2023 Connecticut Deer Program Summary

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Introduction

This booklet is the 44th in a series since the passage of the White-tailed Deer Management Act of 1974, reporting on the status of the white-tailed deer resource in Connecticut. It summarizes white-tailed deer information for 2023, including changes in deer management regulations, harvest statistics, research activities, and population dynamics of Connecticut's deer population. Connecticut's Deer Management Program goals are: 1) to maintain the population at levels compatible with available habitat and land uses, and 2) to allow for a sustained yield of deer for use by Connecticut hunters. The program has mainly focused on stabilizing or reducing deer population growth for the best long-term interest of the deer resource, native plant and animal communities, and the public, while increasing populations in a few areas. Regulated deer hunting has proven to be an ecologically sound, socially beneficial, and fiscally responsible method of managing deer populations. Deer Program efforts have focused on increasing harvest of antlerless deer, coordinating controlled hunts for overabundant deer herds, assisting communities and large landowners with deer management issues, and research and management of deer populations.

Deer Management Zones (DMZs) were established (Figure 1A) and evolved (Figure 1B) because deer populations vary across the state. Management strategies in each zone vary depending on population status. Data from hunter surveys, regulated deer harvests, and total deer mortality have been recorded and evaluated by DMZs in an effort to better manage the statewide deer population. Pursuant to the goal of maintaining populations at levels compatible with available habitat and land uses, aggressive management strategies have been implemented in areas with high deer densities. The replacement antlerless tag program was initiated, allowing hunters in DMZ 11 to harvest additional antlerless deer, with the goal of increasing the doe harvest during the firearms season in 1995 and during the archery season in DMZs 11 and 12 in 1998. In 2003, hunting over bait was permitted in DMZs 11 and 12 during all seasons on private land. The use of bait in areas where hunter access to private land is limited increases hunter opportunity and success. Starting in 2005, hunters could earn a free either-sex tag (Earn-a-Buck; EAB) after harvesting 3 antlerless deer during the same season. In 2009, hunters were issued 1 additional antlerless tag in DMZ 7 and an additional 2 antlerless tags in DMZs 11 and 12 with their shotgun/rifle and muzzleloader permits. In 2010, hunters were allowed to use crossbows in January in DMZs 11 and 12. In 2013, crossbows were expanded for use during the entire archery season on state and private land in all DMZs. In October 2015, archery hunters were allowed to hunt on Sundays on private land in DMZs where deer were considered overpopulated, which included all DMZs except 2, 3, and 4A. In 2018, archers were allowed to hunt on Sundays on private land in all DMZs. In developed areas where firearms hunting is not feasible, DEEP encourages the use of bowhunting as a management tool. Communities experiencing deer overpopulation problems may choose to initiate controlled hunts or, under special conditions, may be eligible to implement sharp-shooting programs.

Pursuant to the goal of allowing for a sustained yield of deer by Connecticut hunters, in other areas of the state where long-term declines in the population appeared to be occurring, a restriction on the use of antlerless tags during the firearms seasons was needed. In 2002, deer populations appeared to be stable in the southern portion, but not in the northern portion of DMZ 4. Following the 2002 season, DMZ 4 was split into two zones (4A and 4B) (Figure 1B), allowing each zone to maintain different management objectives. In DMZ 4A (northern portion), the restriction on the use of antlerless tags was retained, while the use of antlerless tags was again allowed in DMZ 4B (southern portion). A similar low population density was observed in a couple of towns in DMZ 1, which were then shifted into DMZ 2 (2002), also forcing a restriction on the use of the antlerless tag during the firearms season (2016). Until a clear increasing trend begins to occur in those zones, the restriction remains in place.

Figure 1. Connecticut's Deer Management Zones, (A) 1996, (B) 2023.

A. 1996

B. 2023
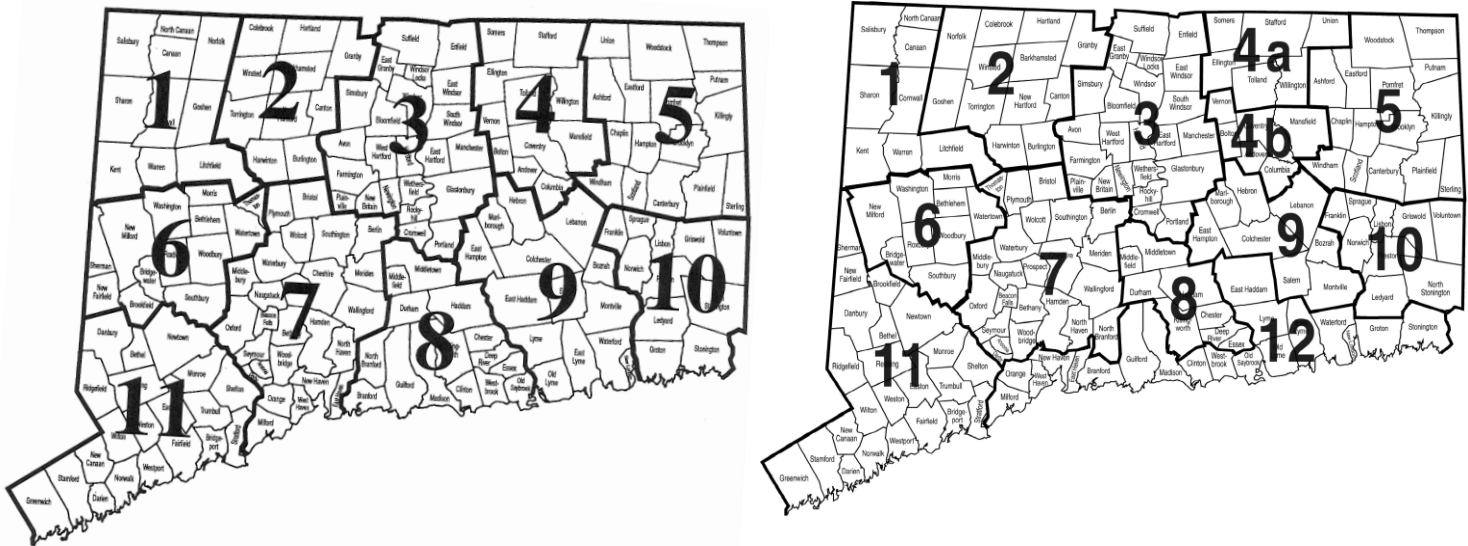
Hunter Notes

Information on dates and locations of hunter education courses can be obtained by calling the Connecticut Department of Energy and Environmental Protection (DEEP) Wildlife Division at 860-424-3011 or on the DEEP website at https://portal.ct.gov/deep/hunting/cefs/connecticut-hunter-education. Licenses and permits to fish, hunt, and trap in Connecticut can be purchased at licensing vendors or online by going to Connecticut's Online Outdoor Licensing System at https://portal.ct.gov/CTOutdoorLicenses.

In 2017, a concerned hunter reported finding several dead deer along a small body of water adjacent to the Connecticut River in Portland. Three fresh carcasses were submitted to the lab and tested positive for hemorrhagic disease (HD) in DMZ 3. Based on reports along the river from Cromwell to Old Lyme, it is believed over 70 deer may have died due to infections that year. No infected animals were reported in 2018 or 2019. In 2020, one fresh carcass was collected and tested positive for HD in Ridgefield, with approximately 20 or more found in the surrounding areas near water bodies, indicating they may have died from HD. Hunters were asked on the 2020 deer hunter survey "if they had observed any dead deer that appeared to die of unknown causes or observed dead deer in or around a water body". Based on those responses, an additional 20 deer many have died from HD, so the total number of deer that died was probably closer to 80 deer in 2020. In summer 2021, two separate deer that appeared unhealthy were euthanized, necropsied, and tested for HD, but HD was not detected in either animal. Although no additional public reports indicating a HD outbreak had occurred, hunters were asked on the 2021 deer hunter survey "if they had observed any dead deer that appeared to die of unknown causes or observed dead deer in or around a water body". Hunters reported a few observations of deer in DMZs 6, 7, and 11 where, if HD did occur, Connecticut was fortunate it was not a major outbreak.

In 2022, severe drought conditions prompted HD reports early, with many being along the Housatonic River. By the end of the summer, more than 80 reports had been made and it was confirmed in 4 different zones (DMZ 1, 2, 10, and 12). Based on responses to the deer hunter survey, upwards of 200 deer may have died from HD in 2022. In 2023, wet spring/summer conditions kept HD at bay, with few reports of sick deer and no confirmations of HD. Hemorrhagic disease is one of the most important infectious diseases affecting white-tailed deer and spreads by a bite from an infected midge. Additional information about HD can be found on the DEEP website at https://portal.ct.gov/deep/wildlife/wildlife-diseases#HD.

In 2023, the DEEP collected 400 chronic wasting disease (CWD) samples throughout the state, and no CWD was detected. Since the beginning of CWD collection efforts in 2003, nearly 10,000 samples have been collected with no detections. Regulations remain in place prohibiting hunters from transporting into Connecticut any deer or elk carcasses or part thereof from any state where CWD has been documented, unless de-boned. Beginning in 2020, the use of natural deer urine products was prohibited, particularly for the purposes of taking or attempting to take or attract deer, or for the surveillance or scouting of deer. Chronic wasting disease can spread through exposure to infected deer urine. These regulations help safeguard Connecticut's native deer population against unnecessary risk of CWD entering the state and the negative long-term impact it would have. Although HD is a concern, CWD is even more of a concern and hunters can do their part to minimize spread. Specific wording of the regulation and an updated list of states where CWD has been documented can be found on the DEEP website at https://portal.ct.gov/deep/wildlife/wildlife-diseases#CWD.

During 2023, the United States Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS), along with some assistance from the DEEP Wildlife Division, sampled and tested deer for SARS-CoV-2 (COVID) as part of a larger nationwide surveillance effort. Results are still pending but SARS-CoV-2 is not expected to be found in any deer. Although deer have tested positive in numerous states, there continues to be no evidence that deer or other wildlife play a significant role in the spread of the virus among people. Additional information and precautions when handling game can be found on the DEEP Wildlife Diseases webpage listed above or at https://www.cdc.gov/coronavirus/2019-ncov/animals/wildlife.html#anchor_1716311317492.

The CT DEEP Wildlife Division expects to be collecting deer heads to test for CWD, HD, and possibly samples to test for SARS-CoV-2 during the 2024 hunting season. Those interested in donating deer heads from harvested deer should contact Wildlife Division biologist Andrew LaBonte (Andrew.Labonte@ct.gov) for more information.

Permit Allocation

To successfully manage Connecticut's deer population growth rate, the Wildlife Division provides opportunities for hunters to purchase multiple deer permits with varying numbers of tags. Permit issuance increased consistently from 1975 to 1992 and remained relatively stable from 1992 to 2009 but has been declining over the past 13 years (Figure 2). Since implementation of the online license system and an increase in fees, permit issuance declined 9% (2009-2011) from the previous 3-year average of 61,859 (2006-2008). Deer permit issuance in 2014 declined nearly 1,000 permits from 2013 and declined another 2,327 permits in 2015. Permit issuance in 2016 was similar to permit issuance levels in 1989. Issuance has declined every year, except in 2020 when there was a slight increase, likely attributed to the COVID-19 pandemic and the presence of snow during the muzzleloader season. Permit issuance declined in 2021, 2022, and 2023 (Figure 2). Archery permit issuance increased to a record high of 17,029 in 2017 but declined slightly in 2018 and 2019. It increased again in 2020, likely a result of the pandemic, but then decreased in 2021, 2022, and 2023 (Table 1). In 2023, issuance for archery (-4.4%) and private land shotgun/rifle (-3.0%) permits had the greatest one-year decline (Table 1).

Overall, in 2023, shotgun/rifle hunters purchased the largest percentage of permits (37.7%), followed by archery hunters (36.0%), muzzleloader hunters (18.1%), and landowners (8.2%). Sixty-three percent of firearms deer permits were issued for use on private land and the remaining 37% were issued for state-managed lands (Table 1). During the fourteenth year of authorizing the use of revolvers for deer hunting, 848 hunters took advantage of this opportunity, a decrease from the previous year (2022; 906).

Figure 2. Total deer permit issuance and total deer harvest in Connecticut, 1975-2023.
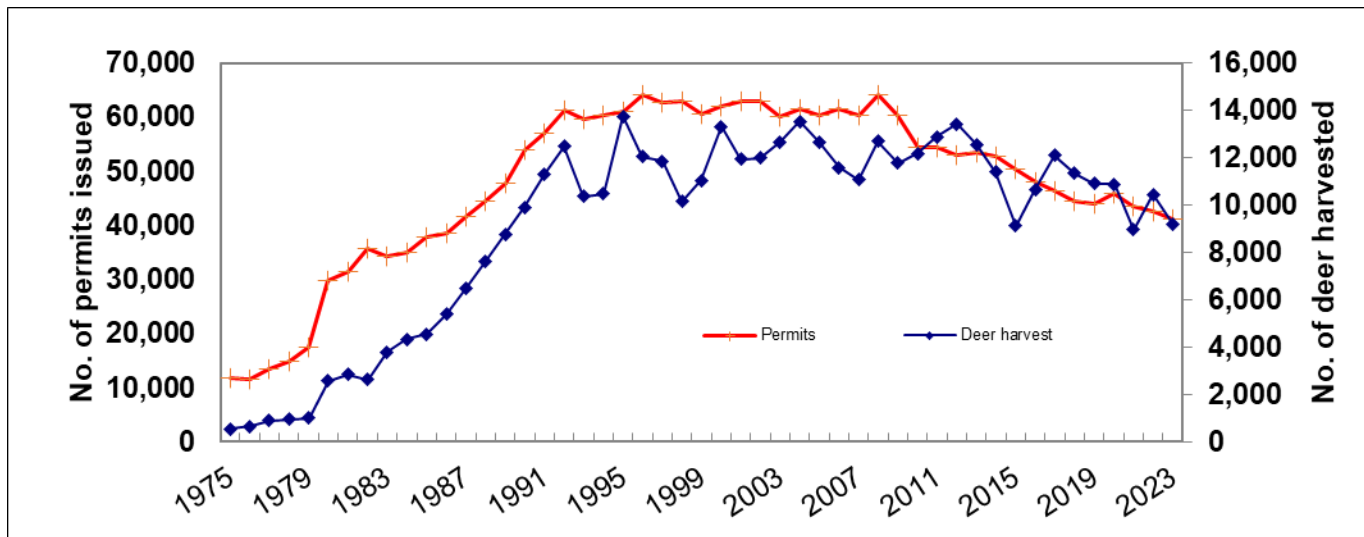
Table 1. Deer hunting permits issued in Connecticut for all regulated hunting seasons, 2020-2023.

Season	Permits 2020	Permits 2021	Permits 2022	Permits 2023	3-year Average Permits 2020-2022	% of Total 2023	% Change 2022 to 2023	% Change 3-year Avg. to 2023
Archery	16,997	16,094	15,493	14,819	16,195	36.0%	-4.4%	-8.5%
Muzzleloader								
State Land	3,004	2,865	2,887	2,800	2,917	6.8%	-2.8%	-4.0%
Private Land	5,249	4,940	4,794	4,656	4,994	11.3%	-2.9%	-6.8%
Subtotal	8,253	7,805	7,681	7,456	7,913	18.1%	-2.9%	-5.8%
Shotgun/Rifle								
State Land*	6,326	5,893	5,698	5,656	5,972	13.7%	-0.7%	-5.3%
Private Land	10,897	10,408	10,199	9,894	10,501	24.0%	-3.0%	-5.8%
Subtotal	17,223	16,301	15,897	15,550	16,474	37.7%	-2.2%	-5.6%
Revolver[A]	931	897	906	848	911	2.1%	-6.4%	-6.9%
Landowner	3,439	3,337	3,445	3,394	3,407	8.2%	-1.5%	-0.4%
Total	**45,912**	**43,537**	**42,516**	**41,219**	**43,988**	**100.0%**	**-3.1%**	**-6.3%**

* A and B season combined and includes controlled hunt permits.
[A] Not included in total permits.

State Land No-Lottery, Lottery, and Controlled Hunt Permits

Over the years, permit issuance was less than the permit quota established for State-managed lands, and many were re-designated as no-lottery areas. New areas, areas of special distinction, and those still in high demand remain in the deer lottery. Lottery permits were allocated at a maximum rate of 1 permit per 20 acres. In 2023, the total number of lottery hunt areas was 13 and all but five deer hunting lottery areas (51, 56, 60, 63, and 68) reached 100% permit issuance (Table 2). In 2023, 638 hunters were selected to hunt during the state land lottery and controlled hunt seasons through the state-administered Deer Lottery Program. Hunters who are not selected in the deer lottery and have no access to private land still have many opportunities to hunt no-lottery areas. Hunters should look at the different weapon types available for use on state properties, the size, and harvest levels in the different state land areas when selecting an area to hunt (Appendix 2).

Table 2. Deer lottery selection results by Deer Hunting Lottery Area, including over the counter sales, 2023.

Deer Hunting Lottery Area	% Hunting Slots Filled
26 (Trout Brook Valley SP)	100
28 (Naugatuck SF -Quillinan Reservior)	100
51 (Yale)[A]	58[A]
MDC52 (Bristol Water Company)	100
56 (Centennial Watershed State Forest)	94
58 (MDC[B] Nepaug - Valentine)	100
60 (Tankerhoosen)	95
62 (Aldo Leopold)	100
63 (Mohawk-Ziegler)	65
64 (MDC[B] Barkhamsted East Block)	100
66 (MDC[B] Nepaug Sweetheart Mt. Block)	100
67 (MDC[B] Barkhamsted West Block)	100
68 (Bishop Swamp)	83

[A] *A season only*
[B] *Metropolitan District Commission*

Regulated Deer Harvest

Regulated hunting is an effective and cost-efficient method for maintaining deer populations at acceptable densities. Over the past 48 years, the trend in deer harvested has been similar to the trend in permit issuance (Figure 2). During the 2023 hunting season, 9,183 deer were legally harvested and reported (Table 3; Figure 2). This represents a 12.1% decrease from the 2022 harvest. Harvest varied considerably by season and town (Appendix 1). Excluding the landowner season, over half (53%) of the deer taken during the 2023 hunting season were harvested by bowhunters. Since crossbows became legal during the January archery season (2009/2010), record bow harvests have been recorded and, although the archery harvest declined in 2021 (4,528), 2022 (4,889) and 2023 (4,434) (Table 3), the archery harvest has exceeded the shotgun/rifle harvest for 11 years (Figure 3).

During the 2023 season, 67% (2,983 total – 2,453 private, 530 state) of the total archery harvest was taken during the early archery season (September 15 to November 14); 18% (803 total – 750 private, 53 state) was taken during the 3-week shotgun/rifle season (open in all zones on private land and state land bowhunting-only areas); 11% (484 – 452 private, 32 state) was taken during the muzzleloader season (December 6 to December 31); and 4% (164) was taken during the January season open in DMZs 11 and 12 on private land only (January 1-31, 2024). Harvest with crossbows during the January season has remained consistently high (2023, 68%; 2024, 67%) compared to when it was first legalized in 2010 (33%), and crossbow harvest has increased similarly during the regular season (2023, 60%) compared to when it was first legalized statewide in 2013 (28%). Based on the number of deer harvested and reported by bowhunters, nearly 1 of 3 (29%) hunters harvested 2 or more deer during the regular archery season. State lands open to archery hunting are a valuable resource to Connecticut deer hunters (Appendix 2).

In 2023, 1,438 deer were harvested during the first 4 days of the shotgun/rifle season (includes junior hunting days), a 16% decrease from 2022 (1,711). The reported shotgun/rifle harvest was 3,264 deer in 2023, a 12% decrease from 2022 (3,710). In 2023, the landowner harvest was 910, a 17.0% decrease from 2022 (1,096). Unlike the 3-week shotgun/rifle season, the landowner season runs from November to December and is less affected by periods of inclement weather and snowfall. The decrease in shotgun rifle harvest in 2023 was likely due to poor weather conditions on typical peak harvest days and the decline in the landowner season was likely due to the decline in permit issuance.

Archery and shotgun/rifle seasons accounted for 48.3% and 35.5% of all deer taken in 2023, while landowner and muzzleloader hunters accounted for 9.9% and 6.3% of all deer taken (Table 3). The decrease in the 2023 deer harvest was partially due to a decline in permit sales, but primarily attributed to poor weather conditions during much of the hunting season.

A Junior Deer Hunter Training Day was established in 2003 for youth hunters. The training period increased to two days in 2009, and then expanded to a full week in 2014. Youth hunters continue to take advantage of these special training days. The recent 3-year average harvest for Junior Deer Hunter Training Days is 35 deer (Table 3).

Hunter Success

Hunter success rate was estimated by dividing total deer harvest by total permit issuance and multiplying by 100 (Table 4). Success rates may fluctuate annually, depending on weather conditions, timing of rain and snowstorms, fall acorn crops, and deer herd size. Archery season success rates fluctuated between 24.3% and 27.6% from 2004 to 2008. Archery success exceeded 35% from 2010 through 2014 (35.2% in 2010; 38.0% in 2011; 37.7% in 2012; 38.3% in 2013; and 35.7% in 2014) but declined during the 2015 (26.9%) and 2016 (31.3%) hunting seasons. In 2017, archery success reached nearly 35% (34.7%), declined slightly in 2018 (31.3%),

and increased again in 2019 (34.9%) and 2020 (34.1%). However, success rates in 2021 decreased for all hunting seasons, including archery, compared to 2020, with the exception of the state land shotgun season. In 2023, success decreased for all seasons from 2022, with archery hunters having the highest annual success rate (29.9%), followed by private land shotgun/rifle hunters (26.9%), and landowner hunters (26.7%) (Table 4). Success rate for the combined muzzleloader seasons was 7.7%. Lower success rates are expected because the muzzleloader season occurs after the shotgun/rifle deer hunting seasons. Hunter success in 2023 was lower than 2022 and the 3-year average for almost all seasons (Table 4).

Table 3. Deer harvested during Connecticut's regulated hunting seasons, 2022-2023.

Season		Harvest 2022	Harvest 2023	3-year Average Harvest (2020-2022)	% of Total 2023	% Change from 2022 to 2023	% Change 3-year Average to 2023
Archery							
State Land		552	615	601	6.7%	11.4%	2.3%
Private Land		4,149	3,655	4285	39.8%	-11.9%	-14.7%
Crossbow[A]		2,828	2,541	2878	27.7%	-10.1%	-11.7%
January[B]		188	164	181	1.8%	-12.8%	-9.4%
Crossbow		128	110	121	1.2%	-14.1%	-8.7%
	Subtotal	4,889	4,434	5,073	48.3%	-9.3%	-12.6%
Muzzleloader							
State Land		123	74	104	0.8%	-39.8%	-29.1%
Private Land		625	501	547	5.5%	-19.8%	-8.4%
	Subtotal	748	575	651	6.3%	-23.1%	-11.7%
Shotgun/Rifle							
State Land		609	595	603	6.5%	-2.3%	-1.3%
Private Land		3,101	2,669	2,816	29.1%	-14.0%	-5.3%
Revolver[C]		11	9	9	0.1%	-18.2%	3.8%
Muzzleloader[C]		28	22	23	0.2%	-21.4%	-4.3%
Youth Hunting Days[C]		25	43	35	0.5%	72.0%	24.0%
	Subtotal	3,710	3,264	3,419	35.5%	-12.0%	-4.6%
Landowner		1,096	910	954	9.9%	-17.0%	-4.6%
	Total	**10,443**	**9,183**	**10,098**	**100.0%**	**-12.1%**	**-9.1%**

[A] *Included as part of private land archery total.*
[B] *Refers to the January following harvest year listed.*
[C] *Included as part of private land shotgun/rifle total.*

Figure 3. Total deer harvest during the firearms and archery seasons in Connecticut, 1990-2023.
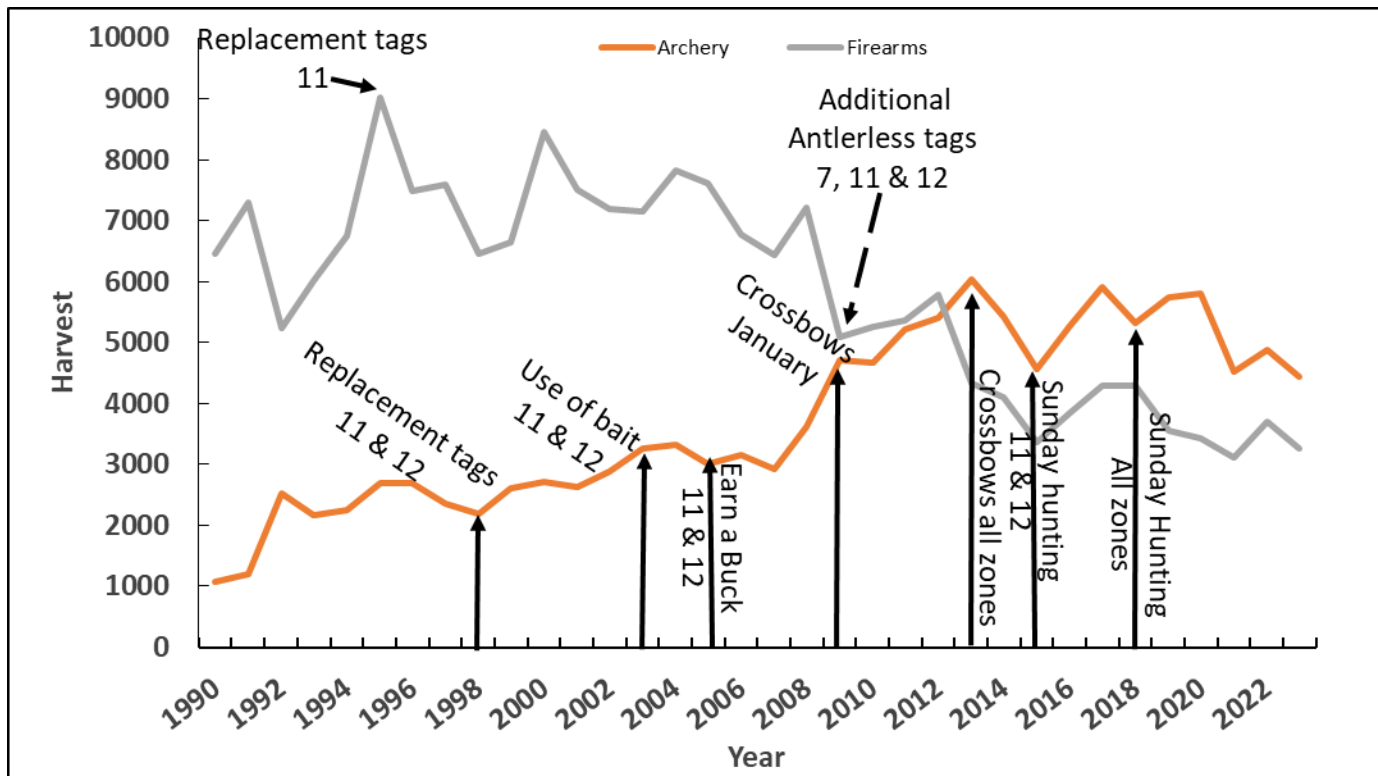
Table 4. Deer hunter success rates (%) in Connecticut, 2020-2023.

Season	2020	2021	2022	2023	3-year Avg. Success Rate (2020-2022)	Difference from 2022	Difference from 3-year Avg.
Archery							
Combined[1]	34.1%	28.1%	31.6%	29.9%	31.3%	-5.4%	-4.4%
Muzzleloader							
State Land	4.2%	2.3%	4.3%	2.6%	3.6%	-39.5%	-27.8%
Private Land	11.4%	8.5%	13.0%	10.7%	10.9%	-17.7%	-2.4%
Combined	8.7%	6.2%	9.7%	7.7%	8.2%	-20.6%	-6.1%
Shotgun/Rifle							
State Land[2]	9.7 %	10.0 %	10.7 %	10.5%	10.1%	-1.9%	3.6%
Private Land	25.8%	24.3%	30.4%	26.9%	26.8%	-11.5%	0.2%
Combined	19.9%	19.1%	23.3%	20.9%	20.8%	-10.3%	0.6%
Landowner	27.0%	25.2%	31.8%	26.7%	28.0%	-16.0%	-4.6%
Average [3]	**23.7%**	**20.6%**	**24.6%**	**22.2%**	**23.0%**	**-9.8%**	**-3.3%**

[1] Data available only for state and private land combined.
[2] State Land A and B was combined in 2020, and was recalculated for previous years.
[3] Average is based on total number of deer harvested/total number of permits issued.

Harvest on state land lottery/controlled hunt areas varied considerably by area, with 23 areas exceeding 10 deer harvested/mi² in 2023 (Appendix 2). Controlled hunts, which occur on large pieces of privately-owned land, play an important role in deer management with the harvest opportunities they provide. A few examples of harvest and success rates are provided below.

Yale Forest (Controlled Hunt Area 51): Yale Forest is a 7,700-acre forest located in Eastford and Ashford. The forest is owned and managed by Yale University for research, education, and forest products. Controlled hunts have been implemented on the property since 1984 in an effort to reduce deer impacts on forest regeneration. During the 2023 controlled hunt, 22 deer were harvested for a 16% success rate.

Bristol Water Company (BWC; Controlled Hunt Area 52): In 1994, BWC contacted the Wildlife Division and expressed interest in opening 4,500 acres for deer management. In 1995, the Wildlife Division conducted a winter aerial deer survey on BWC lands. After survey results were summarized, BWC requested to participate in the controlled hunt program for the 1996, 1997, and 1998 deer seasons to reduce the local deer population. After 3 years of successfully implementing a deer management program on BWC land, BWC asked to continue participating in the program. During the 2023 controlled hunt, 9 deer were harvested for a 12% success rate.

Centennial Watershed State Forest (formerly known as Bridgeport Hydraulic Company; Controlled Hunt Area 56): The Hemlock Tract has been open to hunting since 1996. In 2005, an additional 1,765 acres were opened to hunting (3,474 total acres). During the 2023 controlled hunt, 34 deer were harvested for a 21% success rate.

MDC Nepaug Reservoir (Controlled Hunt Areas 58 and 59): In 2007, MDC (Metropolitan District Commission) contacted the Wildlife Division and expressed concern about the impacts of deer on forest regeneration at their Valentine (Area 58, 1,075 acres) and Pine Hill (Area 59, 325 acres) forest blocks. A browse survey indicated that over 95% of forest regeneration was browsed by deer. In 2008, MDC worked with the Wildlife Division to develop a deer management plan for the two forest blocks. In 2009, both Valentine and Pine Hill were opened to hunting for the early archery and shotgun/rifle seasons. During 2023, Area 58 was open to shotgun hunting only, where 10 deer were harvested for a 25% success rate.

MDC Barkhamsted Reservoir (Controlled Hunt Area 64 and 67): In 2014, MDC (Metropolitan District Commission) contacted the Wildlife Division and expressed concern about impacts of deer on forest regeneration at Barkhamsted Reservoir. This resulted in the establishment of two controlled deer hunts, one in 2016 on the east side (Area 64 – 4,282 acres) and a second in 2017 on the west side (Area 67 – 3,700 acres). To document the impacts of deer on forest regeneration and health, deer exclosures were constructed at 4 different sites. The vegetation has been monitored annually since 2016. During the past 4 years, research has shown that oak seedlings within the fence are healthier and twice the height of the unfenced oaks, primarily due to protection from deer browsing. Although deer continue to impact forest regeneration, the reduction in deer numbers has improved the health of the MDC forests. During the 2023 controlled hunt, 27 deer were harvested for a 34% success rate.

South Central Connecticut Regional Water Authority: Bowhunting for deer is allowed each year on 3,233 acres in North Branford, 154 acres in Seymour and Ansonia, 420 acres in Prospect, and 520 acres in Bethany. In 2022, 24 deer were harvested, while in 2023, 54 deer were harvested.

Zonal Activity

Current population status and long-term trends are analyzed for each DMZ. This approach facilitates the assessment and management of regional deer populations. Annual deer harvest is one of many variables monitored by the Wildlife Division to assess changes in Connecticut's deer population over time for each DMZ. However, without information on hunter distribution and effort by zones, the potential usefulness of these data is limited. To gain insight into hunter distribution and success rates by zone, deer hunters are annually sent an online Deer Hunter Survey to complete. For the 2023 survey, a total of 4,356 hunters responded for a 37% response rate (calculated for hunters who received and opened the email).

Shotgun/Rifle Season

Deer hunters were asked on the hunter survey, "In what zone do you do most of your shotgun/rifle hunting?" The percent of hunters in each DMZ was multiplied by total number of deer permits issued in 2023 to estimate total number of hunters by zone. Total number of hunters and total private land shotgun/rifle deer harvest for each zone were used to estimate deer hunter success rates for each zone (Table 5). In general, higher hunter success rates suggest higher deer density. Of the 13 management zones, most firearms hunting (43%) occurred in 4 zones (1, 2, 5, and 9). Highest private land deer harvests were reported for DMZs 1, 5, 9, and 10. DMZ 4B had the highest deer harvest per square mile (1.4), while DMZ 8 had the greatest density of hunters per square mile (4.6). Hunter success rate was highest in DMZ 6 (40%), while success in zone 2, 4A, and 8 was the lowest (13% and 15%). The trend in hunter success rates by zone has varied over the past 3 years (Table 6). Although hunter success has been variable due to the abundance of acorns and weather conditions, many DMZs have continued to produce relatively high hunter success rates over the past 3 years (Table 6).

Table 5. Zonal hunter numbers, harvest, and success rates for private land during the 2023 shotgun/rifle season.

Zone	Zone Hunted Private Land[A] Shotgun/Rifle	% of Hunters Answered Question[A]	Estimated # of Private Land Shotgun/ Rifle Hunters	Harvest	Area (sq. miles)	Deer Harvest/ Sq. Mile	Hunters/ Sq. Mile	% Success Rate
1	179	7.4	727	250	344.59	0.7	2.1	34
2	271	11.1	1100	138	410.69	0.3	2.7	13
3	156	6.4	633	179	273.33	0.7	2.3	28
4A	153	6.3	621	96	213.5	0.4	2.9	15
4B	115	4.7	467	169	120.66	1.4	3.9	36
5	374	15.4	1518	501	445.94	1.1	3.4	33
6	113	4.6	459	185	260.03	0.7	1.8	40
7	176	7.2	715	205	373.08	0.5	1.9	29
8	190	7.8	771	116	169.11	0.7	4.6	15
9	215	8.8	873	251	279.39	0.9	3.1	29
10	180	7.4	731	226	244.36	0.9	3.0	31
11	156	6.4	633	155	291.53	0.5	2.2	24
12	159	6.5	646	198	358.39	0.6	1.8	31
Total	**2,437**	**100.0**	**9,894**	**2,669**	**3,785**	**0.7**	**2.6**	**27**

[A] Based on hunter survey question asking hunters which zone they primarily shotgun/rifle hunt in.

Table 6. Zonal comparisons in private land shotgun/rifle harvest, hunter distributions, and success rates, 2021-2023.

Zone	Area (sq. miles)	Deer Harvest/Sq. Mile 2021	2022	2023	Hunters/Sq. Mile 2021	2022	2023	Hunter Success Rate (%) 2021	2022	2023
1	344.6	0.7	0.7	0.7	2.4	2.3	2.1	28	30	34
2	410.7	0.4	0.3	0.3	2.3	2.7	2.7	15	13	13
3	273.3	0.7	0.7	0.7	2.2	2.4	2.3	31	27	28
4A	213.5	0.4	0.5	0.4	2.7	2.9	2.9	14	17	15
4B	120.7	1.3	1.8	1.4	3.4	3.9	3.9	38	45	36
5	445.9	1.0	1.5	1.1	3.3	3.3	3.4	32	45	33
6	260.0	0.7	0.8	0.7	2.4	2.3	1.8	30	37	40
7	373.1	0.5	0.6	0.5	1.8	1.9	1.9	29	30	29
8	169.1	0.7	0.7	0.7	3.1	3.5	4.6	23	21	15
9	279.4	0.8	1.1	0.9	3.4	3.4	3.1	23	33	29
10	244.4	0.9	1.2	0.9	3.2	3.0	3.0	28	39	31
11	291.5	0.5	0.5	0.5	2.1	2.6	2.2	22	20	24
12	358.4	0.5	0.7	0.6	2.1	2.1	1.8	27	35	31
Total	**3,785**	**0.7**	**0.8**	**0.7**	**2.8**	**2.7**	**2.6**	**24**	**30**	**27**

Archery Season

Deer hunters were asked on the hunter survey, "In what zone do you do most of your archery hunting?" The percent of hunters in each DMZ was multiplied by total number of archery permits issued in 2023 to estimate total number of hunters by zone. Bowhunter success rates in 2023 were highest in zones 4B, 5, and 6 and lowest in zones 2 and 8. Success rates over the past few years have been similar for most zones (Table 7).

Table 7. Zonal comparisons of archery season success rates, 2020-2023.

Zones	Zone Hunted Archery[A]	% of Hunters Answered Question[A]	Estimated # of Archery Hunters[A]	Harvest	Hunter Success Rate (%) 2020	2021	2022	2023
1	124	5.4	803	214	38.1	26.3	23.0	26.6
2	185	8.1	1,199	193	18.3	14.9	16.8	16.1
3	173	7.6	1,121	324	29.9	29.0	28.5	28.9
4A	124	5.4	803	213	19.9	19.1	23.1	26.5
4B	95	4.2	616	222	31.7	31.9	38.9	36.1
5	239	10.5	1,549	552	31.7	29.6	36.3	35.6
6	95	4.2	616	216	32.7	26.5	26.2	35.1
7	268	11.7	1,737	524	41.7	30.2	32.4	30.2
8	141	6.2	914	195	22.6	23.3	25.6	21.3
9	150	6.6	972	245	27.8	22.1	29.1	25.2
10	122	5.3	791	258	32.1	28.2	32.9	32.6
11	372	16.3	2,410	735	51.6	33.4	33.1	30.5
12	199	8.7	1,289	379	41.3	28.5	38.3	29.4
Total	**2,287**	**100.0**	**14,819**	**4,270**	**34.1**	**27.1**	**30.3**	**28.8**

[A] *Based on hunter survey question asking hunters which zone they primarily "archery" hunt in.*

Archery Observations, Harvest, and Effort

To obtain additional information beneficial to zonal deer management, successful archery hunters were asked "How many hours they hunted and how many fawns, does, and bucks they observed on the day they harvested their deer." Observation rates were measured based on number of deer observed per hour of hunting. Fawn recruitment (number of fawns added to fall population) also is an important variable used to understand changes in population growth and deer herd dynamics. Fawn recruitment was measured as number of fawns observed per doe. The most representative samples of fawn to doe ratios are those collected at the start of the hunting season (September 15 – October 15) when fawns are easily identifiable and hunter harvest would have the least impact on observations. Another means of assessing zonal population changes is looking at the number of deer harvested per hour hunted. Number of deer observed per hour, number of fawns observed per doe, and number of deer harvested per hour varied across years and by zone (Table 8). Observation rates of bucks, does, and fawns were similar to previous years, as was the percent of each class harvested (Table 9). In general, fawns are harvested at a lower rate than they are observed, compared to bucks which are harvested at a greater rate than they are observed (Table 9), which is obvious as many hunters desire to harvest mature animals, especially mature bucks. Hunters are also asked "In the zone you spend the majority of your time hunting, how would you describe the number of fawns compared to last year?" Half of hunters said it was the same (51%), a quarter said it was less (24%), 13 percent said there were far less, while 11 percent said there were more. Responses tend to align with the overall slight decline in fawn/doe (F:D) ratios reported from 2022 to 2023 (Table 8).

Weekend Archery Hunting

Prior to 2015, archery hunting was only allowed on Saturdays. Beginning in 2015, archery hunting was permitted on private land on Sundays in all zones except 2, 3, and 4A, and then in all zones in 2018. The two-day weekend harvest remains to be a critical part of the archery harvest (Table 10).

Table 8. Observation rates (deer seen/hour; D/hr), number of fawns per doe (F:D), and number of deer harvested per hour (H/hr) collected at the time harvest was summarized for the first month of the archery season by Deer Management Zone (DMZ) in Connecticut, 2021-2023.

DMZ	Deer Harvested and Observed/Hour														
	First Month of Archery Season (Sept. 15-Oct. 15)														
	2021				2022				2023				Δ^3	Δ^3	Δ^3
	n	D/hr[1]	F:D	H/hr[2]	*n*	D/hr[1]	F:D	H/hr[2]	*n*	D/hr[1]	F:D	H/hr[2]	D/hr[1]	F:D[4]	H/hr
1	73	1.23	0.35	0.35	45	1.50	0.41	0.34	54	1.38	0.48	0.36	-0.08	0.17	0.06
2	43	1.11	0.53	0.37	65	0.94	0.64	0.34	48	1.19	0.32	0.40	0.27	-0.50	0.18
3	68	1.17	0.58	0.43	122	1.16	0.42	0.37	79	1.28	0.52	0.36	0.10	0.24	-0.03
4A	41	0.76	0.71	0.31	51	1.01	0.56	0.38	56	1.31	0.44	0.39	0.30	-0.21	0.03
4B	41	1.32	0.67	0.41	86	1.28	0.54	0.33	67	1.41	0.50	0.36	0.10	-0.07	0.09
5	121	1.07	0.75	0.35	207	1.17	0.57	0.33	186	1.14	0.51	0.33	-0.03	-0.11	0.00
6	45	1.22	0.84	0.37	42	1.54	0.47	0.38	54	1.23	0.38	0.34	-0.20	-0.19	-0.11
7	127	1.08	0.50	0.38	164	1.16	0.51	0.35	126	1.09	0.59	0.32	-0.06	0.16	-0.09
8	53	1.01	0.50	0.36	61	1.15	0.66	0.41	56	1.12	0.42	0.33	-0.03	-0.36	-0.20
9	61	0.86	0.50	0.33	87	1.09	0.50	0.37	59	1.51	0.52	0.37	0.39	0.04	0.00
10	57	0.88	0.33	0.31	94	1.09	0.55	0.36	63	1.71	0.63	0.35	0.57	0.15	-0.03
11	166	1.06	0.57	0.32	243	1.17	0.51	0.34	144	1.47	0.55	0.34	0.26	0.08	0.00
12	98	1.22	0.54	0.34	161	1.07	0.55	0.37	111	1.09	0.52	0.38	0.02	-0.05	0.03
Total	994	1.07	0.57	0.36	1,428	1.18	0.53	0.36	1,103	1.27	0.51	0.35	0.08	-0.04	-0.03

[1] *Deer observed per hour hunted based on successful hunters.*
[2] *Deer harvested per hour hunted based on successful hunters.*
[3] *Change from 2022 to 2023.*

Table 9. Hunter observations and harvest ratios reported during the first month of the archery season in Connecticut, 2020-2023.

Age-sex	First Month of Archery Season (Sept. 15-Oct. 15)							
	Observation %				Harvest %			
	2020	2021	2022	2023	2020	2021	2022	2023
Bucks	23%	23%	24%	25%	42%	42%	43%	43%
Does	50%	51%	50%	50%	48%	48%	47%	47%
Fawns	27%	26%	26%	25%	10%	10%	10%	10%

Table 10. Weekend harvest on private land during the archery season in Connecticut, 2014-2023.

Weekend Archery Harvest (Sept. 15-December 31) Private Land											
Year	2014[1]	2015[2]	2016[2]	2017[2]	2018[3]	2019[3]	2020[3]	2021[3]	2022[3]	2023[3]	
Percent Harvest	29%	37%	37%	37%	40%	44%	37%	38%	34%	36%	

[1] *Hunting permitted on Saturday only.*
[2] *Hunting permitted on Saturday and Sundays in all zones except 2, 3, and 4A.*
[3] *Hunting permitted on Saturday and Sundays in all zones.*

Overall Private Land Deer Harvest

The 2023 private land deer harvest was highest for DMZs 5, 7, and 11 (Table 11). Zonal harvest levels have fluctuated in most zones over the past 11 years and likely reflect differences in weather conditions, snow cover, acorn abundance, and deer densities (Table 11). Highest total deer harvest had been reported in DMZ 11 for a number of years, likely a result of deer abundance, availability of replacement deer tags, use of bait, and increased access to land for hunting. However, in the past several years, harvest in DMZ 5 has exceeded that of DMZ 11. Total private land deer harvest decreased 13.3% from 2022 to 2023.

Table 11. Private land deer harvest for all seasons (excluding landowner) in each of Connecticut's Deer Management Zones, 2013-2023.

Zone	Year										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1	558	521	472	573	551	609	545	585	485	446	469
2	356	296	273	294	365	326	313	360	335	326	313
3	491	536	426	516	566	520	493	626	529	558	492
4A	320	275	228	295	330	319	335	263	226	279	290
4B	486	496	357	452	488	471	431	462	351	456	393
5	1,345	1,163	902	1,062	1,244	1,251	1,197	1,072	924	1,262	1,049
6	557	490	416	488	528	503	483	534	433	432	434
7	765	747	743	838	880	806	897	911	723	785	729
8	489	398	342	368	423	408	418	358	295	323	271
9	721	685	511	580	701	697	623	563	460	628	483
10	533	546	433	471	606	558	528	493	428	561	476
11	1,921	1,505	1,321	1,538	1,666	1,440	1,148	1,329	922	989	865
12	1,251	1,017	781	916	1,212	1,116	956	786	619	830	561
Total	10,748	8,675	7,205	8,391	9,560	9,024	8,367	8,342	6,730	7,875	6,825
% Change	2.3%	-19.3%	-16.9%	16.5%	13.9%	-5.6%	-7.3%	-<1.0%	-19.0%	17.0%	-13.3%

Long-term Zonal Changes

Most zones have not required any changes over time; however, others have required more management efforts. In DMZ 4, a decreasing trend prompted harvest restrictions on female deer in this zone in 1999. During the shotgun/rifle and muzzleloader seasons, the antlerless-only tag on 2-tag permits was not valid in DMZ 4. In 2002, deer populations appeared to be stable in the southern portion, but not in the northern portion of DMZ 4. Following the 2002 season, DMZ 4 was split into two zones (4A and 4B), allowing each zone to maintain different management objectives. In DMZ 4A (northern portion), the restriction on the use of antlerless tags was retained, while the use of antlerless tags was again allowed in DMZ 4B (southern portion). These changes increased private land shotgun/rifle hunter success in DMZ 4B but have yet to change hunter success in DMZ 4A (Figure 4). Similarly, increasing predator populations (mainly black bear and bobcat) in DMZ 2 have impacted the deer population, resulting in persistently low private land shotgun/rifle hunter success (Figure 4). This situation prompted harvest restrictions on the harvest of female deer beginning in 2016. During shotgun/rifle and muzzleloader seasons, the antlerless-only tag on 2-tag permits was not valid. With little evidence of change in hunter success the past few years, other restrictions may be considered in the future.

Archery hunter success in DMZ 2 has changed little over time (Figure 5), with DMZs 2 and 4A being the lowest in the state when looking at it on a zonal basis (Table 7). What appears to be an increase in DMZs 2 and 4A in 2009 is an artifact of the change in reporting requirements from kill report cards to the current online/telephone reporting system (Figure 5). The decrease in success seen in DMZs 2 and 4A in 2015 (Figure 5) was due to it being a year with the highest acorn abundance. It is unclear about the decline in success in DMZ 4A in 2020 and 2021. In addition to deer abundance, acorn abundance and weather can have a large impact on hunter success.

Replacement Tags

In addition to the initial permits that come with tags in areas with substantial deer problems, the replacement tag system was developed to increase the harvest of female deer. This system is currently in place in DMZs 11 and 12. Since 1998, when archery hunters first had access to replacement tags in DMZ 11, the buck harvest remained relatively stable, while the antlerless harvest in that zone increased nearly 5 times (from 200 to almost 1,000 deer annually and has now declined to below 400). The buck harvest has steadily increased over the years with the addition of the earn-a-buck program in 2005. The number of roadkills in DMZ 11 has shown a steady decline starting a few years after the program began (Figure 6). The ratio of female deer harvested in DMZ 11 increased from 0.9 females per male (1994-1997) to 1.3 females per male (2001-2009), with the past 3 years averaging around 0.7 females per male (Figure 7).

Figure 4. Private land shotgun/rifle hunter success in Deer Management Zones 2, 4A, and 4B, 1998-2023.
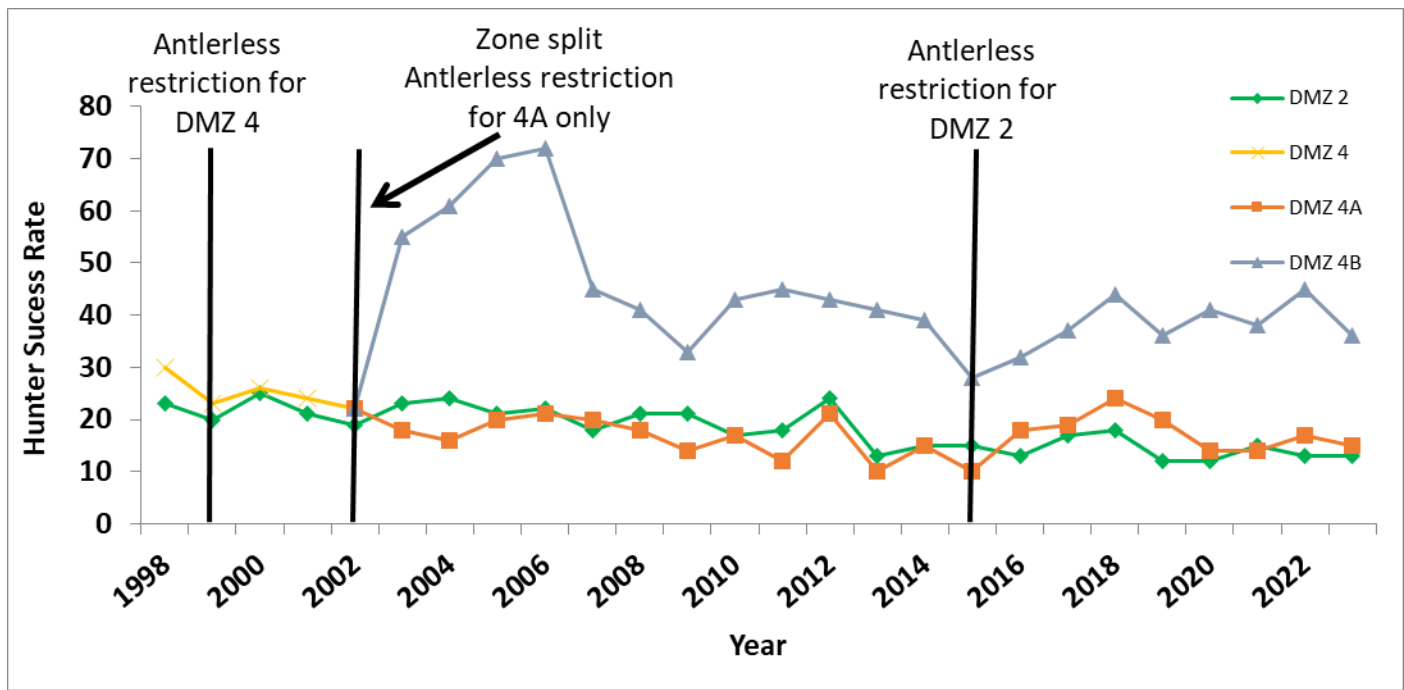
Figure 5. Archery hunter success in Deer Management Zones 2 and 4A, 2002-2023.
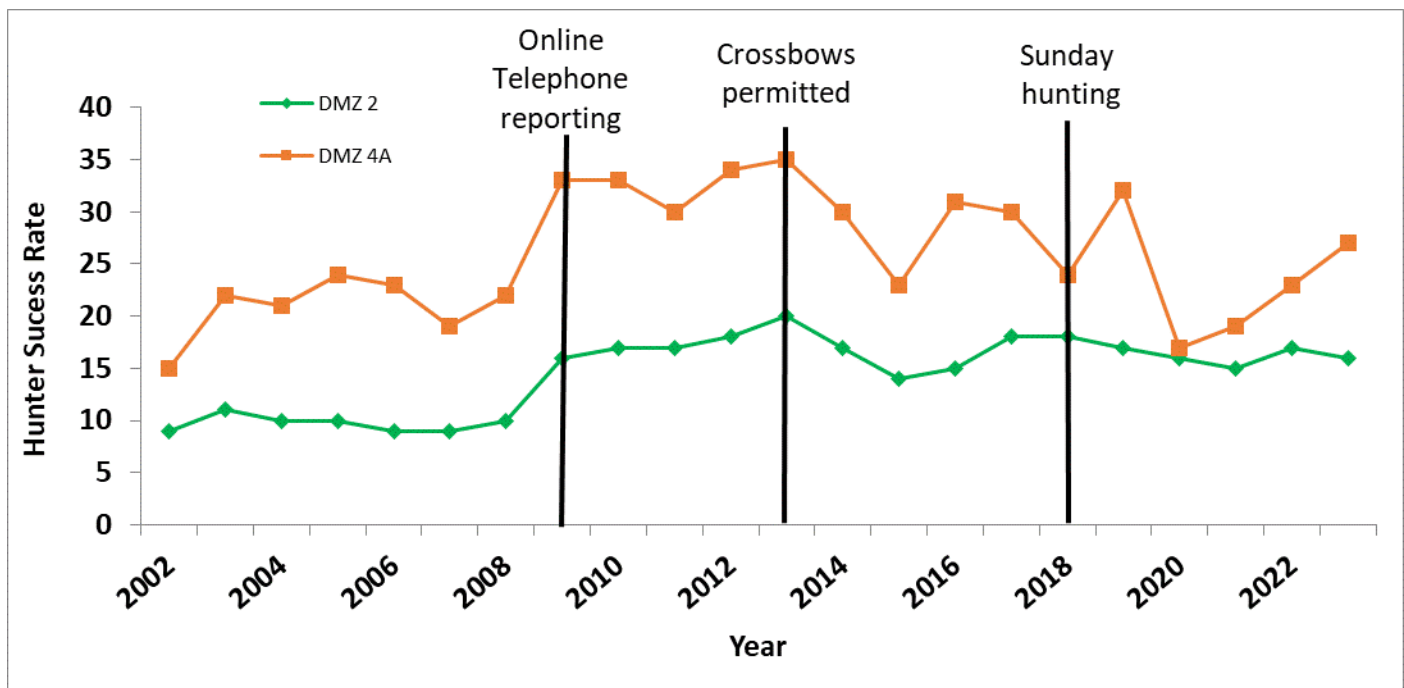
Figure 6. Comparison of trends in roadkills and the antlered and antlerless deer harvests during the archery deer season in Deer Management Zone 11, 1995-2023.
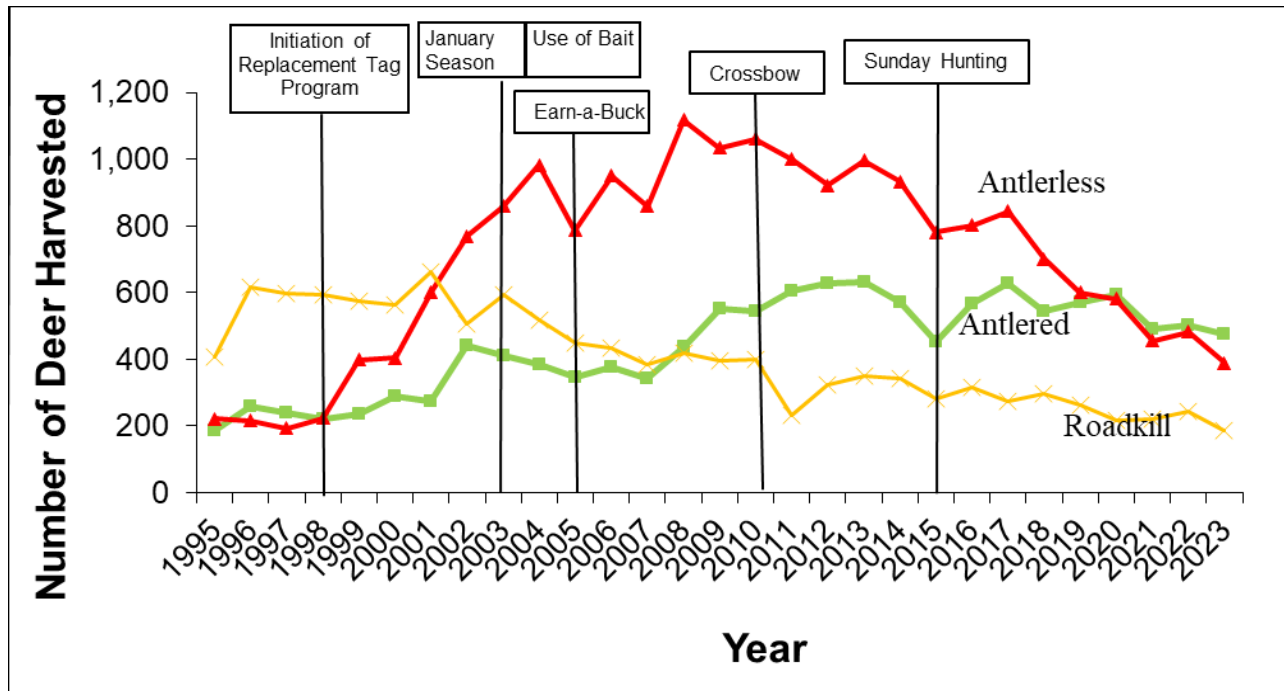
Figure 7. Changes in sex ratios of harvested deer from Deer Management Zone 11 after implementing various management strategies during the archery season, 1995-2023.
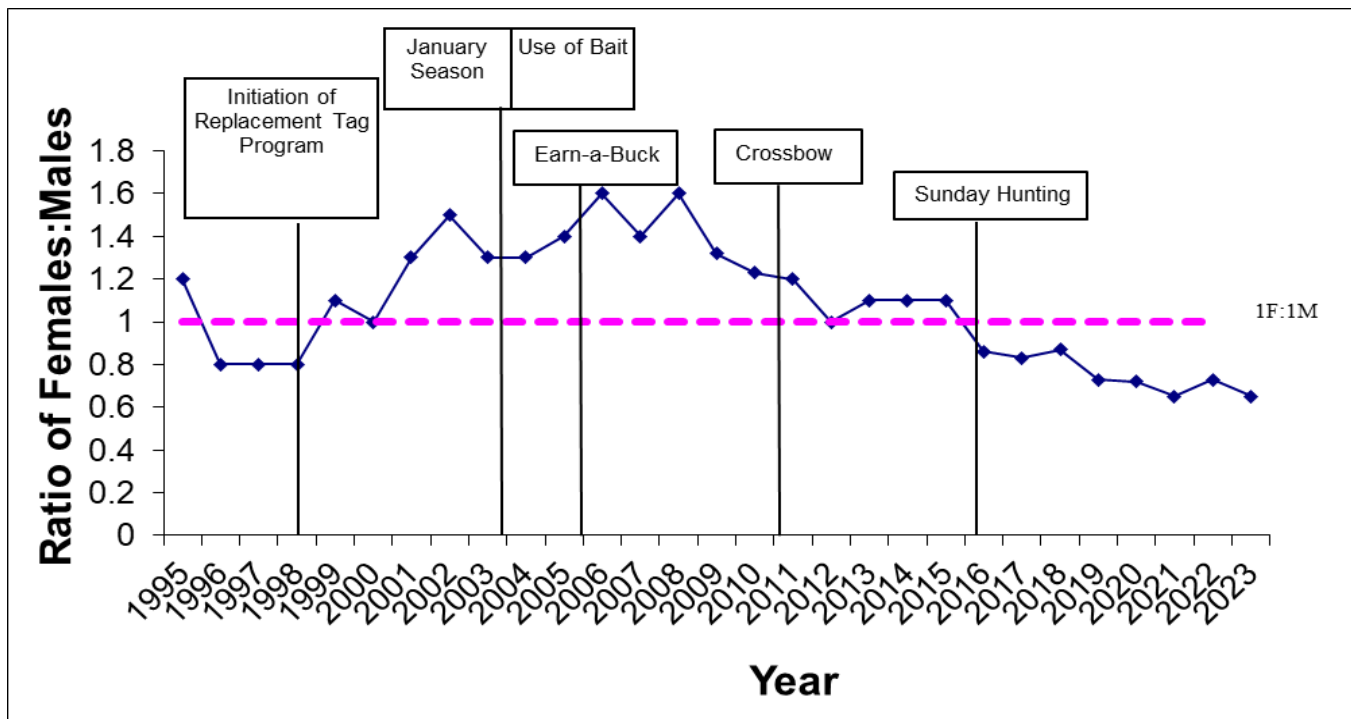
Deer Harvest Sex Ratios

Removal of female deer is the most efficient means of stabilizing deer population growth. To facilitate stabilization, the Wildlife Division developed permits that encourage the harvest of female deer. All 2-tag permits come with 1 antlerless-only and 1 either-sex deer tag. In 2009, this was increased to 1 either-sex and 2 antlerless deer for hunters in DMZ 7 and 1 either-sex and 3 antlerless deer for hunters in DMZs 11 and 12. Although button bucks are included in the antlerless harvest, this system promotes the removal of female deer (Table 12). In zones 2 and 4A, the antlerless-only tag was NOT valid, reducing the bag limit to 1 deer per hunter during

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the private land firearms season. Overall, deer harvest sex ratios have been similar the past three years (Table 13). In 2023, 40% (3,574) of the total regulated deer harvest (excluding crop damage harvest) was comprised of antlerless deer. A significant proportion of the harvest included females, which contributes to population control efforts (Appendix 3).

Table 12. Sex ratios (male:female) and antlered to antlerless ratios of deer harvested during the regular hunting season and through crop damage in 2023.

	Muzzleloader	Shotgun/Rifle	Archery	Landowner	Crop Damage	Total
Male:Female	1.2:1	2.3:1	1.8:1	2.9:1	0.9:1	1.9:1
Antlered:Antlerless	0.8:1	1.5:1	1.4:1	2.2:1	0.7:1	1.5:1

Table 13. Sex ratios (male:female) of deer harvested during Connecticut's regulated hunting seasons, 2021-2023.

2022		2023		Males per Female			3-year Average
Males	Females	Males	Females	2021	2022	2023	(2021-2023)
6,635	4,224	6,234	3,250	1.9:1	1.6:1	1.9:1	1.8:1

Antler Points and Yearling Fraction

Deer age, nutritional status, and genetics affect the number of antler points on bucks. The yearling fraction of the antlered buck harvest is a common measure of hunting pressure. Intensively hunted herds have yearling fractions of about 70%, while lightly hunted herds have fractions of about 30%. Few yearlings (less than 6%) have 7 or more points and few adults (less than 12%) have less than 5 points, based on the known aged samples in Connecticut. Using antlered bucks with less than 5 points (yearling) and those with 7 or more points (adults) is one way of estimating the yearling fraction of the antlered buck harvest.

The statewide yearling male fraction based on antler points during the shotgun/rifle season was 40% in 2012, 44% in 2013, 45% in 2014, 42% in 2015, 36% in 2016, 39% in 2017, 39% in 2018, 36% in 2019, 34% in 2020, 33% in 2021, 34% in 2022, and 34% in 2023. Of all antlered bucks harvested (1 or 2 points, 3 or 4 points, 5 or 6 points, 7 or 8 points, 9 or 10 points, or >10 points), 8-pointers were the most frequent point category (Figure 8). The number of points on antlered bucks has remained relatively consistent over the past 4 years (Figure 8).

Figure 8. Number of antler points on bucks collected by the telecheck/online reporting system during the shotgun/rifle hunting season in Connecticut, 2020-2023.
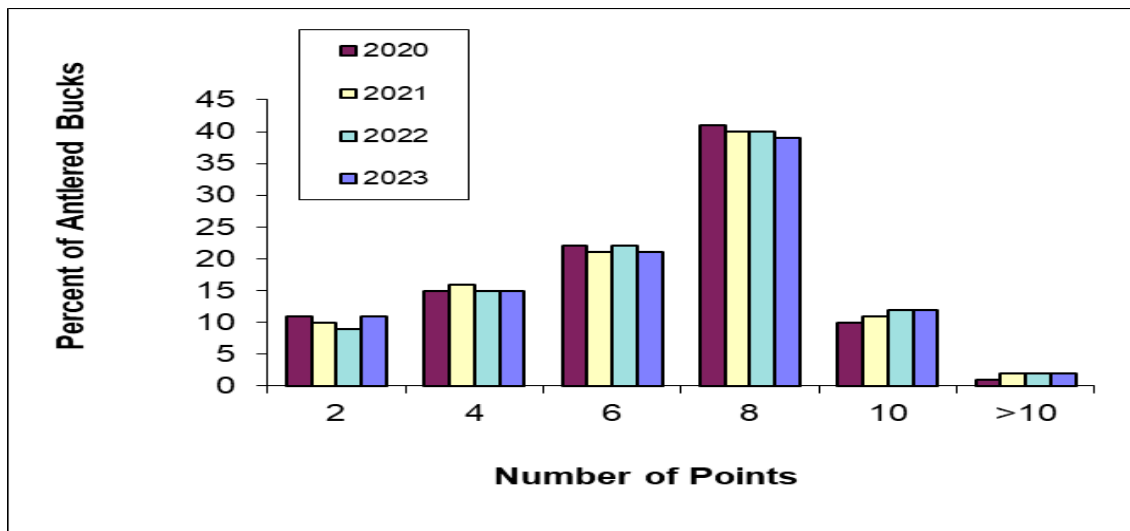
Non-hunting Deer Mortality

Non-hunting deer mortality, particularly roadkills and crop damage, represents a significant percentage of annual deer losses in Connecticut. Roadkill data provide important information relative to cultural carrying capacity, population modeling, and, to a lesser extent, deer density and herd sex ratios. In an urban-suburban state like Connecticut, measures of land-use conflicts, such as roadkills, are an important source of data for the formulation of management policies and recommendations.

In 2023, 783 non-hunting deer mortalities were reported (Appendix 4). Of those, 292 were killed in deer-vehicle accidents. Deer-vehicle accidents accounted for 93% of all reported non-hunting mortality (excluding crop damage; 470) in 2023. Non-hunting

mortality comprised 7.9% of the total reported deer mortality in Connecticut, including crop damage harvest (Appendix 4). Based on a 2-year study (2000-2001), for every 1 deer killed by a vehicle and reported to the Wildlife Division, 5 additional deer are killed by vehicles and not reported. Wildlife kill incident reports (WKIRs) filled out by local and state police and submitted to the Connecticut Department of Energy and Environmental Protection have been used to document deer-vehicle accidents for decades. State and local law enforcement officers are required to complete a motor vehicle crash report within 5 days for the Connecticut Department of Transportation (DOT) when motor vehicle accidents occur, and damages are estimated to exceed $1,000. One of the primary causes of accidents listed for selection is deer. The Connecticut Transportation Institute then enters those reports, which can be accessed through an online database. Those data are not part of this report. At one time, DMZ 11 (Fairfield County, Figure 1) accounted for as much as 21% of all deer roadkills in Connecticut (2000). A steady decline has been observed in the past 10 years, with 13.3% of all road-killed deer being reported in DMZ 11 in 2022. The number of roadkills per square mile has also declined over the past few years (Appendix 5). The amount of roadkills in DMZ 11 has shown a steady decline since implementation of the replacement tag program, extension of the archery season, and allowing the use of bait on private land (Figure 6).

Deer damage is an important economic concern to some commercial agricultural operations. The Wildlife Division's Deer Crop Damage Program regulates the removal of deer on agricultural properties which meet specific criteria and are experiencing deer damage to specific plant commodities. The Division also encourages agriculturists to take advantage of the regulated deer hunting season to aid in the removal of problem deer and to use other methods, such as fencing, to reduce deer damage. In 2015, the crop damage application and deer registration process were streamlined. Crop damage applications can now be obtained from the Department's website (https://portal.ct.gov/deep/wildlife/nuisance-wildlife/deer-crop-damage-permit-program) and filled out electronically. Crop damage shooters are no longer required to mail in paper tags upon removing a deer but are now required to report their removal online or by telephone. During the 2023 calendar year, 470 deer were taken with crop damage permits (Appendix 6). From 1993 to 2022, annual deer removal with crop damage permits fluctuated between 239 and 946 deer. Deer removals in DMZs 3 and 5 accounted for 34% of deer removed with crop damage/jacklight permits in 2023. Crop damage removals increased from May to October, with 53% of the annual removals occurring in September and October (Figure 9). This increase is typically thought to reflect increasing interest in hunting as fall approaches rather than any damage-related trend. An additional 50 deer were killed in November and December using jacklight permits, which is allowed only under special circumstances.

Figure 9. Crop damage deer removals by month, 2023.
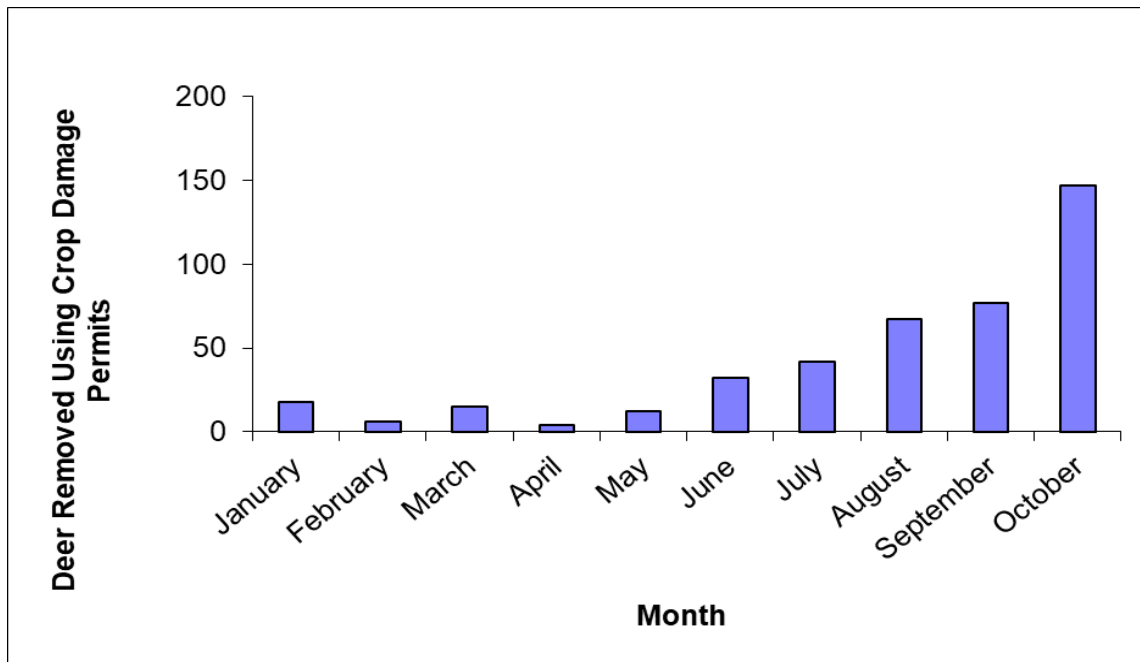
Population Trends

Based on aerial deer surveys conducted between 1975 and 2006 and population reconstruction models applied between 2011-2023, a statewide population estimate was calculated. Using these methods, over the past 20 years the population peaked at 152,000 in the early 2000s and declined some in the later 2000s (110,000) (Figure 10). Keep in mind that both methods are only estimates. Aerial surveys are heavily impacted by forest type and snow cover, and the population reconstruction model uses variables based on reported hunter harvests and sightings of fawns, does, and bucks collected at time of harvest reporting, along with reported roadkills. A correction factor based on research has been applied to all variables.

Figure 10. Statewide deer population estimates based on track count (1896), aerial surveys (1975-2006), and population reconstruction models (2011-2023) in Connecticut.
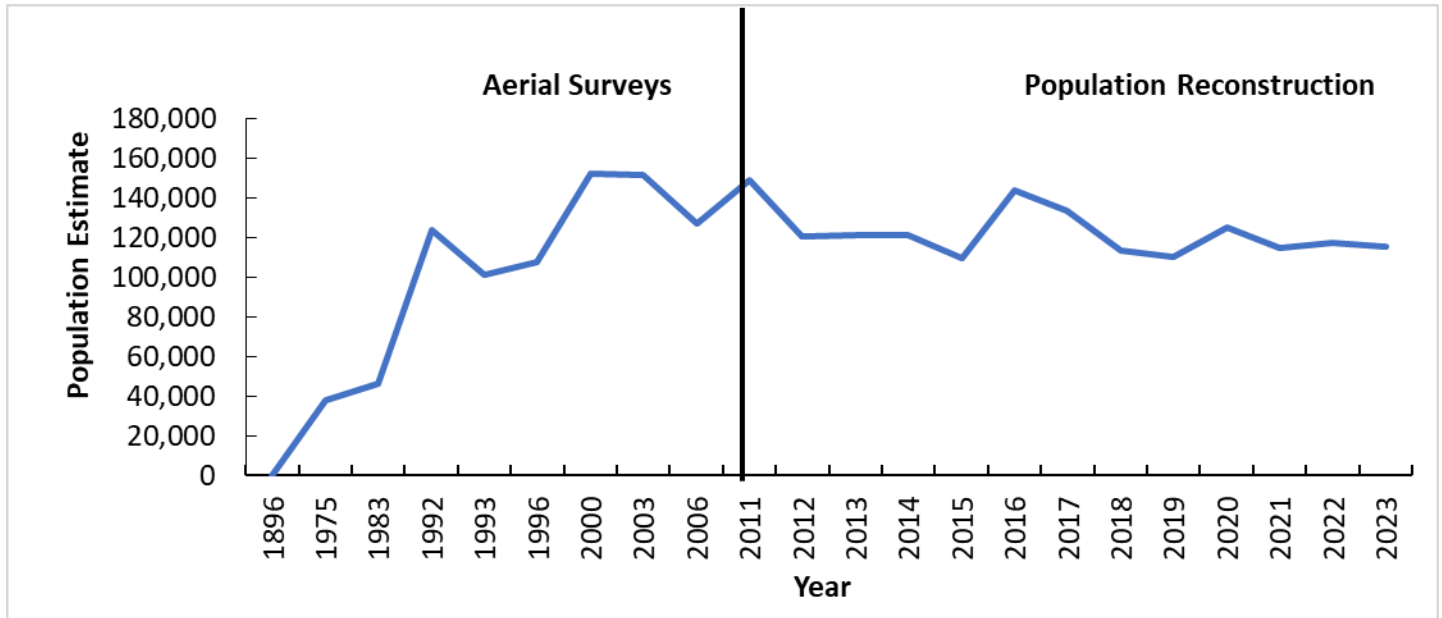
The 2023 deer hunter survey included the question, "How would you describe the status of the deer population in the zone you hunt most from last year to this year?" Hunter perceptions of deer population trends were ranked on a scale of 0 (decreasing population) to 6 (increasing population). Thirty-five percent of the hunters who responded to the survey believed that the population was declining, 49% believed it was stable, and 16% believed it was increasing. DMZs 4A, 4B, and 5 had the highest average rank (3.04, 2.84, and 2.92) (Figure 11), indicating that the population was mainly stable. In general, hunters perceived that deer populations are relatively stable or decreasing slightly in most zones over the past 3 years. Hunter perceptions seem to align with population estimates, which align with management objectives in several zones.

Figure 11. Perception of zonal deer population trends (average rank) by Connecticut's deer hunters, 2021-2023

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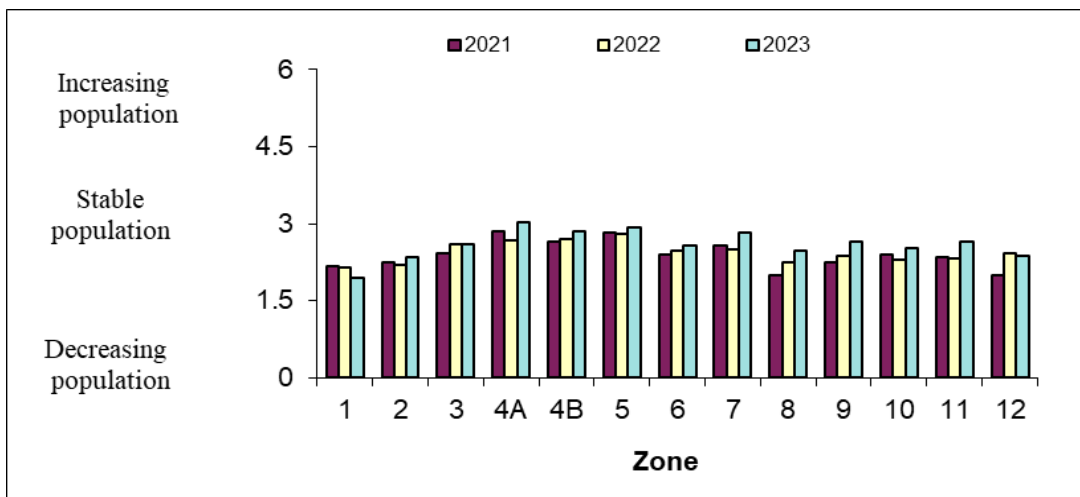
Fall Acorn Crop

Acorns are a preferred food for white-tailed deer during fall and winter. Acorn availability influences deer movement patterns and herd health. To interpret changes in harvest rates, herd health, and herd productivity, the Deer Program has been collecting data since 1993 from hunter surveys on abundance of the fall acorn crop. Hunter perceptions of the fall acorn crop were ranked on a scale from 0 (scarce) to 6 (abundant acorns). In 2023, 45% of the hunters who responded to the survey ranked the fall acorn crop as moderate, 27% as abundant, 23% as scarce, and 5% as non-existent. DMZs 8 and 12 had the highest average rank (4.2 and 4.0), while DMZs 1 and 2 had the lowest average ranks (1.7 and 2.6) (Figure 12). On a scale of 0-6, the average rank statewide was 3.2. Substantial damage was caused to oak trees for consecutive years by spongy (formerly known as gypsy) moth outbreaks (2018 and 2019) in eastern Connecticut and then for multiple years in western Connecticut. The long-term implication on the oak trees is still unknown, although recovery is evident based on surveys over the past few years in eastern Connecticut.

Figure 12. Perception of acorn crops (average rank) by Connecticut's deer hunters, 2020-2023.
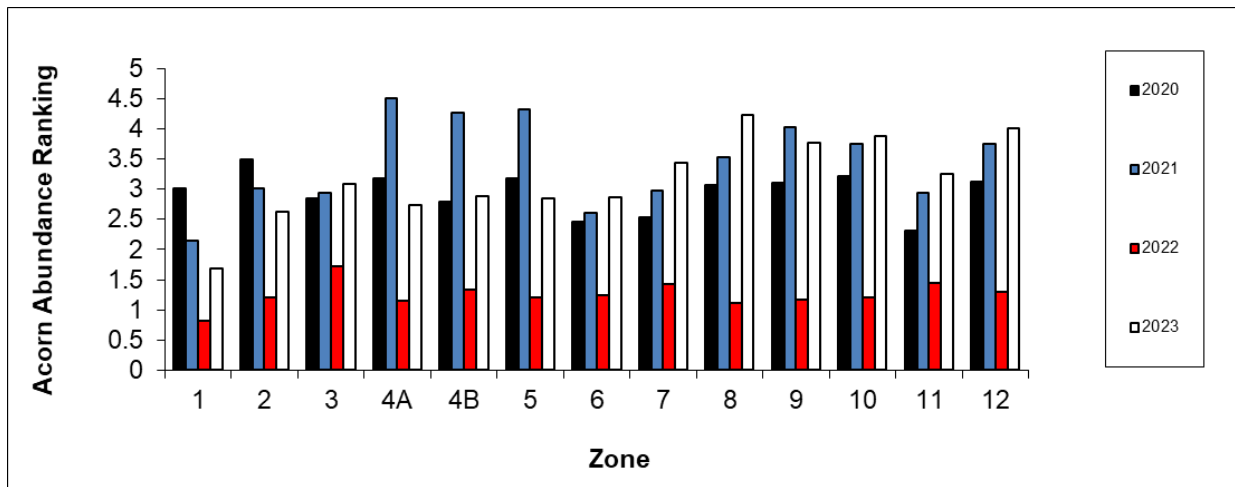
The past 29 years of data on acorn abundance and deer harvest rates suggest that a correlation exists between hunter success and acorn abundance (Figure 13). In 1993, when acorns were abundant, hunter success was one of the lowest recorded, and in 2004, when acorns were scarce, the hunter success rate was the highest. During years with low acorn productivity, deer travel more to access other food sources, such as green fields, increasing their vulnerability to hunters. In 2013 and 2014, the acorn-success pattern was inconsistent and may have been influenced by warm weather during the hunting season. During the 2015 and 2016 seasons, the abundance of acorns and warm weather resulted in lower hunter success rates. During the past couple of years, the lack of acorns has led to increased success rates. On average, the acorn crop statewide has been moderate in most years, scarce about every 5 to 6 years, and abundant every 4 years. In local areas, extensive spongy moth damage has resulted in limited acorn productivity and severely impacted many white oak stands, resulting in large areas with nothing but standing dead oak trees. Depending on the severity of damage that occurs in the coming years, the spongy moth outbreak could have a major impact on Connecticut's forested landscape for years to come.

Figure 13. Relationship between private land shotgun/rifle hunter success rates and fall acorn productivity, 1993-2023.

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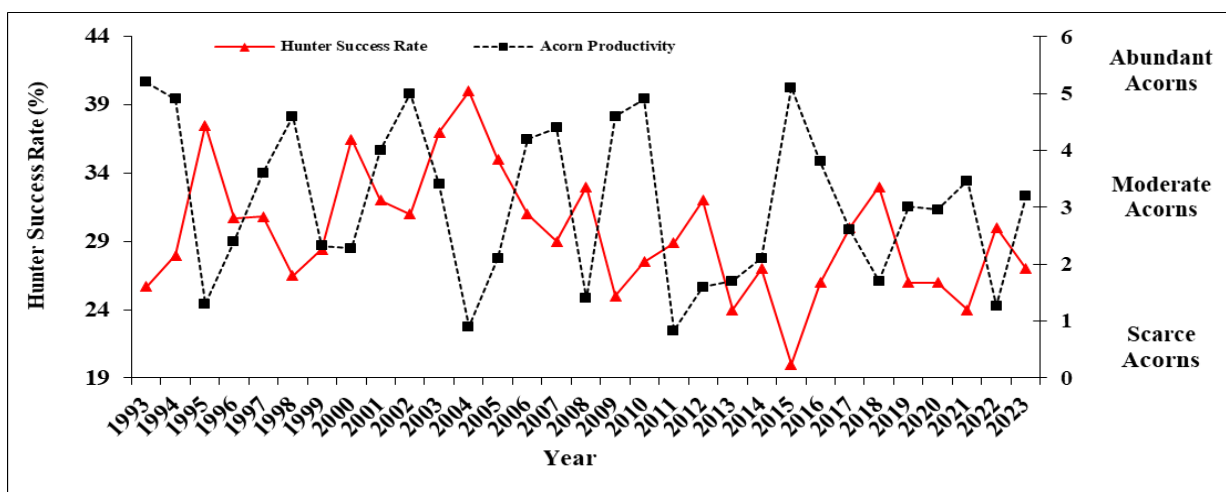
Deer Hunter Expenditures, Effort, Venison Calculations, and Opinions

Deer hunting-related expenditures contribute significantly to Connecticut's economy. Deer permit sales were down in 2023, generating $1,275,964 in revenue for the Connecticut General Fund, slightly less than in 2022 ($1,313,286). Additionally, data collected from the annual deer hunter surveys indicated that Connecticut deer hunters spent an estimated $5,670,554 on deer hunting-related goods and services in 2023, down from $7,108,582 spent in 2022.

In 2023, deer hunters spent a cumulative total of 324,140 days afield. Private land shotgun/rifle and archery hunters used the greatest percentage of available hunting days during those seasons (34% and 21% respectively). State muzzleloader and shotgun hunters used the next greatest percentage of days (20% and 18%). Private land muzzleloader hunters and landowners used the least percentage of days (16% and 15%). Typically, bowhunters have used a smaller percentage of available hunting days (13%) because the archery season is much longer than the firearms season. However, over the past couple of years, usage has increased, possibly due to the availability of having both weekend days as options.

On the deer hunter survey, hunters were asked if they hunted "more", "less", or "the same" amount this year compared to last year. The majority of hunters (42%) indicated they hunted the "same amount", 32% indicated they hunted "less", and 27% indicated they hunted "more". Based on the survey, the two biggest factors influencing why hunters hunted less was because they simply had "less time" and "health issues related to themselves or their family members". Other issues reported as impacting hunting were the weather and access.

From a hunter effort standpoint, it took a similar number of days to harvest a deer during the 2023 archery season (13.7 days/deer harvested) as it did during the 2022 archery season (13.9 days/deer harvested; includes successful and unsuccessful hunters). This calculation is based on total number of hours hunted divided by 8.

Hunters were asked "how satisfied they were with their Connecticut deer hunting experience in 2023". Excluding hunters who had no opinion (about 6%), over a third of hunters were moderately satisfied with their hunting experience (38%), a third were very satisfied (35%), and the remainder were slightly satisfied (14%) or not at all satisfied (13%), the same as in 2022.

Hunters were asked "what the primary reason is why they hunt in the zones in which they do". The primary reason for archers was "it is close to home" (45%) and "they have access to private land there" (41%), while for firearms and muzzleloader hunters the primary reason was "they have access to private land there" (45% and 42%) and "it is close to home" (35% and 37%). Other reasons for archery, firearms, and muzzleloader hunters included "have access to state land there" (8%, 11%, and 13%), and "other" reasons (3%, 5%, and 6%).

Hunters were asked if they supported extending the state land muzzleloader season until the end of December, so it matched the private land muzzleloader season. Doing so would eliminate the late archery season as currently archery hunting is only allowed during the state land firearms/muzzleloader seasons on archery only areas. Overall, 45% of hunters supported it, 31% did not, and 24% were unsure at this time. Sixty two percent of hunters who said yes to extending the state land muzzleloader season had purchased archery permits, while 26% who said yes to extending the state land muzzleloader season had purchased state land muzzleloader permits (Table 14).

Table 14. Hunter responses to 2023 survey question inquiring about extending state land muzzleloader season until the end of December.

Response	Possessed Archery Permit Only	Possessed SL Muzzleloader Permit Only	Possessed Both Permit Types	Overall Consensus Without Regard to Any Permit Types
Unsure	23%	7%	8%	24%
No	42%	12%	15%	31%
Yes	35%	81%	76%	45%

Hunters had the opportunity to write in comments when taking the deer hunter survey. Comments were grouped into specific categories for those that reached double digit numbers (not percentages) and included 31% mentioning predators (bears, bobcats, and coyotes) and the need for hunting/trapping seasons for bears and bobcats, 24% requesting increased opportunities to hunt Sundays during various seasons, such as state land archery and firearms seasons; 14% believed the deer population was in decline; 11% mentioned reducing bag limits during various seasons; 9% expressed concern about the lack of acorns; 6% experienced conflicts with non-hunters (especially mountain bikers and dogs off leash); 3% mentioned changes, such as expanding shooting hours; while another 3% mentioned deer not being active until after legal shooting hours. Many other comments were made, but at a much lower frequency.

Sightings

Hunters mentioning bears and bobcats and the need for hunting/trapping seasons are most likely due to increased sightings of bears, bobcats, and moose while hunting. Populations of these 3 species have been increasing since the early 1990s. To document this increase, hunters were asked on the hunter survey how many bears, bobcats, and moose they observe during the season in relation to how many days they spend hunting. As the number of days hunted before seeing a bear, bobcat, or moose decreases, it would indicate an increasing population (Table 15), which is a much better indicator than just total number of sightings as there is a "catch per unit effort" involved.

Table 15. Hunter sightings of bears, bobcats, and moose, 2012-2023.

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Bear Sightings[A]	100	73	63	30	32	27	27	28	24	10	16	17
Bobcat Sightings[A]	47	41	31	21	22	18	18	28	17	8	15	17
Moose Sightings[A]	1,027	718	841	524	562	458	507	564	512	472	466	503

[A] Hunter sightings are reported as days hunted/one animal observed based on annual deer hunter surveys.

Deer hunters reported personally observing 111 moose and captured an additional 117 on trail cameras in 18 towns in 2023, with sightings being reported in 104 different towns over the past 27-years. Sightings have been reported from 8 to 43 different towns each year (Figure 14). Moose were observed in Barkhamsted, Canaan, Canton, Colebrook, Cornwall, Goshen, Granby, Hartland, Harwinton, Kent, New Hartford, Norfolk, Salisbury, Stafford, Suffield, and Union for 6 of the last 10 years (Figure 14). Most of the towns where hunters report the greatest number of moose sightings occur along the Connecticut-Massachusetts border. In 2023, hunters spent roughly 503 days in the field for every moose observed, more days than in 2022 when hunters spent roughly 466 days in the field for every moose observed (Table 15). The increase in moose sightings may be more related to an increase in trail camera use (although not used to calculate the sighting rate) than a true increase in the population as all other indicators have shown a declining population throughout Connecticut and New England. Unlike bears and bobcats, moose are a northern species that face many unfavorable conditions at the southern extent of their range in Connecticut.

Figure 14. Moose sightings reported on deer hunter surveys, 1996-2023.
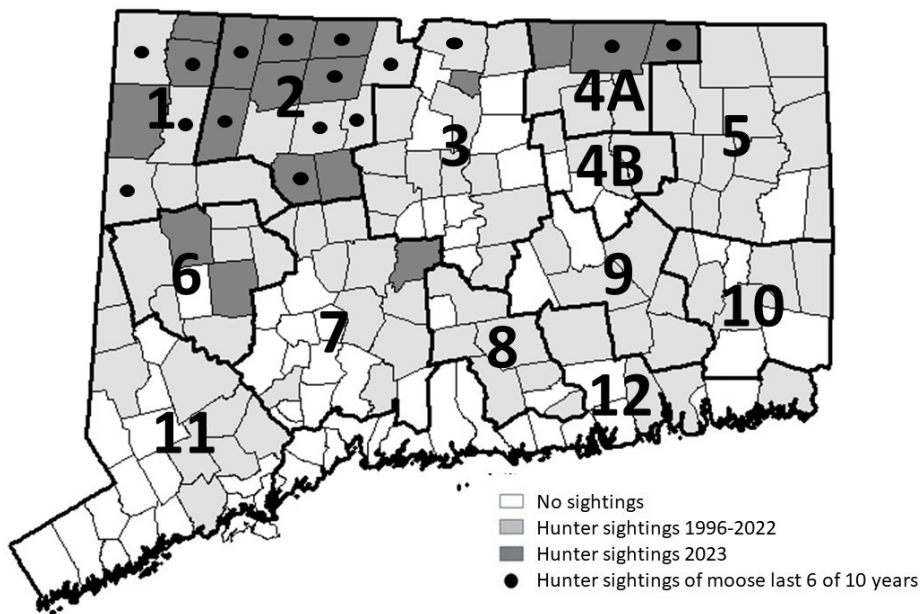
Conclusion

Over the past several decades, deer population size, human land-use practices, and public attitudes toward wildlife have changed considerably. Today, hunters may legally take up to 14 deer (including the January archery season on private land in DMZs 11 and 12) per year if they participate in all hunting seasons, and unlimited deer may be taken in 2 of the 13 Deer Management Zones. Historically, deer permit issuance increased consistently from 11,710 in 1975 to 61,333 in 1992. From 1992 through 2007, permit issuance remained relatively stable, fluctuating between 60,316 and 64,032. In 2008, permit issuance increased to its highest point in history. The cause for this increase is unknown but may have been attributed to the poor economy at the time. In 2009, permit issuance declined slightly, likely due to the switch to online license sales.

Since 2010, permit issuance has continued to decline annually due to changes in the deer lottery system and the ability to purchase permits at any time rather than in advance of the hunting season, and a decline in hunter numbers. Permit issuance in recent years is now at the same level as it was in 1988. Over the last 10 years, harvest in most Deer Management Zones has been stable to declining. The increased opportunities and incentives to harvest deer in urban DMZs 11 and 12 allowed the harvest to more than double, but is now beginning to decline while roadkills have continued to trend downward. Increased harvest opportunities, combined with expanding predator populations, appear to have stabilized deer populations in many areas of the state and population reconstruction models show a stable to declining population in recent years. Changes in hunter numbers will play a big part in harvest management in future years.

The Wildlife Division initiated several long-term urban deer studies in residential communities in past years. Reports summarizing findings from these studies are available to communities interested in managing deer in more developed areas of the state, such as Fairfield County. Copies of these reports can be obtained by contacting the Wildlife Division's Deer Program via email at Andrew.LaBonte@ct.gov or calling the Wildlife Division's Franklin office at 860-418-5921. The Wildlife Division will continue to provide technical assistance on deer control options to interested communities. Future management efforts will continue to focus on deer population stabilization. In areas with overabundant deer populations, landowners will be encouraged to use hunting, where possible, as a management tool. A booklet on *Managing Urban Deer in Connecticut* is available from Wildlife Division offices or online (https://portal.ct.gov/-/media/deep/wildlife/pdf_files/game/urbandeer07pdf.pdf) to assist communities in developing effective deer management programs. Another publication, *An Evaluation of Deer Management Options*, was made available in 2009 by the Northeast Deer Technical Committee and can be found on the DEEP website as well (https://portal.ct.gov/-/media/deep/wildlife/pdf_files/game/deeroptionspdf.pdf).

Mentor a New Hunter

Connecticut's deer hunters are an aging population (56% are $\geq$ 50 years old). Hunter numbers are starting to decline, with fewer hunters left to pass on the legacy. Without seasoned hunters passing on their skills, it will be more challenging for new hunters to gain that knowledge without first-hand experience.

HUNTER AGE STRUCTURE 2022

<20	20-29	30-39	40-49	50-59	60-69	70+
3%	10%	16%	15%	22%	22%	12%

Connecticut designates specific days when experienced adult hunters are encouraged to take a youth hunting, helping them learn safe and effective hunting practices, develop observational skills, and gain confidence and the comfort level they need to discover a passion for hunting and the outdoors.

Specific Youth training days for the deer season and others are in the *Connecticut Hunting and Trapping Guide* or at https://portal.ct.gov/DEEP-Junior-Hunting.

Mentoring is also important for new adult hunters, so do not limit your efforts to just youths. The same skills taught to youth hunters are needed to help adults new to hunting learn the ropes. Whether it be a coworker, friend, or neighbor — either youth or adult — take the time to introduce a new hunter to a lifetime of appreciation for our natural resources through hunting.

Appendix 1. Total reported deer killed by town, 2023.

Town	Archery	Shotgun/Rifle	Landowner	Muzzleloader	Cropkill	Roadkill	Other	Total
Andover	27	26	7	3	0	0	0	63
Ansonia	11	1	0	1	0	0	0	13
Ashford	54	78	29	12	3	0	0	176
Avon	20	9	0	1	7	1	0	38
Barkhamsted	16	34	8	2	0	3	0	63
Beacon Falls	7	22	0	4	1	0	0	34
Berlin	33	20	4	2	0	0	0	59
Bethany	35	18	2	5	6	2	0	68
Bethel	33	7	0	1	0	6	2	49
Bethlehem	11	19	4	2	0	1	0	37
Bloomfield	24	16	1	0	0	0	0	41
Bolton	21	12	1	7	6	0	0	47
Bozrah	11	17	14	5	2	0	0	49
Branford	13	4	2	2	0	0	0	21
Bridgeport	1	1	0	0	0	0	0	2
Bridgewater	23	20	1	1	1	0	0	46
Bristol	7	5	1	0	0	0	0	13
Brookfield	34	4	0	1	0	0	0	39
Brooklyn	28	22	12	7	5	1	0	75
Burlington	21	22	0	3	0	1	0	47
Canaan	34	30	5	4	1	1	0	75
Canterbury	36	49	27	4	0	0	0	116
Canton	28	10	2	1	0	0	0	41
Chaplin	37	30	18	9	3	1	0	98
Cheshire	55	15	3	6	24	4	2	109
Chester	16	11	2	2	0	0	0	31
Clinton	8	4	0	0	0	0	0	12
Colchester	35	67	17	11	10	0	0	140
Colebrook	3	7	1	1	0	0	0	12
Columbia	33	26	18	6	0	0	0	83
Cornwall	21	34	5	3	0	2	0	65
Coventry	49	71	15	7	0	7	1	150
Cromwell	10	4	1	0	1	3	0	19
Danbury	40	7	0	3	0	0	0	50
Darien	35	0	1	0	0	7	3	46
Deep River	7	4	2	0	0	0	0	13
Derby	7	2	0	0	0	0	0	9
Durham	36	29	4	4	1	0	1	75
East Granby	12	7	1	0	0	0	0	20
East Haddam	39	54	19	9	0	2	0	123
East Hampton	23	27	7	5	2	2	0	66
East Hartford	11	3	0	1	9	0	0	24
East Haven	9	2	0	0	0	1	0	12
East Lyme	34	22	0	0	2	7	0	65
East Windsor	16	18	6	2	0	2	0	44
Eastford	19	41	8	5	0	0	0	73
Easton	60	28	4	2	4	10	0	108
Ellington	15	20	9	1	0	0	0	45

Town	Archery	Shotgun/Rifle	Landowner	Muzzleloader	Cropkill	Roadkill	Other	Total
Enfield	43	23	1	2	1	0	0	70
Essex	1	2	0	0	0	0	0	3
Fairfield	67	3	1	1	0	0	0	72
Farmington	12	5	0	0	13	12	1	43
Franklin	14	35	8	3	4	0	0	64
Glastonbury	46	21	4	4	17	6	0	98
Goshen	20	27	7	0	0	1	0	55
Granby	17	12	7	5	0	5	0	46
Greenwich	54	1	0	0	0	1	0	56
Griswold	45	44	11	6	22	3	0	131
Groton	34	6	0	4	5	1	0	50
Guilford	45	19	6	2	13	2	1	88
Haddam	34	38	16	6	2	1	0	97
Hamden	26	10	0	4	13	0	0	53
Hampton	27	34	13	3	4	1	0	82
Hartford	0	0	0	0	0	0	0	0
Hartland	7	16	1	2	0	0	0	26
Harwinton	18	35	3	7	5	3	0	71
Hebron	40	38	17	7	1	0	0	103
Kent	23	39	3	6	1	2	0	74
Killingly	40	44	22	22	0	7	0	135
Killingworth	33	32	10	5	0	0	0	80
Lebanon	54	82	24	7	22	0	0	189
Ledyard	40	29	11	10	0	10	0	100
Lisbon	12	12	15	4	0	0	0	43
Litchfield	41	47	11	5	5	8	0	117
Lyme	15	37	5	1	3	0	0	61
Madison	12	4	2	1	0	0	0	19
Manchester	24	4	0	3	0	5	0	36
Mansfield	73	47	14	12	10	2	0	158
Marlborough	24	34	15	4	0	0	0	77
Meriden	14	7	1	0	0	2	0	24
Middlebury	11	6	4	2	0	4	0	27
Middlefield	12	16	1	4	11	0	0	44
Middletown	56	30	12	5	0	1	0	104
Milford	25	2	0	0	2	0	0	29
Monroe	32	12	1	2	0	0	0	47
Montville	42	30	13	3	2	0	0	90
Morris	11	10	5	4	1	2	0	33
Naugatuck	18	12	2	0	3	1	0	36
New Britain	0	0	0	0	0	2	0	2
New Canaan	43	1	0	0	0	6	0	50
New Fairfield	27	8	0	0	0	2	0	37
New Hartford	24	16	9	0	2	1	0	52
New Haven	4	0	0	0	0	0	0	4
New London	1	0	0	0	0	0	0	1
New Milford	48	30	9	11	5	0	0	103
Newington	4	0	0	0	0	0	0	4
Newtown	93	38	3	7	1	13	0	155

Town	Archery	Shotgun/Rifle	Landowner	Muzzleloader	Cropkill	Roadkill	Other	Total
Norfolk	10	13	6	2	0	2	0	33
North Branford	48	9	1	1	0	3	0	62
North Canaan	4	13	6	1	0	2	0	26
North Haven	19	4	0	1	1	0	0	25
North Stonington	54	54	27	9	0	1	0	145
Norwalk	24	0	0	0	0	0	0	24
Norwich	26	16	8	4	0	10	1	65
Old Lyme	26	11	0	0	0	0	0	37
Old Saybrook	9	1	0	1	0	0	0	11
Orange	22	3	0	1	3	0	0	29
Oxford	28	20	3	4	4	3	0	62
Plainfield	45	40	18	12	16	3	0	134
Plainville	0	1	1	0	1	0	0	3
Plymouth	16	15	5	4	0	0	0	40
Pomfret	32	50	9	12	4	0	0	107
Portland	17	25	3	2	2	13	0	62
Preston	38	36	14	2	9	3	0	102
Prospect	25	9	0	3	0	3	0	40
Putnam	26	15	8	4	0	0	0	53
Redding	47	24	0	2	0	1	0	74
Ridgefield	53	4	0	3	0	0	0	60
Rocky Hill	3	10	0	3	10	4	1	31
Roxbury	14	14	4	4	4	0	0	40
Salem	16	25	10	3	2	0	0	56
Salisbury	41	51	8	5	3	5	0	113
Scotland	21	28	11	7	25	0	0	92
Seymour	25	6	1	1	0	0	0	33
Sharon	38	46	13	9	1	2	0	109
Shelton	32	5	0	0	23	0	0	60
Sherman	30	19	0	2	0	1	0	52
Simsbury	10	1	2	0	0	2	0	15
Somers	22	15	0	3	0	0	0	40
South Windsor	25	19	2	1	5	1	1	54
Southbury	32	25	3	6	19	7	0	92
Southington	22	8	3	2	2	4	1	42
Sprague	6	22	2	3	0	0	1	34
Stafford	54	49	29	14	0	0	0	146
Stamford	35	1	0	0	0	0	0	36
Sterling	31	30	12	2	4	0	1	80
Stonington	50	35	8	3	7	1	3	107
Stratford	5	1	0	0	0	1	0	7
Suffield	31	29	7	7	6	1	0	81
Thomaston	11	7	2	2	3	1	0	26
Thompson	69	43	23	18	0	1	0	154
Tolland	56	19	11	5	2	0	0	93
Torrington	14	21	5	1	0	13	0	54
Trumbull	27	0	0	0	0	0	0	27
Union	29	28	11	4	0	0	0	72
Vernon	19	7	1	4	0	0	0	31

Town	Archery	Shotgun/Rifle	Landowner	Muzzleloader	Cropkill	Roadkill	Other	Total
Voluntown	23	29	6	9	8	1	0	76
Wallingford	67	33	5	10	5	6	1	127
Warren	13	34	3	3	2	3	0	58
Washington	19	30	3	9	12	3	0	76
Waterbury	5	2	0	0	0	1	0	8
Waterford	55	13	4	2	0	2	0	76
Watertown	24	15	3	1	0	0	0	43
West Hartford	1	0	0	0	0	1	0	2
West Haven	3	0	0	0	0	0	0	3
Westbrook	7	3	0	1	0	1	0	12
Weston	18	17	1	0	0	1	0	37
Westport	0	0	0	0	0	0	0	0
Wethersfield	2	2	0	0	2	0	0	6
Willington	37	21	16	6	0	0	0	80
Wilton	76	20	0	10	3	1	0	110
Winchester	15	9	6	1	0	1	0	32
Windham	30	22	0	7	15	0	0	74
Windsor	13	5	3	2	5	1	0	29
Windsor Locks	0	1	0	0	0	0	0	1
Wolcott	9	6	1	1	0	0	0	17
Woodbridge	25	2	0	1	0	6	0	34
Woodbury	34	28	3	6	6	7	0	84
Woodstock	57	68	31	10	0	1	0	167
Total	**4,434**	**3,264**	**910**	**575**	**470**	**292**	**21**	**9,966**

Appendix 2. Deer harvest on state hunting areas, including Deer Lottery Hunting Areas (DLHA), 2023

Fall Archery	Muzzleloader	Lottery Area #	No-Lottery	Code	● Hunting Permitted ▲ Designated Deer Bowhunting Only Area (▲ areas are open during shotgun and muzzleloader) ▲/● Some Sections open to Archery ONLY ❍ Daily/Season Permit Required ✳ Special Conditions ❍ shaded lines = Harvest/mi² greater than 10	Square miles	Fall Archery	Muzzleloader	Lottery	No Lottery	Total Harvest	Harvest/mi²
●	●	62		308	Aldo Leopold WMA	0.87	0	2	2	0	4	4.60
●	●		●	201	Algonquin SF	1.04	15	1	0	9	25	24.04
●	●		●	202	American Legion SF	1.62	5	0	0	3	8	4.94
●	●		●	272	Assekonk Swamp WMA	1.07	4	1	0	1	6	5.61
●	●		●	244	Babcock Pond WMA	2.36	0	0	0	3	3	1.27
▲				203	Barber Pond WMA	0.11	2	0	0	1	3	27.27
●	●		●	273	Barn Island WMA	1.58	5	0	0	2	7	4.43
▲/●	●		●	274	Bartlett Brook WMA	1.10	1	0	0	5	6	5.45
▲				275	Bear Hill WMA	0.57	2	0	0	0	2	3.51
▲				276	Beaver Brook SP	0.56	6	0	0	0	6	10.71
▲				309	Bennett's Pond SP	0.72	1	0	0	1	2	2.78
▲				277	Bigelow Hollow SP	0.80	3	0	0	0	3	3.75
▲	●	68		245	Bishops Swamp WMA	1.62	9	0	6	0	15	12.71
▲				337	Black Pond WMA	0.11	0	0	0	0	0	0.00
▲				204	Black Rock Lake (state and federally owned)	0.62	0	0	0	0	0	0.00
▲				205	Bloomfield Flood Control Area (Site 1)	0.51	5	0	0	1	6	11.76
		52		329	Bristol Water Company	6.75	0	0	9	0	9	1.33
▲/●	●		●	207	Camp Columbia SF	0.94	2	0	0	2	4	4.26
●	●		●	347	Candlewood Hill WMA	0.31	1	0	0	0	1	3.23
▲				208	Cedar Swamp WMA	0.43	4	0	0	0	4	9.30
●✳		56		310	Centennial Watershed SF	6.77	39	0	34	0	73	10.78
●	●		●	209	Centennial Watershed SF (Canaan Block)	0.23	2	0	0	2	4	17.39
▲				311	Centennial Watershed SF (formerly Bpt. Hydr.) -Shelton	0.16	1	0	0	3	4	25.00
▲				310	Centennial Watershed SF -Monroe Parcel (Hattertown)	0.05	0	0	0	0	0	0.00
▲/●	●		●	246	Cockaponset SF	26.85	44	7	0	38	89	3.31
▲				313	Collis P. Huntington SP	1.61	3	0	0	0	3	1.86
▲				247	Cromwell Meadows WMA	0.79	4	0	0	0	4	5.06
▲				210	CT Light & Power (borders Newgate WMA)	0.32	1	0	0	2	3	9.38
▲				248	Durham Meadows WMA	0.80	2	0	0	0	2	2.50
▲				315	East Swamp WMA	0.10	0	0	0	0	0	0.00
▲				211	East Twin Lakes Water Access Area	0.15	3	0	0	0	3	20.00
●	●		●	249	Eightmile River WMA	0.48	1	0	0	3	4	8.33
●	●		●	250	Ellithorpe Flood Control Area	0.64	3	0	0	1	4	6.25
▲				332	Enders SF (Worthen Parcel ONLY)	0.55	0	0	0	0	0	0.00
●	●		●	278	Franklin Swamp WMA	1.07	4	0	0	2	6	5.61
▲				316	George C. Waldo SP	0.23	0	0	0	0	0	0.00

Fall Archery	Muzzleloader	Lottery Area #	No-Lottery	Code	● Hunting Permitted ▲ Designated Deer Bowhunting Only Area (▲ areas are open during shotgun and muzzleloader) ▲/● Some Sections open to Archery ONLY ❍ Daily/Season Permit Required ✱ Special Conditions ❍ shaded lines = Harvest/mi² greater than 10	Square miles	Fall Archery	Muzzleloader	Lottery	No Lottery	Total Harvest	Harvest/mi²
●	●		●	213	Goshen WMA	1.51	2	0	0	5	7	4.64
▲				318	Great Swamp Flood Control Area	0.53	1	0	0	0	1	1.89
●			●	214	Hancock Brook Lake (federally owned)	1.10	1	0	0	2	3	2.73
❍				280	Harkness Memorial SP ▲ (Verkade Property)	0.44	10	0	0	0	10	22.73
▲				251	Higganum Meadows WMA (off Clarkhurst Road)	0.40	0	0	0	0	0	0.00
▲				252	Higganum Reservoir	0.23	1	0	0	1	2	8.70
▲				215	Housatonic River WMA	0.87	8	0	0	2	10	11.49
●	●		●	216	Housatonic SF	17.63	4	3	0	16	23	1.30
●	●		●	302	James V. Spignesi WMA	0.81	3	1	0	3	7	8.64
▲				217	John Minetto SP	1.12	1	0	0	0	1	0.89
▲				281	Killingly Pond SP	0.27	0	0	0	0	0	0.00
●	●		●	253	Kollar WMA	1.40	5	0	0	5	10	7.14
●	●		●	254	Larson Lot WMA	0.38	3	1	0	1	5	13.16
▲				282	Lebanon Coop Mgmt. Area	0.33	0	0	0	0	0	0.00
▲				283	Little River Fish and Wildlife Area	0.08	1	0	0	0	1	12.50
▲				218	Mad River Dam Flood Control Area	0.70	3	0	0	0	3	4.29
▲				255	Mansfield Hollow Lake (excluding SP)	3.14	9	0	0	2	11	3.50
▲				256	Mansfield State-Leased Field Trial Area	0.37	2	0	0	0	2	5.41
●	●		●	263	Maromas Coop WMA	2.48	15	1	0	9	25	10.08
●	●		●	219	Mattatuck SF	7.02	11	1	0	9	21	2.99
●	●		●	220	MDC – Colebrook Reservoir/Hogback Dam	6.50	0	0	0	0	0	0.00
▲				221	MDC – Greenwoods Pond	0.31	1	0	0	0	1	3.23
		64		343	MDC Barkhamsted Res. -Barkhamsted Block	6.69	0	0	15	0	15	2.24
		67		346	MDC Barkhamsted Res-Hartland Block	5.78	0	1	12	0	13	2.25
		58		330	MDC Nepaug Resevoir - Valentine/Pine Hill Block	2.32	0	0	10	0	10	8.20
●				349	MDC Lake McDonough	1.22	4	0	0	0	4	1.72
▲		66		345	MDC Sweetheart Mnt. Block	0.78	3	0	0	0	3	3.85
●	●		●	339	Meadow Brook WMA	0.42	0	0	0	0	0	0.00
▲				338	Menunketesuck WMA	0.26	1	0	0	0	1	3.85
●	●		●	257	Meshomasic SF	14.22	18	2	0	25	45	3.16
▲				258	Messerschmidt Pond WMA	0.72	2	0	0	0	2	2.78
●	●		●	259	Millers Pond	0.41	1	0	0	1	2	4.88
▲				341	Mohawk SF - Clark Pond Tract	0.19	0	0	0	1	1	5.26
●	●	63		342	Mohawk SF - Ziegler/Johnson Tract	0.51	0	0	1	0	1	1.96
●	●		●	285	Mohegan SF	1.50	4	1	0	5	10	6.67
▲				260	Mono Pond	0.45	4	0	0	0	4	8.89
▲				222	Mount Riga SP	0.47	1	0	0	0	1	2.13
●	●		●	223	Nassahegon SF	1.30	1	0	0	5	6	4.62
▲/●	●		●	286	Natchaug SF	7.93	47	8	0	44	99	12.48
●	●		●	261	Nathan Hale SF Mgmt. Area	2.27	8	2	0	12	22	9.69

Fall Archery	Muzzleloader	Lottery Area #	No-Lottery	Code	● Hunting Permitted ▲ Designated Deer Bowhunting Only Area (▲ areas are open during shotgun and muzzleloader) ▲/● Some Sections open to Archery ONLY ◯ Daily/Season Permit Required ✷ Special Conditions ◯ shaded lines = Harvest/mi² greater than 10	Square miles	Fall Archery	Muzzleloader	Lottery	No Lottery	Total Harvest	Harvest/mi²
●	●		●	319	Naugatuck SF	21.15	14	4	0	23	41	1.94
▲				320	Naugatuck SF (Great Hill Block)	0.37	3	0	0	0	3	8.11
▲/●	●	28		321	Naugatuck SF* (Quillinan Reservoir Block)	0.90	6	2	0	0	8	8.89
▲/●			●	287	Nehantic SF	7.91	7	0	0	17	24	3.03
●	●		●	224	Nepaug SF	2.10	0	0	0	2	2	0.95
▲				225	Newgate WMA	0.70	0	0	0	0	0	0.00
●	●		●	288	Nipmuck SF	14.40	19	2	0	18	39	2.71
▲				227	Northfield Brook Lake (federally owned)	0.31	0	0	0	0	0	0.00
▲				289	Nott Island WMA	0.13	0	0	0	0	0	0.00
▲/●	●		●	264	Nye Holman SF	1.20	4	0	0	1	5	4.17
▲/●	●		●	290	Pachaug SF	40.84	47	10	0	50	107	2.62
●	●		●	229	Paugnut SF	2.70	0	0	0	3	3	1.11
▲/●	●		●	322	Paugussett SF	3.04	5	1	0	5	11	3.62
●	●		●	291	Pease Brook WMA	0.33	0	2	0	3	5	15.15
●			●	230	Peoples SF	4.60	1	0	0	5	6	1.30
▲				292	Pomeroy SP	0.32	2	0	0	0	2	6.25
●	●		●	324	Pootatuck SF	1.72	1	0	0	3	4	2.33
●			●	293	Quaddick SF	0.90	6	0	0	1	7	7.78
●	●		●	294	Quinebaug WMA	0.88	8	1	0	4	13	14.77
▲				295	Quinebaug WMA (Aspinook Pond)	0.03	0	0	0	0	0	0.00
▲				326	Quinnipiac River SP	0.53	14	0	0	1	15	28.30
●	●		●	296	Red Cedar Lake (Camp Mooween)	0.93	0	0	0	1	1	1.08
●	●		●	231	Robbins Swamp WMA	2.45	1	0	0	2	3	1.22
●	●		●	232	Roraback WMA	3.10	3	1	0	8	12	3.87
●	●		●	297	Rose Hill WMA	1.08	6	1	0	4	11	10.19
▲				298	Ross Marsh WMA	0.45	1	0	0	0	1	2.22
▲				299	Ross Pond SP	0.58	2	0	0	0	2	3.45
▲				267	Salmon River Cove and Haddam Neck	0.19	1	0	0	2	3	15.79
●	●		●	300	Salmon River SF (including Holbrook Pond)	10.90	28	4	0	34	66	6.06
▲				268	Scantic River SP	0.92	3	0	0	0	3	3.26
●	●			301	Selden Neck SP (Selden Island)	0.88	2	0	0	0	2	2.27
◯				233	Sessions Woods WMA	1.20	0	0	0	0	0	0.00
●	●		●	269	Shenipsit SF	11.85	12	5	0	22	39	3.29
●	●		●	333	Silvio O. Conte NWR - Salmon River Div. (federal land)	0.41	11	1	0	5	17	41.46
▲				234	Simsbury WMA	0.57	1	0	0	0	1	1.75
●	●		●	228	Skiff Mtn. Coop WMA	1.13	0	0	0	0	0	0.00
▲/●				350	Stewart B. McKinney NWR	0.72	5	0	1	0	6	8.33
▲				235	Sucker Brook Flood Control Area	0.24	1	0	0	0	1	4.17
▲				236	Suffield WMA	0.30	1	0	0	0	1	3.33
●	●		●	303	Sugarbrook Field Trial Area	0.31	2	0	0	1	3	9.68

Fall Archery	Muzzleloader	Lottery Area #	No-Lottery	Code	● Hunting Permitted ▲ Designated Deer Bowhunting Only Area (▲ areas are open during shotgun and muzzleloader) ▲/● Some Sections open to Archery ONLY ❍ Daily/Season Permit Required ✱ Special Conditions ❍ shaded lines = Harvest/mi² greater than 10	Square miles	Fall Archery	Muzzleloader	Lottery	No Lottery	Total Harvest	Harvest/mi²
▲				237	Sunnybrook SP (west of Newfield Rd.)	0.69	2	0	0	0	2	2.90
●	●		●	304	Talbot WMA	0.79	5	2	0	0	7	8.86
●	●	60		334	Tankerhoosen WMA	0.78	4	2	3	0	9	11.54
▲				238	Thomaston Dam (federally owned)	1.33	1	0	0	0	1	0.75
●	●		●	239	Topsmead SF (north and west of Rte. 118)	0.28	3	0	0	3	6	21.43
❍	❍	26		327	Trout Brook Valley SP	0.47	2	0	0	0	2	4.26
●	●		●	240	Tunxis SF	15.88	9	1	0	8	18	1.13
●	●		●	270	Wangunk Meadows (off Rte. 17a)	1.00	0	0	0	2	2	2.00
●	●		●	305	West Thompson Dam (federal land)	1.71	14	0	0	2	16	9.36
▲				241	Whiting River Flood Control Area	0.29	2	0	0	0	2	6.90
▲				242	Wood Creek Flood Control Area	0.17	0	0	0	0	0	0.00
▲				328	Wooster Mountain SP	0.69	0	0	0	0	0	0.00
●	●		●	271	Wopowog WMA	0.73	0	0	0	2	2	2.74
●	●		●	243	Wyantenock SF	6.38	6	2	0	18	26	4.08
		51		306	Yale Forest (owned by Yale University)	12.03	0	0	22	0	22	1.83
●	●		●	307	Zemko Pond WMA	0.71	0	0	0	2	2	2.82

Caution should be used when evaluating harvest on individual properties as errors can occur in the reporting process.

Appendix 3.   **Sex ratios (male:female) of deer harvested during Connecticut's regulated hunting seasons, 2021-2023.**

Season	2021		2022		2023		3-year Average (2021-2023)		Males per Female		
	Males	Females	Males	Females	Males	Females	Males	Females	2021	2022	2023
Archery											
State Land	378	199	294	258	417	198	363	218	1.90	1.14	2.11
Private Land	2,377	1,402	2439	1710	2,327	1,328	2,381	1,480	1.70	1.43	1.75
Subtotal	**2,755**	**1,601**	**2,733**	**1,968**	**2,744**	**1,526**	**2,744**	**1,698**	**1.72**	**1.39**	**1.80**
Muzzleloader											
State Land	37	28	82	41	44	30	54	33	1.32	2.00	1.47
Private Land	213	206	331	294	267	234	270	245	1.03	1.13	1.14
Subtotal	**250**	**234**	**413**	**335**	**311**	**264**	**325**	**278**	**1.07**	**1.23**	**1.18**
Shotgun/Rifle											
State Land	429	158	442	166	468	127	446	150	2.72	2.66	3.69
Private Land	1,706	826	2,034	1,067	1,819	850	1,853	914	2.07	1.91	2.14
Subtotal	**2,135**	**984**	**2,476**	**1,233**	**2,287**	**977**	**2,299**	**1,065**	**2.17**	**2.01**	**2.34**
Landowner	607	233	747	349	671	234	675	272	2.61	2.14	2.87
Total	**5,747**	**3,052**	**6,369**	**3,885**	**5,632**	**3,857**	**5,916**	**3,598**	**1.88**	**1.64**	**1.46**

Appendix 4. Non-hunting deer mortality reported in Connecticut, 2010-2023.

Cause of Death	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Road	1,456	1,683	1,177	1,211	1,081	749	619	687	608	480	451[1]	417	389[1]	292
Dog	1	0	2	0	5	0	0	2	2	1	1	0	0	0
Unknown	49	82	58	89	59	62	49	43	31	14	46[1]	39	27	21
Illegal	10	4	6	4	2	2	0	2	1	0	4[1]	1	0	0
Crop Damage	715	804	864	831	812	464	462	560	569	520	239	373	605	470
Total	**2,231**	**2,573**	**2,108**	**2,135**	**1,959**	**1,277**	**1,130**	**1,294**	**1,211**	**1,015**	**740[1]**	**830**	**1,021[1]**	**783**
Non-hunting: Harvest	1:5.5	1:5.0	1:6.7	1:5.9	1:6.8	1:7.4	1:9.4	1:9.3	1:9.3	1:10.7	1:14.7	1:10.8	1:12.5	1:11.7
% Mortality*	11.1	11.6	13.5	14.5	14.6	12.2	9.5	9.7	9.7	8.5	6.3	8.4	7.9	7.9
% of Harvest	12.4	14.0	14.7	17.0	16.1	14.0	10.6	10.7	10.7	9.3	6.8	9.3	8.6	8.5

* Crop damage harvest is included under non-hunting mortality.
[1] Revised numbers from 2020 and 2022 Deer Summary report due to volume of reports received late.

Appendix 5. Frequency of deer roadkills in each of Connecticut's Deer Management Zones, a 5-year comparison, 2019-2023.

Zone	2019	2020[1]	2021	2022[1]	2023	Five-year Total	Zonal %	Habitat (sq. miles)	Roadkills/Sq. Mile 2021	Roadkills/Sq. Mile 2022[1]	Roadkills/Sq. Mile 2022
1	31	21	23	10	25	110	5.4	344.1	0.07	0.03	0.07
2	28	50	45	40	30	193	9.5	409.85	0.11	0.10	0.07
3	85	75	86	77	54	377	18.6	272.1	0.32	0.28	0.20
4A	26	15	15	3	0	59	2.9	213.1	0.07	0.01	0.00
4B	26	28	11	5	15	85	4.2	120.0	0.09	0.04	0.13
5	50	32	25	74	15	196	9.7	444.9	0.06	0.17	0.03
6	29	29	29	26	22	135	6.6	259.1	0.11	0.10	0.08
7	71	77	71	52	40	311	15.3	370.9	0.19	0.14	0.11
8	6	5	1	3	2	17	0.8	167.6	0.01	0.02	0.01
9	14	3	2	8	2	29	1.4	277.8	0.01	0.03	0.01
10	32	36	18	29	28	143	7.0	243.6	0.07	0.12	0.11
11	55	53	55	47	50	260	12.8	290.76	0.19	0.16	0.17
12	23	27	36	15	15	116	5.7	356.4	0.10	0.04	0.04
Total	**476**	**451**	**417**	**389**	**292**	**2,031**	**100.0**	**3,770.2**	**0.11***	**0.10***	**0.08***

* These numbers are averages, not totals.
[1] Revised numbers from 2020 and 2022 Deer Summary report due to volume of reports received late.

Appendix 6. Deer removed using crop damage permits in Connecticut's Deer Management Zones, 2011-2023.

| | | | | | | Year | | | | | | | |
Zone	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1	37	67	44	39	32	37	38	46	30	25	24	23	13
2	17	25	15	16	15	20	18	14	10	4	9	14	7
3	99	70	97	99	30	58	85	71	80	20	62	78	79
4A	10	15	16	8	10	8	3	12	19	8	6	0	2
4B	28	41	56	55	24	13	23	41	35	10	15	19	16
5	93	87	88	77	55	37	45	66	46	8	37	70	79
6	56	74	62	89	49	41	49	47	38	16	32	87	48
7	123	127	118	110	72	60	77	74	86	58	49	87	62
8	28	36	40	41	11	11	23	28	15	6	14	20	14
9	56	56	77	65	35	40	18	31	39	26	30	51	41
10	104	90	83	90	53	53	82	55	47	20	30	54	43
11	93	113	91	79	45	57	55	53	35	19	29	53	31
12	60	63	44	43	30	27	44	31	40	19	36	49	35
Total	**804**	**864**	**831**	**812**	**464**	**462**	**560**	**569**	**520**	**239**	**372**	**605**	**470**

Photo courtesy of Dave Pignataro with an ear-tagged buck he harvested in 2023.

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