



Deer Management

In Mt. Lebanon



June 22, 2015
6:00 P.M. Mount Lebanon High School
Fine Arts Theater
155 Cochran Road, Pittsburgh, PA 15228
Commissioner Work Session and Discussion on
A Goal to Improve Deer Management

Speakers: Keith McGill, Municipal Planner
Jeannine Fleegle, PA Game Commission
Jody Maddock, Director of Campus Services, Bryn Athyn College
Dr. Anthony DeNicola, White Buffalo, Inc.

Agenda:

1. General overview of deer management in Mt. Lebanon and Upper St. Clair — Brief history, reports/statistics, deer/vehicular collisions, (Keith McGill, Municipal Planner)
2. General problems with deer, Pennsylvania Game Commission approach, where to get accurate info, need for a management plan and why deer numbers are not appropriate for management decisions in these areas. (Jeannine Fleegle, Wildlife Biologist, Pennsylvania Game Commission)
3. Development of a deer management plan and discussion of suburban “managed hunts” utilizing recreational archers (Jody Maddock, Director of Campus Services, Bryn Athyn College)
4. Sterilization/contraception, costs/issues, status of response to previous PGC questions and other deer management issues, (Dr. Anthony DeNicola, Founder/President, White Buffalo Inc.)
5. Commission Q & A
6. Commission discussion on next steps.

Deer Management Overview 2015

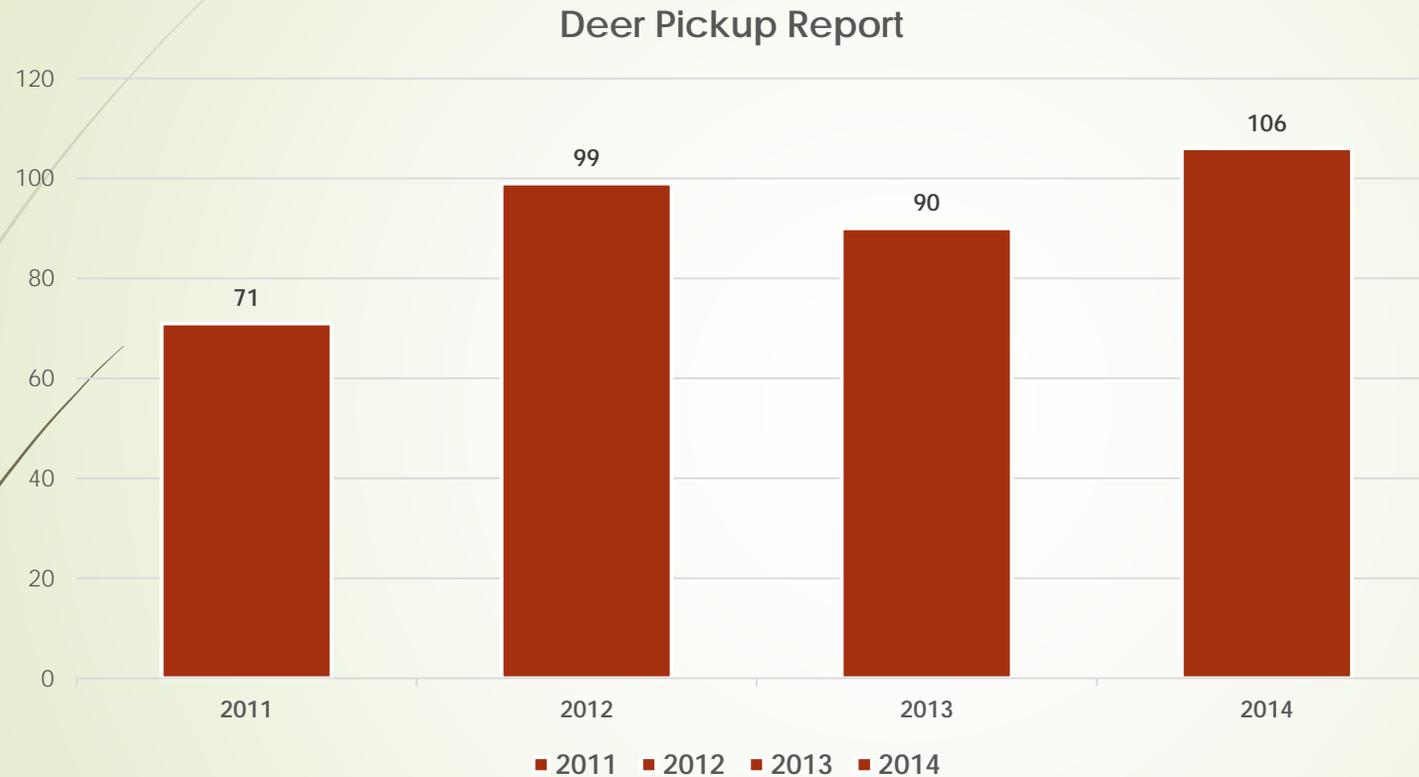


Source: Mt. Lebanon Police Department

Mt. Lebanon is interested in a comprehensive deer management program, the goal of which is to **reduce deer/vehicular collisions** within the municipality by 50% within five years.

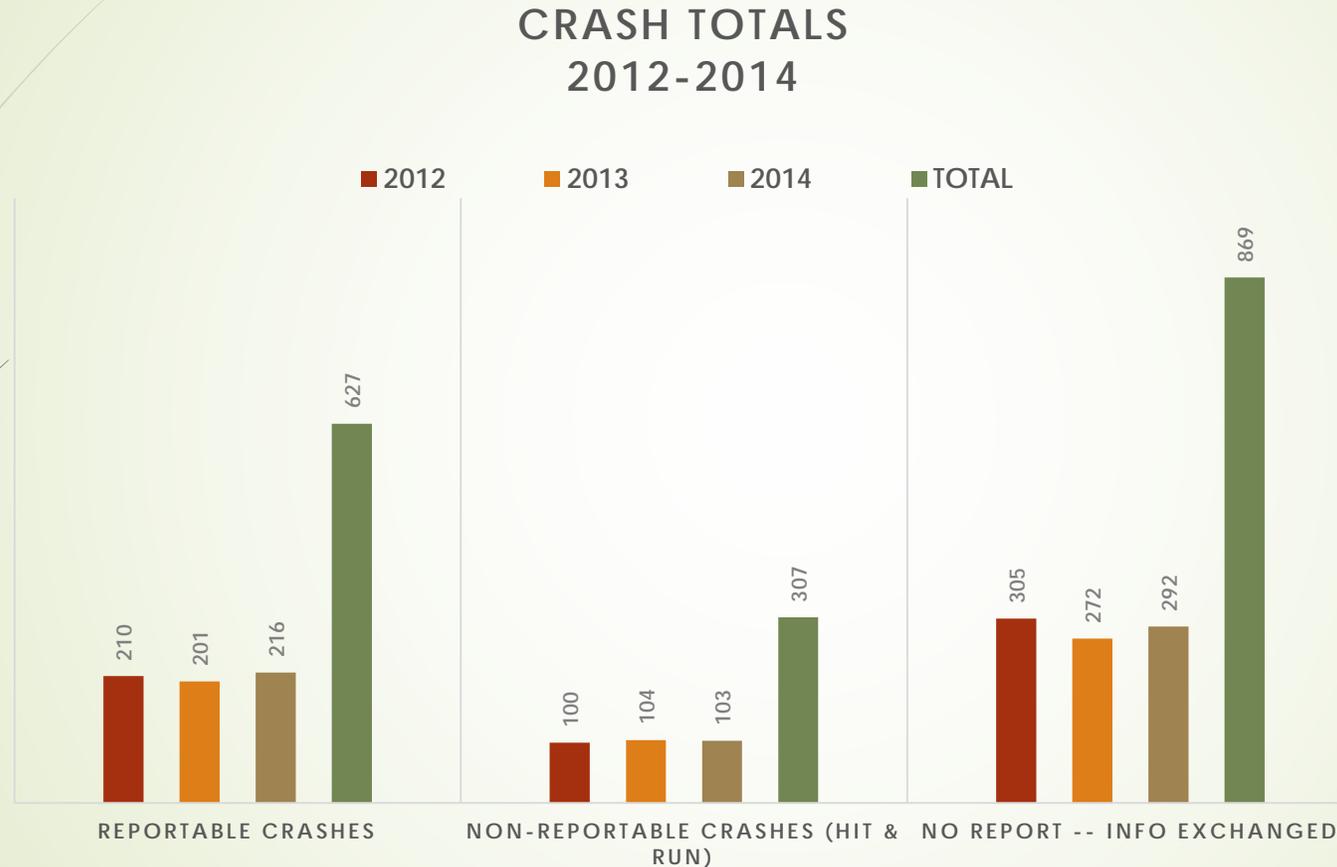
***Confirmed** deer/vehicular collisions only count those incidents in which the police department has definitive proof that a car and a deer are involved.

Deer Management Overview 2015



- South Hills Community Animal Control has picked up **366** dead deer in Mt. Lebanon in the last four years.

Deer Management Overview 2015

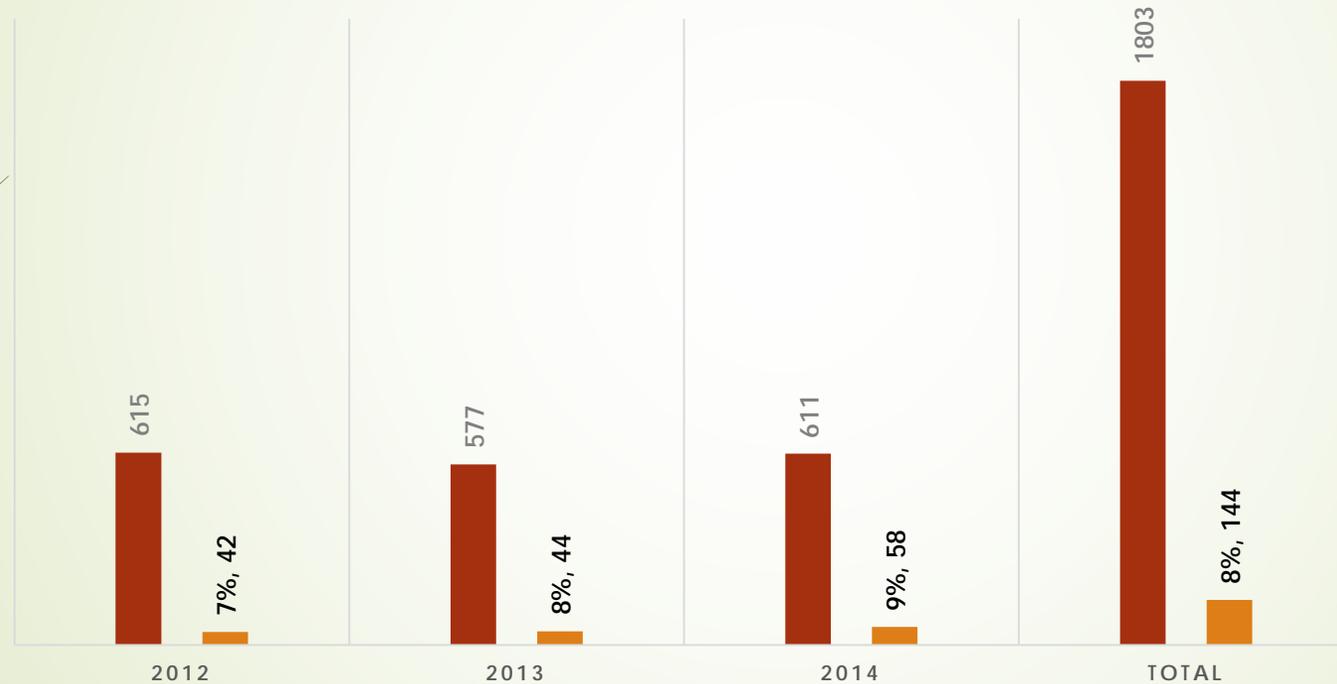


- Total vehicular collisions by year, as per Mt. Lebanon Police Department.

Deer Management Overview 2015

CRASH TOTALS 2012-2014

■ Total Crashes ■ Confirmed Crashes Involving Deer



➤ Total vehicular collisions by year, as per Mt. Lebanon Police Department.

Management Options

- ▶ Non-removal deer management methods:
 - ▶ Take no action
 - ▶ Outcome: population continues to increase
 - ▶ Deer crossing signs
 - ▶ 28 deer crossing signs have been installed on state, county and local roads based on accident or dead deer pickup history.
 - ▶ 2 additional locations have been identified on state (2) roads and requests for installation at these locations has been submitted.
 - ▶ Deterrents
 - ▶ Deterrents include scare devices using motion, auditory deterrents using sound and visual deterrents including flashing or strobe lights. Deterrents can be effective at deterring deer damage initially but because of their adaptable nature deer quickly become habituated to deterrents.

Management Options

► Non-removal deer management methods:

► Public Education

- Sandy Baker retained by the municipality to provide a series of presentations and to speak with residents and elected officials about deer deterrent strategies as part of a comprehensive deer management plan. (April 25-27, 2015)
- Deer Forum: In June of 2014 a deer forum was held and included District Justice Blaise Larotonda (moderator), Dr. Anthony DiNicola (White Buffalo), Jeannine Fleegle (PA Game Commission), Laura Simon (Humane Society of the United States) Tom Kelley (Mt. Lebanon Public Works Director), Sandy Feather (Penn State Cooperative) and Lt. Aaron Lauth (MLPD). Panelists were asked a series of questions on the issue of deer.
- Commission Discussion sessions and meetings. The issue of deer management has been discussed at numerous Commission Discussion and Regular meetings over the past several years.
- Municipal Website: information, reports, articles and more are available on the municipal website.

Management Options

- ▶ Non-removal deer management methods:
 - ▶ Landscaping alternatives
 - ▶ The municipality has been provided and posted a selection of unpalatable (less preferred) herbaceous and woody plants to reduce deer browsing on ornamentals. (*Penn State Extension Deer Resistant Plants*) *Municipal Planting Areas
 - ▶ Ban on deer feeding
 - ▶ Ordinance #3212 was enacted in June 2012 prohibiting feeding deer. Enforcement is through the Inspection Office when a complaint is received.
 - ▶ Repellents
 - ▶ A list of products that may be applied to plants to reduce attractiveness or palatability posted on municipal website. (*Alabama Cooperative Extension*)
 - ▶ Fencing
 - ▶ As provided by the Mt. Lebanon Zoning Ordinance

Management Options

- ▶ Non-removal deer management methods:
 - ▶ Fertility Control
 - ▶ Use of contraceptive drug, vaccine or surgery to reduce reproductive rate of deer population. Application submitted to PA Game Commission (PGC) by the municipality.
 - ▶ Trap and Relocate
 - ▶ Currently **not** approved for use in any area in Pennsylvania. (*A guide to Community Deer Management in Pennsylvania Version 2.4 May 2014 PGC Deer and Elk Section*)

Management Options

- ▶ Non-removal deer management methods:

Non-removal deer management methods	
<u>Municipal</u>	<u>Resident</u>
Deer crossing signs	Landscaping alternatives
Public education	Repellents
Landscaping alternatives	Fencing
Ban on deer feeding	
Fertility control <i>(permit required)</i>	

Management Options

- ▶ Removal deer management methods:
 - ▶ Predator Reintroduction
 - ▶ Reintroduction of deer predators into an area
 - ▶ **Not** approved for any area in Pennsylvania (*A guide to Community Deer Management in Pennsylvania Version 2.4 May 2014 Pennsylvania Game Commission Deer and Elk Section*)
 - ▶ Hunting
 - ▶ By licensed sportsman within the community as defined by the PGC. Regulations set forth each year. (*Requires a license but no permit from the PGC.*)
 - ▶ Community-managed hunts
 - ▶ Hunting by licensed sportsmen within the PGC regulations with increased restrictions defined by the community or landowner. (*Requires a license, but no permit, from the PGC.*)
 - ▶ Deer control permits
 - ▶ Permitted control agent hired to remove deer from specified areas within the community. (*Requires a permit from the PGC.*)

Management Options

▶ Mt. Lebanon deer control permits:

▶ 2005

- ▶ Representatives from PGC and Whitetail Management Associates attended Commission discussion sessions and provided an overview of how archery hunting could be implemented in Mt. Lebanon parks; Commission decided not to pursue bow hunting.*

▶ 2007

- ▶ The municipality executed a cooperative service agreement with USDA Wildlife Services permitting removal by sharpshooting, or capture and euthanasia. All activities were conducted between 9 p.m. and 6 a.m. 79 deer were culled.*

▶ 2008

- ▶ In October 2007 the Commission extended the culling program from November 2007 through September 2008; 146 deer were culled.*

**2012 Mt. Lebanon Deer Management Status Report*

Management Options

- ▶ Mt. Lebanon deer control permits:
 - ▶ 2014
 - ▶ The PGC issued a permit to Mt. Lebanon to capture and euthanize to reduce deer population.
 - ▶ Wildlife Specialists was contracted to cull up to 150 deer at \$500/deer in five public park areas.
 - ▶ Six deer were culled.

Management Options

- Mt. Lebanon deer control permits:

Removal deer management methods	
<u>Municipal</u>	<u>Resident</u>
Hunting	Hunting
Community managed hunts	
Deer control permit issued by PGC	

Management Options

- ▶ Deer density:
 - ▶ 2014
 - ▶ 342 – February 2013 infrared flyover
 - ▶ 193 – February 2014 infrared flyover
(*Vision Air Research, Inc.*)

According to the 2009-2018 Game Commission Whitetail Deer Management Plan deer management objectives are no longer defined by deer densities. Deer management is defined instead by measures of deer health, forest habitat health and deer-human health conflict.

A deer population estimate is NOT a requirement for the issuance of a deer control permit (PGC)

Management Options

2015 Budget	\$75,400	As of 5/20/15 (Finance Department)
Expenditures	475	Deer crossing signs
	3,000	Wildlife Specialists
	<u>2,500</u>	Sandy Baker (estimate)
Remaining	\$69,825	

Management Options

Other Issues:

Lyme Disease and Deer

- Deer are a dead-end host for the Lyme disease bacteria. They do not infect ticks and the bacteria that cause Lyme disease, nor do they contract the disease when an infected tick feeds on them. They play no direct role in the transmission cycle. Tick populations are not affected by deer abundance unless deer are eradicated or severely reduced. (*PGC Lyme Disease & Deer Revelation or Red Herring*)

Reproduction

- Removing deer from a healthy population will **not** increase reproductive rates of the remaining deer. Deer in Pennsylvania breed once a year; average reproductive rate for adult doe in PA is 1.8 fawns/adult doe with 15% producing one fawn; 79% producing twins; 6% producing triplets. Reproduction in females is already close to maximum. (*PGC Deer and Deer Management in Developed Areas Facts and Fiction*)

Management Options

- ▶ Other Issues:

- ▶ Sterilization/Contraception

- ▶ Recent field studies suggest that sterilization of female deer remains expensive. Sterilization may provide an alternative management technique for reducing suburban deer herds in communities willing to endure the costs of a long-term effort and where lethal deer removal is unacceptable or impractical. **Surgical sterilization is scale-limited based on the ability to capture and sterilize a significant percentage of the female deer in a population and maintain that proportion of the population treated over time.**
 - ▶ Overall success will be greatest for closed or insular deer herds where the effects of immigration can be minimized. (*Human-Wildlife Interactions 6(2): 273-282, Fall 2012 Sterilization as an alternative deer control technique; a review*)

Whitetail Deer Management in Upper St. Clair

- ▶ On **August 3, 1998**, after considerable public input, the Upper St. Clair (USC) Board of Commissioners adopted parameters for its Whitetail Deer Management Program.
- ▶ The Board's first action to initiate the program was to authorize a controlled archery hunt at Boyce-Mayview Park.
- ▶ "In spite of various deer management initiatives the number of deer-vehicle collisions within USC Township continues to be relatively high." (*Township of Upper St. Clair 2003 Executive Report on Deer management initiatives April 26, 2004*)
- ▶ The report examines the efficacy of the Deer Management Program in USC and attempts to determine next steps to contend with the issue of public safety raised by the high incidence of deer vehicular collisions.

Whitetail Deer Management in Upper St. Clair

▶ Actions taken:

- ▶ Wildlife biologist(s): worked briefly with two biologists. Dr. Paul Curtis, Cornell University spoke about non-lethal deer control methods including contraception, repellents and fencing.
- ▶ Development of a communication program and library materials-links on website.
- ▶ Installation of deer warning and crossing signs.
- ▶ Test Installation of Strieter –Lites (1999-2003). Removed in 2003 when it was determined that they were not effective in reducing deer-vehicular collisions.
- ▶ Deer population survey 2000-2003 using heat detection technology.
- ▶ Controlled Archery Hunts: Started in 1998 (Whitetail Management Associates South, WMAS) Boyce-Mayview Park. Strict protocols in place to ensure safety of the residents, background check, proficiency test, elevated tree stands. **Even with this program in place the township continued to see a high number of deer-vehicular collisions.**

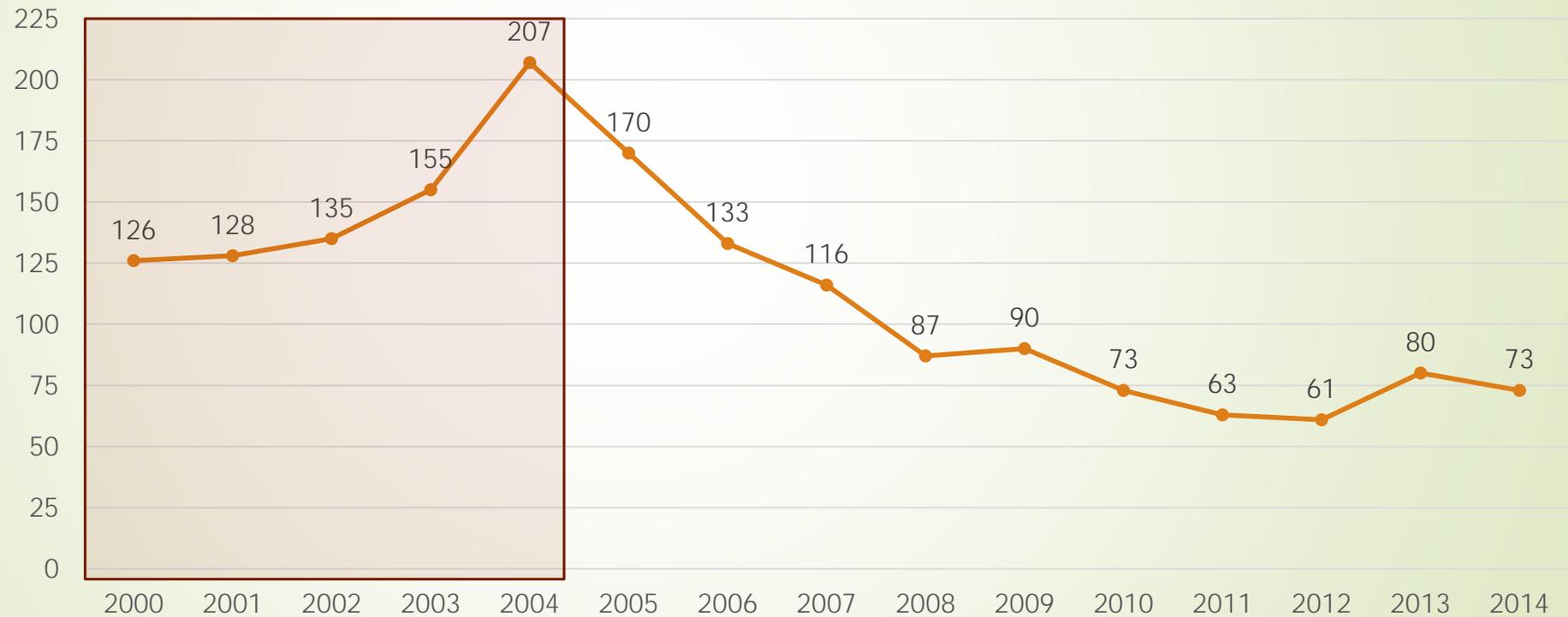
Whitetail Deer Management in Upper St. Clair

➤ Actions taken:

- Evaluation of PZP Deer Birth Control Program: In 2000 USC made application to conduct an experiment using PZP. Approval from the PGC, FDA and Humane Society was mandatory. PGC gave the township a qualified approval subject to approval from the FDA and HSUS but **HSUS backed away after a determination that this option was impractical due to the free-ranging nature of the herd.**
- Recommendation of the 2003 report was to consider a controlled culling (sharpshooting) program.
- Fall 2004 USC received a "Special Use Permit" from the PGC to use sharpshooters. Entered into a contract with USDA Wildlife Services to carry out culling operations. Concentrated on areas that would have the highest impact on reducing accidents on the Route 19 corridor. Cost was approximately \$17,500. 117 deer taken; 39 additional taken through the archery season. (*Township of USC Whitetail Management report May 2005*)
- Culling is conducted throughout the township and on designated private properties. USDA prepares an annual report that is posted on the township website.
- USDA Wildlife Services has culled **1,249 deer since 2005** from USC. Archery hunting within USC continues. In 2013 approximately 5,600 pounds of venison was processed and distributed via soup kitchens, shelters and PGC personnel. USC is in its sixth consecutive year of keeping deer/vehicular collisions at fewer than 100 per year. (*2013 White-Tailed Deer Management Program USC, September 2013*)

Whitetail Deer Management in Upper St. Clair

Accidents Involving Deer as per USC Township



2000-2004 represents Archery Only
2005-2014 represents Archery & Sharpshooting

Whitetail Deer Management in Upper St. Clair

Additional Information as per USC Township:

- ▶ The Township occasionally receives calls during the program to report a gunshot. Most residents are aware of the program and with the newer suppressed weapons calls have become less frequent.
- ▶ There have been very few cases of a wounded deer since the program began. These incidents are reported to the Township by the contractor USDA and no cases have been reported by a resident that have not been reported by USDA.

Whitetail Deer Management in Upper St. Clair

Additional Information as per USC Township:

- ▶ The hours of operation are cover of dark although operations typically are timed as to be as non-detectable by the general public as possible.
- ▶ The contract with USDA-WS has remained at \$37,500 since 2008. The net cost is less, as there are savings from animal control (deer removal charges) and related police response/reporting costs. (\$65.50/call in Mt. Lebanon)
- ▶ There have been no program related accidents/fatalities or injuries

Management Options

- In other communities:
- Allegheny County- Deer management in all 9 County Parks (17 Communities) since 1996 through Whitetail Management Associates. December –January No special permit required. County does not track deer/vehicular collision statistics. Removed just under 500 deer during 2014 season and donated 7,000 pounds of deer meat.(Andy Baechle, Allegheny County Parks Director)
- Peters Township- 1997-present. Archery. The program is approved by the Township and supervised by officers of the Police department. Utilizes Public and Private properties. *Police department has noted a 20% reduction in deer vehicle crashes during the hunting season. (Peters Township News)
- Fox Chapel- 1992-present. Combination Archery and Police Sharpshooters. Utilizes Public and Private properties. Deer/Vehicular collisions declined from 81 in 1993 to a low of 19 in 2007. (Fox Chapel newsletter and Mt L 2012 Deer Management report)