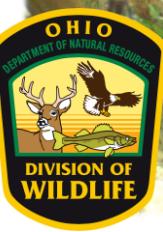


# Annual Summary of Ohio's Deer Program

## Our Deer Management Strategy

The goal of Ohio's deer program is to provide a deer population that maximizes recreational opportunities including viewing, photographing, and hunting, while minimizing conflicts with agriculture, motor travel, and other areas of human endeavor. This has been the Division of Wildlife's goal for over 50 years.



OHIO DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WILDLIFE

Summer 2022

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### DID YOU KNOW?

- Despite regulation changes to increase antlerless harvest (Deer Management Permit valid in all 88 counties), the antlerless harvest, as a percent of the total, declined to 54.8% – a level not seen since the late 90s.
- A record 95,303 deer were harvested during the 2021-22 archery season and 71% of them were taken with a crossbow.
- The number of licensed deer hunters has declined nearly 19% over the last decade.
- In December 2020, routine surveillance detected the first case of CWD in Ohio's wild deer population. A total of 11 CWD-positive deer have been found in southern Wyandot and northern Marion counties.

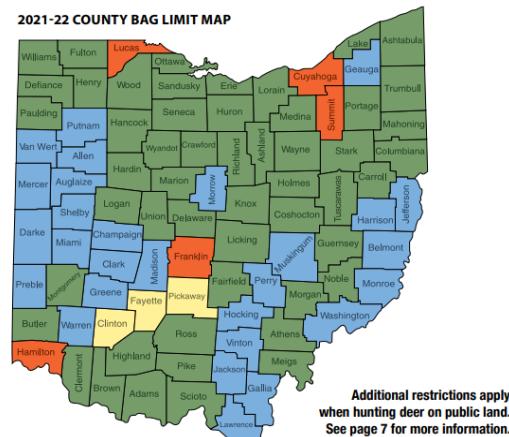
# SEASONS AND PERMITS

A valid hunting license (resident = \$19, nonresident = \$180.96, youth = \$10, senior = \$10) and a deer permit (resident either-sex = \$31.20, nonresident either-sex = \$76.96, deer management = \$15, youth = \$16, senior = \$12) are required to hunt deer in Ohio. Hunters could harvest up to six deer with any combination of either-sex and deer management permits (Figure 1). Deer management permits were valid statewide during the first nine weeks of the archery season, as well as during all Division of Wildlife controlled hunts. Deer harvested during controlled hunts (maximum of six) did not count against a hunter's statewide or county bag limits.

Hunters had the opportunity to hunt deer during Ohio's four seasons, including archery (Sep. 25, 2021 - Feb. 6, 2022), gun (Nov. 29 - Dec. 5, 2021), bonus gun (Dec. 18-19, 2021), and muzzleloader (Jan. 8-11, 2022). Youth (17 and under) season was Nov. 20-21, 2021.

The Division of Wildlife issued 404,800 deer permits during the 2021-22 license year (Table 1). Permit sales for 2021-22 were down more than 35% from the peak in 2009-10. The decreasing trend is likely due to several factors, the most notable of which is fewer hunters. The number of individuals purchasing at least one deer permit has decreased 19% over the last decade from 360,000 in 2011 to 290,000 in 2021 (Figure 2).

Figure 1. Harvest regulations for the 2021-22 season as presented in the Ohio Hunting and Trapping Regulations, Publication 5085.



ONE DEER COUNTY	A hunter may harvest no more than one deer in a one-deer county during the 2021-22 season. A hunter may use an either-sex permit or a deer management permit.
TWO DEER COUNTY	A hunter may harvest no more than two deer in a two-deer county during the 2021-22 season. A hunter may use two either-sex permits, two deer management permits, or one of each.
THREE DEER COUNTY	A hunter may harvest no more than three deer in a three-deer county during the 2021-22 season. A hunter may use three either-sex permits, three deer management permits, or any combination.
FOUR DEER COUNTY	A hunter may harvest no more than four deer in a four-deer county during the 2021-22 season. A hunter may use four either-sex permits, four deer management permits, or any combination.

Table 1. Deer permits issued<sup>1</sup>, 2007 - 2021.

Year	Permit			Total
	Youth	Either-Sex	Antlerless-only <sup>2</sup>	
2007-08	65,647	411,522	101,197	578,366
2008-09	67,338	396,704	147,400	611,442
2009-10	67,828	394,620	162,460	624,908
2010-11	66,300	380,462	162,655	609,417
2011-12	62,864	377,302	163,383	603,549
2012-13	64,634	397,333	126,918 <sup>3</sup>	588,885
2013-14	60,961	373,315	101,400	535,676
2014-15	58,227	378,921	57,230	494,378
2015-16	58,055	392,533	15,514	466,102
2016-17	52,706	373,791	18,669	445,166
2017-18	49,529	367,753	11,724	429,006
2018-19	42,781	345,408	11,117	399,306
2019-20	45,755	339,077	8,535	393,367
2020-21	50,490	346,620	12,698	409,808
2021-22	48,516	333,136	23,148	404,800

<sup>1</sup>Includes both permits sold as well as those acquired for free by seniors and/or disabled veterans.

<sup>2</sup>Antlerless-only permits were renamed "Deer Management Permit" in 2019.

<sup>3</sup>Restrictions on the use of the antlerless permit began in 2012 and continued through 2020.

Figure 2. Number of deer permit buyers, by permit type, 2011 – 2021.

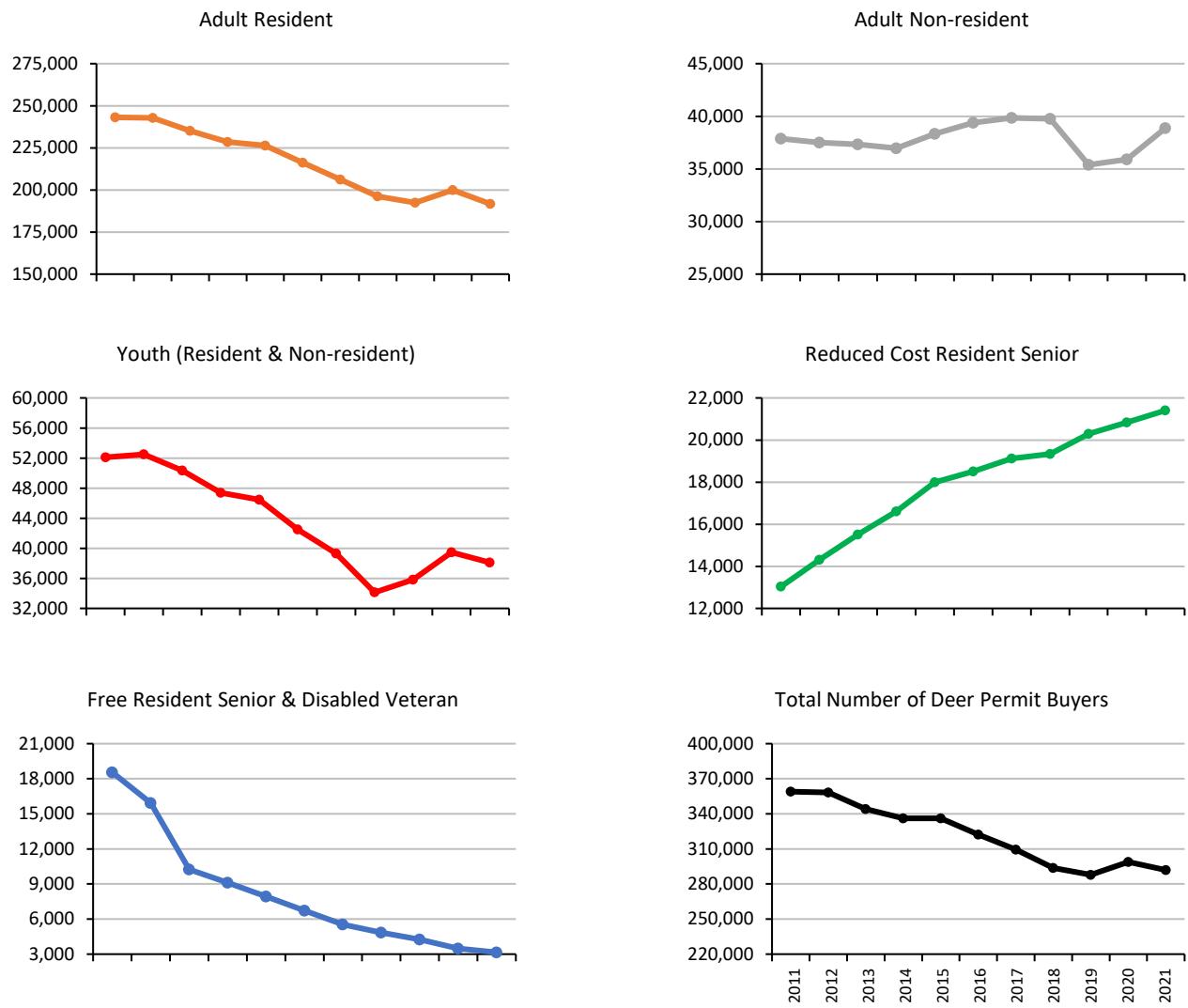


Table 2. Buck, doe, button buck, and total harvests by season, 2021-22 and three-year average<sup>1</sup>.

	Bucks <sup>2</sup>		Does		Buttons		Total		
	2021	3yr avg.	2021	3yr avg.	2021	3yr avg.	2021	3yr avg.	Diff. (%)
<b>Gun</b>									
Traditional (7-day)	26,288	23,817	36,079	33,979	8,014	7,484	70,381	65,280	7.8
Bonus (2-day)	3,035	3,884	5,260	7,415	1,097	1,435	9,392	12,734	-26.2
Youth	4,187	3,331	2,614	2,180	831	699	7,632	6,210	22.9
<b>Total</b>	<b>33,510</b>	<b>31,032</b>	<b>43,953</b>	<b>43,574</b>	<b>9,942</b>	<b>9,618</b>	<b>87,405</b>	<b>84,224</b>	<b>3.8</b>
<b>Archery</b>									
Crossbow	36,524	30,062	26,258	24,001	4,992	4,786	67,774	58,848	15.2
Vertical Bow	14,537	14,022	11,293	12,232	1,699	1,824	27,529	28,078	-2.0
<b>Total</b>	<b>51,061</b>	<b>44,084</b>	<b>37,551</b>	<b>36,233</b>	<b>6,691</b>	<b>6,610</b>	<b>95,303</b>	<b>86,927</b>	<b>9.6</b>
<b>Muzzleloader</b>	<b>3,620</b>	<b>3,443</b>	<b>7,239</b>	<b>6,833</b>	<b>1,282</b>	<b>1,224</b>	<b>12,141</b>	<b>11,501</b>	<b>5.6</b>
<b>Total</b>	<b>88,969</b>	<b>79,329</b>	<b>89,858</b>	<b>87,701</b>	<b>18,161</b>	<b>17,716</b>	<b>196,988</b>	<b>184,746</b>	<b>6.6</b>

<sup>1</sup>Average of 2018-19, 2019-20, and 2020-21 seasons.

<sup>2</sup>Includes bucks at least 1.5 years old with antlers less than three inches in length (2,284), and bucks with shed antlers (1,105).

## HARVEST SUMMARY

Hunters harvested 196,988 deer during the 2021-22 season, 7% more than the three-year average (Table 2). The total includes 88,969 bucks, 89,858 does, and 18,161 button bucks. Coshocton County once again led the state with 7,144 deer killed. A harvest summary by season for the top five counties is presented in Table 3, and a complete harvest summary by county and season is available in Appendix 1.

The harvest total during the traditional statewide gun season was 70,381 deer, 8% more than the three-year average (Table 2). Coshocton, Tuscarawas, Muskingum, Ashtabula, and Knox counties led the state in gun harvest (Table 3). The bonus gun season harvest was 9,392 deer. Coshocton County hunters led the way, harvesting 307 deer during the two-day season, with Tuscarawas, Licking, Guernsey, and Ashtabula counties rounding out the top five.

Archers reported harvesting 95,303 deer, the largest archery harvest on record and nearly 10% more than the three-year average (Table 2). Archers accounted for 48% of the entire deer harvest, and for the ninth year in a row, more deer were taken during archery season than the week of gun season. By comparison, just 15 years ago the archery harvest only accounted for less than 30% of the annual harvest (Figure 3). This shift in the harvest is likely due to the ever-increasing interest and participation in archery hunting. In 1981, only about one-third of gun hunters also bowhunted. In 2021, nearly three out of four gun hunters also hunted the archery season.

Crossbow hunters harvested 67,774 deer, an increase of 15% over the three-year average (Table 2). Crossbows accounted for a record 71% of the archery harvest in 2021, continuing a trend that has been occurring over the last decade (Figure 4). Coshocton County led the state with 2,490 deer, followed by Tuscarawas, Licking, Ashtabula, and Holmes counties. The vertical bow harvest (compounds, recurves, and longbows) was 27,529 deer, 2% below the three-year average. Coshocton County archers led the state with a harvest of 1,068 deer. Tuscarawas, Licking, Knox, and Muskingum were the other top vertical bow harvest counties.

Figure 4. Total archery harvest and proportion taken by crossbows and longbows, 1977-2021.

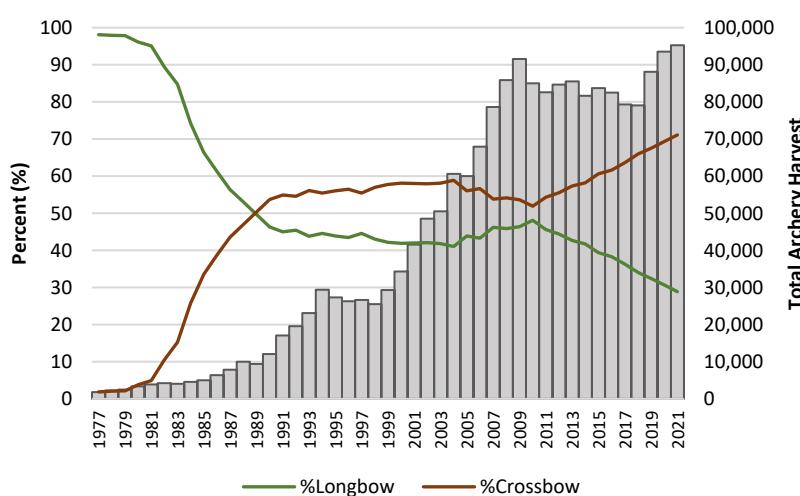
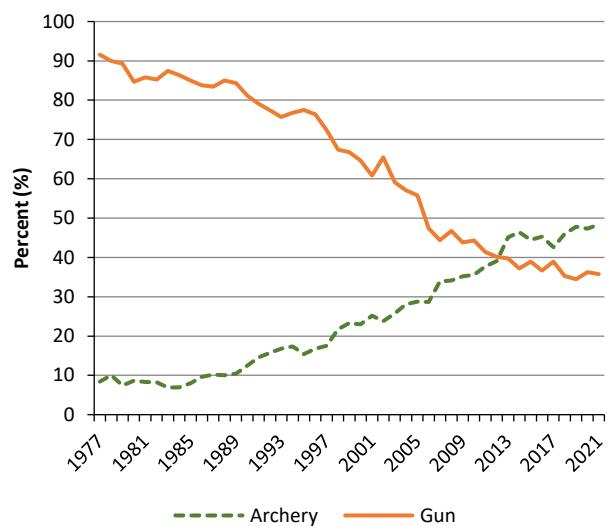


Figure 3. Percent of the total annual deer harvest taken during the archery and traditional 7-day gun season, 1977-2021.



There were 12,141 deer harvested during the four-day statewide muzzleloader season, 6% more than the three-year average harvest (Table 2). Coshocton County was the top spot for muzzleloader hunters with a harvest of 467 deer, followed by Tuscarawas, Guernsey, Ashtabula, and Muskingum counties.

Youth hunters took 7,632 deer during the 2-day youth season, 23% more than the three-year average (Table 2). Top harvest counties for the two-day youth season were Tuscarawas, Coshocton, Holmes, Knox, and Guernsey counties.

Table 3. Buck, doe, button buck, and total harvest by season for the top five counties, 2021-2022.

Season	County	Bucks*	Does	Buttons	Total	Rank	
						2021	2020
Gun	Coshocton	818	1,324	261	2,403	1	1
	Tuscarawas	793	1,168	241	2,202	2	2
	Muskingum	779	1,103	225	2,107	3	4
	Ashtabula	638	1,074	327	2,039	4	3
	Knox	637	1,167	217	2,021	5	5
Bonus Gun	Coshocton	79	197	31	307	1	3
	Tuscarawas	87	165	35	287	2	1
	Licking	81	146	29	256	3	5
	Guernsey	81	128	27	236	4	7
	Ashtabula	72	121	39	232	5	2
Crossbow	Coshocton	1,281	1,063	146	2,490	1	1
	Tuscarawas	1,062	848	123	2,033	2	3
	Licking	1,026	754	129	1,909	3	2
	Ashtabula	791	775	228	1,794	4	4
	Holmes	808	807	138	1,753	5	6
Vertical Bow	Coshocton	531	479	58	1,068	1	1
	Tuscarawas	466	410	51	927	2	3
	Licking	430	356	46	832	3	2
	Knox	362	349	61	772	4	4
	Muskingum	454	259	34	747	5	6
Muzzleloader	Coshocton	127	290	50	467	1	1
	Tuscarawas	107	296	52	455	2	2
	Guernsey	103	237	46	386	3	4
	Ashtabula	68	230	65	363	4	10
	Muskingum	113	213	30	356	5	5
Youth	Tuscarawas	172	118	32	322	1	3
	Coshocton	166	109	32	307	2	1
	Holmes	138	86	26	250	3	2
	Knox	125	78	25	228	4	5
	Guernsey	129	74	17	220	5	6
Total	Coshocton	3,038	3,519	587	7,144	1	1
	Tuscarawas	2,714	3,046	543	6,303	2	2
	Muskingum	2,574	2,356	401	5,331	3	6
	Knox	2,083	2,714	493	5,290	4	5
	Licking	2,341	2,491	412	5,244	5	4

\*Includes bucks at least 1.5 years old with antlers less than three inches in length and bucks with shed antlers.

## Nonresident Hunters

Nonresident hunters accounted for 11.7% of the deer permits issued and 11.5% of the harvest. Approximately 16% of permit buyers were nonresidents and they accounted for 18% of the antlered harvest in the 2021-22 season. Nearly 16% of the nonresident harvest (2,591 deer) was taken on public land, which is 2.5 times the rate of residents (6.2%). The nonresident harvest was 70% antlered. By comparison, the resident harvest was only 41% antlered. The top five nonresident states (by total harvest) were Pennsylvania (2,905), Michigan (1,988), West Virginia (1,380), North Carolina (1,221), and New York (1,073). The top five counties for nonresident deer harvest were Adams (22.1%), Pike (22.0%), Athens (20.5%), Meigs (19.6%), and Morgan (19.1%).

More than two-thirds of the nonresident harvest (68%) occurred during archery season, with the gun and muzzleloader seasons accounting for an additional 22% and 7%, respectively (Table 4). Nonresidents took a much larger percentage of their harvest during archery season than either residents or landowners. Almost three-quarters (74%) of the antlered and over half of the antlerless deer harvested by nonresidents were taken during archery season.

Table 4. Percentage of antlered, antlerless, and total harvest by season, for adult residents, adult nonresidents, and landowners during the 2021-22 deer season.

	Antlered Harvest			Antlerless Harvest			Total Harvest		
	Resident	Non-resident	Landowner	Resident	Non-resident	Landowner	Resident	Non-resident	Landowner
Archery	59	74	60	44	55	40	50	68	48
Gun	33	19	34	41	29	46	38	22	41
Bonus Gun	4	2	3	6	3	6	5	2	5
Muzzleloader	4	5	3	8	12	8	7	7	6

## Landowners

Landowners reported harvesting 55,566 deer, just over 28% of the total harvest. The proportion of the harvest taken by landowners increased substantially from 1995 (19%) to 2005 (28%), remained relatively stable at about 27% until 2017, and has increased slightly since. While the total landowner harvest was relatively split between the gun (41%) and archery (48%) seasons, there was a notable difference in the timing of antlered and antlerless harvests. Most (60%) antlered deer were taken during the archery season (Table 4), but 60% of antlerless deer were taken in the firearms seasons. Landowner proportion of the total county harvest varied considerably across the state but was greatest among southeastern counties. Washington County led the state with landowners accounting for 42% of the total reported harvest. Landowners also accounted for a significant portion of the total harvest in Meigs (41%), Holmes (40%), Gallia (38%), and Perry (37%) counties.

## Public Land

While public land only accounts for roughly 4% of the total land area in the state, resident and nonresident hunters reported harvesting 13,746 deer, 7% of the season total, on public land. Antlered bucks accounted for 45% of the public land harvest, slightly more than the proportion of antlered bucks in the private land harvest (43%). It is worth noting that the proportion of antlered bucks in the public land harvest increased substantially with the implementation of antlerless harvest restrictions in 2018. Prior to the public land antlerless restrictions, antlered deer comprised only 38% of the public land harvest – a bit lower than the average private land harvest (41%). With just over 80,000 acres of public land including the Wayne National Forest, Crown City Wildlife Area, and Dean State Forest, Lawrence County once again held the top spot for the proportion of harvest taken on public land (28%). The other top counties were Hocking (16.8%), Lucas (16.7%), Muskingum (16.7%), Vinton (16.4%), and Morgan (15.9%). Nonresident hunters accounted for more than 25% of the public land harvest in seven of the top 10 counties (Table 5).

Table 5. Public land and total harvest, by residency status, in the top 10 counties for public land acreage during the 2021-22 deer season.

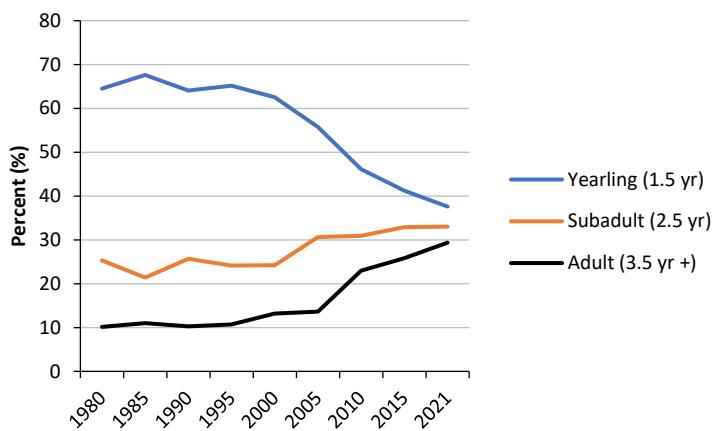
County	Public Land			Resident Harvest			Nonresident Harvest				
	Acres*	% of Total Land in County	% of County Harvest	Public Land	County Total	% of Harvest Taken on Public Land	Public Land	County Total	% of Harvest Taken on Public Land	% of County's Total Harvest Taken by NR	% of County's Public Land Harvest Taken by NR
Lawrence	82,000	28	27.7	291	1,324	22.0	155	289	53.6	17.9	34.8
Scioto	72,000	18	13.0	164	1,753	9.4	111	368	30.2	17.4	40.4
Muskingum	50,000	12	16.7	654	4,477	14.6	235	854	27.5	16.0	26.4
Vinton	49,000	19	16.4	261	1,998	13.1	137	435	31.5	17.9	34.4
Hocking	45,000	17	16.8	321	2,412	13.3	169	506	33.4	17.3	34.5
Washington	40,000	10	7.7	197	2,908	6.8	63	472	13.3	14.0	24.2
Morgan	38,000	14	15.9	392	2,618	15.0	122	617	19.8	19.1	23.7
Coshocton	37,000	10	11.3	576	6,248	9.2	228	896	25.4	12.5	28.4
Athens	33,000	10	10.2	261	2,814	9.3	100	726	13.8	20.5	27.7
Monroe	31,000	10	11.4	216	2,171	9.9	66	306	21.6	12.4	23.4

\*Lands open to public hunting that are owned or administered by the ODNR or U.S. Forest Service (Wayne National Forest), rounded to the nearest 1,000 acres.

### Deer Age Structure

In 2021, Division of Wildlife personnel aged 5,134 deer during the weeklong gun season (7% of the reported harvest) from 39 processors in 35 counties as well as from three inspection stations in the Disease Surveillance Area of Wyandot and Marion counties. Figure 5 shows how the age structure of the antlered harvest has changed over time. The proportion of yearlings in the antlered buck harvest has been steadily declining since the late 1990s. In the early to mid-1980s, nearly 70% of the bucks harvested were yearlings. Today, that percentage is below 40%. A reduction of this magnitude would normally be a result of some type of regulation change, such as antler point restrictions. In Ohio's case, the decline in yearling buck harvest is likely due to at least two factors, increased hunter selectivity (self-imposed harvest restrictions) and liberal antlerless opportunities. The growth of the deer herd over time, coupled with liberal antlerless harvest opportunities, has afforded many hunters the luxury of passing on young bucks in favor of waiting for an opportunity at an older (and, presumably, larger-antlered) deer.

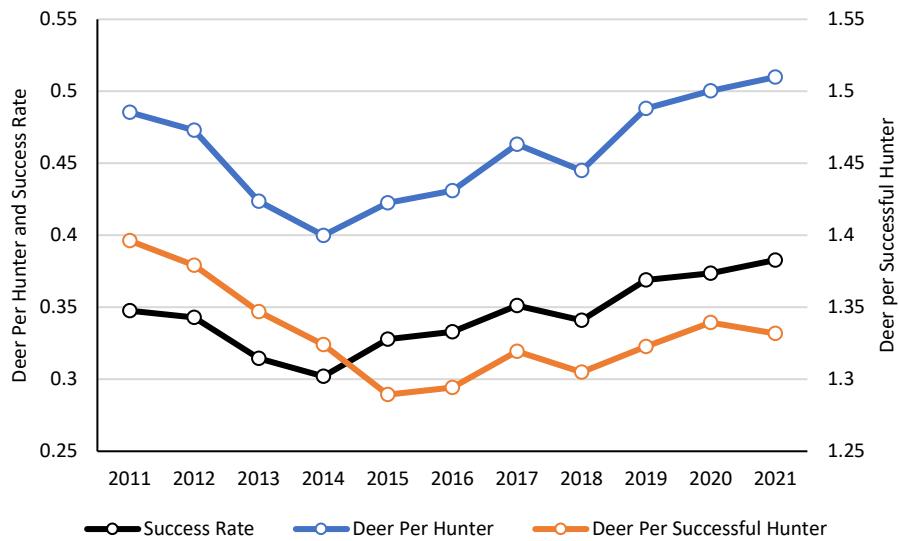
Figure 5. Statewide trends in antlered buck age structure based on a sample of the gun season harvest, 1980 – 2021.



## HUNTER SUCCESS, PARTICIPATION, AND EFFORT

In the 2021-22 season, 191,713 resident adults purchased at least one either-sex or deer management permit and 73,383 harvested at least one deer, resulting in a 38% hunter success rate (Table 6, Figure 6). Hunter success rates have increased steadily over the last few years with this season's success rate signifying a 27% jump over the 2014 season. Just over 37% of private land hunters were successful, as compared to only 15% of public land hunters. Because our deer hunter surveys are limited to resident adult hunters, rates may be different for nonresident hunters, as well as youth, disabled veterans, free and reduced cost seniors, and landowners.

Figure 6. Success rate and average number of deer per hunter and per successful hunter, 2011-2021.



During the 2021-22 season, 77% of hunters bowhunted, while 79%, 40% and 33% reported hunting in the gun, bonus gun, and muzzleloader seasons, respectively (Table 6; Figure 7). Hunter effort remained relatively constant at an average of 19.5 days from 2001-2015, but dipped slightly to an average of 17 days from 2016-2020. During the 2021-22 season, archery, gun, and muzzleloader hunters spent, on average, 18.4, 3.7, and 2.2 days hunting those seasons, respectively, with hunters averaging 18.6 days in the field over the course of the entire season (Table 7). Roughly one in five gun hunters reported a deer harvest and archery hunters posted a success rate just over 26% (Table 6). When considering success rates, it is important to remember that success in any particular season is very much dependent upon success in other seasons. Nearly three-quarters of gun hunters also hunt during the archery season, and most likely do so prior to the gun season. Because most hunters participate in multiple seasons and many choose to hunt bucks only, season-specific success rates have limited value and certainly cannot be compared with other states where hunters have season-specific permits. Additionally, these estimates are derived from surveys of adult, resident hunters that purchased a deer permit. Therefore, season participation and success rates of nonresidents, youth, disabled veterans, seniors, and landowners are currently unknown.

Figure 7. Season-specific hunter participation rates based on results of the 2021-22 deer hunter survey.

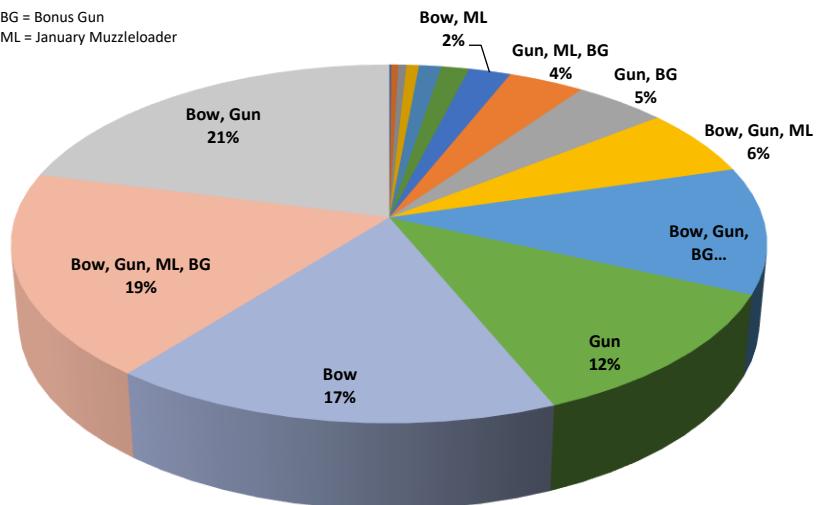


Table 6. Participation and success rates for the 2021-22 deer season compared to the three-year average<sup>1</sup>.

	Participation Rate (%)		Estimated Number of Hunters		Number of Successful Hunters		Success Rate (%)	
	2021	3yr avg.	2021	3yr avg.	2021	3yr avg.	2021	3yr avg.
<b>Nonresident</b>			38,883	37,014	13,275	11,764	34.1	31.8
<b>Resident</b>			<b>191,713<sup>2</sup></b>	<b>196,161</b>	<b>73,383<sup>3</sup></b>	<b>70,856</b>	<b>38.3<sup>4</sup></b>	<b>36.1</b>
Private			180,156 <sup>5</sup>	184,879	67,155	65,306	37.3	35.3
Public			54,387 <sup>6</sup>	52,104	8,345	7,266	15.3	14.0
<b>Archery</b>	77 <sup>7</sup>	75	148,554 <sup>8</sup>	146,917	39,256	37,271	26.4	25.4
<b>Gun</b>	79	77	150,589	152,022	32,628	30,347	21.7	20.0
<b>Bonus Gun</b>	40	43	77,414	83,892	5,012	6,736	6.5	8.0
<b>Muzzleloader</b>	33	35	62,830	69,069	6,113	5,967	9.7	8.6

<sup>1</sup>Average of 2018-19, 2019-20, and 2020-21 deer seasons.

<sup>2</sup>The number of adult resident hunters who purchased at least one deer permit during the 2021-22 season. Excludes non-residents, youth, seniors, disabled veterans, and landowners.

<sup>3</sup>The number of adult resident hunters that reported harvesting at least one deer during the 2021-22 season.

<sup>4</sup>The number of successful adult resident hunters divided by the total number of adult resident hunters that purchased a deer permit.

<sup>5</sup>Among respondents to the 2021-22 deer hunter survey, 94% indicated that they hunted at least once on private land. This rate is applied to the known number of licensed adult hunters to estimate the total number hunting private land at least once during the 2021-22 season.

<sup>6</sup>Among respondents to the 2021-22 deer hunter survey, 28.4% indicated that they hunted at least once on public land. This rate is applied to the known number of licensed adult hunters to estimate the total number hunting public land at least once during the 2021-22 season.

<sup>7</sup>Among respondents to the 2021-22 deer hunter survey, 77% indicated that they hunted at least one day during the 2021-22 archery season.

<sup>8</sup>Estimated total number of licensed resident adults that hunted during the 2022-22 archery season. Estimate is based on an 77% participation rate among the 191,713 resident adults who purchased at least one deer permit during the 2021-22 deer season.

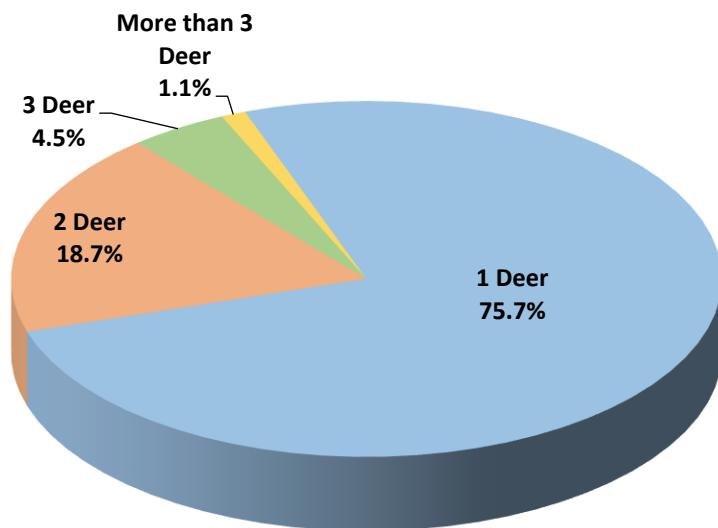
From 2011 to 2014, there was a steady decline in the number of deer taken per hunter. In 2011, 243,126 resident adults harvested 117,988 deer, or 0.49 deer per hunter. This figure declined to 0.47 in 2012, 0.42 in 2013, and in 2014 there were 0.40 deer harvested per resident adult. However, this trend began to reverse in 2015 increasing to 0.51 deer harvested per hunter in 2021. Similarly, there was a steady decline in the number of deer taken by successful hunters from a high of 1.40 in 2011 to a low of 1.29 in 2015. Slight increases have occurred since, with successful hunters taking 1.33 deer in 2021 (Figure 6).

Fifteen years ago, despite large deer populations and liberal bag limits, only 18% of successful hunters harvested more than one deer during the 2006 season. This changed dramatically with the introduction of the \$15 antlerless permit in 2007. From 2007 to 2011, there was a steady increase in the percentage of successful hunters harvesting more than one deer, peaking at 27% in 2011. Then, as deer populations were reduced and restrictions were placed on the use of the antlerless deer permit, the proportion of hunters taking more than one deer steadily declined, reaching 22% in 2016. Not surprisingly, given that all significant measures of the deer population indicate herd growth has occurred recently, the proportion of hunters harvesting more than a single deer increased to 24% in 2021. Of important note is the fact that large statewide bag limits have little impact on both the number of deer harvested per hunter and the percentage of hunters harvesting multiple deer. For example, in 2012 the statewide bag limit was 18 deer. That year, successful hunters averaged 1.40 deer and only 27% reported harvesting more than one. The following year, the statewide bag limit was reduced by 50% to nine deer, yet the proportion of hunters bagging multiple deer and the average number of deer harvested dropped by just 3%.

Table 7. Average number of days spent hunting in 2001 and 2011-21 deer seasons.

	2001	2011	2013	2015	2017	2019	2021
<b>Archery</b>	20.8	19.3	19.7	20.3	16.3	15.7	18.4
<b>Gun</b>	3.8	4.0	3.7	3.7	3.5	3.7	3.7
<b>Bonus Gun</b>	-	1.6	-	1.6	1.5	1.5	1.5
<b>Muzzleloader</b>	2.8	2.4	2.0	2.1	2.1	2.2	2.2
<b>All Seasons</b>	17.3	19.9	19.7	20.3	16.6	16.0	18.6

Figure 8. Percent of successful hunters taking one, two, three, or more than three deer during the 2021-22 season.



As in years past, the vast majority of successful hunters (76%) harvested only a single deer in the 2021-22 season. Nearly 19% of successful hunters bagged two deer, 4.5% harvested three, and 1.1% took four or more deer (Figure 8). Again, to emphasize the limited influence of a large bag limit, of successful hunters, 1% or less harvest more than three deer in a single season, and specifically in 2021, only 119 of the 191,713 permit buyers (0.06%, or about 1 out of every 1,650 hunters) filled their 6-deer bag limit.

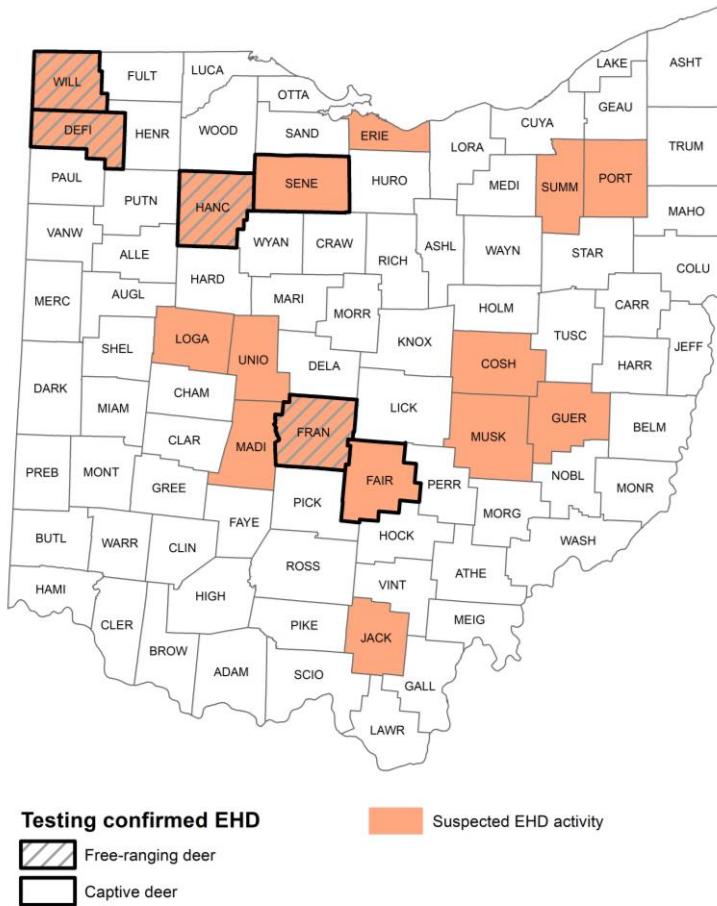
## DISEASE UPDATE

### *Hemorrhagic Disease*

Hemorrhagic Disease (HD) is the most important viral disease of white-tailed deer in the United States. It is caused by related orbiviruses of the epizootic hemorrhagic disease (EHD) or bluetongue (BT) virus serogroups. Since disease caused by EHD and BT viruses are indistinguishable without laboratory testing, the general term, hemorrhagic disease (HD), is often used. The virus is transmitted by biting flies of the genus *Culicoides*, which are commonly called midges, sand gnats, or no-see-ums. For this reason, the occurrence of HD is seasonal, and coincides with periods of the year when these biting flies are abundant - typically late July through November. The first hard freeze of the fall causes a sudden decline in *Culicoides* activity, eliminating new cases of HD.

Deer develop signs of illness about seven days after exposure and symptoms include loss of appetite and fear of humans, excessive salivation, rapid pulse and respiration rate, and high fever (which cause deer to seek water to lie in to reduce their body temperature).

Figure 9. Counties with confirmed or suspected EHD activity in 2021.



Midwestern deer populations have developed little resistance to HD and are likely to die within three days of the onset of symptoms. Hemorrhagic disease does not affect humans, impact the safety of consuming venison, nor pose a serious threat to cattle (EHD generally does not affect sheep, but BT can cause serious disease). The severity and distribution of HD outbreaks are highly variable. While HD outbreaks only occur sporadically in Ohio (recent significant disease events include 2007, 2012, and 2017), they can be severe with locally high mortality. Presently, there are no wildlife management tools that can prevent or control HD in free-ranging deer herds. Repeated exposure to the virus may eventually lead to some herd immunity. While significant localized mortality can cause alarm among the public, past experiences show that HD will not eliminate entire populations, the disease will come to an end with the onset of cold weather, and deer populations will bounce back within a few years.

In 2021, the Division of Wildlife confirmed HD mortality in six Ohio counties (Figure 9). Reports of dead or sick deer indicated that HD activity was most significant in Defiance County, though compared to previous seasons, EHD mortality was relatively mild (only 25 total deer reported dead or sick across the entire state).

The Division of Wildlife relies heavily on reports from the public to document HD activity every summer and fall. Our online species reporting page is the most efficient means to gather public reports of dead or sick deer. Please help us track HD activity each year by visiting <https://apps.ohiodnr.gov/wildlife/speciessighting/> to report any deer that appear sick or those that you find dead during late summer or early fall.

### ***Chronic Wasting Disease***

Chronic Wasting Disease (CWD) is a fatal disease of the central nervous system of mule deer, white-tailed deer, elk, moose, and reindeer. CWD is caused by abnormal proteins, or prions (not a bacteria or virus), that ultimately destroy brain tissue. CWD can be spread through direct animal-to-animal contact or by contact with saliva, urine, feces, carcass parts of an infected animal, or contaminated materials in the environment (plants and soil). Prions released into the environment through bodily fluids or diseased carcasses are extremely resistant to degradation and can remain infectious for years. CWD is known as a transmissible spongiform encephalopathy, a family of diseases that includes bovine spongiform encephalopathy (mad cow disease), scrapie in sheep, and Creutzfeldt-Jakob Disease in humans.

The Division of Wildlife has conducted CWD surveillance since 2002, testing nearly 33,000 deer. In 2021, 4,348 deer were tested for CWD. Division of Wildlife staff collected 999 road-killed deer from 66 counties and hunters submitted 2,171 deer via cooperating taxidermists and processors. An additional 768 deer were submitted by hunters at collection and inspection stations. Additional deer (410) were collected and tested through various means (deer displaying abnormal behavior and/or poor physical condition, found dead under suspicious circumstances, removed in conflict or culling situations, etc.). Nine deer tested positive for CWD in 2021-22, bringing the total number of free-ranging, CWD-positive deer discovered in Ohio to 11 – all of which have come from Wyandot and Marion counties.

### **Positive Detections and Initial Response in 2020**

In December 2020, the Division of Wildlife received test results that a mature buck harvested in southern Wyandot County tested positive for CWD. Upon detection, a 15-township area surrounding the positive location was designated for enhanced surveillance where hunters were encouraged to submit deer for testing throughout the remainder of the deer season, particularly during the 2-day bonus gun and muzzleloader seasons. Additionally, given the proximity to Killdeer Plains Wildlife Area and Refuge, all deer harvested on the remaining controlled hunts were submitted for testing ( $n = 171$ ). This additional surveillance produced a second positive, a yearling doe. Additional culling efforts were implemented on the refuge and surrounding area following the deer season to 1) obtain more information about the prevalence and distribution of the disease, 2) reduce population density (aerial surveys revealed an abnormally high deer density within and surrounding the refuge), and 3) potentially remove additional CWD-positive deer from the herd. In three nights of operations, Division of Wildlife staff removed and tested 72 deer with no additional positives.

## Disease Surveillance Area, 2021-22 Surveillance, and Post-season Removals

A 22-township area covering all of Wyandot and parts of Hardin and Marion counties was declared a Disease Surveillance Area in summer 2021 (see [wildohio.gov](http://wildohio.gov) for complete list of DSA regulations). Sampling was mandatory for any deer harvested in the DSA during the first two weekends of November (Nov. 6-7, 13-14) and the week of gun season (Nov. 29 – Dec. 5). Division of Wildlife staff were present for in-person sampling at inspection stations during the November weekends and on Monday, Tuesday, and Saturday of gun season. Self-serve kiosks were distributed throughout the DSA (Figure 10) and were available for hunters to leave their deer for sampling at any point during the season, including mandatory sampling days. A total of 1,030 hunter harvested deer were sampled from the DSA with eight testing positive (Table 8, Figure 11).

In mid-March 2022, USDA-Wildlife Services was contracted to conduct four nights of targeted removals within 2 miles of known positives. The objective of this effort was to interrupt maintenance and spread of disease by removing deer that were most at-risk for infection. More specifically, removing deer near positives would increase the likelihood of removing currently infected deer as well as the deer with the highest likelihood of becoming infected. Secondarily, localized population reduction in an area where aerial surveys have confirmed very high numbers of deer would potentially reduce contact rates and rate of disease spread. The 4-night targeted effort resulted in the removal of 180 deer, 163 of which were tested for CWD (deer not tested included 15 deer <1 yr old, one that was too heavily scavenged to recover a sample, and one where the sample was damaged). Except for three scavenged animals, an untested adult buck, and a CWD-positive adult doe, deer were processed and roughly 5,800 lbs. of venison was donated to 21 different food service facilities across 10 counties.

Figure 10. Disease Surveillance Area 2021-01 (DSA) with self-serve and staffed sampling locations identified.

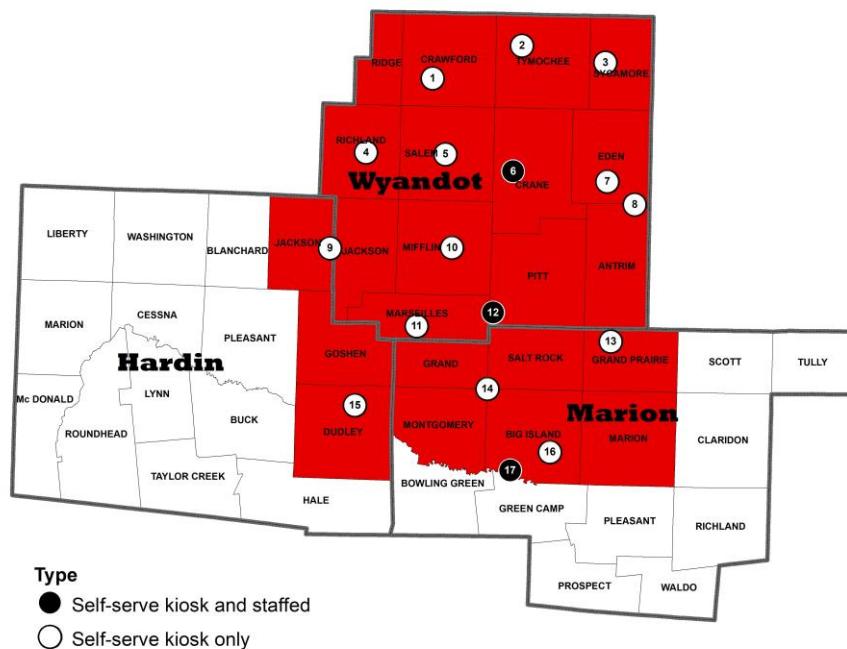


Figure 11. Samples collected and CWD-positives detected in Disease Surveillance Area 2021-01 during the 2021-22 season. Hunting season surveillance locations are approximate based on number of samples collected per township and distribution of deer habitat.

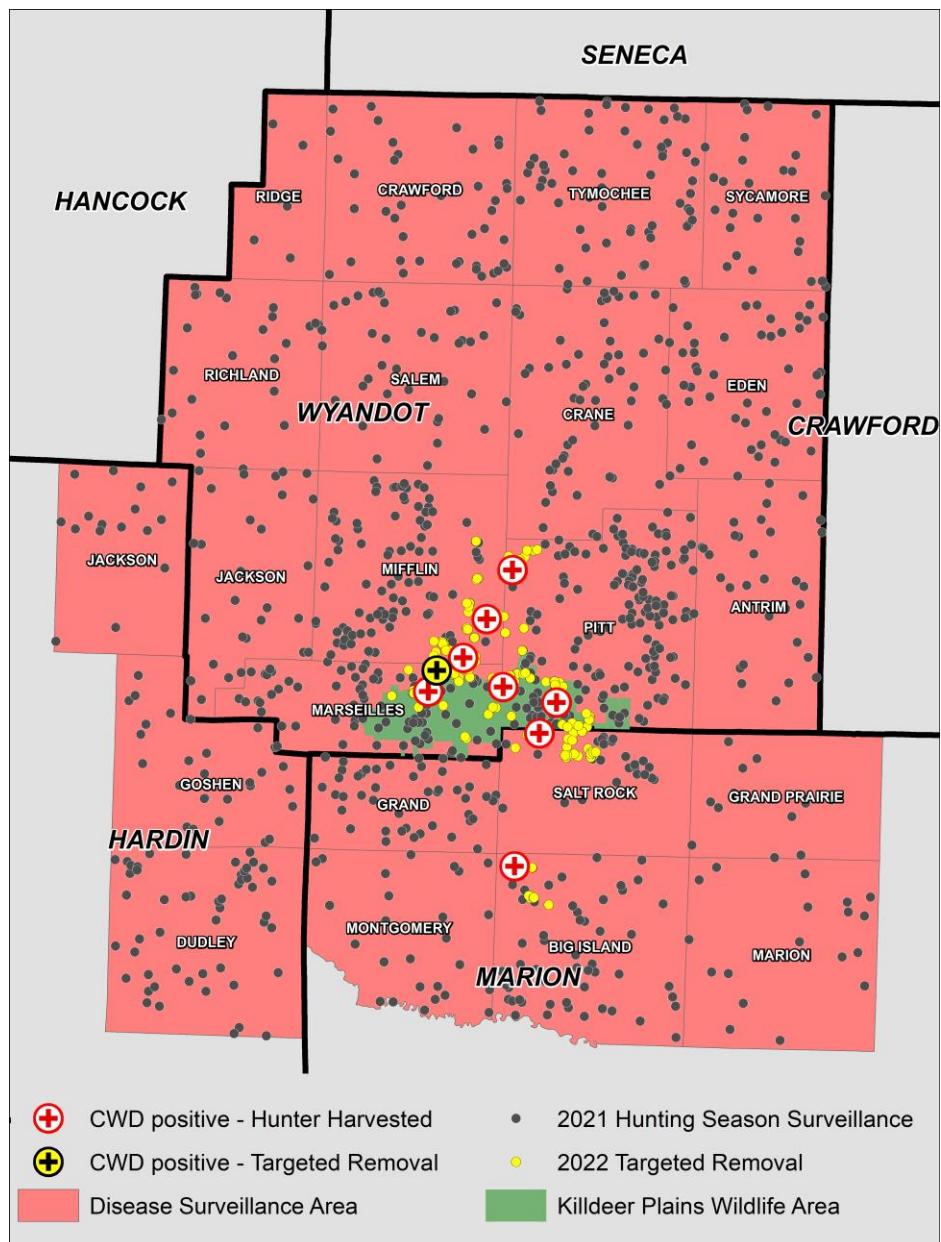


Table 8. Samples collected in Disease Surveillance Area 2021-01 during the 2021-22 season.

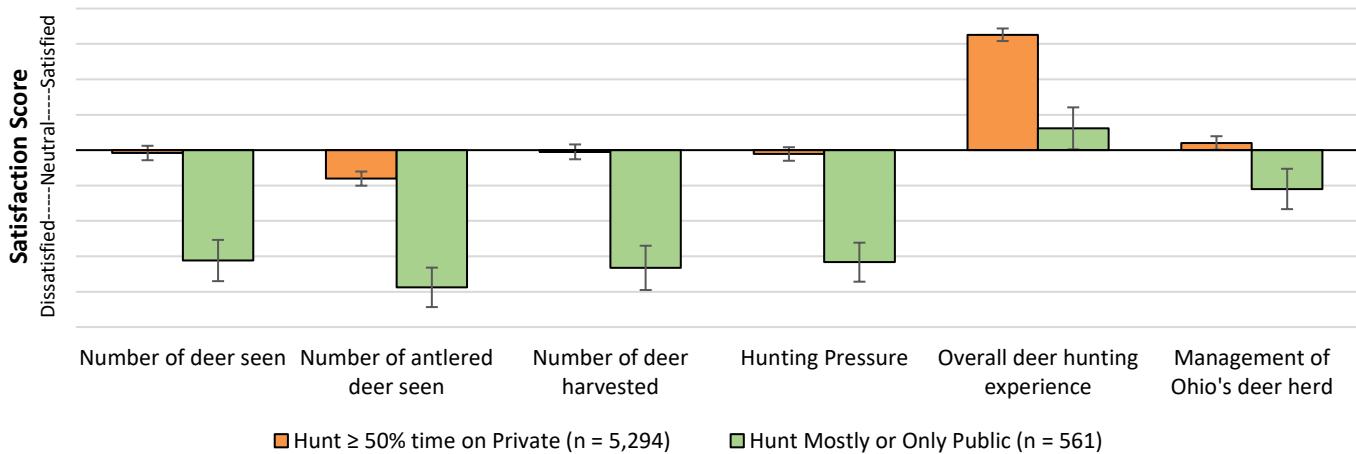
County	Township	Hunting Season Surveillance		Targeted Removal		Total	
		Total Samples	Positives	Total Samples	Positives	Total Samples	Positives
Hardin	Dudley	51	0	0	0	51	0
	Goshen	27	0	0	0	27	0
	Jackson	19	0	0	0	19	0
<b>County Total</b>		<b>97</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>97</b>	<b>0</b>
Marion	Big Island	56	1	14	0	70	1
	Grand	46	0	0	0	46	0
	Grand Prairie	13	0	0	0	13	0
	Marion	18	0	0	0	18	0
	Montgomery	27	0	0	0	27	0
	Salt Rock	24	1	29	0	53	1
	Unknown	1	0	0	0	1	0
<b>County Total</b>		<b>185</b>	<b>2</b>	<b>43</b>	<b>0</b>	<b>228</b>	<b>2</b>
Wyandot	Antrim	34	0	0	0	34	0
	Crane	57	0	0	0	57	0
	Crawford	42	0	0	0	42	0
	Eden	47	0	0	0	47	0
	Jackson	30	0	0	0	30	0
	Marseilles	87	1	30	1	117	2
	Mifflin	90	2	43	0	133	2
	Pitt	170	3	47	0	217	3
	Richland	24	0	0	0	24	0
	Ridge	7	0	0	0	7	0
	Salem	38	0	0	0	38	0
	Sycamore	27	0	0	0	27	0
	Tymochtee	62	0	0	0	62	0
	Unknown	33	0	0	0	33	0
<b>County Total</b>		<b>748</b>	<b>6</b>	<b>120</b>	<b>1</b>	<b>868</b>	<b>7</b>
<b>DSA Total</b>		<b>1,030</b>	<b>8</b>	<b>163</b>	<b>1</b>	<b>1,193</b>	<b>9</b>

## A CLOSER LOOK AT THE 2021-22 SEASON

### *Public Land Regulations*

The most significant harvest regulation change made in the last few years was for public hunting areas (defined in Ohio Administrative Code, 1501:31-15-04, as the areas listed at [wildohio.gov](http://wildohio.gov)). The regulations were: 1) a statewide limit of one antlerless deer, and 2) no antlerless deer after the close of the 7-day gun season (remainder of season was buck-only). This regulation change was due to the feedback received from deer hunter surveys. In a 2015-16 survey, nearly two-thirds of those that self-identified as hunting mostly or exclusively public land indicated support for reducing antlerless harvest on public lands to encourage herd growth. Additionally, when compared to the general population of resident deer hunters, those hunting public land have reported much lower satisfaction for various aspects of their hunting experience (Figure 12).

Figure 12. Satisfaction scores of public vs private land hunters based on three years of deer hunter surveys, 2015-2017.



Public land harvests from 2018-2020 were significantly lower than the typical harvest in the years preceding the regulation change (Figure 13). For reasons not completely understood, though possibly related to the regulation's impact on hunter behavior, the 2018-2020 antlered harvest averaged 15% lower (5,393) than the pre-regulation average (6,353). The antlerless harvest averaged 6,353, which was 39% lower than the pre-restriction average (10,425). An impact of this magnitude suggests that the regulations were an effective means of reducing the antlerless harvest. While the limit of one antlerless deer on public land remained in effect for the 2021-22 season, hunters were permitted to harvest their one antlerless deer at any point during the deer season. It appears that hunters took advantage of the expanded opportunity as public land antlerless harvest (7,531) increased 19% over the 2018-2020 average (Table 9). The Division of Wildlife will continue monitoring harvest trends, populations, and hunter attitudes to determine if the reduction in antlerless harvest results in herd growth and improvements in hunter satisfaction.

Figure 13. Percent of the statewide total antlered and antlerless harvests taken on public land, 2013-2021.

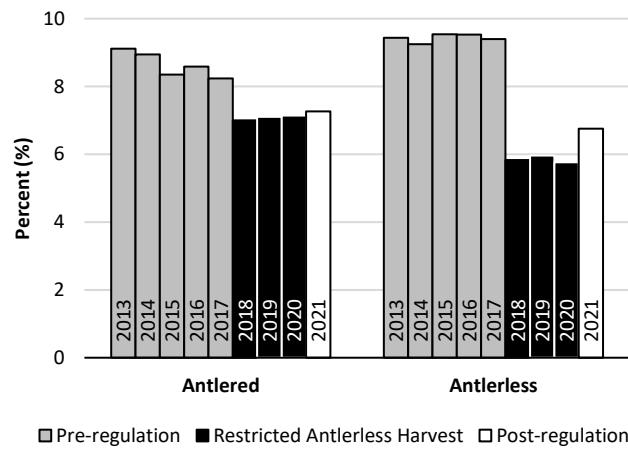


Table 9. Antlered and antlerless harvest on public and private land.

	Public			Private		
	3-year average	2021	Diff. (%)	3-year average	2021	Diff. (%)
Antlered	5,393	6,215	+15.2	70,729	79,365	+12.2
Antlerless	6,353	7,531	+18.5	102,241	103,877	+1.6

## Antlerless Harvest

For the first time since 2013, Deer Management Permits (DMPs) were available in all 88 counties during the 2021-22 season and, for the first time ever, hunters could use DMPs up to the county bag limit (e.g., in a 4-deer county, a hunter could use up to four DMPs to harvest four antlerless deer). These regulation changes were made to increase antlerless harvest and slow population growth that is occurring in most areas of the state.

Surprisingly, the proportion of the harvest that was antlerless declined sharply in 2021 to a

level that hasn't been seen since the late 1990s – levels that subsequently led to record-high deer populations in the mid- to late-2000s (Figure 14). During the period when DMPs were available statewide from 2007-2013 (then named the "antlerless permit") sales of the permit averaged just under 138,000/year. Only about 23,000 DMPs were sold in the 2021 season, and while it may take a season or two for hunters to realize the widespread availability of the DMP, it seems that lack of awareness wasn't the only, or even the most significant reason for the lagging sales. According to the end of season survey that was distributed to 15,000 randomly selected deer permit buyers, only 20% of hunters that either bought more than one permit or harvested more than one deer listed "Deer Management Permits were not valid in the county I hunted" (i.e., lack of awareness) as the reason for choosing not to purchase a DMP. More than half of this group (51%) indicated that they didn't purchase a DMP because they prefer to only purchase one deer permit at a time and wanted the one permit they carried to be valid for a deer of either-sex.

The \$15 permit was a very successful deer management tool in the late 2000s and early 2010s when deer populations had grown well beyond established goals. The cheaper price (\$9 cheaper than an either-sex permit) encouraged hunters to purchase multiple permits in a single transaction (most hunters chose to purchase an either-sex and antlerless-only permit at the same time) and the expiration date (had to be used before gun season) served as motivation to fill the permit on an antlerless deer early in the season. This combination resulted in antlerless deer making up 62-65% of the total harvest and ultimately having the desired impact on populations. The increase in the buck harvest in 2021 (signaling herd growth) coupled with the decline in the antlerless harvest and surprising lack of interest in the DMP (especially given that hunters could save over \$16 on a second permit by choosing a DMP rather than an

either-sex permit) could create significant challenges for managing Ohio's deer herd moving forward.

### **Straight-walled Cartridge Rifles**

The 2020-21 season marked the seventh year that straight-walled cartridge (SWC) calibers were legal for deer hunting. Hunters harvested 4,869, 34,535, and 5,127 deer with SWC rifles during the youth, gun and bonus gun seasons, respectively, accounting for 64%, 49%, and 55% of the total reported harvest during those seasons. The proportion of the harvest taken with SWC rifles has increased each year since the 2014 season when they were first legalized for deer hunting (Figure 15). According to the results of the 2021-22 Deer Hunter

Figure 14. Antlerless harvest as a proportion of the total, 1991-2021.

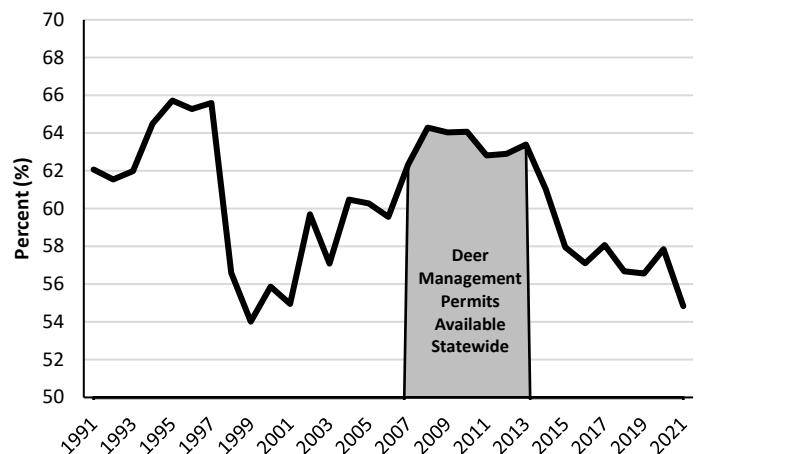
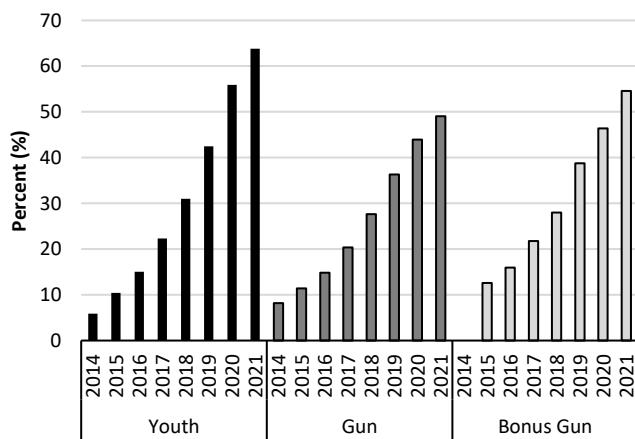


Figure 15. Proportion of youth, gun, and bonus gun season harvest taken with straight-walled cartridge rifles, 2014-2020.



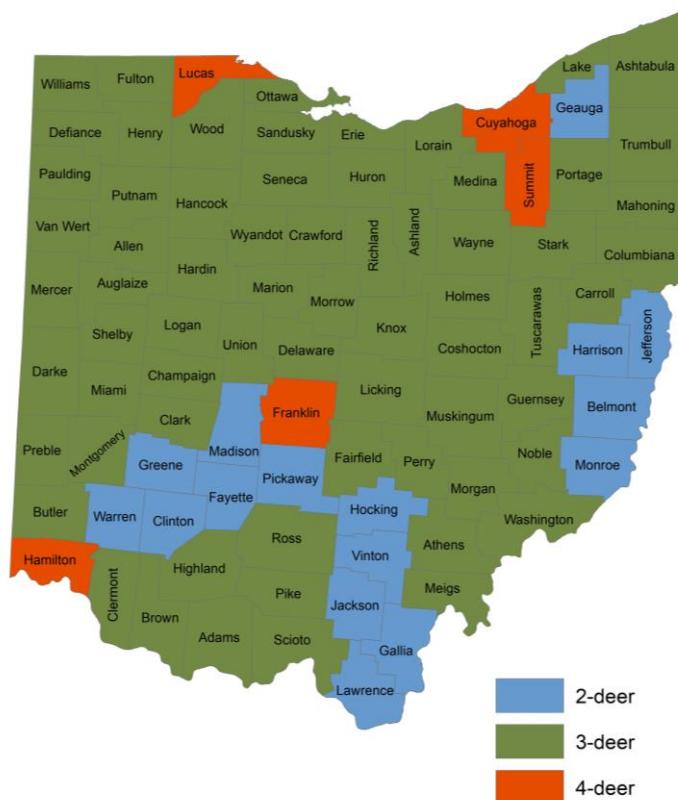
Effort and Harvest Survey (a survey of adult resident hunters), 37% still used a shotgun during the traditional seven-day gun season, 9% used a muzzleloader, and 50% used a SWC rifle. The 350 Legend was the most popular choice among hunters, with 33% opting for this caliber. Other popular choices included the 450 Bushmaster (31%), .45-70 (21%), and the 44 Magnum (7%).

## 2022-23 SEASON PREVIEW

In the mid- to late-2000s, deer populations across most of the state had reached record-highs - well above population goals that had been established in 2000. Through a combination of liberal bag limits, reduced cost antlerless permits, education on the importance of an adequate doe harvest, and other programmatic changes; deer populations in most areas of Ohio were reduced to goal (or nearly to goal) by 2014. Starting in 2013, regulations became increasingly conservative to alleviate harvest pressure on antlerless deer and stabilize populations. Predictably, the results of the 2015 population goal setting process indicated that most areas of the state could tolerate moderate herd growth (see *Periodic Goal-Setting Survey* on page 20 for more information), and, consistent with these desires, data indicate that deer populations in most areas of the state are increasing.

Aside from minor calendar adjustments and additional opportunities in the Disease Surveillance Area (DSA), season dates will remain the same for the 2022-2023 season. In response to increasing population trends and several counties sitting at or near record buck harvests in 2021, the bag limit in 15 counties will increase from two to three, and the previously 1-deer counties will move to two (Figure 16). The additional opportunities in the DSA include an earlier start to archery season (Sept. 10) and a 3-day early firearms season (Oct. 8-10). These extra opportunities are designed to shift harvest earlier in the season. An earlier harvest, specifically those deer removed prior to breeding season, reduces risk of disease spread by taking those animals out of the population before rut-related behaviors trigger long distance movements and more frequent interactions with other deer.

Figure 16. Deer harvest regulations for 2022-23 season.



## BUCKEYE BIG BUCK CLUB

The Buckeye Big Buck Club (BBBC) was founded by former Division of Wildlife biologist and writer Merrill C. Gilfillan in 1957. The primary purposes of the organization are to increase the appreciation of Ohio's white-tailed deer herd, maintain a permanent record of Ohio's trophy deer, and foster wise management of the resource. Membership is open to any hunter that legally harvests a qualifying deer (minimum 140 inches typical or 160 inches non-typical). The Club hosts a banquet each year to showcase deer entering the club and recognize the hunters that harvested them (most deer entering the Club in any given year were harvested in the season prior). After missing a year due to the pandemic, the Club resumed their annual banquet in February 2022. The list of special award winners can be found in Table 10, the top three 2022 entries by implement in Table 11, and the top five typicals and non-typicals of all time in Table 12. A searchable database, containing all 20,032 bucks entered in the Club, is available online at <https://apps.ohiodnr.gov/wildlife/bigbuck/>, and a list of official scorers can be found in Appendix 2.

Table 10. 2022 Buckeye Big Buck Club special award winners.

Award	Description	Name	Score	County
Guilliams-McWilliams Trophy	Top typical	Lear McCoy	190 $\frac{3}{8}$	Adams
Hill-Hill Trophy	Top non-typical	Shawn Clark	239 $\frac{7}{8}$	Adams
BBBC Young Hunter Award	Youngest new member	McKenna Kaiser – Age 5 Dax Crawfis – Age 7	140 $\frac{2}{8}$ 142 $\frac{2}{8}$	Tuscarawas Hancock
George Applegarth Senior Hunter Award	Oldest new member	Dan Landerman – Age 78 Michael Early – Age 78	158 $\frac{5}{8}$ 174 $\frac{5}{8}$	Perry Defiance
Lori Byers Female Hunter Award	Top scoring typical and non-typical by a female	Typical – Erin Cogar Non-typical – Emily Schaad Non-typical – Courtney Hatley	166 $\frac{7}{8}$ 181 $\frac{6}{8}$ 181 $\frac{6}{8}$	Lake Morgan Meigs
Division of Wildlife Employee of the Year	Outstanding contributions to deer management	Sara Zaleski		
President Weisenbarger Award	Outstanding service to the BBBC	Bill Lawrence Mike Rex		

Table 11. 2022 Buckeye Big Buck Club top three typical and non-typical entries by implement type.

Implement	TYPICAL				NON-TYPICAL			
	Name	Year of Harvest	Score	County	Name	Year of Harvest	Score	County
Longbow	Josh Atkinson	2020	182 $\frac{5}{8}$	Henry	Shawn Clark	2020	239 $\frac{7}{8}$	Adams
	Austin Hull	2020	181 $\frac{7}{8}$	Hardin	Matt Brunswick	2020	232 $\frac{3}{8}$	Hancock
	Malachi Taylor	2019	179 $\frac{3}{8}$	Clermont	Eli Dewey	2019	228 $\frac{4}{8}$	Butler
Crossbow	Lear McCoy	2020	190 $\frac{3}{8}$	Adams	Leo Keim	2019	223 $\frac{2}{8}$	Tuscarawas
	Mark Cressna	2020	182 $\frac{6}{8}$	Clark	Jeffery Russell	2020	213 $\frac{0}{8}$	Meigs
	Charles Wolf	2019	179 $\frac{4}{8}$	Seneca	Chuck Reed	2019	210 $\frac{4}{8}$	Pike
Shotgun	Zack Smoke	2019	183 $\frac{6}{8}$	Licking	Terry Salisbury	2019	200 $\frac{6}{8}$	Huron
	Randy Williams	2020	181 $\frac{0}{8}$	Muskingum	John Kaech	2018	196 $\frac{2}{8}$	Auglaize
	Rod Garey	2003	175 $\frac{4}{8}$	Hocking	Patrick Kerr	2019	193 $\frac{7}{8}$	Seneca
Muzzleloader	Brad Young	2021	172 $\frac{4}{8}$	Morrow	Kenneth Wenning	2020	203 $\frac{2}{8}$	Mercer
	Jason Johnson	2019	170 $\frac{2}{8}$	Butler	Charles Cooley, Jr.	2020	196 $\frac{1}{8}$	Stark
	Corey Leighty	2021	167 $\frac{2}{8}$	Wayne	Michael Knierim	2020	188 $\frac{3}{8}$	Fulton
Rifle	James Coppes	2019	174 $\frac{1}{8}$	Paulding	Dennis Meinke	2020	213 $\frac{4}{8}$	Ashtabula
	Shawn Mooney	2020	167 $\frac{2}{8}$	Columbiana	Kevin Rinehart	2019	210 $\frac{1}{8}$	Fairfield
	Paul Wielinski	2021	167 $\frac{2}{8}$	Lucas	David Courtad	2018	190 $\frac{6}{8}$	Wyandot
Handgun	Gregory Buxton	2019	148 $\frac{5}{8}$	Hardin				
	Jack Satterfield, Jr.	2019	145 $\frac{3}{8}$	Meigs				

Table 12. Buckeye Big Buck Club's top five typical and non-typical entries of all time.

	Rank	Hunter	Harvest Year	County	Implement	Score
Typical	1	Brad Jerman	2004	Warren	Crossbow	201 <sup>1/8</sup>
	1	William Kontras	1986	Clark	Vertical Bow	201 <sup>1/8</sup>
	3	Tim Reed	2004	Muskingum	Vertical Bow	198 <sup>3/8</sup>
	4	Steve Davis	2016	Clinton	Crossbow	194 <sup>3/8</sup>
	5	John Daugherty	2006	Wayne	Shotgun	193 <sup>1/8</sup>

Non-typical	1	Michael Beatty	2000	Greene	Vertical Bow	304 <sup>4/8</sup>
	2	Jonathan Schmucker	2006	Adams	Crossbow	295 <sup>3/8</sup>
	3	Daniel Coffman	2015	Fairfield	Vertical Bow	287 <sup>5/8</sup>
	4	Dave Kopp	2016	Stark	Crossbow	267 <sup>3/8</sup>
	5	Chester Veach	1971	Pike	Shotgun	261 <sup>5/8</sup>

While some biases exist in the data (differences in regional/local awareness of the Club, varying interest in entering a qualifying deer, regional availability of official BBBC scorers and scoring events, etc.), a summary of the record book entries provides a general indication of how trophy deer are distributed throughout the state. For instance, it should be no surprise that over the course of the Club's history, the counties with the most record book entries are those in east-central and southeast Ohio, where deer have typically been most abundant and buck harvests the largest (Figure 17). However, accounting for differences in population size shows that a larger percentage of the bucks harvested in western Ohio counties end up in the BBBC (Figure 18). All else being equal, if you were fortunate enough to harvest a buck, the odds that it qualifies for the BBBC are much better if it came from Auglaize County than if it was a deer from Ashtabula County.

Figure 17. Total Buckeye Big Buck Club entries by county.

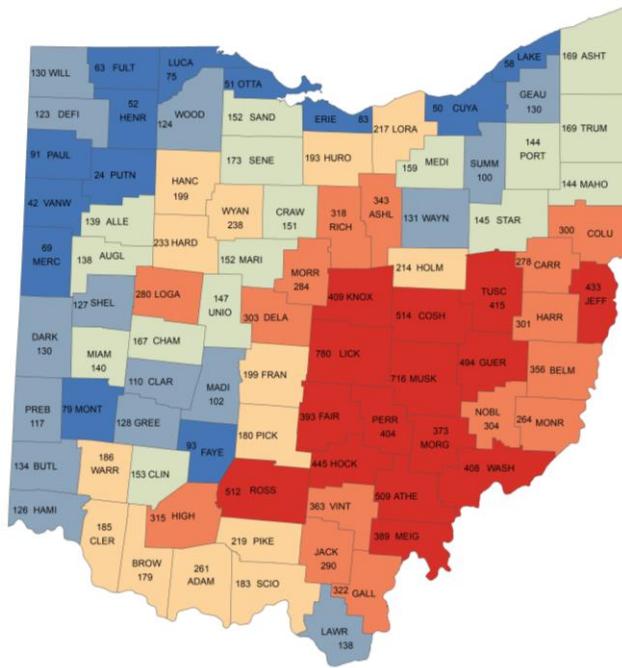
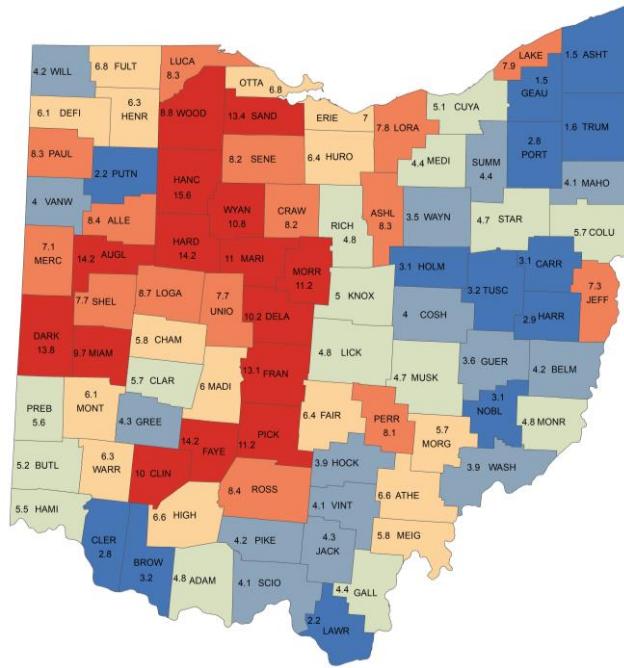


Figure 18. Number of Buckeye Big Buck Club entries for every 1,000 bucks harvested in the county, 2009-2018 average.



# HUNTER FEEDBACK

Hunter surveys comprise a vital piece of the deer management process. Information gleaned from these surveys is critical for monitoring changes in hunter participation, effort, and deer observations as well as gathering opinions on various deer management issues. The Division of Wildlife's deer program utilizes three primary surveys, with each serving a unique purpose.

## Annual Deer Hunter Survey

Each year since 2011, and periodically over the last several decades, the Division of Wildlife has sent surveys to a random sample of adult resident deer permit buyers. The primary purpose of this survey is to monitor hunter participation and effort. In fact, much of the information provided in previous sections of this publication is derived from this annual survey. We also utilize this survey to collect hunter opinions on specific deer management issues that may be used to inform policy and develop or adjust deer hunting regulations. However, responses to this survey have been lacking in recent years, making detailed analyses of the data very difficult (of the 14,614 hunters invited to participate in the 2021 survey, only 2,310 (16%) completed it).

## Deer Hunter Opinions and Satisfaction

Measuring hunter attitudes and opinions is a critical component of evaluating Ohio's deer program. Of particular importance is an annual assessment of hunter satisfaction regarding the hunting experience. The number of deer observed or otherwise perceived to be on the landscape appears to be a primary driver of hunter satisfaction – in essence, tracking hunter attitudes over time can serve as a proxy for tracking deer population size. According to population trends (Figure 25), deer populations hit a recent low in 2014 and have been gradually increasing since. Likewise, hunter surveys since 2015 mirror this trend with decreases in the proportion of hunters reporting “too few deer” when asked their opinion of the deer herd in the area hunted most often (Figure 19). In the 2015 annual deer hunter survey, nearly 57% of hunters reported too few deer and only 37% reported that the number of deer in their area was just about right. Fast forward to 2021, and survey results show that only 34% of hunters feel the deer population is too low and more than half (51%) think that there are just about the right number of deer on the landscape.

Figure 19. Proportion of hunters reporting “too few deer” and “just about the right number of deer” on deer hunter surveys, 2015-2021.

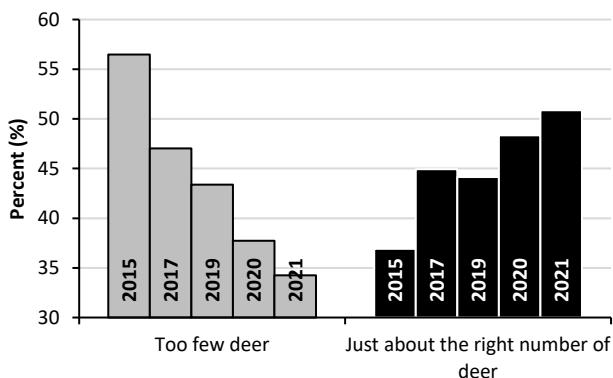
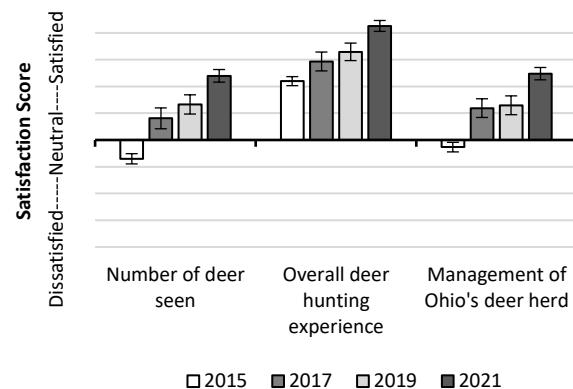


Figure 20. Satisfaction scores of deer hunters, 2015-2021.



Similarly, hunters have reported steady increases in various measures of satisfaction related to number of deer seen, overall deer hunting experience, and management of Ohio's deer herd (Figure 20). In 2015, 40% of hunters claimed they were at least somewhat satisfied with the number of deer seen, 61% were satisfied with their overall deer hunting experience, and 36% had a favorable opinion of the management of Ohio's deer herd. With apparent growth in the deer population since that time, 2021 survey results show that the proportion of hunters with a favorable opinion of deer numbers jumped to 60%, satisfaction with their deer hunting experience increased to 75%, and 58% of hunters gave the Division of Wildlife a favorable rating regarding the management of Ohio's deer herd (Table 13).

Table 13. Proportion of hunters reporting satisfaction or dissatisfaction with various items related to their deer season according to 2015 and 2021 annual deer hunter surveys.

	% Satisfied or Somewhat Satisfied		% Dissatisfied or Somewhat Dissatisfied	
	2015	2021	2015	2021
Deer numbers	40.1	59.8	51.4	27.7
Overall deer hunting experience	60.9	74.6	24.9	14.1
Management of Ohio's deer herd	36.4	57.6	38.7	21.5

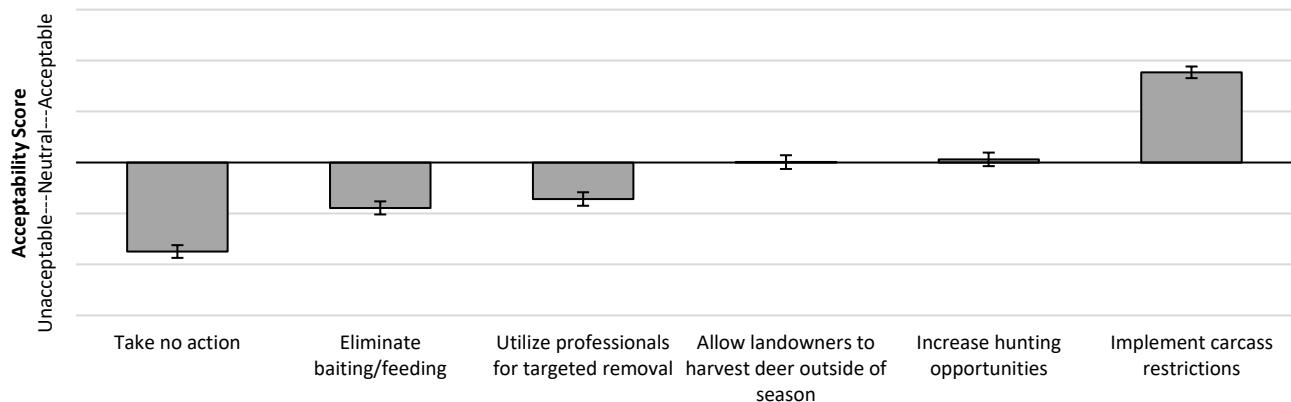
### CWD Management Actions and Outcomes

With the detection of CWD in Ohio's free-ranging deer herd, we used the 2021 deer hunter survey to gather attitudes toward possible management actions that could potentially limit spread and/or maintain low prevalence rates. Survey respondents were asked to rate the acceptability (completely unacceptable, somewhat unacceptable, neither acceptable nor unacceptable, somewhat acceptable, completely acceptable) of the following management actions:

- Take no action to manage CWD
- Use large bag limits and increased hunting opportunity with more/longer seasons to increase deer harvest
- Issue permits to landowners to shoot deer outside of hunting seasons
- Use trained shooters to kill deer in localized areas to supplement harvest by hunters. Trained shooters would only operate within 2 miles of known CWD-positive animals, only on land in which permission has been granted by the landowner, and only after hunting seasons have ended
- Eliminate baiting and feeding of deer
- Prohibit the transportation of deer carcasses and high-risk carcass parts outside of known CWD-infected areas

More than half (56%) of the respondents felt that taking no action to manage CWD was unacceptable (with 40% answering *completely* unacceptable) and only 15% found it to be an acceptable option. The action with the most support was prohibiting transport of deer carcasses and high-risk carcass parts with 62% answering completely or somewhat acceptable (only 14% responded completely or somewhat unacceptable). Eliminating baiting and feeding was least supported with 50% of respondents labeling it as an unacceptable option and just 28% answering completely or somewhat acceptable. Figure 21 shows the relative acceptability scores of each management option and highlights the complexity of CWD management – hunters clearly desire some action to be taken to manage CWD, but most options to do so are weakly supported, if at all.

Figure 21. Acceptability scores of various CWD management options according to 2021 deer hunter survey.

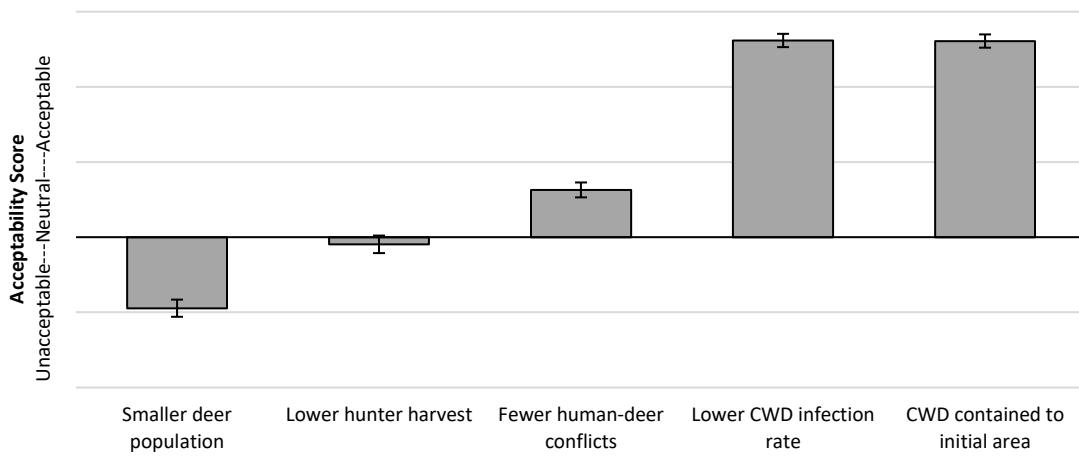


In addition to gauging opinions on possible actions to manage CWD, the 2021 deer hunter survey was used to gather feedback on potential long-term outcomes of CWD management actions. Survey respondents rated the acceptability of the following potential management outcomes:

- Smaller deer population
- Lower hunter harvest
- Fewer human-deer conflicts
- Lower CWD infection rate
- CWD contained to area of initial detection

Not surprisingly, a smaller deer population was the least acceptable outcome (Figure 22) while both a lower CWD infection rate and containing CWD to the initial area of detection were rated by 70% of survey participants as acceptable outcomes. Interestingly, only one-third of hunters thought that fewer human-deer conflicts would be an acceptable outcome of CWD management actions.

Figure 22. Acceptability scores of various CWD management outcomes according to 2021 deer hunter survey.



## Bait, Feed, and Minerals

Given the recent surge in feedback received related to baiting and feeding, we used the 2021 deer hunter survey to gather information on hunters' tendency to utilize bait, feed and/or minerals and to better understand the motivations behind its use. For the series of questions on this topic, participants were given the following definition of the use of bait, feed, or minerals: "the act of placing, distributing, or scattering a substance composed of grains, minerals, salts, fruits, vegetables, hay or other food materials with the intent of luring, enticing, feeding or attracting deer. This definition does not include planting food plots or hunting over or near standing or harvested crops." Of the 2,150 responses, 62% indicated they use bait, feed and/or minerals at some point during the year

(Figure 23). When asked to provide a reason for using bait, feed, or minerals, 76% of hunters indicated using it in conjunction with a trail camera for herd monitoring purposes (Figure 24). More than half of those that use bait, feed, and or minerals claimed that it was to draw and hold deer on their property (56%) and/or increase their chances of harvesting a deer (51%). Interestingly, more than a quarter of the surveyed hunters responded that they use bait, feed, or minerals because they feel like they must compete with their neighbors who bait and/or feed deer. While it wasn't included in the initial list of choices, 100 respondents (7.5%) checked the "Other" box to indicate they use bait, feed, or minerals because of perceived nutritional benefits.

Figure 23. Proportion of hunters that use bait, feed, and or minerals according to the 2021 deer hunter survey.

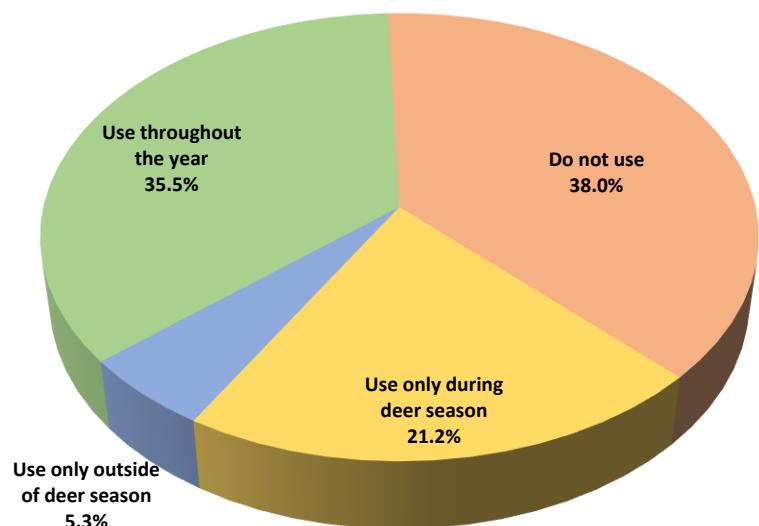
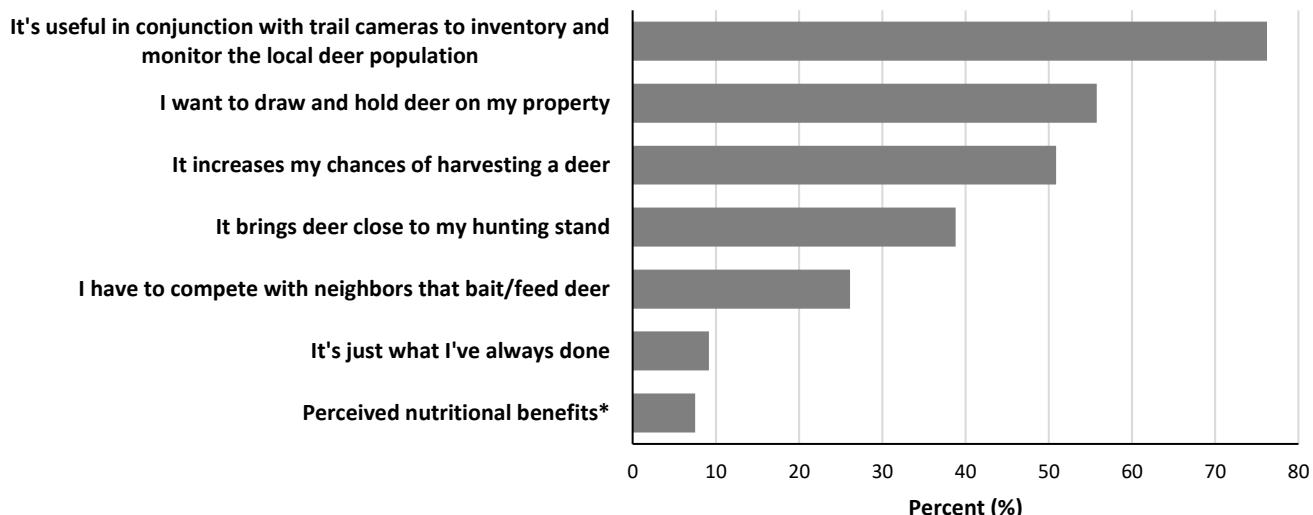


Figure 24. Reasons for including bait, feed, or minerals in the deer hunting experience according to the 2021 deer hunter survey.

Respondents were instructed to select all choices that applied to their situation. \*Nutrition was not included in the initial list of choices, so all write-in answers that mentioned nutrition as a reason to utilize bait, feed, or minerals were combined into the category "Perceived nutritional benefits."



## **Annual Bowhunter Survey**

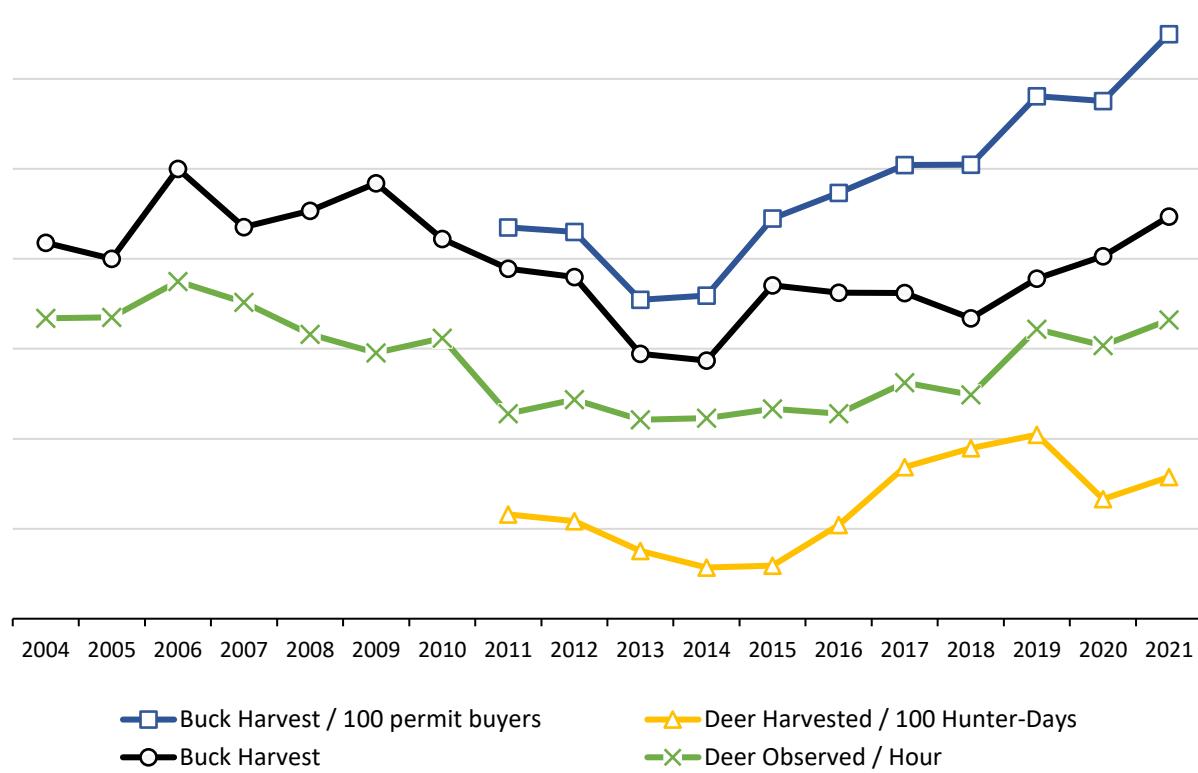
The primary purpose of the annual bowhunter survey is to monitor trends in sighting rates of several furbearing species (coyote, bobcat, fox, raccoon, etc.), but it also serves as one of the deer program's most important population monitoring tools. By recording the number of hours spent hunting and the number of animals seen, hunters participating in this survey provide the data necessary to generate a sighting rate (deer observed per hour) that can be used to track populations over time. The bowhunter survey is not influenced by many of the biases that often impact harvest data (most notably hunter selectivity), making the sighting data an extremely important index to population size. Unlike other surveys, the bowhunter survey is open to anyone willing to participate. We offer two versions of the survey, paper and electronic. In 2021, 780 hunters completed the paper version and 1,043 hunters participated in the online survey. In all, these hunters reported spending 64,300 hours on stand and 54,400 deer sightings for a sighting rate of 0.85 deer/hour. While there is a substantial number of participants, it is not enough to make management decisions at a county level – there are just too few cooperating hunters in each county. If you would like to take an active role in the management of Ohio's deer herd, we encourage anyone interested in participating in the annual bowhunter survey to contact us by phone at 1-800-WILDLIFE (1-800-945-3543) or via email at [wildinfo@dnr.state.oh.us](mailto:wildinfo@dnr.state.oh.us).

## **UNDERSTANDING POPULATION TRENDS**

While the Division of Wildlife does not routinely count deer, several trends that reflect changes in the size of the deer population are monitored annually. Some of the trends used include: the number of bucks harvested, carcasses removed from roadways, deer seen per hour, and number of days to harvest a deer. Rather than direct population estimates, each of these measures serve as an index to the size of the population. In other words, they change when the deer population changes. Contrary to popular belief, biologists do not need to know exactly how many deer are on the landscape to properly manage the population. Rather, determining 1) whether the population is stable, increasing, or decreasing, and 2) whether its current trajectory is in agreement with population objectives are key to making harvest management decisions. These indices provide this valuable information.

Though the annual buck harvest has been used as the primary index of deer population size, a host of variables can influence the number of bucks harvested each year. Crop harvest timing, mast availability, and weather on traditionally high harvest days (opening day of gun season) can certainly impact harvest. Using the annual buck harvest as an index to population size also assumes that hunter participation, effort, and selectivity is relatively constant from year to year. Unfortunately, as hunter numbers continue to decline, we have had to develop a buck harvest index that accounts for the annual decline in hunting pressure. Additionally, as noted, we rely heavily on annual hunter surveys. In the annual Deer Hunter Effort and Harvest Survey hunters provide information regarding their effort (number of days hunted), harvest, and opinions of the deer population in the area they hunt. Finally, participants in the annual Bowhunter Survey record time spent hunting and number of deer seen on each hunting trip. Collectively these data allow biologists to determine if the population is stable, growing, or declining and, most importantly, determine if trends are consistent with direction provided by the results of population goal setting surveys. Figure 25 illustrates general consistency in direction for the different indices that are used to monitor population trends.

Figure 25. Statewide deer population trends based on reported buck harvest, buck harvest per permit buyer, deer observed per hour of bowhunting (annual bowhunter survey), and deer harvested per 100 days of hunting effort (annual deer hunter survey), 2004-2021.



# APPENDIX 1

## Historical Permit Sales and Harvest

Year	Counties Open in Gun Season	Permits Sold	Deer Harvested
1900	88	?	?
1901-42	Season closed		
1943	3	8,500	168
1944	3	9,200	117
1945	3	7,700	62
1946	Season closed		
1947	8	9,669	1,000
1948	13	23,044	1,600
1949	Season closed		
1950	19	22,728	3,500
1951	Season closed		
1952	27	14,081	450
1953	40	30,033	4,000
1954	Season closed		
1955	42	36,419	4,200
1956	88	48,263	3,911
1957	88	46,466	4,784
1958	88	42,777	4,415
1959	88	38,414	2,960
1960	88	27,430	2,584
1961	Season closed		
1962	88	23,049	2,114
1963	88	33,298	2,074
1964	88	32,400	1,326
1965	36	12,808	406
1966	48	24,079	1,073
1967	50	28,892	1,437
1968	50	35,322	1,396
1969	56	45,078	2,105
1970	51	54,807	2,387
1971	63	74,758	3,831
1972	63	88,919	5,074
1973	59	107,933	7,594
1974	65	106,867	10,747
1975	68	125,807	14,972
1976	68	138,946	23,431
1977	73	155,445	22,319
1978	74	175,314	22,967
1979	88	193,764	34,874
1980	88	216,055	40,499

Year	Counties Open in Gun Season	Permits Sold	Deer Harvested
1981	88	231,948	47,634
1982	88	257,504	52,885
1983	88	264,493	59,812
1984	88	273,205	66,860
1985	88	277,714	64,263
1986	88	290,293	67,626
1987	88	297,205	79,355
1988	88	373,435	100,674
1989	88	284,909	91,236
1990	88	295,127	98,468
1991	88	338,186	119,215
1992	88	359,250	126,113
1993	88	385,068	138,752
1994	88	425,797	170,527
1995	88	496,890	179,543
1996	88	475,288	158,000
1997	88	439,814	153,159
1998	88	365,875	118,270
1999	88	361,125	126,770
2000	88	438,744	150,432
2001	88	469,055	165,124
2002	88	507,723	204,652
2003	88	515,928	197,790
2004	88	520,458	216,443
2005	88	515,181	209,513
2006	88	543,614	237,316
2007	88	578,366	232,854
2008	88	611,442	252,017
2009	88	624,908	261,260
2010	88	609,417	239,475
2011	88	603,549	219,748
2012	88	588,885	218,910
2013	88	535,676	191,503
2014	88	494,378	175,801
2015	88	466,102	188,335
2016	88	445,166	182,169
2017	88	429,006	186,247
2018	88	399,306	172,049
2019	88	393,367	184,468
2020	88	409,808	197,721
2021	88	404,800	196,988

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Adams	Gun	395	361	9.5	532	525	115	88	1,042	973	7.1
	Crossbow	623	482	29.2	416	358	62	54	1,101	894	23.1
	Longbow	294	305	-3.7	181	198	18	28	493	532	-7.3
	Bonus Gun	53	60	-12.2	99	103	12	8	164	171	-3.9
	Muzzleloader	68	69	-1.9	125	118	20	18	213	206	3.4
	Youth	64	66	-2.5	37	29	3	6	104	100	3.7
	Total	1,503	1,351	11.3	1,404	1,341	231	203	3,138	2,895	8.4
Allen	Gun	142	131	8.1	168	166	42	40	352	338	4.2
	Crossbow	204	176	15.9	133	134	32	38	369	348	6.1
	Longbow	69	79	-12.7	62	67	9	12	140	158	-11.4
	Bonus Gun	22	27	-19.5	23	42	7	10	52	79	-34.5
	Muzzleloader	15	13	18.4	25	29	6	7	46	48	-4.2
	Youth	33	20	65.0	16	14	4	6	53	40	32.5
	Total	491	453	8.3	433	457	100	113	1,024	1,024	0.0
Ashland	Gun	508	431	17.8	772	706	164	174	1,444	1,311	10.1
	Crossbow	580	470	23.4	454	400	97	82	1,131	953	18.7
	Longbow	210	188	11.7	191	210	20	21	421	419	0.5
	Bonus Gun	60	74	-19.3	118	166	32	33	210	273	-23.0
	Muzzleloader	63	58	8.0	130	133	34	32	227	223	1.8
	Youth	91	62	46.0	69	54	19	13	179	130	38.0
	Total	1,522	1,293	17.7	1,757	1,689	371	360	3,650	3,343	9.2
Ashtabula	Gun	638	614	3.9	1,074	1,103	327	315	2,039	2,032	0.4
	Crossbow	791	693	14.1	775	709	228	198	1,794	1,600	12.1
	Longbow	217	228	-5.0	246	293	68	75	531	597	-11.0
	Bonus Gun	72	126	-43.0	121	290	39	72	232	488	-52.5
	Muzzleloader	68	61	12.1	230	152	65	45	363	258	40.9
	Youth	62	53	16.3	62	56	43	20	167	130	28.8
	Total	1,869	1,793	4.2	2,541	2,635	783	737	5,193	5,165	0.5
Athens	Gun	493	501	-1.5	703	670	131	110	1,327	1,281	3.6
	Crossbow	649	512	26.8	394	306	52	42	1,095	860	27.4
	Longbow	344	337	2.1	178	215	17	22	539	574	-6.1
	Bonus Gun	63	72	-12.1	68	120	28	13	159	205	-22.6
	Muzzleloader	77	89	-13.5	153	166	29	21	259	276	-6.2
	Youth	84	69	21.2	38	31	16	9	138	110	25.5
	Total	1,717	1,590	8.0	1,547	1,518	276	221	3,540	3,329	6.3

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### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Auglaize	Gun	156	125	25.1	215	156	60	51	431	332	29.9
	Crossbow	158	142	11.0	139	123	38	38	335	303	10.4
	Longbow	54	63	-14.7	42	53	14	12	110	129	-14.5
	Bonus Gun	24	26	-7.7	28	37	3	7	55	70	-21.8
	Muzzleloader	17	15	10.9	37	26	6	5	60	47	28.6
	Youth	19	17	9.6	21	16	13	7	53	41	30.3
	Total	433	392	10.5	483	415	135	123	1,051	930	13.0
Belmont	Gun	504	499	1.0	545	581	105	93	1,154	1,173	-1.6
	Crossbow	561	483	16.1	222	220	27	28	810	731	10.8
	Longbow	195	195	0.2	99	121	8	11	302	327	-7.6
	Bonus Gun	53	72	-26.7	86	123	14	20	153	216	-29.2
	Muzzleloader	90	85	6.3	146	137	21	19	257	240	6.9
	Youth	90	75	20.0	48	33	9	8	147	117	26.0
	Total	1,500	1,420	5.7	1,149	1,228	187	180	2,836	2,828	0.3
Brown	Gun	302	291	3.7	490	471	95	83	887	846	4.8
	Crossbow	417	357	16.7	293	306	45	46	755	709	6.4
	Longbow	218	210	3.8	187	192	19	19	424	421	0.7
	Bonus Gun	37	46	-19.6	83	96	10	17	130	159	-18.1
	Muzzleloader	51	54	-6.1	118	120	20	20	189	195	-2.9
	Youth	48	39	23.1	32	26	10	6	90	71	26.8
	Total	1,080	1,007	7.2	1,212	1,223	201	193	2,493	2,423	2.9
Butler	Gun	134	134	0.0	175	153	43	31	352	318	10.7
	Crossbow	380	295	29.0	308	270	63	45	751	609	23.2
	Longbow	145	147	-1.4	134	132	18	26	297	305	-2.6
	Bonus Gun	29	28	4.8	51	48	10	7	90	82	9.3
	Muzzleloader	23	29	-20.7	47	45	6	12	76	86	-12.0
	Youth	28	18	52.7	19	11	5	5	52	34	52.9
	Total	744	656	13.5	737	665	146	126	1,627	1,447	12.4
Carroll	Gun	656	513	28.0	906	835	204	182	1,766	1,530	15.4
	Crossbow	667	542	23.0	465	431	84	71	1,216	1,045	16.4
	Longbow	257	229	12.1	210	190	31	28	498	448	11.2
	Bonus Gun	62	90	-31.4	138	211	20	36	220	337	-34.8
	Muzzleloader	86	77	11.2	203	189	33	25	322	292	10.3
	Youth	66	63	5.3	54	42	12	11	132	116	14.1
	Total	1,808	1,529	18.2	2,000	1,922	389	359	4,197	3,810	10.1

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### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Champaign	Gun	218	160	36.0	204	196	47	38	469	394	19.1
	Crossbow	269	196	37.5	180	172	40	32	489	399	22.6
	Longbow	122	125	-2.1	102	100	8	16	232	241	-3.7
	Bonus Gun	19	30	-36.0	52	50	8	8	79	88	-10.2
	Muzzleloader	23	24	-5.5	33	50	6	10	62	85	-26.8
	Youth	36	24	50.0	17	14	2	4	55	41	33.1
	Total	696	564	23.5	597	585	112	109	1,405	1,258	11.7
Clark	Gun	85	84	1.6	108	90	16	18	209	192	8.7
	Crossbow	185	166	11.2	112	120	20	20	317	306	3.5
	Longbow	95	73	30.1	76	70	6	9	177	151	17.0
	Bonus Gun	12	16	-26.5	20	24	4	2	36	42	-15.0
	Muzzleloader	13	16	-17.0	32	22	6	4	51	42	20.5
	Youth	18	14	31.7	7	3	1	2	26	19	36.8
	Total	411	371	10.7	358	335	53	57	822	763	7.7
Clermont	Gun	218	236	-7.8	328	336	63	66	609	638	-4.6
	Crossbow	488	428	14.1	488	441	88	82	1,064	951	11.9
	Longbow	225	239	-5.9	274	259	35	34	534	531	0.5
	Bonus Gun	46	44	4.5	55	77	11	15	112	136	-17.8
	Muzzleloader	42	45	-6.7	70	86	11	13	123	144	-14.8
	Youth	37	33	11.0	14	17	4	7	55	58	-5.2
	Total	1,066	1,032	3.3	1,236	1,225	214	218	2,516	2,475	1.7
Clinton	Gun	100	98	1.7	89	96	19	25	208	220	-5.3
	Crossbow	142	125	13.6	50	78	8	17	200	221	-9.4
	Longbow	64	65	-1.0	29	54	9	7	102	126	-19.3
	Bonus Gun	13	19	-32.8	18	25	7	5	38	50	-24.0
	Muzzleloader	10	14	-28.6	27	29	0	5	37	48	-22.9
	Youth	19	18	3.6	13	8	2	6	34	33	3.0
	Total	353	343	3.0	229	296	45	69	627	707	-11.4
Columbiana	Gun	518	454	14.0	687	610	157	152	1,362	1,216	12.0
	Crossbow	677	499	35.7	434	359	90	75	1,201	932	28.8
	Longbow	221	206	7.5	162	139	27	29	410	374	9.7
	Bonus Gun	62	83	-25.0	82	163	17	36	161	282	-42.8
	Muzzleloader	76	55	38.2	154	121	19	23	249	199	25.1
	Youth	70	51	37.3	53	39	10	15	133	105	26.7
	Total	1,634	1,359	20.3	1,588	1,447	323	335	3,545	3,140	12.9

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### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Coshocton	Gun	818	717	14.0	1,324	1,288	261	255	2,403	2,260	6.3
	Crossbow	1281	1035	23.8	1,063	909	146	136	2,490	2,080	19.7
	Longbow	531	501	5.9	479	459	58	59	1,068	1,019	4.8
	Bonus Gun	79	104	-24.0	197	254	31	45	307	403	-23.9
	Muzzleloader	127	111	14.1	290	266	50	37	467	415	12.6
	Youth	166	132	25.8	109	102	32	29	307	263	16.6
	Total	3,038	2,626	15.7	3,519	3,321	587	568	7,144	6,516	9.6
Crawford	Gun	259	232	11.5	304	269	83	67	646	568	13.7
	Crossbow	212	165	28.2	151	138	29	27	392	331	18.4
	Longbow	74	73	1.4	52	58	11	7	137	138	-0.5
	Bonus Gun	29	26	10.1	37	52	5	13	71	92	-22.5
	Muzzleloader	13	18	-26.4	37	41	12	8	62	66	-6.5
	Youth	32	22	43.3	17	14	11	8	60	44	37.4
	Total	621	541	14.9	609	574	152	132	1,382	1,247	10.8
Cuyahoga	Gun	20	15	33.3	21	24	8	5	49	44	10.5
	Crossbow	251	205	22.4	326	370	61	59	638	634	0.7
	Longbow	71	73	-3.2	101	164	22	19	194	256	-24.2
	Bonus Gun	3	2	80.0	2	1	1	1	6	4	50.0
	Muzzleloader	0	1	-100	0	1	1	1	1	3	-62.5
	Youth	0	1	-100	0	0	0	0	0	1	-100.0
	Total	345	297	16.0	451	560	93	86	889	943	-5.7
Darke	Gun	122	111	10.2	144	126	37	38	303	275	10.2
	Crossbow	133	116	14.7	111	109	26	22	270	247	9.3
	Longbow	66	62	6.5	55	55	11	12	132	129	2.3
	Bonus Gun	15	20	-23.7	26	32	6	8	47	60	-21.7
	Muzzleloader	9	15	-40.0	24	23	12	4	45	42	8.0
	Youth	15	17	-10.0	8	12	7	3	30	32	-5.3
	Total	362	343	5.4	373	360	100	89	835	793	5.3
Defiance	Gun	292	295	-0.9	403	377	107	106	802	778	3.1
	Crossbow	243	235	3.4	196	221	41	48	480	504	-4.8
	Longbow	76	89	-14.3	67	93	12	12	155	194	-20.1
	Bonus Gun	28	56	-49.7	55	93	18	26	101	175	-42.4
	Muzzleloader	23	32	-28.9	57	57	13	12	93	101	-8.2
	Youth	37	41	-9.0	46	33	15	10	98	84	17.1
	Total	704	757	-7.0	833	885	208	218	1,745	1,859	-6.1

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Delaware	Gun	186	153	21.8	204	195	51	36	441	383	15.0
	Crossbow	342	293	16.7	229	243	57	48	628	584	7.5
	Longbow	199	182	9.5	155	162	29	26	383	370	3.6
	Bonus Gun	23	26	-10.4	39	42	7	10	69	78	-11.5
	Muzzleloader	25	24	5.6	40	33	7	11	72	67	6.9
	Youth	19	15	23.9	6	7	3	4	28	26	7.7
	Total	797	697	14.3	680	688	154	137	1,631	1,522	7.2
Erie	Gun	125	103	21.4	164	130	38	28	327	261	25.4
	Crossbow	212	183	15.8	147	142	43	32	402	357	12.6
	Longbow	47	51	-7.2	52	50	10	11	109	112	-2.4
	Bonus Gun	11	19	-41.1	28	33	8	10	47	61	-23.4
	Muzzleloader	14	14	0.0	19	21	7	5	40	40	0.0
	Youth	15	16	-4.3	10	19	1	6	26	40	-35.0
	Total	426	433	-1.5	420	474	109	117	955	1,024	-6.7
Fairfield	Gun	292	252	15.7	381	347	90	82	763	681	12.1
	Crossbow	374	305	22.8	254	231	42	48	670	584	14.7
	Longbow	169	189	-10.4	144	157	19	15	332	361	-7.9
	Bonus Gun	39	38	2.6	57	83	14	15	110	135	-18.7
	Muzzleloader	42	35	21.2	75	62	13	15	130	112	16.1
	Youth	33	32	4.2	27	18	11	3	71	52	35.7
	Total	955	856	11.5	945	907	193	179	2,093	1,943	7.7
Fayette	Gun	66	62	5.9	43	49	8	8	117	119	-2.0
	Crossbow	76	58	31.0	18	27	5	5	99	90	9.6
	Longbow	29	33	-12.1	6	12	2	3	37	48	-23.4
	Bonus Gun	4	9	-53.8	6	10	2	1	12	20	-41.0
	Muzzleloader	7	9	-22.2	10	10	1	3	18	22	-18.2
	Youth	20	11	87.5	6	3	0	1	26	15	73.3
	Total	207	184	12.5	90	113	18	22	315	319	-1.2
Franklin	Gun	63	68	-7.4	81	61	16	18	160	147	9.1
	Crossbow	208	180	15.8	142	154	27	31	377	365	3.4
	Longbow	107	103	4.2	70	87	9	14	186	204	-8.7
	Bonus Gun	11	9	22.2	12	16	6	3	29	28	4.8
	Muzzleloader	8	12	-31.4	23	17	6	3	37	32	14.4
	Youth	11	6	73.7	3	2	2	1	16	10	65.5
	Total	409	379	7.8	337	340	67	70	813	790	3.0

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Fulton	Gun	169	143	17.9	187	151	51	37	407	331	22.8
	Crossbow	138	125	10.1	93	90	29	24	260	239	8.6
	Longbow	53	55	-4.2	44	49	9	10	106	115	-7.8
	Bonus Gun	20	20	1.7	14	29	7	4	41	52	-21.7
	Muzzleloader	7	13	-44.7	29	18	2	4	38	35	9.6
	Youth	17	13	30.8	12	9	3	5	32	27	18.5
	Total	408	371	10.0	385	353	103	85	896	808	10.8
Gallia	Gun	444	389	14.1	557	559	112	100	1,113	1,048	6.2
	Crossbow	476	356	33.8	227	224	40	34	743	614	21.1
	Longbow	192	180	6.7	89	99	14	11	295	290	1.7
	Bonus Gun	38	50	-23.5	80	85	14	13	132	148	-10.6
	Muzzleloader	78	55	42.7	105	88	10	15	193	158	22.4
	Youth	78	53	48.1	38	35	12	9	128	97	32.0
	Total	1,311	1,090	20.3	1,107	1,099	203	183	2,621	2,372	10.5
Geauga	Gun	246	211	16.6	340	277	114	80	700	568	23.2
	Crossbow	391	337	15.9	346	346	105	87	842	771	9.3
	Longbow	144	145	-0.9	159	179	35	49	338	374	-9.5
	Bonus Gun	27	41	-34.7	33	79	14	24	74	144	-48.6
	Muzzleloader	33	24	39.4	73	49	20	13	126	85	47.7
	Youth	33	16	110.6	29	18	12	8	74	41	79.0
	Total	885	781	13.3	989	956	303	263	2,177	2,000	8.9
Greene	Gun	94	98	-4.4	125	109	27	22	246	230	7.1
	Crossbow	178	168	5.7	130	124	17	21	325	313	3.7
	Longbow	93	99	-6.4	63	77	7	11	163	188	-13.1
	Bonus Gun	16	18	-11.1	28	35	2	6	46	60	-22.9
	Muzzleloader	19	17	11.8	28	23	6	6	53	46	15.2
	Youth	14	16	-12.5	8	8	7	1	29	25	16.0
	Total	421	419	0.5	387	381	67	68	875	869	0.7
Guernsey	Gun	699	612	14.2	1,045	985	224	188	1,968	1,784	10.3
	Crossbow	941	729	29.1	588	533	98	91	1,627	1,353	20.3
	Longbow	337	295	14.4	275	246	24	31	636	572	11.3
	Bonus Gun	81	87	-6.9	128	181	27	35	236	303	-22.2
	Muzzleloader	103	94	9.6	237	207	46	34	386	335	15.2
	Youth	129	77	68.3	74	57	17	20	220	154	43.2
	Total	2,298	1,908	20.5	2,366	2,228	440	404	5,104	4,540	12.4

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Hamilton	Gun	52	63	-17.0	75	77	13	14	140	153	-8.7
	Crossbow	330	301	9.6	379	410	86	92	795	803	-1.0
	Longbow	149	178	-16.1	213	271	42	45	404	493	-18.1
	Bonus Gun	11	9	26.9	12	22	1	2	24	33	-28.0
	Muzzleloader	15	11	40.6	22	16	4	4	41	31	32.3
	Youth	5	4	15.4	2	4	3	0	10	9	11.1
	Total	567	567	0.1	703	803	149	158	1,419	1,528	-7.1
Hancock	Gun	271	213	27.4	278	237	57	70	606	520	16.6
	Crossbow	241	209	15.3	202	165	44	36	487	410	18.7
	Longbow	113	122	-7.1	108	95	13	17	234	234	0.1
	Bonus Gun	23	39	-41.5	46	54	7	12	76	105	-27.8
	Muzzleloader	13	19	-30.4	32	35	12	8	57	61	-7.1
	Youth	42	27	55.6	29	19	13	6	84	51	63.6
	Total	712	636	12.0	703	608	146	151	1,561	1,394	12.0
Hardin	Gun	243	188	29.5	312	278	85	68	640	534	19.9
	Crossbow	178	149	19.2	152	155	38	41	368	345	6.7
	Longbow	94	100	-5.7	93	102	19	20	206	222	-7.1
	Bonus Gun	20	42	-52.8	39	65	8	15	67	122	-45.1
	Muzzleloader	12	26	-53.8	34	52	3	11	49	89	-44.9
	Youth	41	26	57.7	22	16	9	9	72	50	43.0
	Total	596	537	11.1	662	674	165	165	1,423	1,375	3.5
Harrison	Gun	552	479	15.2	642	743	121	149	1,315	1,371	-4.1
	Crossbow	720	555	29.7	329	357	53	53	1,102	965	14.2
	Longbow	276	243	13.4	186	192	19	19	481	455	5.8
	Bonus Gun	53	78	-32.3	82	160	21	29	156	267	-41.6
	Muzzleloader	81	78	3.4	198	159	22	29	301	266	13.0
	Youth	90	68	33.0	54	47	22	12	166	127	30.7
	Total	1,784	1,510	18.1	1,508	1,676	261	294	3,553	3,480	2.1
Henry	Gun	197	154	28.2	200	155	41	42	438	351	24.8
	Crossbow	118	101	16.8	77	68	25	22	220	191	15.0
	Longbow	61	57	6.4	42	42	8	8	111	108	2.8
	Bonus Gun	14	30	-52.8	22	27	11	7	47	64	-26.6
	Muzzleloader	16	11	41.2	13	16	2	5	31	32	-2.1
	Youth	21	11	96.9	12	16	7	3	40	30	31.9
	Total	428	369	16.0	368	331	95	89	891	789	12.9

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Highland	Gun	377	319	18.3	610	507	131	108	1,118	933	19.8
	Crossbow	395	355	11.3	363	316	58	64	816	735	11.1
	Longbow	191	200	-4.5	146	194	23	28	360	422	-14.6
	Bonus Gun	44	53	-16.5	89	108	14	24	147	184	-20.1
	Muzzleloader	64	58	10.3	88	106	25	19	177	184	-3.6
	Youth	87	59	47.5	38	35	11	13	136	106	27.9
	Total	1,165	1,051	10.9	1,344	1,277	263	256	2,772	2,584	7.3
Hocking	Gun	433	418	3.5	575	606	94	106	1,102	1,130	-2.5
	Crossbow	569	475	19.9	300	306	43	45	912	826	10.4
	Longbow	282	257	9.9	153	169	16	19	451	445	1.4
	Bonus Gun	39	55	-29.1	74	95	24	17	137	166	-17.6
	Muzzleloader	83	72	15.8	115	117	14	19	212	208	2.1
	Youth	57	44	30.5	27	22	9	7	93	73	28.0
	Total	1,466	1,328	10.4	1,251	1,322	201	213	2,918	2,863	1.9
Holmes	Gun	510	463	10.1	925	838	210	167	1,645	1,468	12.1
	Crossbow	808	659	22.5	807	633	138	118	1,753	1,410	24.3
	Longbow	300	272	10.2	339	371	43	42	682	686	-0.5
	Bonus Gun	54	81	-33.3	129	190	25	39	208	310	-32.8
	Muzzleloader	68	65	4.6	209	176	24	29	301	270	11.5
	Youth	138	110	25.8	86	92	26	22	250	224	11.8
	Total	1,899	1,667	13.9	2,534	2,325	472	427	4,905	4,419	11.0
Huron	Gun	403	344	17.0	586	514	177	150	1,166	1,008	15.7
	Crossbow	351	293	19.8	234	236	55	49	640	579	10.6
	Longbow	135	139	-2.9	116	125	22	23	273	287	-4.8
	Bonus Gun	34	62	-44.9	62	116	17	30	113	208	-45.8
	Muzzleloader	36	31	14.9	72	73	22	22	130	126	3.2
	Youth	64	41	57.4	50	37	17	13	131	90	45.0
	Total	1,030	917	12.3	1,132	1,117	313	289	2,475	2,323	6.5
Jackson	Gun	372	351	6.1	518	555	93	98	983	1,003	-2.0
	Crossbow	543	452	20.2	314	330	49	47	906	829	9.3
	Longbow	236	249	-5.1	126	167	17	19	379	434	-12.7
	Bonus Gun	44	48	-9.0	96	109	10	15	150	173	-13.3
	Muzzleloader	67	58	16.2	129	123	22	20	218	201	8.6
	Youth	56	59	-4.5	44	31	6	9	106	98	7.8
	Total	1,327	1,220	8.8	1,239	1,323	198	208	2,764	2,751	0.5

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Jefferson	Gun	402	365	10.0	393	358	72	63	867	787	10.2
	Crossbow	534	368	45.2	173	152	27	21	734	541	35.7
	Longbow	226	185	21.9	77	80	11	8	314	273	15.2
	Bonus Gun	48	55	-13.3	55	87	12	14	115	156	-26.1
	Muzzleloader	67	56	20.4	116	74	18	15	201	144	39.3
	Youth	62	51	20.8	31	22	8	4	101	77	30.6
	Total	1,352	1,092	23.8	851	778	149	125	2,352	1,995	17.9
Knox	Gun	637	581	9.6	1,167	965	217	217	2,021	1,764	14.6
	Crossbow	785	638	23.1	738	600	116	111	1,639	1,348	21.6
	Longbow	362	351	3.1	349	360	61	41	772	752	2.7
	Bonus Gun	68	91	-25.3	133	212	28	44	229	347	-34.0
	Muzzleloader	90	74	22.2	215	194	39	39	344	307	12.2
	Youth	125	91	36.9	78	68	25	26	228	185	23.2
	Total	2,083	1,843	13.0	2,714	2,425	493	482	5,290	4,750	11.4
Lake	Gun	54	58	-6.4	91	94	19	24	164	176	-6.6
	Crossbow	239	194	23.0	268	246	72	60	579	500	15.8
	Longbow	54	54	0.6	75	74	13	15	142	142	-0.2
	Bonus Gun	12	13	-10.0	12	25	1	4	25	42	-40.9
	Muzzleloader	6	6	5.9	23	15	4	3	33	24	39.4
	Youth	10	6	76.5	3	3	1	1	14	10	35.5
	Total	377	332	13.6	474	459	111	107	962	898	7.1
Lawrence	Gun	315	309	1.9	308	353	54	51	677	713	-5.1
	Crossbow	333	285	16.7	102	128	22	18	457	432	5.9
	Longbow	180	185	-2.5	47	75	10	9	237	268	-11.7
	Bonus Gun	42	42	0.8	44	50	3	8	89	100	-10.7
	Muzzleloader	40	39	2.6	41	58	7	6	88	103	-14.6
	Youth	42	37	13.5	14	19	5	3	61	59	4.0
	Total	954	901	5.9	557	687	102	95	1,613	1,683	-4.2
Licking	Gun	599	560	7.0	953	865	160	181	1,712	1,605	6.7
	Crossbow	1,026	897	14.4	754	699	129	121	1,909	1,717	11.2
	Longbow	430	414	3.9	356	386	46	36	832	835	-0.4
	Bonus Gun	81	88	-8.0	146	208	29	34	256	329	-22.3
	Muzzleloader	94	107	-12.1	199	201	23	34	316	342	-7.6
	Youth	86	69	25.2	54	48	18	16	158	133	19.1
	Total	2,341	2,151	8.8	2,491	2,425	412	425	5,244	5,000	4.9

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Logan	Gun	264	249	6.2	431	381	82	81	777	711	9.2
	Crossbow	341	281	21.2	331	293	57	66	729	640	13.8
	Longbow	160	164	-2.2	170	190	32	30	362	384	-5.7
	Bonus Gun	40	48	-16.7	74	88	18	18	132	154	-14.3
	Muzzleloader	27	35	-22.1	62	75	12	15	101	125	-19.0
	Youth	49	39	25.6	43	28	10	9	102	76	34.8
	Total	887	822	7.9	1,119	1,065	213	222	2,219	2,109	5.2
Lorain	Gun	294	241	21.8	395	320	94	85	783	646	21.1
	Crossbow	498	443	12.4	389	375	87	83	974	901	8.1
	Longbow	144	141	1.9	126	162	21	30	291	333	-12.7
	Bonus Gun	33	52	-36.1	68	96	10	19	111	167	-33.4
	Muzzleloader	32	28	14.3	66	71	17	17	115	116	-1.1
	Youth	31	28	10.7	28	21	9	9	68	59	15.9
	Total	1,044	937	11.4	1,091	1,057	239	246	2,374	2,240	6.0
Lucas	Gun	51	51	0.7	40	57	12	21	103	128	-19.7
	Crossbow	163	169	-3.4	173	205	29	56	365	430	-15.1
	Longbow	60	62	-3.7	69	86	12	19	141	168	-15.9
	Bonus Gun	9	9	-3.6	6	11	6	1	21	21	0.0
	Muzzleloader	6	3	80.0	11	10	0	2	17	15	10.9
	Youth	1	3	-66.7	3	4	0	1	4	9	-53.8
	Total	291	300	-2.9	302	375	59	102	652	777	-16.1
Madison	Gun	102	71	44.3	112	87	20	14	234	171	36.6
	Crossbow	127	94	35.1	81	60	13	14	221	168	31.5
	Longbow	60	61	-1.6	36	45	2	3	98	109	-10.1
	Bonus Gun	10	16	-36.2	22	24	6	4	38	44	-13.0
	Muzzleloader	10	12	-14.3	15	19	3	4	28	35	-19.2
	Youth	21	13	65.8	4	7	1	2	26	21	23.8
	Total	333	268	24.4	273	244	46	41	652	552	18.0
Mahoning	Gun	215	212	1.6	302	277	97	83	614	571	7.5
	Crossbow	479	389	23.0	366	332	73	94	918	815	12.6
	Longbow	147	121	21.8	117	106	21	24	285	251	13.7
	Bonus Gun	36	42	-15.0	57	74	13	22	106	139	-23.6
	Muzzleloader	36	26	38.5	70	60	10	20	116	105	10.1
	Youth	24	22	9.1	22	11	6	6	52	40	31.1
	Total	939	818	14.8	947	867	224	251	2,110	1,936	9.0

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### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Marion	Gun	197	164	20.1	207	171	42	48	446	382	16.7
	Crossbow	141	120	17.2	103	98	17	18	261	236	10.4
	Longbow	73	66	10.1	58	54	3	10	134	130	3.3
	Bonus Gun	26	28	-6.0	25	41	4	7	55	76	-27.3
	Muzzleloader	21	17	23.5	22	25	3	3	46	45	2.2
	Youth	24	19	26.3	12	9	3	3	39	31	27.2
	Total	486	419	16.0	428	400	72	89	986	907	8.7
Medina	Gun	265	250	6.0	338	313	79	87	682	650	4.9
	Crossbow	536	410	30.6	514	410	96	102	1,146	922	24.3
	Longbow	167	167	0.0	175	177	31	29	373	373	0.1
	Bonus Gun	47	42	12.8	101	82	17	21	165	144	14.6
	Muzzleloader	35	43	-19.2	78	80	19	16	132	139	-5.3
	Youth	28	32	-11.6	19	14	8	8	55	54	1.2
	Total	1,093	955	14.4	1,246	1,091	252	266	2,591	2,312	12.1
Meigs	Gun	448	429	4.4	707	618	104	100	1,259	1,148	9.7
	Crossbow	610	508	20.2	371	310	52	26	1,033	844	22.4
	Longbow	245	237	3.2	158	168	16	12	419	418	0.3
	Bonus Gun	63	66	-4.5	102	131	19	17	184	214	-14.2
	Muzzleloader	99	87	13.4	207	181	32	24	338	293	15.5
	Youth	107	70	52.1	52	41	10	10	169	121	39.3
	Total	1,577	1,406	12.2	1,607	1,458	234	192	3,418	3,056	11.8
Mercer	Gun	181	118	53.8	186	134	55	46	422	298	41.6
	Crossbow	124	99	24.8	107	101	32	35	263	236	11.4
	Longbow	56	48	15.9	49	54	20	13	125	116	8.1
	Bonus Gun	18	21	-12.9	24	28	7	11	49	60	-18.8
	Muzzleloader	3	13	-76.3	20	19	3	5	26	37	-29.7
	Youth	13	15	-11.4	16	12	7	8	36	35	3.8
	Total	397	316	25.6	406	353	128	120	931	789	18.0
Miami	Gun	101	87	16.5	121	103	34	24	256	214	19.6
	Crossbow	186	171	8.6	133	131	23	39	342	341	0.2
	Longbow	71	73	-2.3	55	57	6	17	132	147	-10.0
	Bonus Gun	13	18	-29.1	26	30	8	4	47	52	-9.6
	Muzzleloader	22	8	187.0	22	22	3	3	47	32	45.4
	Youth	16	13	26.3	11	9	7	3	34	25	36.0
	Total	410	371	10.5	373	358	81	91	864	820	5.4

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Monroe	Gun	451	421	7.2	539	568	113	104	1,103	1,092	1.0
	Crossbow	486	404	20.3	202	207	27	28	715	639	12.0
	Longbow	129	130	-0.5	37	72	8	8	174	209	-16.9
	Bonus Gun	52	48	7.6	75	107	14	15	141	170	-17.2
	Muzzleloader	69	60	15.0	125	121	21	13	215	195	10.4
	Youth	63	53	18.9	39	30	7	10	109	92	18.1
	Total	1,261	1,123	12.3	1,026	1,112	190	179	2,477	2,414	2.6
Montgomery	Gun	72	68	6.4	108	65	26	21	206	153	34.3
	Crossbow	192	168	14.3	200	153	34	42	426	363	17.4
	Longbow	78	66	18.8	74	94	14	24	166	183	-9.3
	Bonus Gun	7	13	-44.7	12	19	1	5	20	36	-45.0
	Muzzleloader	8	9	-14.3	16	17	4	1	28	28	1.2
	Youth	8	6	26.3	2	6	1	1	11	14	-19.5
	Total	368	334	10.3	417	356	81	94	866	784	10.5
Morgan	Gun	425	425	0.0	735	698	138	130	1,298	1,253	3.6
	Crossbow	545	432	26.1	317	274	46	45	908	751	20.9
	Longbow	264	255	3.5	126	148	10	15	400	418	-4.2
	Bonus Gun	53	48	9.7	83	102	21	16	157	167	-5.8
	Muzzleloader	79	78	1.3	174	142	29	17	282	237	19.0
	Youth	78	75	4.5	46	34	10	9	134	117	14.2
	Total	1,465	1,332	10.0	1,506	1,421	264	238	3,235	2,991	8.2
Morrow	Gun	245	243	0.7	311	294	77	82	633	620	2.2
	Crossbow	343	277	24.0	257	196	38	44	638	517	23.3
	Longbow	121	119	1.7	86	89	11	17	218	225	-3.1
	Bonus Gun	28	38	-25.7	47	63	13	14	88	114	-22.8
	Muzzleloader	28	27	3.7	44	58	17	15	89	100	-11.0
	Youth	43	33	31.6	20	15	7	5	70	53	32.1
	Total	817	743	10.0	778	721	163	180	1,758	1,644	6.9
Muskingum	Gun	779	675	15.4	1,103	1,099	225	218	2,107	1,993	5.7
	Crossbow	1,028	776	32.5	558	495	67	73	1,653	1,344	23.0
	Longbow	454	420	8.1	259	279	34	29	747	728	2.7
	Bonus Gun	66	81	-18.2	126	181	27	26	219	288	-23.9
	Muzzleloader	113	110	2.4	213	210	30	30	356	350	1.6
	Youth	118	87	35.6	74	70	15	13	207	170	21.8
	Total	2,574	2,164	19.0	2,356	2,362	401	390	5,331	4,915	8.5

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Noble	Gun	431	437	-1.4	676	673	140	129	1,247	1,240	0.6
	Crossbow	623	513	21.4	337	312	63	55	1,023	881	16.2
	Longbow	198	188	5.5	132	139	20	19	350	346	1.2
	Bonus Gun	52	49	5.4	93	121	15	16	160	186	-14.1
	Muzzleloader	68	63	8.5	155	132	22	21	245	216	13.6
	Youth	68	69	-1.4	54	29	6	9	128	107	20.0
	Total	1,449	1,331	8.9	1,465	1,418	269	253	3,183	3,002	6.0
Ottawa	Gun	65	51	27.5	86	73	22	17	173	141	22.4
	Crossbow	127	118	7.3	106	98	17	33	250	249	0.3
	Longbow	25	30	-17.6	29	29	5	6	59	65	-8.8
	Bonus Gun	12	10	24.1	8	20	5	6	25	36	-29.9
	Muzzleloader	12	7	63.6	17	14	2	5	31	26	19.2
	Youth	8	7	14.3	6	6	2	2	16	15	4.3
	Total	250	225	11.3	257	241	53	70	560	536	4.5
Paulding	Gun	229	171	34.2	285	223	84	61	598	455	31.5
	Crossbow	163	141	15.3	122	133	37	30	322	305	5.7
	Longbow	60	72	-16.7	65	62	14	11	139	145	-4.4
	Bonus Gun	26	39	-32.8	35	50	11	15	72	104	-30.5
	Muzzleloader	17	17	-1.9	30	40	5	5	52	62	-16.1
	Youth	42	26	61.5	25	21	9	9	76	57	34.1
	Total	542	469	15.5	567	536	160	133	1,269	1,138	11.5
Perry	Gun	407	373	9.2	577	557	128	122	1,112	1,052	5.7
	Crossbow	527	415	26.9	293	247	53	48	873	711	22.8
	Longbow	189	193	-2.2	113	126	10	16	312	335	-7.0
	Bonus Gun	37	51	-27.0	69	95	6	16	112	162	-30.7
	Muzzleloader	60	58	3.4	106	114	23	19	189	191	-1.2
	Youth	66	44	51.1	31	26	12	8	109	77	40.9
	Total	1,298	1,141	13.8	1,197	1,174	235	230	2,730	2,545	7.3
Pickaway	Gun	141	120	17.2	101	113	17	24	259	258	0.5
	Crossbow	122	108	12.6	65	77	18	17	205	202	1.3
	Longbow	56	72	-22.6	35	43	3	5	94	120	-21.4
	Bonus Gun	19	15	29.5	19	27	6	6	44	48	-8.3
	Muzzleloader	15	17	-13.5	24	29	4	6	43	53	-18.4
	Youth	17	17	-1.9	10	9	2	3	29	29	-1.1
	Total	373	355	5.2	256	300	50	62	679	717	-5.3

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Pike	Gun	244	263	-7.2	313	334	67	69	624	666	-6.3
	Crossbow	410	340	20.5	260	218	31	30	701	588	19.3
	Longbow	188	178	5.4	86	90	6	9	280	278	0.8
	Bonus Gun	34	33	2.0	30	61	3	7	67	101	-33.9
	Muzzleloader	50	45	10.3	70	79	11	12	131	136	-3.9
	Youth	29	41	-29.3	13	23	5	3	47	67	-29.5
	Total	961	906	6.1	777	808	124	131	1,862	1,845	0.9
Portage	Gun	266	217	22.6	347	286	106	104	719	607	18.4
	Crossbow	583	453	28.8	440	412	119	111	1,142	976	17.0
	Longbow	165	150	9.8	168	178	32	44	365	372	-1.8
	Bonus Gun	40	45	-10.4	56	84	12	23	108	152	-28.8
	Muzzleloader	31	31	1.1	63	53	12	14	106	98	8.2
	Youth	32	27	18.5	24	32	8	7	64	66	-3.0
	Total	1,170	971	20.5	1,182	1,129	308	330	2,660	2,431	9.4
Preble	Gun	137	120	13.9	160	136	35	34	332	290	14.4
	Crossbow	206	174	18.4	147	151	26	34	379	360	5.4
	Longbow	104	96	8.0	66	80	5	17	175	193	-9.5
	Bonus Gun	24	24	-1.4	35	41	8	11	67	76	-12.2
	Muzzleloader	14	18	-23.6	31	36	3	7	48	62	-22.2
	Youth	26	23	14.7	11	10	7	4	44	37	20.0
	Total	515	462	11.5	459	458	86	108	1,060	1,028	3.1
Putnam	Gun	156	124	25.5	159	147	55	37	370	308	20.1
	Crossbow	156	123	27.2	96	108	14	27	266	258	3.0
	Longbow	61	51	18.8	54	59	5	12	120	122	-1.6
	Bonus Gun	10	20	-50.8	16	26	6	8	32	54	-41.1
	Muzzleloader	15	11	32.4	15	12	1	3	31	26	17.7
	Youth	22	25	-10.8	21	15	11	8	54	48	13.3
	Total	424	359	18.2	361	371	92	97	877	827	6.1
Richland	Gun	444	435	2.1	714	662	186	173	1,344	1,270	5.9
	Crossbow	701	549	27.7	551	488	103	99	1,355	1,136	19.2
	Longbow	260	259	0.3	217	237	39	37	516	533	-3.2
	Bonus Gun	49	74	-33.5	99	153	24	39	172	266	-35.3
	Muzzleloader	79	59	34.7	118	132	17	28	214	218	-1.8
	Youth	83	54	53.7	48	39	21	13	152	106	43.4
	Total	1,630	1,436	13.5	1,766	1,726	397	391	3,793	3,553	6.8

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Ross	Gun	415	412	0.7	558	523	81	89	1,054	1,024	2.9
	Crossbow	582	493	18.1	365	326	48	51	995	870	14.4
	Longbow	274	284	-3.5	171	193	24	19	469	496	-5.4
	Bonus Gun	49	58	-15.0	82	106	19	12	150	176	-14.9
	Muzzleloader	73	64	13.5	131	130	22	15	226	209	8.1
	Youth	96	83	15.2	32	34	13	11	141	128	10.2
	Total	1,497	1,409	6.2	1,347	1,322	209	200	3,053	2,931	4.2
Sandusky	Gun	122	117	4.3	144	126	39	34	305	278	9.8
	Crossbow	207	187	10.5	189	177	38	38	434	402	8.0
	Longbow	64	58	11.0	51	53	11	8	126	119	6.2
	Bonus Gun	13	17	-22.0	24	35	8	6	45	58	-22.9
	Muzzleloader	18	18	1.9	28	31	9	6	55	54	1.2
	Youth	17	12	37.8	13	10	7	5	37	28	33.7
	Total	445	413	7.7	456	442	113	99	1,014	954	6.3
Scioto	Gun	257	267	-3.9	364	391	60	70	681	729	-6.5
	Crossbow	421	391	7.8	269	223	42	36	732	649	12.8
	Longbow	227	215	5.4	118	127	13	16	358	359	-0.2
	Bonus Gun	39	44	-12.0	78	81	9	12	126	138	-8.5
	Muzzleloader	45	40	13.4	78	76	7	11	130	127	2.4
	Youth	42	45	-6.0	28	31	10	9	80	84	-4.8
	Total	1,035	1,006	2.8	943	938	143	154	2,121	2,098	1.1
Seneca	Gun	351	290	21.0	467	409	109	102	927	800	15.8
	Crossbow	334	279	19.6	248	239	54	53	636	571	11.4
	Longbow	93	93	0.4	78	102	13	13	184	207	-11.3
	Bonus Gun	31	58	-46.6	62	95	18	24	111	177	-37.3
	Muzzleloader	26	33	-21.2	45	57	14	14	85	104	-18.0
	Youth	53	47	12.8	40	29	14	13	107	89	19.8
	Total	895	806	11.1	946	939	223	220	2,064	1,965	5.0
Shelby	Gun	147	131	11.9	186	182	67	44	400	357	11.9
	Crossbow	151	143	5.8	158	131	40	32	349	306	14.2
	Longbow	86	82	5.3	75	77	8	16	169	175	-3.2
	Bonus Gun	22	24	-9.6	46	45	12	11	80	81	-0.8
	Muzzleloader	17	17	-1.9	23	37	8	5	48	60	-19.6
	Youth	23	21	9.5	13	16	12	5	48	42	13.4
	Total	450	422	6.6	505	491	149	115	1,104	1,028	7.4

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Stark	Gun	330	299	10.2	494	452	105	107	929	859	8.1
	Crossbow	705	554	27.3	549	518	120	108	1,374	1,180	16.4
	Longbow	223	185	20.5	196	217	32	30	451	432	4.5
	Bonus Gun	39	58	-32.8	82	127	13	27	134	212	-36.7
	Muzzleloader	66	50	32.0	107	98	14	24	187	173	8.3
	Youth	53	38	40.7	32	23	7	9	92	70	31.4
	Total	1,427	1,194	19.5	1,482	1,451	292	310	3,201	2,955	8.3
Summit	Gun	90	71	26.8	93	81	23	23	206	175	17.5
	Crossbow	529	439	20.4	479	418	115	110	1,123	967	16.1
	Longbow	157	123	28.0	154	169	37	35	348	327	6.4
	Bonus Gun	6	18	-66.7	20	24	3	5	29	46	-37.4
	Muzzleloader	13	9	39.3	23	15	4	5	40	29	36.4
	Youth	13	5	178.6	6	3	0	2	19	10	90.0
	Total	812	669	21.4	779	714	185	182	1,776	1,565	13.5
Trumbull	Gun	419	374	12.1	615	609	207	183	1,241	1,165	6.5
	Crossbow	793	658	20.5	715	601	199	185	1,707	1,444	18.2
	Longbow	170	172	-1.4	244	205	66	57	480	434	10.7
	Bonus Gun	45	76	-40.8	90	190	26	46	161	312	-48.3
	Muzzleloader	38	33	16.3	124	92	26	22	188	146	28.5
	Youth	39	33	18.2	40	34	13	18	92	84	9.1
	Total	1,557	1,397	11.5	1,881	1,787	556	527	3,994	3,710	7.6
Tuscarawas	Gun	793	684	15.9	1,168	1,180	241	242	2,202	2,107	4.5
	Crossbow	1,062	843	25.9	848	706	123	115	2,033	1,664	22.2
	Longbow	466	401	16.1	410	413	51	47	927	861	7.6
	Bonus Gun	87	124	-29.6	165	258	35	50	287	432	-33.5
	Muzzleloader	107	98	9.2	296	239	52	36	455	373	21.9
	Youth	172	112	53.1	118	88	32	25	322	225	42.9
	Total	2,714	2,281	19.0	3,046	2,918	543	521	6,303	5,720	10.2
Union	Gun	160	142	12.9	177	153	43	37	380	331	14.7
	Crossbow	209	159	31.4	142	127	29	27	380	313	21.4
	Longbow	93	89	4.1	93	90	23	19	209	199	5.2
	Bonus Gun	20	24	-16.7	30	30	8	7	58	61	-5.4
	Muzzleloader	18	19	-6.9	32	27	2	5	52	52	0.6
	Youth	21	19	10.5	21	10	3	4	45	34	33.7
	Total	530	456	16.2	498	443	108	100	1,136	999	13.7

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Van Wert	Gun	128	109	17.4	115	93	25	27	268	229	17.2
	Crossbow	107	78	36.6	57	63	13	20	177	161	10.2
	Longbow	31	31	1.1	27	28	5	5	63	64	-1.0
	Bonus Gun	13	20	-35.0	12	21	3	4	28	45	-37.8
	Muzzleloader	11	8	43.5	10	10	3	2	24	20	18.0
	Youth	14	15	-6.7	6	12	4	5	24	31	-23.4
	Total	307	263	16.6	231	230	55	63	593	556	6.7
Vinton	Gun	352	339	3.8	478	471	97	86	927	896	3.5
	Crossbow	478	389	22.8	251	230	43	40	772	660	17.0
	Longbow	233	214	8.7	97	117	7	13	337	344	-2.1
	Bonus Gun	42	47	-11.3	68	79	10	12	120	139	-13.5
	Muzzleloader	63	57	10.5	107	109	14	12	184	178	3.6
	Youth	52	48	8.3	21	25	7	5	80	78	3.0
	Total	1,227	1,103	11.2	1,028	1,037	178	169	2,433	2,309	5.4
Warren	Gun	145	133	9.3	141	143	31	29	317	305	3.9
	Crossbow	271	251	7.8	203	197	34	36	508	484	4.9
	Longbow	131	112	17.3	101	109	18	22	250	243	3.0
	Bonus Gun	22	21	6.5	43	39	4	5	69	64	7.8
	Muzzleloader	19	25	-23.0	30	28	10	8	59	61	-3.8
	Youth	15	15	2.3	12	9	3	2	30	26	16.9
	Total	610	560	9.0	534	530	101	104	1,245	1,194	4.3
Washington	Gun	587	542	8.2	757	725	137	144	1,481	1,411	4.9
	Crossbow	639	498	28.4	265	259	43	40	947	797	18.9
	Longbow	254	237	7.3	90	116	5	12	349	364	-4.1
	Bonus Gun	58	70	-16.7	96	127	8	14	162	211	-23.2
	Muzzleloader	81	92	-12.0	142	164	14	21	237	277	-14.4
	Youth	108	79	36.7	59	39	12	6	179	124	44.4
	Total	1,739	1,529	13.8	1,422	1,440	219	239	3,380	3,207	5.4
Wayne	Gun	318	264	20.6	458	432	117	102	893	798	12.0
	Crossbow	510	377	35.3	394	339	83	73	987	789	25.1
	Longbow	187	163	14.7	159	171	26	33	372	367	1.4
	Bonus Gun	37	50	-26.5	78	93	18	20	133	164	-18.7
	Muzzleloader	30	37	-18.9	66	87	21	15	117	139	-15.6
	Youth	47	40	16.5	38	33	13	15	98	88	10.9
	Total	1,141	940	21.3	1,217	1,172	283	261	2,641	2,373	11.3

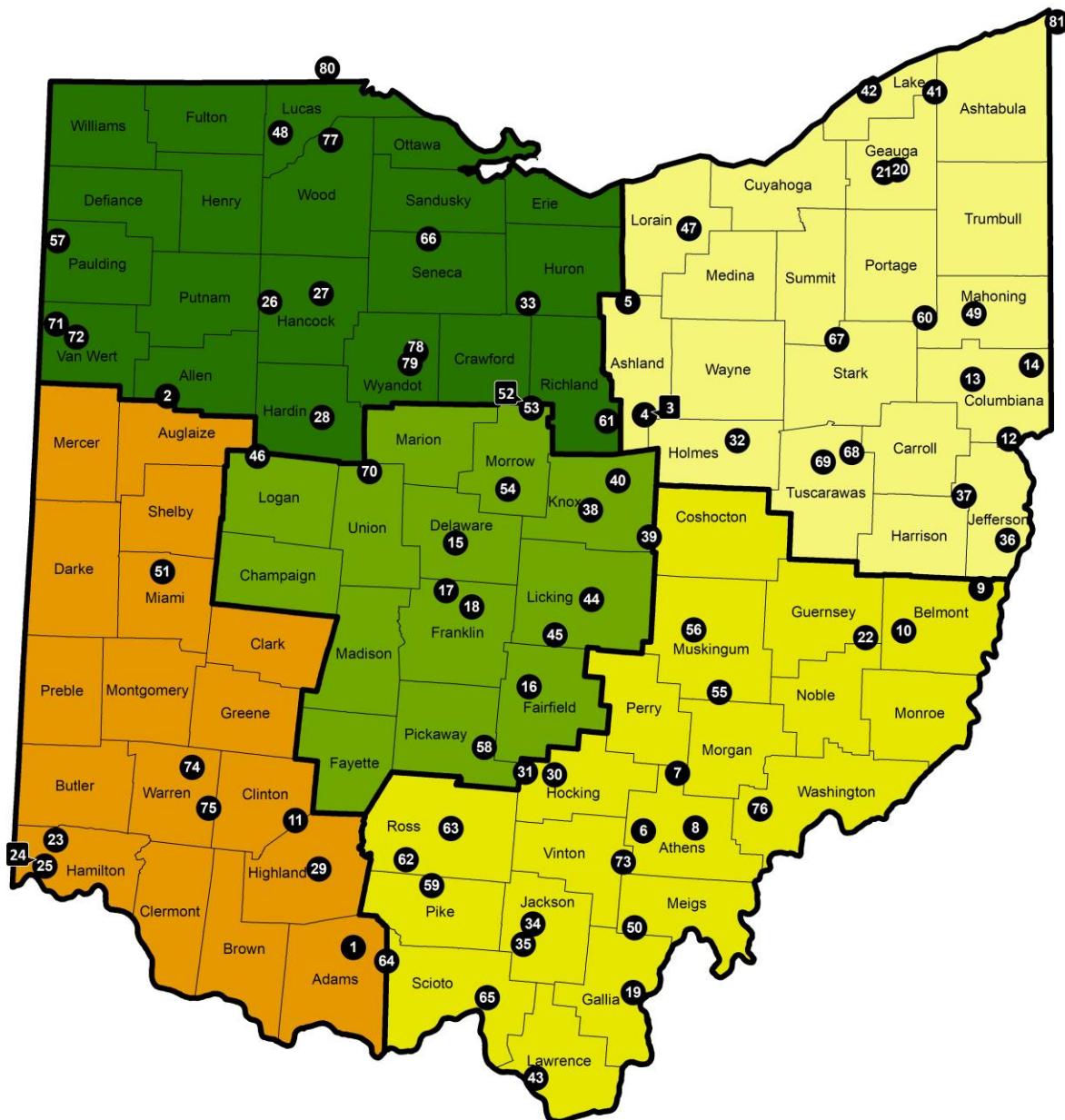
## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2021	3-year average	Diff. (%)	2021	3-year average	2021	3-year average	2021	3-year average	Diff. (%)
Williams	Gun	286	259	10.6	332	300	99	75	717	633	13.2
	Crossbow	305	271	12.7	254	205	48	38	607	514	18.1
	Longbow	128	131	-2.0	110	116	11	16	249	262	-5.0
	Bonus Gun	25	62	-59.9	62	77	9	15	96	154	-37.5
	Muzzleloader	32	31	4.3	62	51	17	10	111	92	20.2
	Youth	23	23	0.0	21	18	10	5	54	46	17.4
	Total	807	786	2.7	854	775	196	162	1,857	1,722	7.8
Wood	Gun	152	145	4.8	152	158	36	36	340	339	0.2
	Crossbow	202	204	-1.0	127	130	22	24	351	359	-2.1
	Longbow	73	86	-14.8	67	65	13	9	153	159	-4.0
	Bonus Gun	19	25	-25.0	30	38	6	9	55	72	-24.0
	Muzzleloader	13	19	-31.6	26	25	4	5	43	49	-12.2
	Youth	21	25	-17.1	10	13	10	4	41	42	-2.4
	Total	487	512	-4.9	418	433	92	88	997	1,033	-3.5
Wyandot	Gun	247	266	-7.3	375	377	100	96	722	739	-2.3
	Crossbow	185	181	2.0	150	136	31	30	366	347	5.5
	Longbow	105	103	2.3	82	98	14	14	201	214	-6.2
	Bonus Gun	26	36	-27.1	59	62	13	14	98	112	-12.8
	Muzzleloader	19	24	-20.8	52	50	9	8	80	82	-2.4
	Youth	51	41	24.4	33	25	11	12	95	78	21.8
	Total	640	671	-4.6	816	785	202	187	1,658	1,643	0.9

## APPENDIX 3

### Buckeye Big Buck Club Official Scorers



## APPENDIX 3

### Buckeye Big Buck Club Official Scorers

ID	County	Name	City	Phone
1	Adams	Bryan Smalley	Peebles	937-779-0180
2	Allen	William Bellman	Lima	419-303-8427
3	Ashland	Jon Byers	Loudonville	419-651-0501
4	Ashland	Lori Byers	Loudonville	419-908-5625
5	Ashland	Steve Reinhold	Nova	419-945-2848
6	Athens	Lloyd Culbertson	Athens	740-664-5021
7	Athens	Bill Peneston	Glouster	740-646-5061
8	Athens	Mike Rex	Athens	740-594-7296
9	Belmont	Tom DeVaul	Bridgeport	740-310-0238
10	Belmont	Devin Stephen	Barnesville	740-827-1674
11	Clinton	Kevin Garen	New Vienna	937-728-9082
12	Columbiana	Bill Lawrence	Wellsville	330-532-4259
13	Columbiana	Kerry Mora	Lisbon	330-222-1840
14	Columbiana	Ray Ward	New Waterford	330-501-0443
15	Delaware	Steve Bohan	Delaware	740-369-1763
16	Fairfield	Tom Moore	Carroll	614-204-3334
17	Franklin	Rod Nutter	Columbus	614-439-2874
18	Franklin	Matt Olson	Columbus	614-774-5174
19	Gallia	Ron Tawney	Gallipolis	740-645-3099
20	Geauga	Dean Charvat	Burton	440-834-4926
21	Geauga	Roger Davis	Newbury	440-564-5092
22	Guernsey	Evan Hastings	Quaker City	740-679-2275
23	Hamilton	Michael Serio	Cincinnati	513-385-7094
24	Hamilton	Robert Wood	Cincinnati	513-604-2151
25	Hamilton	Jennifer Wood	Cincinnati	513-720-7406
26	Hancock	Jason Collert	Mt Cory	419-889-1700
27	Hancock	Robert Ebert	Findlay	567-525-4208
28	Hardin	Gary Oates	Kenton	419-673-0473
29	Highland	Tim Schlater	Hillsboro	937-403-5811
30	Hocking	Jeff Hill	Rockbridge	740-385-1780
31	Hocking	Ed McClure, Jr	Laurelville	740-332-0266
32	Holmes	Mary Wilcox	Millersburg	330-674-1553
33	Huron	Bruce Buurma	Willard	567-227-0134
34	Jackson	David Haynes	Jackson	740-988-6278
35	Jackson	Seth Newkirk	Jackson	740-418-5011
36	Jefferson	Ken Bake	Mingo Junction	740-381-4820
37	Jefferson	Jim Williamson	Bloomingdale	740-543-4367
38	Knox	Adam Cramer	Mt Vernon	614-395-1004
39	Knox	Todd Fogress	Walhonding	740-485-3513
40	Knox	Ed Robinson	Howard	740-507-6722
41	Lake	Mike Irwin	Madison	440-622-5187

## APPENDIX 3

### Buckeye Big Buck Club Official Scorers

<b>ID</b>	<b>County</b>	<b>Name</b>	<b>City</b>	<b>Phone</b>
42	Lake	Mark McGrath	Mentor	440-352-0999
43	Lawrence	Mike Dickess	Ironton	740-532-0142
44	Licking	Steve Shannon	Newark	740-973-4784
45	Licking	Randy Weisenstein	Pataskala	740-739-1217
46	Logan	Gary Miller	Lakeview	419-238-6826
47	Lorain	Eric Ferron	Grafton	440-506-3540
48	Lucas	Steve Siegfried	Monclova	419-877-9096
49	Mahoning	Dusty Briceland	Canfield	330-727-9888
50	Meigs	Jack Satterfield	Langsville	740-742-0618
51	Miami	Westin Baker	Piqua	
52	Morrow	Frank Grauer	Galion	419-564-8133
53	Morrow	Chip Grauer	Galion	419-295-0096
54	Morrow	Shane Holtrey	Marengo	740-272-6103
55	Muskingum	Greg Smith	Blue Rock	740-607-6142
56	Muskingum	Michael Lewis	Zanesville	740-630-8894
57	Paulding	Charles West	Antwerp	419-789-9622
58	Pickaway	Ron Elkins	Circleville	614-296-1199
59	Pike	Toby Williams	Waverly	740-947-7252
60	Portage	Jerry Weingart	North Benton	330-420-8859
61	Richland	Carter Quay	Lucas	419-564-4045
62	Ross	Wes Spradlin	Bainbridge	740-656-0785
63	Ross	JR Tucker	Chillicothe	740-779-0888
64	Scioto	Scott Hoffer	Peebles	740-372-2437
65	Scioto	Gene Peach	Portsmouth	740-876-4234
66	Seneca	Dennis Heilman	Tiffin	419-334-1560
67	Summit	Randy Pepper	N. Canton	330-499-4157
68	Tuscarawas	Michael Budd	Summerdale	740-973-1752
69	Tuscarawas	Brett Burrier	Dover	330-447-1437
70	Union	Mike Cline	Richwood	740-262-5982
71	Van Wert	Rob Miller	Convoy	419-203-5510
72	Van Wert	Rick Waltmire	Van Wert	419 203-8011
73	Vinton	John Ator	McArthur	740-596-5252
74	Warren	Gary Trent	Waynesville	513-897-2117
75	Warren	Darin Woods	Clarksville	513-479-4111
76	Washington	Ryan Huffman	Waterford	740-516-8078
77	Wood	Michael Thompson	Perrysburg	419-575-4429
78	Wyandot	Will Ogden	Upper Sandusky	419-561-1951
79	Wyandot	Steve Swihart	Upper Sandusky	419-294-5137
80		Bill Nash	Lambertville	734-847-0405
81		David Pasky	West Springfield	814-922-3043