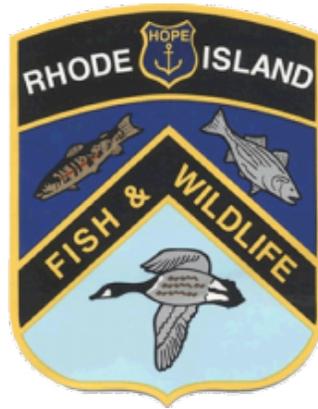




Rhode Island Department of Environmental Management

Rhode Island White-tailed Deer Harvest Report

2017-18 Season



Division of Fish and Wildlife

277 Great Neck Rd West Kingston, RI 02892

September 6, 2018



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."

2017-18 Season Framework

Zones: Figure 1

Zone 1 and 2: Mainland

Zone 3: Patience and Prudence Islands

Zone 4: Block Island

Dates:

1. Archery
 - a. Zone 1: September 15 – January 31
 - i. Youth only: September 9 – 10
 - b. Zone 2: October 1 – January 31
 - i. Youth only: September 23 – 24
 - c. Zone 3: November 1 – January 31
 - i. Youth only: October 28 – 29
 - d. Zone 4: October 10 – 13, 16 – 20, 23 – 27, 30, 31
2. Muzzleloader
 - a. Zones 1 and 2: November 4 – 26
 - i. Youth only: October 28 – 29
 - b. Zones 1 and 2: December 26 – January 2, 2018 (antlerless deer on private land only)
3. Shotgun
 - a. Zone 1: December 2 – 17
 - b. Zone 2: December 2 – 10
 - c. Zones 1 and 2: December 26 – January 2, 2018 (antlerless deer on private land only)
 - d. Zone 3: Disabled Hunters, October 24 – 27
 - e. Zone 4: Archery, Shotgun, and Muzzleloader
 - i. November 1 – 3, 6 – 9, 13 – 17, 20, 21, 27, 28
 - ii. December 1, 4 – 8, 11 – 15, 18, 19, 21, 22
 - iii. January 3 – 5, 8 – 12, 16 – 19, 22 – 26, 29, 30, 31
 - iv. February 1, 2, 5 – 9, 12 – 16

Bag Limits: All methods

1. Antlered deer
 - a. Statewide: 2
 - b. Zone 3: 1
2. Antlerless deer
 - a. Zone 1: 3
 - b. Zone 2: 2
 - c. Zone 3: 2
 - d. Zone 4: unlimited

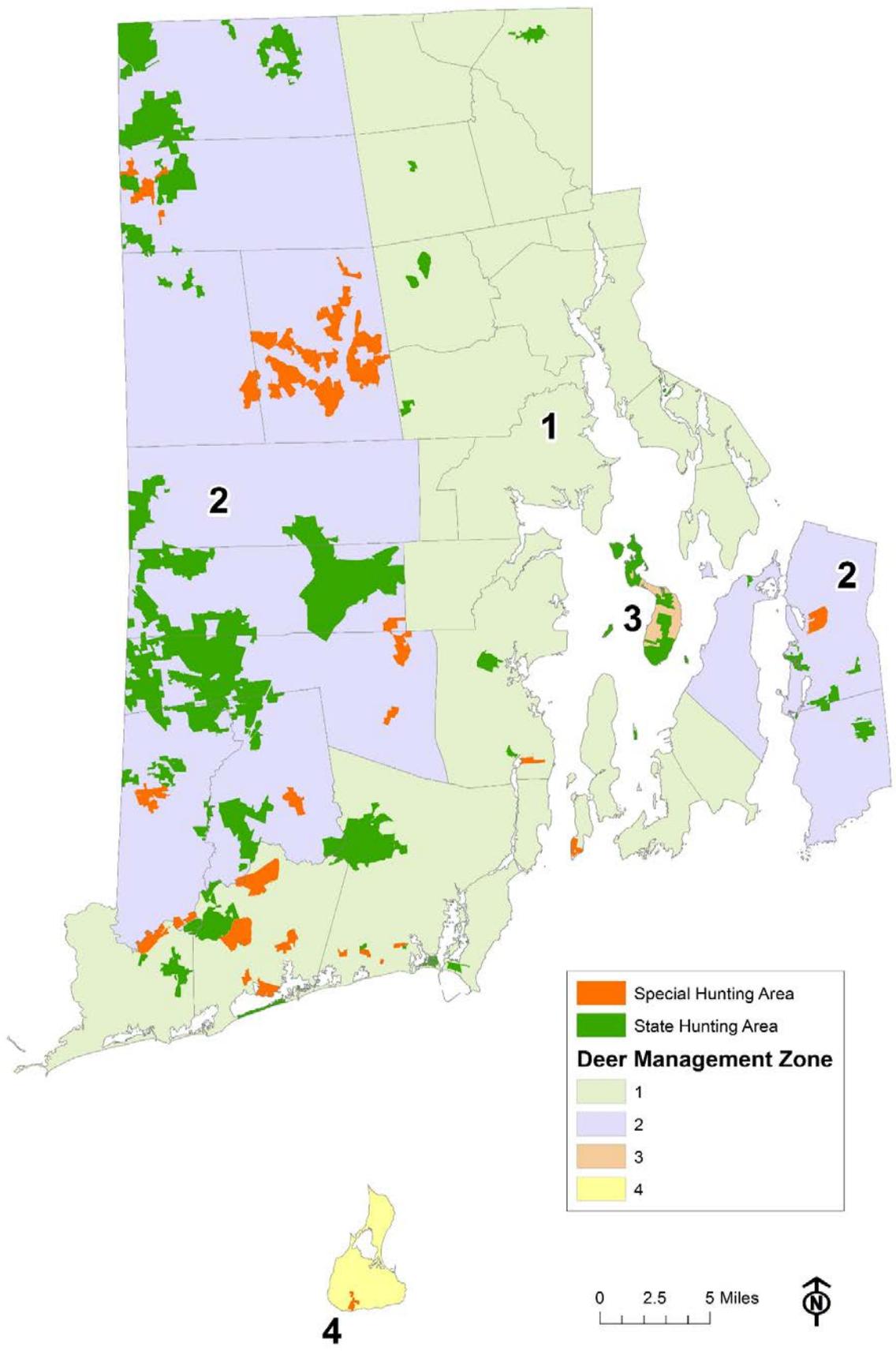


Figure 1

2017 – 18 Significant Changes: The bag limit was reduced in Zone 1. The bag limit and season length were reduced in Zone 2. Zone 1 and 2 late muzzleloader seasons restricted the harvest to private land, antlerless deer only.

Season Summary: Total statewide reported deer harvest was 1,886 deer during the 2017-18 season. This was a 3% reduction from 1,936 in the 2016-17 season. A total of 782 (41%) of deer harvested were antlered, 1,102 (59%) were antlerless and 2 deer were reported with no indication. Figure 2 looks at the historical deer harvest in Rhode Island since 1977, since 2008 there has been a downward trend in overall harvest. Resident hunters harvested 1,667 deer while nonresident hunters harvested 219 deer. All figures are generated from reported harvests only.

Total Reported Harvest: 1,886

Buck to Doe Harvest Sex Ratio: 1.06 (Hunters harvested 1.06 bucks to every 1 doe)

969 (51%) buck; 914 (49%) doe; 3 unknown

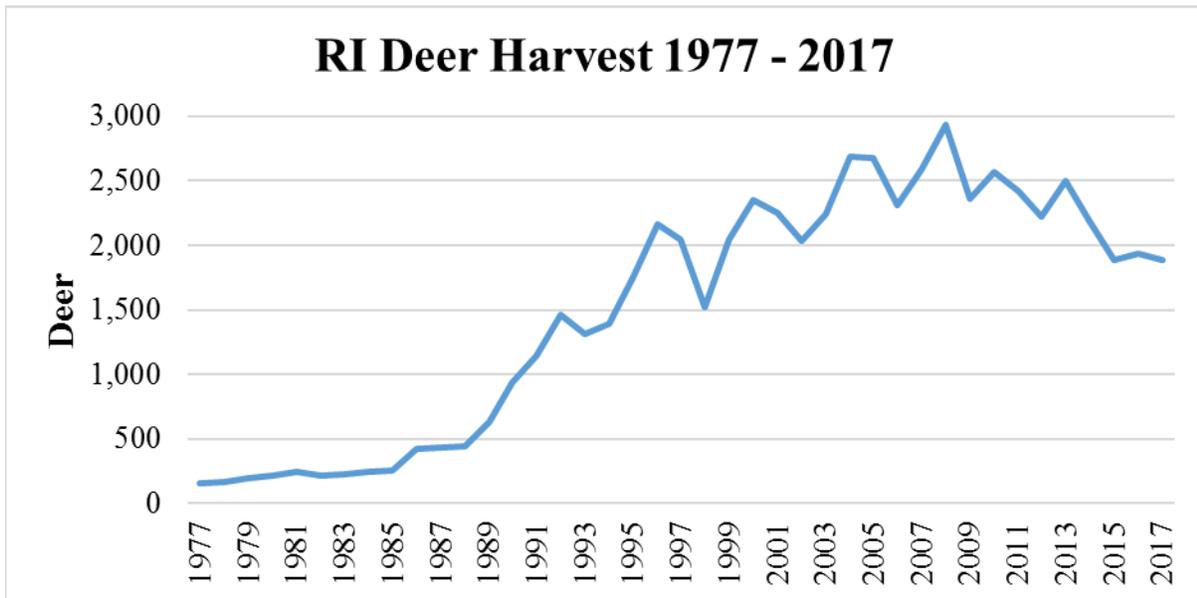


Figure 2

Table 1 indicates a total of 621 deer were harvested in Zone 1; 1,030 deer in Zone 2; 31 deer in Zone 3; 196 deer in Zone 4; and zones were not reported for 8 deer. Muzzleloader hunters harvested the most deer (791), followed by archery hunters (670; 423 vertical bow, 247 crossbow) and then shotgun hunters (411); 14 hunters did not specify their method of take (table 1). Despite the reduction in Zone 2's season length and bag limit, Zone 2's harvest increased from 970 to 1,030 and resulted in a greater harvest than Zone 1.

Table 1. 2017-18 Harvest by Method and Zone

| Zone | Archery | Crossbow | Muzzleloader | Shotgun | Unknown | Total |
|----------------|----------------|-----------------|---------------------|----------------|----------------|--------------|
| 1 | 184 | 112 | 219 | 103 | 3 | 621 |
| 2 | 213 | 106 | 556 | 148 | 7 | 1,030 |
| 3 | 15 | 11 | 2 | 3 | 0 | 31 |
| 4 | 11 | 16 | 8 | 157 | 4 | 196 |
| Unknown | 0 | 2 | 6 | 0 | 0 | 8 |
| Total | 423 | 247 | 791 | 411 | 14 | 1,886 |

Table 2 looks at the harvest in each zone based on age and sex. Zones 1 and 2 produced slightly higher harvest of adult bucks than adult does. While the opposite occurred in Zones 3 and 4.

Table 2. 2017-18 Sex/Age Class of Harvest Per Zone

| Zone | Adult Doe | Doe Fawn | Adult Buck | Button Buck | Unknown | Total |
|----------------|------------------|-----------------|-------------------|--------------------|----------------|--------------|
| 1 | 257 | 37 | 289 | 38 | 0 | 621 |
| 2 | 390 | 57 | 495 | 87 | 1 | 1,030 |
| 3 | 13 | 2 | 10 | 6 | 0 | 31 |
| 4 | 129 | 23 | 37 | 5 | 2 | 196 |
| Unknown | 4 | 2 | 2 | 0 | 0 | 8 |
| Total | 793 | 121 | 833 | 136 | 3 | 1,886 |

In table 3, hunters harvested 1,484 (79%) deer on private land. Between state and federal owned or cooperative properties, hunters harvested 383 (20%) deer. Hunters did not report their location for 19 (1%) deer.

Table 3. 2017-18 Harvest by Land Ownership

| Land Type | Deer Harvested |
|----------------------------|-----------------------|
| Private | 1,484 |
| Federal/State/Co-op | 383 |
| Unknown | 19 |
| Total | 1,886 |

As shown in figure 3, Block Island's harvest declined 28% from the 2016-17 season this year from 272 to 196 deer harvested. An aerial survey was performed of the entire island in March 2017 following the hunting season and there was an estimated 630 deer on the island.

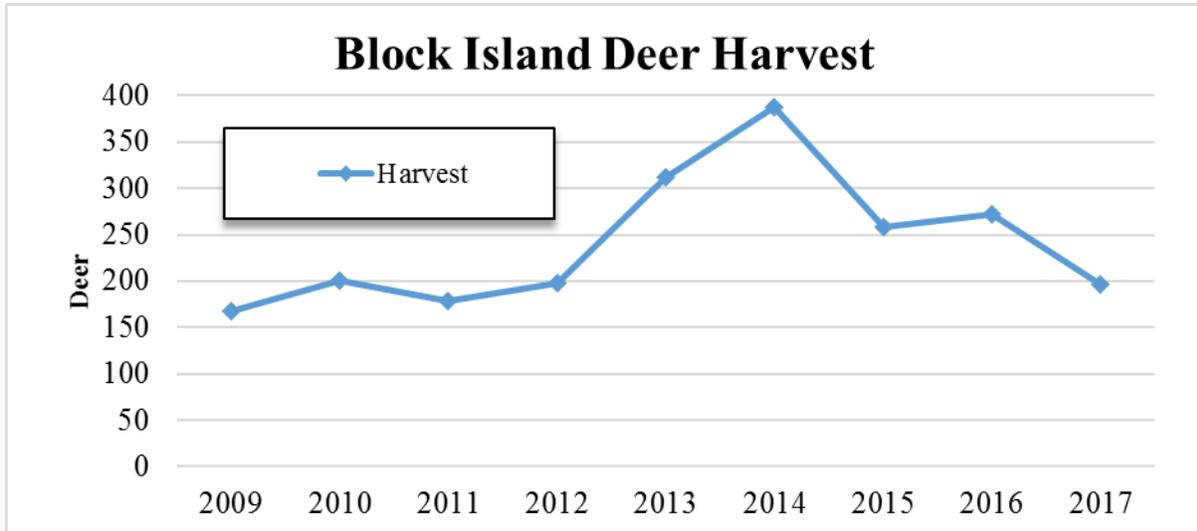


Figure 3

Of all bucks harvested, 8-point bucks were harvested the most frequently. A total of 223 8-pointers were harvested, making up 29% of the total buck harvest. The second most harvested buck was 2-point bucks (fork horn). A total of 99 2-pointers were harvested, comprising 13% of the total buck harvest (figure 4).

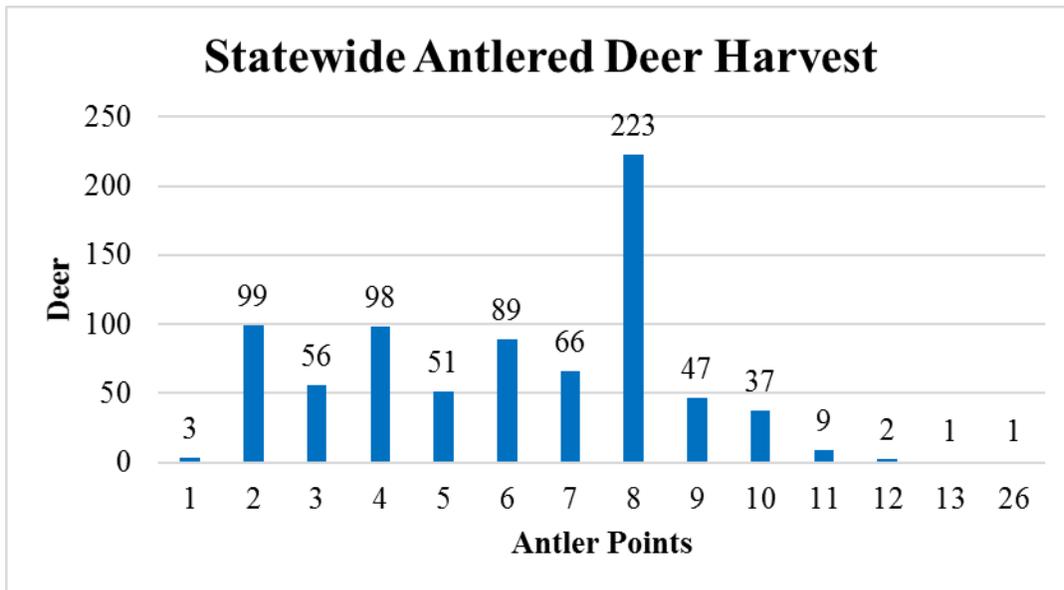


Figure 4

Youth Season: As depicted in table 4, only 2 deer were harvested during the special youth seasons. One cause for concern is the lack of successful youth hunters during the special youth seasons. From last year's data we are unable to determine the number of youth hunters that participated in the special season. With the new online licensing system, the Division of Fish and Wildlife (DFW) will be able to see how many youth hunters we have, and how many participate in the special and regular season, and how many harvest deer during the regular season.

Table 4. 2017-18 Youth Season Harvest

| Zone | Archery | Muzzleloader | Total |
|--------------|----------------|---------------------|--------------|
| 1 | 0 | 0 | 0 |
| 2 | 1 | 1 | 2 |
| 3 | 0 | 0 | 0 |
| 4 | N.A. | N.A. | N.A. |
| Total | 1 | 1 | 2 |

Daily Harvest: Figure 5 displays the daily deer harvest throughout the season. As expected, most deer were harvested during the weekends and on season openers. There is no weekend harvest during the last part of the deer season since Block Island (the only open area) does not allow hunting on weekends.

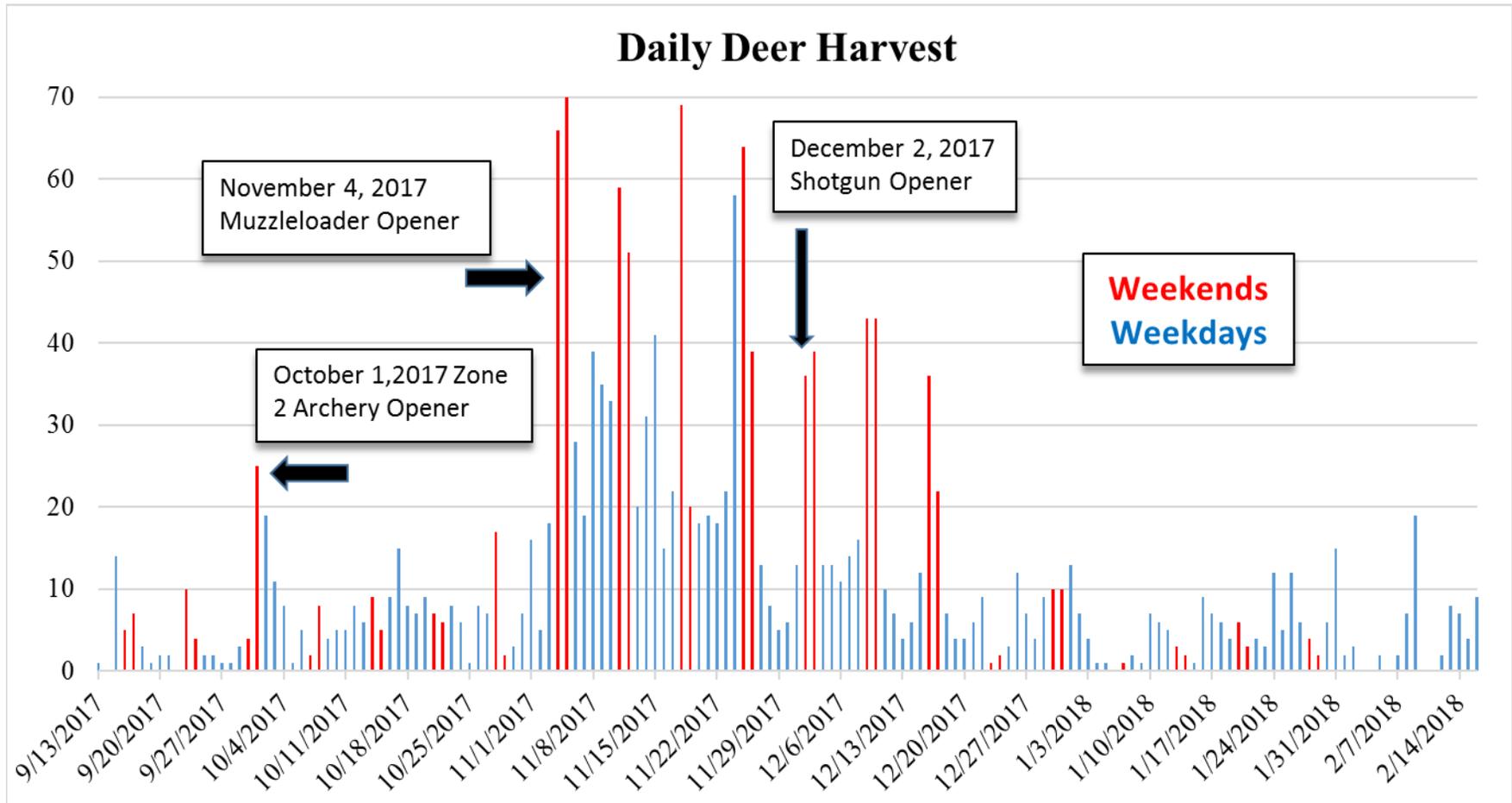


Figure 5

Hunter Effort and Success: For this report, we calculated effort for 2017-18 based on reports we received from kill report cards.

Each hunter that kills a deer must submit a kill report card with information that the DFW uses to monitor the deer harvest (excluding hunters who check their deer at state-operated check stations during mandatory checking periods). This past season we added a hunter-effort section to the card. Some hunters used the prior year's kill card to submit their harvest, which did not include a hunter-effort section, so not all hunters completed the survey.

Successful hunters submitted 1,110 correct kill report cards. The remaining 776 deer were either submitted with old kill cards or checked at a state-operated check station. Of those hunters who submitted the correct card, 14% (152) either had no response, incorrect data, or incomplete answers to the survey, leaving 958 correctly completed surveys. Our intent with the survey was to gather data for the number of deer on the day of the harvest. However, a portion of survey responses were filled out with harvest effort for the entire season and were excluded from our analysis. Future surveys will be issued with clearer instructions.

The results of the survey indicated, on average, successful hunters spent 3 hours in the field per hunt this year. The average successful hunter saw one doe/1.5 hrs, one buck/4 hrs, and one fawn/7 hrs.

As reported, 958 hunters collectively spent approximately 2,900 hours in the woods. On the days they were successful, they saw a total of: 1,945 does, 397 fawns, and 679 bucks. Approximately 71% of hunters saw does, 54% of hunters saw bucks, and 23% of hunters saw fawns.

Approximately 1,231 individual hunters harvested deer across Rhode Island. The majority (73%) of hunters harvested 1 deer (table 5). Few hunters harvested more than 2 deer.

Table 5. 2017-18 Deer Harvest/Hunter

| Hunters | Deer Harvested | % of Hunters |
|----------------|-----------------------|---------------------|
| 901 | 1 | 73% |
| 212 | 2 | 17% |
| 64 | 3 | 5% |
| 20 | 4 | 2% |
| 15 | 5 | 1% |
| 19 | 6+ | 1.5% |
| 1,231 | 1,886 | 100% |

Check Stations: This past year’s mandatory check station dates (first four days of the muzzleloader season) were November 4th – 7th. There were 5 checking locations across the state; Arcadia Management Area, Carolina Management Area, Durfee Hill Management Area, Great Swamp Management Area, and Tiverton Rod and Gun Club.

During the mandatory checking period, 160 deer were checked, a 39% reduction from 261 deer checked during 2016-17. A total of 63 females, 96 males, and 1 unreported deer were checked (83 antlered deer, 77 antlerless deer). The total number of males checked decreased from 171 to 96. There were 13 male fawns and 34 yearling bucks checked this season, a reduction from last year’s 53 yearlings. The 34 yearling bucks made up 35% of the total checked bucks, just above the 30% mark, which is the ideal percentage to harvest. From 2011-2013, hunters annually harvested close to 30% of yearling bucks, and since 2014 hunters have harvested slightly higher than 30% every year (figure 6). Of the total number of bucks checked, hunters checked 25% of 2.5-year-old bucks and 24% of +3.5- year-old bucks.

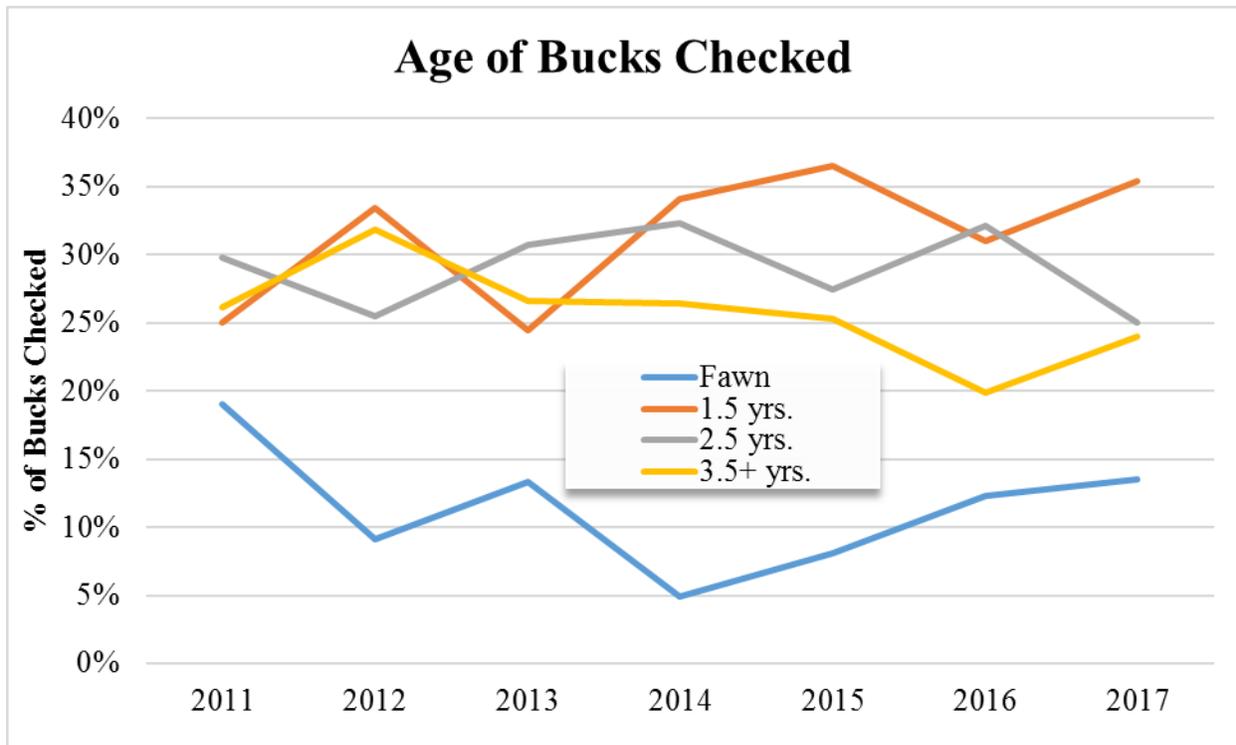


Figure 6

As depicted in figure 7, our mandatory checking period produced an adult buck-to-adult doe ratio of 1.63 (83 bucks, 51 does). Since the 2011-12 deer season the buck: doe ratio has varied from 1.16 in 2013-14 to 3.23 just 2 years later. This range is most likely due to a small sample size. Ideally, we would like to see this number around 1.

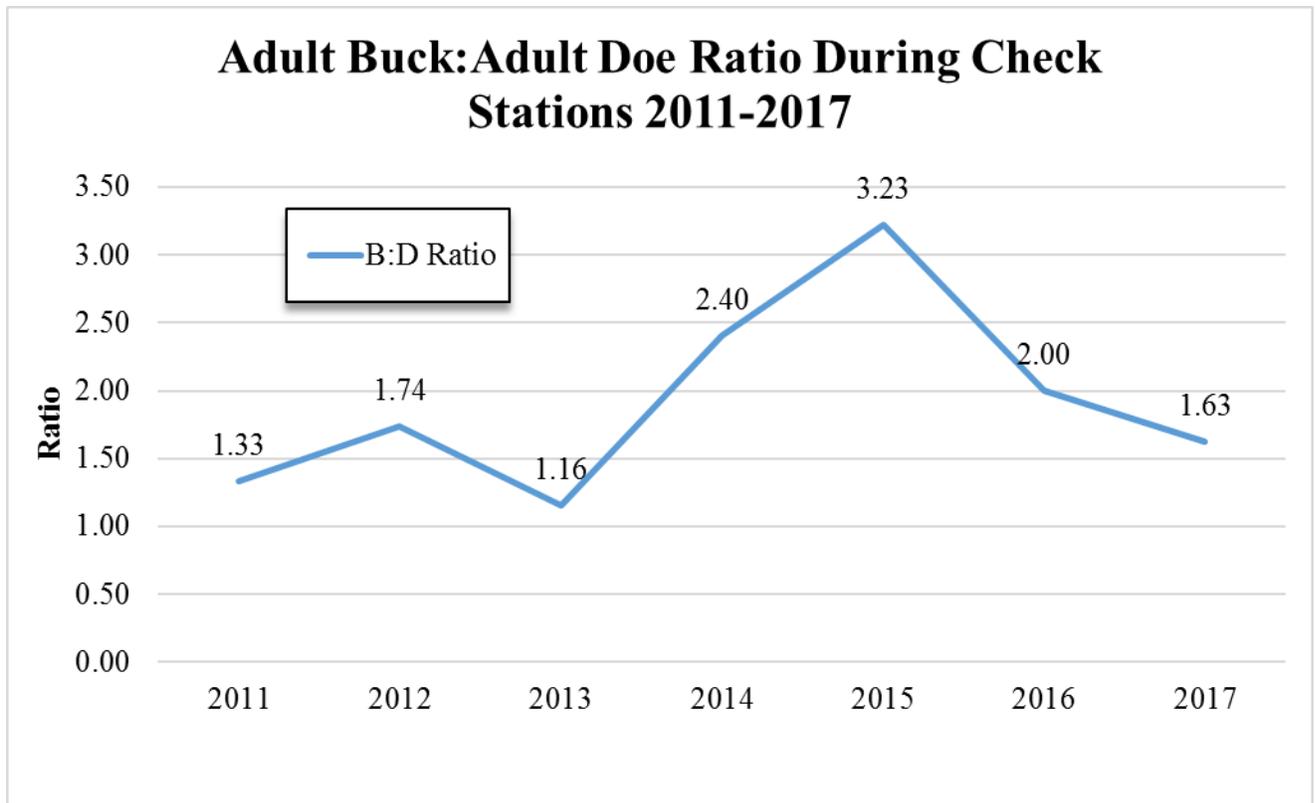


Figure 7

Herd Health: The DFW measures the diameter of the antler beam 1 inch above the base of the antler on yearling males. The DFW also records the hog weight (deer completely gutted). Both data types are used to assess the overall herd health. Since 2013, there have been no dramatic changes from one year to the next (table 6), but it is worth noting that this year’s sample size was much smaller than previous years. Large antler beam diameters (>20mm) indicate excellent herd health, while small diameters (<15mm) indicate poor health. Over the past several years, yearling male buck average beam measurements have varied from 15-17mm (table 7). This indicates fair to good health overall.

Table 6. Average Hog Dressed Weight (lbs) of Mainland Checked Deer

| Age Class | Males | | | | | Females | | | | |
|-----------------|-------|-------|-------|-------|-------|---------|-------|-------|------|------|
| | 2017 | 2016 | 2015 | 2014 | 2013 | 2017 | 2016 | 2015 | 2014 | 2013 |
| Fawn | 58.7 | 61.9 | 59.7 | 58.6 | 58.9 | 55.2 | 57.3 | 56.3 | 53.8 | 51.4 |
| Yearling | 103.9 | 109.2 | 102 | 103.8 | 102.5 | 90.1 | 84 | 89.6 | 88.6 | 87.3 |
| Adult | 132 | 143.1 | 139.5 | 135 | 144.9 | 99.6 | 104.8 | 102.1 | 104 | 98.9 |

Table 7. Yearling Male Antler Beam Measurement (mm)

| 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
|------|------|------|------|------|------|------|------|------|------|
| 17.1 | 17.6 | 16.3 | 15.6 | 15.7 | 15.3 | 17.2 | 17 | 16.8 | 17.3 |

Deer Urine Survey: During the check stations days the DFW surveyed all successful hunters checking deer to find out if they used a deer urine lure while hunting. This was to quantify how many hunters could potentially be impacted if a new regulation banned the use of deer lures (specifically ones that contain deer urine). Overall 160 hunters were surveyed, out of which 134 (84%) did not use urine, 18 (14%) used urine and 8 (5%) did not respond (figure 8). This indicates there would be a small number of hunters affected by the ban the following year.

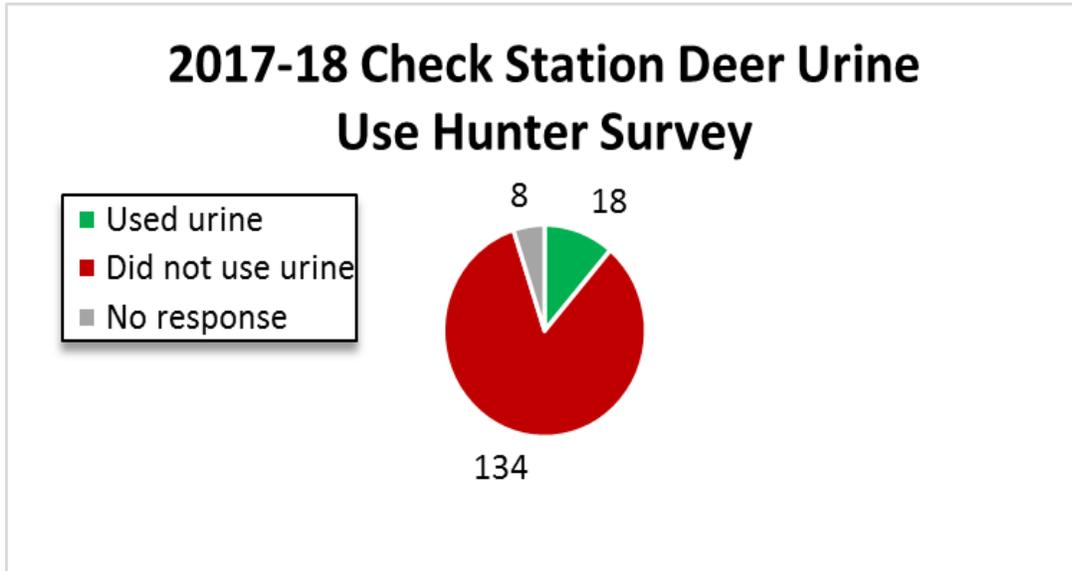


Figure 8

Chronic Wasting Disease (CWD) Monitoring: The DFW continued CWD monitoring of the state's deer herd for the 16th year and implemented a variety of collection methods. In 2017, the DFW sampled 203 deer throughout the state (figure 10). The majority (60%) of the samples originated from hunters at check stations, and the remainder of samples came from butchers, road kills, sick deer, and taxidermists (table 8). The DFW was only able to sample 34 bucks (17% of all samples) over 3.5 years old (figure 9). Hunters who successfully harvest a mature buck (trophy buck) often decide not to allow the DFW to take a sample from that deer to test it for CWD. This is acceptable and not uncommon as we must cut the deer's neck in order to remove the tissue from the throat, making the deer extremely unlikely to be prepared by a taxidermist. However, this does not mean the tissues can never be removed. If the deer is brought to a taxidermist, the sample could be removed after the deer's head has been caped.

If you harvest a mature buck (3.5+ years old) and would like to have it tested for CWD please contact the DFW. Mature males are most likely to contract the disease because of their movement patterns. The DFW is planning to offer training to willing taxidermists and butchers on how to collect tissue for CWD testing to increase our sample size of mature bucks.

All samples tested negative for CWD.

Table 8. 2017-18 CWD Sample Origin

| Sample type | Count | % of Total |
|----------------------|------------|-------------|
| Butcher | 45 | 22% |
| Check Station | 121 | 60% |
| Hunter | 3 | 1% |
| Hunter/Sick | 1 | 0% |
| Roadkill | 28 | 14% |
| Sick deer | 3 | 1% |
| Taxidermist | 2 | 1% |
| Total | 203 | 100% |

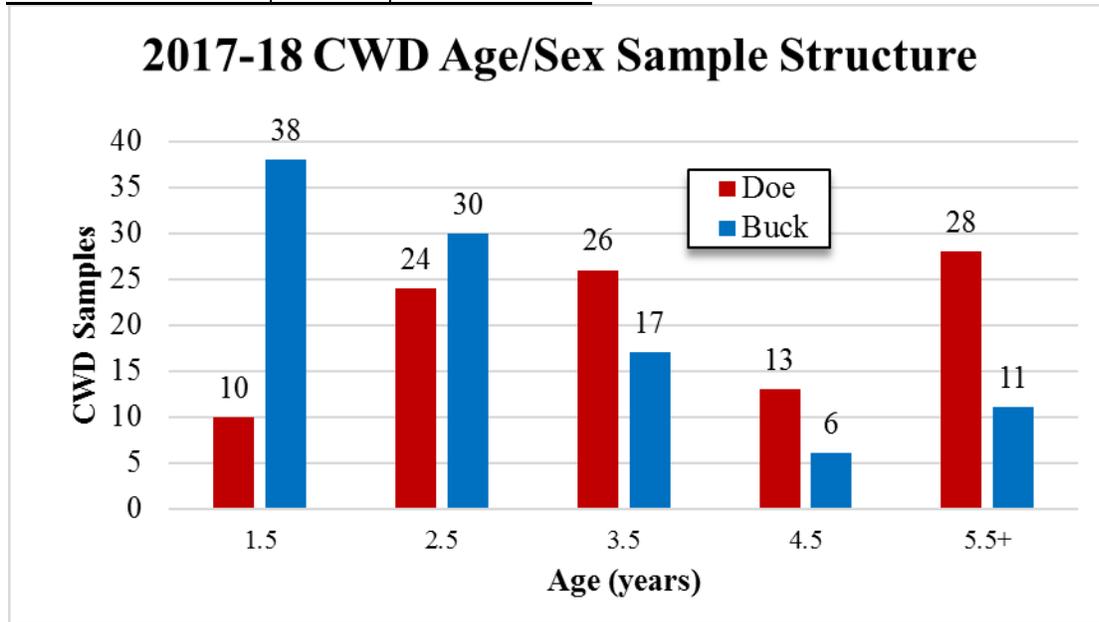


Figure 9

Town Harvest: Included in table 9.

2018 – 19 Significant Changes:

- Starting in 2018, the use or possession of natural deer urine lures is prohibited as an additional precautionary measure to further minimize the potential for CWD to be introduced into Rhode Island.
- Rhode Island hunting licenses and tags are now available online at www.ri.gov/dem/huntfish. Hunters can also report their harvests through the online system. Kill cards **will not** be an acceptable method to report your harvest.
- Tiverton Rod and Gun Club **will not** be a deer check station for the 2018-19 hunting season.
- Tree stands may not be installed on state-owned and co-op property prior to August 15th and must be removed prior to February 15th annually.

I would encourage you to provide feedback about the report by sending it to dylan.ferreira@dem.ri.gov.

Thank you

Senior Wildlife Biologist, Dylan Ferreira

Table 9. 2017-18 Town Deer Harvest by Method

| Town | Archery | Crossbow | Muzzleloader | Shotgun | Unknown | Total |
|------------------|----------------|-----------------|---------------------|----------------|----------------|--------------|
| Bristol | 10 | 4 | 0 | 0 | 0 | 14 |
| Burrillville | 19 | 9 | 65 | 13 | 1 | 107 |
| Charlestown | 16 | 8 | 36 | 23 | 0 | 83 |
| Coventry | 20 | 8 | 69 | 18 | 4 | 119 |
| Cranston | 2 | 6 | 4 | 3 | 0 | 15 |
| Cumberland | 10 | 4 | 7 | 0 | 0 | 21 |
| East Greenwich | 9 | 5 | 15 | 8 | 1 | 38 |
| East Providence | 0 | 1 | 1 | 0 | 0 | 2 |
| Exeter | 20 | 19 | 75 | 15 | 0 | 129 |
| Foster | 24 | 21 | 50 | 27 | 0 | 122 |
| Glocester | 13 | 6 | 65 | 16 | 0 | 100 |
| Hopkinton | 21 | 7 | 40 | 8 | 0 | 76 |
| Jamestown | 19 | 9 | 5 | 6 | 0 | 39 |
| Johnston | 7 | 6 | 8 | 2 | 0 | 23 |
| Lincoln | 6 | 9 | 0 | 0 | 0 | 15 |
| Little Compton | 9 | 3 | 16 | 2 | 0 | 30 |
| Middletown | 6 | 0 | 0 | 0 | 0 | 6 |
| Narragansett | 5 | 4 | 3 | 0 | 1 | 13 |
| New Shoreham | 11 | 16 | 8 | 157 | 4 | 196 |
| Newport | 0 | 1 | 0 | 0 | 0 | 1 |
| North Kingstown | 27 | 16 | 21 | 8 | 1 | 73 |
| North Smithfield | 15 | 7 | 32 | 6 | 0 | 60 |
| Portsmouth | 24 | 12 | 6 | 3 | 0 | 45 |
| Richmond | 14 | 4 | 34 | 15 | 0 | 67 |
| Scituate | 18 | 14 | 71 | 21 | 0 | 124 |
| Smithfield | 7 | 4 | 15 | 9 | 0 | 35 |
| South Kingstown | 32 | 20 | 51 | 22 | 0 | 125 |
| Tiverton | 18 | 4 | 22 | 1 | 0 | 45 |
| Wakefield | 0 | 1 | 0 | 0 | 0 | 1 |
| Warwick | 1 | 0 | 0 | 0 | 0 | 1 |
| West Greenwich | 24 | 11 | 44 | 12 | 2 | 93 |
| Westerly | 15 | 6 | 21 | 16 | 0 | 58 |
| Woonsocket | 1 | 0 | 1 | 0 | 0 | 2 |
| Unknown | 0 | 2 | 6 | 0 | 0 | 8 |
| Total | 423 | 247 | 791 | 411 | 14 | 1,886 |

2017-18 CWD Sampling Effort

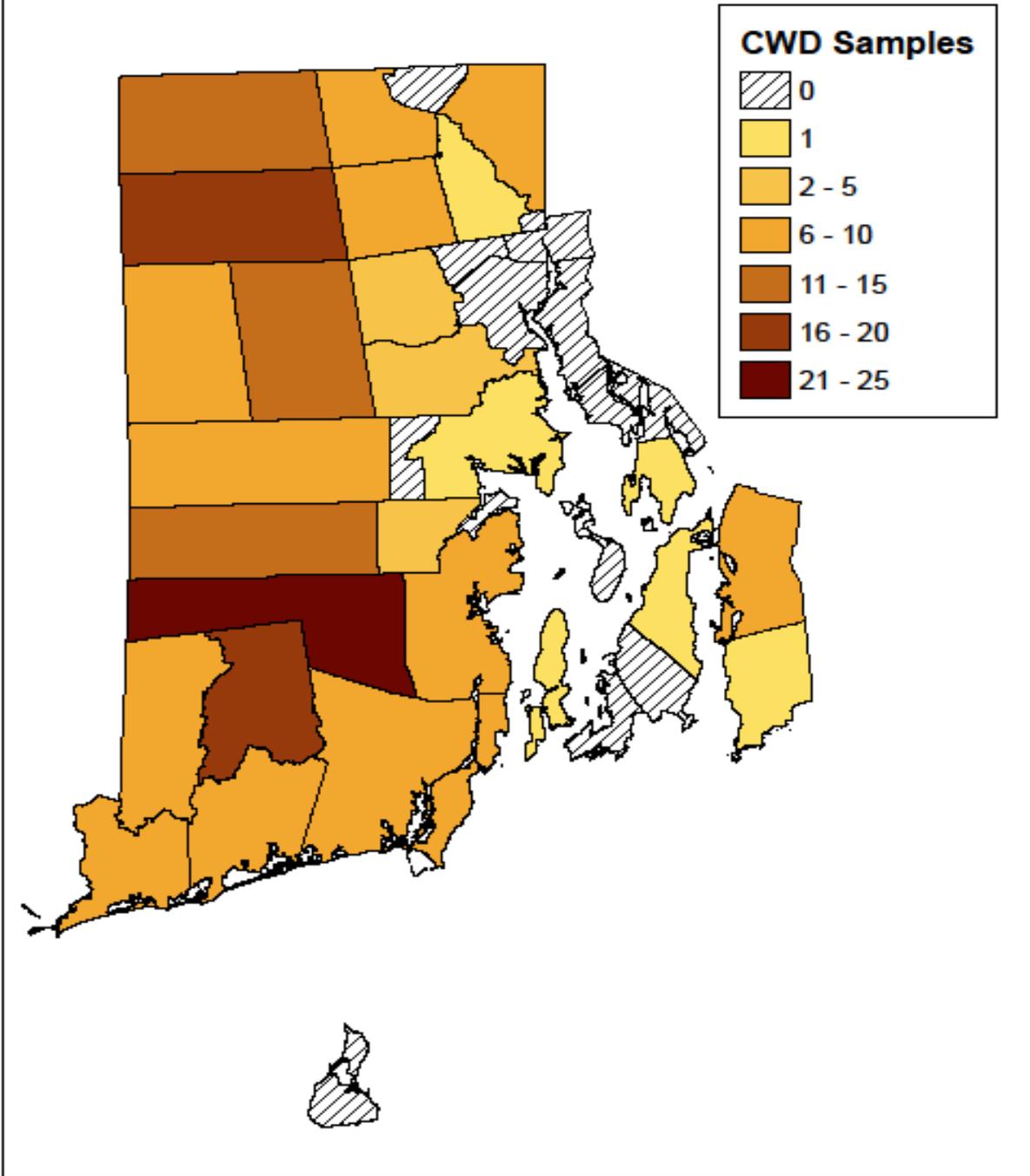


Figure 10