# **Connecticut Wild Turkey Program Report**

2022 Spring and Fall Seasons

Department of Energy and Environmental Protection Bureau of Natural Resources, Wildlife Division 79 Elm Street Hartford, CT 06106-5127 860-424-3011

Department of Energy and Environmental Protection Bureau of Natural Resources

Wildlife Division



Prepared By William Cassidy, *Turkey Program Biologist* 

Photo by Paul Benjunas, Outreach Program Biologist

04/2023

#### **Table of Contents**

Introduction	4
2022 Spring Turkey Season	4
Spring Turkey Hunter Survey Results	9
2022 Fall Firearms Turkey Season	13
2022 Fall Archery Turkey Season	15
Wild Turkey Brood Survey	17
Population Dynamics	19
Summary	21
Appendix A. Connecticut spring turkey harvest by town, 2012 - 2022	23
Appendix B. Spring turkey harvest from state-owned and managed lands, 2021 and 2022	28
Appendix C. Ruffed grouse observations (seen or heard) from turkey hunter surveys, 2012-2022	31
Appendix D. Connecticut fall firearms turkey harvest and hunter numbers, 1990-2022	35
Appendix E. Connecticut fall archery turkey harvest and hunter numbers, 1983-2022	36

#### **List of Tables**

- Table 1. Connecticut's spring turkey harvest on private and state lands, 2021 and 2022.
- Table 2. Connecticut's spring turkey hunter participation rate and estimated hunter numbers, 2021 and 2022.
- Table 3. Turkeys harvested during the spring 2021 and 2022 seasons by Turkey Management Zone.
- Table 4. Harvest distribution among hunters, 2017-2022
- Table 5 Number of survey respondents hunting in each Turkey Management Zone, 2022.
- Table 6. Summary of hunter and non-hunter interference during the Spring Wild Turkey Season, 2022.
- Table 7. Composition of the 2022 fall firearms season harvest.
- Table 8. Wild turkey harvest by town during the 2021 and 2022 fall firearms seasons.
- Table 9. Wild turkey harvest during the 2021 and 2022 fall firearms seasons by Turkey Management Zone.
- Table 10. Wild turkey harvest by town during the 2021 and 2022 fall archery seasons.
- Table 11. Wild turkey harvest during the 2021 and 2022 fall archery seasons by Turkey Management Zone.
- Table 12. Wild turkey brood survey data for Connecticut, 2007–2022.
- Table 13. Wild turkey brood survey data by month for Connecticut, 2022

## **List of Figures**

- Figure 1. Connecticut's spring wild turkey season harvest, 1981-2022.
- Figure 2. Distribution of the 2022 spring turkey harvest in Connecticut.
- Figure 3. Connecticut's 13 Turkey Management Zones, 2022.
- Figure 4. Ruffed grouse population growth index reported on spring turkey hunter surveys from 2005-2022.
- Figure 5. Average number of days spent afield between state and private land spring turkey hunters, 2018-2022.
- Figure 6. Trend in Spring Wild Turkey Season hunter satisfaction versus harvest per hunter (individual success rate) from 2018-2022.
- Figure 7. Poults per hen from 2018-2022.
- Figure 8. Perception of hunters regarding wild turkey population growth from 2000-2022.
- Figure 9. Trend in spring turkey harvest success from 1981-2022.
- Figure 10. Ratio of juvenile to adult turkeys taken during Connecticut's spring wild turkey seasons, 1981-2022.

## Department of Energy and Environmental Protection Bureau of Natural Resources, Wildlife Division 79 Elm Street Hartford, CT 06106-5127 860-424-3011



The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act. Please contact us at 860-418-5910 or <a href="deep.accommodations@ct.gov">deep.accommodations@ct.gov</a> if you: have a disability and need a communication aid or service; have limited proficiency in English and may need information in another language; or if you wish to file an ADA or Title VI discrimination complaint.





Partnering to fund conservation & connect people with nature

#### Introduction

The wild turkey is an important component of our state's wildlife diversity. The goal of the Connecticut Wild Turkey Management Program is to manage the wild turkey population at a level compatible with available habitat and various land uses, and to allow for a sustained yield of turkeys for use by the people of Connecticut. Wild turkeys continue to be of moderate abundance throughout the state, providing the public with hunting and wildlife viewing opportunities.

To successfully manage a statewide wild turkey population, biologists must take a holistic approach. Factors that should be considered include harvest, hunter participation and effort, annual productivity, predator-prey interactions, seasonal weather conditions, species density dependence, diseases, and habitat modifications. On an annual basis, harvest, hunter dynamics, and productivity are presented in the Turkey Summary booklets. Other variables are obvious in effect, but their current influence is unknown (disease, predator-prey, and habitat). Other variables are known yet unpredictable (weather), and the influence of density dependence or lack thereof is not known. Because many factors play a role in the dynamics of a statewide wild turkey population, biologists must consider all parameters to facilitate positive changes and ensure that turkey populations are managed properly.

The 2022 wild turkey hunting seasons continued to emphasize changing conditions. From 2020 to 2022, harvest and hunter participation declined across all wild turkey hunting seasons. The 2022 totals were similar to pre-pandemic levels (2019), showing just 49 more hunters having purchased some form of the Resident Game Bird Conservation Stamp (RGBCS). Of note, previous summaries used the number of RGBCSs issued as a metric to calculate hunter participation. Hereafter, and including in this summary, all hunter data will be calculated using a count of unique Conservation ID numbers to which one or more RGBCSs were issued (i.e., an individual holding both a Landowner and statewide participation stamp will not be counted twice) as opposed to counting issuance.

Connecticut maintains three wild turkey hunting seasons, which include spring, fall archery, and fall firearms. For the majority of Connecticut's wild turkey hunters, spring is the most popular season, and for this reason, the 2022 spring season highlights are presented first, followed by the spring turkey hunter survey information, annual brood survey data, fall firearms season highlights, and fall archery season information.

# 2022 Spring Turkey Season

#### **Overall Results**

The 42<sup>nd</sup> annual statewide spring turkey season was open from April 27 – May 28, 2022. A total of 6,986 Resident Game Bird (RGB) hunters were eligible to participate in the spring season as of June 1 and 1,139 birds were harvested (Figure 1). The 2022 spring harvest consisted of 314 juvenile and 823 adult males and 2 bearded females. The number of hunters decreased by 9.3% (714 hunters) and harvest decreased by 8.7% (102 birds) from the 2022 totals (Tables 1 and 2).

To provide a quality turkey hunting experience for Connecticut's junior hunters (ages 12 to 15), the 18<sup>th</sup> Annual Youth Wild Turkey Junior Hunter Training Days took place from Saturday, April 16 to Saturday, April 23, 2022 (excluding Sunday, April 17). Participants harvested 44 wild turkeys, 9 fewer birds than the previous year. For the 2022 season, 49 juniors harvested their first wild turkey, 55% (27) of which were during the junior season. Overall, 78 juniors (70% as derived from the spring turkey hunter survey) took part in the Junior Hunter Training Days with a 56% success rate. Junior Wild Turkey Hunter Training Days have been well received by all participants, both youth hunters and mentors.

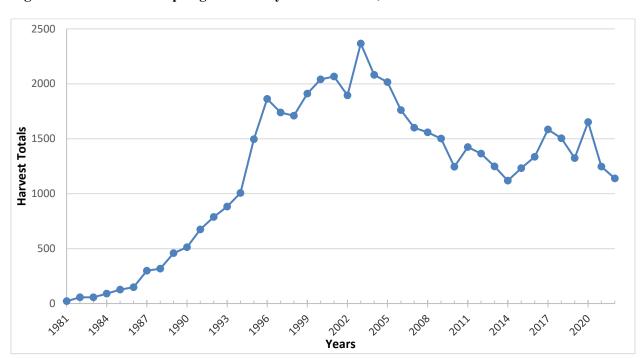


Figure 1. Connecticut's spring wild turkey season harvest, 1981 – 2022.

Table 1. Connecticut's spring turkey harvest on private and state lands, 2021 and 2022.

		<b>Total Harvest</b>	
<b>Land Type</b>	2021	2022	% Change
Private Land	989	890	-10.0%
State Land	258	249	-3.5%
Overall Total	1,247	1,139	-8.7%

Table 2. Connecticut's spring turkey hunter participation rate and estimated hunter numbers, 2021 and 2022.

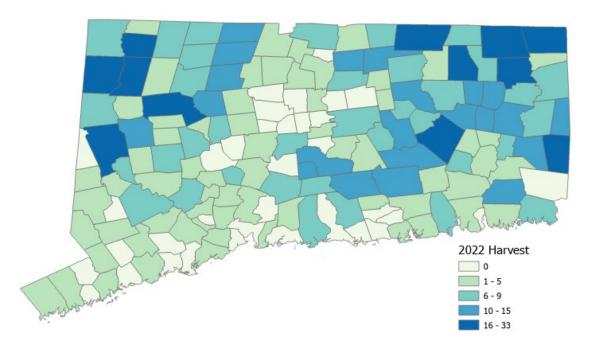
Year	RGB Hunters	Participation Rate <sup>3</sup>	Estimated Hunter Numbers
2021	$7,700^{1}$	72%	5,544
2022	$6,986^2$	69%	4,820

<sup>&</sup>lt;sup>1</sup> RGB hunters permitted from 12/1/20 to 6/1/21.

#### Harvest by Town

At least 1 bird was taken from 140 of Connecticut's 169 towns (Figure 2, Appendix A). Twenty or more birds were taken from 10 towns and 30 or more birds were taken from 1 town. The towns of Cornwall (33), Sharon (24), and Woodstock (24) had the highest reported turkey harvest.

Figure 2. Distribution of the 2022 spring turkey harvest in Connecticut.



#### **Zonal Harvest**

Similar to 2021, the northeastern corner of the state (Turkey Management Zone 5) reported the highest harvest among Connecticut's 13 Turkey Management Zones (TMZs) during 2022 (Table 3, Figure 3). Prior to 2004, northwest Connecticut (Zone 1) had typically held this distinction. Zone 4B recorded the lowest harvest. Zones 3, 4B, and 6 showed the largest decrease in harvest from 2021 to 2022. Although harvest was variable among zones, turkey populations exist in all zones and harvest is a function of hunter access and turkey densities.

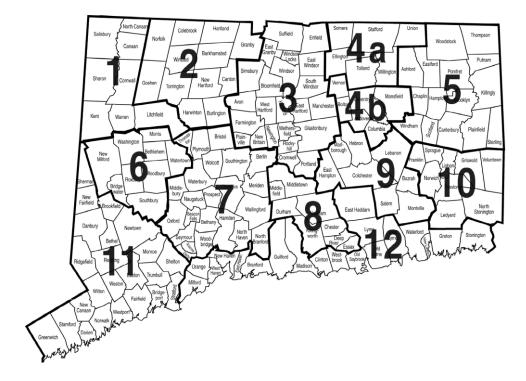
<sup>&</sup>lt;sup>2</sup> RGB hunters permitted from 12/1/21 to 6/1/22.

<sup>&</sup>lt;sup>3</sup> Participation rates derived from the respective year's Spring Turkey Hunter Surveys.

Table 3. Turkeys harvested during the spring 2021 and 2022 seasons by Turkey Management Zone.

_	Harvest	Harvest	Percent
Zone	2021	2022	Change
1	101	127	25.74
2	128	116	-9.38
3	109	65	-40.37
<b>4A</b>	68	62	-8.82
<b>4B</b>	74	49	-33.78
5	230	209	-9.13
6	84	58	-30.95
7	71	80	12.68
8	48	61	27.08
9	89	76	-14.61
10	116	102	-12.07
11	67	52	-22.39
12	62	82	32.26
Total	1,247	1,139	-8.66

Figure 3. Connecticut's 13 Turkey Management Zones, 2022.



#### **Private and State Land Hunting**

Private land accounted for the majority of the harvest (78%). Private land encompasses the largest amount of land, includes the best turkey habitat, and likely has more experienced hunters with lower hunter densities than state land (based on median age of successful hunters). Of the state-managed properties, Natchaug State Forest (24) in Eastford and Pachaug State Forest (23) in Voluntown yielded the most turkeys in 2022. The most productive state land turkey hunting areas (≥ 5 birds harvested/mi² and a minimum harvest of 4 birds) were Meadow Brook WMA in Colchester and Algonquin State Forest in Colebrook (Appendix B).

#### **Harvest Distribution Among Hunters**

Analysis of hunter reporting data indicates the distribution of harvest among spring turkey hunters has remained relatively consistent over time (Table 4). Further analysis indicates that the harvest of additional birds, of what would have been allowed under the pre-2020 spring regulations (3/private, 2/state bag limits, AM only harvest) for the 2022 season, makes up 4.4% of the total harvest. This percentage is an increase from 3.4% in 2021 but remains below the 5.4% seen in 2020 when regulations first changed.

Table 4. Harvest distribution among hunters, 2017-2022.

Year	Birds Harvested	Hunter Count	Percentage of Spring Hunters	Additional Birds
	5	19	0.4%	
	4	19	0.4%	•
2017	3	110	2.1%	- n/o
2017	2	261	5.1%	n/a
	1	561	10.9%	<u>-</u>
	0	4193	81.2%	•
	5	19	0.3%	
-	4	21	0.4%	<u>-</u>
2010	3	96	1.8%	/ .
2018	2	252	4.6%	n/a
	1	518	9.5%	
	0	4642	85.2%	
	5	10	0.2%	
	4	16	0.3%	
2019	3	80	1.5%	- n/a
2019	2	210	3.9%	n/a
_	1	545	10.0%	
	0	4584	84.2%	<del>-</del>
	5	27	0.4%	
2020	4	38	0.5%	89
	3	84	1.2%	<del>-</del>

	2	246	3.6%	
	1	595	8.6%	
	0	5921	85.7%	
	5	7	0.1%	
•	4	25	0.4%	
2021	3	73	1.3%	12
2021	2	171	3.0%	43
	1	551	9.6%	•
	0	4916	85.6%	•
	5	16	0.3%	
	4	18	0.4%	
2022	3	66	1.3%	50
	2	183	0.5%	50
	1	424	8.4%	•
	0	4345	86.0%	•

## **Spring Turkey Hunter Survey Results**

The Spring Wild Turkey Hunter Survey is used to obtain a variety of information to better manage Connecticut's wild turkey resource. The survey provides valuable insight into population growth trends, economic expenditures, and recreational benefits. It also provides turkey hunters a forum to weigh in on potential changes to the program and overall satisfaction with the Wildlife Division's management of Connecticut's wild turkey population. Prior to 2010, each spring turkey hunter received a mail-in survey attached to their permit. Since then, in an effort to streamline the survey process, all individuals who purchased a RGBCS and provided an email address receive a survey.

In 2022, a total of 5,436 surveys were emailed to spring turkey hunters and 25% of those hunters responded (1,353). Thirty-one percent of the respondents had obtained a RGBCS by June 1 but did not participate in the 2022 spring turkey hunting season. This ratio was used to calculate total spring turkey hunter numbers. Of those that did hunt (total est. 4,820), most of their hunting activity occurred in Turkey Management Zones 2 and 5 which is consistent with 2021 (Figure 3; Table 5). On average, spring turkey hunters spent an estimated \$286 on hunting-related items (stamps and license not included) totaling \$251,637. An additional \$178,346 of revenue was generated through the sales of RGBCS (as of May 31, 2022).

Thirty-nine percent of spring turkey hunters (n=885) responding to the survey believed the turkey population was decreasing. Of the remainder, 4% believed it was increasing, 25% believed it was stable, and 12% had no opinion. Hunters were asked to rank the change in population from last year to this year as decreasing (0), slightly decreasing (1.5), stable (3.0), slightly increasing (4.5), or increasing (6.0). From this information, a turkey population growth index of 1.6 was derived for 2022, indicating a slightly decreasing turkey population. All Turkey Management Zones had a mean index below 3.0, suggesting statewide decline in wild turkey numbers from 2020 to 2022.

To collect data on ruffed grouse distribution in Connecticut, an additional question was added to the turkey hunter survey in 2005. Hunters were asked to report whether they observed ruffed grouse or heard grouse drumming and, if so, to provide the town in which the encounter occurred. During 2022, hunters reported 58 encounters with ruffed grouse in 39 towns. The town with the highest number of grouse encounters was Hartland (Appendix C). A grouse population index was derived by dividing total grouse observations into the total number of surveys returned and then multiplying by 100. This represents the average number of grouse encountered by 100 spring turkey hunters. The 2022 index was 4.3 (Figure 4). Overall, grouse population trends indicate that Connecticut's grouse numbers continue to decline. Only 5% of the spring turkey hunters encountered grouse during the season.

The survey was also used to assess hunter preferences and activities. The majority of hunters who purchased a RGBCS by June 1 intended to pursue wild turkeys (94%); 59% indicated they would hunt only wild turkeys, 34% wild turkeys and other gamebirds, 2% pheasants and other gamebirds, 4% only pheasants, and three individuals only hunted other game birds. Ninety percent of the hunters identified themselves as spring turkey hunters, 32% as fall archery turkey hunters, 33% as fall firearms turkey hunters, and 6% did not intend to hunt turkey in 2022. Of the 2022 spring hunters, 51% hunted turkeys on private land only, 12% on both private and state lands, and 36% on state land only. On average, 2022 spring turkey hunters spent approximately 4.9 days pursuing turkeys on private land and 5.3 days on state land (Figure 5). In 2020, hunting hours were extended from ending at noon until ending at sunset, giving hunters the option of afternoon hunting. Hunters were asked what percentage of time they spent hunting in the morning and afternoon; collectively the hunters indicated that 83% of their time was spent hunting during morning hours (a 3% increase from 2021) and 17% during the afternoon, a 2% decrease from the previous year. Most hunters still preferred morning hunts.

The 2022 state land spring turkey hunters encountered over three times more hunter interference from other hunters than private land hunters (16% vs. 5%), and almost three times as much interference from non-hunters (11% vs. 4%). These numbers are very similar to 2021, where the only difference was a 1% decrease in non-hunter interference on state land (Table 6). Overall, it appears that most 2022 spring hunters were satisfied with the quality of the Connecticut hunt experience: excellent -11%, good -27%, fair -24%, poor -20%, and very poor -15%. Generally, it appears that positive season satisfaction correlates to higher harvest rates (Figure 6).

Table 5. Number of survey respondents hunting in each Turkey Management Zone, 2022.

Zone	Hunters	%
1	78	9
2	105	12
3	76	9
<b>4A</b>	58	7
<b>4B</b>	32	4
5	103	12
6	41	5
7	76	9
8	50	6
9	70	8
10	76	9
11	68	8
12	51	6
Total	884	100

Figure 4. Ruffed grouse population growth index reported on spring turkey hunter surveys from 2005 - 2022.

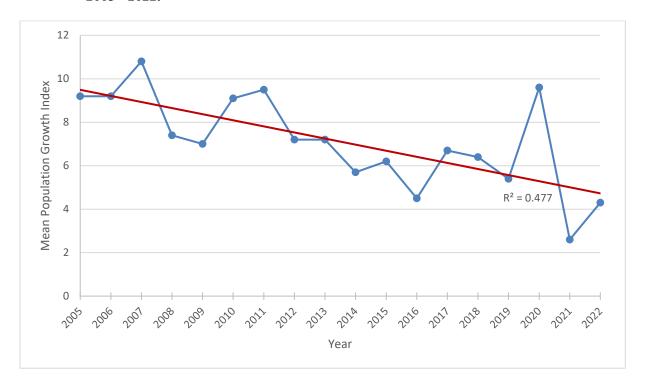


Figure 5. Average number of days spent afield between state and private land spring turkey hunters, 2018-2022.

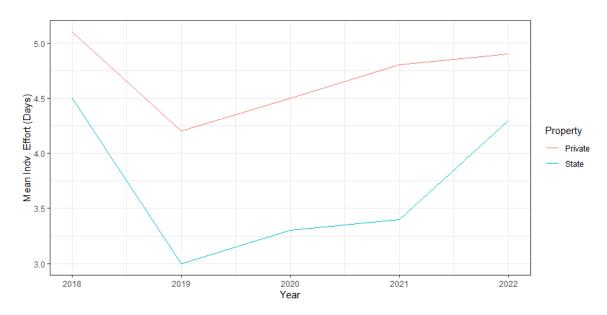


Table 6. Summary of hunter and non-hunter interference during the Spring Wild Turkey Season, 2022.

	Hunter In	terference	Non-Hunter	Interference
	N=	%	N=	%
Experienced on all	12	1	11	1
property types				
Experienced on	143	16	94	11
State Land				
Experienced on	43	5	37	4
Private Land				
Did not	687	78	743	84
Experience				
Total	885	100	885	100
	Interference T	Trend (Private)	Interference	Trend (State)
	N=	%	N=	%
Same as previous	151	17	167	19
year				
Did not	452	51	276	31
experience any				
Did not hunt	179	20	308	35
property type				
Less than previous	41	5	14	2
year				
More than	61	7	119	13
previous year				
Total	884	100	884	100

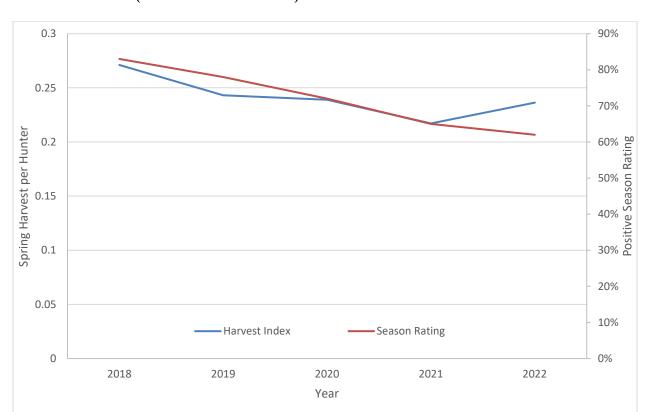


Figure 6. Trend in Spring Wild Turkey Season hunter satisfaction versus harvest per hunter (individual success rate) from 2018-2022.

## 2022 Fall Firearms Turkey Season

The fall firearms season was open statewide in 2022 for the 27<sup>th</sup> year in Connecticut. Hunters who purchased a RGBCS were able to hunt on any state land open to turkey hunting and all private lands where hunters obtained a signed landowner consent form. An estimated 1,088 hunters (derived from preliminary responses from the 2022/2023 Resident Game Bird Hunter Survey) participated during the fall firearms wild turkey season. Hunters harvested 69 birds (Appendix D) during the 29-day, 2022 fall firearms season and posted a success rate of 6.3%. Hunters harvested 61 birds on private land and 8 birds on state land (Table 7). Three hunters harvested 3 birds, 18 harvested 2, and 24 harvested 1 during the season. The harvest consisted of 64% adults, 36% juveniles, 41% males, and 59% females. Overall, from 2021 to 2022, the fall firearms harvest increased by 36%.

Fall firearms hunters reported taking at least 1 bird from 28 of Connecticut's 169 towns. The towns reporting the highest harvests were Colchester, Stafford, and Woodstock (6) (Table 8). In addition, Turkey Management Zone 4A (13 birds) reported the highest zonal harvest (Table 9).

Table 7. Composition of the 2022 fall firearms season harvest.

	Private Land	State/Public Lands	Total
Adult Hen	19	3	22
Adult Male	10	2	12
Juvenile Hen	12	2	14
Juvenile Male	19	1	20
Unknown Sex or Age	1	-	1
Total	61	8	69

Table 8. Wild turkey harvest by town during the 2021 and 2022 fall firearms seasons.

Town of Harvest	Number	r of Birds	Town of Harvest	Numbe	r of Birds
	2021	2022		2021	2022
Ashford	0	2	New Fairfield	1	0
Canton	1	0	Norfolk	2	0
Colchester	0	6	Putnam	0	3
Cornwall	7	0	Scotland	0	1
Cromwell	2	0	Stafford	4	6
Durham	1	0	Suffield	2	2
Eastford	1	0	Tolland	3	0
Goshen	0	2	Union	2	0
Groton	1	0	Voluntown	3	5
Hampton	1	0	Warren	0	2
Harwinton	4	0	Willington	4	2
Lebanon	0	2	Woodstock	0	6
Middletown	1	0	Total	44	69

Table 9. Wild turkey harvest during the 2021 and 2022 fall firearms seasons by Turkey Management Zone.

Harvest by Year				Harvest	by Year
Zone	2021	2022	Zone	2021	2022
1	9	5	7	0	3
2	7	3	8	2	5
3	4	4	9	0	8
<b>4A</b>	13	8	10	3	6
4B	0	0	11	1	3
5	4	14	12	1	7
6	0	3	Total	44	69

## 2022 Fall Archery Turkey Season

Connecticut's 39<sup>th</sup> fall archery turkey season was open statewide and ran concurrently with the 2022 archery deer season. The purchase of a RGBCS allowed archers to participate in the 2022 season. These hunters could harvest turkeys on any state land open to fall archery turkey hunting or any private land where written landowner consent was obtained. An estimated 1,071 hunters (derived from preliminary responses from the 2022/2023 Resident Game Bird Hunter Survey) participated during the fall archery wild turkey season. Archers reported a harvest of 82 birds and posted a success rate of 7.6%. Harvest was reported in 49 towns with Guilford (4), Lebanon (4), and Winchester (4) reporting the highest harvest (Table 10). Turkey Management Zones 12 (12), 11 (10), and 5 (10) reported the highest zonal harvest (Table 11). Because the fall archery wild turkey season runs concurrently with the archery deer season, hunters in Zones 11 and 12 have the additional month of January to harvest wild turkeys; all other zones close at the end of December. The 2023 January season yielded no harvest with an estimated 115 participating hunters.

Thirty-eight of the 82 birds harvested by archers were males (27 adults, 11 juveniles) and 43 were females (39 adults, 4 juveniles). The fall archery turkey harvest increased by 22% from 2021 to 2022 (Appendix E).

Table 10. Wild turkey harvest by town during the 2021 and 2022 fall archery seasons.

<b>Town of Harvest</b>	n of Harvest Number o		Town of Harvest	Numbe	r of Birds
	2021	2022		2021	2022
Andover	1	0	North Branford	0	1
Avon	1	0	North Stonington	0	3
Barkhamsted	0	1	Norwalk	1	0
Berlin	0	2	Old Lyme	1	0
Bethany	1	0	Old Saybrook	1	0
Bristol	1	0	Oxford	1	0
Brookfield	1	0	Preston	0	1
Cheshire	1	0	Prospect	1	2
Canton	1	0	Redding	1	1
Deep River	0	1	Ridgefield	1	3
East Haddam	2	3	Shelton	2	0
East Hartford	1	0	Somers	1	1
East Lyme	3	1	Southbury	1	0
Easton	0	1	Southington	2	0
Enfield	0	1	Stonington	2	1
Glastonbury	2	1	Thompson	1	3
Griswold	0	1	Tolland	1	1
Guilford	3	4	Torrington	2	0
Haddam	1	0	Trumbull	1	0
Hamden	0	1	Union	1	0
Hartland	0	1	Voluntown	1	1
Harwinton	1	1	Waterford	2	1
Killingworth	0	1	Watertown	1	1
Lebanon	1	4	West Haven	1	0
Ledyard	2	0	Weston	1	0
Litchfield	1	0	Willington	2	2
Lyme	0	1	Winchester	0	4
Mansfield	1	3	Windham	2	1
Meriden	1	0	Windsor Locks	1	0
Middletown	1	0	Wolcott	0	1
Montville	1	0	Woodbridge	3	1
Newtown	3	2	Total	67	82

Table 11. Wild turkey harvest during the 2021 and 2022 fall archery seasons by Turkey Management Zone.

	Harvest	by Year		Harvest	by Year
Zone	2021	2022	Zone	2021	2022
1	2	0	7	11	8
2	4	8	8	2	2
3	5	8	9	2	4
<b>4A</b>	5	4	10	3	8
<b>4B</b>	2	3	11	11	10
5	3	10	12	14	12
6	3	5	Total	67	82

### Wild Turkey Brood Survey

Since 2007, turkey brood surveys have been conducted annually from June 1 through August 31 to assess annual fluctuations in statewide wild turkey recruitment. Volunteers and DEEP staff were requested to report turkey sightings, categorized by total hens, total poults, and total number of hens with poults, and beginning in 2021 tom and jake sightings were also collected. Numbers for 2021 male sightings were excluded due to low reporting. These observations were analyzed to obtain an annual productivity index and evaluate fall recruitment. The productivity index, or ratio of young per adult hen, was historically derived by dividing the total number of poults by the total number of hens. By evaluating recruitment over time, biologists can monitor changes and trends in Connecticut's statewide wild turkey population.

Modifications were made to the 2022 brood survey to improve data quality and bring data collection and analysis in line with the standards prepared by the National Wild Turkey Federation Technical Committee in 2019 (within Table 11 the previous calculation method can be found in parenthesis since 2018 with the new index analysis to be the sole number reported moving forward). Additionally, to increase data collection among volunteers, announcements of the survey were made in invitations to the Spring Wild Turkey Hunter Survey; to further improve data quality, revisions to instructions to improve clarity were implemented in mid-July.

The 2022 brood index was 3.87 young per adult for all hens observed and 4.47 young per adult for hens observed with at least one poult (Table 12, Figure 7). A total of 838 cooperators reported 386 wild turkey observations, including 684 hens (615 with broods and 69 without broods). The brood index was found to be variable throughout the summer months (Table 13). During 2021, the updated brood index was 4.31 young per adult for all hens observed and 4.84 young per adult for hens observed with at least one poult. Participants reported 328 observations, which included 579 hens and 1,920 poults. The brood survey information indicates that wild turkeys had a slightly above average (5-year average of 3.34) productivity in Connecticut during 2022. Variance in the poults reported by month is to be expected based on detectability and discernibility based on time of year. The 2022 spring weather was relatively warm and dry throughout Connecticut, continuing a trend from 2021. Fair conditions were present during both the nesting (May 1 – May 31) and brooding (June 1 – June 30) periods; while the nesting period

was drier than 2021 and two degrees warmer, the brooding period in 2022 was noted to be wetter (by 5/100" on average) and an average of three degrees cooler than 2021, however.

Table 12. Wild turkey brood survey data for Connecticut, 2007 – 2022.

Year	Total	Total	Total	Hens	Young	Young	Total	M:F	No. of
	Hens	Young	Hens and Young	without Young	per Hen	per Brood	Males	Ratio	Reports
2007	731	1,900	2,631	270	2.6	4.1	-	-	405
2008	448	988	1,436	330	2.2	4.3	-	-	224
2009	611	1,049	1,660	177	1.7	2.4	-	-	323
2010	472	1,686	2,158	105	3.6	4.6	-	-	278
2011	685	1,919	2,604	118	2.8	3.4	-	-	375
2012	435	1,089	1,524	293	2.5	3.7	-	-	244
2013	337	843	1,180	115	2.5	3.7	-	-	200
2014	579	1,561	2,140	194	2.7	4.1	-	-	313
2015	530	1,560	2,091	152	2.9	4.1	-	-	266
2016	401	1,120	1,521	123	2.8	4.0	-	-	202
2017	877	2,289	3,164	287	2.6	3.9	-	-	424
2018	1,223	2,955	4,178	378	2.89	4.06 (3.5)	-	-	644
					$(2.4)^{a}$				
2019	422	691	1,113	234	2.39	4.30 (3.6)	-	-	203
					(1.6)				
2020	324	920	1,244	53	3.26	4.63 (3.4)	-	-	176
					(2.8)				
2021	579	1920	2,499	89	4.31	4.84 (3.9)			328
					(3.3)				
2022	684	2,217	2,901	69	3.87	4.47 (3.9)	81	0.12	386
					(3.1)				

<sup>&</sup>lt;sup>a</sup> Data in parenthesis reflects a continuation of Connecticut's original Brood Survey Index (2007-2022) and is provided as a reference to contrast the NWTF analysis values in plain text.

5
4.5
4
3.5
3.5
2
1.5
1
0.5
0
2018
2019
2020
2021
2022

Years

Figure 7. Poults per hen from 2018-2022.

Table 13. Wild turkey brood survey data by month for Connecticut, 2022.

Month	Total Hens	Total Poults	Number of Reports	Hens Per Report	Poults Per Report
June	129	506	100	1.29	5.06
July	362	1,151	187	1.94	6.16
Aug.	193	560	99	1.95	5.66
Total	684	2,217	386	1.77	5.74

# **Population Dynamics**

In Connecticut, to obtain insight into long-term wild turkey population trends, biologists collect data on spring wild turkey harvest, hunter participation, and a hunter perception population growth index (PPGI). The spring season information was used to represent a population index, because this was the most popular season, with the highest number of hunters and harvest. The turkey population growth index is derived from a question on the annual Spring Turkey Hunter Survey (See Spring Hunter Survey Results, Figure 8). When all of these parameters were reviewed from 2000 to 2022, both indices show a downward trend (Figures 8 and 9), though a longer perspective and PPGI dataset might be desired to assess the overall trend of the population.

The ratio of juvenile to adults in the spring harvest, along with brood survey information, can also provide insight into wild turkey population dynamics. For example, in 2010 and 2019, data showed that a lower number of juvenile birds were harvested, indicating lower poult production the previous year (juvenile birds are approximately 1 year old). Therefore, it was expected that in 2009 and 2018 brood indices should be lower than average; the brood index in 2009 was 1.7 and

in 2018 was 2.4 (2018) (Table 11, Figure 10). In 2011, the juvenile to adult ratio was the highest it had been since 1994, indicating exceptional productivity; the brood index for 2010 was the highest ever recorded (3.6). It appears that the brood survey data can provide some insight as to what the juvenile harvest will be the following spring, at least when the brood index is exceptionally high or low; the indices are less reliable when they tend towards the long-term average.

Year

Figure 8. Perception of hunters regarding wild turkey population growth from 2000 – 2022.

Type — 5 Yr. Avg. — Index

Figure 9. Trend in spring turkey harvest success from 1981-2022.

Year Note: Data from 2022 reflects the change from RGBCS issued to RGB hunters used to calculate success rate.

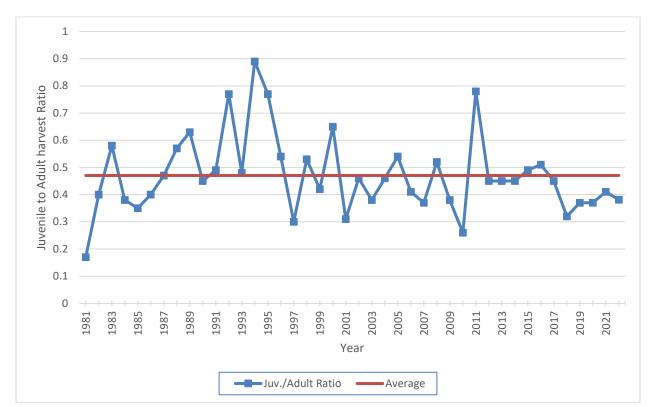


Figure 10. Ratio of juvenile to adult turkeys taken during Connecticut's spring wild turkey seasons, 1981 – 2022.

## **Summary**

The state's wild turkey population appears stable from 2021 to 2022. Spring harvest success rates varied little from the 2021 season (Figure 9), even when considering variations in source data (hunter numbers vs permit issuance varied by <400, the index would have remained flat as opposed to increased should issuance have been used). The brooding season offered reasonable conditions and the poult per hen index indicated a greater than average year of recruitment. While fall harvest increased by a significant percent, its scale (a total of 151 birds harvested statewide, 32% juvenile, 52% female) and the relatively mild winter were unlikely to cause significant impact on the breeding population for the spring of 2023.

# Appendices

Appendix A. Connecticut spring turkey harvest by town, 2012-2022.

Andover         7         10         7         7         4         14         12         10         11         10         8           Ansonia         1         1         0         1         0	Town	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ashford         28         21         13         20         31         35         34         24         14         16         23           Avon         1         3         3         3         3         1         4         3         5         1         1           Barkhamsted         5         8         6         12         4         12         10         9         25         8         12           Beacon Falls         9         5         9         9         6         6         8         4         6         3         2           Berlin         9         4         10         7         6         8         4         6         3         12           Bethile         1         3         3         0         5         3         6         4         3         1         2           Bethelle         1         3         3         0         5         3         6         4         3         1         2           Bethelle         1         3         3         1         7         4         6         8         8         10         4         5	Andover	7	10	7	7	4	14	12	10	11	10	8
Avon	Ansonia	1	1	0	1	0	0	0	0	0	0	0
Barkhamsted         5         8         6         12         4         12         10         9         25         8         12           Beacon Falls         9         5         9         9         6         6         8         4         6         3         2           Berlin         9         4         10         7         6         8         18         9         17         10         9           Bethany         5         4         4         5         1         9         1         2         2         3         1           Bethel         1         3         3         0         5         3         6         4         3         1         2           Bethlehem         6         3         1         7         4         6         8         8         10         4         5           Bollomfield         5         5         3         1         3         0         2         4         5         0         6           Bollom         1         1         2         2         0         2         4         5         7         5         7 <td>Ashford</td> <td>28</td> <td>21</td> <td>13</td> <td>20</td> <td>31</td> <td>35</td> <td>34</td> <td>24</td> <td>14</td> <td>16</td> <td>23</td>	Ashford	28	21	13	20	31	35	34	24	14	16	23
Beacon Falls         9         5         9         9         6         6         8         4         6         3         2           Berlin         9         4         10         7         6         8         18         9         17         10         9           Bethany         5         4         4         5         1         9         1         2         2         3         1           Bethele         1         3         3         0         5         3         6         4         3         1         2           Bethlehem         6         3         1         7         4         6         8         8         10         4         5           Bloomfield         5         5         3         1         3         0         2         4         5         0         6         6         8         10         4         5         8         13         5         7         5         7         7         7         7         7         7         7         7         7         7         7         7         8         7         7         1         2	Avon	1	3	3	3	3	1	4	3	5	1	1
Berlin	Barkhamsted	5	8	6	12	4	12	10	9	25	8	12
Bethany         5         4         4         5         1         9         1         2         2         3         1           Bethel         1         3         3         0         5         3         6         4         3         1         2           Bethlehem         6         3         1         7         4         6         8         8         10         4         5           Bloomfield         5         5         3         1         3         0         2         4         5         0         6           Bolton         4         8         3         2         4         5         4         2         3         3         1           Borlon         11         3         2         4         5         8         13         5         7         5         7           Branford         1         2         2         0 <td< td=""><td>Beacon Falls</td><td>9</td><td>5</td><td>9</td><td>9</td><td>6</td><td>6</td><td>8</td><td>4</td><td>6</td><td>3</td><td>2</td></td<>	Beacon Falls	9	5	9	9	6	6	8	4	6	3	2
Bethel         1         3         3         0         5         3         6         4         3         1         2           Bethlehem         6         3         1         7         4         6         8         8         10         4         5           Bloomfield         5         5         3         1         3         0         2         4         5         0         6           Bolton         4         8         3         2         4         5         4         2         3         3         1           Botton         4         8         3         2         4         5         8         13         5         7         5         7           Broad         1         2         2         0         2         0	Berlin	9	4	10	7	6	8	18	9	17	10	9
Bethlehem         6         3         1         7         4         6         8         8         10         4         5           Bloomfield         5         5         3         1         3         0         2         4         5         0         6           Bolton         4         8         3         2         4         5         4         2         3         3         1           Bozrah         11         3         2         4         5         8         13         5         7         5         7           Branford         1         2         2         0	Bethany	5	4	4	5	1	9	1	2	2	3	1
Bloomfield	Bethel	1	3	3	0	5	3	6	4	3	1	2
Bolton         4         8         3         2         4         5         4         2         3         3         1           Bozrah         11         3         2         4         5         8         13         5         7         5         7           Branford         1         2         2         0         2         0	Bethlehem	6	3	1	7	4	6	8	8	10	4	5
Bozrah         11         3         2         4         5         8         13         5         7         5         7           Branford         1         2         2         0         2         0	Bloomfield	5	5	3	1	3	0	2	4	5	0	6
Branford         1         2         2         0         2         0         0         0           Bridgeport         0	Bolton	4	8	3	2	4	5	4	2	3	3	1
Bridgeport         0         0         0         0         0         1         0         0         0           Bridgewater         4         4         4         6         8         2         9         10         12         10         8           Bristol         0         1         2         1         3         2         1         5         5         4         3           Brookfield         3         2         1         2         0         1         1         0         1         1         2           Brooklyn         10         10         2         3         12         11         12         11         12         10         10           Brooklyn         10         10         2         3         12         11         12         11         12         10         10           Brooklyn         10         10         2         3         12         11         12         11         12         10         10         10         10         10         10         10         10         10         11         11         11         19         18         18         12 <td>Bozrah</td> <td>11</td> <td>3</td> <td>2</td> <td>4</td> <td>5</td> <td>8</td> <td>13</td> <td>5</td> <td>7</td> <td>5</td> <td>7</td>	Bozrah	11	3	2	4	5	8	13	5	7	5	7
Bridgewater         4         4         4         6         8         2         9         10         12         10         8           Bristol         0         1         2         1         3         2         1         5         5         4         3           Brookfield         3         2         1         2         0         1         1         0         1         1         2           Brooklyn         10         10         2         3         12         11         12         11         12         10         10           Burlington         11         8         5         7         6         11         4         4         0         5         3           Canaan         20         11         14         8         11         19         8         18         22         14         19           Canterbury         12         13         7         9         5         14         15         13         16         9         18           Canton         8         8         7         7         14         7         11         5         8         5	Branford	1	2	2	0	2	0	0	2	0	0	0
Bristol         0         1         2         1         3         2         1         5         5         4         3           Brookfield         3         2         1         2         0         1         1         0         1         1         2           Brooklyn         10         10         2         3         12         11         12         11         12         10         10           Burlington         11         8         5         7         6         11         4         4         0         5         3           Canaan         20         11         14         8         11         19         8         18         22         14         19           Canterbury         12         13         7         9         5         14         15         13         16         9         18           Cantor         8         8         7         7         14         7         11         5         8         5         5           Chaplin         8         10         9         8         8         11         11         13         14         15	Bridgeport	0	0	0	0	0	0	0	1	0	0	0
Brookfield         3         2         1         2         0         1         1         0         1         1         2           Brooklyn         10         10         2         3         12         11         12         11         12         10         10           Burlington         11         8         5         7         6         11         4         4         0         5         3           Canaan         20         11         14         8         11         19         8         18         22         14         19           Canterbury         12         13         7         9         5         14         15         13         16         9         18           Canton         8         8         7         7         14         7         11         5         8         5         5           Chaplin         8         10         9         8         8         11         11         13         14         15         12           Cheshire         10         6         4         4         1         7         6         2         4         4	Bridgewater	4	4	4	6	8	2	9	10	12	10	8
Brooklyn         10         10         2         3         12         11         12         11         12         10         10           Burlington         11         8         5         7         6         11         4         4         0         5         3           Canaan         20         11         14         8         11         19         8         18         22         14         19           Canterbury         12         13         7         9         5         14         15         13         16         9         18           Canton         8         8         7         7         14         7         11         5         8         5         5           Chaplin         8         10         9         8         8         11         11         13         14         15         12           Cheshire         10         6         4         4         1         7         6         2         4         4         2           Chester         4         5         5         4         3         4         9         4         7         2	Bristol	0	1	2	1	3	2	1	5	5	4	3
Burlington         11         8         5         7         6         11         4         4         0         5         3           Canaan         20         11         14         8         11         19         8         18         22         14         19           Canterbury         12         13         7         9         5         14         15         13         16         9         18           Canton         8         8         7         7         14         7         11         5         8         5         5           Chaplin         8         10         9         8         8         11         11         13         14         15         12           Cheshire         10         6         4         4         1         7         6         2         4         4         2           Chester         4         5         5         4         3         4         9         4         7         2         1           Clinton         0         0         1         0         2         1         1         0         1         0         0 <td>Brookfield</td> <td>3</td> <td>2</td> <td>1</td> <td>2</td> <td>0</td> <td>1</td> <td>1</td> <td>0</td> <td>1</td> <td>1</td> <td>2</td>	Brookfield	3	2	1	2	0	1	1	0	1	1	2
Canaan         20         11         14         8         11         19         8         18         22         14         19           Canterbury         12         13         7         9         5         14         15         13         16         9         18           Canton         8         8         7         7         14         7         11         5         8         5         5           Chaplin         8         10         9         8         8         11         11         13         14         15         12           Chaplin         8         10         9         8         8         11         11         13         14         15         12           Chaplin         8         10         9         8         8         11         11         13         14         15         12           Chaplin         8         10         9         8         8         11         11         13         14         2           Chester         4         5         5         4         3         4         9         4         7         2         1	Brooklyn	10	10	2	3	12	11	12	11	12	10	10
Canterbury         12         13         7         9         5         14         15         13         16         9         18           Canton         8         8         7         7         14         7         11         5         8         5         5           Chaplin         8         10         9         8         8         11         11         13         14         15         12           Cheshire         10         6         4         4         1         7         6         2         4         4         2           Chester         4         5         5         4         3         4         9         4         7         2         1           Clinton         0         0         1         0         2         1         1         0         1         0         0           Collected         11         15         9         13         26         7         17         14         20         21         18           Collebrook         15         10         12         9         4         11         5         15         6         6 <t< td=""><td>Burlington</td><td>11</td><td>8</td><td>5</td><td>7</td><td>6</td><td>11</td><td>4</td><td>4</td><td>0</td><td>5</td><td>3</td></t<>	Burlington	11	8	5	7	6	11	4	4	0	5	3
Canton         8         8         7         7         14         7         11         5         8         5         5           Chaplin         8         10         9         8         8         11         11         13         14         15         12           Cheshire         10         6         4         4         1         7         6         2         4         4         2           Chester         4         5         5         4         3         4         9         4         7         2         1           Clinton         0         0         1         0         2         1         1         0         1         0         0           Colchester         11         15         9         13         26         7         17         14         20         21         18           Colebrook         15         10         12         9         4         11         5         15         6         6         8           Columbia         4         7         3         3         4         10         8         3         13         5         9 <td>Canaan</td> <td>20</td> <td>11</td> <td>14</td> <td>8</td> <td>11</td> <td>19</td> <td>8</td> <td>18</td> <td>22</td> <td>14</td> <td>19</td>	Canaan	20	11	14	8	11	19	8	18	22	14	19
Chaplin         8         10         9         8         8         11         11         13         14         15         12           Cheshire         10         6         4         4         1         7         6         2         4         4         2           Chester         4         5         5         4         3         4         9         4         7         2         1           Clinton         0         0         1         0         2         1         1         0         1         0         0           Colchester         11         15         9         13         26         7         17         14         20         21         18           Colebrook         15         10         12         9         4         11         5         15         6         6         8           Columbia         4         7         3         3         4         10         8         3         13         5         9           Cornwall         19         15         24         10         16         16         16         20         31         20	Canterbury	12	13	7	9	5	14	15	13	16	9	18
Cheshire         10         6         4         4         1         7         6         2         4         4         2           Chester         4         5         5         4         3         4         9         4         7         2         1           Clinton         0         0         1         0         2         1         1         0         1         0         0           Colchester         11         15         9         13         26         7         17         14         20         21         18           Colebrook         15         10         12         9         4         11         5         15         6         6         8           Columbia         4         7         3         3         4         10         8         3         13         5         9           Cornwall         19         15         24         10         16         16         16         20         31         20         33           Coventry         24         19         18         20         18         27         32         22         30         21	Canton	8	8	7	7	14	7	11	5	8	5	5
Chester         4         5         5         4         3         4         9         4         7         2         1           Clinton         0         0         1         0         2         1         1         0         1         0         0           Colchester         11         15         9         13         26         7         17         14         20         21         18           Colebrook         15         10         12         9         4         11         5         15         6         6         8           Columbia         4         7         3         3         4         10         8         3         13         5         9           Cornwall         19         15         24         10         16         16         16         20         31         20         33           Coventry         24         19         18         20         18         27         32         22         30         21         19           Cromwell         2         3         5         5         5         6         5         3         5         0	Chaplin	8	10	9	8	8	11	11	13	14	15	12
Clinton         0         0         1         0         2         1         1         0         1         0         0           Colchester         11         15         9         13         26         7         17         14         20         21         18           Colebrook         15         10         12         9         4         11         5         15         6         6         8           Columbia         4         7         3         3         4         10         8         3         13         5         9           Cornwall         19         15         24         10         16         16         16         20         31         20         33           Coventry         24         19         18         20         18         27         32         22         30         21         19           Cromwell         2         3         5         5         5         6         5         3         5         0         0           Danbury         1         2         3         3         2         2         10         5         4         2	Cheshire	10	6	4	4	1	7	6	2	4	4	2
Colchester         11         15         9         13         26         7         17         14         20         21         18           Colebrook         15         10         12         9         4         11         5         15         6         6         8           Columbia         4         7         3         3         4         10         8         3         13         5         9           Cornwall         19         15         24         10         16         16         16         20         31         20         33           Coventry         24         19         18         20         18         27         32         22         30         21         19           Cromwell         2         3         5         5         5         6         5         3         5         0         0           Danbury         1         2         3         3         2         2         10         5         4         2         4           Darien         0         0         2         0         0         0         0         0         0         0	Chester	4	5	5	4	3	4	9	4	7	2	1
Colebrook         15         10         12         9         4         11         5         15         6         6         8           Columbia         4         7         3         3         4         10         8         3         13         5         9           Cornwall         19         15         24         10         16         16         16         20         31         20         33           Coventry         24         19         18         20         18         27         32         22         30         21         19           Cromwell         2         3         5         5         6         5         3         5         0         0           Danbury         1         2         3         3         2         2         10         5         4         2         4           Darien         0         0         2         0         0         0         0         2         0         0	Clinton	0	0	1	0	2	1	1	0	1	0	0
Columbia         4         7         3         3         4         10         8         3         13         5         9           Cornwall         19         15         24         10         16         16         16         20         31         20         33           Coventry         24         19         18         20         18         27         32         22         30         21         19           Cromwell         2         3         5         5         6         5         3         5         0         0           Danbury         1         2         3         3         2         2         10         5         4         2         4           Darien         0         0         2         0         0         0         0         2         0         0	Colchester	11	15	9	13	26	7	17	14	20	21	18
Cornwall         19         15         24         10         16         16         16         20         31         20         33           Coventry         24         19         18         20         18         27         32         22         30         21         19           Cromwell         2         3         5         5         5         6         5         3         5         0         0           Danbury         1         2         3         3         2         2         10         5         4         2         4           Darien         0         0         2         0         0         0         0         2         0         0	Colebrook	15	10	12	9	4	11	5	15	6	6	8
Coventry         24         19         18         20         18         27         32         22         30         21         19           Cromwell         2         3         5         5         5         6         5         3         5         0         0           Danbury         1         2         3         3         2         2         10         5         4         2         4           Darien         0         0         2         0         0         0         0         2         0         0	Columbia	4	7	3	3	4	10	8	3	13	5	9
Cromwell         2         3         5         5         5         6         5         3         5         0         0           Danbury         1         2         3         3         2         2         10         5         4         2         4           Darien         0         0         2         0         0         0         0         2         0         0	Cornwall	19	15	24	10	16	16	16	20	31	20	33
Danbury         1         2         3         3         2         2         10         5         4         2         4           Darien         0         0         2         0         0         0         0         2         0         0	Coventry	24	19	18	20	18	27	32	22	30	21	19
Darien 0 0 2 0 0 0 0 2 0 0	Cromwell	2	3	5	5	5	6	5	3	5	0	0
	Danbury	1	2	3	3	2	2	10	5	4	2	4
Deep River         0         4         7         0         2         3         3         5         5         1         1	Darien	0	0	2	0	0	0	0	0	2	0	0
	Deep River	0	4	7	0	2	3	3	5	5	1	1

Town	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Derby	0	0	0	0	0	0	0	0	1	1	1
Durham	11	12	10	9	14	11	17	12	12	9	8
East Granby	8	5	3	2	8	4	4	5	4	9	5
East Haddam	15	26	15	22	16	25	25	7	19	12	12
East Hampton	7	5	9	4	7	11	2	10	12	9	5
East Hartford	0	0	1	1	1	4	0	0	1	0	0
East Haven	3	0	1	0	1	1	0	0	0	0	1
East Lyme	14	8	12	15	13	14	15	13	12	8	7
East Windsor	15	11	10	20	1	11	15	17	21	15	13
Eastford	5	10	11	13	22	27	19	12	19	14	9
Easton	6	3	0	3	3	11	13	5	15	10	4
Ellington	5	15	10	15	9	11	18	5	10	7	10
Enfield	9	5	4	5	6	17	8	13	11	9	5
Essex	3	3	6	2	4	0	0	1	0	0	0
Fairfield	0	0	2	1	4	1	3	2	3	1	1
Farmington	4	0	0	0	0	0	2	1	1	2	0
Franklin	11	10	14	10	16	16	10	11	13	12	4
Glastonbury	7	13	18	12	13	11	11	15	21	12	10
Goshen	18	9	13	14	13	18	17	14	13	10	7
Granby	21	5	13	13	15	15	8	10	17	10	5
Greenwich	0	0	0	1	0	3	4	3	4	1	1
Griswold	16	12	20	14	19	10	17	21	19	15	17
Groton	6	4	1	5	4	2	4	2	7	3	4
Guilford	13	6	7	8	10	8	12	6	9	7	7
Haddam	20	17	10	23	31	27	21	14	17	13	15
Hamden	7	7	5	5	4	5	10	10	12	1	4
Hampton	8	12	10	8	8	18	12	12	18	10	12
Hartford	1	0	0	0	0	0	0	0	0	0	1
Hartland	16	18	9	10	13	17	15	13	18	8	16
Harwinton	11	16	12	16	25	22	16	12	13	13	16
Hebron	4	8	12	5	8	10	21	17	15	12	12
Kent	15	15	9	14	12	16	11	8	25	7	9
Killingly	14	9	2	5	9	10	10	11	14	20	10
Killingworth	5	4	4	13	13	8	9	12	10	6	11
Lebanon	36	30	27	31	24	27	31	36	38	28	22
Ledyard	5	8	6	7	12	7	14	16	15	15	15
Lisbon	5	5	2	2	4	10	10	4	10	4	8
Litchfield	19	22	13	14	12	20	15	9	18	23	23
Lyme	13	18	19	11	20	29	18	13	10	6	3
Madison	1	0	0	3	0	7	1	0	3	5	0

Town	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Manchester	5	3	1	1	0	0	0	0	0	2	0
Mansfield	13	11	11	18	15	16	17	14	15	12	9
Marlborough	3	3	11	6	7	13	2	9	10	5	10
Meriden	2	0	2	0	3	0	1	3	2	2	1
Middlebury	1	3	3	1	3	7	0	2	2	1	2
Middlefield	13	10	6	12	12	15	3	10	10	4	13
Middletown	12	11	13	21	18	12	12	15	21	13	12
Milford	3	1	5	3	3	4	3	2	4	3	4
Monroe	2	4	0	2	5	4	5	3	4	1	3
Montville	15	10	8	12	9	15	16	7	13	7	1
Morris	6	6	3	7	3	7	5	6	8	8	6
Naugatuck	6	7	3	5	6	3	2	3	6	6	5
New Canaan	0	0	0	1	1	3	1	1	1	1	0
New Fairfield	6	2	4	3	5	2	7	4	7	6	5
New Hartford	16	22	20	14	15	23	18	18	24	14	16
New London	0	0	0	0	0	0	0	0	0	0	1
New Milford	16	16	8	24	18	15	8	14	15	15	19
Newington	0	0	0	0	0	0	0	0	1	0	0
Newtown	13	16	10	9	17	18	12	15	15	15	10
Norfolk	14	11	19	12	13	9	17	6	10	17	12
North Branford	4	3	8	6	5	7	3	2	4	3	4
North Canaan	5	7	4	4	3	3	6	2	8	3	1
North Haven	8	5	4	5	5	8	6	2	6	3	0
N. Stonington	16	12	16	15	18	26	27	23	28	23	22
Norwalk	0	0	0	0	0	1	1	0	3	1	3
Norwich	5	0	0	5	3	4	0	2	6	6	4
Old Lyme	6	7	6	7	9	9	7	10	8	5	3
Old Saybrook	1	0	2	2	1	1	1	0	0	0	1
Orange	3	4	5	12	7	7	1	3	3	2	5
Oxford	17	10	5	7	10	7	7	10	13	4	7
Plainfield	9	18	14	12	20	18	17	12	16	16	7
Plainville	4	1	3	1	1	5	5	1	0	0	0
Plymouth	7	9	7	8	5	7	10	7	17	4	9
Pomfret	15	21	15	18	20	19	22	18	21	20	20
Portland	8	5	9	4	11	11	5	10	10	7	4
Preston	10	9	6	16	9	8	13	8	11	13	6
Prospect	3	2	3	2	4	1	3	0	2	2	7
Putnam	11	9	6	5	6	7	7	3	8	1	5
Redding	17	23	12	12	5	10	8	11	6	12	5
Ridgefield	1	2	2	2	6	4	5	4	7	8	1

Town	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Rocky Hill	9	7	2	1	3	4	4	3	1	1	1
Roxbury	10	6	4	10	3	12	9	0	2	2	3
Salem	15	12	7	8	7	11	10	6	8	2	6
Salisbury	18	22	11	11	14	19	11	14	17	8	11
Scotland	25	19	17	18	14	26	28	24	14	12	16
Seymour	3	8	4	4	6	5	3	0	4	3	1
Sharon	25	17	13	19	18	17	11	22	22	33	24
Shelton	3	0	2	0	5	9	3	6	9	2	2
Sherman	5	5	3	3	3	5	3	4	4	0	0
Simsbury	4	2	6	1	1	6	4	5	4	6	3
Somers	10	12	8	8	13	11	21	4	9	15	8
Southbury	9	5	11	10	10	18	10	10	15	4	7
Southington	3	4	3	3	6	1	7	1	3	3	2
South Windsor	5	8	7	9	6	14	5	8	15	13	6
Sprague	6	6	1	3	7	2	6	4	6	1	3
Stafford	20	20	21	16	33	21	29	19	21	14	22
Stamford	1	5	6	5	4	2	2	1	0	0	1
Sterling	15	8	9	15	10	14	19	14	29	13	13
Stonington	11	11	12	19	12	15	9	16	15	8	8
Stratford	2	0	0	2	0	3	1	1	2	1	0
Suffield	32	17	28	9	25	28	20	20	26	24	12
Thomaston	4	5	2	1	3	1	0	1	2	4	6
Thompson	17	25	12	15	22	26	33	35	32	32	19
Tolland	9	6	3	5	4	5	6	8	6	7	7
Torrington	15	15	13	7	16	13	17	16	17	19	9
Trumbull	0	0	0	3	0	1	0	0	1	0	0
Union	12	7	14	9	12	15	18	8	17	14	12
Vernon	0	2	1	2	4	3	2	5	2	3	3
Voluntown	14	10	9	14	19	16	20	28	22	27	23
Wallingford	8	6	8	8	5	11	12	9	4	7	7
Warren	14	10	7	7	8	15	15	17	10	13	7
Washington	7	10	9	18	13	18	13	10	17	14	12
Waterbury	0	0	0	1	0	0	0	0	1	1	0
Waterford	9	6	8	15	10	16	10	4	10	3	3
Watertown	14	2	2	4	2	6	10	6	11	11	10
Westbrook	2	2	3	1	0	3	0	0	3	0	0
West Haven	0	0	0	0	0	1	0	0	2	0	0
West Hartford	0	0	0	1	0	0	0	0	0	0	0
Weston	0	0	1	0	1	0	0	3	1	1	0
Westport	0	0	0	0	1	1	0	0	0	0	0

Town	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Wethersfield	0	0	0	0	0	0	1	0	3	2	0
Willington	16	18	12	20	10	15	20	25	13	11	3
Wilton	0	0	1	0	2	1	1	1	3	3	3
Winchester	15	7	9	7	8	14	10	15	17	13	7
Windham	10	13	10	12	5	19	14	9	9	17	15
Windsor	1	1	0	1	2	8	0	0	3	5	2
Windsor Locks	0	0	0	0	1	0	0	0	0	1	0
Wolcott	3	3	4	4	0	3	3	4	4	2	0
Woodbridge	1	0	0	4	0	0	3	1	4	0	2
Woodbury	1	6	7	7	5	12	8	15	15	16	8
Woodstock	30	33	19	42	49	46	48	31	44	25	24
Town Not Reported	0	0	5	0	0	0	0	0	0	0	0
Total	1,364	1,248	1,118	1,232	1,335	1,584	1,504	1,324	1,652	1,247	1,139

Appendix B. Spring turkey harvest from state-owned and managed lands, 2021 and 2022.

	No. Birds Harvested		Sq. Miles	Harv./mi <sup>2</sup>	
State Land	2021	2022	Ivilles	2021	2022
Aldo Leopold WMA	2	2	0.87	2.3	2.3
Algonquin SF	3	7	1.04	2.1	6.7
American Legion	2	1	1.62	1.2	0.6
Babcock WMA	1	0	2.36	0.4	0
Barber Pond WMA	1	1	0.11	9.1	9.1
Barn Island WMA	1	1	1.58	0.6	0.6
Bartlett Brook WMA	0	3	0.56	0	5.4
Bear Hill WMA	1	2	0.48	1.8	4.2
Beaver Brook SP	3	0	0.48	6.25	0
Bishops Swamp WMA	5	2	1.18	4.2	1.7
Bloomfield FCA	1	0	0.51	2.0	0
Cent. Water. SF (Canaan Block)	0	1	0.23	0	4.3
Cockaponset SF	17	16	26.85	0.6	0.6
Colebrook Reservoir-MDC	1	0	6.50	0.1	0
Durham Meadows WMA	1	0	0.80	1.25	0
Eightmile River WMA	5	1	0.48	10.4	2.1
Ellithorpe Flood Control Area	0	1	0.68	0	1.5
Enders SF	2	0	0.55	3.6	0
Flaherty FTA*	1	0	0.79	1.3	0
Franklin Swamp WMA	1	1	1.07	0.9	0.9
Goshen WMA	2	2	1.51	1.3	1.3
Great Swamp FCA	6	0	0.53	11.3	0
Hancock Brook Lake	2	0	1.10	1.8	0
Higganum Meadows WMA	0	1	0.40	0	2.5
Housatonic River WMA	3	2	0.87	3.4	2.3
Housatonic SF	19	15	17.63	1.1	0.9
John Minetto SP	0	1	1.12	0	0.9
Kollar WMA	1	3	1.40	0.7	2.1
Larson Lot WMA	4	1	0.38	10.5	2.6
Mad River Dam FCA	3	1	0.70	4.3	1.4
Mansfield Hollow Lake	0	4	3.14	0	1.3
Mattatuck SF	3	16	7.0	0.4	2.3
McKinney NWR Units	0	1	1.39	0	1.4
MDC – Colebrook	0	3	0.46	0	0.5
Reservoir/Hogback Dam		4	0.42	0	0.7
Meadow Brook WMA	0	4	0.42	0	9.5
Meshomasic SF	8	5	14.22	0.6	0.4

	No. Birds Harvested		Sq. Miles	Harv./mi <sup>2</sup>	
State Land	2021	2022	IVIIICS	2021	2022
Messerschmidt Pond WMA	1	0	0.69	1.4	0
Mohawk SF Ziegler/Johnson Tract	1	0	0.51	2.0	0
Mohegan SF	0	1	1.50	0	0.7
Nassahegon SF	2	1	1.78	2.6	0.6
Natchaug SF	24	24	7.93	3.0	3.0
Naugatuck SF	8	4	21.15	0.4	0.2
Naugatuck SF (Great Hill Block)	0	1	0.37	0	2.7
Nehantic SF	5	3	7.91	0.6	0.4
Nepaug SF	4	3	2.10	2.0	1.4
Newgate WMA	1	0	0.70	1.4	0
Nipmuck SF	5	5	14.40	0.3	0.3
Northfield Brook Lake	1	0	0.31	3.2	0
NU-Maromas Coop WMA	0	1	2.48	0	0.4
NU-Skiff Mtn. Coop WMA	2	4	1.13	2.8	3.5
Nye Holman SF	0	2	1.23	0	1.6
Pachaug SF	29	23	40.84	0.7	0.6
Paugussett SF	2	2	3.04	0.7	0.7
Paugnut SF	2	2	2.7	0.7	0.7
Peoples SF	4	4	4.60	0.9	0.9
Pootatuck SF	3	3	1.72	1.7	1.7
Quaddick SF	3	2	0.90	3.3	2.2
Quinebaug River WMA	2	2	2.20	0.9	0.9
Quinnipac River SP	3	1	0.53	5.7	1.1
Quinnipac River WMA	1	2	0.88	1.1	0.9
Robbins Swamp WMA	3	3	2.45	1.2	1.2
Roraback WMA	1	2	3.10	0.3	0.6
Rose Hill WMA	2	2	1.08	1.9	1.9
Salmon River SF	8	11	10.90	0.7	1.0
Shenipsit SF	5	3	11.85	0.4	0.3
Silvio O. Conte NWR	0	1	1.23	0	0.8
Simsbury WMA	4	1	0.57	7.0	1.8
Spignesi WMA	2	4	0.82	2.4	4.9
Sucker Brook FCA	2	2	0.24	8.3	8.3
Suffield WMA	1	1	0.30	3.3	3.3
Talbot WMA	1	3	0.79	1.3	3.8
Tankerhoosen WMA	2	0	0.78	2.6	0
Thomaston Dam*	2	0	1.33	1.5	0
Trout Brook Valley SP	3	1	0.47	6.4	2.1
Tunxis SF	9	15	15.88	0.6	0.9

State Land	No. Birds Harvested 2021	2022	Sq. Miles	Harv./mi <sup>2</sup> 2021	2022
Wagnunk Meadows	1	0	1.00	1	0
West Thompson Dam	4	1	1.71	2.3	0.6
Wyantenock SF	2	5	6.38	0.3	0.8
Yale Forest	4	8	12.03	0.3	0.7

Appendix C. Ruffed grouse observations (seen or heard) from turkey hunter surveys, 2012-2022.

Town	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Andover	0	0	1	0	0	0	0	0	0	0	0
Ansonia	0	0	0	1	0	0	0	0	0	0	0
Ashford	0	2	2	0	3	2	2	1	5	1	2
Barkhamsted	1	1	0	1	1	1	4	2	2	1	2
Beacon Falls	0	0	0	0	0	0	1	0	1	0	1
Berlin	1	0	0	0	0	0	0	1	0	0	0
Bethany	0	0	0	0	0	1	0	0	1	0	0
Bethel	0	0	0	0	0	0	0	1	0	0	0
Bethlehem	1	0	0	0	0	0	0	1	0	0	0
Bloomfield	0	1	1	0	0	0	1	0	0	0	1
Bristol	0	0	1	0	0	0	0	1	0	0	0
Burlington	0	0	0	1	0	1	0	0	0	0	0
Canaan	4	4	2	3	3	2	2	4	7	0	1
Canterbury	0	0	0	0	1	1	0	0	1	1	1
Canton	0	0	0	1	0	0	0	0	0	0	0
Chaplin	0	1	0	0	0	1	1	0	1	1	1
Cheshire	0	0	0	0	1	0	0	0	1	1	0
Chester	0	0	0	0	0	1	0	0	0	0	0
Clinton	0	0	0	0	1	0	0	0	4	0	0
Colchester	1	0	0	2	0	0	0	1	1	3	1
Colebrook	2	3	2	3	1	3	1	5	0	3	3
Columbia	1	1	0	0	0	0	0	0	1	3	0
Cornwall	3	4	3	4	2	3	3	1	3	0	2
Coventry	0	0	1	0	1	1	0	0	0	0	0
Danbury	0	0	0	0	1	0	0	0	0	0	0
Deep River	0	0	0	0	0	0	0	0	0	0	1
Durham	0	0	0	1	0	0	0	0	1	0	0
East Granby	1	2	0	0	1	2	3	0	1	0	0
East Haddam	0	0	1	1	0	0	0	0	3	0	0
East Hampton	0	0	1	0	0	0	0	0	1	0	0
East Hartford	0	0	0	0	0	0	0	0	1	0	0
East Haven	0	0	0	0	1	0	0	0	3	0	0
East Lyme	0	0	0	0	0	1	2	0	0	0	0
East Windsor	0	0	0	0	0	1	0	2	0	0	2
Easton	0	0	0	0	0	0	0	0	0	1	0
Eastford	2	1	0	1	0	4	2	2	0	1	1
Ellington	0	0	0	0	0	4	2	1	0	1	0

Town	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Enfield	0	0	1	0	0	0	0	1	0	0	1
Glastonbury	2	1	0	0	1	0	0	1	3	0	0
Goshen	3	3	6	5	5	3	5	6	5	4	3
Granby	1	0	0	0	2	2	2	1	1	1	2
Greenwich	1	0	0	0	0	0	0	0	0	0	0
Griswold	0	0	0	0	0	0	0	0	0	1	0
Groton	0	0	0	0	0	0	0	0	1	0	0
Guilford	0	0	1	0	0	0	0	1	1	0	0
Haddam	0	0	0	0	1	0	0	1	2	0	0
Hamden	0	0	1	0	0	0	0	0	0	0	0
Hampton	0	0	0	0	1	0	0	1	0	0	0
Hartland	1	4	2	6	1	5	8	7	5	6	6
Harwinton	3	0	3	0	2	2	1	1	1	3	2
Hebron	0	0	1	0	0	0	0	0	3	1	1
Kent	1	2	0	2	0	1	0	0	4	0	0
Killingly	0	0	0	1	0	1	2	1	0	0	1
Killingworth	0	0	0	1	0	0	0	0	0	0	0
Lebanon	3	2	0	1	0	1	2	0	0	0	0
Ledyard	0	1	0	1	0	0	1	0	2	0	0
Lisbon	0	0	0	0	0	0	0	0	0	1	0
Litchfield	2	1	1	2	2	1	1	0	1	0	0
Lyme	1	1	0	2	0	0	0	0	1	0	1
Madison	0	0	0	1	0	1	0	0	0	0	0
Mansfield	0	0	1	1	3	1	0	0	3	0	0
Marlborough	0	0	0	0	0	0	0	0	0	1	0
Meriden	0	0	0	0	0	0	0	0	3	0	0
Middlefield	0	0	0	1	0	1	0	0	0	0	0
Middletown	0	0	0	0	0	0	1	0	4	1	0
Monroe	0	0	0	1	0	1	0	0	0	0	0
Morris	0	3	1	0	0	0	0	0	0	0	0
Naugatuck	1	1	1	0	0	1	0	0	1	0	1
New Canaan	0	0	0	0	0	0	0	0	1	0	0
New Fairfield	1	0	1	1	0	1	0	0	0	1	1
New Hartford	1	1	0	1	0	1	0	0	0	3	0
New Milford	0	0	0	2	0	3	0	1	0	0	0
Newtown	0	1	0	0	0	0	1	0	5	1	1
Norfolk	3	3	1	2	2	1	2	2	1	1	2
North Branford	0	0	0	0	1	0	0	0	0	0	0

Town	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
North Canaan	0	0	1	0	0	0	2	2	1	2	0
North Franklin	0	0	0	0	0	0	0	0	3	0	0
North Haven	0	1	0	1	1	0	1	0	1	0	0
N Stonington	2	1	0	0	0	0	0	0	0	0	0
Old Lyme	1	0	0	0	0	1	1	0	0	0	0
Oxford	1	0	0	0	0	2	1	0	1	0	0
Plainfield	0	0	0	0	0	1	5	3	4	1	0
Plymouth	0	2	1	0	0	1	2	1	2	0	1
Pomfret	2	0	0	1	0	1	4	0	2	0	0
Portland	0	2	0	0	0	0	0	0	2	1	0
Preston	0	0	0	0	1	0	0	0	1	0	1
Putnam	0	0	0	0	0	0	0	1	0	0	0
Redding	0	1	0	0	0	0	0	0	3	0	0
Ridgefield	0	0	0	0	0	0	0	0	1	0	0
Salisbury	1	3	0	1	1	2	0	1	0	0	2
Salem	0	1	0	1	0	0	1	0	0	0	0
Scotland	0	0	0	0	1	0	0	0	3	0	0
Seymour	1	0	0	0	0	0	0	2	0	0	0
Sharon	4	6	4	5	3	3	0	0	3	1	2
Sherman	0	1	0	0	0	0	0	0	0	0	0
Simsbury	0	0	0	0	0	0	0	0	4	0	0
Somers	0	1	0	0	0	1	0	0	4	0	1
South Windsor	0	0	0	0	0	0	0	0	1	0	0
Southbury	1	0	1	0	0	1	2	1	2	0	1
Southington	0	0	0	0	0	1	0	0	2	0	0
Sprague	0	0	0	0	0	1	1	0	0	0	0
Stafford	1	3	3	1	1	2	1	1	3	0	1
Stamford	0	0	0	0	1	0	0	0	0	0	0
Sterling	0	1	0	0	0	0	0	0	1	0	0
Stonington	0	0	0	0	0	0	0	0	4	0	0
Suffield	1	1	0	0	1	0	1	1	3	0	2
Thompson	0	0	0	0	0	0	0	2	1	1	1
Tolland	0	1	1	1	0	1	0	0	3	0	1
Torrington	0	1	0	2	1	0	0	3	2	1	0
Union	2	0	0	1	1	0	1	0	1	0	0
Vernon	0	0	0	0	0	0	0	0	1	0	0
Voluntown	0	1	0	1	0	0	1	1	0	1	0
Warren	1	5	4	4	3	2	0	1	0	0	1

Town	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Washington	0	1	0	0	0	1	1	0	1	0	1
Waterbury	0	0	0	0	0	0	1	0	0	0	0
Waterford	0	0	0	0	0	0	1	0	1	0	0
Watertown	0	0	0	0	6	0	0	0	1	0	0
Westbrook	0	0	1	0	1	1	0	0	0	0	0
Weston	0	0	1	0	0	0	0	0	1	0	0
Westport	0	0	0	1	0	0	0	0	0	0	0
Willington	1	0	1	0	0	1	1	0	0	0	1
Wilton	0	2	2	0	0	0	0	0	1	0	0
Winchester	0	1	1	1	1	1	0	0	0	1	0
Windham	0	1	0	0	0	1	1	1	0	0	0
Windsor	0	0	0	0	0	0	0	0	3	0	0
Wolcott	0	0	0	0	0	0	1	1	0	0	0
Woodbridge	1	0	0	0	0	0	0	0	0	0	0
Woodbury	0	0	1	1	0	0	0	0	0	1	1
Woodstock	0	0	0	2	0	1	2	1	1	0	0
Total	66	81	57	74	56	82	82	70	151	53	58

Appendix D. Connecticut fall firearms turkey harvest and hunter numbers, 1990 – 2022.

Year	Hunter Numbers	Harvest		
1990	579	52		
1991	514	34		
1992	402	40		
1993	376	45		
1994	599	54		
1995	1,028	121		
1996	2,069	124		
1997	2,073	140		
1998	1,783	112		
1999	2,304	290		
2000	2,378	190		
2001	3,060	287		
2002	3,981	188		
2003	3,337	134		
2004	3,060	234		
2005	2,941	156		
2006	2,926	109		
2007	2,769	165		
2008	3,037	160		
2009	3,313	64		
2010	2,444	64		
2011	2,586	69		
2012	2,383	47		
2013	2,440	47		
2014	2,145	61		
2015	2,127	51		
2016*	NA	60		
2017*	NA	56		
2018**	3,919	66		
2019	3,066	32		
2020	4,244	58		
2021	3,775	44		
2022	3,289	69		

<sup>\*</sup>Data unavailable due to the initiation of the Resident Game Bird Conservation Stamp.

\*\*Hunter participation numbers derived from intended participation indicated in the Spring Turkey Hunter Survey beginning in 2018.

Appendix E. Connecticut fall archery turkey harvest and hunter numbers, 1983 – 2022.

Year	Hunter Numbers	Harvest
1983	434	2
1984	348	1
1985	558	8
1986	596	10
1987	848	4
1988	1,071	7
1989	1,380	7
1990	1,094	13
1991	1,755	20
1992	841	11
1993	924	19
1994	1,297	25
1995	2,137	43
1996	2,275	27
1997	2,024	41
1998	1,967	36
1999	2,187	64
2000	2,145	41
2001	2,395	73
2002	2,706	64

Year	Hunter Numbers	Harvest
2003	2,296	58
2004	2,173	68
2005	2,061	46
2006	2,034	26
2007	1,957	43
2008	2,297	51
2009	2,523	64
2010	1,862	50
2011	1,691	63
2012	1,260	39
2013	1,409	60
2014	1,375	66
2015	1,532	64
2016*	NA	91
2017*	NA	121
2018**	3,105	115
2019	3,999	79
2020	4,359	107
2021	3,837	67
2022	3,517	82

<sup>\*</sup>Data unavailable due to the initiation of the Resident Game Bird Conservation Stamp.

<sup>\*\*</sup>Hunter participation numbers derived from intended participation indicated in the Spring Turkey Hunter Survey beginning in 2018.