Federal Aid in Wildlife Restoration Project: W-15-R Title of Job: 2018 Spring Wild Turkey Harvest Job: E2



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The spring turkey hunter survey is conducted each year at the end of the spring season. The season closed on 31 May 2018. The objective of the survey is to obtain information on the spring turkey harvest and success. Information on age and sex composition of the harvest is also obtained and is reported elsewhere. This year's survey was available to hunters from 22 June 2018 until 9 July 2018. A full summary of hunter responses is provided in a separate report, *Spring 2018 Turkey Hunter Survey Report*.

Caveats. The spring Wild Turkey Hunter Survey samples spring turkey hunters who provided valid email addresses at the time they purchased their permit(s). As such, the sample frame may be biased and not strictly generalizable to the population of all spring turkey hunters. For the spring 2018 season, however, 69.1% of unique permits sold were associated with an email address. A reminder email was sent to all non-respondents one week after the initial invitation was sent, but no further attempts were made to contact hunters who failed to respond to the survey. Therefore, results might be biased toward successful hunters, if successful hunters respond more readily to harvest surveys. However, it is likely that such biases are small given the proportion of permit buyers sampled and the response rate (see below).

Interpretations. Permit sales for the spring 2018 season were 9.3% lower than the spring of 2017. Youth permits (4,004 permits) sales fell 17.0% and regular statewide permit (26,058 permits) sales fell 8.1% compared to spring 2017 (4822 youth and 28,352 regular permits). Youth permits continue to be a strong component of overall spring permit sales, comprising 13.3% of the total permits sold for the spring 2018 season. Spring 2018 harvest was 13.2% lower than spring 2017 harvest (20,431), with an estimated total harvest of 17,731 turkeys in 2018. Overall harvest success was 61.3% for spring 2018, compared to 64.4% for spring 2017. Spring 2018 success rates were above the management goal for spring harvest success of 50%.

Take-home Message. Spring turkey hunters continue to enjoy a high rate of success in Nebraska, but fewer turkeys were harvested during the spring 2018 season compared to 2017. Although still strong sellers, youth permit sales dropped considerably compared to 2017. Non-resident hunters, on both youth and regular permits, were more successful than their native Nebraskan counterparts were.

Methods. This year's survey was composed and administered in-house using Snap Survey development software (Snap v11) and Snap Webhosting service. An initial invitation to participate in the survey for the spring 2018 season was sent to 16,142 permit buyers (69.1% of unique permit buyers), but 583 were bounced back as undeliverable, giving an effective sample size of 15,559 permitted hunters. Initial invitations were emailed on 22 June 2018, and a reminder email was sent to all non-responding hunters on 29 June 2018. The survey was closed on 9 July 2018. The survey was also available on the NGPC website for hunters who did not have valid emails associated with their permits. The website survey was open over the same period as the invitation-only version. At the end of the survey period, responses had been received from 4,018 spring turkey hunters, representing 5,831 individual permits for the spring 2018 season. The raw response rate was, therefore, 25.8% and the permit response rate was 37.5%. Each survey respondent represented 5.2 spring 2018 permit buyers.

Results. Permit sales for the spring 2018 season (n = 30,062) were 9.3% lower than spring 2017 sales (n = 33,174; Figure 1). Of permits sold, 4,004 (13.3%) were youth permits and 26,058 were statewide regular permits. Youth permits sales were 17.0% lower than in 2017 (n = 4,822), and statewide regular permit sales were 8.1% lower than in 2017 (n = 28,352). Of all unique permit

buyers (n = 23,347), 77.4% bought only one permit, 16.4% bought two permits, and 6.2% bought three permits. Estimated total turkey harvest for the spring 2018 season was 17,731 turkeys. Of these, 1,430 were harvested on youth permits and 16,301 were harvested on regular statewide permits (Table 1, Figure 2). Overall, harvest was 13.2% lower during the spring 2018 season compared to spring 2017. Success during the spring 2018 season was 61.3%, with youth success lower at 37.2% and regular permit holders' success higher at 64.7% (Figure 3). Table 2 summarizes the 2018 spring season results.

TABLE 1. Spring turkey season harvest and success, 2012-2018.

| | | | | | Year | | | |
|----------|-----------|--------|--------|--------|--------|--------|--------|--------|
| Type | Statistic | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Shotgun/ | Permits | 29,541 | 30,760 | 28,854 | 28,724 | 28,899 | 28,352 | 26,058 |
| Regular | Harvest | 18,884 | 19,040 | 16,707 | 17,378 | 20,143 | 18,569 | 16,301 |
| | Success | 65.9% | 61.9% | 57.9% | 60.5% | 69.7% | 67.5% | 64.7% |
| Youth | Permits | 5,979 | 6,144 | 5,576 | 5,416 | 4,932 | 4,822 | 4,004 |
| | Harvest | 2,535 | 2,402 | 2,253 | 2,616 | 1,993 | 1,862 | 1,430 |
| | Success | 42.4% | 39.1% | 40.4% | 48.3% | 40.4% | 41.5% | 37.2% |

FIGURE 1. Spring turkey permit sales, 1964-2018.

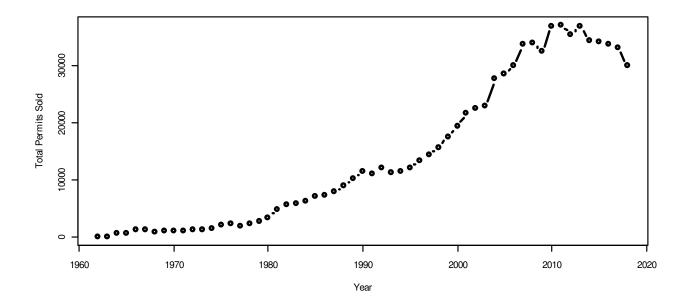


TABLE 2. Summary of spring 2018 turkey hunter survey responses and estimated harvest.

| Permit | Permits | Survey | Reported | Success | Estimated |
|-----------|--|---|---|---|--|
| Type | Sold | Permits | Harvest | Rate | Harvest |
| Youth | 2,789 | 392 | 128 | 32.6% | 911 |
| Regular | 13,678 | 2,124 | 1,134 | 53.4% | 7,303 |
| Sub-Total | 16,467 | 2,516 | 1,262 | 50.2% | 8,214 |
| Youth | 1,215 | 321 | 137 | 42.7% | 519 |
| Regular | 12,380 | 2,994 | 2,176 | 72.7% | 8,998 |
| Sub-Total | 13,595 | 3,315 | 2,313 | 69.8% | 9,517 |
| Total | 30,062 | 5,831 | 3,575 | 61.3% | 17,731 |
| | Type Youth Regular Sub-Total Youth Regular Sub-Total | Type Sold Youth 2,789 Regular 13,678 Sub-Total 16,467 Youth 1,215 Regular 12,380 Sub-Total 13,595 | Type Sold Permits Youth 2,789 392 Regular 13,678 2,124 Sub-Total 16,467 2,516 Youth 1,215 321 Regular 12,380 2,994 Sub-Total 13,595 3,315 | Type Sold Permits Harvest Youth 2,789 392 128 Regular 13,678 2,124 1,134 Sub-Total 16,467 2,516 1,262 Youth 1,215 321 137 Regular 12,380 2,994 2,176 Sub-Total 13,595 3,315 2,313 | Type Sold Permits Harvest Rate Youth 2,789 392 128 32.6% Regular 13,678 2,124 1,134 53.4% Sub-Total 16,467 2,516 1,262 50.2% Youth 1,215 321 137 42.7% Regular 12,380 2,994 2,176 72.7% Sub-Total 13,595 3,315 2,313 69.8% |

FIGURE 2. Spring turkey harvest, 1964-2018.

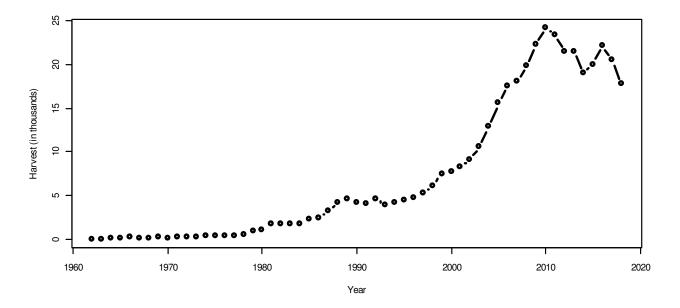


FIGURE 3. Spring turkey hunter success rate, 1964-2018. The horizontal line represents the success-rate goal established in the Focus on the Future plan (50% success).

