Job: E2

2 July 2024

Federal Aid in Wildlife Restoration Project: W-15-R Title of Job: 2024 Spring Wild Turkey Harvest





The spring turkey hunter survey is conducted each year at the end of the spring season. The season closed on 31 May 2024. 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 10 June until 24 June 2024.

Caveats. For the spring 2024 season, however, 92.5% of unique permits sold were associated with an email address, and as such, the sample frame was representative of the population of permit buyers. 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. Regulation changes instituted in 2023 reduced the number of permits hunters could purchase per season and put a quota of 10,000 on non-resident permits. As such, changes in permit sales were likely affected by these regulation changes and not by the permit-buying behavior of spring turkey hunters. Likewise, the reduction in available permits may have reduced total harvest.

*Interpretations*. Youth permits continue to be a strong component of overall spring permit sales, comprising 13.2% of the total permits sold for the spring 2024 season. Spring 2024 harvest was 15.1% lower than spring 2023 harvest (12,302), with an estimated total harvest of 10,441 turkeys in 2024. Overall harvest success was 40.8% for spring 2024, compared to 48.8% for spring 2023. Spring 2024 success rates were below the management goal for spring harvest success of 50%, but continue a pattern of decline.

**Take-home Message.** Spring turkey hunters continue to enjoy a somewhat high rate of success in Nebraska. The decrease observed in the number of permits sold and in total harvest can be attributed, at least partially, to the reduction in the number of permits a hunter could purchase and in the establishment of a quota for non-resident permits. For those spring hunters who went afield, success has continued to decrease while falling below 50% for the first time since 2004.

*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 2024 season was sent to 19,118 permit buyers (92.5% of unique permit buyers), but 450 were bounced back as undeliverable, giving an effective sample size of 18,668 permitted hunters. Initial invitations were emailed on 10 June 2023, and a reminder email was sent to all non-responding hunters on 21 June 2023. The survey was closed on 24 June 2024. Because nearly all permitted hunters provided an email address, no standalone version was available on the agency website for this year's survey. At the end of the survey period, responses had been received from 4,778 spring turkey hunters, representing 6,028 individual permits for the spring 2024 season. The raw response rate was, therefore, 25.6% and the permit response rate was 32.3%. Each survey respondent represented 4.32 unique spring 2024 permit buyers.

**Results**. Permit sales for the spring 2024 season (n = 25,581) were 1.5% higher than spring 2023 sales (n = 25,200; Figure 1). Regulation changes did reduce the number of permits a hunter could purchase from three to two, and instituted a cap on the number of permits available to non-residents (10,000). These changes will have impacted both permit sales and total harvest. Of permits sold, 2,725 (13.2%) were youth permits and 17,936 were statewide regular permits. Of all unique permit buyers (n = 20,661), 80.8% bought only one permit and 19.2% bought two permits. Estimated total turkey harvest for the spring 2024 season was 10,441 turkeys. Of these, 865 were harvested on youth permits and 9,576 were harvested on regular statewide permits (Table 2, Figure 2). Overall, harvest was 15.1% lower during the spring 2024 season compared to spring 2023. Success during the spring 2024 season was 44.8%, with youth success lower at 31.7% and regular permit holders' success higher at 54.4% (Figure 3). Table 3 summarizes the 2024 spring season results.

**TABLE 1**. Comparison of demographic factors among all permit buyers, permit holders sampled, and survey respondents for the spring 2024 turkey hunter survey.

Demographic		Permit Buyers	Permits Sampled	Respondents	
Factor	ctor Sample Size		19,118	4,778	
Residency	Resident	61.3%	59.8%	46.5%	
	Non-resident	38.7%	40.2%	53.5%	
Sex	Male	92.7%	93.4%	95.6%	
	Female	7.3%	6.6%	4.4%	
	Median	37	39	50	
Age	Mean	39.1	40.4	47.9	
	% Youth Permits	13.2%	8.5%	10.1%	

TABLE 2. Spring turkey season harvest and success, 2018-2024.

					Year			
Type	Statistic	2018	2019	2020	2021	2022	2023	2024
Shotgun/	Permits	26,058	24,793	18,453	32,279	27,141	21,941	17,936
Regular	Harvest	16,301	16,834	11,540	18,770	14,781	10,784	9,576
	Success	64.7%	67.9%	62.5%	60.4%	54.5%	49.2%	54.4%
Youth	Permits	4,004	3,541	4,297	4,626	4,132	3,259	2,725
	Harvest	1,430	1,297	2,057	2,012	1,717	1,518	865
	Success	37.2%	36.6%	47.9%	44.8%	41.6%	46.6%	31.7%

TABLE 3. Summary of spring 2024 turkey hunter survey responses and estimated harvest.

	Permit	Permits	Survey	Reported	Success	Estimated
Residency	Type	Sold	Permits	Harvest	Rate	Harvest
Resident	Youth	2,143	340	108	31.8%	681
	Regular	10,529	2,335	1,091	46.7%	4,917
	Sub-Total	12,672	2,675	1,199	44.8%	5,598
Non-resident	Youth	582	301	95	31.6%	184
	Regular	7,407	3,052	1,920	62.9%	4,659
	Sub-Total	7,989	3,353	2,015	60.1%	4,843
	Total	20,661	6,028	3,214	40.8%	10,441

FIGURE 1. Spring turkey permit sales, 1964-2024.

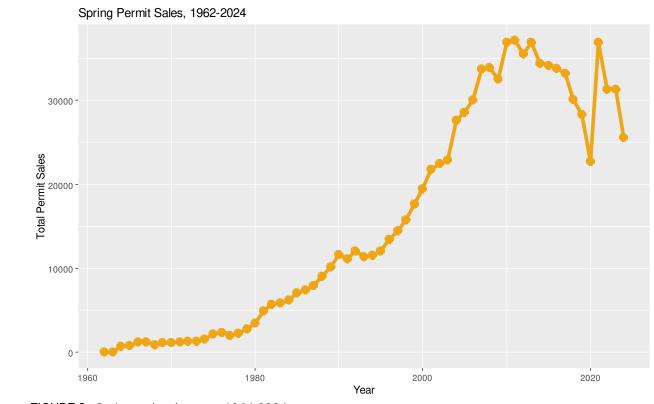
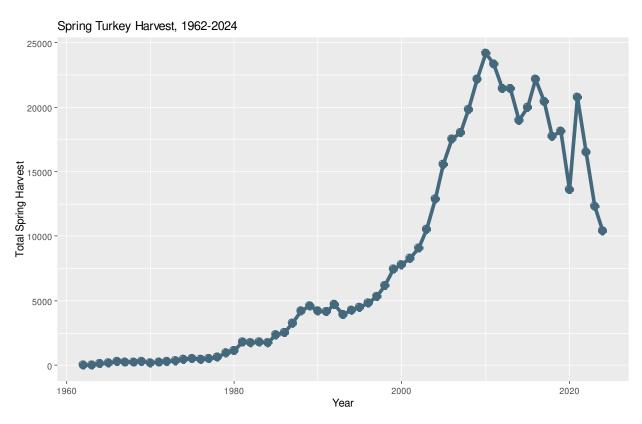


FIGURE 2. Spring turkey harvest, 1964-2024.



**FIGURE 3**. Spring turkey hunter success rate, 1964-2024. The horizontal line represents the success-rate goal (50% success) established in the 2011 Focus on the Future plan.

