

**USDA APHIS WILDLIFE SERVICES
ACTIVITIES SUMMARY REPORT
2018 WHITE-TAILED DEER MANAGEMENT PROGRAM
TOWNSHIP OF UPPER ST. CLAIR
(August 2018)**

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. 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 Pennsylvania Game Commission (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 (using WS form 12A) 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 position them in safe locations for sharpshooting.

Direct control operations utilized mobile units equipped with a suppressed .243 rifle and a suppressed 300 Whisper. Frangible and controlled fracturing ammunition are used to minimize the passage of rounds through deer. 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 units are used to locate deer without the aid of spotlights. Once located, mobile units move into a safe shooting position and observe deer with a spotlight. The use of the spotlight allows the shooter confirm the target and observe any obstructions or debris between them and the deer. When the shot is determined safe, the deer is humanely euthanized via sharpshooting with a quick-kill shot. This method of euthanasia is in concurrence with American Veterinary Medical Association Guidelines for the Euthanasia of Animals. 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 multiple juveniles within the same group. Large antlered 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 enjoy. Deer removal consisted of multiple nights between February 1, 2018 and March 27, 2018. The duration of each effort was highly dependent on deer activity and weather, but averaged approximately 9 hours per night.

RESULTS

WS successfully removed a total of 72 deer from the TOWNSHIP during the 2017-2018 deer management program. Deer were harvested on both public (62) and private properties (10) (Table 1), and were comprised of 22 (31%) adult females, 32 (44%) adult males, 6 (8%) juvenile females, and 12 (17%) juvenile males. Of the 72 deer culled, 19 (26%) 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). Four (6%) of the 72 culled deer had injuries consistent with automobile encounters.

Approximately 2,880 pounds of venison was processed and distributed to citizens in Western Pennsylvania via soup kitchens and shelters.

ANALYSIS

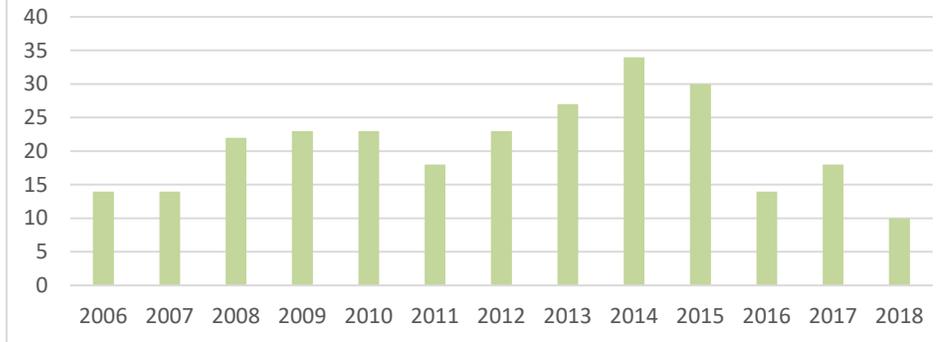
WS has culled 1,847 deer (1,160 adults, 687 juveniles) from the TOWNSHIP since the inception of the deer management program in 2005. The program successes experienced to date are largely due to an expansive baiting program and private property access. New private property access is essential to deer culling operations. In 2016, private properties enrolling in the program fell from 36 to 28 sites and to 24 sites in 2018. Deer damage is greatly reduced from the inception of the program and not as many residents are experiencing deer damage or deer vehicle collisions, therefore, residents may not see a need to have culling take place on their property.

Historically, private properties are critical to the success of the management program. Figure 1 shows the extent of how many deer are taken from private properties, that otherwise would have not been accessible since the inception of the program.

Table 1. Number of deer culled during 2018, by property, in the Township of Upper St. Clair, Pennsylvania.

Property	Number Of Deer Culled
Baker Park	2
Morton	2
Fire Station	1
Gardens	6
Gilfillan Park	9
Hays Park	4
Mayview	7
Mulch Piles	5
Private	10
Boyce Ball Field	8
Tustin Park	7
Fort Couch Park	8
Township Building	2
Johnston	1
Total	72

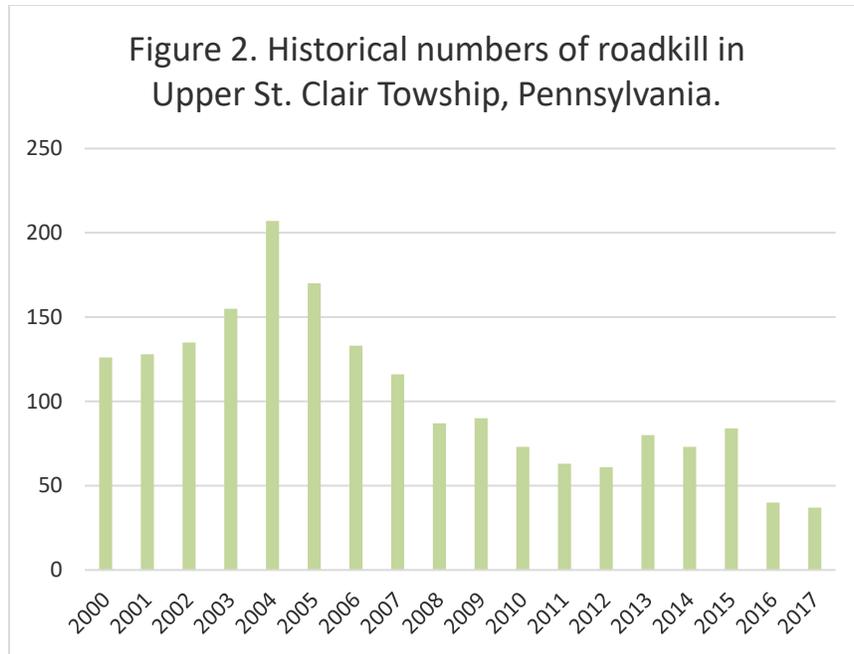
Figure 1. Historical numbers of deer taken from private property by WS in the Township of Upper St. Clair, Pennsylvania.



The first year of deer culling operations in 2005 resulted in 117 deer removed from the TOWNSHIP in 201.5 hours of effort (1.72 hours per deer). Comparable to 2018, 72 deer were culled in 288 hours of effort (4 hours per deer). Deer density within the TOWNSHIP is reduced, resulting in more effort per deer culled.

Archery hunting within the TOWNSHIP is continuing with declining harvest numbers. The 2017-2018 archery season ended with 1 deer being harvested. Harvest was greatly reduced, but archers also were not observing many deer. Archery hunting is an important recreation opportunity for hunters in Allegheny County and also the most cost-effective management tool.

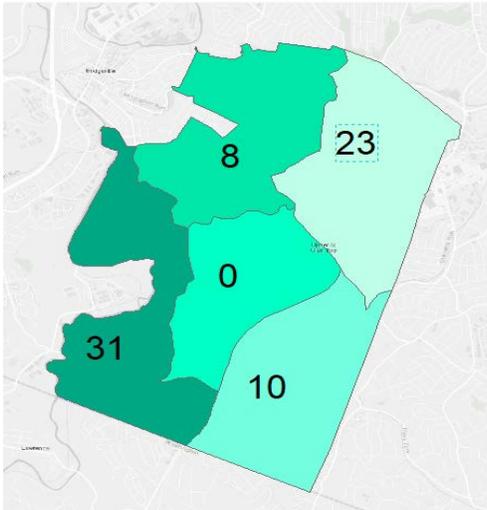
One of the goals of the TOWNSHIP is to keep deer/vehicle collisions at fewer than 100 per year. Currently the TOWNSHIP is in the 10th consecutive year in achieving that goal. Roadkill numbers are at an all-time low since the inception of the deer management program with only 37 reported this year (Figure 2). Additionally, deer complaints were down to 2 complaints compared to 75, the highest on record.



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 2017 and 2018 has decreased from 2015 and 2014. Nightly sightings of large herds of deer were lower than they have been in previous years. There were also less deer observed crossing roads, or on property which WS has no access.

Access to private properties is an essential part of successful removal of deer throughout the TOWNSHIP. WS also analyzed locations in the TOWNSHIP where deer were being culled (Figure 3). 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.

Figure 3. Numbers of deer removed, by area, in 2018 by WS in the Township of Upper St. Clair, Pennsylvania.



WS believes management target numbers were increased appropriately in 2014 to keep deer/vehicle collisions under 100 per year as part of the TOWNSHIP'S Deer Management Plan as roadkill numbers slightly rose again. The Deer Management Plan was updated in 2014 to include valuable information from accomplishments of deer management in the TOWNSHIP. Increased traffic volume and decreased deer-vehicle collision rates for a decade suggests that WS deer management activities are effective at reducing deer-human conflicts within the TOWNSHIP. Increased culling activities utilizing sharp shooting and archery hunting will be necessary to maintain deer-vehicle collisions at acceptable levels.

The 2017-2018 cull resulted in a historically low deer take (72). Numbers of deer observed by the mobile unit were low as were sightings of large herds of deer. Several factors were taken into consideration. Epizootic Hemorrhagic Disease (EHD), a fatal virus transmitted by biting flies effected several surrounding areas of the Pittsburgh community. However, Pennsylvania deer harvest data from the Management Unit 2B, which covers the majority of Allegheny County, was unaffected. Limited snow cover during operations may also have played a factor in the acceptance of bait by deer. Many factors play a role in deer survivorship throughout the course of a year, therefore, we may not ever be able to explain the dip in deer population without more data collection. The use of roadkill numbers compared to the TOWNSHIP's roadkill target goal will continue to be used to adjust the estimated take of deer each year.

RECOMMENDATIONS

WS recommends continuing the deer damage management program each year to maintain deer-vehicle collisions below 100 per year and keep complaints at a minimum. WS recommends management activities consisting of at least ten nights, targeting 120 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.

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 1 deer was harvested in the TOWNSHIP by archers. If archery harvest numbers increase

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 St. Clair. Deer control operations have continued for over a decade with great support from the community and its leadership. Wildlife Services would like to thank the community in the Township of Upper St. Clair. Without their support, a deer culling operation would not be possible.

Wildlife Services would also like to thank our private cooperators for allowing us to utilize their property and the entire Upper St. Clair Police Department for their outstanding contributions to a safe and efficient culling program. We would also like to thank the Pennsylvania Game Commission for their ongoing support for the program. All participants should be recognized for their support and assistance with the deer damage management program and be applauded for their contributions.