



Town of DeWitt White-Tailed Deer Management & Education Plan

Revised 10.11.2018

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Executive Summary

The objective of the Deer Management and Education Plan (DMEP) is to safely and effectively reduce the white-tailed deer (*Odocoileus virginianus*) population, revitalize native plants, decrease property damage and decrease the tick population within the Plan designated areas. This plan was originally drafted by the DeWitt Neighborhood Deer Committee (DNDC) with technical guidance from Cornell Cooperative Extension of Onondaga and subsequently presented to and adopted by the DeWitt Town Board.

The DMEP will address the following impacts of white-tailed deer:

- Landscaping damage & economic impact
- Deer-vehicle incidents
- Damage to forest vegetation and native plants and impacts to soil erosion and stormwater runoff
- Deer/human/pet conflicts
- Blacklegged tick populations
- Exposure to Lyme disease and other tick-borne illnesses to both humans and pets

To reduce these impacts the DMEP recommends implementing lethal methods to remove deer on preselected designated sites within the deer management area in order to stabilize deer herds with the ultimate goal of reducing populations. The goal of this program is to reduce the damage caused by deer through population control. Decreased landscape and forest plant damage (property damage and a resurgence of native plants), and deer-vehicle incidents, will be determining factors in measuring the success of the program. Additionally, the program hopes to reduce tick density and exposure to Lyme disease and other tick-borne illnesses.

The Town recognizes that sustainably managing wildlife is a long-term project and that adaptive management practices are necessary to remain flexible and cope with surprises while making necessary management decisions in the best interest of the ecosystem and the residences. Sound science, best management practices (BMPs), and yearly self-evaluations are key to a successful program.

The DMEP will serve as a resource document that Town officials, residents, and program participants can reference for general guidance, management decisions, and procedures.

Introduction

Rampant deforestation and unregulated hunting wiped out over 95% of the country's deer in the 19th century. Management efforts in the first part of the 20th century were aimed at increasing deer numbers. New York and many other states were highly successful in this effort. Deer play vital roles in the natural and cultural environment and are highly valued for their beauty, grace, and as a food source. However, the abundance of deer in large parts of the state is causing increasing problems, particularly in suburban areas like DeWitt. Deer have been observed within the City limits of Syracuse for over two decades. In the past 15 years, however, deer numbers have steadily increased in pockets of habitat where hunting is not permitted or not ideal. In addition to being an important part of the Lyme disease transmission pathway, deer can be a nuisance to homeowners and gardeners and wreak havoc on forest regeneration. Warmer

winters with less snow accumulation are conducive to high overwinter survival of both deer and ticks. In the face of putative climate warming, more deer and more ticks are likely in our futures. Finally, the medical community is often slow to react to the emergence of an unfamiliar disease. It takes some time for doctors to become familiar with the proper diagnosis and treatment of Lyme disease and other tick-borne illness in emerging areas.

The primary land use in Central New York is agriculture in a predominantly forested landscape. Deer thrive in this environment. Urban areas serve as de-facto refuges from hunting. Low regional deer densities on rural lands are maintained by harvesting about 40% of the females and 80% of the males from the deer population every year. In the absence of hunting, deer numbers will grow to a level where birth and death rates are equilibrated by some combination of other mortality factors (e.g., vehicles, coyotes, diseases, etc.). Consequently, green space management will necessarily require a close look at deer abundance to avoid future land management conflicts.

While the exact number of deer is not definitely known, scientists estimate that the population is increasing by about 30% each year. The NYS DEC supports approaching deer management at a community level. Taking steps to stabilize deer populations and ultimately reducing deer populations are crucial to minimizing the impacts they are causing to the environment/ecosystem, landscapes, and health.

Background

Land Use

The Town of DeWitt is approximately 40 square miles in size and has approximately 124 miles of maintained paved surface streets. The Town is a suburb of the City of Syracuse and includes the Village of East Syracuse, the hamlets of Jamesville and Collamer, a large active quarry, railyard, and the international airport along with residential areas of older neighborhoods, contemporary homes and condominiums, and newer subdivisions. Land use is varied throughout the Town of DeWitt. The northern portion from I-690 North includes the International airport, CSX railroad, several interstates, and numerous highways. Land use is largely industrial and hi-tech with a few pockets of residential communities interspersed. The Southern portion from I-690 south is largely residential interspersed with commercial arterials and large parcels of industrial. It is also proliferated by dense wooded areas, parks, golf courses, campuses, and green spaces that are mostly interconnected. The average parcel size in the southern part of Dewitt from I-690 south is just over one acre with the median parcel size being about .34 acres. While there are no local moratoriums or local restrictions on hunting or the discharging of weapons, hunting is extremely limited due to these factors. Additionally, most of the homes feature landscaping with ornamental plantings throughout. These issues combined with native food resources, protected bedding areas, and little to no predators create an ideal habitat for white-tailed deer to proliferate.

Deer Management Background

The Town of DeWitt staff noticed a slight uptick in deer complaints in 2014 and began tracking these calls. Complaints were generally concentrated to specific areas within the Town, most

notably north and west of I-481 and south of Genesee Street. The Town was interested in learning more about these issues and organized an information sharing opportunity with neighboring municipalities and governing agencies in 2015. This meeting was informative as to the complexity and challenges ahead.

Learning from communities like Cayuga Heights, the Town recognized the necessity for community involvement. As a result, in 2016, the Town organized a Deer Task Force comprised of community members that had expressed concern about the issue in the recent past. A broad array of stakeholders were assembled including animal rights advocates, hunters, farmers, parents of young children, gardeners, etc. Over a period of about 10 months, experts presented to the group on deer population size; impacts to the environment and people; management options; benefits and costs; experiences; and challenges and opportunities. Around this same time, SUNY-ESF received funding through Assemblyperson Hunter's office to determine current deer densities and model future populations under specified scenarios.

This group was unable to make any recommendations after meeting for almost a year. Subsequently they were disbanded in late 2016.

On Saturday, April 29, 2016 the Town hosted a public forum at the Jamesville DeWitt Middle School in an attempt to share information with the residents most impacted by deer. The forum was an information sharing opportunity between residents and the Town in an attempt to convey problems and realistic solutions. Representatives of lethal and non-lethal management were present.

DNDC Background

Early in 2017 some of the community members from the Deer Task Force aligned and began a grassroots effort. They sought guidance from Cornell Cooperative Extension. The group leaders went door-to-door and garnered over 500 signatures community members supporting lethal management of deer. They also drafted the original management plan that was adopted by the DeWitt Town Board. This group calls themselves the DeWitt Neighborhood Deer Committee (DNDC). The DNDC began meeting at the end of May 2017. Highlights are chronological from most recent to oldest.

October 2018-Update to DMEP

Several components of this plan have been modified including the following sections:

- Addition of the Executive Summary, Introduction, and Background Sections
- Addendum A, USDA-APHIS-WS Project Summary Report
- Addendum B, January 2018 Press Release
- Addendum C, DOH Tick Analysis
- Several Subsections within Recommendations
- Addendum D, Cooperative Service Agreement
- Addendum E, An updated map reflecting an expanded deer management area
- Addition of Adaptive Management Procedures and budget information
- Addendum F, SEQR Determination and Board Resolution

April 1, 2018 USDA-APHIS-Wildlife Services Project Summary Report-See Addendum A

The Town of DeWitt received the above report from USDA summarizing the background, objectives, methods, results, and recommendations. After suitable sites were identified and proper authorizations received--operations commenced and over a period of 13 nights during January, February, and March. A total of 53 deer were removed resulting in 1,590 pounds of venison for donation.

January 1 through March 31 2018 Bait and Cull Operations

The Town of DeWitt submitted the adopted deer management plan, SEQR, Town Board resolutions, and a nuisance permit application to the New York State Department of Environmental Conservation (NYSDEC). NYSDEC issued a nuisance permit to the Town of DeWitt for bait and cull operations from December 21, 2017 through March 31, 2018. The DeWitt Town Board subsequently entered into agreement with the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) Wildlife Services (WS) to conduct bait and cull operations on several locations within the Town of DeWitt.

January 2018 Press Release-See Addendum B

The Town of DeWitt issued a Press Release to all media outlets informing the public of the Town's plan to move forward with bait and cull operations and advising the public of park closures from dusk to dawn.

October 23, 2017-Public Hearing at 7:05 pm

A public hearing was held at DeWitt Town Hall to consider the adoption and implementation of the proposed deer management plan. Supervisor Michalenko presented the matter. Barbara Cargo, community member, presented over 400 signatures in favor of the deer culling efforts. The signatures are on file in the Clerk's office. Several people spoke in favor of culling and two opposed lethal management. Discussions included public health and safety, Lyme disease, auto collisions, ecosystem damage, property damage; the need for an effective, long term culling. Other deer management options were discussed including allowing hunter to reduce the deer population; and sterilization which showed to be too costly. The next step after approving the Deer Management Plan would be obtaining a permit from the NYS Department of Conservation and the cull would not take place until the winter. All persons desiring to be heard, having been heard, the public hearing was closed. The Town Board resolved to adopt the deer management plan.

September 25, 2017 - Presentation of the DNDC DMEP to the DeWitt Town Board

The DNDC again presented to the DeWitt Town Board formally requesting the Town to adopt the proposed management plan and implement the strategies within. The comments from the September 19th meeting were recorded and be presented along with the petition to the DeWitt Town Board on Monday, October 23, 2018.

September 19, 2017 - Public Meeting on the DNDC DMEP at Jamesville DeWitt Middle School

70 people were in attendance for the presentation of the DNDC DMEP. The plan was presented by Amanda Slisz and Olivia Green. Audrey Mitchell spoke on her journey with Lyme Disease, Amanda covered personal tick protection and ways to decrease tick population in yards, Jacob Dillon, ESF grad student working with Brian Underwood, made a presentation on the local deer

statistics and the methodologies behind them. A 45 minute question and answer period was held at the end. Written comments were collected to submit to the Town Board.

September 14, 2017 - Deer Management Meeting, Holy Cross Church, DeWitt

DNDC members met with the Syracuse Neighbors group; Mark Barlow- St Mary's Cemetery Director; Justin Gansowski - District Supervisor USDA, APHIS, Wildlife Services; Courtney LaMere - Region 7 Wildlife Biologist NYS DEC; Daniel Glavin - Oakwood Cemetery Director; Jed Schneider - Asst VP Facilities and Planning LeMoyne College; Brian Underwood - Research Biologist Patuxent Wildlife Research Center SUNY ESF; and Nader Maroun - Syracuse Common Council 5th District. The purpose of this meeting was to assemble the three large landowners, LeMoyne College, St Mary's Cemetery and Oakwood Cemetery, and provide information from the experts to make informed and sound decisions regarding the opportunities and challenges of participating in the program.

September 11, 2017 DNDC Meeting at DeWitt Town Hall

DNDC members met with DeWitt Town staff, Town Supervisor, Town Board Member (Rigney), Syracuse Common Councilor (Maroun), Cornell Cooperative Extension representatives (Cross, Ferrare), and DEC Big Game Biologist (LaMere) to gather feedback on the DMEP, discuss the process for submitting the DMEP to the Town Board, budgeting, permitting, meaningful public participation, and timelines. Discussion included emphasizing educational components of the DMEP in upcoming public participation opportunities and methods to capture public comments at the public information session for review by the Town Board at a later time. Feedback on the management area was provided. Options for lethal deer controls were discussed (professional sharpshooting contractors, private agents on private property, legal setbacks and other restrictions).

September 6, 2017 – DeWitt Advisory Conservation Commission Meeting

DNDC member briefed the DACC on DMEP and opportunities for public input into the process.

August 21, 2017 - DNDC Meeting

Discussion included recent interpretation of updated guidance on NYS Environmental Conservation Laws in reference to the issuance of deer damage permits and its impact on the DMEP. The five updated activities which would preclude some of our deer management proposals will be submitted to the NYS legislature in a bill that would allow exceptions to be made for approved DMEPs. This bill is being sponsored by Senator DeFransico and will be brought before the legislature in January 2018. It is our hope we would be able to move forward with our plans in January or February 2018. There was an update on the public education meeting that was held July 20, 2017, review of the date and location for a meeting with our DMEP area residents and discussion of how to inform them of the DNDC DMEP and how to publicize this meeting. We also discussed how the DNDC DMEP would be sustained financially in the coming years.

August 9, 2017 – Tick Drag and DOH Analysis-See Addendum C

Cornell Cooperative Extension and volunteers conducted a tick drag on several properties in and adjacent to the management area. *Ixodes scapularis* (blacklegged tick or deer tick) were tested by the New York State Department of Health (NYSDOH) for certain tick-borne pathogens:

Borrelia burgdorferi (bacterial causative agent of Lyme disease)

Anaplasma phagocytophilum (rickettsial causative agent of human granulocytic anaplasmosis)

Babesia microti (bacterial causative agent of *Borrelia miyamotoi* disease)

Ticks collected from DeWitt and several other Onondaga County municipalities were combined and analyzed as one sample by NYSDOH. The following results are reflective of Onondaga County as a whole, not just Dewitt. Of the 28 adult deer ticks collected, 15 were positive and 13 were negative for *Borrelia burgdorferi*, an infection rate of 53.6%. All 50 ticks were negative for the presence of *Anaplasma phagocytophilum*, *Babesia microti*, and *Borrelia miyamotoi*.

After reviewing these results the NYS DOH encouraged consideration of follow-up activities such as working with partners to develop strategies to educate the public about the potential risk of encountering ticks and how to reduce the risk of exposure to ticks.

July 20, 2017 - Senator John DeFrancisco Tick and Lyme Press Conference at Ryder Park
DNDC members as well as Town representatives attended the press conference in show of support for deer management in DeWitt. Insert date of Justin Gansowski talk

July 20, 2017 - Brian Underwood Community Deer Talk at Holy Cross Church
An educational event for the community to learn about deer, impacts, and management options.

July 11, 2017- DNDC meeting

Updates on the Town of DeWitt Board meeting, meeting with Brian Underwood, and the tick drag were discussed. A review of the Syracuse Eastside Neighbors (SEN) DMEP was completed. The DNDC discussed the boundaries for our Plan, considering the suggested 4 to 5 square kilometers from Brian Underwood and the zip code break out from Pamela Hunter's survey. It was decided it would be good to go with as large of an area as possible to provide multiple bait sites and to be adjacent to the SEN management area to cover as much of the deer population as feasible. We agreed it would benefit all of us to work in conjunction with other groups like SEN for both public education as well as our own continuing education on the DMEP process. The DNDC decided to plan for a public meeting on our own DMEP in September and to attend the DeWitt Town Board meeting in late September to present this Plan. We also had a discussion about how to inform the residents in the area of the DMEP of the public meeting in September.

July 6, 2017- DNDC meeting with Deer Researchers

DNDC members met with Brian Underwood and graduate student to discuss deer abundance research in DeWitt. The discussion included current deer population densities and prospective boundaries for the DMEP, as well as an overview of deer impact in our area and the effectiveness of various deer management techniques. Deer behavior (e.g., habitat range and spread, breeding patterns) was also discussed in the context of population management.

June 26, 2017- Presentation of petitions to DeWitt Town Board

Olivia Green and Amanda Slisz, of the DNDC, addressed the DeWitt Town Board, expressed the concerns of the group, and presented over 400 signatures in favor of a culling. 50+ community members came to the meeting to stand and be counted in show of their support for a culling in the Town of DeWitt. The Board allowed community members to speak. All spoke in favor of a culling. The Board said they would support a DMEP.

June 19, 2017- DNDC Meeting

During this meeting the DNDC reviewed a timeline for a culling and where we stood on each phase of that timeline. The DNDC decided to move forward with the DMEP and to plan for a public meeting in August or September. We also reviewed and discussed Pamela Hunter's survey results and the status of the DMEPs of the two neighboring Syracuse groups. The DNDC decided we would continue to get signatures of support and would attend the next Town of DeWitt Board meeting to ask for their support of a DMEP.

May 22, 2017- DNDC Meeting

This was the first neighborhood group meeting. With the help of Cornell Cooperative Extension (CCE), we discussed how a community based deer process could work and shared concerns about the current environment in our neighborhood. The DNDC talked about going door to door for signatures in support of a culling and the possibility of doing a tick drag. The CCE gave an overview of their involvement as well as the DEC and USDA. We decided we would work toward having a DMEP to the DEC in the fall.

April 29, 2017- Public Forum at Jamesville DeWitt Middle School

This meeting was put together and hosted by the Town of DeWitt and Cornell Cooperative Extension. It consisted of a panel presentation, Q&A session, and comment session. The expert panel consisted of: Courtney LaMere, Region 7 Big Game Biologist, NYS DEC; Brian Underwood, Adjunct Associate Professor and Research Wildlife Biologist, USGS Research Station at SUNY ESF; Paul Curtis, Extension Wildlife Specialist, Department of Natural Resources, Cornell University; and Nick Piedmonte, M.S. candidate, SUNY ESF, Tick Ecology.

Assessing, Educating, and Managing Impacts Inflicted by an Overabundance of White-Tailed Deer

Reducing Human Vulnerability

Deer Feeding is Illegal

Feeding wild deer is illegal in NY, but some residents disobey or are unaware of the prohibition. Some mistakenly believe that providing food will be helpful and others simply enjoy seeing the deer on their property. However, willingly feeding deer contributes to unnatural concentrations of deer, which exacerbates deer-related impacts and increases the risk of disease transmission. It also alters the behavior of deer. Overtime, feeding deer acts to increase deer populations.

Violations of the state law should be reported to the local Environmental Conservation Officers. Additionally, community residents should be educated on the problems feeding deer causes for the community, the ecosystem, and to the deer themselves.

Deer-Vehicle Collisions (DVCs)

There are several steps that can be taken to reduce the risk of DVCs. Several signs exist in the Town of DeWitt along roadways identifying areas where numerous deer have been sighted crossing the roads. Slowing down and being vigilant in these areas especially between dawn and dusk and during the rut can reduce DVCs. Motorists should slow down and watch for additional deer when they see one crossing in front of them.

Tick Management

While reducing exposure to ticks and tick-borne illnesses is a major interest of SEN, the neighbors realize that managing the deer population is only one piece of the puzzle where tick population numbers are concerned. Deer play an important role in spreading ticks to new areas, but small mammals are the reservoir for Lyme disease. These methods are meant to help measure tick population and pathology in the area, demonstrate the impact deer management has on the tick population, and most importantly, teach homeowners how to limit their exposure and reduce the chances of contracting disease.

Personal Protection

When outdoors, wear light colored clothes, long pants, long sleeves and socks. Tuck in shirts and tuck pant legs into boots or socks. Use repellent containing 20-30% concentration of DEET on clothes and bare skin. Apply repellents to children by applying to your hands first and then applying to children's skin. Apply repellents containing Permethrin to clothing only, not bare skin. This is a viable solution and residents should learn personal protection.

Inspect oneself frequently when outside and remove ticks from clothes with duct tape or a lint roller. Head-to-toe inspections should be conducted after coming inside and removing clothes, and any embedded ticks should be removed using fine-tipped tweezers without squeezing the ticks body.

Pesticide Application and 4-Poster Devices

Devices that treat small mammals with pesticide can control tick populations while reducing pesticide use.

4-Posters™ have now been registered for use in Upstate NY. They are bait stations designed to attract deer and treat deer with permethrin while they are eating the bait. Maintaining 4-Posters™ is expensive, and many communities that have tried them have abandoned their use due to cost. The constant availability of extra food for deer and other animals can also lead to many negative consequences. For use of the 4-Posters™, an application must be made to DEC for deer feeding permits and must be concurrent with a lethal deer management program. In addition to cost, there are several restrictions to consider prior to application, approval, and use.

Landscaping

Recognize "tick zones" – areas with forest and brush where deer, rodents and ticks are common. Utilize landscaping methods such as 3 ft. barriers of wood chip or rock to separate the "tick zone" from the lawn. Maintain a 9 ft. barrier of lawn between the wood chips and areas such as patios, gardens and play sets. Move children's play area away from wooded areas and place on wood chips or sand. Mow lawns often and remove brush. Avoid creating conditions that ticks favor such as ground cover, leaf litter, and dark and humid spaces. Creation of "tick

safe zones” will help reduce resident’s exposure. This is a viable solution and we encourage residents to practice preventative landscaping wherever possible.

Tick Drags

Tick drags will be performed bi-annually with CCE and trained local residents to determine population numbers. A tick drag involves capture of ticks by dragging a white sheet across an area susceptible to ticks. Captured ticks may be tested for Lyme disease and other tick borne illness. Drags will be performed in areas with landowner’s permission and will take place on one day in the fall and one day in the spring. Successful drags are conducted on days without rain and temperatures above 45 degrees. Including tick drags in the DMEP will allow monitoring of population numbers.

Public Education

Cornell Cooperative Extension of Onondaga County can present public education workshops on measures to reduce exposure to ticks and tick bites through personal protective approaches and landscaping methods. Additionally, residents will be trained as volunteers to participate in “Tick Drags”.

Damminix© Tick Tubes

Damminix© Tick Tubes are biodegradable, cardboard tubes filled with permethrin treated cotton balls. Mice collect the cotton to build their nests. Deer ticks that feed on mice in the spring and the fall are exposed to permethrin and killed. These tubes are available locally and provide an environmentally friendly, easy to use option. This is a viable supplement and may be a part of the DMEP.

The Town will continue to support education of neighbors and explore practical ways to reduce exposure to ticks and tick-borne illness in the neighborhood.

Forest Vegetation

Assessing Vegetation Impacts from Deer (AVID) is a protocol developed at Cornell University’s Department of Natural Resources. This easy to conduct annual protocol can be implemented on larger natural areas by volunteers trained by CCE staff to collect field data to track tree, shrub, and wildflower response to deer browsing over time. This knowledge will help guide deer management on the local and even the state level. Natural area parcels are likely to be located in or around the defined project areas, but not in residential neighborhoods. This method would be added in a future management plan when capacity allows. For more information on AVID, please visit <http://wildlifecontrol.info/research/deer-forest-impacts-project/> and <http://wildlifecontrol.info/wp-content/uploads/2016/11/AVID.Regeneration.Protocol-10-18-2016.pdf>

White-Tailed Deer Management Options

Non-Lethal Methods

Fencing

Fencing prohibits deer movement via physical barrier. To be effective, fencing must be a minimum of 10 feet in height and not possess any openings. This option is not feasible due to the large geographic area of the designated DMEP area and installation and maintenance costs. In addition, the Town of DeWitt zoning does not allow fences of this height.

Habitat Alteration

The practice of habitat alteration as a method of white-tailed deer population control would involve altering the vegetative landscape within the DMEP designated area to reduce or eliminate species that deer use for forage and/or shelter. Although residents are encouraged to practice preventative landscaping, this method is not feasible due to the size of the designated DMEP area and the extensive habitat alteration that this would entail.

Capture and Relocate

The practice of capture and relocate as a method of white-tailed deer population reduction would involve reducing the deer herd within the DMEP designated area by capturing deer and moving them elsewhere. This option is not viable as the NYSDEC prohibits the trapping of deer except under special permit for scientific purposes. Additionally, survival of relocated deer has proven to be poor; up to three-quarters of relocated deer don't survive the first year after release.

Fertility Control

Immunocontraception and sterilization techniques have been employed by some municipalities in an effort to reduce white-tailed deer populations. These techniques have not proven effective in controlling wild free-ranging populations of deer nor tick populations. Permits are granted through the NYS DEC with an accompanying lethal management program in an adjacent area.

Communities that have engaged in fertility control only programs have found it inadequate for reducing deer numbers and associated impacts. Although deer reproduction is reduced, deer remain on the landscape until they die from other causes (deer-vehicle collision) or old age. Several of these communities have added lethal methods to management plans in successive years. Additionally, fertility control programs are costly and require handling and tagging of all animals in the program.

Fertility control methods also do not address herbivory or the spread of ticks and tick borne diseases.

Lethal Methods

Predator Control

The introduction of large mammalian predators would generate safety concerns from residents. And furthermore, the town does not contain suitable habitat.

Parasite or Disease Introduction

The risks and uncertainties associated with parasite or disease introduction make it an impractical option for deer population control.

Poison

Currently there are no toxins, poisons, or lethal baits registered for deer control.

Traditional Hunting

The Town of DeWitt does not prohibit recreational hunting on private lands. Public lands owned by the Town of DeWitt are not large enough or isolated enough to allow for the safe discharge of weapons.

Traditional hunting utilizes firearms, bow, and crossbow to shoot and kill the deer. Sportsmen and women must adhere to hunting regulations and seasons as set by the NYS DEC and pass an education course prior to purchasing hunting license(s). Traditional hunting is a viable option in areas where it can be performed legally and safely, which is not the case in the majority of DeWitt.

Controlled Hunt

Controlled hunting occurs within the normal hunting seasons using an individual's own carcass tags and provides a mutually beneficial formal arrangement between hunters and landowners. Simply put, it is a way to formalize the authority that all landowners have to restrict how hunting occurs on their land. Individual property owners can choose whether they want to be included in a municipal controlled hunt. A set of rules is established that applies to all participating properties and places limits or requirements on hunting on those properties that are stricter than state law requirements. Controlled hunts may be a viable option in situations where it can be performed legally and safely. The following is a list of aspects of hunting that are often subject to limitation in controlled hunts: number of hunters, experience, proficiency, performance, criminal record, identification, notification, day/time, equipment, location, shooting direction, distance, visibility, deer sex, field dressing, meat disposition, conflict resolution, discharge setbacks, trespassing, interference, liability, sale of meat, etc.

NYSDEC DMAP Program

Under the deer management assistance program (DMAP) the NYSDEC issues a special permit and determined number of deer tags to a landowner or resource manager, or a group of landowners or resource managers whose property is in need of site specific deer management efforts. DMAP is for use during the hunting season and could be used in conjunction with a controlled hunt or traditional hunting. This is a viable option and could be a supplement to the proposed recommendations in this plan.

Managed Bait and Shoot (Culling)

The bait and shoot hunting technique involves luring deer with kernel corn into safe shooting zones where certified marksmen can fire a lethal shot humanely dispatching the deer. This option is useful within the DMEP designated area where there is not enough land available or there is no hunter access to manage through traditional hunting. Local municipalities that have performed deer management activities report greater success culling deer post hunting season over bait, when deer have fewer food resources. Controlling the selection of sites through a managed bait and shoot culling process provides a high degree of safety to residents and their property.

The Town will continue to search and explore any practical deer management supplement that will help work towards this program's success.

Recommendations

Hunting

The Town of DeWitt encourages private landowners to allow hunting during the normal hunting season on their property where it can be performed legally and safely via traditional hunting, a controlled hunt, or enrollment into the DMAP program. The NYS DEC can provide necessary guidance to interested landowners. Hunting in combination with a culling program can be effective at stabilizing herds.

Culling Procedures

This is the preferred management method for the Town of DeWitt due to the proximity of public roads, schools, dwellings, businesses, and other infrastructure. The United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) Wildlife Services (WS) is the preferred agency to contract for services to implement bait and shoot procedures. Professional marksman will use rifles with sound suppressors for culling. NYS DEC will issue all tags directly to the agency requesting the nuisance permit. See Addendum D for current draft contract.

Dates and Times

USDA Wildlife Services may operate 24 hour shooting, however, most activities occur after dark and before dawn between January 1 and March 31 of the new calendar year. Exact dates and times cannot be predicted or disclosed in advance as it is dependent on several factors including wind direction, temperatures, weather conditions, and participation schedules. Specific locations will be baited 1-3 weeks prior to shooting.

Safety Considerations

Protecting the safety of the property owner, property, pets, other wildlife, bystanders, and participants is of the highest priority of all culling activities. A Press Release was issued in advance of the 2017-2018 operations as will Press Released be issued for future operations. In addition to informing the public of the Towns plans to proceed with bait and call management, it also informs the public that public lands are closed between dusk to dawn and that all outdoor night activity on public and private lands should be curtailed between dusk and dawn and between the months of January through March.

Only certified marksmen handle firearms. Personnel assigned to the project have been trained in safe firearm use, certified as marksmen, and receive refresher training every two years. The team is supervised by the WS wildlife biologist.

Safe shooting zones are established to provide adequate backstop that will greatly reduce the risk of a projectile from traveling off site, ricocheting, or traveling an unknown direction.

Establishment of Bait Stations and Stand Locations

Bait stations and stand locations will be determined by the USDA Wildlife Services with landowner approval.

It is the right of each landowner to restrict the number of individuals on their property, the times and dates participants are allowed on properties, stand locations, baiting locations and access routes. The agreement to use properties can be terminated by landowners at any time.

Deer Takes

In most cases, takes will be restricted to antlerless deer only. However, antlered deer may be considered on a case-by-case basis upon landowner request due to the tremendous amount of irreversible landscape damage caused from scrapes and rubs.

Tracking, Field Dressing and Processing of Deer

Personnel are instructed to only take safe and clean kill shots. However, it is understood that despite all precautions and skill, deer may be wounded, may not expire immediately, may expire on neighboring properties, or may not be found. Every effort possible will be made, including the possible use of trained dogs.

When possible, participants will have pre-authorization to retrieve deer from adjoining properties. In these cases, participants will have the names and phone numbers of neighbors should they need to be contacted regarding deer retrieval. In most instances landowners/neighbors are unaware of deer harvest activities.

Participants may use flashlights to track deer after they are shot or when traveling to/from trees stands; therefore, property owners may notice slow moving lights. In very rare circumstances, tracking operations may continue the following morning with better light. In the event a deer is wounded and mobile, or has expired on a property that the participant does not have pre-approved access to enter, NYS Environmental Conservation or local police will be contacted to assist in locating and/or collecting the deer.

Once a deer is recovered, it is to be removed discretely and cleanly via sled. Field dressing and processing will occur at the facility of the meat processor hired by USDA.

All harvested deer will be donated to the Food Bank of Central New York.

Deer Management Areas-See Addendum E

Deer Management area (DMAs) are defined by attached map and encompassed by the following borders:

Interstate 690 at the North following the westerly boundary south between the Town of DeWitt and the City of Syracuse and the Town of Onondaga accordingly; along the southerly boundary between the Town of Dewitt and the Towns of Lafayette and Pompey accordingly; along the easterly boundary between the Towns of Pompey and Manlius accordingly to the I-690 boundary.

The management area was expanded since 2017-2018 to increase the number of parcels that can be added to the program and increase the overall coverage area and effectiveness.

Adaptive Management Procedures

Adaptive management practices are necessary to remain flexible and cope with complications and unforeseen surprises while making necessary management decisions in the best interest of the ecosystem and the residences. In addition to measuring plant regeneration, tick and deer populations, and residential complaints, the Town of DeWitt will review several other components to determine if the program should continue or be terminated. The Town of DeWitt will provide regular updates to the New York State Department of Environmental Conservation, constituents, and other partners as requested.

Success Measurement Procedures

In order to measure the success of tick and deer population control several methods will be considered.

- Annual surveys of neighbors may be periodically implemented to determine impact on deer-vehicle incidents, property damage, and native plant damage.
- AVID Protocol may be performed annually to assess impacts on forest vegetation.
- Tick drags will be performed bi-annually in areas with landowner's permission and will take place on one day in the fall and one day in the spring.

Public Notification and Citizen Input

The view of citizens, businesses, and interest groups are valuable and will continue to help shape the DMEP. The development, implementation and review of this program are to be transparent. The public is encouraged to attend relevant Town Board meetings, visit the Town webpage at <http://www.townofdewitt.com/WhiteTailedDeer.aspx>, and read the Town Newsletter to stay abreast of the current activities.

Budgetary Considerations

2017-2018: Operations and management were reimbursed through a grant from Assemblywoman Hunter's Office administered by SUNY-ESF.

Of the \$25,000 allocated for implementation and management, \$16,349.58 was paid to USDA for management services with \$8,650.42 reimbursing the Town for soft costs.

See Addendum D

The Town plans to submit a request to Onondaga County for reimbursement of expenses in support of lethal deer management operations.

Project Summary Report

The 2017-2018 report recommends adding additional properties to the program to increase overall coverage, increase the number of deer removed and ultimately lower the amount of property and forest damage as well as reduce human-wildlife conflicts.

The report also recommends continuing to track the amount of damage that is being inflicted by white-tailed deer by way of recording the number of complaints received from residents, carcasses removed from roadways, and/or deer/vehicle collisions.