

Federal Aid in Wildlife Restoration Project: W-15-R  
Title of Job: 2020 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 2021. 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 11 June 2021 until 28 June 2021. A full summary of hunter responses is provided in a separate report, *Spring 2020 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 2021 season, however, 76.8% 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. Although Nebraska did not limit or restrict permit sales to non-residents due to the continuing pandemic, travel restrictions or other precautionary measures may have affected non-resident participation. Further, year-to-year comparisons, especially for non-residents, will reflect the 2020 sales restrictions.

**Interpretations.** Permit sales for the spring 2021 season were 62.2% higher than the spring of 2020, potentially because no restrictions on non-resident sales were in place in 2021. Youth permits (4,700 permits) sales increased 9.4% and regular statewide permit (32,205 permits) sales increased 74.5% compared to spring 2020 (4,297 youth and 18,453 regular permits). Youth permits continue to be a strong component of overall spring permit sales, comprising 11.8% of the total permits sold for the spring 2021 season. Spring 2021 harvest was 52.8% higher than spring 2020 harvest (13,597), with an estimated total harvest of 20,782 turkeys in 2021. Overall harvest success was 56.3% for spring 2021, compared to 59.8% for spring 2020. Spring 2021 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. The sharp increase in permits sold and in total harvest are at least partially attributable to the pandemic, so these values should be interpreted with this in mind. Due to lockdowns and social distancing across the country, people had more free time available for outdoor recreations, such as hunting, which were seen as safe activities. For those spring hunters who went afield, success was on par with previous years.

**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 2021 season was sent to 21,492 permit buyers (76.8% of unique permit buyers), but 708 were bounced back as undeliverable, giving an effective sample size of 20,784 permitted hunters. Initial invitations were emailed on 11 June 2021, and a reminder email was sent to all non-responding hunters on 18 June 2021. The survey was closed on 28 June 2021. 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 4,972 spring turkey hunters, representing 7,128 individual permits for the spring 2021 season. The raw response rate was, therefore, 23.9% and the permit response rate was 34.3%. Each survey respondent represented 7.42 spring 2021 permit buyers.

**Results.** Permit sales for the spring 2021 season ( $n = 36,905$ ) were 62.2% higher than spring 2020 sales ( $n = 22,750$ ; Figure 1). Although the COVID-19 pandemic was ongoing, no permit sale restrictions were instituted for the 2021 spring turkey season. Of permits sold, 4,626 (11.8%) were youth permits and 32,279 were statewide regular permits. Youth permits sales were 9.4% higher than in 2020 ( $n = 4,297$ ), and statewide regular permit sales were 74.5% higher than in 2020 ( $n = 18,453$ ). Of all unique permit buyers ( $n = 21,492$ ), 75.0% bought only one permit, 18.1% bought two permits, and 6.9% bought three permits. Estimated total turkey harvest for the spring 2021 season was 20,782 turkeys. Of these, 2,012 were harvested on youth permits and 18,770 were harvested on regular statewide permits (Table 2, Figure 2). Overall, harvest was 52.8% higher during the spring 2021 season compared to spring 2020. Success during the spring 2020 season was 56.3%, with youth success lower at 44.8% and regular permit holders' success higher at 60.4% (Figure 3). Table 3 summarizes the 2021 spring season results.

**TABLE 1.** Comparison of demographic factors among all permit buyers, permit holders sampled, and survey respondents for the spring 2021 turkey hunter survey.

Demographic Factor	Sample Size	Permit Buyers	Permits Sampled	Respondents
		27,969	21,492	4,972
Residency	Resident	54.1%	51.6%	64.0%
	Non-resident	45.9%	48.4%	36.0%
Sex	Male	93.2%	93.4%	96.0%
	Female	6.8%	6.6%	4.0%
Age	Median	37	38	48
	Mean	38.9	39.7	46.2
	% Youth Permits	12.7%	11.0%	11.8%

**TABLE 2.** Spring turkey season harvest and success, 2015-2021.

Type	Statistic	Year						
		2015	2016	2017	2018	2019	2020	2021
Shotgun/ Regular	Permits	28,724	28,899	28,352	26,058	24,793	18,453	32,279
	Harvest	17,378	20,143	18,569	16,301	16,834	11,540	18,770
	Success	60.5%	69.7%	67.5%	64.7%	67.9%	62.5%	60.4%
Youth	Permits	5,416	4,932	4,822	4,004	3,541	4,297	4,626
	Harvest	2,616	1,993	1,862	1,430	1,297	2,057	2,012
	Success	48.3%	40.4%	41.5%	37.2%	36.6%	47.9%	44.8%

**TABLE 3.** Summary of spring 2021 turkey hunter survey responses and estimated harvest.

Residency	Permit Type	Permits Sold	Survey Permits	Reported Harvest	Success Rate	Estimated Harvest
Resident	Youth	3,272	394	158	40.1%	1,312
	Regular	14,805	2,108	1,035	49.1%	7,269
	Sub-Total	18,077	2,502	1,193	47.7%	8,581
Non-resident	Youth	1,428	445	218	49.0%	700
	Regular	17,400	4,181	2,765	66.1%	11,501
	Sub-Total	18,828	4,626	2,983	64.5%	12,201
Total		36,905	7,128	4,176	56.3%	20,782

FIGURE 1. Spring turkey permit sales, 1964-2021.

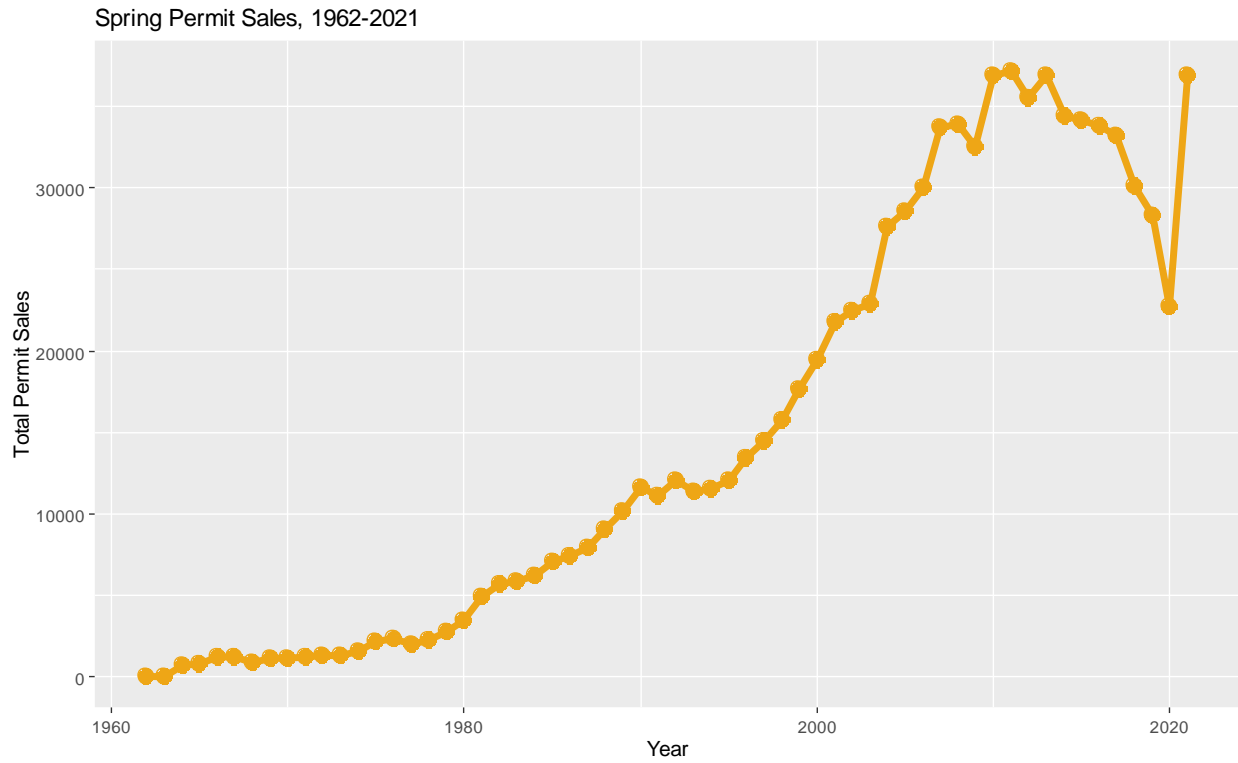
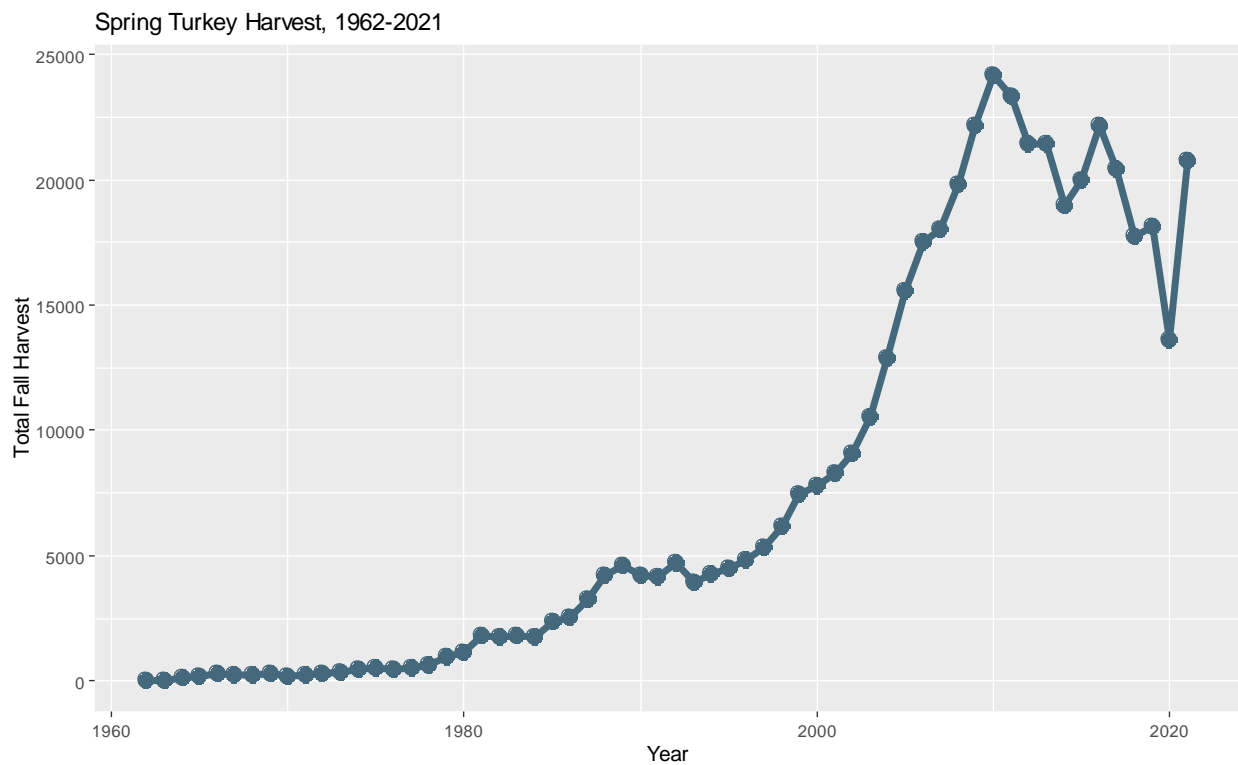


FIGURE 2. Spring turkey harvest, 1964-2021.



**FIGURE 3.** Spring turkey hunter success rate, 1964-2021. The horizontal line represents the success-rate goal established in the Focus on the Future plan (50% success).

