

State of Rhode Island Department of Environmental Management Division of Fish & Wildlife

2019-20 Deer Harvest and Hunter Summary



Acknowledgements

Prepared by the Rhode Island
Department of Environmental Management

Division of Fish & Wildlife
277 Great Neck Road
West Kingston, RI 02892
Phone: (401) 789-0281
Fax: (401)783-7490

Dylan Ferreira, Senior Wildlife Biologist
August 2020



THIS PROJECT WAS SUPPORTED by Wildlife Restoration Grants administered by the U.S. Fish and Wildlife Service, Wildlife and Sport Fish Restoration Program: *Partnering to fund conservation and connect people with nature.*

Federal Aid Project funded by your purchase of hunting equipment.

It is the policy of the Rhode Island Department of Environmental Management to offer its services and accommodations to all orderly persons, and as required, to all properly licensed persons, without regard to race, religion, color, national origin, ancestry, sex, age, or handicap. If you believe that you have been discriminated against in any program, activity, facility, or if you desire further information, please write to the Office for Equal Opportunity, US Department of the Interior, Office of the Secretary, Washington, DC 20240.

Table of Contents

Acknowledgements.....	2
Table of Contents.....	3
Introduction.....	3
Regulation Changes.....	4
2019-20 Deer Harvest.....	4
Overview.....	4
Harvest Composition and Trends.....	5
Check Stations and Herd Health.....	8
Chronic Wasting Disease.....	9
License Sales.....	10
Special Hunt Opportunitites.....	10
Conclusion.....	10
Appendix.....	12

Introduction

This summary offers an overview of deer harvest and hunters in Rhode Island for the 2019-20 deer season. This information serves to guide future management decisions to ensure there is continued hunting opportunity for hunters while maintaining a healthy deer population. In addition, this report is aimed to provide a summary of pertinent information related to deer and deer hunting for public review.

Rhode Island offers ample opportunity for hunters to harvest white-tailed deer across the state with lengthy seasons, generous bag limits and ample public land accessibility. Liberal bag limits allow for the take of two* antlered and multiple antlerless deer across the state. In addition, Sunday hunting is permitted in most areas** further increasing hunting opportunity. Rhode Island’s extensive deer season begins in with archery (including crossbows) in mid-September through the end of January. A month-long muzzleloader season begins the first Saturday of November typically coinciding with the rut, giving hunters a high chance of harvesting a mature buck if they desire. The shotgun season follows the muzzleloader season for 1-2 weeks, depending on the location (zone). A “private land, antlerless deer only” season is open from the end of December to the beginning of January allowing for firearms hunters to further reduce deer densities on private properties if desired.

The complete set of rules and regulations pertaining to hunting can be found on our website at <http://www.dem.ri.gov/documents/regulations/index.php>.

*Only one may be taken in Zone 3

**Check local ordinances

Regulation Changes

2019-20 Hunting Season

- There were no significant changes for the 2019-20 deer season.

2020-21 Hunting Season

- There are no significant changes for the upcoming 2020-21 deer season.

2019-20 Deer Harvest

Overview

Since the first regulated hunting season in Rhode Island in 1954, there has been tremendous changes in deer population, land use, habitat types, hunter effort, and public perception of wildlife and hunters. Deer harvest has also seen significant changes over time. Harvest data dates to 1977 when statewide harvest was 157 deer. Since then, harvest increased until 2008, when harvest peaked around 3,000 deer. Harvest declined approximately 30% between 2008 to 2014 to around 2,000 deer where it has remained for the past six years. In the 2019-20 season, 2,285 deer were harvested, an 8% increase from the previous season's harvest of 2,125 deer.

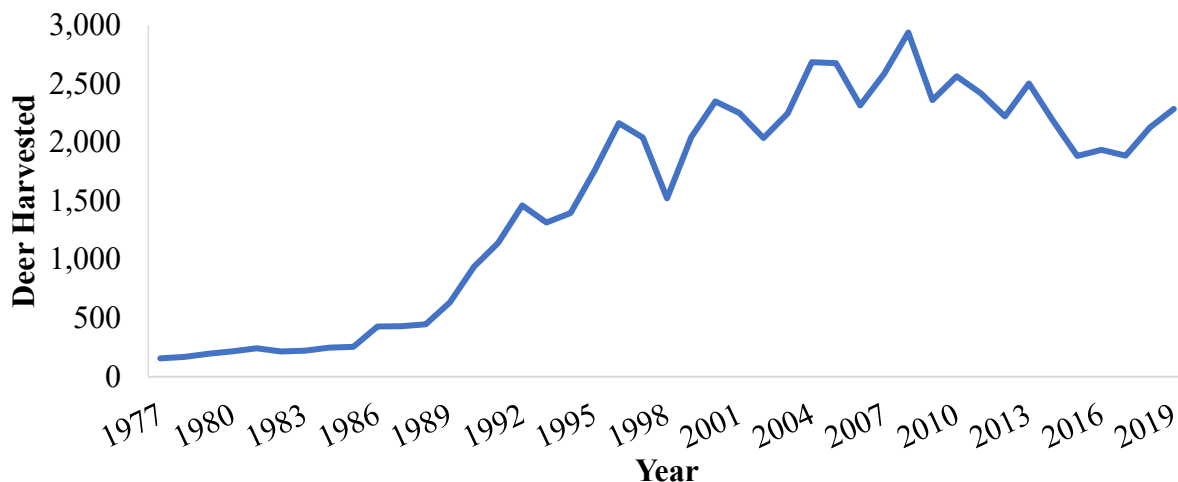


Figure 1. Statewide deer harvest 1977-2019.

For each deer harvested, approximately 30% of its field dressed body weight is available as consumable venison. Resultantly, the 2019-20 season yielded over 39 tons of consumable venison – equivalent to about 158,000 meals. Recent surveys have shown that most hunters hunt to provide food for their families, while also enjoying time spent with family and friends in the outdoors. Hunters are continually participating in the conservation of wildlife and their habitats. By purchasing hunting licenses and permits, hunters are helping fund the conservation of habitat and wildlife (including non-game species) in Rhode Island. Wildlife is a renewable resource that when managed properly can provide sustenance in the form of wild, local, sustainable protein year after year to its consumers. In addition, the Wildlife Restoration Act, commonly known as the Pittman-Robertson Act, places an excise tax on firearms, ammunition, and archery equipment that funds wildlife restoration projects across the United States, including Rhode Island.

Harvest Composition and Trends

	2019-20	2018-19	1-year change	5-year average	5-year change
Statewide Harvest	2,285	2,125	8%	2,002	14%
Zone 1	736	643	14%	635	16%
Zone 2	1,389	1,225	13%	1,072	30%
Zone 3	19	35	-46%	27	-29%
Zone 4	141	222	-36%	267	-47%
Shotgun	304	381	-20%	434	-30%
Muzzleloader	1,095	981	12%	877	25%
Archery (combined)	886	763	16%	689	29%
Archery-Crossbow	602	494	22%	276	119%
Archery-Vertical Bow	284	269	6%	346	-18%
Antlerless	1,213	1,131	7%	1,119	8%
Antlered	1,072	994	8%	872	23%
Female	1,002	937	7%	991	1%
Male	1,283	1,188	8%	1,011	27%
Private Land	1,708	1,586	8%	1,547	10%
Public Land	577	539	7%	452	28%
Buck Kill/Sq. Mile	1.24	1.16	7%	0.99	25%
% Yearling Buck Harvest	27%	30%	-10%	33%	-19%
Yearling Antler Beam (mm)	16.6	15.7	6%	16.5	1%
Male Fawn Weight (lbs.)	57	58	-2%	60	-4%
Male Yearling Weight (lbs.)	105	105	0%	105	0%
Male Adult Weight (lbs.)	147	143	3%	139	6%
Female Fawn Weight (lbs.)	56	57	-2%	56	0%
Female Yearling Weight (lbs.)	90	86	5%	88	3%
Female Adult Weight (lbs.)	101	100	1%	102	-1%
Checked Deer	197	200	-2%	244	-19%
CWD samples	328	254	29%	215	53%
Non-Seasonal Take	41	46	-11%	36	15%
Auto strikes	838	1,088	-23%	987	-15%
Hunting Licenses	8,326	9,205	-10%	8,615	-3%
Deer Hunters	4,834	5,370	-10%	7,726	-37%
Deer Permits	18,535	18,839	-2%	19,563	-5%
Average Weight (lbs.)	115	120	-4%	120	-4%
Consumable Venison (lbs.)	78,833	76,500	3%	72,086	9%
Meals	157,666	153,000	3%	144,173	9%

Table 1. Deer harvest changes from 2018 to 2019.

Harvest by Zone: Rhode Island is separated into four deer management zones as seen in Appendix I. The total harvest in each zone is partly reflective of the amount of land open to hunting in each zone, which effectively impacts hunter effort. The greatest harvest occurred in Zone 2 (1,389 deer), mainly because most of the state/cooperative properties are located within its boundaries. Most of this area is comprised of forested habitat and devoid of expansive, densely developed areas that reduce the amount of huntable property. As depicted in Figure 2, a total of 736 deer were harvested in Zone 1; 1,389 in Zone 2; 19 in Zone 3; and 141 in Zone 4. More adult bucks were taken in Zones 1 and 2, whereas most of the harvest in Zone 4 was adult does, where the goal is to reduce deer densities.

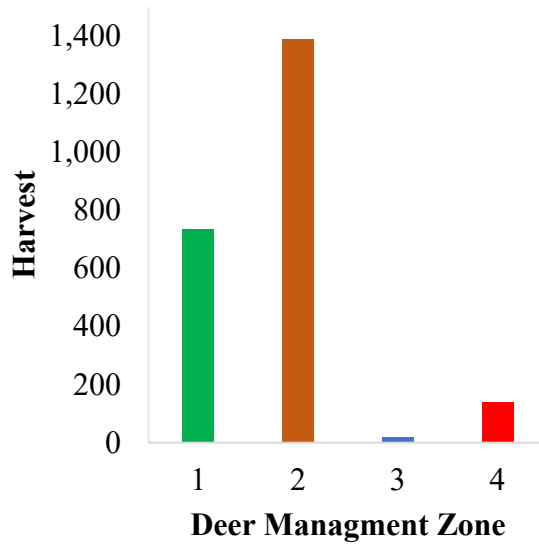


Figure 2. 2019-20 Harvest by Deer Management Zone.

Harvest by Method: Deer were harvested with all four legal method types (archery, crossbow, muzzleloader, and shotgun) throughout the deer season. Compared to last year’s hunting season, the crossbow harvest increased by 22% from 494 to 602 deer harvested. Muzzleloader also increased 12% from 981 to 1,095 deer harvested accounting for the largest portion of harvest. Vertical archery equipment harvest increased this 6% year. Conversely, shotgun harvest decreased 20%. The long season length, ease of use and little amount of practice required to become proficient has made the crossbow a sought-after method of take. However, muzzleloader harvest remains the highest due to their accuracy, long range while also coinciding with the rut, or breeding period when males throw caution to the wind in search of a mate.

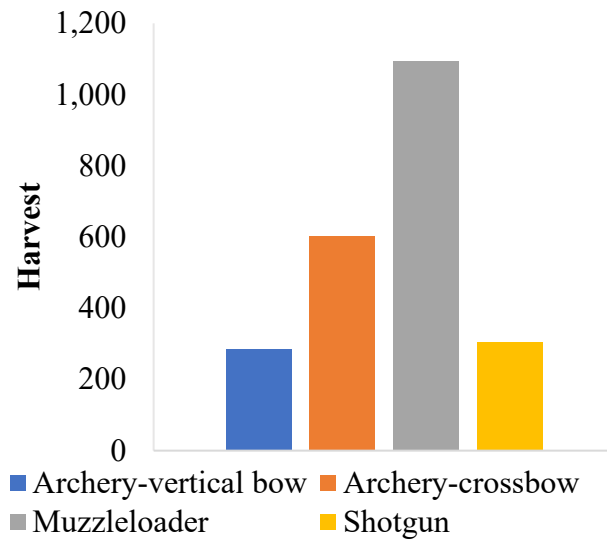


Figure 3. 2019-20 Harvest by method.

Antlered vs Antlerless: A total of 1,072 deer (47%) were antlered and 1,213 deer (53%) were antlerless. This is consistent with past harvest results, as antlerless harvest has exceeded antlered harvest since 2011. Interestingly, of the antlered deer harvested, 1 of those were reported to be a female with antlers.

Buck to Doe Ratio: Hunters harvested 1,283 (56%) males and 1,002 (44%) females. This resulted in a 1:1.28 female to male harvest ratio (for every female harvested, 1.28 males are harvested).

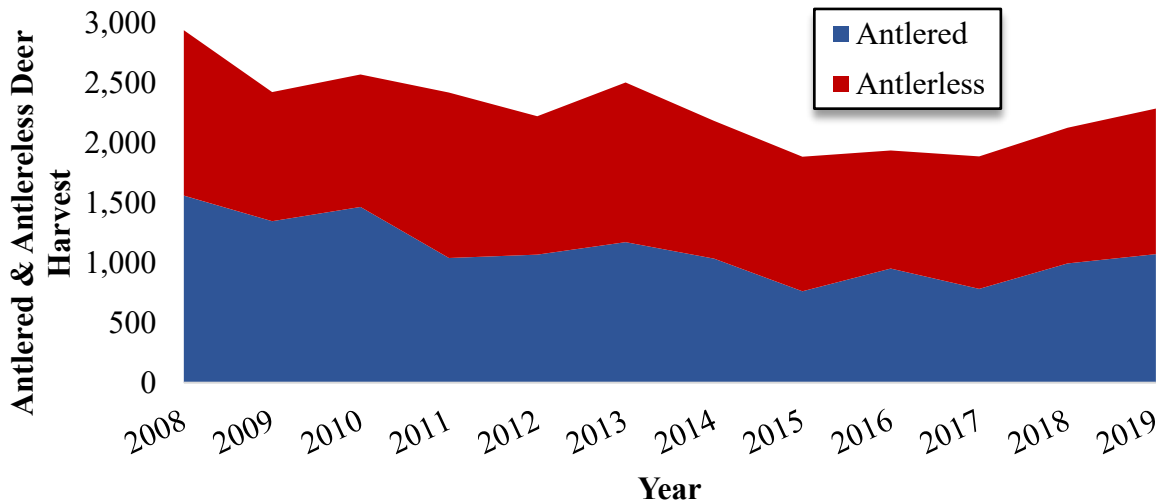


Figure 4. Antlered & Antlerless harvest, 2018-2019.

Antler Points: The DFW require hunters to record the number of antler points for each antlered deer they harvest. Eight-point bucks were the most commonly harvested antlered deer totaling 265 (25%). The second-most harvested antlered buck were 2-point bucks (spike bucks) at 155 (14%). Both statistics are the same as last year’s harvest.

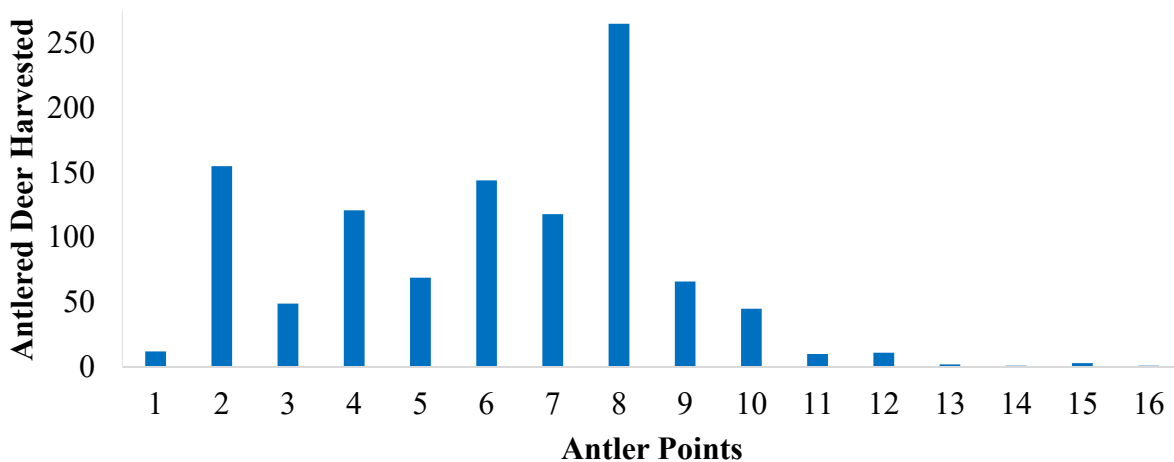


Figure 2. Antler points on antlered deer harvested during 2019-20.

Private and Public Land Hunting: Rhode Island has many Wildlife Management Areas, Undeveloped State Parks, and Cooperative (co-op) properties open to hunting. Hunting co-ops enable hunters to access various properties that were not traditionally open to hunting in addition to state Wildlife Management Areas (WMA’s) and increase hunting opportunities. The DFW has worked closely with private property owners such as land trusts, The Nature Conservancy, and others to open their lands to deer hunting. This is often undertaken to reduce deer densities at the specific property to mitigate the impacts of high deer densities. However, 75% of all deer harvested in RI, are harvested on private land. The number of deer harvested per each state and co-op property is listed in the appendix.

Check Stations & Herd Health

The DFW operate deer check stations during the first four days of the muzzleloader season (November 2nd – 5th, 2019) which all deer harvested (except deer in zones 3 and 4) were required to be brought to a state-operated check station. The four checking locations included: Arcadia Management Area, Carolina Management Area, Durfee Hill Management Area, and Great Swamp Management Area. Biological information collected at the check stations included: age, weight, sex, and antler beam measurements. This is also when the majority of CWD samples were collected.

Age Structure: During the mandatory checking period, 197 deer were checked representing a slight decrease from 200 deer checked during 2018-19. In 2019-20, a total of 80 females and 117 males (96 antlerless and 101 antlered deer) were checked. There were 30 yearling males checked this season, 27% of the total checked bucks, which is the ideal percentage (less than 30%) of harvest for this age class. Of the total number of bucks checked, 38% were 2.5-year-old and 30% were 3.5- year-old or older.

Herd Health: The DFW measures antler beam diameters and hog weight to assess the overall herd health. The antler beam diameter (mm) is measured one inch above the base of the antlers on yearling males. Large antler beam diameters (>20mm) indicate excellent herd health, while small diameters (<15mm) indicate poor health. Over the past 10 years, yearling male beam measurements have averaged 16.4mm while varying from 15.3mm – 17.6mm. This indicates fair to good health overall. This season produced an average measurement of 16.6mm, which suggests the herd health is good.

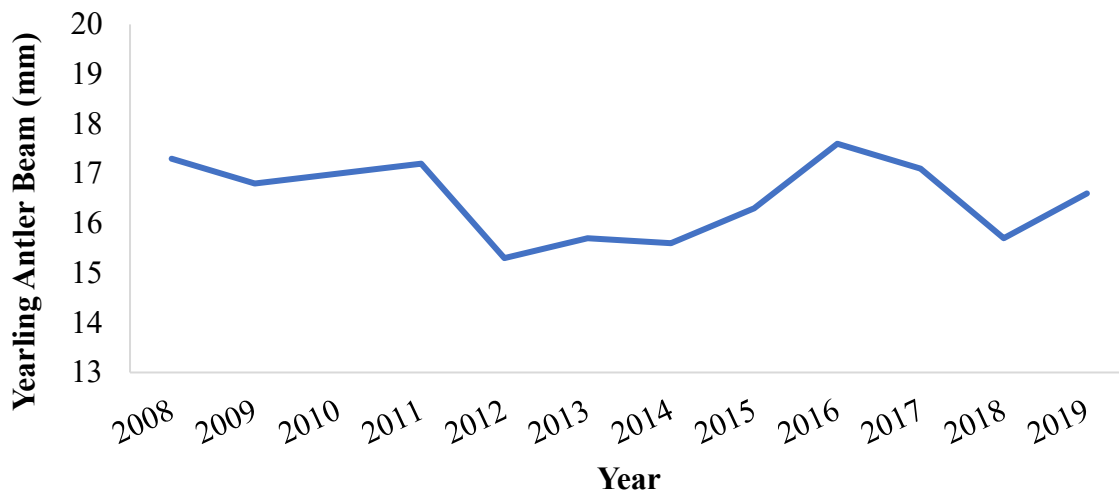


Figure 3. Yearling antler beam measurements from 2008-2019.

The DFW also measures the hog weight (completely field dressed with no organs remaining) of all deer checked. Since 2013, there have been no dramatic changes from one year to the next. The DFW will continue to monitor these metrics for significant changes; however, at this point there is no cause for concern.

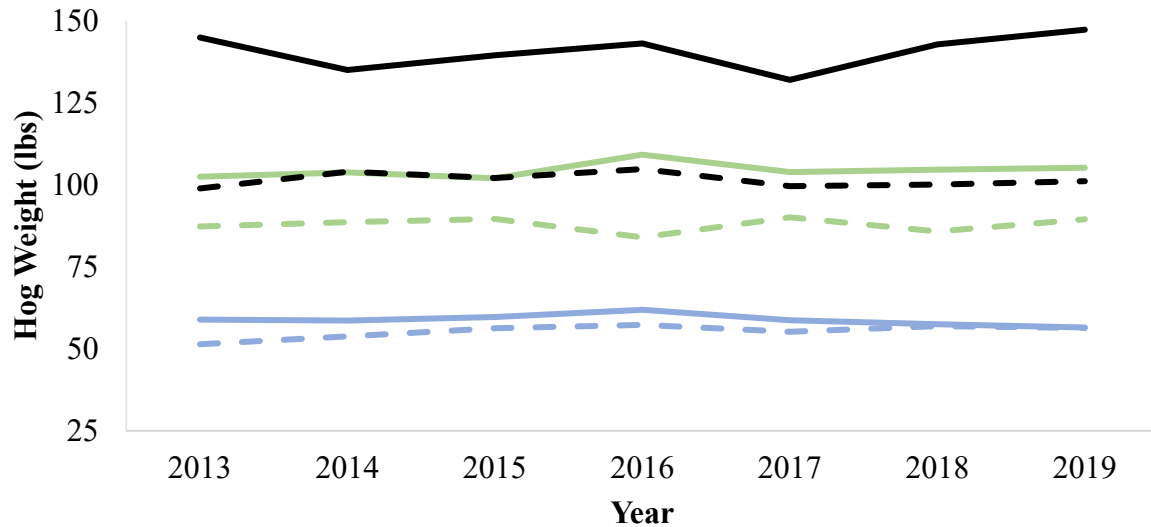


Figure 4. Hog weight of males (solid lines) and females (dashed lines) for various age groups, adults (black), yearlings (green), fawns (blue).

Chronic Wasting Disease

The DFW continued CWD surveillance for the 18th year and implemented a variety of collection methods. In 2019, the DFW sampled 328 deer throughout the state beginning in summer continuing through winter. Most of the samples originated from hunter harvested deer at check stations (48%), and voluntary deer processors (45%). The remainder of samples came from taxidermists, road kills, and potentially sick deer. The DFW sampled 49 bucks that were 3.5 years old or older, an increase of 14 deer from the previous year. This is in large part due to the help of local taxidermists sampling deer for DFW that would typically not be sampled. Hunters who successfully harvest a mature buck (3.5 years old or older) often decide not to allow the DFW to take tissue samples from that deer as they would like it to be taxidermied. This is acceptable and not uncommon, as the deer’s neck must be cut in order to remove tissue from the throat, making the deer unsuitable for taxidermy. However, this does not mean the tissues cannot be removed. If the deer is brought to a taxidermist, the sample could be removed after the deer has been caped (hide removed). If you harvest a mature buck (at least 3.5 years old) and would like to have it tested for CWD, please contact the DFW (401-789-0281). We aim to increase mature male samples because they are more likely to contract the disease because of their movement patterns. The DFW will continue to offer training to willing taxidermists and butchers on how to collect tissue for CWD testing to increase our sample size of mature bucks. CWD has not been detected in any samples submitted for testing during the 17 years of CWD surveillance. This year’s test results have been delayed due to new equipment at the laboratory which required staff training out of state which was been delayed due to COVID 19 complications. However, all CWD test results were negative for all deer that were deemed “sick.”

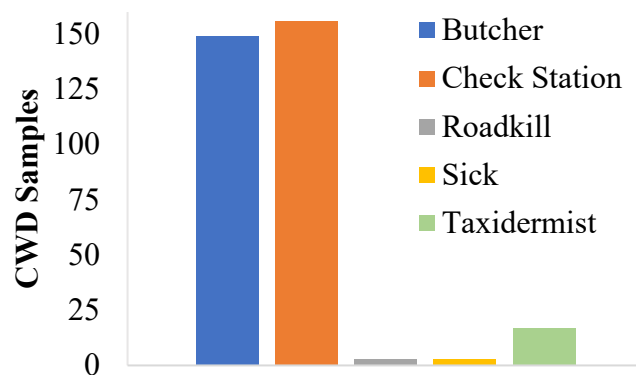


Figure 5. Collection method of CWD samples.

License Sales

The launch of the new online licensing system has streamlined its hunter harvest data collection process, thereby reducing data entry time and errors. The system has also enhanced the ability of the DFW to analyze license and permit sales, which can be used as a measure of hunter effort. The DFW offers a variety of resident and non-resident hunting licenses to the public. In total, 8,326 hunting or hunting and fishing combination licenses were sold in 2019-20. There was a total of 18,535 deer permits sold, with residents accounting for 16,075 permits, and nonresidents accounting for the 2,460 remaining permits. Most hunters, both residents and non-residents, purchased two deer permits. There were 1,434 successful deer hunters in Rhode Island, with the majority (86%) of hunters harvesting 2 deer or less. Resident hunters still harvest the most deer in the state, accounting for 1,977 deer, while nonresident hunters harvested 308 deer.

Over the past 20 years, hunting across the country has declined due to a variety of reasons and Rhode Island is no exception. In 2000, there was ~11,528 licensed hunters, purchasing almost 19,000 deer permits, since then, license sales have decreased 20%. Deer permits were also experiencing a similar trend but the removal of “either-sex” permits required hunters to purchase additional permits if they wanted the option to harvest a deer regardless of antlers. The increase in 2018 is likely due to the new online licensing system, allowing hunters easy access to hunting licenses and permits for the first time.

Special Hunt Opportunities

The DFW offers special hunt opportunities for youth hunters as well as disabled hunters. Youth hunters have the first opportunity to harvest a deer during archery and muzzleloader seasons. Disabled hunters also have a great opportunity to harvest deer using firearms in Zone 3, which is archery-only for all other hunters. A special hunting permit must be obtained through the RI DEM Office of Boat Registration and Licensing, 235 Promenade St. Providence, RI 02908 (401) 222-3576 by each applicant prior to hunting.

Conclusion

Since 2014, the statewide deer harvest has remained stable at ~2,000 with no major changes in overall health, weight, harvest sex ratios, and antler beam measurements. In order to ensure sustainability of the deer population, the DFW is currently working to more accurately assess and estimate the deer population via tools such as population modeling using existing data sources. The DFW also intends to survey deer hunters to better understand hunter demographics and behaviors, as well as to gain a better estimate of hunter effort. These surveys will be administered randomly so if you are selected the DFW highly encourages you to complete the survey. The data from these surveys will be used in conjunction with biological data to develop deer management prescriptions.

In 2018, the average age of hunters in Rhode Island was 47 years old (samples size of 2,855 hunters) and continues to rise annually. In 10-20 years, most today’s hunters will age out, leaving behind a small group of hunters to carry the hunting tradition and financially support wildlife conservation. In order to keep the hunting tradition alive and to continue funding wildlife conservation I ask all hunters to continually mentor a family member, friend, coworker, or anyone who shows an interest in the outdoors and especially hunting. It is not only difficult to start hunting

but it is especially difficult for those who are not exposed to hunting at an early age to successfully participate in the activity.

Please keep in mind when en route to your hunting destination, actively hunting in the field, headed home from your hunt, or stopping at the local coffee shop wearing camouflage, you represent all hunters. A positive public perception of hunters is a key component in keeping the hunting tradition alive. Be respectful when in a public setting to individuals that may not want to see bloody clothing, or the deer you just harvested even though you couldn't be prouder. Do your best to field dress animals in secluded areas, away from hiking trails and parking lots. Dispose of your carcass properly by double bagging them and bringing them to a nearby landfill. Leaving entrails or carcasses in public locations can lead to conflicts between hunters and others while also giving hunters a negative public image.

Whether you are hunting for sustenance, a mature buck, or enjoying time outdoors, Rhode Island offers great hunting opportunity for all hunters. Regardless of your motive, the DFW wishes you a safe and successful upcoming hunting season.

I highly encourage you to provide feedback about this report by emailing it to Dylan.Ferreira@dem.ri.gov.

Appendix

Rhode Island Deer Harvest by town via method.

Town	Archery	Crossbow	Muzzleloader	Shotgun	Total
Barrington	1	0	0	0	1
Bristol	4	9	0	1	14
Burrillville	17	25	92	16	150
Charlestown	11	25	48	19	103
Coventry	18	38	70	17	143
Cranston	3	2	8	2	15
Cumberland	6	16	9	4	35
East Greenwich	12	13	15	6	46
East Providence	3	2	0	0	5
Exeter	12	29	115	13	169
Foster	6	22	103	14	145
Glocester	13	25	91	19	148
Hopkinton	6	26	71	18	121
Jamestown	14	18	4	2	38
Johnston	2	6	10	1	19
Lincoln	1	24	0	0	25
Little Compton	11	6	29	2	48
Middletown	9	1	0	0	10
Narragansett	3	13	0	1	17
New Shoreham	16	39	22	64	141
North Kingstown	25	37	23	6	91
North Smithfield	8	9	37	7	61
Portsmouth	13	28	2	5	48
Providence	0	0	1	0	1
Richmond	10	22	57	8	97
Scituate	7	40	83	20	150
Smithfield	0	9	25	7	41
South Kingstown	17	40	70	21	148
Tiverton	28	27	25	9	89
Warren	0	4	0	0	4
West Greenwich	3	27	56	14	100
West Warwick	0	2	0	0	2
Westerly	5	17	29	8	59
Woonsocket	0	1	0	0	1
Total	284	602	1,095	304	2,285

Rhode Island Deer Harvest by Property.

Property	Deer Harvested
Private	1,708
Arcadia Management Area	106
Beavertail Co-Op	1
Big River Management Area	57
Black Farm Management Area	6
Black Hut Management Area	22
Black Rock/Rodman Hollow Co-Op	10
Block Island NWR Co-Op	4
Buck Hill Management Area	16
Burlingame Management Area	31
Burlingame North Camp Co-Op	3
Camp Nokewa	2
Carbuncle Pond	2
Carolina Management Area	13
Cocumscussoc	10
Cuttyhunk Brook North TNC Co-Op	4
Diamond Hill	22
Durfee Hill Management Area	13
Eight Rod Farm Management Area	14
Francis Carter TNC Co-Op	9
Galilee Bird Sanctuary	3
George Washington Management Area	44
Glocester Land Trust Sprague Farm	1
Gould Island	1
Grass Pond TNC Co-Op	7
Great Swamp Management Area	26
Grills Preserve 1 Westerly Land Trust Co-Op	5
Grills Preserve 2 Hopkinton Land Trust Co-Op	2
JL Curran	5
Killingly Pond Management Area	8
King Preserve TNC Co-Op	1
Lake Road	1
Nicholas Farm Management Area	12
Ninigret NWR Co-Op	8
Northwest Co-Op	1
Pocasset Ridge TNC Co-Op	5
Ponagansett Management Area	4
Providence Water Supply Co-Op	14

Prudence Island Management Area	26
Rockville Management Area	2
Round Top Management Area	2
Sapowet Marsh Management Area	1
Simmons Mill Management Area	5
Snake Den	2
South Shore Management Area	13
Tillinghast Pond Management Area	9
Westerly Land Trust, Riverwood	1
Wickaboxet Management Area	2
Woody Hill Management Area	21
Total	2,285

Rhode Island Deer Management Zones

