2022 Season Report: Deer Management Subcommittee

Harvard, Massachusetts

The Deer Management Subcommittee (DMS) has been entrusted by the Conservation Commission to conduct a controlled archery hunt on designated Town parcels to control the deer population. The 2022 deer hunting season concluded at dusk on December 31. This report is to share a few observations on the deer management and hunting activity from the past year.

In an effort to effectively site our resources, the DMS continued a survey on conservation lands in the Town of Harvard. DMS volunteers checked each property for different criteria. They made note of access points, distance to dwellings, trails and roadways, and evaluated if the property had signs of deer activity. These results were reported to the DMS, who used this information to make recommendations to the Conservation Commission. The DMS consulted with the Conservation Stewardship group and advanced the Coke Land for approval. The Commission then voted to approve the Coke Land for inclusion in the program. This property is in addition to the previously approved properties that include Barrett, Blomfelt, Damon/Stephenson, Dunlap, Gillette, Great Elms, Hermann Orchard/Rodriquez, Maxant, Perini, Shaker Spring House, Vesenka Willard/Poitras

DMS began preparation for our third season by hosting qualification sessions at the Harvard Sportsman's Club, which is large enough for archers to be socially distanced at all times. Each qualifier was supervised by certified Archery instructors and required to follow proper range protocols. DMS member and Rangemaster, Joe Pulido, was present at all qualifiers, and recorded their paperwork, as well as performed a poundage-pull check on each of their bows.

Participants were required to hit a six-inch round target at 25 yards with at least three of five arrows, which is the strict requirement specified in our original report. Seven new archers successfully passed the test. A total of 19 qualified hunters were issued Harvard Hunter ID numbers for the 2022 season, and 18 actively participated. The Maxant and Barrett properties were assigned a team of two hunters to increase the level of hunting activity on these properties, and the Maxant team harvested the first deer of the Season.

Each hunter has taken a State mandated hunter safety class and has a current Massachusetts hunting license. Each hunter is requested by DMS to purchase antlerless deer permits, commonly known as "doe tags" in addition to the buck tags that come with the hunting license. Harvesting a doe is more effective in controlling deer population.

The approved hunters were allowed to hunt on designated conservation properties and required to complete a daily log after each hunt or scouting activity. Each hunter was issued a photo ID with their Hunter number on it and a dashboard parking placard, as well as two bright orange numbered stand tags. Each hunter had been vetted by the Harvard Police Department and the Environmental Police Officer (EPO). The hunters carried the contact numbers of the Harvard Police, Environmental Police, the Conservation office and a DMS member number. They also were required to have in their possession their Hunter ID, Hunting License, doe and buck tags, and a map of their assigned properties. Hunters also follow the regulations and rules as stated by the MA Division of Fisheries & WildlifeDMS has had discussions regarding the best way to distribute hunters over designated properties. The majority of towns in the Commonwealth open their designated properties so that qualified hunters may choose

where to set their stands. A minority of towns and Land Trusts assign hunters to specific properties. Both distribution strategies have their benefits. DMS has interviewed and surveyed the qualified hunters from previous seasons and several different towns and Land Trusts in an effort to determine which method would best serve the Town of Harvard conservation lands.

DMS and the Conservation Commission decided to continue to assign the hunters to specific properties. For 2022 DMS made a concerted effort to match hunters with their desired parcels. Each hunter would have their own lot, or in the case of larger lots, share with one or more other hunters. This allowed each hunter to have responsibility and 'ownership' of each property assigned to them. They were given the contact information of those they shared the property with and could coordinate hunts if they chose to. Hunters were asked to select their top five preferred properties and given the best match available. The properties were then assigned based on participation in the previous year program, Harvard residency or a Town of Harvard employee. Those that participated more were given a priority for their properties of choice. In two cases, recently qualified hunters came to the qualifier hunt with an existing hunting buddy. The DMS saw this as an opportunity to increase hunting on the properties by issuing the two pairs onto a single parcel. This made sense as the "buddies" were familiar with each other's hunting style and there was already good communication in place.

When asked how the new system worked this year for the archery crew, DMS received the following replies:

- I liked working with the other hunter(s) that were assigned. I like that we were encouraged to keep in touch and share info. I love that the people in charge have advocated for hunting in Harvard and have been effective. I like the continued effort to hunt new conservation areas. I like to effort to form community and foster discussion within the group.
- To have an area that was just ours and to have some ownership of our area. It was great.
- Having captains at each spot allows you to partner with people and share the land cause obviously not many people put time into the hunting season like some of us who are very serious about it.
- It's a great program. Seems to be working well.
- The program offers people the opportunity to enjoy the outdoors and more importantly, become a part of the long term solution of protecting of the habitat.
- I'm able to hunt almost in my backyard.
- The opportunity to hunt, and aid and assist with the conservation program.
- Great communication with hunters!
- Provides an opportunity to hunt properties with a higher chance of seeing deer.
- I generally like how the program is run. I like that I get to hunt properties with little or no access to other hunters.
- The ability to have an area where I knew I could go and would not have the pressure of a traditional public land site.
- It encouraged me to get out and explore some of the conservation lands in town and see what deer and wildlife is there.
- I like that each Hunter has his own site to hunt.

When asked what improvements could be made for a future hunt the hunters were concerned about: properties that were under-hunted for the season, opening up more land, having an earlier qualifier to allow for earlier site assignment and scouting.

Hunter comments included:

- I personally believe there's a lot of people not hunting enough hours in their spots while there is plenty of deer sign.
- Opening up more areas: more conservation areas, but also more than one plot for each hunterperhaps two plots.
- I would explore allowing the participants to invite a qualified guest to join them when so
 desired, both for the safety factor of not being alone and for the potential advantage of
 increasing the harvest.
- Having more areas for additional hunters may be nice.
- Reduced the dwelling and trail setback distances. Ask neighboring abutters approval to hunt
 within Conservation property. Dwelling setback should be reduced to 250ft and trail setback
 should be reduced to 35ft. This would allow more huntable areas in our relatively small
 properties.
- I feel it's been a work in progress improving every year. I think finalizing properties and permission to set stands and cameras should be done by mid-late august.
- I had no difficulties with the program. I thought it was very well organized and gave hunters the expectations for the program clearly so that we knew we were hunting how we should be. The maps with set backs that you gave were extremely helpful when doing initial scouting for stand locations.
- I live next to a conservation area that I wish was in the program so I could go hunting there. I qualified late but I think it is a good idea to do the June qualifiers so we have time to get out and scout before the hunt.

One stated goal of the individual parcel assignment method was to increase the number of individual stand visits by each hunter. Of the 180 hunter log entries that were collected through Google Forms, 75% of all hunting and scouting activity was on 8 parcels: Barrett, Blomfelt, Daman/Stephenson, Gillette, Great Elms, Hermann Orchards/Rodriquez, Vesenka and Willard/Poitras.

18 of the 19 approved hunters did get out to hunt. Of these, 10 accounted for 75% of the trips to scout or hunt. Some approved hunters only hunted once or twice due to other time commitments, hunting opportunities at other locations, plan changes due to Covid, or personal challenges. In consultation with other programs and the State Deer Biologist, Dr. Feehan, it is common that the majority of people actively hunting will be a minority within the group of hunters. Our selection of hunters is a meritocracy in that hunters that put in the most time scouting and hunting are more likely to receive their preferred choices of hunting areas for the next year.

Four deer were harvested by approved hunters on Town conservation property. Three adult does were harvested from Damon/Stephenson and one from Maxant.

DMS continues to evaluate methods of estimating the number of deer in Harvard. The initial studies were deer pellet counts, however there are other methods that the state Deer Biologist prefers. DMS has been in contact with the Harvard Conservation Stewardship Subcommittee regarding the placement of two pilot "Oak Sentinels" monitoring stations. The premise is that oak seedlings are placed on a property with some of them protected from being browsed by herbivores by small fences and others left unfenced and available to be browsed by deer. The rate of browsing can be used to estimate the number of deer in an area. White-tailed deer can have a significant impact on the vegetation in local woodlands. With high deer populations, more stress is put on native tree seedlings that are preferred food sources of deer. Following a recommendation from the State Deer Biologist, the DMS is also looking into the AVID (Assessing Vegetation Impacts from Deer) method for estimating deer density.

Incidents of hunter harassment and vandalism have declined, and we have had no reports of it occurring to program members this year. There were on occasions hikers and dog walkers going off trails and into nearby hunting locations as seen by our hunters and their trail cameras. The hikers and walkers were not visibly affected to the hunter presence and stand locations.

Unpermitted hunting and poaching on Conservation Land continues to be observed and reported by our Hunters. We would like to commend the hunters, the Harvard Police, and State Environmental Police and the Conservation and Town Administrator's office, and the Conservation Chairman for their quick and hard work in their involvements in stopping the illegal hunting. In one case, one of our hunters discovered a bait-pile and camera. This was confiscated and turned in to the Harvard police. In other cases, suspicious cars were reported to the EPOs and Harvard PD. We commend the Harvard Policeman who responded to a neighbor's call and caught red-handed two career poachers removing a deer from Conservation land. They were reported to the State Environmental Police. We also commend Conservation staff for very quick coordination with the Harvard Police, Town Counsel and the Conservation Chair in drafting and issuing a "Trespass Notice" which will bar these criminals from Harvard Conservation land. The State Environmental Police logged no complaints or incidents involving the participants in our program.

The DMS is satisfied that the program was a continued success this year. While we wish the harvest numbers were higher, bowhunting is an inherently difficult activity. We have been told both by the State deer biologist and our participants that only one in every three hunters will successfully take a deer in a season. We are grateful that more properties were approved to expand the managed area. MassWildlife has shared with DMS that by opening more of the landscape to hunting, it is a way to increase the season's yield.

A number of hunters who qualified for the hunt requested a longer period to scout and setup their tree stands/equipment. Hunter assignments to the same parcel year after year provides a hunter more time to study the terrain and "pattern" the deer activity. The skilled hunter looks for deer prints in the winter's snow. They check pathways, grazing patterns, bedding areas, territorial marking "rubs" and "scrapes". Before the season begins, they are able to predict where the deer may be at a given time. Ideally, their hunting stands are installed weeks or months before the season begins - so the deer become used to them – and are not alarmed by their sudden presence. In order to be successful, hunters continue to use their scouting observations throughout the Season to know where the deer would be at a given time and make stand location adjustments appropriately. We can reasonably expect

a continuing increase in harvested deer each year going forward due to our seasoned hunters having a better command and knowledge of the properties and the deer movements across them.

An example of how information learned from scouting can be useful in predicting deer movements can be seen in the information gathered last fall at the new "Coke" property that was added this year. Early reconnaissance showed the forested portion of the property on the edge of its field to have a rich population of deer. However, this year's early season research showed that the population is apparently very dependent on the corn and silage that is grown in the field. Observations showed that as soon as the field area was cleared of its vegetation by the farmer, the deer sightings on the Coke property dropped away completely. As in this case and others the hunters will adjust using data they have gathered and plan their hunting location and timing accordingly for the Fall 2023 Season, and future seasons.

Some of our hunters also chose to hunt on non-program lands that they had already scouted where they had permission to hunt – in Harvard and other towns. Of all of the program hunters, two were successful in harvesting a deer on Harvard land outside of the program. All of the other hunters also stated that they hunt private property. This group harvested 7 deer from those properties.

Statistics from MassWildlife showing the number of deer harvested in the Town of Harvard both on public and private lands was recently released. Although most of the harvested deer are outside our Program, we like to monitor the number of all deer harvested within the Town of Harvard. The Harvard Police in 2022 logged 6 incidents of vehicles colliding with deer.

Town	Adult Male	Female	Antierless Male	Total
Harvard	34	32	6	72

Season	Female	Male	Total
Archery	16	21	37
Primitive	8	9	17
Shotgun	7	10	17
Youth	1	0	1
Total	32	40	72

Land Type	Female	Male	Total
Private	20	32	52
Public	9	4	13
Town Hunt	1	1	2
Other Controlled Hunt	2	3	5
Total	32	40	72

Martin Feehan of MassWildlife explained the "Land Types" categories are not well defined and there may be some confusion at the data entry portal between Public, Town Hunt and Other Controlled Hunts. For the 2023 season we will work with the deer biologist and our archery hunt volunteers to assure each hunter reports in the Town Hunt block.

We are satisfied with many important aspects of the program. First, there were no reported safety incidents involving participants in the hunt. Secondly, there were no conflicts or negative interactions that we are aware of in the woods between hunters and the general public. The Commisson's Deer Management program has contributed to reducing the deer population. While our hunters are free to harvest bucks and does, we have asked that they focus on removing the does – as that is a direct way to control reproduction and the population. With the notable exception of a buck harvested the first season, all of the other deer harvested by the program have been does (87.5%). Archery continues to show itself as a very effective means to hunt deer. Based on the State's Harvard data reported above, the majority of deer (37) were harvested during the Archery Season - as compared to 35 taken during Youth, Primitive Firearms, and Shotgun Season's combined. Keep in mind that the count of 35 deer during the firearm seasons also includes some archery harvested deer – including three from the town Conservation Hunt.

In a recent correspondence with the State Deer Biologist, Dr. Martin Feehan, he stated that the town overall harvest was a "glaring measure of success", and he offered the following observations; "The 3-year average from before the CC hunt began was 54 deer and in the three years since 67 deer, a 24% increase far exceeding the 9% increase we have seen across WMZ 9 during the same time. One of the common trends of many municipal land hunts is that they lead to increased overall harvests because they get deer moving, as the municipal controlled hunts reduce the amount of refugia for deer. In my professional opinion the program is successful for both the deer taken on Conservation Commission managed lands, but also on the lands surrounding due to these impacts on movement. From 2017 to 2022 there was a 50% increase in harvest across the town and there continues to be an acceleration that is likely due in part to the expansion of available land to the hunting program increasing the deer movement across other huntable properties. Hopefully, there will be continued access to grow the success of the program."

Our mandated goal to manage the deer population has taken another step forward. It is estimated that an adult deer can consume as much as 2000 pounds of vegetation every year. The removal of four adult deer is a step toward that management goal. It is particularly valuable from a land management standpoint that our hunter team harvested does, as that is an affirmative way to assist in controlling population. Also, the addition of more Conservation parcels to hunt and increasing the hunting areas of existing properties keeps us moving forward.

We are grateful for the continued support of the Commission and we are looking forwards to next year's deer season!

Robert Douglas, Chair

Tom Cotton

Ben Urguhart

Paul Willard

Joe Pulido, Rangemaster/Hunt Coordinator