NWTF Technical Committee Representatives' Report - PA Chapter NWTF Board of Directors Meeting, June 6, 2010

Submitted by: Mary Jo Casalena, Wildlife Biologist II, and Robert C. Boyd, Assistant Director, Bureau of Wildlife Management, PA Game Commission

Final 2010-2011 Wild Turkey Seasons

During the April PGC Board of Commissioners meeting, Commissioners accepted staff recommendations to:

- 1. Open the fall season in WMU 5A to a conservative, three-day, mid-week (Tuesday –Thursday) fall turkey season for three years beginning 2010, while continuing to monitor population indices to determine how well the population can withstand the harvest.
- 2. Close the fall season in WMUs 5C and 5D because population indices suggest the populations here, except for the northern portion of WMU 5C, have declined substantially since 2001-2005 and warrant full protection.

However, in response to opening bear season on Saturday, Nov. 20, on a 6 to 2 vote, the Board agreed to substantial changes to the fall turkey hunting season. Beginning fall 2010, the season framework was changed to:

- 1. avoid concurrence with a new black bear season framework, which otherwise would coincide with each other (turkey seasons close for the 3-day bear season; Saturday, Monday, Tuesday),
- 2. re-open after the bear season to run through the 3-day Thanksgiving day holiday (Thursday Saturday),
- 3. remove it from the archery deer season (by opening after archery season closes),
- 4. and increase fall turkey hunter participation (via the Thanksgiving holiday hunt period). The last time turkey season coincided with Thanksgiving weekend was 1976, when from 1961 to 1976 the fall turkey season was open this holiday weekend 10 of the 16 years.

The fall 2010 season dates are as follows:

WMUs 1A, 1B and 2A: November 13-27; closed November 20-24;

WMU 2B: November 6-27; closed November 20-24;

WMUs 2C, 2D, 2E, 4A, 4B and 4D: November 13-27; closed November 20-24;

WMUs 2F, 2G, 3A, 3B, 3C, 4C and 4E: November 6-27; closed November 20-24;

WMU 5A November 16-18;

WMUs 5B, 5C and 5D: Closed to fall turkey hunting.

Harvest Management

We received 29% more harvest report cards by the end of this spring turkey season than by the end of the 2009 and 2007 seasons and 22% more than 2008. This increase most likely is due to the above average summer reproduction two and three years ago, which provided a high proportion of the vocal and highly pursued 2-year old gobblers. We continue to receive report cards until the 4 th Wednesday after the close of the season (June 23 rd), at which time we make our final count.

Special turkey licenses sold for the 2010 spring season was 13,599, a 27% increase from 2009 and an amazing 55% increase from the previous average since the special license was introduced in 2006. This substantial increase most likely is due to licenses available for sale from July 1, 2009 until the 2010 spring season opened. Prior to the computerized Point-Of-Sale Licensing System, sales of the license were limited to January 1 – April 1.

Wild Turkey Hen Harvest Rates and Annual Survival Rates Study

We revised the study proposal and budget due to the changes that were made to the fall turkey hunting seasons during the April 2010 Commission meeting. The first study objective of determining female turkey harvest rates and survival rates by age and fall season length remains but was modified by deleting the second part of the objective (to determine the effects of varying season length on harvest and survival rate). While this is still part of the study, we determined to provide more general objectives the first year because our primary objective is to determine harvest rates of the new season structure. We included a turkey hunter survey after the fall season to determine hunter attitudes, satisfaction and daily participation with the new season structure. This objective replaced the previous objective #3 (use these data to more accurately determine fall turkey season length recommendations while maintaining or enhancing populations at or below social carrying capacity). The four study objectives are:

- 1. Determine female turkey harvest rates and survival rates by age and fall season length.
- 2. Determine the relationship between fall mast crop and age-specific harvest rates.
- 3. Determine fall hunter participation and hunter harvest throughout the season and hunter satisfaction.
- 4. Use these data to build population models to allow us to successfully model the dynamics of the turkey population and help direct future management decisions.

The addition of a \$10,000 turkey hunter survey each year was approved by the Executive Director. Also, we are saving \$19,723 each year by not needing to hire Biologist Aides to help with winter trapping (regional trapping crews proved we can reach banding quotas without additional temporary employees).

The turkey biologist worked with the PGC Regions and PCFWRC at Penn State regarding data management and locating transmitters from mortalities. As expected, once hens dispersed from winter flocks, mortalities of transmittered hens began, mainly predation. During spring dispersal (mid-March through mid-April) 8 transmittered hens died. Mortalities continue during nest incubation (end of April through early June), with 10 additional hens killed, mainly predation. We are monitoring 40 transmittered hens (of 60). One transmitter was censored (died within one week of capture), two stopped transmitting in late April (transmitter destroyed, underwater or underground, in an animal den) and one is to be retrieved. The remaining 16 causes of mortality were: one unknown, 2 possibly illegally killed, 2 from predation (unknown predator), 5 from mammalian predation, including one incubating hen killed by a black bear, and 6 from avian predation (hawk or owl). This mortality is a natural aspect of turkey nesting season. Of the additional 240 legbanded hens, one leg band has been reported (leg bone with band was recovered in late March). I recorded video clips with H. Korber for a PGC video promoting and explaining the hen harvest rate study.

Rocket charges were delivered for the upcoming late summer leg banding season (mid-August to mid-September) when we will leg band an additional 150 hens (75 per Study Area), focusing on brood flocks to obtain a sample of leg banded juvenile hens. Transmitters recovered from mortalities will be redeployed.

Gobbler Spring Harvest Rates and Annual Survival Rates Study

Gobbler legband returns as of 27 May: 70; 7 of which were banded this past winter in conjunction with hen banding activities and the remaining 63 were banded during previous years as part of the gobbler harvest rate study. Eight banded males were harvested by youth during the youth season, two were harvested in New Jersey during the NJ gobbler season and one was banded in Ohio and harvested in Beaver County on the opening day of our regular season. Leg band reporters are very appreciative of learning where and when the turkeys were banded. The PCFWRC at Penn State drafted the final report, which is being reviewed by the 3 states involved. The report will be

submitted to NWTF by the end of this month, and a manuscript submitted to the Journal of Wildlife Management later this summer. News release from Penn State: http://live.psu.edu/story/45808

2008 Pennsylvania Turkey Hunter Survey

We revised (from reviewer comments) and re-submitted the draft manuscript *Knowledge*, *characteristics and attitudes of wild turkey hunters in Pennsylvania*, regarding results of the 2008 turkey hunter survey and comparisons with the 2001 and 1995 surveys, for the Proceedings of the 10th National Wild Turkey Symposium. A final report, for public distribution and the PGC website, also is being prepared, which includes analyses by Wildlife Management Unit.

Wild Turkey Management Plan

The annual review of the wild turkey management plan strategies is underway in preparation for discussion during the annual PGC/PANWTF Cooperative meeting (June 10, 2010). Each PGC Bureau is reviewing management plan strategies they are responsible for to show outputs and outcomes, if the timeframe for accomplishments is being maintained, and identifying potential problems with implementation.

Hunting Related Shooting Incidents (HRSIs)

Very preliminary information to date shows 12 HRSIs from this spring's turkey season, one unfortunately being fatal (failure to identify target) and one self-inflicted (Table 1, below). Of the remaining 10, 7 were caused by a failure of the hunter to positively identify their target, and 2 from the victim being in line of fire. Please note this is a preliminary report, may not include all incidents and final results may change as investigations proceed. We will provide an update during the next quarterly meeting.

Information and Education

In cooperation with the Bureau of I&E MJ Casalena recorded 3 additional Radio PA segments regarding the spring turkey season and turkey nesting/brood rearing, prepared the spring turkey hunting season forecast news release, provided hunting forecast for several outdoor writers and individual turkey hunters, responded to more than 25 phone and email inquiries regarding timing of the spring season, turkey hunting, the fall season changes and biology/population/habitat management.

NWTF Convention

The two PGC award recipients and Turkey Technical Committee member, Bob Boyd, enjoyed the Convention and associated meetings. The PGC is very appreciative of the financial assistance from PANWTF to defray part of the Technical Committee member's travel expenses.

Michaux State Forest Summer Sighting Surveys

With the re-opening of fall turkey season in WMU 5A, we will continue our turkey population efforts in the Michaux State Forest, where the majority of the turkey population and harvest exists. Thanks to a well-established cooperative effort among the PGC, DCNR Bureau of Forestry (BOF), and volunteers from local NWTF chapters, the 13 th year of weekly Summer Sighting Surveys on the Michaux State Forest are underway to provide an additional index to turkey population trends besides our harvest and hunting success trend data for WMU 5A. This is the area of the turkey radio-telemetry study where we investigated the causes of the suppressed wild turkey population and closed the fall season from 2003 - 2009 to aid in population recovery. Additionally, since 2002, BOF staff record each day, turkeys they see and miles driven, as an additional index of the turkey population.

Table 1. 2010 Pennsylvania Spring Turkey HRSIs, Preliminary Summary

| Incident | Date | County | Injury | Cause |
|----------|------------|----------------|----------|---------------------------------|
| 1 | 05/01/2010 | Bradford | FATAL | Failure to positively ID target |
| 2 | 05/01/2010 | Clearfield | Nonfatal | Unknown |
| 3 | 05/01/2010 | Greene | Nonfatal | Failure to positively ID target |
| 4 | 05/01/2010 | Indiana | Nonfatal | Failure to positively ID target |
| 5 | 05/01/2010 | Union | Nonfatal | Failure to positively ID target |
| 6 | 05/03/2010 | Northumberland | Nonfatal | Failure to positively ID target |
| 7 | 05/04/2010 | Cameron | Nonfatal | Self inflicted |
| 8 | 05/04/2010 | Perry | Nonfatal | Failure to positively ID target |
| 9 | 05/15/2010 | Potter | Nonfatal | Failure to positively ID target |
| 10 | 05/15/2010 | Potter | Nonfatal | Line of fire |
| 11 | 05/22/2010 | Bradford | Nonfatal | Line of fire |
| 12 | 05/31/2010 | Montour | Nonfatal | Failure to positively ID target |