

Maryland Annual Deer Report



2014-2015

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

Another deer season is in the books, and based on the harvest results, many hunters experienced a slower than normal 2014-2015 deer season. Fewer deer in the population in some areas and a good acorn crop made deer hunting slightly more challenging for the year. Deer did not respond to bait with the numerous acorns on the ground, and liberal harvests over the past decade have reduced deer numbers in many areas to help alleviate crop damage, deer-vehicle collisions, and numerous other conflicts with the Maryland public. That being said, Maryland still has a very healthy deer population and most hunters that put forth the effort ended the season with venison in the freezer. The reduced harvest also means more deer will be carried over, ensuring a productive 2015-2016 season. The Department of Natural Resources (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.

2014-2015 Season Recap

The 2014-2015 deer harvest decreased 9% from 95,863 in 2013-2014 to 86,883 this season. The harvest was only slightly less than the total of 87,541 deer two years ago in 2012-2013, and 7% lower than the 5-year average of 93,395 deer. The greatest decrease occurred in southern and central Maryland while the decrease was minimal on the Eastern Shore. Garrett (+15%), Somerset (+2%), and Worcester (+3%) counties observed an increase in the harvest when compared to 2013-2014. The overall harvest included 83,855 white-tailed deer (27,053 antlered and 56,802 antlerless) and a record 3,028 sika deer (1,228 antlered and 1,800 antlerless).

Chronic Wasting Disease

DNR sampled 230 deer during the 2014-2015 deer season in the Allegany County area and detected Chronic Wasting Disease (CWD) in four deer. The four adult bucks were harvested within the current disease management area (Harvest Management Unit 233). A total of six deer with CWD have now been detected in Allegany County. The first positive was a yearling buck taken by a hunter in November 2010 in Green Ridge State Forest, close to where CWD is present in West Virginia. To date, DNR has tested over 8,000 Maryland deer for CWD.

CWD is a naturally occurring 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 Maryland, New York, Ohio, Pennsylvania, Virginia, and West Virginia in the mid-Atlantic. Currently 22 states and two Canadian provinces have documented CWD in their deer, elk or moose populations (free-ranging, captive, or both).

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 quad-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 Department recently completed two related projects concerning CWD in Maryland. Responsive Management, a professional public opinion survey firm that specializes in natural resource issues, was contracted to survey Maryland deer hunters about CWD. Deer hunters in several different areas of Maryland were surveyed via telephone about CWD and whether its occurrence has impacted their deer hunting. The survey found that the presence of CWD did not change most hunters' behavior significantly. While some hunters did choose to either change their hunting location in Maryland, or stop hunting in Maryland altogether, most indicated they continued to hunt deer as they always did. The survey asked a broad range of questions, and the full report is available online at http://dnr2.maryland.gov/wildlife/Documents/2013_MD_CWD_Report.pdf.

The Department also contracted with the University of Delaware (UDEL) to examine deer population trends in the Maryland CWD management area and how CWD may impact deer hunter participation currently and in the future. UDEL used camera surveys and spotlight/FLIR roadside counts to estimate the size of the deer population in a section of Green Ridge State Forest. They found pre-hunting season density estimates ranging from 10 – 30 deer per square mile depending on method used. Average density among methods was about 20 deer per square mile. This density is considered healthy for CWD management while still providing recreational opportunity for hunters.

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:

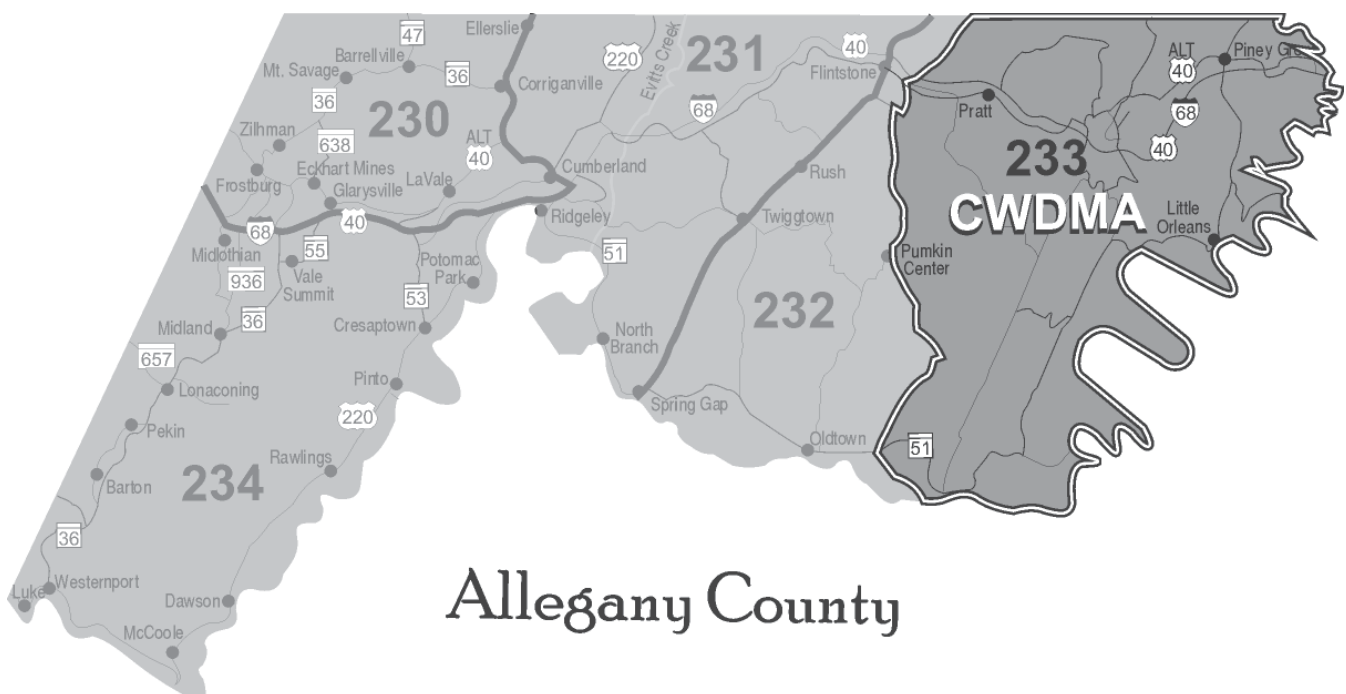
- Avoid shooting or handling a deer that appears sick.
- Wear latex or rubber gloves when field-dressing or butchering deer.
- Remove all internal organs.
- Remove the meat from the bones and spinal column if home processing a deer.
- Do not use household knives or utensils when field-dressing or home 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. The changes outlined below apply only to the CWD Management Area (CWDMA), which is defined as Habitat Management Unit 233 in Allegany County.

(1) 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.
- 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.
- Whole deer carcasses or parts being transported directly to approved meat processors, taxidermists, or lined landfills within Allegany County.
- Deer leg quarters with no portion of the spinal column attached.



Dumpsters will be available at select locations to dispose of carcass parts before leaving the CWDMA. Please consult the DNR website (<http://dnr2.maryland.gov>) or contact the DNR office (301-842-2702) for a list of dumpster locations.

(2) Baiting and feeding of deer is prohibited in the CWDMA on both private and public land.

Bait and feed include, but are not limited to, corn, other grains, pelleted foods, mineral supplements, and salt blocks that act as attractants to deer. Hunting over food plots or areas where normal agricultural activities have occurred is not considered baiting or feeding.

Please check the Department's website (<http://dnr2.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 prohibit the importation of whole carcasses and certain carcass parts of deer, moose, and elk harvested from states that have CWD.

A person may bring only the following parts of a dead deer, elk, or moose into Maryland from another state or province's designated CWD containment, surveillance, or management area:

- Meat with no part of the spinal column or head attached.
- Meat without backbone.
- 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 mounts or tanned hides.

The Department will maintain a list of CWD positive states/provinces and contact numbers to call to confirm the containment areas in those regions that are subject to these restrictions. The list is available on the DNR website or by calling 410-260-8540.

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. Travelers may pass through Maryland with cervid carcasses, provided that no parts are disposed of or remain in the state.

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/ and the Maryland DNR website <http://dnr2.maryland.gov>.

Taking Deer Carcasses out of Maryland

Now that 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 (see <http://www.cwd-info.org/index.php/fuseaction/policy.regulationsMap>). 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.

UDEL also used the Responsive Management CWD survey and conducted further analyses of the results. They examined individual hunter responses to the survey and compared them to actual harvest check-in data to further determine if CWD was significantly impacting deer harvest in Maryland. Their results suggest that CWD will have a minimal impact on deer harvest in Maryland. Further results can be found in the graduate thesis at http://udspace.udel.edu/bitstream/handle/19716/13019/Jacob_Haus_thesis.pdf?sequence=1.

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 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/2009-2018MarylandWTDeerPlan.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 non-lethal techniques where hunting is not practical or acceptable. Therefore, the Deer Project employs a blend of hunting-related deer management methods and proven 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 in order 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.

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. 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 25,000 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 averages 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. DNR's research found that about 25% of sika female fawns were pregnant while up to 50% of white-tailed female fawns had bred. 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 often 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.

As more information is collected on sika deer in Maryland, it becomes apparent that more research is needed to understand their life history traits and the role they play in the ecosystem. The University of Delaware has conducted recent studies on sika deer and is continuing to explore additional research opportunities including how sika deer and white-tailed deer allocate resources.

Results of Legislative Changes Enacted for the 2014-2015 Deer Season

Several legislative changes concerning deer hunting took effect for the 2014-2015 Maryland deer season. Sunday deer hunting opportunities were expanded in Allegany, Frederick, Garrett, and Washington counties. For the first time, some of these expanded Sunday opportunities were on

public lands. Sunday hunting continues to grow in popularity and the added days for 2014-2015 provided important additional opportunities for hunters to harvest deer. A total of 1,817 deer were taken on the Sundays open for deer hunting in the four counties mentioned above (Table 2); including 25 from public lands.

In Montgomery County, the archery safety zone was decreased from 150 yards to 100 yards. It is difficult to measure how the reduction in archery safety zones translates to the total deer harvest, but it unquestionably provides additional access for deer hunting. That being said, the Department encourages hunters to consider the likely recovery distance for deer shot with archery equipment and to be cognizant of adjacent home owners and landowners. To date, there have been very few, if any, reported conflicts due to the reduced archery safety zones in several counties.

In Charles and St. Mary's counties, the firearms deer season was extended to end on March 31. This season was for antlerless deer only and was repealed during the 2015 legislative session. A total of 378 antlerless deer (231 in Charles County and 147 in St. Mary's County) were harvested during the nearly three month season. These deer were not included in the annual total harvest (Table 1) but will be included for future modeling purposes.

Several regulatory changes were also enacted for the 2014-2015 season. For the first time, antler restrictions were enacted for part of the statewide buck bag limit. The bag limit remained one antlered deer per weapon season with one bonus antlered deer available in Region B. However, if a hunter was fortunate enough to take three or four antlered deer during the license year, no more than two of them could have fewer than three points on each antler present. The antlered deer could be taken in any order with respect to the restriction. Not surprisingly, results of this regulation for the first year were mixed and it will take several years to ascertain any definite pattern in the data. Statewide, the estimated percentage of yearling bucks harvested (of all adult bucks) declined from 53% to 47%. However the average number of antler points and average beam diameters for yearling bucks also appeared to decline in some counties (Table 9).

Also enacted for the 2014-2015 season, the antlerless white-tailed deer bag limit was reduced from three to two per license year in Region A to further stabilize the population in that region. While the antlerless harvest did decline nearly 5% for the region, it is difficult to ascertain how much of the decline was due to the regulation change and how much was a result of other factors (decreased population, abundant acorns, reduced hunter effort, etc.). The Department will continue to monitor the results of this bag limit change in coming years.

The Department also instituted a wanton waste regulation for white-tailed deer. The regulation makes it illegal for a person to intentionally wound

Table 1
Maryland Reported Antlered and Antlerless Deer Harvest for the
Archery, Firearm, and Muzzleloader Hunting Seasons by County, 2014-2015

COUNTY	ARCHERY			FIREARMS			MUZZLELOADER			TOTAL		
	Antlered	Antlerless	SubTotal	Antlered	Antlerless	SubTotal	Antlered	Antlerless	SubTotal	Antlered	Antlerless	TOTAL
Allegany	417	352	769	1028	681	1709	286	287	573	1731	1320	3051
Anne Arundel	440	997	1437	256	704	960	121	374	495	817	2075	2892
Baltimore	854	2065	2919	437	1142	1579	211	704	915	1502	3911	5413
Calvert	215	426	641	186	437	623	69	238	307	470	1101	1571
Caroline												
Whitetail	236	434	670	377	905	1282	121	365	486	734	1704	2438
Sika	1	1	2	0	0	0	0	0	0	1	1	2
Carroll	592	1147	1739	844	2059	2903	198	624	822	1634	3830	5464
Cecil	379	748	1127	496	1338	1834	130	369	499	1005	2455	3460
Charles	503	906	1409	458	984	1442	171	502	673	1132	2392	3524
Dorchester												
Whitetail	173	311	484	460	1186	1646	141	368	509	774	1865	2639
Sika	291	467	758	507	822	1329	342	418	760	1140	1707	2847
Frederick	774	1424	2198	1234	2578	3812	338	924	1262	2346	4926	7272
Garrett	747	537	1284	1290	1007	2297	449	423	872	2486	1967	4453
Harford	425	930	1355	341	953	1294	151	491	642	917	2374	3291
Aberdeen P.G.	60	163	223	45	85	130	16	38	54	121	286	407
Howard	377	874	1251	214	714	928	91	311	402	682	1899	2581
Kent	354	553	907	508	1227	1735	190	488	678	1052	2268	3320
Montgomery	745	1655	2400	591	1654	2245	184	581	765	1520	3890	5410
Prince George's	389	785	1174	302	697	999	129	366	495	820	1848	2668
Queen Anne's	389	679	1068	549	1537	2086	158	515	673	1096	2731	3827
St. Mary's	415	758	1173	287	730	1017	146	441	587	848	1929	2777
Somerset												
Whitetail	192	297	489	387	1191	1578	86	338	424	665	1826	2491
Sika	0	1	1	1	4	5	0	1	1	1	6	7
Talbot	264	486	750	390	1175	1565	120	426	546	774	2087	2861
Washington	632	917	1549	1118	1592	2710	276	552	828	2026	3061	5087
Wicomico												
Whitetail	260	478	738	507	1366	1873	119	404	523	886	2248	3134
Sika	19	12	31	25	25	50	18	13	31	62	50	112
Worcester												
Whitetail	221	421	642	674	1977	2651	120	411	531	1015	2809	3824
Sika	8	9	17	8	21	29	8	6	14	24	36	60
Total	10372	18833	29205	13520	28791	42311	4389	10978	15367	28281	58602	86883

Table 2
Maryland Reported Sunday Hunting Deer Harvest
by County, 2014-2015

COUNTY	Archery			Firearms			Junior Hunt			Muzzleloader			Grand Total
	Antlered	Antlerless	Total	Antlered	Antlerless	Total	Antlered	Antlerless	Total	Antlered	Antlerless	Total	
Allegany ⁵	15	8	23	103	3	106	46	32	78	2	0	2	209
Anne Arundel ¹	7	12	19	17	51	68	7	6	13	0	0	0	100
Calvert ³	16	33	49	39	68	107	6	5	11	0	0	0	167
Caroline ³	27	25	52	72	164	236	19	15	34	0	0	0	322
Carroll ⁴	41	51	92	126	320	446	39	37	76	8	28	36	650
Cecil ¹	3	8	11	62	132	194	23	25	48	0	0	0	253
Charles ³	42	61	103	78	185	263	17	13	30	0	0	0	396
Dorchester ²													
Whitetail	11	14	25	56	142	198	22	23	45	0	0	0	268
Sika	14	19	33	74	117	191	6	4	10	0	0	0	234
Frederick ⁴	40	77	117	185	400	585	49	23	72	11	30	41	815
Garrett ⁵	44	25	69	94	1	95	67	45	112	7	1	8	284
Harford ³	33	65	98	49	173	222	11	13	24	0	0	0	344
Kent ¹	10	12	22	53	126	179	18	13	31	0	0	0	232
Montgomery ¹	11	11	22	39	99	138	19	18	37	0	0	0	197
Queen Anne's ³	28	52	80	96	292	388	31	20	51	0	0	0	519
St. Mary's ³	26	61	87	48	144	192	16	16	32	0	0	0	311
Somerset ³	13	16	29	68	185	253	22	23	45	0	0	0	327
Talbot ²	23	21	44	35	132	167	16	19	35	0	0	0	246
Washington ⁵	33	41	74	127	204	331	51	30	81	7	16	23	509
Wicomico ²													
Whitetail	14	35	49	47	130	177	28	31	59	0	0	0	285
Sika	2	0	2	1	1	2	0	0	0	0	0	0	4
Worcester ³	17	28	45	102	320	422	28	24	52	0	0	0	519
Total	470	675	1145	1571	3389	4960	541	435	976	35	75	110	7191

1 Archery season was open on Sunday November 2, 2014 on private lands only. Firearm season was open on Sunday November 30, 2014 on private lands only. The Junior Hunt was open on Sunday November 16, 2014 on private lands only.

2 Archery season was open on Sunday October 12, October 19, October 26, November 2, and November 9, 2014 on private lands only. Firearm season was open on Sunday November 30, 2014 on private lands only. The Junior Hunt was open on Sunday November 16, 2014 on private lands only.

3 Archery season was open on Sunday October 12, October 19, October 26, November 2, and November 9, 2014 on private lands only. Firearm season was open on Sunday November 30 and December 7, 2014, and January 11, 2015 on private lands only. The Junior Hunt was open on Sunday November 16, 2014 on private lands only.

4 Archery season was open on Sunday October 12, October 19, October 26, November 2, and November 9, 2014 on private lands only. Firearm season was open on Sunday November 30 and December 7, 2014, and January 11, 2015 on private lands only. The Junior Hunt was open on Sunday November 16, 2014 on private lands only. Muzzleloader season was open Sunday December 21 & 28, 2014 on private lands only.

5 Archery season was open on Sunday October 12, October 19, October 26, November 2, and November 9, 2014 on private and designated public lands only. Firearm season was open on Sunday November 30 and December 7, 2014, and January 11, 2015 on private and designated public lands only. The Junior Hunt was open on Sunday November 16, 2014 on private and designated public lands only. Muzzleloader season was open Sunday December 21 & 28, 2014 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, Indian Springs WMA, Mount Nebo WMA, Prather's Neck WMA, Sideling Hill WMA, and Warrior Mountain WMA.

Figure 1
Maryland Reported Deer Harvest for the Archery, Firearm, and Muzzleloader Seasons, 2005-2006 through 2014-2015

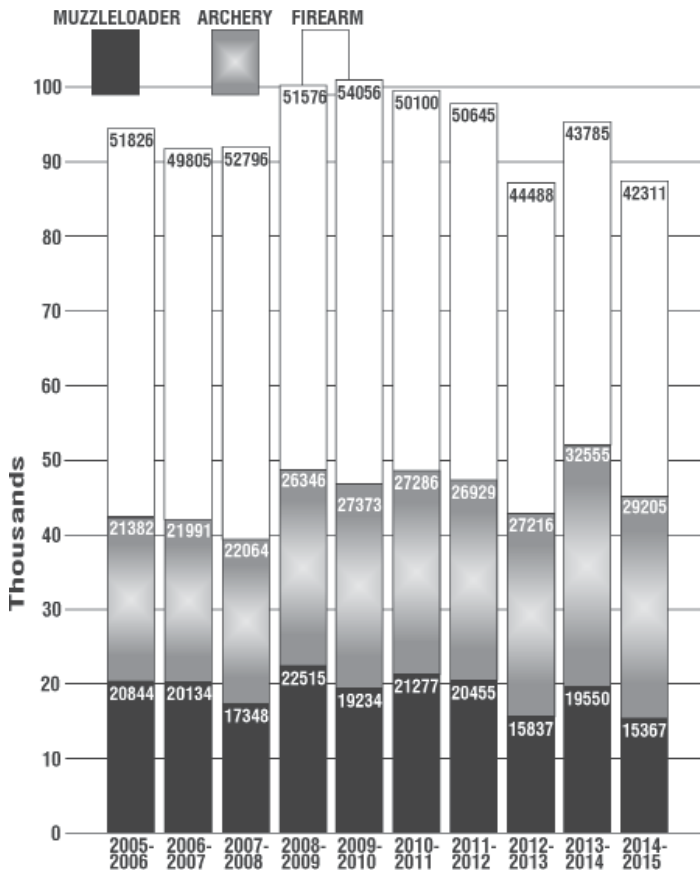


Figure 3
Maryland Reported Button Buck and Doe Harvest, 2005-2006 through 2014-2015

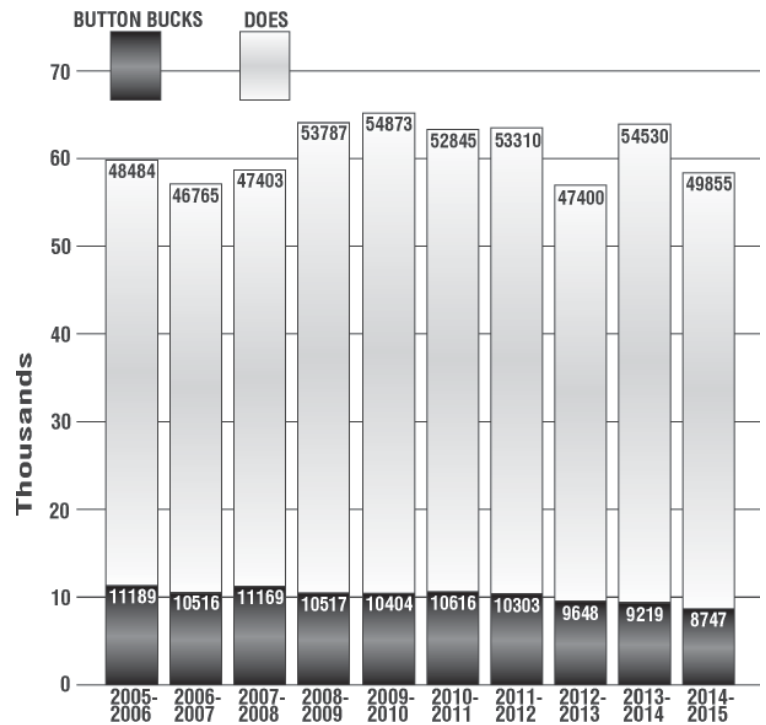


Figure 2
Maryland Reported Antlered and Antlerless Deer Harvest, 2005-2006 through 2014-2015

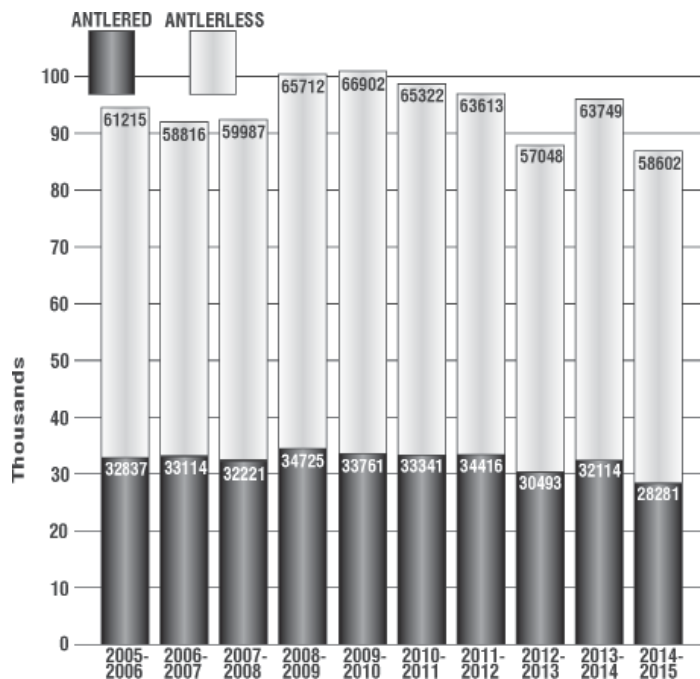
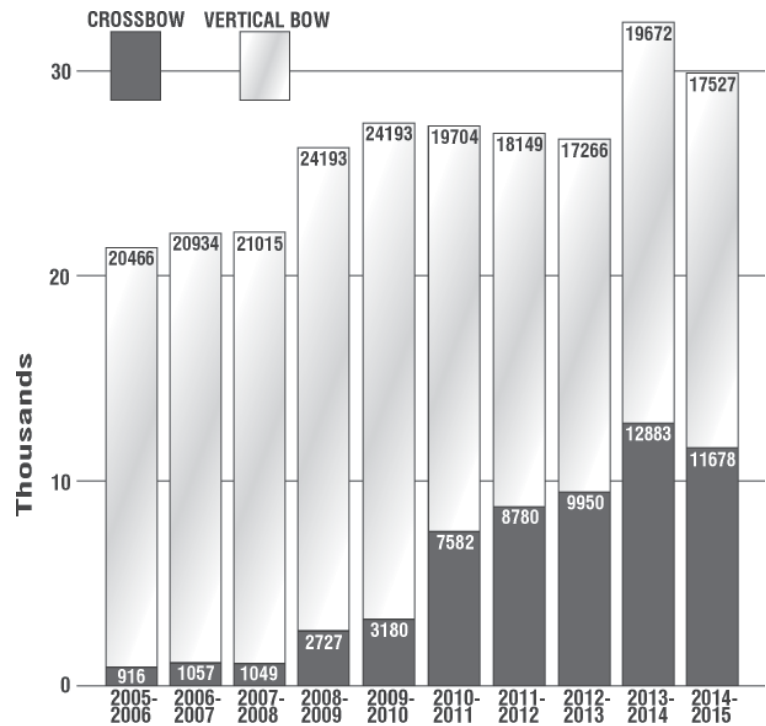


Figure 4
Maryland Reported Crossbow and Vertical Bow Deer Harvest during the Designated Archery Season, 2005-2006 through 2014-2015



or kill a deer and not make a reasonable and legal attempt to retrieve it. This regulation does not supersede the need for written permission when entering onto another person's property. To date there have been no reported violations of the regulation.

Lastly, the sika deer bag limit was increased to three deer, no more than one antlered, for each weapon season. The bag limit was liberalized in response to an increasing sika deer population. Hunters responded favorably to the change and harvested 1,800 antlerless sika deer during the 2014-2015 season; a 14% increase over the previous year's 1,585 antlerless deer.

Legislative and Regulatory Changes For the Coming 2015-2016 Season

Numerous deer-related pieces of legislation were introduced during the 2015 legislative session. These bills primarily dealt with Sunday hunting and reduced safety zone distances. However, at the close of the session, almost all of the bills failed to be passed into law. The only bill to pass (SB068) repealed the extended deer firearms season (January – March) in Charles and St. Mary's counties.

However, additional Sunday hunting opportunities are tentatively planned for the 2015-2016 season within the existing legislative framework. Consult the DNR webpage or a local DNR office prior to deer season for final Sunday dates, counties, and lands.

Additional information regarding legislative and regulatory changes can be found in the 2015-2016 Guide to Hunting and Trapping that comes with the hunting license.

2014-2015 Deer Harvest

Maryland deer hunters harvested 86,883 deer in 2014-2015, a 9% decrease from the 95,863 deer reported in 2013-2014 (Table 1, Figure 1). The harvest was comprised of 28,281 antlered deer (27,053 white-tailed deer and 1,228 sika deer) and 58,602 antlerless deer (56,802 white-tailed deer and 1,800 sika deer; Figure 2). The antlerless harvest included 49,855 does or antlerless bucks, and 8,747 button bucks (Figure 3). The antlered harvest decreased 12% while the antlerless harvest decreased 8% compared to the 2013-2014 season.

In Deer Management Region A (Garrett, Allegany, and western Washington counties), hunters reported taking 8,740 deer this year, a 5% decrease from the 9,176 deer harvested in 2013-2014. The antlered harvest decreased 5% from 5,186 deer last year to 4,930 this year, and the antlerless harvest also decreased 5% from 3,990 to 3,810 deer.

The reported harvest in Region B decreased 10% from 86,687 deer last year to 78,143 deer this year. The antlered harvest decreased 13% from 26,928

deer to 23,351 deer, and the antlerless harvest decreased 8% from 59,759 deer last year to 54,792 deer this year. Frederick County led the harvest totals this year with 7,272 deer, followed by Carroll County with 5,464 deer and Baltimore County at 5,413 deer. Montgomery County and Washington County completed the top 5 with 5,410 and 5,087 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) declined 14% for the 2014-2015 season. Hunters in these counties reported 18,964 deer compared to 22,055 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 grow in popularity and is an important aid to deer management. A total of 7,191 deer (8% of the total harvest) were taken on Sundays during the 2014-2015 season. (Table 2). Sunday hunting is permitted in 20 of 23 counties on up to 11 Sundays each year, predominantly on private lands only.

Archery Season

Archery season in Maryland opens the Friday after Labor Day (September 5th in 2014-2015) and closes on January 31. Approximately 55,000 – 65,000 resident and non-resident hunters purchase an archery stamp each year that permits them to hunt during the archery season. The average Maryland hunter that deer hunts with a vertical bow normally does so for about 14 days each season and 35% of these hunters take one deer or more each year with their bow. Approximately 16,000 hunters currently hunt deer with a crossbow. The average crossbow hunter uses a crossbow for about 10 days each year and approximately 45% are successful in taking one or more deer per year with the weapon.

In 2014-2015:

- The reported archery harvest (vertical and crossbow) decreased 10% from 32,555 deer in 2013-2014 to 29,205 deer in 2014-2015 (Table 1).
- There were 10,372 antlered deer (36% of the total archery harvest) and 18,833 antlerless deer harvested with crossbows and vertical bows.
- The antlered archery harvest decreased 10% and the antlerless harvest (16,637 does and 2,196 button bucks) decreased 11% from the previous year.
- Crossbow hunters took 4,285 antlered deer and 7,393 antlerless deer during the archery season (Table 3).
- The crossbow harvest (11,678) represented 40% of the total archery season harvest in 2014-2015

Table 3
Maryland Reported Crossbow Deer Harvest
by County, 2014-2015

County	Archery Season			Muzzleloader/Firearm Seasons			Grand Total
	Antlered	Antlerless	Total	Antlered	Antlerless	Total	
Allegany	209	161	370	3	2	5	375
Anne Arundel	208	430	638	15	51	66	704
Baltimore	359	824	1183	28	100	128	1311
Calvert	102	174	276	5	21	26	302
Caroline	68	146	214	2	12	14	228
Carroll	215	375	590	6	30	36	626
Cecil	153	298	451	9	22	31	482
Charles	188	364	552	13	37	50	602
Dorchester							
Whitetail	73	118	191	3	12	15	206
Sika	120	163	283	4	5	9	292
Frederick	285	507	792	6	23	29	821
Garrett	360	245	605	8	4	12	617
Harford	208	419	627	16	60	76	703
Howard	157	359	516	20	57	77	593
Kent	128	182	310	4	5	9	319
Montgomery	311	655	966	41	92	133	1099
Prince George's	176	322	498	12	32	44	542
Queen Anne's	136	216	352	5	10	15	367
St. Mary's	185	351	536	6	25	31	567
Somerset							
Whitetail	92	137	229	1	9	10	239
Sika	0	1	1	0	0	0	1
Talbot	112	197	309	1	13	14	323
Washington	262	400	662	6	16	22	684
Wicomico							
Whitetail	90	171	261	2	12	14	275
Sika	4	5	9	1	0	1	10
Worcester							
Whitetail	81	168	249	4	12	16	265
Sika	3	5	8	0	1	1	9
Total	4285	7393	11678	221	663	884	12562

Table 4
Maryland Reported 2-Week Fire-
arm Season Deer Harvest by
County, 2014

County	Antlered	Antlerless	Total
Allegany	917	618	1535
Anne Arundel	211	548	759
Baltimore	359	904	1263
Calvert	152	355	507
Caroline	294	768	1062
Carroll	672	1685	2357
Cecil	407	1012	1419
Charles	363	835	1198
Dorchester			
Whitetail	354	1028	1382
Sika	414	630	1044
Frederick	995	2102	3097
Garrett	1096	891	1987
Harford	290	785	1075
Howard	140	418	558
Kent	405	1003	1408
Montgomery	432	989	1421
Prince George's	257	574	831
Queen Anne's	436	1196	1632
St. Mary's	231	630	861
Somerset			
Whitetail	299	970	1269
Sika	1	4	5
Talbot	314	1013	1327
Washington	934	1331	2265
Wicomico			
Whitetail	391	1162	1553
Sika	21	19	40
Worcester			
Whitetail	520	1619	2139
Sika	5	17	22
Total	10910	23106	34016

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 - 50,000 hunters pursue deer with a firearm each year in

- the same percentage as 2013-2014 (Figure 4).
- Approximately 7,200 different hunters harvested a deer with a crossbow during archery season (compared to 7,700 in 2013-2014).
- 87% of the archery harvest was on private lands.
- Archery hunters took 1,145 deer (470 antlered, 675 antlerless) on Sundays open to archery hunting (Table 2).

Maryland. The average deer hunter spends five to six days each year pursuing deer with a firearm and approximately 40 - 45% of firearm hunters bag at least one deer each year.

In 2014-2015:

- The statewide firearm harvest decreased 3% from 43,758 deer in 2013-2014 to 42,311 deer (Table 1).
- The firearm harvest was comprised of 13,520 antlered deer (32% of the total firearm harvest) and 28,791 antlerless deer.
- The antlered harvest decreased 10% and the antlerless harvest (23,967 does or antlerless bucks and 4,824 button bucks) increased less than 1% from 2013-2014.
- The majority (80%) of the firearm harvest occurred during the 2-week season that begins the Saturday after Thanksgiving (Table 4).
- Firearm hunters took 49% of all deer harvested in Maryland compared to 46% last season. (Figure 1).
- The majority (89%) of the firearm harvest was taken on private property.
- Firearm hunters bagged 4,960 deer (1,571 antlered and 3,389 antlerless) on the Sundays open during the 2-week and January firearm seasons, and juniors harvested 976 deer (541 antlered and 435 antlerless) on the Junior Deer Hunt Sunday (Table 2).
- Junior deer hunters bagged a total of 2,518 deer (1,479 antlered and 1,039 antlerless) during the Junior Deer Hunt weekend; an 8% increase (Table 5).
- Deer hunters reported 4,694 deer (79% antlerless) for the 2-day January firearm season (Table 6).
- Deer hunters in Charles and St. Mary's counties harvested 231 and 147 antlerless deer, respectively, during a legislatively mandated firearm season from January 12 – March 31. This season has since been repealed via additional legislation.

Muzzleloader Season

The 2014-2015 statewide, either-sex muzzleloader season included three days in October (October 16 - 18) and two weeks during late December (December 20 – January 3). Region B continued with a six day antlerless-only muzzleloader season (October 20 - 25) 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 57,500 and 7,900 muzzleloader stamps, respectively in 2014-2015. The stamps are required to hunt deer during the muzzleloader season. Maryland muzzleloader hunters pursue deer for about three days per hunter during the October season and for about 3.5 days in the late two-week season. Approximately 32% of

muzzleloader hunters were successful in harvesting at least one deer last year.

In 2014-2015:

- The muzzleloader harvest totaled 15,367 deer compared to 19,550 deer in 2013-2014, a 21% decrease (Table 1).
- There were 4,389 antlered deer and 10,978 antlerless deer harvested with muzzleloaders. Antlerless deer represented 71% of the total muzzleloader harvest.
- The antlered harvest decreased 21% and the antlerless harvest (9,251 does or antlerless bucks and 1,727 button bucks) decreased 21% from the previous year.
- The October muzzleloader harvest was 9,226 deer (2,833 antlered and 6,393 antlerless); a 20% decrease from the previous year's harvest of 11,588 deer (Table 7).
- The December muzzleloader harvest totaled 6,141 deer (1,556 antlered and 4,585 antlerless); a 23% decrease from the previous year (Table 8).
- The October muzzleloader season accounted for 60% 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 http://dnr2.maryland.gov/wildlife/Documents/md_annual_deer_report13-14.pdf.

Deer Research and Data Use

In 2014-2015, 4,827 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 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

Table 5
Maryland Reported Junior Deer Hunt Harvest
by County, 2014

County	Antlered	Antlerless	Total
Allegany	111	63	174
Anne Arundel	11	10	21
Baltimore¹	26	13	39
Calvert	16	14	30
Caroline	46	29	75
Carroll	98	67	165
Cecil	56	55	111
Charles	47	31	78
Dorchester			
Whitetail	63	55	118
Sika	17	9	26
Frederick	126	63	189
Garrett	194	116	310
Harford	23	26	49
Howard¹	16	18	34
Kent	48	31	79
Montgomery	59	42	101
Prince George's¹	19	3	22
Queen Anne's	57	54	111
St. Mary's	32	28	60
Somerset	54	60	114
Talbot	46	40	86
Washington	154	78	232
Wicomico	81	61	142
Worcester			
Whitetail	79	72	151
Sika	0	1	1
Total	1479	1039	2518
¹ Saturday only.			

Table 6
Maryland Reported 2-Day January Firearm Season
Deer Harvest by County, 2015

County	Antlered	Antlerless	Total
Anne Arundel	27	92	119
Baltimore	48	196	244
Calvert¹	18	68	86
Caroline¹	37	108	145
Carroll¹	74	307	381
Cecil	32	198	230
Charles¹	46	117	163
Dorchester			
Whitetail	41	103	144
Sika	75	183	258
Frederick¹	113	413	526
Harford¹	37	168	205
Howard	19	80	99
Kent	43	160	203
Montgomery	62	181	243
Prince George's	21	88	109
Queen Anne's¹	56	287	343
St. Mary's¹	22	65	87
Somerset¹	34	161	195
Talbot	30	122	152
Washington	30	183	213
Wicomico			
Whitetail	35	143	178
Sika	4	6	10
Worcester¹	75	286	361
Total	979	3715	4694
¹ The late firearm season included Sunday January 11, 2015 in this county.			

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 overpopulation and habitat degradation.

Overall, Maryland's long-term data for these indicators show healthy, productive deer

Table 7
Maryland Reported Early Muzzleloader Season
Deer Harvest by County, 2014

County	Antlered	Antlerless	Total
Allegany	231	154	385
Anne Arundel	68	189	257
Baltimore	109	374	483
Calvert	41	137	178
Caroline	60	198	258
Carroll	124	332	456
Cecil	70	249	319
Charles	93	285	378
Dorchester			
Whitetail	108	256	364
Sika	261	278	539
Frederick	200	560	760
Garrett	363	237	600
Harford	108	337	445
Howard	50	170	220
Kent	133	254	387
Montgomery	93	304	397
Prince George's	62	185	247
Queen Anne's	98	265	363
St. Mary's	73	252	325
Somerset			
Whitetail	60	247	307
Sika	0	1	1
Talbot	67	271	338
Washington	184	310	494
Wicomico			
Whitetail	75	258	333
Sika	15	7	22
Worcester			
Whitetail	79	277	356
Sika	8	6	14
Total	2833	6393	9226

Table 8
Maryland Reported Late Muzzleloader Season
Deer Harvest by County, 2014-2015

County	Antlered	Antlerless	Total
Allegany	55	133	188
Anne Arundel	53	185	238
Baltimore	102	330	432
Calvert	28	101	129
Caroline	61	167	228
Carroll	74	292	366
Cecil	60	120	180
Charles	78	217	295
Dorchester			
Whitetail	33	112	145
Sika	81	140	221
Frederick	138	364	502
Garrett	86	186	272
Harford	59	192	251
Howard	41	141	182
Kent	57	234	291
Montgomery	91	277	368
Prince George's	67	181	248
Queen Anne's	60	250	310
St. Mary's	73	189	262
Somerset	26	91	117
Talbot	53	155	208
Washington	92	242	334
Wicomico			
Whitetail	44	146	190
Sika	3	6	9
Worcester	41	134	175
Total	1556	4585	6141

Table 9
Maryland Yearling White-tailed Deer Buck (1 1/2 Year Old) Vital Statistics by County, 2014-2015

County	%YearlingBuck	AveragePoints	BeamDiameter(mm)
Allegany	49	3.3	16.0
Anne Arundel	45	3.4	17.0
Baltimore	41	4.4	17.7
Calvert	36	4.6	19.2
Caroline	44	3.5	18.6
Carroll	56	3.5	17.4
Cecil	57	3.7	17.9
Charles	32	3.0	14.5
Dorchester	45	3.2	18.4
Frederick	65	4.1	17.4
Garrett	68	4.1	18.5
Harford	57	4.3	14.1
Howard	26	3.0	16.0
Kent	27	3.9	18.0
Montgomery	39	3.5	17.8
Prince George's	31	4.7	16.3
Queen Anne's	32	3.7	18.2
St. Mary's	40	4.3	17.5
Somerset	45	2.5	15.9
Talbot	46	3.3	18.1
Washington	64	4.1	19.3
Wicomico	32	3.1	15.3
Worcester	47	2.7	14.8
Statewide	47	3.7	17.3

populations across the state. However, results for 2014-2015 are somewhat mixed and possibly the new antler restriction regulation caused some confusion and/or apprehension among hunters (Table 9). These data will be monitored closely in the coming years to determine what effects the antler restriction may have.

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 2014. 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 reproductive study of white-tailed deer in Maryland during 2014-2015. QDMA staff and volunteers examined the reproductive tracts of 128 female deer harvested during the season and found that 81% 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, 27% were carrying one fetus, 70% carried two fetuses, and 3% were carrying three fetuses. The sex ratio of the 145 fetuses examined was 48% male and 52% female. Like previous years, peak breeding occurred during the first three weeks of November, with 63% bred during the first two weeks of the month. During this period, and just prior to it, bucks will be most active looking for receptive females to breed.

Dressed weights were also collected for harvested deer. Female fawns averaged 49 lbs in weight, yearlings 74 lbs, and adults weighed an average of 87 lbs. Male fawns averaged 50 lbs, yearlings 75 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 <http://www.marylandqdma.com>.

Archery Hunter Survey

The annual Archery Hunter Survey was continued for 2013-2014 (survey data from the 2014-2015 season are currently being analyzed and were not ready for the report). Archery hunters reported 20.8 bucks per 100 hours and 47.6 does per 100 hours in 2013-2014. Likewise,

they observed 2.3 adult does for every one adult buck and 0.62 fawns for every one adult doe in 2013-2014. The full report is available online at 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. 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 nonlethal 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. The Deer Project works with Baltimore City as well as 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 nonlethal and lethal methods is provided at: 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 II provides a summary of the total deer taken on Maryland public lands during the 2014-2015 hunting seasons.

Deer Population

Maryland's deer population prior to the 2014-2015 hunting season was estimated at 199,000 deer, down 12% from the 2013-2014 estimate of 227,000. 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 begun to decline. 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 10) 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 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

Table 10
Maryland Reported Deer Vehicular Mortality by County, 2014¹

County	Male	Female	Unknown	Total
Allegany	105	192	23	320
Anne Arundel	29	13	6	48
Baltimore	108	97	979	1,184
Calvert	29	32	157	218
Caroline	17	20	49	86
Carroll	218	398	115	731
Cecil	24	64	6	94
Charles	49	214	105	368
Dorchester	24	30	1	55
Frederick	334	548	5	887
Garrett	53	117	38	208
Harford	67	209	82	358
Howard	278	545	1,013	1,836
Kent	22	56	14	92
Montgomery	85	64	3,620	3,769
Prince George's	465	531	236	1,232
Queen Anne's	5	0	11	16
St. Mary's	31	35	0	66
Somerset	6	16	6	28
Talbot	82	59	15	156
Washington	145	299	34	478
Wicomico	2	1	0	3
Worcester	0	0	38	38
Total	2,178	3,540	6,553	12,271

¹Estimates 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.

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 33,500 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 2014, 8,482 deer were taken with DMPs compared to 8,969 deer in 2013 (Table 11), a decrease of about 5%. 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 2014, 1,633 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. Coyotes have increased in number in Washington, Allegany, and Garrett counties over the last five years. Very young fawns in the spring can be a food source for predators. 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 predating 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 declined in recent years to relatively low numbers, 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 predating 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, 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 has recently contracted with University of Delaware to begin a research project in Garrett County to examine predator abundance and fawn recruitment. Results will be available in coming years.

Table 11
Maryland Reported Crop Damage Mortality
by County, 2014

County	Male	Female	Total
Allegany	16	180	196
Anne Arundel	18	120	138
Baltimore	57	311	368
Calvert	14	73	87
Caroline	14	137	151
Carroll	100	530	630
Cecil	34	150	184
Charles	23	260	283
Dorchester			
Whitetail	33	362	395
Sika	24	257	281
Frederick	60	451	511
Garrett	95	712	807
Harford	35	300	335
Howard	18	253	271
Kent	19	151	170
Montgomery	35	356	391
Prince George's	52	252	304
Queen Anne's	39	172	211
St. Mary's	41	204	245
Somerset	41	300	341
Talbot	69	349	418
Washington	29	314	343
Wicomico			
Whitetail	44	323	367
Sika	3	12	15
Worcester			
Whitetail	57	613	670
Sika	0	1	1
Other	111	258	369
Total	1081	7401	8482

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 while the potential for mature antlered buck survival improves.

The 2014 Maryland Trophy Deer Contest for bucks taken in the 2012-2013 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 were accepted.

The 2015 Maryland Trophy Deer Contest for deer taken during the 2013-2014 hunting seasons will be held at the Country Life Outdoors Festival at the St. Mary's County Fairgrounds, August 28 – 30, 2015. All entries must be present at the 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
White-tailed Deer, Firearms, Typical Antlers		
194 0/8	Kent	Kevin Miller
185 7/8	Queen Anne's	Walter Lachewitz
184 0/8	St. Mary's	Larry Day
White-tailed Deer, Firearms, Non-Typical Antlers		
268 1/8	Charles	William Crutchfield, Jr.
248 7/8	Charles	Donza Watson
228 4/8	Montgomery	Jack Poole
White-tailed Deer, Bow, Typical Antlers		
183 3/8	Talbot	Petey Councill
178 1/8	Harford	Mark Rogowski
177 0/8	Baltimore	Richard Traband
White-tailed Deer, Bow, Non-Typical Antlers		
220 2/8	Prince George's	Yates Claggett
208 7/8	Anne Arundel	Robert Gertz
207 5/8	Talbot	Richard E. Stacey, Sr.
White-tailed Deer, Muzzleloader, Typical Antlers		
178 6/8	Baltimore	John Gueazdowski
171 3/8	Dorchester	Mark Bronder
170 1/8	Talbot	Kara Gowe
White-tailed Deer, Muzzleloader, Non-Typical Antlers		
229 6/8	Anne Arundel	Robert Brookman
200 4/8	Dorchester	Greg Glos
199 3/8	Talbot	William Shields
White-tailed Deer, Crossbow, Typical Antlers		
166 3/8	Baltimore	Wayne Wipfield
164 4/8	Kent	Douglas C. Wood
162 7/8	St. Mary's	Lawrence Copey
White-tailed Deer, Crossbow, Non-Typical Antlers		
180 3/8	Baltimore	Ronnie Hamilton
179 0/8	Somerset	Ernest Hughes
176 4/8	Frederick	Kenneth A. Brame
Sika Deer, Firearms		
75 7/8	Dorchester	James Howdyshell
72 5/8	Dorchester	David King, Jr.
71 2/8	Dorchester	Steve Brownley
Sika Deer, Bow		
69 6/8	Dorchester	Lenny Hyre
69 4/8	Dorchester	Larry Owen
68 1/8	Dorchester	Theresa Henriksen
Sika Deer, Muzzleloader		
74 6/8	Dorchester	Henry Williams, Jr.
73 4/8	Dorchester	John Eger
72 7/8	Dorchester	Milton Kern
Sika Deer, Crossbow		
67 4/8	Dorchester	David King
66 6/8	Dorchester	Ronald C. Taylor
52 4/8	Dorchester	Denis Witmer
Fallow Deer, Firearms		
176 7/8	Prince George's	Patrick A. Akins
Fallow Deer, Muzzleloader		
127 7/8	Talbot	Bill McCready

Results from the
**2014 MARYLAND TROPHY DEER CONTEST
 FOR THE 2012-2013 DEER HUNTING SEASONS**

Sponsored by the Maryland Bowhunters Society, the Maryland Chapter of the Quality Deer Management Association, and the Maryland Wildlife & Heritage Service.

White-tailed Deer Firearms Season, Typical Antlers

Score	County	Name
155 7/8	Frederick	Colby Williams
144 1/8*	Saint Mary's	Richard E. Long
139 7/8*	Saint Mary's	David Adkins
138 5/8*	Harford	Anthony Fiorini
137 7/8	Prince George's	James Thomas
132 4/8*	Saint Mary's	Joey Johnson, II
124 5/8*	Saint Mary's	Michael Dahlstrom
123 5/8*	Saint Mary's	Richard E. Long
121 6/8	Howard	Jeffrey Scarcia
116 4/8*	Prince George's	James Thomas
113 6/8	Carroll	Hunter N. Riddle
105 3/8	Cecil	Rachel Rhoades

***Historical**

White-tailed Deer Firearms Season, Non-Typical Antlers

Score	County	Name
187 1/8	Saint Mary's	Jason Long
163 7/8*	Saint Mary's	Robert Cook
145 1/8*	Prince George's	Bill Orrence
126 1/8*	Charles	Jim Matthews

***Historical**

White-tailed Deer Archery Season, Typical Antlers

Score	County	Name
162 2/8**	Harford	Larry A. Hillenbrand
158 0/8	Dorchester	Todd E. Egerspacher
154 3/8**	Charles	Jacob Hostetler
152 5/8**, *	St. Mary's	James Durst
152 2/8	Montgomery	Brian Ray
149 7/8	Charles	Donald Burch
148 2/8*	Charles	Michael Haniuk
147 6/8	Baltimore	Patrick Sullivan, Jr.
143 1/8*	Prince George's	Garland Wrenn
141 4/8*	Saint Mary's	Joey Johnson, II
140 0/8	Charles	Kurt Wright
133 3/8	Saint Mary's	Chad Day
127 0/8**	Saint Mary's	John Fenwick
115 7/8	Montgomery	Ron Fimiani
102 4/8	Saint Mary's	Charles Wilcox
81 5/8*	Howard	Ron Fimiani

* Historical **Crossbow

White-tailed Deer Archery Season, Non-Typical Antlers

Score	County	Name
171 2/8	Saint Mary's	Jamie Johnson
170 6/8**	Saint Mary's	Richard Nueslein
137 7/8	Montgomery	Vikki Vanwinkle
92 3/8	Charles	Robert Stewart

**Crossbow

White-tailed Deer Muzzleloader Season, Typical Antlers

Score	County	Name
152 3/8*	Charles	Skyler Martin
148 3/8	Howard	Dave Erat
142 5/8	Saint Mary's	Robbie Jameson
141 2/8*	Prince George's	Garland Wrenn
136 1/8	Charles	Joseph Schwab
122 2/8*	Saint Mary's	John Kachel

* Historical

Results from the
2014 MARYLAND TROPHY DEER CONTEST
FOR THE 2012-2013 DEER HUNTING SEASONS

-continued-

White-tailed Deer Muzzleloader Season, Non-Typical Antlers

Score	County	Name
184 6/8	Charles	Michael Vernon
174 3/8	Prince George's	Jeremy Bellows

Sika Deer, Firearms Season

Score	County	Name
65 7/8*	Dorchester	Jeffrey Jezek

*Historical

Sika Deer, Muzzleloader Season

Score	County	Name
69 6/8	Dorchester	Jeffrey Jezek

Sika Deer, Archery Season

Score	County	Name
75 4/8**	Dorchester	John Pippin
58 1/8*	Dorchester	Duane Riddle
57 5/8	Dorchester	Jason Long

* Historical **Crossbow

W.H. HENRY OF

Appendix I

Statewide Reported Antlered and Antlerless Deer Harvest by Public Hunting Area and County, 2014-2015

County/PublicLand	Antlered	Antlerless
Allegany		
Belle Grove WMA	1	0
Billmeyer WMA	8	3
Dan's Mountain WMA	107	64
Green Ridge SF	195	90
Rocky Gap SP	20	19
Sideling Hill WMA	8	2
Warrior Mountain WMA	84	60
Anne Arundel		
Anne Arundel County Managed Hunts	6	55
Crownsville CWMA	1	4
Davidsonville Receiver Station	4	30
Fort Meade	31	115
Smithsonian	5	28
Baltimore		
Gunpowder SP	20	117
Gwynnbrook WMA	5	8
Liberty Watershed	28	92
Loch Raven Watershed	86	206
Patapsco SP	19	61
Pretty Boy Watershed	76	172
Soldiers Delight NEA	10	71
Calvert		
Biscoe Gray Heritage Farm CWMA	5	5
Calvert Cliffs SP	4	7
Flag Pond CWMA	0	0
Hall Creek	3	1
Huntingtown Area	7	26
Caroline		
Chesapeake Forest Lands	4	18
Idylwild WMA	33	71
Tuckahoe SP	5	22

County/PublicLand	Antlered	Antlerless
Carroll		
Avondale WMA	4	12
Hahn CWMA	0	0
Hanover Watershed	9	40
Liberty Watershed	46	152
Maring CWMA	2	3
Morgan Run SP NEA	8	36
Patapsco SP	23	40
Sawmill-Spiegel CWMA	16	37
Woodbrook CWMA	7	12
Cecil		
C&D Canal	13	36
Earlville WMA	4	6
Elk Neck SF	10	40
Elk Neck SP	9	54
Fair Hill NRMA	7	142
Grove Farm WMA	10	22
Old Bohemia WMA	3	4
Charles		
Cedar Point WMA	16	46
Cedarville SF	3	11
Chapel Point SP	10	8
Chapman Residual	6	12
Chapman State Park	3	17
Chicamuxen WMA	6	7
Doncaster SF or Tayloes Neck	1	9
Indian Creek NRMA	1	15
Indian Head Naval Ordnance Area	12	49
Mattawoman NEA	2	6
Myrtle Grove WMA	15	25
Nanjemoy NRMA	4	14
Nanjemoy Creek WMA	0	1
Riverside WMA	0	3

County/PublicLand	Antlered	Antlerless
Dorchester		
Blackwater NWR		
whitetail	28	48
sika	136	205
Chesapeake Forest Lands		
whitetail	41	98
sika	41	27
Fishing Bay WMA		
whitetail	2	16
sika	61	108
LeCompte WMA		
whitetail	3	13
sika	0	7
Linkwood WMA		
whitetail	6	11
sika	1	0
Taylor's Island WMA		
whitetail	0	0
sika	8	9
Frederick		
Cunningham Falls SP Thurmont WS	36	57
Emmitsburg Watershed	6	16
Frederick City Watershed	66	177
Heaters Island WMA	2	9
Monocacy NRMA	40	75
South Mountain SP	19	40

Appendix I -continued-

Statewide Reported Antlered and Antlerless Deer Harvest by Public Hunting Area and County, 2014-2015

County/PublicLand	Antlered	Antlerless
Garrett		
4-H Center	1	7
Cunningham Swamp WMA	3	3
Deep Creek Lake SP	19	11
Frostburg Watershed	8	9
Garrett SF	84	54
Mount Nebo WMA	33	19
Potomac SF	48	32
Savage River SF	198	138
Youghiogheny Reservoir	5	5
Harford		
Aberdeen Proving Grounds	121	286
Gunpowder SP	3	19
Rock SP	3	12
Stoney Forest	5	2
Susquehanna SP	13	56
Howard		
Howard County Parks & Recreation Hunts	24	168
Hugg-Thomas WMA	7	21
Patapsco SP	29	79
Patuxent River SP	54	132
Tridelphia/Rocky Gorge (WSSC)	41	131
Kent		
Eastern Neck NWR	19	42
Millington WMA	27	73
Sassafras NRMA	10	21
Montgomery		
Cherrington CWMA	8	43
Mckee-Beshers WMA	50	118
Montgomery County M-NCPPC Lands	31	472
Patuxent River SP	46	96
Seneca - Schaeffer Farm	14	42
Seneca Creek SP	77	160
Strider WMA	6	19
Tridelphia/Rocky Gorge (WSSC)	34	107

County/PublicLand	Antlered	Antlerless
Prince George's		
Aquasco Farms Coop	7	21
Beltsville	78	175
Billingsly Tract (Patuxent River Park)	6	12
Brandywine Receiver Station	8	20
Cheltenham WMA	1	2
Gardner Road Park CWMA	2	3
Mill Town Landing NRMA	1	7
Nottingham	2	2
Patuxent WRC (Central & South Tracts)	15	52
Rosaryville SP	1	25
Spice Creek (Patuxent River) NRMA	5	3
Tridelphia/Rocky Gorge (WSSC)	2	33
Queen Anne's		
Tuckahoe SP	5	10
Wye Island NRMA	17	53
St. Mary's		
Elms' CWMA	6	2
Greenwell SP	3	11
Historic St. Mary's City CWMA	1	0
Newtowne Neck SP	15	16
Patuxent Naval Air Station	30	55
Point Lookout SP (Jacobs Property)	3	5
St. Inigoes SF	3	7
St. Mary's SP	18	42
Somerset		
Chesapeake Forest Lands		
whitetail	45	140
sika	1	0
Deal Island WMA		
whitetail	5	19
sika	1	0
Fairmount WMA	2	7
Maryland Marine Properties WMA	2	3
Pocomoke Sound WMA	2	4
South Marsh Island WMA	1	0
Wellington WMA	5	7
Talbot		
Seth SF	4	3

County/PublicLand	Antlered	Antlerless
Washington		
Ft. Frederick SP	1	7
Greenbrier SP	16	47
Hagerstown Watershed	4	11
Indian Springs WMA	81	52
Maryland Correctional Training Center	1	20
Prather's Neck WMA	2	6
Sideling Hill WMA	21	6
South Mountain SP	36	54
W. Maryland Ag Research Station (B)	0	16
Woodmont	26	21
Wicomico		
Chesapeake Forest Lands		
whitetail	70	142
sika	2	1
Ellis Bay WMA		
whitetail	4	7
sika	5	4
Johnson WMA	1	4
Nanticoke WMA		
whitetail	10	14
sika	3	5
Wetipquin WMA		
whitetail	0	0
sika	1	0
Wicomico SF		
whitetail	17	42
sika	1	0
Worcester		
Assateague NS		
whitetail	1	6
sika	21	25
Assateague SP		
whitetail	1	0
sika	2	8
Chesapeake Forest Lands	28	74
E.A. Vaughn WMA		
whitetail	13	47
sika	1	0
Hickory Point WMA	0	11
Isle of Wight WMA	0	2
Pocomoke River WMA	4	7
Pocomoke SF	40	102



State of Maryland
Lawrence J. Hogan Jr., Governor
Boyd K. Rutherford, Lieutenant Governor



Mark J. Belton, Secretary, Department of Natural Resources
Frank W. Dawson III, Deputy Secretary, Department of Natural Resources
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
<http://dnr2.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, Civil Rights Coordinator, Division of Bird Habitat Conservation, 4040 N. Fairfax Drive, Mail Stop 110, Arlington, VA, 22203.



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

Printed on Recycled Paper
July 2015

