

Report of Deer Management Advisory Committee – Village of Head of the Harbor  
October 14, 2016

The Village Code (Chapter 123) forbids the discharge of firearms (including use of bows and arrows, air guns, etc.) anywhere in the Village, except by police officers or except when necessary for the protection of person or property in accordance with state law. This ordinance has the practical effect of prohibiting deer hunting anywhere in the Village, as well as any deer control method involving darting. Limited deer hunting is permitted in other parts of Suffolk County at specified times under New York Department of Environmental Conservation (“DEC”) rules and various local rules.

At the September 2015 regular Village Trustees Meeting, an amendment to the Village Code was introduced which would have allowed the Trustees to lift the ban on the use of bows and arrows in the Village on certain large properties to be determined at a later date by the Trustees. As stated at the meeting, the amendment was proposed in response to complaints by a number of property owners in the Village, especially large property owners, regarding the numbers of deer on their properties. At the meeting, a number of residents voiced their strong objections to the proposed amendment, and, as a result, the amendment was withdrawn and the Mayor appointed an 8-member Deer Management Advisory Committee to consider issues relating to deer in the Village.

The members of the Advisory Committee are: Susan Bryde, Robin Herrnstein, James Kramer, Sean Murtha, Theresa O’Brien, Collette Porciello, Eric Stubbs, and Michael Utevsky, Chair. Trustee Daniel White was appointed as the Board’s liaison to the Committee.

The Committee decided, among other things, to survey the Village residents to determine if the residents believed there was a deer problem. A public forum was also held at which residents were invited to give the Committee their views.

The Committee also met as a group with various persons who are actively involved in deer management issues, including:

- Michelle Gibbons, Regional Wildlife Manager, and Leslie Lupo, Deer Biologist, New York Department of Environmental Conservation;
- John Rochetta, independent deer management consultant (to Peconic Land Trust, Village of North Haven, and others);
- Wendy Chamberlin, of Wildlife Preservation Coalition of Eastern Long Island;
- Katherine Griffiths, Director of Avalon Park and Preserve in Head of the Harbor;
- Dr. Allen Rutberg, of the Center for Animals and Public Policy, Cummings School of Veterinary Medicine, Tufts University; and
- Kali Pereira, of the Humane Society.

In addition, individual committee members consulted with biologists at Stony Brook University regarding tick-borne diseases, with police representatives in

Head of the Harbor and Suffolk County regarding auto accidents involving deer, with the Mayor of the adjoining village of Nissequogue, and with others; and findings were reported back to the Committee. Voluminous studies regarding deer management issues in other parts of New York State were made available to the Committee, both online and in printed form, including a study of various types of actions conducted by Cornell University on its campus in Ithaca, New York and the nearby village of Lansing, and a proposed deer management plan and environmental impact statement for Fire Island prepared by the National Park Service.

Here are the Committee's findings and recommendations:

a. Public Opinion: The Survey and the Public Forum.

1. Survey. Based upon interviews with experts and readings of available literature, the Committee learned that there is no simple way to count the deer population in an area like Head of the Harbor, nor is there an agreed-upon desirable density of deer population. The experts counseled that the deer population becomes a problem when residents perceive that it is a problem. Accordingly, the Committee developed a survey to determine whether residents perceived a problem with the deer population and, if so, what was the nature of the problem. The survey was mailed to the approximately 525 homes on the Village's mailing list in late April 2016, and results were tabulated in June 2016. 265 responses were returned, which constituted an astonishingly high response rate of 52%. Among the results:

- i. 59.6 % of respondents considered deer a problem, and 33.5% identified deer as a minor problem. Respondents noted the following problems: damage to landscape or property (58.8%), vehicular risk (58.1%) , and disease (tick-borne diseases including Lyme Disease) (56.2%).
- ii. 58.8% of respondents believed that the deer problem is a legitimate concern of local government.
- iii. Comments were encouraged. Although no specific question was asked about uses of lethal versus non-lethal means, there were 26 comments against the use of lethal means to reduce the deer population, 12 in favor of managed deer hunting, and 8 against managed deer hunting.

*A full summary of the survey results is attached to this Report as Appendix 1.*

2. Public Forum. A public forum on the issue of deer management was held at Village Hall on June 23, 2016. Approximately 50 residents attended. The persons who attended spoke largely against deer hunting and in favor of an experimental program of immuno-contraception (see below). The primary reason that speakers gave for their opposition to hunting was the difficulty of enforcing rules—concerns that the small Village

police force would be unduly burdened with the task of enforcement , that hunters could not be properly controlled and that poaching and trespassing incidents would increase. Also expressed was the fear that deer that were injured by an arrow might wander from a property that permitted hunting onto other properties that did not, or onto public roads, and create a nuisance for private landowners and the local police. It should also be noted that some of the residents present at the Public Forum expressed opposition to any method involving lethal force against deer.

b. Consideration of Specific Options

There are two categories of approaches that could be taken to address a deer problem:

- Strategies to mitigate the impact of deer on the community, and
- Strategies to reduce the deer population

The distinction is important in that many of the strategies in the first category can be undertaken by the Village or its residents without involving other surrounding communities. However, since deer are mobile, strategies in the second category may be less effective when undertaken by the Village without coordination with surrounding jurisdictions.

The first three recommendations below fall in the first category – strategies to reduce the impact of deer. The second three are strategies to reduce the number of deer.

1. Vehicular Speed Limits. In various studies, auto accidents involving deer have been found to be a major problem, and 58.1% of Village residents who responded to the survey considered risk to vehicles, including collisions, vehicular accidents a problem. However, police statistics from Suffolk County and from Head of the Harbor police indicated only a small number of such accidents, approximately 5 or 6 per year, with no measurable increase in recent years and no fatalities to date. Nonetheless, each accident has the potential for bodily injury and death to people traveling in the vehicle. Almost all of the accidents occurred on Route 25A, near the intersections of Hitherbrook Road, High Hedges, and Mills Pond Road, where the speed limit is 45 mph. There were almost no reported vehicle-deer accidents on other roads in the Village, where the speed limit is generally 25 mph. **Accordingly, the Committee recommends that the Village consider reducing the speed limit on this portion of Route 25A to 35 mph.**
2. Deer Fencing. Deer fencing is used on the North Fork and South Fork of Long Island protect agricultural properties and other large properties from deer

devastation. It was also recommended by the National Park Service for environmentally sensitive parts of Fire Island (including the William Floyd Estate and the Sunken Forest) in its deer management plan. The fencing is generally made of thin chicken wire that is visually almost transparent, strung between wooden posts. In order to be effective, the fencing must be 8 feet high. The current Village Code, Section 165-28, requires that fencing heights not exceed 4 feet in front yards and 6 feet on all other sides of a property, and that the fencing material be wood or other natural material unless the Architectural Review Board approves another material. **The Committee believes that 8-foot deer fencing should be allowed on agricultural properties and plant nurseries in the Village, as well as other large properties where sufficient need is shown.**

3. Spiked Swimming Pool Fences. There have been a few recent incidents of police responding to calls about deer having been impaled on spiked fences that surround swimming pools. The Committee was asked by an elected official to consider a ban on spiked fences. However, an interview with Charles Loehman, the chief of police, led the Committee to conclude that these calls were handled in the ordinary course of duty by the police and were not considered a serious problem. The Village Architectural Review Board has begun notifying applicants who desire to install spiked fences of the potential for deer impalement. **The Committee does not recommend any change in the Village Code to prohibit spiked fencing around swimming pools, and believes that the current ad hoc recommendations being made by the Architectural Review Board are adequate.**
4. Bow Hunting in Season. Deer hunting is regulated by the State DEC and is also subject to local regulations by individual townships. At present, in Suffolk County deer hunting with a bow and arrow is permitted for four months, October through January, subject to each hunter receiving a local Township permit as well as the written permission of the landowner. Archers must be located on a platform which is at least 150 feet from any structure. From meetings with some of the Committee's consultants described above, as well as from a review of recent studies, the Committee concluded that deer hunting with bow and arrow, in season and pursuant to DEC regulation, may help to stabilize the deer population but would likely not effect a significant reduction of the herd. Also, at the public forum and in internal committee meetings, a substantial number of residents expressed their opposition to hunting as well as their fears that there would not be adequate enforcement of the regulations to prevent hunters and poachers from trespassing on properties where they were not permitted. The Committee does not know if these fears are shared by a majority of the Village, but it does believe that a significant number of residents strongly object to bow-hunting in season as permitted by DEC regulations.

**Therefore, the Committee recommends against permitting DEC sanctioned deer hunting in season by bow hunters.**

5. Immuno-Contraception. Chemical contraception using PZP, a natural protein taken from pig ovaries, has been used on an experimental basis by the Humane Society with the approval of the New York DEC, in parts of Fire Island and, more recently, in the Village of Hastings-on-Hudson. It was also used in Fripp Island, an isolated barrier island in South Carolina. According to Dr. Rutberg, the Principal Investigator on the studies of PZP, over a 7-year period on Fripp Island, the deer population was reduced by attrition in half, from 350 deer to 175 deer; and on certain parts of Fire Island the deer population was reduced by 60% over ten years. The initial studies were performed using so-called Native PZP; this is the form that was used on Fire Island. This program requires that a doe be 'darted' in autumn with an anesthetic so that it can be tagged and injected with PZP; a follow-up booster injection of PZP is required in the following few weeks. Native PZP has been submitted to the EPA for approval as a commercial drug. It is no longer available as part of a study. It is unknown when or if the EPA will grant approval; costs of a commercial product and its administration cannot be predicted at this time.

An extended-release form of PZP has now been developed which can be given year-round; follow-up boosters are currently given at 2-3 years. Although it has not yet been used in as many experimental programs as the original form, extended-release PZP has been studied since 2005. A large percentage of the treated does are rendered sterile for approximately two years, possibly longer with the extended release PZP, after which further inoculation is required. It should be noted that extended-release PZP is currently available only as part of a study, and, like native PZP, must be administered by darting since both forms are destroyed if given by mouth.

Committee members met with Dr. Rutberg and Ms. Pereira, who described the program in Hastings-on-Hudson. Hastings-on-Hudson is more like Head of the Harbor than are Fire Island or Fripp Island, since the two villages are not isolated islands, are suburban in character, and have porous boundaries with adjoining villages. It took the Village of Hastings-on-Hudson and the Humane Society approximately 2 years to prepare their proposal for an experimental program and obtain DEC approval for use of the extended-release PZP. In the first year, 2013, 8 deer were captured, tagged and injected with PZP; and another 20 deer were injected in each of 2014 and 2015. That is, over the first 3 years, a total of 48 does were inoculated. The expected result, as more does are captured, tagged and injected, is that the birth rate will decrease and, over time, the deer population will also decrease. According to Dr. Rutberg and Ms. Pereira, deer have a life expectancy of 12-14 years in suburban areas like Fire Island or Hastings-on-

Hudson, and it was expected to take 4-6 years after a substantial number of does are injected for a measurable decrease to be felt by the residents.

The cost of the program to the Village was not made clear. Although the unsubsidized cost may be as much as \$500-\$1,000 per inoculated doe, there were said to be subsidies of cost and labor available from the participating organizations, and contributions can be solicited from local groups as well. Ms. Griffiths, the Director of Avalon Park, indicated that the Park's supporting foundation would be interested in participating in such a program and contributing to its cost.

Although there are limited experimental results to date, this program appears to work if a large percentage of does can be darted and if the program is maintained over an extended period of time. It also appears to be a program that would meet with little or no resistance from Village residents, since it does not involve lethal means and also easily allows for close supervision of a small number of program participants who can be identified to Village residents. **The Committee recommends that the Village consider joining with Avalon Park in an experimental program of deer immuno-contraception and investigate the costs to the Village of such a program.**

6. Culls – Majority Opinion. Culls are short-duration, intensive hunting in confined areas. The hunters are typically USDA-certified. Supervision is undertaken by a combination of NY DEC and local authorities. Culling normally is done using rifles or shotguns. In some cases, archers have been used due to community resistance to rifles and shotguns but the reduced lethality of arrows and consequent risk of deer injury and panic flight has limited the use of this approach. Normally, culls are conducted from perches on ATVs or stands so that shots are aimed downward and bait is used to attract deer to specific locations. They occur on government tracts or where invited by private land-owners. Costs vary from \$400/head to \$1,200/head (Southold NY). Potential issues with culling include community sentiment, which in some cases has led to active resistance. Although actual reported hunting injuries in New York State have been minimal, with no fatalities in 3 years, questions remain about risks of people and pets as well as the division of liability between property owners, hunters and the Village should an injury occur. Some sources have recommended that a police officer should be paired with each hunter, potentially reducing risks but increasing costs. It also appears to be the case that Village participation in a cull would disqualify the Village from participation in an immuno-contraceptive study for some number of years. The ultimate efficacy of a cull, particularly in a Village surrounded by other jurisdictions with deer is also an open question. Even apart from deer mobility, population studies suggest that deer can replace themselves through increased fecundity in one-to-two years. An effective cull therefore implies a Village commitment to an annual program,

probably indefinitely. Moreover, a cull (like an immuno-contraceptive program) entails a careful deer census of numbers, gender and ages to determine the most effective culling strategy and to assess its effectiveness afterwards. **In light of the expressions of community opposition evident in the survey and meetings, long term costs, impact on the ability of the Village to participate in an immuno-contraceptive study, and questions concerning effectiveness of a cull, the majority of the Committee recommends that the Village should not consider a cull at this time.**

6.A Culls – Minority Opinion. While the Committee has agreed on recommendations to mitigate deer –related damage, its members have disagreed on recommendations with regard to population reduction. A minority of members believes that: (i) immuno-contraception techniques may hold promise of being a long-term solution to deer over-population, but (ii) if effective, this program will not substantially reduce deer population until at least 6 years from its commencement, and (iii) therefore, the Village should consider culls – using archery but not guns -- as a short-term measure while an immuno-contraception program is being developed and implemented.

Culls are usually carried out after the regular hunting season, for a brief period of time, pursuant to ‘nuisance permits’ issued by the DEC. They are usually conducted over bait, so that a large number of deer can be lured to a single location, and they can be performed by trained sharp-shooters or trained archers. They can be carried out as a Village-wide program on large public lands and private lands, or they can be carried out privately on large privately owned parcels upon request by the owners.

For the immuno-contraception program to be effective, a substantial majority of fertile does must be inoculated. But as noted above, the experimental immuno-contraception program in Hastings-on-Hudson took approximately 2 years to get started, and over the following three years managed to dart and vaccinate a total of 48 deer. That reported success rate does not inspire confidence in us that the program will succeed even in seven years. Furthermore, as the program is implemented, the deer population will continue to multiply at even greater rates, unless other short-term measures are implemented.

The majority notes a number of criticisms of culls which should be responded to. Most important is the concern for the safety of local residents, which the minority shares. This concern is valid if rifles are used for hunting in suburban areas like ours, but it should not apply to bow hunting. DEC representatives and others have noted that there is not a single recorded instance of accidental injury to residents or passersby from bow hunting. The majority’s observation that female deer give birth more frequently and to multiple fawns as their numbers are diminished is a frequently noted example of a ‘feedback loop’ which applies equally to reductions resulting

from hunting and from contraception – that is, when there is more food, there will be more births. Similarly, both lethal programs and non-lethal programs will be equally affected by the travel of deer between our Village and neighboring communities. Finally, the cost of managing volunteer archers in a cull is considerably less than the cost of using paid sharpshooters.

The minority of the Committee is also concerned for the health of the deer population itself. As the population increases, the availability of food will diminish. This will result in a reduction of the deer population through malnutrition, disease and a reduction in fertility rates. That is the downside of the ‘feedback loop,’ and we believe that selective culling of the deer population through managed bow hunting is a less cruel result than the natural results of overpopulation.

It is a commonly-held view of experts in deer management that, in the words of one, an “integrated approach combining several techniques is usually the key to successful deer management programs.” (A. DeNicola, et al., “Managing White-Tailed Deer in Suburban Environments,” published by Cornell Cooperative Extension, et al.)

**For the above reasons, a minority of the Committee recommends that the Village consider culls as a deer management tool in advance of an immuno-contraception program, either on a Village-wide basis or just on large privately owned parcels. However, if culls are to be implemented, the Village must work with local residents to mitigate opposition to lethal means, and should also investigate further any negative impacts on a proposed experimental immuno-contraception study.**

7. Coordination with Neighboring Jurisdictions. Unlike Fire Island, the Village of Head of the Harbor has porous boundaries which can be easily traversed by deer. The incorporated Village of Nissequogue lies to the west, to the south is land under the jurisdiction of the Town of Smithtown, and to the east is the unincorporated hamlet of Stony Brook, which is part of the Town of Brookhaven. All have deer. **Although participation in joint programs may be difficult for legal and budgetary reasons, the Committee recommends that the Village keep in continuing contact with neighboring Villages and Towns with regard to deer management issues.**

RESPECTFULLY SUBMITTED,

THE DEER MANAGEMENT ADVISORY COMMITTEE  
OCTOBER 14, 2016