

Hopewell Township Deer Management Advisory Committee

Working to achieve a balance in our community

2013 Annual Report May 28, 2014



Hopewell Township Deer Management Advisory Committee Information

Deer Management Advisory Committee (DMAC or Committee) members are appointed by the mayor for terms lasting three years or less. There are seven regular members, two alternate members, one township administrative officer, and one township committee liaison. The committee currently has two co-chairpersons and one secretary who are elected annually. The committee is required to have at least one hunter, one farmer, and one master gardener as members.

Dorothy Aicher, Regular Member
Michael Bellaus - Alternate #2, Hunter
William Cane, Regular Member, Co-Chair
James Gambino, Regular Member, Secretary
John Hart, Township Committee Liaison
Robert Miller, Administrative Officer
Denise Moser, Regular Member, Co-Chair
John Piepszak, Regular Member, Master Gardener/Hunter
Chris Pazdan, Alternate #1, Farmer
Michael Van Clef, Regular Member
David Van Selous, Regular Member, Hunter

Meetings

Regular meetings are held on the fourth Wednesday each month in the Township's municipal building auditorium located at 201 Washington Crossing Pennington Road, Titusville, NJ 08560. All meetings are audio-recorded and open to the public.

If you have questions or comments about information contained in this report, or about our deer management program, please write to us at: deermanagement@hopewelltp.org. For general information, such as meeting minutes, program documents, or news articles, please visit us at: http://www.hopewelltp.org/deer_mgmt_comm_main.html

Acknowledgement

We would like to specifically acknowledge the contributions of James Burd, who acted as the Township Committee Liaison during the critical early stages of the Committee and whose contributions provided a firm foundation for its ongoing efforts.

The Deer Management Advisory Committee would like to expressly thank the Hopewell Township Committee for their continuing and unwavering support of our work, and also Township Staff, Police and Publics Works department for their dependable help and assistance with the deer management program.

Cover photo courtesy of Chuck Noona

Executive Summary

This is the second annual report prepared by the Hopewell Township Deer Management Advisory Committee (DMAC or Committee) covering activities from June 2013 through April 2014. The report is organized in the format of the Hopewell Valley Deer Management Plan (September 2010) and provides highlights of recent, continuing and future activities along with revised summaries of deer impacts.

Recently completed activities include:

- Regular meetings were held on the fourth Wednesday of each month.
- Conducted two pre-season hunter orientation & safety meetings.
- Conducted second season of the Hopewell Township Deer Management Program.
 - Sixty-one hunters were permitted to harvest deer on 14 township-owned parcels totaling 623 acres. The antlerless deer harvest goal was 173 and 133 were actually harvested (71% of the goal). Antlered deer represented 15% of the total number of harvested deer (156).
- Conducted an end-of-season hunter questionnaire and meeting.
- Conducted Hopewell Valley deer population survey in March/April 2014.
- Reviewed locations of deer vehicle collisions provided by the Police Department and prepared a map depicting 'hot spots'.
- Co-sponsored an educational forum on Lyme disease in April 2014 with the Township Health Department
- Authored an article for publication with the NJ League of Municipalities.

Continuing and future activities include:

- Strategy Sets #1 and #2 (Improvement of Hunting Access and Efficacy):
 - Planning and continued implementation of the Township deer management program
 - Encouraging improved access and efficacy on both public and private lands
 - Development of cooperative and coordinated approaches for deer management with the Township Agricultural Advisory Committee and broader agricultural community
 - Exploring the establishment of a local venison donation service with Hunters Helping the Hungry
 - Facilitate a meeting of public and non-profit land managers to discuss management strategies
- Strategy Set #3 (Avoidance of Deer Impacts):
 - Provide outreach and warning signage to minimize deer vehicle collisions
 - Perform outreach on Lyme disease prevention and use of deer resistant landscaping
- The next deer count and public questionnaire will be performed in 2015.

Summary of Updated Deer Population Size and Impact Reduction Goals:

- The 2014 deer population surveys suggest a rapidly increasing population with 84 deer per square mile (2012 survey measured 42 deer per square mile). The ultimate desired condition is 10 deer per square mile. See report text for further discussion.
- Goal #1 (Reduce Lyme disease). The last two years have seen an increase from lower values observed in 2010 and 2011. The number of cases in 2013 was 53 (stated goal was 49 by 2013).
- Goal #2 (Reduce Deer-Vehicle Collisions): Collisions have been stable over the last two years at approximately 23% less than the peak in 2009. The number of collisions in 2013 was 467 (stated goal was 425 by 2013).
- Goal #3 (Reduce Agricultural Losses): No updates since the 2010 public questionnaire.
- Goal #4 (Reduce Landscape Planting Losses): No updates since the 2010 public questionnaire.
- Goal #5 (Reduce Ecological Damage): No updates since the 2012 annual report.

Summary of Goals and Strategies from the 2010 Hopewell Valley Deer Management Plan

Goal #1: Reduce Lyme Disease Cases

There has been an annual average of 65 CDRSS (Communicable Disease Reporting and Surveillance System) confirmed cases of Lyme disease from 2007-2009. The Plan recommended a 25% reduction goal by 2013 (49 cases) and a 75% reduction goal by 2019 (16 cases). See report text for utilization of CDRSS confirmed cases only.

Goal #2: Reduce Deer Vehicle Collisions

There has been an annual average of 567 deer-vehicle collisions from 2007-2009. The Plan recommended a 25% reduction goal by 2013 (425 collisions) and a 75% reduction goal by 2019 (142 collisions).

Goal #3: Reduce Agricultural Losses

The public questionnaire results suggested that 27% of respondents had crop losses exceeding \$5,000 per year. The Plan recommended a 25% reduction goal by 2013 (20% of respondents) and a 75% reduction goal by 2019 (7% of respondents).

Goal #4: Reduce Landscape Planting Losses

The public questionnaire results suggested that 55% of respondents had severe or moderate landscape damage. The Plan recommended a 25% reduction goal by 2013 (41% of respondents) and a 75% reduction goal by 2019 (14% of respondents).

Goal #5: Reduce Ecological Damage

Local forest health has been monitored through two science-based protocols called ‘sentinel seedlings’ (measuring deer browse on planted tree seedlings) and ‘forest secchi’ (measuring the density of forest understory vegetation). The average browse on planted tree seedlings has been 59% from 2006 - 2009. The average amount of native understory vegetation has been 21%. The Plan recommended a 25% improvement by 2013 (44% browse on planted seedlings & 26% native understory cover) and a 75% improvement by 2019 (14% browse on planted seedlings & 37% native understory cover).

The Plan recommended three sets of strategies to obtain these stated goals:

Strategy Set #1: Improvement of Hunting Access

- 1A) Encourage and facilitate hunting access on public and private lands
- 1B) Develop strategies to access “pocket deer” in residential areas

Strategy Set #2: Improvement of Hunting Efficacy

- 2A) Encourage and facilitate coordinated hunting activities among neighboring landowners, including deer drives
- 2B) Encourage and facilitate use of Agricultural Depredation Permits by farmers
- 2C) Encourage and facilitate Deer Management Programs that focus harvests on female deer
- 2D) Encourage and facilitate program for venison donation to local food banks
- 2E) Consult with the NJ Division of Fish & Wildlife and other wildlife professionals to facilitate strategies 1A through 2D

Strategy Set #3: Avoidance of Deer Impacts

- 3A) Improve awareness of methods that reduce Deer Vehicle Collisions
- 3B) Improve awareness of methods that reduce Lyme disease
- 3C) Improve awareness of methods that reduce landscape damage
- 3D) Discourage the intentional feeding of deer in non-hunting situations

Table of Contents

Hopewell Township Deer Management Advisory Committee Information.....	i
Executive Summary.....	ii
Summary of Goals and Strategies from the 2010 Hopewell Valley Deer Management Plan.....	iii
Table of Contents.....	iv
List of Tables, Figures and Appendices.....	v
I. Introduction.....	1
II. Strategy Implementation Efforts.....	1
Introduction.....	1
Strategy Sets #1 & #2 - Improvement of Hunting Access and Efficacy.....	2
Strategy Set #3 - Avoidance of Deer Impacts.....	6
III. Evaluation of Impact Reduction Goals.....	6
Introduction.....	6
Deer Population Estimates.....	6
Goal #1: Reduce Lyme Disease Cases.....	8
Goal #2: Reduce Deer Vehicle Collisions.....	8
Goal #3: Reduce Agricultural Losses.....	9
Goal #4: Reduce Landscape Planting Losses.....	9
Goal #5: Reduce Ecological Impacts.....	9
IV. Planned Activities.....	10
Introduction.....	10
Measurement of Goals.....	10
Strategy Sets #1 & #2 - Improvement of Hunting Access and Efficacy.....	10
Strategy Set #3 - Avoidance of Deer Impacts.....	11

List of Tables, Figures and Appendices

List of Tables

Table 1.	Hopewell Township Deer Management Program - Harvest Data by Parcel – 2013/2014 Season	3
Table 2.	Hopewell Township Deer Management Program - Comparison of First and Second Seasons	4

List of Figures

Figure 1.	Hopewell Valley Deer Harvest Totals	1
Figure 2.	FoHVOS Antlerless Deer Harvests Per Five Acres of Hunted Land.....	5
Figure 3.	Hopewell Valley Deer Population Surveys	7
Figure 4.	Lyme Disease Cases for the Hopewell Valley.....	8
Figure 5.	Deer Vehicle Collisions for Hopewell Township.....	9

List of Appendices

Appendix A.	2013-14 Program Hunting Parcel Map
Appendix B.	End-of-Season Hunter Survey Results
Appendix C.	Deer Vehicle Collision Map
Appendix D.	Deer Count Maps (2010, 2012 and 2014)

I. Introduction

This is the second annual report prepared by the Hopewell Township Deer Management Advisory Committee (Committee) covering activities from June 2013 through April 2014. The report is organized in the format of the Hopewell Valley Deer Management Plan (September 2010) and provides highlights of recent, continuing and future activities along with revised summaries of deer impacts.

II. Strategy Implementation Efforts

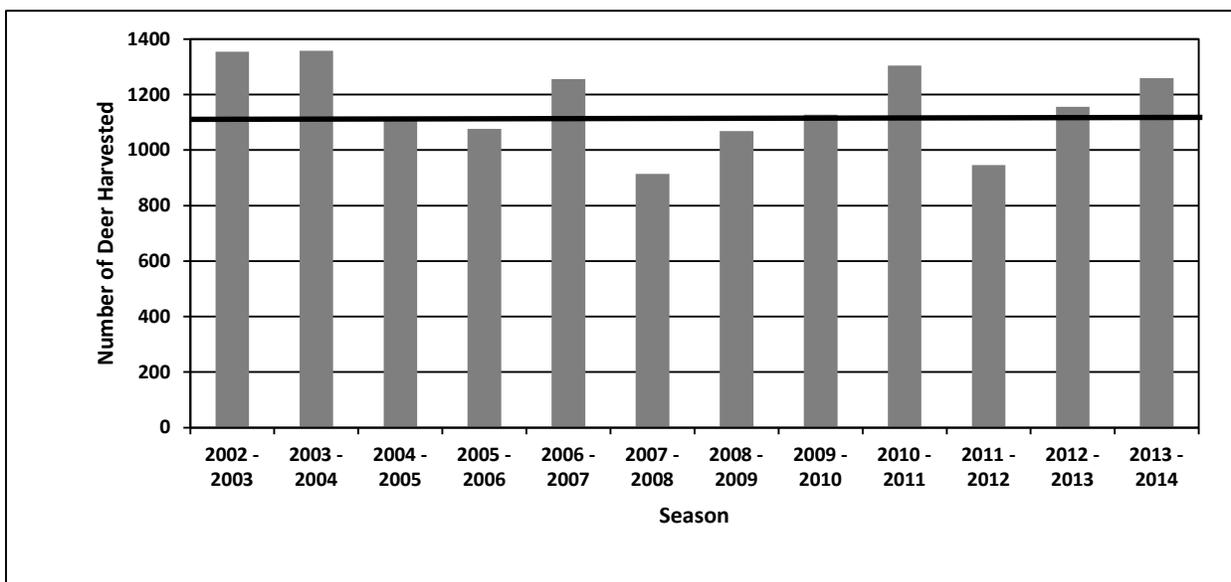
Introduction

This section describes strategy implementation efforts of Hopewell Township, along with other land managers in the Hopewell Valley.

All deer harvested within the Hopewell Valley are tracked annually by the NJDEP - Division of Fish & Wildlife (see Figure 1 below). The annual average total harvest (1,161 deer) is shown as a black line and represents approximately twice the average annual number of deer struck by vehicles in the Township (see Figure 5, page 8). Harvest numbers have been relatively stable over the last decade, but there has been an increase over the last two years relative to the 2011/2012 season. Antlerless deer harvests continue to account for approximately 70% of the total deer harvests. Note: Antlerless deer are defined as females or males with antlers less than three inches long by the NJ Division of Fish & Wildlife.

The most productive deer seasons include Fall Bow (ca. early September to late October; 24% of total harvests) and Permit Shotgun (ca. early December to early February; 38%) with the other four major hunting seasons accounting for the remaining harvests (Winter Bow – ca. late December to mid-February - is the least productive season and accounts for less than 2% of annual harvests). These harvest timing trends are consistent over the reported time period.

Figure 1. Hopewell Valley Deer Harvest Totals (2002-2014)
Solid black line represents the average over the reported time period.
Source: New Jersey Division of Fish & Wildlife (J. Powers, personal communication)



Strategy Sets #1 & #2 - Improvement of Hunting Access and Efficacy

The improvement of hunting access and efficacy is a critical strategy to reach stated goals. Efforts by individual land managing entities are described below.

Hopewell Township

The Committee successfully completed administration of the second hunting season of the township's deer management program (See Appendix A for a map of program hunting parcels). Program-related documents are available on the township website ([Click here](#)). The results of 2013/2014 end-of-season hunter questionnaires are provided in Appendix B. The majority of hunters are satisfied with the program and plan to participate next season.

Sixty-one hunters were permitted to harvest deer on 14 township-owned parcels totaling 623 acres (representing one additional property and six additional hunters compared to the 2012/2013 inaugural program). The Program quota of two antlerless deer for Bow Only parcels, and three antlerless deer for Firearm/Bow parcels was met or exceeded by 44% of hunters.

The antlerless deer harvest goal was 173 or 1.4 deer per 5 acres of hunted land. Overall, 156 deer were harvested; including 23 antlered and 133 antlerless (see Table 1 below for harvest information by parcel). The antlerless deer harvest represented 85% of the total harvest, 77% of the anticipated harvest, and corresponds to 1.1 antlerless deer per 5 acres of hunted land. Eighty-three percent of the antlerless deer harvested were female and the remaining deer were young bucks without antlers. All of the preceding figures were similar to results obtained in the 2012/2013 program (See Table 2 for season comparisons).



Ongoing ecological impacts

Deer browsed oak seedling that cannot grow to assure future forest cover in Hopewell Township.

Table 1. Hopewell Township Deer Management Program - Harvest Data by Parcel – 2013/2014 Season

Parcel #	Site Name	Acres	Allowable Sporting Arm	Number of Permitted Hunters	Anticipated Antlerless Harvest Goal (*)	Antlerless Deer Harvested		Antlered Deer Harvested	Total Number of Deer Harvested	Recovered Later - Not Tagged	Not Recovered Antlerless	Not Recovered Antlered
						Does	Other (**)					
1	Stony Brook Rd	13	Bow & Firearm	2	6	3	0	0	3			
2	Gomez Preserve	57	Bow & Firearm	5	15	6	2	3	11			
3	Harbourton-Woodsville Rd	12	Bow & Firearm	2	6	3	0	0	3		1	
4	Vogler Preserve	11	Bow Only	2	4	3	2	1	6			
5	Vales Preserve	6	Bow Only	2	4	11	4	0	15			
6	Else	67	Bow & Firearm	6	18	11	4	1	16		1	1
7	Penn-Rocky Hill Rd	5	Bow Only	2	4	3	0	1	4			
8	Bayberry Rd	86	Bow & Firearm	8	24	11	2	2	15			
9	Pennington Point	39	Bow Only	3	6	5	0	3	8	1		
10	Alliger Park	166	Bow & Firearm	12	36	19	3	3	25		1	
11	Scotch Rd	31	Bow & Firearm	6	18	11	1	4	16		2	
12	Reed Rd	3	Bow Only	1	2	3	1	0	4			
13	Weidel	52	Bow & Firearm	5	15	9	2	4	15			
14	Zaitz-Hutcheson	75	Bow & Firearm	5	15	13	1	1	15			
		623	TOTALS	61	173	111	22	23	156	1	5	1
total Antlerless Harvests =						133						
percent of Antlerless Goal =						76.88%						
percent of Total Harvest						71%	14%	15%		1%	3%	1%
% of Goal												
Bow Only Properties	Anticipated Harvest Goal	20	32	Actual	160.00%	(8 of 10 hunters reached their goal)						
Bow & Firearm Properties	Anticipated Harvest Goal	153	101	Actual	66.01%	(19 of 51 hunters reached their goal)						
	Anticipated Program Harvest Goal	173	133	Actual	76.88%	Total (27 of 61 hunters reached their goal)						

(*) Anticipated Harvest Goal = 2 antlerless deer per hunter for Bow Only properties, 3 antlerless deer per hunter for Bow & Firearm properties

(**) Note: shed bucks, button bucks and deer with spikes < 3 inches are considered antlerless deer as per NJ Fish & Wildlife rules.

Comments are welcome and may be e-mailed to the Program Director at: deermanagement@hopewelltpw.org

Table 2. Hopewell Township Deer Management Program - Comparison of First and Second Seasons

Hunting Season	# of Hunting Days	# of Parcels	Total Acres	# of Hunters	# of Hunters with No Harvests	# of Successful Hunters	# of Does	# of Other (*)	# of Bucks	Total Deer	Harvest Average per hunter	Total Antlerless (**)	Antlerless Average per hunter
2012 / 2013	138	13	548	55	14	41	86	22	13	121	2.95	108	2.63
2013 / 2014	132	14	623	61	10	51	111	22	23	156	3.06	133	2.61
% change	-4.3	7.7	13.7	10.9	-28.6	39.5	29.1	0.0	76.9	28.9	3.6	23.1	-1.0

(*) Other = shed bucks, button bucks and deer with spikes < 3 inches, which are all considered antlerless deer as per NJ Fish & Wildlife rules.

(**) Antlerless = Does + Other

Note 1: Season 1 began one week earlier than Season 2, and also was much warmer at the start. It is also one year following an EHD outbreak in several areas of the Twp.

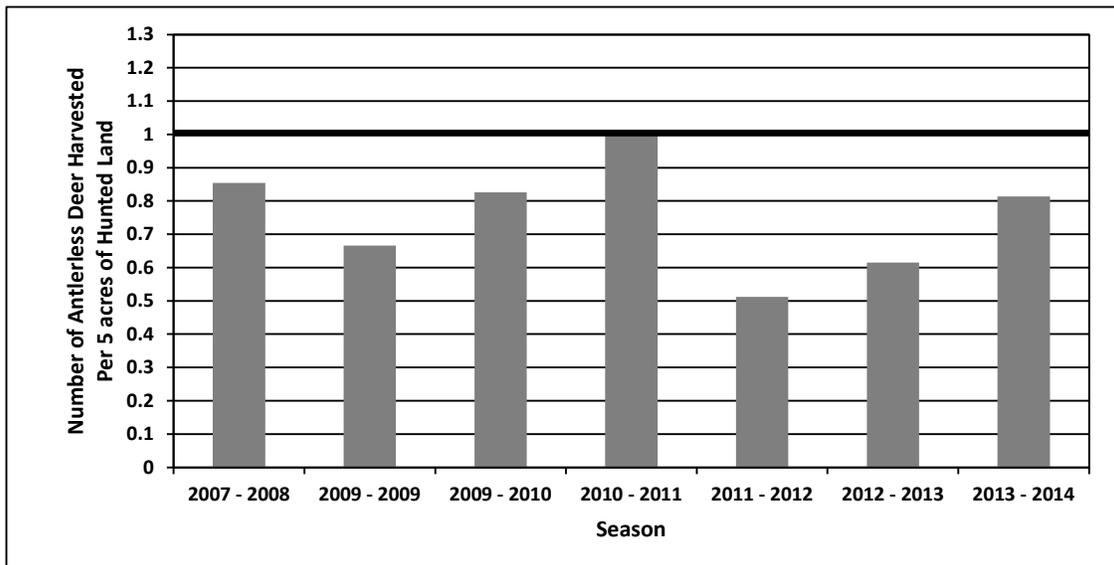
Note 2: Season 1 also was disrupted by Superstorm Sandy, which may account for the lower totals.

Note 3: Season 2 had cooler temperatures to start, with significant snow cover and very cold temperatures mid-December through end-of-season and beyond.

Non-Profit Organizations

The Friends of Hopewell Valley Open Space (FoHVOS) have been conducting a Deer Management Program since 2007. Antlerless harvest goals have been set at 1 per 5 acres of hunted land (shown as black line on Figure 2). Hunted acreage is currently 516, which represents the maximum of huntable preserves where FoHVOS leads deer management efforts (approximately 8 acres of FoHVOS preserves are not huntable). Significant program changes for the 2013/2014 season facilitated increased antlerless harvest (from a low of 50% of goals in 2011/2012 to 80% of goals). In the 2013/2014 season, a total of 84 antlerless deer were harvested on FoHVOS preserves.

**Figure 2. FoHVOS Antlerless Deer Harvests
Per Five Acres of Hunted Land (2007/2008 – 2013/2014)**
Solid black line represents the annual harvest goal.



Other non-profit organizations with active deer management programs on lands in the Hopewell Valley include the D&R Greenway Land Trust (multiple preserves), Stony Brook - Millstone Watershed Association (874 acres) and New Jersey Conservation Foundation (Honeystone Preserve, 50 acres).

State and County Lands

The New Jersey Department of Environmental Protection (including the Division of Parks and Forestry, Division of Fish & Wildlife and New Jersey Natural Lands Trust) manage 3,400 acres in Hopewell Township. The state had recreational hunting opportunities on approximately 60 acres (former Blackwell Farm), but this was discontinued in 2013. Currently, the state does not conduct any deer management activities in Hopewell Township.

Mercer County manages 4,246 acres in Hopewell Township and immediately adjacent areas. The Ted Stiles Preserve at Baldpate Mountain (approximately 1,350 acres) has had an exemplary deer management program for approximately fifteen years. Mercer Meadows (approximately 810 acres) was recently added to the Counties deer management program (bow hunting only). The Howell Living History Farm (approximately 200 acres) has allowed limited recreational hunting opportunities and began more intensive efforts to prevent severe damage to its corn maze (but efforts in 2013 were not effective). Another small County-owned parcel (approximately 17 acres) is part of the FoHVOS Heritage Preserve deer management program. In total, approximately 1,830 acres are hunted, while approximately 2,420 acres of County land in Hopewell Township have no hunting access.

The County requires the harvesting of female deer (antlerless male deer are not counted toward harvest goals) and requires the submission of a post-harvest deer photo. In the 2013/2014 season, 101 antlerless deer were harvested at Baldpate Mountain (equivalent to 0.4 antlerless deer per 5 acres of hunted land) across 35 hunting dates in December/January. Mercer Meadows had a total antlerless harvest of 18 antlerless deer (equivalent to 0.1 antlerless deer per 5 acres). However, hunting is restricted to particular locations, sporting arms (compound bows only) and times of year.

Private Lands

Private lands account for nearly 70% of the land area in the Hopewell Valley. Recreational hunting occurs on much of the land without safety zone restrictions, but deer management programs on private lands remain uncommon. FoHVOS, through its Private Lands Stewardship Program (current membership is approximately 75 landowners), discusses deer management strategies and encouraged increased antlerless harvests on several private properties during the 2013/2014 season.

Strategy Set #3 - Avoidance of Deer Impacts

The Committee prepared a map depicting deer-vehicle collision ‘hot spots’ that will be posted on the Township website (See Appendix C). Collision data was provided by the Police Department. A total of 558 collisions were mapped (includes all deer crash reports with exact street addresses or road intersections from 2009 - 2013). Collisions occurring in the same vicinity were grouped. However, it is important to note that isolated collisions occur throughout the Valley. The most dangerous roadways include Route 579 (especially south of Route 623), Route 546, Route 611 (especially south of Route 546), Route 31 and Route 29. This information will be utilized to guide future placement of warning signage to improve driver awareness and help reduce deer-vehicle collisions.

In April 2014, the Committee worked with the Township Health Department to provide an educational forum on Lyme disease. Speakers included Dr. Kathy Spreen and Bob Oley, who provided information on the disease and backyard protection measures to attendees.

III. Evaluation of Impact Reduction Goals

Introduction

The intention of all strategy implementation efforts is the reduction of deer impacts. Goals from the Hopewell Valley Deer Management Plan are provided on Page iii.

Deer Population Estimates

While not an impact reduction goal, estimates of the deer herd size may be utilized to determine the relationship between population levels and measured impacts. Distance sampling was performed by the Committee in late March/early April in 2010, 2012 and 2014. Figure 3 below depicts survey results as deer per square mile throughout the Hopewell Valley (See Appendix C for maps showing actual deer observation locations).

For reference, wildlife researchers have estimated that deer densities of 10 per square mile (dashed line on chart) were typical prior to European colonization of the United States (McCabe and McCabe 1984). Impacts to forest health have been shown to occur above this level (deCalesta 1994, deCalesta 1997). Additionally, 10 deer per square mile represents the upper threshold that supports the Lyme disease cycle (Stafford 2007).

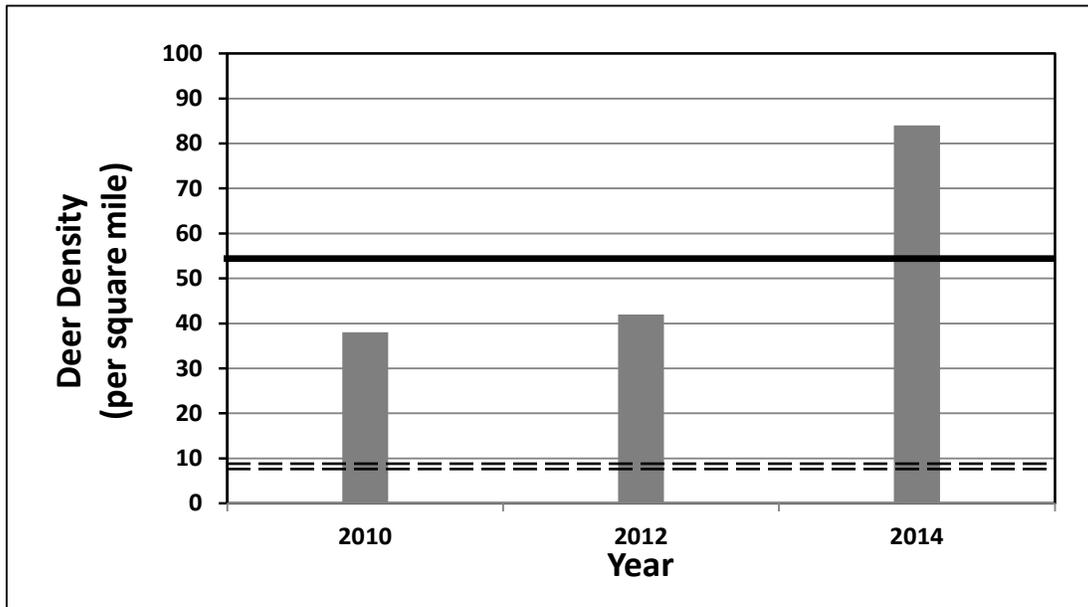
There was a dramatic increase from 2012 (42 deer per square mile) to 2014 (84 deer per square mile or over 10X more than the ultimate desired condition of 10 deer per square mile). This was especially surprising because the 2010 and 2012 populations were similar and harsher winter conditions this past season should have naturally reduced the herd size. Although the reasons are not completely clear, the following could be speculated:

a) Surveyor Experience Levels: In 2010, surveyors were inexperienced and may have under-estimated the population size due to missed deer observations. Surveyors in 2012 and 2014 involved professionals from the Division of Fish & Wildlife along with experienced hunters.

b) Blue Tongue Disease Outbreak of 2011/2012: The survey in 2012 followed an outbreak of “blue tongue” (Epizootic Hemorrhagic Disease or EHD). Despite the use of an experienced survey team, deer numbers were significantly lower, leading to a population estimate similar to that observed in 2010, where it was possible that more deer were present, but were under-estimated due to missed deer observations.

c) Population Recovery and Use of Experienced Survey Team: In 2014, it appears that the population recovered significantly since 2012, which was recorded by the experienced survey team.

Figure 3. Hopewell Valley Deer Population Estimates
Solid black line represents the average over the reported time period.
Dashed line represents the ultimate desired condition.

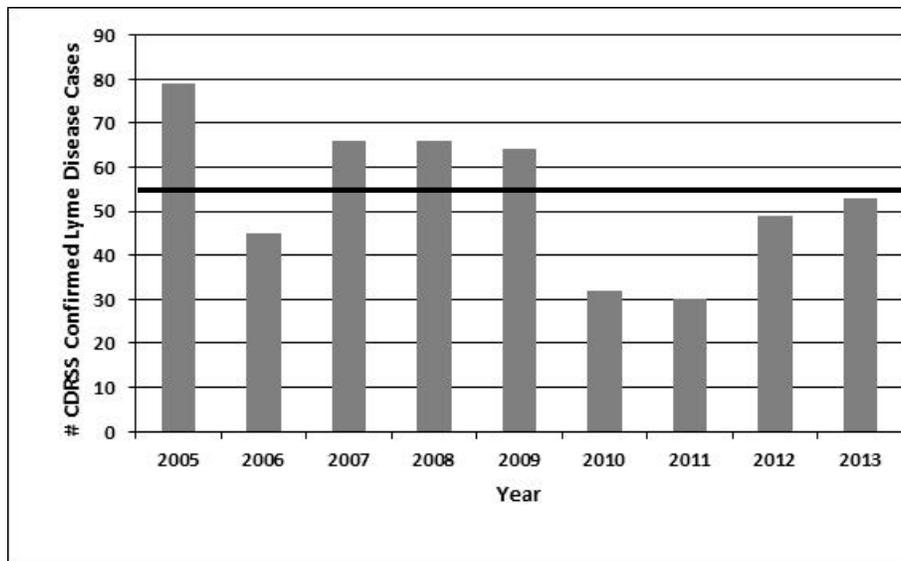


Goal #1: Reduce Lyme Disease Cases

Hopewell Valley Lyme disease data is reported in Figure 4 below. This data has been corrected from the 2010 report to reflect only confirmed cases through the Communicable Disease Reporting and Surveillance System (CDRSS) and confirmed by the New Jersey Department of Health and Human Services. These cases include all residents from Hopewell Township, Hopewell Borough and Pennington Borough that were diagnosed with Lyme disease by their physician (and formally confirmed through blood testing). It is important to note that many cases are unreported or unconfirmed because physicians often diagnose and treat the disease without the blood testing required for formal tracking purposes. The average number of annual cases since 2005 was 54 (black line on chart). Future reduction goals should be based upon a 75% reduction of cases based upon the average number of cases from 2007 – 2009 or 65 cases.

There appears to be an upward trend over the last several years with a low of 30 cases in 2011 and a significant increase to 53 cases in 2013. While the 2013 cases approached the stated goal of 49 cases, the upward trend since 2011 is troubling. This increase may coincide with an increased deer herd size following the blue tongue disease outbreak (see above).

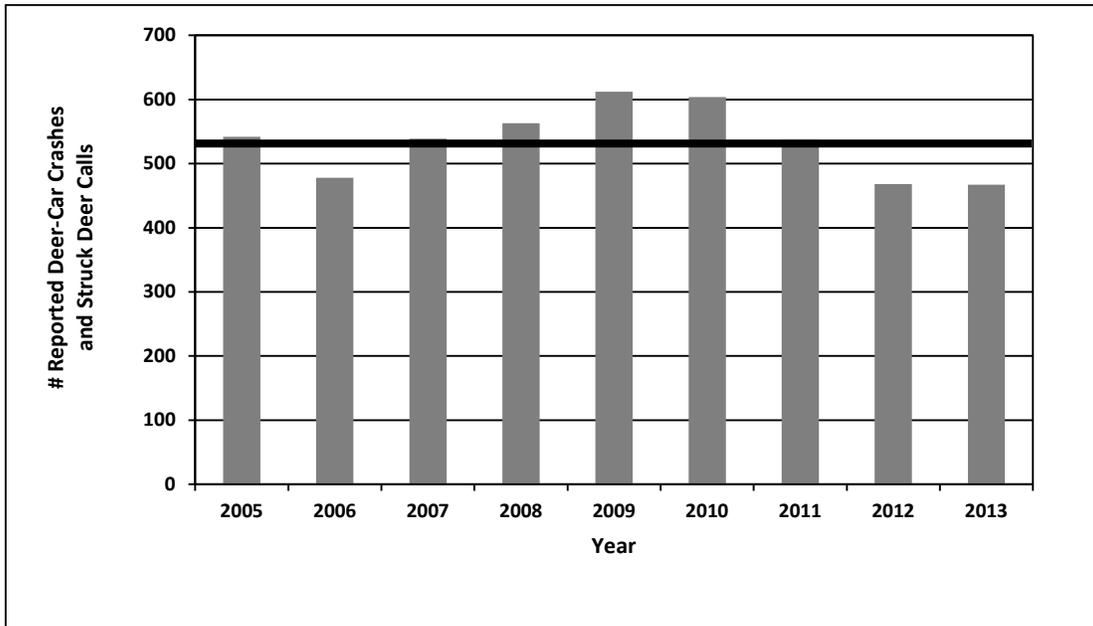
Figure 4. Lyme Disease Cases for the Hopewell Valley
Solid black line represents the average over the reported time period.



Goal #2: Reduce Deer Vehicle Collisions

Hopewell Township tracks Deer-Vehicle Collisions (DVC's) through two methods – reported deer-car crashes and struck deer calls (see 2010 Deer Management Task Force Report for a detailed explanation). The combined average is 534 DVC's per year since 2005 (see Figure 5 below, black line on chart). There has been a downward trend since 2010 (604 collisions) to 2013 (467 collisions), representing a 23% reduction since a peak in 2009. Current collisions are approaching the stated goal of 425 collisions by 2013 and collisions appear to have stabilized at values below the longer term average over the last two years. This data does not support a dramatically increased herd size following the blue tongue disease outbreak (see above).

Figure 5. Deer Vehicle Collisions for Hopewell Township
 Solid black line represents the average over the reported time period.



Goal #3: Reduce Agricultural Losses

There have been no measurements conducted since the public questionnaire was performed in 2010. A second public questionnaire is planned for 2015.

Goal #4: Reduce Landscape Planting Losses

There have been no measurements conducted since the public questionnaire was performed in 2010. A second public questionnaire is planned for 2015.

Goal #5: Reduce Ecological Impacts

There have been no measurements since the 2012 annual report. Seven properties were planted with ‘Sentinel Seedlings’ in December 2013 and measurements of seedling browse levels and forest understory density (‘Forest Secchi Protocol’) will be conducted in June 2014. Sites included five private properties and two public lands owned by Mercer County (Mercer Meadows and Curlis Lake Woods). Results will be provided in the 2014 annual report.

IV. Planned Activities

Introduction

This section contains a brief overview of planned activities over the next year.

Measurement of Goals

The Hopewell Township Police Department continually tracks deer-vehicle collisions and the Township Health Department regularly tracks Lyme disease cases. Forest health measurements (Sentinel Seedling and Forest Secchi) will be conducted at multiple sites by FoHVOS staff and volunteers. Agricultural and landscape loss data/issues will be collected from the 2015 public questionnaire.

Strategy Sets #1 & #2 - Improvement of Hunting Access and Efficacy

Hopewell Township

The Township plans to continue implementation of its deer management program. For the 2014/2015 season, 15 sites totaling 688 acres are planned to be included in the program. The Carter Road site (65 acres) is the newest parcel being added to join with the 14 sites from the 2013/2014 season. The Committee will continue to conduct an ongoing review of Township land holdings for potential additions to the deer management program.

Non-Profit Organizations

Each of the four non-profit land managers in Hopewell Township (FoHVOS, D&R Greenway Land Trust, Stony Brook - Millstone Watershed Association and the New Jersey Conservation Foundation) will continue their deer management efforts. The Committee will encourage increased collaboration between these groups by inviting them to discuss their program successes and challenges along with the potential to form partnerships with DMAC and/or other governmental entities.

State and County Lands

The Committee will continue to serve as a resource to facilitate increased hunting access and efficacy on state and county lands. In some cases, the Township might consider direct management of programs on state lands through the existing Township program.

Private Lands

The Township Agricultural Advisory Committee and the Deer Management Advisory Committee will begin close collaboration to increase coordination of deer management on private lands and adjacent township properties. This will be part of a larger collaboration on deer management activities with the agricultural community.

FoHVOS will continue to work with private land owners on stewardship efforts, including increasing hunting access and efficacy and promoting native deer resistant landscape plantings. The Sourlands Conservancy has developed "[The Hunter Connection](#)", which is a web-based matching program that links hunters with private landowners interested in deer management on their properties within all Sourland municipalities, including Hopewell Township. The Committee will support this effort within the Township.

Strategy Set #3 - Avoidance of Deer Impacts

1) The Committee plans to increase its community outreach efforts to better educate the public about our deer management program. This effort will include staffing an information booth at the fall Hopewell Harvest Fair community event.

2) The Committee will publicize the deer-vehicle collision “hot spot” map through the Township’s web site. The collision data information will also allow implementation of avoidance strategies, which may include roadside warning signage and/or vegetation management to help reduce the number of collisions.

3) FoHVOS will continue to promote deer-resistant native plants for landscaping through its [Private Lands Stewardship Program](#).

4) The Committee will continue its work to provide outreach regarding tick prevention and treatment. Planned efforts are outlined below and particular items will include coordination with the Township Health Department:

- Township website enhancements along with expanding outreach through the cable television, health happenings and Health Department bulletin boards.
- Spring 2015 public presentation by Lyme disease expert(s) to increase tick and Lyme disease awareness along with prevention measures
- Preparation of a news article to be provided to the League of Municipalities and increase communications with other municipal efforts across the state
- Detailed review of CDRSS data to deepen understanding of Lyme disease incidences
- Researching options to increase outreach to health care providers and hospitals
- Provide outreach at the Hopewell Harvest Fair

Appendix A

Hopewell Township Deer Management Program

Property Map

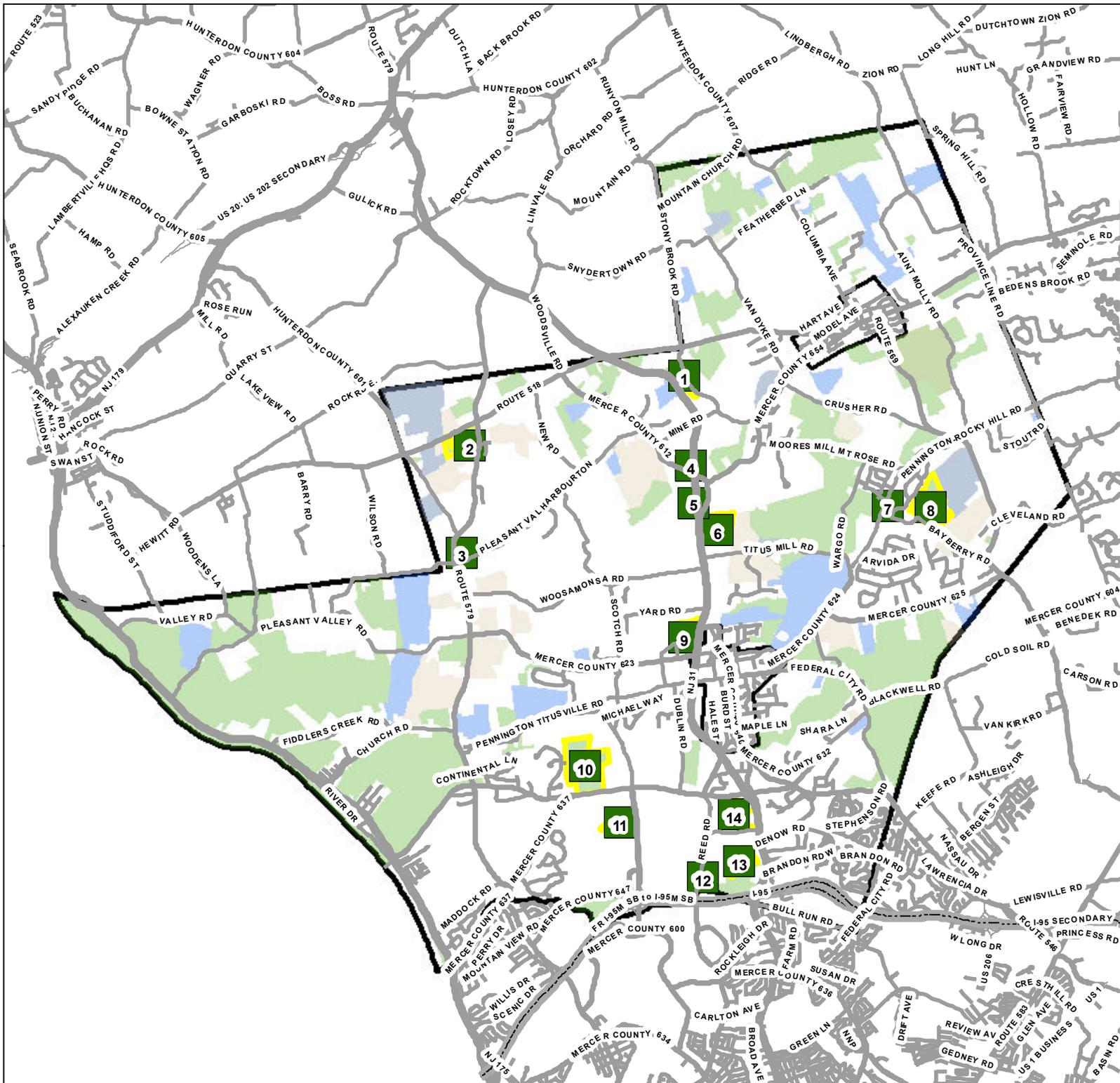
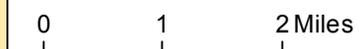
Site ID, Site Name

1. Stony Brook Road
2. Gomez Preserve
3. Harbourton-Woodville Road
4. Vogler Preserve
5. Vales Preserve
6. Else
7. Pennington-Rocky Hill
8. Bayberry Road
9. Pennington Point
10. Alliger Park
11. Scotch Road
12. Reed Road
13. Weidel
14. Zaitz-Hutcheson



Legend

- DMP Property Locations
- Property Boundary
- Preserved Farmland
- Protected Open Space
- Private Easements



Appendix B

Appendix B. End-of-Season Hunter Survey Results

Question	Number of Respondents
How many years have you been hunting?	
0-1	0
2-5	1
5-10	3
11+	39
How many hours did you spend at your hunting parcel?	
0-10	0
11-50	12
51-100	16
100+	15
Did you utilize bait?	
Yes	38
Did you utilize lures?	
Yes	26
Did you meet your antlerless deer harvest quota?	
Yes	26
No	17
What factors impacted your ability to meet your antlerless quota?	
Not enough time to hunt	3
Not enough deer on the parcel	11
Too many rules	0
Butchering meat / storage was difficult and/or expensive	1
My parcel has too much hunting pressure or other issues from neighboring properties	6
Could not access portions of the parcel that had a lot of deer	5
Would you be interested in harvesting additional deer if they could be donated for free to a local food bank?	
Yes	35
Do you feel that the number of assigned hunters was correct for the size of parcel?	
My parcel was too small for the number of hunters	10
My parcel was the right size for the number of hunters	33
My parcel was too big and has room for additional hunters next season	0
Were there any concerns with other hunters on your parcel?	
No problem	42
I prefer to be with a different group of hunters next season	3
Not Applicable	1
How do you feel about the quality of the Deer Management Program?	
Program is fine	37
Needs improvement	
Are you interested in participating in the 2014/2015 hunting season?	
Yes	43
No	1

Appendix C

**Hopewell Township
Deer Management
Advisory Committee**

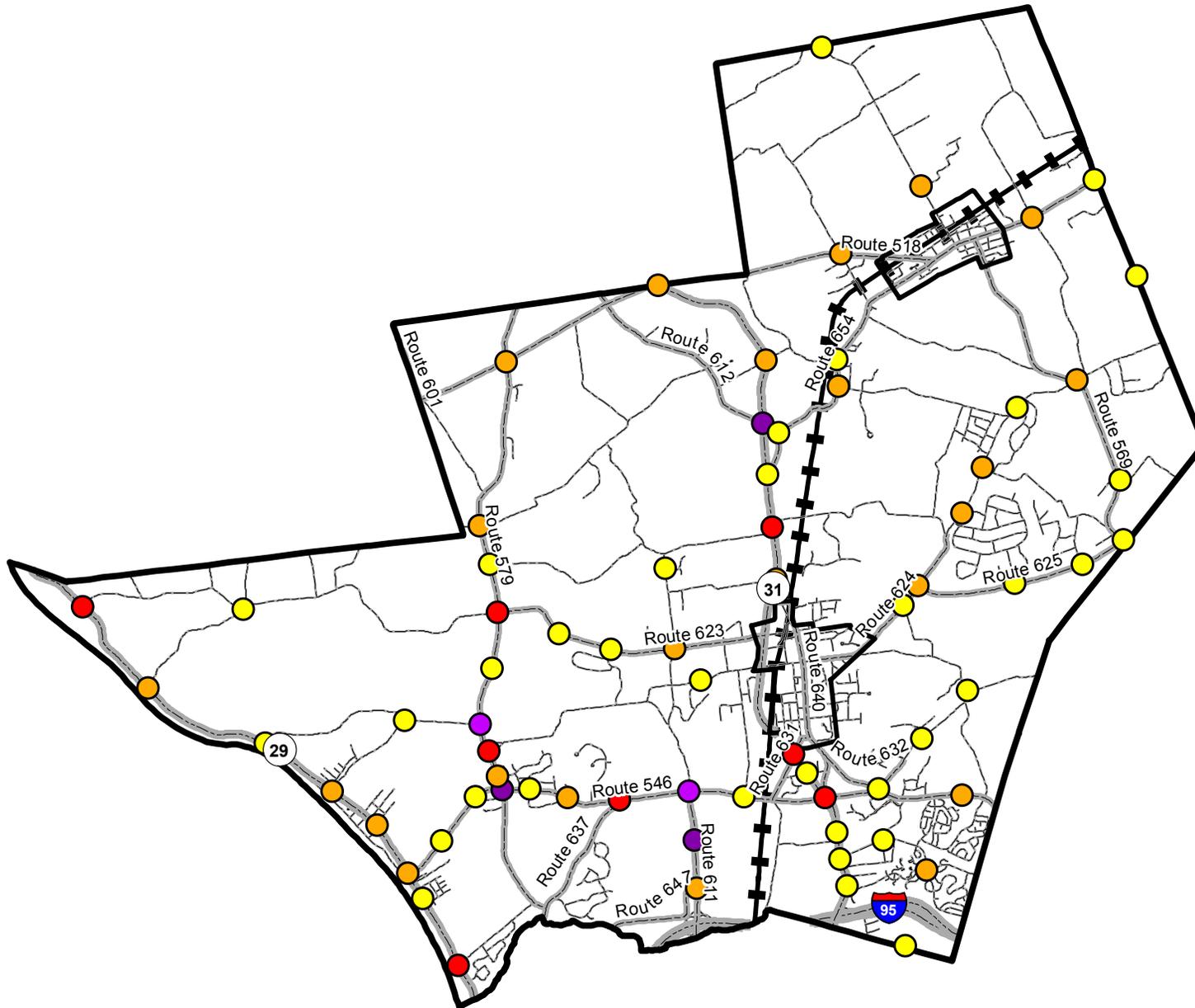
**Deer-Vehicle
Collision Map**

This map was produced to inform residents of areas with greatest risk of deer-vehicle collisions.

Collision data was provided by the Police Department. A total of 558 collisions were mapped (includes all deer crash reports with exact street addresses or road intersections from 2009 - 2013).

Collisions occurring in the same vicinity were grouped. However, it is important to note that isolated collisions occur throughout the Valley.

The most dangerous roadways include Route 579 (especially south of Route 623), Route 546, Route 611 (especially south of Route 546), Route 31 and Route 29.



Collision Numbers

-  3 to 5
-  6 to 10
-  11 to 15
-  16 to 20
-  20 to 25



0 1 2 Miles

Appendix D

**Hopewell Valley
Deer Management
Task Force**

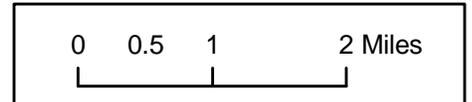
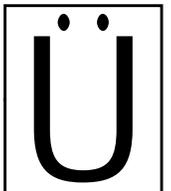
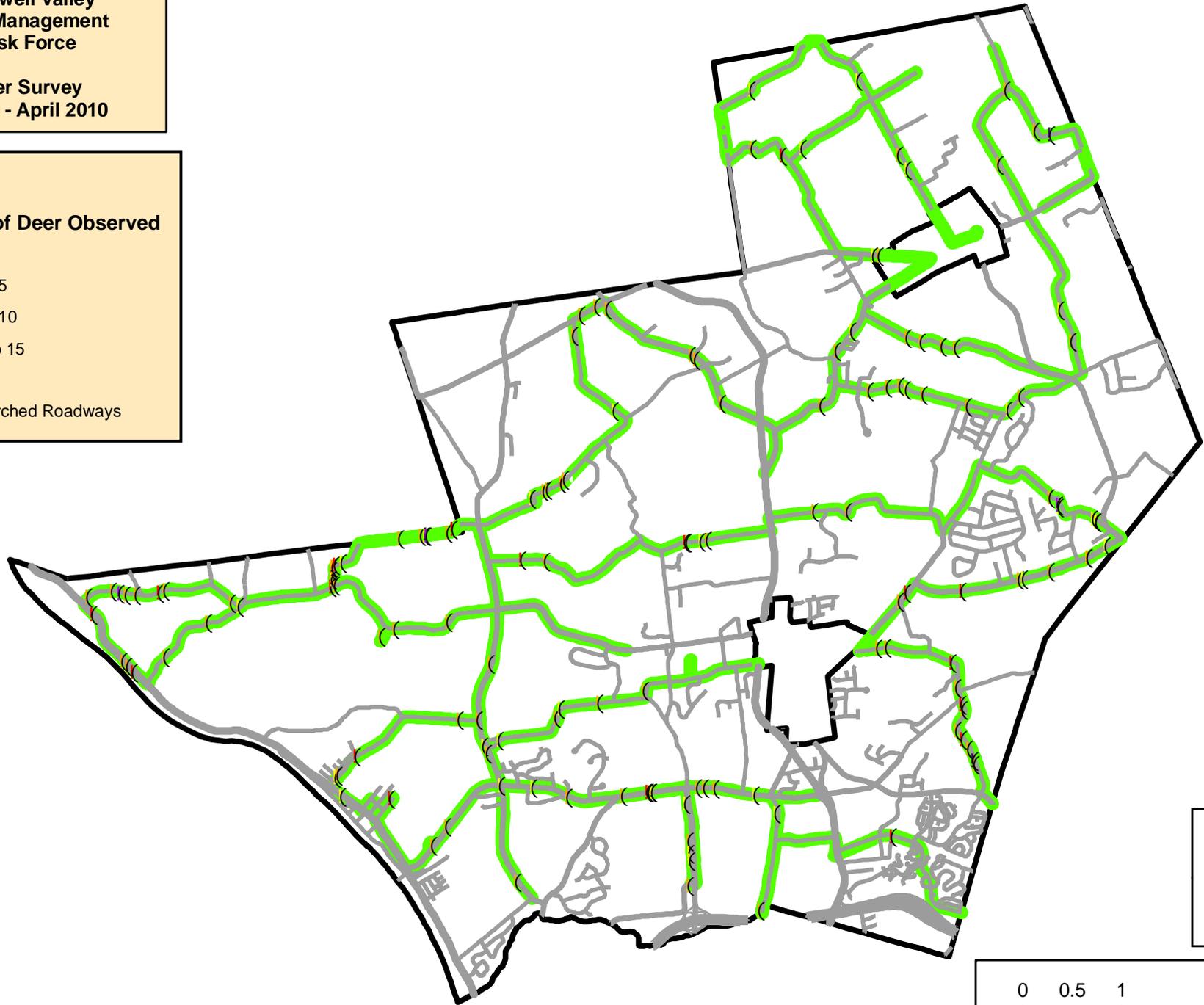
**Deer Survey
March - April 2010**

Legend

Number of Deer Observed

- (1
- (2 to 5
- (6 to 10
- (11 to 15
- (> 15

 Searched Roadways



**Hopewell Township
Deer Management
Advisory Committee**

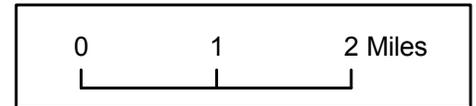
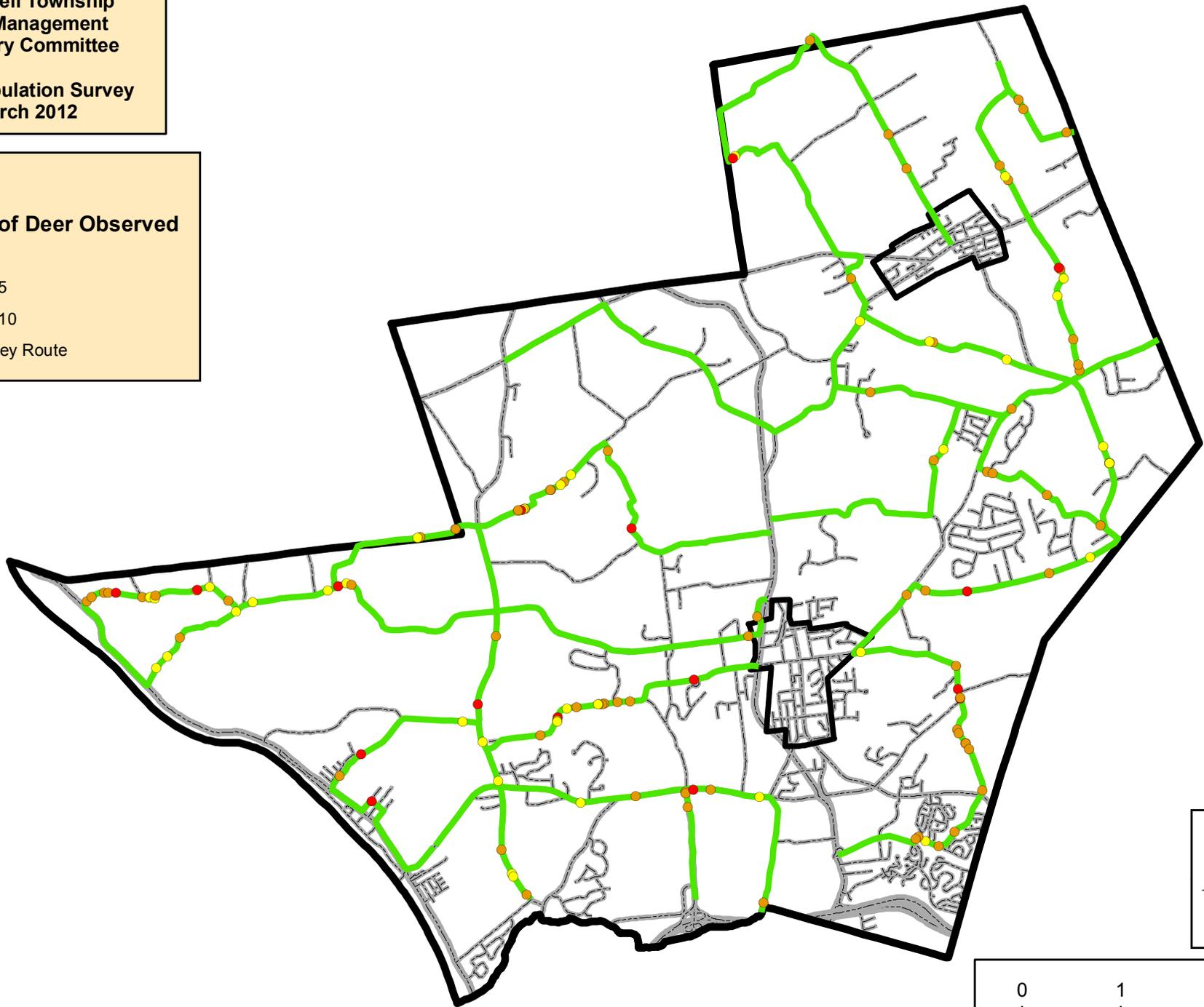
**Deer Population Survey
March 2012**

Legend

Number of Deer Observed

- 1
- 2 to 5
- 6 to 10

— Survey Route



**Hopewell Township
Deer Management
Advisory Committee**

**Deer Population Survey
March - April 2014**

Legend

Number of Deer Observed

- 1
- 2 to 5
- 6 to 10
- 11 to 15
- Survey Route

