

**USDA APHIS WILDLIFE SERVICES
ACTIVITIES SUMMARY REPORT
2013 WHITE-TAILED DEER MANAGEMENT PROGRAM
TOWNSHIP OF UPPER ST. CLAIR
(September 2013)**

USDA APHIS Wildlife Services (WS) was requested by the Township of Upper St. Clair (TOWNSHIP) to conduct white-tailed deer culling throughout the TOWNSHIP. The operational control program to reduce deer densities was first implemented in 2005 and has been continued in the subsequent years. The objective of the program is to manage the deer population at or near 5-8 deer per square mile, as originally recommended by the Pennsylvania Game Commission (PGC). In addition, deer culling is conducted to decrease the amount of property damage, nuisance complaints, and deer-vehicle collisions throughout the TOWNSHIP, with special emphasis along the State Route 19 corridor. WS conducted operations under a PGC Special Use Permit for deer control issued to the TOWNSHIP to achieve program objectives. The following report includes program methods, results, analysis, and recommendations.

METHODS

Public and private properties are utilized in the TOWNSHIP as part of WS operational control in cooperation with the TOWNSHIP and PGC. Written permission is obtained from private properties each year before control operations take place. Each property is examined for potential baiting sites that allow a clear line of site from a shooting position and sufficient backstop. Bait is placed to draw deer from dense cover and adjoining properties and position them in safe locations for shooting.

Direct control operations utilized mobile units equipped with a suppressed .243 rifle and a suppressed 300 Whisper. Frangible and controlled fracturing ammo are used to minimize the passage of rounds through deer. A suppressed .22 pistol is used for final dispatch of deer, if required. Each mobile unit consisted of three members assigned specific roles to accomplish safe and effective removal of deer (driver, spotter and shooter). Hand-held Forward Looking Infrared (FLIR) units and night vision goggles are used to locate deer without the aid of spotlights. Once located, mobile units moved into a safe shooting position and observed the deer with a spotlight. The use of the spotlight allows the shooter to observe any obstructions or debris between them and the deer. When determined the shot is safe, the deer is removed via sharpshooting with a quick-kill shot. Upon removal, the deer's age, sex, tag number, location and injuries are recorded and the deer are taken to a processor for distribution to local food banks.

The order in which deer are removed is determined by the availability of safe shots, age, sex and injuries. Ultimately adult does and injured deer are ranked highest in priority while juveniles and antlered deer are taken last; all depending on availability of safe shots. This allows the reduction of the breeding population and also aids in the removal of juveniles within the same group. Large bucks and uniquely identifiable deer such as albino and piebald deer are not

targeted for removal to leave opportunities for archery hunters and the general public to view them. Deer removal consisted of multiple nights between January 15, 2013 and March 8, 2013.

RESULTS

WS successfully removed a total of 140 deer from the TOWNSHIP during the 2012-2013 deer management program. Deer were harvested on both public (113) and private properties (27)(Table 1), and were comprised of 47 (34%) adult females, 42 (30%) adult males, 25 (18%) juvenile females, and 26 (18%) juvenile males. Of the 140 deer culled, 42 (30%) were taken from the properties selected due to their proximity to State Route 19 (i.e. Gilfillan Park, Wiltshire Park, Boyce ball field, the tennis bubbles, pump station, Township building and fire station). Six (4%) of the 140 culled deer had injuries.

Approximately 5,600 pounds of venison was processed and distributed to citizens in Western Pennsylvania via soup kitchens, shelters, and PGC personnel.

ANALYSIS

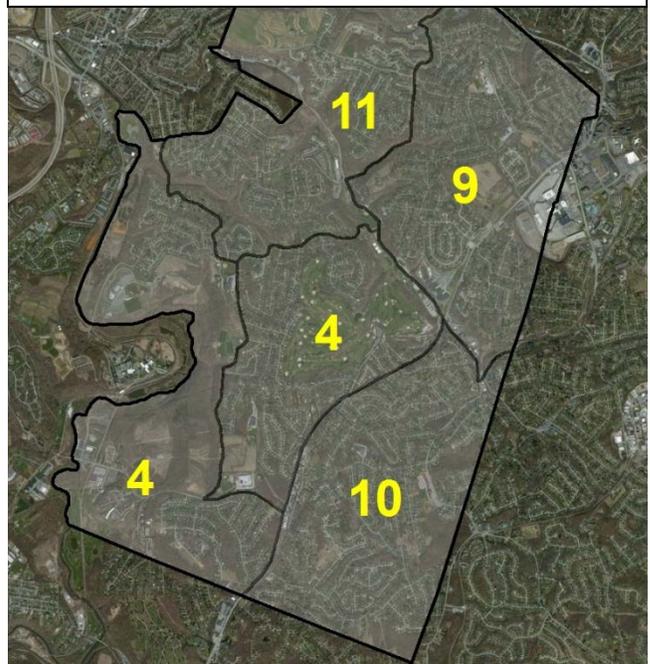
WS has culled 1,249 deer (759=adults, 490=juveniles) from the TOWNSHIP since the inception of the deer management program in 2005. WS intentionally targeted adult deer first, and hence, this strategy likely explains the larger amount of adults versus any other categories culled. The program successes experienced to date are largely due to an expansive baiting program and private property access (Figure 1). One particular private property new in 2013 accounted for 14 (10%) of the deer removed.

Archery hunting within the TOWNSHIP is continuing with increasing harvest numbers each season. The past two seasons have the highest harvest numbers since 2007, with 8 and 10 deer harvested by archers in 2012 and 2013

Table 1. Number of deer culled by property in the Township of Upper Saint Clair, Pennsylvania.

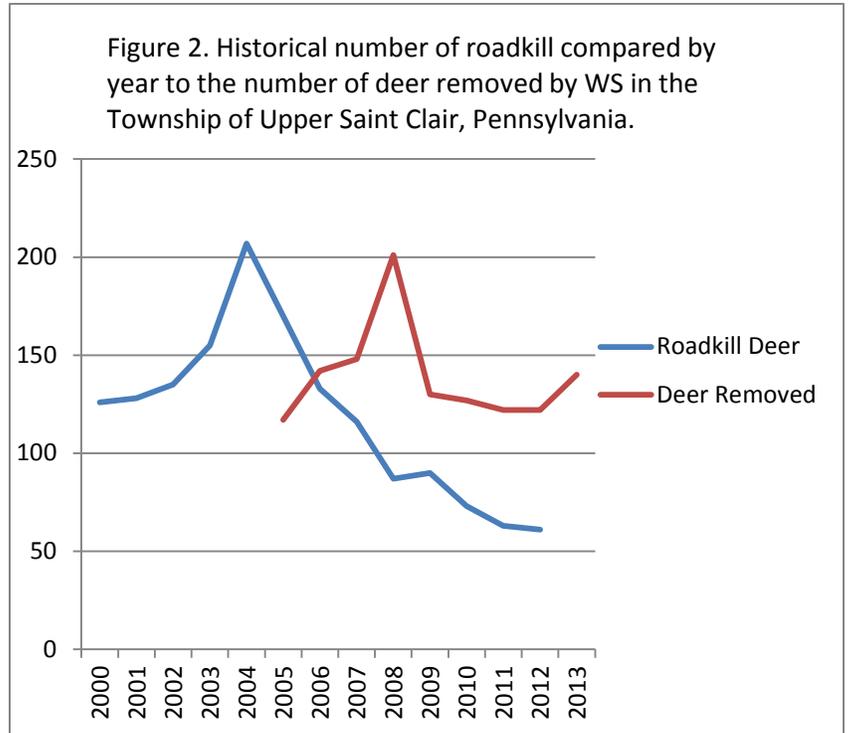
Property / # deer culled	
Baker Park	0
Boyce Ballfield	1
Byrnowick Park	0
Fire Station	4
Gardens	9
Gilfillan Park	17
Hays Park	7
Johnston Park	1
Mayview	15
Morton Park	0
Mulch Piles	25
Private	27
Pump Station	6
Tennis Bubbles	0
Township Building	3
Trotwood Park	0
Tustin Park	14
Wiltshire Park	11

Figure 1. Number of private properties by area in cooperation with WS for deer management in the Township of Upper Saint Clair, Pennsylvania.



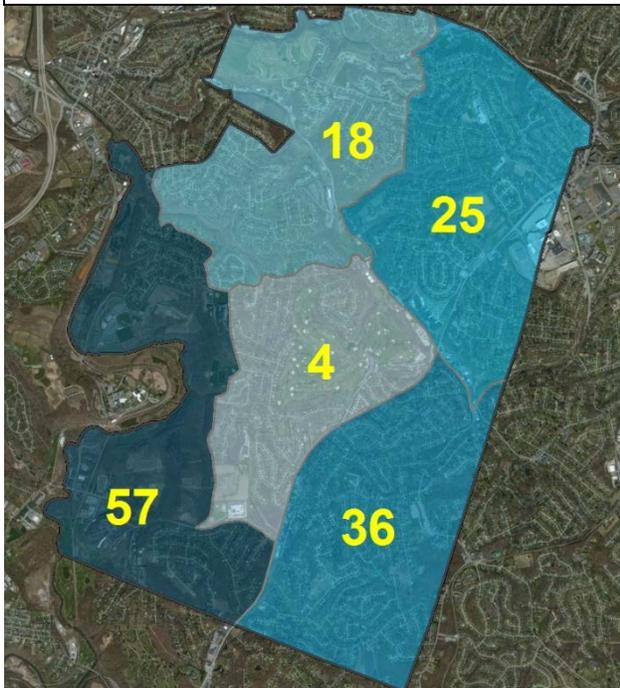
respectively. Archery hunting is an important recreation opportunity for hunters in Allegheny County and also the most cost-effective management tool. If harvest numbers continue to increase each year, archery once again can be an effective management tool for the TOWNSHIP.

One of the goals of the TOWNSHIP is to keep deer/vehicle collisions at fewer than 100 per year. Currently the TOWNSHIP is in the 5th consecutive year in achieving that goal. Additionally, roadkill numbers have fallen steadily with the exception of one year since the inception of the deer management program (Figure 2). A total of 61 roadkills were reported for 2012. Deer complaints were also at a record low of 3, down from the highest year of 75. This success clearly points to deer culling operations as a key factor in reducing deer/vehicle collisions.



Numbers of deer taken each year are based upon several factors. One of which is the number of deer observed on a nightly basis by the mobile unit. The number of deer culled in

Figure 3. Numbers of deer removed by area by WS in the Township of Upper Saint Clair,



2013 increased due to the nightly sightings of a larger number of deer than were seen in recent years. Large herds were seen on numerous occasions crossing roads to and from properties which WS does not have permission to cull deer. Access to private properties is an essential part of successful removal of deer throughout the TOWNSHIP.

In 2013, WS also analyzed locations in the TOWNSHIP where deer were being removed (Figure 3). Ninety-seven percent of the deer were removed from areas which share a border with another township. The center area is comprised of similar land classes as three other areas, but still has a lower deer density than those near areas, outside of the TOWNSHIP, where deer management is not conducted. The highest numbers of deer were taken from the SW corner of the TOWNSHIP

which consists of a large amount of public land. Access and the availability of safe shooting opportunities could explain the high number of deer removed from this area.

While WS deer culling efforts have been successful in the TOWNSHIP, it is not possible to determine whether the TOWNSHIP has met their goal of 5-8 deer per square mile without conducting population surveys. Estimates can be used in comparative analyses for future management. Without a deer density estimate, visual observations, damage complaints, and reported deer-vehicle collisions are the only statistics available to measure successes or failures of current management approaches. While these are valuable statistics, population surveys are critical to determine the number of deer that must be removed in order to maintain a desirable deer population.

Based on the long term trend of decreased numbers of deer complaints, deer/vehicle collisions and general observations, WS has concluded deer management has stabilized population growth and decreased the population locally. However, increased archery harvest, increased sightings by mobile units and increased removal by WS in 2013 suggests the target number may need adjustment to maintain the population to acceptable levels. Increased traffic volume and decreased deer-vehicle collision rates suggests that WS deer management activities are effective at reducing the deer population within the TOWNSHIP. Continued culling activities utilizing sharp shooting and archery hunting will be necessary to maintain deer-vehicle collisions at acceptable levels.

RECOMMENDATIONS

WS recommends continuing the deer damage management program each year to establish and maintain deer densities at or near 5-8 deer per square mile. Continued management is necessary to maintain deer-vehicle collisions below 100 per year. WS recommends management activities consisting of at least ten nights, targeting 140 or more deer. However, the number of nights allocated to culling should incorporate the following factors: (1) nightly mobile unit observations of deer sightings; (2) weather events; (3) vehicle/deer collision rates; (4) impacts of over-abundant deer on local environments and; (5) available monetary resources.

WS recommends the addition of new private properties available to shooting. Green space becomes more limited each year, but deer still have access to neighborhood backyards. To continue to be able to cull over-abundant deer within neighborhoods, access is essential.

WS also recommends a deer density estimate survey within the TOWNSHIP. With the increase in mobile unit observations and a small drop in roadkill numbers in comparison to previous years, a density estimate would aid in determining if control numbers should be modified. Without an estimate on deer densities per square mile, it is unknown if we are maintaining 5-8 deer per square mile as recommended by PGC.

Finally WS recommends the continuation of an archery program within the TOWNSHIP. Every deer taken from the TOWNSHIP during archery season benefits the community. This year 10 deer were taken in the TOWNSHIP by archers. This is an increase over the last two

archery seasons. If archery harvest numbers increase each year within the TOWNSHIP and the program flourishes to historical numbers, the number of deer taken by WS could be decreased.

ACKNOWLEDGEMENTS

Wildlife Services would like to thank everyone involved with deer management in the Township of Upper Saint Clair. Deer control operations went flawlessly in 2013. It began with the clerical assistance of Debi Bakowski and Diana Pifer on permitting, paperwork and telephone calls. A special thanks to Mark Mansfield and Gary Schaffer for the willingness to help and always being just a phone call away.

Wildlife Services would also like to thank our private cooperators for allowing us to utilize their property, the entire Upper St. Clair Police Department for their outstanding contributions to a safe and efficient culling program. We would also like to thank local Wildlife Conservation Officer Beth Fife for her support of the management activities. All participants should be recognized for their support and assistance with the deer damage management program and be applauded for their contributions over the last nine years.