

Doug Hotton Retires

The Wildlife and Heritage Service (WHS) Deer Project hosted a retirement party this past winter for one of its own. Doug Hotton, who is probably best known as the Deer Project Leader for WHS, retired after 30 years of dedicated service to the Maryland Department of Natural Resources.

Doug grew up on Maryland's Eastern Shore, where his family farmed for a living. Doug often mentioned the time he spent working on the family farm led to his strong connection to Maryland's farming community and to wildlife.

Doug received his undergraduate degree at University of Maryland and his master's degree at Auburn. During his tenure as Deer Project Leader for WHS, he represented Maryland as a member of the Southeastern Cooperative Wildlife Disease Study (SCWDS) steering committee, the Northeast Deer Technical Committee, and the Southeast Deer Technical Committee.

Doug is a Certified Wildlife Biologist by the Wildlife Society, and a member of the Maryland/Delaware chapter of the Wildlife Society.

He is an avid turkey and deer hunter, and bicycle riding enthusiast.

Doug worked in the field of wildlife management for over 33 years. He started his career as a game warden in rural Tennessee, where he chased poachers and enforced wildlife conservation laws. After a few years in Tennessee, he returned to Maryland and began working for the Wildlife & Heritage Service, which at the time was the Wildlife Administration.

During his career in Maryland, Doug worked as a district and regional biologist before taking over the deer project. Early on, he was involved with the state's wild turkey restoration efforts, worked with Peregrine Falcon restoration efforts, flew waterfowl surveys, and answered public concerns about suburban wildlife issues. He was also instrumental in public programs such as Tracks and Trails, Project Wild, and the Envirothon.

Doug spent the last 12 years of his wildlife career managing deer. He once mentioned that explaining the science of deer management to various public groups was a most rewarding part of his position. Under his tenure, Maryland's rapidly growing deer population was stabilized by enacting liberal antlerless seasons and bag limits. Doug also oversaw the creation of a leading urban/suburban deer management program, and he mentored the next generation of deer management professionals to take the helm in Maryland.

Doug officially retired on January 1, 2008, and he left some very big shoes to fill.

Introduction

The Maryland Department of Natural Resources (DNR) Deer Project is responsible for managing native white-tailed deer and exotic sika deer. The goals of the Deer Project are to ensure the present and future well-being of deer and their habitat; maintain deer populations at levels necessary to ensure compatibility with human land uses and natural communities; encourage and promote the recreational use and enjoyment of the deer resource; and inform and educate Maryland citizens concerning deer biology, management options, and the impacts that deer have on landscapes and people. The Deer Project utilizes broad-based deer management techniques to meet these diverse goals.

During the last couple of decades, the primary focus of the Deer Project has been to slow a rap-



idly growing deer population. While hunting remains the most cost-effective and efficient population control mechanism avail-

able 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 at the forefront of modern deer management, Maryland Deer Project staff annually attend deer conferences and are members of the Northeast Deer Technical Committee and Southeast Deer Technical Committee. Staff routinely share ideas and experiences with deer biologists and managers from other eastern states and provinces as they relate to current deer management and biology issues.

Maryland Public Attitudes Regarding Deer Management

Effective deer management in Maryland requires that the DNR remains credible and is viewed as such by the general public. A 2007 survey by Responsive Management, an independent public opinion and attitude research firm, found that 60% of the Maryland general public thought that the DNR was very credible and 27% thought it was somewhat credible. Only 2% thought it was not credible at all. A

total of 57% of the general public agreed or strongly agreed that Maryland does a good job of conserving its deer population while 13% disagreed or strongly disagreed that Maryland does a good job.

The majority of the Maryland public also recognizes the value of deer hunting as an effective management tool. The 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 deer to be managed in their area, the top 3 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 tools that deer hunting provides, it also provides significant economic benefits to Maryland. A recent survey sponsored by the Association of Fish and Wildlife Agencies found that deer hunting in 2006 generated over \$113 million in retail sales with a total multiplier effect of over \$190

million contributed to Maryland's economy. Deer hunting in Maryland supports nearly 2,300 jobs and generates \$71 million in salaries, wages, and business owner's income, \$15 million in state and local tax revenue, and \$16 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 wildlife management in the early 1900s, Maryland's deer population has expanded back into all habitats. State wildlife biologists, working hand-in-hand with private citizens, restocked the white-tailed deer to all available habitats in the state. Some native deer were trapped in western Maryland and released into unoccupied habitat. A few deer were obtained from other states and released across Maryland. The majority of deer stocked after World War II came from a large population inhabiting Aberdeen Proving Grounds in Harford County. When all unoccupied deer habitat was stocked, deer relocation efforts ended in the early 1960s.

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, 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 with antlered buck harvest.

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. Streets and home sites created in a wooded area produce habitat preferred by white-tailed deer. Open farm fields become better deer habitat as new homeowners plant trees and shrubs on their bare home site. Deer populations have escalated in these suburban land-scapes 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 and associated 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 6 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 exotic species at current levels 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 of 6 to 8 antler points. Professional guide services are available that cater exclusively to sika deer hunters. Recent survey figures indicate that approximately 4,600 hunters annually pursue sika deer for a total of 25,800 man days.

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 2 species, sika deer use forested wetlands, marshes, and the interface between these 2 habitats much more than white-tailed deer. Sika deer do not appear to rely on agricultural lands like 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 lower reproductive potential than white-tailed deer. Sika females tend to bear a single calf while white-tailed females over 1.5 years old frequently bear twin 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. DNR conducted a pilot study in 2007 on Assateague Island to see if radio transmitters can be effectively used to locate newborn calves to further our knowl-

edge on sika birth rates and calf survival. The transmitters, which are commonly used in white-tailed deer, need several modifications before they can be effectively used in sika deer.

Sika deer in Maryland appear to be long-lived compared to 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. One sika female was aged at 20+ years using the cementum annuli aging technique. 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. Most recently, Penn State University in conjunction with the National Park Service examined sika deer and white-tailed deer interactions on Assateague Island and their effects on the island habitat. Results

of the study will be available in 2008. Likewise, the Deer Project is cooperating with University of Delaware in Dorchester County to study dispersal and movements of juvenile sika stags in relation to survival and range expansion. The study is scheduled to be completed in 2010. Food habits, timing of reproduction, and calf survival are several of the questions yet to be addressed in future studies.

2007-2008 Deer Hunting Regulation and Legislation Changes There were several changes/additions made dur-

There were several changes/additions made during the spring of 2008 to enhance Maryland deer hunting starting in the 2008-2009 season:

- In Region A, private land deer hunters will have 2 days instead of 1 for antlerless deer harvest during the 2-week firearm season. Private land owners have asked for the additional day as a way to increase their ability to manage the deer herd on their property.
- Deer hunters in Region A will only be able to take a maximum of 2 antlerless deer from public land during the bow, muzzleloader, and firearm seasons combined. The deer population on public lands in

Table 1
Maryland Reported Antlered and Antlerless Deer Harvest for the Bow, Firearm, and Muzzleloader Hunting Seasons by County, 2007-2008

COUNTY		BOW			FIREARM		MU	IZZLELOA	DER		TOTAL	
COUNTY	Antlered	Antlerless	Sub Total	Antlered	Antlerless	Sub Total	Antlered	Antierless	Sub Total	Antlered	Antierless	Grand Total
Allegany	605	358	963	1473	885	2358	400	524	924	2478	1767	4245
Anne Arundel	296	630	926	368	825	1193	141	323	464	805	1778	2583
Baltimore	797	1716	2513	633	1595	2228	298	751	1049	1728	4062	5790
Calvert	173	271	444	282	591	873	114	219	333	569	1081	1650
Caroline	141	262	403	479	1088	1567	132	397	529	752	1747	2499
Carroll	480	681	1161	993	1964	2957	301	600	901	1774	3245	5019
Cecil	272	515	787	535	1278	1813	161	364	525	968	2157	3125
Charles	347	591	938	817	1343	2160	274	581	855	1438	2515	3953
Dorchester												
White-tailed	134	211	345	632	1421	2053	141	338	479	907	1970	2877
Sika	139	197	336	421	471	892	277	217	494	837	885	1722
Frederick	598	874	1472	1540	2839	4379	442	1047	1489	2580	4760	7340
Garrett	657	458	1115	1641	971	2612	432	600	1032	2730	2029	4759
Harford	368	709	1077	436	1071	1507	200	458	658	1004	2238	3242
Aberdeen Proving Ground	79	280	359	100	111	211	21	68	89	200	459	659
Howard	292	704	996	302	872	1174	107	323	430	701	1899	2600
Kent	210	364	574	608	1346	1954	189	438	627	1007	2148	3155
Montgomery	495	1258	1753	556	1721	2277	215	563	779	1266	3542	4808
Prince George's	241	400	641	370	764	1134	144	329	474	755	1493	2248
Queen Anne's	275	385	660	660	1558	2218	224	473	697	1159	2416	3575
St. Mary's	290	501	791	542	1089	1631	199	463	662	1031	2053	3084
Somerset												
White-tailed	150	238	388	605	1517	2122	117	338	455	872	2093	2965
Sika	1	0	1	0	1	1	0	0	0	1	1	2
Talbot	170	338	508	503	1341	1844	157	351	508	830	2030	2860
Washington	713	1044	1757	1990	3458	5448	440	1175	1615	3143	5677	8820
Wicomico												
White-tailed	211	325	536	832	1633	2465	140	437	577	1183	2395	3578
Sika	6	6	12	16	9	25	3	7	10	25	22	47
Worcester												
White-tailed	195	389	584	1073	2575	3648	175	513	688	1443	3477	4920
Sika	7	17	24	24	28	52	4	3	7	35	48	83
TOTAL	8342	13722	22064	18431	34365	52796	5448	11900	17348	32221	59987	92208

Figure 1
Maryland Reported Deer Harvest for the Bow,
Firearm, and Muzzleloader Seasons, 1998-2007

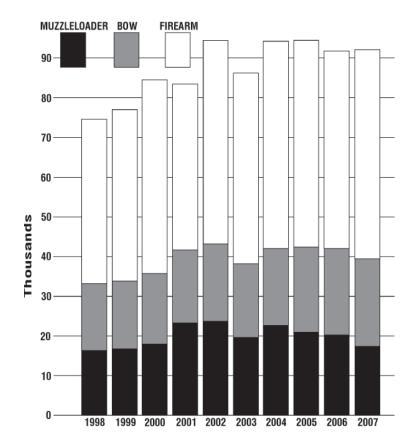
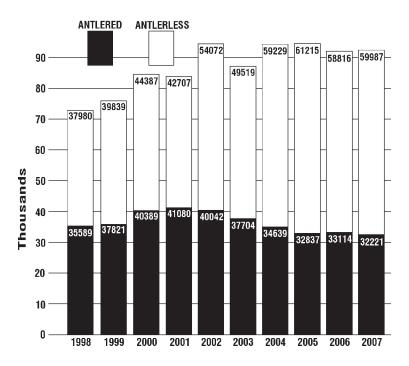


Figure 2
Maryland Reported
Antlered and Antlerless Deer Harvest, 1998-2007



Region A has been under target levels for several years and reducing the bag limit will help bring the population up slightly.

- In Region B, all hunters will be permitted to use crossbows during the vertical bow season (9/15 1/31) in the suburban archery zone (Anne Arundel, Baltimore, Howard, Montgomery, Prince George's Counties). Expanding the use of crossbows in the suburban zone will increase hunting opportunities and increase the deer harvest in the area of the state where it is needed most.
- To increase hunting opportunities for our junior hunters, the junior day deer bag limit will be independent of the firearm season bag limit. In Region A, junior hunters who bagged a buck on the junior day could not hunt again until the last day of the 2-week firearm season (the antlerless day). Likewise, a junior hunter in Region B who bagged a buck on the junior day would have to take 2 does before being able to take a buck during the 2-week firearm season. Removing this restriction allows junior hunters to fully participate with their family during the regular 2-week firearm season regardless of their success on the junior day.
- To increase hunter safety, hunters who use ground blinds will be required to display fluorescent orange outside the ground blind. This applies to all deer hunters who would be required to wear fluorescent orange if they were hunting without a blind.
- Washington County has expanded Sunday bowhunting to include the last 3 Sundays in October and first 2 Sundays in November. Harford County will now permit Sunday hunting on the first Sunday of November and first Sunday of the 2-week deer firearm season.

More details of the new regulations will be available in the 2008-2009 Guide to Hunting and Trapping that comes with the hunting license.

2007-2008 Deer Harvest

Maryland deer hunters harvested 92,208 deer in 2007-2008; a less than 1% increase from the 91,930 deer taken in 2006-2007 (Table 1, Figure 1). The harvest was comprised of 32,221 antlered deer and 59,987 antlerless deer (Figure 2). The antlerless harvest included 48,599 does and 11,388 button bucks. Compared to 2006-2007, the harvest of antlered deer dropped 2.6% while the antlerless harvest increased 2.0%. During 2007-2008, Maryland deer hunters in cooperation with Farmers and Hunters Feeding the Hungry again donated over 60 tons of venison to those less fortunate.

Table 2 Maryland Reported Crossbow Deer Harvest by County, 2007-2008

COUNTY	Cros	sbow Sea	ison ¹	All Other Times ²			Grand
0001111	Antlered	Antlerless	Total	Antlered	Antlerless	Total	Total
Allegany	21	35	56	76	39	115	171
Anne Arundel	12	37	49	41	69	110	159
Baltimore	24	81	105	108	218	326	431
Calvert	5	17	22	16	31	47	69
Caroline	3	9	12	14	25	39	51
Carroll	12	27	39	44	54	98	137
Cecil	5	23	28	31	44	75	103
Charles	12	38	50	40	69	109	159
Dorchester							
White-tailed	1	15	16	23	30	53	69
Sika	13	23	36	10	18	28	64
Frederick	20	46	66	59	94	153	219
Garrett	32	47	79	81	49	130	209
Harford	22	42	64	38	92	130	194
Aberdeen Proving Ground	3	6	9	11	31	42	51
Howard	10	33	43	40	103	143	186
Kent	6	16	22	23	27	50	72
Montgomery	14	65	79	57	171	228	307
Prince George's	13	26	39	21	53	74	113
Queen Anne's	7	17	24	25	29	54	78
St. Mary's	8	35	43	26	54	80	123
Somerset							
White-tailed	5	13	18	20	46	66	84
Sika	0	0	0	1	0	1	1
Talbot	5	17	22	27	51	78	100
Washington	28	60	88	88	105	193	281
Wicomico							
White-tailed	5	15	20	20	32	52	72
Sika	0	1	1	0	1	1	2
Worcester							
White-tailed	4	14	18	27	33	60	78
Sika	0	1	1	1	0	1	2
TOTAL	290	759	1049	968	1568	2536	3585

¹ Crossbow season was October 1-15, 2007 and January 15-31, 2008.

Bow Season

The Maryland bow season opens in mid-September and closes at the end of January. In 2007-2008, approximately 49,000 residents and 7,300 nonresidents purchased a bow stamp to archery hunt for deer. Maryland bowhunters typically hunt for about 13 days each season and approximately 35% of bowhunters take 1 deer or more each year.

In 2007-2008:

• The bow harvest totaled 22,064 deer compared to

Table 3 Maryland Reported Sunday Hunting Deer Harvest by County, 2007-2008

09 County, 2007-2000						
		Bow Seaso	n	Firearm Season		
COUNTY	Antlered	Antierless	Total	Antlered	Antlerless	Total
Allegany ¹	10	8	18	123	6	129
Anne Arundel ¹	12	15	27	33	70	103
Calvert ¹	8	7	15	34	93	127
Caroline ¹	5	13	18	58	122	180
Cecil 1	11	9	20	46	98	144
Charles ¹	11	15	26	92	148	240
Dorchester ²						
White-tailed	14	19	33	72	174	246
Sika	7	10	17	59	47	106
Garrett ¹	9	1	10	144	3	147
Kent ¹	7	14	21	65	121	186
Montgomery 1	14	20	34	45	114	159
Queen Anne's¹	8	7	15	77	156	233
St. Mary's ²	16	41	57	66	145	211
Somerset ²	12	19	31	63	145	208
Talbot ¹	8	14	22	64	156	220
Washington ¹	9	13	22	174	268	442
Wicomico ²						
White-tailed	18	16	34	111	141	252
Sika	0	0	0	1	1	2
Worcester ²						
White-tailed	10	40	50	106	253	359
Sika	0	1	1	1	7	8
TOTAL	189	282	471	1434	2268	3702

¹Bow season was open on Sunday November 4, 2007. Firearm season was open on Sunday November 25, 2007.

21,991 in 2006-2007, an increase of less than 1% (Table 1).

- There were 8,342 antlered deer (38%) and 13,722 antlerless deer harvested with vertical and cross-bows
- The antlered harvest decreased 3.4% and the antlerless harvest (11,700 does and 2,022 button bucks) increased 2.7% over the previous year.
- Crossbow hunters took 290 antlered deer and 759 antlerless deer during the crossbow season (Table 2).
- Eighty-four percent of the archery harvest came from private lands.
- Bowhunters took 471 deer (189 antlered, 282 antlerless) on Sundays open to bowhunting on private land across 17 counties (Table 3).

² All other times include deer taken by disabled hunters with crossbow permits, 65 or older hunters permitted to use a crossbow anytime, and deer taken with a crossbow during the muzzleloader and firearm seasons.

² Bow season was open on Sundays October 14, October 21, October 28, November 4, and November 11, 2007. Firearm season was open on Sunday November 25, 2007.

Table 4
Maryland Reported 2 Week Firearm Season Deer
Harvest by County, 2007-2008

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COUNTY	Antlered	Antierless	Total
Allegany	1399	823	2222
Anne Arundel	328	735	1063
Baltimore	538	1354	1892
Calvert	244	522	766
Caroline	422	942	1364
Carroll	857	1645	2502
Cecil	459	969	1428
Charles	703	1148	1851
Dorchester			
White-tailed	537	1257	1794
Sika	411	461	872
Frederick	1316	2408	3724
Garrett	1500	872	2372
Harford	379	881	1260
Aberdeen Proving Ground	8	30	38
Howard	233	495	728
Kent	507	1128	1635
Montgomery	443	1164	1607
Prince George's	325	632	957
Queen Anne's	575	1310	1885
St. Mary's	487	979	1466
Somerset			
White-tailed	514	1290	1804
Sika	0	1	1
Talbot	451	1186	1637
Washington	1780	2986	4766
Wicomico			
White-tailed	697	1396	2093
Sika	15	9	24
Worcester			
White-tailed	916	2207	3123
Sika	17	22	39
TOTAL	16061	28852	44913

Firearm Season

The state firearm season is a 2-week season that begins the Saturday after Thanksgiving. In Region B, hunters have an additional 2 days of firearm hunting in early January. Deer taken during managed hunts outside the normal deer seasons are also counted as firearm kills. Approximately 60,000 hunters pursue deer with a firearm each year in Maryland. The average deer hunter spends about 5 days each year pursuing deer with a firearm and approximately 45% of firearm hunters bag at least 1 deer each year.

In 2007-2008:

- The firearm harvest totaled 52,796 compared to 49,805 in 2006-07, an increase of 6.0% (Table 1).
- There were 18,431 antlered deer (35%) and 34,365 antlerless deer harvested with firearms.
- The antlered harvest increased 3.0% and the antlerless harvest (27,186 does and 7,179 button bucks) increased 7.7% over the previous year.
- The majority (85%) of the firearm season harvest occurs during the 2-week season that begins the Saturday after Thanksgiving (Table 4).
- Firearm hunters took 57% of all deer harvested in Maryland compared to 54% last season. (Figure 1).
- The majority (87%) of the firearm harvest was taken on private property.
- Firearm hunters bagged 3,702 deer (1,434 antlered and 2,268 antlerless) on Sunday, November 25, 2007 across private lands in 17 counties (Table 3).
- The 2-day January firearm season in Region B was held on January 4 and 5, 2008 (Table 5).
 Hunters took 4,636 deer during this late season.
 Almost 80% of the harvest was antlerless deer.
- Junior deer hunters bagged 2,211 deer (1,237 antlered and 974 antlerless) on the Junior Hunt day held November 10, 2007 (Table 6).

Muzzleloader Season

Like previous years, the 2007-2008 statewide, either sex muzzleloader season included 3 days in October (October 18 - 20) and 2 weeks during late December (December 15 - 29). Region B continued with a 6-day antlerless only muzzleloader season (October 22 - 27) to provide for additional deer population management through antlerless deer harvest.

Resident and non-resident hunters purchased approximately 59,600 and 7,900 muzzleloader stamps, respectively. The stamps are required to hunt deer with a muzzleloader or to hunt deer with

Table 5 Maryland Reported 2 Day January Firearm Season Deer Harvest by County, 2007-2008

Table 6 Maryland Reported Junior Day Deer Harvest by County, 2007-2008

COUNTY	Antlered	Antlerless	Total
Anne Arundel	26	70	96
Baltimore	45	185	230
Calvert	23	60	83
Caroline	31	125	156
Carroll	60	268	328
Cecil	38	185	223
Charles	62	153	215
Dorchester	33	121	154
Frederick	104	369	473
Harford	31	158	189
Aberdeen Proving Ground	2	3	5
Howard	21	117	138
Kent	34	156	190
Montgomery	55	214	269
Prince George's	31	97	128
Queen Anne's	46	217	263
St. Mary's	32	81	113
Somerset	37	169	206
Talbot	27	131	158
Washington	68	378	446
Wicomico	62	164	226
Worcester	71	276	347
TOTAL	939	3697	4636

COUNTY	Antlered	Antlerless	Total
Allegany	74	62	136
Anne Arundel	14	14	28
Baltimore	47	22	69
Calvert	15	8	23
Caroline	26	21	47
Carroll	75	50	125
Cecil	36	25	61
Charles	41	25	66
Dorchester			
White-tailed	60	42	102
Sika	9	9	18
Frederick	120	62	182
Garrett	141	99	240
Harford	26	15	41
Aberdeen Proving Ground	2	1	3
Howard	16	14	30
Kent	39	29	68
Montgomery	41	62	103
Prince George's	13	18	31
Queen Anne's	38	30	68
St. Mary's	23	28	51
Somerset	54	57	111
Talbot	25	24	49
Washington	142	94	236
Wicomico			
White-tailed	73	73	146
Sika	1	0	1
Worcester	86	90	176
TOTAL	1237	974	2211

Table 7 Maryland Reported Early Muzzleloader Season Deer Harvest by County, 2007-2008

Table 8 Maryland Reported Late Muzzleloader Season Deer Harvest by County, 2007-2008

COUNTY	Antlered	Antierless	Total
Allegany	295	169	464
Anne Arundel	81	165	246
Baltimore	164	308	472
Calvert	65	110	175
Caroline	74	222	296
Carroll	210	322	532
Cecil	110	188	298
Charles	135	282	417
Dorchester			
White-tailed	108	242	350
Sika	225	137	362
Frederick	281	564	845
Garrett	328	243	571
Harford	129	226	355
Aberdeen Proving Ground	18	57	75
Howard	63	153	216
Kent	147	226	373
Montgomery	121	273	394
Prince George's	67	177	244
Queen Anne's	149	222	371
St. Mary's	108	267	375
Somerset	75	204	279
Talbot	96	169	265
Washington	324	636	960
Wicomico			
White-tailed	79	263	342
Sika	1	3	4
Worcester			
White-tailed	121	325	446
Sika	4	3	7
TOTAL	3578	6156	9734

COUNTY	Antlered	Antlerless	Total
Allegany	105	355	460
Anne Arundel	60	158	218
Baltimore	134	443	577
Calvert	49	109	158
Caroline	58	175	233
Carroll	91	278	369
Cecil	51	176	227
Charles	139	299	438
Dorchester			
White-tailed	33	96	129
Sika	52	80	132
Frederick	161	483	644
Garrett	104	357	461
Harford	71	232	303
Aberdeen Proving Ground	3	11	14
Howard	44	170	214
Kent	42	212	254
Montgomery	94	290	384
Prince George's	77	152	229
Queen Anne's	75	251	326
St. Mary's	91	196	287
Somerset	42	134	176
Talbot	61	182	243
Washington	116	539	655
Wicomico			
White-tailed	61	174	235
Sika	2	4	6
Worcester	54	188	242
TOTAL	1870	5744	7614

a bow during the muzzleloader season. Maryland muzzleloader hunters pursue deer for about 2.6 days each during the October season and for about 3.4 days in the late 2-week season. Approximately 34% of blackpowder hunters are successful in harvesting at least 1 deer.

In 2007-2008:

- The muzzleloader harvest totaled 17,348 deer compared to 20,134 in 2006-07, a decrease of 13.8% (Table 1).
- There were 5,448 antlered deer (31%) and 11,900 antlerless deer harvested with muzzleloaders.
- The antlered harvest decreased 17.3% and the antlerless harvest (9,713 does and 2,187 button bucks) decreased 12.1% over the previous year.
- The October muzzleloader harvest totaled 9,734 deer (3,578 antlered and 6,156 antlerless), a 26% decrease over the previous year's harvest of 13,190 deer (Table 7).
- The December muzzleloader harvest totaled 7,614 deer (1,870 antlered and 5,744 antlerless), a 10% increase over the previous year (Table 8).
- The October muzzleloader season accounted for 56% of the total muzzleloader harvest for the year.
- Muzzleloader hunters took 88% 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 Deer Project began revising the 10-year plan in 2007 and will complete the process during the summer of 2008. Through April 2008, 2 stakeholder meetings and 7 public meetings were held and public comments were solicited online. An extensive phone survey of 400 Maryland hunters, 400 Maryland general public, and 400 Maryland landowners was also conducted by Responsive Management, Inc. to gauge public opinion about deer and deer management. Writing of the new plan is near completion and a draft plan will be provided for public review/comment before being finalized.

Deer Research and Data Use

The 2007-2008 deer season marked the second year that DNR staff collected deer age and biological data under a modified protocol. Instead of only collecting data during the 2-week firearm season, as was done in the past, DNR staff and volunteers collected half of their samples during early

Table 9
Maryland Yearling Buck (1 1/2 Year Old) Vital Statistics
by County, 2007-2008

COUNTY	% Yearling Bucks	Average Points	Average Beam Diameter (mm)
Allegany	75	4.0	17.3
Anne Arundel	49	4.9	19.6
Baltimore	53	4.6	18.5
Calvert	59	3.7	18.3
Caroline	74	4.5	19.4
Carroll	68	4.6	19.7
Cecil	52	5.0	20.5
Charles	64	3.5	17.6
Dorchester	63	4.5	20.2
Frederick	66	4.4	18.7
Garrett	80	4.4	19.4
Harford	58	5.3	21.2
Howard	78	4.0	18.1
Kent	62	5.0	20.9
Montgomery	59	4.9	19.6
Prince George's	69	4.2	18.3
Queen Anne's	50	4.9	19.9
St. Mary's	41	3.8	18.0
Somerset	63	3.9	18.1
Talbot	60	4.6	20.9
Washington	74	4.3	19.7
Wicomico	53	4.1	19.6
Worcester	48	4.9	20.7

muzzleloader season and half during the 2-week firearm season. Splitting the sample gives a better estimate of the herd age distribution since nearly half of the yearly harvest now occurs before the 2-week firearm season. The early season harvest (bow and early muzzleloader) contains a higher percentage of yearling bucks than does the firearm season and later. An accurate estimate of the yearling buck composition is important for the deer population model currently used by the Deer Project.

In 2007-2008, 4,488 deer were examined at butcher shops across the state. Sex and age of each deer was recorded along with antler measurements 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 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 1 year old), yearlings (approximately 1.5 years old) or adults (2 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 9).

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.

Maryland experienced a significant HD outbreak during the 2007-2008 season. Numerous dead deer that were suspected of dying from HD were reported from the Eastern Shore to as far west as Allegany County. Likewise, all of Maryland's neighboring states reported HD outbreaks as well. Upper Eastern Shore and southern Maryland counties appear to have been hardest hit in Maryland. However, deer populations rebound quickly and while numbers may remain below normal for several years, the recent outbreak is not expected to have long-term impacts on the deer population in these counties.

CWD Research

Chronic Wasting Disease (CWD) is a disease of the central nervous system that causes death in deer, elk, and moose (cervids). CWD has historically been a disease of the West, although it now is east of the Mississippi River in Wisconsin, Illinois, New York and West Virginia. Since 2002, nearly 4,500 samples have been collected from Maryland deer and tested for CWD. Most recently, approximately 950 hunter-killed deer from the 2007-2008 season tested negative for the disease. Testing in Maryland is a precautionary measure and CWD has not been found in the state.

West Virginia detected CWD in free-ranging deer during 2005 in Hampshire County, approximately 11 miles south of the Maryland-West Virginia border of Allegany County. To date, West Virginia DNR has found 23 deer with the disease. In response to their discovery, Maryland's Deer Project has increased CWD sampling rates in Allegany County, and each year since 2005 have collected samples from hunter-killed deer, road kill deer, and deer taken under Deer Management Permits. A total of 105 samples were tested from Allegany County in 2007.

Bowhunter Survey

The Deer Project, in cooperation with the Furbearer Project, continued the annual Bowhunter Survey in 2006-2007. The Bowhunter Survey provides observational data about furbearers, deer

and other wildlife. Each year, a random sample of 10,000 to 20,000 bowhunters are sent the survey and asked to participate. Bowhunters 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 a bowhunter and don't receive a survey but would like to participate, contact Robert Colona (410-221-8838, Ext 101) or download the survey from the DNR website (http://www.dnr.maryland.gov). The complete results for these surveys pertaining to deer can be found on the DNR website or by contacting Brian Eyler (301-842-0332).

In the 2006-2007 survey, Maryland's bowhunters recorded the following statewide information regarding deer.

- Statewide White-tailed Deer Sex Ratio- 1 adult buck per 2.5 adult does. The Ridge & Valley Region had the highest sex ratio with 1 adult buck per 3.2 does and the Eastern Coastal Region contained the lowest sex ratio of 1 adult buck per 2.1 adult does.
- Statewide White-tailed Deer Reproductive Rate. 63 fawns per each adult doe. The most productive section of the state was the Appalachian Plateau Region (.78) and the least productive section was the Piedmont Region (.59).

DNR and Maryland Counties Cooperative Deer Management

Since 1994, Maryland DNR has promoted deer management cooperative relationships with Maryland counties. Montgomery County and Howard County both developed their own deer management units manned by professional staff. Maryland DNR works with both counties regarding the evolution of countywide deer management efforts. Both counties have implemented nonlethal and lethal deer management programs while maintaining public support and DNR cooperative advice and guidance. 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.

The Deer Project is currently working with Baltimore County officials, who are in the early stages of creating a deer management plan. Maryland DNR encourages other counties to follow the lead of Montgomery and Howard counties to develop a deer management cooperative relationship with the Deer Project. Interested county staff 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 with different opinions on deer management issues. This includes the large suburban corridor in the midsection of the state.

Maryland is developing rapidly with its increasing human population. Conversion of forested and agricultural lands into housing developments improves habitat conditions for deer. Developed areas experience improved deer survival and population increases. More deer lead to a greater number of negative interactions with suburban residents, though, resulting in a decreased tolerance of deer.

Safety concerns and social considerations in urban areas often prevent the use of many lethal deer population control measures. Non-lethal control measures, most often used in developed areas, can help reduce deer problems but they do not eliminate them. They also do not address the troubles that result from high deer numbers. Increased deer-vehicle collisions, damage to ornamental plants and gardens, and damage to natural habitat are some problems that have resulted from this hands-off style of deer management.

Nonlethal methods can help reduce some of the damage that deer cause and serve to increase public tolerance of deer. When public tolerance levels have been surpassed, lethal methods are often considered. Certain lethal methods can be applied to decrease the numbers of deer in suburban areas and reduce deer problems.

Effective Suburban Deer Management

Some deer management techniques are more effective than others at resolving deer-human conflicts. No single method can completely resolve all deer problems. Some are applicable only in certain situations. Often, a combination of non-lethal and lethal techniques is applied to help resolve deer problems, particularly in suburban areas. The Deer Project will continue to evaluate new techniques for their effectiveness and suggest proven methods to 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 pro-

vided at: www.dnr.state.md.us/wildlife/ddmtintro.asp 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 Deer Project 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 1 shows the total deer taken on Maryland public lands during the 2007-2008 hunting seasons.

Deer Population

Maryland's deer population prior to the 2007-2008 hunting season was estimated at 228,000 deer, a slight decline of about 2.5% over the 2006-2007 estimates of 234,000. Trends in deer abundance are commonly monitored using harvest estimates and 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.

Table 10 Maryland Reported Deer Vehicular Mortality by County, 2007 ¹

COUNTY	Male	Female	Unknown	Total
Allegany	39	52	3	94
Anne Arundel	9	2	181	192
Baltimore	49	78	1217	1344
Calvert	22	9	193	224
Caroline	11	12	20	43
Carroll	161	291	58	510
Cecil	5	10	0	15
Charles	6	1	252	259
Dorchester				
White-tailed	16	23	67	106
Sika	0	0	24	24
Frederick	43	208	520	771
Garrett	42	111	68	221
Harford	65	211	66	342
Howard	228	447	604	1279
Kent	22	31	11	64
Montgomery	22	32	2116	2170
Prince George's	3	1	635	639
Queen Anne's	1	0	33	34
St. Mary's	64	136	10	210
Somerset	13	21	2	36
Talbot	40	49	4	93
Washington	227	118	24	369
Wicomico	5	1	10	16
Worcester	3	1	35	39
TOTAL	1096	1845	6153	9094

¹ 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.

Table 11
Maryland Reported Crop Damage Mortality
by County, 2007

		ı	
COUNTY	Male	Female	Total
Allegany	29	233	262
Anne Arundel	18	102	120
Baltimore	59	344	403
Calvert	11	41	52
Caroline	4	61	65
Carroll	45	239	284
Cecil	37	92	129
Charles	17	95	112
Dorchester	14	157	171
Frederick	40	272	312
Garrett	82	545	627
Harford	30	196	226
Howard	7	42	49
Kent	16	42	58
Montgomery	57	245	302
Prince George's	40	157	197
Queen Anne's	17	54	71
Somerset	18	184	202
St. Mary's	40	187	227
Talbot	47	210	257
Washington	35	198	233
Wicomico	60	233	293
Worcester	104	556	660
Other	72	228	300
TOTAL	899	4713	5612

Non-Hunting Mortality

Factors that cause mortality in deer, other than hunting, include disease, fawn predation by predators such as bears and coyotes, 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, a major 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 estimate there are approximately 25,000 deer-vehicle collisions in Maryland each year.

When deer are causing damage to commercial crops, farmers can obtain a Deer Management Permit (DMP) from DNR. DMPs allow farmers to harvest antlerless deer on their property outside of the regular state hunting seasons and bag limits. In 2007, 5,612 deer were taken with DMPs compared to 4,732 deer in 2006 (Table 11), an increase of about 19%. Liberal antlerless bag limits for deer hunting in recent years have decreased the number of deer traditionally taken using DMPs. However, other factors including weather and market prices for crops can influence how many deer farmers try to control each year using the DMP process.

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 2007, 653 deer were harvested via sharp-shooting in Maryland. Sharp-shooting is performed by deer cooperators licensed by MD 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 5 years. Very young fawns in the spring can be a food source for them. 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 effective or 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 western Maryland deer population. The recent decline in western Maryland's deer population can be largely attributed to the relatively high percentage of antlerless deer being 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 2 - 4 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 the coyote and bear situation in Maryland and develop alternative management strategies if the need arises.

Trophy Deer Contest

Each year the Maryland Bowhunters Society 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 maximum size and are in good health.

The 2007 Trophy Deer Contest for bucks taken in the 2005-06 hunting season was held during the Call of the Wild Sportsman's Show at the Frederick Fairgrounds. The results of the 2007 contest are listed on the following pages.

The 2008 Maryland Trophy Deer Contest for deer taken during the 2006-07 hunting seasons will be held during the Southern Maryland Hunting and Outdoor Expo at the Charles County Fairgrounds on August 16 and 17. The Boone and Crockett system score antlers and both white-tailed and sika entries are accepted. All entries must be present at the contest.

Maryland All Time Trophy Records

Maryland's best white-tailed deer with typical antlers came from Kent County. It measured 194 0/8 and was bagged during firearm season in November 2002 by Kevin C. Miller. The best non-typical antlered white-tailed deer totaled 268 3/8, which Billy Crutchfield, Jr bagged in Charles County during firearm season in December 2007. The Crutchfield buck bested the previous Maryland record non-typical buck, taken in 1987, by 40 Boone & Crockett points. For thirty years, the record non-typical buck taken by Jack Poole reined as the state record. Jack Pool took this unique buck in Montgomery County during firearm season on November 1987.

The best typical white-tailed deer taken with archery equipment came from Talbot County and measured 183 3/8. Petey Councell bagged it on November 11, 1994. Yates Clagett took the best non-typical white-tailed deer with archery equipment in Prince George's County. It measured 220 2/8 and was The best typical white-tailed deer taken with a muzzleloader measured 178 6/8. John Gweazdowski in Baltimore County took it on January 2, 1994. William Shields bagged the best non-typical taken with a muzzleloader on December 7, 2001. Bill took the deer in Talbot County and it totaled 199 3/8.

All top sika deer were taken in Dorchester County. A sika firearm harvest taken by James Howdyshell on November 30, 1994 measured 75 7/8. The best sika deer taken with a bow totaled 68 1/8 and was bagged by Theresa Henriksen on October 10, 1996. Henry Williams Jr. tagged the best sika harvested with a muzzleloader on December 19, 1992. This sika deer measured 74 6/8.



Results from the 2007 MARYLAND TROPHY DEER CONTEST FOR THE 2005-2006 DEER HUNTING SEASONS

Sponsored by the Maryland Bowhunters Society and the Maryland Wildlife & Heritage Service

White-tailed Deer Firearm Season, Typical Antlers

Score	County	Name
171 7/8	Prince George's	Carl Loveless, Jr.
167 5/8	Wicomico	John Heaphy
161 6/8	Anne Arundel	Mark Watkowski
160 0/8	Dorchester	John P. Heisey, Jr.
152 0/8	Worcester	Richard Ahmer
150 0/8	Washington	Jonathan Miller
146 1/8	Washington	Ghon Eckley
144 2/8	Montgomery	Mike Hixon
143 7/8*	Prince George's	Frank Furr
142 2/8	Frederick	Carol Poole
140 7/8	Cecil	Paul Crothers
136 1/8	Carroll	Camet B. Haulsee
135 0/8	Queen Anne's	Rutledge Webb
128 5/8	Carroll	Jessica Dixon
127 1/8	Howard	Josh White
118 6/8	Montgomery	Joe Hagelin, Jr.
118 5/8	Dorchester	Brandon Heisey
118 4/8*	Washington	Edward Yetter
117 4/8	Anne Arundel	Charles Hall
115 7/8	Frederick	Tim Beaton
115 4/8	Anne Arundel	Jamie Roell
114 7/8	Allegany	Tommy L. Henerman
110 3/8	Frederick	Dakota Bittner
103 7/8	Anne Arundel	John Ambrose
* Historical		

White-tailed Deer Firearm Season, Non-Typical Antlers

Score	County	Name
218 2/8	Wicomico	M. Carrol Huston, Jr.
173 6/8	Worcester	Louis Murray
172 2/8	Dorchester	Raymond Henderson, Jr.
167 3/8	Wicomico	Robert Pedrick
162 2/8	Kent	Michael Butala
158 1/8	Prince George's	William Vermillion
140 3/8	Montgomery	Jeff Irwin
139 7/8	St. Mary's	Tom Paul
107 3/8	Washington	Edward Yetter

White-tailed Deer Bow Season, Typical Antlers

Score	County	Name
167 5/8	St. Mary's	Lawrence Copsey
155 7/8**	Prince George's	Glen Brown
141 7/8	Anne Arundel	Bob Carlson
132 1/8	Prince George's	Carl Loveless, Sr.
124 0/8	Montgomery	Sean Kenney
121 4/8	Frederick	Holmes Stoner
120 3/8*	Frederick	Todd Crosco
119 7/8	Montgomery	Jennifer Johnson
119 0/8*	Montgomery	Marty Shreves
117 6/8	Baltimore	Michael Berg
116 6/8	Anne Arundel	Jamie Roell
107 2/8	Frederick	Tim Beaton
105 6/8	Baltimore	Charlene Berg
95 5/8	Anne Arundel	John D. Gerard, Jr.
ata 7 7 0 0 1 ata ata 0		

^{*} Historical ** Crossbow

White-tailed Deer Bow Season, Non-Typical Antlers

Score	County	Name
192 5/8	Talbot	James Brandow
161 3/8	Prince George's	Tom Paul
160 3/8* **	Anne Arundel	Kevin Davis
105 7/8	Frederick	Andrew Montgomery
* 11		

^{*} Historical ** Crossbow

White-tailed Deer Muzzleloader Season, Typical Antlers

Score	County	Name
147 7/8	Charles	Danny Chiarizia
145 6/8	Montgomery	Shawn Jeffers
142 4/8	Frederick	Mark Cheeks
141 3/8	St. Mary's	John Fenwick
136 5/8	Montgomery	Bob Jannone
131 4/8	Charles	Yancy Costa
125 3/8	Frederick	Eddie Winfield
118 7/8	Frederick	Joseph S. Reid
118 2/8	Anne Arundel	Ken Potter, III
92 0/8	Anne Arundel	Ken Potter, III

White-tailed Deer Muzzleloader Season, Non-Typical Antlers

County	Name
Prince George's	Josh Janos
Queen Anne's	Noah Plauger
Carroll	Brian Zorbach
Charles	Robert Chiarizia
	Prince George's Queen Anne's Carroll

Sika Deer

Score	County	Hunting Season	Name
65 3/8	Dorchester	Bow	Sean Fischer
64 5/8*	Dorchester	Muzzleloader	Mark Shaw
60 4/8	Dorchester	Muzzleloader	Mike Stouffer
59 2/8	Dorchester	Muzzleloader	Joseph E. Rogerson
52 4/8	Dorchester	Crossbow	Dennis Witmer
41 6/8*	Dorchester	Firearm	Donald Mattingly, Jr.
	The second secon		

 ${\it Appendix \ 1}$ Statewide Reported Antlered and Antlerless Deer Harvest by Public Hunting Area and County, 2007-2008

County/Public Area	Antlered	Antierless
Allegany		
Belle Grove WMA	4	3
Billmeyer WMA	18	9
Dan's Mountain WMA	155	97
Green Ridge State Forest	566	345
Rocky Gap State Park	18	18
Sideling Hill WMA	36	8
Warrior Mountain WMA	64	88
Anne Arundel		
Davidsonville Receiver Station	1	4
Fort Meade	59	116
Smithsonian	21	89
Baltimore		
Gunpowder State Park	20	128
Gwynnbrook WMA	5	2
Liberty Watershed	35	101
Patapsco State Park	10	41
Pretty Boy Watershed	80	162
Soldiers Delight NEA	2	18
Calvert		
Calvert Cliffs State Park	4	21
Flag Pond Coop.	0	1
Hall Creek	4	2
Huntington Coop. (Kings Landing NRMA)	13	17
Caroline		
Chesapeake Forest Lands	4	13
ldylwild WMA	24	67
Tuckahoe State Park	5	10
Carroll		
Avondale WMA	1	8
Hanover Watershed	11	31
Liberty Watershed	39	100
Morgan Run State Park	9	21
Patapsco State Park	14	54
Sawmill-Speigel Coop.	10	26
Slacks Coop.	8	10

County/Public Area	Antlered	Antierless
Cecil		
Bainbridge CWMA	2	48
C & D Canal	10	17
Earlville WMA	6	10
Elk Neck State Forest	11	19
Elk Neck	16	46
State Park Fair Hill NRMA	10	147
Charles		
Blossom Point	15	12
Cedarville	8	14
State Forest Chapel Point State Park	10	12
State Park Chapman Residual/SP	8	29
Chicamuxen WMA	3	4
Doncoster	13	15
State Forest Douglas Point (Nanjemoy NRMA)	7	10
(Nanjemoy NRMA) Indian Creek NRMA	3	9
Indianhead Naval	11	58
Ordinance Area Myrtle Grove WMA	18	33
Purse SP (Nanjemoy NRMA)		
(Nanjemoy NRMA) Wilson Farm	1	2
(Nanjemoy NRMA)	3	2
Dorchester		
Blackwater NWR		
White-tailed	29	25
Sika	94	78
Chesapeake Forest Lands		
White-tailed	32	78
Sika	10	14
Fishing Bay WMA		
White-tailed	5	9
Sika	41	49
LeCompte WMA		
White-tailed	6	10
Sika	2	3
Linkwood WMA		
White-tailed	7	22
Sika	0	0
Taylors Island WMA		
White-tailed	0	1
Cile	c	10

6

Sika

10

County/Public Area	Antlered	Antlerless
Frederick		
Cunningham Falls SP/ Thurmont Watershed	44	76
Emmitsburg Watershed	12	25
Fort Detrick	2	11
Frederick City Watershed	111	208
Heaters Island WMA	4	5
Monocacy NRMA	53	69
South Mountain State Park	14	29
Garrett		
4-H Center	3	2
Deep Creek Lake State Park	12	11
Frostburg Watershed	11	5
Garrett State Farcet	129	108
State Forest Mt. Nebo WMA	31	23
Potomac	45	40
State Forest Savage River	248	134
State Forest Youghiogheny Reservoir	9	8
Harford		-
Aberdeen	200	459
Proving Ground Gunpowder		
State Park	0	17
Rock State Park	1	13
Stoney Forest	2	17
Susquehanna State Park	9	59
Howard		
Alpha Ridge Park	0	16
Blandair Park	1	19
David Forse Park	7	28
High Ridge Park	2	3
Hugg-Thomas WMA	5	8
Middle Patuxent Environmental Area	19	71
Patapsco State Park	30	89
Patuxent River State Park	35	134
Schooley Mill Park	0	22
Tridelphia/ Rocky Gorge (WSSC)	37	203

County/Public Area	Antlered	Antlerless
Kent		
Eastern Neck NWR	36	33
Millington WMA	33	94
Sassafras NRWA	8	20
Montgomery		
Cherrington Coop.	6	26
McKee-Beshers WMA	41	85
Montgomery Co. M-NCPPC Lands	25	441
Patuxent River State Park	50	91
Sene ca Creek State Park	55	201
Strider WMA	6	14
Tridelphia/ Rocky Gorge (WSSC)	19	111
Prince George's		
Aquasco Farms Coop.	1	6
Beltsville	57	114
Billingsly Tract (Patuxent River Park)	1	0
Brandywine Receiver Station	11	23
Mill Town Landing NRMA	2	6
Nottingham	0	0
Patuxent WRC (Central Tract)	9	86
Rosaryville State Park	4	8
Spice Creek NRMA	2	5

Antlered	Antierless
8	12
19	66
1	5
5	10
40	72
7	13
18	55
0	0
48	97
11	25
7	15
2	4
4	13
7	14
1	2
0	29
20	42
12	16
171	362
8	26
0	1
283	366
27	69
1	15
109	195
	8 19 1 5 40 7 18 0 48 11 7 2 4 7 1 0 20 12 171 8 0 283 27 1

County/Public Area	Antlered	Antlerless
Wicomico		
Chesapeake Forest Lands		
White-tailed	51	110
Sika	0	1
Ellis Bay WMA	2	3
Johnson WMA	2	1
Nanticoke WMA		
White-tailed	17	19
Sika	5	1
Wicomico State Forest	34	53
Worcester		
Assateague National Seashore		
White-tailed	5	21
Sika	31	41
Assateague State Park		
White-tailed	0	0
Sika	2	3
Chesapeake Forest Lands	40	88
E.A. Vaughn WMA	18	61
Hickory Point WMA	2	3
Isle of Wight WMA	0	1
Pocomoke River WMA		
White-tailed	7	12
Sika	1	0
Pocomoke State Forest	68	130

This publication of the

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