

### **ACKNOWLEDGEMENTS**

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### TABLE OF CONTENTS

Introduction	3
Regulation Changes	4
Spring Turkey Season Highlights	4
Spring Harvest Composition & Trends	4-5
Private and State Land Hunting	6
Harvest by Town	7
Special Hunt Opportunities	8
Spring Turkey Hunter Survey Results	8-9
Fall Archery Turkey Season Summary	10
Wild Turkey Brood Survey	10-11
Wild Turkey Gobble Call Count Survey	11-12
Conclusion	13
Appendix A: Harvest by Town 2020-2024	14

### INTRODUCTION

The wild turkey is an important game bird in Rhode Island; however, they were not always as abundant as they are today. A combination of forest clearing, overharvest, and harsh weather conditions had eliminated the wild turkey from Rhode Island in the early 1800s.

The Rhode Island Division of Fish and Wildlife (DFW) along with the National Wild Turkey Federation (NWTF) began a wild turkey restoration project on February 8, 1980. Twentynine wild turkeys trapped and transferred from Vermont were released into the town of Exeter. Rhode Island DFW released additional turkeys from New York and Pennsylvania during the mid-1990's. In 1994, 48 turkeys from New York were released in Burrillville (20), Little Compton (15), and West Greenwich (13). In 1995, 45 turkeys from Pennsylvania were released in Foster (22) and Scituate (23), and in 1996, 15 turkeys from Pennsylvania were released in Tiverton. Population growth was assisted by the immigration of birds released in 1983 and 1984 by the Connecticut Department of Environmental Protection along the border of Rhode Island and Connecticut. Subsequent generations of turkeys dispersed from release sites and have colonized all towns in Rhode Island apart from New Shoreham (Block Island) and all islands other than Aquidneck in Narragansett Bay. Since 1985, the Division of Fish and Wildlife has conducted various surveys to monitor wild turkey population trends over time. Annual surveys include gobble call counts, summer brood surveys, mast surveys, and statewide sighting reports as well as the analysis of hunter harvest data. The state has taken a conservative approach toward managing the turkey flock with the goal of preserving a quality spring hunt and a healthy, self-sustaining population. Today, wild turkeys occur throughout mainland Rhode Island and their comeback is hailed as one of the true wildlife success stories. The DFW continues to collect turkey population data to ensure proper management of the wild turkey resource for future generations.

This report presents a summary of the 2024 spring and fall turkey season results, the 2024 spring hunter survey, the 2024 wild turkey brood survey, and the 2024 spring gobble call count survey.



### **REGULATION CHANGES**

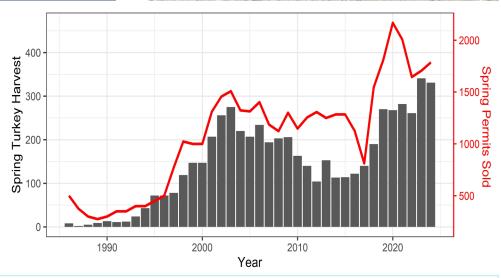
Turkeys must be reported in the online licensing system within 24 hours of harvest.

# SPRING TURKEY SEASON HIGHLIGHTS

The 39th annual statewide spring turkey season was held from April 25 to May 19, 2024. Turkey hunters reported harvesting 331 birds, a 2.9% decrease in harvest from the 341 birds taken during the 2023, but still the second highest harvest on record (Figure 1). Harvest remained relatively stable between 2020 2022 despite changing outdoor recreation participation during the pandemic and has been at its peak since 2023. Resident hunters accounted for the majority, 58% (191 birds), of the spring harvest, while turkeys harvested by non-resident hunters

made up 42% (140 birds) of the total harvest. Non-residents came from 25 states as far away as Washington, Texas, Missouri, and Louisiana to hunt turkeys in Rhode Island. Most out-of-state harvest was from hunters that reside in Massachusetts (25 birds) and Connecticut (21 birds). Sixty-four percent (212 birds) of the total birds harvested during the spring of 2024 occurred before 9:00am and 52% (160 birds) of the total

# Desmos Photos



**Figure 1.** Spring wild turkey harvest in Rhode Island, 1986–2024. The wild turkey harvest (gray bars) corresponds to the left y-axis and the number of permits sold (red polyline) corresponds to the right y-axis.

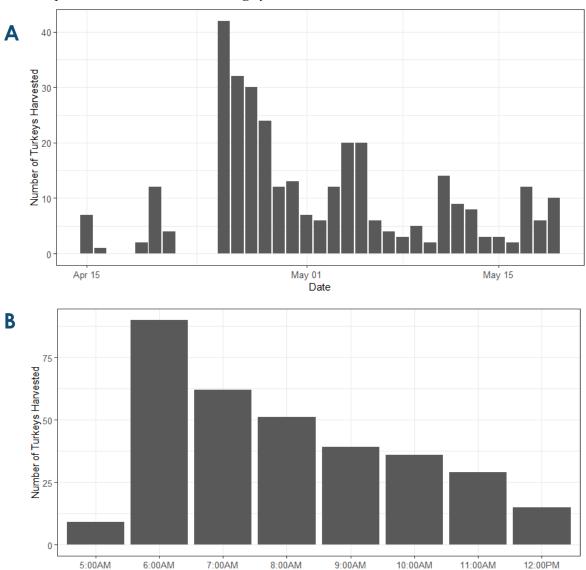
birds harvested occurred within the first seven days of the season (excluding youth season; Figure 2). The youth hunt occurred April 15–21 and paraplegic hunt occurred on April 21 and 22. These special hunts resulted in the harvest of 26 turkeys.

# SPRING HARVEST COMPOSITION AND TRENDS

The 2024 spring turkey harvest consisted of 51 juveniles (jakes; 15%), and 278 adult toms (84%), about a 11:2 adult to juvenile ratio (Table 1). Recent harvests (2019–2022) have remained high and are comparable to the high harvests in the early 2000s. The record harvest in 2023 was primarily driven by an increase in the number of jakes harvested and remained high this past season. The proportion of young males to adult males has fluctuated 13–24% between 2018 and 2022 (Table

1) and was slightly higher at 28% in 2023 but has returned to the norm. The percentage of jakes harvested is comparable to other New England states and can be an indicator of reproductive success of the previous year. Overall, the trend in harvest is positive from 1986 to 2024 despite fluctuations from year to year.

**Figure 2.** Distribution of the spring 2024 wild turkey harvests by date (A) and time (B) as reported via the online licensing system in Rhode Island.



**Table 1.** Age and sex breakdown of spring harvested wild turkeys in Rhode Island, 2020–2024.

8:00AM

9:00AM

Time

10:00AM

11:00AM

12:00PM

6:00AM

7:00AM

	2024	2023	2022	2021	2020
Number Harvested					
Adult Male (Tom or Gobbler)	278	243	216	228	232
Young Male (Jake)	51	95	46	54	35
Bearded Hen	2	3	0	0	1
Total	331	341	262	282	268
Harvest Proportion					
Adult Male (Tom or Gobbler)	0.84	0.71	0.82	0.81	0.87
Young Male (Jake)	0.15	0.28	0.18	0.19	0.13
Bearded Hen	0.01	0.01	0.00	0.00	0.00
Total	1.00	1.00	1.00	1.00	1.00

# PRIVATE AND STATE LAND HUNTING

Private land accounted for most of the harvested birds (n = 285; 86%); however, 46 birds were taken on 17 different state wildlife management areas (Table 2, 3). Turkey harvest over the past five years has predominately occurred on private land, typically with 10–14% of the harvest occurring public lands (Table 2). In 2024, 14% of turkeys were harvested on public lands.



**Table 2.** The proportion of spring harvested wild turkeys on both private and state land in Rhode Island, 2020–2024.

Land Type	2024	2023	2022	2021	2020	Mean
Private Land	0.86	0.86	0.85	0.89	0.90	0.87
Public Land	0.14	0.14	0.15	0.11	0.10	0.13
Total	331	341	262	282	268	297

**Table 3.** The number and location of spring harvested wild turkeys taken on public management areas in *Rhode Island*, 2024.

Management Area	Number of harvested turkeys
Arcadia	15
Big River	6
Other*	5
Buck Hill	4
South Shore	3
Tillinghast	3
Eight Rod Farm	1
George Washington	1
Black Hut	1
Burlingame	1
Camp Nokewa	1
Durfee Hill	1
Great Swamp	1
Nicholas Farm	1
Simmons Mill	1
Washington Grove	1

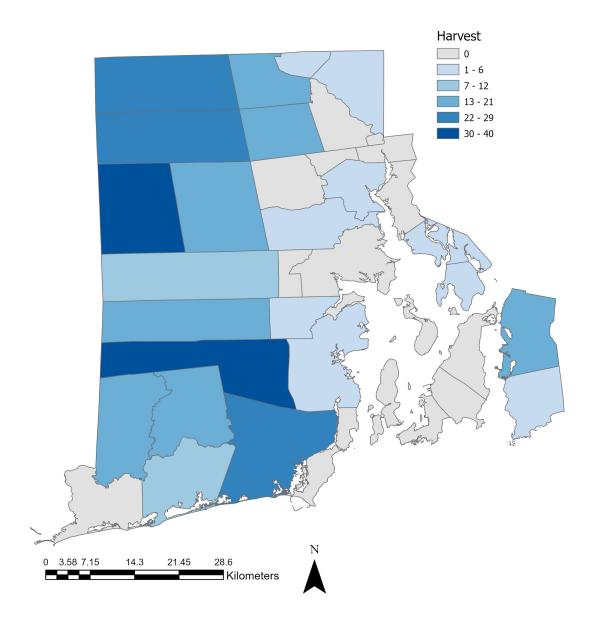
<sup>\*</sup>Public lands that are not management areas

### **HARVEST BY TOWN**

Turkeys were harvested in 24 of the 39 towns in the state (Figure 3). The following five towns had the highest harvests during the 2024 spring season: Foster (40), Exeter (38), Burrillville (29), South Kingstown (27), and Glocester (23).



**Figure 3.** Distribution of the spring 2024 wild turkey harvest in Rhode Island. Towns where turkeys were not harvested are shaded in light gray. New Shoreham (Block Island) does not have a resident turkey population and is not displayed.



# SPECIAL HUNT OPPORTUNITIES

A youth hunt and a Paraplegic Hunt occurred prior to the 2024 regular season. During these special seasons, youth and paraplegic hunters harvested a combined 23 birds. The youth hunt is a seven-day hunt ending the weekend before the statewide opening day and the paraplegic hunt is a two-day hunt on the weekend prior to the statewide opening day. The youth hunt is open to junior hunters, age 12 -15 years, with a valid license accompanied by at least one adult who is a legal resident and holds a valid hunting license. The first youth/paraplegic hunt took place in 2004 and resulted in the harvest of 5 birds. The overall impact of the youth season can be best measured in the opportunity it provides to attract and retain new hunters. The small number of participating hunters make it unlikely that youth/paraplegic hunts affect the regular season in any significant way.



# SPRING TURKEY HUNTER SURVEY RESULTS

The spring turkey hunter survey was once again emailed out to anyone who purchased a turkey permit and had a valid email address within the Rhode Island Outdoor system. The survey provides insight into perceived population trends, hunter effort, hunter experience, and youth mentorship. This survey has varied over the years, but the goal remains the same; to understand the dynamics of the spring turkey hunt and the preferences of Rhode Island spring turkey hunters. Of the 1,263 hunters with a valid email address, 44% (554) responded to the survey and of those, 20% (113) purchased a permit but did not hunt during the spring 2024 season.

A total of 1,786 spring wild turkey permits were sold to 1,317 hunters (Table 4) and with a participation rate of 76.6%, we estimated about 1,009 active turkey hunters during the spring 2024 season. This is an increase in the number of permits sold from the previous 2 years, but a decrease from 2020–2021 in which > 2,000 permits were sold and may be in part related to the reduction in COVID-related restrictions and the return to typical work schedules. Seven percent of hunters that responded (29) indicated they either mentored a junior hunter or were a junior hunter during the 2024

spring youth turkey season (Table 4). Hunter effort across both state and private land during the spring 2024 season was 4.6 days on average with a range of 1 to 25 days per hunter (Table 4) and based on survey results, hunters harvested 10.1 turkeys per 100 hunter days (n=387), slightly lower than the previous year.



**Table 4.** Summary of Rhode Island spring turkey hunter survey, 2023-2024

	2024	2023
Number of Tags Issued	1786	1705
Number of Hunters who Purchased Permits	1317	1247
Rate of Participation in Hunt	77%	78%
Estimated Number of Active Turkey Hunters <sup>1</sup>	1009	965
Average Number of Years Hunter Spent Turkey Hunting	14	14
Average Number of Days per Hunter/Season <sup>2</sup>	4.57	4.43
Hunter Success Rate <sup>3</sup>	27.0%	28.1%
Participation in Youth Turkey Hunt	7%	10%

<sup>&</sup>lt;sup>1</sup>Estimated number of active turkey hunters was derived based on the total number of hunters that purchased at least one turkey permit and the percentage of hunters surveyed that indicated they actively hunted during the 2024 spring season.

In the 2021 Wild Turkey Hunter Survey, we discovered that new hunters were more likely to hunt state land than experienced hunters, and that most turkey harvest occurs on private land. This relationship led us to specifically ask new turkey hunters (< 3 years of experience) about their experience turkey hunting in the 2024 Wild Turkey Hunter Survey. Thirty-two percent of respondents started turkey hunting in the last five years. New turkey hunters mentioned that skill development (e.g., calling), locating turkeys, securing access to private land, finding a mentor, and finding time to hunt were the biggest barriers encountered. Seventeen percent of new hunters had previously participated in the Wild Turkey Hunting clinic hosted by the Division of Fish and Wildlife and most respondents were interested in learning more about the clinic.

The Rhode Island spring turkey season bag limits have remained conservative across the years allowing for ample opportunity and enjoyable hunts. Overall, 55.9% of survey respondents were either satisfied or very satisfied with the spring 2024 wild turkey season. Hunter satisfaction has remained consistent and high between 2019–2024. Twenty-four percent of the survey respondents did not have an opinion and 19.8% responded as unsatisfied or very unsatisfied. A 1-bird decrease

from the past 2 years, Rhode Island turkey hunters on average saw 4 gobblers. On average, they also heard 6 gobblers, heard 3 hens, and saw 4 hens, the same as the past 2 years. These sightings indicate that most hunters are finding turkeys which likely contributes to hunter satisfaction. The hunter success rate during the 2024 spring season was 27.0%, similar to last year (Table 4).

When asked about interference from other hunters while turkey hunting, most hunters (56%) reported they had not experienced interference during the spring 2024 season. Of the 44% of respondents that experienced interference, 5.4% experienced interference on private land, 31.2% experienced interference on state land, and 7.3% reported interference on both state and private land. However, 48% of hunters didn't observe any other hunters at all throughout the spring season, a decline from the previous year.

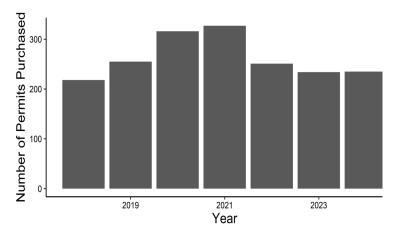
<sup>&</sup>lt;sup>2</sup>Calculated from 387 survey responses.

<sup>&</sup>lt;sup>3</sup> Hunter success was derived by dividing the number of successful hunters by the estimated active hunters.

<sup>&</sup>lt;sup>4</sup> This value is a combination of adult mentors and youth who participated in turkey hunting.

# FALL ARCHERY TURKEY SEASON SUMMARY

The fall 2024 wild turkey archery season ran from October 1–31, 2024. Hunters purchased 235 permits, which was the same as the previous year (Figure 4). The 2024 season resulted in a harvest of 5 birds (Table 5). This is about the same as the previous year. All the birds were harvested on private land. The fall archery season continues to have low harvest (Table 5).



**Figure 4.** Fall wild turkey permit sales in Rhode Island, 2018–2024.

**Table 5.** Composition of fall harvested wild turkey in Rhode Island, 2020–2024.

	2024	2023	2022	2021	2020
Male					
Adult (Tom or Gobbler)	2	3	-	-	1
Juvenile (Jake)	-	1	-	-	-
Female					
Adult (Hen)	3	2	3	2	2
Juvenile (Jenny)	-	-	-	1	2
Total	5	6	3	3	5

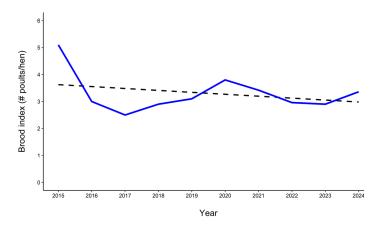
### WILD TURKEY BROOD SURVEY

Observations of wild turkey hens (adult females) with their young (poults) have been recorded in Rhode Island since 1995. Typically, observations occur between the months of June and August and can be an indicator of fall recruitment. In 2019, the survey analysis changed to follow the standardized protocol for conducting wild turkey brood surveys prepared by the National Wild Turkey Federation Technical Committee. This standardized approach will help facilitate comparison of brood indexes across states within the Northeast and across the US. Major changes to the survey analysis include: the exclusion of June observations (only July and August observations used); and standardized filtering that reduces bias in observations.

We estimated the 2024 brood index to be 3.31 (CI= 3.06, 3.56) poults per hen gathered from 437 observations (Figure 4). The brood index fluctuates from year to year and likely reflects the impacts of weather and rainfall on brood success and survival in any given year. The average number of poults per brood was 4.29 (CI= 4.02, 4.56) resulting from 337 observations. Seventy-two percent of hen observations had

a brood (n=437) and the male to female ratio was estimated to be about 1 male per 3 females (n=487). Overall, the brood index is greater than that of 2023 and is on par with the ten-year average (3.3 poults/hen; Figure 5). Long term trends (1993–2024) in the brood index show a decline since the start of the brood survey in 1993. This decline is likely in part due to high reproduction at low population densities following reintroduction and translocations in the 1990s, and lower per-hen reproduction as the population reached carrying capacity. The number of turkey brood reports has grown from ~40 in the early 90's to over 400 in 2024!

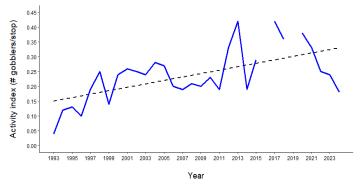
The Rhode Island Division of Fish and Wildlife relies on observations of poults and hens from the public. Members of the public can report their observations via an online form (http://www.dem.ri.gov/programs/bnatres/fishwild/pdf/wild-turkey-brood-packet.pdf) as well as by submitting hard copies of the forms to the division's wildlife office.



**Figure 5.** 10-year average brood index (# poults/hen) collected from public and biologist observations in Rhode Island, 2015–2024. The dashed trendline indicates a slight decrease in the brood index between 2015 and 2024, but it is not significant (p = 0.38).

### WILD TURKEY GOBBLE CALL COUNT SURVEY

The wild turkey gobble call count survey was re-instated during the spring of 2020 and conducted again starting in 2021. Three weeks prior to the opening of the turkey season, volunteers and biologists conducted call counts on 11 routes throughout Rhode Island. Each driving route contained 13 survey locations, each 1 mile apart, for which the observer would stop and listen for turkey gobbles for four minutes. Observers recorded the total number of gobbles heard, the number of turkeys gobbling, and the number of turkeys visually observed at each stop. Routes were run twice per week, alternating driving directions, for a duration of three weeks. Effort was made to conduct surveys on good weather days whenever possible. During the 2024 gobbler survey, 11.5% of the total stops were active with an activity index of 0.18 active gobblers per stop and a gobble index of 4.1 calls per active gobbler (Table 6). We observed a 2.5% decrease in the number of stops with active gobblers compared to 2023. A combination of weather and yearto-year variation likely contributed to this increase. The activity index was lower than in 2023, which may be due to 2 routes which were omitted from analysis because of a lack of volunteer participation, but the gobble index increased. Gobbler activity (Figure 6) and the percentage of active stops has increased over time, while the gobble index (Figure 7) remains relatively stable.



**Figure 6.** Rhode Island average activity index (# gobblers/stop) collected from public and biologist observations during the spring wild turkey gobble call count survey (survey not conducted in 2016 or 2019), 1993–2024. The dashed trendline indicates a significant increase in gobbler activity ( $p = 4.12x10^4$ ).

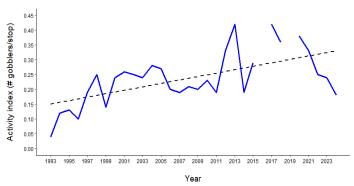


Figure 7. Rhode Island average gobble index (# calls/gobbler) collected from public and biologist observations during the spring wild turkey gobble call count survey (survey not conducted in 2016 or 2019), 1993–2024. The dashed trendline indicates a relatively stable trend in calls per gobbler.

**Table 6.** Summary of the spring turkey gobble call count survey results from 1993–2024, Rhode Island.

Year	% Stops Active Activity Index		Gobble Index		
2024	11.49	0.18	4.1		
2023	13.99%	0.24	3.1		
2022	10.01%	0.25	4.8		
2021	17.20%	0.33	4.1		
2020	19.00%	0.38	3.9		
2019	NA	NA	NA		
2018	18.00%	0.36	6.2		
2017	18.00%	0.42	3.6		
2016	NA	NA	NA		
2015	21.00%	0.29	2.9		
2014	8.00%	0.19	2.7		
2013	20.00%	0.42	4.3		
2012	21.40%	0.33	4.8		
2011	12.70%	0.19	3.6		
2010	16.70%	0.23	3.8		
2009	15.40%	0.2	3.9		
2008	12.70%	0.21	4.7		
2007	13.70%	0.19	5.4		
2006	16.20%	0.2	6.7		
2005	17.30%	0.27	4.4		
2004	10.90%	0.28	5.4		
2003	15.70%	0.24	14.3		
2002	15.50%	0.25	5.3		
2001	14.60%	0.26	4.4		
2000	12.50%	0.24	4.8		
1999	10.10%	0.14	5.6		
1998	15.50%	0.25	3.6		
1997	14.10%	0.19	3.6		
1996	8.20%	0.1	3		
1995	10.40%	0.13	4.4		
1994	9.30%	0.12	3.8		
1993	3.30%	0.04	2.8		
Average	14.10 %	0.24	4.6		

### CONCLUSION

The wild turkey is a highly adaptable species capable of flourishing in an array of habitat types. Once locally extirpated, the wild turkey now occupies most of the state. Recent changes to the bag limits have increased hunting opportunity resulting in an increased turkey harvest for the springs of 2019 to 2024. While fluctuations in the harvest occur, long term trends are positive. Rhode Island turkey hunters indicate that they are satisfied with the spring bag limits and the hunting opportunity provided to them. Like harvest

trends, brood index estimates fluctuate from year to year. The 2024 brood index estimate is around the 10-year average and has not changed significantly over the past 17 years. RI DEM Fish and Wildlife will continue to monitor turkey populations and encourage public participation in the yearly brood survey, gobbler survey, and the spring turkey hunter survey.

I encourage you to provide feedback about this report by emailing: Elizabeth.Bonczek.CTR@dem.ri.gov



## APPENDIX A

Wild turkey harvest by town during the spring seasons in Rhode Island, 2020–2024.					
Taxon of Hamasal	Number of Birds				
Town of Harvest	2024	2023	2022	2021	2020
Barrington	1	0	0	0	0
Bristol	3	0	0	1	3
Burrillville	28	32	22	35	29
Charlestown	9	7	6	11	12
Coventry	12	16	16	22	21
Cranston	1	5	3	2	1
Cumberland	6	6	5	3	4
E. Greenwich	5	5	4	1	1
E. Providence	0	0	0	0	0
Exeter	38	33	18	30	23
Foster	40	34	22	14	21
Glocester	23	35	26	21	23
Hopkinton	17	10	12	16	5
Johnston	0	1	4	2	0
Little Compton	5	4	4	14	6
Lincoln	0	2	0	1	0
Middletown	0	1	0	0	4
Narragansett	0	0	1	0	0
N. Kingstown	5	4	4	4	12
N. Providence	0	1	0	1	0
N. Smithfield	18	14	11	12	8
Providence	5	0	0	0	0
Portsmouth	0	0	0	0	1
Richmond	14	30	13	21	12
Scituate	21	16	19	16	18
Smithfield	13	4	11	9	13
S. Kingstown	27	29	16	15	19
Tiverton	15	28	24	11	18
Warren	2	2	4	3	1
W. Greenwich	21	20	11	10	9
Westerly	0	2	4	3	4
Woonsocket	2	0	2	4	0
TOTAL	331	341	262	282	268