

## Minnesota's Wild Turkey Harvest - 2013

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Minnesota offers fall and spring turkey hunting seasons. The fall turkey season was 30 days in length (October 1-30) and allowed for an unlimited number of hunters to take one wild turkey of either sex. Although there were an unlimited number of hunters, each hunter needed to select and could only hunt in 1 of the 12 permit areas (PAs; Figure 1). The spring turkey season regulated harvest and distributed hunting pressure by allocating permits across the 12 PAs and 8 time periods using a quota system for the first 4 time periods. During spring, adult hunters interested in pursuing turkeys for the first 4 time periods were required to apply for a permit through a lottery system but youth hunters were able purchase a permit over-the-counter during these time periods. Preference for this lottery system was determined by the number of years a valid but unsuccessful application had been submitted since last receiving a permit. Hunters could apply individually or in a group of up to 4 hunters. Successful applicants were notified through U.S. Mail and unsuccessful applicants were awarded a preference point. Hunters could simply purchase a permit over-the-counter for the last 4 seasons. The goal of this system was to provide quality turkey hunting opportunities by minimizing hunter interference rates while allowing hunters to take the harvestable surplus of turkeys.

*Fall 2012 Turkey Season* – This was the first year that a quota system was not used to restrict hunter numbers during the fall season. Consequently, the number of permits issued to hunters doubled from 5,382 permits in 2011 to 10,779 permits in 2012 (Table 1, Figure 2). There were 1,753 turkeys harvested during Fall 2012, which was about 400 more turkeys than the record harvest in 2010. Hunter success rates ranged from 10-19% at the permit area level (Table 2) and averaged 16% at the statewide level, which was slightly below the 5-year average (22%). These lower hunter success rates may be related to hunters interested in harvesting a turkey opportunistically while pursuing other species and therefore were expending less effort; and/or allowing more casual turkey hunters who may not have as much experience with turkey hunting during the fall season. It is unlikely these reduced hunter success rates are related to fewer turkeys in the pre-hunt population because turkey population growth rates have been stable to slightly increasing throughout Minnesota (Giudice et al. 2011) and the 2011-12 winter was relatively mild, which would suggest above average survival and reproduction rates should have occurred the previous year. Weather conditions were favorable throughout the season and most crops were harvested in early- to mid-October.

*Spring 2013 Turkey Season* – There were 38,831 permits issued during the spring season, including 19,113 general/landowner permits, 5,539 youth permits, 4,550 archery permits, and 9,629 surplus permits (Table 2). Hunters registered 10,390 turkeys (Table 3), which was about 12% below the 5-year average (Figure 3). Hunter success rates averaged 30% at the statewide level, which was comparable to the 5-year average of 30% (Table 3). The winter of 2012-13 was relatively mild through February, but then measurable snow was on the ground through much of April in most of the range where turkeys were

abundant in Minnesota. The impact of the delayed but extended winter weather on turkey populations is unknown, but it is reasonable to believe that the winter-like weather affected hunter effort and turkey movement patterns. This likely explains much of the reduced harvest success rates and hunter participation rates, particularly during the first few hunting time periods. Wisconsin and Iowa both reported similar trends in spring 2013 wild turkey harvests as well.

#### **LITERATURE CITED**

GIUDICE, J. M., M. TRANEL, and K. HAROLDSON. 2011. Fall Wild turkey Population Survey, 2010. Minnesota Department of Natural Resources, St. Paul, MN, Agency Report.

Table 1. Permits available and issued, applicants, registered harvest, and hunter success rates for fall wild turkey seasons 1990 – 2012, Minnesota.

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

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

Table 2. Permits issued, registered harvest, and hunter success during the Fall 2012 and Spring 2013 Minnesota wild turkey seasons.

Permit Area	Fall 2012			Spring 2013		
	Permits Issued	Harvest	Success (%) <sup>a</sup>	Permits Issued <sup>b</sup>	Harvest	Success (%) <sup>a</sup>
501	1,750	316	18	9,050	2,639	29
502	175	24	14	610	169	28
503	1,717	282	16	3,961	1,255	32
504	401	39	10	930	278	30
505	788	126	16	3,150	908	29
506	466	75	16	1,334	317	24
507	2,690	515	19	8,107	2,628	32
508	1,425	197	14	3,868	1,170	30
509	128	19	15	246	102	41
510	1,144	147	13	2,788	886	32
511	71	10	14	133	27	20
512	24	3	13	38	11	29

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

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

Table 3. Permits available, permits issued, and registered harvest from 1978 – 2013 for all spring wild turkey hunting seasons in Minnesota.

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

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

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

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

Table 4. Permits available and issued by license type (resident and non-resident) and time period for the spring 2013 wild turkey season, Minnesota.

Time period	Permits available	Permits issued			
		General lottery	Landowner	Surplus	Youth <sup>b</sup>
A	5,705	4,807	628	1	1,284
B	5,705	4,707	271	90	221
C	5,705	5,091	236	0	1,682
D	5,705	3,307	57	1,960	958
E	Unlimited	5	0	4,844	377
F	Unlimited	0	0	856	168
G	Unlimited	4	0	1,490	499
H	Unlimited	0	0	388	350
Total <sup>a</sup>	Unlimited	17,921	1,192	9,629	5,539

<sup>a</sup> Excludes archery permit sales.

<sup>b</sup> Total excludes youth archery permits.

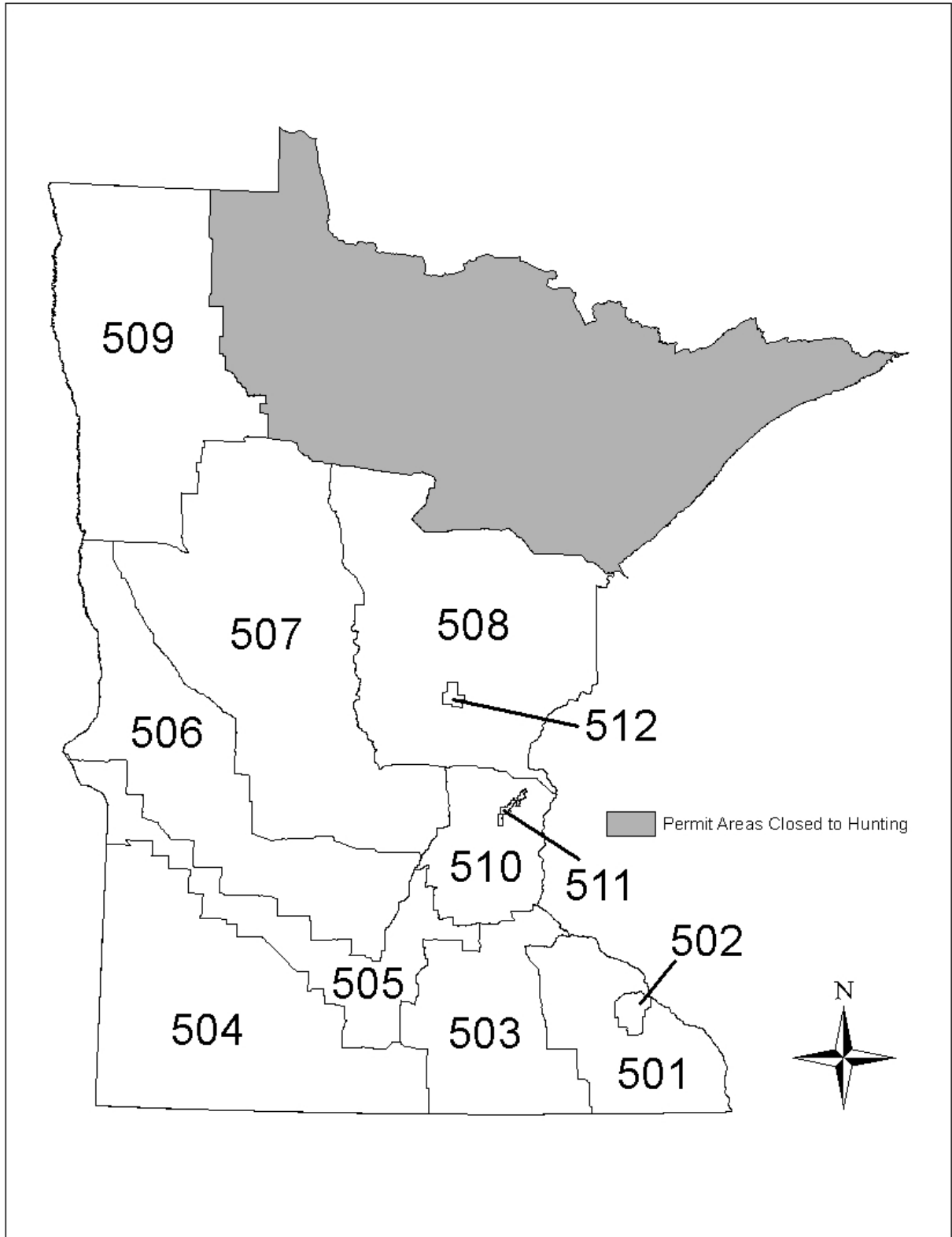


Figure 1. Permit areas open for hunting during the 2013 spring turkey hunting season, Minnesota.

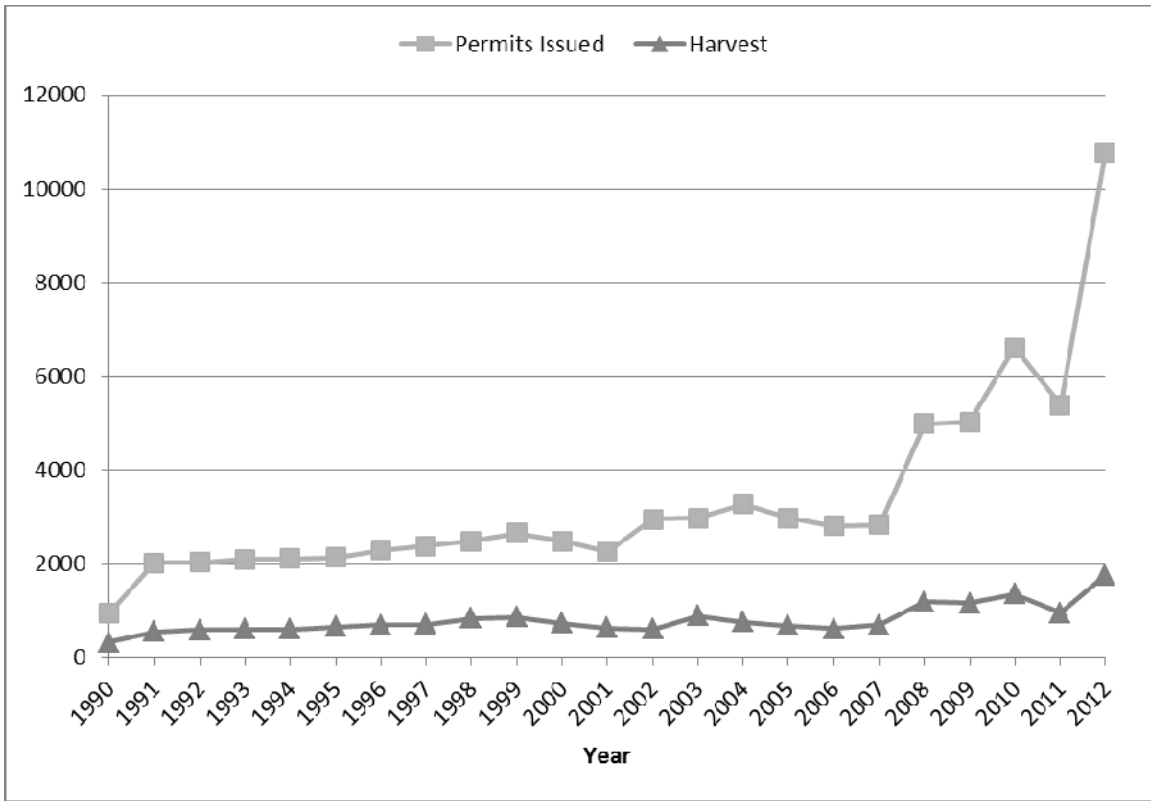


Figure 2. Permits issued and registered harvest for fall wild turkey seasons, 1990-2012, Minnesota.



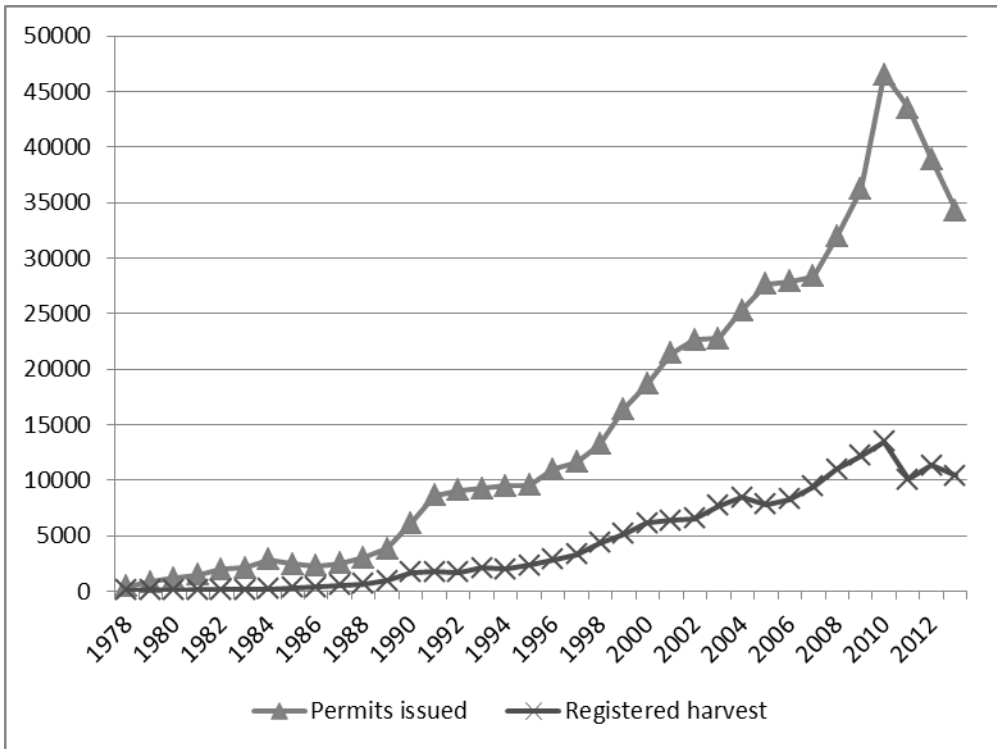


Figure 3. Permits issued and registered harvest for spring wild turkey seasons, 1978-2013, Minnesota.