

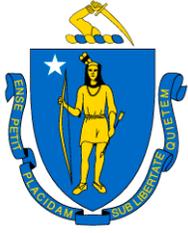
BLUE HILLS STATE RESERVATION

WHITE-TAILED DEER MANAGEMENT PROGRAM

2015
Program Overview & Results



A Joint Publication of the
Massachusetts Department of Conservation & Recreation
and the
Massachusetts Division of Fisheries & Wildlife



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Secretary

Department of Conservation & Recreation

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Commissioner



Massachusetts Division of Fisheries & Wildlife

Jack Buckley
Director



Table of Contents

Executive Summary - - - - - 4

1.0 – Background - - - - - 5

- 1.1 – Blue Hills Resource Management Plan & Deer Population Survey
- 1.2 – Legislative Mandate
- 1.3 – Blue Hills Deer Management Plan

2.0 – Controlled Hunt Program Logistics & Operations - - - - - 6

- 2.1 – Controlled Hunt Timing, Length, & Management Zones
- 2.2 – Hunter Interest, Participation, and Distribution
- 2.3 – Hunter Orientation
- 2.4 – Antlerless Deer Permits
- 2.5 – Road Closures
- 2.6 – Public Outreach, Notice, & Information Efforts
- 2.7 – Unified Command
- 2.8 – Law Enforcement Actions, Violations, & Public Safety
- 2.9 – Program Costs

3.0 – Harvest Results - - - - - 11

- 3.1 – Overall Deer Harvest
- 3.2 – Harvest Success Rates

4.0 – Conclusion - - - - - 14

- 4.1 – Recommendations for 2016

Appendix A: General Rules & Provisions for the 2015 Controlled Hunt - - - - - 15

2015 Blue Hills State Reservation Controlled Hunt Executive Summary

Segment 1 (11/30/15 & 12/1/15)													
Number of Permittees Selected	98												
Number of Permits Issued	89 (91%)												
	Day 1 (11/30/15)						Day 2 (12/1/15)						Day 1 & 2
	Zone 1 Fowl Meadow (248 acres)	Zone 2 Great Blue (637 acres)	Zone 3 Houghton's Pond (575 acres)	Zone 4 Chickatawbut (1,024 acres)	Zone 5 Wompatuck (496 acres)	TOTAL (2,980 acres)	Zone 1 Fowl Meadow (248 acres)	Zone 2 Great Blue (637 acres)	Zone 3 Houghton's Pond (575 acres)	Zone 4 Chickatawbut (1,024 acres)	Zone 5 Wompatuck (496 acres)	TOTAL (2,980 acres)	
Number of Hunters Participating	7	19	16	29	14	85	5	14	13	23	11	66	86*
Hunter Distribution	1/35 acres	1/34 acres	1/36 acres	1/35 acres	1/34 acres	1/35 acres	1/50 acres	1/46 acres	1/44 acres	1/45 acres	1/45 acres	1/45 acres	1/35 acres
Number of Deer Harvested	4	6	4	9	3	26	1	4	5	4	1	15	41
Success Rate***	57%	32%	25%	31%	21%	31%	20%	29%	38%	17%	9%	23%	48%
Number of Females Harvested	2	5	2	6	2	17 (65%)	1	3	4	3	1	12 (80%)	29 (71%)
Number of Males Harvested	2	1	2	3	1	8 (35%)	0	1	1	1	0	3 (20%)	12 (29%)
Number of Deer Harvested from Tree Stand	2	4	0	1	3	10 (38%)	0	2	0	0	0	2 (13.3%)	12 (29.3%)
Number of Deer Harvested from Ground	2	2	4	8	0	16 (62%)	1	2	5	4	1	13 (86.6%)	29 (70.7%)
Number of Hunters That Harvested Deer	3	3	4	6	3	19	1	3	3	4	1	12	27****

Segment 2 (12/7/15 & 12/8/15)													
Number of Permittees Selected	98												
Number of Permits Issued	74 (76%)												
	Day 3 (12/7/15)						Day 4 (12/8/15)						Day 3 & 4
	Zone 1 Fowl Meadow (248 acres)	Zone 2 Great Blue (637 acres)	Zone 3 Houghton's Pond (575 acres)	Zone 4 Chickatawbut (1,024 acres)	Zone 5 Wompatuck (496 acres)	TOTAL (2,980 acres)	Zone 1 Fowl Meadow (248 acres)	Zone 2 Great Blue (637 acres)	Zone 3 Houghton's Pond (575 acres)	Zone 4 Chickatawbut (1,024 acres)	Zone 5 Wompatuck (496 acres)	TOTAL (2,980 acres)	
Number of Hunters Participating	6	17	11	27	9	70	5	10	10	25	7	57	72**
Hunter Distribution	1/41 acres	1/37 acres	1/52 acres	1/38 acres	1/55 acres	1/43 acres	1/50 acres	1/63 acres	1/57 acres	1/41 acres	1/71 acres	1/52 acres	1/41 acres
Number of Deer Harvested	6	1	1	5	1	14	1	1	5	1	1	9	23
Success Rate***	100%	6%	9%	19%	11%	20%	20%	10%	50%	8%	14%	16%	32%
Number of Females Harvested	4	0	1	5	1	11 (79%)	1	1	4	0	1	7 (78%)	18 (78%)
Number of Males Harvested	2	1	0	0	0	3 (21%)	0	0	1	1	0	2 (22%)	5 (22%)
Number of Deer Harvested from Tree Stand	2	0	0	3	1	6 (43%)	0	0	3	0	1	4 (44%)	10 (43%)
Number of Deer Harvested from Ground	4	1	1	2	0	8 (57%)	1	1	2	1	0	5 (55%)	13 (57%)
Number of Hunters That Harvested Deer	4	1	1	5	1	12	1	1	2	1	1	6	15****

4-Day Summary						
Number of Permittees Selected	196					
Number of Permits Issued	163 (83%)					
	Zone 1 Fowl Meadow (248 acres)	Zone 2 Great Blue (637 acres)	Zone 3 Houghton's Pond (575 acres)	Zone 4 Chickatawbut (1,024 acres)	Zone 5 Wompatuck (496 acres)	TOTAL (2,980 acres)
Number of Hunters Participating	13	37	27	58	23	158
Number of Deer Harvested	12	12	15	19	6	64
Success Rate***	92%	32%	56%	33%	26%	41%
Number of Females Harvested	8 (67%)	9 (75%)	11 (73%)	14 (74%)	5 (83%)	47 (73%)
Number of Males Harvested	4 (33%)	3 (25%)	4 (27%)	5 (26%)	1 (17%)	17 (27%)
Number of Deer Harvested from Tree Stand	4 (33%)	6 (50%)	3 (20%)	4 (21%)	5 (83%)	22 (34%)
Number of Deer Harvested from Ground	8 (67%)	6 (50%)	12 (80%)	15 (79%)	1 (17%)	42 (66%)
Number of Hunters That Harvested Deer	7	7	8	15	5	42

- * This total factors in 1 permittee who participated on Tuesday (12/1/15), but not on Monday (11/30/15).
- ** This total factors in 2 permittees who participated on Tuesday (12/8/15), but not on Monday (12/7/15).
- *** Calculated by dividing the number of deer harvested by the number of hunters participating.
- **** To avoid double-counting, these totals exclude any hunters who harvested deer on both days.

1.0 – Background

The Massachusetts Department of Conservation and Recreation (DCR) and the Massachusetts Division of Fisheries and Wildlife (MassWildlife) have legislative mandates and missions to protect and manage a myriad of natural resources including forests, wildlife, and the habitats upon which a diversity of wildlife depends. From the canopy to the understory, healthy forest ecosystems are made up of trees and plants of multiple species and age classes and a diversity of vegetation that provide suitable and sustainable habitat for a rich and varied wildlife community. From the perspective of long-term forest management, tree regeneration is critical to the survival of forests and their ability to recover from natural disturbances. Forests that contain high deer population densities prohibit forest regeneration as deer over-browse on young tree seedlings. In addition, extremely high deer densities can promote the spread of some invasive species and significantly reduce biodiversity.

1.1 – Blue Hills Resource Management Plan & Deer Population Survey

As manager and steward of the Blue Hills Reservation, DCR has become increasingly concerned with the long-term health of the Reservation’s forest and the ecological impacts of sustained high deer densities on this natural resource. DCR’s management of the Blue Hills Reservation is guided by the existence of a comprehensive Resource Management Plan (RMP) that was approved by the DCR Stewardship Council in April 2011 following a robust planning and development process involving input from local residents, stakeholders, and the Friends of the Blue Hills.¹ The Blue Hills RMP noted a growing concern over the size of the deer population within the Reservation and the impact of over-browse on rare plants and other vegetation throughout the Reservation. In addition, the RMP explicitly recommended that the agency work with MassWildlife to ascertain the size of the deer population, determine its impacts on the Reservation’s natural resources, and discuss deer management options.² As such, DCR and MassWildlife worked together to conduct a deer population survey in 2013 to estimate deer density in and around the Blue Hills Reservation. Using distance sampling as a survey method, MassWildlife estimated that there were about 85 deer per square mile of deer habitat within the Blue Hills (85% Confidence Interval [CI] = 65 – 107).³

1.2 – Legislative Mandate

In addition to following the recommendations within the Blue Hills RMP, DCR and MassWildlife were issued a legislative mandate in the 2014 Environmental Bond Bill ([Chapter 286 of the Acts of 2014](#)), which was signed into law by former Governor Deval Patrick in August 2014.⁴ Specifically, Section 43 of the bond bill directs DCR (in consultation with MassWildlife) to “identify areas in which deer overpopulation is negatively impacting forestation, water resources, or plant growth on department-owned land” and “to develop and implement a harvest management plan for the identified areas.”

¹ The Friends of the Blue Hills is a non-profit organization that works both independently and in cooperation with the DCR to preserve the natural resources of and enhance recreational opportunities in the Blue Hills Reservation. Many of its leaders and members include individuals who live, work, and own property in the communities where the reservation is located and, in some cases, directly adjacent to the boundaries of the Reservation. For more information visit: www.friendsofthebluehills.org.

² To view a copy of the approved 2011 Blue Hills Resource Management Plan please visit: <https://www.mass.gov/eea/docs/dcr/stewardship/rmp/bh/sections1-4.pdf>. Appendices can be viewed at: <http://www.mass.gov/eea/docs/dcr/stewardship/rmp/bh/appendices.pdf>.

³ To view a copy of MassWildlife’s 2013 Blue Hills deer abundance survey report please visit: <https://www.mass.gov/eea/docs/dcr/parks/south/blue-hills-deer-survey-report.pdf>.

⁴ To view Chapter 286 of the Acts of 2014, please visit: <https://malegislature.gov/Laws/SessionLaws/Acts/2014/Chapter286>.

1.3 – Blue Hills Deer Management Plan

In light of each agency's mission, the recommendations outlined in the Blue Hills RMP, the results of the deer abundance survey, and the legislative mandate detailed in the 2014 Environmental Bond Bill, DCR and MassWildlife began developing a deer management plan for the Blue Hills Reservation in late 2014. Recognizing that deer management activities can take several forms, both agencies worked together to analyze, assess, and consider the relative impacts and efficacy of several alternative management approaches for a location like the Blue Hills. This planning process and several public information sessions held in the fall of 2015 resulted in the release of a final [Blue Hills Deer Management Plan](#) that recommended the phased implementation of an annual controlled deer hunt similar to the very successful annual hunt managed by DCR's Division of Water Supply Protection at the Quabbin Reservation. The Quabbin hunt successfully reduced and has maintained deer densities of less than 20 deer per square miles over the course of more than two decades.⁵

The primary motivation to implement a controlled hunt is to reduce deer densities to a level that allows tree regeneration and growth to occur and to maintain those densities at levels that allow for continuous growth and development of forest regeneration. When deer densities decrease, DCR and MassWildlife expect a corollary reduction, over the long-term, in the negative impacts that overabundant deer have on healthy forest regeneration and the forest's ability to maintain an adequate diversity of species and age classes. The Deer Management Plan is designed provide a concrete, practical, and workable solution intended to deal with a critical environmental problem.

2.0 – Controlled Hunt Program Logistics & Operations

The Blue Hills Deer Management Plan was developed with a number of considerations in mind, including: public safety, resources, efficacy (in terms of reducing deer densities in a reasonable amount of time), and timing (both from the perspective of how long it might take to reach a more sustainable deer density and also the duration of time in which hunting would actually take place within the Reservation). Other controlled hunts in more rural areas have included an aggressive initial reduction phase. Given the suburban/urban nature of the areas surrounding the Reservation and the fact that legal hunting has not taken place in the Blue Hills in over 100 years, public safety, not efficacy, was given primary consideration. Therefore, the 2015 controlled hunt was designed to be intentionally very conservative (including low hunter densities and only four days of hunting) and implemented on a limited scale with an understanding that if the initial hunt proved safe, future hunts could be gradually enhanced to a more appropriate level in order to increase efficacy.

2.1 – Controlled Hunt Timing, Length, & Management Zones

The 2015 Blue Hills controlled deer hunt took place over the course of 4 weekdays (Monday, November 30th; Tuesday, December 1st; Monday, December 7th; and Tuesday, December 8th) during the regular shotgun season in Massachusetts. In accordance with state regulations, hunting was allowed to begin one half hour before sunrise and all hunters were required to check out before 4:00 PM.

In 2015, DCR limited the controlled hunt to areas of the Reservation north of I-93 and east of the Neponset River in Fowl Meadow. Of the Reservation's more than 7,000 acres, only 2,980 acres (representing less than half of the Reservation's total area) across five distinct management zones were identified and opened to hunting. The boundaries of the five management zones were established using not only the existing state setback laws and

⁵ To view the Blue Hills Reservation Deer Management Plan, which includes a detailed background on the deer overabundance problem, an overview of the various management approaches analyzed, and a description of the components of the management program please visit: <http://www.mass.gov/eea/docs/dcr/news/public-meetings/materials/parklands/blue-hills-deer-management-plan.pdf>.

regulations, but also hard boundary delineations, such as trails, roads, and pathways that could be easily identified on the ground. As such, in many cases, the boundaries that were delineated were further away from roads and buildings than required by state setback standards of 150-feet from a hard-surfaced highway and 500-feet from a dwelling in use. (To view maps of the five management zones and their boundaries, please refer to pages 17 through 20 of the [Blue Hills Deer Management Plan](#).) The Ponkapoag section of Blue Hills Reservation located south of I-93 was not opened to hunting. DCR encouraged the general public to utilize the Ponkapoag section during the four days of the controlled hunt for hiking, biking, and other recreational activities.

2.2 – Hunter Interest, Participation, and Distribution

As anticipated, the prospect of deer hunting in the Blue Hills Reservation attracted the interest of many licensed hunters from across Massachusetts and other New England states. The application process was open from October 14 through October 28, 2015 and permittees were selected utilizing a random lottery system. Licensed hunters were offered the opportunity to apply on-line using a web-based form or by mail using a paper application. A total of 2,543 applications were submitted to DCR. Of these, 140 applications were found to be incomplete and removed from the final applicant pool.

From among the remaining 2,403 completed applications, 196 permittees (8% of the total applicant pool) were selected by random lottery on November 3, 2015. Half of these permittees were selected to hunt during Segment 1 (November 30th and December 1st) and the other half were selected to hunt during Segment 2 (December 7th and 8th). A maximum of 98 hunters were selected to participate in the controlled hunt during each two-day segment and each hunter was assigned to one of the five management zones. Based upon the amount of acreage open to hunting in each zone, a conservative density of 1 hunter per 30 acres was utilized to determine the number of hunters assigned to each zone.

Out of the 196 applicants selected to participate, a total of 163 permits were actually issued. This was due largely to scheduling conflicts or other circumstances that did not allow a number of selected applicants to either attend one of the mandatory orientation sessions or participate in the actual hunt. The below table provides a breakdown by state of residence of all applicants and those who were issued permits to participate in the controlled hunt.

State of Residence	Number of Applicants	Number of Permittees
Massachusetts	2,452	158
New Hampshire	43	3
Maine	15	0
Vermont	15	2
Rhode Island	8	0
Connecticut	4	0
Other States	6	0
TOTAL	2,543	163

Of the 163 permits that were issued, 89 were issued to Segment 1 hunters and 74 were issued to Segment 2 hunters. A total of 86 hunters participated in one or both of Segment 1's hunting days and a total of 72 hunters participated in one or both of Segment 2's hunting days. Actual participation figures by management zone are presented in the table below.

Day 1 (Monday, November 30, 2015)		Day 2 (Tuesday, December 1, 2015)	
Management Zone	# of Hunters	Management Zone	# of Hunters
Zone 1: Fowl Meadow	7	Zone 1: Fowl Meadow	5
Zone 2: Great Blue	19	Zone 2: Great Blue	14
Zone 3: Houghton's Pond	16	Zone 3: Houghton's Pond	13
Zone 4 Chickatawbut	29	Zone 4 Chickatawbut	23
Zone 5: Wompatuck	14	Zone 5: Wompatuck	11
TOTAL	85	TOTAL	66
<i>(Segment 1 participation = 86 hunters. One hunter participated on Tuesday, but not on Monday.)</i>			
Day 3 (Monday, December 7, 2015)		Day 4 (Tuesday, December 8, 2015)	
Management Zone	# of Hunters	Management Zone	# of Hunters
Zone 1: Fowl Meadow	6	Zone 1: Fowl Meadow	5
Zone 2: Great Blue	17	Zone 2: Great Blue	10
Zone 3: Houghton's Pond	11	Zone 3: Houghton's Pond	10
Zone 4 Chickatawbut	27	Zone 4 Chickatawbut	25
Zone 5: Wompatuck	9	Zone 5: Wompatuck	7
TOTAL	70	TOTAL	57
<i>(Segment 2 participation = 72 hunters. Two hunters participated on Tuesday, but not on Monday.)</i>			

The reduced number of hunters during each of the four days resulted in lower hunter densities than the 1 hunter per 30 acres standard outlined in the Deer Management Plan. The table below outlines daily hunter densities in each of the five management zones.

Day 1 (Monday, November 30, 2015)		Day 2 (Tuesday, December 1, 2015)	
Management Zone	Hunter Distribution	Management Zone	Hunter Distribution
Zone 1: Fowl Meadow (248 acres)	1/35 acres	Zone 1: Fowl Meadow (248 acres)	1/50 acres
Zone 2: Great Blue (637 acres)	1/34 acres	Zone 2: Great Blue (637 acres)	1/46 acres
Zone 3: Houghton's Pond (575 acres)	1/36 acres	Zone 3: Houghton's Pond (575 acres)	1/44 acres
Zone 4 Chickatawbut (1,024 acres)	1/35 acres	Zone 4 Chickatawbut (1,024 acres)	1/45 acres
Zone 5: Wompatuck (496 acres)	1/34 acres	Zone 5: Wompatuck (496 acres)	1/45 acres
TOTAL (2,980 acres)	1/35 acres	TOTAL (2,980 acres)	1/45 acres
Day 3 (Monday, December 7, 2015)		Day 4 (Tuesday, December 8, 2015)	
Management Zone	Hunter Distribution	Management Zone	Hunter Distribution
Zone 1: Fowl Meadow (248 acres)	1/41 acres	Zone 1: Fowl Meadow (248 acres)	1/50 acres
Zone 2: Great Blue (637 acres)	1/37 acres	Zone 2: Great Blue (637 acres)	1/63 acres
Zone 3: Houghton's Pond (575 acres)	1/52 acres	Zone 3: Houghton's Pond (575 acres)	1/57 acres
Zone 4 Chickatawbut (1,024 acres)	1/38 acres	Zone 4 Chickatawbut (1,024 acres)	1/41 acres
Zone 5: Wompatuck (496 acres)	1/55 acres	Zone 5: Wompatuck (496 acres)	1/71 acres
TOTAL (2,980 acres)	1/43 acres	TOTAL (2,980 acres)	1/52 acres

2.3 – Hunter Orientation

As outlined in the Blue Hills Deer Management Plan, all permittees were required to attend an orientation session that was organized and hosted by DCR, MassWildlife, the Massachusetts Environmental Police (MEP), and the Massachusetts State Police (MSP). Orientation sessions were conducted on the evenings of November

12 and 16, 2015. All selected applicants who completed an orientation session were given DCR-issued access permits to participate in the controlled hunt.

During the orientation sessions, permittees were provided an overview of the Blue Hills Deer Management Plan and the rationale and objectives for conducting a controlled deer hunt. In addition, DCR, the MEP, and the MSP presented and provided information on public safety, hunter safety, and firearms safety. Permittees were provided a thorough review of the management zone maps and boundaries, the check-in and check-out procedures to be followed during the hunt, and the specific rules and regulations that would govern the conduct of the four-day hunt (see Appendix A). MassWildlife also provided permittees with information on pre-hunt scouting, field dressing and tagging of harvested deer, and how to obtain antlerless deer permits specific to the Blue Hills controlled hunt.

2.4 – Antlerless Deer Permits

In 2015, MassWildlife made antlerless deer permits specific to the Blue Hills controlled hunt available to permittees who had completed the mandatory orientation session. Following each orientation session, DCR provided MassWildlife with a list of hunters who had been given DCR access permits. MassWildlife then made Blue Hills-specific antlerless permits available for purchase to these individuals only. The antlerless permits also specified valid dates that reflected the two-day hunting segment that each hunter was assigned to by DCR. Given the nature and purpose of the controlled hunt to facilitate a reduction of the deer herd, and since the most effective way to achieve this goal is to reduce the number of female deer, hunters were required to purchase at least two Blue Hills-specific antlerless permits and were allowed to purchase up to four permits. While MassWildlife also prohibited the use of any Zone 10 antlerless permits for hunting in the Blue Hills, any antlered deer (bucks) harvested during the Blue Hills controlled hunt were counted toward each hunter's statewide bag limit of two antlered deer.

2.5 – Road Closures

DCR and MSP successfully closed Chickatawbut Road (from Route 28/Randolph Avenue to Route 37) and Wompatuck Road (from Chickatawbut Road to Route 37) to vehicular travel during each of the four hunting days. The road closures were announced two weeks in advance of the controlled hunt via traffic advisories and social media posts as well as variable message boards stationed at key park entrances and intersections in and around the Reservation. On each day of the controlled hunt, these roads were re-opened to vehicular traffic by 4:30 PM. MSP officers patrolling the roadways and highways in and around the Blue Hills reported no significant impacts to regular morning and evening commutes as a result of the road closures.

2.6 – Public Outreach, Notice, & Information Efforts

Following the decision on October 14, 2015 to move forward with a controlled hunt, DCR put in motion a public notice and information effort – as noted in the Deer Management Plan – to notify and inform neighbors, stakeholders, users of the Reservation, and the general public that a four-day controlled hunt would be taking place in the Blue Hills during the regular shotgun season. The following is a list of public notice and information activities undertaken:

- DCR, its partner agencies, and the Friends of the Blue Hills issued press releases, published information on their websites or blogs, and posted information on social media outlets.
- DCR and MassWildlife also responded to numerous inquiries from local, statewide, and national press and media outlets on a daily basis, which significantly augmented efforts to communicate important information and logistics regarding the controlled hunt.
- Two weeks in advance of the controlled hunt, DCR deployed ten variable message boards throughout the Reservation at key park entrances and roadway intersections. These message boards were used to

publicize upcoming road closures directly to motorists and to communicate the dates and times in which the controlled hunt was to take place.

- Several weeks before the hunt, DCR's Park Rangers and Visitor Services staff developed and posted large informational flyers that featured a map of the management zones; details about the rationale for the controlled hunt; and an outline of the timing, location, and logistics of the hunt. These flyers also included contact information for requesting additional information in advance of the controlled hunt and a direct phone number to the on-site Unified Command Center that members of the public could use to report any concerns or issues while the hunt was taking place. Copies of this flyer and corresponding map were posted at the Park Headquarters, on all park bulletin boards and informational kiosks, at the Trailside Museum, and other visitor attractions and amenities.
- DCR's Visitor Services developed a quarter-fold informational brochure that contained the same information as the large flyers, including contact information. Copies of these brochures were made available for park visitors and the general public to take with them at the Park Headquarters, at several informational kiosks, at the Trailside Museum, and at other visitor attractions and amenities.
- During regular patrols of the Reservation, DCR's Park Rangers distributed hundreds of copies of the informational brochures to park visitors. In addition, they disseminated copies of these brochures to hundreds of neighbors and residences abutting areas north of the I-93 where the controlled hunt was to take place.
- DCR's Sign Shop produced several hundred blaze orange public notice signs of varying sizes that were posted by DCR's Park Rangers at numerous public access points, parking/pull-off areas, and other key locations throughout areas of the Reservation located north of I-93 where the controlled hunt was to take place. These signs also included contact information for requesting additional information in advance of the controlled hunt and also included a direct phone number to the on-site Unified Command Center that members of the public and permitted hunters could use to report any concerns or issues while the hunt was taking place.
- DCR, MassWildlife, MEP, and MSP held a follow-up informational/logistical meeting with Police Chiefs and representatives of local law enforcement departments on October 22, 2015 to assess changes made to the Deer Management Plan, review the revised boundaries of each management zone, coordinate a communications strategy, review law enforcement roles and procedures, and discuss other key operational and logistical aspects of the controlled hunt.

2.7 – Unified Command

The safe, successful, and smooth operation of the 2015 Blue Hills controlled hunt is largely due to the integrated and meticulous inter-agency coordination among DCR, MassWildlife, MEP, MSP, and local law enforcement agencies facilitated by the unified command structure implemented during the controlled hunt. Utilizing an operations and communications trailer provided by the Massachusetts Emergency Management Agency (MEMA), a Unified Command Center (UCC) was established and stationed near the Park Headquarters and the MSP Barracks on Hillside Street. The UCC was staffed throughout the controlled hunt by operational decision-makers from DCR, MassWildlife, MEP, and MSP, as well as representatives from local police departments. The unified command structure, supported by the use of two-way radio systems by all staff throughout the field, allowed for



centralized coordination of on-the-ground resources, efficient communication, and effective management of any issues or situations that arose in any part of the Blue Hills Reservation.

2.8 – Law Enforcement Actions, Violations, & Public Safety

Pursuant to [MGL c. 131, §5C](#), two individuals were arrested by MEP officers on charges of hunter harassment and interfering with a permitted hunter’s participation in the controlled hunt.⁶ Two separate incidents of vandalism to two hunters’ vehicles also took place during the first week of the hunt. In response to these incidents, DCR installed additional wildlife cameras in advance of week two along designated parking areas. In addition, the MSP and MEP enhanced its roving patrols of these areas during the second week of the hunt. All hunting-related complaints involving reports of hunting taking place too close to dwellings were investigated immediately by MEP officers and determined to be unfounded. Citations were issued by the MEP for the following violations: a permitted hunter who failed to remove the ammunition from his shotgun prior to exiting his management zone in the evening, a permitted hunter who drove his vehicle onto Wolcott Path (which is only open to authorized vehicles), and permitted hunter who shot a deer from within a management zone into a closed zone. MEP officers also provided assistance in transporting five harvested deer to the check station and also investigated five reports of hunter harassment that were unfounded. There were no injuries or other public safety issues during the hunt; demonstrating that a controlled hunt can be safely conducted in a suburban/urban setting.

2.9 – Program Costs

Primary costs associated with implementing the Blue Hills controlled hunt beyond regularly scheduled working hours included DCR overtime staffing, State Police details, Environmental Police details, and signage, printing, equipment, and supplies. The majority of these expenses were associated with staffing. The level of staffing provided by MSP, MEP, and DCR is a direct reflection of inter-agency efforts to address public safety concerns expressed by neighbors and the general public during public meetings and via public comment. DCR, MSP, and MEP fully recognized that hunting in the Blue Hills would present a new activity. As such, staffing levels were established in order to provide adequate resources and staffing to address any concerns or issues. In anticipation of protests, the MSP and MEP also mustered resources to ensure the safe operation of the controlled hunt while affording protestors an organized and safe area from which to stage their demonstration. The following chart provides a cost for each of the main cost categories.

Description	Amount
MA State Police Details	\$45,407
MA Environmental Police Details	\$33,475
DCR Staffing	\$52,491
Signage, Printing, Equipment, & Supplies	\$9,324
Total	\$140,697

3.0 – Harvest Results

3.1 – Overall Deer Harvest

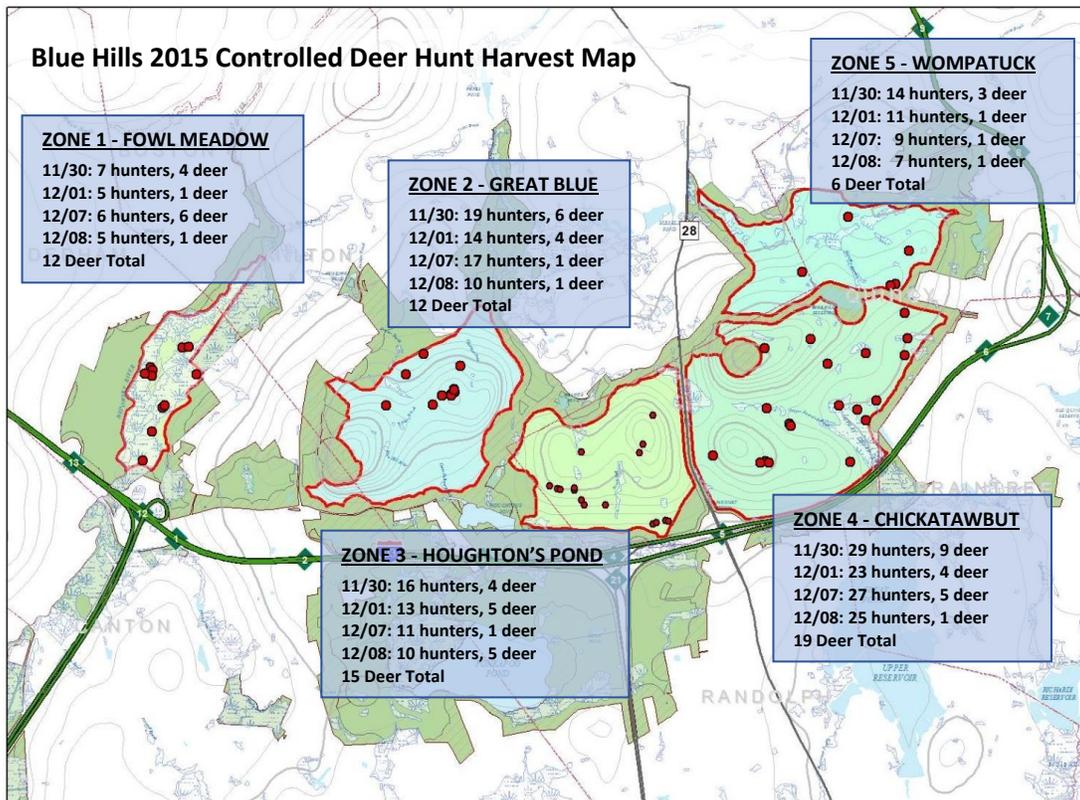
In just four days, a total of 64 deer were harvested from approximately 4.7 square miles of forestland opened to hunting. This represents a reduction of approximately 14 deer per square mile from the hunted areas. When

⁶ MGL c. 131, §5C is titled “Obstruction or interference with lawful taking of fish or wildlife; remedies” and is the Commonwealth’s principal hunter harassment law. To view a full copy of the provisions in MGL c. 131, §5C, please visit: <https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIX/Chapter131/Section5C>.

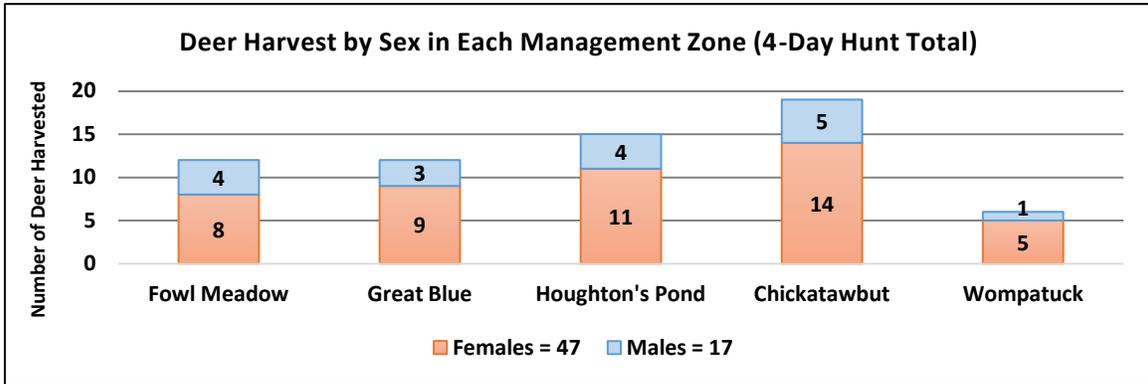
extended to the approximate 7 square miles of forested land in the Blue Hills, however, the total harvest of 64 deer represents a reduction of about 9 deer per square mile of forest. The following table presents daily, weekly, and overall harvest numbers for each of the hunted areas within the five management zones.

Management Zone	Square Miles Hunted	Segment/Week 1			Segment/Week 2			4-Day Total
		Mon.	Tues.	Total	Mon.	Tues.	Total	
1 – Fowl Meadow (248 acres)	0.39	4	1	5	6	1	7	12
2 – Great Blue (637 acres)	1.00	6	4	10	1	1	2	12
3 – Houghton’s Pond (575 acres)	0.90	4	5	9	1	5	6	15
4 – Chickatawbut (1,024 acres)	1.60	9	4	13	5	1	6	19
5 – Wompatuck (496 acres)	0.78	3	1	4	1	1	2	6
TOTAL	4.67	26	15	41	14	9	23	64

The map below shows the boundaries of each of the five management zones and provides the number of hunters and deer harvested in each zone by date. In addition, the red dots identify the approximate deer harvest locations.



A more significant factor is that 47 female deer were harvested, equating to at least 120 fewer deer in the spring of 2016. This figure includes both the 64 deer that were harvested and a conservative estimate of the potential number of young that could have been added to the deer herd using an average of 1.5 fawns per female harvested. The following chart presents harvest by sex in each of the five management zones across all four days of the controlled hunt.



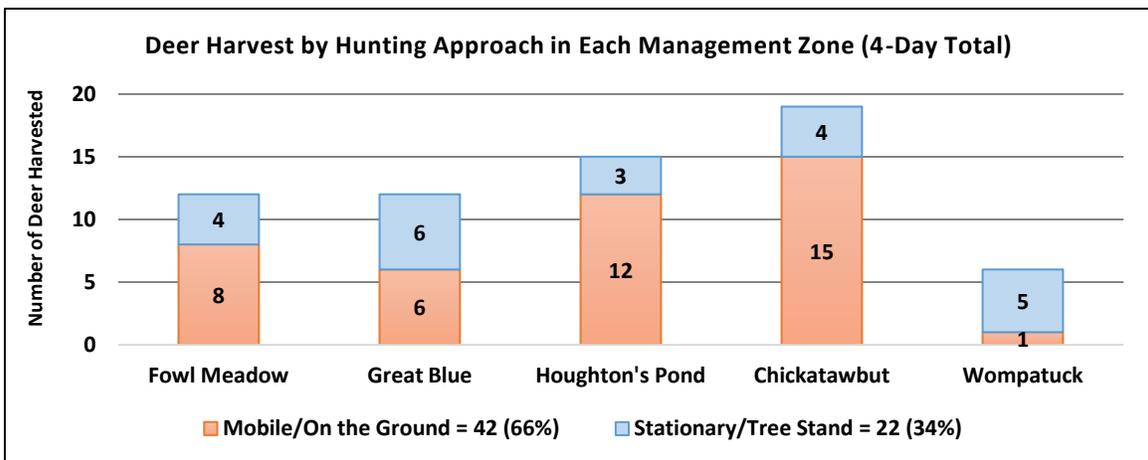
3.2 – Harvest Success Rates

Harvest success rate is calculated by dividing the number of deer harvested by the number of hunters. It varied greatly by zone and is likely related to differences in habitat and deer distribution.

Differences in harvest between areas might also be attributable to hunting method (i.e., whether hunters were in a tree stand or mobile on the ground). Two-thirds of the total harvest (42 deer) was taken by hunters who reported they were hunting from the ground at the time of harvest. The zones yielding the highest harvests (Zones 1 through 4) saw a greater percentage of harvested deer being taken by hunters who were hunting from the ground. Of the 58 deer taken in Zones 1 through 4, a total of 41 (71%) were harvested from the ground. Hunting from the ground may have given these hunters more opportunities to encounter deer, particularly if deer were stationary during the day and not visible to tree stand hunters.



The following chart provides the number of deer taken in each zone according to whether the hunter was reportedly on the ground or in a tree stand at the time of harvest. The subsequent table provides weekly and average harvest success rates across each of the five management zones.



Harvest Success Rates							
Management Zone	Segment/Week 1 (2 Days)			Segment/Week 2 (2 Days)			Average Success Rate
	# of Hunters	Total Harvest	Success Rate	# of Hunters	Total Harvest	Success Rate	
1 – Fowl Meadow	7	5	71%	6	7	117%	94%
2 – Great Blue	19	10	53%	18	2	11%	32%
3 – Houghton’s Pond	16	9	56%	11	6	55%	56%
4 – Chickatawbut	30	13	43%	28	6	21%	32%
5 - Wompatuck	14	4	29%	9	2	22%	26%
TOTAL	86	41	48%	72	23	32%	48%

4.0 – Conclusion

Overall, the 2015 controlled hunt was a good beginning toward addressing deer abundance and its impacts in the Blue Hills Reservation. As noted previously, DCR, MassWildlife, and our partner agencies designed and implemented a very conservative controlled hunt program with a primary goal of ensuring safety. Moreover, DCR and MassWildlife are very satisfied with the outcome of the controlled hunt from an overall operational and public safety standpoint. In advance of the controlled hunt, considerable time was spent assessing a myriad of operational aspects associated with conducting a controlled hunt within the Reservation and developing a plan that addressed these operational concerns. The successful execution of this plan and the buy-in from permitted hunters to the overall goal of safety represents a significant achievement and demonstrates that a controlled hunt can be safely conducted in a suburban/urban setting.

In addition to releasing this report, DCR and MassWildlife will host a public meeting to provide an overview of the results and to begin soliciting input on the development of a program for 2016. While the 2015 Blue Hills Deer Management Plan included an anticipated overview of how the program might be implemented in future years, the plan noted that actual program design in subsequent years would be developed based upon an assessment of prior year experiences and outcomes. As such, DCR and MassWildlife – together with state and local partners – will begin planning the 2016 program this spring with the goal of issuing a plan by early summer. DCR will also continue its longer-range vegetation monitoring program as outlined in the Deer Management Plan.

4.1 – Recommendations for 2016

As noted in the 2015 Deer Management Plan for the Blue Hills Reservation, DCR has adopted a phased approach to implementing and utilizing an annual controlled hunt to address high deer population densities within the Reservation. Although potential scenarios for expanding the controlled hunt were proposed within the Deer Management Plan, DCR and DFW continue to assess the operations and outcomes of the 2015 hunt and are working to develop a program design for 2016 featuring a controlled hunt. Potential modifications and enhances that are being considered include changes to length of the hunt, allowable hunting areas, allowable hunting implements, permitting, and hunter participation and distribution.



Blue Hills Reservation

2015 Controlled Deer Hunt Program

All permittees are required to know and understand the information contained in this document. Please review and read this document carefully and thoroughly prior to attending your assigned hunter orientation.

Background:

Since its acquisition by the Commonwealth over 120 years ago, hunting has not been permitted within the Blue Hills Reservation. With the absence of any form of deer management, population densities within the Reservation have consequently increased to significant levels. Over-browsing of trees and plants as a direct result of these high deer densities has compromised the long-term health of the Reservation's forests and its ability to successfully regenerate. This situation is negatively impacting plants and animals in the Reservation; including rare species.

The Department of Conservation and Recreation (DCR), in consultation with the Massachusetts Division of Fisheries and Wildlife (DFW), has determined that the considerable size of the deer herd is negatively impacting the Department's mandate to protect the natural resources of the Blue Hills Reservation. As environmental agencies with the legal mandate and mission to conserve the state's natural resources, it is the responsibility of DCR and DFW to take action to protect the natural resources of the Blue Hills for the enjoyment and appreciation of current and future generations. Moreover, DCR and DFW have concluded that the most practical, workable, and effective management option to accomplish the goal of reducing deer densities is through the use of controlled/permitted hunting.

The use of controlled hunting is designed to serve as a management tool in achieving the goal of maintaining an ecologically sustainable deer population that allows for the continuous growth and development of forest regeneration. **Moreover, the Blue Hills Controlled Hunt is not a recreational hunt.** DCR and DFW view the hunters selected to participate in the hunt as partners in successfully achieving the primary objectives of deer management in the Blue Hills. As partners in this effort, DCR and DFW expect all selected permittees to abide by and comply with the rules of the Blue Hills Controlled Hunt Program, DCR's regulations for use of its parklands, DFW's

rules and regulations related to hunting, and all Commonwealth laws regarding the possession and discharge of firearms.

Selected permittees who violate any rules or regulations will be immediately removed from the property, permanently ineligible for participation in future years, and subject to any relevant fines or penalties prescribed by applicable state laws and/or regulations.

General Rules & Provisions for the 2015 Blue Hills Controlled Deer Hunt

1. Hunting by Access Permit Only: Hunting of white-tailed deer shall be allowed in designated areas of the Blue Hills Reservation by those persons holding an access permit issued by the DCR. All persons to whom such a permit has been issued are also required to have a valid 2015 Massachusetts Hunting/Sporting License issued by DFW. All persons to whom such a permit has been issued who are also residents of the Commonwealth of Massachusetts must have a valid FID card or license to carry. All licenses must be valid on the days in which the controlled hunt is scheduled to take place.

DCR-issued access permits are valid only for the person named on the permit and for the date/time period specified on the permit.

2. Organization & Timing: The 2015 Blue Hills Controlled Deer Hunt features two, two-day segments:

- Week 1 hunting dates are Monday, November 30th and Tuesday, December 1st
- Week 2 hunting dates are Monday, December 7th and Tuesday, December 8th

Permittees are selected via a random permit drawing from among a larger applicant pool.

3. Management Zone Assignments: Each permittee is assigned to a particular management zone. The management zone shall be noted and identified on the DCR-issued access permit. Permittees are required to remain within the boundaries of their assigned management zone while hunting. The boundaries of the management zones have been delineated using not only the existing state firearms discharge setback laws, but also hard boundary delineations such as trails, roads, and pathways that can be identified on the ground. In some areas where hard boundaries were not available, DCR has posted no hunting signs along those areas to delineate the boundary of the

management zone. In many cases, the boundaries that have been delineated exceed the existing statutory discharge setback standards. All permittees are required to know the boundaries of their management zone. Absolutely no hunting or discharge of firearms is allowed outside of the delineated boundaries. Permittees will be provided detailed trail maps with the boundaries of their management zone clearly delineated.

4. **General Hunting & Discharge Prohibitions:** No hunting or discharge of firearms is allowed outside of the boundaries of the designated management zones, within 500 feet of any building or dwelling, within 150 feet of any roadway, or in any area posted as no hunt zones. In 2015, no hunting will be allowed in the Ponkapoag section of the Reservation south of Route I-93.
5. **Hunter Orientation Required:** All permittees are required to attend a hunter orientation session in order to be allowed to participate in the Blue Hills Controlled Hunt. Selected hunters who do not fulfill the hunter orientation requirement will not receive a permit and will not be eligible to participate in the controlled hunt.
6. **Deer Hunting Only:** The Blue Hills Controlled Deer Hunt is restricted to white-tailed deer only. The shooting or injury of any other bird or animal species is strictly prohibited.
7. **Hunting Implements:** Permittees selected to participate in the 2015 controlled hunt are limited to use of shotguns with slug only. The use of buckshot or any other hunting implement or firearm is prohibited.
8. **Scouting:** Permittees are allowed to scout within their management zone beginning Wednesday, November 11, 2015. The final day for scouting shall be Saturday, November 21, 2015. While scouting, permittees are required to have the following on their person:
 - DCR Notice of Selection Letter
 - 2015 Massachusetts Hunting/Sporting License
 - Valid photo ID

The use of trail/game cameras for the purposes of scouting is prohibited.

9. **Tree Stands:** DCR encourages permittees who are comfortable with this form of hunting to make use of a tree stand while hunting. Permittees are limited to one (1) tree stand. Tree stands must be either a climbing tree stand or a hang-on tree stand

with climbing sticks (please be sure to bring the bottom section of the climbing sticks with you on the day of the controlled hunt). Permittees who plan to hunt from a tree stand are allowed to install their tree stand on the Sunday before their permitted hunting dates. Tree stands must also be removed by the Wednesday immediately following a permittee's hunting dates. Specifically:

- Segment 1 permittees can install tree stands on Sunday, November 29th and must remove their tree stands by Wednesday, December 2nd.
- Segment 2 permittees can install tree stands on Sunday, December 6th and must remove their tree stands by Wednesday, December 9th.

The installation of a tree stand does not entitle a hunter to a particular area of the Reservation. Hunters possessing a permit to hunt in a particular management zone may hunt in any area within the boundaries of that zone. In accordance with DCR's regulations at 302 CMR 12.11 (10), the installation of a permanent tree stand is not allowed. Permanent tree stands are defined as a type of hunting platform or structure (emplaced for any period of time) which is fastened to a tree by nails, bolts, wire or other fasteners which intrude through the bark into the wood of the tree.

10. **Hunting Blinds:** The use of on-the-ground hunting blinds is prohibited.
11. **Vegetation Cutting:** Cutting of branches, trees, or shrubs is prohibited.
12. **Minor Permittees:** Any permittee under the age of 18 years must be accompanied by an adult over the age of 21 who is also a registered hunter possessing a valid Massachusetts Hunting/Sporting License. The accompanying adult is responsible for supervising the minor permittee at all times while hunting and may not bring or discharge any firearms himself/herself. The accompanying adult is also prohibited from engaging in any deer driving.
13. **Antlerless Permits:** DFW will make antlerless deer permits specific to the Blue Hills Controlled Deer Hunt available on Monday, November 23, 2015. All hunters selected to participate must purchase two (2) antlerless permits. No more than four (4) antlerless permits can be purchased. The use of any Zone 10 antlerless permits is prohibited in the Blue Hills. Antlerless deer harvested during the Blue Hills Controlled Deer Hunt are

considered “bonus deer” and do not count towards state bag limits. Antlered deer will count toward the statewide bag limit of two (2) antlered deer.

14. Parking & Vehicular Access: Permitted hunters are not allowed to park their vehicles along the sides of Route I-93. In addition, vehicular access is prohibited on the Reservation’s trails. Permittees should make use of designated parking areas. Permittees will also be allowed to park in the pull-off parking areas on Chickatawbut Road and Wompatuck Road. Where there is sufficient space, permittees may also park along the sides of Chickatawbut Road and Wompatuck Road so long as the vehicle is completely beyond the painted white shoulder line.

15. Check-In & Check-Out: All permittees are required to check-in and check-out each day they are scheduled to hunt. Failure to check-in and check-out by the appropriate times will disqualify a permittee from participating in the hunt. Check-in will take place between 4:30 and 7:00 AM. All permittees must check-out by 4:00 PM.

During check-in and while hunting, all permittees must have the following on their person:

- DCR Blue Hills Controlled Hunt Access Permit
- DFW Blue Hills Antlerless Deer Permits
- 2015 Massachusetts Hunting/Sporting License
- Valid FID card or license to carry
- Valid Photo ID

Failure to provide any of these documents during check-in, or while hunting, will disqualify a permittee from participating in the hunt.

16. Deer Driving: The use of any organized deer driving involving any individual not permitted to hunt is strictly prohibited. Permittees are not allowed to invite or bring family or friends for the purpose of deer driving. Only permitted hunters may participate in any deer driving. Permittees are prohibited from driving deer toward roadways/highways, private property, or areas of the Reservation where hunting will not be allowed.

17. Deer Tracking: Permittees are prohibited from tracking any wounded deer onto private property or a roadway. If you wound a deer and it crosses onto private property, contact the Blue Hills Controlled Hunt Unified Command Center (UCC). An Environmental Police Office will meet you at your location and accompany you onto private land to search for the deer. The UCC phone

number shall be printed on the back of the DCR-issued access permits.

18. Deer Cleaning: Permittees who harvest a deer are required to move the deer at least 100 feet away from a trail for the purposes of gutting and cleaning the deer. In addition, no deer parts can be disposed of within 100 feet of the Blue Hills Reservoir. Harvested deer must be legally tagged prior to moving. To the greatest extent possible, permittees are encouraged to select areas that are generally out of view for the disposal of deer parts.

19. Deer Removal & Check Stations: Permittees who harvest a deer must first legally tag the deer, and then are responsible for transporting the deer to their vehicle (may not be concealed from view) and must bring the deer to the Blue Hills deer check station on the day of harvest (the 48 hrs does not apply and online checking is not allowed). A hunter may harvest a deer, legally tag it, and then continue to hunt and harvest one more deer prior to checking both deer. Once those two deer are checked, the hunter may go back out that day.

20. Trailside Museum Deer: The Mass Audubon Trailside Museum, located at 1904 Canton Avenue (Rt. 138) in Milton, features captive deer in outdoor exhibits. Permittees are prohibited from shooting these deer. All permittees assigned to the Management Zone 2 (Great Blue Management Zone) should familiarize themselves with the location of the Museum and exhibits and remain east of Summit Road while hunting.

21. Compliance with Rules & Requests: All permittees within the Blue Hills Reservation shall obey the directions of posted regulatory signs, any state or local law enforcement official, Environmental Police Officer, DCR Ranger, DCR employee, and DFW employee.

22. Carry In – Carry Out: No litter or refuse of any sort may be thrown or left in or on any land or water within the Blue Hills Reservation while hunting.

23. Conduct & Alcohol: Any form of disorderly conduct is strictly prohibited during the controlled hunt. Possession or consumption of alcoholic beverages while participating in the controlled hunt is strictly prohibited.

24. Pets & Animals: Permittees may not bring any pets or other animals with them during the controlled hunt.

25. Property Damage/Vandalism: DCR is not responsible for any damage or vandalism to a permittee's property, vehicle, tree stand, or other possessions.

26. DFW Rules & Regulations: Massachusetts Division of Fisheries and Wildlife rules and regulations related to hunting shall apply to the Blue Hills Reservation Controlled Deer Hunt. In

the event of a conflict, the Blue Hills Controlled Deer Hunt rules and provisions take precedence over the rules and regulations of the DFW.

27. Cancellation: The controlled hunt (in its entirety or specific dates) may be cancelled at any time due to severe weather conditions or security situations. In the case of cancellation, DCR will make all efforts to provide advance notice to permittees.