

## **Prairie-chicken harvest in Minnesota during 2007**

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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 (Figure 1). The objective of this report is to document results of the 2007 prairie chicken season.

### **METHODS**

This report summarizes prairie-chicken hunting season information from the Electronic Licensing System (ELS), where all permit applications, lottery results, and harvest registrations are recorded. All successful hunters are required to register their prairie-chicken(s) at an ELS registration station. Relying on ELS registration data requires one to assume that all harvested prairie-chickens were registered and were registered as being harvested in the correct permit area. As advised by the Prairie Chicken Committee, I did not conduct a post-season hunter survey because there were no changes to the season this year and results of the hunter survey were fairly consistent among years from 2003 to 2006.

### **RESULTS & DISCUSSION**

One hundred eighty-two prairie-chicken hunting permits were available during 2007. There were 187 lottery winners because if the last applicant selected for a permit area had applied as a member of a party, permits were awarded to all members of the party (Table 1). Of the 150 hunters who purchased a permit, 79 (53%) bagged at least 1 prairie-chicken (Table 2). Hunters registered 122 prairie-chickens during 2007, which may have been the greatest annual harvest since the modern seasons began in 2003 (Table 3). During 2003 115 prairie-chickens were registered in ELS, but hunters reported during the post-season survey that 129 prairie-chickens were killed and retrieved. The number of applicants has been similar during the last 3 years; hunter success rates and total harvest have been more variable (Table 3).

Table 1. Results of the lottery for prairie-chicken hunting permits in Minnesota during 2007.

Permit type	Permit area	No. of applicants	Lottery winners	
			Number	Proportion
Regular	801A	4	4	1.00
	802A	11	11	1.00
	803A	10	10	1.00
	804A	15	15	1.00
	805A	74	17	0.23
	806A	61	15	0.25
	807A	62	22	0.35
	808A	31	16	0.52
	809A	53	17	0.32
	810A	115	25	0.22
	811A	60	15	0.25
All		496	167	0.34
Landowner	801A	0	0	
	802A	0	0	
	803A	1	1	1.00
	804A	1	1	1.00
	805A	4	4	1.00
	806A	6	3	0.50
	807A	3	3	1.00
	808A	2	2	1.00
	809A	4	4	1.00
	810A	1	1	1.00
	811A	1	1	1.00
All		23	20	0.87
Both	All	519	187	0.36

Table 2. Hunter harvest of prairie-chickens in Minnesota during 2007.

Permit area	No. of hunters <sup>a</sup>	Success rate <sup>b</sup>	Birds registered	Birds per harvester <sup>c</sup>
801A	1	0.00	0	0.0
802A	9	0.78	12	1.7
803A	9	0.67	9	1.5
804A	11	0.64	8	1.1
805A	20	0.60	19	1.6
806A	16	0.75	18	1.5
807A	18	0.28	9	1.8
808A	13	0.77	14	1.4
809A	19	0.37	13	1.9
810A	21	0.52	17	1.5
811A	13	0.15	3	1.5
All	150	0.53	122	1.5

<sup>a</sup> Number of people who purchased a permit.

<sup>b</sup> Proportion of hunters who registered at least 1 prairie-chicken.

<sup>c</sup> Mean number of prairie-chickens registered per successful hunter.

Table 3. Annual summary of prairie-chicken hunting results in Minnesota during 2003–2007.

Year	Permits available	Success		
		Applicants	Harvest	rate <sup>a</sup>
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

<sup>a</sup> Proportion of hunters who registered at least 1 prairie-chicken.

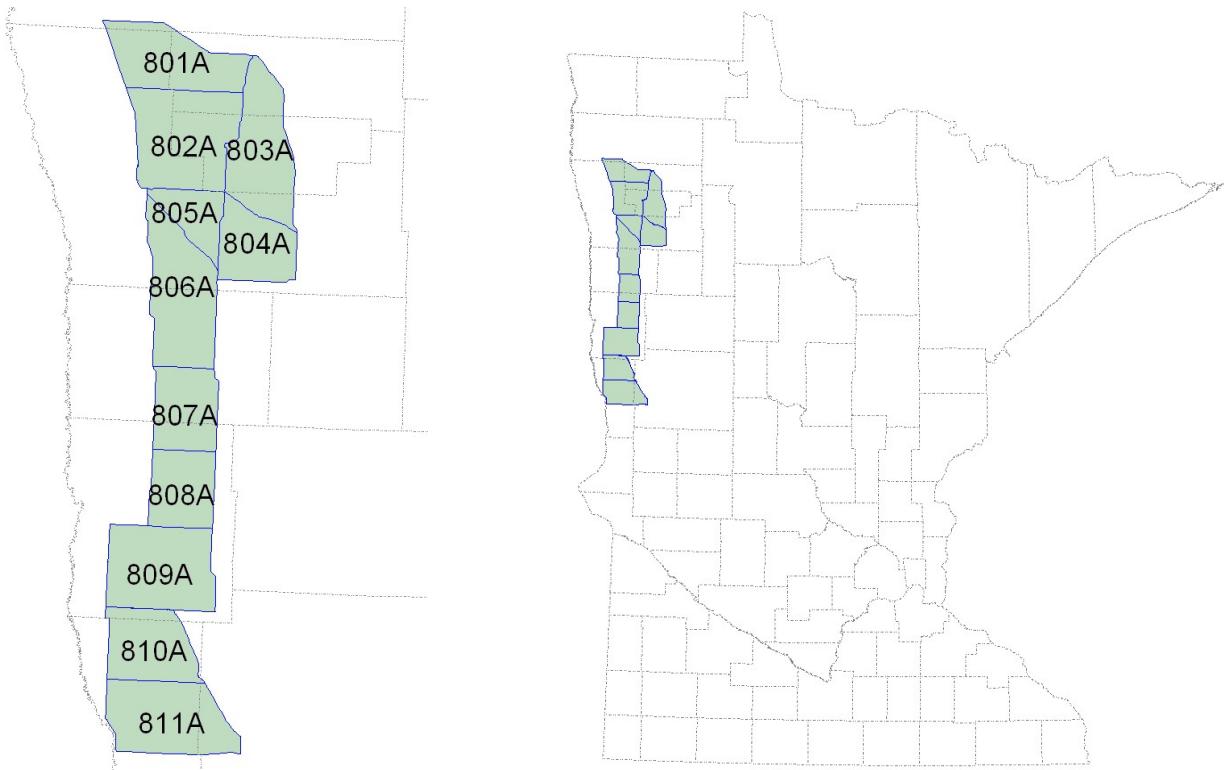


Figure 1. Map of permit areas for prairie-chicken hunting in Minnesota (left) and their location relative to counties within the state (right).