

**DRAFT NWTF Technical Committee Representatives' Report - PA Chapter NWTF
Board of Directors Meeting, October 3, 2010**

Submitted by: Mary Jo Casalena, Wildlife Biologist II, Bureau of Wildlife Management, PA Game Commission

Wild Turkey Population and Harvest Management

The spring 2010 turkey population was approximately 360,000, 13 percent higher than the previous 6-year average of 318,000 (Table 1).

Results of the recently published 2009 annual game-take survey, which surveys 2% of Pennsylvania general hunting license holders, showed that in 2009 PA hunters realized excellent turkey harvests as turkeys continued to be the second most popular game species. There were 228,903 hunters for the spring 2009 season, which was similar to the 10-year average of 228,561. Spring hunters also experienced one of the most successful spring seasons with a 19 percent success rate. Hunter success has exceeded this level during only 2 other years (2000 and 2001, with 20 and 21 percent success, respectively). The final 2009 spring harvest of 42,478 bearded birds (not including second birds harvested with the special turkey license) was 5 percent above spring 2008 (40,483), and 8 percent above the previous 10-year average, during which time we had record harvests of over 41,000 bearded birds from 2000-2004. With the 2009 spring harvest we are now back to harvests above 40,000 bearded birds. Preliminary results suggest the warm, dry spring weather provided excellent conditions for nesting and poult survival, so overall recruitment into the fall population is expected to be above average. Hens appeared to enter the spring 2010 breeding season in good condition despite the harsh winter as evidenced from the sample of 300 hens we captured for leg-banding and radio-tagging during the winter. Summer turkey sighting and hen productivity data currently are being analyzed to determine how this summer's turkey production compares to previous years.

Despite shorter fall seasons in 3 WMUs in 2009, participation increased from 2008 with 156,752 fall turkey hunters (152,294 in 2008) and 529,427 days fall turkey hunting (486,592 in 2008). Even so, participation remained over 20 percent below the previous 10-year average. The final fall 2009 harvest of 20,934 (24,288 in 2008) was 37 percent below the previous 10-year average, due to shorter seasons in almost half of the WMUs since 2004, poor recruitment, and the decline in participation. Hunter success (13 percent) also declined, mainly due to below average recruitment due to the cool, wet spring, and abundant mast crop which dispersed the small sized flocks making them more difficult for hunters to locate. Hunter success has been as high as 21 percent (2001, a year with excellent recruitment), and as low as 4 percent (1979).

Final preliminary 2010 harvests will be reported once the second harvest data have been tabulated.

Wild Turkey Hen Harvest Rates and Annual Survival Rates Study

The majority of my time was dedicated to trapping turkeys, as per wild turkey management plan strategy 1.9. I coordinated with PCFWRU at Penn State regarding data management and locating transmitters from mortalities. Trapping commenced on October 1 with 98 females banded; 65% of our trapping goal, which was better than anticipated due to the hot weather and abundant food supply which made bringing birds to bait difficult. Banding totals are: 57 in Study Area 1; 6 in Huntingdon, 5 in Mifflin, 16 in Bedford, 5 in Centre, 10 in Clearfield and 15 in Somerset County; and 41 were banded in Study Area 2; 10 in Lycoming, 5 in Tioga, 2 in Clinton, 14 in Elk County and 10 in the Northwest Region. Since the last reporting cycle, five additional hens have died; 3 were censored because they died less than 2 weeks after capture and the others were unknown causes. From the winter captures, we are monitoring 27 transmittered hens (of 61). Twenty of the transmitters retrieved from mortalities were redeployed during this trapping season.

Gobbler Spring Harvest Rates and Annual Survival Rates Study

Work continues on the manuscript for the *Journal of Wildlife Management*.

Annual Cooperative PGC/NWTF/PANWTF Meeting

This meeting, held June 10 at the PGC headquarters, emphasizes the partnership between the PGC and NWTF/PANWTF and demonstrates the health and importance of this partnership. The PGC Executive Office and all pertinent PGC Bureaus participated. Meeting minutes were distributed to all attendees and the entire PANWTF Board.

Information and Education

After 11 years of service, Robert Boyd is no longer a technical representative on the NWTf Turkey Technical Committee due to Bob's transfer to Chief of the Special Services Division within the Bureau of Wildlife Management. He still maintains his position as Assistant Bureau Director.

In conjunction with BI&E, I continued work on revising the wild turkey web page. Completed a review of the final version of a manuscript I prepared for the Tenth National Wild Turkey Symposium

Regional Oak Mast Survey

Since 2006 the PA Game Commission has participated in the Annual Regional Oak Mast Survey, which is coordinated by the Virginia Department of Game and Inland Fisheries. Turkey harvest rates are lower during autumns with abundant mast crops because the abundance of food spreads the flocks making them more difficult for hunters to locate. Knowledge of annual variations in acorn crops is an important aspect of big-game management. Three surveys are conducted annually in PA. I conducted the Allegheny Mountains survey, while surveys also were conducted in the Ridge and Valley Province and the Northeastern Pocono Plateau. Both red and white oak acorn production were well above average with very large acorns on individual trees in the Allegheny Mountains and Ridge and Valley Province regions. However, the dry late summer weather desiccated acorns that dropped late in some areas, especially white oaks. Data for the Pocono Plateau area are pending.

Table 1. Pennsylvania estimated wild turkey population by Wildlife Management Unit (WMU), estimated from reported spring harvest, 2004 - 2010.

WMU	2004	2005	2006	2007	2008	2009	2010	7-Yr Avg	Avg. Poptn Density (Birds/Sq.Mi.)
1A	20,222	14,923	16,772	14,971	18,096	19,116	20,926	17,861	9.7
1B	24,660	17,002	22,475	21,582	24,226	23,350	25,153	22,678	10.7
2A	21,683	16,596	18,416	14,539	18,349	16,848	18,728	17,911	9.9
2B	16,627	14,218	14,554	13,003	12,134	12,499	14,416	13,944	10.2
2C	18,762	16,673	16,947	17,230	17,461	18,663	19,235	17,887	5.8
2D	33,366	21,073	23,988	20,127	25,410	25,926	27,351	25,368	10.2
2E	8,089	6,330	7,091	8,137	7,779	9,163	10,188	8,128	6.4
2F	16,121	11,198	9,526	10,750	10,993	11,274	12,133	11,734	4.9
2G	19,211	13,796	17,659	19,060	21,943	19,634	24,139	19,385	4.7
3A	9,999	8,080	11,792	10,148	11,711	12,034	13,697	11,088	7.4
3B	17,694	11,906	15,773	18,292	20,886	20,732	20,799	18,050	8.0
3C	18,762	14,032	18,622	19,184	22,070	24,617	22,532	20,019	9.3
3D	16,796	14,310	17,154	16,422	18,645	18,241	16,360	16,880	7.7
4A	8,482	9,584	11,665	10,449	12,811	12,583	12,936	11,239	6.5
4B	10,336	11,005	13,928	11,470	13,952	13,047	11,287	12,170	7.7
4C	21,907	19,838	20,592	18,809	21,098	22,041	21,940	20,930	11.6
4D	13,818	10,823	15,639	15,439	17,081	19,170	22,617	16,405	6.0
4E	19,436	17,568	19,748	17,232	21,520	21,957	23,674	20,202	11.6
5A	4,213	3,588	4,193	4,906	4,524	4,729	5,284	4,500	3.5
5B	4,606	4,958	6,454	5,712	6,469	7,347	6,003	5,949	2.1
5C	13,762	13,411	11,905	9,420	10,274	11,654	10,273	11,550	5.3
5D	1,067	709	461	596	507	591	338	611	0.7
Total	341,809	271,620	315,354	297,478	337,941	344,976	360,008	324,801	7.2