

**2014 Pennsylvania
Fall Wild Turkey Hunter Survey**

Results



Mary Jo Casalena, Wild Turkey Biologist,

&

Josh Johnson, Wildlife Biometrician

Pennsylvania Game Commission

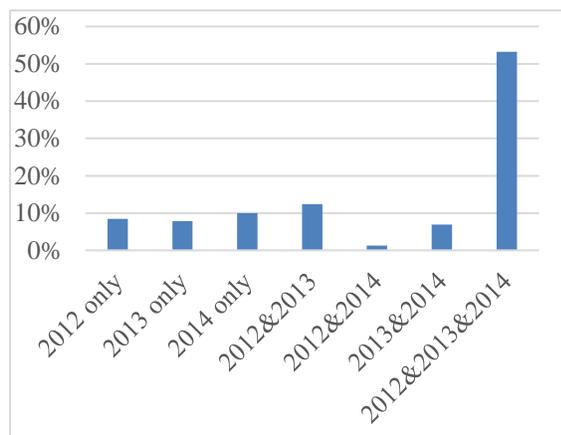
August 2015

Each year (2010-2014), as part of our 5-year hen wild turkey harvest and survival rate study, the Pennsylvania Game Commission conducted an annual survey of fall wild turkey hunters to evaluate hunter satisfaction, turkey hunter recruitment, and reactivation of former fall turkey hunters, particularly due to fall season changes in 2010 and 2011.

Survey questions were similar each year (where applicable) for comparison purposes. We surveyed 10,000 randomly selected hunting license buyers, which provided a sufficient cross-section of the hunting population to compare those who hunted turkeys in the past to new turkey hunters. In 2010 and 2011, surveys were mailed one week after we mailed a postcard announcement in January informing hunters of the upcoming survey, with a follow-up reminder postcard to non-respondents (Dillman 1978). From 2012-2014, the initial postcard was a request for hunters to complete the survey online, with the website provided, but also stipulated we would mail a paper survey in two weeks if they were unable to complete the survey online. Two paper mailings were sent to non-respondents.

The 61% survey response rate we received in 2014 was similar to 2013 (62%), but an increase compared to previous years; 56% in 2012, 50% in 2011, and 46% in 2010. Response rates via the internet (52%) decreased from 65% in 2013. The margin of error for survey responses was $\pm 1\%$ at the statewide level.

Game-take survey data (Johnson et al. 2014) show that fall turkey hunting participation increased for the second consecutive year from a low of 123,121 in 2012 to 203,597 in 2014 (196,459 regular hunters plus 7,138 mentored youth), a 20% increase from the previous 3-year average (155,648). Possible reasons for increased participation were the above average turkey recruitment, i.e., larger flocks that were easier to see; the mentored youth program motivated hunters to participate; the 3-day Thanksgiving season fit better into hunters' schedules; or the increased advertisement effort by the Game Commission. Pennsylvania has more than twice the number of fall turkey hunters than any other state (i.e., in 2013, the most recent data available, Pennsylvania boasted 199,088 compared to Wisconsin, with 57,840, the state with the second most fall turkey hunters). Approximately 21% of all license buyers participated in both the 2014 and 2013 fall turkey seasons, compared to 14% in both 2011 and 2012 seasons, according to game-take survey data (Johnson et al. 2014). Even though participation increased, our fall turkey hunter



surveys showed a declining trend for the percentage of respondents who fall turkey hunted during at least one of the last 3 years from 37% in 2010 to 28% in 2014, while the percentage of respondents who never hunted turkeys in Pennsylvania (fall or spring) increased from 32% to 37%, surpassing those who fall turkey hunted (Fig. 1).

Figure 1. Percentage of survey respondents who fall turkey hunted in PA during at least one of the last 3 years, and percentage who never hunted turkeys in PA (fall or spring), 2010-2014.

Disparity between surveys may partially be explained by survey methodology. Regardless, the fall turkey hunting tradition remains strong in Pennsylvania, which also exhibits the highest 10-year average fall harvest among northeastern states, followed by New York, and Virginia (Massachusetts Division of Fisheries and Wildlife 2013).

However, the majority of those who fall turkey hunted had done so each fall for the last 3 years (range 51-80%; Fig. 2).

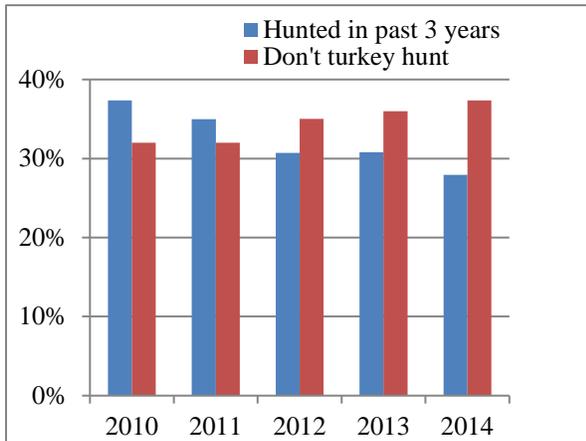
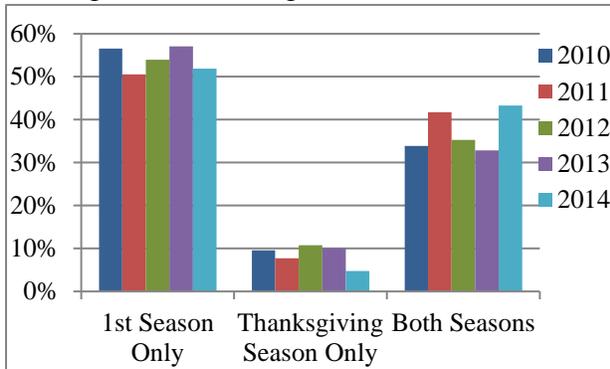


Figure 2. PA fall turkey hunting participation by those survey respondents who participated in at least 1 fall turkey season, 2012 - 2014.

Throughout the 5-year survey period, approximately 46% of respondents hunted the 3-day Thanksgiving season since it began in 2010, demonstrating that turkey hunters took advantage of the extra opportunity (Fig. 3). About 37% of fall turkey hunters, on average, hunted both seasons, whereas 9% hunted only the Thanksgiving season, and the remainder (54%)

hunted the first season only. In 2014, the percentage of hunters who hunted both seasons (43%) was higher than average, while those who hunted the first season only (52%) or the Thanksgiving



season only (5%) were lower than average. This pattern in participation was opposite of 2013, but similar to 2011. Season participation fluctuates annually, and is likely due to multiple personal reasons for hunters and demonstrates the benefit that multiple seasons provide.

Figure 3. Respondent participation during each season segment, 2010–2014. First season is early November prior to black bear season (2–3 weeks

depending on WMU). Thanksgiving season is Thanksgiving Day and the following Friday–Saturday.

Beginning in 2012, mentored youth were permitted to harvest a fall turkey with the mentor transferring their fall turkey harvest tag to the mentored youth. In 2014, 9% of respondents took a mentored youth fall turkey hunting and 14% harvested a turkey (in 2013 7% mentored a youth with an 8% success rate, and in 2012 10% mentored a youth with an 11% success rate). These success rates are similar to those of adult hunters, and may increase mentored youth hunter recruitment and retention rates.

Respondents who rated their overall satisfaction of their fall turkey hunting experience as good to very good was the lowest in 2014 (44%) compared to other years (Figure 4).

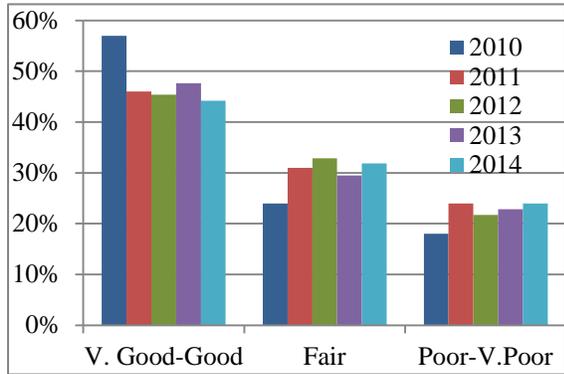


Figure 4. Rating of survey respondents' fall wild turkey hunting experience in PA, 2010-2014.

Overall harvest success of respondents (for both season segments) ranged from 8% in 2013 to 12% in 2012. However, hunters' ratings were higher in 2013 than 2012, demonstrating that harvest success was not the driving force to a favorable hunt. We asked hunters how important harvesting a turkey was to their satisfaction and 51% responded

not important; 32% responded it was somewhat important, while only 7% responded very important. Beginning with the 2013 survey, hunters were asked their level of satisfaction if they saw but did not harvest a fall turkey. Results were similar for both years: 47% were satisfied when they saw but did not harvest a turkey, 37% had no opinion, and only 16% were dissatisfied. This aspect of seeing but not harvesting turkeys may affect hunters' overall hunting experience and will be examined in more detail. Seeing turkeys, however, is dependent on a variety of factors besides total population, such as poult recruitment, food supply, and weather during the season, which are challenging for wildlife agencies to manage.

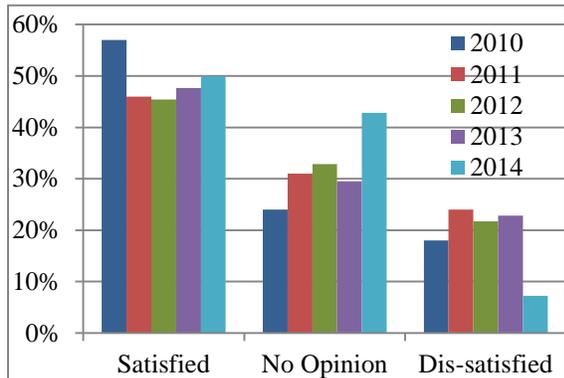


Figure 5. Pennsylvania fall wild turkey hunter satisfaction with the fall wild turkey season structure of two season segments, 2010 - 2014.

The Thanksgiving season remained less important for our turkey hunters than the regular season. However, 50% of hunters were satisfied with the season structure of two season segments, while those with no opinion climbed to 43% from an average of 29%, and those dissatisfied decreased

to 7% from an average of 22% (Fig. 5). Overall satisfaction with the opportunity to hunt each of the 3 days of the Thanksgiving season shifted over the years (Fig. 6). Although most hunters remained satisfied with these opportunities, the percentage of satisfied hunters decreased while

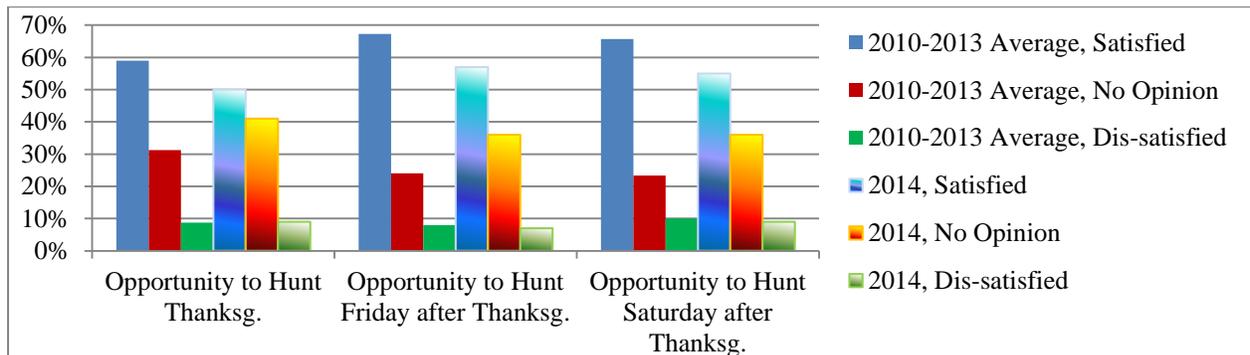


Figure 6. Respondents' satisfaction with the opportunity to hunt each of the 3 days of the Thanksgiving holiday season, 2010-2013 average compared to 2014.

the percentage of hunters with no opinion increased. Satisfaction with the opportunity to hunt Thanksgiving declined from an average of 59% to 50% throughout the 5 years (Fig. 6). However, the percentage of respondents with no opinion increased from 31% to 41% during the same time period, while the percentage of dissatisfied hunters remained the same (9%). Trends were similar for hunters' responses regarding the opportunities to hunt Friday and Saturday after Thanksgiving. This suggests some ambivalence among hunters regarding the new season structure.

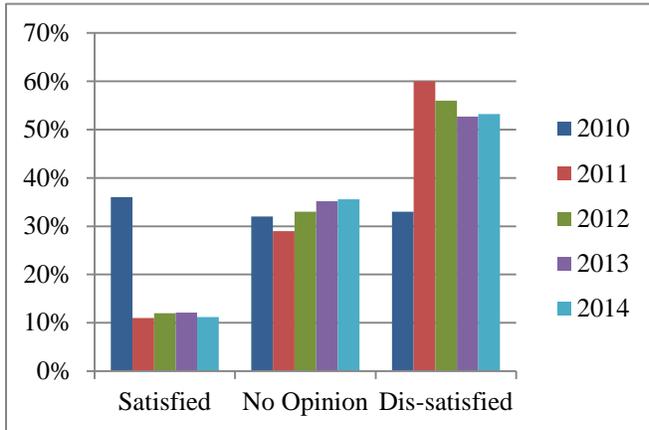


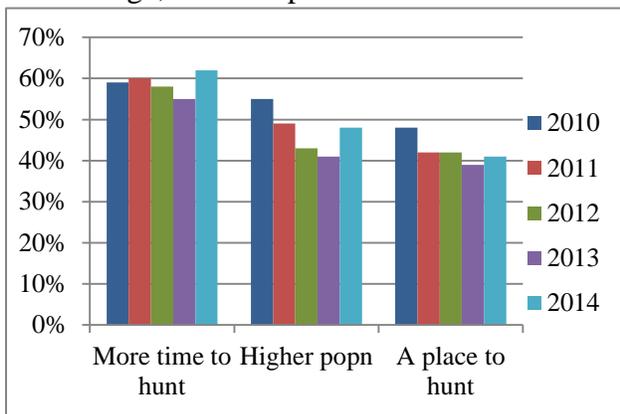
Figure 7. Hunter satisfaction if fall wild turkey hunting seasons were returned to the former structure with no Thanksgiving season segment, 2010-2014. The 3-day Thanksgiving season was added in 2010.

When asked their level of satisfaction if seasons were returned to the former structure with no Thanksgiving segment, most respondents desired to maintain the Thanksgiving season, but the

percentage of hunters with no opinion has increased since 2011, similar to the question above (Fig. 7). These results demonstrate the Thanksgiving season seems to be an accepted season that the agency likely should maintain in the future.

When asked their level of satisfaction with other aspects of the fall 2014 season, there was not a consensus among current fall turkey hunters, similar to previous years. Questions included, satisfaction if: the season did, and did not, overlap with archery deer season; seasons remained the same but also were open during the Saturday of the statewide black bear season; and seasons remained the same as they were from 2011-2013.

Non-turkey hunters were asked how likely 10 factors (5 related to length and timing of fall turkey season) would influence their interest in starting to participate annually in fall turkey hunting. The top 3 factors remained the same all 5 years, along with order of importance (Fig. 8). On average, 58% responded that more free time to hunt would influence their interest, 47% responded higher turkey populations, and 43% responded having a place to hunt; all factors not related to season structure. The top reason mimicked that of nationwide surveys for the need of more free time to hunt (U.S. Department of the Interior et al. 2011).



responded higher turkey populations, and 43% responded having a place to hunt; all factors not related to season structure. The top reason mimicked that of nationwide surveys for the need of more free time to hunt (U.S. Department of the Interior et al. 2011).

Figure 8. Top 3 factors that would influence hunters' interest in starting fall wild turkey hunting, 2010 - 2014.

Although having more free time to hunt was the most important factor that would influence this group to begin fall turkey hunting, one factor that would provide flexibility to potential hunters, a longer season, became less important over time (Figure 9).

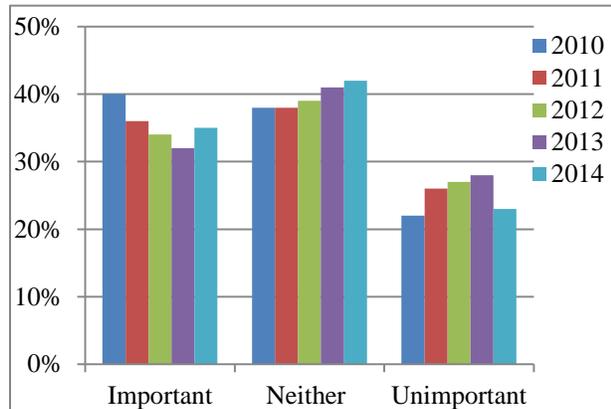


Figure 9. The importance of a longer fall turkey hunting season for influencing hunter's interest in starting fall turkey hunting, 2010-2014.

Providing the flexibility of 2 fall seasons, managing for higher turkey populations, and maintaining hunter access were the most important aspects of recruiting and maintaining fall turkey hunters in Pennsylvania.

Summary

Throughout the 5 years of surveys, the percentage of those who fall turkey hunted recently declined to almost one-quarter of the respondents while those who never fall turkey hunted in Pennsylvania increased slightly and surpassed those who did. However, the majority of fall turkey hunters consistently did so each year. Existing turkey hunters were satisfied with the additional recreational opportunity of the Thanksgiving holiday season segment as nearly half of respondents participated in that season. Hunting success did not drive satisfaction, but only about half of respondents had overall satisfaction with the seasons. Seeing turkeys, even without harvesting one, may have positively affected hunters' overall hunting experience. The top 3 factors that would influence non-turkey hunters' interest in fall turkey hunting remained the same all 5 years, along with the order of importance; more free time to hunt, higher turkey populations, and having a place to hunt. Providing the flexibility of 2 fall seasons, managing for higher populations and maintaining hunter access were the most important aspects of maintaining and recruiting fall turkey hunters in Pennsylvania.

Literature Cited

- Dillman, D. A. 1978. Mail and telephone surveys: the total design method. John Wiley and Sons, New York, New York, USA.
- Johnson, J. B., R. C. Boyd, and M. Weaver. 2014. Game-take survey annual report. Annual Job Report, Project No. 06110, Job No. 11101, Pennsylvania Game Commission, Harrisburg, USA.

Massachusetts Division of Fisheries and Wildlife. 2013. Annual report of the Northeast Upland Game Bird Technical Committee for the Northeast Wildlife Administrators Association, September 16-19, 2013. Massachusetts Division of Fisheries and Wildlife, West Boylston, Massachusetts.

U.S. Department of the Interior, U.S. Fish and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau. 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.