



White Buffalo Inc.

Conserving Native Species and Ecosystems

FINAL REPORT

2016 Deer Management Program

Town and Country, Missouri

by

White Buffalo Inc.

Ryan Rodts

12 February 2016



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 seventh year in which a deer population management program was implemented.

METHODS

Pre-baiting was conducted from 30 December 2015 – 9 January 2016. Sharpshooting efforts were conducted from 10 - 31 January 2016. Twenty two days of fieldwork were required to achieve the harvest of 210 deer.

We followed the operations protocol outlined in the contract and changes agreed to verbally prior to the onset of site preparations. Nineteen sites were available throughout the area of operation. One site was not used during the removal period due to lack of consistent deer activity.

RESULTS

The entire data set generated from harvested deer is represented in the spreadsheet entitled "City of Town and Country - Deer Harvest: 10-31 January 2016 (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. We expended 439.5 person-hours for the sharpshooting activities (210 deer harvested) resulting in 2.09 person hours per deer harvested. This was a slight increase over the previous year's effort (1.95 person hours per deer).

Table 1. Sex and age class of deer harvested in Town and Country, Missouri from 10-31 January 2016.

AGE	# MALE (%)	# FEMALE (%)	# COMBINED
Yearling/Adult	63 (30%)*	88(42%)	151 (72%)
Fawns	29 (14%)	30 (14%)	59 (28%)
Total	92 (44%)	118 (56%)	210 (100%)

*Five adult males had shed their antlers



Table 2. Number of deer harvested by day during the 22 days of field operations.

DATE	# Harvested	DATE	# Harvested	DATE	# Harvested	DATE	# Harvested
1/10/16	7	1/16/16	9	1/22/16	9	1/27/16	11
1/11/16	16	1/17/16	11	1/23/16	12	1/28/16	2
1/12/16	11	1/18/16	8	1/24/16	10	1/29/16	6
1/13/16	11	1/19/16	11	1/25/16	8	1/30/16	4
1/14/16	12	1/20/16	6	1/26/16	14	1/31/16	7
1/15/16	10	1/21/16	15				

Table 3. Deer harvest by Ward

Ward	# Harvested
1	36 (17%)
2	85 (40%)
3	60 (29%)
4	29 (14%)

Pregnancy rates

It was too early in pregnancy to identify and count fetuses.

Population estimates

See attached population estimation report.



DISCUSSION

The reduction in acreage requirement in 2014, from five to two acres, benefitted the program again in 2016 by the inclusion of 4 additional new properties. Deer harvest on these properties accounted for 25 deer, 12% of the total harvest. Two of these properties were located in Ward 3 and were intended to address multiple complaints from residents in the Brook Mill area and deer vehicle collisions along State Highway 141. These two sites contributed 5% to the harvest total. The other two properties were located in Ward 1 and 2, contributing seven deer each to the harvest total.

Although we had moderate success on the sites in the Brook Mill area, we expect the municipality will still receive an above average number of complaints from residents. Feeding activity, by at least one resident, tremendously impacted our success. On 17 January 2016 twenty-four deer were observed in the resident's yard feeding and only six were harvested from an adjoining property where we have access. Officials from the municipality informed the resident of the deer feeding ordinance and the resident agreed to stop feeding. The historical nature of the residents feeding activity had a lasting impact and the second harvest attempt on our proximate access site resulted in one deer harvested, while six deer were observed in the neighboring yard.

Ward 2 continued to produce the highest removal numbers accounting for 40% of the harvest while contributing only 31% of the available access. The harvest result in Ward 3 was 29%, a slight decrease from 31% the previous year. Ward 1 and 4 showed slight increases in harvest success up 3% and 4% respectively. Two sites, in Ward 4, accounted for 14% of the total harvest.

Harvest results from specific sites ranged from a high of 20 deer to a low of three for sites where effort was exerted. Twenty-five percent of the sites had 15 or more deer culled and contributed 33% of the total. Two sites along Queeny Park, in Ward 3, contributed 35 deer to the total resulting in 17% of the harvest. It is evident that Queeny Park still harbors very high deer densities that overlap adjoining neighborhoods.

Even when doubling the harvest from 2015 levels showed very little decrease in operational efficiency. This indicates no diminishing returns in allocation of effort per deer harvested, at the current reduction level. We would expect to see effort per deer to increase substantially as the population level is reduced to goal density.

Weather conditions for the majority of the program were near ideal. During the last four days of the program, temperatures in the 50-65 degree Fahrenheit range diminished the harvest rate. Deer were less pressed to fulfill their energy requirements and decreased their activity at our bait sites. We expended 18% of our total effort during the 4-day period, which resulted in only 9% of the total harvest.



Overall the program would benefit from the inclusion of access along Topping Road. During the distance sampling survey numerous deer were sighted along Topping Road and its intersecting streets which resulted in ~22% of the total observations. Additionally, access in the Manor Hill/Woodmark area would benefit the program. Numerous deer were observed in this area and are not being addressed at our sole access point along Thornhill Road.

Seventy-five of the adult deer harvested were tagged and labeled for Chronic Wasting Disease (CWD) testing by Missouri Department of Conservation (MDC). This was part of a larger sampling effort by MDC to screen for the disease in areas proximate to the detection made previously in Franklin County.

We would like to thank the following individuals and organizations for assistance provided prior to and during the culling period; Gary Hoelzer, Tom Thousand, Gene Russo, Fred Meyland-Smith, Lynn Wright, Erin Shank (Missouri Department of Conservation) and John's Butcher Shop (venison processing for charitable donation).



Appendix A

City of Town and Country – Deer Harvest: 10-31 January 2016

DATE	HARVEST #	CWD TAG #	SEX	AGE	Street Address
1/10/16	1	501	M	2.5	Des Peres
1/10/16	2	502	M	1.5	Des Peres
1/10/16	3	511	M	1.5	Conway Hill
1/10/16	4	512	F	2.5	Conway Hill
1/10/16	5		F	.5	Conway Hill
1/10/16	6	513	M	1.5	Conway Hill
1/10/16	7	514	M	3.5	Conway Hill
1/11/16	8	503	F	4.5	Dry Ridge
1/11/16	9	504	M	4.5	Dry Ridge
1/11/16	10	505	M	1.5	Dry Ridge
1/11/16	11	506	F	3.5	Dry Ridge
1/11/16	12	507	F	2.5	Dry Ridge
1/11/16	13	508	F	2.5	Dry Ridge
1/11/16	14		F	.5	Dry Ridge
1/11/16	15	515	F	1.5	Muir Field
1/11/16	16		M	.5	Muir Field
1/11/16	17	516	M	1.5	Muir Field
1/11/16	18	517	M	2.5	Muir Field
1/11/16	19	518	M	2.5	Muir Field



1/11/16	20	519	M	1.5	Muir Field
1/11/16	21	520	F	3.5	Muir Field
1/11/16	22		F	.5	Muir Field
1/11/16	23	531	M	3.5	Muir Field
1/12/16	24	532	F	1.5	Town and Country Est.
1/12/16	25	533	F	3.5	Town and Country Est.
1/12/16	26	534	F	4.5	Town and Country Est.
1/12/16	27	535	F	2.5	Town and Country Est.
1/12/16	28		M	.5	Town and Country Est.
1/12/16	29		F	.5	Town and Country Est.
1/12/16	30		M	.5	Town and Country Est.
1/12/16	31	509	M	1.5	Mason Wood
1/12/16	32	510	F	4.5	Mason Wood
1/12/16	33	521	F	4.5	Mason Wood
1/12/16	34	522	F	2.5	Mason Wood
1/13/16	35	536	M	2.5	Glaize view
1/13/16	36	537 (UA)	M	3.5	Glaize view
1/13/16	37		F	.5	Glaize view
1/13/16	38	538	M	1.5	Glaize view
1/13/16	39	539	F	1.5	Glaize view
1/13/16	40	540	F	2.5	Glaize view
1/13/16	41		M	.5	Glaize view
1/13/16	42	523	F	1.5	Weidman



1/13/16	43	524	F	1.5	Weidman
1/13/16	44	525	F	4.5	Weidman
1/13/16	45	526	F	2.5	Weidman
1/14/16	46	541	M	1.5	Thornfield
1/14/16	47	542	M	2.5	Thornfield
1/14/16	48	543	M	2.5	Thornfield
1/14/16	49	544	M	1.5	Thornfield
1/14/16	50		M	.5	Thornfield
1/14/16	51	545	M	3.5	Thornfield
1/14/16	52	546	M	2.5	Thornfield
1/14/16	53	527	M	1.5	Barrett Station
1/14/16	54	528	M	1.5	Barrett Station
1/14/16	55	529	M	1.5	Barrett Station
1/14/16	56	530	M	1.5	Barrett Station
1/14/16	57	552	M	1.5	Barrett Station
1/15/16	58	547	F	4.5	Old Colony
1/15/16	59	548	F	1.5	Old Colony
1/15/16	60	549	M	1.5	Old Colony
1/15/16	61	550	M	1.5	Old Colony
1/15/16	62	561	M	3.5	Old Colony
1/15/16	63	562	M	1.5	Old Colony
1/15/16	64	551	M	1.5	Featherstone
1/15/16	65	552	F	3.5	Featherstone



1/15/16	66	553	M	4.5	Featherstone
1/15/16	67		F	.5	Featherstone
1/16/16	68	563	F	1.5	Mason Wood
1/16/16	69		M	.5	Mason Wood
1/16/16	70	564	F	2.5	Mason Wood
1/16/16	71	565	F	1.5	Mason Wood
1/16/16	72	566	F	1.5	Mason Wood
1/16/16	73		F	.5	Mason Wood
1/16/16	74	581	M	3.5	Dry Ridge
1/16/16	75	583	F	1.5	Dry Ridge
1/16/16	76		M	.5	Dry Ridge
1/17/16	77	582	F	3.5	Brookmill
1/17/16	78		M	.5	Brookmill
1/17/16	79	584	M	1.5	Brookmill
1/17/16	80	585	M	4.5	Brookmill
1/17/16	81	586	F	2.5	Brookmill
1/17/16	82		M	.5	Brookmill
1/17/16	83	567	F	2.5	Sellenriek
1/17/16	84	568	M	1.5	Sellenriek
1/17/16	85	569	F	1.5	Sellenriek
1/17/16	86	570	F	1.5	Sellenriek
1/17/16	87	571	M	1.5	Sellenriek
1/18/16	88	572	F	2.5	Thornfield



1/18/16	89	573	F	3.5	Thornfield
1/18/16	90		M	.5	Thornfield
1/18/16	91		M	.5	Thornfield
1/18/16	92		F	.5	Featherstone
1/18/16	93	587	M	2.5	Featherstone
1/18/16	94	588	M	1.5	Featherstone
1/18/16	95		F	.5	Featherstone
1/19/16	96		F	1.5	Glaize view
1/19/16	97		M	1.5	Glaize view
1/19/16	98		M	2.5	Glaize view
1/19/16	99		F	5.5	Glaize view
1/19/16	100		F	2.5	Glaize view
1/19/16	101		M	3.5	Weidman
1/19/16	102		F	2.5	Weidman
1/19/16	103		M	2.5	Weidman
1/19/16	104		F	2.5	Weidman
1/19/16	105		F	.5	Weidman
1/19/16	106		F	.5	Weidman
1/20/16	107		F	4.5	Mason
1/20/16	108		F	1.5	Mason
1/20/16	109		F	6.5+	Town and Country Est.
1/20/16	110		F	5.5	Town and Country Est.
1/20/16	111		F	3.5	Town and Country Est.



1/20/16	112		M	.5	Town and Country Est.
1/21/16	113		F	2.5	Horton Place
1/21/16	114		M	.5	Horton Place
1/21/16	115		F	4.5	Horton Place
1/21/16	116		M	.5	Horton Place
1/21/16	117		M	.5	Horton Place
1/21/16	118		M	1.5	Sellenriek
1/21/16	119		F	.5	Sellenriek
1/21/16	120		F	1.5	Sellenriek
1/21/16	121		M	3.5	Sellenriek
1/21/16	122		F	5.5	Sellenriek
1/21/16	123		F	2.5	Sellenriek
1/21/16	124		F	6.5+	Sellenriek
1/21/16	125		F	.5	Sellenriek
1/21/16	126		F	.5	Sellenriek
1/21/16	127		M	.5	Sellenriek
1/22/16	128		F	2.5	Mason Wood
1/22/16	129		F	.5	Mason Wood
1/22/16	130		F	3.5	Mason Wood
1/22/16	131		M	.5	Mason Wood
1/22/16	132		F	3.5	Conway Hill
1/22/16	133		F	.5	Conway Hill
1/22/16	134		M	4.5	Conway Hill



1/22/16	135		M	3.5	Conway Hill
1/22/16	136		M	2.5	Conway Hill
1/23/16	137		F	2.5	Mason
1/23/16	138		F	4.5	Mason
1/23/16	139		F	2.5	Mason
1/23/16	140		F	.5	Mason
1/23/16	141		M	.5	Mason
1/23/16	142		F	3.5	Muir Field
1/23/16	143		M	.5	Muir Field
1/23/16	144		M	1.5	Muir Field
1/23/16	145		M	.5	Muir Field
1/23/16	146		F	.5	Muir Field
1/23/16	147		F	6.5+	Muir Field
1/23/16	148		M	2.5	Muir Field
1/24/16	149		F	3.5	Weidman
1/24/16	150		F	4.5	Weidman
1/24/16	151		F	4.5	Weidman
1/24/16	152		F	.5	Weidman
1/24/16	153		F	.5	Weidman
1/24/16	154		F	2.5	S. Outer 40
1/24/16	155		M	.5	S. Outer 40
1/24/16	156		F	1.5	S. Outer 40
1/24/16	157		F	1.5	S. Outer 40



1/24/16	158		F	3.5	S. Outer 40
1/25/16	159		F	2.5	Thornfield
1/25/16	160		F	1.5	Thornfield
1/25/16	161		M	3.5	Thornfield
1/25/16	162		F	3.5	Glaize view
1/25/16	163		F	2.5	Glaize view
1/25/16	164		M	3.5	Glaize view
1/25/16	165		F	.5	Glaize view
1/25/16	166		M	.5	Glaize view
1/26/16	167		F	3.5	Old Colony
1/26/16	168		F	.5	Old Colony
1/26/16	169		M	.5	Old Colony
1/26/16	170		F	1.5	Old Colony
1/26/16	171		F	1.5	Old Colony
1/26/16	172		M	3.5	Old Colony
1/26/16	173		F	2.5	Old Colony
1/26/16	174		F	2.5	Old Colony
1/26/16	175		F	.5	Old Colony
1/26/16	176		M	3.5 (UA)	Featherstone
1/26/16	177		M	4.5	Featherstone
1/26/16	178		M	3.5	Featherstone
1/26/16	179		F	3.5	Featherstone
1/26/16	180		M	.5	Featherstone



1/27/16	181		F	4.5	Dry Ridge
1/27/16	182		M	.5	Dry Ridge
1/27/16	183		F	2.5	Barrett Station
1/27/16	184		F	.5	Barrett Station
1/27/16	185		F	.5	Barrett Station
1/27/16	186		M	.5	Barrett Station
1/27/16	187		M	1.5	Barrett Station
1/27/16	188		F	6.5+	Barrett Station
1/27/16	189		F	3.5	Barrett Station
1/27/16	190		M	.5	Barrett Station
1/27/16	191		F	.5	Barrett Station
1/28/16	192		M (UA)	3.5	Des Peres
1/28/16	193		F	3.5	Brookmill
1/29/16	194		F	5.5	Muir Field
1/29/16	195		F	2.5	Muir Field
1/29/16	196		F	.5	Muir Field
1/29/16	197		F	.5	Glaize View
1/29/16	198		F	3.5	Glaize View
1/29/16	199		M	.5	Glaize View
1/30/16	200		F	6.5+	Alsace
1/30/16	201		F	.5	Alsace
1/30/16	202		F	1.5	Alsace



1/30/16	203		F	.5	Alsace
1/31/16	204		M	4.5 (UA)	Horton
1/31/16	205		M	.5	Horton
1/31/16	206		F	5.5	S. Outer 40
1/31/16	207		F	1.5	S. Outer 40
1/31/16	208		M	1.5	S. Outer 40
1/31/16	209		M	1.5	S. Outer 40
1/31/16	210		M	2.5 (UA)	S. Outer 40