

**NWTF Technical Committee Representatives' Report - PA Chapter NWTF
Board of Directors Meeting, March 7, 2010**

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Harvest Management

Very preliminary fall 2009 turkey harvest estimates show an approximate harvest of 23,100, which is 5% lower than the 2008 fall harvest and 3% lower than the previous three-year average (Table 1). These data still are being checked, and may change somewhat within the next two weeks. Final harvest totals from the annual Game-Take survey will be available this summer.

Wild Turkey Season Recommendations

During the January PGC Board of Commissioners meeting, the Board gave preliminary approval of staff recommendations to: close the fall season in WMUs 5C and 5D and open the season in WMU 5A as a three-day (Tuesday – Thursday) season. Also, in support of the hen harvest and survival rate study, the Board gave preliminary approval to decrease the fall season in WMU 4D from 3 weeks to 2 weeks and increase the season in WMU 2F from 2 weeks to 3 weeks.

However, in response to opening bear season on Saturday, Nov. 20, the Board gave preliminary approval to eliminate the last Saturday of the fall turkey season in WMUs with 3-week seasons: 2B, 2F, 2G, 3A, 3B, 3C, 3D, 4C and 4E. The motion was designed to ensure that there would not be an overharvest of turkeys in these units.

The Bureau of Wildlife Management has not developed a final position regarding the Board's action, but the Bureau disagrees with changing the bear season dates and closing the 3-week turkey season on Friday for several reasons. The bear biologist and Bureau Chief will develop the position regarding bear season, but we will mention that returning to a 3-day bear season with no extensions in WMUs with over-abundant bear populations goes against strategy 4.13 in the Bear Management Plan (identify by July 1, 2010, WMUs where harvest is not meeting goals established in Strategy 4.1.1 and identify hunting opportunities beyond those established by Strategy 4.1.2 that could be added in these WMUs). The Bear Management Plan states that larger harvests can be achieved by making seasons longer, adding special seasons, allowing hunting methods that improve success (e.g., baiting), and/or overlapping seasons with other hunting opportunities (e.g., deer hunting), which has been done and has not only controlled bear populations, but has also increased bear hunting participation (strategy 4.14; calculate by July 1, 2011, the recreational benefit (e.g., participation, approval rating, etc.) for new hunting opportunities identified in Strategy 4.1.3 and incorporate those with the greatest benefit into annual season and bag limit recommendations).

Regarding the Friday closing of fall turkey season, again the Bureau of Wildlife Management has not developed a final position, but the Bureau wants to ensure the four-year hen harvest and survival rate study objectives are not compromised. The study is designed to determine not only hen harvest and survival rates, but just as importantly, the effect of fall season length on harvest rate. Removing the last Saturday from the three-week season could potentially remove up to 45% of the last week's harvest. With this much of the third week's harvest removed, we most likely will not be able to detect a difference in harvest rates between a two-week season and three-week season, nullifying a main objective of the 4-year, \$3 million study. The study is aimed to determine how much fall hunting recreation we can allow without impacting the turkey resource. This study might prove that we can safely increase fall turkey seasons.

The purpose of the proposed change to the bear season is to increase hunting opportunities to the approximately 140,000 bear hunters, particularly to youth bear hunters. However, removing the last Saturday of the three-week turkey season decreases hunting opportunities to the approximately 183,000 fall turkey hunters. Although we currently do not have figures on the number of youth bear

and turkey hunters, we can extract youth harvest data before the April Commission meeting to determine the potential impact to youth. Even without figures on youth turkey and bear hunters, the bear and turkey biologists agree that youth hunter recruitment potential is greater with turkey hunting than bear hunting, with 16% fall turkey hunter success rate versus 3% for bear hunters, two hunting seasons available for turkey and overall more hunting days offered.

There are multiple options available for fall turkey and bear seasons. Six potential options are described below, but other options may be possible. We will strive to recommend an option that not only best supports the hen study but also can be maintained into the future. Changes to hunting seasons can be confusing so we endeavor to keep changes to a minimum.

Option 1: No change from 2009 bear season and maintain the Saturday fall turkey season closure on November 20, 2010. This will fully support the hen study as designed.

Option 2: The preliminarily approved seasons. See above for disadvantages of this option.

Option 3: Same as Option 2, except keep fall turkey season would remain open on Saturday November 20, concurrent with opening day of bear season in the 9 WMUs with a 3-week season. This keeps the turkey season structure the same as before, but allows additional turkey harvest incidental to bear hunting as well as potential conflicts between turkey and bear hunters. This option also is contrary to decision-making guideline #6 for recommending fall turkey-hunting seasons specified in the Turkey Management Plan that specifies “maintain the opening day of the fall turkey season separate from other big game and small game seasons to minimize the opportunistic taking of turkeys by hunters pursuing other species during opening day.” (Management Plan for Wild Turkeys in Pennsylvania, 2006 -2015, page 36). However, this increased harvest will be documented with data so that we will be able to determine any affect of the incidental harvest.

Option 4: Open fall turkey season later (one week for WMUs with a three -week season, two weeks later for WMU’s with a two-week or shorter season) so turkey season ends November 27 (except for the WMU with a season shorter than one week). Keep the proposed three-day bear season (November 20, 22, 23).

Three-week season WMUs: November 6 – 27,

Two-week season WMUs: November 13-27,

Three-day season WMU: November 16 – 18.

Turkey and bear seasons would be concurrent all three days of bear season, increasing incidental take of turkeys in both the two- and three-week season WMUs. This option also is contrary to decision-making guideline #6 for recommending fall turkey-hunting seasons in the Turkey Management Plan. Although season lengths technically would remain the same, potential harvest would increase substantially due to the three days of concurrent bear season, Thanksgiving holiday and the day before and after Thanksgiving, when most schools and many businesses are closed. Instead of just three or four Saturdays there would be eight or nine large harvest days (eight for the two-week WMUs, nine for the three-week WMUs). Each Saturday typically comprises 6 – 15% of the total harvest.

Although this proposal would remove fall turkey season from archery season, these concurrent seasons were not a conflict in terms of turkey harvest, whereas the overlap with bear season and three extra holidays have substantial risk of creating an overharvest.

The later into November we have fall turkey season, the higher the probability of snow cover, which increases harvest due to the ability to see turkeys easily through the woods.

This option may be too much opportunity too soon. Although an objective of the Turkey Management Plan is to increase hunting opportunity, it states to increase opportunity where the turkey population can withstand such, and, without harvest rate data, we currently are not in a position to recommend increasing potential fall harvest that significantly. Instead of setting the season in this liberal fashion, then determining whether hen harvest rates are too high and risking a future decrease in the season, a more conservative approach would be to set seasons more conservatively for the four-

year study, then, if harvest rates are low, increase season lengths according to the research results. Fall seasons are structured conservatively partially because seasons are finalized in April, prior to knowing the outcome of the turkey breeding season. During years of poor reproduction, the majority of the fall turkey harvest comprises adults (few juveniles in the fall population). Results from the WMU 5A hen study showed that maintaining even a one-week fall turkey season in an area where the turkey population declined substantially was too much harvest for the population. Once we closed the season, the population recovered to the point where, after 7 years, we have proposed to re-open the season.

Option 5: Same as Option 2, except re-open turkey season on Friday and/or Saturday AFTER thanksgiving in the 9 WMUs with a 3-week season. This provides the weekend harvest day eliminated in Option 2. Offering two days (Friday and Saturday), may be beneficial by allowing hunters more opportunity to locate fall turkey flocks that sometimes can be difficult to locate in just one day of hunting. This option adds complication to the season structure, but keeps turkey and bear hunting separate.

Option 6: Open turkey season one-week earlier so it does not overlap with bear in the 9 WMUs with three-week seasons. However, turkey season would open concurrent with pheasant season in 18 of the 19 open WMUs (WMU 5A will open on a Tuesday) so the potential for incidental harvest is much higher than Option 3. Also, the increased harvest will occur in WMUs with shorter seasons, potentially impacting those WMUs more so than those with three-week seasons. This option also is contrary to decision-making guideline #6 for recommending fall turkey-hunting seasons in the Turkey Management Plan.

Wild Turkey Spring Harvest Rates and Annual Survival Rates Study

Dr. Duane Diefenbach presented preliminary results at the annual National Wild Turkey Technical Committee meeting during the NWTF National Convention in February. Results were well-received. He will present the results today to the board, followed by a question/answer period.

Hen Turkey Survival and Harvest Rate Study

The majority of MJ Casalena's time has been dedicated to baiting, trapping and attaching leg bands and transmitter to wild turkeys for this study. As of 5 March, we have banded 227 of the 310 hen winter quota, trapping an average of 8 hens per trapping attempt, and deployed 34 of the 60 transmitters. Banding totals per Region are: NC Region, 91 (quota = 146); SC Region, 72 (quota = 73); SW Region, 41 (quota = 49), NW Region, 23 (quota = 42). We also have legbanded 44 males with non-reward bands incidental to hen trapping. To date, satellite data reveal the vast majority of transmitted hens have remained within one mile of the trapping site, which is expected because turkeys remain in their winter flocks. Trapping will continue through mid-March, at which time flocks begin dispersing from winter flocks and baiting turkeys to trap sites becomes ineffective.

We submitted a proposal to NWTF's Grant-in-aid Research Funding to cover the costs of legband rewards and part of the monthly ARGOS fees for downloading the locations of hens with the 60 satellite transmitters (calendar year 2011 = \$17,420; year 2012 = \$18,720; year 2013 = \$19,920). Thirteen proposals were submitted including ours. NWTF typically funds several studies each year. Funding announcements are expected this summer.

PANWTF Habitat Superfund Projects

The PA Chapter NWTF was able to fund 57 of the 63 proposals (\$74,931) plus their seed subsidy (\$4,500) and conservation seed programs for wild turkey habitat improvement throughout Pennsylvania. Of these proposals, 37 projects were funded in cooperation with the PA Game Commission for a total of \$50,138 funded to the Game Commission by the PA NWTF, plus the conservation seed program. Most habitat improvement projects were funded at a lower level than requested because there simply were not enough funds available to fully fund every proposal. These

habitat projects are just one example of the strong cooperative relationship between the PANWTF, local NWTF chapters and the Game Commission.

2008 Pennsylvania Turkey Hunter Survey

B. Boyd presented the preliminary results of this survey at the Annual NWTF Convention. We completed a draft of the manuscript regarding the 2008 PA turkey hunter survey and comparisons with the 1995 and 2001 surveys for inclusion in the peer-reviewed *Proceedings of the 2010 National Wild Turkey Symposium* and will present the results to the PGC Board in early 2010.

Annual NWTF Convention and Sport Show, Nashville, TN

Thanks to the generous support from the Pennsylvania State Chapter, the Game Commission sent Technical Committee representative, B. Boyd, to the National Convention. B. Boyd's attendance at the National Wild Turkey Technical Committee meeting was important, not only for providing the presentation, but also to advocate for our hen harvest rate research study proposal. The Technical Committee agreed with the importance of the study, and agreed with the amount requested, especially compared to last year's request of \$139,567 for the first year, prior to us receiving federal funding for the study. Also attending the Convention for the Game Commission were Commissioner Jay Delaney, the Joe Kurz award recipient (Jon Zuck, Land Management Officer in Bedford & Fulton Counties, SC Region) and Wildlife Conservation Officer of the Year award recipient (Travis Anderson, Somerset County, SW Region).

Table 1. Pennsylvania spring and fall wild turkey harvests, by Wildlife Management Unit (WMU), determined from reported harvest and corrected for reporting rate, 2006 - 2009.

WMU	Spring				Fall			
	2006	2007	2008	Prelim. 2009	2006	2007	2008	Prelim. 2009
1A	2,086	1,885	2,267	2,398	888	922	1,136	1,336
1B	2,808	2,725	3,066	2,978	1,391	1,577	1,316	1,698
2A	2,296	1,816	2,280	2,137	826	713	857	666
2B	1,800	1,611	1,509	1,555	746	655	717	794
2C	2,098	2,138	2,171	2,347	1,399	1,670	1,468	1,389
2D	3,000	2,523	3,193	3,291	1,545	1,795	2,009	1,574
2E	885	1,026	989	1,168	819	802	955	1,051
2F	1,193	1,350	1,372	1,417	795	962	771	908
2G	2,206	2,398	2,774	2,502	2,018	2,303	2,427	2,326
3A	1,480	1,287	1,492	1,530	819	1,461	1,050	1,156
3B	1,961	2,274	2,623	2,607	1,395	1,795	1,304	1,645
3C	2,330	2,425	2,804	3,131	1,099	1,817	1,332	1,565
3D	2,136	2,056	2,331	2,291	965	966	767	680
4A	1,468	1,332	1,604	1,622	1,260	1,403	1,337	1,003
4B	1,739	1,440	1,764	1,666	1,264	1,118	869	661
4C	2,552	2,373	2,657	2,781	1,191	1,390	1,455	1,080
4D	1,939	1,937	2,161	2,445	1,741	2,151	2,628	1,688
4E	2,467	2,152	2,726	2,790	1,572	1,541	1,644	1,688
5A	515	601	567	590	-	-	-	-
5B	795	700	798	905	-	4	-	-
5C	1,474	1,166	1,266	1,454	273	285	254	171
5D	56	74	63	73	19	9	8	5
Unknown								48
TOTAL	39,382	37,317	42,507	43,677	22,077	25,338	24,304	23,132

Table 2. Average percentage (%) Pennsylvania fall turkey harvests (2004-2008) for each Saturday and each week (Monday – Friday) of the season, by Wildlife Management Unit (WMU).

WMU	2004-08 Average							Total ^a
	1st Sat	Mon-Fri	2nd Sat	Mon-Fri	3rd Sat.	Mon-Fri	4th Sat.	
1A	24.1	25.1	10.8	20.8	12.1			92.9
1B	25.6	27.1	11.4	22.1	12.4			98.6
2A	20.9	21.2	11.7	19.5	10.9	11.1	12.5	107.8
2B	14.6	20.0	10.2	17.7	9.7	14.5	13.6	100.4
2C	23.9	23.0	11.6	24.9	14.7			98.1
2D	19.2	20.1	11.4	14.7	9.3	14.0	11.5	100.2
2E	21.8	25.0	13.5	24.1	14.9			99.3
2F	19.2	23.2	9.6	22.5	8.9	15.3	11.6	110.4
2G	17.8	24.7	8.4	16.2	6.9	15.0	11.0	100.0
3A	20.4	28.4	7.7	15.1	6.1	12.6	9.6	99.9
3B	19.2	21.6	9.8	16.4	8.7	13.8	10.3	99.8
3C	18.2	16.9	8.5	16.8	12.1	13.3	14.3	100.2
3D	16.6	19.8	9.4	14.1	8.4	18.5	13.2	99.9
4A	19.4	25.4	14.3	24.9	14.9			98.9
4B	23.2	26.6	13.4	22.1	13.3			98.6
4C	17.0	23.6	9.2	18.9	8.6	13.5	9.8	100.6
4D ^b	21.2	24.5	6.8	17.4	7.3	13.7	9.4	100.2
4E	18.4	22.6	8.7	16.2	8.5	16.3	9.6	100.2
5A								
5B								
5C	25.8	66.2						92.0
5D	15.0	68.0						83.0
Range	15-26%	18-28%	7-14%	14-25%	6-15%	11-19%	9-14%	

Total^a . Total percentage may not equal 100 due to rounding.

4D^b . Averages are for 2007 & 2008, for the 3-week seasons.

For 3-week season WMUs the last Mon-Fri comprises 11 - 19% of the season's total harvest, on average from 2004 - 2008.

For 3-week season WMUs the last Saturday comprises 9 - 14% of the season's total harvest, on average from 2004 - 2008.

For 3-week season WMUs the last Saturday comprises 42 - 47% of the last week's harvest, on average, 2006 & 2008 data.