

Federal Aid in Wildlife Restoration Project: W-15-R
Title of Job: 2016 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 2016. 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 20 June 2016 until 6 July 2016. A full summary of hunter responses is provided in a separate report, *Spring 2016 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 2016 season, however, 65.2% of all permits sold were associated with an email address. After accounting for individuals who purchased multiple permits, 64.4% of unique, individual permit buyers provided 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 2016 season were 0.90% lower than the spring of 2015. Youth \$5.00 permits (4,932 permits) sales fell 8.9%, but regular statewide permit (28,899 permits) sales increased 0.6% compared to spring 2015 (5,416 youth and 28,724 regular permits). Youth permits continue to be a strong component of overall spring permit sales, comprising 14.6% of the total permits sold for the spring 2015 season. Spring 2016 harvest was 11.0% higher than spring 2015 harvest (19,994), with an estimated total harvest of 22,136 turkeys in 2016. Overall harvest success increased to 65.7% for spring 2016, compared to 59.0% for spring 2015. Spring 2016 success rates were above the Focus on the Future strategic plan goal for spring harvest success of 50%.

Take-home Message. Spring turkey hunters continue to enjoy a high rate of success in Nebraska, with more turkeys harvested during the spring 2016 season compared to 2015, despite a slight drop in the number of permits sold.

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 2016 season was sent to 17,107 (64.4% of unique permit buyers) permit buyers, but 832 were bounced back as undeliverable, giving an effective sample size of 16,275 permitted hunters. Initial invitations were emailed on 20 June 2016, and a reminder email was sent to all non-responding hunters on 27 June 2016. The survey was closed on 6 July 2016. 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 4,509 spring turkey hunters, representing 6,421 individual permits for the spring 2016 season. The raw response rate was, therefore, 27.7% and the permit response rate was 39.5%. Each survey respondent represented 5.3 spring 2016 permit buyers.

Results. Permit sales for the spring 2016 season ($n = 33,831$) were 0.90% lower than spring 2015 sales ($n = 34,140$; Figure 1). Of permits sold, 4,932 (14.6%) were \$5.00 youth permits and 28,899 were statewide regular permits. Youth \$5.00 permits sales ($n = 4,932$) were 8.9% lower than in 2015 ($n = 5,416$), and statewide regular permit sales ($n = 28,899$) were 0.6% higher than in 2015

(n = 28,724). Of all unique permit buyers (n = 26,552), 78.7% bought only one permit, 15.2% bought two permits, and 6.1% bought three permits. Estimated total turkey harvest for the spring 2016 season was 22,136 turkeys. Of these, 1,993 were harvested on \$5.00 youth permits and 20,143 were harvested on regular statewide permits (Table 1, Figure 2). Overall, harvest was 11.0% higher during the spring 2016 season compared to spring 2015. Success during the spring 2016 season was 65.7%, with youth success lower at 40.4% and regular permit holders' success higher at 69.7% (Figure 3). Table 2 summarizes the 2016 spring season results.

TABLE 1. Spring turkey season harvest and success, 2010-2016.

Type	Statistic	Year						
		2010	2011	2012	2013	2014	2015	2016
Shotgun/ Regular	Permits	30,693	30,344	29,541	30,760	28,854	28,724	28,899
	Harvest	21,270	20,237	18,884	19,040	16,707	17,378	20,143
	Success	69.3%	66.7%	65.9%	61.9%	57.9%	60.5%	69.7%
Youth	Permits	6,210	6,385	5,979	6,144	5,576	5,416	4,932
	Harvest	2,912	3,065	2,535	2,402	2,253	2,616	1,993
	Success	46.9%	48.0%	42.4%	39.1%	40.4%	48.3%	40.4%

FIGURE 1. Spring turkey permit sales, 1964-2016.

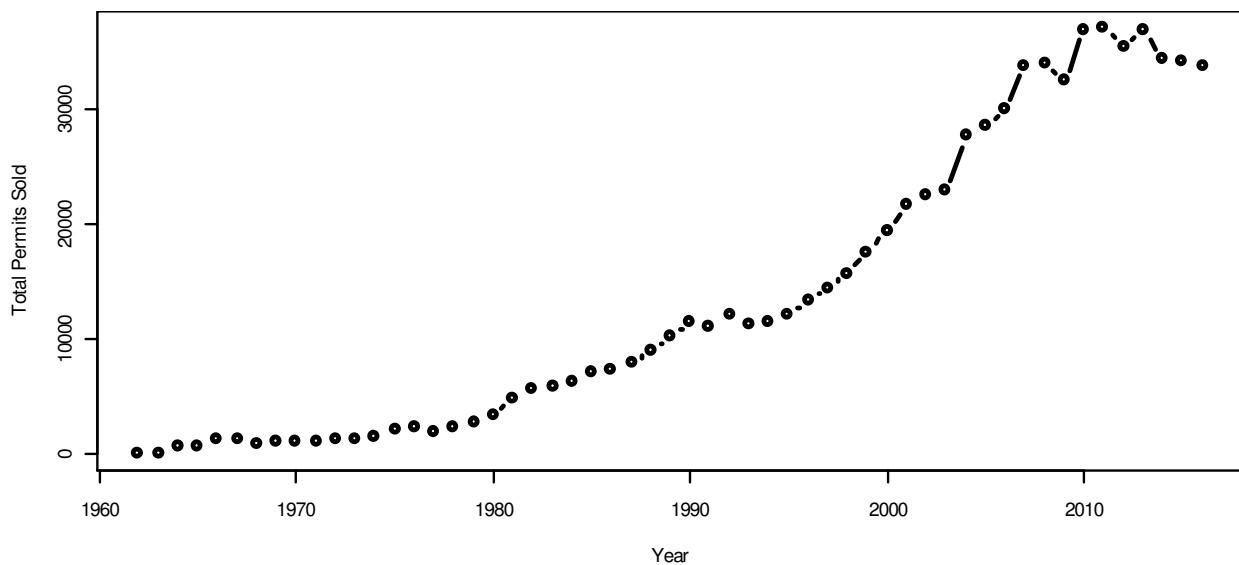


TABLE 2. Summary of spring 2016 turkey hunter survey responses and estimated harvest.

Permit Type	Permits Sold	Survey Permits	Reported Harvest	Success Rate	Estimated Harvest
Youth	4,932	868	351	40.4%	1,993
Regular	28,899	5,553	3,870	69.7%	20,143
Total	33,831	6,421	4,221	65.7%	22,136

FIGURE 2. Spring turkey harvest, 1964-2016.

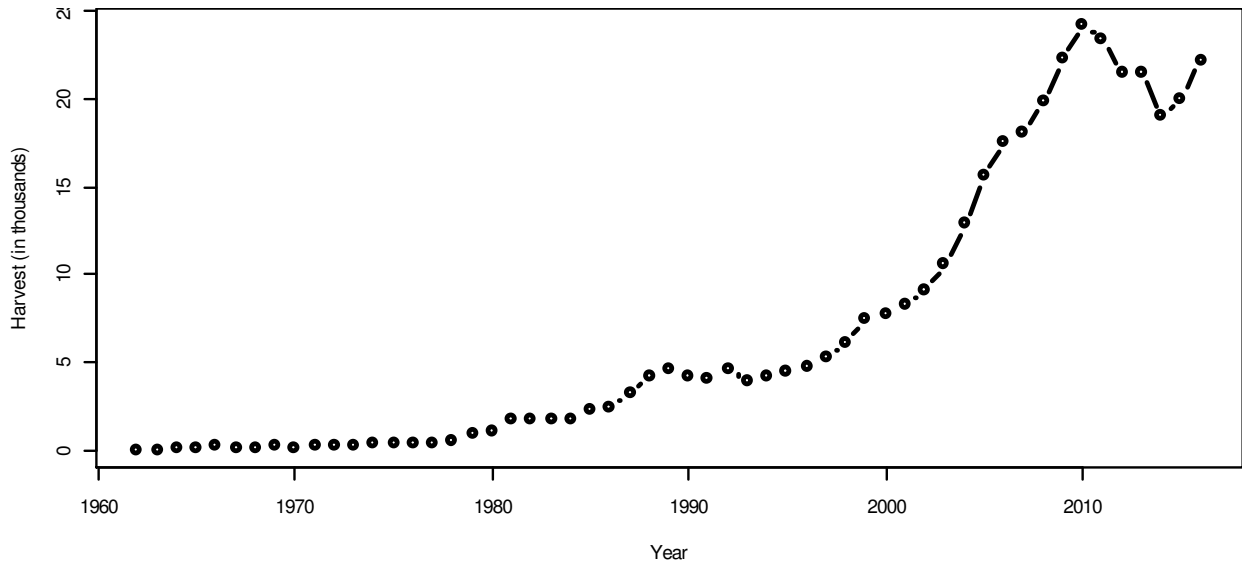


FIGURE 3. Spring turkey hunter success rate, 1964-2016. The horizontal line represents the success-rate goal established in the Focus on the Future plan (50% success).

