PHED/PS COMM #1 April 18, 2016

MEMORANDUM

April 14, 2016

TO: Planning, Housing, and Economic Development Committee Public Safety Committee

FROM: Linda McMillan, Senior Legislative Analyst

SUBJECT: Worksession: FY17 Operating Budget – Deer Management

Those expected for this worksession:

Casey Anderson, Chair, Montgomery County Planning Board Mike Riley, Director, Montgomery County Parks Antonio DeVaul, Chief, M-NCPPC Montgomery County Park Police Bill Hamilton, Natural Resources Manager Bob Cissel, Agricultural Preservation Advisory Board and Montgomery Agriculture Producers

At this worksession, the joint Committee will receive an update on the results of the 2015-2016 Deer Season and the implementation of expanded deer management efforts by Park and Planning. The joint Committee will receive comments from Mr. Cissel on the impact of deer on agriculture. Council staff is recommending the joint Committee request follow-up on the recommendation regarding the composting of large animals.

2015-2016 Deer Season Results (not just Parks)

The Maryland Department of Natural Resources has not yet issued its full report but has issued the total number of deer harvested in the 2015-2016 season. <u>Statewide</u>, there was a 3% <u>decrease</u> in the number of deer killed (86,883 in 2014-15 to 84,022 in 2015-2016 season). This is the second year that the number of deer killed statewide has declined. The Department of Natural Resources attributes this to reduced deer numbers in some rural areas and poor weather conditions that impeded hunting.

Montgomery County has also seen a two-year decline as shown in the table on the following page. Of Montgomery County's neighboring counties, Frederick County had the

highest number and the smallest decline (7,149 deer, a 1.2% decline), Prince George's harvest was 2,512 deer (a 5.8% decline), and Howard's 2,334 deer (a 9.6% decline).

Montgomery County

Season	2011-12	2012-13	2013-14	2014-15	2015-16	Change 14- 15 to 15-16
	5,571	5,598	5,889	5,410	4,744	(12.3%)

Deer Management – Montgomery County Parks

Deer population management is occurring in 19,372 acres of the 37,076 acres of parkland. The following highlights regarding deer management are included in the Parks budget document.

- Implemented new deer population management operations on approximately 1,300 acres of parkland, to manage white-tailed deer populations and impacts.
- Continued deer population management at 32 other M-NCPPC park units resulting in over 1,500 deer being harvested from Montgomery parks and approximately 500 harvested from the sharp-shooting operations. This was processed into 30,000 pounds of meat that was donated to food banks in the metropolitan area.
- M-NCPPC's program is considered by the State Department of Natural Resources to be the exemplary program of its type in Maryland.
- By the end of FY15, approximately 19,000 acres of M-NCPPC Montgomery County parkland will be under deer population management.

Program Indicator: Percent (%) of Best Natural Area (BNA) and Biodiversity Area (BDA) acreage with on-going natural resource management programs.

	Target	FY15	FY16	FY17
	-	Actual	Actual	Projected
On-going deer management	80%	63.9%	69.1%	69.1%
BNA/BDA Acres with Deer Management		9,075	9,808	9,808
Total BNA/BDA acres		14,194	14,194	14,194

Deer management is ongoing in many park areas that are not BNA/BDAs that are not represented here. FY16 changes include the additional of 43 acres of BDA in Paint Branch Stream Valley Park.

For FY16, the Council added \$273,489 in new funding that would help in achieving four

- goals:
 - 1. Create a fourth sharpshooting team to increase harvest;
 - 2. Implement sharpshooting in Muddy Branch Stream Valley Park (Darnestown) and Rock Creek Stream Valley Park (north of 495/Kensington);
 - 3. Add four days of sharpshooting at M-NCPPC parks in the down-county;
 - 4. Plan and implement a pilot archery program in Great Seneca Stream Valley Park (Germantown) and Watts Branch Stream Valley Park (Potomac).

Update on Sharpshooting

Information on all deer management methods is posted on the Parks Department website. The website includes links to public comment received regarding new initiatives and a link to all park properties and the type of hunting that will occur.

http://www.montgomeryparks.org/PPSD/Natural_Resources_Stewardship/Deer_Management/de er_initiatives.shtm

Sharpshooting takes place from mid-January to the end of February. Unfortunately, weather, including the blizzard of 2016, resulted in the loss of 5.5 of 16 planned days. This is a major reason that the number of deer killed were below the level anticipated.

	2013-14	2014-15	2015-16
Sharpshooting (M-NCPPC Parks)	473	562	526
Montgomery County Deer Program	1,551	1,644	1,553
Hunts*			

*Parks, Dickerson (MC Solid Waste property), Seneca managed hunts, WSSC (MC only)

Update on Archery Pilot

The Parks Department has provided the following update on the new archery managed hunt and to the question from Council staff about whether they intend to expand the archery managed hunt to any other areas.

During Fiscal Year 2016, Montgomery Parks selected 2 park locations (Great Seneca SVU1, Germantown and Watts Branch SVU 1 & 2, Travilah and Potomac) to implement a pilot Archery Managed Deer Hunting Program. Two select groups were selected to participate, each permitted upon one of these two park locations, during periods of the Regulated Archery Season occurring September 15 through January 31.

No accidents, park impacts, or negative interaction with the public were reported, and 84 deer were harvested. Occurrence of deer wounded and unrecovered was as expected, and similar to other means of deer population management. In total, 16 of 21 qualified participants took part in the pilot Archery Managed Deer Hunting Program.

It is the intent to expand the Archery Managed Deer Hunting Program into two additional areas of parkland during Fiscal Year 2017. Currently, the options for consideration include expansion of management from Watts Branch Stream Valley Park, Units 1 & 2 into Watts Branch Stream Valley Park, Unit 3, and implementation into the Lois Y. Green Conservation Park or Ovid Hazen Wells Conservation Park.

Please note: wounding rates experienced during MNCPPC, DP pilot AP effort are consistent with those reported in various professional documents and publications (e.g., Fairfax County Archery Program

reports, First National Conference of Bowhunting, Howard County Department of Recreation's Archery Program reports, Human – Wildlife Interactions Journal, and Journal of the Southeastern Association of Fish and Wildlife Agencies).

Expansion of Sharpshooting and/or Managed Hunts

In response to questions from Council staff about (1) whether there could be expansion of the program in FY17 within the current budgeted amount, and (2) what the next areas for deer management would be if extra funds are available, Parks provided the following.

At this time the Department does not expect to expand within the current budget. However, the Department continues to evaluate active programs in search of strategy changes that may allow for reallocating existing resources to achieve expansion into new areas of parkland; dependent upon an examination of Fiscal Year 2016 operations.

It is important to note that direct reduction population management of White-tailed Deer on M-NCPPC parkland typically ends on the last week in February, each year. This reality often precludes incorporation of new management initiatives into the next fiscal year's budget request. As a result, the M-NCPPC, Department of Parks' proposed FY17 budget did not include a request for new resources necessary for program expansion. However, it is understood that there are additional parklands in which deer management is necessary to address deer impacts, and park staff believe that expanded efforts could potentially be considered at the following park locations, if new Fiscal Year 2017 resources were available.

Additional funding in the amount of \$192,822.83 would provide capability of expansion of Park Police-based Sharpshooting into the Northwest Branch Stream Valley Park, Unit 4 in Silver Spring/Wheaton, and implementation of the Cooperative Managed Deer Hunting into the newly acquired Bennett Creek Conservation Park, in Damascus. An expansion of these locations would require 1 full-time career Natural Resources Specialist and 1 part-time career Senior Natural Resources Specialist (\$146,152.83), \$5,170 in Park Police overtime (100 hours), \$24,000.00 in seasonal funding, \$21,500.00 supplies and materials funding. These funding accommodations will begin an evaluation process and development stage, and may or may not result in deer population reductions occurring within the year in which funding begins.

Parks has also shared that other areas that need to be evaluated for deer management include Rock Creek Stream Valley Park, Unit 3; Sligo Creek Stream Valley Park, Unit 5; and Cabin John Stream Valley Park, Units 1 through 5.

Council staff is not recommending additional funding for Parks Department deer management for FY17 because there is not a good measure of what can be accomplished with current resources given the loss of sharpshooting days. For FY18, if the archery program continues to prove successful and there is a better sense of how much can be accomplished with sharpshooting, expansion of resources should be considered.

Deer Vehicle Collisions

The FY16 Annual Report from the Deer Management Program is attached at © 1-20. Each year the Annual Report contains information on deer-vehicle collisions reported to the Montgomery County Police Department (© 5). This does not include collision where a driver does not call the police but, for example, may just report to their insurance company.

For calendar year 2014 there was about a 6% decline. However it is still significantly above the 2008 level, which has been the low point in the 2000's. The map at \bigcirc 6 shows that collisions occur in all parts of the County.

2008	2009	2010	2011	2012	2013	2014
1,841	1,945	1,930	2,038	2,019	2,146	2,014

Agricultural Damage

The report contains information from a deer damage survey conducted in May 2014 (© 7). Note that of the 32 respondents, 94% said damage is worst on farms adjacent to parks.

Farmers are using a variety of strategies to attempt to minimize damage to their crops. From the thirty-two (32) respondents they indicated the following:

- 63% have stopped raising certain crops due to deer damage.
- 45 % have made use of Crop Damage Permits.
- 97 % allowed deer hunting on land they owned or rented.
- 53 % have discussed with their hunters ways to increase the harvest of deer.
- 28% say they do not have a quota system in place requiring the harvest of Does before the harvest of bucks.
- 31% say they rent farmland where hunting is not allowed.
- 66% say that they farm on or adjacent to parkland.
- 94% say that deer damage is worst on farms adjacent to parks.
- 50% have family members that have contracted Lyme disease.

Large Animal Composting

The Annual Report recommends the development of a large-animal composting program (© 20). It notes that rendering (current disposal method) is expensive and that the current, and only, contractor may stop providing the service. Council staff agrees that this is a serious potential problem. Council staff recommends the joint Committee request a report from the Executive on how this could be implemented. Solid Waste, Animal Services, Office of Agriculture, and Maryland State Highway should be included in the development of a proposal.

Montgomery County Deer Management Program



Annual Report and Recommendations Fiscal Year 2016

Prepared by Montgomery County Deer Management Work Group Rob Gibbs, Chair June 2015

The Montgomery County Deer Management Work Group

Maryland Department of Natural Resources Wildlife and Heritage Service, M-NCPPC, Department of Parks Montgomery County Montgomery Soil Conservation District Montgomery County Police Department U. S. National Park Service Washington Suburban Sanitary Commission This page intentionally blank

Montgomery County Deer Management Program Annual Report and Recommendations Fiscal Year 2016

Introduction

The <u>Comprehensive Management Plan For White-tailed Deer in Montgomery County. MD</u>, (Montgomery County Deer Management Work Group, 1995) calls for the Montgomery County Deer Management Work Group (DMWG), on an annual basis, to review deer-impact data and present a list of recommendations for the upcoming year. Recommendations are submitted to and implemented by County, State and Federal agencies and private landowners as appropriate.

This report briefly reviews the current status of the County's Deer Management Program, makes recommendations for Fiscal Year (FY) 2016 (July 1, 2015 to June 30, 2016) and describes the rationale upon which these recommendations are based.

Information on all aspects of the County's Deer Management Program is available on the Internet at <u>www.ParksDeerManagement.org/</u>. The website includes data from past years on deer-vehicle collisions, impacts to natural ecosystems, damage to agricultural crops, local deer populations and other pertinent information about the program including locations and application procedures for managed hunts on M-NCPPC Parkland. Comments and specific questions regarding this report can be addressed to Bill Hamilton at <u>Bill.hamilton@montgomeryparks.org</u> / 301-962-1342.

Citizen Notification and Comment Periods for Proposed Deer Management on County Parkland

Public input is solicited prior to the implementation of any new population management on M-NCPPC Parkland. M-NCPPC will publicize information on any new proposals through press releases to local newspapers, other news media and the Internet. Following these public announcements there will be a comment period during which citizens can submit comments through the mail, or e-mail. While some public meetings may be held in areas where management is expected to be very controversial, it is felt that use of the internet and public media provides greater and more convenient opportunities for citizens to learn about and comment on deer population management actions that are proposed on parkland throughout the county. Information will be provided at <u>www.ParksDeerManagement.org/</u>. Once management actions have been implemented, it should be understood that they will continue annually.

Goal and Objectives

The goal of Montgomery County's deer management program is to reduce deer-human conflicts to a level that is compatible with human priorities and land uses. The deer management plan lists four objectives for attaining this goal.

- 1. Reduce deer-vehicle collisions (DVCs) on a countywide basis.
- 2. Reduce depredation on agricultural crops and home landscapes to levels acceptable to county residents.
- 3. Reduce negative impacts of deer on natural communities to preserve native plant and animal diversity.
- 4. Continue a countywide education program to provide residents with information on deer, deer problems and how to minimize or prevent deer-human conflicts.

Overview of Deer Management Program

The Deer Management Program has been in operation since 1995. During the past 20 years many deer management actions have been implemented and progress has been made in addressing many of the negative impacts associated with high deer populations. The following sections outline the actions and accomplishments of the program to date and the current status of the various deer impacts including problems that still need attention. For those interested in additional data related to the program visit <u>www.ParksDeerManagement.org</u> and click on "Deer Plans & reports" and then "Deer Data 1996-2011"

Deer Program Accomplishments

FY2015

- In response to requests and complaints from the local community the M-NCPPC Department of Parks implemented deer population management in Martin Luther King Recreational Park, Paint Branch Stream Valley Park units 5 & 6 and adjacent parks including Pilgrim Hill Local Park, Valley Mill Special Park, Tamarack Neighborhood Park, Paint Branch Neighborhood Park and the Red Door Historical Cultural Park (a total of 440 acres). The program was conducted by specially trained Park Police sharpshooters along with Park wildlife staff. The program was successful with 80 deer harvested and will be continued in FY2016.
- The M-NCPPC continued its deer population management program in 23 parks, added the 7 new locations mentioned above and expanded areas in Black Hill Regional and Hoyles Mill Conservation Parks to cover a total of over 18,100 acres of County parkland.
- The Washington Suburban Sanitary Commission (WSSC) continued to expand its deer population management on WSSC lands in the County.
- Virtually all State land under the management of the Maryland Department of Natural Resources continues to have deer population management conducted.

Other Deer Management Actions Implemented to Date

- A comprehensive educational program on deer, their impacts and remedial methods including: informational brochures and publications, phone numbers for help, the seasonal use of Public Service Announcements about deer-vehicle collisions, local Cable TV Programs on deer management in the county, and programs on deer through County nature centers and community meetings.
- The DMWG working with other local government agencies through the Council of Governments (COG) completed and released an educational video on preventing Deer-vehicle collisions (DVCs). This program began being aired on Montgomery Cable TV during the peak seasons for deer vehicle collisions and is available for use in local government and private driver education programs.
- County deer information is available online at www.ParksDeerManagement.org
- A successful program of workshops for homeowners on protecting their property from deer damage has been operated since 1995. Over 2000 county residents and landscape professionals have attended. Community groups can schedule a program by calling 301-962-1342.
- Wildlife reflector systems and experimental warning signs were tested at eight locations along County roads identified as having high numbers of deer-vehicle collisions (DVCs). These signs have proven to have no effect in reducing DVCs and are no longer being used.
- Improved methods to collect data for deer-vehicle collisions and other impacts using GIS system mapping.
- Program to identify and monitor impacts to natural vegetation on M-NCPPC Parkland.
- Cooperative County and State efforts to better address DVC through roadway design.
- Cooperative effort with M-NCPPC Transportation Planning Office to review projects that include bridges that cross
 wildlife corridors in order to allow for safe passage of wildlife under roadways.
- Cooperative effort with Washington Area Council of Governments (COG) to reduce DVCs regionally.
- Cooperative effort with County and State park officials to initiate deer population management in parks where high deer populations were contributing to high numbers of DVCs, and other impacts.
- Cooperative effort with MD Department of Natural Resources to adjust hunting regulations to help increase antlerless deer harvest in order to reduce deer populations in areas open to hunting.
- Changes were made to County Code in early 2003 to allow for use of 8-foot deer fencing in residential side and backyards and all types of fencing on agricultural properties.
- The Department of Economic Development (DED), working closely with the DMWG, conducted a successful

workshop for Agricultural growers in 2004 on implementing effective deer population management program. DED continues to work with farmers to reduce deer damage to crops

- The DED, working closely with area farmers, has established two refrigerated storage facilities one in Poolesvile and the other near Laytonsville - to facilitate the ability of farmers to better manage deer on their property and donate the meat to charity. This program is paid for by DED.
- M-NCPPC initiated a workshop in 2007 of local and regional government agencies and wildlife experts, who are currently conducting deer population management in this and other regions, to assess the state of the art of this work and develop new strategies for addressing non-traditional deer population management in suburban settings.
- In late 2007 changes were made to County Code firearms regulations related to hunting to better match state regulations and facilitate deer management on private land.
- A Lyme Disease Awareness Task Force in 2008 developed a citizen awareness program to promote better understand of the disease, its causes and prevention including educational materials, a website, educational signage in park areas and two episodes of the County Cable TV show, "Rural Montgomery County".
- December 2014 M-NCPPC, MD DNR and other DMWG members participated in educational workshops and other deer management related efforts to assist communities and private landowners in addressing deer impacts.
- Spring of 2014 Maryland State legislation was passed reducing the safety zone for archery hunting in Montgomery County from 150 yards to 100 yards in order to provide more opportunity to manage deer populations in the urban zone. The County Council made appropriate adjustments to county firearm regulations to match this new change.

Deer-vehicle Collisions

The number of Deer-vehicle Collisions (DVCs) countywide as reported by the Montgomery County Police Department for 2014 was 2,014 (see table 1 and figure 1). This is slightly lower than the previous three years, but given the high numbers of accidents, fluctuations from year to year are to be expected. Overall, DVCs have risen very slowly since hitting a low of 1,841 in 2008.

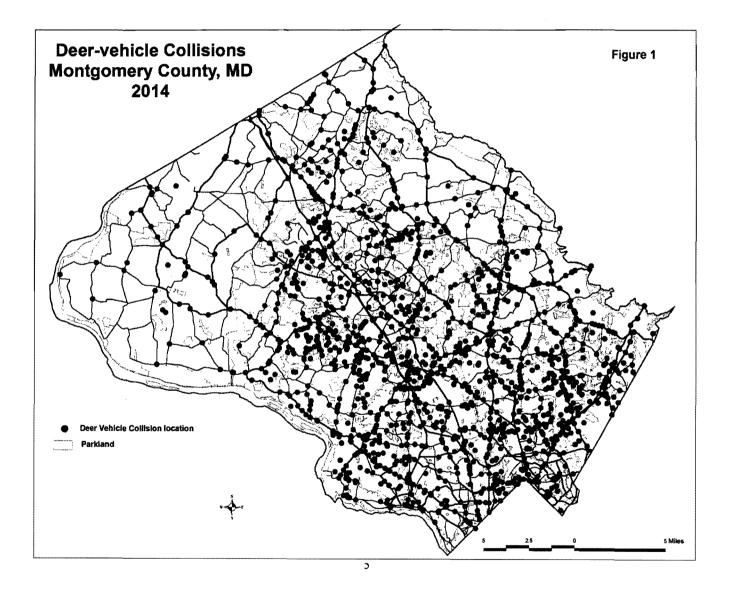
Table 1. Deer-vehicle Collision Data 1994 - 2013

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1,343	1,244	1,776	1,705	1,774	1,891	2,033	2,003	2,127	2,047	1,997	1,969	1,951	1,867	1,841	1,945	1,930	2,038	2,019	2,146	2,014
Data	Data on DVCs are collected and maintained by the Montgomery County Police Department.																			

Several approaches have been taken to reduce DVCs countywide including education, use of signage, structural design (e.g. designing bridges and fencing where possible to keep deer off roadways; see "Deer Program Accomplishments" above) and Deer Population Management (see that section below).

Between 1996 and 2002, Montgomery County Police analyzed DVC data on roads surrounding several parks where deer population management was conducted. In each case, data showed a significant and sometimes dramatic decline in DVCs as deer populations were reduced. More recent DVC data shows that the average number of DVCs per square mile in 2013 within ¼ mile of parkland was 10.9 for parks with no deer management and only 3.4 for parks where population management is being conducted. That is an average reduction of 69% where management is taking place. This would indicate that it is important to continue to expand deer management into areas where DVCs continue to be high or are increasing.

Expansion of deer population management beyond its current locations poses considerable challenges. Many of these areas do not contain county parkland on which to conduct deer management. In areas where parkland is present, it is often comprised of narrow stream valley parks surrounded by dense development making deer population management much more difficult and in some cases impossible under current State regulations and using current methods. New and innovative approaches to deer population reduction are needed to address these areas. Changes to regulations and other restrictions will likely be required as well.



Management efforts continue to be implemented into new areas where possible. However, until new methods can be approved and deployed, DVC numbers are expected to continue a slow upward trend as deer continue to increase in areas where management is not currently practicable.

Agricultural Damage

In 2004 the County's agricultural community declared that deer overpopulation was the number-one threat to farming in the County. Consequently, agricultural damage has been a particular focus of the DMWG's recommendations and continues to be an important concern. The nationally acclaimed Agricultural Reserve is an important component of the County's General Plan. It helps maintain protected farmland for future food and fiber as well as provide open space that contributes to the county's character and quality of life. The existence of the Agricultural Reserve depends on the continued viability of agriculture.

A 2004 survey of County farmers indicated significant losses to agricultural crops due to deer browse. Thirty-six (36) farmers reported losses on corn, soybeans, wheat and hay. Thirty-four (34) producers reported losses on tree fruit, small fruit or vegetables. Twenty-seven (27) producers suffered losses on nursery, Christmas trees, grapes and other agricultural crops. In all, over 2000 acres of agricultural land have been removed from production due to deer crop damage and 2/3 of survey respondents believed crop damage from deer was on the increase.

In May of 2014 an updated Deer Damage Survey was initiated and the results are outlined below. Please click on the link below to access the results from the 2014 Survey.

http://www.montgomerycountymd.gov/agservices/Resources/Files/AAC_Meetings/October2014/Attachment_ B.pdf

Farmers are using a variety of strategies to attempt to minimize damage to their crops. From the thirty-two (32) respondents they indicated the following:

63% have stopped raising certain crops due to deer damage.

45 % have made use of Crop Damage Permits.

97 % allowed deer hunting on land they owned or rented.

53 % have discussed with their hunters ways to increase the harvest of deer.

28% say they do not have a quota system in place requiring the harvest of Does before the harvest of bucks.

31% say they rent farmland where hunting is not allowed.

66% say that they farm on or adjacent to parkland.

94% say that deer damage is worst on farms adjacent to parks.

50% have family members that have contracted Lyme disease.

A total of 19,197 acres was included in the 2014 survey which represents 42% of the total cropland reported in the 2012 Agricultural Census-45,557 acres. The overall loss for acres reported was 16%. The crop loss of \$4,411,786 represents 9.3% of the Total Market Value of Agricultural Products Sold reported in the 2012 Agricultural Census-\$48,341,000.

The 2011 Wildlife Damage Survey conducted by Maryland Agricultural Statistics Service indicated central Maryland farmers had sustained estimated losses of over \$4.3 million due to deer browse. The central Maryland area includes Montgomery, Baltimore, Carroll, Frederick, Harford, Howard and Washington Counties. Damage in the central Maryland region is reported to be much higher than in other areas. It should be noted that higher crop prices can result in increased economic losses even if actual amount of crop damage remains unchanged. Crop damage losses on corn and soybeans exceeded \$800,000 in 2009 with just a 5% crop loss across the entire crop. Field losses can range as high as 50 % in some areas. Some deer damage occurs in almost every field and

on almost every crop. Overall, deer damage does not appear to have declined significantly despite more aggressive population control measures on both public and private land.

Deer Donation Program

The County's Deer Donation Program has expanded since it was initiated in 2004 (table 2). Administered through the Department of Economic Development – Agricultural Services Division and operated by members of the local agricultural community, this program enables farmers and hunters to harvest additional deer beyond what they need for personal use and donate the meat to a good cause. The number of deer donated increased from 2004 to 2011. For the past three years the number of deer being donated has been lower. One likely cause is that the recession is causing hunters to keep more deer for their own use and to share with neighbors and family, leaving less meat to be donated. Also the program only has one cold box at this time located in Poolesville and we are working to develop an alternative approach where cold boxes can be leased and not purchased. The 75 deer donated last year provided nearly 3,000 pounds of meat donated to the Charitable Food organizations in the County.

By accepting extra or unwanted deer, the Deer Donation program has allowed some farmers to develop much more focused and effective hunting operations. Members of the agricultural community are now working more closely with their hunters to insure that more deer are being harvested. The Patriot Land and Wildlife Management Company, which provides management assistance for the donation program, has sponsored a Deer Donation Contest for the past three years to encourage hunters to harvest more deer. Some property owners have initiated organized one or two day hunts using groups of hunters to increase the harvest success and reduce deer numbers on their farms. The Deer Donation program facilitates these practices by providing an outlet for a large number of deer harvested at one time.

Deer Donation Program	Deer Donation Program - Deer Collected and Pounds of Venison Donated								
2004-2005 Season	39 deer	1,560 pounds							
2005-2006 Season	51 deer	2,040 pounds							
2006-2007 Season	85 deer	3,400 pounds							
2007-2008 Season	197 deer	7,880 pounds							
2008-2009 Season	150 deer	6,000 pounds							
2009-2010 Season	304 deer	12,160 pounds							
2010-2011 Season	403 deer	16,120 pounds							
2011-2012 Season	222 deer	8,880 pounds							
2012-2013 Season	163 deer	6,520 pounds							
2013-2014 Season	152 deer	6,080 pounds							
2014-2015 Season	75 deer	3,000 pounds							
Totals	1,841 deer	73,640 pounds							

Table 2. Number of Deer and Pounds of Meat donated through the Deer Donation Program 2004 - 2015

More information on the Deer Donation program is available on the County website at: <u>http://www.montgomerycountymd.gov/AgServices/aginitiatives.html#deer</u>

The Deer Donation Program has invested \$200,000 over ten years. The value of the program is calculated to be \$699,580. This is based on the value of the meat collected (**73,640** lbs at \$2/lb) and the value of the commodity grain in the farmer's fields not consumed by these deer. **1,841** deer harvested, 2,000 lbs of grain saved for each deer harvested, average value of all commodity grain estimated at \$\$9/bushel).

Many changes have been made to State and local regulations and educational programs have been offered to citizens and communities in recent years aimed at helping the agricultural community reduce deer damage to their products. These efforts have made an impact, but crop damage by deer remains a problem for local farmers.

Impacts to Home Gardens and Landscaping

Many residents continue to experience impacts to home gardens and landscaping. As discussed above, deer impacts are likely spreading into more urban areas as deer populations continue to expand into areas where management is not occuring. Though much work remains to be done, many citizens are taking advantage of the educational materials, workshops, and regulation changes that have been made to help reduce impacts to home landscapes.

Complaint calls remained steady in the past couple of years coming mostly from more urban areas in the County including: lower Rock Creek Stream Valley, Sligo Creek Stream Valley, the Paint Branch/Colesville area, Potomac, Rockville, Derwood, Quince Orchard and Olney. Most come from fairly densely populated areas surrounding narrow strips of parkland and increasingly from areas with few parks but where well forested housing lots provide habitat for deer herds.

As mentioned elsewhere in this report, these areas pose a challenge to safe deer population management. Recently initiated management efforts in Sligo, Rock Creek, and Paint Branch Stream Valley Parks have been successful in the small areas within these narrow, linear parks where sharpshooting can be implemented. These operations have helped extend our experience in more urban areas, however, the vast majority of these and other urban parks cannot be managed using current methods, and under current guidelines and regulations. New methods of addressing other highly developed areas continue to be explored.

Homeowners experiencing deer damage can call for information and to register their complaint at 301-962-1342/1344. Homeowner/Community Associations and other community organizations that would like a free workshop on controlling deer damage around the home can call 301-590-9650 or 301-962-1342. The Maryland DNR webpage lists various deer management options available to homeowners and communities –

Deer Damage Management Techniques webpage - <u>http://dnr2.maryland.gov/wildlife/Pages/hunt_trap/deerdamage.aspx;</u>

An Evaluation Of Deer Management Options http://dnr2.maryland.gov/wildlife/Pages/hunt_trap/deerhuntastool.aspx;

Deer Hunting: An Effective Management Tool link: <u>http://dnr2.maryland.gov/wildlife/Pages/hunt_trap/deerhuntastool.aspx;</u>

Or go to <u>www.Maryland.gov</u> and search for "Maryland Deer Damage Management" and other deer related topics. Links to additional information specific to deer management in Montgomery County (e.g., County fencing regulations, firearms restriction regulations, the county's cool box program for farmers, information on Lyme disease, tips for driving in deer country and other relevant information can be found at <u>www.ParksDeerManagement.org</u>.

Impacts to Natural Communities

An overabundance of deer can profoundly impact native vegetation and habitat for other wildlife. Park studies and observations have shown that where deer populations are high, forest trees are not reproducing, the park understory of shrubs and wildflowers is severely reduced and rare plants are declining and in many parks have disappeared due to deer feeding habits. Other studies have shown that other species, especially forest birds and small mammals, decline as both food and cover are heavily impacted by deer browsing. The only way to reduce damage to natural communities is to reduce deer populations within park areas. The Department has undertaken an aggressive program of deer population management – see section below titled "Deer population Management" for more details on this effort.

Even after deer populations have been reduced, recovery of vegetation may occur slowly over many years. Current staffing and funding has not permitted detailed studies to quantify the extent of vegetative recovery in parks where management is taking place. However, general observation by long-time naturalists and other qualitative information strongly suggest that understory vegetation and tree survival is increasing where deer populations have been reduced. A number of species, including some orchids and lilies that had not been seen for years are now blooming again as well, though in limited numbers. As discussed below under "Deer Population Management," deer reductions are fairly local and new management techniques will be required to address impacts to the smaller, more urban park areas in the County.

Educational Program

Education is a cornerstone of the Countywide Deer Management Program. In order to achieve the deer plan's goal of reducing deer impacts to acceptable levels, two things must happen, 1) Deer populations must be managed – see more on this throughout this report and 2) just as importantly, County residents must become educated in how to live with deer and how to minimize the negative impacts associated with deer. A long list of educational efforts is described under "Deer Program Accomplishments" and includes: homeowner workshops, brochures, educational programs at Nature Centers and on County Cable Television, a DVD on avoiding deervehicle collisions, regular public service announcements and talks for citizen groups. As citizens become more educated on ways to reduce deer impacts and begin to put this education into practice (e.g. adopt driving habits that help avoid deervehicle collisions, or use different methods to protect their home landscaping or farm crops) they will reduce deer impacts and raise their tolerance for deer in the landscape. A good place to begin learning about this issue is to visit our website at <u>www.ParksDeerManagement.org</u>.

Lyme Disease

Lyme disease is a bacterial illness transmitted through the bite of the Black-legged tick. Early symptoms range from flu-like headache, fever, and general fatigue to joint and muscle pain. A circular rash may occur in 70-90% of individuals. If left untreated, the disease can become chronic and debilitating. Lyme disease continues to be a growing concern in the county.

While Lyme disease is often linked to deer management in the mind of the public because it is transferred through the bite of the so-called deer tick (the new accepted name is the black-legged tick), it is widely accepted that reducing deer numbers cannot effectively control the spread of the disease. Black-legged ticks feed on many species of mammals and birds and most often pick up the disease by feeding on infected mice and chipmunks, not deer. For these reasons, Lyme disease is best viewed as a public health issue.

The Montgomery County Department of Health and Human Services (HHS) tracks cases of Lyme disease and provides education for the public and health professionals in the County. The number of positive lab reports for Lyme disease sent to MCDHHS Disease Control Program continues to increase. In 2014 there were 141 cases (confirmed and probable) and 178 suspect. The increase in lab tests being done is an indication that the medical community is more aware of the symptoms of Lyme disease and labs are being ordered more often to assist in diagnosis.

Education to the medical community is key to increasing diagnosis and early treatment for Lyme disease. When caught early, Lyme disease is usually easily treated with antibiotics. The disease, however, can be difficult to diagnose because many tests are unreliable and the symptoms resemble those of other ailments including the flu and arthritis. Some in the medical community feel that when left untreated, Lyme disease can become chronic resulting in long-lasting and debilitating health problems. This most often results when it is not diagnosed and treatment is delayed for an extended period of time. The increased education efforts directed at the public and doctors should help ensure that the disease is detected and treated more quickly.

Additional efforts by the Department of Health and Human Services to address Lyme disease include:

- Presentations in the community and distribution of literature on Lyme Disease prevention
- Counseling of individual patients on prevention
- Surveillance on positive lab slips to identify true cases
- Referrals to physicians for diagnosis and treatment
- Education of community physicians on Lyme Disease diagnosis and treatment

Montgomery County promotes personal protection from ticks and awareness of the symptoms of the illness as the best defense against Lyme disease. General information is available at:

- The Montgomery County Department of Health and Human Services -<u>http://www.montgomerycountymd.gov/HHS-Program/PHS/LymeDisease/LymeDiseaseIndex.html</u> or 240-777-1755
- The Centers for Disease Control <u>http://www.cdc.gov/lyme/</u>.
- The Lyme Disease Foundation <u>www.lyme.org</u>; 24 hour information line at 800-886-5963.
- The National Capital Lyme and Tick-Borne Disease Association has information and offers local support groups - <u>www.natcaplyme.org</u> or (703) 821-8833.
- Cornell University has information at <u>http://wildlifecontrol.info/TickStudy/Pages/default.aspx</u> on a product to help reduce the number of ticks in an area called the four poster feeder.

The state of Connecticut has put out a manual with information on how to reduce ticks around the home - <u>http://www.ct.gov/caes/lib/caes/documents/special_features/tickhandbook.pdf</u>. It discusses a variety of methods ranging from how to landscape your yard to the use of various products including pesticide applications to lawns and more targeted approaches including the Tick Control System - <u>www.tickboxtcs.com</u> and Damminix Tick Tubes - <u>www.ticktubes.com</u>.

Deer Population Management

Management of deer populations depends largely on managing the number of reproducing females in the population. DNR has significantly liberalized the harvest or bag limits for antlerless deer over the past 20 years to promote the harvest of female deer in an effort to limit population growth. Based on trends in deer hunting harvest data for the county, DNR believes that deer populations are stabilizing within areas of the county where hunting occurs. However, much of the County has only limited hunting opportunities due to development density and weapons discharge restrictions. Deer populations in these areas are likely increasing. DNR notes that as urbanization of the county continues, regulating the deer population will become even more difficult, as lethal management via hunting often is not an option in urban and suburban settings.

Several strategies have been taken over the past 20 years to help reduce deer populations in areas where traditional hunting is limited, including parkland and suburban/urban areas. These include managed hunts on State and County parkland, property managed by the Washington Suburban Sanitary Commission (WSSC), and property managed by Montgomery County Department of Solid Waste. Sharpshooting (shooting of deer at night by specially trained marksman under very safe conditions) is being employed in some county parks where hunting is not possible. Regulation changes to facilitate population management on private properties include, changes to County weapons laws as well as State hunting regulations.

Deer population management was conducted on 37 parcels of public land in FY13 totaling nearly 31,000 acres. These included 28 parcels of County parkland (some parcels include multiple parks), 4 state park and wildlife management areas, 3 federal facilities, WSSC property and one parcel of non-park County property. Population management efforts are now in place on most large parcels of public parkland in the county (see figure 2 and table 3). Populations are being reduced and associated deer impacts are declining. However, due to the small home range of deer, the effects of these efforts may remain localized. Outside of these areas deer populations likely remain high or are increasing due to lack of population controls and continued development that concentrates deer into smaller and smaller areas. In many cases deer are adapting to living completely within suburban neighborhoods.

Many acres of parkland in narrow stream valleys, small local parks, and in highly populated areas are not currently being managed. Effective deer population management in these smaller urban areas can be very difficult, costly, and in some cases not feasible at all. Efforts to explore new methods to address these locations continue.

Table 4 illustrates how much the County's Deer Management Program contributed to the overall management of deer populations in the county last year. Nearly 26 % of the total deer harvest in the county is directly associated with management efforts initiated or recommended by the County's program. Because managing female or antierless deer is so critical to reducing populations, the county program focuses on antierless harvest and as a result over 29% of the countywide antierless harvest comes from hunts associated with the program.

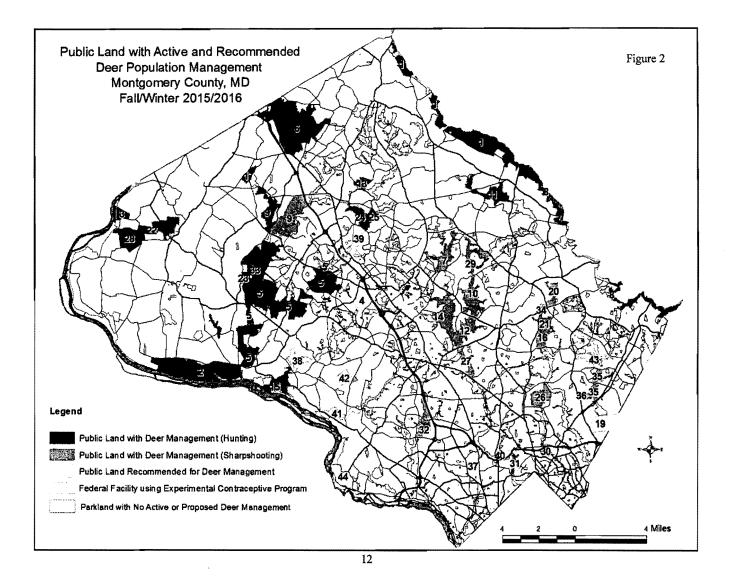
As more and more public land comes under management, deer on private lands represent an increasing portion of the population causing negative impacts countywide. Managing deer populations on private properties therefore becomes an increasingly important part of countywide management efforts. Despite liberalized bag limits and regulations that have increased the hunting of antlerless deer, the DMWG believes that many parcels of privately owned land are not being hunted efficiently enough to significantly reduce deer numbers. Educational efforts targeting both landowners and hunters in more effective management techniques will be continued. As already mentioned, population management becomes more difficult as you move from rural to more suburban and urban parts of the county. Nevertheless, there are opportunities for some communities to manage deer populations within their neighborhoods where the community can reach agreement on the methods.

Deer Population Management by Communities

A number of communities have embarked on their own management efforts. Where large lots exist or neighbors can reach agreement, and state distance requirements can be met, archery hunting can be implemented on private property to reduce deer numbers. Archery hunters must be a minimum of 100 yards from any occupied dwelling or have permission from the homeowner to hunt. As a result, the ability to implement such a program is limited in the more densely populated sections of the County. Several hunting organizations offer hunting services free of charge.

As deer impacts continue to expand into areas that are not accessible for County sponsored management, other options, such as community based management may need to be explored more fully. For the time being, these programs are very limited in application.

For assistance in developing community deer management plans contact the Maryland Department of Natural Resources at 301-432-4307.



	Park Area	FY initiated	Recommended Action/Comment
1	Patuxent River State Park	Prior to 1994	Continue population mgt
2	McKee-beshers Wildlife Mgt Area	Prior to 1994	Continue population mgt
3	Dickerson Conservation Park	Prior to 1994	Continue population mgt
4	National Institute of Standards and Tech.	1994	Continue contraceptive population mgt
5	Seneca Creek State Park	1997	Continue population mgt
6	Little Bennett Reg. Park	1997	Continue population mgt
7	Ag/History Farm Park	1997	Continue population mgt
8	WSSC Reservoirs	1999	Continue population mgt
9	Black Hill Regional Park	2001	Continue population mgt
10	North Branch SVP Units 2 & 3	2001	Continue population mgt
1	Rachel Carson Cons. Park	2002	Continue population mgt
2	Rock Creek Regional Park	2002	Continue population mgt
3	Goshen Recreational Park	2002	Continue population mgt
.4	Needwood Golf Course	2002 to '06; 2011	Continue population mgt
.5	Blockhouse Point Cons. Park	2003	Continue population mgt
.6	NW Branch Recreation Park	2004	Continue population mgt
.7	Bucklodge Forest Cons Park	2004	Continue population mgt
8	Hoyles Mill Cons. Park	2004	Continue population mgt
19	· · · · · · · · · · · · · · · · · · ·	2024	Continue lethal population mgt/
	White Oak Federal Facility*	2004	Monitor contraceptive results.
20	Woodlawn Special Park	2004	Continue population mgt
21	Northwest Branch Golf Course	2004 to '06; 2011	Continue population mgt
2	Woodstock Equestrian Park	2005	Continue population mgt
23	Little Seneca SVP unit 1	2005	Continue population mgt
24	North Germantown Greenway Park	2006	Continue population mgt
25	Great Seneca Stream Valley Unit 2	2006	Continue population mgt
26	Wheaton Regional Park	2006	Continue population mgt
27	Rock Creek Stream Valley Unit 7	2008	Continue population mgt
28	DSWS Property in Dickerson	2011	Continue population mgt
9	North Branch Stream Valley Unit 4	2011	Continue population mgt
30	Sligo Creek Golf Course	2012	Continue population mgt
31	Rock Creek Stream Valley Unit 2	2013	Continue population mgt
32	Cabin John Regional Park	2014	Continue population mgt
33	Schaefer Rd Expansion of Hoyles Mill CP	2015	Continue population mgt
34	Red Door Historical Cultural Park	2015	Continue population mgt
	Paint Branch Stream Valley Units 5&6,		
) E	including: Pilgrim Hills Local Park, Tamarack	2015	Continuo non ulatina aut
35	Neighborhood Park, Valley Mill Special Park,	2015	Continue population mgt
	and Paint Branch Neighborhood Park		
36	Martin Luther King Recreational Park	2015	Continue population mgt
37	National Institutes of Health, Bethesda	2015	Contraception program initiated
8	Muddy Branch Stream Valley Park Unit 1	Initiate in FY16	Initiate in FY16
9	Great Seneca Stream Valley Park Unit 1	Initiate in FY16	Initiate in FY16
0	Watts Branch Stream Valley Park Units 1&2	Initiate in FY16	Initiate in FY16
11	Rock Creek Stream Valley Unit 3	Initiate in FY16	Initiate in FY16
12	Serpentine Barrens Conservation Park	Future	Investigate for future mgt
13	Upper Paint Branch Stream Valley Pk	Future	Investigate for future mgt
	C&O Canal National Historical Park -		NPS is investigating methods and funding for
44	Goldmine Tract in Potomac, MD	Future	deer population mgt. in the national park.

Table 3. Public Land with Current or Proposed Deer Population Management Programs – See Map 2

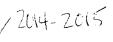


Table 4. Numbers and Percentages of Deer Harvested in Montgomery County Programs Compared to Countywide Deer Harvest 2013-2014 season.

	totals	Antlerless	% antierless
County Hunting harvest (DNR)	5410	3890	71.9%
Sharpshooting (M-NCPPC Parks)	562	479	85.2%
DNR Deer Management Permits (Mont. Co.)	391	356	91.0%
Total deer harvest for Montgomery County	6,363	4,725	74.3%
M-NCPPC Mont Co Parks program total	1131	1003	89.0%
Dickerson -MC-DSW	54	53	98.2%
Seneca managed hunts (all)	318	221	69.5%
WSSC managed hunts (Mont Co only)	141	107	75.9%
Total Harvest from Mont Co Deer Program hunts	1,644	1,384	84.2%
Percentage of total county harvest	25.8%	29.3%	

Deer Population Management using Contraception

Contraception has the potential to be a useful tool in helping to address high deer populations in urban/suburban locations and other areas where the use of lethal methods is limited. Studies and testing of contraceptives for deer have been ongoing for many years. However, the development of effective drugs and cost effective methods of administering them to wild, free roaming deer have proven extremely difficult. In 2009 the U.S. Food and Drug Administration (FDA) approved a product called GonaContm, for use in free ranging white-tailed deer. GonaContm is an immunocontraceptive vaccine that limits the release of sex hormones causing deer to remain in a non-reproductive state as long as a sufficient vaccine level is present in the body. While this long awaited approval represents a step forward in deer contraceptives, GonaContm has significant limitations. It must be hand-injected, requiring each animal to be captured, and it must be re-administered every 2 to 5 years. For more information on this product and its potential applications see:

http://www.aphis.usda.gov/wildlife_damage/nwrc/research/reproductive_control/gonacon.shtml

Over the past year or so, a couple of experimental programs have been initiated in the Greater Washington area using surgical sterilization to permanently prevent reproduction in treated female deer. The method involves capturing deer and performing surgery to remove ovaries. The overall costs and efficacy of this method are being evaluated and will be reviewed by the DMWG.

Deer Management Recommendations for FY 2016

In accordance with the Comprehensive Management Plan for White-tailed Deer in Montgomery County, Maryland, the DMWG recommends the following actions for FY 2016. Agencies that should take lead responsibility for each recommendation are listed in parenthesis after that action. The final decision to proceed with any recommendation is up to the lead agency or agencies and it is expected that appropriate public input will be considered.

Many recommendations are on-going or require multiple-years to be fully implemented thus there is considerable overlap in recommendations from year to year. It is expected that all actions will be done in cooperation with the DMWG.

- 1. Continue public education efforts. This includes educating the public about deer issues, particularly on available non-lethal methods to reduce deer damage to personal property.
 - a. Continue to offer the Homeowner Workshop Program. Update the program and improve publicity to increase the number of programs. Coordinate workshops with DNR education efforts. (MNCPPC, Montgomery County Master Gardeners)
 - b. Continue efforts to educate the public about deer, deer impacts and remedies via the Internet, Educational DVDs, and County Cable TV. (Montgomery Soil Conservation District (MSCD), County Cable Montgomery [CCM], M-NCPPC
 - c. Continue to publicize information about the County's fencing regulations as a valuable tool to reduce deer damage. Information was recently updated on the website of the County Department of Permitting Services (DPS) which issues permits for fencing in the county and information will also be added to the M-NCPPC deer website. (DPS, M-NCPPC)
 - d. The County Department of Health and Human Services (HHS) should continue their efforts to educate the public and doctors on the prevention, early detection and treatment of Lyme disease and other emerging tick-borne diseases – (e.g., ehrlichiosis, babesiosis, STARI and others) and to document cases occurring in the County (this will likely require additional funding). A continued effort to get educational materials to <u>all</u> doctors should be a priority. (HHS)
 - e. The County should expand its educational information on Lyme disease to include information on Integrated Pest Management (IPM) methods and products available to reduce ticks in the landscape. These include Tick Control System - <u>www.tickboxtcs.com</u> and Daminix Tick Tubes - <u>www.ticktubes.com</u>. (HHS, M-NCPPC, DMWG)
 - f. M-NCPPC should investigate the efficacy and costs of the above mentioned tick reduction methods as well as tick levels in select parks in order to evaluate their potential use in parks that have especially high levels of ticks. (M-NCPPC)
 - g. The M-NCPPC and DNR should update educational information available on their websites to better inform county residents of options available to landowners and communities to reduce deer populations including recent regulation changes to archery hunting. Archery hunting can be a safe and effective method of reducing deer populations where firearms are not appropriate. Improvements in archery equipment, including crossbows, have significantly improved effectiveness.

MCPD and the Firearms Safety Committee (FSC) should continue to publicize the County Weapons Law. Informational brochures should continue to be distributed to all County businesses that sell hunting licenses. DED should inform county farmers of new opportunities that the changes allow. M-NCPPC should include this information on their deer website and in deer program press releases. The Weapons Law is available online at: <u>http://www.mymcpnews.com/wordpress/wp-content/uploads/weapons-law-brochure-on-line-format.pdf</u> (MCPD, FSC, DED, M-NCPPC)

- 2. Continue efforts to improve road fencing, signage and design to reduce deer-vehicle collisions.
 - a. The Montgomery County Police Department (MCPD), Montgomery County Department of Transportation (MCDOT) and Maryland State Highway Administration (SHA), in coordination with the DMWG, should continue to evaluate roadway DVCs and examine accident mitigation methods. (MCPD, DMWG, MCDOT, SHA)
 - b. MCPD and MCDOT should continue to utilize variable message boards, when they are available, as a way to remind drivers about watching out for deer during fall when the highest number of DVCs usually occur. (MCPD, MCDOT)
 - c. A greater effort should be made by SHA and the Maryland Transportation Authority (MDTA) to implement a program to inspect and repair the wildlife fencing along the entire length of 270, 495, the newly opened Inter-County Connector (ICC) and other fenced State roads, at least once per year. Over time, tree falls, vandalism, erosion and other factors create breaks and holes in wildlife fencing placed along roads. Fences with holes can create a situation where deer that happen to wander through the hole become trapped on the road. (SHA, MDTA)
 - d. MDTA should continue to monitor DVCs along the ICC and make adjustments as necessary to fencing, underpasses, access ramps, etc. to minimize DVCs. (MDTA)
 - e. Keep current and, where possible, cooperate with other studies that investigate methods of reducing deer-vehicle collisions. (MCDOT, M-NCPPC, SHA, MDTA, DNR)
 - f. Continue to work with appropriate agencies on new and retrofit road projects to better design roadways and especially bridges for wildlife passage. (MCDOT, SHA, M-NCPPC)
- 3. Continue to monitor progress in the development and use of fertility control methods to regulate deer populations.
 - a. Continue to monitor on-going efforts in Montgomery County at the National Institute of Standards and Technology (NIST) being conducted by The Humane Society of the U.S. and the on-going sterilization efforts at the National Institute of Health (NIH) being conducted by White Buffalo, Inc., as well as other study sites around the country. (DNR, DMWG)
 - b. Continue to monitor progress and approval of deer fertility control efforts including surgical sterilization projects that are ongoing across the country. (DNR, DMWG)
- 4. Continue to encourage more community involvement in deer management efforts.

In many cases it is incumbent upon a community to work together and address neighborhood concerns regarding deer. Several approaches to reducing deer damage to home landscaping and gardens may have a greater effect when applied on a community level. Neighbors or communities can work together in their use of fencing, vegetation management, and repellents. Adjustments to community covenants that reduce fencing restrictions or enactment of "no deer feeding" policies are examples of cooperative efforts. Communities, in many cases, may be better able than County or State agencies to fund and/or implement other local management efforts such as installation of fencing, localized efforts to reduce tick populations to prevent Lyme disease, a community based managed hunting program on private lands or working cooperatively with established hunting organizations to utilize archery hunting to reduce local deer populations. Any of these efforts will involve a high level of cooperation, organization and communication within the community as well as coordination with appropriate County or State agencies.

a. The County and State should continue to provide information and assistance to communities that express a desire to address local deer impacts. These might include local public meetings, educational workshops, literature and recommendations on specific management efforts that could be undertaken by the community. DNR provides technical advice for communities on deer management issues. (M- NCPPC, DNR, Maryland Cooperative Extension (MCE))

- b. DMWG and DNR should investigate the best way to create a database of experienced archery hunting organizations willing to assist communities in reducing deer populations. Changes made to the archery safety zone in 2014 were designed to allow more hunting in suburban areas. A database of available hunting organizations would provide a convenient opportunity to connect citizens with willing hunters. Citizens can currently obtain a list of Deer Cooperators, businesses licensed by DNR to use non-lethal and lethal deer management techniques to help resolve deer problems, by contacting the Maryland DNR at 301-432-4307. (DMWG, DNR)
- c. Continue to promote the DNR website for available community-based deer management options. For online information go to <u>www.maryland.gov</u> and search for "Maryland Deer Damage Management" and other deer related topics. (MCE, M-NCPPC, DNR)

5. Continue to encourage effective deer population management on private properties.

Over 80% of the land in Montgomery County is privately owned and any effort to manage deer populations on these lands can only be undertaken by the landowners. Managing deer impacts countywide requires the cooperation of county agencies and private landowners. Parcels of land that are forested, in agriculture or slated for development all potentially support large deer populations that need to be managed.

Many landowners that do allow hunting on their property are not doing it effectively and would benefit greatly from reviewing the DNR publication, "Deer Hunting - a Valuable Deer Management Tool for Private Landowners".

- a. The Office of Agriculture (OOA) (formerly Department of Economic Development (DED)) should continue the work done under DED to promote and facilitate effective deer management in support of the County's Agriculture Community and the Agricultural Reserve.
- b. OOA should continue the successful cooperative cool box program to assist farmers in storing, transporting, processing and donating to charity, deer harvested from agricultural lands. Efforts made to increase publicity, access, and hours of operation, and to make the process more user friendly should continue. Additional locations should be considered.(OOA)
- c. OOA developed a revised survey for 2014 to again poll members of the agricultural community regarding the current status of crop damage caused by deer. The survey was last conducted in 2004. The survey results are available on line and can be accessed at

http://www.montgomerycountymd.gov/agservices/Resources/Files/AAC_Meetings/October2014 /Attachment_B.pdf

The survey feedback indicates that deer are still having a significant impact on crop production, and efforts to this point may just be maintaining the status quo rather than reducing damage levels. (DED)

d. Continue to promote a focus on the harvest of female deer to reduce deer populations. Farmers and other large landowners should refer to the DNR publication, "Deer Hunting - a Valuable Deer Management Tool for Private Landowners" to develop an effective deer management program on their property with a goal to reduce deer populations to 20 deer or less per square mile.

"A major goal of DNR's deer management changes is to continue to improve the quality of Maryland's deer herd. By encouraging antlerless deer harvest and restraining antlered buck harvest, populations will reach appropriate levels while the potential for mature antlered buck survival improves". - DNR Annual Deer Report, 2014, Draft (DNR, DMWG, OOA)

- e. M-NCPPC should continue to work with farmers growing crops on private land adjacent to parkland deer management sites, to coordinate their management efforts. Landowners should contact M-NCPPC at 301-962-1342 for more information. (M-NCPPC)
- f. Identify large parcels of private property in areas experiencing deer related impacts and reach out to investigate, address and encourage mitigation. This might involve partnerships between private and public landowners to allow effective management under current regulations. (DMWG, OOA, Identified landowners)
- g. A meeting was held in December 2014 between representatives of the County's agricultural community and the DMWG which helped to provide a better understanding of the needs of County farmers and ways in which they can improve deer management on their properties. Follow up meetings should be scheduled on a regular basis (annually at a minimum) to continue this productive dialogue and promote better management on agricultural land as well as other adjacent properties. (OOA, DMWG)
- h. The OOA should send out information to their e-mail mailing list about better methods discussed above.

6. Continue and expand deer population management on select State, County, and Federal lands.

Table 1 lists public land on which deer population management is currently being conducted and land on which the DMWG recommends deer management in the future. Decisions as to the type of population management implemented, the duration of the operation, and annual harvest goals should be decided by the appropriate agencies and DNR. The timing of implementation is subject to the resources and budget of the agency managing the property. Budgets for FY15 will most likely limit which of the following recommendations can be implemented in the upcoming year.

- a. The National Park Service at the C&O Canal National Historical Park should continue the planning process for identifying management solutions for high density deer populations and related impacts to forest health. The NPS has solicited and included public comment and is currently developing potential alternatives for management. The preferred alternative will be finalized and published in the Final Environmental Assessment in Spring/Summer of 2016. Funding has been requested to implement the preferred management alternative once it has been finalized, but it is doubtful that funding will be available in the near future.
- b. The Montgomery County Division of Solid Waste Services (DSWS) should continue and expand where possible deer population management efforts begun in 2011 on property they manage in the Dickerson area to help reduce impacts to local agriculture. See Map 2; Table 1, #29. (DSWS)
- c. Montgomery County government should review the lands under their jurisdiction for potential deer population management efforts. M-NCPPC Department of Parks can assist with evaluating parcels for potential management and make recommendations on management options. (Montgomery County Government (MCG), M-NCPPC)
- d. M-NCPPC Montgomery Parks should continue ongoing deer population management programs adjusting methods and harvest goals as needed; and continue to expand these efforts, as budgets and staffing allow, into new areas to reduce deer impacts to park resources and adjacent property. Explore opportunities to work cooperatively with adjacent property owners or communities where joint efforts can benefit both the community and park resources. Refer to Map 2 and Table 3 for proposed management locations. (M-NCPPC)
- e. Continue to investigate all non-lethal and lethal methods that are appropriate for managing deer populations in smaller more urban parks and which provide the level of control and safety required. (DMWG, M-NCPPC)

- f. The Washington Suburban Sanitary Commission (WSSC) should continue current deer population management programs on their lands and continue to expand these efforts, as required to protect WSSC resources and adjacent property. (WSSC)
- g. Investigate a cooperative effort between M-NCPPC, WSSC and Avenel Country Club to conduct deer management on the combined adjacent properties managed by each in Potomac. (WSSC, M-NCPPC)

7. Additional recommendations.

 a. Develop a large animal composting program. This could possibly be done in conjunction with SHA and/or with other counties, some of which currently have composting facilities in operation. Cost savings to the county could be substantial over the current disposal methods. (MCPD – Animal Services Division)

Background - Each year thousands of deer and other large animal carcasses are picked up and disposed of from along County roads. The current method of disposal (rendering) is expensive and depends on a contractor that has given notice to the county that it may stop providing this service in the near future. This would leave the county in the unacceptable position of having no way to dispose of carcasses at all. Much work has been done in recent years on developing methods of composting large animal carcasses that are sanitary, effective and environmentally sound. Composting is currently being used in New York, Virginia, and more locally by the Maryland State Highway Administration (SHA). Developing such a program in the county would provide the additional benefits of being a more dependable and less expensive alternative of disposal.