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Introduction

The objective of the Village of Fayetteville Deer Management Plan (VFDMP) is to safely and effectively reduce the white-tailed deer (*Odocoileus virginianus*) population within the Village of Fayetteville, New York, to address the following issues:

1. Increase in Lyme disease within Village residents and pets.
2. Negative impacts to natural plant communities.
3. Frequent deer-vehicular accidents within the Village and surrounding community.
4. Property damage from white-tailed deer; including, but not limited to residential landscapes.

The ultimate success of this program is defined as reaching a deer population density of eight (8) or fewer per square mile within the Village limits. Numerous studies have shown significant reductions in tick density following a reduction in deer density, with other hosts present. Other measures of success, because they imply progress towards the ultimate goal of eight (8) or fewer deer per square mile, will include:

1. Reduced risk of new Lyme disease incidents, as measured by tick drags. Tick drags may be performed twice annually with CCE, trained local residents, and Village staff. A tick drag involves capture of ticks by dragging a white sheet across an area of tick habitat. Captured ticks will be identified to life stage and species and may be tested for Lyme disease and other tick borne illness. Drags on private property 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. Tick drags conducted as described will provide community education opportunities and information about where ticks are and what species are present. A more robust and consistent sampling design is recommended to determine tick population numbers accurately and how deer management efforts are impacting the tick population.
2. Reduced deer-vehicle collisions as reported by the Town of Manlius Police Department annually.
3. Reduced property damage as reported by Village residents.

This VFDMP will serve as a document Village officials, program participants, and Village residents can turn to for general guidance, rationales for management decisions, and answers to procedural questions. This wildlife management policy is not a program designed to permit recreational hunting within the Village.

The Deer Committee anticipates that the process of managing the deer population within the Village will be a long-term project that will utilize adaptive management to accommodate changing conditions and

lessons learned. Furthermore the Deer Committee anticipates the success of this program is dependent upon the following:

1. Assistance from professional wildlife management organization(s)
2. Utilization of multiple management approaches and supplements
3. Transition from “initial phase” which is anticipated to rely primarily on culling, to a “maintenance phase” which will utilize a controlled hunting program and non-lethal measures.

To ensure the safety of persons and property as well as the quick and humane cull of deer, all NYS, Village and VFDMP rules and regulations must be followed.

Managed Culling Procedures

The Village will employ one of the following options annually:

1. The Village may hire wildlife management professionals to cull deer on its behalf. In the event that the Village hires wildlife management professionals to participate in the VFDMP, the professionals may use a variety of methods to cull deer, including bait and kill (firearms), trap and Kill and archery. See Appendix B: “Lethal Methods” for definitions. Hired professionals must follow all guidelines set forth by the New York State Department of Environmental Conservation.

Managed bait and kill (culling) is the preferred method. USDA Wildlife Services will be used for initial bait and shoot procedures. Professionals will use rifles with sound suppressors for culling. NYS DEC will issue all tags directly to the permit holder.

Trap and kill using box traps may be considered if setback distances for culling cannot be met and the property is located in an area where deer impacts are high.

2. The Village may select a small group of proficient participants who are Village residents or otherwise closely connected with the Village and who successfully complete the permit application process. Participants will most likely use compound bows or crossbows exclusively. See Appendix A: Guidelines for Use of Archers.

All efforts will be made to target antlerless deer.

Dates and Times

- The deer management season within the Village is anticipated to start no earlier than November annually and run no later than April annually.
- All culling activities within Village limits are to take place between one hour before legal sunset and sunrise the following morning.
- The Village of Fayetteville Deer Management Committee will regularly review the success of the program and shorten or extend the season based on deer harvest numbers.

Program Review Activities

The Fayetteville Deer Management Committee will meet regularly during the program to review activities and to determine if the program should continue or be terminated. The Deer Management Committee will provide regular updates to the Village Board.

Public Notification and Citizen Input

The views of local citizens, businesses and interest groups are valuable and helped shape the VFDMP. The development, implementation and review of this program will be transparent and involve citizen input at every step. The public is encouraged to attend and participate at Village Board meetings and public information meetings.

Village residents will be sufficiently notified of deer management program activities via press releases that will be published in local newspapers, the Village newsletter, and postings on the Village website. For the safety of participants and the public, and for an effective program, the Village may withhold details regarding exact locations and times of culling activities.

Additional management supplements are available on the Village website.

Description of Deer Management Areas

Deer Management Areas (DMA's) are defined as properties located within the Village of Fayetteville or owned or managed by the Village of Fayetteville or properties the Village of Fayetteville has been given permission to access for the purposes of this Plan where culling activities are to take place during the VFDMP per NYSDEC deer damage permit. DMA's may include but are not limited to parks, land preserves, commercial and private properties and other village/town properties.

All DMA's will have the written consent of the owner for culling activities and adjacent properties will be notified. It is the right of landowners to restrict the times and dates individuals are allowed on property, stand locations, bait locations and access routes. An agreement to use one's property may be terminated by a landowner at any time.

Appendix A

Guidelines for Use of Archers

Participant Application Process and Selection

The participant application and selection process is designed to enlist proficient individuals that are capable of confidently and safely reducing the deer herd within the Village as humanely as possible. With the exception of hired wildlife management professionals, all participants in the VFDMP must complete the following requirements (as outlined in the participant application packet, which will be made available if/when the village decides to use volunteer archers):

- 1) Proof of residency within the Town of Manlius or a contiguous town.
- 2) Provide a copy of his/her driver's license
- 3) Provide the Village Clerk with the original copy of current NYS hunting license
- 4) Provide the Village Clerk with the original copy of either a) current bowhunting privilege, or b) valid bowhunter education certificate
- 5) Provide completed Participant Application for Deer Management Program
- 6) Provide completed Participant Signature Page, stating they have read and will abide by all rules and regulations
- 7) Provide completed Waiver and Release of Liability
- 8) Provide the completed Archery Proficiency Test page accompanied with stamped and signed target
- 9) Submit to a background check

Deer management tag(s) will be issued to the Village by NYSDEC for subsequent distribution to participants on a first-come, first-served basis. Participant applications will be reviewed and accepted or rejected by the Village of Fayetteville Deer Committee. Preference will be given to individuals who live near the designated deer management areas.

If compound bows or crossbows are used, approved participants will be given a unique six digit code that is to be written in permanent marker on the cock fletching (vane) of every arrow taken afield. This code will only be known by the Village and the participant, and will serve to provide an identifier between a deer and the participant as well as, in the unlikely event that this happens, to identify deer that are shot within the Village by persons not permitted by this program.

Participants will agree to report any form of harassment to the Town of Manlius Police Department.

Safety Considerations

- Top priority of all culling activities will be to protect the safety of participants, property owners, property, pets, other wildlife, and bystanders.
- Participants are required to wear properly functioning safety harness and utilize a lifeline at any moment they leave the ground to prevent falls from treestands while climbing, descending, or in the stands.
- All shots must be either broadside or quartering away and well within the participant's comfort level.
- Maximum shot distance is 25 yards.

- Participants will not be under the influence of drugs or alcohol. The Village has a zero tolerance policy for individuals under the influence of alcohol or drugs.
- Participants must follow motto of “when in doubt, don’t shoot”.

Establishment of Bait Stations and Stand Locations

A representative from the NYSDEC and the Village Deer Management Committee will inspect all deer management areas where culling activities are proposed. Culling activities will take place from ladder-style tree stands with a minimum height of 12 feet (participant feet) above ground level. Bait (corn) will be placed in appropriate locations within 25 yards of stands within 3 weeks prior to culling activities for the purposes of attracting deer. A few small branches or other small vegetation may be trimmed to improve shooting lanes. Treestand locations may be moved slightly or abandoned depending on cull success and observations of participants. Trail cameras may be installed to monitor deer activity to target the best possible times to utilize specific locations. Use of supplemental red lights will allow for safe, highly accurate shots at close range.

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 by contacting the Village Clerk.

Tracking, Field Dressing, and Processing of Deer

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, possibly including the use of trained dogs, to recover all animals or assure that they suffered only a superficial wound that will quickly heal.

When possible, participants will have pre-authorization to retrieve deer from adjoining properties. All participants will have the names and phone numbers of neighbors should they need to be contacted regarding deer retrieval. In most instances landowners/neighbors will not notice activities or deer harvest because it happens quickly and quietly.

Participants may use flashlights to track deer after they are shot or when traveling to/from treestands; 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 onto, the Town of Manlius Police will be contacted to assist in locating and/or collecting the deer.

Once a deer is recovered, it is to be removed discreetly and field dressed at an approved location. Deer may then be transported to a venison processing facility. All harvested deer will be consumed by landowners, or participants, or donated to local food banks and pantries.

Appendix B

The Village of Fayetteville Deer Committee considered the following methods of safely and effectively reduce the white-tailed deer population within the Village of Fayetteville before settling on the current plan of action. These options, as well as any other relevant options, will be reconsidered when applicable.

Alternatives to the VFDMP - Nonlethal Methods

Fencing

Fencing prohibits deer movement via physical barrier. To be effective, fencing must be a minimum of ten feet in height and not possess any openings. This option is not feasible due to the large geographic area of the Village and installation and maintenance costs.

Habitat Alteration

The practice of habitat alteration as a method of white-tailed deer population control would involve altering the vegetative landscape within the village to reduce or eliminate species that deer use for forage and/or shelter. This option is not viable as the extensive habitat alteration and coordination of the village and property owners is not feasible.

Capture and Relocate

The practice of capture and relocate as a method of white-tailed deer population control would involve reducing the deer herd within the Village by capturing deer and moving them elsewhere. This requires a research permit. In addition, 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 surgical sterilization techniques have been employed by some townships in an effort to reduce white-tailed deer populations. When used solely this option is not viable as these techniques have not proven effective in controlling wild populations of deer (Bishop et. al., 2007). However; surgical sterilization may prove to be a valuable management option when used as a component of a larger management strategy, specifically surgical sterilization of deer located in densely populated areas of the Village.

Utilization of TCS Bait Box

This is a box with bait that applies Fipronil (ingredient used in frontline for dogs/cats) to small mammals (mice, squirrels etc). See <http://www.tickboxtcs.com/>. This device shows potential as it has been shown to be effective in test areas in CT and is currently being used by the Cary Institute in their five year tick research project in the Hudson Valley. The downsides to this device are its cost (\$40-50, twice a year per unit), the large number of units required (one every 30-40 linear feet, or 10 per 1/2-1 acre parcel) and it must be installed by a licensed pesticide applicator.

Utilization of Met52 fungal spray

This consists of naturally occurring fungal spores that targets ticks and is applied to landscape twice a season (April/May, and July). This biopesticide shows potential as it poses no risk to humans, has effectively reduced tick populations in test areas in CT and is currently being used by the Cary Institute in

their five year tick research project in the Hudson Valley. The downside to this spray is it is very expensive and will require special approval to be applied in certain areas, such as school grounds.

Management Supplements

Management supplements are actions that, while they do not affect the deer population directly, help work towards the program's success. Examples of management supplements members of the Deer Committee are reviewing are:

- Removal of Village ban on chicken hens and guinea hens, as they have been shown to be helpful with reducing tick populations.
- Utilization of 4-Poster permethrin deer feeding stations, if the NYSDEC and the EPA change their rules to allow them to be used in Upstate NY, as they are documented as an effective means of controlling ticks.
- Distribution of permethrin "tick tubes" to village residents. While "tick tubes" are relatively affordable and can be installed by the homeowner, test areas in Connecticut and New York have shown them to be ineffective at controlling tick populations (Stafford, 2007). This is likely a result of a lack of chipmunks and squirrels utilizing the product.
- Educational outreach aimed at helping village residents learn to minimize the chance of contracting Lyme disease and maximize the chance of recognizing it early when it is contracted.

The Deer Committee will continue to search for any practical management supplement that will help work towards this programs success.

Alternatives to the VFDMP - Lethal Methods

Predator Introduction

The introduction of large mammalian predators would generate safety concerns from residents. And furthermore, the Village 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 (Bishop et. al., 2007).

Poison

Currently there are no toxins, poisons or lethal baits registered for deer control (Bishop et. al., 2007). Furthermore there are no safe methods of delivering lethal doses within the Village limits.

Managed Bait and Kill (Culling)

The bait and kill method involves baiting deer to strategic locations that comply with state law and landowner authorization. This method is useful in large, designated areas where traditional hunting is not allowed.

When a deer is feeding, a qualified sharpshooter kills the animal using a rifle with noise suppression. This method is characterized by careful site selection, trained and experienced sharpshooters, and electronic surveillance to assure a safe cull without damage to human life or property.

A municipality typically contracts with USDA Wildlife Services for the bait and kill method. USDA Wildlife Services oversees the process and conducts culling over a 24- hour period. Actual shooting occurs during

the night. Exact times cannot be predicted and are dependent on wind direction, participation schedules and weather. Bait stations are usually established one to three weeks before the start of culling and are maintained daily. All deer are discreetly removed by sled, and the meat is promptly processed and donated to a food bank.

A managed bait and kill operation ensures a quick and humane cull with the best chance for a meaningful reduction in deer population.

Trap and Kill (Culling)

The trap and kill method uses a small box cage, which is baited with corn to attract deer. It is monitored by a live video feed. When a deer is trapped inside a cage, a wildlife professional approaches the cage and kills the deer by using a captive bolt device. This device kills instantly without pain. It is the same method used by the meat processing industry.

Although the bait and kill method is recommended, other culling and non-lethal control methods may be useful in specific situations and should be considered within the adaptive management approach. The trap and kill method, for example, could be used to reach deer in areas where required setbacks cannot be achieved. Non-lethal methods could be combined in these areas to lower reproductive rates of remaining does.

Traditional Hunting

Traditional hunting utilizing firearms and archery methods to cull white-tailed deer has proven effective at controlling white-tailed deer populations. The use of firearms by the general public is unwise in the densely populated Village. Sportsmen and women must adhere to hunting regulations and seasons as set by the NYSDEC, and pass an education course(s) before purchasing their hunting license(s).

Individual's must use their own carcass tags and are not allowed the use of bait.

Traditional hunting via vertical bows may be a viable option in situations where it can be performed, following all NYS hunting regulations, specifically while maintaining a 150 ft setback from any dwelling unless the hunter has the written permission of the landowner. Furthermore, hunts could move deer from previous areas of refuge, including areas not suitable for the VFDMP and instill a heightened awareness in any remaining deer, thus making them less likely to inhabit the Village.

This option deserves consideration and could be a supplement to the VFDMP.

Controlled Hunting

Controlled hunting is similar to traditional hunting, but with additional focus on reaching specific management goals. Landowners or managers can implement a controlled-hunt format by imposing restrictions such as limiting times or days when hunting can occur, specifying the types of implements that can be used, requiring proficiency tests or other qualifications of participating hunters, or limiting the number of hunters that can use an area simultaneously. The use of DMAP permits can be helpful for municipalities implementing controlled hunts.

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 (NYSDEC, 2015). This program will be available to Village residents bordering Green Lakes State Park during the open hunting season. This option deserves consideration and could be a supplement to the VFDMP.

Appendix C

References

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