

# **Town of Elizabeth Deer Management Program**

## Background Summary

From 2006 through 2013 the Town of Elizabeth fielded an increase in concerns from Town residents related to conflicts with the local deer population. These conflicts ranged from damage to personal property to safety issues associated with vehicle accidents. Initial discussions with the Colorado Division of Wildlife (now Colorado Parks and Wildlife (CPW)) included investigation of education and non lethal mitigation techniques. From those early conversations the issue of unlawful deer feeding was identified and the Town adopted an ordinance to address this due to the State's limited fine structure. As conflicts continued the Town further explored the viability of techniques for managing a deer herd. Among the topics reviewed were trap and transplant, sterilization, education, and various means of lethal control. Considering the goals of the Town, the cost / benefit of the different techniques, and the practicality of each option available the Town has continued to explore the option of lethal control as defined in this document.

## Management Options

The following are summaries of other management alternatives that have been used to address similar urban deer issues. The discussed pros and cons are not all inclusive but demonstrate many considerations regarding each technique. The view of public acceptance in this document is based upon proposals and actions in other communities involved with deer management. Literature citations regarding fiscal costs and other pertinent information stated herein are included at the end of this document. It should be noted that none of the options discussed result in a "one time" fix. All of the options available require an ongoing or maintenance approach resulting from the renewability of the wildlife resource.

**Education / Mitigation** – This alternative has been utilized for years by the Town and Colorado Parks and Wildlife. It is recommended that educational materials continue to be available and referenced regarding deer living in and around the Town. This approach is publicly acceptable, offers citizens options for resolving their individual issues and with modern technology (i.e. the internet) costs of this approach can be minimized. The limitations in resolving urban issues via education alone is that this approach requires 100% citizen participation and compliance regarding interactions with wildlife (such as not feeding deer), education does not affect deer population growth patterns, and the effectiveness of the message is limited by the interest and receptiveness of the public.

**Trap and Transplant** – This alternative typically is attractive to the public as problem animals are removed from sight and attention. Activities related to trapping can be localized limiting liability and visible impact within the community. The implementation of this method is limited by issues such as costs (approximately \$400-\$800 per animal to be borne by the Town), biological factors such as disease transfer, low survival rates of transplanted animals, limited transplant locations of a similar habitat type. Due to biological considerations the trap and transplant option is not considered viable or acceptable by Colorado Parks and Wildlife.

**Fertility Control** – This alternative typically holds some public support. There are varying techniques of applying fertility control within a deer herd. Currently, there is not a fertility control drug that is approved for the use in Mule Deer so physical sterilization techniques would be the most likely method used in this case. This method allows for specific targeting of animals chosen to be sterilized and the location of this option is moderately controllable. The costs typically associated with deer fertility control programs varies from approximately \$300 - \$1000+ per animal. The necessity to use

immobilizing and tranquilizing drugs necessitate exploration of the impacts of chemically altered animals later being consumed as part of the food chain. Given the current state of this management technique this is not a viable option to manage mule deer in Colorado.

**Professional Culling** – This option can be highly effective in controlling population numbers. Typically this option involves the hiring of outside contractors and /or dedication of Town staff and resources to conduct these operations. The ability to selectively harvest the desired animals in desired locations exists. The animals taken may be put to use for human consumption in most cases. These programs have approximate costs of \$150 - \$400 per animal to be borne by the Town. Selection of a culling agent and associated liability with culling activities would be the responsibility of the Town. The State does not currently have a State-wide standard for application and implementation of a contract or municipal culling program, one would likely need to be developed prior to applying for such a program and its implementation.

**Public Harvest Program** – This option can also be highly effective in controlling population numbers. The pros and cons of this option rely heavily upon the method in which it would be implemented. Town staff time would be necessary but may be augmented via oversight provided by a volunteer program coordinator(s). There would be little or no fiscal impact to the Town provided that participants are required to purchase their own license, provide their own equipment and volunteer their time. Harvested animals are legally required to be made ready for human consumption. Mechanisms for licensure allowing animal harvest already exist via regulation by Colorado Parks and Wildlife. For these reasons this document expands upon an implementation description of this option as a preferred alternative for the Town.

#### Public Harvest Program Description and Overview

The deer management program will be implemented to regulate and control the deer population within the Town of Elizabeth. This program is directed toward population management not extirpation of the deer population. The intent of this program is to reduce conflicts with deer, maintain deer herd health, and provide a benefit to those in need via a supplemental food source through a safe and effective deer harvest. This program has been developed in conjunction with numerous parties to ensure the appropriate level of technical expertise has been provided.

Implementation of the deer management program (the program) will require involvement of Town staff, community volunteers, and State Wildlife Agency personnel. The role of each of these positions is listed below:

#### - Town Staff

- Town Administrator
  - Assist in the development of the program.
  - Request licenses from CPW and distribute licenses to program participants as needed to facilitate implementation of the program.
  - Presentation of the program to the Town Board and facilitation of public input processes.
  - Facilitation of any necessary regulatory changes within Town ordinances.
  - Oversight of the program and program coordinator during implementation.
- Chief of Police
  - Assist in the development of the program and advise the Town related to any changes in Town ordinances to ensure public safety is addressed.

- Provide oversight of the program and assist with enforcement of legal issues that arise during implementation of the program.
- Volunteer Positions
  - Program Coordinator(s) / Assistant Coordinator(s)
    - Administer the approved program.
    - Oversee all program activities and operate as the point person in directing the activities of the program participants. This includes but is not limited to:
      - Obtaining permission from landowners where necessary.
      - Contacting landowners adjacent to designated activity areas where necessary.
      - Designation of program activity areas.
      - Program participant selection as outlined in this document.
      - Holding program participants accountable during implementation as outlined in this document.
      - Maintain a record of shots taken and harvest of all participants through out the program.
      - Maintain a record of disposition of harvested animals.
    - Act as the liaison between the Town and the program participants.
  - Program Participants
    - Conduct harvest in compliance with the program rules as stated in this document by demonstrating proficiency in the harvest of deer.
    - Conduct themselves in a professional and appropriate manner as representatives of the program.
- State Wildlife Agency
  - Provide Technical advice during program development and presentations related to the program.
  - Provide Technical advice regarding other management options.
  - Provide advice regarding education and outreach efforts.
  - Provide information regarding the deer population via population counts and harvest data.
  - Program participant selection as outlined in this document.
  - Provide a mechanism to license program participants.
  - Provide assistance and oversight to the program coordinator and program participants.
  - Enforce State laws and regulations related to hunting and hunter harassment.

The program involves identifying appropriate locations within the Town where animals may be harvested with archery equipment in a safe and effective manner. This program required an amendment to Article 8 of Chapter 10 of the Town of Elizabeth Municipal Code. The State of Colorado does not relinquish its statutory authority related to the oversight and management of wildlife in working with the Town, however this is a cooperative management effort. To provide the necessary control the program has multiple layers of accountability, a communication plan, is restricted to specified locations, and utilizes permitted individuals vetted to be proficient with their equipment.

#### Communication Plan

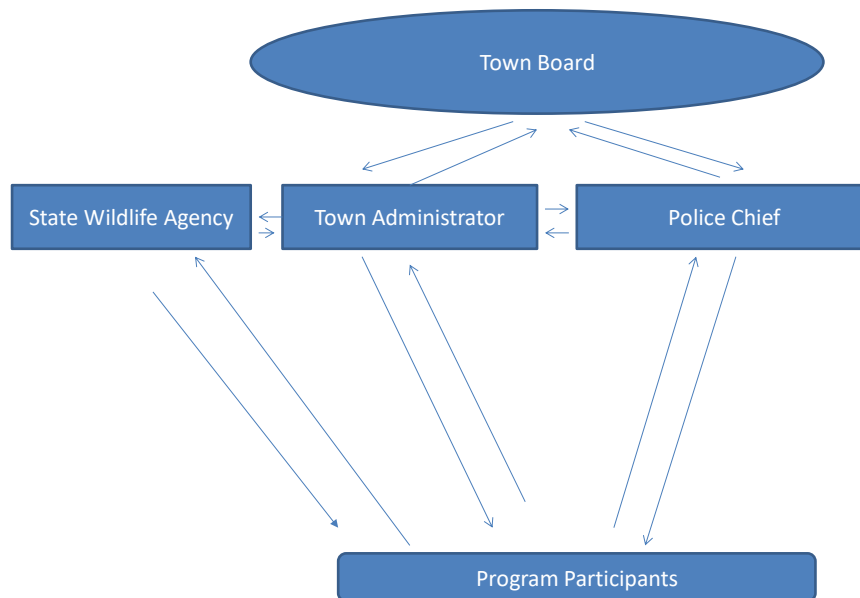
- External Communication
  - Public information regarding the development, implementation and monitoring of this program will be primarily provided via public meetings as the program is presented to the Town Board. The program outline will be included on the Town website as part of the Board Packet. It

is also likely that local media outlets will have a desire to report upon the program and further the dissemination of information.

- As this program is approved to go forward, general information about the program will be posted on the Town's web site for public access.
- As the program is implemented, periodic reports will be provided to the Board of Trustees in a public meeting over the course of the program, and these reports will be available to the public.
- As the program is implemented, a detailed analysis of the effectiveness of the program will be conducted at the conclusion of each implementation season. This analysis will include any lessons learned during the course of the program, and recommendations as to whether the program should be continued as well as any recommended improvements to the program should it continue. This after action report will be available to the public.
- As an ongoing key component of the program, animal counts will be conducted each year as specified in this program. Those animal counts will allow the program to be fine-tuned over time to meet specific population goals and will allow the public to monitor the effectiveness of program over time, as the program is approved and continued.

- Internal Communication

- During program implementation the flow of information will be as illustrated Town Board  
Town Administrator Police Chief State Wildlife Agency Program Coordinator Program  
Participants



Participant Selection

Participants will be required annually to demonstrate their marksmanship proficiency prior to being permitted by the Town to actively participate in this management program. In order to be invited to the proficiency test participants must meet the following minimum criteria:

- Archery and cross bows equipment only
- Shooting a minimum draw weight of 55 pounds with arrows weighing a minimum of 380 grains (points included)

- Previously licensed to hunt in Colorado. Those with more than 5 years prior big game hunting experience in Colorado are preferred.
- Possessing or able to obtain a bowhunter education card.
- Shall have no big game hunting related violations in Colorado in the five years prior to applying and have never been suspended from hunting in Colorado to participate in the program.
- Physically able to lift a 100lb sack to a height of 3 feet high and/or drag dead weight of 100-130lb a distance of 50 yards.

The Town will solicit applicants meeting the above criteria to participate in the deer management program and if necessary implement a random drawing to narrow the pool of applicants to approximately 50 individuals who will be invited to a marksmanship proficiency test.

#### *Proficiency Test*

Invitees will arrive at the testing area prepared as though they are going on a hunt in December. Using only the equipment they bring with them they will be required to shoot Broadhead tipped arrows from multiple shooting positions to simulate expected field conditions at targets placed up to 30 yards away. Preferably 3-D targets will be available for use and a standardized scoring template and system will be used to evaluate shooting accuracy. In addition to 3D targets participants must place 4 out of 5 arrows in a 3 inch diameter circle from distances out to 30 yards to be considered for program participation. Actual shot distances will not be provided but participants may use any equipment they bring to help determine this. Participants may also be asked to conduct memory tasks to further test their mental focus and simulate the additional pressures associated with the implementation of this program. The number of selected archers will be determined by their accuracy, demonstrated safety, and other attributes shown during the testing process. Additional archers may be selected as “on call or back up” participants should members of the core group become unavailable. If an insufficient number of archers of the original 50 invitees pass the test then the Town will decide if there is a need to hold a second test for an additional 50 applicants.

#### *Program Participation Policy /Rules*

Participants will read and sign a statement acknowledging their understanding of, and desire to adhere to the rules of the program. The following rules will be implemented:

##### **- General Program Policy / Rules**

- Participants may be required to sign a waiver releasing the Town of any liability for their personal injury or damage to their personal property used in the execution of the program. The Town, however will insure the participants as agents of the Town against liability for any property damages that may occur while participating in acts associated with the program.
- All participant activities will be directed by and subject to the discretion of the Town or Town designee.
- Program activities will only occur in areas delineated within the program as relayed by the Town or Colorado Parks and Wildlife.
- No participant shall engage anyone who is harassing them related to or during the activities of this program. Any such harassment shall be reported to the Town or Colorado Parks and Wildlife.
- Participants will abide by all State hunting rules and regulations.

- Participants shall have on their person an appropriate hunting license while participating in the program. However participants shall avoid the harvest of more animals than can be effectively handled in one session.
- Whenever possible a support crew of program participants will be available to assist any program participant that harvests an animal. This is intended to facilitate and expedite animal removal, care, and any necessary follow up.
- Maximum shooting distance will be 30 yards, shots over 30 yards may be allowed only to recover a wounded animal or to expedite the expiration of a previously arrowed animal. Throughout the program participants may be required to demonstrate their proficiency via practice sessions where their effectiveness at this range maybe re-evaluated for continued participation.
- When feasible stands elevated at least 5 feet off the ground may be implemented. Use of stands will be determined in advance based upon activity location, back stop, etc... Use of all standard safety equipment while in an elevated stand is required. In situations where stands are not feasible ground blinds may be used to determine shooting location, shooting lanes, etc...
- No shots will be taken at moving (walking or running) animals.
- No shots will be taken at animals that are leaving the delineated management area.
- Deer shall not be driven to the delineated hunting area to provide shot opportunities.
- Shots will be limited to either broadside or slightly quartering angles.
- Time periods for harvest may exclude days when there is snow cover on the ground. Harvest activities shall be appropriately mitigated when it is likely that area youth will be exposed to program activities.
- 51% of harvested game animals shall be donated for human consumption to aid those in need. Remaining animals may be retained by the participant for their use.

**- Program Participant Accountability Policy**

- Each participant will be assigned a program ID badge and number. The badge shall be with the participant at all times while conducting program related functions within the Town. This may include a vehicle badge to be placed in view inside the vehicle while actively participating in the program. This badge should not be on display outside of active participation times.
- Participation in this program is a privilege not a right and participants are subject to removal from the program at the discretion of the Town Police Chief or his designee, and / or the Town Administrator or his designee.
- Participants will report to Colorado Parks and Wildlife any violations they observe of either program rules or other hunting laws and regulations and, if necessary, provide written statements regarding the incident.
- Each participant will provide one dozen of their arrows to be crested with a Hi-Viz style cresting that will be marked sequentially 1-12 and each will be marked with the participants ID number. These arrows shall be submitted for inspection upon demand. Any lost or missing arrows that have not been reported may be cause for removal from the program.
- Animal recovery is mandatory and any wounded or lost animal may be cause for removal from the program upon review of the circumstances surrounding the incident. Participants are expected to assist with animal recovery if a fellow participant needs help.

- No posting of photographs, articles, or comments related to this program in any media will be allowed. If a participant is approached by media regarding the program they will direct the media outlet to the Town Administrator or Colorado Parks and Wildlife.
- Prior to each outing a participant will communicate via text or similar media with the Town or CPW the date, time, and location of where they will be conducting management activities. This information may also be required to be entered on a shared calendar.
- All shots taken will be documented by the program participant via a text or other media to the Town or CPW within 15 minutes of the shot being taken. All harvest will be documented within 24 hours of such harvest. This documentation will be provided to CPW at the end of the season and may be provided in summary to the Town at the conclusion of the program.
- New participants are required to be mentored by participants who have been previously involved in the program prior to hunting solo. Previous participants are expected to make themselves available as mentors to allow new participants opportunity to fulfill this requirement.

- **Leave No Trace Policy** – This policy is designed to respect the values of individuals within the community who may be sensitive to or impacted by elements inherent to the Deer Management Program.

- Participants will move to and from hunting locations wearing “street clothing” with their bow either cased or disguised so as not to be recognizable. This requirement may be waived in the event that a specific ingress/egress to the management area has been designated that provides an adequate level of discretion.
- Upon entering the Stand or Blind location the participant shall adorn such camouflage as is appropriate to minimize or eliminate detection and impact to the public. Use of florescent orange may be required by law depending on the hunting license being used, in such cases compliance with the law will override the requirements of this document.
- Use of an area by the participant is subject to use by other members of the community. If other people are in the vicinity of the Stand/Blind area the participant shall abandon the management action until such time as others are sufficiently clear of the area.
- All attempts will be made to remove any sign (such as blood trails) of the management activity from areas of public access. To facilitate this, Stand locations on or near publicly used areas may be equipped with a 5 gallon bucket of water and a scrub brush either at the participant’s vehicle, the stand/blind site, or other convenient location.
- All harvested animals will be field dressed off site in a time suitable to provide for the human consumption of the animal.
- All harvested animals will be concealed during transport both from the field and while in a vehicle. Field transport may be facilitated by use of a covered wheel barrow or something similar.

#### Management Activity Areas

To closely monitor and control this management program areas of primary consideration for implementation of the Deer Management Program are:

- Public Works Shop Area
- Wastewater Treatment Facility Area
- South 40 Ac Town owned parcel

The Town Manager in consultation with the Police chief, and Colorado Parks and Wildlife may approve additional areas for program use. This may entail seeking permission on properties other than those owned by the Town but within or adjacent to Town limits.

#### Deer Population Monitoring

Given the methods used by the State to estimate deer populations relatively little data has been available regarding the deer that specifically and directly affect the Town. The State has conducted ground based population surveys since 2014. Attached to this plan are documents regarding the survey protocol. These counts in the winter months are the norm for survey methods and will remain an annual part of the program into the future upon approval of the Deer Management Plan. Future management harvest recommendations will be based upon the information obtained via ongoing counts and agreed upon Town and CPW goals.

To maintain a conservative approach the harvest goals for this population were based upon the following:

##### *Assumptions:*

- Not all yearlings are female
- Not all available does get bred
- Typical fawn mortality on the Eastern Plains of Colorado is estimated around 20%.
- 16% adult mortality
- Population count estimates are all inclusive (Doe, Yearling, Buck)

##### ***Recommended Harvest for 2023***

Given the above conditions, and biological assumptions the recommended harvest goal for 2023 is 7-10 antlerless deer.

#### Measures of Success

The implementation of the program is designed to address many areas of concern; some of these concerns have been brought forth proactively and may be difficult to measure. At minimum measures of success for the program include:

- No human safety issues arise due to program implementation.
- Motor vehicle accidents involving deer decline. The baseline measure of these accidents is primarily anecdotal so this may be a measure of perception post implementation vs. pre implementation.
- Density dependant diseases are limited or nonexistent within the local deer herd.
- Trend over the long term toward maintenance of a deer population at a level that balances the needs of the community and a healthy deer herd.
- Wounding or loss of deer is less than 10% of animals harvested.
- Venison from harvested deer is utilized for human consumption and a benefit those in need.
- Financial costs to the Town are minimal.



## Authority

Colorado Parks and Wildlife has the authority to license and regulate the harvest of wildlife as defined in Colorado Revised Statutes. The Town of Elizabeth holds the authority to regulate the discharge of weapons including archery equipment as defined by Town of Elizabeth Municipal Code. These entities are working in conjunction within their respective scopes of authority to implement the Public Harvest Program as described above.

## Literature Citations:

<sup>1</sup> DeNicola, A.J., VerCauteren, K. C., Curtis, P. D., and Hygnstrom, S. E. 2000. Cornell Cooperative Extension Office. *Managing White-Tailed Deer in Suburban Environments, A Technical Guide*. Cornell University, Media and Technology Services Resource Center.

<sup>2</sup> Schaefer, C. M. 2007. College of Natural Resources, University of Wisconsin. *Development of a Community Education Plan for Urban White-Tailed Deer Management*. Masters of Science in Natural Resources (Environmental Education and Interpretation) Thesis.

<sup>3</sup> Ginett, T. F. PHD. University of Wisconsin, Stevens Point.

<http://www.uwsp.edu/wildlife/deer/Deer305.pdf>, Control Methods Publication.

<sup>4</sup> Colorado Division of Wildlife, State of Colorado.

[http://wildlife.state.co.us/NR/rdonlyres/D43D5CEB-6310-433C-BCFF-](http://wildlife.state.co.us/NR/rdonlyres/D43D5CEB-6310-433C-BCFF-E510FA64D2CF/0/2009HuntingIncidentReport.pdf)

E510FA64D2CF/0/2009HuntingIncidentReport.pdf, 2009 Hunting Incident Report. Hunter Education.

<sup>5</sup> Colorado Revised Statutes. State of Colorado Legislative Resources Revised 2010.

[http://www.state.co.us/gov\\_dir/leg\\_dir/olls/colorado\\_revised\\_statutes.htm](http://www.state.co.us/gov_dir/leg_dir/olls/colorado_revised_statutes.htm)