

**NWTF Technical Committee Representatives' Report - PA Chapter NWTF
Board of Directors Meeting, October 6, 2007**

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Harvest Management

The final spring 2006 harvest was $39,297 \pm 3,686$ (37,843 first harvest + 1,454 second harvest). Comparing the first harvest with previous years, 2006 was 16% greater than 2005 (32,593), 14% below 2003 (42,876) and 4% below the previous 3-year average (38,872; Table 1, Figure 1).

The final fall 2006 harvest was $24,482 \pm 3,057$, 3% lower than 2005 (25,173), 21% lower than 2003 (31,100), and 22% lower than the previous 3-year average (31,206; Table 1, Figure 1). Harvest density was the lowest in recent history and the third consecutive year with an average below 0.60 turkeys harvested per square mile. Fall harvest densities have been decreasing since the peak in 2001. Fall season lengths were shortened in some WMUs in 2004 and 2005, hunter participation has been decreasing and the mast crop has been abundant during the last two falls, all probably contributing to lower harvests.

There were $245,023 \pm 8,834$ total spring hunters, similar to 2005 (247,304), and the second highest since 1983 (255,982). Statewide hunter success was 15.4% (13.2% in 2005), and was 6% below the previous 3-year average. Total number of days hunted during spring 2006 for the first turkey ($937,021 \pm 48,446$) decreased 10% from 2005 (1,038,280), possibly due to higher success rates.

The number of fall turkey hunters has been decreasing, with only $182,233 \pm 8,160$ fall hunters in 2006, a decrease of 11% from 2005 (203,982), and the second consecutive year of lowest number of hunters since records have been kept (1978). Statewide hunter success had risen to 21% in 2001, a year with excellent recruitment, but had fallen to a low of 12.3% in 2005 and has risen slightly to 13.4% in 2006. Hunter success in 2006 was 10% lower than the previous 3-year average. Number of days hunted in 2006 ($534,139 \pm 32,369$) decreased 22% from 2005 (684,865), and also was the second consecutive year of least number of days hunted since records have been kept (1990). Fall turkey hunters and days hunted have been decreasing since the mid 1990s. Some of this decrease may be an accumulation of shorter fall season lengths during the past few years, as well as a shift in hunter preferences to other concurrent hunting seasons, as observed in an independent survey conducted by Responsive Management in 2004.

The preliminary spring 2007 harvest updated since the August PANWTF board meeting, calculated from report cards, was approximately 41,046 (39,539 first harvest + 1,507 second harvest; Figure 1). The first harvests were 3% above the preliminary 2006 harvest (38,483), similar to the preliminary 2005 estimate (39,993) as well as to the previous 3-year average preliminary harvest (39,831). Even though spring harvests are down from the record 49,186 in year 2001, Pennsylvania hunters have consistently maintained spring harvests above 30,000. Spring harvest density, from first harvests, was 0.77 turkeys harvested per square mile, compared to 0.72 for 2005, and 0.86 for the previous 3-year average. In 2007, 7,585 second spring turkey licenses were sold (success rate = 20%), compared to 8,041 in 2006 (18% success rate).

Wild Turkey Spring Harvest Rates and Annual Survival Rates Study

The band retention rate component of the study to date shows retention rates of standard aluminum and stainless steel butt-end bands are unsatisfactory and that loss rates are greater for adults. Of birds banded in 2006 and harvested in 2007, more than half the butt-end bands were lost. Stainless steel bands had greater retention rates than aluminum bands but they are still unsatisfactory. Butt-end bands for male turkeys, if used in a mark-recapture analysis would result in substantial negative bias in survival and harvest rates. No rivet bands have been reported missing

from harvested birds to date. This information was presented to and well received by the Northeast Upland Gamebird Technical Committee in September.

Michaux State Forest Turkey Summer Sighting Surveys

Thanks to a well-established cooperative effort among the Pennsylvania Game Commission, Bureau of Forestry, and volunteers from the National Wild Turkey Federation, the tenth year of six weekly Summer Sighting Survey routes on the Michaux State Forest were completed in 2007 to provide an additional index to turkey population trends besides our harvest data for WMU 5A. Turkey sightings in 2007 were the second highest since we began the survey in 1998, 67.5 turkeys seen per 1,000 miles driven and were more than twice the previous average of 29.3 (Figure 2). The record of 71.3 was during 2004. Turkey productivity (poult per hen) in 2007 (4.3 poult per hen) increased from the record low last year (3.0 poult per hen), but was slightly below the previous 10-year average of 4.5 poult per hen, according to data collected by BOF staff (Figure 3). Productivity normally varies from year to year. Fall turkey hunting in WMU 5A has been closed since 2003 to assist with population recovery. BOF staff turkey sightings per 1,000 miles driven also were the second highest recorded this year (15.0) and were 20% higher than the previous average (12.5). Sightings have been substantially higher, on average, since 2004 due to a combination of a closed fall turkey season, record reproduction in 2004, average to above average fall mast crops, and relatively mild winters. Results from the radio-telemetry study showed that juvenile survival (recruitment and annual sub-adult survival) was limiting the population. The closed fall season has allowed higher survival not only during years of poor recruitment (2006), but also during the excellent recruitment year (2004), helping this low population to rebuild itself relatively quickly. The closed season coupled with above average sightings this summer, and a moderate mast crop this fall provide favorable conditions for over-wintering turkeys and for entering the next breeding season in good condition if winter weather is not severe.

Eastern Mast Survey

Based on a recommendation by the Northeast Wild Turkey Technical Committee in 2004, state agencies from the eastern states have encouraged the adoption of a standardized oak and beech mast survey for the region to provide a standardized means of collaborating data collection and comparing/sharing results among states. The Eastern Mast Survey was started in 2006. Pennsylvania joined the effort this year with three survey areas, representing three ecoregions within the state (Appalachian Plateau Glaciated High/Low Section, Appalachian Plateau Allegheny Mountain Section and Ridge and Valley Provinces). Bob Eriksen is assisting with this effort.

PGC Seedlings Sale for 2008 Planting

The PGC Howard Nursery provides FREE seedlings to the PANWTF when planted on public land or land open to hunting. Otherwise seedling costs are: $\geq 300 = 15$ cents each, $< 300 = 25$ cents each, all in packs of 50 seedlings per species. Chapters can use the 2007 seedling order form on the PGC website; the 2008 form will be posted by January 1 (www.pgc.state.pa.us, Forms and Programs, Howard Nursery). We project approximately 2.7 million seedlings available for distribution spring 2008. There are 21 species with "sufficient quantities" to make available to all cooperators. In addition, there are 17 species available in smaller quantities for use on SGL's and cooperator habitat projects. There are unusually high quantities of both large-tooth (40,000) and trembling aspen (55,000). We put extra effort in producing these seedlings; please make use of them to the best of your abilities. We have a good number of 3-year old American Mountain Ash (3-5 foot) and 3-year old crabapples (30-36 inch). For more information please contact Cliff Guindon, Superintendent of the PGC Howard Nursery. With habitat superfund proposals due by the end of the year, it is time to consider seedling orders for next spring planting.

Please encourage Chapters to consider a JAKES planting project on a SGL in their area or on a large cooperator property. JAKES planting projects dwindled down several years ago due to a

nationwide outbreak of Sporotrichosis, which is a naturally occurring spore found in the soil. Normal, safe handling (wearing gloves) of plants and washing of hands prevents outbreaks.

Northeast Upland Gamebird Technical Committee Meeting

The Northeast Wild Turkey Technical Committee was reorganized into this committee, which now covers wild turkeys, ruffed grouse, American woodcock and Northern bobwhite quail. Mary Jo Casalena is the Pennsylvania representative for wild turkeys at this annual meeting. State/provincial upland gamebird biologists from all northeast states and Canadian provinces, and technical representatives from the National Wild Turkey Federation, attend the 3-day meeting. The committee works on specific charges provided by the Northeast Wildlife Administrators Association, specifically to identify and resolve population management issues associated with these various upland game bird species, as well as identify habitat needs and priorities to provide to the Northeast Upland Habitat Committee. The committee is also important for facilitating exchange of information and to establish coordination and collaboration on projects. The committee's list of priorities for turkey research to the NWTF 2008 Grant-in-Aid research funding included studying hen harvest/survival rates, which fits in well with the PGC's Turkey Management Plan. NWTF considers priority lists from all Turkey Technical Committees when finalizing the national priority list.

Table 1. Final 2006 Pennsylvania spring and fall wild turkey harvests by Wildlife Management Unit (WMU). Spring second harvest is from hunters who purchased a Special Turkey License to harvest a second spring gobbler, one per day.

WMU	Spring			Fall		
	First Harvest	Harvest per Square Mile	Second Harvest	Harvest	Harvest per Square Mile	Percent State Harvest
1A	1,598	0.87	73	1,015	0.55	4.1%
1B	2,196	1.17	111	1,626	0.77	6.6%
2A	2,596	1.12	86	1,321	0.73	5.4%
2B	1,798	1.18	53	1,117	0.82	4.6%
2C	2,296	0.60	64	915	0.30	3.7%
2D	2,696	1.07	121	2,641	1.06	10.8%
2E	1,099	0.62	34	609	0.48	2.5%
2F	1,598	0.44	50	1,219	0.51	5.0%
2G	2,296	0.47	87	2,539	0.62	10.4%
3A	1,997	0.86	65	1,117	0.74	4.6%
3B	2,196	0.77	69	711	0.32	2.9%
3C	2,296	0.95	95	1,524	0.71	6.2%
3D	2,096	0.87	77	711	0.33	2.9%
4A	1,897	0.74	69	1,828	1.05	7.5%
4B	1,997	0.97	68	1,321	0.83	5.4%
4C	2,396	1.26	81	1,015	0.56	4.1%
4D	1,398	0.63	62	1,524	0.55	6.2%
4E	1,798	1.26	97	1,321	0.76	5.4%
5A	400	0.36	12	-	0.00	0.0%
5B	300	0.26	21	-	0.00	0.0%
5C	848	0.61	46	387	0.18	1.6%
5D	51	0.06	1	19	0.02	0.1%
Unknown	-	-	12	-	-	0.0%
TOTAL	37,843	0.77	1,454	24,482	0.54	100.0%

Figure 1. Fall and spring wild turkey harvests in Pennsylvania, 1975 – 2007. Spring 2007 data are preliminary.

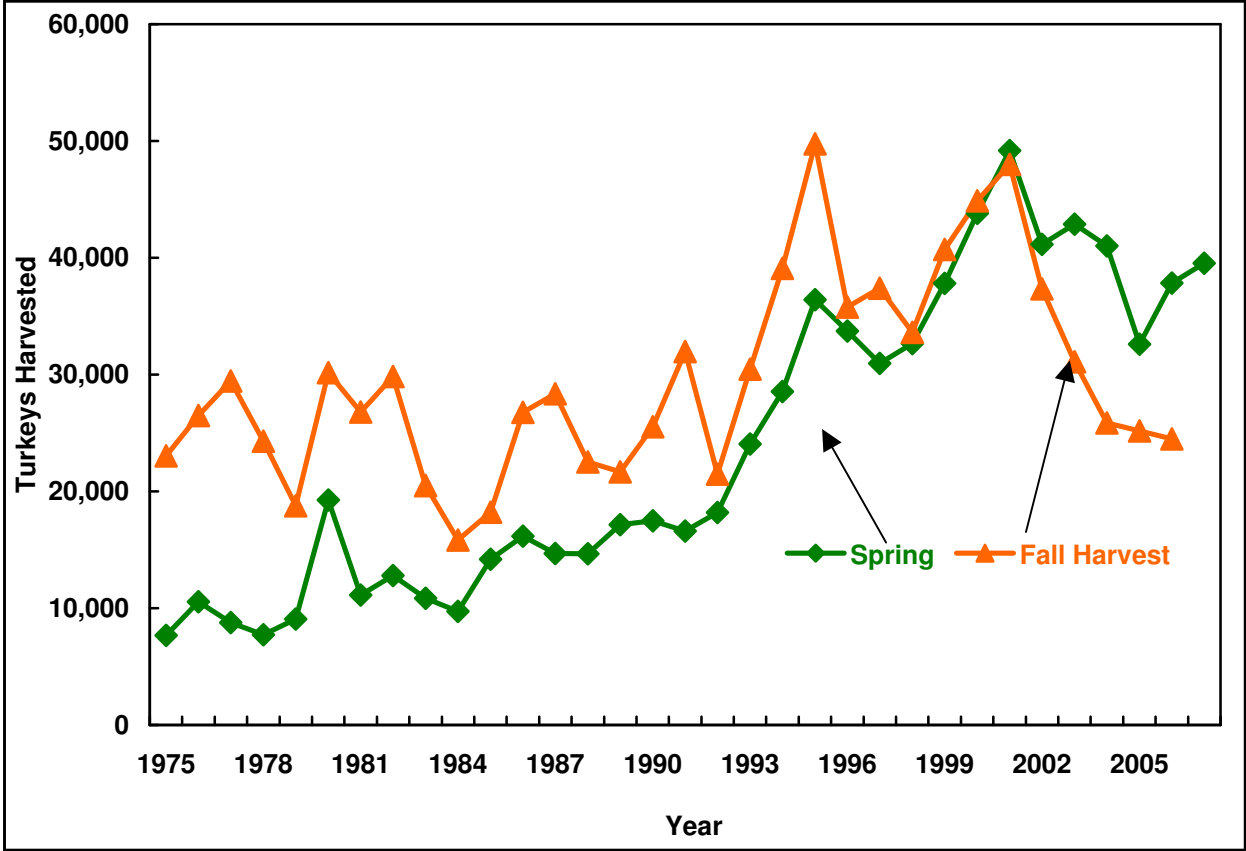


Figure 2. Turkeys seen per 1,000 miles driven at the Michaux State Forest, Pennsylvania. Fall turkey season was closed in 2003.

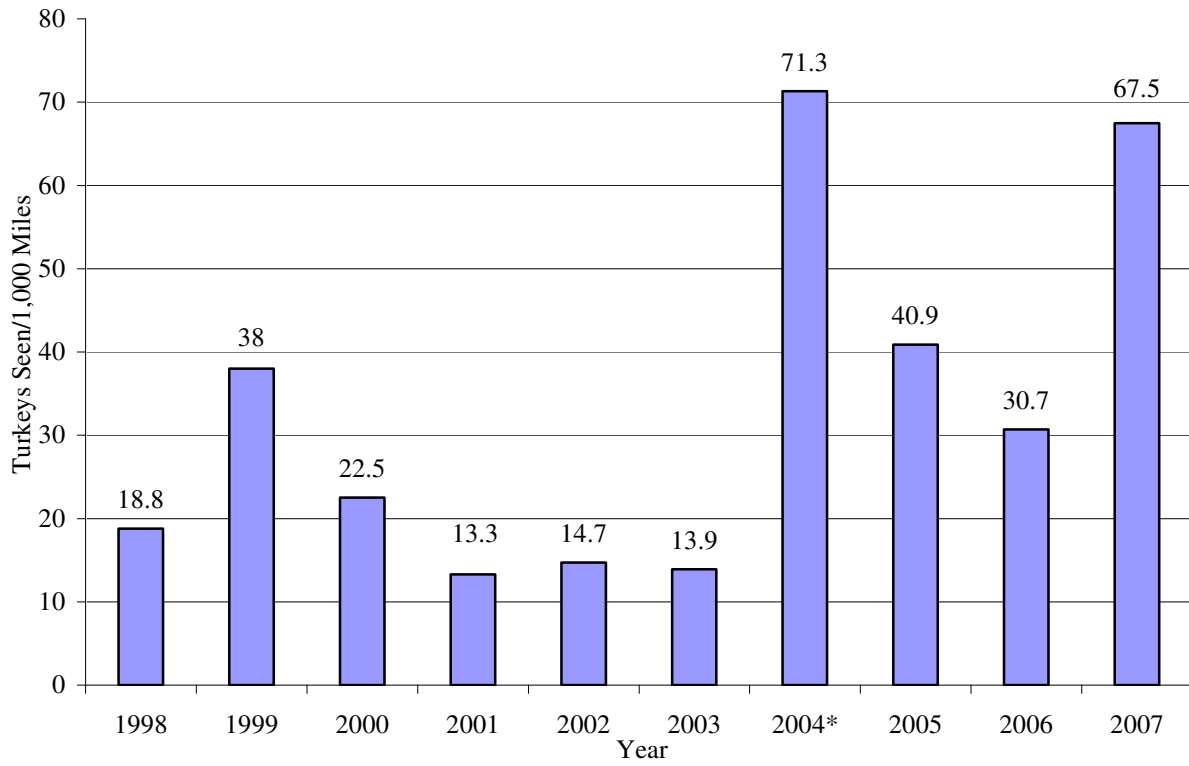


Figure 3. Turkey productivity (poult/hen) in the Michaux State Forest, Pennsylvania, 1996-2007, from Bureau of Forestry staff sightings.

