

Community-Based Deer Management Plan

for

The City of Oneonta

Background

Concerns about the increasing deer population and its effects on the Oneonta community were presented to the Environmental Board. The Environmental Board deemed it a Quality-of-Life and Infrastructure Committee issue, resulting in Mayor Drnek appointing an ad hoc Deer Management Task Force. The Deer Management Task Force, consisting of community volunteers representing all wards of the city, was tasked with creating an effective deer management strategy to be considered by the QLI Committee. The task force began meeting weekly on August 11, 2022.

Task Force Members

Betsy Holland

Catherine Paluch Susan Brunswick Marjorie O'Mara

Sandra Bright Joann Chmielowski

Susan Lettis Joe Chmielowski

Wendy Miller-Willis Thomas Travisano

Mission

The mission of this committee is to first gather the opinions of community members through a survey to determine if there is a problem that needs to be addressed. If the result of the survey and additional research determines a need for a plan, this task force will create an effective deer management strategy for the consideration of the QLI committee. The Deer Management Task Force will strive to educate the public on deer related issues through forums and written publications.

PROBLEM DEFINITION

Oneonta City residents have reported concerns about widespread landscape damage and crop losses, as well as an increase of tick-borne illnesses and deer/car collisions caused by the increase in the population of the white-tailed deer in the area.

The results of the survey validate that the majority of respondents have concerns with the overpopulation of deer in the City of Oneonta and its negative impact on their quality of life. See detailed results of survey in Appendix A.

Concerns include:

- Health of the deer herd
- Injuries to deer through interactions with human environment
- Damage to gardens and landscaping
- Lyme and other tick-borne diseases
- Deer/vehicle traffic collisions
- Damage to natural areas such as forests and farm crops
- Erosion caused by overbrowsing, possibly leading to flooding
- Decreased biodiversity

Information that corroborates these concerns:

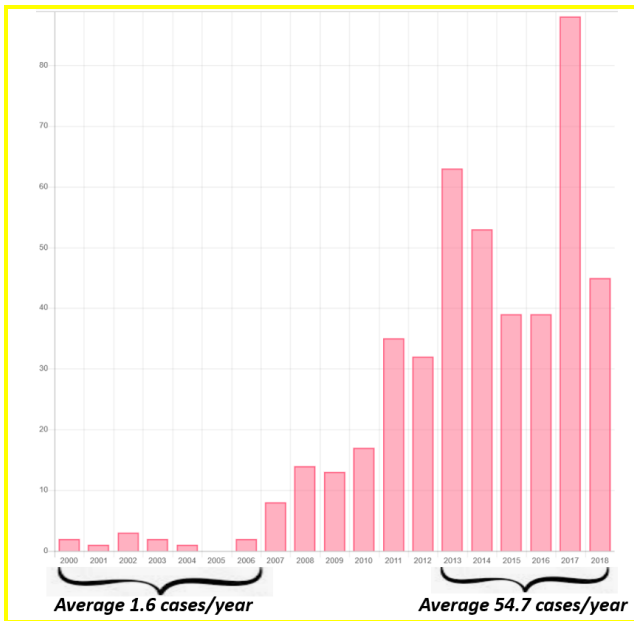
Deer related Motor vehicle accidents

Oneonta has been ranked the 27th most likely city in upstate New York to have a deer/vehicle collision by The National Insurance Crime Bureau. There were 71 animal loss claims in 2017.

OCCURANCE OF TICK-BORNE ILLNESS in Otsego County

The following graph shows data from 2000-2018. It shows **confirmed** cases reported to Otsego county. The actual number may be 10 times greater.

<https://www.tickcheck.com/stats/county/new-york/otsego-county/lyme>



Recent findings for the 13820 zip code in Otsego County report an increase in Lyme disease from 10 confirmed cases in 2021 to 114 confirmed cases in 2022. Factors that account for the dramatic rise in cases may be due to heightened awareness but certainly can be linked to the increase in the deer population.

Lyme Disease Data

Zip Code Area: 13820

Year	Cases of Lyme Disease
2020	8
2021	10
2022	114

Source: Otsego County Communicable Disease Electronic Surveillance System

Please see Appendix B for additional Lyme Disease information.

GOALS

The goal of a Deer Management Plan is not to eliminate deer. The plan is to:

- Safely and effectively reduce the deer population to a sustainable level.
- Maintain a socially acceptable level for the deer population
- Revitalize native plants and preserve healthy, local forest and farm land
- Decrease property damage
- Decrease deer/car collisions
- Decrease tick exposure
- Supporting a community that is well educated on how to live with deer while reducing human-deer conflict

PROCESS of the TASK FORCE

To accomplish the mission, the task force did the following;

1. Conducted a city-wide survey. (derived from surveys created by Cornell University)
2. Presented a public forum by representatives of the DEC about deer management.
3. Obtained information from other communities in New York which implemented Deer Management Plans.
4. Reviewed research on the effects of deer overpopulation on deforestation, relationship to tick-borne illnesses, incidence of deer/car interactions and the health of the deer herd. (See References for researched articles)

MANAGEMENT ACTIONS RECOMMENDED

After extensive research the Deer Management Task Force identified actions that fall into two categories.

COMMUNITY ACTIONS

There are mitigation strategies which can be employed by citizens on their property. The following suggestions may help to temporarily deter deer but will not address the issue of overpopulation:

- Fencing – effective fencing must encapsulate the entire area and be 8’ high.
- Landscaping with deer-resistant plantings
- Use of sprays and repellents
- Stop feeding deer (it is harmful to the deer and is illegal)
- Increase distribution of educational materials addressing tick avoidance.

Many of these strategies are already in use by the city residents. Eight-foot fencing is the only fool proof way of keeping deer off property. The installation of fencing can be costly and height restrictions are in place.

CITY ACTIONS

- Increase road signage warning of deer crossing
- Lower speed limits
- Allow higher fencing
- Disseminate Educational materials on deer resistant planting, avoiding tick-borne illnesses and the illegality of feeding deer and the negative effects on their health. (See Appendices B, C and D)
- Develop a multi-year plan for the reduction of the deer population which includes coordinating with property owners to obtain nuisance permits (See Appendix E)

Impact Monitoring

Progress toward objectives will be tracked using a variety of monitoring methods. Monitoring data can be collected by volunteers or non-specialist city employees. Accuracy and consistency will be maximized by simple, easy-to-use protocols. It is not necessary to count deer, because the problem is the impacts the deer are causing, not the deer themselves; therefore, monitoring will focus on ecological damage and cultivated plant damage.

Please see Appendix F for additional information.

Conclusion

After extensive research of studies and other cities' deer management plans, the effectiveness and cost of many alternatives, the task force has determined that community education paired with controlled herd reduction strategies are ultimately the best and most effective choice. This approach is primarily accomplished by encouraging owners of land abutting city land (i.e., Hartwick College, SUNY Oneonta, Job Corps as well as individual property owners) to allow hunting on their land. This would be strictly controlled by the following procedures:

1. Landowners establish specific written criteria for where and when hunting is allowed on their land.
2. Recruit fully licensed and experienced bow hunters who agree to abide by DEC conduct requirements.
3. Hunters apply for extra Doe permits.
4. Hunters take responsibility for removing deer (hunters can take deer to be processed and donated to food pantries)
5. City officials will follow up on the results of deer population reduction by establishing a liaison with the hunters to gather information.

This approach has been demonstrated to be an effective and safe management strategy for reducing deer population in communities such as Hamilton and Camillus, NY. (refer to attached packet) It is recommended that communities think in terms of a ten year planning horizon when undertaking deer management. Paul Curtis, faculty member in the Department of Natural Resources at Cornell University states that:

“Deer populations build up momentum and it takes a while to overcome that (as deer have a high reproduction rate). If you don't remove a large number of animals early, you're constantly fighting that reproduction. You are also fighting immigration because most communities are not fenced or an island, so you are constantly looking at deer coming in from the outside.”

ADDITIONAL SUPPORTING DOCUMENTS

It is illegal to intentionally feed wild deer or moose in New York.

Feeding of white-tailed deer causes unnatural concentrations near the food source, which can lead to ecological damage, damage to property, and an increased risk of transmission of disease between deer.

<https://www.dec.ny.gov/animals/7197.html>

Deer Overabundance. A concise article from the DEC explaining how deer overpopulation has occurred, its impact on the ecosystem, and suggestions for community management.

<https://www.dec.ny.gov/animals/104911.html>

Oh Deer! How Deer Shape Forests in the Catskills & Beyond. Webinar that explains the impact deer population has on forests with suggestions on how to restore both a healthy deer population and healthy diverse forests.

<https://www.caryinstitute.org/news-insights/lecture-video/oh-deer-how-deer-shape-forests-catskills-beyond>

Dr. Paul Curtis

<https://www.youtube.com/watch?v=hYFCMlc74kw>

Fertility Control

Efficacy of surgical sterilization for managing overabundant suburban white-tailed deer. Communities that have tried fertility control have found it inadequate for reducing deer numbers. Most have turned to lethal methods within a few years.

<https://www.dropbox.com/s/05dbm63ry1hju7j/Test.docx?dl=0>

REFERENCES

Appendix: A: Deer Survey Results

<http://bit.ly/3UTL86M>

Deer Survey Generalizations

<https://bit.ly/30cm2x5>

Appendix B: Deer Resistant Plantings

<https://bit.ly/30cm2x5>

Appendix C Avoiding Tick-borne illnesses

Tick bite avoidance information sheet

<http://bit.ly/3tHCY5s>

Research to evaluate the degree of association between deer density, tick abundance, and human cases of Lyme disease in one Connecticut community over a 13-yr period.

“Number of resident-reported cases of Lyme disease per 100 households was strongly correlated to deer density in the community. Reducing deer density to 5.1 deer per square kilometer resulted in a 76% reduction in tick abundance, 70% reduction in the entomological risk index, and 80% reduction in resident-reported cases of Lyme disease in the community from before to after a hunt was initiated.”

<https://academic.oup.com/jme/article/51/4/777/894869>

Appendix D: Negative effects of feeding deer

It is illegal to intentionally feed wild deer or moose in New York.

Feeding of white-tailed deer causes unnatural concentrations near the food source, which can lead to ecological damage, damage to property, and an increased risk of transmission of disease between deer.

<https://www.dec.ny.gov/animals/7197.html>

Appendix E: Department of Environmental Conservation: Deer Management Assistance Program

The Deer Management Assistance Program (DMAP) offers landowners and land managers opportunities to improve deer management on the lands they own or control. This link includes an application form.

https://www.dec.ny.gov/docs/wildlife_pdf/dmapappl.pdf

Appendix F: Ecological Monitoring Methods

<http://bit.ly/3V3i2Bm>

