FAQ: Highland Park Deer Management

As of October 6, 2020

1) When did Borough Council and Administration start looking into the deer population in Highland Park?

In 2018, after receiving a number of complaints and concerns about the increasing population of deer in the Borough, Council tasked the Borough Administrator with researching the issue. The Borough contacted the NJDEP's Division of Fish and Wildlife for assistance and they requested additional information on the nature and location of the complaints as well as police incident reports. That information was collected through Oct. 2018 and compiled in the form of a map and has been made available on the Borough's website HERE.

2) What types of complaints and concerns did residents have about deer?

The nature of the complaints about deer varied. Some residents were upset that their landscaping and gardens were being eaten by deer. Other residents were concerned about health risks related to deer, including ticks, Lyme Disease and exposure to deer feces. Residents were also concerned about the dangers of motor vehicle accidents.

3) Have there been any traffic accidents related to deer in Highland Park?

According to motor vehicle accident (MVA) data from the Highland Park Police Department, there have been 21 deer-related MVA's since 2011, accounting for 0.6% of total MVA's in the Borough. This data does not include "near misses" and accidents that may not have been reported to the department.

4) Are there public health risks related to deer?

A commonly held belief is that deer are transmitters of Lyme Disease. Humans can contract Lyme disease if bitten by an infected Blacklegged tick, commonly known as a deer tick. Deer serve as a food supply for this tick. Deer also move ticks around on the landscape, including into residential properties. A 2010 study by the Harvard School of Public Health found that:

"Ticks also depend on another key host animal: white footed mice. Ticks do not actually get Lyme Disease from deer, as is commonly believed – rather, ticks, contract it as larvae when they feed on infected mice. Adult female ticks need deer [and other mammals] to lay their eggs and for food, but the deer do not become infected."

5) Do deer damage the environment?

According to the NJDEP's Division of Science & Research October 2019 report:

"Deer are selective browsers, and over time, herds can eat some [native] plants out of existence and reduce the populations of other [native] plants. Because tree seedlings are especially vulnerable to hungry deer, the future species composition of forests can be determined by deer browsing...deer browsing can significantly change habitat composition and also exerts a strong influence on other animal populations."

Raritan Valley Community College Professor Dr. Jay Kelly – who has a Bachelor's Degree and PhD in Biology from Rutgers State University – studied the regional changes in forest understories in northern New Jersey from 2014 – 2018 and compared that data to similar studies done from 1948 – 1973 when deer densities were significantly lower. Dr. Kelly found "significant declines occurred in nearly all forest layers, including densities of large seedlings, saplings and land trees." The full study can be accessed HERE.

The Borough's own natural areas – including the 14-acre Meadows Trail off of So 6th Avenue and the Native Plant Sanctuary – are being damaged by the deer population in the Borough. Testimony from volunteers from the Native Plant Sanctuary, Environmental Commission, Meadows Committee and Sustainable Highland Park detailed the destruction of native plant life they have witnessed over a number of years and communicated a need to preserve these green spaces for residents for years to come.

6) Who has the Borough spoken with about deer management in Highland Park?

The Borough Administrator's Office has spoken to a number of professionals regarding deer management options in Highland Park, including:

- Dr. Tony DeNicola, Founder & CEO, White Buffalo Inc.
- Dr. Jay Kelly, Professor, Raritan Valley Community College
- Cindy Kuenstner, Senior Wildlife Biologist, NJDEP's Division of Fish and Wildlife
- Angi Metler, Executive Director, Animal Protection League of New Jersey
- Joe Paulin, Wildlife Conservation & Management Educator, RU Cooperative Extension
- Jodi Powers, Senior Wildlife Biologist, NJDEP's Division of Fish and Wildlife

7) What has the Borough done so far to address issues related to deer?

- The Borough's Shade Tree Advisory Committee (STAC) gathered and published a list of recommended deer-resistant plants for residents to refer to when making landscaping decisions. That list can be found HERE.
- The Borough contacted the NJDEP's Division of Fish and Wildlife to seek their advice on alternatives.
- The Borough commissioned a deer population survey in December 2019 to better understand how many deer live in the area. That study can be found **HERE**.
- Borough Council passed an <u>ordinance</u> on September 1, 2020 that prohibits the feeding of white-tailed deer in Highland Park on public or private land.

8) What were the key findings of Highland Park's deer population survey?

The Borough hired Dr. Jay Kelly of Raritan Valley Community College to do an infrared drone survey of Highland Park and its buffer zones near Donaldson Park and Johnson Park to obtain estimates of local deer population size and density. The survey took place overnight on December 6 & 7, 2019. A total of 374 deer were counted in the 4.02 mi² survey area resulting in a total density of 93 deer/ mi². Highland Park's boundaries specifically had a density of 74 deer/ mi².

According to the discussion of the report, which can be read in its entirety <u>HERE</u>, "densities of deer observed in the surveyed areas are far higher than both historical, biological and social thresholds for sustainable deer management."

9) What public meetings have been held to discuss deer?

- **June 30, 2020:** The Borough invited two senior wildlife biologists from the NJDEP's Division of Fish and Wildlife to present information on white-tailed deer populations, risks they can potentially pose to communities like Highland Park, and options for population management. The meeting can be viewed in its entirety **HERE**.
- August 11, 2020: Members of Council gathered for a work session to discuss deer management options in Highland Park as a follow-up to the June 30th presentation by NJDEP. Council heard testimony from the Board of Health, Environmental Commission, Native Plant Sanctuary, Meadows Trail Committee and Sustainable Highland Park about their positions on deer management and was then able to ask questions of these representatives as well as the Borough Administrator before members of the public were given time to provide their own comments. The meeting can be viewed HERE.

10) What non-lethal deer management options have been discussed?

- Do Nothing: Conditions will likely worsen. Deer are not near their biological carrying capacity, so the population in the state (and in Highland Park) is unlikely to self-regulate and has the potential to expand exponentially. NJ (and HP) also lacks natural predators of deer.
- Behavior Modifications: Chemical repellants are an option for individual homeowners.
 However, these chemicals need to be reapplied after heavy rainfall and are not practicable for the Borough to use on a broad scale.
- Fencing: Deer fencing is only effective when it is either at least 8 feet tall to inhibit deer access to a property or a shorter, double row of fencing spaced 4-5 feet apart. Fencing is expensive and may not be practical in many locations.
- Trap & Transfer: Deer are no longer permitted to be transferred out of state due to concerns of disease spread and there are no places in New Jersey to move them to. There is also a concern of up to 25% of captured/transported deer dying due to a phenomena called "capture myopathy" which is brought on by the high levels of stress the animals experience during their trapping and transferring. A much larger percentage of deer may not survive past one year post-transfer as a result.
- Fertility Controls: Fertility controls are expensive and logistically complex. They also require a multi-year investment of financial resources that the Borough does not have. Cornell University released a study in November 2019 analyzing 10 years of research on a white-tailed deer population. The study, which can be read in its entirety HERE found that:

"Despite deer sterilization rates of >90%, the deer population remained stable. Neither sterilization nor **recreational** hunting reduced deer browse rates nor does neither appear able to achieve reductions in deer populations or their impacts. We eliminated deer sterilization and recreational hunting in a core management area in favor of allowing volunteer archers to shoot deer over bait, including at night. This resulted in a substantial reduction in the deer population and a linear decline in browse rates as a function of spring deer abundance."

11) Why is the Borough considering controlled bowhunting on the 14-acre Meadows property?

The Borough's Meadows was identified by the wildlife biologists at the NJDEP's Division of Fish and Wildlife as a possible location for a controlled bow hunt as it is the largest undeveloped Borough-owned property in Highland Park. Controlled bowhunting within the state's established hunting regulations was recommended by the NJDEP as an affordable and cost-effective way to help control the deer population in the Borough.

12) What must happen procedurally in order to establish a controlled hunt in Highland Park?

In order to establish a controlled bow hunt in Highland Park at the Meadows property, the Borough Council would have to authorize it via resolution. In addition, many towns develop a Deer Management Plan to establish goals and articulate safety and other related policies that will govern their overall Deer Management Program. If the Borough should decide to proceed with a controlled hunt, it may be possible to develop and present a Deer Management Plan for Council's approval before the end of the year.

13) If there is bowhunting on the Meadows property, who would be allowed to hunt and when and how many hunters?

The Borough has considerable discretion over who is given permission to hunt on the Meadows property. At a minimum, all hunters must be licensed in New Jersey and pass a background check as well as be free of any game code violations. The Borough can also require weapons proficiency testing and field training, as is done at the Rutgers Ecological Preserve.

Controlled bowhunting would take place within the New Jersey's statutorily defined deer bowhunting season, which in 2020 in Highland Park's zone is September 12, 2020 through February 20, 2021. Hunters must follow all of the state's regulations regarding bag limits as articulated in the **game code**.

Should the Borough decide to proceed with controlled bowhunting, it has complete authority to establish the hours and days hunting will be permitted within the state hunting regulations. As for the number of hunters allowed on the property at any given time, that would be determined as part of the creation of the Deer Management Plan; however, given the relatively small size of the Meadows property (14 acres), it is unlikely to exceed 2 or 3 hunters at a time.

14) What are the costs associated with controlled bowhunting?

A controlled bow hunt using volunteer hunters would be low- to no-cost for the Borough. There will be time spent on administration of the program; however, that can be managed with existing staff. Borough administration may have the opportunity to engage with a few expert hunters, which may require reimbursement of costs up to \$2000 per season, but that potential arrangement has not been fully negotiated.

Some towns do hire companies with sharpshooters to hunt their properties; however, that type of effort typically requires a special permit from the NJDEP' Division of Fish and Wildlife as well as approval by the state's Fish and Game Council, who are unlikely to approve such a measure without first trying controlled bowhunting. Costs for these services can be very high, up to \$1000 per harvested deer.

In addition, if the Borough decides it would like to have harvested deer be donated to area food pantries, it would need to budget for those costs, which are estimated at \$75 per deer.

15) What types of safety measures will be put in place if there is controlled bowhunting on the Meadows property?

The safety protocols would be fully developed as part of a Deer Management Plan; however, at a minimum, all access points to the property would have signs posted indicating when the area is open to hunters (thereby closed to visitors). The Borough Police Department would make routine patrols to the area to enhance safety. In some communities, hunters are required to sign in and out with the Police Department so they know who is participating in the controlled hunt at all times.

Hunters must be licensed in New Jersey, pass a background check and must not have any game code violations on their record. The Borough can require proficiency testing in the field for all participating hunters as is done by Rutgers at the Ecological Preserve in Piscataway.

16) What happens to the deer after they are harvested?

Hunters would be responsible for removing the harvested deer from the property. Typically, hunters consume what they harvest or donate their deer to area food banks via an organization such as Hunters Helping the Hungry.

17) Is there a risk associated with eating deer meat?

All donated meat is processed by a state-inspected butcher such as those affiliated with Hunters Helping the Hungry. Hunters and butchers are aware not to distribute meat from any game animal that exhibits signs of illness, an uncommon occurrence. According to the NJDEP's Division of Fish and Wildlife, more than 9,100 New Jersey deer have been tested for Chronic Wasting Disease (CWD) to date, with zero testing positive. There are no known cased of CWD in New Jersey. For more information on CWD click **HERE**.

18) Will controlled deer hunting have to happen every year?

In order to help manage the deer population, controlled bowhunting would have to take place annually to have a lasting impact. The harvesting goals, days and hours of operation can be adjusted over time as needed.

19) Could an injured deer find its way off the Meadows property?

Even if the Borough goes to great lengths to find extremely qualified and experienced bowhunters, there is the potential that a mortally wounded deer could leave the property and die elsewhere, potentially on private property. The Borough will establish clear protocols as to what to do in the event that this should happen well in advance of authorizing a controlled bow hunt on the property.