

# **Prairie-chicken harvest in Minnesota during 2008**

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## **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, p.6). 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. p.6).

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, p.7 ). 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, p .7). 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**

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

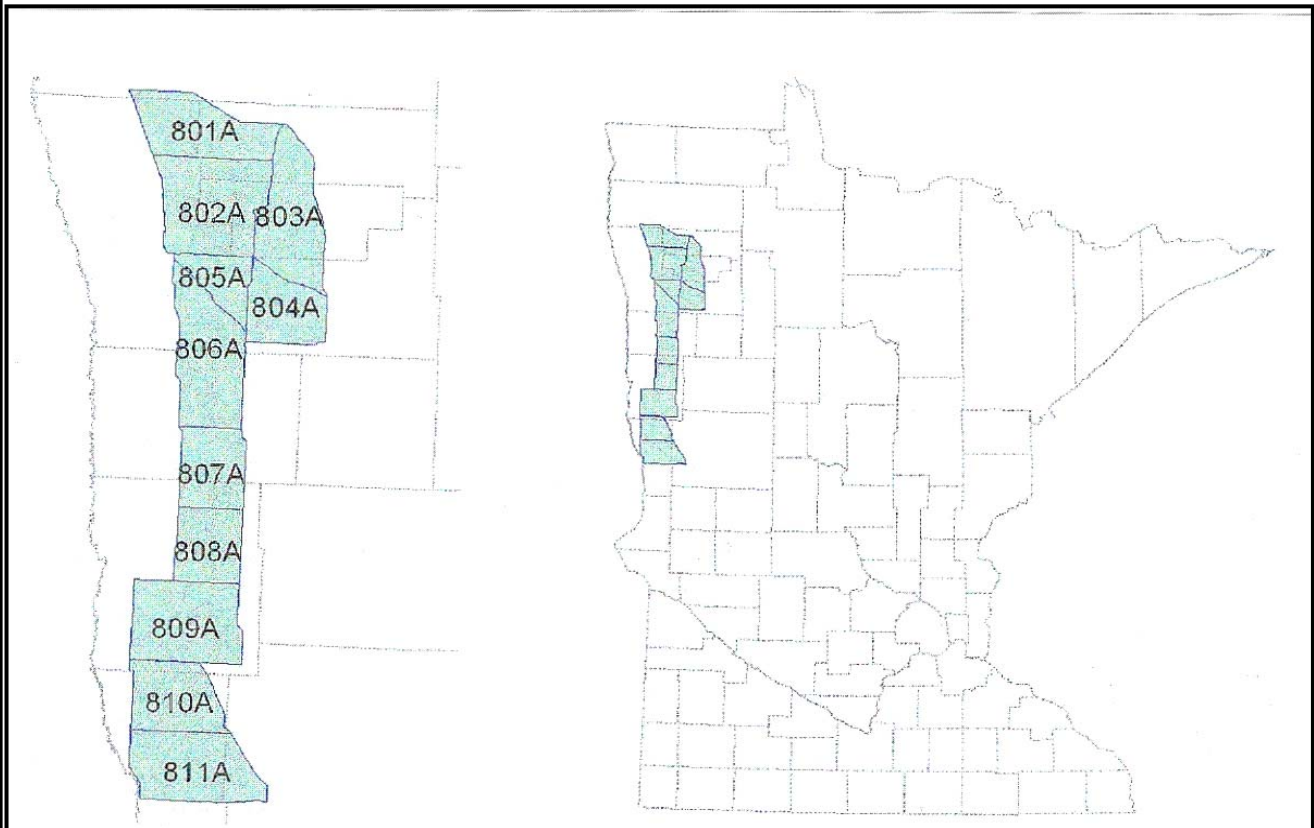


Table 1. Results of the lottery for prairie-chicken hunting permits in Minnesota during 2008.

Permit Area	Permits available	No. of applicants	Lottery winners	
			Number	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

*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.*



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

Permit Area	No. of Hunters		Birds Harvested		Birds per harvester	Success rate
	Self-reported	Estimated	Self-reported	Estimated		
801A	1	2	1	2	10	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

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

Year	Permits	Applicants	Harvested	Success
			Birds	Rate
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

Proportion of hunters who harvested  $\geq$  prairie-chicken.

