

FINAL REPORT
2018 Deer Management Program
Mt Lebanon, Pennsylvania
by
White Buffalo, Inc.
16 March 2018

INTRODUCTION

Mt Lebanon contains a matrix of dense suburban and commercial development interspersed with a spectrum of parks. The absence of any comprehensive deer management 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 other deer related issues. This is the third year in which White Buffalo, Inc. has implemented deer population management program within the municipal boundaries. We harvested 115, 55, and 57 deer during the 2016, 2017, and 2018 programs respectively.

METHODS

Sharpshooting efforts were conducted from 9-13 February 2018 and 3-9 March 2018. Eleven days of fieldwork were required to achieve the harvest of 57 deer. We followed the operations protocol outlined in the contract and PGC Permit #42239. Fourteen sites were available throughout the area of operation. Three sites were not used during the removal period due to lack of consistent deer activity.

RESULTS

We expended ~127.75 person-hours to harvest 57 deer (this does not include travel time, site preparations and set up, or baiting). The entire data set generated from harvested deer is represented in the spreadsheet entitled "Mt Lebanon, PA- Deer Harvest: 9-13 February and 3-9 March 2018 (Appendix A). The overall harvest demographics are summarized in Table 1. Harvest by day is summarized in Table 2. Harvest results from specific sites ranged from a high of 10 deer to a low of 0 for sites where effort was allocated. Thirty one deer were harvested from private properties while 26 were removed from the three public properties available.

Table 1. Sex and age class of deer harvested in Mount Lebanon, PA from 3-9 February and 9-13 March 2018.

AGE	# MALE (%)	# FEMALE (%)	# COMBINED
Yearling/Adult	13 (23%)	23 (40%)	36 (63%)
Fawns	13 (23%)	8 (14%)	21 (37%)
Total	26 (46%)	31 (54%)	57 (100%)

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

DATE	# Harvested	DATE	# Harvested	DATE	# Harvested	DATE	# Harvested
2/9/18	10	2/13/18	6	3/5/18	0	3/8/18	0
2/10/18	5	3/3/18	8	3/6/18	3	3/9/18	8
2/12/18	7	3/4/18	4	3/7/18	6		

Harvest by Deer Management Zone

To allow for a more comprehensive population management program, we summarized all the harvest data by management zone. Zone 1 was delineated as all land west of Cedar and Cochran to the municipal boundary. Zone 2 was composed of all land east of Cedar and Cochran, west of Scott Road, and north of Beadling Road and Mt Lebanon Boulevard to the northern municipal boundary. Zone 3 was south of Beadling Road and Mt Lebanon Boulevard, west of Castle Shannon Boulevard, to the southern municipal boundary. Zone 4 covered land east of Scott Road/Castle Shannon Boulevard to the municipal boundary. Harvest breakdown based on zone for the sharpshooting effort is summarized in Table 3.

Table 3. Deer harvest by Zone Mount Lebanon, PA 9-13 February and 3-9 March 2018.

Zone	# Harvested
1	14
2	14
3	9
4	20

DISCUSSION

There was a very balanced harvest throughout the community for both archery and sharpshooting initiatives. When both management phases are combined, 82 deer were culled this past fall/winter. We expended ~127.75 person-hours, for sharpshooting, to harvest 57 deer. Therefore, it required ~2.2 hours/deer harvested, slightly less than last year's effort. It should be noted that the amount of support effort, specifically the amount of time spent baiting, increased significantly over last year's project. After 4 days of shooting activity persistent rainfall and above average temperatures required us to suspend activities until conditions improved. This required baiting for an additional ~3 weeks over what was anticipated.

Twenty seven percent of this year's sharpshooting effort resulted in no harvest. During the last week of the program 36% of the effort resulted in no harvest. As deer that lived proximate to bait sites were removed the activity became much more unpredictable, resulting in removal effort without any harvest. Bait site activity became very sporadic (arrival times and/or days) at most locations, as the remaining deer had to travel longer distances to baited locations. With numerous obstacles (i.e., human activities) to navigate in dense suburbia there was increased likelihood that deer were detoured on route to our baited locations.

Overall the amount of effort required to remove deer in Mount Lebanon, PA is a high compared to other projects with similar local deer densities. This is due to the challenge of working in a densely developed area with a "tree stand only" approach, restrictions on hours when work can be conducted, and lack of safe and discreet shooting locations in some areas where deer densities are known to be above suitable thresholds.

Anecdotal evidence suggested we have achieved localized impacts on deer abundance proximate to culling locations. Numerous homeowners adjacent to culling sites have described a significant reduction in deer observations, and the regeneration of landscape plantings thought to be no longer present or salvageable. In addition, the number of sharpshooting sites with enough consistent deer activity to justify removal efforts continues to decrease. Twenty two percent of the available sites initiated at the beginning of the 2018 program were not utilized due to lack of deer activity.

Regardless of the relative success of the two harvest phases in some areas of the municipality, there continues to be pockets of more densely developed areas where deer have not been addressed (e.g., along Morrison Drive and Valleyview Road). After three years of effort we have exhausted access options to sharpshoot or implement the archery program. Therefore, the challenge moving forward is how to address the deer in areas where sharpshooting and archery hunting is not feasible due to lack of suitable locations. The Commission will need to decide whether to add non-traditional lethal management activities in very tightly developed areas (i.e., capture and euthanize), or transition to sterilization in these areas of the community. In respect to surgical sterilization, it is not currently a deer management option that is allowed by the Pennsylvania Game Commission, and Mt. Lebanon was recently denied approval for a deer sterilization research project. A new submittal would be necessary with emphasis on maintaining, not reducing, the local population at the desired density. The added advantage of fertility control methods is that bait leverage is not critical like sharpshooting and can still be effective in less intense winter weather.

RECCOMENDATIONS

In order to improve operational efficiency and remove deer otherwise not accessible, it is recommended that the hours available for sharpshooting activities be expanded. Currently sharpshooting activities can only occur between the hours of 18:00 - 22:00 h Monday-Friday on public property and 16:00 - 23:00 h seven days a week on private property. On three occasions removal opportunities were lost at Rob Hollow Park due to deer arriving at the cull site before the operational work window and they did not return during the hours available for removal efforts. Broadening the operational work window would allow us to be more flexible with removal activities. Due to the limited amount of park use during the winter very few residences would be impacted by a timing adjustment. As always, Public Safety is paramount, if there are people in the park we do not shoot. Our suggestion would be to increase the operational work window to 15:00-00:00 seven days a week for both public and private sites.

The addition of Hoodridge and Williamsburg Parks to the public properties authorization list would help increase operational efforts. Currently, we work on private properties adjoining both of these parks. While we have been reasonably successful at both locations, the ability to shoot across the property line into park property would have increased the harvest. At Williamsburg Park the harvest could have been doubled by simply having the ability to shoot across the line by 40 feet. Actual shooting locations would not need to be moved and both have already been inspected by the police department. This simple adjustment would have increased the overall harvest by nearly 10% in 2018.

It also would be our recommendation for the municipality to conduct another deer population estimate. This would allow us to gain a better understanding of our impacts where we have access, the relative distribution of deer in areas we do not have access, and allow us to better argue for alternative management options if deemed necessary.

ACKNOWLEDGMENTS

We would like to thank all participating homeowners for their cooperation. Without access to these private parcels deer management in Mount Lebanon would be very limited. In addition, we would like to acknowledge Kip's Processing, LLC for processing the venison for donation. Through this year's program 2,194.5 pounds of venison have been donated to charitable organizations through the PA Hunters Sharing the Harvest Network.

Appendix A

Mt. Lebanon, PA - Deer Harvest: 9-13 February and 3-9 March 2018

DATE	TAG #	SEX	AGE
2/9/18	22001	F	4.5+
2/9/18	22002	F	3.5
2/9/18	22003	M	0.5
2/9/18	22004	F	1.5
2/9/18	22005	F	2.5
2/9/18	22006	F	1.5
2/9/18	22007	M	0.5
2/9/18	22008	F	0.5
2/9/18	22009	M	1.5
2/9/18	22010	M	1.5
2/10/18	22011	F	1.5
2/10/18	22012	M	0.5
2/10/18	22013	M	0.5
2/10/18	22014	F	0.5
2/10/18	22015	F	4.5+
2/12/18	22016	M	2.5
2/12/18	22017	M	1.5
2/12/18	22018	M	1.5
2/12/18	22019	F	0.5
2/12/18	22020	F	3.5
2/12/18	22021	F	0.5
2/12/18	22022	M	0.5
2/13/18	22023	F	4.5+
2/13/18	22024	M	0.5
2/13/18	22025	F	0.5
2/13/18	22026	F	1.5
2/13/18	22027	M	0.5
2/13/18	22028	F	1.5
3/3/18	22029	M	0.5
3/3/18	22030	F	4.5+
3/3/18	22031	F	4.5+
3/3/18	22032	M	0.5
3/3/18	22033	M	0.5
3/3/18	22034	M	0.5
3/3/18	22035	F	4.5+

3/3/18	22036	M	0.5
3/4/18	22037	M	4.5+
3/4/18	22038	F	4.5+
3/4/18	22039	F	4.5
3/4/18	22040	F	4.5+
3/6/18	22041	M	1.5
3/6/18	22042	M	2.5
3/6/18	22043	M	4.5
3/7/18	22044	F	3.5
3/7/18	22045	F	0.5
3/7/18	22046	M	3.5
3/7/18	22047	M	2.5
3/7/18	22048	M	4.5+
3/7/18	22049	M	3.5
3/8/18	22050	F	4.5+
3/8/18	22051	F	3.5
3/8/18	22052	F	0.5
3/8/18	22053	F	0.5
3/8/18	22054	F	3.5
3/8/18	22055	F	4.5+
3/8/18	22056	F	2.5
3/8/18	22057	M	0.5