FINAL REPORT

2023 Deer Management Program

Town and Country, Missouri

by

White Buffalo, Inc.

21 January 2023

INTRODUCTION

The City of Town and Country contains a matrix of suburban and commercial development, parks, and other open spaces. The absence of any deer management combined with fertile soils 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 deervehicle collisions and damage to garden and landscape plantings. This is the 13th year in which a deer population management program was implemented.

METHODS

Pre-baiting was conducted from 23 December 2022 - 10 January 2023. Sharpshooting efforts were conducted from 11 - 17 January 2023. Seven days of fieldwork were required to achieve the harvest of 50 deer.

We followed the operations protocol outlined in the contract and changes agreed to verbally prior to the onset of site preparations. Eleven sites were available throughout the area of operation.

RESULTS

The entire data set generated from harvested deer is represented in the spreadsheet entitled "City of Town and Country - Deer Harvest: 11 – 17 January 2023 (Appendix A). The overall harvest demographics are summarized in Table 1. Harvest by day is summarized in Table 2. Harvest breakdown based on Ward is summarized in Table 3. Effort per Ward is summarized in Table 4. We expended 143.5 person-hours for sharpshooting activities (50 deer harvested), resulting in 2.87 person-hours per deer harvested. This was nearly identical to 2022 effort (2.81 person-hours per deer).

Table 1. Sex and age class of deer harvested in Town and Country, Missouri from 11–17 January 2023.

AGE	# MALE (%)	# FEMALE (%)	# COMBINED
Yearling/Adult	22 (44%)*	22 (44%)	44 (88%)
Fawns	2 (4%)	4 (8%)	6 (12%)
Total	24 (48%)	26 (52%)	50

^{*}Three with antlers less than 3" or shed

Table 2. Number of deer harvested by day during the 7 days of field operations.

	#		#		#		#
DATE	Harvested	DATE	Harvested	DATE	Harvested	DATE	Harvested
1/11/2	14	1/13/23	8	1/15/23	7	1/17/23	4
3							
1/12/2	6	1/14/23	7	1/16/23	4		
3							

Table 3. Deer harvest by Ward

	#	
Ward	Harvested	
1	2	
2	34	
3	6	
4	8	

Table 4. Effort by Ward

Ward	Percentag e of Sites	Percentag e of Seated Attempts	Percentag e of Harvest
1	9%	7%	4%
2	55%	65%	68%
3	9%	7%	12%
4	27%	21%	16%

Population estimates

No population estimate was conducted during this year's program.

DISCUSSION

Eleven sites were used as part of the 2022/2023 Town and Country, MO deer management program. Ten of these locations had been used in previous years. One new site was added to the property list in Ward 2. The new site in Ward 2 was utilized one evening and resulted in the harvest of 4 deer.

Ward 2 continued to produce the highest removal numbers, accounting for 68% of the overall harvest and containing more sites than the other three Wards combined. This pattern has been stable throughout the years.

Weather plays a significant role in how shooting efforts are distributed. Shortduration programs present unique weather challenges as the conditions needed to diversify efforts have the potential to be elusive. Wind direction is of primary importance. Deer use their olfactory sense to identify risks in their environment. Although suburban deer appear indifferent to human activity, if they smell human presence, and cannot identify their location, it becomes a risk. In order to be successful, deer management staff need to insert themselves into the deer's environment without being detected. To do this we need specific wind patterns at each location we have selected for sharpshooting activities. We expect the predominant wind to be northwest during the winter months in Missouri. As a result, most sharpshooting locations are oriented to take advantage of this prevailing wind. During the 2023 project only three northwest winds were recorded during our operation window, 16:00–21:00 each day. This can pose a problem as using a site on a marginal wind direction increases the likelihood of detection and potentially the failure of removal efforts. Unseasonably warm weather conditions, in addition to a heavy mast crop, likely diminished the overall harvest. Warm winter weather presents two main challenges to suburban deer management; the energy requirements for deer are lower in mild weather resulting in less consistency in arrival at bait sites, and human activity increases which can result in disruption of deer travel patterns. Deer still utilize bait under these conditions but their arrival times tend to be more sporadic and result in decreased operational efficiency.

Harvest results from specific sites ranged from a high of 8 deer to a low of 1. The most productive site was in Ward 2 and contributed 16% to the total.

An archery hunt was implemented in Queeny Park during the 2020–2021 hunting season. This hunt resulted in the removal of 30, 37 and 27 deer in 2020, 2021, and 2022, respectively. Harvest through this program should be additive to the ongoing management efforts in Town and Country.

Looking forward, the program would benefit by obtaining additional access points in the following areas: 1) the eastern boundary of Queeny Park, and 2) along Topping Road. This recommendation is based on the number of deer generally observed in these areas in combination with a current lack of access to these areas for deer management purposes.

There are two notable items from this year's effort. First is the number of coyotes observed. Coyotes were either directly observed or photos were captured on game cameras at every deer management site except for the one in Mason Valley. While in previous years, we would occasionally observe coyotes or capture photos of them, this year it was a common occurrence. The second was the notable lack of juvenile deer.

Unique to this year's management efforts was the donation of 15 deer to the Saint Louis Zoo's American Red Wolf Conservation and Recovery Facility. The Missouri Department of Conservation permitted the donation of up to 20 deer carcasses from the Town and Country Deer Management program to the recovery effort.

We would like to thank the following individuals and organizations for assistance provided prior to and during the culling period: Bob Shelton, Town and Country Police Department, Tom Thousand, Erin Shank (Missouri Department of Conservation), all the cooperating homeowners, and John's Butcher Shop (venison processing for charitable donation).

Appendix A

City of Town and Country – Deer Harvest: 11–17 January 2023

Number	Date	Street	Se x	Age
1	1/11/23	Thornfield	F	5.5+
2	1/11/23	Thornfield	F	5.5+
3	1/11/23	Thornfield	F	4.5
4	1/11/23	Thornfield	F	1.5
5	1/11/23	Thornfield	F	1.5
6	1/11/23	Thornfield	М	2.5
7	1/11/23	Dry Ridge	М	2.5
8	1/11/23	Dry Ridge	М	2.5
9	1/11/23	Dry Ridge	М	2.5
10	1/11/23	Dry Ridge	F	5.5+
11	1/11/23	Dry Ridge	F	3.5
12	1/11/23	Dry Ridge	F	2.5
13	1/11/23	Dry Ridge	F	2.5
14	1/11/23	Dry Ridge	F	5.5+
15	1/12/23	Thornhill	F	3.5
16	1/12/23	Thornhill	F	1.5
17	1/12/23	Thornhill	F	0.5
18	1/12/23	Mason	F	3.5
19	1/12/23	Mason	М	2.5
20	1/12/23	Mason	М	2.5
21	1/13/23	Old Colony	F	2.5
22	1/13/23	Old Colony	F	0.5
23	1/13/23	Old Colony	М	1.5
24	1/13/23	Old Colony	М	1.5
25	1/13/23	Old Colony	М	2.5
26	1/13/23	Old Colony	F	1.5
27	1/13/23	Old Colony	F	3.5
28	1/13/23	Pebble Acres	М	2.5
29	1/14/23	Outer 40	F	4.5
30	1/14/23	Outer 40	М	1.5
31	1/14/23	Outer 40	М	3.5
32	1/14/23	Outer 40	М	1.5
33	1/14/23	Outer 40	М	3.5
34	1/14/23	Hickory Woods	М	2-5
35	1/14/23	Hickory Woods	М	1.5

36	1/15/23	Weidman	F	2.5
37	1/15/23	Weidman	М	1.5
38	1/15/23	Weidman	М	0.5
39	1/15/23	Weidman	М	2.5
40	1/15/23	Weidman	М	4.5
41	1/15/23	Weidman	М	0.5
42	1/15/23	Thornfield	F	0.5
43	1/16/23	Featherstione	F	6.5+
44	1/16/23	Featherstione	F	3.5
45	1/16/23	Featherstione	F	3.5
46	1/16/23	Featherstione	М	4.5
47	1/17/23	Bellerive CC	М	1.5
48	1/17/23	Bellerive CC	М	2.5
49	1/17/23	Bellerive CC	F	2.5
50	1/17/23	Bellerive CC	F	0.5