	40	Yes
	2	9	0	0	9		
		48	**0**	**8**	**40**		

Table 21. (Continued).

Special Hunt	Preference Level	Applications		Unsuccessful	Winners	Permits Available	Bonus Permits
		Total	Rejected				
919 - Buffalo River State Park	1	25	0	10	15	16	Yes
	2	1	0	0	1		
		26	**0**	**10**	**16**		
920 - Glacial Lakes State Park	1	26	0	0	26	30	Yes
	2	5	0	0	5		
		31	**0**	**0**	**31**		
921 - Lake Louise State Park	1	40	0	29	11	25	Yes
	2	15	0	0	15		
		55	**0**	**29**	**26**		
922 - Beaver Creek Valley State Park	1	56	0	44	12	20	Yes
	2	8	0	0	8		
		64	**0**	**44**	**20**		
923 - Zumbro Falls SNA	1	8	0	0	8	12	Yes
	2	2	0	0	2		
		10	**0**	**0**	**10**		
924 - Forestville/Mystery Cave SP	1	143	0	54	89	110	Yes
	2	23	0	0	23		
		166	**0**	**54**	**112**		
925 - Frontenac State Park	1	74	0	48	26	50	Yes
	2	27	0	0	27		
		101	**0**	**48**	**53**		
926 - Great River Bluffs SP	1	56	0	0	56	100	Yes
	2	1	0	0	1		
		57	**0**	**0**	**57**		
927 - Whitewater State Park	1	120	0	100	20	50	Yes
	2	30	0	0	30		
	3	1	0	0	1		
		151	**0**	**100**	**51**		
928 - Zumbro Falls SNA	1	14	0	4	10	12	Yes
	2	2	0	0	2		
		16	**0**	**4**	**12**		
929 - Whitewater Refuge	1	47	0	0	47	50	No
	2	1	0	0	1		
		48	**0**	**0**	**48**		
930 - Lake Elmo Park Reserve	1	161	0	150	11	50	Yes
	2	42	0	3	39		
	3	2	0	0	2		
		205	**0**	**153**	**52**		
931 - Vermillion Highlands WMA	1	60	0	44	16	25	Yes
	2	7	0	0	7		
	3	1	0	0	1		
	9	1	0	0	1		
		69	**0**	**44**	**25**		
932 - Elm Creek Park Reserve	1	274	0	160	114	150	Yes
	2	37	0	0	37		
	3	1	0	0	1		
		311	**0**	**160**	**151**		
933 - Murphy-Hanrahan Park Reserve	1	65	0	0	65	90	Yes
	2	18	0	0	18		
		83	**0**	**0**	**83**		
		3,506	**0**	**1,443**	**2,063**	**2,207**	

Table 22. 2008 Special Permit Areas for Muzzleloader Hunters.

Permit Area Number	Preference Level	Applications		Unsuccessful	Winners	Permits Available	Bonus Permits
		Total	Rejected				
935 - Jay Cooke SP	1	210	0	210	0	120	Yes (4)
	2	126	0	11	115		
	3	5	0	0	5		
		341	**0**	**221**	**120**		
936 - Crow Wing SP	1	90	0	90	0	45	Yes (4)
	2	59	0	56	3		
	3	41	0	0	41		
	9	1	0	0	1		
		191	**0**	**146**	**45**		
937 - Soudan Mine SP	1	15	0	0	15	20	Yes (1)
	2	2	0	0	2		
	3	2	0	0	2		
		19	**0**	**0**	**19**		
938 - City of Tower	1	10	0	0	10	40	No
	2	1	0	0	1		
		11	**0**	**0**	**11**		
939 - Interstate SP	1	6	0	0	6	20	Yes (1)
	2	3	0	0	3		
		9	**0**	**0**	**9**		
940 - Lake Shetek SP	1	35	0	35	0	15	Yes (4)
	2	25	0	19	6		
	3	10	0	0	10		
		70	**0**	**54**	**16**		
941 - Lake Maria SP	1	62	0	47	15	25	Yes (4)
	2	9	0	0	9		
	3	2	0	0	2		
		73	**0**	**47**	**26**		
942 - Nerstrand Woods SP	1	107	0	107	0	50	Yes (1)
	2	63	0	32	31		
	3	18	0	0	18		
		188	**0**	**139**	**49**		
943 - Rice Lake SP	1	42	0	37	5	20	Yes (1)
	2	7	0	0	7		
	3	8	0	0	8		
		57	**0**	**37**	**20**		
944 - Sibley SP	1	57	0	55	2	40	Yes (1)
	2	34	0	0	34		
	3	4	0	0	4		
		95	**0**	**55**	**40**		
944 - Vermillian Highlands WMA	1	28	0	13	15	25	Yes (1)
	2	10	0	0	10		
		38	**0**	**13**	**25**		
TOTAL		**1,019**	**0**	**665**	**354**	**420**	
GRAND TOTAL		**52,207**	**2,570**	**22,393**	**29,813**	**34,952**	

2008 ELK HARVEST REPORT

Joel Huener, Thief Lake WMA

INTRODUCTION

Minnesota has two populations of elk. The first herd lives in the area north of Grygla on a combination of public and private lands, and can trace its origins back to re-introduction efforts in the area in 1935 (Figure 1). The second herd lives along the Manitoba/Kittson County border (about 60 miles from the Grygla herd), and is comprised of animals that have moved in from Canada.

The Minnesota Legislature provided for the opportunity for sport hunting of elk in 1987 to help alleviate depredation concerns in the Grygla herd range, and to provide for the unique recreational opportunity this affords. Hunting this population is permitted whenever the pre-calving population exceeds 20 animals.

The border herd is comprised of three sub-populations – the Caribou herd which moves back and forth between Caribou WMA in Minnesota, and Vita, Manitoba; the Water Tower herd, which lives largely within Minnesota along the Manitoba border, and the Lancaster herd, which lives east of Lancaster, Minnesota. Elk of the Lancaster herd are year-round residents of Minnesota in an area comprised almost entirely of private land, and have been responsible for most of the depredation claims in that area. In an effort to limit depredation in this area, an elk season was established this year in a zone that encompassed the range of the Lancaster herd.

METHODS

Population estimates for these two herds are based on helicopter surveys done between December and March, when snow conditions and the lack of leaf cover permits good visibility of elk. Surveys are undertaken with DNR – Wildlife personnel from Thief Lake WMA, Thief River Falls area office and the Karlstad area office with DNR aircraft and pilots. Areas are covered using transects at 1/5 mile intervals in the Grygla herd range, and 1/3 mile intervals in the Border herd range. Transects are programmed into GPS based systems on the aircraft.

Further information on herd composition is derived from ground surveys driven during early morning hours in the respective elk ranges. Because the Border herd winters on both sides of the border, coordination between the Province of Manitoba and Minnesota DNR is necessary, and has not been possible in all years.

When the pre-calving population in the Grygla herd is above 30, a recommendation for hunting seasons and permit numbers is forwarded to the Region and St. Paul based on herd composition. This year, after experiencing extensive depredation in the Lancaster area, it was decided to define a hunting zone there and offer elk permits there as well to address depredation concerns. Elk hunting in Minnesota is a once-in-a-lifetime opportunity, and hunters may apply for permits singly or in parties of two (receiving one permit between them). Hunters were allowed to choose between zone 10 (Grygla herd) and zone 20 (Lancaster herd – figure 2). Permits are distributed based on a lottery. Successful applicants must attend a mandatory orientation at Thief Lake WMA, and animals taken must be registered either at Thief Lake headquarters or at the Karlstad Wildlife office, where biological samples are taken.

RESULTS

The pre-calving population for the Grygla elk herd in 2008 was 55 animals (see Figure 3). The aerial survey of the Border herd showed 60 animals (Figure 4), while a concurrent survey by the Manitoba Ministry of Natural Resources showed an additional 85 elk in adjacent portions of Manitoba. Based on the survey and observed additional mortality since the 2007 survey, a total of 12 permits were offered in the Grygla herd, and 11 permits were offered in the Lancaster herd. Permit distribution by area and season are shown in Table 1. All of the either sex permits were offered during a September bugle season (two antlerless only permits were also offered during this time frame in the Lancaster hunt zone). One antlerless hunt was held in late November, and another in December.

Harvest statistics for this season are presented in Table 2, while Table 3 presents hunt results in the Grygla area from 1987-2007. The elk rut was going on during the September hunt, and all parties were able to fill their tags. In the Grygla zone, 1 bull was taken on opening day, and the other tag was filled with a bull the following Tuesday. In the Lancaster zone, a bull was taken opening morning, and cows were taken on Monday and Tuesday.

Cold weather and snow were present during the late November hunt. One of the permittees in the Grygla zone was not able to hunt due to health reasons. The remaining four parties hunted until Wednesday, when three adult cows were taken. The fourth party hunted several days longer, but did not fill a tag. In the Lancaster zone, the four parties had filled all four tags by Thursday morning.

The December hunt was cold (7 of 9 days were below zero) and had plenty of snow. In the Grygla zone, no elk were taken until Thursday, when a single adult cow was tagged. Several of the parties had left the area by this time, and the remaining party hunted without getting an opportunity. In the Lancaster zone, one cow was harvested on Tuesday, two on Thursday, and the final one was harvested on Friday.

Because only 4 of 10 antlerless tags had been filled in the Grygla zone, an alternate hunt was held in January (3-11) of 2009. During this hunt, holders of unfilled tags for the Grygla zone were allowed another opportunity to hunt. Five of the 6 potential parties expressed interest in participating, but only 3 parties actually went afield. Conditions were cold (below zero every day) and deep snow. One adult cow was taken on Wednesday, and a female calf was taken on Thursday. Biological samples to examine elk health and screen for bovine tuberculosis and chronic wasting disease were collected from all animals.

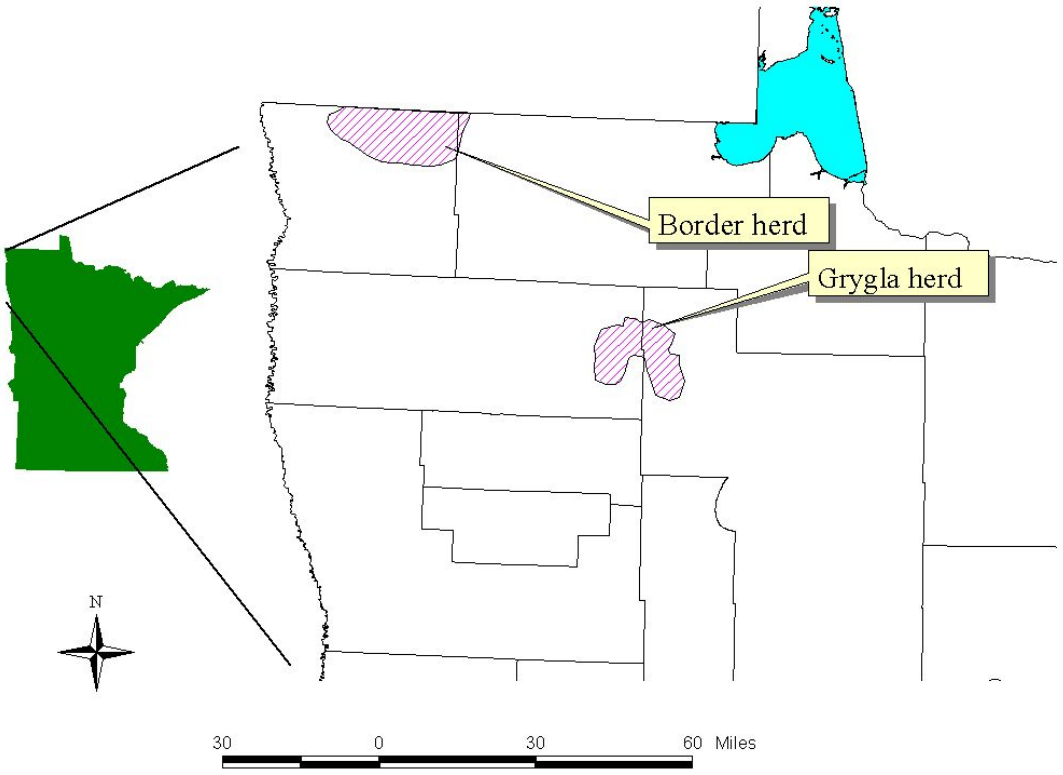


Figure 1. Current elk range in Minnesota, 2008.

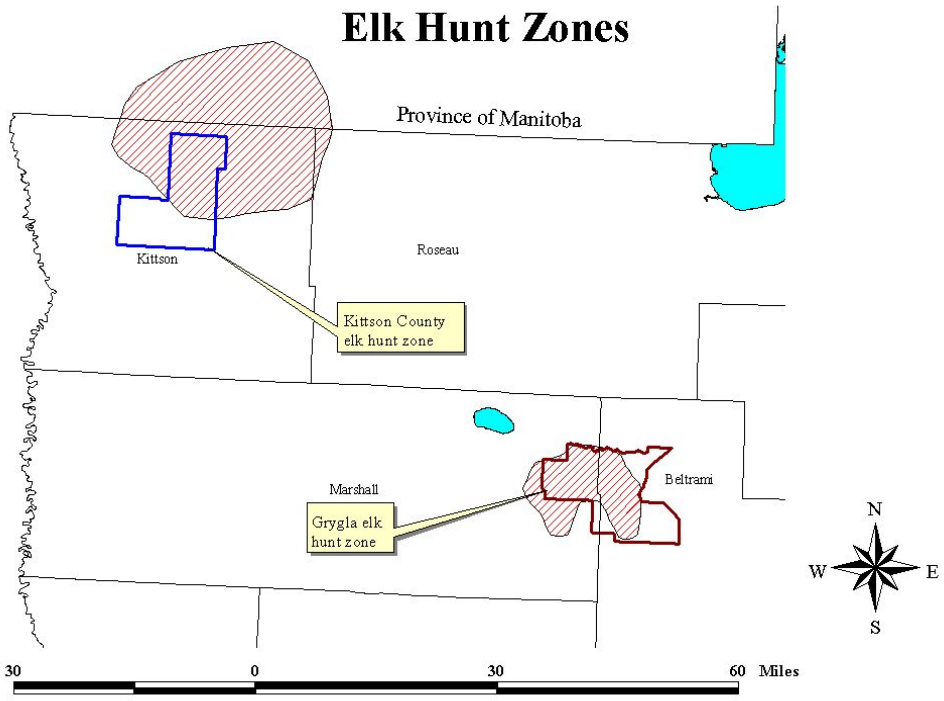


Figure 2. Elk hunting zones in Minnesota, 2008.

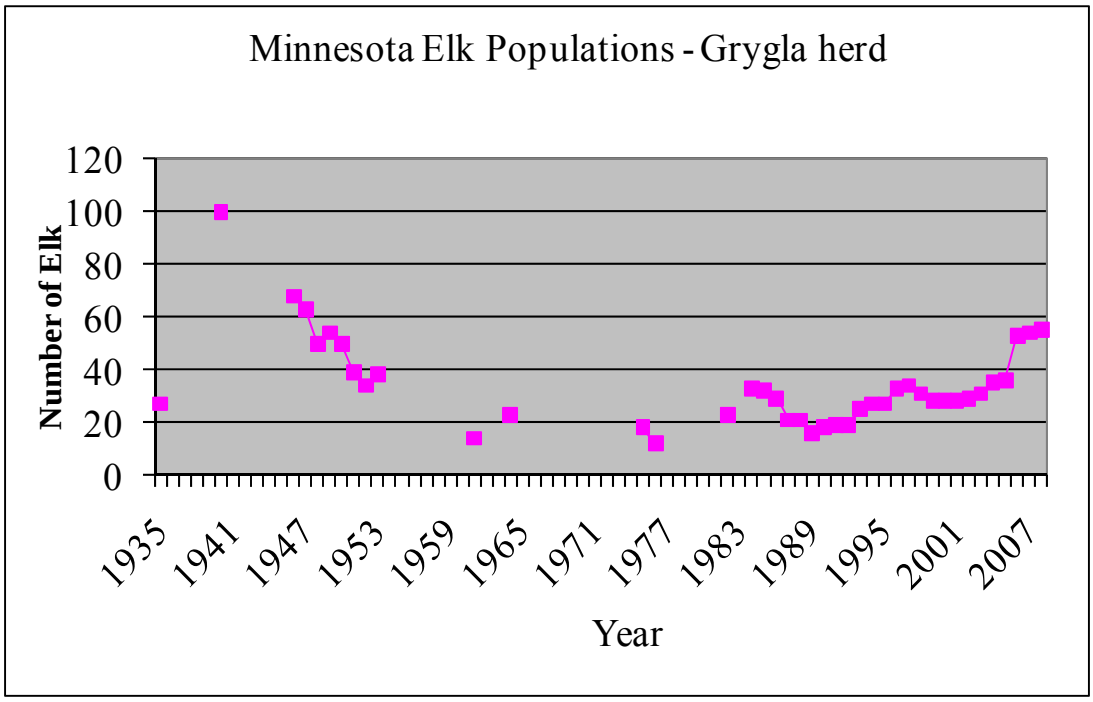


Figure 3. Pre-calving elk numbers in the Grygla herd, 2008.

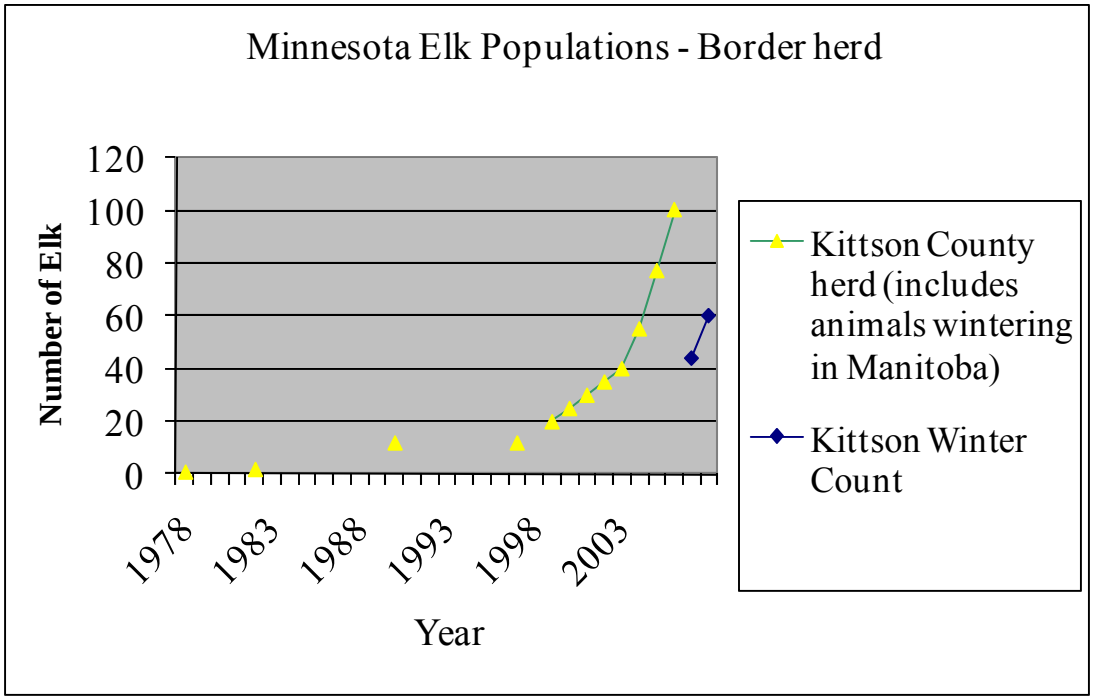


Figure 4. Pre-calving elk numbers in the Border herd, 2008.

Table 1. Elk permits offered by area and season, 2008.

Season	Grygla herd		Lancaster herd	
	Either-sex	Antlerless-only	Either-sex	Antlerless-only
September 13-21	2	0	1	2
November 22-30	0	5	0	4
December 6-14	0	5	0	4
Total	2	10	1	10

Table 2. Elk harvest by area and season, 2008.

Season	Grygla herd		Lancaster herd	
	Bull	Antlerless	Bull	Antlerless
September 13-21	2	0	1	2
November 22-30	0	3	0	4
December 6-14	0	1	0	4
January 3-11 (alternate)		2		
Total	2	6	1	10

Table 3. Minnesota elk harvest (Grygla herd) by year including 1987-2007.

	Bulls		**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			6	6
Total	17(3 alternate)	9	34	19*

*One of two elk taken was actually a spike bull

2008 MINNESOTA MOOSE HARVEST

Mark S. Lenarz, Forest Wildlife Populations and Research Group

INTRODUCTION

Each year, a limited number of permits are issued that allow Minnesota residents to hunt moose. The following report is intended to document the number of hunters applying for permits, the number of permits issued, a hunting party's chance of receiving a permit, hunter success rate, and a breakdown of the harvest by hunting zone. Information on permit numbers and moose harvested by members of the 1854 Treaty Authority or Fond du Lac band of Lake Superior Chippewa within the 1854 Ceded Territory is also provided.

METHODS

All successful State hunters are required to register their moose at one of 10 registration stations and provide information on the location where they killed their moose, date of kill, and sex of moose harvested.

RESULTS

In 2008, State hunters harvested 110 moose in northeastern Minnesota. No season was held in northwestern Minnesota. Of the 2,706 parties that applied for this year's moose hunt, 247 (9%) were drawn, and 245 purchased licenses (Table 1). Hunters were restricted to harvesting bulls in this year's hunt. Table 1 also lists the number of permits offered by hunting zone, chance of being selected for a permit, and hunter success. The 1854 Treaty Authority issued 47 hunter permits and 8 subsistence permits. Band members killed 16 moose (13 bulls and 3 cows). The Fond du Lac band issued 70 permits and the preliminary harvest (as of 10/24/2008) was 12 moose (bulls only). The Fond du Lac season closes 12/31/2007.

DISCUSSION

The success rate of State hunters in 2008 was 45%, a decrease of 5% over 2007 (Tables 1 and 2). This was the second year of hunting was for bulls only. In 2005, and 2006, hunter success for bulls was 50% and 49%, respectively. The success rate for members of the 1854 Treaty Authority was 29%. The preliminary success rate for the Fond du Lac band was 17%, as of 10/24/2008.

Table 1. Moose harvested, licenses offered and sold, application rate, and party success, in 2008 moose hunt by State hunters in northeastern Minnesota

Zone	Bulls	Cows	Total	Licenses Offered	Licenses Sold*	Party Applications*	Chances for Permit	% Success
20	1	0	1	15	15	104	14%	7%
21	3	0	3	10	9	124	8%	33%
22	1	0	1	7	7	58	12%	14%
23	0	0	0	3	3	25	12%	0%
24	6	0	6	8	8	168	5%	75%
25	7	0	7	13	13	276	5%	54%
26	2	0	2	4	3	32	13%	67%
27	2	0	2	5	5	31	16%	40%
28	3	0	3	9	9	47	19%	33%
29	5	0	5	7	7	109	6%	71%
30	3	0	3	8	8	140	6%	38%
31	10	0	10	18	18	392	5%	56%
32	1	0	1	5	5	19	26%	20%
33	3	0	3	7	7	95	7%	43%
34	1	0	1	2	2	44	5%	50%
36	3	0	3	10	10	42	24%	30%
37	2	0	2	3	3	20	15%	67%
60	1	0	1	6	6	33	18%	17%
61	6	0	6	10	10	49	20%	60%
62	8	0	8	22	22	159	14%	36%
63	2	0	2	6	6	33	18%	33%
64	2	0	2	8	8	25	32%	25%
70	7	0	7	8	8	126	6%	88%
72	10	0	10	13	13	123	11%	77%
73	3	0	3	6	6	71	8%	50%
74	3	0	3	4	4	59	7%	75%
76	2	0	2	6	6	88	7%	33%
77	5	0	5	13	13	104	13%	38%
79	3	0	3	5	5	32	16%	60%
80	5	0	5	6	6	78	8%	83%
Total	110	0	110	247	245	2,706	9%	45%

*Number of 2, 3, or 4 person parties - rejected applications

Table 2. Applicants, permit numbers, moose harvested, and success rates of state moose hunters since 1993.

	Northwest				Northeast				
Year	Party Applicants	Permits	Moose Harvested	Party Success	Party Applicants	Permits	Licenses Purchased	Moose Harvested	Party Success
1993	6,558	446	422	95%	2,934	315	315	264	84%
1994	8,208	262	244	93%	3,022	189	189	155	82%
1995	7,622	191	171	90%	3,181	188	188	156	83%
1996	2,476	39	38	97%	3,830	207	207	156	75%
1997		No Season			3,958	198	198	152	77%
1998		No Season			4,157	182	182	125	69%
1999		No Season			3,919	189	189	136	72%
2000		No Season					No Season		
2001		No Season			3,164	182	176	125	71%
2002		No Season			2,580	208	202	141	70%
2003		No Season			2,328	224	217	144	66%
2004		No Season			3,062	246	240	151	63%
2005		No Season			3,060	284	276	164	59%
2006		No Season			2,952	279	269	161	60%
2007		No Season			2,566	233	229	115	50%
2008		No Season			2,706	247	245	110	45%

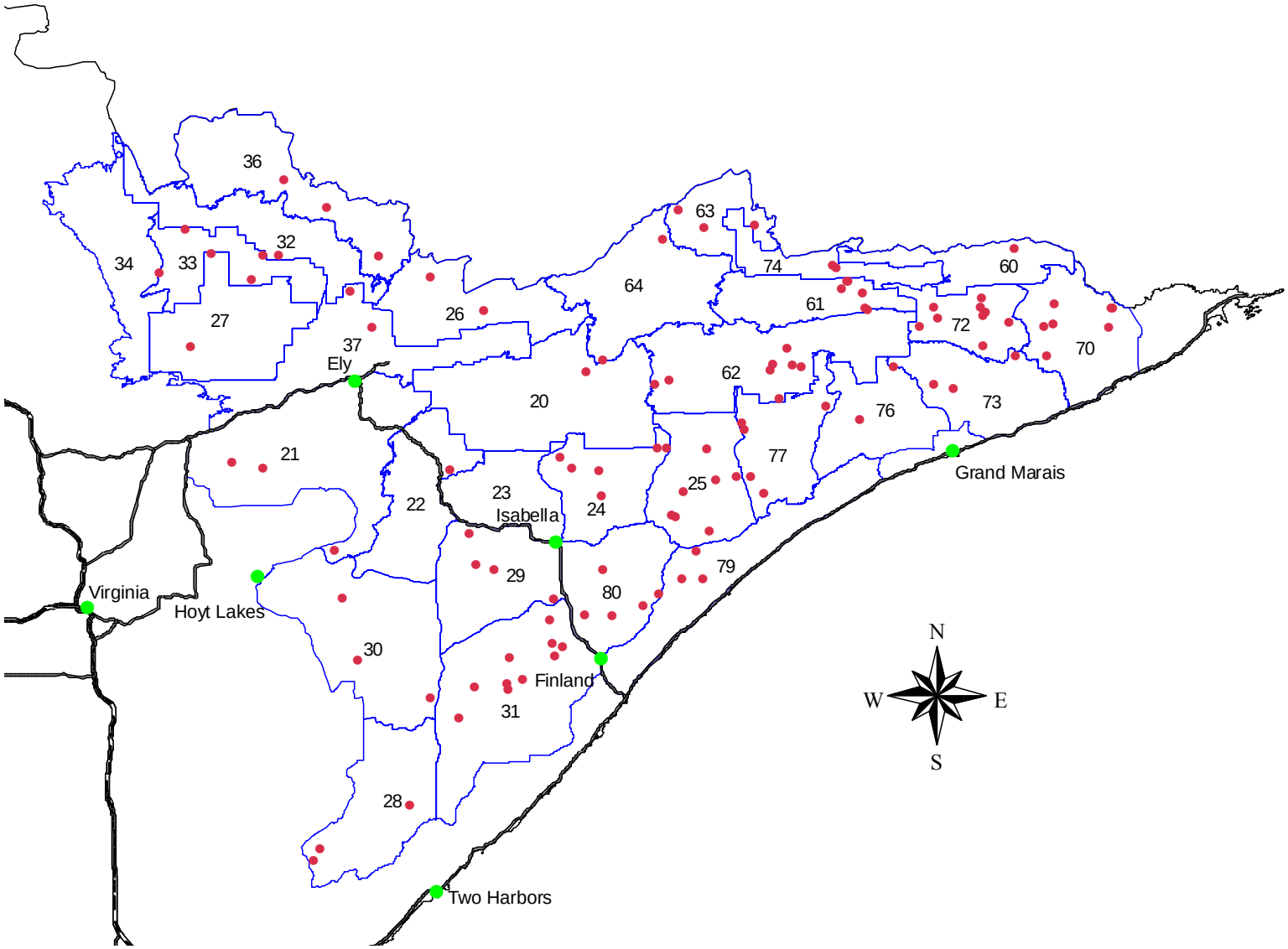


Figure 1. 2008 moose harvest and hunting zones in northeastern Minnesota.