



SUBURBAN WILDLIFE
MANAGEMENT SOLUTIONS, LLC

FINAL REPORT

2021- 2022 DEER MANAGEMENT PROGRAM

MT. LEBANON, PA

April 7, 2022



INTRODUCTION

In 2014, Mt. Lebanon established deer management goals to improve the safety of the community by reducing deer related vehicle accidents by 50%. In addition, Mt. Lebanon aimed to address resident complaints of property damage due to over browsing. Deer related vehicle accident data obtained by Mt. Lebanon between 2013 and 2016 showed an upward trend in deer related vehicle accidents with an eventual high of 122 in 2016. Additionally, deer pickups were also trending upwards with an eventual high of 127 in 2015.

Mt. Lebanon utilized this data in the development and assessment of strategies to combat the increasing number of conflicts between residents and deer. In 2015 Mt. Lebanon implemented a multi-faceted approach to deer population management which included both a managed archery hunting program as well as sharpshooting. Since that time data has indicated a decline in deer-related vehicle accidents to an eventual low of 49 in 2021.

Suburban Wildlife Management Solution (SWMS) has participated in and/or managed the archery hunting portion of the program since 2015. In 2021 SWMS began conducting the sharpshooting phase of the deer management program which occurs in February and March each year. Sharpshooting has proven to be an effective way to manage the deer population in Mt. Lebanon.

Property Assessment

Private property owner involvement remains vital to the overall success of the management program. Over the past 7 years, SWMS staff has spent hundreds of hours in Mt. Lebanon meeting with residents and assessing feasibility of deer management locations. In doing so, we have developed strong working relationships with property owners as well as a vast knowledge of local deer behavior and patterns. This knowledge has helped us to consistently deliver a safe and effective management program.

Mt. Lebanon via various media outlets provides the community with instructions on donating private properties for use in the deer management program. All private properties are first assessed via overhead mapping. Following the initial assessment, representatives of SWMS conduct an onsite evaluation. Site evaluations for sharpshooting are also completed with a representative(s) of the Mt. Lebanon Police Department to identify any potential safety hazards.

Public properties used for the deer management program include the Mt. Lebanon Golf Course, McNeilly Park, Robb Hollow Park, and the Conservation District. Additionally, multiple private properties are utilized for both archery hunting and sharpshooting.



MANAGED ARCHERY HUNTING

Managed archery hunting is an essential part of the Mt. Lebanon Deer Management Program. Archery hunters are permitted to hunt various public and private property locations throughout the community. Pursuant to the law, archery hunting takes place only during the permitted dates and times established by the PA Game Commission. In addition, Mt. Lebanon and SWMS impose restrictions in furtherance of those established by the PA Game Commission to further regulate permitted activities and ensure the program remains safe and discreet throughout the hunting season. Archery hunting is prohibited on township owned properties during Saturday and Sunday.

Private property locations again remained consistent for the 2021-2022 archery season. This is primarily due to the limited tracts of land large enough to provide viable hunting locations. As in years past, multiple locations were assessed for feasibility, but determined to be too small or experience high volumes of pedestrian traffic making them unusable for archery hunting.

Archers interested in volunteering are encouraged to contact SWMS and complete the application process. Participation is limited to residents of Mt. Lebanon. Through the vetting process SWMS added 3 new volunteer archers to the program for the 2021-2022 hunting season.

Results

As a result of our efforts during the 2021-2022 archery program, 20 deer were safely harvested from Mt. Lebanon. Deer harvest consisted of 12 female, 5 juvenile male, and 3 antlered male. (Table 1)

Table 1

Archery Harvest Data	
Female	12 (60%)
Juvenile Male	5 (25%)
Antlered Male	3 (15%)
Total	20

Table 2

Archery Property Analysis	
McNeilly Park	8
Robb Hollow Park	1
Conservation District	2
Mt Lebanon Golf Course	2
Public Property	13
Private Property	7
Total	20

Private properties remain an important part of the program and accounted for 35% of the total harvest. (Table 2). An additional benefit of the archery program is the donation of venison to local families living with hunger. During the 2021-2022 archery season, Mt. Lebanon volunteer archers donated 10 deer through Hunters Sharing the Harvest to local food pantries, missions, homeless shelters, Salvation Army facilities, and churches.



SHARPSHOOTING

Sharpshooting remains a very effective way to safely and quickly reduce deer populations in suburban environments. Property access again proved vital to the success of the sharpshooting portion of the program. Upon determining a sharpshooting location was feasible, SWMS staff begin baiting the sight. Baiting assists in attracting deer to a specific area and ensures safe and humane removal. Baiting for the 2022 program began on January 22, 2022.

Mt. Lebanon established permitted times to conduct sharpshooting. In order to ensure safe and discrete operation the majority of sharpshooting occurs at times with the lowest human activity. Sharpshooting for the 2022 program was permitted daily between 4 pm and 2 am.

SWMS operators utilize ATF registered; suppressed .223 caliber rifles equipped with night vision technology for sharpshooting. To reduce the use of spotlights, night vision and thermal imaging technology is also utilized to locate target animals. Ammunition consists of frangible or controlled penetration projectiles to minimize the bullet travel past the intended target.

In order to ensure the greatest reduction in overall deer population, adult doe are targeted as the top priority. Juvenile and antlered deer are also harvested; however, they are of a lower priority. Once a shot is determined safe, all shots are taken with a solid earthen backdrop created by topography and shooter elevation. All deer are shot in the head or cervical spine to ensure they are dispatched in a humane manner as defined in Pennsylvania Code §147.722 (Definitions). All harvested deer are removed from the location and transported to a local processor. The venison acquired during the sharpshooting phase is then donated through Hunters Sharing the Harvest.

Results

SWMS safely removed 52 deer from Mt. Lebanon during the sharpshooting portion of the 2021 - 2022 deer management program. SWMS Staff expended approximately 251 hours to accomplish this harvest number. This does not include time spent conducting site assessment, baiting, transportation to the processor, and resident outreach.

Harvests were spread nearly evenly between public and private properties with public properties accounting for 27 (52%) and private properties accounting for the remaining 25 (48%) deer harvested (Table 3).

Table 3

Sharpshooting Property Analysis	
McNeilly Park	6
Robb Hollow Park	7
Conservation District	4
Mt. Lebanon Golf Course	10
Twp Property	27
Private Property	25
Total	52



The success of the program continues to hinge on the involvement of private property owners. SWMS utilized five private property locations during the sharpshooting portion of the program. However, one location proved unsuccessful due to high volumes of human activity during the operational window. Four additional private properties were assessed, but not used due to various reasons including property size, proximity to other homes or businesses, and/or abundant human activity.

Table 4

Sharpshooting Demographics			
	Adult / Yearling	Juvenile	Total
Female	22 (42%)	5 (10%)	27
Male	19 (37%)	6 (11%)	25

Demographics of the 52 deer harvested include 22 (42%) adult or yearling female; 5 (10%) juvenile female; 19 (37%) adult or yearling male; and 6 (11%) juvenile male. (Table 4)

ANALYSIS

Data indicates management efforts are having a positive impact in reducing deer-related vehicle accidents. During 2021, Mt. Lebanon recorded 49 deer-related vehicle accidents which represents the lowest number since prior to the implementation of management efforts. Additionally, residents consistently report fewer deer sightings and less damage in and around areas where management efforts are taking place.

SWMS volunteer archers harvested 20 deer during the archery portion of the deer management program. Combined with the 52 deer harvested in the sharpshooting phase, 72 deer were removed from Mt. Lebanon during the 2021-2022 deer management program. The sharpshooting harvest total for 2022 shows a slight increase from the 2021 harvest total.

Weather for the 2022 season was less favorable than the 2021 season as we experienced fewer days with snow cover. The lack of snow cover made browse more readily available to the deer herd thus reducing their need to feed at established bait sights. However, being locally based in the South Hills allows us to effectively adapt sharpshooting operations to weather, citizen interaction, and/or deer behavior thus ensuring harvest goals are met.

DISCUSSION

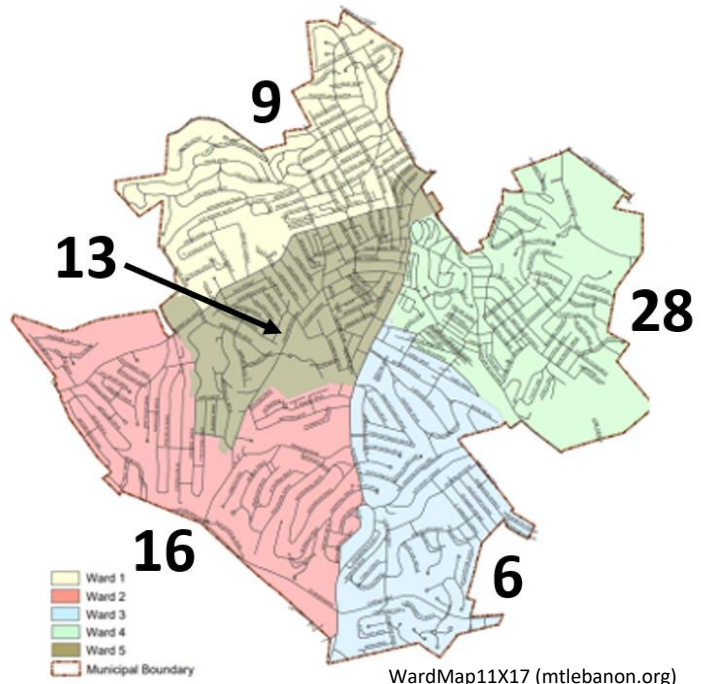
Mt. Lebanon remains a very complex and challenging area to conduct deer management due to the high population density combined with the limited number of public properties. Achieving a balanced harvest, spread evenly throughout Mt. Lebanon, continues to be a top priority. We continue working with residents in the development of strategies to address the deer population in their neighborhoods. The continued cooperation of residents makes management efforts possible and assists in the development of suitable properties for management activities.



However, certain areas of Mt. Lebanon consistently prove difficult to conduct management operations. This can be attributed primarily to both a lack of available public property and/or private properties that are not viable due to size, proximity to other residents or business, and high volume of human activity. These areas include Bower Hill Road both east and west of St. Clair Hospital, Segar Road, Orchard Drive and the Sunset Hills area.

In evaluating deer harvest within each ward, we are able to assess the deer management program across the entire community (Figure 1). Wards 1 and 3 have presented various challenges in achieving a more balanced harvest. Specifically, the lack of large public property coupled with high population density make management efforts very difficult. We continue to work towards acquiring additional private property locations in these wards. As with the 2021 season the southern end of Ward 3, specifically public property located adjacent to Conor Road, accounted for the harvest total in that ward. We continue to work towards solutions for the northern end of Ward 3. Larger tracts of land continue to provide higher yields in Ward 2 and Ward 4. Ward 5 also remains challenging due a lack of viable private properties coupled with the density of homes and business. However, we continue to develop additional properties and harvest totals are increasing in this ward.

Figure 1



SWMS encourages residents to contact us with any deer related issues. This is the first step in developing areas to conduct deer management and the only way to ensure a comprehensive program.

RECOMMENDATIONS

We have received requests for deer management in the Sunset Hills area, however, we have been unsuccessful in acquiring viable private properties. The use of currently restricted public properties specifically Williamsburg Park and Sunset Hills Park would undoubtedly increase the number of deer harvested in this area with minimal effect on residents.



Additionally, expanding permitted times for sharpshooting would be beneficial. During the 2022 season, Mt. Lebanon agreed to expand permitted times to 4pm - 2am. This change resulted in a higher yield on public property with no noticeable effect on residents. Many baited sites continue to experience deer activity prior to or shortly after the permitted times. Therefore, we would suggest expanding the permitted times to at least 4pm-4am for both public and private properties.

Deer management harvest numbers continue to remain steady. However, with the decrease in deer numbers in hunted areas, archery hunting alone cannot maintain the current deer population. Additionally, archery hunting is not possible in certain areas where sharpshooting occurs. Therefore, SWMS recommends continued sharpshooting efforts to regulate the deer population. Without sharpshooting, the deer population will certainly increase back to levels observed prior to the implementation of the program. We believe that the target goal of combined archery and sharpshooting efforts should continue to be at or around 60-80 deer per season. This is based on multiple factors including historical harvest totals, available properties, reduced deer population, community goals, resident sentiment, and vehicle accident statistics. SWMS and Mt. Lebanon will continue to evaluate this data to determine if harvest totals should be adjusted.

ACKNOWLEDGEMENTS

SWMS would like to thank the residents of Mt. Lebanon for their continued insight and support of the management program. Without the assistance of the community, this program would not be possible. SWMS would also like to acknowledge the Mt Lebanon Municipal Staff and members of the Mt. Lebanon Police Department for continually working with us to ensure a safe and effective management program. Additionally, we would like to thank Kip's Deer Processing for processing all deer taken during the sharpshooting phase and preparing the venison for donation through Hunters Sharing the Harvest. Finally, we would like to recognize Hunters Sharing the Harvest and Executive Director Randy Ferguson for ensuring all venison was distributed to individuals and families living with hunger throughout Allegheny County. In addition, Director Ferguson and HSH furthered their support of the program by graciously contributing 50% of the cost of processing during the 2022 sharpshooting program. The 2022 sharpshooting portion of the deer management program yielded 2,002 pounds of venison for local families living with hunger.



Deer Harvest Total				
	DATE	TAG #	SEX	AGE
1	2/2/2022	38901	M	2.5
2	2/2/2022	38902	M	2.5
3	2/2/2022	38903	M	2.5
4	2/2/2022	38904	M	2.5
5	2/4/2022	38905	F	2.5
6	2/4/2022	38906	M	1.5
7	2/4/2022	38907	F	2.5
8	2/7/2022	38908	M	1.5
9	2/7/2022	38909	M	1.5
10	2/7/2022	38910	M	2.5
11	2/7/2022	38911	M	2.5
12	2/8/2022	38912	M	< 1
13	2/8/2022	38913	F	3.5
14	2/11/2022	38914	F	2.5
15	2/11/2022	38915	F	3.5
16	2/11/2022	38916	F	2.5
17	2/11/2022	38917	F	3.5
18	2/11/2022	38918	F	2.5
19	2/11/2022	38919	F	1.5
20	2/11/2022	38920	M	1.5
21	2/11/2022	38921	F	< 1
22	2/11/2022	38922	F	< 1
23	2/16/2022	38923	M	< 1
24	2/16/2022	38924	M	1.5
25	2/16/2022	38925	F	2.5
26	2/16/2022	38926	M	< 1



Deer Harvest Total				
	DATE	TAG #	SEX	AGE
27	2/16/2022	38927	M	1.5
28	2/16/2022	38928	M	1.5
29	2/16/2022	38929	F	3.5
30	2/19/2022	38930	F	2.5
31	2/21/2022	38931	F	2.5
32	2/21/2022	38932	M	< 1
33	2/21/2022	38933	F	2.5
34	2/21/2022	38934	F	3.5
35	2/21/2022	38935	M	< 1
36	2/21/2022	38936	M	< 1
37	2/21/2022	38937	F	2.5
38	2/21/2022	38938	M	1.5
39	2/22/2022	38939	F	< 1
40	2/22/2022	38940	M	1.5
41	2/24/2022	38941	M	1.5
42	2/24/2022	38942	M	1.5
43	2/25/2022	38943	F	2.5
44	2/25/2022	38944	F	< 1
45	2/25/2022	38945	F	< 1
46	2/25/2022	38946	F	1.5
47	2/25/2022	38947	F	1.5
48	2/25/2022	38948	F	2.5
49	2/25/2022	38949	M	2.5
50	2/25/2022	38950	F	2.5
51	2/25/2022	38951	M	3.5
52	2/25/2022	38952	F	2.5