

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 (%) ^a |
|------|-------------------|------------|----------------|--------------------|---------------------------------|
| 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 |

^a 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 (%) ^a | Permits Issued ^b | Harvest | Success (%) ^a |
| 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 |

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

^b 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 (%) ^a |
|-------------------|-----------|---------------------|------------|--------------------|--------------------------|
| | 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 ^b | 33,976 | 28,320 | 83.4 | 9,412 | 33 |
| 2008 ^b | 37,992 | 31,942 | 84.1 | 10,994 | 34 |
| 2009 ^b | 42,328 | 36,193 | 85.5 | 12,210 | 34 |
| 2010 ^b | 55,982 | 46,548 ^c | 83.0 | 13,467 | 29 |
| 2011 ^b | Unlimited | 43,521 ^c | N/A | 10,055 | 23 |
| 2012 ^b | Unlimited | 38,906 ^c | N/A | 11,325 | 29 |
| 2013 ^b | Unlimited | 34,281 ^c | N/A | 10,390 | 30 |

^a Success rates not adjusted for non-participation

^b Youth hunt data included

^c 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 ^b |
| 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 ^a | Unlimited | 17,921 | 1,192 | 9,629 | 5,539 |

^a Excludes archery permit sales.

^b Total excludes youth archery permits.

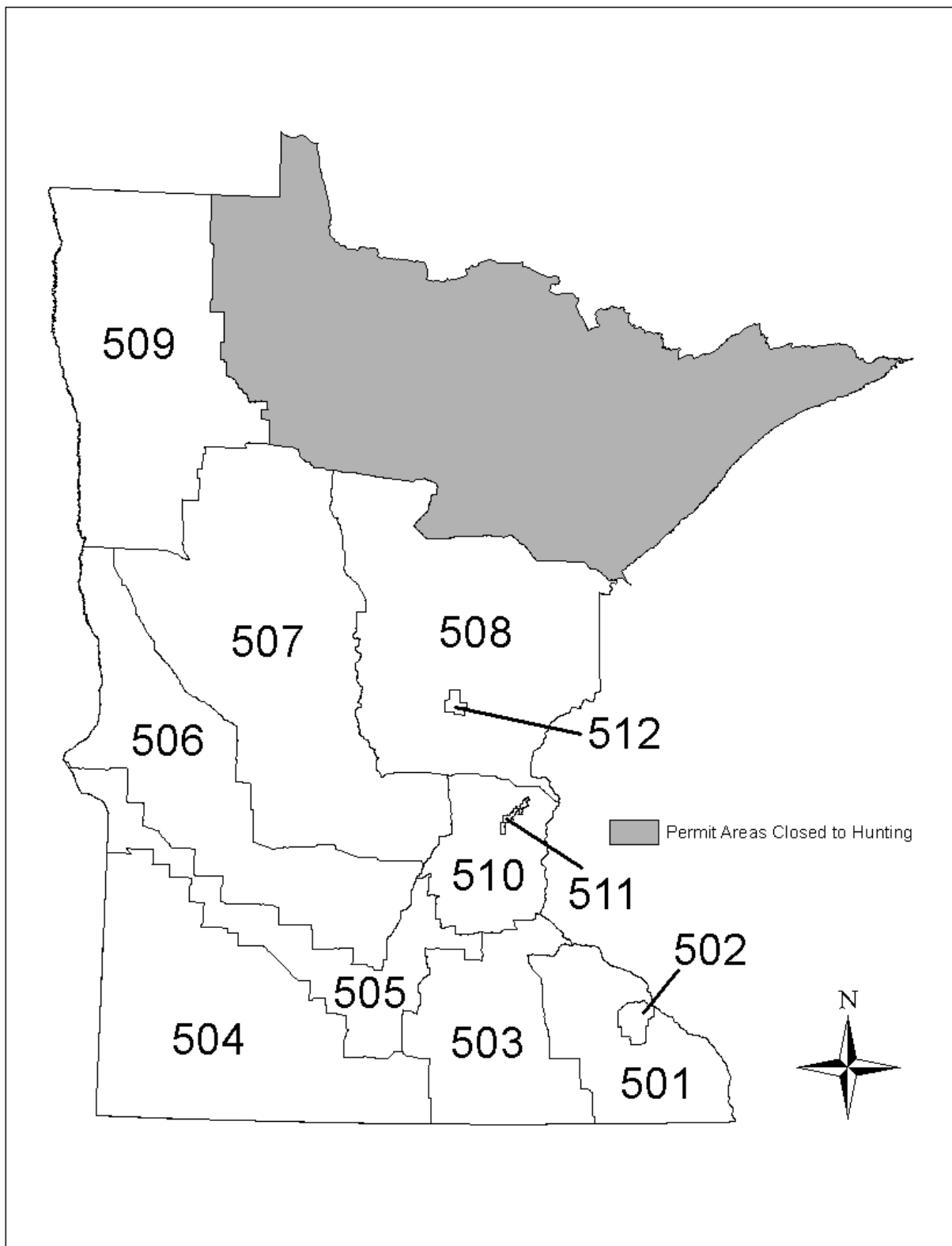


Figure 1. Permit areas open for hunting during the 2013 spring turkey hunting season, Minnesota.

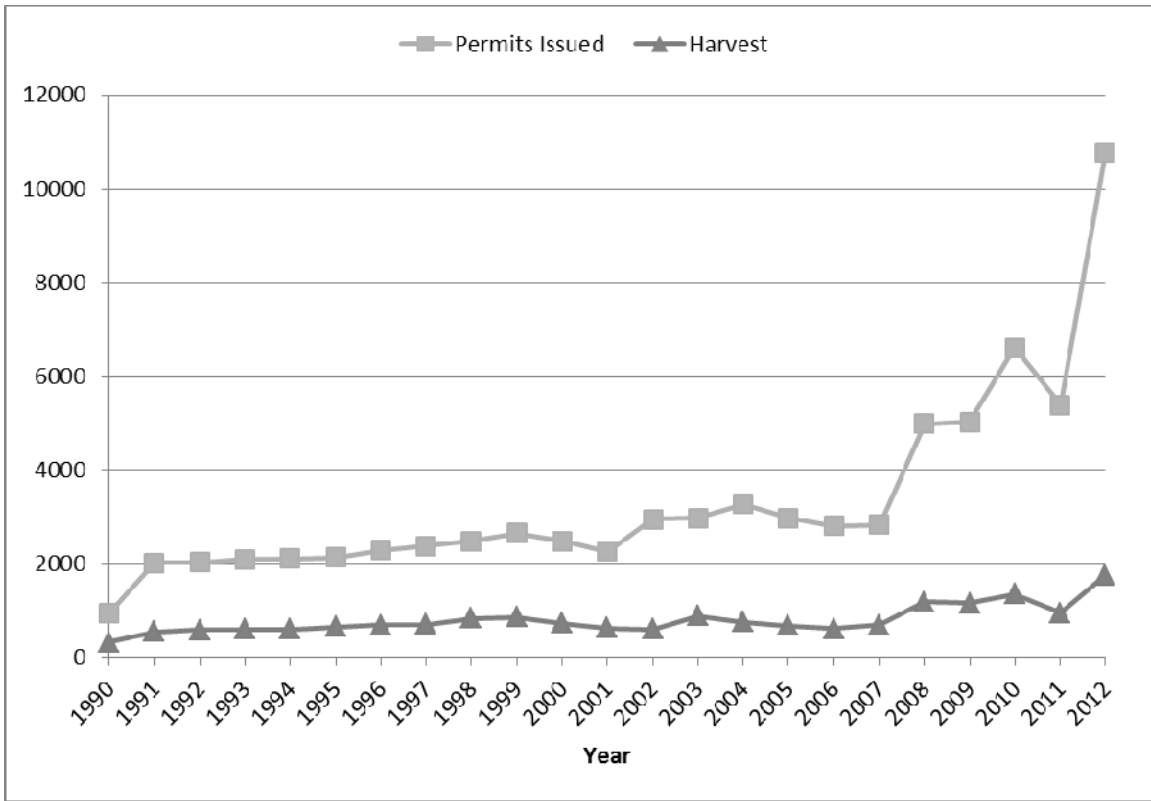


Figure 2. Permits issued and registered harvest for fall wild turkey seasons, 1990-2012, Minnesota.

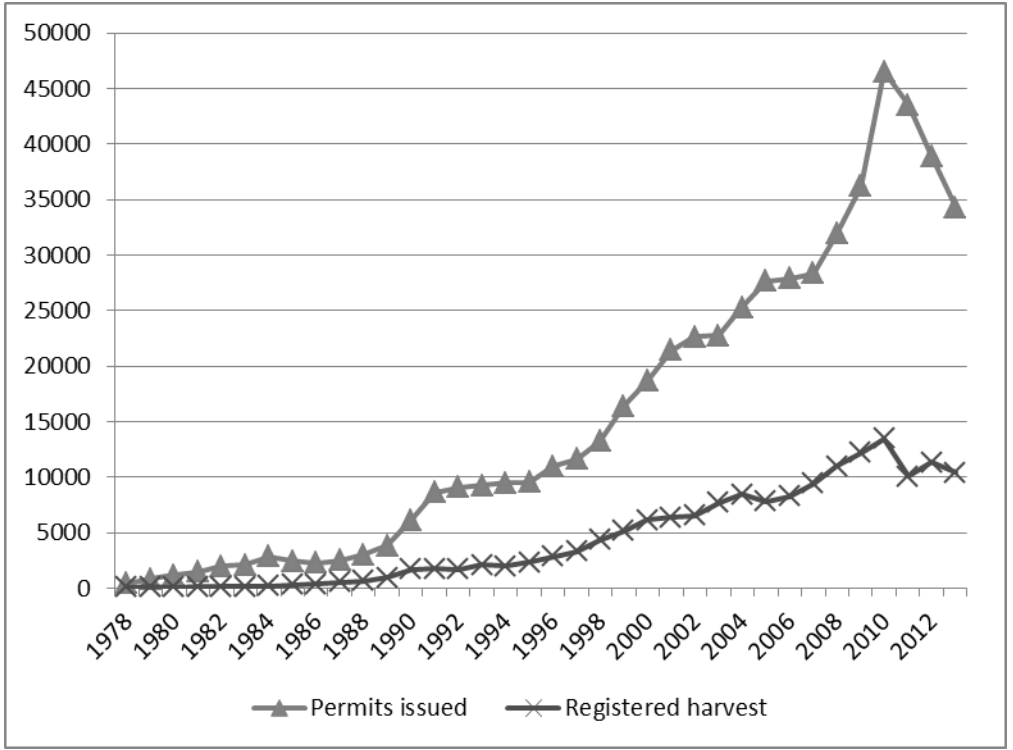


Figure 3. Permits issued and registered harvest for spring wild turkey seasons, 1978-2013, Minnesota.