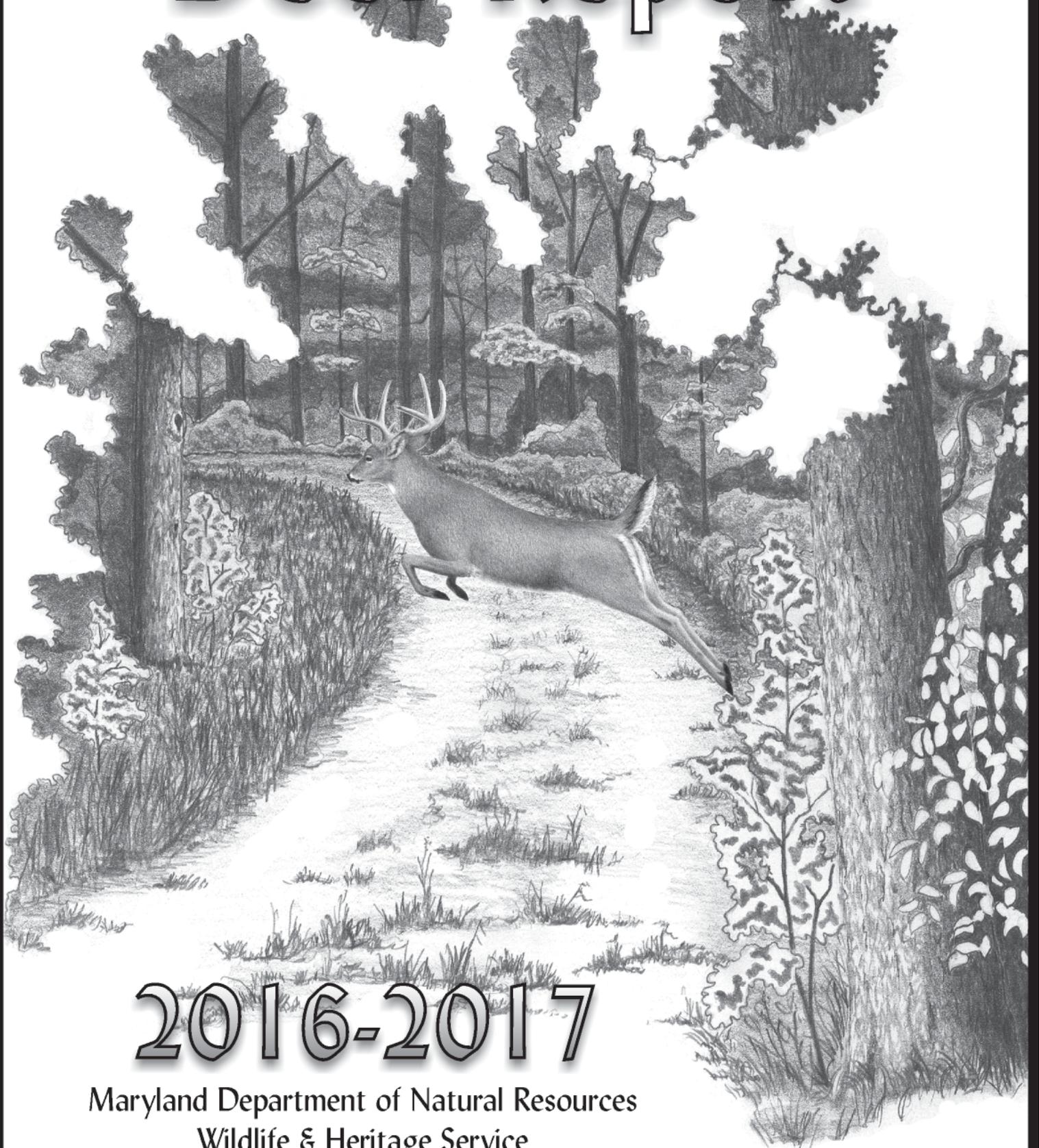


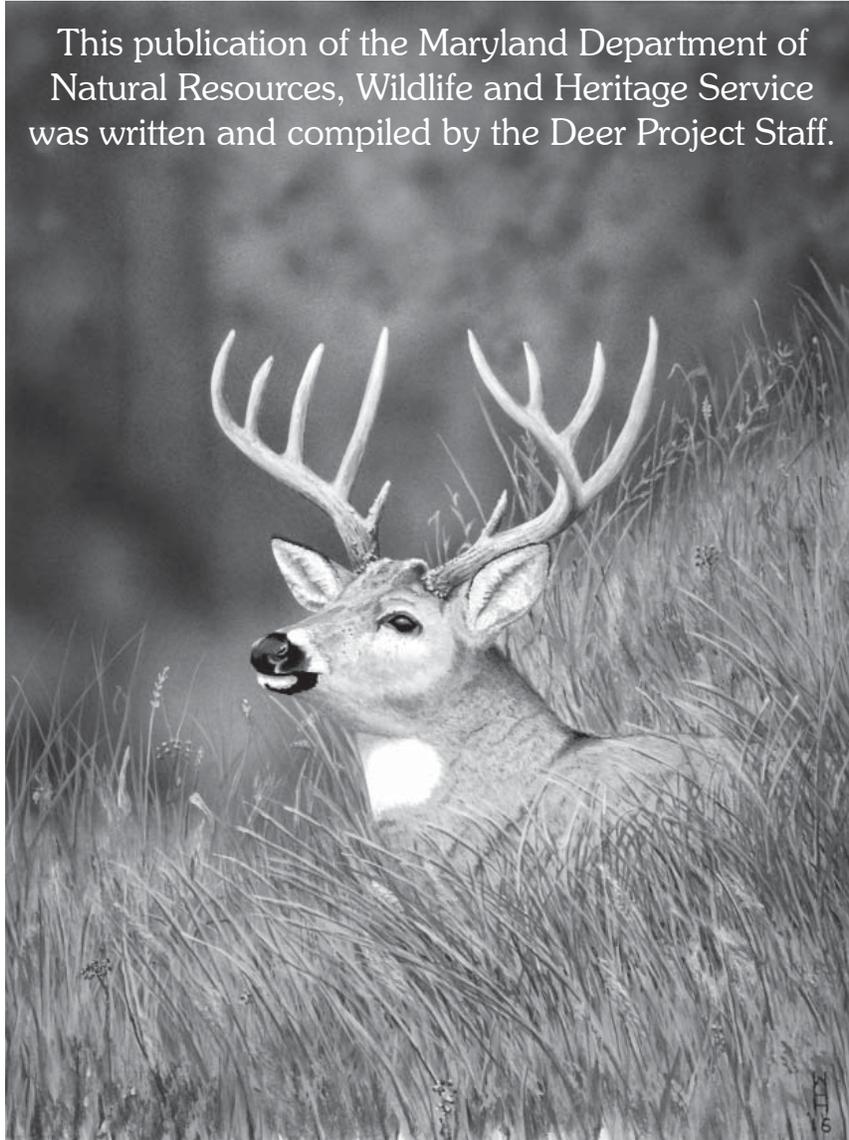
# Maryland Annual Deer Report



2016-2017

Maryland Department of Natural Resources  
Wildlife & Heritage Service

This publication of the Maryland Department of  
Natural Resources, Wildlife and Heritage Service  
was written and compiled by the Deer Project Staff.



Brian Eyler, Deer Project Leader  
George Timko, Assistant Deer Project Leader  
Art and publication design by W.H. Henry

## **Introduction**

The 2016-2017 Maryland deer season concluded with a total harvest very similar to the previous two seasons. The recent trend in the annual harvest, while lower than a decade ago, still indicates that there are healthy deer numbers across the state. In fact, hunters in Maryland have harvested over 80,000 deer per year for the past 17 seasons. A relatively short 25 years ago deer hunters harvested only half as many deer each year.

Numerous factors contribute to the annual deer harvest. Fewer deer in the population in many areas is without doubt responsible for some of the reduced harvest in recent years. Likewise, warmer weather has become more common during the deer season lately, which also influences the harvest to some degree. And available mast from year to year, paired with many hunters using bait, influences the annual harvest as well. Lastly, a major influence on the harvest is hunter effort, which fluctuates from year to year based on the economy and other factors.

While hunter effort changes to a relatively small degree from year to year, overall it is down considerably in Maryland over the long term. In recent years, survey data indicate that hunters spend about 930,000 total “days” a year deer hunting in Maryland. This is significantly less than the peak in 1994 of 1,736,000 days. However, while effort is down, success is up (owing to Maryland’s very healthy deer population). In 1994, deer hunters were taking on average one deer for every 20 days of effort. Today, deer hunters take one deer for every 12 days of effort.

As mentioned in prior reports and above, warm weather, bait, and mast availability (primarily acorns) can alter deer movements significantly. Many deer hunters find that they observe numerous deer on their trail cameras, but more (especially adult bucks) are photographed at night than during legal shooting hours. This is probably more common in states such as Maryland, where deer baiting is allowed. Ample food in the form of bait and acorns, combined with milder weather, reduces overall deer movement and increases nocturnal activity. These changed movements make it appear as though there are fewer deer in the population than there really are, and they negatively impact the harvest.

The Department of Natural Resources (DNR) will continue to monitor the deer population closely, and will make changes to seasons and bag limits as needed. DNR thanks all deer hunters in Maryland for their continued interest in deer hunting and aiding the Department in effectively managing the deer population for all citizens of the state.

## **2016-2017 Season Recap**

The 2016-2017 deer harvest increased 1% from 84,022 in 2015-2016 to 85,193 this season. The harvest was approximately 6% below the previous 5-year average of 90,468 deer. The overall harvest included 82,360 white-tailed deer (29,042 antlered and 53,318 antlerless) and 2,833 sika deer (1,284 antlered and 1,549 antlerless). The whitetail antlered and antlerless harvest each increased approximately 1%.

## **Chronic Wasting Disease**

DNR sampled 319 deer during the 2016-2017 deer season in the Allegany County area and detected Chronic Wasting Disease (CWD) in six deer. All of the infected deer were harvested within the current CWD Management Area (CWDMA). Five of the infected deer came from Harvest Management Unit (HMU) 233, while one came from HMU 231. A total of 17 deer with CWD have now been detected in Maryland (all from Allegany County). The first positive was a yearling buck taken by a hunter in November 2010 in Green Ridge State Forest, near where CWD is present in West Virginia. To date, DNR has tested over 8,800 Maryland deer for CWD.

CWD is a disease of the brain and nervous system that causes death in cervids. CWD is classified as a transmissible spongiform encephalopathy (TSE) and attacks the brain of cervids, producing small lesions that eventually result in death. CWD historically was a disease of the West, but since 2001 it has been detected in numerous states east of the Mississippi River, including the Mid-Atlantic States of Maryland, New York, Ohio, Pennsylvania, Virginia, and West Virginia. Currently there are over 20 states and two Canadian provinces in North America that have documented CWD in their deer, elk or moose populations (free-ranging, captive, or both). The disease has also been detected in Norway (free ranging reindeer) and South Korea (captive elk from Canada).

Concerns over CWD should not stop hunters from enjoying the hunting season or any venison they may acquire. CWD has not been shown to be transmissible to humans. However, it is recommended that hunters field-dressing or butchering deer should take the same precautions as they might to protect against other pathogens or diseases. Additional information on the proper handling of harvested deer and CWD management can be found on the following pages.

## **CWD Research in Maryland**

The Department is currently cooperating with Penn State University on a deer genetics/CWD project. A PhD candidate is collecting genetic samples from hunter-harvested deer to study dispersal patterns in the four-state area (Maryland, Pennsylvania, Virginia, and West Virginia). Gaining insight into the dispersal characteristics of deer in areas with CWD will provide managers a better understanding of how to manage for the disease as it relates to deer populations.

## **The Deer Project**

The DNR Deer Project is responsible for managing native white-tailed deer and non-native sika deer. The Deer Project utilizes broad-based deer management techniques under guidance of the current 10-year deer management plan. The current 2009-2018 plan has five major goals:

- Population Goal: Use diverse and progressive methods to ensure the long-term viability of Maryland’s white-tailed deer population through comprehensive research, efficient monitoring, public outreach, trained staff and effective management.
- Education Goal: Educate Maryland citizens on all aspects

# The Proper Handling of Harvested Deer and CWD Management

The following common-sense precautionary measures are recommended for the safe handling, field-dressing and home processing of venison:

- Avoid shooting or handling a deer that appears sick.
- Wear latex or rubber gloves when field-dressing or butchering deer.
- Remove all internal organs.
- Remove the meat from the bones and spinal column if home processing a deer.
- Do not use household knives or utensils when field-dressing or home processing a deer.
- Avoid cutting through bones or the spinal column (backbone).
- Never eat a deer's brain, eyeballs, spinal cord, spleen, or lymph nodes.
- If you saw off antlers or through a bone, or if you sever the spinal column with a knife, be sure to disinfect these tools prior to using them for the butchering or removal of meat.
- Remove all fat, membranes and connective tissue from the meat. Note that normal field-dressing and trimming of fat from meat will remove lymph nodes.
- Always wash hands and instruments thoroughly after dressing and processing game meat.
- Use a 50/50 solution of household chlorine bleach and water to disinfect tools and work surfaces. Wipe down counters and let them dry; soak knives for one hour.

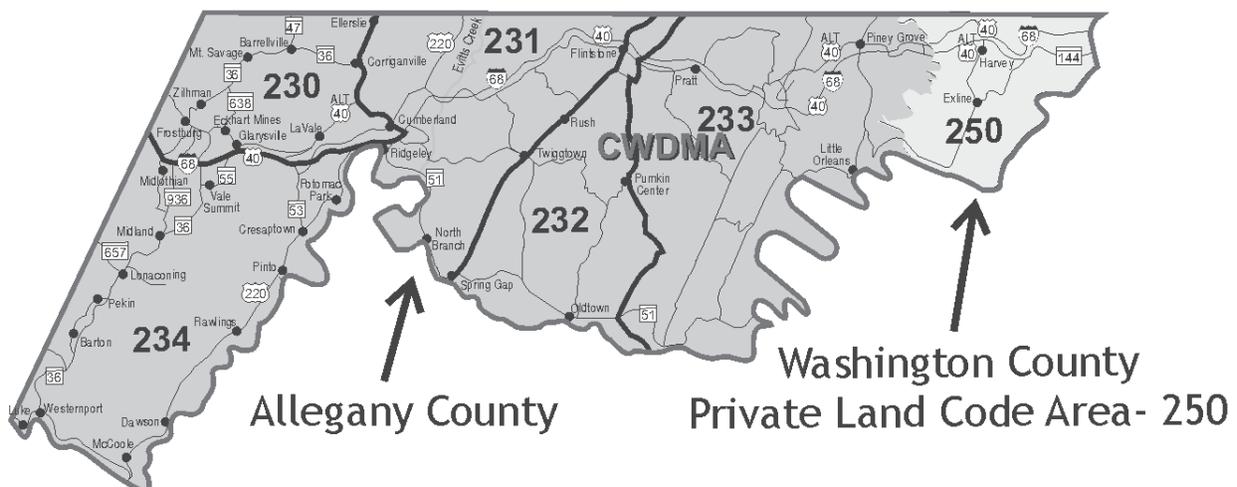
## CWD Management

Due to the detection of CWD in Allegany County, DNR has implemented a number of measures that are intended to prevent the unintentional spread of CWD to other locations in Maryland or to other states. The changes outlined below apply only to the CWD Management Area (CWDMA), which is currently defined as all of Allegany County and Harvest Management Unit (HMU) 250 in western Washington County.

**Whole deer carcasses or deer parts cannot be transported out of the CWDMA, except for:**

- Meat with no part of the spinal column, backbone, or head attached.
- Hind quarters and front shoulders with no spinal column or backbone attached.
- Cleaned hide with no head attached.
- Skull plate cleaned of all meat and brain tissue.
- Antlers with no meat or soft tissue attached.
- Finished taxidermy mounts or tanned hides.
- Upper canine teeth, also known as buglers, whistlers, or ivories.
- Whole deer carcasses or parts being transported directly to approved meat processors, taxidermists, or lined landfills within Allegany or Washington counties.

## Chronic Wasting Disease Management Area



Please check the Department's website ([www.dnr.maryland.gov](http://www.dnr.maryland.gov)) for updates on CWD surveillance and management in Maryland. Hunter assistance and cooperation is essential to the Department's efforts to monitor and manage CWD in Maryland.

### ***Carcass Importation Ban***

The primary objective in the management of CWD is to prevent its spread into new areas. One possible mode of disease transmission is by the movement and disposal of infected carcasses. In an effort to minimize the risk for disease spread, Maryland, along with many other states, has adopted regulations that restrict the importation of whole carcasses and certain carcass parts of deer, moose and elk harvested from states that have CWD.

A person may not import the whole carcass of a dead deer, elk, or moose into Maryland from another state or province's designated CWD containment, surveillance, or management area, unless the final destination of the carcass is within the Maryland CWDMA or with a CWD-approved Maryland processor or taxidermist. Travelers may pass through any part of Maryland with whole carcasses from other state/province CWD areas if the carcasses will not remain in the state for more than 24 hours, and no parts are disposed of or remain in the state.

A person may import only the following parts of a carcass into Maryland if the final destination is within the state but outside the CWDMA and not with an approved processor or taxidermist:

- Meat with no part of the spinal column or head attached.
- Hind quarters and front shoulders with no spinal column or backbone attached.
- Cleaned hide with no head attached.
- Skull plate cleaned of all meat and brain tissue.
- Antlers with no meat or soft tissue attached.
- Upper canine teeth, also known as buglers, whistlers, or ivories.
- Finished taxidermy mount or tanned hides.

Please consult the CWD Alliance website at [www.cwd-info.org](http://www.cwd-info.org) for a complete list of state and province CWD containment, surveillance, and management areas.

Any person who imports or possesses a cervid carcass or part of a cervid that was tested for chronic wasting disease in another state or province and is notified that the cervid tested positive, must report the test results to the Maryland Department of Natural Resources within 24 hours of receiving such notification- by telephone at 301-842-0332; or by FAX 301-842-1026; or by email to [brian.eyler@maryland.gov](mailto:brian.eyler@maryland.gov).

If you hunt deer, elk, moose or other cervids in other states and/or provinces, particularly those in which CWD has been detected, check with the respective fish and wildlife agencies regarding special regulations or specific advice for hunters. Also check with your home state fish and wildlife agency to ensure that animals lawfully killed elsewhere may be imported and possessed in your state. Additional information can be found at the CWD alliance website [www.cwd-info.org/](http://www.cwd-info.org/) and the Maryland DNR website [www.dnr.maryland.gov](http://www.dnr.maryland.gov).

### ***Taking Deer Carcasses out of Maryland***

Because Maryland is considered a CWD positive state, deer hunters must follow carcass importation regulations in other states when they transport a deer carcass out of Maryland. The surrounding states of Delaware, Pennsylvania, Virginia, and West Virginia each have specific regulations as to whether they will allow whole deer carcasses or only parts of carcasses to enter from Maryland. Likewise, the regulations for each of these states vary as to whether they apply to deer from anywhere in Maryland, or just to deer taken within the CWDMA. Hunters are strongly encouraged to check state regulations before transporting deer carcasses.

of deer biology, including management tools, disease issues, economic aspects and recreational opportunities.

- **Recreation Goal:** Provide the opportunity for all citizens to safely, fairly and ethically enjoy diverse deer-related recreational experiences and traditions consistent with established deer population trend goals.
- **Damage Goal:** Identify and actively address the negative impacts the deer population has on human interests and the ecosystem in a manner consistent with the long term viability of the deer population in Maryland.
- **Operational Resources Goal:** Ensure that all necessary resources are available to support the proper management of white-tailed deer in Maryland.

The 2009-2018 deer plan is available for download at <http://dnr2.maryland.gov/wildlife/Documents/2009-2018Maryland-WTDeerPlan.pdf>.

During the last several decades, the primary focus of the Deer Project has been to slow and ultimately reduce a rapidly growing deer population. While hunting remains the most cost-effective and efficient population control mechanism available in most Maryland landscapes, continued urbanization has necessitated the development and use of additional techniques where hunting is not practical or acceptable. Therefore, the Deer Project employs a blend of hunting-related deer management methods and proven lethal and non-lethal deer management techniques to manage deer.

To remain up-to-date on current deer management techniques and methods, Maryland Deer Project staff are members of the Northeast Deer Technical Committee and Southeast Deer Study Group. Staff routinely meet and share information with deer biologists and managers from other eastern states and Canadian provinces as they relate to current deer management and biology.

### **Maryland Public Attitudes Regarding Deer Management**

The majority of the Maryland public recognizes the value of deer hunting as an effective management tool. A 2007 survey by Responsive Management found that 36% of the Maryland general public were strongly in favor of deer hunting, 25% were somewhat in favor, 19% were neutral or had no opinion, 10% were somewhat opposed to deer hunting, and 10% were strongly opposed. Similarly, 76% of the general public agreed or strongly agreed that deer should be hunted to maintain a healthy population. The survey found that 44% of the general public felt population control was the most important reason for deer hunting, 24% thought hunting for the meat was most important, 14% for sport/recreation, 10% no good reason, 5% don't know, and 1% thought to be with family/friends was most important

Overall, when asked how they prefer the deer population to be managed in their area, the top three responses by the Maryland general public were: 45% for legal, recreational hunting, 33% for birth control/immunocontraception, and 16% indicated they preferred professional removal via sharpshooters.

### **Deer Hunting Economics**

Along with the positive recreational benefits and population management that deer hunting provides, it also provides significant economic benefits to Maryland. A 2011 survey by the U.S. Fish & Wildlife Service found that deer hunting generated \$221 million annually for the Maryland economy (retail sales plus multiplier effect). Deer hunting in Maryland supports over 2,400 jobs and generates \$69 million in salaries, wages, and business owner's income, \$17.5 million in state and local tax revenue, and \$19 million in federal tax revenue.

### **White-tailed Deer History**

Prior to the arrival of European immigrants, white-tailed deer inhabited all of Maryland and eastern North America. Native Americans hunted deer during all seasons. In Maryland, wolves and mountain lions preyed on all age classes and sexes of white-tailed deer.

The first European settlers in Maryland found ample white-tailed deer populations. Deer meat and hides provided them with food and clothing. Venison recipes from those early settlers have been passed down through generations.

As the colony prospered and human populations multiplied, unregulated market hunting and the destruction of habitat (deforestation) caused deer populations to decline drastically throughout the 1700s. Market hunters sold deer meat to colonists and shipped deer hides to England's booming leather industry. With settlements expanding across the state during the 1800s, deer populations continued to drop, and mountain lions and wolves were exterminated. By 1900, white-tailed deer only inhabited limited sections of far western Maryland.

Since the birth of modern wildlife management in the early 1900s, Maryland's deer population has expanded dramatically to fill all available habitats. State wildlife biologists, working hand-in-hand with private citizens, re-established white-tailed deer in all counties in the state. Some native deer were trapped in western Maryland and released into unoccupied habitat elsewhere. A few deer were obtained from other states and released across Maryland. The majority of deer relocated after World War II came from a large population inhabiting Aberdeen Proving Grounds in Harford County. Deer relocation efforts ended in the early 1960s when most areas of the state supported a self sustaining deer herd.

Early hunting seasons of the 1930s and 1940s prohibited the taking of antlerless deer to allow for the continued growth and expansion of relocated deer herds. As deer numbers climbed and all deer habitat became populated, deer seasons and bag limits became more liberal. Across Maryland today, the current deer seasons and bag limits encourage the harvest of antlerless deer in order to manage deer populations. At the same time these regulations encourage hunters to be more selective when harvesting an antlered buck.

Since white-tailed deer thrive in habitat that is composed of woods and openings, the expansion of housing developments into forests or onto farms provides excellent whitetail habitat. Community open spaces and home sites created in wooded

areas produce habitat preferred by white-tailed deer. Open farm fields become better deer habitat as new homeowners plant trees and shrubs on their property. Deer populations have escalated in these suburban landscapes where exceptional habitat is available and hunting becomes limited. Effectively addressing these suburban deer herds remains a significant challenge for Maryland deer managers.

## ***Sika Deer History***

Maryland sika deer are originally from Yakushima Island in southern Japan and can be found in the marshes, swamps, wet woodlands, and agricultural fields in portions of the lower Eastern Shore. Populations exist mainly in Dorchester County and on Assateague Island in Worcester County. However, harvest data and reported sightings indicate that sika deer are slowly expanding into similar but more limited marshy habitat in portions of Wicomico, Caroline, and Somerset counties.

Sika deer became established on the lower Eastern Shore after being released by Clement Henry on James Island (Dorchester County) and by Dr. Charles Law on Assateague Island (Worcester County) during the early 1900s. Exactly how they initially made their way from Japan to the Eastern Shore is unknown, but genetic research indicates several generations probably were in captivity in the United Kingdom before coming to Maryland. The small number of sika deer in the original stock (approximately six individuals) has resulted in relatively low genetic variability within the population today. However, Maryland sika deer display no ill effects from the small founder population and appear as healthy or healthier than native white-tailed deer. Currently, DNR's sika deer management goal is to maintain this non-native species at population levels observed during the late 1990s and early 2000s so that hunting opportunities are balanced with agricultural depredation and whitetail competition issues across the lower Eastern Shore.

Sika deer hunting is very popular in Dorchester County and on Assateague Island. Nonresidents and hunters from other areas of Maryland now travel to the lower Eastern Shore with hopes of taking a trophy sika stag with six points or more. Professional guide services are available that cater exclusively to sika deer hunters. Recent survey figures indicate that 3,000 - 5,000 hunters annually pursue sika deer for over 30,000 hunter days per year.

Past biological data collected by DNR staff indicate that the average field-dressed weight of a 1.5 year-old male sika deer is 53 pounds, while 3.5+ year-old males top 80 pounds. Sika stags that were 3.5+ years of age averaged 5.5 antler points, while 2.5 year-old deer had 4.1 points. Field-dressed yearling (1.5 years old) females averaged 45 pounds with 3.5+ year-old females weighing about 60 pounds.

Sika deer tend to use different habitats than native white-tailed deer that share the same area. Although home range sizes are similar between the two species, sika deer use forested wetlands, marshes, and the interface between these two habitats much more than white-tailed deer. Sika deer do not appear to rely on agricultural lands to the extent that white-tailed deer do. It is unknown whether sika deer prefer the forested wetlands and marshes of Dorchester County, or if competing white-tailed deer relegate them there.

Previous research directed by DNR confirmed that sika deer have a lower annual reproductive output than white-tailed deer. Sika females tend to bear a single calf while whitetail females over 1.5 years old frequently bear two fawns. However, sika deer tend to be longer-lived than white-tailed deer, and probably produce as many, or more, calves in their lifetime as do female white-tailed deer. Tagged individuals from previous research studies have been harvested or observed 10+ years after they were initially captured. Numerous sika deer aged by DNR staff have teeth worn below the gum line indicating significant age.



Several female sika deer have been confirmed to be over 20 years old either by using the cementum annuli aging technique or by when they were originally tagged. The longer life span of sika deer may result from their use of habitat that is more difficult to hunt, thus, not as many are harvested each year as compared to white-tailed deer.

The Department will continue to monitor sika deer closely, and promote research to learn more about this unique species on the Eastern Shore. Recently, a study completed by the University of Delaware examined sika genetics and the possible consequences of competition between sika deer and native white-tailed deer. Results of that study are available at <http://udspace.udel.edu/handle/19716/17498>.

### **Results of Legislative and Regulatory Changes For the 2016-2017 Deer Season**

Several legislative changes went into effect for the 2016-2017 deer season, including the reduction of the safety zone when using archery equipment in Anne Arundel, Charles, Harford, and St. Mary's counties. While it is difficult to ascertain what impact these reduced zones have on the total deer harvest, they without doubt provide additional access for deer hunting.

Several deer poaching violations were prosecuted under the new poaching restitution law, resulting in significantly higher penalties for the offenders. The Poaching Restitution Act of 2016 increases the mandatory fines for poaching sika and white-tailed deer. The amount of the fines are weighted based on whether the poached deer is antlered or antlerless, and what the Boone & Crockett (B&C) score is if antlered. If convicted of poaching a buck with a B&C score of 150 or less inches, the mandatory penalty is \$2,000 - \$5,000 and 80 hours of community service. If convicted, and the B&C score is greater than 150 inches, the mandatory penalty increases to \$5,000 - \$10,000 and 80 hours of community service. Fines for poaching an antlerless white-tailed deer are \$300 - \$500.

Lastly, Deer Management Permit holders (and all listed shooters) in Charles and St. Mary's counties were permitted via a legislative change to use rifles while shooting under the authority of their permit beginning in 2016. However, the total number of deer harvested under Deer Management Permits in these counties decreased for the year.

Along with legislative changes, two regulatory changes also went into effect for the 2016-2017 season:

- Carcass transport restrictions concerning CWD were modified. Hunters that harvest deer from other state CWD areas are now permitted to bring the whole carcass into Maryland's CWDMA or to Maryland CWD-approved processors and taxidermists (see CWD section for additional information).
- Sika deer are now allowed to be harvested in any county in Maryland. Prior to the regulation change, sika deer legally could only be harvested in Caroline, Dorchester, Talbot, Wicomico, and Worcester counties. Sika deer have been sighted as far north as Kent County.

There were no notable effects from these two regulation changes.

### **Regulatory and Legislative Changes For the Coming 2017-2018 Season**

Several deer-related pieces of legislation were introduced and passed during the 2017 legislative session. These bills once again addressed archery safety zones and Sunday hunting. Also this year, an Apprentice Hunting License was authorized. The law changes include:

- The expansion of Sunday hunting in Kent and Montgomery counties. Some of these new Sundays will have the legal hunting hours set at one half hour before sunrise to 10:30 am. Specifics of these Sunday changes are still being developed.
- In Montgomery County, the safety zone for archers has been changed to 50 yards; however, archers must use a tree stand when hunting within 50 to 100 yards of an occupied dwelling or other building.
- An Apprentice Hunting License will be available to both residents and non-residents who have never hunted before. Satisfactory completion of a short, online hunter safety course will be required prior to purchasing the license, and the apprentice hunter is required to hunt with a Maryland resident at least 18 years old who possesses a valid Maryland hunting license. This program is still being developed.

Regulations concerning air guns (including air bows) for deer hunting were also implemented for the coming 2017-2018 season. Air guns will be legal for hunting white-tailed and sika deer during the firearms season ONLY. To be legal for deer hunting an air gun must have a working safety and:

- Shoot one .40 caliber or greater bullet or ball at a single discharge which generates at least 400 foot-pounds of muzzle energy; or
- Shoot an arrow or bolt at least 18" in length with a minimum speed of 300 feet per second at release with a sharpened broadhead with metal points and a minimum width of 7/8 inch.

Additional information regarding these legislative and regulatory changes will be available in the 2017-2018 Guide to Hunting and Trapping that comes with the hunting license.

### **2016-2017 Deer Harvest**

Maryland deer hunters harvested 85,193 deer in 2016-2017, a 1% increase from the 84,022 deer reported in 2015-2016 (Table 1, Figure 1). The harvest was comprised of 30,326 antlered deer (29,042 white-tailed deer and 1,284 sika deer) and 54,867 antlerless deer (53,318 white-tailed deer and 1,549 sika deer; Figure 2). The antlerless harvest included 47,062 does or antlerless bucks, and 7,805 button bucks (Table 3, Figure 3). The antlered and antlerless harvest each increased approximately 1% compared to the 2015-2016 season.

In Deer Management Region A (Garrett, Allegany, and western Washington counties), hunters reported taking 8,490 deer this year, an 8% decrease from the 9,190 deer harvested in 2015-2016. The antlered harvest decreased 8% from 5,493 deer last year to 5,067 this year, and the antlerless harvest decreased 7% from 3,697 to 3,423 deer. Part of the harvest decline in Re-

Table 1  
Maryland Reported Antlered and Antlerless Harvest for the Archery, Firearm, and Muzzleloader  
Hunting Seasons by County, 2016-2017

COUNTY	Archery			Firearms			Muzzleloader			Total		
	Antlered	Antlerless	Total	Antlered	Antlerless	Total	Antlered	Antlerless	Total	Antlered	Antlerless	TOTAL
Allegany	467	328	795	980	621	1601	215	296	511	1662	1245	2907
Anne Arundel	474	949	1423	311	676	987	115	265	380	900	1890	2790
Baltimore	909	1905	2814	506	1193	1699	213	641	854	1628	3739	5367
Calvert	303	539	842	226	496	722	85	218	303	614	1253	1867
Caroline												
Whitetail	269	455	724	537	1246	1783	112	332	444	918	2033	2951
Sika	0	0	0	0	1	1	0	0	0	0	1	1
Carroll	705	1147	1852	1104	1961	3065	193	553	746	2002	3661	5663
Cecil	427	829	1256	555	1139	1694	117	343	460	1099	2311	3410
Charles	460	745	1205	492	931	1423	144	324	468	1096	2000	3096
Dorchester												
Whitetail	195	326	521	576	1220	1796	125	274	399	896	1820	2716
Sika	305	456	761	606	737	1343	274	266	540	1185	1459	2644
Frederick	806	1378	2184	1568	2714	4282	306	784	1090	2680	4876	7556
Garrett	723	445	1168	1439	890	2329	461	384	845	2623	1719	4342
Harford	535	1095	1630	426	969	1395	142	473	615	1103	2537	3640
Howard	377	801	1178	237	646	883	71	268	339	685	1715	2400
Kent	401	548	949	653	1259	1912	178	375	553	1232	2182	3414
Montgomery	716	1459	2175	611	1418	2029	178	491	669	1505	3368	4873
Prince George's	378	696	1074	318	646	964	136	303	439	832	1645	2477
Queen Anne's	418	707	1125	566	1406	1972	157	470	627	1141	2583	3724
St. Mary's	394	717	1111	355	758	1113	103	285	388	852	1760	2612
Somerset												
Whitetail	180	306	486	475	1081	1556	63	211	274	718	1598	2316
Sika	2	0	2	3	2	5	0	0	0	5	2	7
Talbot	259	423	682	444	1209	1653	109	349	458	812	1981	2793
Washington	626	871	1497	1201	1344	2545	235	459	694	2062	2674	4736
Wicomico												
Whitetail	223	430	653	611	1361	1972	97	398	495	931	2189	3120
Sika	26	15	41	28	31	59	20	20	40	74	66	140
Worcester												
Whitetail	239	422	661	708	1783	2491	104	334	438	1051	2539	3590
Sika	9	7	16	7	13	20	4	1	5	20	21	41
<b>Total</b>	<b>10826</b>	<b>17999</b>	<b>28825</b>	<b>15543</b>	<b>27751</b>	<b>43294</b>	<b>3957</b>	<b>9117</b>	<b>13074</b>	<b>30326</b>	<b>54867</b>	<b>85193</b>

Table 2  
Maryland Reported Sunday Hunting Deer Harvest by County, 2016-2017

COUNTY	Archery			Firearms			Junior Hunt			Muzzleloader			Grand Total
	Antlered	Antlerless	Total	Antlered	Antlerless	Total	Antlered	Antlerless	Total	Antlered	Antlerless	Total	
Allegany <sup>5</sup>	49	25	74	104	0	104	39	20	59	1	0	1	238
Anne Arundel <sup>1</sup>	13	14	27	26	55	81	6	6	12	0	0	0	120
Calvert <sup>3</sup>	31	37	68	46	87	133	7	6	13	0	0	0	214
Caroline <sup>3</sup>													
Whitetail	26	37	63	90	246	336	16	15	31	0	0	0	430
Sika	0	0	0	0	1	1	0	0	0	0	0	0	1
Carroll <sup>4</sup>	61	119	180	174	325	499	30	21	51	3	13	16	746
Cecil <sup>1</sup>	12	21	33	51	96	147	34	15	49	0	0	0	229
Charles <sup>3</sup>	39	58	97	72	165	237	16	15	31	0	0	0	365
Dorchester <sup>2</sup>													
Whitetail	15	20	35	61	121	182	24	14	38	0	0	0	255
Sika	25	10	35	73	78	151	7	5	12	0	0	0	198
Frederick <sup>4</sup>	71	124	195	226	445	671	45	25	70	4	17	21	957
Garrett <sup>5</sup>	61	44	105	157	0	157	101	31	132	4	0	4	398
Harford <sup>3</sup>	47	66	113	47	136	183	19	6	25	0	0	0	321
Kent <sup>1</sup>	13	16	29	86	135	221	19	12	31	0	0	0	281
Montgomery <sup>1</sup>	13	11	24	43	74	117	21	11	32	0	0	0	173
Queen Anne's <sup>3</sup>	53	42	95	94	285	379	18	18	36	0	0	0	510
St. Mary's <sup>3</sup>	36	45	81	50	113	163	14	11	25	0	0	0	269
Somerset <sup>3</sup>													
Whitetail	12	21	33	76	181	257	22	18	40	0	0	0	330
Sika	0	0	0	0	0	0	1	0	1	0	0	0	1
Talbot <sup>2</sup>	24	40	64	46	129	175	20	19	39	0	0	0	278
Washington <sup>6</sup>	46	60	106	152	169	321	47	28	75	3	8	11	513
Wicomico <sup>2</sup>													
Whitetail	22	37	59	64	105	169	33	37	70	0	0	0	298
Sika	1	0	1	2	4	6	0	1	1	0	0	0	8
Worcester <sup>3</sup>	16	31	47	138	301	439	33	32	65	0	0	0	551
<b>Total</b>	<b>686</b>	<b>878</b>	<b>1564</b>	<b>1878</b>	<b>3251</b>	<b>5129</b>	<b>572</b>	<b>366</b>	<b>938</b>	<b>15</b>	<b>38</b>	<b>53</b>	<b>7684</b>

1 Archery season was open on Sunday November 6, 2016 on private lands only. Firearm season was open on Sunday November 27, 2016 on private lands only. The Junior Hunt was open on Sunday November 13, 2016 on private lands only.

2 Archery season was open on Sundays October 16, 23, & 30 and November 6 & 13, 2016 on private lands only. Firearm season was open on Sunday November 27, 2016 on private lands only. The Junior Hunt was open on Sunday November 13, 2016 on private lands only.

3 Archery season was open on Sundays October 16, 23, & 30 and November 6 & 13, 2016 on private lands only. Firearm season was open on Sundays November 27 and December 4, 2016, and January 8, 2017 on private lands only. The Junior Hunt was open on Sunday November 13, 2016 on private lands only.

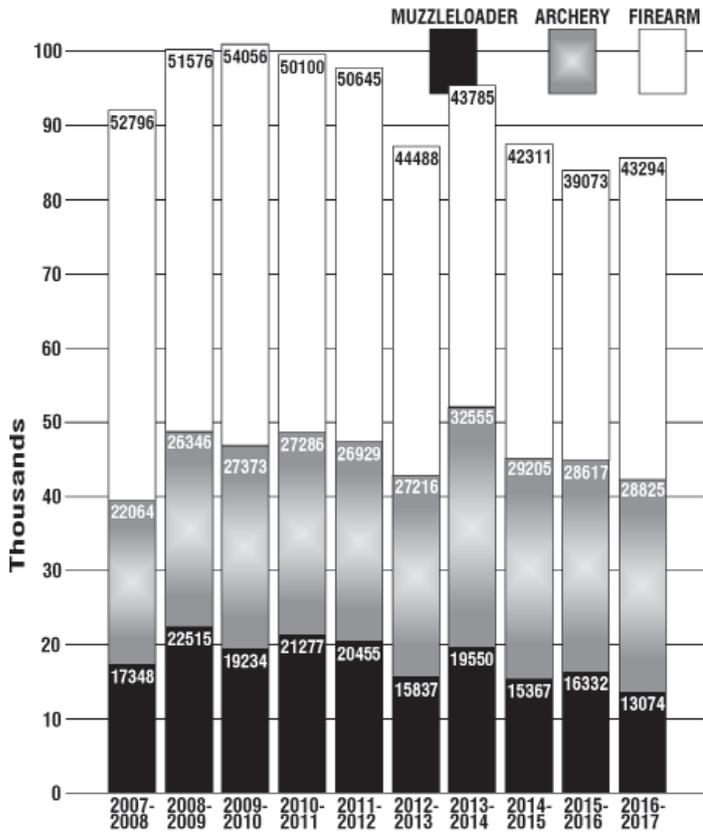
4 Archery season was open on Sundays October 2, 9, 16, 23, & 30 and November 6, 13, & 20, 2016 on private lands only. Firearm season was open on Sundays November 27 and December 4, 2016, and January 8, 2017 on private lands only. The Junior Hunt was open on Sunday November 13, 2016 on private lands only. Muzzleloader season was open Sundays December 18 & 25, 2016 on private lands only.

5 Archery season was open on Sundays October 2, 9, 16, 23, & 30 and November 6, 13, & 20, 2016 on private and designated public lands only. Firearm season was open on Sundays November 27 and December 4, 2016, on private and designated public lands only. The Junior Hunt was open on Sunday November 13, 2016 on private and designated public lands only. Muzzleloader season was open Sundays December 18 & 25, 2016 on private and designated public lands only.

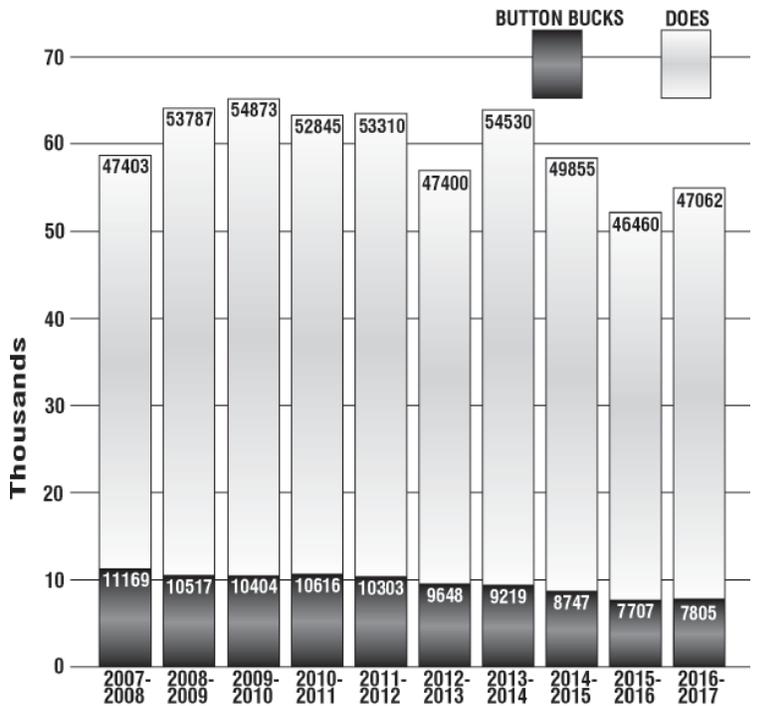
6 Archery season was open on Sundays October 2, 9, 16, 23, & 30 and November 6, 13, & 20, 2016 on private and designated public lands only. Firearm season was open on Sundays November 27 and December 4, 2016, on private and designated public lands only in Zone 2. Firearm season was open on Sundays November 27 and December 4, 2016, and January 8, 2017 on private lands only in Zone 1. The Junior Hunt was open on Sunday November 13, 2016 on private and designated public lands only. Muzzleloader season was open Sundays December 18 & 25, 2016 on private and designated public lands only.

Designated public lands open to Sunday hunting in Allegany, Garrett, and Washington counties were: Billmeyer-Belle Grove WMA, Cunningham Swamp WMA, Dan's Mountain WMA, Garrett SF, Green Ridge SF, Indian Springs WMA, Mount Nebo WMA, Potomac SF, Prather's Neck WMA, Savage River SF, Sideling Hill WMA, and Warrior Mountain WMA.

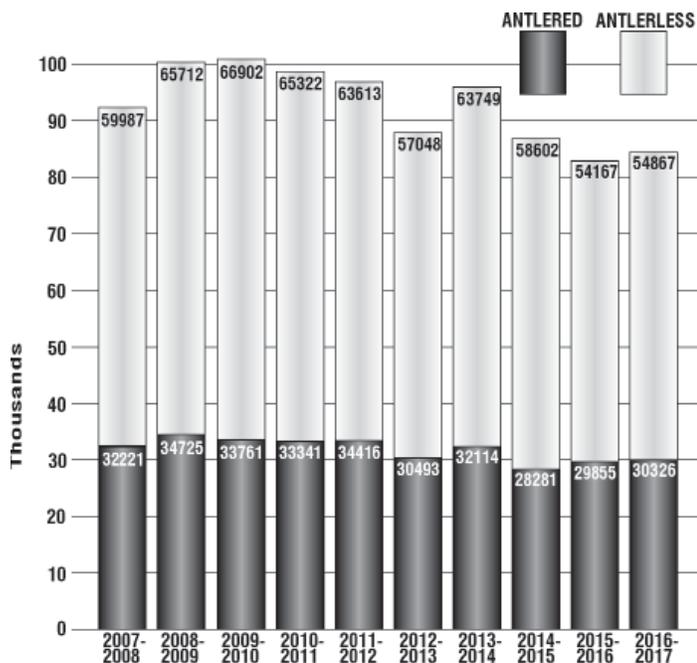
**Figure 1**  
Maryland Reported Deer Harvest for the Archery, Firearm, and Muzzleloader Seasons, 2007-2008 through 2016-2017



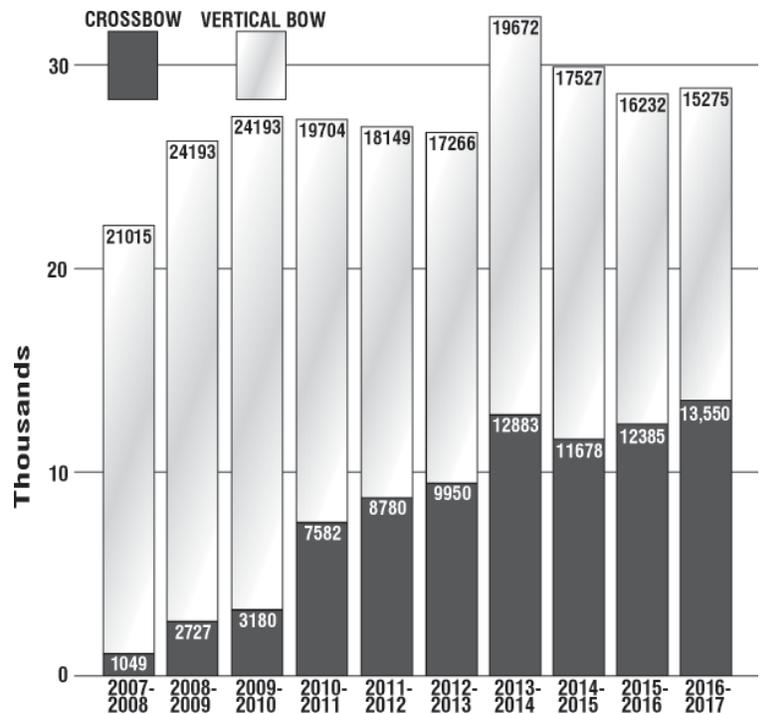
**Figure 3**  
Maryland Reported Button Buck and Doe Harvest, 2007-2008 through 2016-2017



**Figure 2**  
Maryland Reported Antlered and Antlerless Deer Harvest, 2007-2008 through 2016-2017



**Figure 4**  
Maryland Reported Crossbow and Vertical Bow Deer Harvest during the Designated Archery Season, 2006-2007 through 2016-2017



gion A is most likely related to CWD and the enlarged management area that probably caused some hunters to choose to hunt elsewhere.

The reported harvest in Region B increased 3% from 74,832 deer last year to 76,703 deer this year. The antlered harvest increased 4% from 24,362 deer to 25,259 deer, and the antlerless harvest increased 2% from 50,470 deer last year to 51,444 deer. Frederick County led the harvest totals again this year with 7,556 deer, followed by Carroll County with 5,663 and Baltimore County at 5,367. Montgomery and Washington counties rounded out the top five with 4,873 and 4,736 deer, respectively (Table 1).

Following the statewide trend, the deer harvest in Maryland's suburban counties (Anne Arundel, Baltimore, Howard, Montgomery, and Prince George's counties) increased 4% for the 2016-2017 season. Hunters in these counties reported 17,907 deer compared to 17,252 deer reported the previous year. DNR will continue with liberal antlerless harvest regulations in these counties in an effort to address the impacts that high deer populations have on Maryland's suburban landscape and residents.

Sunday deer hunting in Maryland continues to be an important aid to deer management. A total of 7,684 deer (9% of the total harvest) were taken on Sundays during the 2016-2017 season. (Table 2). Sunday hunting is permitted in 20 of 23 counties with up to 13 Sundays open in some counties, predominantly on private lands only.

### Archery Season

Archery season in Maryland opens the Friday after Labor Day (September 9th in 2016-2017) and closes on January 31 (unless the 31st is a Sunday). Resident and non-resident hunters purchased approximately 57,000 and 10,000 archery stamps respectively in 2016-2017. The average Maryland hunter that deer hunts with a vertical bow each year (approximately 23,000) normally does so for about 10-15 days each season and 25-35% of these hunters take one deer or more each year with their bow. Approximately 19,000 hunters currently hunt deer with a crossbow. The average crossbow hunter uses a crossbow for 10-11 days each year and approximately 35-45% are successful in taking one or more deer per year with the weapon.

In 2016-2017:

- The reported archery harvest (vertical and crossbow) increased 1% from 28,617 deer in 2015-2016 to 28,825 deer in 2016-2017 (Table 1).
- There were 10,826 antlered deer (38% of the total archery harvest) and 17,999 antlerless deer harvested with crossbows and vertical bows.
- The antlered archery harvest increased 3% and the antlerless harvest (16,013 does and 1,986 button bucks) decreased 1% from the previous year.
- Crossbow hunters took 5,333 antlered deer and 8,217 antlerless deer during the archery season (Table 4).
- The crossbow harvest (13,550 deer) represented 47% of the

Table 3  
Maryland Reported Buttonbuck Harvest  
by County, 2016-2017

COUNTY	Buttonbuck	Female or Antlerless	Total	Percent Buttonbuck
<b>Allegany</b>	174	1071	1245	14.0
<b>Anne Arundel</b>	310	1580	1890	16.4
<b>Baltimore</b>	425	3314	3739	11.4
<b>Calvert</b>	193	1060	1253	15.4
<b>Caroline</b>				
<b>Whitetail</b>	338	1695	2033	16.6
<b>Sika</b>	0	1	1	*
<b>Carroll</b>	505	3156	3661	13.8
<b>Cecil</b>	342	1969	2311	14.8
<b>Charles</b>	257	1743	2000	12.9
<b>Dorchester</b>				
<b>Whitetail</b>	337	1483	1820	18.5
<b>Sika</b>	84	1375	1459	5.8
<b>Frederick</b>	545	4331	4876	11.2
<b>Garrett</b>	229	1490	1719	13.3
<b>Harford</b>	391	2146	2537	15.4
<b>Howard</b>	236	1479	1715	13.8
<b>Kent</b>	346	1836	2182	15.9
<b>Montgomery</b>	489	2879	3368	14.5
<b>Prince George's</b>	277	1368	1645	16.8
<b>Queen Anne's</b>	390	2193	2583	15.1
<b>St. Mary's</b>	276	1484	1760	15.7
<b>Somerset</b>				
<b>Whitetail</b>	245	1353	1598	15.3
<b>Sika</b>	0	2	2	*
<b>Talbot</b>	349	1632	1981	17.6
<b>Washington</b>	267	2407	2674	10.0
<b>Wicomico</b>				
<b>Whitetail</b>	351	1838	2189	16.0
<b>Sika</b>	12	54	66	*
<b>Worcester</b>				
<b>Whitetail</b>	435	2104	2539	17.1
<b>Sika</b>	2	19	21	*
<b>Total</b>	<b>7805</b>	<b>47062</b>	<b>54867</b>	<b>14.2</b>
*Small sample size				

Table 4  
Maryland Reported Crossbow Deer Harvest  
by County, 2016-2017

COUNTY	Archery Season			Muzzleloader/Firearm Seasons			Grand Total
	Antlered	Antlerless	Total	Antlered	Antlerless	Total	
Allegany	280	172	452	9	9	18	470
Anne Arundel	239	458	697	23	47	70	767
Baltimore	386	812	1198	40	118	158	1356
Calvert	157	272	429	11	23	34	463
Caroline	133	207	340	4	23	27	367
Carroll	332	466	798	14	48	62	860
Cecil	201	382	583	6	26	32	615
Charles	225	343	568	14	30	44	612
Dorchester							
Whitetail	102	173	275	2	9	11	286
Sika	139	220	359	6	10	16	375
Frederick	414	609	1023	14	36	50	1073
Garrett	411	237	648	6	2	8	656
Harford	250	531	781	14	52	66	847
Howard	164	357	521	21	57	78	599
Kent	181	202	383	5	9	14	397
Montgomery	351	715	1066	48	112	160	1226
Prince George's	192	284	476	14	36	50	526
Queen Anne's	181	275	456	7	23	30	486
St. Mary's	217	359	576	7	39	46	622
Somerset							
Whitetail	102	166	268	1	8	9	277
Sika	2	0	2	0	0	0	2
Talbot	132	202	334	6	10	16	350
Washington	317	411	728	9	26	35	763
Wicomico							
Whitetail	99	189	288	1	5	6	294
Sika	12	3	15	0	0	0	15
Worcester							
Whitetail	111	169	280	6	15	21	301
Sika	3	3	6	0	0	0	6
Grand Total	5333	8217	13550	288	773	1061	14611

Table 5  
Maryland Reported 2-Week Firearm  
Season Deer Harvest by  
County, 2016

COUNTY	Antlered	Antlerless	Total
Allegany	863	561	1424
Anne Arundel	239	471	710
Baltimore	440	969	1409
Calvert	184	403	587
Caroline			
Whitetail	447	1050	1497
Sika	0	1	1
Carroll	936	1571	2507
Cecil	428	903	1331
Charles	389	780	1169
Dorchester			
Whitetail	447	1041	1488
Sika	415	486	901
Frederick	1299	2136	3435
Garrett	1186	804	1990
Harford	328	768	1096
Howard	182	396	578
Kent	521	1052	1573
Montgomery	435	779	1214
Prince George's	269	505	774
Queen Anne's	452	1184	1636
St. Mary's	288	649	937
Somerset			
Whitetail	381	936	1317
Sika	2	2	4
Talbot	381	1075	1456
Washington	1014	1097	2111
Wicomico			
Whitetail	504	1187	1691
Sika	26	28	54
Worcester			
Whitetail	565	1545	2110
Sika	0	2	2
Total	12621	22381	35002

total archery season harvest in 2016-2017 – slightly higher than the 43% that it was in 2015-2016 (Figure 4).

- Approximately 8,400 different hunters harvested a deer with a crossbow during archery season (compared to 7,700 in 2015-2016).
- 87% of the archery harvest was on private lands.
- Archery hunters took 1,564 deer (686 antlered, 878 antlerless) on Sundays open to archery hunting (Table 2).

### **Firearm Season**

The statewide firearm season begins the Saturday after Thanksgiving and runs for the following two weeks. In Region B, hunters have an additional two or three days of firearm hunting in early January. Deer taken during managed hunts outside the normal deer seasons are also counted as firearm kills. Approximately 45,000 - 55,000 hunters pursue deer with a firearm each year in Maryland. The average deer hunter spends 5-6 days each year pursuing deer with a firearm and approximately 40-45% of firearm hunters bag at least one deer each year.

In 2016-2017:

- The statewide firearm harvest increased 11% from 39,073 deer in 2015-2016 to 43,294 deer (Table 1).
- The firearm harvest was comprised of 15,543 antlered deer (36% of the total firearm harvest) and 27,751 antlerless deer.
- Both the antlered harvest and the antlerless harvest (23,275 does or antlerless bucks and 4,476 button bucks) increased 11% from 2015-2016.
- The majority (81%) of the firearm harvest occurred during the 2-week season that begins the Saturday after Thanksgiving (Table 5).
- Firearm hunters took 51% of all deer harvested in Maryland compared to 47% last season. (Figure 1).
- The majority (89%) of the firearm harvest was taken on private property.
- Firearm hunters bagged 5,129 deer (1,878 antlered and 3,251 antlerless) on the Sundays open during the 2-week and January firearm seasons, and juniors harvested 938 deer (572 antlered and 366 antlerless) on the Junior Deer Hunt Sunday (Table 2).
- Junior deer hunters bagged a total of 2,444 deer (1,558 antlered and 886 antlerless) during the Junior Deer Hunt weekend; a 4% decrease from the 2,534 deer in 2015-2016. (Table 6).
- Deer hunters reported 4,403 deer (79% antlerless) for the 3-day January firearm season (Table 7).

### **Muzzleloader Season**

The 2016-2017 statewide, either-sex muzzleloader season included three days in October (October 20 - 22) and two weeks during late December (December 17 – 31). Region B continued with a six day antlerless-only muzzleloader season (October 24 - 29) to provide for additional deer population management through antlerless deer harvest. The October muzzleloader

season is set annually to begin the first Thursday after the 15th of the month.

Resident and non-resident hunters purchased approximately 54,000 and 8,000 muzzleloader stamps, respectively in 2016-2017. The stamps are required to hunt deer during the muzzleloader season. It is estimated that 30,000-35,000 hunters actually hunt during the season. Those that do hunt pursue deer for 3-5 days for each of the early and late seasons. Approximately 30-35% of muzzleloader hunters are successful in harvesting at least one deer in any given year.

In 2016-2017:

- The muzzleloader harvest totaled 13,074 deer compared to 16,332 deer in 2015-2016, a 20% decrease (Table 1).
- There were 3,957 antlered deer and 9,117 antlerless deer harvested with muzzleloaders. Antlerless deer represented 70% of the total muzzleloader harvest.
- The antlered harvest decreased 25% and the antlerless harvest (7,774 does or antlerless bucks and 1,343 button bucks) decreased 18% from the previous year.
- The October muzzleloader harvest was 7,216 deer (2,333 antlered and 4,883 antlerless); a 26% decrease from the previous year's harvest of 9,747 deer (Table 8).
- The December muzzleloader harvest totaled 5,858 deer (1,624 antlered and 4,234 antlerless); an 11% decrease from the previous year's harvest of 6,585 deer (Table 9).
- The October muzzleloader season accounted for 55% of the total muzzleloader harvest for the year.
- Muzzleloader hunters took 90% of their total harvest on private lands.

### **Maryland DNR Deer Plan**

Maryland's first statewide 10-Year White-tailed Deer Management Plan was created in 1998 and has guided all phases of deer management in Maryland since that time. The plan was revised in 2009 and provides information on deer biology and management in Maryland and outlines the responsibilities and goals of the Deer Project team. The plan and supporting documents are available on the DNR website at [www.dnr.maryland.gov/wildlife/Hunt\\_Trap/pdfs/2009-2018MarylandWTDeerPlan.pdf](http://www.dnr.maryland.gov/wildlife/Hunt_Trap/pdfs/2009-2018MarylandWTDeerPlan.pdf).

### **Deer Research and Data Use**

In 2016-2017, 4,403 deer were examined at butcher shops across the state during the muzzleloader and firearm seasons. At the butcher shops, sex and age of the deer were determined and antler measurements were recorded for bucks. Deer were also checked for evidence of illness or disease. The yearly sample of harvested deer provides valuable information that is used to estimate deer population numbers and to detect any changes in the deer herd reproductive potential. It is also used to monitor the overall health of deer and the effects of changes to seasons and bag limits made to better manage deer populations.

Staff and volunteers determine the age of each deer by the wear and replacement of its teeth. As young deer get older their

Table 6  
Maryland Reported Junior Deer Hunt Harvest  
by County, 2016

COUNTY	Antlered	Antlerless	Total
Allegany	117	60	177
Anne Arundel	13	10	23
Baltimore <sup>1</sup>	26	16	42
Calvert	15	13	28
Caroline	48	36	84
Carroll	91	52	143
Cecil	72	37	109
Charles	48	34	82
Dorchester			
Whitetail	57	42	99
Sika	16	8	24
Frederick	134	72	206
Garrett	253	86	339
Harford	26	20	46
Howard <sup>1</sup>	15	7	22
Kent	61	25	86
Montgomery	55	30	85
Prince George's <sup>1</sup>	5	6	11
Queen Anne's	61	36	97
St. Mary's	33	21	54
Somerset			
Whitetail	58	39	97
Sika	1	0	1
Talbot	40	36	76
Washington	144	57	201
Wicomico			
Whitetail	84	72	156
Sika	2	1	3
Worcester	83	70	153
Total	1558	886	2444
<sup>1</sup> Saturday only.			

Table 7  
Maryland Reported 3-Day January Firearm  
Season Deer Harvest by County, 2017

COUNTY	Antlered	Antlerless	Total
Anne Arundel	22	82	104
Baltimore	38	189	227
Calvert	27	80	107
Caroline	42	160	202
Carroll	77	338	415
Cecil	53	153	206
Charles	52	116	168
Dorchester			
Whitetail	36	115	151
Sika	50	111	161
Frederick	135	506	641
Harford	30	142	172
Howard	19	110	129
Kent	37	156	193
Montgomery	43	179	222
Prince George's	32	93	125
Queen Anne's	53	186	239
St. Mary's	24	77	101
Somerset	36	106	142
Talbot	23	98	121
Washington	43	190	233
Wicomico			
Whitetail	23	102	125
Sika	0	2	2
Worcester	53	164	217
Total	948	3455	4403

Table 8  
Maryland Reported Early Muzzleloader Season  
Deer Harvest by County, 2016

COUNTY	Antlered	Antlerless	Total
Allegany	147	120	267
Anne Arundel	44	123	167
Baltimore	98	333	431
Calvert	36	111	147
Caroline	64	188	252
Carroll	122	300	422
Cecil	66	192	258
Charles	56	157	213
Dorchester			
Whitetail	79	190	269
Sika	200	177	377
Frederick	172	446	618
Garrett	349	141	490
Harford	77	252	329
Howard	36	137	173
Kent	106	203	309
Montgomery	79	256	335
Prince George's	66	141	207
Queen Anne's	87	241	328
St. Mary's	49	145	194
Somerset	39	130	169
Talbot	65	206	271
Washington	156	247	403
Wicomico			
Whitetail	58	242	300
Sika	18	13	31
Worcester			
Whitetail	61	191	252
Sika	3	1	4
Total	2333	4883	7216

Table 9  
Maryland Reported Late Muzzleloader Season  
Deer Harvest by County, 2016-2017

COUNTY	Antlered	Antlerless	Total
Allegany	68	176	244
Anne Arundel	71	142	213
Baltimore	115	308	423
Calvert	49	107	156
Caroline	48	144	192
Carroll	71	253	324
Cecil	51	151	202
Charles	88	167	255
Dorchester			
Whitetail	46	84	130
Sika	74	89	163
Frederick	134	338	472
Garrett	112	243	355
Harford	65	221	286
Howard	35	131	166
Kent	72	172	244
Montgomery	99	235	334
Prince George's	70	162	232
Queen Anne's	70	229	299
St. Mary's	54	140	194
Somerset	24	81	105
Talbot	44	143	187
Washington	79	212	291
Wicomico			
Whitetail	39	156	195
Sika	2	7	9
Worcester			
Whitetail	43	143	186
Sika	1	0	1
Total	1624	4234	5858

Table 10  
 Maryland Yearling White-tailed Deer Buck (1 1/2  
 Year Old) Vital Statistics by County, 2016-2017

COUNTY	%YearlingBuck	AveragePoints	BeamDiameter(mm)
<b>Allegany</b>	<b>63</b>	<b>3.1</b>	<b>16.2</b>
<b>Anne Arundel</b>	<b>36</b>	<b>3.5</b>	<b>17.0</b>
<b>Baltimore</b>	<b>37</b>	<b>3.9</b>	<b>17.3</b>
<b>Calvert</b>	<b>48</b>	<b>4.1</b>	<b>19.2</b>
<b>Caroline</b>	<b>47</b>	<b>4.7</b>	<b>19.7</b>
<b>Carroll</b>	<b>53</b>	<b>4.7</b>	<b>20.0</b>
<b>Cecil</b>	<b>44</b>	<b>4.7</b>	<b>20.9</b>
<b>Charles</b>	<b>34</b>	<b>3.3</b>	<b>17.1</b>
<b>Dorchester</b>	<b>47</b>	<b>3.8</b>	<b>18.6</b>
<b>Frederick</b>	<b>55</b>	<b>3.7</b>	<b>18.3</b>
<b>Garrett</b>	<b>58</b>	<b>4.8</b>	<b>20.1</b>
<b>Harford</b>	<b>55</b>	<b>4.2</b>	<b>19.7</b>
<b>Howard</b>	<b>28</b>	<b>3.4</b>	<b>17.0</b>
<b>Kent</b>	<b>29</b>	<b>4.3</b>	<b>19.4</b>
<b>Montgomery</b>	<b>33</b>	<b>4.1</b>	<b>17.8</b>
<b>Prince George's</b>	<b>46</b>	<b>3.4</b>	<b>17.4</b>
<b>Queen Anne's</b>	<b>31</b>	<b>3.6</b>	<b>17.3</b>
<b>St. Mary's</b>	<b>36</b>	<b>4.4</b>	<b>19.3</b>
<b>Somerset</b>	<b>42</b>	<b>3.3</b>	<b>18.2</b>
<b>Talbot</b>	<b>48</b>	<b>3.7</b>	<b>18.7</b>
<b>Washington</b>	<b>69</b>	<b>4.8</b>	<b>20.7</b>
<b>Wicomico</b>	<b>45</b>	<b>3.1</b>	<b>15.1</b>
<b>Worcester</b>	<b>38</b>	<b>3.7</b>	<b>17.3</b>
<b>Statewide</b>	<b>47</b>	<b>4.1</b>	<b>18.7</b>

milk teeth are replaced with permanent teeth. As adult deer age, their permanent teeth begin to wear down. This enables biologists to reliably categorize deer as fawns (less than one year old), yearlings (approximately 1.5 years old) or adults (two years and older). The proportions of deer in each age class and their gender are then used in reconstruction models to develop and follow trends in the state's deer population.

The antler beam circumference measurements of yearling male deer that are brought to butcher shops are used as indicators of the reproductive potential and health of the deer herd. Yearling males in good habitat with moderate deer numbers will have larger antler beam diameters than those in higher populations or poorer habitat. Abundant food and modest competition translates into more energy available for antler growth. This is most evident in the yearling age class. Trends in these measurements can indicate deer herd over-population and habitat degradation.

Overall, Maryland's long-term data for these indicators show healthy, productive deer populations across the state (Table 10). The percentage of yearling bucks in the harvest remains very healthy at 47% and has shown a positive declining trend. However, the average number of antler points for yearling bucks and the average antler beam diameter for yearling bucks also have been declining. These data will continue to be monitored closely in the coming years.

Deer examined at the butcher shops are also examined for evidence of hemorrhagic disease; a viral disease spread by biting midges. Hemorrhagic disease (HD), or "Blue-tongue", commonly appears in late summer and early fall. Deer that have survived HD and are harvested will exhibit hooves with sloughing or peeling tissue. These deer are still suitable for human consumption. HD occurs yearly in Maryland, although it varies in intensity. The results of this yearly, statewide examination are reported to the Southeastern Cooperative Wildlife Disease Study (SCWDS) in Athens, Georgia as part of a nationwide survey. The HD study with SCWDS is one of the oldest and most complete nationwide wildlife disease investigations in the country.

Significant HD outbreaks typically occur every three to five years and may affect 10-20% of a local deer population. However, it is projected that the disease will have little impact on the white-tailed deer population long-term. The last significant outbreak of HD in Maryland was in 2012. The Department received relatively few reports of suspected HD during 2016. DNR will continue to monitor for HD in the coming years.

### **Research by the Quality Deer Management Association (QDMA)**

The Maryland State Chapter of QDMA continued their annual reproductive monitoring of white-tailed deer in Maryland during 2016-2017. QDMA staff and volunteers examined the reproductive tracts of 154 female deer harvested during the season and found that 89% of adult females (1.5 years and older) were pregnant. No female fawns (0.5 years old) examined this year were pregnant. Of the pregnant females, 32% were carrying one fetus, 66% carried two fetuses, and 2% were carry-

ing three fetuses. The sex ratio of the 156 known-sex fetuses (5 unknown) was 51% male and 49% female. Like previous years, peak breeding occurred during the first three weeks of November, with 85% bred during that period. Approximately 63% were bred during the first two weeks of November. A total of 4 deer were bred after November 30, and 2 deer were bred prior to November 1 in late October. Late October and early November are typically when bucks will be most active looking for receptive females to breed.

Dressed weights were also collected for harvested deer. Female fawns averaged 48 lbs in weight, female yearlings 75 lbs, and female adults weighed an average of 86 lbs. Male fawns averaged 51 lbs, yearlings 80 lbs, and adults 101 lbs.

Information concerning white-tailed deer reproductive rates and population densities in urban areas are important components for effective management of deer in Maryland. For further information on these studies, visit the Maryland QDMA website at [www.marylandqdma.com](http://www.marylandqdma.com).

## Archery Hunter Survey

The annual Archery Hunter Survey was continued for 2015-2016 (survey data from the 2016-2017 season are currently being analyzed and were not ready for the report). Archery hunters reported 17.7 bucks per 100 hours and 44.4 does per 100 hours in 2015-2016. Likewise, they observed 2.5 adult does for every one adult buck and 0.54 fawns for every one adult doe in 2015-2016. The full report is available online at [http://dnr2.maryland.gov/wildlife/Pages/hunt\\_trap/bhsurvey.aspx](http://dnr2.maryland.gov/wildlife/Pages/hunt_trap/bhsurvey.aspx).

The Archery Hunter Survey provides observational data about furbearers, deer and other wildlife. Archery hunters record the number of animals observed during each hunt, number of hours they hunt, county of hunt, and other specific details about each hunt. If you are an archery hunter and would like to participate, contact Brent Evans at 443-786-3656 or [brent.evans@maryland.gov](mailto:brent.evans@maryland.gov). Forms are also available on the DNR website at the web address listed above.

## DNR and Maryland Counties Cooperative Deer Management

Since 1994, Maryland DNR has promoted cooperative deer management relationships with Maryland counties. Montgomery County and Howard County both developed their own deer management units manned by professional staff. Maryland DNR works closely with both counties regarding their deer management efforts. Both counties have implemented non-lethal and lethal deer management programs while maintaining majority public support. Maryland DNR staff participates in county deer management workshops, reviews and advises on county deer management plans, and issues appropriate state permits for deer management activities at the county level. Anne Arundel, Baltimore, and Prince George's counties have also developed similar deer management programs within their jurisdictions with DNR assistance.

Reservoir watersheds are areas of largely undeveloped land that protect Maryland water supplies. These areas are often managed by municipal staff. Unregulated deer numbers are

known to affect the watershed habitat and water quality and can also affect neighboring residents. Among others, the Deer Project works with Frederick County, Baltimore City, and the Washington Suburban Sanitary Commission to manage the deer on their respective watershed lands. These entities permit public hunting on suitable areas of their watershed properties in order to regulate deer numbers. Through these cooperative relationships with Maryland DNR, hunters fill a valuable role in helping to manage deer numbers. Annually, hunters remove hundreds of deer from watershed properties during the regulated deer hunting seasons.

Maryland DNR continues to work with various county and municipal government agencies on deer management issues and encourages others to follow the lead of the aforementioned entities to develop deer management programs in cooperation with the DNR. Interested entities should contact George Timko, Maryland DNR Assistant Deer Project Leader at 301-432-4307.

## Suburban Deer Management

Deer management in suburban areas ranks as one of the most difficult challenges facing wildlife agencies throughout the country. Maryland's Deer Project is charged with managing deer across the state's varied landscape for a diverse public that has different opinions on how deer should be managed. This includes the large urban/suburban corridor in the midsection of the state.

As development continues in Maryland, the conversion of forested and agricultural lands into housing developments can actually improve habitat conditions for deer. Developed areas provide more than adequate food resources and they often offer refuge from hunting. As a result, deer numbers can increase rapidly in these areas. High deer numbers lead to a greater number of negative interactions with suburban residents, decreasing the residents' tolerance of deer, and increasing the demand on DNR to somehow regulate the population.

Safety concerns and social considerations in urban areas often prevent the use of common lethal deer population control measures (i.e., hunting). Non-lethal control measures such as fencing and repellants can help reduce deer problems but they do not eliminate them. They also do not address the deer overpopulation itself.

Increasing deer-vehicle collisions, damage to ornamental plants and gardens, and damage to natural habitats are some of the problems that continue to persist when deer numbers are not directly reduced. Often times, when public tolerance levels have been surpassed, lethal control methods are considered as a last resort. At this point, the Department must provide its professional opinion as to what, if any, lethal method (i.e., managed hunt, professional sharp-shooting, etc.) is feasible for a particular scenario. Often, a combination of non-lethal and lethal techniques is recommended to help resolve the problem. The Deer Project will continue to evaluate any new deer management techniques as they are created, and promote effective methods that help reduce deer-human conflicts.

## Deer Management Information

A section of the DNR website is devoted to public education on deer and deer management options. Information on non-lethal and lethal methods is provided at: [http://dnr2.maryland.gov/wildlife/Pages/hunt\\_trap/deerdamage.aspx](http://dnr2.maryland.gov/wildlife/Pages/hunt_trap/deerdamage.aspx).

Further information and assistance can be obtained from George Timko, Maryland DNR Assistant Deer Project Leader at 301-432-4307.

### Public Property Deer Management

DNR provides assistance to local governments, communities, and publicly owned properties that choose to address deer population issues. Public entities that desire to conduct hunts outside of the regional deer hunting season framework may do so with prior approval of DNR. Managed hunts are used to help control deer populations under special conditions on properties where stricter control of hunters is required. This allows each facility to manage deer hunting to complement their mission. Military bases and agricultural research facilities, as well as state, county, and municipal parks have developed deer hunting programs in conjunction with DNR.

To improve opportunities for the public to qualify for managed hunts, the Assistant Deer Project Leader guides the statewide Shooter Qualification Card program. This program provides public access to shooting ranges where hunters can become certified at the standards required to apply for managed hunts held across the state. Appendix I provides a summary of the total deer taken on Maryland public lands during the 2016-2017 hunting seasons.

### Deer Population

Maryland's deer population prior to the 2016-2017 hunting season was estimated at 216,000 deer, up slightly from the 2015-2016 estimate of 214,000. Trends in deer abundance are commonly monitored using harvest estimates and the age structure of the deer herd. These methods work well in areas where hunters have access to most of the land but are much less reliable for urban/suburban deer populations, where hunting occurs sporadically.

Liberal antlerless regulations have slowed or halted deer population growth in many areas outside the Washington D.C. to Baltimore suburban corridor. In some rural counties, the deer population has declined. DNR is currently investigating additional ways to control deer in the suburban corridor where hunting is inhibited by lack of access to land.

### Non-Hunting Mortality

Factors that cause mortality in deer, other than hunting, include disease, fawn predation (from bears, coyotes, bobcats, fishers, feral dogs, etc.), collisions with vehicles, harvest using Deer Management Permits, and harvest via sharp-shooting. Data concerning deer killed by vehicles (Table 11) is reported to the DNR by a broad spectrum of agencies (county police, state police, sheriff deputies, city police, park rangers, county roads and state roads staff, etc). Because of its many and varied sources, deer-vehicle collision data tend to vary from year to

Table 11  
Maryland Reported Deer Vehicular Mortality by  
County, 2016<sup>1</sup>

COUNTY	Male	Female	Unknown	Total
Allegany	74	88	32	194
Anne Arundel	29	23	26	78
Baltimore	87	117	744	948
Calvert	36	17	208	261
Caroline	32	37	11	80
Carroll	248	397	68	713
Cecil	37	39	13	89
Charles	1	0	250	251
Dorchester	40	49	10	99
Frederick	226	318	2	546
Garrett	43	69	50	162
Harford	145	354	61	560
Howard	189	426	766	1,381
Kent	37	26	4	67
Montgomery	84	26	3,566	3,676
Prince George's	21	12	20	53
Queen Anne's	8	4	22	34
St. Mary's	31	68	24	123
Somerset	5	19	2	26
Talbot	80	75	7	162
Washington	148	187	15	350
Wicomico	9	45	48	102
Worcester	1	0	20	21
<b>Total</b>	<b>1,611</b>	<b>2,396</b>	<b>5,969</b>	<b>9,976</b>
<b><sup>1</sup>Estimates vary from year to year depending on effort put forth by various agencies who collect the data. Total numbers should be considered minimum estimates for a given year.</b>				

year depending on the effort put forth by the various agencies who report them. Therefore, these data should be used with caution when looking at trends over time and should be considered minimum estimates for a given year.

Besides deer-vehicle collision data obtained from the various state agencies of Maryland, State Farm Insurance Company also estimates total deer vehicle collisions based on its share of the insurance business for each state and the number of accidents reported by their clients. They project there have been an average of 32,200 deer-vehicle collisions in Maryland during each of the last five years.

Farmers and landowners can obtain a Deer Management Permit (DMP) from DNR when deer are causing damage to commercial crops. DMPs allow farmers to harvest antlerless deer on their property outside of the regular state hunting seasons and bag limits. In 2016, 7,957 deer were taken with DMPs compared to 8,535 deer in 2015 (Table 12), a decrease of 7%. Elevated market prices for crops and significantly higher planting costs continue to cause farmers to control deer more intensely than they have in the past. While regulated hunting remains the most effective way to control deer statewide, DMPs are a valuable tool for farmers protecting their livelihood.

In areas where lethal control of deer via regulated hunting is not feasible due to urbanization or security issues (i.e., military bases), sharp-shooting deer is a viable lethal alternative for controlling deer numbers. During 2016, 1,999 deer were harvested via sharp-shooting in Maryland. Sharp-shooting is performed by deer cooperators licensed by DNR. County and/or federal officials and a few private groups remove deer using this method.

In recent years hunters have become increasingly concerned about coyote and bear predation on deer in western Maryland. Very young fawns in the spring can be a food source for predators. Coyotes have increased in number in Washington, Allegany, and Garrett counties over the last five years. Likewise, the black bear population is expanding and population numbers are at record highs for recent times. Studies in other states indicate that bears have been shown to be equally, or even more effective at preying on fawns than coyotes.

Currently, reproductive data that the Deer Project collects does not indicate coyotes or bears are having a significant impact on the deer population in Maryland. In Garrett County, fawn recruitment based on the annual hunter harvest has periodically declined in recent years, but the deer population remains stable there. While the deer population is significantly lower in western Maryland than it was 10 years ago, the decline can be largely attributed to the relatively high percentage of antlerless deer taken during hunting season.

While there's no doubt that coyotes and bears are preying on fawns, Maryland's long-term deer data along with research and experience from nearby states indicate that their effect is minimal. The vast majority of white-tailed deer give birth to fawns within a two to four week period in May and June, which overwhelms predators like coyotes and bears. During that time,

Table 12  
Maryland Reported Crop Damage Mortality  
by County, 2016

COUNTY	Male	Female	Total
<b>Allegany</b>	19	210	229
<b>Anne Arundel</b>	20	129	149
<b>Baltimore</b>	28	262	290
<b>Calvert</b>	9	65	74
<b>Caroline</b>	23	125	148
<b>Carroll</b>	89	438	527
<b>Cecil</b>	74	180	254
<b>Charles</b>	15	188	203
<b>Dorchester</b>			
<b>Whitetail</b>	33	307	340
<b>Sika</b>	24	179	203
<b>Frederick</b>	55	458	513
<b>Garrett</b>	116	780	896
<b>Harford</b>	25	215	240
<b>Howard</b>	23	204	227
<b>Kent</b>	26	141	167
<b>Montgomery</b>	45	442	487
<b>Prince George's</b>	33	261	294
<b>Queen Anne's</b>	25	146	171
<b>St. Mary's</b>	41	248	289
<b>Somerset</b>	23	266	289
<b>Talbot</b>	61	328	389
<b>Washington</b>	39	322	361
<b>Wicomico</b>			
<b>Whitetail</b>	37	271	308
<b>Sika</b>	0	4	4
<b>Worcester</b>	57	433	490
<b>Other</b>	127	288	415
<b>Total</b>	1067	6890	7957

there are far more fawns on the ground than can be consumed by predators, thus ensuring that an adequate number will survive to reproduce in coming years.

The Deer Project will continue to monitor fawn recruitment rates and coyote and bear populations in Maryland and develop alternative management strategies as the need arises. As part of this monitoring, the Department is currently working with the University of Delaware on a research project in Allegany and Garrett counties to examine predator abundance and fawn recruitment. Results will be available next year.

### Trophy Deer Contest

Each year the Maryland Bowhunters Society, the Maryland Chapter of the Quality Deer Management Association, and DNR cosponsor the Maryland Trophy Deer Contest. This contest recognizes hunters who have harvested trophy bucks and promotes quality Maryland deer through wise management. The goal of quality deer management is to produce deer numbers that are in balance with the available habitat and have deer that reach maturity and are in good health.

A primary goal of DNR's deer management program is to maintain the quality of Maryland's deer herd. By encouraging antlerless deer harvest and restraining antlered buck harvest, populations can reach appropriate levels compatible with the surrounding dominant land use. A secondary benefit for hunters is the potential for mature antlered buck survival improves.

The 2016 Maryland Trophy Deer Contest for bucks taken in the 2014-2015 hunting season was held during the Country Life Outdoors Festival at the St. Mary's County Fairgrounds. The Boone and Crockett system is used to score antlers and white-tailed, sika, and fallow deer entries are accepted. The results of the 2016 contest are listed on the following pages.

Details of the 2017 Maryland Trophy Deer Contest for deer taken during the 2015-2016 hunting seasons have not been finalized at this time. All entries must be present at the annual contest.

### Maryland All Time Trophy Records

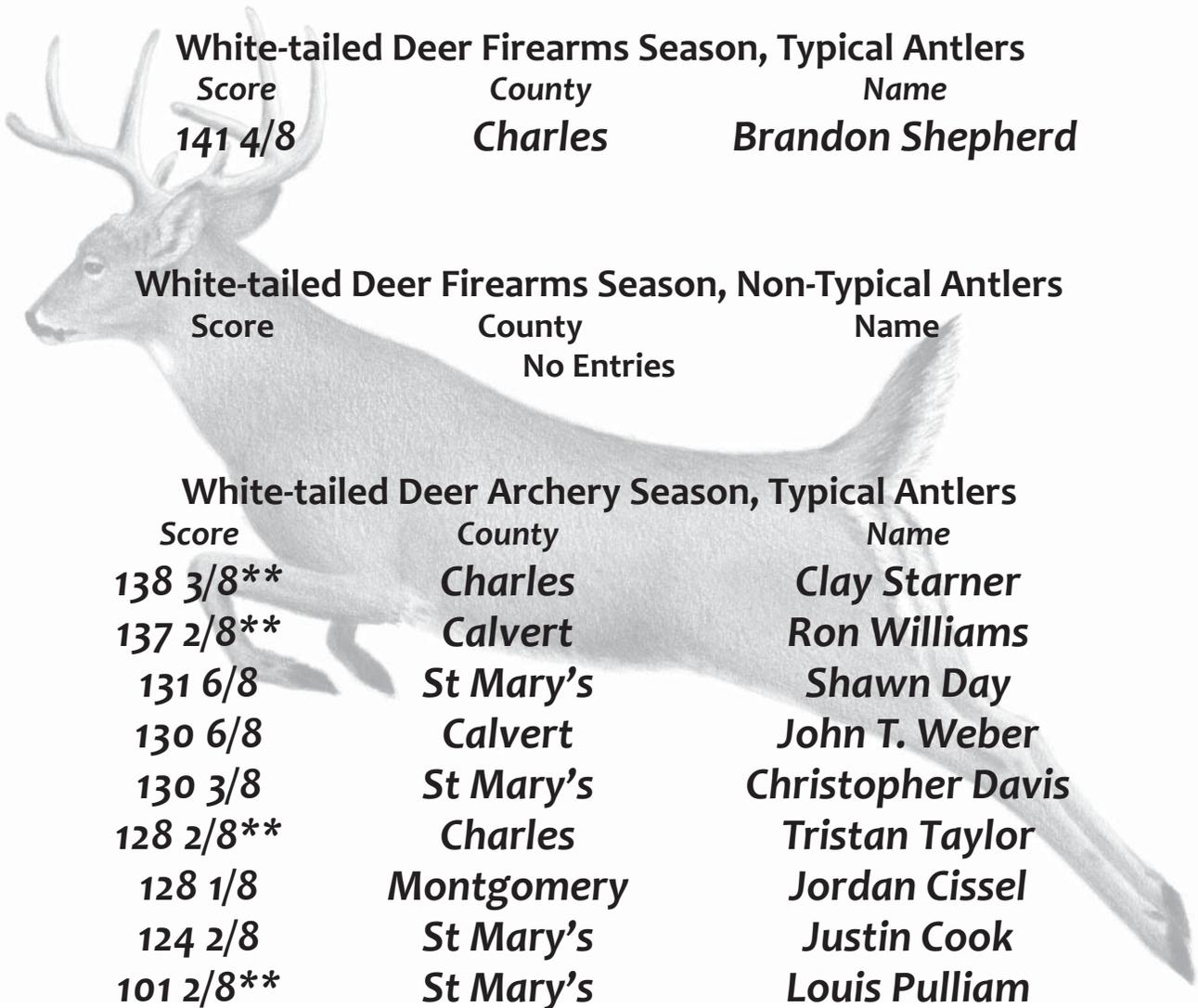
Maryland's quality habitat has produced some impressive trophy deer, with record deer coming from across the state. The attached table indicates the scores of the top three bucks per weapon (hunting implement), which county it was taken in, and the name of the hunter who took it. This list is compiled from information collected by Walter "Tinker" Johnson, chairman and record-keeper for the Maryland Trophy Deer Contest.

### Maryland All Time Trophy Deer Records

Score	County	Name
<b>White-tailed Deer, Firearms, Typical Antlers</b>		
194 0/8	Kent	Kevin Miller
185 7/8	Queen Anne's	Walter Lachewitz
184 0/8	St. Mary's	Larry Day
<b>White-tailed Deer, Firearms, Non-Typical Antlers</b>		
268 1/8	Charles	William Crutchfield, Jr.
248 7/8	Charles	Donza Watson
228 4/8	Montgomery	Jack Poole
<b>White-tailed Deer, Bow, Typical Antlers</b>		
183 3/8	Talbot	Petey Council
178 1/8	Harford	Mark Rogowski
177 0/8	Baltimore	Richard Traband
<b>White-tailed Deer, Bow, Non-Typical Antlers</b>		
223 3/8	Cecil	Jordan Duhamell
220 2/8	Prince George's	Yates Claggett
208 7/8	Anne Arundel	Robert Gertz
<b>White-tailed Deer, Muzzleloader, Typical Antlers</b>		
178 6/8	Baltimore	John Gweazdowski
171 3/8	Dorchester	Mark Bronder
170 1/8	Talbot	Kara Gowe
<b>White-tailed Deer, Muzzleloader, Non-Typical Antlers</b>		
229 6/8	Anne Arundel	Robert Brookman
200 4/8	Dorchester	Greg Glos
199 3/8	Talbot	William Shields
<b>White-tailed Deer, Crossbow, Typical Antlers</b>		
166 3/8	Baltimore	Wayne Wipfield
164 4/8	Kent	Douglas C. Wood
162 7/8	St. Mary's	Lawrence Copsey
<b>White-tailed Deer, Crossbow, Non-Typical Antlers</b>		
211 2/8	Wicomico	Steve Whitelock
195 3/8	Kent	Albert H. Piasecki
185 6/8	Calvert	Mark A. Yetter
<b>Sika Deer, Firearms</b>		
77 4/8	Wicomico	Tim Krauss
75 7/8	Dorchester	James Howdysshell
72 5/8	Dorchester	David King, Jr.
<b>Sika Deer, Bow</b>		
74 1/8	Dorchester	Samuel King
72 3/8	Dorchester	Bryan Spath
69 6/8	Dorchester	Lenny Hyre
<b>Sika Deer, Muzzleloader</b>		
74 4/8	Dorchester	Henry Williams, Jr.
73 4/8	Dorchester	John Eger
72 7/8	Dorchester	Milton Kern
<b>Sika Deer, Crossbow</b>		
75 4/8	Dorchester	Jay Pippin
67 4/8	Dorchester	David King
66 6/8	Dorchester	Ronald C. Taylor
<b>Fallow Deer, Firearms</b>		
176 7/8	Prince George's	Patrick A. Akins
<b>Fallow Deer, Muzzleloader</b>		
128 1/8	Talbot	Bill McCready
<b>Fallow Deer, Bow</b>		
202 1/8	Prince George's	Michael Cavanaugh

**Results from the**  
**2016 MARYLAND TROPHY DEER CONTEST**  
**FOR THE 2014-2015 DEER HUNTING SEASONS**

Sponsored by the Maryland Bowhunters Society, the Maryland Chapter of the Quality Deer Management Association, and the Maryland Wildlife & Heritage Service. Submitted by Walter 'Tinker' Johnson, Chairman of the Maryland Trophy Deer Contest, held at the St Mary's County Fairgrounds, 7/1/16-7/3/16



<b>White-tailed Deer Firearms Season, Typical Antlers</b>		
<b>Score</b>	<b>County</b>	<b>Name</b>
<b>141 4/8</b>	<b>Charles</b>	<b>Brandon Shepherd</b>
<b>White-tailed Deer Firearms Season, Non-Typical Antlers</b>		
<b>Score</b>	<b>County</b>	<b>Name</b>
	<b>No Entries</b>	
<b>White-tailed Deer Archery Season, Typical Antlers</b>		
<b>Score</b>	<b>County</b>	<b>Name</b>
<b>138 3/8**</b>	<b>Charles</b>	<b>Clay Starner</b>
<b>137 2/8**</b>	<b>Calvert</b>	<b>Ron Williams</b>
<b>131 6/8</b>	<b>St Mary's</b>	<b>Shawn Day</b>
<b>130 6/8</b>	<b>Calvert</b>	<b>John T. Weber</b>
<b>130 3/8</b>	<b>St Mary's</b>	<b>Christopher Davis</b>
<b>128 2/8**</b>	<b>Charles</b>	<b>Tristan Taylor</b>
<b>128 1/8</b>	<b>Montgomery</b>	<b>Jordan Cissel</b>
<b>124 2/8</b>	<b>St Mary's</b>	<b>Justin Cook</b>
<b>101 2/8**</b>	<b>St Mary's</b>	<b>Louis Pulliam</b>

\*\*Crossbow

**White-tailed Deer Archery Season, Non-Typical Antlers**

<b>Score</b>	<b>County</b>	<b>Name</b>
<b>195 3/8**</b>	<b>Kent</b>	<b>Albert Piasecki</b>
<b>185 6/8**</b>	<b>Calvert</b>	<b>Mark Yetter</b>
<b>179 0/8</b>	<b>St Mary's</b>	<b>Joseph Jackson, Jr.</b>
<b>164 0/8</b>	<b>Caroline</b>	<b>Brent Edwards</b>
<b>148 7/8</b>	<b>St Mary's</b>	<b>Chad Day</b>
<b>148 2/8*</b>	<b>St Mary's</b>	<b>Eddie Boatright</b>
<b>141 5/8*</b>	<b>St Mary's</b>	<b>Kevin Boothe</b>

\* Historical \*\*Crossbow

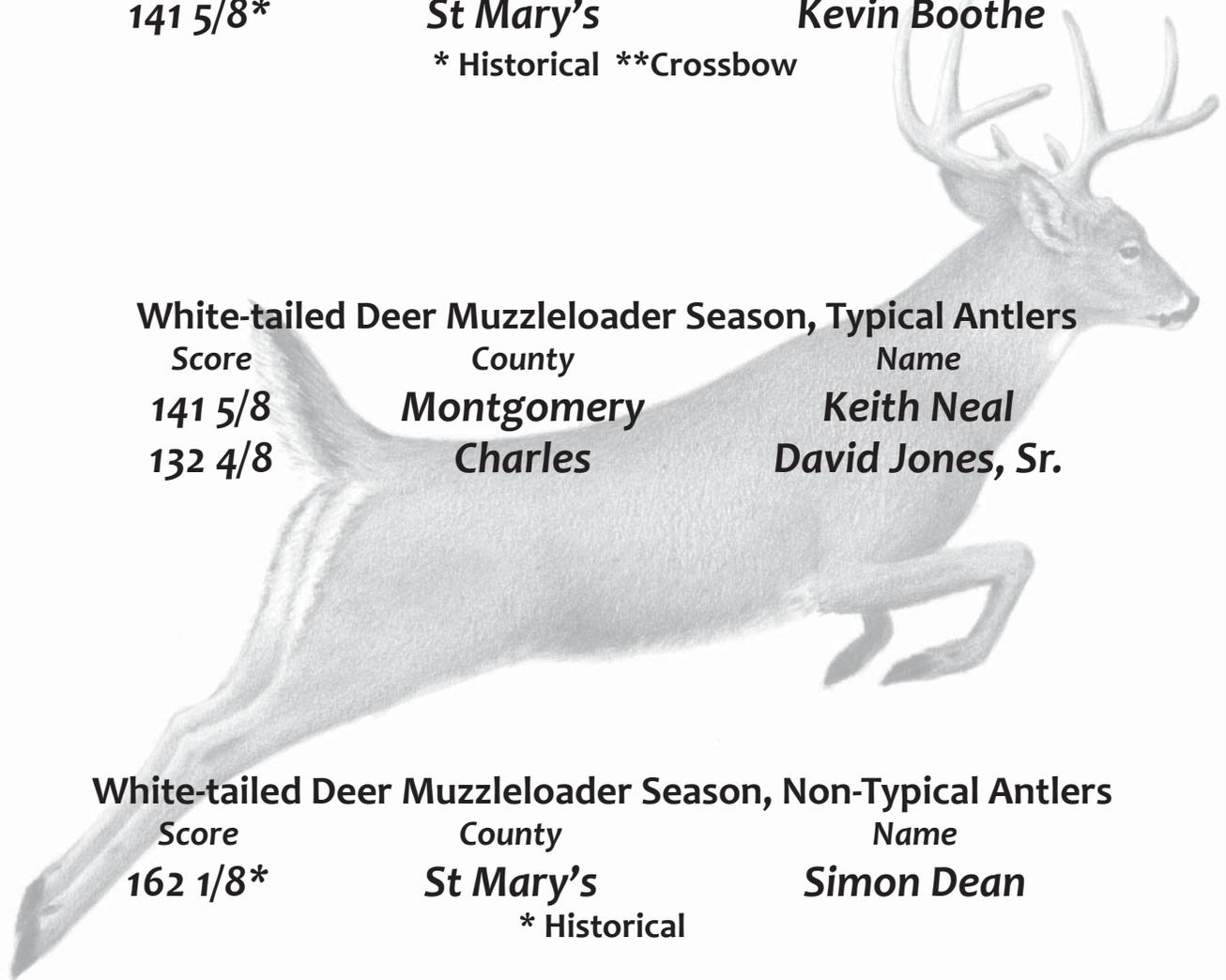
**White-tailed Deer Muzzleloader Season, Typical Antlers**

<b>Score</b>	<b>County</b>	<b>Name</b>
<b>141 5/8</b>	<b>Montgomery</b>	<b>Keith Neal</b>
<b>132 4/8</b>	<b>Charles</b>	<b>David Jones, Sr.</b>

**White-tailed Deer Muzzleloader Season, Non-Typical Antlers**

<b>Score</b>	<b>County</b>	<b>Name</b>
<b>162 1/8*</b>	<b>St Mary's</b>	<b>Simon Dean</b>

\* Historical



**Results from the  
2016 MARYLAND TROPHY DEER CONTEST  
FOR THE 2014-2015 DEER HUNTING SEASONS**

-continued-



**Sika Deer, Firearms Season**

Score	County	Name
72 0/8	Dorchester	Arthur Rhoderick
49 0/8	Dorchester	Waylen Rhoderick

**Sika Deer, Muzzleloader Season**

Score	County	Name
	No Entries	

**Sika Deer, Archery Season**

Score	County	Name
66 0/8	Dorchester	Bill Bowen

**Fallow Deer, Archery Season**

Score	County	Name
202 1/8*	Prince George's * Historical	Michael Cavanaugh

Appendix I  
Statewide Reported Antlered and Antlerless Deer Harvest by Public Hunting Area and County, 2016-2017

County/PublicLand	Antlered	Antlerless
<b>Allegany</b>		
Belle Grove WMA	3	0
Billmeyer WMA	14	14
Dan's Mountain WMA	76	54
Green Ridge SF	204	125
Rocky Gap SP	17	9
Sideling Hill WMA	5	2
Warrior Mountain WMA	55	40
<b>Anne Arundel</b>		
Anne Arundel County Managed Hunts	13	36
Crownsville CWMA	1	5
Davidsonville Receiver Station	10	28
Fort Meade	38	89
Smithsonian	7	41
<b>Baltimore</b>		
Gunpowder SP	16	117
Gwynnbrook WMA	2	5
Liberty Watershed	28	59
Loch Raven Watershed	60	166
Patapsco SP	28	41
Pretty Boy Watershed	92	161
Soldiers Delight NEA	12	25
<b>Calvert</b>		
Biscoe Gray Heritage Farm CWMA	2	0
Calvert Cliffs SP	4	10
Flag Pond CWMA	0	0
Hall Creek	2	5
Huntingtown Area	15	13
Parkers Creek WMA	9	15
<b>Caroline</b>		
Chesapeake Forest Lands	10	26
Idylwild WMA	40	84
Tuckahoe SP	5	12

County/PublicLand	Antlered	Antlerless
<b>Carroll</b>		
Avondale WMA	6	7
Hahn CWMA	1	2
Hanover Watershed	16	43
Liberty Watershed	46	107
Maring CWMA	1	6
Morgan Run SP NRMA	8	19
Patapsco SP	13	43
Sawmill-Speigel CWMA	11	26
Woodbrook CWMA	7	12
<b>Cecil</b>		
C&D Canal	14	24
Earlville WMA	1	10
Elk Neck SF	20	50
Elk Neck SP	27	49
Fair Hill NRMA	15	92
Grove Farm WMA	14	15
Old Bohemia WMA	6	9
<b>Charles</b>		
Cedar Point WMA	9	25
Cedarville SF	7	16
Chapel Point SP	10	19
Chapman State Park	10	23
Chicamuxen WMA	1	2
Doncaster SF or Tayloes Neck	3	11
Indian Creek NRMA	6	7
Indian Head Naval Ordnance Area	8	28
Myrtle Grove WMA	28	26
Nanjemoy NRMA	4	8
Nanjemoy Creek WMA	0	0
Riverside WMA	0	1

County/PublicLand	Antlered	Antlerless
<b>Dorchester</b>		
Blackwater NWR		
whitetail	49	28
sika	166	184
<b>Chesapeake Forest Lands</b>		
whitetail	63	121
sika	42	45
<b>Fishing Bay WMA</b>		
whitetail	3	14
sika	75	91
<b>LeCompte WMA</b>		
whitetail	4	19
sika	1	6
<b>Linkwood WMA</b>		
whitetail	3	12
sika	1	0
<b>Taylor's Island WMA</b>		
whitetail	1	4
sika	5	16
<b>Frederick</b>		
Cunningham Falls SP Thurmont WS	33	40
Emmitsburg Watershed	11	19
Frederick City Watershed	79	169
Heaters Island WMA	5	10
Monocacy NRMA	51	72
South Mountain SP	15	31

Appendix I -continued-  
Statewide Reported Antlered and Antlerless Deer Harvest by Public Hunting Area and County, 2016-2017

County/PublicLand	Antlered	Antlerless
<b>Garrett</b>		
Cunningham Swamp WMA	2	3
Deep Creek Lake SP	19	9
Frostburg Watershed	14	5
Garrett SF	93	58
Mount Nebo WMA	50	29
Potomac SF	51	23
Savage River SF	268	159
Youghiogheny Reservoir	4	3
<b>Harford</b>		
Aberdeen Proving Grounds	84	151
Gunpowder SP	3	10
Rock SP	6	15
Stoney Forest	2	6
Susquehanna SP	9	27
<b>Howard</b>		
Howard County Parks & Recreation Hunts	12	117
Hugg-Thomas WMA	2	25
Patapsco SP	15	58
Patuxent River SP	62	159
Tridelphia/Rocky Gorge (WSSC)	38	130
<b>Kent</b>		
Eastern Neck NWR	37	37
Millington WMA	36	104
Sassafras NRMA	24	38
<b>Montgomery</b>		
Cherrington CWMA	8	24
Islands of the Potomac WMA	3	11
Mckee-Beshers WMA	45	89
Montgomery County M-NCPPC Lands	60	384
Patuxent River SP	53	103
Seneca - Schaeffer Farm	12	41
Seneca Creek SP	64	128
Strider WMA	7	14
Tridelphia/Rocky Gorge (WSSC)	42	90
<b>Prince George's</b>		
Aquasco Farms Coop	5	19
Belt Woods NEA	6	22
Beltsville	91	151

County/PublicLand	Antlered	Antlerless
<b>Prince George's</b>		
Billingsly Tract (Patuxent River Park)	4	12
Brandywine Receiver Station	8	15
Cheltenham WMA	1	1
Gardner Road Park CWMA	0	4
Mill Town Landing NRMA	2	5
Nottingham	1	7
Patuxent WRC (Central & South Tracts)	21	59
Rosaryville SP	9	23
Spice Creek (Patuxent River) NRMA	7	6
Tridelphia/Rocky Gorge (WSSC)	1	10
<b>Queen Anne's</b>		
Tuckahoe SP	11	16
Wye Island NRMA	25	62
<b>St. Mary's</b>		
Elms' CWMA	5	4
Greenwell SP	3	17
Historic St. Mary's City CWMA	5	8
Newtowne Neck SP	5	12
Patuxent Naval Air Station	18	48
Point Lookout SP (Jacobs Property)	3	5
St. Inigoes SF	4	7
St. Mary's SP	27	39
<b>Somerset</b>		
Cedar Island WMA	0	0
Chesapeake Forest Lands	51	107
Deal Island WMA		
whitetail	17	18
sika	2	1
<b>Fairmount WMA</b>		
whitetail	5	10
sika	0	1
<b>Maryland Marine Properties WMA</b>		
Maryland Marine Properties WMA	1	3
<b>Pocomoke Sound WMA</b>		
Pocomoke Sound WMA	6	6
<b>South Marsh Island WMA</b>		
South Marsh Island WMA	0	0
<b>Wellington WMA</b>		
Wellington WMA	2	5
<b>Talbot</b>		
Seth SF	3	1

County/PublicLand	Antlered	Antlerless
<b>Washington</b>		
Ft. Frederick SP	0	7
Greenbrier SP	18	28
Hagerstown Watershed	10	14
Indian Springs WMA	84	39
<b>Maryland Correctional Training Center</b>		
Maryland Correctional Training Center	10	16
<b>Prather's Neck WMA</b>		
Prather's Neck WMA	5	5
<b>Sideling Hill WMA</b>		
Sideling Hill WMA	17	9
<b>South Mountain SP</b>		
South Mountain SP	24	55
<b>W. Maryland Ag Research Station (B)</b>		
W. Maryland Ag Research Station (B)	1	20
<b>Woodmont</b>		
Woodmont	22	10
<b>Wicomico</b>		
<b>Chesapeake Forest Lands</b>		
whitetail	60	135
sika	9	6
<b>Ellis Bay WMA</b>		
whitetail	1	3
sika	1	1
<b>Johnson WMA</b>		
Johnson WMA	2	8
<b>Nanticoke WMA</b>		
whitetail	9	21
sika	4	5
<b>Wetipquin WMA</b>		
Wetipquin WMA	0	2
<b>Wicomico SF</b>		
whitetail	11	47
sika	0	1
<b>Worcester</b>		
<b>Assateague NS</b>		
whitetail	10	7
sika	18	19
<b>Assateague SP</b>		
whitetail	1	0
sika	0	0
<b>Chesapeake Forest Lands</b>		
Chesapeake Forest Lands	40	103
<b>E.A. Vaughn WMA</b>		
whitetail	19	39
sika	1	0
<b>Hickory Point WMA</b>		
Hickory Point WMA	4	2
<b>Isle of Wight WMA</b>		
Isle of Wight WMA	2	2
<b>Pocomoke River WMA</b>		
Pocomoke River WMA	3	12
<b>Pocomoke SF</b>		
Pocomoke SF	45	98





Larry Hogan Jr., Governor  
Boyd K. Rutherford, Lieutenant Governor



Mark Belton, Secretary  
Joanne Throwe, Deputy Secretary  
Paul A. Peditto, Director, Wildlife & Heritage Service

Wildlife & Heritage Service  
Tawes State Office Building, E-1  
580 Taylor Avenue  
Annapolis, MD 21401  
410-260-8540  
FAX 410-260-8596  
[maryland.gov/wildlife](http://maryland.gov/wildlife)

The facilities of the Department of Natural Resources are available to all without regard to race, color, religion, sex, sexual orientation, age, national origin, or physical or mental disability. Accommodations for individuals with disabilities will be provided upon request. Seven days advance notice is requested. This document is available in alternative format upon request from a qualified individual with a disability.

This program receives federal assistance from the U.S. Fish and Wildlife Service, and thus prohibits discrimination on the basis of race, color, national origin, disability, age, and sex in educational programs, pursuant to Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and Title IX of the Educational Amendments of 1972. If you believe that you have been discriminated against in any program, activity, or service, please contact the Office of Fair Practices-MD Department of Natural Resources, Tawes Building, 580 Taylor Ave., D-4, Annapolis, MD, 21401. The telephone number is 410-260-8058. You may also write to the U.S. Fish and Wildlife Service, Division of Policy and Programs, Wildlife and Sport Fish Restoration Program, 4401 N. Fairfax Drive, Mail Stop: WSFR-4020, Arlington, Virginia 22203.



Survey and inventory results reported in this publication were funded by the Federal Aid in Wildlife Restoration Act.

Printed on Recycled Paper  
July 2017

