

FINAL REPORT

2016 Deer Management Program

Mt Lebanon, Pennsylvania

by

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INTRODUCTION

Mt Lebanon contains a matrix of dense suburban and commercial development interspersed with a spectrum 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 first year in which a deer population management program was implemented since 2008.

METHODS

Sharpshooting efforts were conducted from 25 February - 8 March 2016. Thirteen days of fieldwork were required to achieve the harvest of 115 deer. We followed the operations protocol outlined in the contract and PGC Permit #36657. Twenty 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 ~304 person-hours to harvest 115 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 - Deer Harvest: 25 February - 8 March 2016 (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 17 deer to a low of 1 for sites where effort was applied. We culled 11 or more deer at four sites which contributed to 48% of the total harvest.

Table 1. Sex and age class of deer harvested in Mt Lebanon, Pennsylvania from 25 February - 8 March 2016.

AGE	# MALE (%)	# FEMALE (%)	# COMBINED
Yearling/Adult	18 (16%)	49 (43%)	67 (59%)
Fawns	28 (24%)	20 (17%)	48 (41%)
Total	46 (40%)	69 (60%)	115 (100%)

Table 2. Number of deer harvested by day during the 13 days of field operations.

DATE	# Harvested	DATE	# Harvested	DATE	# Harvested
2/25/16	6	3/1/16	6	3/5/16	2
2/26/16	8	3/2/16	4	3/6/16	2
2/27/16	19	3/3/16	4	3/7/16	6
2/28/16	15	3/4/16	5	3/8/16	5
2/29/16	33				

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 is summarized in Table 3, including archery harvest.

Table 3. Harvest by zone for archery hunting and sharpshooting.

Zone	Sharpshooting Harvest	Archery Harvest*	Combined Harvest
1	37 (32%)	31 (32%)	68 (32%)
2	28 (24%)	7 (7%)	35 (16%)
3	20 (18%)	31 (32%)	51 (24%)
4	30 (26%)	29 (29%)	59 (28%)

*Exact locations for 6 deer harvested by Cooperators were not known, and therefore not included.

DISCUSSION

There was a very balanced harvest throughout the community for both archery and sharpshooting initiatives (Table 3). When both management phases are combined, 219 deer were culled this past fall/winter. Hunter were more active in, and proximate to, some of the larger parks reducing densities in the areas where it is more efficient and discrete to remove deer. This required us to place more emphasis in the more densely developed neighborhoods, thereby reducing sharpshooting efficiency.

We expended ~304 person-hours to harvest 115 deer resulting in ~2.6 hours/deer harvested. This was a high compared to other projects with similar local deer densities because of unusually warm weather, people intentionally feeding deer, and the challenge of working in a densely developed area with a “tree stand only” approach. The average annual temperatures were significantly exceeded (10-20 degrees) on 7 of the 13 removal days. This diminished interest in bait by deer, but more importantly, there was a substantial increase in human activity often compromising removal efforts. This impact was evident with the rapid diminishing returns after the fifth day of culling (Table 2). The last eight days (i.e., 62% of the total effort) resulted in only 30% of the total harvest.

Regardless of the success of the two harvest phases, there are pockets of more densely developed areas where deer have not been addressed. We intentionally avoided working in these densely developed areas during both culling phases this year to minimize conflicts. We continue to receive correspondence from community members that are observing deer in their yards even after we are done with the project. The Commission will need to decide whether to emphasize more culling activities in very tightly developed areas or transition to sterilization in these areas of the community. The concern with culling in more congested areas is that there will inevitably be more neighbor conflicts because of the increased visibility of operations. 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 to the desired density.

Appendix A

Mt Lebanon – Deer Harvest: 25 February - 8 March 2016

DATE	TAG #	SEX	AGE
2/25/2016	17881	M	0.5
2/25/2016	17882	F	0.5
2/25/2016	17883	M	1.5
2/25/2016	17884	M	1.5
2/25/2016	17885	M	0.5
2/25/2016	17886	F	4.5+
2/26/2016	17887	F	3.5
2/26/2016	17888	M	2.5
2/26/2016	17889	M	0.5
2/26/2016	17890	M	1.5 1/2 Shed
2/26/2016	17891	M	3.5 1/2 Shed
2/26/2016	17892	F	4.5+
2/26/2016	17893	M	0.5
2/26/2016	17894	M	0.5
2/27/2016	17895	F	1.5
2/27/2016	17896	F	4.5
2/27/2016	17897	M	0.5
2/27/2016	17898	F	4.5+
2/27/2016	17899	F	2.5
2/27/2016	17900	F	3.5
2/27/2016	17901	M	0.5
2/27/2016	17902	F	0.5
2/27/2016	17903	M	0.5
2/27/2016	17904	M	0.5
2/27/2016	17905	M	0.5
2/27/2016	17906	F	2.5
2/27/2016	17907	M	0.5
2/27/2016	17908	F	4.5+
2/27/2016	17909	F	4.5
2/27/2016	17911	F	4.5+
2/27/2016	17912	F	3.5

2/27/2016	17913	M	0.5
2/27/2016	17914	F	0.5
2/28/2016	17910	F	0.5
2/28/2016	17915	F	0.5
2/28/2016	17916	F	4.5+
2/28/2016	17917	F	3.5
2/28/2016	17918	F	0.5
2/28/2016	17919	F	0.5
2/28/2016	17920	M	0.5
2/28/2016	17921	F	4.5
2/28/2016	17922	F	0.5
2/28/2016	17923	F	0.5
2/28/2016	17924	F	1.5
2/28/2016	17925	F	4.5+
2/28/2016	17926	F	4.5
2/28/2016	17927	M	0.5
2/28/2016	17928	F	4.5+
2/29/2016	17929	F	0.5
2/29/2016	17930	F	3.5
2/29/2016	18021	F	4.5+
2/29/2016	18022	F	1.5
2/29/2016	18023	M	1.5
2/29/2016	18024	F	4.5
2/29/2016	18025	F	0.5
2/29/2016	18026	M	0.5
2/29/2016	18027	F	3.5
2/29/2016	18028	F	0.5
2/29/2016	18029	F	4.5
2/29/2016	18030	M	1.5
2/29/2016	17931	M	0.5
2/29/2016	17932	M	2.5 1/2 Shed
2/29/2016	17933	M	0.5
2/29/2016	17934	F	6.5
2/29/2016	17935	F	0.5
2/29/2016	17936	M	0.5
2/29/2016	17937	F	0.5
2/29/2016	17938	M	0.5
2/29/2016	17939	F	0.5

2/29/2016	17940	F	1.5
2/29/2016	18001	M	0.5
2/29/2016	18002	F	2.5
2/29/2016	18003	M	1.5 Shed
2/29/2016	18004	F	1.5
2/29/2016	18005	F	5.5
2/29/2016	18006	F	1.5
2/29/2016	18007	M	0.5
2/29/2016	18010	M	1.5 Shed
2/29/2016	18009	M	2.5 Shed
2/29/2016	18008	M	1.5 1/2 Shed
2/29/2016	17991	M	2.5 Shed
3/1/2016	17971	F	3.5
3/1/2016	17972	F	4.5
3/1/2016	17973	M	0.5
3/1/2016	17974	M	0.5
3/1/2016	17975	M	0.5
3/1/2016	17976	M	0.5
3/2/2016	17977	M	1.5 Shed
3/2/2016	17978	M	0.5
3/2/2016	17979	F	0.5
3/2/2016	17992	F	3.5
3/3/2016	17980	F	4.5+
3/3/2016	17981	M	1.5 Shed
3/3/2016	17982	F	4.5
3/3/2016	17983	F	2.5
3/4/2016	17984	F	1.5
3/4/2016	17985	M	0.5
3/4/2016	17986	F	3.5
3/4/2016	17987	F	2.5
3/4/2016	17988	F	0.5
3/5/2016	17989	M	1.5 Shed
3/5/2016	17990	F	4.5+
3/6/2016	17993	F	3.5
3/6/2016	17994	M	3.5 Shed
3/7/2016	17995	F	0.5
3/7/2016	17996	F	1.5
3/7/2016	17997	F	2.5

3/7/2016	17998	F	4.5+
3/7/2016	17999	F	1.5
3/7/2016	18000	F	0.5
3/8/2016	17941	M	1.5 Shed
3/8/2016	17942	F	0.5
3/8/2016	17943	F	3.5
3/8/2016	17944	F	2.5
3/8/2016	17945	M	0.5