

Connecticut Wild Turkey Program Annual Report Fall 2010 – Spring 2011



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Introduction

The goal of the Connecticut Turkey Management Program is to manage wild turkey populations at levels 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 abundant throughout Connecticut, providing the public with wildlife viewing and hunting opportunities.

Brood survey and spring harvest information during the past two years have indicated that annual productivity has had an upward trend. These increases in annual productivity may be attributed to spring weather conditions. During the past two years, the spring nesting and brood rearing periods have been warm and dry, which enhances survival of poults and nesting hens and results in increased productivity. Due to the higher poult recruitment rates during 2010 and 2011, spring turkey hunters during 2012 should observe higher numbers of 2-year-old gobblers and jakes.

This report presents a summary of the fall 2010 and spring 2011 wild turkey hunting seasons in Connecticut. For most Connecticut sportsmen, “turkey hunting” means spring gobbler hunting. Because of its popularity, information for the 2011 spring season is presented first, followed by highlights from the 2010 fall seasons.

2011 Spring Gobbler Season

Overall Results

The 31st annual spring turkey season was open statewide from April 27 – May 28, 2011. A total of, 8,505 spring turkey permits (state and private land) were issued and 1,424 birds were harvested. In 2011, permit issuance increased by 15.1% and harvest increased by 14.4%. Beginning in 2010, spring turkey hunters were eligible to purchase both a private land and state land permit, which allows for a potential bag limit during the spring season of 5 birds. The overall success rate for all hunters in 2011 was 10.2%; a decrease from the 2010 success rate of 11.7% (Table 1).

In an effort to provide a quality turkey hunting experience for Connecticut’s junior hunters (ages 12 to 15), the youth wild turkey hunter training days took place on Saturday, April 16, and Saturday, April 23, 2011. Participants harvested 52 wild turkeys, 11 birds fewer than the previous year. The youth wild turkey hunter training days have been well-received by all participants, both youth and mentors alike.

Private Land Hunting

Private land accounted for the majority of the harvest (84%). Success rates are typically higher on private land than state land because private land encompasses the largest amount of land open to turkey hunting in Connecticut, as well as the best turkey habitat. Private land also has lower hunting densities and may be hunted by more experienced hunters. Private land permits were issued to 6,226 individuals who were eligible to hunt on any lands for which they obtained written permission from the landowner. Private land turkey hunters had a 12.0% success rate in 2011 (Table 1).

State Land Hunting

A total of 2,279 permits were issued on state land areas. Hunters on state lands had a success rate of 7.5% (Table 1). Of the state-managed properties, Natchaug State Forest (29; Eastford), Cockaponset State Forest (20; Haddam), and Pachaug State Forest (12; Voluntown) yielded the most turkeys in 2011. The most productive state land turkey hunting areas (≥ 4 birds harvested/mi² and a minimum harvest of 5 birds) were Algonquin State Forest (Colebrook) and Franklin Swamp Wildlife Management Area (North Franklin).

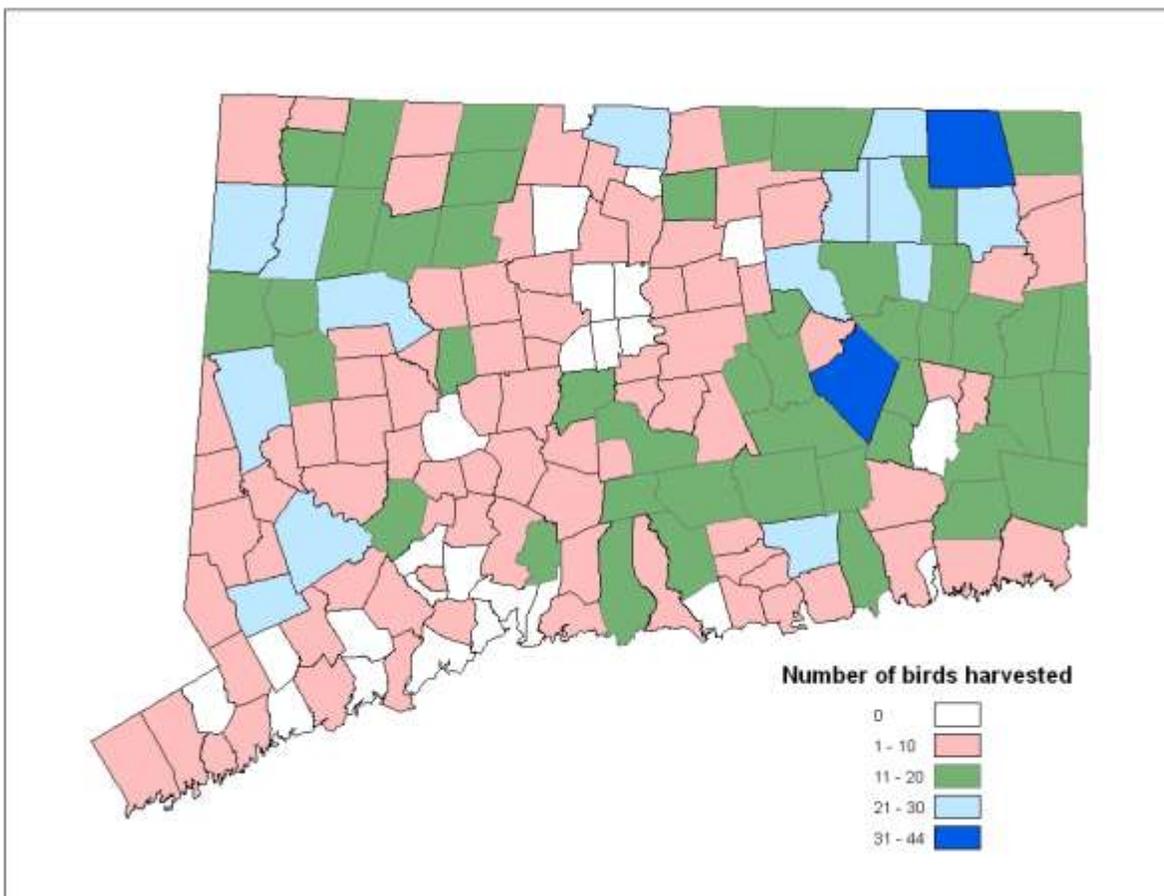
Harvest by Town

At least one bird was taken from 145 of Connecticut's 169 towns (Figure 1, Appendix A). Twenty or more birds were taken from 16 towns, and 30 or more birds were taken from 3 towns. The towns of Lebanon (44), Woodstock (44), and Pomfret (30) had the highest turkey harvest.

Table 1. Harvest and success rates of Connecticut's spring turkey hunters on private and state land, 2010 and 2011.

Permit Type	Total Number of Permits	Total Harvest	Number of Successful Hunters	Success Rate
Private Land				
2010	5,255	1,048	733	13.9%
2011	6,226	1,198	750	12.0%
% Change 10-11	18.5%	14.3		
State Land				
2010	2,134	197	171	8.0%
2011	2,279	226	171	7.5%
% Change 10-11	6.8	14.7		
Overall Total				
2010	7,389	1,245	867	11.7%
2011	8,505	1,424	871	10.2%
% Change 10-11	15.1	14.4		

Figure 1. Distribution of the 2011 spring turkey harvest in Connecticut.



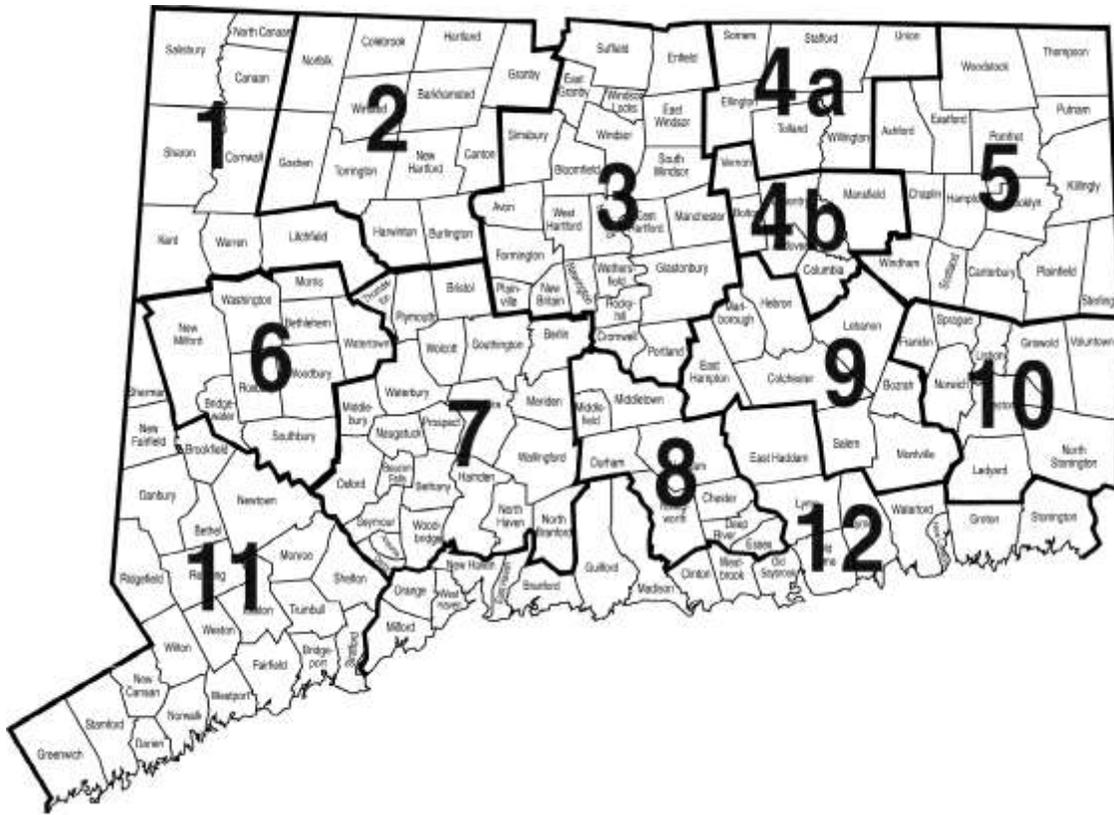
Harvest by Zone

Similar to 2010, the northeastern corner of the state (Zone 5) reported the highest harvest among Connecticut’s 12 Turkey Management Zones in 2011 (Table 2, Figure 2). Prior to 2004, northwest Connecticut (Zone 1) had typically held this distinction. The west-central (Zone 6) and south-central (Zone 8) portions of the state recorded the lowest harvest. Although harvest is variable among zones, locally abundant turkey populations exist in all zones, and it is a function of hunter access and zonal turkey numbers which influence zonal harvest.

Table 2. Gobblers harvested during the spring 2010 and 2011 seasons by turkey management zone.

Zone	Harvest 2010	Harvest 2011	Percent Change	Zone	Harvest 2010	Harvest 2011	Percent Change
1	136	129	-5.2%	7	109	118	8.3%
2	132	121	-8.3%	8	72	78	8.3%
3	78	89	14.1%	9	98	119	21.4%
4A	55	94	70.9%	10	61	86	41.0%
4B	35	62	77.1%	11	73	106	45.2%
5	206	257	24.8%	12	119	98	-17.7%
6	71	67	-5.6%				
				Total	1,245	1,424	14.4%

Figure 2. Connecticut's 12 turkey management zones.



Population Dynamics

The spring harvest consisted of 626 juvenile and 790 adult male birds, and 8 bearded hens. The increased ratio of juveniles to adults in the harvest (25.6% in 2010 versus 79.2% in 2011) is primarily due to increased recruitment of young birds into the 2011 spring turkey population (Figure 3) and, to a lesser extent, hunters becoming less selective (more willing to harvest jakes versus mature gobblers). This also is supported by the 2010 Turkey Brood Survey which was the highest in the past 5 years. Harvest statistics indicate the growth rate of Connecticut's wild turkey population varies annually, depending upon many variables such as weather and predation. Juvenile to adult ratios (Figure 3) and the turkey population growth index (Figure 4) observed during the spring season harvest between 2000 and 2010 indicate that Connecticut's wild turkey population has experienced a downward trend starting in the mid-1990s. The 2011 population dynamic information suggests that there were population increases during 2010; however to access trends we need to continue to monitor harvest, the growth index, and annual productivity via the brood survey.

Figure 3. Ratio of juvenile to adult gobblers taken during Connecticut’s spring wild turkey seasons, 1981–2011.

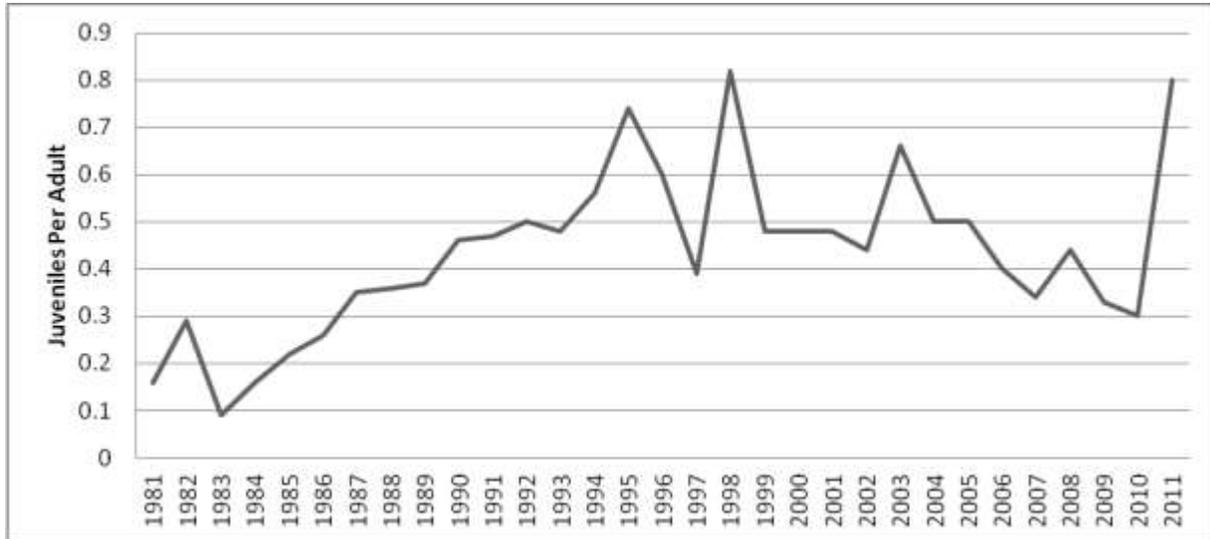
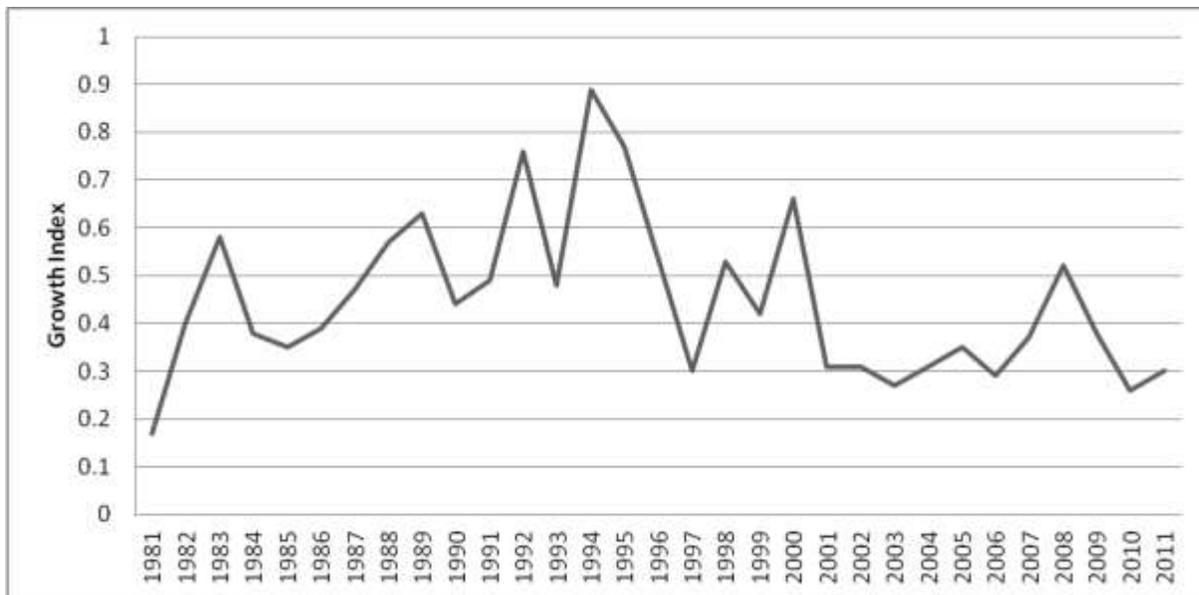


Figure 4. Growth index (first day harvest/permits issued) for the wild turkey population in Connecticut, 1981–2011.



2011 Spring Turkey Hunter Survey Results

The spring wild turkey hunter survey is used to obtain a variety of information from hunters to better manage Connecticut’s wild turkey resource. The turkey hunter survey provides valuable insight into population growth trends, economic expenditures, and recreational benefits. In 2010, the spring turkey survey changed from a mail-in survey attached to the spring turkey permit to an online survey distributed to hunters with email addresses. In 2011, a total of 2,845 surveys were emailed to spring turkey hunters and 11% of those hunters responded to the survey. Overall, 15.4% of all respondents did not hunt. Most hunting activity occurred in Turkey Management Zones 11, 2, and 5 (Figure 2; Table 3).

Information from surveys was used to determine the economic and recreational benefits provided by spring turkey hunting. Overall, spring turkey hunters enjoyed 26,638 days afield and spent \$1,165,041 on hunting-related items. Permit sales generated an additional \$161,595 (Table 4).

Thirty-eight percent of spring turkey hunters responding to the survey believed the turkey population was stable. Of the remainder, 23% believed it was increasing, and 39% believed it was decreasing. The mean statewide rank of Connecticut's turkey population for 2011 was 2.6 (a rank of 3.0 suggests the population is stable). Based on the spring turkey hunter survey, hunters indicated that populations appeared to decline in nearly all zones except Zones 3, 4A, 4B, and 6. Since 1995, the wild turkey population growth index has indicated a gradual decline in the overall turkey population (Figure 5).

To collect data on ruffed grouse distribution in Connecticut, an additional question was added to the turkey hunter survey, starting in 2005. Hunters were asked to report whether they observed ruffed grouse or heard grouse drumming and, if so, provide the town in which the encounter occurred. During 2011, hunters reported 31 encounters with ruffed grouse in 21 towns. The towns with the highest number of grouse encounters were Hartland (4) and Norfolk (3) (Appendix C). A grouse population index was derived from dividing total grouse observations by total number of surveys returned and then multiplying by 100. This represents the average number of grouse encountered by 100 spring turkey hunters. The 2011 index was 9.5, which is higher than the indices for 2010 (9.1), 2006 (9.2), and 2005 (9.2), but lower than what was reported in 2007 (10.8; Figure 6). This information indicates that the ruffed grouse population in Connecticut is stable albeit at low numbers.

Table 3. Number of spring hunter survey respondents hunting in each turkey management zone, 2011.

Zone	Hunters	%
1	26	9.1
2	33	11.5
3	17	5.9
4	28	9.8
5	31	10.8
6	9	3.1
7	25	8.7
8	26	9.1
9	16	5.6
10	21	7.3
11	34	11.8
12	21	7.3
Total	287	100.0

Table 4. Economic and recreational benefits provided by the 2011 Connecticut spring turkey hunting season.

Permit Type	Total Permits		Hunting Expenses*		Hunter Days of Recreation*	
	No. Issued	Revenue	Average*	Total	Average	Total
Private	6,226	\$118,294**	\$170	\$939,420	3.4	21,168
State	2,279	\$43,301	\$99	\$225,621	2.4	5,470
Total	8,505	\$161,595		\$1,165,041		26,683

* Values derived from hunter surveys.

** Excludes landowner permits issued free-of-charge.

Figure 5. Perception of hunters regarding wild turkey population growth from 2003–2011.

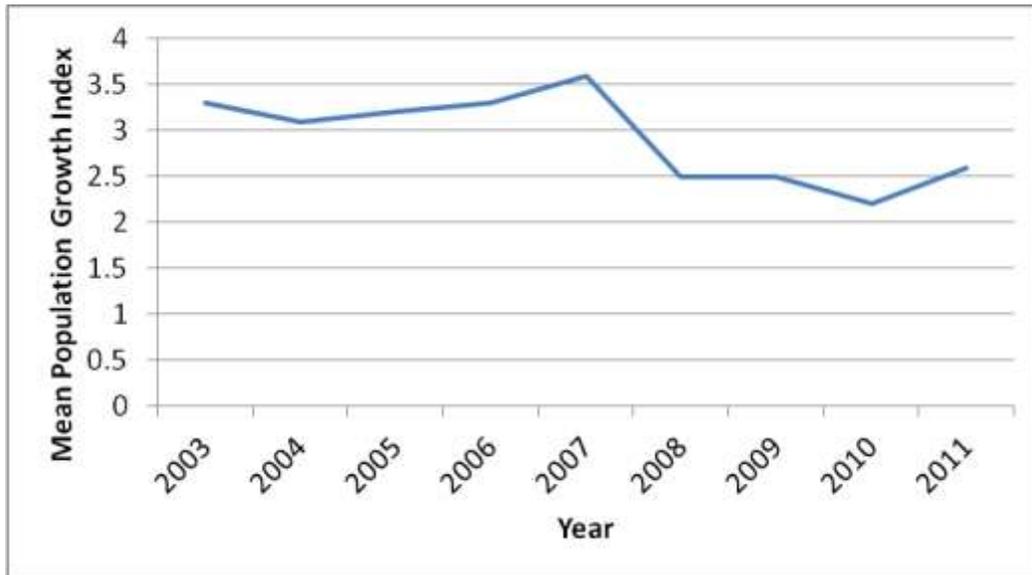
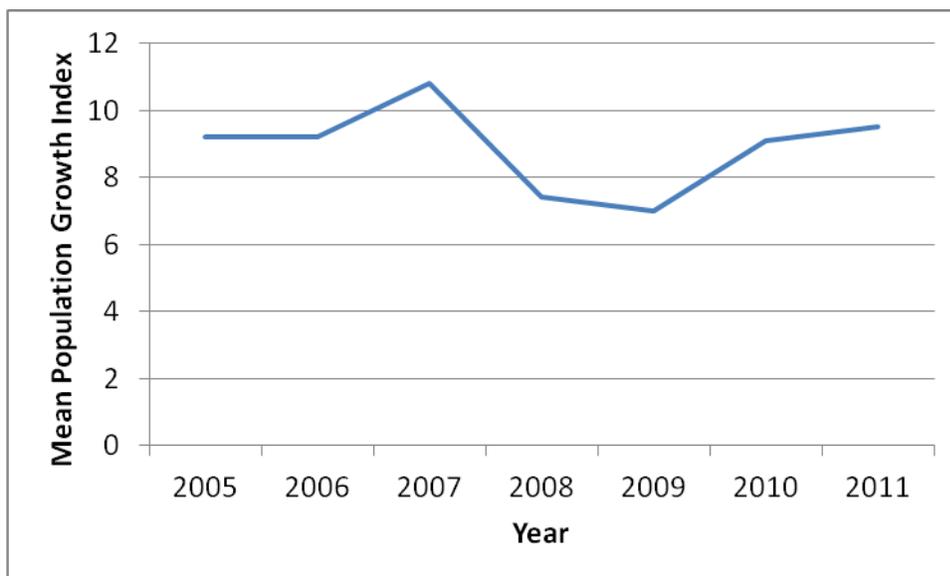


Figure 6. Ruffed grouse population growth index reported on hunter surveys from 2005–2011.



2010 Fall Firearms Turkey Season

The fall firearms season was open statewide in 2010 for the 15th year in Connecticut. Hunters who purchased a state land fall firearms permit were able to hunt on any state land open to turkey hunting. Hunter densities on private lands are controlled by the landowners through mandatory consent forms. Fall firearms turkey hunters may purchase both a private and state land permit, which allows for the potential season bag limit of 3 birds.

During the 2010 fall firearms turkey season, 2,444 permits were issued (26.2% decrease from 2009) and 64 birds were harvested during the 26-day period (October 1-30). Overall, 51 hunters harvested at least 1 bird for a 2.0% success rate. Hunters harvested 56 birds on private land and 8 birds on state land. Fifty-eight percent of harvested birds were adults. Of the 64 birds taken, 35 were females and 25 were males; sex was not reported for 4 birds.

Fall firearms hunters reported taking at least 1 bird from 35 of 169 Connecticut towns (25%). The 5 towns reporting the highest harvest at 3 birds were Bloomfield, Chaplin, Torrington, Watertown, and Willington (Table 5). In addition, Turkey Management Zones 4 (15 birds) and 2 (8 birds) reported the highest zonal harvest (Table 6). The harvest included 12 adult males, 22 adult females, 13 juvenile males, and 13 juvenile females (Table 7). Over half of the harvested birds (53.3%) were adults. Of the 60 birds whose sex was known, the harvest was skewed towards females (58.3%) over males (41.6%).

2010 Fall Archery Turkey Season

Connecticut's 28th fall archery turkey season was open statewide and ran concurrently with the 2010 archery deer season. A total of 1,862 permits were issued to archers who could use them on any state land open to fall archery turkey hunting or any private land where written consent was obtained from the landowner. Of the archery permits that were issued, archers reported a harvest of 50 birds from 38 towns during the fall 2010 season. Turkey Management Zone 11 (16 birds) reported the highest zonal harvest (Table 6). Of the 50 birds harvested by archers, 17 were males (13 adults, 4 juveniles), 30 were females (19 adults, 11 juveniles), and 3 were of unknown age and sex (Table 8). The town reporting the highest harvest was Newtown (5; Table 9).

Turkey Brood Survey Information

Since 2007, turkey brood surveys have been conducted annually from June 1 - August 31 to assess annual fluctuations in statewide wild turkey populations. Volunteers and Departmental staff were requested to report turkey sightings, categorized by total hens, total poults, and total number of hens with poults. These observations were analyzed to obtain an annual productivity index and to evaluate recruitment into the fall population. By evaluating recruitment over time, biologists can quantify changes and trends in Connecticut's statewide wild turkey populations.

In 2011, 75 cooperators reported 375 wild turkey observations, which included 685 hens – 567 with broods and 118 without broods. The 2011 brood index was 2.8 young per adult for all hens observed and 3.4 young per adult for hens observed with at least 1 poult (Table 10). The 71 participants in the 2010 brood survey reported 278 wild turkey observations, which included 472 hens – 367 with broods and 105 without broods. During 2010, the brood index was 3.6 young per adult for all hens observed and 4.6 young per adult for hens observed with at least 1 poult (Table 10). Brood survey information indicates that wild turkeys had fair productivity in Connecticut during 2011. Spring weather in 2011 was warm and dry throughout Connecticut, creating favorable conditions during the hatching and brood-rearing periods. Despite these favorable conditions, productivity was lower than the previous year. This may be attributed to an increased number of juvenile hens, resulting from very good turkey productivity during 2010.

Juvenile hens generally produce less poults than more mature hens, which could have resulted in a lower poult to hen ratio during 2011.

Table 5. Wild turkey harvest by town during the 2009 and 2010 fall firearms seasons.

Town of Harvest	Number of Birds		Town of Harvest	Number of Birds	
	2009	2010		2009	2010
Beacon Falls	1	0	Newtown	1	2
Bloomfield	0	3	Old Lyme	3	0
Brooklyn	2	0	Oxford	1	0
Chaplin	0	3	Plymouth	0	1
Chester	1	0	Pomfret	2	0
Clinton	1	0	Preston	0	1
Colchester	1	0	Putnam	2	0
Colebrook	1	0	Rocky Hill	0	1
Columbia	2	0	Salisbury	0	2
Cornwall	0	1	Scotland	0	1
Coventry	1	2	Sharon	2	0
Cromwell	0	1	Somers	0	1
East Haven	2	0	Southbury	1	0
East Windsor	1	0	Stafford	1	4
Eastford	1	0	Stonington	1	2
Easton	0	2	Thompson	0	1
Ellington	1	0	Tolland	1	0
Glastonbury	1	1	Torrington	1	3
Granby	0	2	Union	1	2
Griswold	0	1	Voluntown	3	2
Haddam	2	2	Wallingford	1	0
Hampton	0	1	Waterford	1	0
Harwinton	2	1	Watertown	0	3
Hebron	1	0	Willington	3	4
Lebanon	3	1	Winchester	1	2
Ledyard	1	0	Woodbridge	1	0
Mansfield	2	1	Windham	0	2
Middletown	2	1	Woodbury	2	0
Montville	0	1	Woodstock	3	0
New Hartford	2	0	Unknown	0	4
Total				64	60

Table 6. Turkeys harvested during the 2010 fall archery and firearms seasons by turkey management zone.

Zone	Harvest		Zone	Harvest	
	Firearms	Archery		Firearms	Archery
1	3	5	7	1	4
2	8	2	8	4	3
3	6	0	9	2	1
4	15	2	10	4	2
5	8	8	11	4	16
6	3	1	12	2	3
Unknown				4	3
Total				64	50

Table 7. Age and sex of birds harvested during the 2010 fall firearms season.

Age	Sex	Number Harvested
Adult	Male	12
Adult	Female	22
Juvenile	Male	13
Juvenile	Female	13
Unknown		4
Total		64

Table 8. Wild turkey harvest by town during the 2009 and 2010 fall archery seasons.

Town of Harvest	2009	2010	Town of Harvest	2009	2010
Beacon Falls	0	1	Newtown	1	5
Bethel	0	1	Norwalk	0	1
Bethany	1	0	Old Lyme	0	1
Brookfield	4	1	Orange	0	1
Brooklyn	0	1	Plainfield	0	1
Canaan	0	1	Portland	1	0
Canton	0	1	Redding	1	0
Cornwall	0	1	Ridgefield	1	0
Coventry	1	0	Salem	0	1
Danbury	0	1	Seymour	1	0
Durham	0	1	Sharon	0	2
East Hampton	1	0	Shelton	2	1
Easton	1	1	Sherman	1	0
Enfield	1	0	Southbury	3	0
Fairfield	1	0	Suffield	1	0
Franklin	1	0	Thompson	0	3
Granby	3	0	Tolland	1	0
Greenwich	2	0	Trumbull	1	0
Killingly	0	1	Union	1	0
Killingworth	0	1	Wallingford	0	1
Kent	1	0	Waterford	1	1
Ledyard	0	2	Weston	1	1
Litchfield	0	1	Westport	2	1
Mansfield	1	1	Willington	0	1
Marlborough	1	0	Winchester	0	1
Meriden	0	1	Windham	0	2
Middlefield	0	1	Wolcott	1	0
Milford	1	0	Woodbridge	0	1
Montville	1	0	Woodbury	0	1
Monroe	0	1	Unknown	0	3
New Canaan	0	1	Total	41	50
New Fairfield	0	1			

Table 9. Wild turkey brood survey data, 2007-2011.

Year	Total Adults	Total Young	Total Adults & Young	Adults without Young	Young per Adult	Young per Adult with Young	Number of 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	1,708	2,180	105	3.6	4.6	278
2011	685	1,919	2,604	118	2.8	3.4	375
Total	2,947	7,564	10,511	1,000	2.6	3.8	1,605

Outlook

Connecticut's wild turkeys have proven to be highly adaptable by using and flourishing in habitats that were once thought unsuitable for this species. From 1975 through the early 1990s, Connecticut's wild turkey population grew rapidly due to trap and transport efforts and the species' ability to take full advantage of an unoccupied niche in our state's landscape. However, once turkeys were established throughout Connecticut, the statewide population appeared to level off and decline. The long-term data sets of the juvenile to adult ratio in the spring harvest and the wild turkey population growth index (first day spring turkey harvest/total permit issuance) indicate a downward trend from about 1995 through 2009. Although the data indicated a slow decline of the turkey population, the last two years of brood survey information and the 2011 spring harvest results suggest increased productivity, which may be the start of a new trend.

Connecticut offers a diversity of habitat types that provide wild turkeys with all essential habitat components needed for survival. However, there still is room for habitat improvement, particularly on state land. One of the key wild turkey habitat components that is lacking on state land is open fields. This microhabitat is important for young turkeys because the majority of their dietary requirements are insects and these forest openings provide that food source. To address this issue, the Department of Energy and Environmental Protection (DEEP) Wildlife Division has been working with the National Wild Turkey Federation (NWTf) to develop brood habitat on state land. To date, 3 projects have been completed, totaling about 25 acres of brood habitat. Two projects were in Nipmuck State Forest (Union and Woodstock) and a third was completed at Enders State Forest (Granby). The Wildlife Division will continue to work with sportsmen's and other non-profit organizations to develop new projects that enhance turkey habitat on state and private lands.

Despite population fluctuations, wild turkeys remain abundant throughout the entire state. Be sure to thoroughly review the current Connecticut Hunting and Trapping Guide before going afield to find out about new opportunities. Through continued cooperation among the DEEP, NWTf, sportsmen, other conservation organizations, and private landowners, the future of the wild turkey in Connecticut looks bright.

Appendix A. Connecticut spring wild turkey harvest by town, 2001 – 2011.

Town	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Andover	8	13	14	7	8	2	3	4	4	10	14
Ansonia	0	0	2	0	0	0	1	0	0	3	3
Ashford	35	20	32	33	28	19	19	10	25	16	25
Avon	0	5	4	4	7	2	7	11	6	9	3
Barkhamsted	7	7	13	7	23	14	6	6	11	8	12
Beacon Falls	8	5	11	10	8	10	7	7	7	8	5
Berlin	9	8	10	5	4	5	2	9	9	5	10
Bethany	5	8	7	8	3	8	5	6	7	9	5
Bethel	6	4	6	11	2	2	10	5	3	2	5
Bethlehem	13	12	13	13	9	7	3	7	2	8	4
Bloomfield	5	4	6	7	10	5	3	3	4	6	1
Bolton	8	10	7	16	7	7	7	6	9	1	3
Bozrah	20	13	21	14	13	20	17	11	5	6	12
Branford	11	3	2	3	4	4	1	1	0	1	5
Bridgeport	0	0	0	0	0	0	0	8	0	0	0
Bridgewater	6	9	15	6	6	4	4	6	6	4	5
Bristol	5	2	2	1	1	5	5	0	0	0	2
Brookfield	3	4	14	11	8	5	5	6	7	3	5
Brooklyn	13	12	15	17	28	12	12	13	15	16	8
Burlington	12	16	13	14	16	5	27	12	11	12	8
Canaan	20	15	20	19	19	22	16	28	16	18	14
Canterbury	13	20	20	22	16	15	9	7	18	10	18
Canton	10	10	12	9	4	8	6	4	4	6	9
Chaplin	14	7	9	16	14	8	7	7	8	12	25
Cheshire	8	13	23	13	12	15	10	10	9	9	4
Chester	9	7	6	7	7	5	6	10	6	5	4
Clinton	0	4	1	1	2	3	0	0	3	4	0
Colchester	29	45	34	38	30	26	18	14	21	16	12
Colebrook	7	5	13	10	17	14	21	14	11	8	8
Columbia	7	16	22	23	13	12	14	6	9	2	8
Cornwall	27	25	35	33	31	44	37	37	31	20	28
Coventry	43	25	32	19	23	15	10	14	15	16	21
Cromwell	5	11	7	1	9	5	3	3	10	0	4
Danbury	6	6	12	5	7	5	5	1	6	3	1
Darien	0	0	0	0	1	0	0	0	0	1	1
Deep River	7	6	6	5	4	1	1	3	2	8	3
Derby	1	3	2	0	1	2	0	3	0	1	0
Durham	9	9	17	16	21	14	5	9	9	4	12
East Granby	3	7	5	5	4	11	6	6	2	4	6
East Haddam	39	29	27	39	33	17	24	14	27	25	17
East Hampton	24	9	13	12	11	10	8	6	12	9	5
East Haven	0	1	0	1	0	0	0	3	2	3	1
East Lyme	33	18	29	26	26	23	23	18	16	13	10
East Windsor	13	6	9	12	11	15	22	10	13	13	11
Eastford	20	12	20	13	11	17	13	15	14	13	11
Easton	23	20	21	25	22	8	13	18	8	2	8
Ellington	17	9	14	7	19	5	17	17	14	16	9
Enfield	7	12	7	14	8	13	6	9	16	7	6
Essex	2	13	7	7	6	5	7	7	4	4	6
Fairfield	3	3	1	0	2	3	4	8	4	0	3
Farmington	1	6	8	8	3	4	7	3	5	4	3
Franklin	17	21	28	15	19	19	17	18	10	13	15
Glastonbury	17	16	21	11	14	12	14	7	11	7	8
Goshen	35	25	39	38	27	24	18	17	20	10	12
Granby	10	8	17	13	10	9	7	12	7	15	8
Greenwich	1	2	2	2	0	2	0	4	2	2	2

Town	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Griswold	5	13	6	15	10	11	5	4	6	5	11
Groton	3	2	6	0	9	4	2	2	3	2	1
Guilford	13	21	27	19	20	13	20	15	11	17	13
Haddam	39	38	45	26	26	22	29	19	14	16	19
Hamden	12	16	17	11	11	7	7	9	7	8	7
Hampton	20	22	29	19	26	22	22	21	9	17	19
Hartford	0	1	0	0	0	0	0	0	0	0	0
Hartland	12	14	14	12	13	9	18	10	7	15	11
Harwinton	16	16	22	11	14	17	12	14	10	14	9
Hebron	30	16	22	18	26	24	15	16	15	12	14
Kent	13	21	21	34	20	30	18	9	23	18	15
Killingly	8	12	10	9	11	11	13	13	9	2	4
Killingworth	22	22	30	20	15	16	10	17	7	7	12
Lebanon	48	70	76	69	63	52	33	37	39	30	44
Ledyard	11	4	18	21	21	35	29	18	9	8	11
Lisbon	11	12	10	13	3	14	10	11	4	3	5
Litchfield	38	33	38	41	27	31	27	29	14	23	24
Lyme	31	28	37	31	43	21	19	28	24	16	23
Madison	7	2	2	1	0	1	3	0	6	1	3
Manchester	6	4	4	5	7	5	2	3	2	0	2
Mansfield	27	26	28	28	13	12	12	13	14	6	16
Marlborough	18	10	17	19	12	10	4	2	7	3	10
Meriden	3	4	4	3	2	0	0	3	6	3	1
Middlebury	6	1	6	1	5	2	1	2	2	2	2
Middlefield	12	14	14	6	19	8	8	8	12	10	7
Middletown	17	18	39	27	30	22	30	20	18	18	15
Milford	0	2	3	5	3	2	2	0	0	2	0
Monroe	9	5	5	3	4	0	0	2	5	1	3
Montville	27	24	19	22	20	13	20	20	8	8	9
Morris	13	14	14	17	16	13	18	12	15	3	4
Naugatuck	10	9	7	7	10	8	7	8	6	11	7
New Canaan	6	0	3	3	2	1	2	2	1	3	0
New Fairfield	9	10	8	12	10	6	8	8	1	6	7
New Hartford	19	9	19	17	22	25	18	14	22	14	11
New Haven	0	0	0	1	1	0	1	0	0	0	0
New London	0	0	0	0	0	0	0	1	0	1	0
New Milford	34	21	38	22	16	28	25	27	13	16	20
Newtown	30	23	35	19	27	29	21	22	14	12	22
Norfolk	15	3	16	12	15	18	13	15	13	9	14
North Branford	9	6	5	12	14	13	4	7	5	5	5
North Canaan	2	0	16	3	7	2	2	4	8	1	2
North Haven	3	3	1	5	4	5	2	4	11	3	12
N. Stonington	5	21	32	19	38	18	14	26	23	13	13
Norwalk	0	0	1	0	0	0	0	0	1	0	1
Norwich	3	6	9	5	5	7	3	5	7	8	0
Old Lyme	14	15	9	4	8	20	6	12	15	7	9
Old Saybrook	5	2	6	2	0	0	2	0	0	2	1
Orange	4	0	2	2	5	3	1	5	1	4	1
Oxford	26	25	30	21	13	17	9	8	10	17	14
Plainfield	15	8	17	9	14	8	14	25	15	9	12
Plainville	5	0	2	0	2	1	2	0	2	1	2
Plymouth	7	9	10	8	13	4	14	7	13	8	12
Pomfret	32	26	28	25	19	15	23	24	31	35	30
Portland	17	16	10	12	7	15	10	7	16	4	9
Preston	17	17	17	13	13	17	17	17	15	5	11
Prospect	6	3	3	4	5	7	5	1	5	1	4
Putnam	12	15	9	11	8	1	4	4	6	3	7
Redding	39	29	33	46	38	38	15	23	16	21	28
Ridgefield	3	5	4	11	6	5	3	2	2	3	2
Rocky Hill	3	0	5	7	10	7	3	3	6	7	4

Town	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Roxbury	17	7	8	5	13	5	6	3	4	4	4
Salem	20	20	22	21	12	13	8	6	7	14	13
Salisbury	27	19	27	28	18	26	25	20	19	16	8
Scotland	34	35	43	28	27	23	24	29	19	13	17
Seymour	5	8	5	2	1	2	2	2	1	1	0
Sharon	33	30	46	50	38	38	38	31	23	28	22
Shelton	4	6	15	10	7	2	5	6	8	4	3
Sherman	8	8	16	8	7	13	11	6	4	6	5
Simsbury	2	9	3	6	5	5	3	3	2	0	0
Somers	7	12	13	12	14	10	2	9	8	8	18
Southbury	13	20	21	19	19	15	12	13	13	11	9
Southington	5	10	5	8	3	3	0	9	7	3	8
South Windsor	9	13	10	9	12	12	15	7	10	4	3
Sprague	9	6	10	14	10	6	8	6	8	1	9
Stafford	12	6	18	16	24	9	8	15	17	8	18
Stamford	4	4	3	4	2	0	4	3	0	1	4
Sterling	12	18	15	10	10	20	12	14	19	7	10
Stonington	24	16	12	16	19	16	15	10	11	6	5
Stratford	0	0	0	0	7	3	4	2	3	0	1
Suffield	14	16	25	9	25	16	13	10	17	12	22
Thomaston	2	2	2	4	6	2	2	1	3	4	5
Thompson	27	22	28	37	21	27	11	22	16	15	12
Tolland	9	10	23	17	15	11	9	13	10	3	7
Torrington	9	10	14	18	19	8	10	17	11	13	12
Trumbull	0	1	3	2	1	0	0	1	0	0	0
Union	9	9	6	6	6	11	8	8	11	7	21
Vernon	4	2	0	1	0	1	1	1	0	0	0
Voluntown	14	11	11	10	7	9	18	7	10	5	11
Wallingford	10	10	11	12	10	5	8	4	9	6	9
Warren	22	15	32	18	29	10	20	17	18	12	16
Washington	18	16	28	27	10	16	15	18	19	11	10
Waterbury	1	1	3	0	0	0	0	1	0	0	0
Waterford	14	9	18	14	15	10	13	11	10	13	8
Watertown	15	10	18	12	11	9	13	9	5	10	4
West Haven	0	0	1	2	1	0	0	1	0	1	0
Westbrook	2	2	1	4	3	9	1	2	1	1	2
Weston	5	2	4	5	0	0	0	0	1	1	0
Westport	0	0	0	0	0	0	1	2	2	0	0
Wethersfield	0	0	4	3	0	0	0	1	0	0	0
Willington	13	7	8	13	10	18	14	14	12	13	21
Wilton	4	2	0	1	3	2	6	1	4	2	2
Winchester	17	12	12	9	14	13	9	15	13	8	7
Windham	19	17	17	18	12	8	6	5	4	6	15
Windsor	6	4	2	9	3	6	4	5	2	0	4
Wolcott	0	4	7	1	10	5	4	4	2	2	3
Woodbridge	3	2	5	2	1	1	3	0	3	0	0
Woodbury	25	20	27	11	21	9	5	17	8	4	7
Woodstock	50	52	48	35	52	40	49	38	47	32	44
Town not reported	27	14	13	24	0	0	0	0	0	0	0
Total	2,067	1,894	2,367	2,081	2,016	1,760	1,601	1,558	1,502	1,245	1,424

Appendix B. Spring turkey harvest from state-owned and managed lands, 2010 and 2011.

State Land	Number of Birds Harvested			Kills/Sq. Mile	Kills/Sq. Mile
	2010	2011	Square Miles	(2010)	(2011)
Aldo Leopold WMA	7	4	0.87	8.05	4.60
Algonquin SF	2	7	1.04	1.92	6.73
American Legion SF	1	2	1.62	0.62	1.23
Assekong Swamp WMA	0	1	1.07	0.00	0.93
Barn Island WMA	1	0	1.58	0.63	0.00
Babcock Pond WMA	2	1	2.34	0.85	0.43
Bartlett Brook WMA	0	1	1.1	0.00	0.91
Bear Hill WMA	1	1	0.56	1.79	1.79
Bishops Swamp WMA	3	4	1.18	2.54	3.39
Bloomfield FCA (1)	2	0	0.51	3.92	0.00
Centennial Watershed SP	1	0	10.67	0.09	0.00
Cockaponset SF	14	20	26.85	0.52	0.74
Durham Meadows WMA	0	1	0.89	0.00	1.12
East Swamp WMA	0	3	0.13	0.00	23.08
Ellithorpe FCA	1	0	0.63	1.59	0.00
Franklin Swamp WMA	1	5	1.07	0.93	4.67
Goshen WMA	1	4	1.51	0.66	2.65
Great Swamp FCA	2	1	0.53	3.77	1.89
Hancock Brook Lake	2	3	1.1	1.82	2.73
Higganum Meadows WMA	1	2	0.4	2.50	5.00
Housatonic River WMA	1	0	0.87	1.15	0.00
Housatonic SF	12	11	17.63	0.68	0.62
John Minetto SP	2	0	1.12	1.79	0.00
Larson Lot WMA	2	0	0.38	5.26	0.00
Lebanon Coop Mgmt. Area	5	2	0.33	15.15	6.06
Mad River Dam FCA	1	1	0.81	1.23	1.23
Mansfield Hollow Lake	3	2	3.14	0.96	0.64
Mansfield Leased FTA	1	0	0.47	2.13	0.00
Mattatuck SF	6	4	7.3	0.82	0.55
MDC Colebrook-Hogback	3	3	6.5	0.46	0.46
Meshomasic SF	1	7	14.22	0.07	0.49
Messerschmidt WMA	2	0	0.72	2.78	0.00
Mohegan SF	2	0	1.5	1.33	0.00
Mono Pond	1	0	0.44	2.27	0.00
Nassahegon SF	2	2	1.92	1.04	1.04
Naugatuck SF	11	11	21.15	0.52	0.52
Nathan Hale SF	2	1	2.27	0.88	0.44
Natchaug SF	21	29	7.93	2.65	3.66
Nehantic SF	9	7	7.91	1.14	0.88
Nepaug SF	0	1	2.1	0.00	0.48
Newgate WMA	0	1	0.7	0.00	1.43
Nipmuck SF	0	5	14.4	0.00	0.35
NU-Maromas Coop WMA	4	4	2.19	1.83	1.83
NU-Skiff Mtn. WMA	1	5	1.11	0.90	4.50
Pachaug SF	8	12	40.84	0.20	0.29
Paugnut SF	0	3	2.6	0.00	1.15
Paugussett SF	4	5	3.04	1.32	1.64
Pease Brook WMA	0	1	0.32	0.00	3.13
Peoples SF	5	2	4.6	1.09	0.43
Pootatuck SF	3	0	1.72	1.74	0.00
Pomeroy SP	1	0	0.45	2.22	0.00
Quinebaug River WMA	2	3	2.57	0.78	1.17
Quinnipiac River SP	2	1	0.53	3.77	1.89

State Land	Number of Birds Harvested			Kills/Sq. Mile	Kills/Sq. Mile
	2010	2011	Square Miles	(2010)	(2011)
Robbins Swamp WMA	0	2	2.5	0.00	0.80
Roraback WMA	4	1	3.09	1.29	0.32
Rose Hill WMA	2	3	0.96	2.08	3.13
Salmon River SF	3	5	10.91	0.27	0.46
Scantic River SP	2	0	0.92	2.17	0.00
Selden Island SP	1	0	0.83	1.20	0.00
Simsbury WMA	1	0	0.35	2.86	0.00
Spignesi WMA	0	1	0.7	0.00	1.43
Sunnybrook SP	1	0	0.7	1.43	0.00
Talbot WMA	1	1	0.74	1.35	1.35
Thomaston Dam	1	0	1.33	0.75	0.00
Tunxis SF	10	6	14.87	0.67	0.40
Wangunk Meadows	1	2	1	1.00	2.00
West Thompson Dam	1	0	3.05	0.33	0.00
Wooster Mountain SP	1	1	0.56	1.79	1.79
Wopowog WMA	0	1	0.74	0.00	1.35
Wyantenock SF	2	3	6.38	0.31	0.47
Yale Forest	3	8	12.03	0.25	0.67
Zemko Pond WMA	4	4	0.72	5.56	5.56

Appendix C. Ruffed grouse observations (seen or heard) from turkey hunter surveys, 2006-2011.

Town	2006	2007	2008	2009	2010	2011
Andover	1	0	0	0	0	0
Ansonia	2	2	0	0	0	0
Ashford	5	4	1	6	2	1
Avon	0	0	0	0	0	0
Barkhamsted	9	5	7	5	1	2
Beacon Falls	2	0	0	1	0	0
Berlin	1	0	0	0	0	0
Bethany	1	0	0	0	0	0
Bethel	1	0	0	0	0	0
Bethlehem	1	1	0	0	0	0
Bolton	0	0	0	0	0	0
Bozrah	0	0	0	0	0	0
Bridgewater	0	1	0	0	0	0
Bristol	0	1	0	0	0	0
Brooklyn	0	0	0	0	0	0
Burlington	0	1	0	1	0	0
Canaan	7	4	7	7	0	0
Canterbury	1	1	0	0	0	0
Canton	0	2	0	0	0	1
Chaplin	1	5	4	2	0	1
Cheshire	0	1	0	1	0	0
Chester	1	2	1	1	0	0
Colchester	2	0	1	0	0	0
Colebrook	4	9	3	1	3	1
Columbia	0	0	0	1	0	0
Cornwall	11	7	7	1	3	1
Coventry	1	0	0	0	0	0
Danbury	0	0	0	0	0	0
Durham	0	0	0	2	0	0
East Granby	1	2	2	2	2	0
East Haddam	0	0	0	0	1	0
East Hampton	0	0	0	0	0	0
East Lyme	1	2	0	1	1	0
East Windsor	2	1	0	0	0	0
Eastford	6	2	4	0	1	0
Easton	0	1	1	0	0	0
Ellington	1	1	2	0	2	0
Enfield	2	1	1	1	0	0
Farmington	2	0	0	0	0	0
Glastonbury	0	1	0	1	0	0
Goshen	18	17	6	9	4	2
Granby	5	3	1	2	1	0
Greenwich	0	0	0	1	1	0
Griswold	1	0	0	0	0	0
Guilford	0	4	2	0	0	0
Haddam	1	1	5	2	0	0
Hamden	0	0	0	0	0	1
Hampton	3	3	1	0	0	0
Hartland	13	15	5	7	4	4
Harwinton	2	1	4	1	0	0
Hebron	1	0	2	2	0	0
Kent	5	3	1	4	3	0
Killingly	1	0	1	0	0	0
Killingworth	0	2	0	1	0	0
Lebanon	1	1	1	0	1	0
Ledyard	0	3	0	1	0	1

Town	2006	2007	2008	2009	2010	2011
Lisbon	1	0	0	0	0	0
Litchfield	4	1	5	2	1	0
Lyme	0	2	1	1	1	0
Mansfield	1	0	0	0	0	0
Marlborough	0	0	0	0	0	0
Meriden	0	0	1	0	0	0
Middlebury	1	0	0	0	0	0
Middlefield	0	0	0	3	0	0
Middletown	0	2	4	0	0	0
Monroe	0	0	0	1	0	0
Montville	2	0	0	0	0	0
Morris	0	1	1	2	0	0
Naugatuck	0	1	1	1	2	0
New Canaan	0	1	0	0	0	0
New Fairfield	1	0	7	1	0	0
New Hartford	4	5	0	6	0	1
New Milford	3	1	1	1	0	0
Newtown	2	1	2	1	0	0
Norfolk	4	4	2	6	1	3
North Canaan	0	2	1	0	0	0
North Haven	1	1	0	0	0	0
North Stonington	1	0	1	0	0	1
Old Lyme	1	0	0	0	0	0
Oxford	0	0	1	0	0	0
Plainfield	0	0	0	0	0	1
Plymouth	0	2	1	0	2	0
Pomfret	3	1	0	2	0	0
Portland	1	0	3	0	1	0
Preston	0	0	0	0	0	0
Putnam	0	0	0	1	0	0
Redding	1	0	0	0	0	0
Ridgefield	0	0	1	0	0	0
Rocky Hill	0	0	1	0	0	0
Roxbury	0	1	0	0	0	0
Salisbury	4	6	6	3	3	1
Salem	0	0	0	1	0	0
Scotland	1	0	1	0	0	0
Sharon	7	9	10	6	6	2
Sherman	1	1	0	1	0	0
Simsbury	0	0	0	1	0	0
Somers	0	2	3	1	0	0
Southbury	0	1	1	1	1	0
Southington	0	0	0	0	0	2
Stafford	4	3	2	1	3	0
Stamford	0	1	0	0	0	0
Sterling	1	0	1	0	0	0
Stonington	0	0	0	0	0	0
Suffield	2	2	1	0	0	0
Thomaston	0	1	0	0	0	0
Thompson	2	3	3	1	1	0
Tolland	1	0	0	2	3	0
Torrington	4	5	3	7	3	2
Union	1	1	3	1	0	0
Voluntown	0	1	1	2	1	0
Wallingford	1	0	0	0	0	0
Warren	3	2	2	2	1	1
Washington	3	1	0	2	1	1
Waterbury	1	0	0	0	0	0
Waterford	0	0	0	0	1	0

Town	2006	2007	2008	2009	2010	2011
Watertown	1	2	0	1	0	0
Westbrook	1	0	0	0	0	0
West Hartford	0	0	1	0	0	0
Wethersfield	1	0	0	0	0	0
Willington	0	0	1	1	2	0
Winchester	6	2	4	3	2	0
Windham	0	0	0	0	0	0
Windsor	0	0	0	1	0	0
Woodbury	1	0	0	1	1	0
Woodstock	11	5	6	6	1	1
Unknown	0	0	1	0	0	0
Total	205	184	147	138	68	31