



**White Buffalo Inc.**

Conserving Native Species and Ecosystems

## **Final Deer Management Report**

Village of Cayuga Heights, New York

25 April 2022

Submitted by

Dr. Anthony J. DeNicola

White Buffalo Inc.



## INTRODUCTION

Village of Cayuga Heights officials had voiced concerns over deer-vehicle collisions, risks of Lyme disease, and impacts to landscape vegetation because of a locally abundant deer population. The potential for the furtherance of these conflicts prompted Trustees to address the abundance of deer through research conducted by Cornell University in the early- to mid-2000s. After experiencing no relief, there was further discussion regarding management options. Thorough analysis and consultations revealed that there were no legal lethal methods available. Therefore, they decided to pursue a surgical sterilization research project that was conducted during in 2012-13 resulting in all females in the Village being captured and sterilized.

During fall of 2014 the NYS Legislature passed a law that reduced the discharge setback from occupied structures from 500 ft to 250 ft for crossbows, and 150 ft for archery equipment. This allowed legal access to private property for lethal management actions. After considerable discussion, the Trustees, in consultation with the Chief of Police, decided to pursue a highly structure depredation cull using archery equipment. This involved strategic use of bait to control deer movements and the most advanced crossbows to ensure humane treatment of animals. In winter 2016, the archery culling was followed by a surgical sterilization phase to address the remaining untreated females. The final year of the archery depredation culling program was implemented in 2017, because NYSDEC began to enforce a statute that prohibits placing bait within 300 ft of a roadway. Given this development, the only remaining lethal option was to opportunistically capture deer using remote immobilization equipment from roadways, then euthanize them via lethal injection while they were under anesthesia. During the first year (2018) of capture and euthanasia efforts 45 deer were removed from the Village. In 2019, 15 deer were removed; with a remnant population of <10 deer. In 2020, no deer management efforts were conducted due to the Covid-19 pandemic. In 2021, 21 deer were removed; with a remnant population of <10 deer. The purpose of this report is to summarize the fourth year of the capture and euthanasia deer management program.

## SITE DESCRIPTION

The Village of Cayuga Heights (VCH) contains a matrix of suburban and commercial development, parks, and other open-spaces. The absence of any deer management, combined with fertile soils and good-quality habitat, allowed the local deer population to increase to a level



incompatible with some land-use and human activities prior to our involvement. Although deer physical condition is not an issue, there is ongoing concern regarding numerous deer/vehicle collisions, Lyme disease risks, and damage to garden and landscape plantings. Camera surveys conducted by Cornell University documented a ~30% population decline one year after the surgical sterilization research project was initiated. After the conclusion of capture and euthanasia efforts in 2021 the population was maintained at ~96% of the initial population size (i.e., ~225 deer reduced to <10 deer). The purpose of the capture and euthanasia management program is to maintain the local deer population at the very low densities achieved in 2019.

## METHODS

We followed the permit conditions outlined in the NYSDEC Deer Damage Permit #25467. We remotely immobilized deer using darting equipment from a vehicle with collaboration from the VCH Police Department. Deer were administered 190 mg Telazol (tiletamine HCl + zolazepam HCl) and 175 mg xylazine HCl. After deer were sufficiently anesthetized, they were retrieved from the field, and transported to a designated location to be euthanized using a lethal IV injection of potassium chloride.

## RESULT AND DISCUSSION

Deer capture and euthanasia activities were conducted from 18-21 April 2022. We removed 19 deer from the Village during three nights of operations (see Table 1). A complete list of the deer lethally removed can be found in Appendix A.

Sixty-eight percent of the harvest was female and 89% were antlerless (i.e., includes male fawns). If culling efforts were not conducted this year the population would have increased significantly through immigration and fawning this spring. In contrast, we have maintained the low densities achieved in 2019.

**Table 1.** Sex and age class of deer captured and euthanized in the Village of Cayuga Heights, New York from 18-21 April 2022.

AGE	# MALE (%)	# FEMALE (%)	# COMBINED (%)
Yearling/Adult	2 (11)	11 (57)	13 (68)
Fawns	4 (21)	2 (11)	6 (32)
Total	6 (32)	13 (68)	19 (100)



Our continued inability to use bait legally leaves the Village leadership with only one option to maintain the local deer population. Given the past four years of successful capture and euthanasia removal, we recommend that the Village continue using capture and euthanasia or the population will increase given the documented rates of immigration. The capture and euthanasia approach also eliminates the need for future sterilization efforts, given the capture methods are the same.

### **ACKNOWLEDGEMENTS**

We would like to thank the following individuals for assistance provided prior to and during the project; Mayor Linda Woodard, Chief Jerry Wright and his staff (especially James Manning) from the Village of Cayuga Heights Police Department. We also greatly appreciate the support, through permitting from NYSDEC (Courtney LaMere).



**APPENDIX A. Deer Harvest Data 18-21 April 2022, Cayuga Heights, NY**

<b>Date</b>	<b>Carcass Tag #</b>	<b>Age</b>	<b>Sex</b>	<b>Location</b>	<b>Notes</b>
4/18/22	126891	Adult	Female	Renwick	
4/18/22	126892	Fawn	Male	Wyckoff	
4/18/22	126893	Adult	Female	Wyckoff	
4/18/22	126894	Adult	Male	Cayuga Heights	
4/18/22	126895	Adult	Female	Triphammer	
4/18/22	126896	Fawn	Female	Triphammer	
4/18/22	126897	Fawn	Female	Triphammer	
4/18/22	126898	Adult	Female	Triphammer	
4/18/22	126901	Adult	Female	Cayuga Heights	
4/18/22	126902	Adult	Female	Cayuga Heights	
4/19/22	126899	Adult	Female	Renwick	
4/19/22	126900	Fawn	Male	Spruce	
4/19/22	126903	Adult	Female	Simsbury	
4/19/22	126904	Adult	Female	Pleasant Grove	
4/19/22	126905	Adult	Female	Hanshaw	
4/20/22	126906	Adult	Male	Highland	
4/20/22	126907	Fawn	Male	Renwick	
4/20/22	126908	Fawn	Male	Wyckoff	
4/20/22	126909	Adult	Female	Renwick	