

Spring 2012 Wild Turkey Harvest Report

Eric Walberg and Marrett Grund
Farmland Wildlife Populations and Research Group
Minnesota Department of Natural Resources
Madelia, Minnesota

July 26, 2012

In Minnesota, the spring wild turkey hunting season is designed to regulate harvest and distribute hunting pressure by allocating permits across 12 permit areas (PAs, Figure 1) and 8 time periods using a quota system. Although youth hunters could purchase a permit over-the-counter, adult hunters interested in pursuing wild turkeys were required to apply for a permit through a lottery system. Preference for this lottery system was determined by the number of years a valid but unsuccessful application has 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. The goal of this system was to provide quality turkey hunting opportunities by minimizing hunter interference rates, conservatively harvesting turkeys in permit areas where the turkey range was expanding, yet allowing a substantial harvest in the remainder of the state.

There were two notable regulation changes for the 2012 spring hunting season: the last 4 time periods (E, F, G and H) had an unlimited number of permits available and the number of PAs was reduced from 81 to 12 PAs by pooling smaller PAs into larger ones. Permits for time periods E through H and all surplus licenses remaining after the drawing were offered over-the-counter in mid-March on a first-come, first-served basis.

Seven types of hunting licenses were available to resident 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; (3) youth permit for residents age 17 or less on opening day of the turkey hunting season; (4) archery permit which could be purchased for the last 4 time periods; (5) youth archery; (6) surplus permits; and (7) military permit. Five types of hunting licenses were available to nonresident turkey hunters: (1) general lottery permit; (2) youth permit; (3) archery permit; (4) youth archery permit; and (5) surplus permit.

During 2012, 42,817 permits were issued (Table 1, Figure 2), including 17,944 general lottery permits, 1,346 landowner permits, 8,664 youth permits, 3,911 archery permits, and 10,952 surplus permits. There were 187 permits issued for the Camp Ripley disabled veterans hunt. Hunters registered 11,325 turkeys, an increase of 13% from 2011 (Table 1, Figure 2). Hunter success averaged 29% (Table 1), which was comparable to the 5-year average of 30%. Hunter success by PA ranged from 15% (PA 511) to 45% (PA 509; Table 2). Hunter success varied by license type from 13% (archery) to 32% (general lottery and landowner), 24% (youth), and 23% (surplus). The number of general lottery licenses (including landowner) issued averaged 4,818 permits in time periods A – D, whereas the number of surplus licenses issued averaged 209 permits over the same time periods (Table 3). The average number of surplus licenses issued in the last four time periods increased to an average of 2,530 surplus permits

because there were an unlimited number of surplus permits available and no general lottery permit quota was offered. The number of youth permits issued averaged 1,872 permits in time periods A – D and the average number of permits issued in the last four time periods declined to 285 youth permits (Table 3), which indicates youth hunters took advantage of hunting turkeys earlier in the spring. The 8,940 permits issued to resident and non-resident youth hunters (general lottery, surplus, and archery) in 2012 was a 3% increase over the 8,693 youth permits issued in 2011. Approximately 18% (2,380) of harvested turkeys were registered using the phone registration system, 30% (4,002) through the internet, and 52% (4,943) at a registration station.

Numeric changes in annual turkey harvests can be influenced by turkey population size, hunter effort, and weather. As of 2010, Minnesota's wild turkey population appeared to be stable or growing modestly throughout most of the range, with more rapid growth in the northern PAs (Giudice et al. 2011). The effect of the mild winter of 2011-12 on turkey abundance is unknown, but survival rates may have been above average due to above average temperatures and below average precipitation (Minnesota Climatology Working Group 2012). Weather conditions in April and May were relatively warm and wet across much of Minnesota, with above average temperatures and above average precipitation (Minnesota Climatology Working Group 2012). Precipitation during the 2012 spring turkey harvest was similar to the last two spring turkey harvests for the month of April, but more precipitation occurred in May (Minnesota Climatology Working Group 2012). Although hunting opportunities increased in 2012 due to a larger portion of Minnesota being open for turkey harvest and an unlimited number of permits available for time periods E through H, hunter effort was reduced, with over 4,600 fewer permits issued in 2012 than in 2011. Fewer permits issued from 2011 to 2012 may have been caused, at least in part, by time periods E and F switching to unlimited permit availability and the poor weather that occurred during the month of May. The increase in success rate that occurred from 2011 to 2012 was likely a function of above average temperature during the 2012 spring turkey hunting season, which likely increased hunter effort for those hunters who participated. Improved weather conditions increased the spring 2012 turkey harvest in Wisconsin, Iowa, and South Dakota from 2011 as well. Consequently, the increased harvest in 2012 was likely the result of warmer weather and possibly increased turkey abundance due to increased winter survival rates compared to 2011.

Literature Cited

Giudice, J., M. Tranel, and K. Haroldson. 2011. Fall Wild Turkey Population Survey, 2010. Minnesota Department of Natural Resources, St. Paul, MN, Agency Report.

Minnesota Climatology Working Group. 2012. Climate journal. <http://climate.umn.edu/> Accessed 20 June 2012.

Table 1. Permits available, permits issued, and registered harvest from 1978 – 2012 for all spring wild turkey hunting seasons in Minnesota.

Year	Permits			Registered harvest	Success (%) ^a
	Available	Issued	Issued (%)		
1978	420	411	97.9	94	22.9
1979	840	827	98.5	116	14.0
1980	1,200	1,191	99.3	98	8.2
1981	1,500	1,437	95.8	113	7.9
1982	2,000	1,992	99.6	106	5.3
1983	2,100	2,079	99.0	116	5.6
1984	3,000	2,837	94.6	178	6.3
1985	2,750	2,449	89.1	323	13.2
1986	2,500	2,251	90.0	333	14.8
1987	2,700	2,520	93.3	520	20.6
1988	3,000	2,994	99.8	674	22.5
1989	4,000	3,821	95.5	930	24.3
1990	6,600	6,126	92.8	1,709	27.9
1991	9,170	8,607	93.9	1,724	20.0
1992	9,310	9,051	97.2	1,691	18.7
1993	9,625	9,265	96.3	2,082	22.5
1994	9,940	9,479	95.4	1,975	20.8
1995	9,975	9,550	95.7	2,339	24.5
1996	12,131	10,983	90.5	2,841	25.9
1997	12,530	11,610	92.7	3,302	28.4
1998	14,035	13,229	94.3	4,361	33.0
1999	18,360	16,387	89.3	5,132	31.3
2000	20,160	18,661	92.6	6,154	33.0
2001	22,936	21,404	93.3	6,383	29.8
2002	24,136	22,607	93.7	6,516	28.8
2003	25,016	22,770	91.0	7,666	33.7
2004	27,600	25,261	91.5	8,434	33.4
2005	31,748	27,638	87.1	7,800	28.2
2006	32,624	27,876	85.4	8,241	29.6
2007 ^b	33,976	28,320	83.4	9,412	33.2
2008 ^b	37,992	31,942	84.1	10,994	34.4
2009 ^b	42,328	36,193	85.5	12,210	33.7
2010 ^b	55,982	46,548 ^c	83.0	13,467	29.0
2011 ^b	Unlimited	43,521 ^c	N/A	10,055	23.1
2012 ^b	Unlimited	38,906 ^c	N/A	11,325	29.1

^a Success rates not adjusted for non-participation

^b Youth hunt data included

^c Permits issued to archery hunters were not included in this Table. There were 2,462 permits issued to archers in 2011 and 3,911 permits issued to archers in 2012.

Table 2. Permits issued, registered harvest, and hunter success during the 2012 Minnesota spring wild turkey season.

Permit Area	Permits Issued ^a	Harvest ^b	Success (%) ^c
501	9,943	2741	28
502	857	181	21
503	4,645	1499	32
504	958	291	30
505	3,627	1019	28
506	1,438	401	28
507	9,522	2883	30
508	4,021	1156	29
509	244	111	45
510	3,262	957	29
511	154	23	15
512	48	17	35

^a Permits issued for the Camp Ripley disabled veterans hunt (187) and archery permits (3,911) were not included in this Table.

^b There were 45 turkeys registered from the Camp Ripley disabled veterans hunt and were not included in this Table.

^c Success rates were not adjusted for non-participation.

Table 3. Permits available and issued by license type (resident and non-resident) and time period for the spring 2012 wild turkey season, Minnesota.

Time period ^a	Permits available	Permits issued			
		General lottery	Landowner	Surplus	Youth ^c
A	5,705	4,410	675	17	3,705
B	5,705	4,587	293	93	460
C	5,705	4,656	273	93	2,184
D	5,705	4,272	105	631	1,137
E	Unlimited	9	0	5,202	376
F	Unlimited	4	0	1,296	146
G	Unlimited	2	0	2,632	399
H	Unlimited	4	0	988	220
Total ^b	Unlimited	17,944	1,346	10,952	8,664

^a A = April 18-22, B = April 23-27, C = April 28–May 2, D = May 3-7, E = May 8-12, F = May 13-17, G = May 18-24, H = May 25-31

^b Total includes 187 issued for the Camp Ripley disabled veterans hunt (4 general lottery and 183 surplus), but excludes archery permit sales.

^c Total excludes 276 youth archery licenses.

2012 Spring Wild Turkey Permit Areas

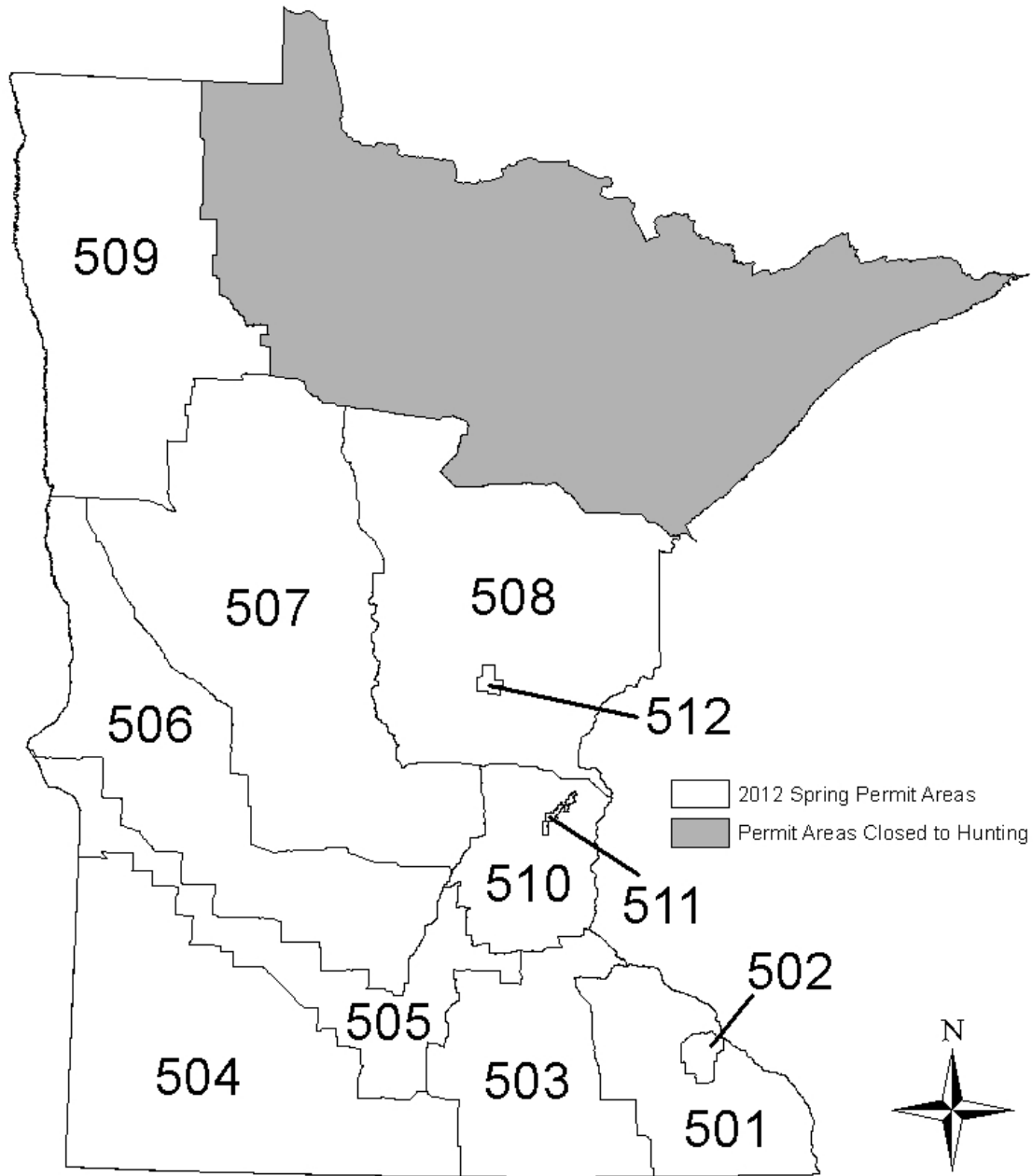


Figure 1. Permit areas open for hunting during the 2012 spring turkey hunting season, Minnesota.

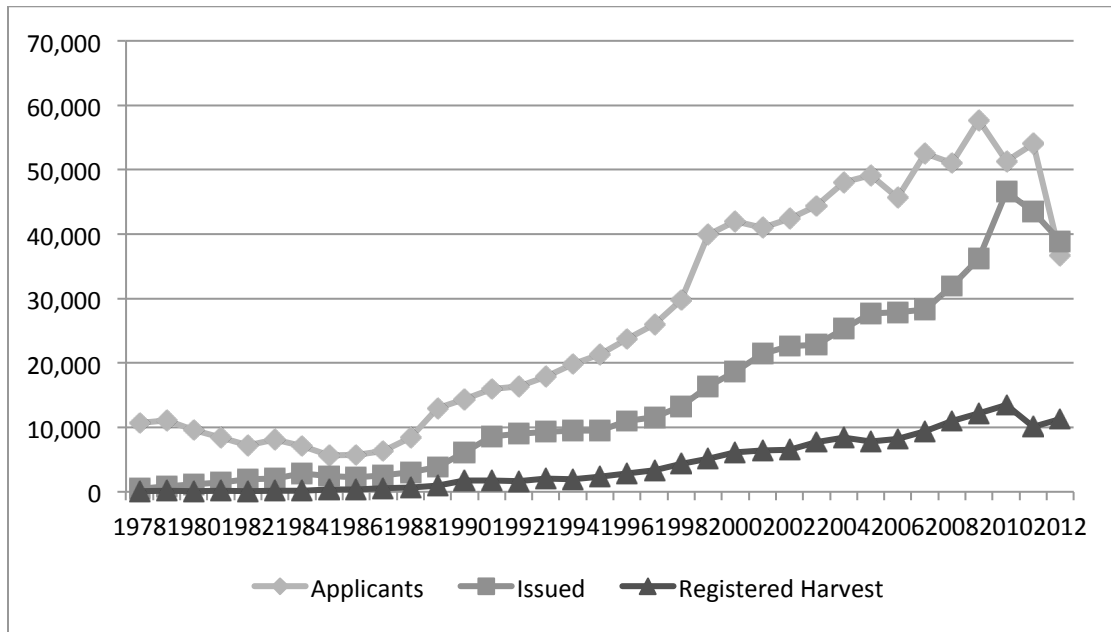


Figure 2. Applicants, permits issued, and registered harvest for the spring wild turkey seasons 1978-2012, Minnesota. Number of permits issued does not include archery permits in 2010-2012.