# ANNUAL BIG CAME REPORT 2021-2022



Wildlife and Heritage Service





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## Maryland Annual Biq Game Report 2021-2022

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## DEER WHITE-TAILED & SIKA

#### Introduction

Maryland deer hunters harvested 70,845 deer during the 2021-2022 season (Table 1, Figure 1). The statewide harvest included 27,947 antlered and 39,498 antlerless white-tailed deer; and 1,541 antlered and 1,859 antlerless sika deer. The antlerless harvest consisted of 36,235 does or antlerless bucks and 5,111 button bucks (Table 2, Figure 2). The overall harvest was 13 percent lower than the 2020-2021 total of 81,729 deer.

The harvest in deer management Region A decreased 16%, from 9,383 deer last year to 7,929 this year. Hunters in the western counties reported 4,888 antlered and 3,041 antlerless deer.

Deer hunters in Region B harvested 62,916 deer, down 13% from 72,346 deer harvested last year. A total of 24,600 antlered and 38,316 antlerless deer were reported in this region.

Frederick County had the highest reported harvest with 6,088 deer reported. Carroll County followed with 5,071 deer, and Baltimore County was third with 4,501. Garrett and Washington counties rounded out the top five with 3,923 and 3,899 deer, respectively.

Hunters harvested 7,289 deer on Sundays (Table 3). Sunday deer hunting opportunities are available in 20 of Maryland's 23 counties. Opportunities vary by county and are only permitted during certain weeks of the deer hunting season (Table 4).

#### **Archery Season Summary**

Each year, archery season in Maryland opens the Friday after Labor Day (September 10 in 2021-2022) and closes on January 31 (unless January 31 is a Sunday and is closed to hunting on Sunday). Resident and non-resident hunters purchased approximately 54,000 and 12,000 archery stamps respectively in 2021-2022. Archers may also use primitive bows during the Primitive Deer Hunt Days February 1 - 3. The average Maryland hunter who hunts deer with a vertical bow each year (approximately 21,000 hunters) normally does so for about 10-12 days each season; and 25-35 percent of these hunters take at least one deer each year with their bow. Approximately 20,000 hunters currently hunt deer with a crossbow in Maryland. The average crossbow hunter hunts with a crossbow for 10-12 days each year and 35-45 percent are successful in taking at least one deer per year with the weapon.

#### In 2021-2022:

- The reported archery harvest (vertical and crossbow) decreased 14 percent from 28,369 deer in 2020-2021 to 24,508 deer in 2021-2022 (Table 1, Figure 3).
- There were 11,506 antlered deer (47 percent of the total archery harvest) and 13,002 antlerless deer harvested with crossbows and vertical bows.
- The antlered archery harvest decreased 7 percent and the antlerless harvest (11,639 does or antlerless bucks and 1,363 button bucks) decreased 19 percent from the previous year.
- Archery hunters took 2,048 deer (1,070 antlered, 978 antlerless) on Sundays open to archery hunting (Table 3).
- Archery hunters took 35 percent of all deer harvested in Maryland, the same percentage as last season. (Figure 3).
- Eighty six percent of the archery harvest was on private lands.
- Crossbow hunters took 7,048 antlered deer and 7,471 antlerless deer during the archery season (Table 5).
- The crossbow harvest (14,519 deer) represented 59 percent of the total archery season harvest in 2021-2022 slightly higher than the 58 percent that it was in 2020-2021 (Figure 4).
- Approximately 10,249 different hunters harvested a deer with a crossbow during archery season (compared to 11,200 in 2020-2021).
- Archery hunters harvested 29 deer during the Primitive Deer Hunt Days, February 1 -3 (Table 11).

Table 1 Maryland Reported Antlered and Antlerless Deer Harvest for the Archery, Firearm, and Muzzleloader Hunting Seasons by County, 2021-2022

OOUNTY		Archery			Firearms		M	uzzleload	er		Total	
COUNTY	Antlered	Antierless	Total									
Allegany	526	387	913	1,027	461	1,488	284	329	613	1,837	1,177	3,014
Anne Arundel	404	507	911	257	402	659	94	173	267	755	1,082	1,837
Baltimore	1,004	1,353	2,357	457	1,036	1,493	219	432	651	1,680	2,821	4,501
Calvert	250	293	543	201	351	552	100	143	243	551	787	1,338
Caroline	292	329	621	475	1,010	1,485	141	237	378	908	1,576	2,484
Carroll	799	990	1,789	1,007	1,567	2,574	252	456	708	2,058	3,013	5,071
Cecil	550	689	1,239	506	1,043	1,549	141	264	405	1,197	1,996	3,193
Charles	393	386	779	306	509	815	174	187	361	873	1,082	1,955
Dorchester												
Whitetail	195	196	391	415	835	1,250	122	204	326	732	1,235	1,967
Sika	455	580	1,035	575	815	1,390	320	308	628	1,350	1,703	3,053
Frederick	952	1,017	1,969	1,361	1,905	3,266	361	492	853	2,674	3,414	6,088
Garrett	731	474	1,205	1,264	630	1,894	448	376	824	2,443	1,480	3,923
Harford	610	779	1,389	379	921	1,300	150	323	473	1,139	2,023	3,162
Howard	422	593	1,015	262	461	723	91	190	281	775	1,244	2,019
Kent	420	416	836	453	1,198	1,651	204	340	544	1,077	1,954	3,031
Montgomery	692	888	1,580	440	853	1,293	148	285	433	1,280	2,026	3,306
Prince George's	350	374	724	218	383	601	134	171	305	702	928	1,630
Queen Anne's	418	397	815	480	1,155	1,635	176	332	508	1,074	1,884	2,958
St. Mary's	317	340	657	223	342	565	117	138	255	657	820	1,477
Somerset												
Whitetail	219	228	447	422	920	1,342	93	189	282	734	1,337	2,071
Sika	7	3	10	9	4	13	1	1	2	17	8	25
Talbot	253	330	583	307	862	1,169	134	171	305	694	1,363	2,057
Washington	621	689	1,310	1,012	989	2,001	256	332	588	1,889	2,010	3,899
Wicomico												
Whitetail	298	392	690	606	1,302	1,908	142	297	439	1,046	1,991	3,037
Sika	46	35	81	55	55	110	39	22	61	140	112	252
Worcester												
Whitetail	275	329	604	758	1,646	2,404	139	280	419	1,172	2,255	3,427
Sika	7	8	15	19	16	35	8	12	20	34	36	70
Total	11,506	13,002	24,508	13,494	21,671	35,165	4,488	6,684	11,172	29,488	41,357	70,845

Figure 1 Maryland Reported Antlered and Antlerless Deer Harvest, 2012-2013 through 2021-2022

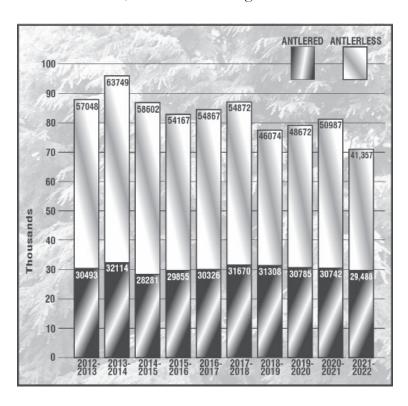


Figure 2 Maryland Reported Button Buck and Doe Harvest, 2012-2013 through 2021-2022

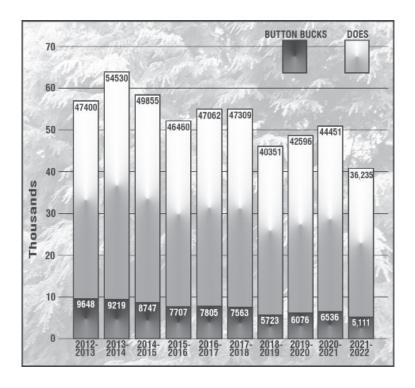


Table 2 Maryland Reported Buttonbuck Harvest by County, 2021-2022

COUNTY	Buttonbuck	Female or Antlerless	Total	Percent Buttonbuck
Allegany	106	1,067	1,173	9.0
Anne Arundel	152	930	1,082	14.0
Baltimore	321	2,500	2,821	11.4
Calvert	109	678	787	13.9
Caroline	253	1,323	1,576	16.1
Carroll	362	2,651	3,013	12.0
Cecil	259	1,737	1,996	13.0
Charles	140	942	1,082	12.9
Dorchester				
Whitetail	232	1,003	1,235	18.8
Sika	97	1,606	1,703	5.7
Frederick	336	3,078	3,414	9.8
Garrett	151	1,327	1,478	10.2
Harford	271	1,752	2,023	13.4
Howard	148	1,096	1,244	11.9
Kent	268	1,686	1,954	13.7
Montgomery	215	1,811	2,026	10.6
Prince George's	114	814	928	12.3
Queen Anne's	223	1,661	1,884	11.8
St. Mary's	130	690	820	15.9
Somerset				
Whitetail	178	1,159	1,337	13.3
Sika	1	7	8	*
Talbot	236	1,127	1,363	17.3
Washington	207	1,798	2,005	10.3
Wicomico				
Whitetail	258	1,733	1,991	13.0
Sika	10	102	112	*
Worcester				
Whitetail	328	1,927	2,255	14.5
Sika	6	30	36	*
Total	5,111	36,235	41,346	12.4
*Small sample s	ize			

#### FIREARM SEASON SUMMARY

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 depending on whether Sunday hunting is allowed in the county where they are hunting. Deer taken during managed hunts outside the normal deer seasons are also counted as firearm kills. Approximately 45,000 - 55,000 hunters deer hunt with a firearm each year in Maryland. The average firearm hunter spends 5-6 days each year pursuing deer and approximately 35-45 percent of firearm hunters bag at least one deer each year.

#### In 2021-2022:

- The statewide firearm harvest decreased 12 percent from 40,162 deer in 2020-2021 to 35,165 deer (Table 1, Figure 3).
- The firearm harvest included 13,494 antlered deer (38 percent of the total firearm harvest) and 21,671 antlerless deer.
- The antlered harvest decreased 6 percent and the antlerless harvest (18,760 does or antlerless bucks and 2,911 button bucks) decreased 16 percent from 2020 2021.
- The majority (76 percent) of the firearm harvest occurred during the two-week season that began the Saturday after Thanksgiving (Table 6).
- Firearm hunters took 50 percent of all deer harvested in Maryland compared to 49 percent last season (Figure 3).
- The majority (89 percent) of the firearm harvest was taken on private property.
- Firearm hunters bagged 4,326 deer (1,639 antlered and 2,687 antlerless) on the Sundays open during the two-week and January firearm seasons; and junior deer hunters harvested 727 deer (468 antlered and 259 antlerless) on the Junior Deer Hunt Sunday (Table 3).
- Junior deer hunters bagged a total of 1,972 deer (1,323 antlered and 649 antlerless) during the Junior Deer Hunt weekend; 9 percent less than the 2,171 deer taken in 2020-2021. (Table 7).
- Deer hunters reported 5,667 deer (76 percent antlerless) for the three-day January firearm season (Table 8).

#### Muzzleloader Season Summary

The 2021-2022 statewide either-sex muzzleloader season included three days in October (October 21 - 23) and two weeks beginning in mid-December (Decem-

ber 18 – January 1). Region B continued with a six-day antlerless-only muzzleloader season (October 25 - 30) to provide for additional deer population management through antlerless deer harvest. Primitive muzzleloaders (flintlock or sidelock percussion with no telescopic optics or other electronic aiming devices) could also be used during the Primitive Deer Hunt Days February 1 - 3. 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 48,000 and 9,000 muzzleloader stamps respectively in 2021-2022. The stamps are required to hunt deer during the muzzleloader season. It is estimated that 25,000-35,000 hunters actually hunt during this season. Those that do hunt pursue deer for 3-5 days for each of the early and late seasons. Approximately 25-30 percent of muzzleloader hunters are successful in harvesting at least one deer in any given year.

#### In 2021-2022:

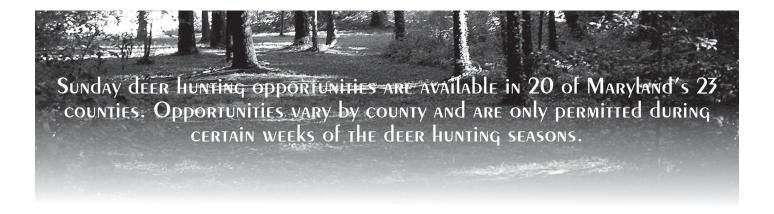
- The muzzleloader harvest totaled 11,172 deer compared to 13,198 deer in 2020-2021, a 15 percent decrease (Table 1, Figure 3).
- There were 4,488 antlered deer and 6,684 antlerless deer harvested with muzzleloaders. Antlerless deer represented 60 percent of the total muzzleloader harvest.
- The antlered harvest increased 12 percent and the antlerless harvest (5,847 does or antlerless bucks and 837 button bucks) decreased 27 percent from the previous year.
- Muzzleloader hunters took 16 percent of all deer harvested in Maryland, the same percentage as last season. (Figure 3).
- The October muzzleloader harvest was 6,738 deer (3,141 antlered and 3,597 antlerless); an 11 percent increase from the previous year's harvest of 6,079 deer (Table 9).
- The December muzzleloader harvest totaled 4,185 deer (1,297 antlered and 2,888 antlerless); a 39 percent decrease from the previous year's harvest of 6,911 deer (Table 10).
- The October muzzleloader season accounted for 46 percent of the total muzzleloader harvest for the year.
- Muzzleloader hunters took 88 percent of their total harvest on private lands.
- Muzzleloader hunters harvested 249 deer with primitive flintlock or percussion sidelock muzzleloaders during the Primitive Hunt Days, February 1 3 (Table 11).

Table 3
Maryland Reported Sunday Hunting Deer Harvest by County, 2021-2022

00111171		Archery		ı	irearms		Jı	ınior Hunt		Mu	zzleloade	r	Grand
COUNTY <sup>1</sup>	Antlered	Antlerless	Total	Total									
Allegany	84	50	134	136	0	136	43	22	65	6	0	6	341
Anne Arundel	10	6	16	17	31	48	2	0	2	*	*	*	66
Calvert	31	22	53	29	59	88	4	2	6	*	*	*	147
Caroline	37	22	59	60	159	219	18	11	29	*	*	*	307
Carroll	88	118	206	134	236	370	47	24	71	9	30	39	686
Cecil	73	96	169	67	174	241	20	8	28	6	11	17	455
Charles	31	12	43	51	66	117	5	6	11	*	*	*	171
Dorchester													
Whitetail	20	16	36	66	117	183	16	14	30	5	5	10	259
Sika	30	29	59	82	112	194	3	6	9	3	8	11	273
Frederick	118	109	227	189	308	497	47	28	75	12	24	36	835
Garrett	103	58	161	157	0	157	68	28	96	10	0	10	424
Harford	66	58	124	52	147	199	7	4	11	*	*	*	334
Kent	49	62	111	54	175	229	21	10	31	4	18	22	393
Montgomery	61	56	117	42	72	114	14	11	25	6	6	12	268
Queen Anne's	52	26	78	77	219	296	16	3	19	*	*	*	393
St. Mary's	45	34	79	30	53	83	7	1	8	4	5	9	179
Somerset	20	11	31	60	144	204	19	12	31	*	*	*	266
Talbot	24	28	52	21	78	99	15	6	21	*	*	*	172
Washington	77	95	172	122	132	254	39	20	59	2	14	16	501
Wicomico													
Whitetail	27	38	65	63	124	187	24	18	42	*	*	*	294
Sika	1	0	1	3	6	9	0	0	0	*	*	*	10
Worcester													
Whitetail	23	32	55	126	273	399	33	25	58	*	*	*	512
Sika	0	0	0	1	2	3	0	0	0	*	*	*	3
Total	1,070	978	2,048	1,639	2,687	4,326	468	259	727	67	121	188	7,289

<sup>\*</sup> Sunday hunting was not open during this season in this county.

See Table 4 for the Sundays that were open for deer hunting in each county in 2021-2022.

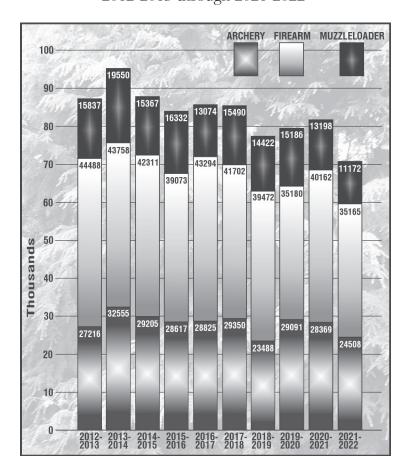


#### Table 4 Maryland Sunday Deer Hunting Dates by County, 2021-2022

COUNTY	Lands Open								Archery Season	eason									Firearms Season	Season		Muzzleloader Seasc	der Seas
		Sept. 12	Sept.19	Sept. 26	Oct. 3	Oct. 10	Oct. 17	Oct. 24	Oct. 31	Nov. 7	Nov. 14	Nov. 21	Jan. 2	Jan. 9	Jan. 16	Jan. 23	Jan. 30	Nov. 14 (jJr. Hunt)	Nov. 28	Dec. 5	Jan. 9	Dec. 19	Dec. 26
ALLEGANY	Private & Designated Public <sup>1</sup>	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open		Open	Open						
ANNEARUNDEL	Private Only									Open								Open	Open				
BALTIMORE	None																						
CALVERT	Private Only						Open	Open	Open	Open	Open							Open	Open	Open	Open		
CAROLINE	Private Only						Open	Open	Open	Open	Open							Open	Open	Open	Open		
CARROLL	Private Only				Open	Open	Open	Open	Open	Open	Open	Open	Open					Open	Open	Open	Open	Open	Open
CECIL	Private & Designated Public <sup>1</sup>	Open	Open	Open	Open	Open	Open		Open	Open	Open	Open	Open	Open	Open	Open	Open						
CHARLES	Private Only						obeu	Open	Open	Open	Open							Open	Open	open	Open		
DORCHESTER	Private Only				Open	Open	Open	Open	Open	Open	Open	Open	Open					Open	Open	Open	Open	Open	Open
FREDERICK	Private Only				Open	Open	Open	Open	Open	Open	Open	Open	Open					Open	Open	Open	Open	Open	Open
GARRETT	Private & Designated Public <sup>1</sup>	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open		Open	Open						
HARFORD	Private Only						Open	Open	Open	Open	Open							Open	Open	Open	Open		
HOWARD	None																						
KENT	Private Only	Open	Open	Open	Open	Open	Open		Open	Open	Open	Open	Open	Open <sup>2</sup>	Open <sup>2</sup>	Open	Open						
MONTGOMERY	Private Only	Open <sup>2</sup>	Open	Open	Open <sup>2</sup>	Open <sup>2</sup>	Open <sup>2</sup>		Open <sup>2</sup>	Open <sup>2</sup>	Open <sup>2</sup>	Open	uedo	Open <sup>2</sup>	Open <sup>2</sup>	Open <sup>2</sup>	Open						
PRINCE GEORGE'S	None																						
QUEEN ANNE'S	Private Only						Open	Open	Open	Open	Open							Open	Open	Open	Open		
ST. MARY'S	Private & Designated Public <sup>1</sup>	Open	Open	Open	Open	Open	Open		Open	Open	Open	Open	Open	Open	Open	Open	Open						
SOMERSET	Private Only						Open	Open	Open	Open	Open							Open	Open	Open	Open		
TALBOT	Private Only						Open	Open	Open	Open	Open							Open	Open				
WASHINGTON REGION A	Private & Designated Public <sup>1</sup>	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open		Open	Open						
WASHINGTON REGION B	Private Only	Open	Open	Open	Open	Open	Open		Open	Open	Open	Open	Open	Open	Open	Open	Open						
WICOMICO	Private Only						Open	Open	Open	Open	Open							Open	Open	Open <sup>2</sup>			
WORCESTER	Private Only						Open	Open	Open	Open	Open							Open	Open	Open	Open		

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Figure 3 Maryland Reported Deer Harvest for the Archery, Firearm, and Muzzleloader Seasons, 2012-2013 through 2021-2022





SEASON HARVEST IN 2021-2022.

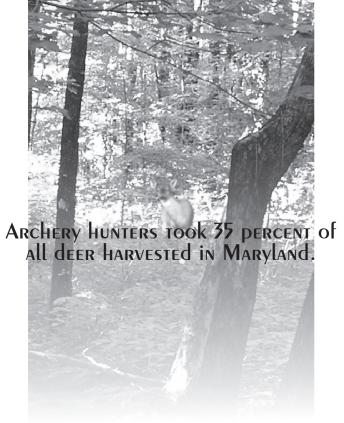


Figure 4 Maryland Reported Crossbow and Vertical Bow Deer Harvest during the Designated Archery Season, 2012-2013 through 2021-2022

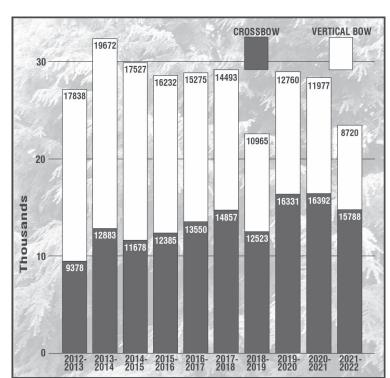


Table 5 Maryland Reported Crossbow Deer Harvest by County, 2021-2022

A second of a	语义置	( Phillips				ASSESSABLE ASSESSA	146.00 CT
COUNTY	Arc	chery Seaso	n	Muzzleloa	ader/Firearı	n Seasons	Grand
COUNTY	Antlered	Antlerless	Total	Antlered	Antlerless	Total	Total
Allegany	363	263	626	11	11	22	648
Anne Arundel	245	309	554	37	49	86	640
Baltimore	571	742	1313	61	145	206	1,519
Calvert	150	185	335	15	26	41	376
Caroline	187	191	378	6	9	15	393
Carroll	461	522	983	26	64	90	1,073
Cecil	322	388	710	27	45	72	782
Charles	220	237	457	14	26	40	497
Dorchester							
Whitetail	118	121	239	4	11	15	254
Sika	260	336	596	11	21	32	628
Frederick	575	566	1141	23	42	65	1,206
Garrett	525	311	836	10	5	15	851
Harford	353	430	783	20	59	79	862
Howard	254	337	591	30	76	106	697
Kent	237	231	468	7	15	22	490
Montgomery	408	471	879	47	76	123	1,002
Prince George's	202	214	416	21	29	50	466
Queen Anne's	272	235	507	17	27	44	551
St. Mary's	215	208	423	13	16	29	452
Somerset							
Whitetail	148	137	285	1	7	8	293
Sika	5	3	8	0	0	0	8
Talbot	171	209	380	6	21	27	407
Washington	407	415	822	13	23	36	858
Wicomico							
Whitetail	192	238	430	12	17	29	459
Sika	27	20	47	0	0	0	47
Worcester							
Whitetail	159	151	310	6	11	17	327
Sika	1	1	2	0	0	0	2
Grand Total	7,048	7,471	14,519	438	831	1,269	15,788

Approximately 10,249 different hunters harvested a deer with a crossbow during archery season.

#### Table 6 Maryland Reported 2-Week Firearm Season Deer Harvest by County, 2021

#### Table 7 Maryland Reported Junior Deer Hunt Harvest by County, 2021

	WORLDHAM TO STATE	A PACE THE REAL PROPERTY.	NEW WHILE
COUNTY	Antlered	Antlerless	Total
Allegany	892	409	1,301
Anne Arundel	179	289	468
Baltimore	377	763	1,140
Calvert	162	274	436
Caroline	376	775	1,151
Carroll	808	1,155	1,963
Cecil	385	782	1,167
Charles	247	363	610
Dorchester			
Whitetail	313	637	950
Sika	354	445	799
Frederick	1,084	1,403	2,487
Garrett	1,052	552	1,604
Harford	295	657	952
Howard	188	293	481
Kent	329	909	1,238
Montgomery	281	470	751
Prince George's	164	274	438
Queen Anne's	370	841	1,211
St. Mary's	175	282	457
Somerset			
Whitetail	313	696	1,009
Sika	7	4	11
Talbot	240	704	944
Washington	856	792	1,648
Wicomico			
Whitetail	444	1,021	1,465
Sika	43	48	91
Worcester			
Whitetail	560	1,246	1,806
Sika	4	2	6
Total	10,498	16,086	26,584

COUNTY	Antlered	Antierless	Total
Allegany	135	52	187
Anne Arundel	7	7	14
Baltimore <sup>1</sup>	19	15	34
Calvert	11	4	15
Caroline	41	27	68
Carroll	99	48	147
Cecil	48	17	65
Charles	15	12	27
Dorchester			
Whitetail	39	34	73
Sika	14	11	25
Frederick	142	58	200
Garrett	212	78	290
Harford	18	10	28
Howard <sup>1</sup>	10	2	12
Kent	50	17	67
Montgomery	45	28	73
Prince George's <sup>1</sup>	12	6	18
Queen Anne's	37	16	53
St. Mary's	15	6	21
Somerset	48	43	91
Talbot	31	18	49
Washington	103	42	145
Wicomico			
Whitetail	83	46	129
Sika	4	1	5
Worcester	85	51	136
Total	1,323	649	1,972
<sup>1</sup> Saturday only.			

Table 8 Maryland Reported 3-Day January Firearm Season Deer Harvest by County, 2022

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Table 9 Maryland Reported Early Muzzleloader Season Deer Harvest by County, 2021

Company of the Compan	87 3/25-750A/N	Company of the Compan	E-2012-91 La
COUNTY	Antlered	Antlerless	Total
Allegany	209	164	373
Anne Arundel	53	82	135
Baltimore	147	213	360
Calvert	73	86	159
Caroline	107	108	215
Carroll	168	238	406
Cecil	98	174	272
Charles	94	110	204
Dorchester			
Whitetail	96	130	226
Sika	246	183	429
Frederick	246	282	528
Garrett	335	183	518
Harford	106	151	257
Howard	57	95	152
Kent	159	172	331
Montgomery	84	116	200
Prince George's	79	87	166
Queen Anne's	125	183	308
St. Mary's	76	80	156
Somerset			
Whitetail	62	135	197
Sika	1	1	2
Talbot	98	96	194
Washington	184	164	348
Wicomico			
Whitetail	102	177	279
Sika	32	18	50
Worcester			
Whitetail	96	158	254
Sika	8	11	19
Total	3,141	3,597	6,738

Table 10 Maryland Reported Late Muzzleloader Season Deer Harvest by County, 2020-2021

COUNTY	Antlered	Antierless	Total
Allegany	74	125	199
Anne Arundel	39	88	127
Baltimore	71	208	279
Calvert	24	55	79
Caroline	32	122	154
Carroll	84	211	295
Cecil	41	86	127
Charles	78	76	154
Dorchester			
Whitetail	25	72	97
Sika	65	111	176
Frederick	114	196	310
Garrett	111	158	269
Harford	44	164	208
Howard	34	92	126
Kent	42	164	206
Montgomery	63	168	231
Prince George's	50	83	133
Queen Anne's	48	141	189
St. Mary's	39	56	95
Somerset	29	51	80
Talbot	36	74	110
Washington	69	155	224
Wicomico			
Whitetail	37	111	148
Sika	6	3	9
Worcester			
Whitetail	42	117	159
Sika	0	1	1
Total	1,297	2,888	4,185

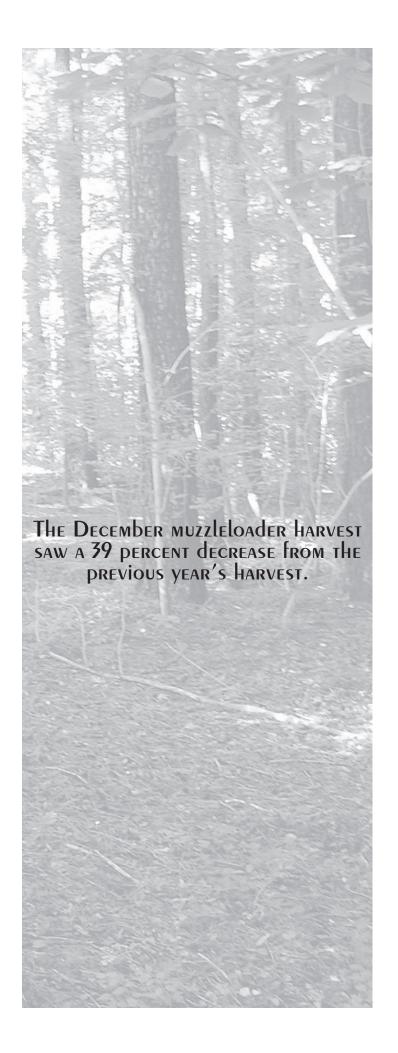


Table 11 Maryland Reported Primitive Deer Hunt Days Harvest by County, 2022

		北州是	The same of	Service Con-			A SHARE STATE OF THE SHARE STATE	J. March	
COUNTY	Archery Season		Muz	zleloader So	eason	Total			
COUNTY	Antlered	Antlerless	Total	Antlered	Antlerless	Total	Antlered	Antierless	Total
Allegany	0	0	0	1	40	41	1	40	41
Anne Arundel	1	2	3	2	3	5	3	5	8
Baltimore	0	2	2	1	11	12	1	13	14
Calvert	0	0	0	3	2	5	3	2	5
Caroline	0	2	2	2	7	9	2	9	11
Carroll	0	2	2	0	7	7	0	9	9
Cecil	0	0	0	2	4	6	2	4	6
Charles	0	2	2	2	1	3	2	3	5
Dorchester									
Whitetail	0	1	1	1	2	3	1	3	4
Sika	2	0	2	9	14	23	11	14	25
Frederick	0	1	1	1	14	15	1	15	16
Garrett	0	0	0	2	35	37	2	35	37
Harford	0	1	1	0	8	8	0	9	9
Howard	0	0	0	0	3	3	0	3	3
Kent	0	1	1	3	4	7	3	5	8
Montgomery	1	1	2	1	1	2	2	2	4
Prince George's	0	2	2	5	1	6	5	3	8
Queen Anne's	0	0	0	3	8	11	3	8	11
St. Mary's	0	3	3	2	2	4	2	5	7
Somerset	0	0	0	2	3	5	2	3	5
Talbot	0	0	0	0	1	1	0	1	1
Washington	0	0	0	3	13	16	3	13	16
Wicomico									
Whitetail	0	3	3	3	9	12	3	12	15
Sika	1	0	1	1	1	2	2	1	3
Worcester	0	1	1	1	5	6	1	6	7
Total	5	24	29	50	199	249	55	223	278

Hunters may only use long bows, recurve bows or flintlock and sidelock percussion muzzleloading rifles or handguns during the Primitive Hunt Days.

#### Public Property Deer Management

The Maryland Department of Natural Resources (DNR) provides assistance to local governments, communities, and publicly-owned properties that choose to address deer management issues. Public entities that desire to conduct hunts outside of the regional deer hunting season framework may do so with prior approval from 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, airports, 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, DNR cooperates with organizations and shooting ranges that offer a shooter qualification program. This program provides public access to shooting ranges where hunters can become certified in the standards required to apply for managed hunts held across the state. When they have successfully passed the program, they receive a statewide shooter qualification card. Appendix II provides a summary of the total deer taken on Maryland public lands during the 2021-2022 hunting seasons. Some of these public lands are part of the managed hunting programs described here.

#### Suburban Deer Management

Deer management in suburban areas ranks as one of the most difficult challenges facing wildlife agencies throughout the country. DNR 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 the department 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.

Increasing deer-vehicle collisions, damage to ornamental plants and gardens, and damage to natural habitats are some of the problems that persist when deer population is not directly managed and reduced. Oftentimes, when public tolerance levels have been surpassed, lethal control methods are considered as a last resort. At this point, DNR provides 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. DNR will continue to evaluate any new deer management techniques as they are created and promote effective methods that help reduce deer-human conflicts.

#### Non-Hunting Mortality

Factors that cause mortality in deer other than hunting iFactors 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.

To monitor deer mortality due to deer-vehicle collisions, DNR primarily uses data provided by State Farm Insurance Company. State Farm estimates total animal-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 are 30,000 – 35,000 deer-vehicle collisions in Maryland annually.

Negative impacts to farmland are also of concern when deer populations are not managed or reduced. Farmers and landowners can obtain a Deer Management Permit from DNR when deer are causing damage to commercial crops. Deer Management Permits allow farmers to harvest antlerless deer on their property outside of the regular state hunting seasons and bag limits. In 2021, 8,700 deer were taken with Deer Management Permits compared to 10,014 deer in 2020 (Table 12). 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, Deer Management Permits 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), public and private landowners may obtain a Deer Cooperator Permit. Sharp-shooting deer via a Deer Cooperator Permit is a viable, lethal alternative for controlling deer numbers. A limited number of farmers also use the permit at night in particularly problematic areas to reduce deer damage to their crops. Permittees must pass written and shooting

Table 12 Maryland Deer Management Permit Statistics by County, 2021-2022

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COUNTY	No. Permits Issued	No. Shooters Authorized	No. Successful Shooters	No. Deer Authorized to Harvest	Whitetail Males Harvested	Whitetail Females Harvested	Sika Males Harvested	Sika Females Harvested	Total Harvested	Tags Utilized %
Allegany	47	236	90	435	32	230			262	60
Anne Arundel	27	178	33	820	15	88			103	13
Baltimore	87	624	96	1,646	30	394			424	26
Calvert	19	109	19	555	2	47			49	9
Caroline	31	169	55	505	24	229			253	50
Carroll	174	755	212	4,040	86	595			681	17
Cecil	37	303	66	837	58	221			279	33
Charles	47	231	45	1,610	15	144			159	10
Dorchester	75	524	135	1,885	27	334	14	236	611	32
Frederick	122	701	149	2,190	57	548			605	28
Garrett	434	1,927	498	3,829	151	1150			1,301	34
Harford	45	476	57	875	24	213			237	27
Howard	50	301	75	1,080	22	218			240	22
Kent	37	270	65	740	40	273			313	42
Montgomery	56	384	91	1,340	29	289			318	24
Prince George's	28	191	45	1,060	9	154			163	15
Queen Anne's	40	238	67	630	30	222			252	40
St. Mary's	62	340	49	2,060	24	143			167	8
Somerset	43	335	61	843	28	224			252	30
Talbot	62	343	108	1,115	62	401			463	42
Washington	100	457	118	1,310	41	324			365	28
Wicomico	91	461	102	1,491	43	435	1	14	493	33
Worcester	95	608	152	1,830	65	644	0	1	710	39
Total	1,809	10,161	2,388	32,726	914	7,520	15	251	8,700	27

Deer Management Permits allow farmers to harvest antlerless deer on their property outside of the regular state hunting seasons and bag limits.

exams in order to obtain the permit and must submit an Operational Plan for approval. The majority of these permits are limited to the months of February and March. During 2021, 1,595 deer were harvested under authority of these permits in Maryland. County and/or federal officials, as well as a few private groups, remove the majority of deer taken with this method.

Over the past decade, there has been increased concern about predation on deer in the United States. These concerns often are focused on coyotes, and particularly in the southeastern part of the country. In Maryland, these concerns are more pronounced in the western counties, where bears and coyotes are more abundant. 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 some counties, fawn recruitment, based on the annual hunter harvest, has declined to relatively low numbers during some years, but the deer population remains stable. While the deer population is significantly lower than it was 20 years ago, the decline can be largely attributed to the relatively high percentage of antlerless deer taken during the hunting season.

While there is 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, as well as coyote and bear populations, in Maryland, and will develop alternative management strategies as the need arises.

#### **DEER Population**

Maryland's white-tailed deer population prior to the 2021-2022 hunting season was estimated at 231,000 deer, approximately 1 percent lower than the previous 5-year average of 233,000 deer. Trends in deer abundance are commonly monitored using harvest estimates and the age structure of the deer herd. These methods work well in areas where hunters have access to most of the land, but are much less reliable for urban/suburban deer populations where hunting occurs sporadically.

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

#### Chronic Wasting Disease

In 2021, the DNR sampled 710 deer for Chronic Wasting Disease (CWD) and detected 53 deer carrying the disease. The 53 positive deer were all from within the existing CWD Management Area.

Maryland first detected CWD in November 2010 in Green Ridge State Forest near an area where chronic wasting disease is present in West Virginia. To date, the DNR has detected the disease in 133 deer out of more than 11,500 tested.

CWD is a disease of the brain and nervous system that causes death in cervids (members of the deer family). The disease is classified as a transmissible spongiform encephalopathy and attacks the brain of cervids, producing small lesions that eventually result in death. CWD was historically a western U.S. disease, but since 2001 it has been detected in numerous states east of the Mississippi River, including the mid-Atlantic states of Maryland, New York, Ohio, Pennsylvania, Virginia, and West Virginia. To date, 30 states and four Canadian provinces in North America have documented CWD in their deer, elk, or moose populations (free-ranging, captive, or both). The disease has also been detected in Finland (free-ranging moose), Norway (free-ranging reindeer), South Korea (captive elk from Canada), and Sweden (free-ranging moose).

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 take the same precautions as they might to protect against other pathogens or diseases. Additional information on the proper handling of harvested deer and chronic wasting disease management can be found in Appendix I.

DNR continues to cooperate with various research institutions concerning CWD. Currently, staff are participating in a multistate effort coordinated by Cornell University to identify the most effective surveillance strategies for the disease.

#### DEER RESEARCH AND DATA USE

In 2021-2022, department staff and volunteers examined 3,894 deer 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 infor-

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

The antler beam circumference measurements of yearling bucks 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 populations across the state. The percentage of yearling bucks in the harvest remains very healthy and has shown a positive declining trend in recent years. However, the average number of antler points and the average antler beam diameter for yearling bucks have also been declining. These data will continue to be monitored closely in the coming years, but the declining trend may be an artifact of the sampling that now occurs at butcher shops.

Deer examined at the butcher shops are also examined for evidence of hemorrhagic disease (HD); a viral disease spread by biting midges. HD, or "blue-tongue," commonly appears in late summer and early fall. Deer that have survived hemorrhagic disease and are harvested will exhibit hooves with sloughing or peeling tissue. These deer are still suitable for human consumption. Hemorrhagic disease occurs yearly in Maryland, although it varies in intensity. The results of this annual statewide examination are reported to the Southeastern Cooperative Wildlife Disease Study in Athens, Georgia as part of a nationwide survey. This study 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 percent, or more, of a local deer population. There were very few reported cases of the disease in 2021-2022. The Department of

Natural Resources will continue to monitor for HD in the coming years.

#### **Archery Hunter Survey**

The annual Archery Hunter Survey was continued for 2020-2021 (survey data from the 2021-2022 season are currently being analyzed and were not ready for this report). Archery hunters reported 17.0 bucks and 37.6 does per 100 hours in 2020-2021. Likewise, they observed 2.2 adult does for every one adult buck and .60 fawns for every one adult doe in 2020-2021.

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 by email at brent. evans@maryland.gov Forms are also available on the DNR website, at dnr.maryland.gov/wildlife/Pages/hunt\_trap/bhsurvey.aspx.

## Regulatory and Legislative Changes for the Coming 2022-2023 Season

The Maryland Department of Natural Resources hosted its biennial regulatory review process during 2021-2022 for the coming two hunting seasons beginning with 2022-2023. As part of the process, the department hosted a virtual stakeholder meeting and posted the proposals online for review and comment. Comments were also accepted via telephone and letter/email. The following regulations related to deer hunting were created or modified:

• One day was added to the antlerless firearm season in Region A on public and private lands.

Legislatively, Sunday hunting was expanded in Calvert, Caroline, Charles, Dorchester, Queen Anne's, Somerset, and Talbot counties. Hunters should consult the 2022-2023 Guide to Hunting and Trapping for more information on these regulatory and legislative changes.

## Maryland Record Deer and Bear Standings

The department would like to sincerely thank Tinker Johnson and the Trophy Deer Contest for many years of diligence and hard work maintaining deer records and hosting scoring events prior to 2021. Beginning in 2021, Bucks-Bears-Stags (BBS) became the official record keeper of Boone & Crocket scores for outstanding Maryland white-tailed deer, sika deer, and black bear (see page 37). To find out more information about Bucks-Bears-Stags, or to arrange official scoring of a deer or bear, visit www.bucks-bears-stags.com.

#### Appendix I Chronic Wasting Disease in Deer

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

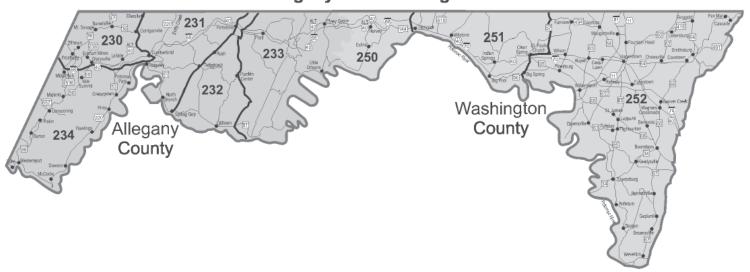
- Avoid shooting or handling a deer that appears sick.
- Wear latex or rubber gloves when field-dressing or butchering deer.
- Remove all internal organs.
- Remove the meat from the bones and spinal column if home processing a deer.
- Do not use household knives or utensils when field-dressing or home 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.

#### Chronic Wasting Disease Management

Due to the detection of chronic wasting disease in Allegany and Washington counties, the Maryland Department of Natural Resources has implemented a number of measures that are intended to prevent the unintentional spread of chronic wasting disease to other locations in Maryland or to other states. The changes outlined below apply only to the Chronic Wasting Disease Management Area, which is currently defined as all of Allegany and Washington counties. Whole deer carcasses or deer parts cannot be transported out of the Chronic Wasting Disease Management Area, except for:

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

### The Chronic Wasting Disease Management Area Includes Allegany And Washington Counties.



#### Appendix I -continued-Chronic Wasting Disease in Deer

Please check the Maryland Department of Natural Resources website, at dnr.maryland.gov, for updates on chronic wasting disease surveillance and management. Hunter assistance and cooperation is essential to the department's efforts to monitor and manage chronic wasting disease.

#### Carcass Importation Ban

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

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

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

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

Please consult the Chronic Wasting Disease Alliance website at cwd-info.org for a complete list of state and province chronic wasting disease containment, surveillance and management areas.

Any person who imports or possesses a cervid carcass or part of a cervid that was tested for chronic wasting disease in another state or province, and is notified that the cervid tested positive, must report the test results to the Department of Natural Resources within 24 hours of receiving such notification - by telephone at 301-334-4255 or by email to jonathank.trudeau@maryland.gov.

If you hunt deer, elk, moose or other cervids in other states and/or provinces, particularly those in which chronic wasting disease 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 Chronic Wasting Disease Alliance website at cwd-info.org/ and the Maryland Department of Natural Resources website at dnr.maryland.gov/.

## Taking Deer Carcasses out of Maryland

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

#### Appendix II Statewide Reported Antlered and Antlerless Deer Harvest by Public Hunting Area and County, 2021-2022

County/PublicLand	Antlered	Antlerless
Allegany		
Belle Grove WMA	6	5
Billmeyer WMA	8	6
Dan's Mountain WMA	60	21
Green Ridge SF	246	160
McCoole FMA	0	0
Rocky Gap SP	14	9
Sideling Hill WMA	1	6
Warrior Mountain WMA	66	60
Anne Arundel		
Anne Arundel County Managed Hunts	20	42
Crownsville CWMA	1	7
Davidsonville Receiver Station	5	6
Fort Meade-Pautuxent	29	29
Fort Meade Army Installation	3	2
Sandy Point SP	7	21
Smithsonian	19	20
Baltimore		
Gunpowder SP	22	101
Gwynnbrook WMA	2	4
Liberty Watershed	17	26
Loch Raven Watershed	70	83
North Point SP	5	5
Patapsco SP	17	19
Pretty Boy Watershed	100	116
Soldiers Delight NEA	10	21
Calvert		
Biscoe Gray Heritage Farm CWMA	1	0
Calvert Cliffs SP	8	10
Flag Pond CWMA	0	1
Hall Creek	6	4
Huntingtown Area	9	19
Parkers Creek WMA	19	33
Caroline		
Chesapeake Forest Lands		
whitetail	6	15
sika	0	0
ldylwild WMA	45	56
Tuckahoe SP	13	7

County/PublicLand	Antlered	Antlerless
Carroll		
Avondale WMA	6	4
Farver CWMA	0	1
Hahn CWMA	2	0
Hanover Watershed	5	13
Liberty Watershed	52	95
Maring CWMA	3	2
Morgan Run SP NRMA	12	20
Patapsco SP	17	55
Sawmill-Speigel CWMA	13	25
Woodbrook CWMA	9	8
Cecil		
Bohemia River SP	0	0
C&D Canal	9	14
Earlville WMA	6	12
Elk Neck SF	30	35
Elk Neck SP	25	32
Fair Hill NRMA	35	71
Grove Farm WMA	18	23
Old Bohemia WMA	6	7
Charles		
Blossom Point Field Test Facility	3	14
Cedar Point WMA	7	12
Cedarville SF	5	8
Chapel Point SP	5	17
Chapman State Park	8	14
Chicamuxen WMA	1	4
Doncaster SF or Tayloes Neck	2	11
Indian Creek NRMA	4	7
Indian Head Naval Ordnance Area	8	32
Myrtle Grove WMA	16	30
Nanjemoy NRMA	8	2
Nanjemoy Creek WMA	0	0
Popes Creek WMA	6	17
Riverside WMA	2	2

County/PublicLand	Antlered	Antlerless
Dorchester		
Blackwater NWR		
whitetail	29	23
sika	209	299
Chesapeake Forest Lands		
whitetail	75	98
sika	49	46
Fishing Bay WMA		
whitetail	4	6
sika	99	111
LeCompte WMA		
whitetail	8	5
sika	3	14
Linkwood WMA		
whitetail	6	7
sika	2	4
Taylor's Island WMA		
whitetail	3	0
sika	10	18
Frederick		
Cunningham Falls SP, Thurmont Watershed	31	34
Emmitsburg Watershed	0	5
Fort Detrick	0	2
Frederick City Watershed	51	89
Heaters Island WMA	5	3
Monocacy NRMA	28	33
South Mountain SP	21	22
Urbana FMA	3	2

#### Appendix II -continued-Statewide Reported Antlered and Antlerless Deer Harvest by Public Hunting Area and County, 2021-2022

County/PublicLand	Antlered	Antlerless
Garrett	711110104	71111011000
Cunningham Swamp	0	0
WMA	6	2
Deep Creek Lake SP	11	9
Frostburg Watershed	17	13
Garrett SF	100	51
Mount Nebo WMA	22	22
Potomac SF	33	26
Savage River SF	217	141
Wolf Den Run SP	4	1
Youghiogheny Reservoir	7	9
4H Center	3	1
Harford		
Aberdeen Proving Grounds	73	120
Gunpowder SP	0	4
Rock SP	8	24
Stoney Forest	3	6
Susquehana SP	17	55
Howard		
Howard County Parks & Recreation Hunts	36	67
Hugg-Thomas WMA	13	15
Patapsco SP	18	42
Patuxent River SP	62	98
Tridelphia/Rocky Gorge (WSSC)	29	30
Kent		
Eastern Neck NWR	12	11
Millington WMA	28	47
Sassafras NRMA	25	33
Montgomery		
Cherrington CWMA	11	20
Islands of the Potomac WMA	5	21
Mckee-Beshers WMA	30	62
Montgomery County MNCPPC Lands	78	407
Patuxent River SP	56	111
Seneca - Schaeffer Farm	15	17
Seneca Creek SP	50	78
Strider WMA	7	6
Tridelphia/Rocky Gorge (WSSC)	7	9

County/PublicLand	Antlered	Antlerless
Prince George's		
Aquasco Farms Coop	16	17
Belt Woods NEA	7	5
Beltsville	42	51
Billingsly Tract (Patuxent River Park)	6	9
Brandywine Receiver Station	6	4
Cheltenham WMA	3	2
Gardner Road Park CWMA	1	2
Marlboro Natural Area CWMA	5	13
Mill Town Landing NRMA	2	7
Nottingham	4	9
Patuxent WRC (Central & South Tracts)	8	12
Queen Anne Bridge Road CWMA	4	7
Rosaryville SP	6	7
Spice Creek (Patuxent River) NRMA	3	10
Tridelphia/Rocky Gorge (WSSC)	0	1
Queen Anne's		
Browns Branch WMA	9	14
Tuckahoe SP	13	12
Wye Island NRMA	25	34
St. Mary's		
Elms' CWMA	2	4
Greenwell SP	7	15
Historic St. Mary's City CWMA	1	3
Myrtle Point Park CWMA	0	4
Newtowne Neck SP	10	12
Patuxent Naval Air Station	5	10
Point Lookout SP (Jacobs Property)	5	4
St. Inigoes SF	2	3
St. Mary's SP	19	23

Somerset  Cedar Island WMA  Chesapeake Forest Lands  Whitetail  Sika  Deal Island WMA  Whitetail  Sika  Concentration  Whitetail  Sika  Concentration  Fairmount WMA  Whitetail  Sika  Concentration  Witetail  South Marine  Properties WMA  Pocomoke Sound  WMA  WMA  Concentration  WMA  Wellington WMA  Talbot  Seth SF  Washington  Ft. Frederick SP  Seth SF  Washington  Ft. Frederick SP  Training Center  Ft. Frederick SP  Training Center  Prather's Neck WMA  Sideling Hill WMA  South Mountain SP  Washaryland Ag  Research Station (B)  Washaryland Ag  Research Station (B)	County/PublicLand	Antlered	Antlerless
Chesapeake Forest Lands  Whitetail 64 104  sika 2 1  Deal Island WMA  Whitetail 5 25  sika 2 0  Fairmount WMA  Whitetail 0 9  sika 0 0  Maryland Marine Properties WMA  Pocomoke Sound WMA  WMA 1 0  South Marsh Island WMA  Wellington WMA 4 13  Talbot  Seth SF 4 5  Washington  Ft. Frederick SP 5 3  Greenbrier SP 17 24  Indian Springs WMA 1 39  Maryland Correctional Training Center 7 23  Prather's Neck WMA 1 5  Sideling Hill WMA 11 3  South Mountain SP 29 41  W. Maryland Ag Research Station (B) 4 3	Somerset		
Lands  whitetail 64 104  sika 2 1  Deal Island WMA  whitetail 5 25  sika 2 0  Fairmount WMA  whitetail 0 9  sika 0 0  Maryland Marine Properties WMA 1 8  Pocomoke Sound WMA 0 0  Wellington WMA 4 13  Talbot  Seth SF 4 5  Washington  Ft. Frederick SP 5 3  Greenbrier SP 17 24  Indian Springs WMA 1 51  Maryland Correctional Training Center 7 23  Prather's Neck WMA 1 5  South Mountain SP 29 41  W. Maryland Ag Research Station (B) 4 3	Cedar Island WMA	0	0
sika         2         1           Deal Island WMA         2         0           whitetail         5         25           sika         2         0           Fairmount WMA         0         9           whitetail         0         9           sika         0         0           Maryland Marine Properties WMA         1         8           Pocomoke Sound WMA         1         0           South Marsh Island WMA         0         0           Wellington WMA         4         13           Talbot         5         4         5           Washington         5         3         3           Ft. Frederick SP         5         3         3           Greenbrier SP         17         24         1           Indian Springs WMA         51         39           Maryland Correctional Training Center         7         23           Prather's Neck WMA         1         5           Sideling Hill WMA         11         3           South Mountain SP         29         41           W. Maryland Ag Research Station (B)         4         3			
Deal Island WMA	whitetail	64	104
whitetail         5         25           sika         2         0           Fairmount WMA         0         9           whitetail         0         9           sika         0         0           Maryland Marine Properties WMA         1         8           Pocomoke Sound WMA         1         0           South Marsh Island WMA         0         0           Wellington WMA         4         13           Talbot         5         4         5           Washington         5         3         4         5           Washington         7         24         1<	sika	2	1
sika         2         0           Fairmount WMA         0         9           whitetail         0         9           sika         0         0           Maryland Marine Properties WMA         1         8           Pocomoke Sound WMA         1         0           South Marsh Island WMA         0         0           Wellington WMA         4         13           Talbot         3         5           Seth SF         4         5           Washington         7         24           Indian Springs WMA         51         39           Maryland Correctional Training Center         7         23           Prather's Neck WMA         1         5           Sideling Hill WMA         11         3           South Mountain SP         29         41           W. Maryland Ag Research Station (B)         4         3	Deal Island WMA		
Fairmount WMA   whitetail   0   9	whitetail	5	25
whitetail         0         9           sika         0         0           Maryland Marine Properties WMA         1         8           Pocomoke Sound WMA         1         0           South Marsh Island WMA         0         0           Wellington WMA         4         13           Talbot         3         5           Seth SF         4         5           Washington         7         24           Indian Springs WMA         51         39           Maryland Correctional Training Center         7         23           Prather's Neck WMA         1         5           Sideling Hill WMA         11         3           South Mountain SP         29         41           W. Maryland Ag Research Station (B)         4         3	sika	2	0
sika 0 0  Maryland Marine Properties WMA 1 8  Pocomoke Sound 1 0  South Marsh Island WMA 0 0  Wellington WMA 4 13  Talbot Seth SF 4 5  Washington Ft. Frederick SP 5 3  Greenbrier SP 17 24  Indian Springs WMA 51 39  Maryland Correctional 7 23  Prather's Neck WMA 1 5  Sideling Hill WMA 11 3  South Mountain SP 29 41  W. Maryland Ag Research Station (B)	Fairmount WMA		
Maryland Marine Properties WMA  Pocomoke Sound WMA  South Marsh Island WMA  Wellington WMA  4 13  Talbot  Seth SF 4 5  Washington  Ft. Frederick SP 5 3  Greenbrier SP 17 24  Indian Springs WMA 51 39  Maryland Correctional Training Center  Prather's Neck WMA 1 5  Sideling Hill WMA 11 3  South Mountain SP 29 41  W. Maryland Ag Research Station (B)	whitetail	0	9
Properties WMA  Pocomoke Sound WMA  South Marsh Island WMA  Wellington WMA  Talbot  Seth SF  Washington  Ft. Frederick SP  Greenbrier SP  Indian Springs WMA  Maryland Correctional Training Center  Prather's Neck WMA  Sideling Hill WMA  South Mountain SP  W. Maryland Ag Research Station (B)	sika	0	0
WMA         1         0           South Marsh Island WMA         0         0           Wellington WMA         4         13           Talbot           Seth SF         4         5           Washington         5         3           Ft. Frederick SP         5         3           Greenbrier SP         17         24           Indian Springs WMA         51         39           Maryland Correctional Training Center         7         23           Prather's Neck WMA         1         5           Sideling Hill WMA         11         3           South Mountain SP         29         41           W. Maryland Ag Research Station (B)         4         3	Maryland Marine Properties WMA	1	8
WMA         0         0           Wellington WMA         4         13           Talbot           Seth SF         4         5           Washington         5         3           Ft. Frederick SP         5         3           Greenbrier SP         17         24           Indian Springs WMA         51         39           Maryland Correctional Training Center         7         23           Prather's Neck WMA         1         5           Sideling Hill WMA         11         3           South Mountain SP         29         41           W. Maryland Ag Research Station (B)         4         3		1	0
Talbot Seth SF 4 5  Washington Ft. Frederick SP 5 3 Greenbrier SP 17 24 Indian Springs WMA 51 39  Maryland Correctional 7 23  Prather's Neck WMA 1 5 Sideling Hill WMA 11 3 South Mountain SP 29 41  W. Maryland Ag Research Station (B) 4 3		0	0
Seth SF         4         5           Washington         5         3           Ft. Frederick SP         5         3           Greenbrier SP         17         24           Indian Springs WMA         51         39           Maryland Correctional Training Center         7         23           Prather's Neck WMA         1         5           Sideling Hill WMA         11         3           South Mountain SP         29         41           W. Maryland Ag Research Station (B)         4         3	Wellington WMA	4	13
WashingtonFt. Frederick SP53Greenbrier SP1724Indian Springs WMA5139Maryland Correctional Training Center723Prather's Neck WMA15Sideling Hill WMA113South Mountain SP2941W. Maryland Ag Research Station (B)43	Talbot		
Ft. Frederick SP 5 3 Greenbrier SP 17 24 Indian Springs WMA 51 39 Maryland Correctional Training Center 7 23 Prather's Neck WMA 1 5 Sideling Hill WMA 11 3 South Mountain SP 29 41 W. Maryland Ag Research Station (B) 4 3	Seth SF	4	5
Greenbrier SP 17 24 Indian Springs WMA 51 39 Maryland Correctional Training Center 7 23 Prather's Neck WMA 1 5 Sideling Hill WMA 11 3 South Mountain SP 29 41 W. Maryland Ag Research Station (B) 4 3	Washington		
Indian Springs WMA 51 39  Maryland Correctional Training Center 7 23  Prather's Neck WMA 1 5  Sideling Hill WMA 11 3  South Mountain SP 29 41  W. Maryland Ag Research Station (B) 4 3	Ft. Frederick SP	5	3
Maryland Correctional Training Center 7 23  Prather's Neck WMA 1 5  Sideling Hill WMA 11 3  South Mountain SP 29 41  W. Maryland Ag Research Station (B) 4 3	Greenbrier SP	17	24
Prather's Neck WMA 1 5 Sideling Hill WMA 11 3 South Mountain SP 29 41 W. Maryland Ag Research Station (B) 4 3	Indian Springs WMA	51	39
Sideling Hill WMA 11 3 South Mountain SP 29 41 W. Maryland Ag Research Station (B) 4 3	Maryland Correctional Training Center	7	23
South Mountain SP 29 41  W. Maryland Ag Research Station (B) 4 3	Prather's Neck WMA	1	5
W. Maryland Ag Research Station (B) 4 3	Sideling Hill WMA	11	3
		29	41
	W. Maryland Ag Research Station (B)	4	3
Woodmont 20 12	Woodmont	20	12



County/PublicLand	Antlered	Antlerless
Wicomico		
Blackwater National Wildlife Refuge		
whitetail	0	3
sika	0	2
Chesapeake Forest Lands		7
whitetail	85	140
sika	12	16
Ellis Bay WMA		
whitetail	1	5
sika	5	3
Johnson WMA	3	1
Nanticoke WMA		
whitetail	9	23
sika	14	10
Wetipquin WMA	1	1
Wicomico SF		
whitetail	17	26
sika	0	1
Worcester		
Assateague NS		
whitetail	5	10
sika	27	30
Assateague SP		
whitetail	0	1
sika	2	4
Chesapeake Forest Lands		
whitetail	63	75
sika	0	0
E.A. Vaughn WMA		
whitetail	19	47
sika	0	0
Hickory Point WMA	4	4
Isle of Wight WMA	2	1
Pocomoke River WMA	10	13
Pocomoke SF		
whitetail	60	104
sika	1	0

CFL- Chesapeake Forest Land CWMA- Cooperative Wildlife Management Area FMA- Fishery Management Area MNCPPC- Maryland-National Capital Park and Planning Commission NEA- Natural Environment Area NRMA- Natural Resources Management Area

NS- National Seashore NWR- National Wildlife Refuge SF- State Forest SP- State Park WMA- Wildlife Management Area

WMA- Wildlife Management Area WRC- Wildlife Research Center

WSSC- Washington Suburban Sanitary Commission

## Wild Turkey Introduction

Wild turkeys are an important game bird in Maryland, providing recreation and enjoyment for many hunters, wildlife enthusiasts and citizens. Although turkey numbers were dangerously low less than a century ago, conservation efforts have brought the species back from the brink of extinction. Maryland DNR uses a variety of survey and hunting data to monitor wild turkeys in the state to ensure that the population remains healthy.

Following a period of population stabilization in the 2000s, the statewide wild turkey population has increased over the last 10 years and now numbers over 40,000. Much of the increase can be attributed to the recent growth of the central region's turkey population. In many suburban counties that previously contained low densities of turkeys, data suggest that populations have grown significantly. However populations in the western region and portions of the eastern shore have either stabilized or declined from their previous high densities. Densities vary considerably across the state and within regions due to differences in habitat quality and recent reproduction success. Reproductive success in the summer of 2021 was high throughout much of the state, presumably due to the Brood X cicada emergence.

Approximately 10,000 hunters annually pursue turkeys in the spring, fall or winter hunting seasons in Maryland. Only deer and waterfowl attract more hunting participation. In the 2022 spring season, hunters harvested 4,208 turkeys, the second highest harvest on record and a 7.6% percent increase over the previous year. An exceptionally high number of juvenile turkeys in most of the state likely contributed to the increase. The 2021 fall turkey harvest of 81 was slightly lower than the prior year and reflects a long-term decline in participation during the fall season. A total of 67 turkeys were reported harvested during the three day statewide winter turkey season.

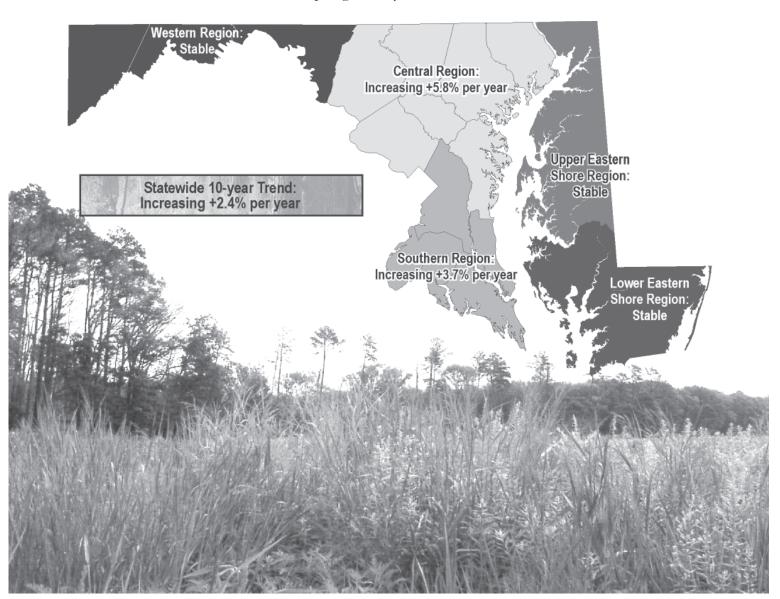
Wild turkey conservation efforts have brought the species back from the brink of extinction. The Maryland turkey population now numbers over 40,000.

#### **Population Status**

Maryland's estimated wild turkey population has increased in some regions and remained stable in other regions over the past 10 years (Figure 1). The most rapid growth has occurred in the central and southern regions, where populations have increased at an estimated 4-6% per year. Populations in the eastern and western regions have remained stable. Density indices (2020-22 average spring turkey kill per forested mi²) are categorized as high in 12 counties (>1 kill/mi²), moderate in nine counties (0.5-1.0 kill/mi²), and low in the remaining two counties (<0.5 kill/mi², Table 1). The highest densities of turkeys are still found in the western mountains, the eastern region and portions of the southern region, but densities continue to increase in non-traditional areas (Figure 2).

The summer wild turkey observation survey estimated high reproductive success in summer of 2021 with a statewide index of 3.0 poults observed per hen (Figure 3). This was the highest estimate since 2015 and above the long-term average. The western and central regions appeared to fare exceptionally well, likely due to the concurrent 17 year "Brood X" cicada emergence. A detailed summary can be found here: https://dnr.maryland.gov/wildlife/Documents/wt\_observe\_survey.pdf.

Figure 1 Maryland Estimated 10-Year Wild Turkey Population Trends by Region, Based on Spring Turkey Harvest, 2013-2022



#### Spring Season

Maryland hunters harvested 4,208 wild turkeys during the spring 2022 regular and junior turkey seasons (Table 1, Figure 3). This year's harvest was 8% higher than the 2021 harvest and just 2% below the record harvest of 4,303 set in 2020. The percentage of juvenile turkeys or "jakes" reported in the harvest was 24%, the highest level since 2011 (Figure 4). The increase can be attributed to the Brood X cicada emergence in the summer of 2021 that provided abundant food for newly-hatched turkeys and increased survival of the young birds. Turkey populations in the central region of the state especially benefited from last summer's high reproduction. Five counties in the region posted record harvests: Anne Arundel, Baltimore, Howard, Montgomery and Prince George's. But counties further west lead the state in total turkey harvest, with Garrett County reporting 436 turkeys, followed by Washington County with 400 and Frederick County with 343.

Table 1 Maryland Reported Spring Gobbler Season Harvest, 2016-2022

								% Change	10-year	Average kill/
COUNTY	2016	2017	2018	2019	2020	2021	2022	2021-2022	average	sq. mi. 20-22
Allegany	256	293	250	278	286	266	282	6.0	274	0.89
Anne Arundel	45	58	49	74	81	64	85	32.8	65	0.46
Baltimore	52	51	55	56	65	53	82	54.7	52	0.32
Calvert	73	59	76	68	82	58	72	24.1	67	0.65
Caroline	172	149	135	152	180	149	168	12.8	155	1.73
Carroll	76	103	103	73	93	104	94	-9.6	79	0.92
Cecil	69	87	69	89	94	80	67	-16.3	73	0.63
Charles	265	320	336	348	369	353	334	-5.4	310	1.30
Dorchester	274	303	212	221	211	197	170	-13.7	232	1.09
Frederick	299	332	313	304	348	281	343	22.1	288	1.43
Garrett	387	429	412	429	387	374	436	16.6	404	0.93
Harford	110	127	105	124	88	104	91	-12.5	106	0.64
Howard	34	24	36	33	34	35	51	45.7	29	0.54
Kent	181	174	168	166	206	151	160	6.0	164	2.39
Montgomery	94	135	149	135	162	154	164	6.5	124	1.13
Prince George's	87	91	76	105	109	99	115	16.2	93	0.58
Queen Anne's	190	160	115	145	144	120	144	20.0	153	1.37
Somerset	150	163	145	129	171	180	176	-2.2	153	0.93
St. Mary's	188	202	191	188	226	187	204	9.1	188	1.90
Talbot	88	94	80	87	95	80	84	5.0	86	1.37
Washington	355	426	459	414	439	345	400	15.9	388	2.20
Wicomico	206	175	139	155	193	181	193	6.6	165	1.31
Worcester	223	220	188	229	240	295	293	-0.7	229	1.14
Total	3874	4175	3861	4002	4303	3910	4208	7.6	3877	1.07

Figure 2 Maryland Wild Turkey Density Indices Based on Average Spring Turkey Harvest per Square Mile of Forest, 2020-2022.

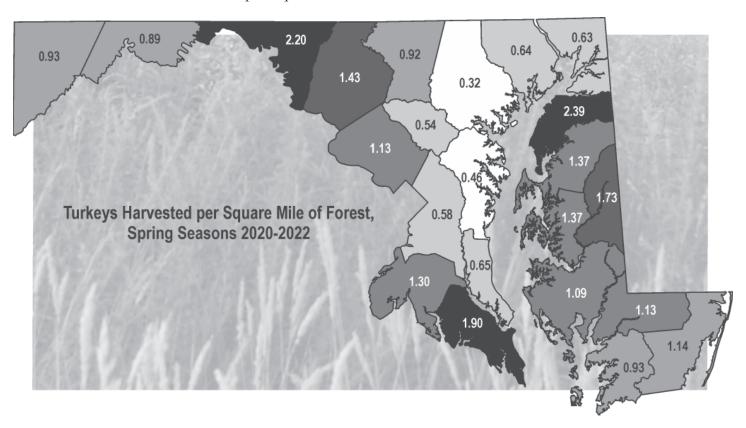


Figure 3

Average Number of Poults per Adult Hen Observed by Participants in Summer Wild Turkey Observation Survey, 2007-2021. Error Bars Represent a 95% Confidence Interval.

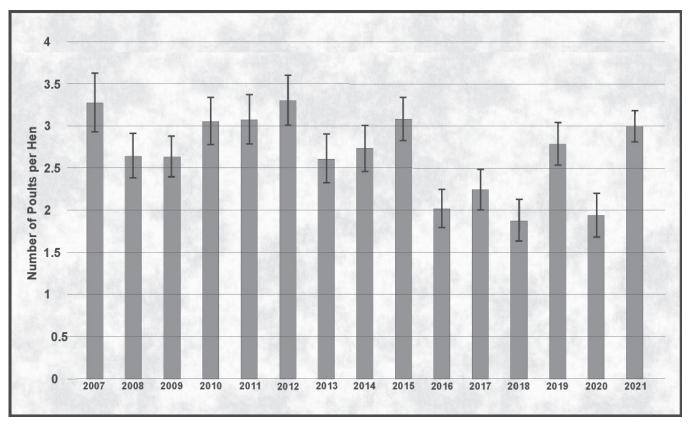
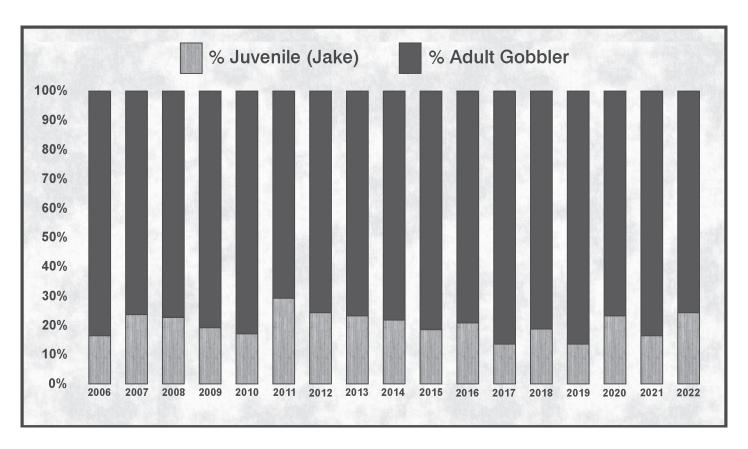


Figure 4
Percentage of Juvenile and Adult Gobblers Reported Harvested in Spring Turkey Seasons, 2006-2022.



#### Fall Season

Turkey hunters reported taking 81 wild turkeys during the 9-day 2021 fall season. The harvest was slightly lower than the 2020 fall season harvest of 84 (Table 2, Figure 5). The fall season is limited to the three westernmost counties in Maryland.

Table 2 Maryland Reported Fall Turkey Season Harvest, 2015-2021.

COUNTY	2015	2016	2017	2018	2019	2020	2021	% Change 2020-2021	10-year average
Allegany	36	35	24	31	22	36	33	-8.3	38
Garrett	49	51	55	50	53	32	30	-6.3	47
Washington	31	33	26	16	16	16	18	12.5	25
Total	116	119	105	97	91	84	81	-3.6	110









#### Winter Season

Hunters reported taking 67 wild turkeys during the 2022 winter turkey season that was open January 20-22 statewide (Table 3, Figure 5). The harvest was 24% lower than the 2021 total of 89 turkeys. Adult males comprised 30% of the harvest with the remainder females and juveniles. Eighty-one percent were taken with a shotgun, but some hunters harvested their bird with a crossbow or vertical bow. The winter turkey season was established in 2015 to provide hunters additional turkey hunting opportunities while minimizing conflicts with other hunting seasons.

Table 3 Maryland Reported Winter Turkey Season Harvest, 2018-2022.

COUNTY	2018	2019	2020	2021	2022
Allegany	6	4	2	4	4
Anne Arundel	4	2	2	0	4
Baltimore	1	1	1	3	7
Calvert	1	1	2	0	0
Caroline	2	1	5	4	5
Carroll	3	2	5	1	3
Cecil	2	3	3	4	2
Charles	4	3	1	8	0
Dorchester	8	6	3	6	1
Frederick	6	7	3	12	3
Garrett	8	7	9	7	4
Harford	2	1	0	5	3
Howard	1	1	1	0	4
Kent	4	3	6	2	0
Montgomery	2	1	1	3	2
Prince George's	0	2	5	7	1
Queen Anne's	5	6	4	3	1
Somerset	2	4	6	3	4
St. Mary's	10	6	13	6	9
Talbot	2	0	4	3	0
Washington	8	7	3	5	3
Wicomico	3	3	1	3	4
Worcester	3	2	2	0	3
Total	87	73	82	89	67



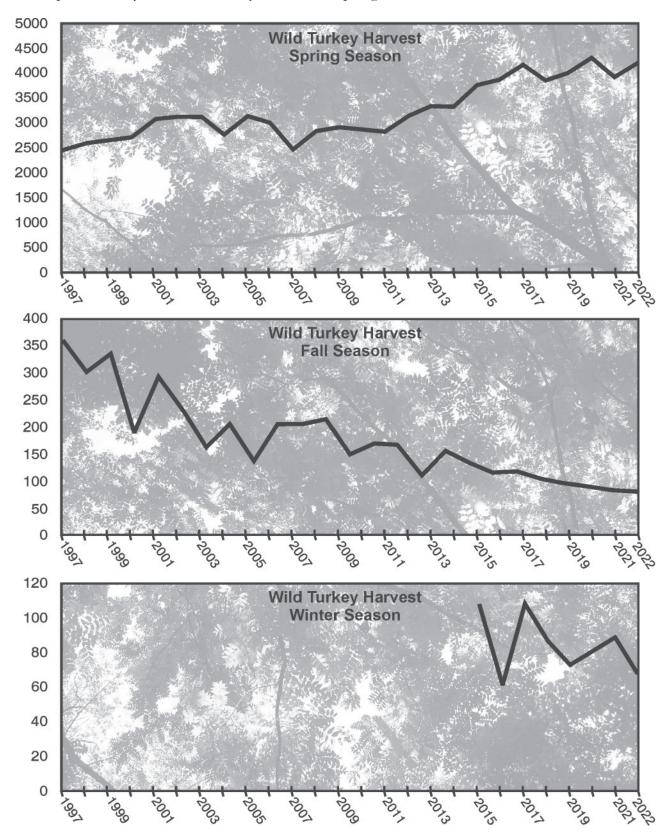








Figure 5 Reported Maryland Wild Turkey Harvest in Spring, Fall and Winter Seasons, 1997-2022.



#### Hunter Participation

The annual hunter mail survey estimates that the total number of turkey hunters in Maryland is lower than in the 1980s and 90s, but has remained generally stable over the last 15 years (Figure 6) at about 10,000.

Participation in fall turkey hunting has declined by over 80 percent. In the 2020-21 season, about 1,200 fall turkey hunters spent 3,000 days afield. Success rate in the fall season is typically about 10 percent.

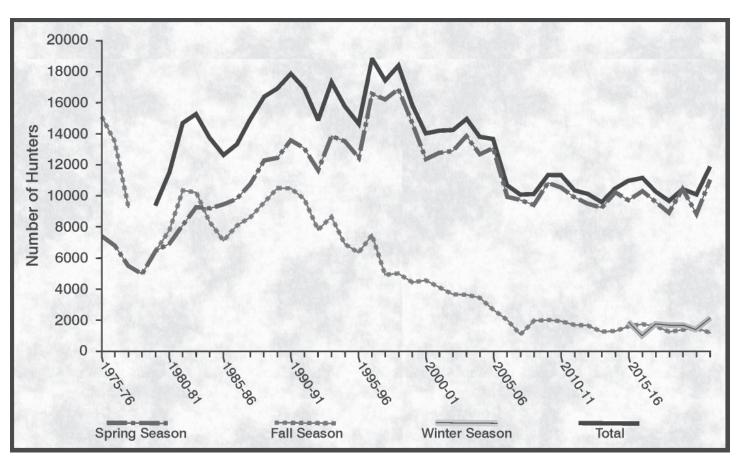
Spring turkey hunting participation peaked in the mid-1990s when the season was opened statewide. The most recent hunter mail survey data (2020) estimated that about 11,000 spring turkey hunters hunted 56,000 days. These estimates were up about 25%, presumably due to a COVID-19-related increase in hunting participation in spring of 2020. About 30 percent of spring hunters are typically successful in taking at least one turkey.

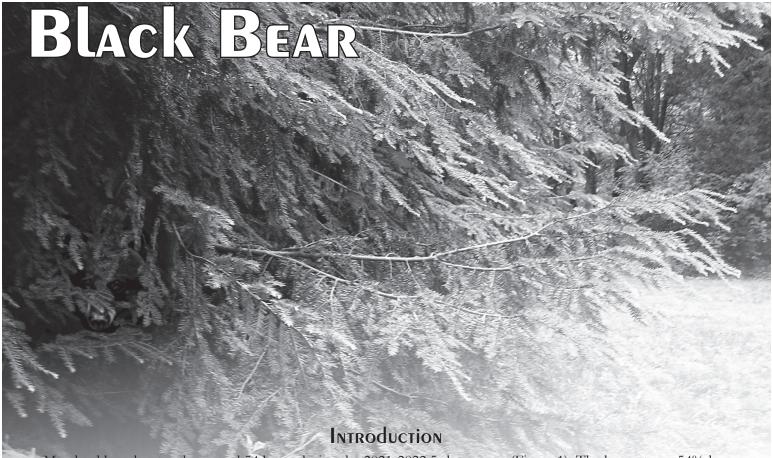
An estimated 2,200 hunters spent 2,900 days pursuing turkeys during the winter season statewide.

#### Wild Turkey Research

Beginning in January 2022, MD DNR plans to begin 3-year comprehensive research project, in collaboration with various university, non-profit, and state and federal agency partners, to better understand factors impacting turkey populations. Turkey numbers have declined in certain areas of Maryland as well as other parts of the Eastern U.S. Most concerning is the long-term decline in reproductive success across the region. A sample of hens will be trapped, radio-tagged and monitored on two sites in Maryland as well as on sites in Pennsylvania, New Jersey, and Ohio. Objectives include assessing the impact of weather, predators, habitat, and disease on turkey survival and reproduction. Gobblers will be leg-banded to estimate harvest rates as well.

Figure 6 Estimated Number of Maryland Wild Turkey Hunters, for the Turkey Seasons of 1975-76 to 2019-20.





Maryland bear hunters harvested 54 bears during the 2021-2022 5-day season (Figure 1). The harvest was 54% lower than the 117 bears harvested during 2020-2021. Warm weather, abundant natural foods, and a decline in hunter effort were primary factors in the decline. Hunters harvested 33 bears in Garrett County, 10 in Washington County, 6 in Allegany County, and 5 bears in Frederick County.

In 2021-22:

- The harvest was comprised of 20 male bears and 34 female bears.
- The heaviest bear taken was a male that weighed 362 pounds (estimated live weight).
- Male bears had a mean weight of 155 pounds and female bears had a mean weight of 142 pounds.
- The vast majority of the harvest (51 bears) was taken with rifles.
- Twenty of the bears were taken on public land while 34 were harvested on private land.

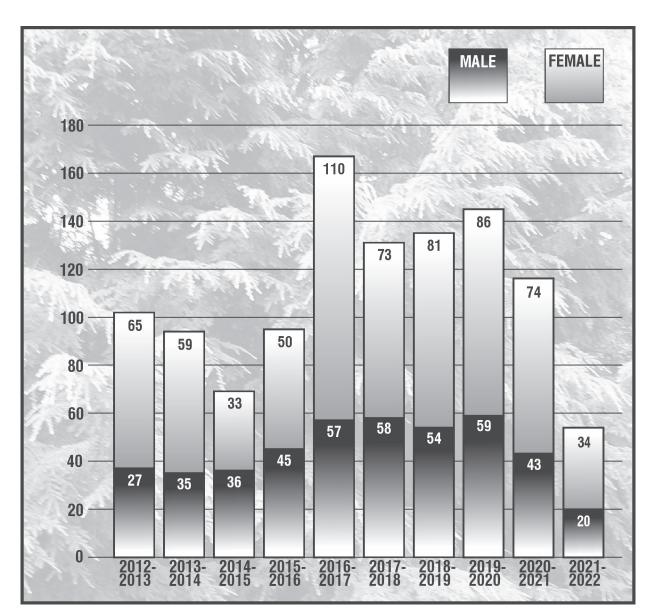
#### Black BEAR MANAGEMENT

Black bears are predominantly located in Maryland's four western counties (Allegany, Frederick, Garrett, and Washington). However, the population continues to expand, and bear sightings east of the occupied range are not uncommon. While most of these reported sightings are young bears that are dispersing, there have been several reports of sows with cubs outside of the western counties. As the bear population expands and occupies additional counties, the department will adjust management practices accordingly.

The DNR Bear Project manages black bears using a mix of lethal and non-lethal techniques under guidance of a bear management plan. Along with the annual bear hunt in the four western counties, the department conducts extensive public outreach about living with black bears, and uses non-lethal aversion techniques for problematic bears whenever possible. Agricultural damage permits are also available for farmers experiencing crop damage from bears. These permits allow farmers suffering bear damage to lethally remove one bear from the affected property annually.

The Bear Project uses multiple methods to monitor Maryland's bear population status. The population has been periodically directly estimated using DNA mark-recapture techniques. The department also uses several indices to monitor population trends, including the number of bears killed annually on Maryland roadways and by other non-hunting causes (Figure 6), and a scent station monitoring survey (Figure 7). These indices suggest Maryland's bear population remains healthy and is expanding eastward.

Figure 1 Maryland Reported Male and Female Black Bear Harvest, 2012-2013 through 2021-2022



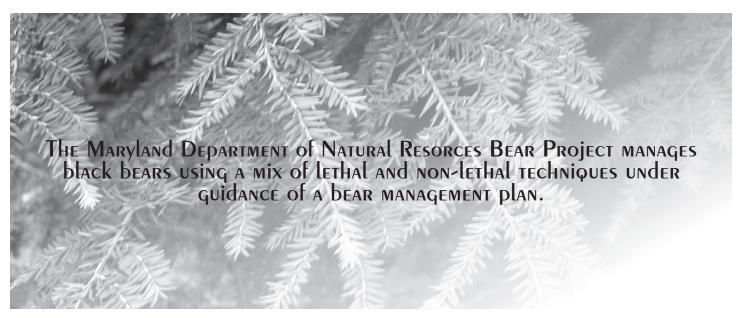
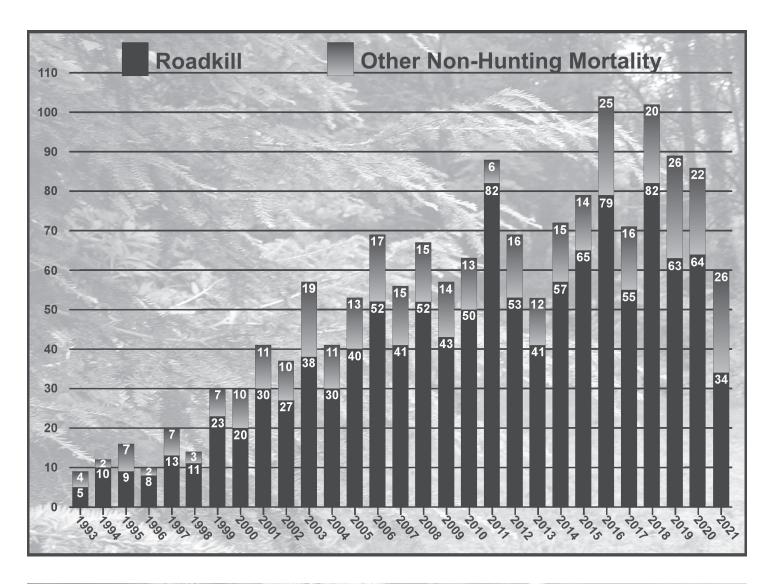


Figure 2 Maryland Black Bear Roadkill and Other Non-Hunting Mortality, 1993-2021.



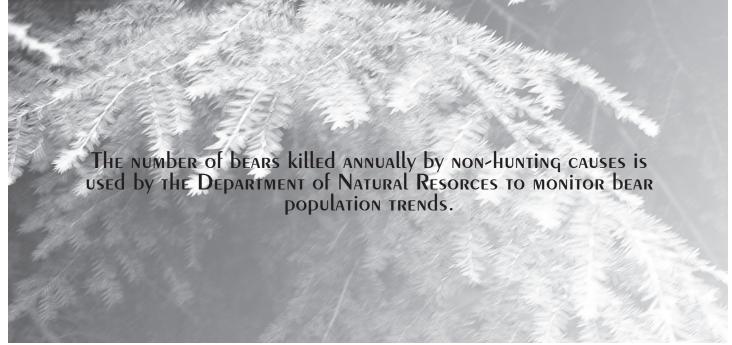
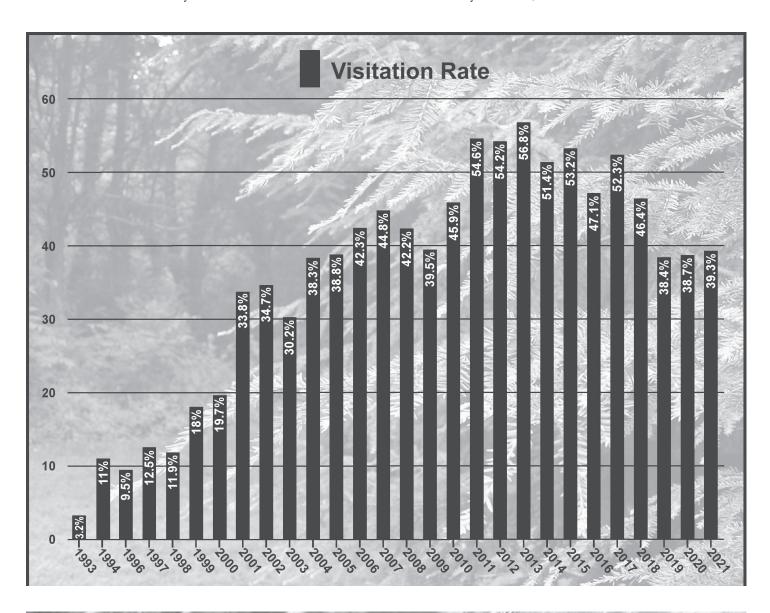
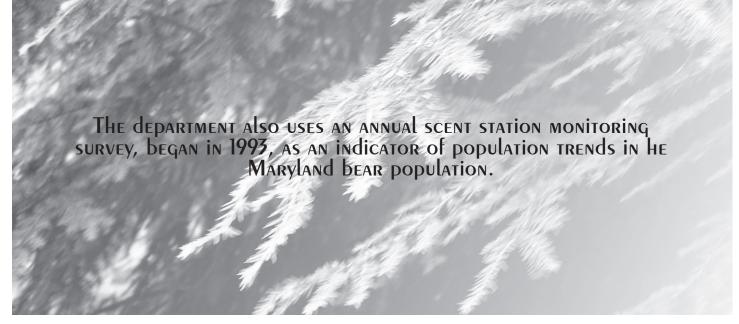


Figure 3 Maryland Black Bear Scent Station Visitation by Percent, 1993-2021.





Listings provided by Bucks-Bears-Stags. The Offical Record-Keeper for Outstanding Maryland Deer and Bear.

Beginning in 2021, Bucks-Bears-Stags (BBS) became the official record keeper of Boone & Crocket scores for outstanding Maryland white-tailed deer, sika deer, and black bear. To find out more information about Bucks-Bears-Stags, or to arrange official scoring of a deer or bear, visit: www.bucks-bears-stags.com.

Black Bear, Adult Male Hunter, 2021				
Name	County	Net Score		
Albert Lankford, State Record	Garrett	22 1/16		
Wayne Harley	Frederick	20 11/16		
John Fink	Garrett	18 8/16		
Robert Underwood	Allegany	16 13/16		
Black Bea	AR, YOUTH MALE HUNTER, 202	21		
Name	County	Net Score		
Eric Andrews	Garrett	20 9/16		
Elijah Fleming	Garrett	18 0/16		

All-Time Top Ten Black Bear					
Name	County	Harvest Year	Net Score		
1 Albert Lankford, State Record	Garrett	2012	22 1/16		
2 Coty Jones	Garrett	2007	21 10/16		
3 Tyler J. Minnick	Garrett	2019	21 8/16		
4 Ronald Oberender	Garrett	2016	20 11/16		
5 Wayne Harley	Frederick	2020	20 11/16		
6 Eric Andrews, Youth	Garrett	2004	20 9/16		
7 Robert J. Marks, III	Washington	2018	20 3/16		
8 Lacie Ashby	Garrett	2017	19 6/16		
9 Ashley Moreland	Allegany	2018	19 0/16		
10 John Fink	Garrett	2012	18 8/16		

The state record bear, taken by Albert Lankford, was harvested in 2012 and not measured until 2021.



White-Tailed De	er, Typical Antlers, Firear	rms, Adult Male Hunt	ER		
Name	County	Gross Score	Net Score		
Troy N. Thomas	Queen Anne's	201 7/8	173 4/8		
Paul Miles, Jr.	Queen Anne's	Not Recorded	156 1/8		
Jamie Wink	Somerset	158 0/8	154 0/8		
James McCrobie, Jr.	Garrett	152 2/8	149 2/8		
Jerry Tichnell	Garrett	152 0/8	148 4/8		
Donovan Cullings	Harford	152 5/8	144 4/8		
Michael Biddle, II	Caroline	169 0/8	143 2/8		
Jack Kemp	Queen Anne's	147 6/8	141 2/8		
Timothy L. Hamilton	Somerset	147 3/8	140 4/8		
White-Tailed Dee	r, Typical Antlers, Fireari	ns, Adult Female Hun	TER		
Molly Bryden	Kent	158 5/8	144 5/8		
White-Tailed Dec	er, Typical Antlers, Firear	rms, Youth Male Hunt	ER		
Kenny Eck	Queen Anne's	151 3/8	145 3/8		
Hayden Gibbons-Neff	Talbot	144 7/8	134 1/8		
Darrin Yoder	Garrett	137 2/8	130 5/8		
White-Tailed Dee	r, Typical Antlers, Fireard	ns, Youth Female Hun	TER		
Jadyn Telep	Cecil	131 7/8	127 0/8		
Kaylee Jo Davis	Garrett	129 5/8	126 6/8		
White-Tailed Deer,	Non-Typical Antlers, Fire	earms, Adult Male Hi	INTER		
L. Evan Miles	Queen Anne's	186 0/8	179 2/8		
Troy T Harris	Queen Anne's	181 1/8	175 1/8		
Dale Linton	Worcester	183 1/8	169 4/8		
Joseph A Mister, Jr.	Calvert	165 4/8	162 3/8		
George Schriver	Queen Anne's	167 2/8	161 4/8		
Andrew E West	Somerset	168 1/8	160 0/8		
White-Tailed Deer, Non-Typical Antlers, Firearms, Youth Male Hunter					
Coalson Plato	Cecil	163 3/8	160 4/8		
Tony Zouras	Frederick	164 4/8	160 4/8		
Reagan Goldsmith	Cecil	138 0/8	132 5/8		

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White-Tailed Deer, Typical	Antlers, Traditional And C	Compound Bow, Adul	r Male Hunter
Name	County	Gross Score	Net Score
Alan Sebold	Garrett	167 4/8	147 1/8
Jimmy Yoder	Garrett	155 5/8	146 7/8
Lucas W. Spiering	Caroline	152 5/8	146 4/8
Vern Sweitzer	Garrett	147 3/8	141 3/8
Austin Gray	Carroll	149 1/8	141 2/8
Brandon Kemp	Garrett	142 1/8	138 2/8
Andrew Evans	Cecil	142 3/8	137 7/8
Corey Burrell	Garrett	140 6/8	135 5/8
Michael Deville	Talbot	146 6/8	135 3/8
Chris Digges	Charles	136 6/8	134 1/8
Jimmy Yoder	Garrett	137 0/8	132 7/8
Michael Pettorossi	Cecil	142 0/8	132 5/8
Rocky McCumbee	St. Mary's	146 6/8	131 7/8
William Freeman	Garrett	138 2/8	130 5/8
Andrew Evans	Dorchester	134 0/8	130 1/8
Andrew Evans	Worcester	135 1/8	128 6/8
Eric Sutton	Kent	132 6/8	126 3/8
Mathew Reed	Kent	135 5/8	126 3/8
Charles Stevenson	Charles	152 0/8	126 1/8
James McCrobie, Jr.	Garrett	135 3/8	125 2/8
Rocky McCumbee	St. Mary's	135 5/8	125 0/8
Sam Ward	Cecil	120 6/8	118 5/8
Steve Rowland	Montgomery	121 3/8	118 5/8
White-Tailed Deer, Non-Typ	ical Antlers, Traditional &	Compound Bow, Adu	It Male Hunter
Andrew Evans	Worcester	156 4/8	147 5/8
Charles Stevenson	Queen Anne's	142 5/8	128 0/8
White-Tailed Do	eer, Typical Antlers, Crossl	bow, Adult Male Hun	TER
Larry Gordon, Jr.	Garrett	172 1/8	165 2/8
Frank Long	St Mary's	164 3/8	151 6/8
Frank Long	St Mary's	140 6/8	136 6/8
A.J. Fleming	Garrett	135 6/8	131 5/8
Carl Lee	Garrett	131 1/8	128 7/8
David Cameron	Howard	128 0/8	117 7/8
David Patterson	Queen Anne's	129 6/8	115 6/8
Robert Mesaris	Somerset	136 1/8	115 4/8

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White-Tailed De	er, Typical Antlers, Crossl	bow, Youth Male Hun	TER		
Name	County	Gross Score	Net Score		
Kayden Mathew Winters	Frederick	126 5/8	125 0/8		
Brendon Layman	Harford	127 7/8	124 0/8		
Elijah Fleming	Garrett	124 3/8	120 7/8		
White-Tailed De	er, Typical Antlers, Crossb	ow, Youth Female Hu	NTER		
Amelia Bolden	Garrett	130 2/8	110 4/8		
White-Tailed Deer	, Non-Typical Antlers, Cro	ssbow, Adult Male H	UNTER		
William Gabler	Worcester	161 4/8	156 6/8		
Danny Ray Teets, Jr.	Garrett	150 0/8	146 5/8		
Kevin Robison	Allegany	145 5/8	138 2/8		
Thomas Crist	Queen Anne's	145 4/8	136 5/8		
White-Tailed Dee	r, Typical Antlers, Muzzlek	pader, Adult Male Hu	INTER		
Pete Jayne	Queen Anne's	174 5/8	154 0/8		
Marty Hall	Kent	163 5/8	151 6/8		
Marty Hall	Kent	156 5/8	150 5/8		
Troy Thomas	Queen Anne's	153 0/8	149 7/8		
Carl Lee	Garrett	138 3/8	134 6/8		
Andrew Myer	Queen Anne's	136 6/8	133 2/8		
Jim Vecheck	Queen Anne's	138 7/8	132 2/8		
	, Typical Antlers, Muzzlelo	Ader, Adult Female H			
Terri Jean Carder	Frederick	141 2/8	136 3/8		
	r, Typical Antlers, Muzzlelo	1			
Logen Click	Carroll	152 7/8	144 0/8		
	, Typical Antlers, Muzzlelo				
Amelia Bolden	Garrett	140 1/8	136 2/8		
Jadyn Telep	Cecil	130 2/8	125 5/8		
White-Tailed Deer, Non-Typical Antlers, Muzzleloader, Adult Male Hunter					
Randy Aukamp, Jr.	Queen Anne's	170 0/8	160 1/8		
Rocky McCumbee	St. Mary's	156 7/8	144 1/8		

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	White-Tailed Deer, In V	/Elvet	
Rocky McCombie, Muzzleloader, Non- Typical	St. Mary's	148 2/8	145 4/8
Nathan Petersheim, Bow	Garrett	146 3/8	140 6/8
Michael Wathen, Crossbow	St. Mary's	133 7/8	130 5/8
Elijah-Fleming, Cross- bow	Garrett	125 1/8	122 7/8
White-Tai	led Deer, Typical Antlers, A	Antlers Picked Up	
Name	County	Gross Score	Net Score
Steve Speck	Cecil	168 2/8	164 6/8
Ryan Mazeska	Charles	170 1/8	160 4/8
Evan Miles	Queen Anne's	165 4/8	160 1/8
Evan Miles	Queen Anne's	169 5/8	156 3/8
Tracey Mazeska	St Mary's	159 0/8	154 1/8
Rick Watts	Kent	166 2/8	153 7/8
Ryan Mazeska	Charles 🗼	162 2/8	151 7/8
Troy N. Thomas	Queen Anne's	155 3/8	148 7/8
Steve Forman	Prince George's	167 3/8	146 3/8
Cobenn Bolden	Garrett	144 2/8	140 1/8
Tracey Mazeska	Prince George's	152 3/8	142 0/8
White-Tailed	Deer, Non-Typical Antlers	s, Antlers Picked Up	
Luke Blatherwick	Dorchester	267 3/8	254 1/8
Evan Miles	Queen Anne's	165 4/8	160 1/8

# Maryland's Finest All-Time Record White-tailed Deer Standings

	Typical Antlers, Fire	ARMS	
Name	County	Gross Score	Net Score
Kevin Miller	Kent	Unknown	194 6/8
Walter Lachewittz	Queen Anne's	Unknown	185 7/8
Larry Day	St. Mary's	Unknown	184 0/8
	Non-Typical Antlers, Fig	REARMS	
William Crutchfield, Jr.	Charles	Unknown	268 1/8
Danza Watson	Charles	Unknown	248 7/8
Jack Poole	Montgomery	Unknown	228 4/8
Typical	Antlers, Traditional & C	COMPOUND BOW	
Petey Council	Talbot	Unknown	183 3/8
Mark Rogowski	Harford	Unknown	178 1/8
Richard Traband	Baltimore	Unknown	177 0/8
Non-Typic	al Antlers, Traditional &	Compound Bow	
Jordan DuHamell	Cecil	Unknown	223 3/8
Robert Gertz	Anne Arundel	Unknown	208 7/8
Richard E. Stacey, Sr.	Talbot	Unknown	207 5/8
	Typical Antlers, Cross	sbow	
Charlie Wallace	St. Mary's	186 7/8	172 3/8
Bobby D Penkert	St. Mary's	191 6/8	166 7/8
Wayne Wipfield	Baltimore	Unknown	166 3/8
	Non-Typical Antlers, Cr	ossbow	
Steve Whitelock	Wicomico	Unknown	211 2/8
Albert H. Piasecki	Kent	Unknown	195 3/8
Tyler Gladu	St. Mary's	202 4/8	186 7/8
	Typical Antlers, Muzzle	loader	
John Gweazdowski	Baltimore	Unknown	178 6/8
Mark Bronder	Dorchester	Unknown	174 2/8
Richard Catron	Montgomery	Unknown	172 7/8
N	on-Typical Antlers, Muzi	zleloader	
Robert Brookman	Anne Arundel	Unknown	229 6/8
Greg Glos	Dorchester	Unknown	200 4/8
William Shields	Talbot	Unknown	199 3/8
Ту	pical Antlers, Antlers P	icked Up	
Steve Speck	Cecil	168 2/8	164 6/8
Ryan Mazeska	Charles	170 1/8	160 4/8
Evan Miles	Queen Anne's	169 5/8	156 3/8
Non	-Typical Antlers, Antlers	Picked Up	
Luke Blatherwick	Dorchester	267 3/8	254 1/8
Evan Miles	Queen Anne's	165 4/8	160 1/8

#### Maryland's Finest All-Time Record Sika and Fallow Deer Standings

All-Time Best Sika Deer					
Name	County	Harvest Method	Gross Score	Net Score	
1. Tim Krauss, #1 All-Time	Wicomico	Firearm	Unknown	77 1/8	
2. James Howdyshell	Dorchester	Firearm	Unknown	75 7/8	
3. John Pippin, #1 Crossbow	Dorchester	Crossbow	Unknown	75 4/8	
4. William Stuart, #1 Vertical Bow	Dorchester	Bow	76 1/8	74 6/8	
5. Henry Williams, Jr., #1 Muzzleloader	Dorchester	Muzzleloader	Unknown	74 4/8	
6. Samuel King	Dorchester	Bow	Unknown	74 1/8	
7. Robert S Bartoshesky	Wicomico	Bow	78 7/8	74 1/8	
8. John Eger	Dorchester	Muzzleloader	Unknown	73 4/8	
9. Jordan Williamson	Wicomico	Crossbow	76 7/8	73 4/8	
10. Milton Kern	Dorchester	Muzzleloader	Unknown	72 7/8	
11. Rick Rice	Wicomico	Muzzleloader	75 1/8	72 6/8	
12. David King, Jr.	Dorchester	Firearm	Unknown	72 5/8	
13. Bryan Spath	Dorchester	Bow	Unknown	72 3/8	
14. Joseph W. Myers	Dorchester	Muzzleloader	Unknown	72 1/8	
15. Bert Weber	Dorchester	Firearm	74 6/8	72 1/8	
16. Arthur Rhoderick	Dorchester	Firearm	Unknown	72 0/8	
17. Bryon Richardson, #1 Picked Up	Wicomico	Picked-Up	75 4/8	70 2/8	

All-Time Best Fallow Deer						
Name County Harvest Method Gross Score Net Score						
Patrick A. Akins	Prince George's	Firearm	Unknown	176 7/8		
Michael Cava- nah	Prince George's	Bow	Unknown	202 1/8		
Jody LeCompte	Talbot	Crossbow	Unknown	134 7/8		
Bill McCready	Talbot	Muzzleloader	Unknown	128 1/8		

The Maryland Department of Natural Resouces would like to sincerely thank Tinker Johnson and the Trophy Deer Contest for many years of diligence and hard work maintaining deer records and hosting scoring events prior to 2021.



