

FINAL REPORT
2022 Deer Management Program
Town and Country, Missouri
by
White Buffalo, Inc.
3 February 2022

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 numerous deer-vehicle collisions and damage to garden and landscape plantings. This is the 11th year in which a deer population management program was implemented.

METHODS

Pre-baiting was conducted from 3–22 January 2022. Sharpshooting efforts were conducted from 23–29 January 2022. Seven days of fieldwork were required to achieve the harvest of 51 deer.

We followed the operations protocol outlined in the contract and changes agreed to verbally prior to the onset of site preparations. Twelve 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: 23–29 January 2022 (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 (51 deer harvested) resulting in 2.81 person-hours per deer harvested. This was nearly identical to 2020 effort (2.83 person-hours per deer).

Table 1. Sex and age class of deer harvested in Town and Country, Missouri from 23–29 February 2022.

AGE	# MALE (%)	# FEMALE (%)	# COMBINED
Yearling/Adult	28 (55%)	15 (29%)	43 (84%)
Fawns	5 (10%)	3 (6%)	8 (16%)
Total	33 (65%)	18 (35%)	51

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

DATE	# Harvested	DATE	# Harvested	DATE	# Harvested	DATE	# Harvested
1/23/22	5	1/25/22	5	1/27/22	6	1/29/22	8
1/24/22	9	1/26/22	16	1/28/22	2		

Table 3. Deer harvest by Ward

Ward	# Harvested
1	3
2	28
3	17
4	3

Table 4. Effort by Ward

Ward	Percentage of Sites	Percentage of Seated Attempts	Percentage of Harvest
1	17%	7%	6%
2	58%	72%	55%
3	8%	14%	33%
4	17%	7%	6%

Population estimates

See attached population estimation report.

DISCUSSION

Twelve sites were initially selected and prepared for deer management activities. Ten sites were used as part of the 2022 Town and Country, MO deer management program. Nine of these locations had been used in previous years. Three new sites were added to the property list; one each in Wards 1, 2, and 4. Lack of deer activity at the new site in Ward 1 precluded its use and was eventually abandoned. The new site in Ward 2 was utilized one evening and resulted in no harvest. The new site in Ward 4 resulted in the successful harvest of three deer.

Ward 2 continued to produce the highest removal numbers accounting for 55% of the overall harvest and contained 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. Short duration 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 2022 project only one northwest wind was 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. An appropriate wind direction prevented the use of one site completely and delayed the use of a second until the last day of the project.

Harvest results from specific sites ranged from a high of 17 deer to a low of 0. The most productive site was in Ward 3 and contributed 33% to the total. This site, located on the western side of Queeny Park, has been a top producing site since the inception of the program.

An archery hunt was implemented in Queeny Park during the 2020–2021 hunting season. This hunt resulted in the removal of 30 deer according to the Missouri Department of Conservation (MDC) website. Results from the 2021–2022 season increased to 37. Harvest through this program should be additive to the ongoing management efforts in Town and Country. During Distance Sampling (deer population estimate), numerous deer were still observed along Mason Road where it adjoins Queeny Park.

In cooperation with MDC, 24 blood samples and oral swabs have been submitted to the United State Department of Agriculture Animal and Plant Health Inspection Services Wildlife Services Division, to be included in a larger study of COVID-19 surveillance in white-tailed deer.

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 observed in these areas

during the Distance Sampling survey, in combination with a current lack of access to these areas for deer management purposes.

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, Tim Randick, 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: 23–29 January 2022

DATE	HARVEST #	SEX	AGE	Street
1/23/22	1	M	0.5	Thornhill
1/23/22	2	M	0.5	Thornhill
1/23/22	3	M	2.5	Thornhill
1/23/22	4	F	1.5	Thornhill
1/23/22	5	M	2.5	Thornhill
1/24/22	6	F	3.5	Mason
1/24/22	7	F	0.5	Mason
1/24/22	8	F	1.5	Mason
1/24/22	9	M	3.5	Old Colony
1/24/22	10	M	3.5	Old Colony
1/24/22	11	M	2.5	Old Colony
1/24/22	12	M	2.5	Old Colony
1/24/22	13	F	1.5	Old Colony
1/24/22	14	F	4.5	Old Colony
1/25/22	15	M	3.5	Thornfield
1/25/22	16	M	3.5	Thornfield
1/25/22	17	F	6.5	Thornfield
1/25/22	18	F	4.5+	Thornfield
1/25/22	19	M	4.5	South Outer 40
1/26/22	20	M	4.5+	Dry Ridge
1/26/22	21	M	3.5	Dry Ridge
1/26/22	22	M	2.5	Dry Ridge
1/26/22	23	F	3.5	Dry Ridge
1/26/22	24	M	3.5	Weidman
1/26/22	25	M	1.5	Weidman
1/26/22	26	F	1.5	Weidman
1/26/22	27	F	2.5	Weidman
1/26/22	28	F	4.5+	Weidman
1/26/22	29	F	0.5	Weidman
1/26/22	30	F	0.5	Weidman
1/26/22	31	M	3.5	Weidman
1/26/22	32	M	1.5	Weidman
1/26/22	33	F	1.5	Weidman
1/26/22	34	F	6.5+	Weidman
1/26/22	35	M	0.5	Weidman
1/27/22	36	M	1.5	Pebble Valley

1/27/22	37	F	6.5+	Pebble Valley
1/27/22	38	F	2.5	Pebble Valley
1/27/22	39	M	1.5	Thornfield
1/27/22	40	M	2.5	Thornfield
1/27/22	41	M	3.5	Thornfield
1/28/22	42	M	2.5	Thornhill
1/28/22	43	M	0.5	Thornhill
1/29/22	44	M	2.5	Hickory Woods
1/29/22	45	M	2.5	Hickory Woods
1/29/22	46	M	1.5	Hickory Woods
1/29/22	47	M	0.5	Weidman
1/29/22	48	M	1.5	Weidman
1/29/22	49	M	1.5	Weidman
1/29/22	50	M	2.5	Weidman
1/29/22	51	M	3.5	Weidman