

MEMORANDUM

January 25, 2012

TO: Public Safety Committee

FROM: Linda McMillan, Senior Legislative Analyst 

SUBJECT: **Update: FY 2012 (July 2011) Report of the Deer Management Work Group;**

At this session, the Committee will have an opportunity to discuss the FY 2012 Annual Report and Recommendations of the Montgomery County Deer Management Work Group, new deer management efforts being undertaken in Sligo Creek Park, the approach to deer management along the C&O Canal with a representative from the National Park Service, and concerns raised by constituents about deer overpopulation in neighborhoods.

Those expected for this session:

- Mary Bradford, Director, Montgomery County Parks, M-NCPPC
- John Hench, Montgomery County Parks, M-NCPPC
- Rob Gibbs, M-NCPPC staff and Chair of the Deer Management Work Group
- Darien Manley, Chief, M-NCPPC Park Police, Montgomery County
- Kevin Brandt, Superintendent, C&O Canal, National Park Service
- Jeremy Criss, Agricultural Services Manager, Department of Economic Development

Background on Deer Management Work Group

In 1993, the County Council established a White-tailed Deer Task Force charged with developing a range of ways to deal with this growing problem. The Deer Management Program has been in place since 1995. Since that time, Park and Planning has continued to staff the Deer Management Work Group (DMWG) and has issued annual reports identifying problems and making recommendations for the upcoming year.

The objectives of the Deer Management Program are:

1. Reduce deer-vehicle collisions on a county-wide basis.
2. Reduce depredation on agricultural crops and home landscapes to levels acceptable to county residents.
3. Reduce the negative impacts of deer on natural communities to preserve plant and animal diversity.

4. Continue a county-wide education program to provide residents with information on deer, deer problems, and how to minimize or prevent deer-human conflicts.

FY 2012 Annual Report

The FY 2012 Annual Report and Recommendations of the Deer Management Work Group is attached at ©1-16. The report highlights the following FY11 accomplishments.

- The Montgomery County Division of Solid Waste has implemented a deer control program on 800 acres of county-owned land in Dickerson to help reduce impacts on agriculture in the area; 128 deer have been harvested from the property.
- The Montgomery County Revenue Authority re-implemented a deer management program on the Northwest Branch and Needwood Golf Courses.
- M-NCPPC added sharpshooting in the North Branch Park Stream Valley Park.
- M-NCPPC and other DMWG members participated in a regional Suburban Deer Management Workshop conducted by the Maryland Cooperative Extension and the Maryland Department of Natural Resources.

The report notes (© 9-10) that in FY11 deer management was conducted on 27 parcels of public land including 19 County parks, 3 State park and wildlife management areas, one Federal facility, WSSC property, and one non-park County property.

Deer Management in Sligo Creek Park

The Parks Department will be conducting a sharpshooting effort in Sligo Creek Park later this month. This will be the first time sharpshooting will be used in this park, although is already used in several other parks (see ©22-23). Parks are selected after careful consideration of the size of the deer population and the amount of damage occurring to vegetation and the park ecosystem, deer-vehicle collisions, and prevalence of Lyme disease. Park and Planning sought citizen input about this proposal. The response letter from Parks Director Bradford is attached at © 17-18. Parks Department representatives will brief the Committee on the plans for this sharpshooting effort.

The letter from Director Bradford notes that Parks received hundreds of responses to the notice about sharpshooting in Sligo Creek Park and that the vast majority favored this method. This would be similar to survey results included in the Maryland Department of Natural Resources' 2010-2011 Annual Deer Report that says a 2007 survey of Maryland residents showed that 36% strongly favor deer hunting, 25% were somewhat in favor, 19% were neutral or had no opinion, 10% were somewhat opposed, and 10% were strongly opposed. Seventy-six percent (76%) agreed or strongly agreed that deer should be hunted to maintain a healthy population.

Director Bradford's letter also addresses the issue of deer contraception. Many people are interested in finding a non-lethal method to control and reduce the deer population, Parks

included. Director Bradford notes that the contraceptive being used at NIST is experimental and not approved by the FDA. Maryland has recently approved the use of the only FDA approved deer contraceptive, GonaCon. However, a deer must be tranquilized and captured in order to inject this drug. Additional information on GonaCon is included at © 24-27. Information on Washington Post blog posting estimated that the cost per deer for GonaCon would be about \$1,000 because the deer must be tranquilized and tagged. One tag will state that the meat of the animal should not be consumed by humans. The information on © 27 also notes that it is expected only people working under the authority of wildlife agencies will be able to administer the drug. It also notes that it is a tool to be used with other deer management efforts rather than something that would eliminate the need for hunting to control deer overpopulation.

Request for Deer Management along the C&O Canal

The DMWG recommends expanding reduction programs on public land. On ©15, the report specifically says:

“The National Park Service (NPS) should consider addressing deer management needs in the Goldmine Tract of the C&O Canal Historic Park in Potomac, MD. Currently, there are no plans to initiate deer management efforts in the park. This needs to change. The Goldmine tract is reported to be the largest contiguous forest in the County and the adjacent Potomac River Gorge is one of the most biologically diverse areas in the State. Both areas are being negatively impacted by deer overpopulation. Neighboring communities have been complaining for more than a decade about deer impacts to property and deer-vehicle collisions. Initiating deer management on NPS land is a long and onerous process but that is no reason to ignore a problem that is negatively impacting the resources the park was established to protect. Efforts should start as soon as possible.”

C&O Superintendent Brandt has been invited to speak with the Committee about NPS’ approach to deer in the park and what process would have to be undertaken if a deer hunt were considered.

DNR Data on Deer Harvest by Bowhunting, Firearm, and Muzzleloader

Source: Maryland DNR Annual Deer Reports

Season	Bow	Firearm	Muzzleloader	Total
2010-2011	2,228	2,730	1,011	5,969
2009-2010	2,100	2,572	927	5,599
2008-2009	1,963	2,202	998	5,163
2007-2008	1,753	2,277	779	4,809
2006-2007	1,783	2,396	937	5,116

The five-year data shows that:

- The total number of deer harvested increased 16.5% from the 2006-07 season through the 2010-11 season (note that there was a decrease from 2006-2007 to 2007-2008 but increases in every season since.)

- The number of deer harvested by bowhunting increased by almost 25%.
- The number of deer harvested by firearm increased by about 14%.
- The number of deer harvested by Muzzleloader increased by about 8%.

The DNR report notes changes in regulations. Changes that may have impacted the deer harvest in the 2010-2011 season include DNR liberalizing antlerless deer harvest regulations in the suburban counties in an effort to address impacts on suburban landscapes and neighborhoods and allowing crossbows to be used statewide during the entire archery seasons.

The County DMWG report (©10) shows that in addition to the deer counted in the DNR report, 596 were harvested through sharpshooting and 322 DNR Deer Management Permits. Total deer harvested in the 2010-2011 season in Montgomery County was 6,887.

Use of Bowhunting to Reduce Deer in Residential Neighborhoods

In the last few months, the Council has received correspondence from residents in Potomac and Silver Spring about the growing problem with deer. Previously, the Council has heard from other communities, such as those in the Darnestown and Bethesda areas.

Mr. Gibbs and Mr. Criss work with private homeowners to provide them with information on private organizations that will bow-hunt on private property in residential neighborhoods. This type of hunt requires permission from every property owner on which hunting will occur and also requires permission of adjacent property owners within 150 yards. This 150 yard “safety zone” is required by State law:

“...a person, other than the owner or occupant, while hunting for any wild bird or mammal may not shoot or discharge a firearm or other deadly weapon within 150 yards, known as the “safety zone,” of a dwelling house, residence, church, or other building or camp occupied by human beings, or shoot any wild bird or mammal while it is within this area, without specific advance permission of the owner or occupant.” The exception to this is that the law provides that for archery in Frederick County this safety zone is 50 yards.

While there has been some success in arranging private bow-hunting in residential neighborhoods, the Council has also received correspondence suggesting that reducing the safety zone would help ease the permission requirements. Council staff cautions that any support for such a change must be very carefully considered and, if the Committee is interested, it may want to look at what the implications are in some specific neighborhoods. While bow-hunting has an extremely good safety record, some modern bows can shoot farther than 50 yards and Montgomery County is much more urbanized than Frederick County. Council staff notes that other suburban counties such as Prince George’s, Anne Arundel, and Baltimore do not have a reduced zone. Any such change would require a change to State law and would not be an issue for this General Assembly session. The previous data shows an increase in the number of deer harvested by bow and it may be that continued outreach to neighborhoods would increase the number of places where bow-hunting is used without having to decrease the permitted safety zone.

The Department of Natural Resources document “Deer Hunting – A Valuable Management Tool for Private Landowners” is attached at © 30-33.

Deer Vehicle Collisions

The County DMWG report contains information about deer vehicle collisions (© 4-5). The map at © 5 shows that collisions occur throughout the County. The high point for the number of reported collisions was 2002 and there was a decrease until 2009 when the number increased by about 100. There was a slight decrease in 2010. It must be noted that the data are based on reports to the Montgomery County Police. There are many unreported collision.

Reported Deer-Vehicle Collisions

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010
MC Police Dept Rpts	2,127	2,047	1,997	1,969	1,951	1,876	1,841	1,945	1,930

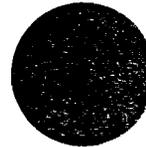
State Farm Insurance has studied the likelihood of a driver having a collision with a deer based on claims. For Maryland, the chance for a driver is about 1 in 120. Maryland has ranked 13 and 14 among the States for the last two years (© 28-29) A State Farm representative shared with Mr. Criss that based on an average claim of \$3,100, the cost of collisions in Maryland is about \$99 million.

Deer Donation Program

The Department of Economic Development continues to assist with the deer management program by providing cold boxes so that hunters may donate deer to be processed and given to area food banks, shelters, or other non-profit organizations. The following table provides data on the number of deer 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

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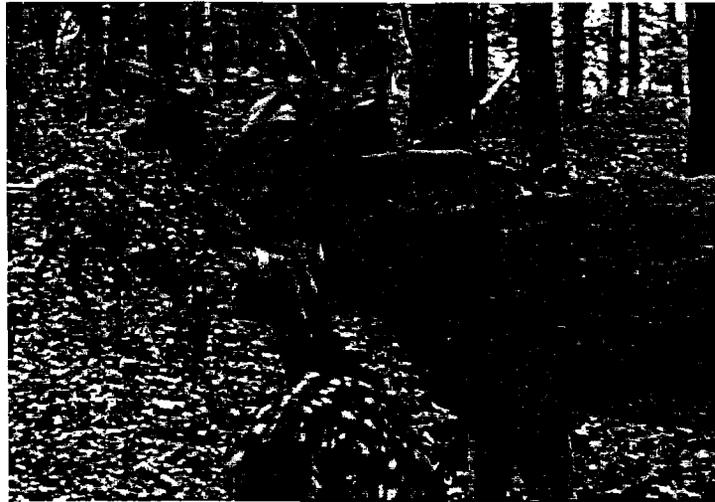


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Montgomery County Deer Management Program

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Annual Report and Recommendations Fiscal Year 2012

Prepared by
Montgomery County Deer Management Work Group
Rob Gibbs, Chair
July 2011

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

Montgomery County Deer Management Program Annual Report and Recommendations Fiscal Year 2012

Introduction

The Comprehensive Management Plan For White-tailed Deer in Montgomery County, MD, (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) 2012 (July 1, 2011 to June 30, 2012) 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 www.ParksDeerManagement.org/. The website includes data from the past 16 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 Rob Gibbs at rob.gibbs@montgomeryparks.org or 301-962-1341.

Citizen Notification and Comment Periods for Proposed Managed Hunts on County Parkland

A new method of notifying citizens about M-NCPPC managed hunts and receiving public comments was initiated in 2005 and will be continued. Instead of holding public meetings, which had very low attendance in previous years, M-NCPPC will publicize this information through press releases to local newspapers, planning board agendas, 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 this new approach will provide 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 www.ParksDeerManagement.org/.

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 16 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 www.ParksDeerManagement.org and click on "Deer Plans & reports" and then "Deer Data 1996-2007"

Deer Program Accomplishments

FY2011

- In response to recommendations from the DMWG, the Montgomery County Division of Solid Waste Services (DSWS) during the Fall of 2010 initiated deer population management on the approximately 800 acres of County owned property that they manage in the Dickerson area between Martinsburg and Wasche Roads. The program proved very successful harvesting 128 deer from the property. The goal of this effort is to help reduce impacts to agriculture in the area.
- In response to recommendations from the DMWG, M-NCPPC Department of Parks re-implemented deer population management on the Northwest and Needwood Golf Courses in cooperation with the Montgomery County Revenue Authority (MCRA) who is now responsible for these golf course operations.
- The M-NCPPC continued its deer population management program in 19 parks adding one new sharpshooting location in FY11 in North Branch Park Stream Valley Park SVU 4 and covering over 15,000 acres. Despite several weather related cancellations management goals were exceeded and the Department had its highest harvest to date.
- M-NCPPC and other DMWG members participated in a regional Suburban Deer Management Workshop conducted by the Maryland Cooperative Extension and the Maryland Department of Natural Resources (DNR) on May 26, 2011.

Other Deer Management Actions Implemented to Date

- A comprehensive educational program on deer, their impacts and remedial methods including: informational brochures and publications, library materials, 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, programs on deer through County nature centers.
- 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. 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 Internet web page (www.ParksDeerManagement.org) with educational information, phone numbers for reporting deer damage and receiving helpful information (301-962-1341/1342 or 1-877-463-6497).
- An extremely successful program of workshops for homeowners on protecting their property from deer damage. Well over 1600 county residents and landscape professionals have attended. Community groups can schedule a program by calling 301-590-2809 or 301-962-1341.
- Wildlife reflector systems and experimental warning signs were tested at eight locations along County roads identified as having high numbers of deer-vehicle collisions. These signs have proven to have no effect in reducing DVCs and are no longer being employed.
- Improved data collection 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 effort with County and State road agencies to better address deer-vehicle collisions (DVCs) 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 Poolesville 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. Several local farmers coordinate the program.
- 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. The effort included new educational materials, a website, and educational signage in park areas. The effort continued in 2009 and included two episodes of the County Cable TV show, “Rural Montgomery County,” on Lyme Disease, providing important educational information to the public on this important topic.

Deer-vehicle Collisions

The number of Deer-vehicle Collisions (DVCs) countywide as reported by the Montgomery County Police Department for 2010 was 1,930 (see table 1 and figure 1). This is down slightly from the count for 2009 (1,945) but still represents about a 5% increase over 2008 (1,841). Overall, DVC numbers still remain over 8% below the highest accident rates that occurred in 2002 despite the fact that total vehicle miles traveled in the County increased by approximately 10% between 2000 and 2010 ([www.marylandroads.com/oppen/Vehicle Miles of Travel.pdf](http://www.marylandroads.com/oppen/Vehicle_Miles_of_Travel.pdf)).

Police report that only 5 DVCs resulted in personal injuries and there were no fatalities.

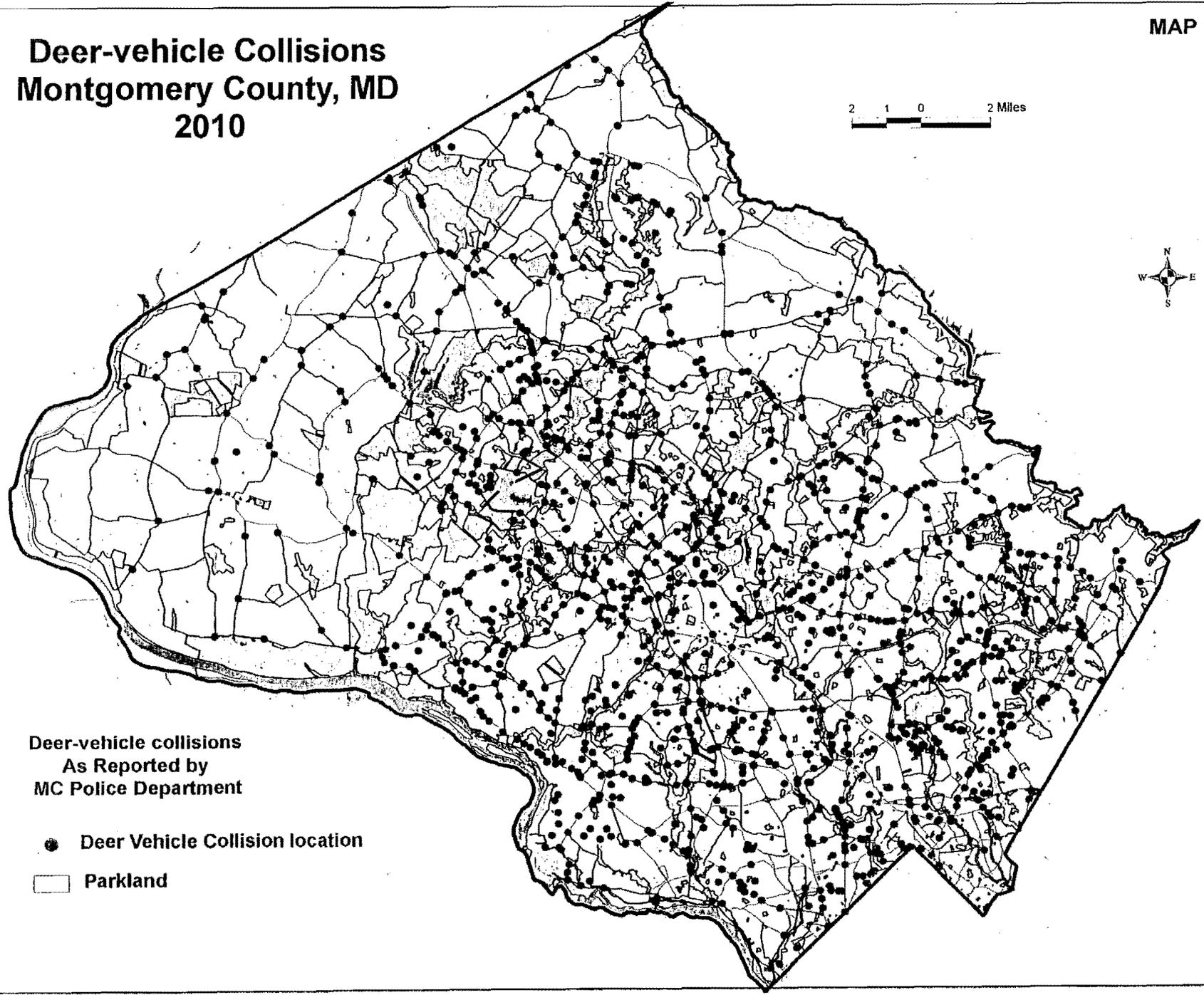
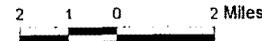
Table 1. Deer-vehicle Collision Data 1994 - 2010

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
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

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).

Deer-vehicle Collisions Montgomery County, MD 2010



Deer-vehicle collisions
As Reported by
MC Police Department

● Deer Vehicle Collision location

□ Parkland

5

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 suggest that this is the case at most deer population management sites.

While accidents have declined around parks where deer management has been employed, other areas have seen an increase as deer continue to expand into more developed portions of the county. These are mostly more urban/suburban areas where conducting deer population management is more problematic and limited. See the sections below titled "Deer Population Management" and "Education" for more discussion on how these efforts impact DVCs. Data suggests that the small increase in DVCs since 2008 is the result of increases in the more urban/suburban areas offsetting the reductions in areas where deer management has significantly reduced DVCs over the past 15 years. The solution to this problem is to expand the deer population management program into these areas. This, however, is not likely to occur in the next year or two given the County's current budget situation and the higher costs of conducting these efforts in more urbanized areas.

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 for the past several years and continues to be an important concern. The nationally acclaimed Agricultural Preserve is an important component of the County's General Plan. It helps maintain open space and contributes significantly to the county's character and quality of life. The existence of the Agricultural Preserve 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 has been removed from production due to deer crop damage and 2/3 of survey respondents believed crop damage from deer was on the increase.

Farmers are using a variety of strategies to attempt to minimize damage to their crops. Thirty-seven (37) have used fencing and/or cages around tree trunks to prevent rubbing damage. The farmers generally report that fencing as being effective in limiting damage to crops but at a significant cost to the individual farmer. Thirty-two (32) reported using deer repellents with very limited success. Nine (9) farmers were using scare tactics other than having dogs (i.e. noisemaking devises, motion activated lights, etc.). Forty-seven (47) have used dogs as deterrent with most indicating some success with this method. Deer control methods that rely on live dogs or noise making devices can be bothersome to neighbors. Possible effects on neighboring properties must be considered when considering options for deer management.

Over 100 landowners allowed hunting and/or used crop damage permits in an effort to control deer populations. Many feel higher deer harvest will help limit crop damage.

The 2009 Wildlife Damage Survey conducted by Maryland Agricultural Statistics indicated central Maryland farmers had sustained losses of over \$3.2 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. Higher crop prices in 2007, 2008 and 2009 have contributed to increased economic losses. Crop damage losses on corn and soybeans will exceed \$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.

The County's Deer Donation Program has expanded dramatically over the last two years. 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 extra meat to a good cause. The number of deer donated during the 2009-2010 hunting season increased over 100% from the previous season, and donations were up another 32% this season. The 401 deer donated this year equated to over 16,000 pounds of meat donated to the Capital Area Food Bank in Washington, D.C.

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. 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. Information on the Deer Donation program is available on the County website at:

http://www.montgomerycountymd.gov/content/ded/ag-services/pdffiles/2010-2011_deer_donation_program_summary-updated-2-22-2011.pdf

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 are experiencing impacts to home gardens and landscaping. 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 have increased 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 and Olney. Most come from fairly densely populated areas surrounding narrow strips of parkland or in some cases 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 real challenge to safe deer population management. Various options are being explored.

Homeowners experiencing deer damage can call for information and to register their complaint at 301-962-1341/1342. Homeowner or Community Associations that would like a free workshop on controlling deer damage around the home can call 301-590-9650 or 301-962-1341. The Maryland DNR webpage lists various deer management options available to homeowners and communities at http://www.dnr.state.md.us/wildlife/Hunt_Traps/deer/deer_damage/ddmtintro.asp. 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, and other relevant information can be found at www.ParksDeerManagement.org.

Impacts to Natural Communities

An overabundance of deer can have a profound impact on 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 these impacts to the plant community also impacts other species, especially forest birds and small mammals both of which decline as both food and cover is 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, especially 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 new DVD on avoiding deer-vehicle collisions, regular public service announcements and talks for local 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 deer-vehicle collisions, or use different methods to protect their home landscaping or farm crops) they will lower 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 www.ParksDeerManagement.org.

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 2008, the CDC changed the case definition for a Lyme disease case. In 2008, the number of cases of Lyme disease reported to Montgomery County was 247 (confirmed and probable), with an additional 210 “suspect” cases. The number of cases reported for 2009 was 74 (staff not available to do surveillance follow-up). In 2010, the number of cases of Lyme disease reported was 288 (confirmed and probable), and 175 “suspect”. The number of positive labs reports for Lyme disease sent to MCDHHS Disease Control Program has steadily increased. 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 done more often to assist in diagnosis. Due to budget cuts, we are unable to investigate all positive lab slips that are reported to Disease Control.

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
- 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 - www.montgomerycountymd.gov/lymedisease or 240-777-1755
- The Centers for Disease Control – www.cdc.gov.
- The Lyme Disease Foundation - www.lyme.org; 24 hour information line at 800-886-5963.
- The National Capital Lyme and Tick-Borne Disease Association has information and offers local support groups - www.natcaplyme.org or (703) 821-8833.
- The American Lyme Disease Foundation, www.aldf.com/fourPoster.shtml - has information on a product to help reduce the number of ticks in an area called the four poster feeder.

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 decade 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 16 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 27 parcels of public land in FY11 totaling approximately 28,000 acres. These included 19 County parks, 3 state park and wildlife management

areas, 1 federal facility, 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 1). 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 as a result of continued development forcing deer into smaller and smaller areas:

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 are continuing to make progress.

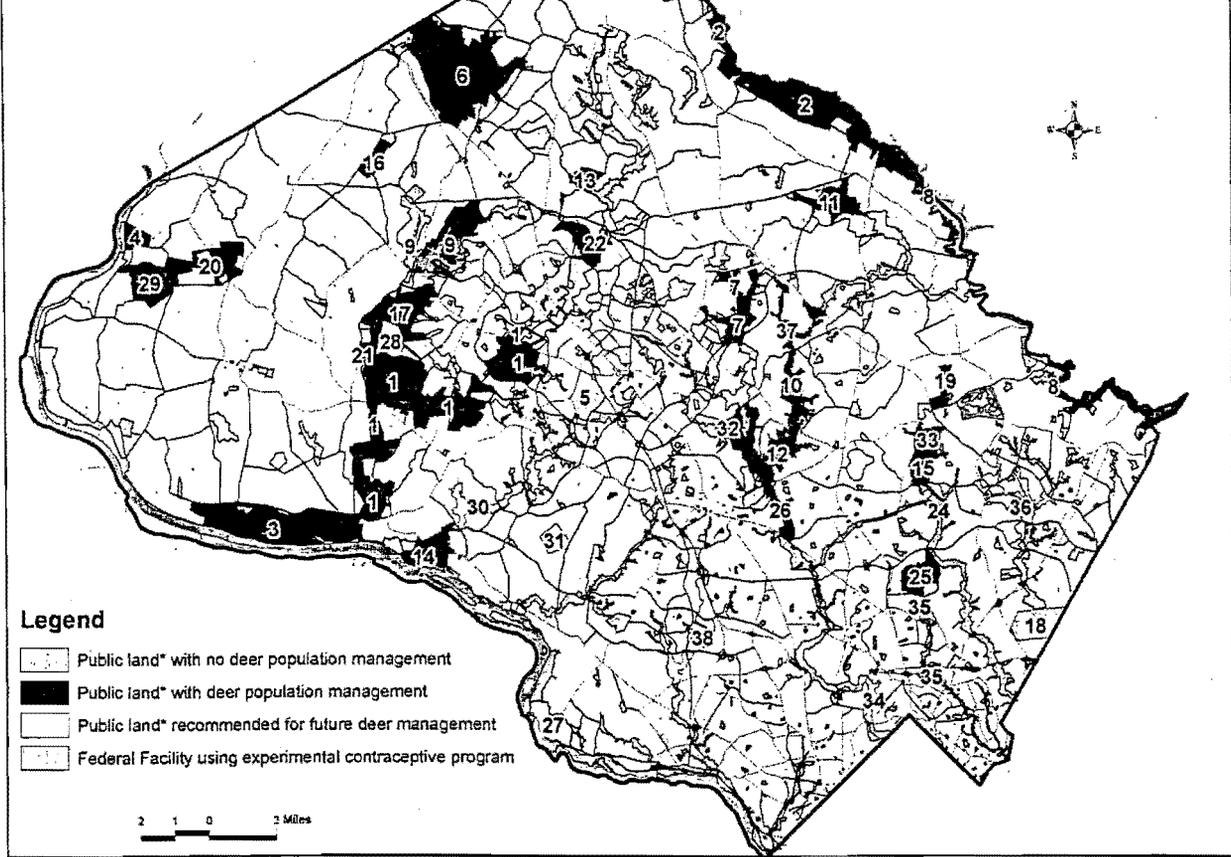
The following table illustrates how much the County's Deer Management Program contributes to the overall management of deer populations in the county. Nearly 30 % of the total deer harvest in the county is directly associated with management efforts initiated or recommended by the County's program. Because managing female or antlerless deer is so critical to reducing populations, the county program focuses on antlerless harvest and as a result over 35% of the countywide antlerless harvest comes from hunts associated with the program.

Table 2. Numbers and Percentages of Deer Harvested in Montgomery County Programs Compared to Countywide Deer Harvest.

	totals	Antlerless	% antlerless
Countywide Hunting harvest (DNR)	5,969	4,320	72.37%
Sharpshooting (M-NCPPC Parks)	596	560	93.96%
DNR Deer Mgt Permits (Mont. Co.)	322	283	87.89%
Total Harvest for County	6,887	5,163	74.97%
Mont Co Park program total	1,405	1,312	93.38%
Dickerson -MC-DSW	128	121	94.53%
Seneca mgt hunts (all)	386	289	74.87%
WSSC managed hunts (Mont Co only)	110	86	78.18%
Total Harvest from Mont Co Deer Program hunts	2,029	1,808	89.11%
Percentage of total county harvest	29.46%	35.02%	

**Public Land* with Active and Recommended
Deer Population Management
Montgomery County, MD
Fall/Winter 2011/2012**

Map 2
See Table 3 for key to numbered locations



Deer population management on private properties continues to be an important part of countywide management efforts. However, 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. For assistance in developing community deer management plans contact the Maryland Department of Natural Resources at 301-432-4307.

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 GonaCon™, for use in free ranging white-tailed deer. GonaCon™ 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, GonaCon™ has significant limitations to its wide-scale use in free-

roaming deer populations. It must be hand-injected requiring that 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/about/pdfs/faq_bc4deer.pdf

Table 3. Public Land with current and proposed deer population management programs – See Map 2

	Park Area	FY initiated	Recommended Action/Comment
1	Seneca Creek State Park	1997	Continue population mgt
2	Patuxent River State Park	Prior to 1994	Continue population mgt
3	McKee-beshers Wildlife Mgt Area	Prior to 1994	Continue population mgt
4	Dickerson Conservation Park	Prior to 1994	Continue population mgt
5	Nat Institute of Standards and Tech.	1994	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	Northbranch SVP	2001	Continue population mgt
11	Rachel Carson Cons. Park	2002	Continue population mgt
12	Rock Creek Regional Park	2002	Continue population mgt
13	Goshen Recreational Park	2002	Continue population mgt
14	Blockhouse Point Cons. Park	2003	Continue population mgt
15	NW Branch Recreation Park	2004	Continue population mgt
16	Bucklodge Forest Cons Park	2004	Continue population mgt
17	Hoyles Mill Cons. Park	2004	Continue population mgt
18	White Oak Federal Facility	2004	Continue lethal population mgt/ monitor contraceptive results.
19	Woodlawn Special Park	2004	Continue population mgt
20	Woodstock Special Park	2005	Continue population mgt
21	Little Seneca SVP unit 1	2005	Continue population mgt
22	North Germantown Greenway Park	2006	Continue population mgt
23	Great Seneca Stream Valley Unit 2	2006	Continue population mgt
25	Wheaton Regional Park	2006	Continue population mgt
26	Rock Creek Stream Valley Unit 7	2008	Continue population mgt
27	C&O Canal NP Goldmine Tract	Future	Investigate deer population management/ NPS currently has no plans to manage deer
28	SHA purchase future Hoyles Mill CP	Future	Investigate mgt for FY12
29	DSWS Property in Dickerson	2011	Continue population mgt
30	Muddy Branch Stream Valley Park	Future	Investigate mgt for future mgt
31	Serpentine Barrens Conservation Park	Future	Investigate mgt for future mgt
32	Rock Creek Golf Course	2002 to 2006; 2011	Continue population mgt
33	Northwest Branch Golf Course	2004 to 2006; 2011	Continue population mgt
34	Rock Creek Stream Valley Unit 2	Future	Investigate future mgt
35	Sligo Creek Stream Valley Unit 4,5	Future	Investigate mgt for FY12
36	Upper Paint Branch Stream Valley Pk	Future	Investigate mgt for future mgt
37	North Branch Stream Valley Unit 4	2011	Continue population mgt
38	Cabin John Regional and SV parks	Future	Investigate future mgt

Deer Management Recommendations for FY 2012

In accordance with the Comprehensive Management Plan for White-tailed deer in Montgomery County, Maryland, the DMWG recommends the following actions for FY 2012. 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 the successful Homeowner Workshop Program. Update program and publicize better to increase 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, the County Fair and County Cable TV. (Montgomery Soil Conservation District (MSCD), County Cable Montgomery [CCM], M-NCPPC)
 - c. More detailed information regarding the County's fencing regulations and recommendations for fencing to reduce deer damage should be added to the M-NCPPC deer website. (M-NCPPC)
 - d. The County Department of Health and Human Services (HHS) should continue their increased efforts to enhance surveillance, educate the public and doctors on the prevention, early detection and treatment of Lyme Disease. A concerted effort to get educational materials to all doctors should be a priority. (HHS)

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. (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.
 - c. SHA should 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. Fences with holes can create a situation where deer that happen to wander through the hole become trapped on the road. (SHA)
 - d. SHA should monitor DVCs along the new ICC and make adjustments as necessary to fencing, underpasses, access ramps, etc. to minimize DVCs. (SHA)
 - e. Keep current and, where possible, cooperate with other studies that investigate methods of reducing deer-vehicle collisions. (MCDOT, M-NCPPC, SHA, DNR,)
 - f. Continue to work with appropriate agencies on new and retrofit road projects to better design roadways and 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 at the National Institute of Standards and Technology (NIST) being conducted by The Humane Society of the U.S. as well as other study sites around the country. (DNR, DMWG)
- b. Continue to monitor progress and approval of other deer fertility control methods. (DNR, DMWG, USDA)

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 the County or State to fund and/or implement other local management efforts such as installation of fencing, localized efforts to reduce tick populations to prevent Lyme disease or even a community based managed hunting program on private lands. 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. Continue to promote the DNR website for available community-based deer management options at http://www.dnr.state.md.us/wildlife/Hunt_Trap/deer/deer_damage/ddmtintro.asp especially the publication **An Evaluation of Deer Management Options** by The Northeast Deer Technical Committee available on the website. (MCE, M-NCPPC, DNR)

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

The vast majority of land in the County is private (>80%) 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 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 Department of Economic Development (DED) should continue their successful cooperative cooler box program to assist farmers in storing, transporting, processing and donating to charity, deer harvested from agricultural lands. (DED)

- b. Promote Quality Deer Management (QDM) as a philosophy and information source to encourage landowners and hunters to better manage deer herds on private property. More information is available at www.qdma.com and www.marylandqdma.com. (DNR, DMWG)
 - c. MCPD and the Firearms Safety Committee (FSC) should continue to publicize the changes to the County Weapons Law that were completed in 2007. Informational brochures should continue to be distributed to all County businesses that sell hunting license. 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. Information can be found at: www.montgomerycountymd.gov/content/ded/agsservices/pdf/files/weapons_web.pdf (MCPD, FSC, DED, M-NCPPC)
 - d. 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 this program. (M-NCPPC)
 - e. Continue to monitor feedback regarding changes made in Frederick County to reduce hunting distance requirements for bow hunting. So far there has been no negative feedback and no safety issues resulting from the change.
 - f. Publicize regulations on use of crossbows which offer potentially more effective deer management in areas not open to firearm hunting. FY11 data suggests an increase in the use of this weapon but mostly as a replacement to other bow types as bow harvest remained about the same.
 - g. Promote additional opportunities for Sunday hunting in the County. Current regulations allow Sunday hunting in the County on two Sundays – the Sundays following the first opening days for the bowhunting and firearms deer seasons respectively and only on private property. Sunday hunting has increased harvest and adding additional Sundays would provide added hunting opportunities on private land and increase harvest without reducing other recreational activities on Sundays on public property.
- 6. Continue and expand population reduction programs on select State and County 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. Tight budgets for FY12 will most likely limit which of the following recommendations can be implemented in the upcoming year. Budgets are expected to remain limited for the next 1 to 2 years.

- a. The National Park Service (NPS) should consider addressing deer management needs in the Goldmine Tract of the C&O Canal Historic Park in Potomac, MD. Currently there are no plans to initiate deer management efforts in the park. This needs to change. The Goldmine tract is reported to be the largest contiguous forest in the County and the adjacent Potomac River Gorge is one of the most biologically diverse areas in the State. Both areas are being negatively impacted by deer overpopulation. Neighboring communities have been complaining for more than a decade about deer impacts to property and deer-vehicle collisions. Initiating deer management on NPS land is a long and onerous process but that is no reason to ignore a problem that is negatively impacting the resources the park was established to protect. Efforts should start as soon as possible. (NPS)

- b. The Montgomery County Division of Solid Waste Services (DSWS) should continue their successful deer population management efforts begun last year on the 800 acre property they manage in the Dickerson area to help reduce impacts to agriculture in the area. See Map 2 and Table 1, #29 (DSWS)
- c. M-NCPPC should continue deer population management re-initiated in FY 11 on the Needwood and Northwest Branch Golf Courses operated by the Montgomery County Revenue Authority (MCRA) – see Map 2 and Table 1, #32 & 33 (MCRA, 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 in order to reduce deer impacts to park resources and adjacent property. Refere to Map 2 and Table 3 for proposed management locations. (M-NCPPC)
- e. 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)
- f. Continue to investigate methods that are appropriate for managing deer populations in smaller more urban parks that provide the level of control and safety required. (DMWG, M-NCPPC)

7. Other recommendations

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.

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



MONTGOMERY COUNTY DEPARTMENT OF PARKS
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

December 5, 2011

REF: Sligo Creek Stream Valley Park Deer Management Proposal

Residents and citizens:

Thank you for your comments on the proposed 2012 deer management program in the Sligo Stream Valley at the Sligo golf course.

First, we acknowledge that none of us is happy about a lethal deer management operation in the Sligo golf course area. We were asked to implement a deer management program in this area by community groups, individuals, and the Montgomery County Council due to the increasingly adverse impacts of the burgeoning deer population on local neighborhoods, an increase in deer-vehicle collisions, Lyme disease from deer-borne ticks, and damage to the natural ecosystem of Sligo Creek Stream Valley Park. Native plants are being browsed heavily, dying with no chance to reproduce, and birds and other animals that rely on a balanced ecosystem are disappearing. We agreed to investigate how these impacts could be addressed and considered both lethal and non-lethal methods to reduce the damage caused by the huge whitetail deer population. In developing recommendations, the Department of Parks and the County's Deer Management Work group considered all available, viable options in terms of safety and effectiveness, and initially determined that the sharpshooting option was the best.

We then opened a comment period for our citizens, notifying the local media outlets and providing a link on our website. So far, we have received hundreds of responses. The vast majority of respondents favor the sharpshooting alternative. Nonetheless, there were several commentators who raised the question of safety and suggested an alternative option of using birth control, so let me address those two issues.

Safety is always the first concern in choosing deer management actions. The use of sharpshooting is done under very strict conditions using specially trained park police officers using special weapons and ammunition. Shooting is always done from an elevated position, so that all shooting is downward in trajectory assuring that if a miss occurs, bullets travel a very short distance and end up in the ground. This method of deer reduction has been used effectively and safely by the Parks Department since 1999 and there has never been a case where the public was put at risk. If anyone familiar with the program believed that this could not be done in this area with complete confidence in the safety of the public, it would not be considered. In addition to the high level of safety, this method also represents an extremely humane, near instantaneous, death and the meat is used to feed the hungry in our community. Other lethal methods could lead to wounded injured animals moving through the area, and a prolonged and inhumane death.

The use of contraception to control deer numbers is something that many, including park staff, would prefer. However, at this time only one drug is approved by FDA for use in the contraception of wild deer. It is called GonaCon™ and it can only be hand-injected into deer. This means that each deer needs to be captured, marked, injected and released. This needs to be repeated for each deer every two years or so. Unfortunately, this is not a method that can be used effectively for wild, free-roaming deer. Several letters have suggested that we employ the deer contraception method being used “successfully” on the NIST grounds in Germantown. We investigated this option, and found it to be inapplicable to the deer population in Sligo Creek. The drug being used at NIST is an experimental drug that has not yet been approved by FDA. Even though they have been conducting the NIST experiment since 1994, FDA has not yet approved the drug for general use. Another important factor is that NIST is a fenced facility. That greatly reduces expansion of the herd by immigration from non-treated deer. The deer population at NIST is largely closed to both immigration and emigration, unlike Sligo. In an open population where deer would mix and mingle with non-treated deer, the limited success experienced at NIST is unlikely to be replicated in the open Sligo Creek park area. Moreover, there are many who would argue that the work done at NIST has not been very successful at all in reducing deer populations. When the program began, the population of deer in NIST was 211 deer; the population increased to a high of 291 in 1997. Since that time, contraception has been administered annually, yet the population for 2010 in NIST was 193 deer. In 16 years, they have not been able to reduce the herd below 200 deer per square mile, even though preferred population levels are around 30 deer per square mile. Since 1994, the two highest causes of deer deaths at NIST, where cause of death could be determined, have been deer vehicle collisions and malnutrition. Therefore, the overall evidence so far appears to be that even with the long-term immunocontraceptive effort, the deer population has not declined. Because most of our parks are not fenced and deer can move in and out of them at will, we conclude that immunocontraception is not a viable control option. To be fair, the research at NIST has helped increase our knowledge of deer contraception and in that respect it should be considered in some circumstances.

We certainly understand the concern that some have with the killing of deer. Given the conditions, however, that exist in much of Montgomery County – the lack of wild predators and a habitat that provides easy access to food sources -- we are left with two equally undesirable options: to use the most humane method at our disposal (sharpshooting) to reduce the herd and make use of the meat to feed the hungry, or allow the deer to continue to increase in number, knowing that the end result is likely to be greater impact to the nearby community, continued severe degradation of the natural ecosystem in Sligo Creek Park, and ultimately, as we are beginning to see now, a herd of sick and starving deer.

Sincerely,

Mary R. Bradford
Director of Parks

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Department of Parks Approves Deer Management for Sligo Creek Stream Valley Park; Program to Begin in January 2012

by Abbigail Irelan on December 5th, 2011

DEPARTMENT OF PARKS APPROVES DEER MANAGEMENT FOR SLIGO CREEK STREAM VALLEY PARK; PROGRAM TO BEGIN IN JANUARY 2012

SILVER SPRING, MD— M-NCPPC, Montgomery Parks, announces that a new deer management program in Sligo Creek Stream Valley Park Golf Course has been approved and will begin in January, 2012.

As part of the program, specially trained Park Police sharpshooters, under very stringent guidelines and in the most humane way possible, will lethally remove deer from the park. The Park Police-based sharpshooting activities will occur within the Sligo Creek Golf Course at night from 5:30 pm until sunrise – when the park is closed to the public – throughout January, February and March, 2012.

The Department of Parks was asked to implement a deer management program in this area by community groups, individuals, and the Montgomery County Council due to the increasingly adverse impacts of the burgeoning deer population on local neighborhoods including an increase in deer-vehicle collisions, Lyme disease from deer-borne ticks, and damage to the natural ecosystem of Sligo Creek Stream Valley Park. Native plants are being browsed heavily, dying with no chance to reproduce, and birds and other animals that rely on a balanced ecosystem are disappearing.

Parks wildlife ecology staff investigated deer densities in Sligo Creek Stream Valley Park between Route 29 and Arcola Avenue annually beginning in 2007. Current estimates show that 140-181 individual deer use these parklands; this density is over four times higher than recommended for the area. It was determined that the Sligo Creek Golf Course was the best location to begin reducing deer populations.

The new program was proposed in October, 2011, and the Department accepted public comments

regarding the proposal through November 10, 2011, receiving 151 responses from area residents. Seventy-four percent of respondents were supportive of the program.

Several comments opposing the program suggested utilizing alternative measures, such as birth control, to manage the population. "The use of birth control was considered for this site," said Natural Resources Manager Rob Gibbs, "however it was determined that it was not a feasible method for free roaming wild deer in Sligo Creek Park." One important reason this method was not selected is that the only FDA-approved drug for birth control in wild deer requires each deer to be captured, tagged and hand injected with the drug. This process would need to be repeated with each treated deer every two to three years and for any fawns born or non-treated deer that move into the area. Some experimental efforts using deer contraception have been conducted in the county; however, they have all been done within fenced areas and even then, have not significantly reduced deer numbers even after more than a decade of use. The Department continues to monitor advances in deer contraception in hopes of using it in the future if the drugs and technology improve.

Concerns regarding safety were also raised during the comment period. In order to ensure the public is aware of park closures and sharpshooting operations, the Department will post yellow and black "Park Closed" signs around and throughout Sligo Golf Course. Notices of closures will also be posted on the Montgomery Parks website. Park Police will patrol the park during these operations to ensure public safety and safe weapons discharge.

"Park Police has been utilizing sharpshooting as a method of deer population reduction in Montgomery Parks since 1999, safely and effectively when traditional hunting is not practical or legally possible," said Department of Parks Wildlife Ecologist Bill Hamilton. All deer harvested from the program will be utilized to feed the hungry throughout the Capital area, including in Montgomery County.

The Department of Parks sharpshooting operations have been very successful. Over the past 11 years, more than 4,000 deer have been harvested and about 70 tons of meat donated to local food banks. Measurable reductions of impacts from deer have been realized, such as a decline in deer-vehicle collisions surrounding parks where management occurs. There has not been a single safety accident since the program began.

Lowering deer numbers in the area will reduce deer-vehicle collisions and impacts to home landscaping, and help the heavily damaged park ecosystem recover and support a greater diversity of native plants and animals including a more balanced and healthy population of deer.

To learn more the department's deer management program, visit www.ParksDeerManagement.org.

###

Contact:
Abbi Irelan
Marketing and Public Affairs Manager
Montgomery County Department of Parks
301-495-2532 (office)
301-785-2438 (cell)

From → [Park Police](#), [Parks](#)

Comments are closed.

MontgomeryParks.org

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 ALL THE MORE WITH
 A HUNT FOR THEM

Deer Population Management

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[Frequently Asked Questions \(FAQs\)](#)



Managed Deer Hunts

* [Frequently Asked Questions](#)

M-NCPPC Department of Parks, in order to reduce and maintain deer populations in accordance with the goals of the County's deer management plan, conducts managed deer hunts in select parks during the Fall and Winter.

Programming is designed with public safety being paramount. Managed hunting programs are directed and supervised by the Department's Wildlife staff and participants are required to follow strict safety and procedural guidelines. Safety buffers are established to meet and exceed State and County ordinance and hunting sites are selected to use terrain, distance, and habitat to enhance safe weapons discharge.

Weapons discharge is directed into the ground and/or other suitable backdrops, and in many cases, hunting from an elevated position is *required* to ensure that hunters' have a suitable backstop. A variety of harvest strategies have been employed using all weapons legal in the county. However, most programming requires participants to utilize rifled shotguns to harvest deer. On dates when managed hunting is occurring the park is closed to the public.

Managed hunts were implemented in the county in the Fall of 1996 and have occurred annually ever since. To date, the Department has conducted managed deer hunting programs in nine county parks with exceptional results. Currently, 11 parks are included in the Managed Deer Hunting Program

To learn more about the Montgomery Parks managed deer hunting programs, please review the [Frequently Asked Questions \(FAQ's\)](#) regarding deer population management being conducted on County parkland.

Park Closure Dates

[Parks Managed Hunt Dates](#) | [Park Police Sharpshooting Dates](#)

Montgomery Parks Managed Hunt Dates

For public safety, the Department of Parks closes select park locations to public access for the duration of deer population management operations. The following is a schedule of park closure dates and specified locations for Managed Deer Hunting and Park Police-based Sharpshooting operations for Fiscal Year 2012. These park closures are enforced, under park regulation (Chapter III, Section 2, Letter B.), by

he Department's Park Police Division.

Managed Deer Hunting Program (Shotgun)

Parks Closed from Sunrise to Sunset

October

- 28 – Hoyles Mill Conservation Park (Boyds)
- 28 – Woodstock Equestrian Park (Beallsville)

November

- 2 – North Germantown Greenway (Clarksburg)/Great Seneca Stream Valley Park (Gaithersburg)
- 4 – Hoyles Mill Conservation Park (Boyds)
- 4 – Woodstock Equestrian Park (Beallsville)
- 7 – Rachel Carson Conservation Park (Olney)
- 8 – Blockhouse Point Conservation Park (Darnestown)
- 12 – Hoyles Mill Conservation Park (Boyds)
- 16 – North Germantown Greenway (Clarksburg)/Great Seneca Stream Valley Park (Gaithersburg)
- 18 – Hoyles Mill Conservation Park (Boyds)
- 21 – Rachel Carson Conservation Park (Onley)
- 22 – Blockhouse Point Conservation Park (Darnestown)

December

- 2 – Bucklodge Forest Conservation Park (Boyds)
- 2 – Woodstock Equestrian Park (Beallsville)
- 3 – Hoyles Mill Conservation Park (Boyds)
- 7 – Little Bennett Regional Park (Clarksburg)
- 8 – Little Bennett Regional Park (Clarksburg)
- 9 – Little Bennett Regional Park (Clarksburg)
- 9 – Hoyles Mill Conservation Park (Boyds)
- 12 – Rachel Carson Conservation Park (Olney)
- 13 – Blockhouse Point Conservation Park (Darnestown)
- 14 – North Germantown Greenway (Clarksburg)/Great Seneca Stream Valley Park (Gaithersburg)
- 17 – Hoyles Mill Conservation Park (Boyds)

January

- 4 – Little Bennett Regional Park (Clarksburg)
- 5 – Little Bennett Regional Park (Clarksburg)
- 6 – Little Bennett Regional Park (Clarksburg)
- 6 – Hoyles Mill Conservation Park (Boyds)
- 13 – Bucklodge Forest Conservation Park (Boyds)
- 13 – Woodstock Equestrian Park (Beallsville)
- 14 – Hoyles Mill Conservation Park (Boyds)
- 21 – Hoyles Mill Conservation Park (Boyds)

Park Police-based sharpshooting locations 2010-2011

Parks Closed from 5:30PM – Sunrise daily, January 1 – March 31

Agricultural History Farm Park (Derwood - including attached segments of Rock Creek Stream Valley Units 12 & 16)



Needwood Golf Course (Rockville)

North Branch Stream Valley Park Units 2 & 3 (Norbeck)

North Branch Stream Valley Park Unit 4 (Olney)

Northwest Branch Recreation Park (Aspen Hill - including Layhill Local Park in Wheaton)

Northwest Branch Stream Valley Park Unit 7 (Norwood)

Northwest Golf Course (Wheaton)

Rock Creek Regional Park (Rockville)

Rock Creek Stream Valley Park Unit 7 (Aspen Hill)

Sligo Golf Course (Silver Spring)

Wheaton Regional Park (Wheaton)

Woodlawn Special Park (Sandy Spring)

Tenant-Based Managed Deer Hunting Program

Park Closed to Public Access Year Round

Goshen Recreation Park (Goshen)

Park Police-based Sharpshooting

M-NCPPC Department of Parks, in order to reduce and maintain deer populations in accordance with the goals of the County's deer management plan, conducts Police-based sharpshooting in select parks during the period of January through March.

Deer population reductions are conducted from Sunset until Sunrise while the parks are closed to the public. Programming is designed with public safety being paramount. Police-based sharpshooting programs are directed and supervised by the Department's Park Police Division and Wildlife staff. Park Police Officers participating in this program have received extensive training and certification and utilize the most advance equipment and techniques available. Weapons discharge is conducted in a safe manner with safe backdrops identified prior to firing.

Deer are removed safely, humanely, and discreetly. All deer harvested during such programming are donated to the Capital Area Food Bank for distribution to the regions charitable organizations. To date, the Department of Parks has donated at least 148,234 pounds of venison (592,936 servings) to those in need.

Police-based sharpshooting was implemented in the county in the spring of 1999 and has occurred annually ever since. To date, the Department has conducted Police-based sharpshooting programs in seventeen county parks with exceptional results. Police-based sharpshooting is being conducted annually, and the Department continues to investigate expanding efforts to parklands in need of deer population reduction. Click please review the [Frequently Asked Questions](#) (FAQ's) on this topic.

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Montgomery County Department of Parks
9500 Brunett Ave., Silver Spring, MD 20901
www.montgomeryparks.org



Deer Birth Control Could Prevent Collisions

By Tim Wall | Thu Sep 1, 2011 02:44 PM ET



"Sorry deer, not in the mood tonight, or this season, or for the next five years, in fact" said the doe on birth control.

A birth control injection for deer puts them completely out of the mood to mate for up to five years without a booster. GonaCon, as the birth control is called, even eliminates dangerous and destructive courtship behaviors responsible for the autumn increase in collisions between cars and deer.

The birth control shot is actually a vaccine that causes the deer to produce antibodies against a key hormone, Gonadotropin-releasing hormone (GnRH), which triggers production of sex hormones. GnRH kicks in when days get shorter and triggers many animals from northern latitudes to get feisty for the mating season.

SLIDE SHOW: Reindeer Help Christmas Trees Grow

Other deer birth control vaccines prevent pregnancy, but they don't stop the animals from exhibiting mating behaviors, said David Goldade of the U. S. Department of Agriculture's (USDA's) Animal and Plant Health Inspection Service/Wildlife Services National Wildlife Research Center (NWRC) in Fort Collins, Colo., where GonaCon was developed.

"That opens the door to dangerous situations in which males chase females across the highway. With GonaCon, however, vaccinated deer don't even try to mate," Goldade said in a press release.

Goldade recently reported on the new vaccine at the 242nd National Meeting and Exposition of the American

Chemical Society.

The vaccine causes deer to produce antibodies that destroy the GnRH before it can ever trigger the sex hormones. USDA studies on white-tailed deer, free-ranging California ground squirrels, captive Norway rats, domestic and feral swine and wild horses have shown GonaCon to be effective in a wide range of animals.

The birth control vaccine could even be useful for pets and domesticated animals that have not been spayed or neutered. In cats, for example, scent-spraying, fighting, wandering, and caterwauling could be controlled.



The vaccine was designed to control the wild deer population, but there are a few drawbacks. Though it is registered with the Environmental Protection Agency, it must also be registered with state agencies. So far, only Maryland and New Jersey have approved its use.

Also, the vaccine has to be injected into a captured and sedated deer by a USDA or state game and fish department staff member. Capturing, sedating, and vaccinating hundreds of thousands of deer would be time-consuming and expensive.

But the benefits of controlling deer populations may be worth it.

Encounters with deer can be deadly. In the approximately 1.5 million deer-auto collisions, an average 150 people die each year. Deer populations have exploded in the past few decades.

BLOG: Forensic DNA Identifies Wolf Serial Killer Suspect

A lack of natural predators and reduced hunting pressure has allowed deer to become common and expand into urban areas. At the same time, humans spread further out into rural areas that were once deer habitat. These two factors combine and result in damage to property when deer eat crops and landscaping plants.

Deer cause an estimated \$1 billion in property damage per year.

IMAGE 1: *A male white-tailed deer (Wikimedia Commons)*

IMAGE 2: *A white-tailed deer fawn (Wikimedia Commons)*

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GonaCon™—Birth Control for Deer: Questions and Answers

Q. What is GonaCon™?

A. GonaCon™ is a new gonadotropin-releasing hormone (GnRH) immunocontraceptive vaccine developed by scientists at the U.S. Department of Agriculture's (USDA) Wildlife Services' (WS) National Wildlife Research Center (NWRC). Presently, applications of GnRH are being researched in controlled field studies for potential use as a wildlife management tool.

Q. How does GonaCon™ work?

A. The single-shot, multiyear vaccine stimulates the production of antibodies that bind to GnRH, a hormone in an animal's body that signals the production of sex hormones (e.g., estrogen, progesterone, and testosterone). By binding to GnRH, the antibodies reduce GnRH's ability to stimulate the release of these sex hormones. All sexual activity is decreased, and animals remain in a nonreproductive state as long as a sufficient level of antibody activity is present.

Q. How does GonaCon™ stimulate the production of antibodies?

A. GonaCon™ causes an animal's body to make antibodies against its own GnRH. To do this, WS scientists synthesize and hook GnRH to a foreign protein. This material looks like a large, new molecule that the animal's immune system has never encountered. As a result, when it is injected into the animal's body, the body's immune response neutralizes the hormone's function, resulting in infertility.

Q. What are the health effects associated with GonaCon™?

A. The health effects associated with GonaCon™ are minimal. Vaccinated animals showed a decrease in sexual activity and breeding behavior. In field and pen studies, animals showed little to no visual evidence of inflammation at injection sites, and blood chemistry was similar among treatment and control groups. However, in some necropsied animals, granulomas were present at injection sites. Development of granulomas is a common side effect in vaccines with adjuvants, which are compounds used in many human and livestock vaccines to enhance a vaccine's effectiveness.

Q. Are there any dangers or secondary hazards to humans or other animals that eat meat from vaccinated deer?

A. There is no known danger associated to humans or wildlife from eating deer that have been vaccinated with GonaCon™. In 2005, the U.S. Food and Drug Administration (FDA) informed APHIS that white-tailed deer vaccinated with GonaCon™ do not raise a human food safety concern. As with other vaccines, such as those used with livestock, both the vaccine and the antibodies produced are proteins. Once ingested, they are broken down by stomach acids and enzymes. In 2003, the FDA approved the slaughter of experimentally vaccinated pigs with GonaCon™. Similar injectable hormone-altering products are used routinely in livestock applications.

Q. How long does GonaCon™ last?

A. It depends upon the individual animal and its response to the vaccine. Long-term field efficacy data currently does not exist. However, in pen studies, a single-shot of GonaCon™ has successfully kept 4 out of 5 female deer infertile for 5 years. A second shot given the same year or in subsequent years can significantly increase effectiveness, potentially rendering deer infertile for life.

Q. Can GonaCon™ be used with other wildlife species?

A. In addition to white-tailed deer, GonaCon™ has proven effective for use with other wildlife species, including California ground squirrels, Norway rats, feral cats and dogs, domestic and feral swine, wild horses, and elk. Since registering the contraceptive is time consuming and costly, WS has decided to focus registration efforts on use for female white-tailed deer. Future research will likely be directed toward registering GonaCon™ for use with other wildlife species.

Q. What are the benefits of GonaCon™?

A. Because it is a single-shot, multiyear vaccine, GonaCon™ may be a practical management tool. Deer may need to be injected only once to become infertile for up to 5 years. A boost injection could increase effectiveness to almost 100 percent and increase longevity of the contraceptive effect. The vaccine can be used in urban and residential areas, where other management methods, such as hunting, are not an option.

Q. What are the limitations of GonaCon™?

A. GonaCon™ must be injected into the muscle or

tissue of each animal. Eventually, WS scientists hope to produce an oral GnRH vaccine bait that will be attractive to deer but not other animals.

Q. How much does GonaCon™ cost?

A. The vaccine itself only costs \$2–\$10 per dose. The main cost of using GonaCon™ is associated with the time and money required to capture and vaccinate the deer. This cost can be several hundred dollars per deer depending upon many factors, such as how many deer need to be captured and whether the deer are easy or difficult to catch.

Q. How does GonaCon™ differ from porcine zona pellucida (PZP)?

A. PZP, another immunocontraceptive vaccine, has been used to sterilize dogs, coyotes, burros, wild horses, and white-tailed deer temporarily. The PZP vaccine, also known as SpayVac™, causes multiple estrus cycles in female deer. GonaCon™, however, prevents female deer from entering estrus.

Q. Is GonaCon™ currently available to Federal, State, and local wildlife management agencies?

A. No. Once registered, GonaCon™ will be under the authority of the Environmental Protection Agency (EPA). The GonaCon™ studies underway in Maryland, New Jersey, and Pennsylvania are being conducted as part of EPA's approval process. NWRC hopes to submit a registration application to EPA in early 2008 and anticipates a product registration approximately 18 months after submittal. NWRC is currently seeking a private-sector partner to take the vaccine to market.

Q. Who will be allowed to use GonaCon™?

A. GonaCon™ will be registered as a "Restricted Use" product. Although final label language has not been negotiated with EPA, NWRC anticipates the product will be labeled for use by USDA-APHIS Wildlife Services or State wildlife management personnel or persons working under their authority. GonaCon™ users will need to follow State authorization processes.

Q. Will GonaCon™ eliminate the need for hunting to control deer overpopulation?

A. No. Contraception alone cannot reduce overabundant deer populations to healthy levels. GonaCon™ is a tool to be used in conjunction with other wildlife management methods.

Q. What studies are currently being done with GonaCon™?

A. A field study near Silver Spring, MD, provided additional data on the efficacy of the vaccine on white-tailed deer. At a fenced military facility, 28 adult does were

captured in the summer of 2004, equipped with eartags and radiotelemetry transmitters, and injected with GonaCon™. The reproductive behavior and reaction of these does were monitored for 2 years and compared with those of 15 unvaccinated adult does that inhabit an adjacent, enclosed parcel of similar habitat. Data show the vaccine to be 88 percent effective the first year and 47 percent effective the second year in treated deer.

In July 2005, a similar field study involving another 28 deer was started in Morris County, NJ, that showed 67 percent effectiveness the first year and 48 percent effectiveness the second year. Results from these studies will be submitted to the EPA during the registration process for GonaCon™.

WS scientists collaborated with Pennsylvania State University to conduct studies required by EPA on the toxicity and safety of GonaCon™ in captive deer. Responses of treated and control groups of deer were compared via blood and tissue analyses. Data showed no differences between treatment and control groups.

Q. What does WS hope to accomplish with these studies?

A. Data from field and pen studies will aid in the final EPA process for approving GonaCon™ as a contraceptive for use in wildlife and feral animals.

Q. What other agencies or organizations are involved in these studies?

A. USDA's WS is working with the following agencies and organizations to develop and test GonaCon™:

- Pennsylvania State University
- U.S. General Services Administration
- U.S. Department of Defense
- USDA's Veterinary Services

Q. What is the NWRC mission?

A. The NWRC is the research arm of USDA's WS program, a nonregulatory program that provides Federal leadership in managing conflicts with wildlife. NWRC applies scientific expertise to the development of practical methods to resolve human-wildlife conflicts and maintain the quality of the environments shared with wildlife.

Q. How do I obtain more information on this subject?

A. For more information on GonaCon™ and WS' National Wildlife Research Center, please go to http://www.aphis.usda.gov/wildlife_damage/nwrc/ on the Web.

USDA is an equal opportunity provider and employer.

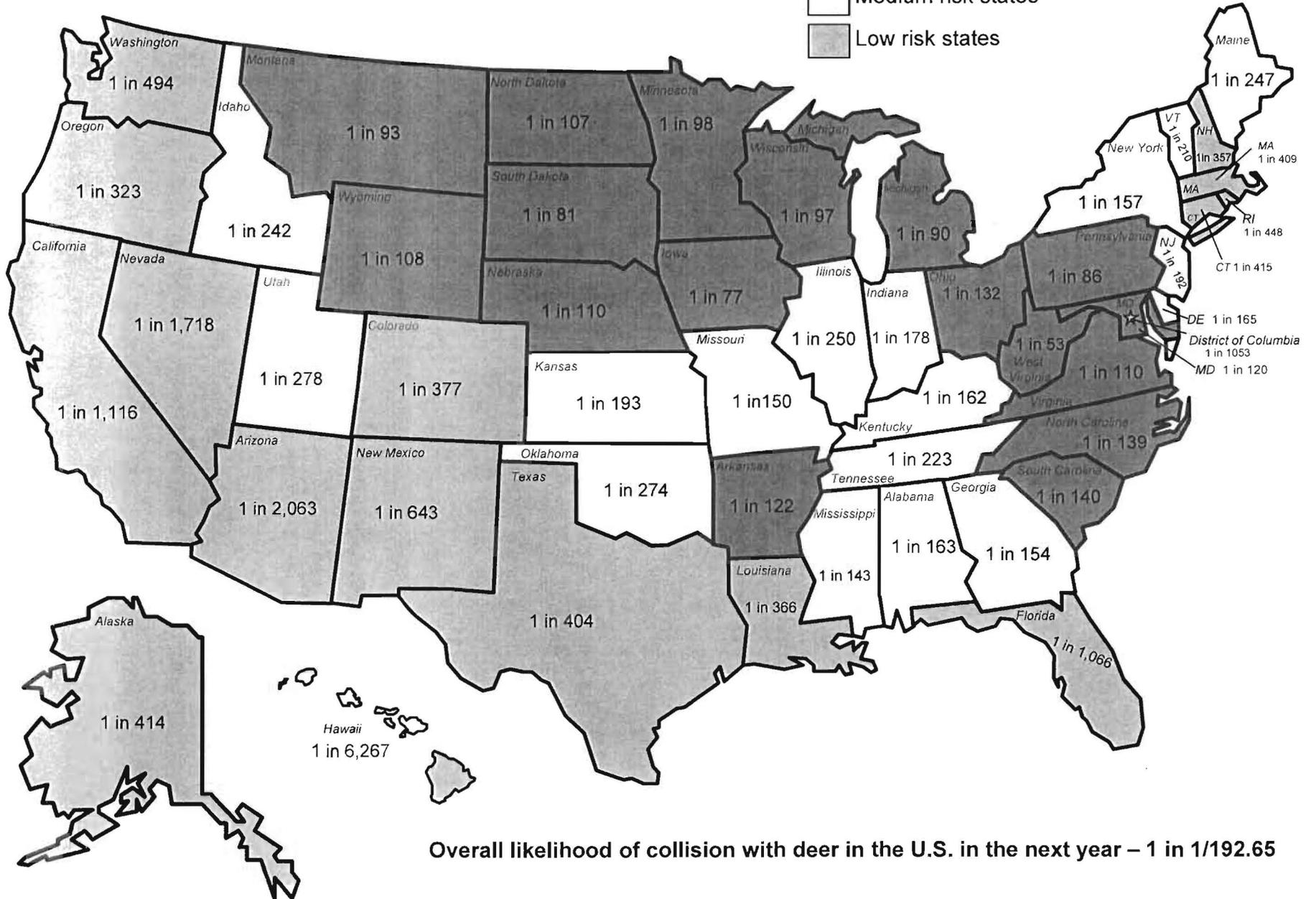
Likelihood of Collision with Deer

STATE	Projected # of Deer-Vehicle Collisions (7-1-2010 to 6-30-2011)	Licensed Drivers in 2009	Likelihood of Collision with Deer	State Ranking 2010-2011	State Ranking 2009-2010
ALABAMA	23,153	3,782,284	1/163.4	23	23
ALASKA	1,227	507,759	1/413.8	41	41
ARIZONA	2,134	4,403,390	1/2,063.4	50	50
ARKANSAS	16,961	2,065,065	1/121.8	14	9
CALIFORNIA	21,219	23,680,643	1/1,116.0	48	48
COLORADO	9,826	3,704,561	1/377.0	38	40
CONNECTICUT	7,023	2,916,143	1/415.2	42	38
DELAWARE	4,230	699,745	1/165.4	24	21
DISTRICT OF COLUMBIA	357	376,086	1/1,053.5	46	46
FLORIDA	13,135	14,005,066	1/1,066.2	47	47
GEORGIA	41,009	6,315,035	1/154.0	20	22
HAWAII	142	889,918	1/6,267.0	51	51
IDAHO	4,352	1,055,269	1/242.5	30	33
ILLINOIS	33,218	8,301,118	1/249.9	32	31
INDIANA	31,108	5,550,469	1/178.4	25	24
IOWA	27,773	2,145,333	1/77.2	2	2
KANSAS	10,618	2,045,426	1/192.6	27	27
KENTUCKY	18,090	2,939,423	1/162.5	22	25
LOUISIANA	8,437	3,086,004	1/365.8	37	36
MAINE	4,103	1,013,533	1/247.0	31	29
MARYLAND	32,675	3,904,685	1/119.5	13	14
MASSACHUSETTS	11,333	4,629,636	1/408.5	40	43
MICHIGAN	78,304	7,082,820	1/90.5	5	3
MINNESOTA	33,218	3,245,441	1/97.7	8	10
MISSISSIPPI	13,489	1,930,603	1/143.1	18	16
MISSOURI	28,096	4,217,910	1/150.1	19	17
MONTANA	7,959	737,964	1/92.7	6	5
NEBRASKA	12,283	1,349,295	1/109.85	11	12
NEVADA	984	1,690,431	1/1,717.9	49	49
NEW HAMPSHIRE	2,894	1,034,329	1/357.4	36	37
NEW JERSEY	30,866	5,923,538	1/191.9	26	28
NEW MEXICO	2,144	1,377,983	1/642.7	45	45
NEW YORK	72,307	11,329,488	1/156.7	21	19
NORTH CAROLINA	46,652	6,504,269	1/139.4	16	20
NORTH DAKOTA	4,440	476,561	1/107.3	9	7
OHIO	60,200	7,937,498	1/131.9	15	15
OKLAHOMA	8,459	2,320,985	1/274.4	33	32
OREGON	8,809	2,841,972	1/322.6	35	35
PENNSYLVANIA	101,299	8,687,206	1/85.8	4	6
RHODE ISLAND	1,667	746,032	1/447.5	43	39
SOUTH CAROLINA	23,337	3,268,498	1/140.1	17	18
SOUTH DAKOTA	7,420	602,165	1/81.2	3	4
TENNESSEE	20,039	4,476,539	1/223.4	29	30
TEXAS	38,067	15,374,063	1/403.9	39	42
UTAH	6,190	1,720,015	1/277.9	34	34
VERMONT	2,414	506,977	1/210.0	28	26
VIRGINIA	48,658	5,347,745	1/109.90	12	11
WASHINGTON	10,181	5,026,521	1/493.7	44	44
WEST VIRGINIA	25,175	1,328,992	1/52.8	1	1
WISCONSIN	42,261	4,105,142	1/97.1	7	8
WYOMING	3,796	410,813	1/108.2	10	13

Overall likelihood of Collision with Deer in the U.S. the next year - 1/192.65

Likelihood of Collision with Deer

- High risk states
- Medium risk states
- Low risk states



Overall likelihood of collision with deer in the U.S. in the next year – 1 in 1/192.65





[\(/wildlife/index.asp\)](#)

Deer Hunting - A Valuable Management Tool for Private Landowners

Regulated hunting is the most effective and economical method of controlling deer populations in many locales. Over 60 years of experience and research confirm the effectiveness of deer hunting as a means of deer population control. In most situations, private landowners have the ability to regulate the deer harvest in order to reduce the level of deer damage on their land. The most successful deer management occurs when landowners play an active role.

Private landowners must strive with hunters to harvest appropriate numbers of deer to meet deer management goals. The key element is to have hunters taking adequate numbers to control the deer herd growth.

Deer populations are best managed when landowners utilize all Maryland hunting seasons. Deer seasons and bag limits are established for hunters using bows, modern firearms or muzzleloading firearms. Maryland's bow deer season usually opens in mid September and closes at the end of January. Firearms deer season traditionally opens the Saturday following Thanksgiving Day and runs for two weeks. Muzzleloader deer season usually is open in late October and for two weeks in late December and early January. By understanding these different seasons and hunting devices, a landowner can best address deer management goals. The annual Department of Natural Resources (DNR) publication "Hunting & Trapping in Maryland" describes the current deer hunting seasons and bag limits. This publication is available at the regional DNR offices listed below.

Tips For Landowners To Maximize Hunting Efficiency

What hunting seasons should be used?

All available hunting seasons should be used to maximize deer population management.

Bow Season: Archery deer hunting is a silent and discreet method of taking deer. Since bow hunters prefer to hunt out of elevated portable tree stands, arrows travel short distances before striking the ground. Archery hunters can hunt in sections of Maryland closed to firearms due to county or municipal ordinances. Open lands surrounded by development may be hunted tactfully by archers. Maryland bow hunters average a 35 percent success rate.

Firearm Season: Deer hunting with modern firearms is the most popular deer hunting method. The use of rifles or shotguns is closely regulated on a county by county basis. Many hunters schedule their vacation around this season. Over half of all deer harvested in Maryland are taken with firearms. Maryland firearm hunters have a 45% success rate.

Muzzleloader Season: Muzzleloader deer hunting continues to grow in popularity in Maryland. Muzzleloaders have an effective range similar to a shotgun. Muzzleloaders are fired once and must be reloaded. Improvements in muzzleloader technology have increased the effectiveness of this one shot firearm. Thirty-six percent of muzzleloader hunters take at least one deer across the state.

How can landowners find potential hunters?

Talk to hunters that are in your service club, your place of worship, your workplace or your hobby club. They may need a place to hunt or know of hunters that are looking for deer hunting property. Income from a hunting lease can help to offset the monetary losses from deer damage. Place a classified advertisement in a local newspaper which indicates that your farm is available for a deer hunting lease. Local sporting goods stores usually have areas where notices can be posted. Clubs also advertise their desire to lease properties at these locations.

Should landowners screen potential hunters on their property?

In order to attract ethical, safe and effective hunters, landowners may encourage hunters to have a certain level of experience and training. Suggest that hunters be graduates of Maryland's Hunter Education Course. Hunters that live close to the property may be able to hunt frequently, thus be more successful. Select hunters with a number of years of deer hunting experience. Require hunters under 16 years of age to be accompanied by an adult hunter.

How many hunters should be on property?

Have at least one hunter for each 25 acres of woodland open to hunting. It is possible to have a greater hunter density depending on the topography and surrounding property. During bow season, the density could be one bow hunter per 15 acres of woodland. Hunters should be distributed evenly across the property to maximize deer harvest. The most common error is to not have enough hunters distributed across the property.

How can hunter cooperation and safety be stressed?

Meet with individual hunters or the hunting club prior to each season. Maps can be distributed at the meeting to indicate hunting areas, hazards and safety zones. Any rules can be discussed at this meeting. Hunting areas can be assigned which will ensure an even distribution of hunters and increase safety. Requiring the use of portable tree stands can increase safety. Shots taken from elevated tree stands create a quick downward flight of bullets or arrows. In future years, written information concerning any land use changes may be supplied to a hunting club spokesman which reduces the need for an annual meeting. Chronic violators of property rules should be excused from the land.

How can the property owner encourage effective deer harvest?

Open as much of your property to hunting as you feel comfortable with. Deer hunting on 400 acres of a 500 acre farm will more effectively manage deer than hunting 100 acres of this farm. Hunter density (at least one hunter per 25 acres of woods) and hunter distribution across the property should be emphasized. Remember that the key element to controlling deer numbers is to harvest adequate numbers of does. Hunters may be limited to taking no more than one antlered buck during each season (bow, firearm and muzzleloader). Hunters may be required to take an antlerless deer before harvesting an antlered buck during each season. Suggest that the hunting club have deer drive hunts using unarmed drivers near the end of the two week firearms season. Request copies of the possession tags for deer taken off of the farm.

There are many different ways for landowners to encourage adequate doe deer harvest. Some landowners make the hunting lease renewal dependent on a certain level of doe harvest. Other landowners have been successful by increasing the overall lease cost and then allowing the club to reduce it to an approved minimum level by harvesting a set number of does. The options are only limited by safety, the imagination of the landowner and hunting club and the deer hunting regulations.

How does the landowner handle trespass problems?

Make sure that boundary lines are properly marked and maintained. Signs can be used to mark property boundaries. Signs may read "Hunting by Permission Only", "Posted: No Trespassing", or "Posted: Big Doe Hunting Club".

Maryland law also allows property owners to use bright blue oil base paint on trees to mark property boundaries. The paint mark must be a vertical mark at least 2 inches wide and at least 8 inches in length. The mark must be at least 3 feet from the ground but no more than 6 feet high. An observer should be able to see marks to his left and

right when standing between marked trees. Your hunters can assist with boundary maintenance.

Issue a signed "Permission to Hunt" card to each hunter. All deer hunters must have written permission in order to deer hunt. Require hunters to provide you with tag numbers of their vehicles. Become familiar with the local Natural Resources Police Officer and prosecute all hunting and trespass violations. Members of the hunting club will be pleased to help you enforce trespass violations.

How can a landowner protect himself against potential liability related to deer hunting?

Lawsuits brought by hunters against consenting landowners are extremely rare. The following suggestions will help to further reduce the limited likelihood of any legal proceedings. Indicate on the property map any potential hazards. Hazards may include abandoned wells, old gravel pits, sink holes, cliffs or vacant buildings. If you are not sure if a feature is a hazard, place it on map to be safe. Make sure that all recreating on your property receive a copy of the map.

If you lease your property to a hunting club, require the club to acquire liability insurance coverage for hunting activities. This liability insurance will provide coverage for the landowner in the rare occurrence of a lawsuit. Contact your insurance agent for information regarding hunting liability insurance. Your hunting club may have access to liability insurance through non-profit conservation organizations.

More detailed information on landowner liability can be found in the publication "[Landowner Liability and Recreational Access](http://extension.umd.edu/publications/PDFs/EB357.pdf)" (<http://extension.umd.edu/publications/PDFs/EB357.pdf>), which you may download for free from the University of MD, Cooperative Extension Service". This publication can also be purchased from your local county Cooperative Extension Service office (see the government pages of the phone book in the County Government section under Extension Service).

How can the deer management program be evaluated?

Damage to crops will stabilize and then decline when adequate numbers of deer are removed from the property. If hunter pressure is relatively stable, hunter success rates will generally follow deer population trends. As deer numbers stabilize and decline, the numbers of deer taken by the hunters will stabilize and then drop. If crop damage continues to increase and/or hunters success rate climbs, additional antlerless deer need to be removed. Be patient. It may take two to three years before you notice reduced crop damage.

Well managed deer hunting will effectively manage deer numbers when conducted on an annual basis. Using the preceding standards will provide for a professional and friendly relationship between the landowner and the hunting group. Hunters appreciate the opportunity to hunt and will cooperate with reasonable rules such as the ones indicated. A balanced hunting program will reduce trespass and littering problems as well as provide for effective deer management.

For Additional Information:

- Western Regional Office (Allegany, Frederick, Garrett and Washington counties): 3 Pershing Street; Room 110; Cumberland, MD 21502; 301-777-2136.
- Central Regional Office (Baltimore, Carroll, Cecil, Harford, Howard, Montgomery counties and Baltimore City): 2 South Bond St.; Bel Air, MD 21014; 410-836-4557.
- Eastern Regional Office (Caroline, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, Worcester counties): P.O. Box 68, Wye Mills MD 21679; 410-827-8612.
- Southern Regional Office and Headquarters (Anne Arundel, Calvert, Charles, Prince George's, St. Mary's counties): Tawes State Office Building, E-1; 580 Taylor Ave.; Annapolis, MD 21401; 410-260-8540.

The Department of Natural Resources (DNR) recognizes the positive benefits of hunting through the DNR Hunting Policy described below.

Maryland DNR Hunting Policy: The Maryland Department of Natural Resources (DNR) is dedicated to helping people enjoy nature and live in

harmony with our natural resources. Our goal is to maintain vibrant natural communities, with abundant wildlife resources, and diverse outdoor opportunities for recreation and economic growth.

It is the policy of DNR to conserve and manage the wildlife resources of the State to provide safe and enjoyable hunting opportunities to the citizens of Maryland and its visitors, to manage and make available for public use and enjoyment the lands with which it has been entrusted and to improve the public's understanding and interest in the State's wildlife resources through information and outreach programs.

DNR carries out educational and training programs to improve awareness, appreciation and conservation of Maryland's natural resources. Through coordinated programs, such as hunter education, and the provision of other recreational opportunities such as "Becoming an Outdoors Woman," our objective is to encourage sportsmanship, instill an environmental ethic and promote public safety.

Revenues from hunting licenses and federal excise taxes on hunting equipment provide for the scientific investigation, conservation, protection and management of wildlife, as well as the training of safe and ethical hunters.

Your stewardship and thoughtful use of our natural resources, as partners, will continue to enhance the high quality of living that we enjoy in Maryland.

Document prepared by:

L. Douglas Hotton

Contact: Brian Eyler, Deer Project Leader
Game Program

Wildlife and Heritage Service

Maryland Department of Natural Resource

Phone: 301-842-0332

Quick Links

[Deer Hunting Information \(/wildlife/Hunt_Trap/deer/deerhunting.asp\)](/wildlife/Hunt_Trap/deer/deerhunting.asp)

[Bowhunter Survey \(/wildlife/Hunt_Trap/bhsurvey.asp\)](/wildlife/Hunt_Trap/bhsurvey.asp)

[Disabled Hunter Access \(/publiclands/accessforall/accesshunt.asp\)](/publiclands/accessforall/accesshunt.asp)

[Deer Management \(/wildlife/Hunt_Trap/deer/deer_management/index.asp\)](/wildlife/Hunt_Trap/deer/deer_management/index.asp)

[Deer Damage \(/wildlife/Hunt_Trap/deer/deer_damage/index.asp\)](/wildlife/Hunt_Trap/deer/deer_damage/index.asp)

[Deer Health and Diseases \(/wildlife/Hunt_Trap/deer/disease/index.asp\)](/wildlife/Hunt_Trap/deer/disease/index.asp)

[Deer Importation Regulations](#)

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[Technical Information \(/wildlife/Hunt_Trap/deer/technical_information.asp\)](/wildlife/Hunt_Trap/deer/technical_information.asp)

[Sika Deer \(/wildlife/Hunt_Trap/deer/sika/index.asp\)](/wildlife/Hunt_Trap/deer/sika/index.asp)

[Guide to Hunting & Trapping \(/huntersguide/index.asp\)](/huntersguide/index.asp)

[Hunter Education Classes \(/nrp/hunter_education.asp\)](/nrp/hunter_education.asp)

[Wildlife Management Areas \(/wildlife/PublicLands/index.asp\)](/wildlife/PublicLands/index.asp)

[Annual Report \(/wildlife/Hunt_Trap/pdfs/md_annual_deer_report10-11.pdf\)](/wildlife/Hunt_Trap/pdfs/md_annual_deer_report10-11.pdf)

[Deer Project Annual Report Archives](#)

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[Farmers and Hunters Feeding the Hungry \(/wildlife/Hunt_Trap/FHFH/fhfh.asp\)](/wildlife/Hunt_Trap/FHFH/fhfh.asp)

[Game Mammal Program \(/wildlife/Hunt_Trap/gamemam.asp\)](/wildlife/Hunt_Trap/gamemam.asp)

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