2022-2023 White-tailed Deer Program Report

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2022-2023 HUNTING SEASON RESULTS

In the 2022-2023 season, lowa deer hunters harvested 109,600 deer (Table 1.1), marking a 7% increase from the previous season (Table 1.2). Deer license sales also rose by 2% compared to the prior season.

During the 2022-2023 season, antierless deer (adult does and fawns) constituted 57% of the total harvest, a 2% increase from the previous season (Table 1.1). Antiered deer, which includes shed-antiered bucks, made up 43% of the total harvest, with 1,054 shed-antiered bucks reported.

Figure 1.1 illustrates the comparison between the electronic harvest reporting system and the postseason postcard survey harvest estimates conducted prior to the 2006 hunting season. The figure provides insights into the actual harvest based on the relationship between these two systems. Figure 1.2 presents a historical breakdown of reported harvest by the sex-age category of deer.

In the 2022-2023 hunting season, 66 counties offered additional antlerless licenses, totaling 78,600 available antlerless licenses statewide (Figure 1.3). Resident hunters had the opportunity to purchase an unlimited number of antlerless licenses before reaching the county quota, but were limited to one antlerless license before September 15th. These licenses were specific to a county and season.

Total harvest for the first and second **shotgun seasons** was 8% and 0% higher, respectively, in 2022-2023 compared to 2021-2022. Overall, the total reported harvest for the entire shotgun season was approximately 4.1% higher than the previous season, with license sales up by about 1% (Table 1.2). Antlered bucks represented 41% of the total harvest during the shotgun seasons, while does made up 48% of the reported harvest. Button bucks accounted for 10%, and shed-antlered bucks were less than 1% (Table 1.1). The distribution of reported antlered deer kill per square mile (Table 1.4) was highest in northeastern and southern lowa due to greater deer densities and hunting opportunities.

Archery season hunters harvested 21,879 deer, including those killed on senior crossbow licenses, reflecting a 2% increase from 2021-2022. Antiered deer constituted 58% of the total reported archery harvest (Table 1.1).

During the **early muzzleloader** season, there was a 3% decrease in the reported harvest compared to 2021-2022, with license sales increasing by 1% (Table 1.1 and Table 1.2). This season saw a harvest of 49% antiered bucks, 44% does, and 7% button bucks. In the **late muzzleloader** season of 2022-2023, hunters reported harvesting 9,423 deer, marking a 12% increase compared to the previous season. Of these, 35% were bucks.

Nonresident hunters were issued 6,059 any-deer licenses for the 2022-2023 deer hunting seasons (Table 1.1). All nonresident hunters also received antierless-only licenses, with additional optional antierless-only licenses available to them. The reported success rate for the nonresident any-deer and antierless-only licenses was 45% and 26%, respectively (Table 1.1). In total, nonresidents reported harvesting 2,833 antiered bucks and 2,053 does in 2022-2023.

Youth season witnessed a 7% increase in the total number of licenses issued (13,736) compared to 2021-2022 (Table 1.1 and Table 1.2). Youth season hunters who did not harvest a deer during the youth deer hunting season could use the unfilled tag during subsequent deer hunting seasons. The success rate for youth licenses was 38% with 5,283 deer reported. Fifty-seven percent of the deer reported were antlered bucks (including shed-antlered bucks). Reported harvest by youth hunters increased 7% compared to 2021-2022.

Disabled season hunters were issued 471 licenses, a 12% increase from the previous season. An either-sex deer license purchased by either a youth or disabled season hunter did not count towards the maximum number of any-deer licenses allowed. Reported harvest by hunters using a disabled license increased 29% compared to 2021-2023. The success rate for disabled licenses was 34% with 160 deer reported. Forty-four percent of the deer reported were antlered bucks (Table 1.1).

Special management hunts were conducted at 69 locations in 2022-2023 during which the total reported harvest was 2,474 deer (Table 1.5). These hunts aim to address the specific management needs of areas such as state and county parks and urban areas that cannot be opened to general regulations. The majority of deer taken in these hunts were antlerless, and the deer tagged did not count against a hunter's regular licenses. These hunts achieved their population goals in localized areas.

An additional 5,763 licenses and permits were issued to hunters/landowners in **depredation** situations which resulted in a reported harvest of 3,182 deer. This marked a 28% increase in the depredation harvest from 2021-2022 (Table 1.1 and Table 1.2).

POPULATION TREND SURVEYS

Three techniques are currently used to monitor trends in Iowa deer populations: (1) spotlight surveys conducted by Iowa DNR staff in March and April, (2) the number of animal-related accidents reported to the Department of Transportation, and (3) the annual Bow Hunter Observation Survey coordinated by the Iowa DNR and conducted by volunteers during October-November (Table 1.6). These surveys correlate well with the reported antlered harvest but are subject to variability due to survey conditions, deer behavior, habitat conditions, and weather.

New spotlight routes were introduced in 2006 and replaced the old ones in 2012, consisting of 199 transects distributed across all counties for a total survey mileage of about 4,750 miles. These routes aim to be more representative of available rural habitats within counties. In 2022, the average number of deer observed per 25 miles increased by 23% (Table 1.6); however, deer counts were abnormally low during the 2021 spring spotlight survey (down 12% from the previous year). 2022 spotlight deer counts were 7% higher than 2020 and 3% higher than 2019. Additionally, the 2022 spring spotlight survey period experienced favorable environmental conditions such as humidity and precipitation. Correcting for these weather factors alone provides an adjusted estimate of a 10% increase in 2022 deer counts from the previous year, indicating a stable to slightly increasing statewide deer population.

The Bow Hunter Observation Survey, representing about 80,000 hours of observation throughout the state, replaced the aerial deer survey as a trend index. This survey is conducted voluntarily by a randomly selected group of Iowa bow hunters. In 2022, total deer observations per 1,000 hours hunted increased by 9%.

The estimated harvest from 2006-2022 informed the statewide deer population model, which suggests a stable to slightly increasing deer population statewide (Figure 1.4). The model aligns well with the harvest and bowhunter observation data. The data indicate that the statewide deer herd declined from 2006-2013, stabilized from 2013-2017, and has slightly increased since 2017. Most counties have achieved or are close to the population goal set in the 2009 Review of lowa's Deer Management Program, aiming for "a stable deer population at the approximate level that occurred in the mid to late 1990s... capable of sustaining a harvest of between 110,00 - 130,000 deer annually".

DISEASE REPORT

The Iowa DNR actively monitors **Chronic Wasting Disease (CWD)**, a neurological disease primarily affecting deer and elk. CWD is characterized by abnormal protein (prion) buildup in the brain, leading to weight loss, abnormal behavior. CWD is always fatal to the infected animal. Iowa has tested over 100,000 wild deer and 5,000 captive deer and elk since 2002 as part of CWD surveillance. Samples are collected from all 99 counties, primarily in areas near detected cases. In 2022-2023, 97 new CWD-positive cases were detected, adding Jasper, Grundy, Marshall, and Lucas counties to the list of affected areas, bringing the total to 16 (Figure 1.5).

Epizootic Hemorrhagic Disease (EHD) is another disease affecting deer, spread by biting midges. EHD causes high fever, weakens the heart and lungs. Unlike CWD which is 100% fatal, deer can survive EHD, though survival in lowa is typically low. Dry, drought years can worsen EHD outbreaks as deer concentrate around water sources. In 2022, 17 suspected cases of EHD were reported, mainly in western and east-central lowa. Overall, 2022 was considered a mild year for EHD in lowa, with a limited number of reported cases compared to previous years.

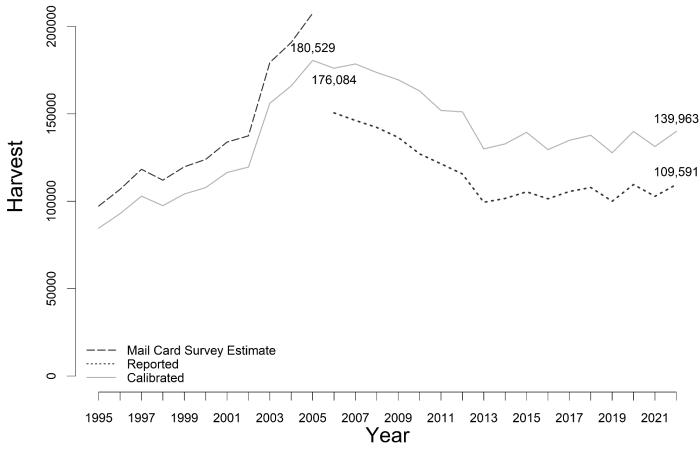


Figure 1.1. Post-season reported harvest and estimates from 1995-1996 to 2022-2023.

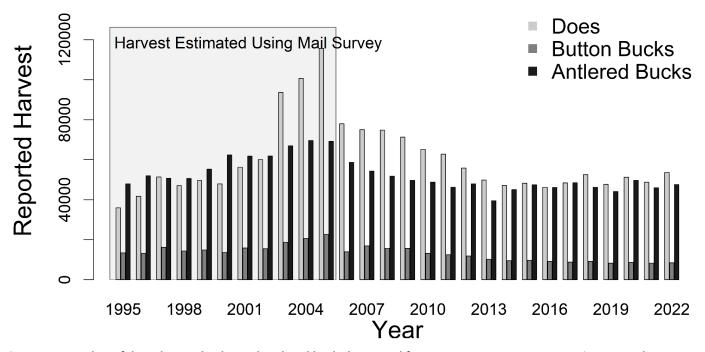


Figure 1.2. Number of does, button bucks, and antiered bucks harvested from 1995-1996 to 2022-2023. Since 2006, harvest was reported and is not directly comparable to previous estimates from mail card surveys.

Antierless Deer Quota, Antierless-only Deer Licenses Sold, and Total Doe Deer Harvest by Iowa County, 2022

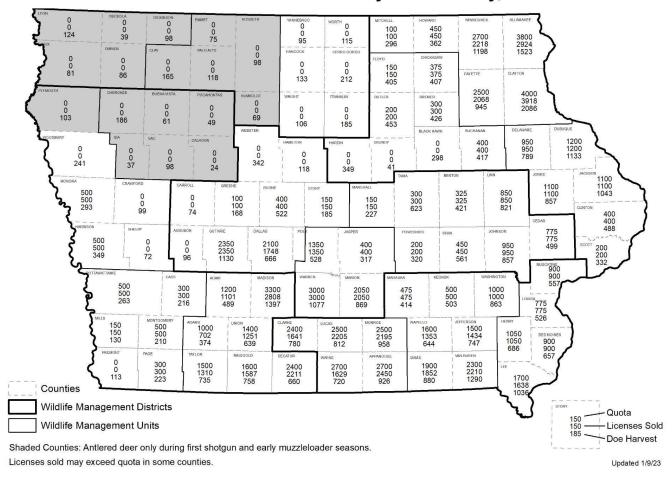
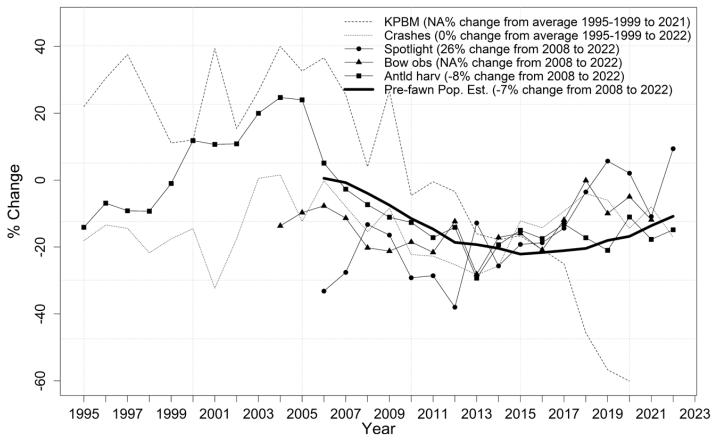


Figure 1.3. Resident antlerless-only deer quota, resident antlerless-only deer licenses sold, and total doe harvest in each county 2022-2023. Doe harvest may exceed licenses sold because antlerless deer could be harvested using either-sex, depredation, or special deer management unit tags.



^{*} KPBM = recovered deer-vehicle collisions (IADOT and Salvage Tags) divided by billion miles driven on secondary highways (IADOT estimate).

Figure 1.4. Deer population indices with simulation, 1995-2022.

^{*} Crashes = animal-related crashes reported to IADOT.

^{*} Bow obs = bow hunter observation survey from start of archery season through Friday before 1st weekend in December.

^{*} Antld harv = reported antlered deer harvest.

^{*} Pre-fawn Pop. Est. = pre-fawning (~end-May) population index from deterministic 2-sex, 10-age class accounting model.

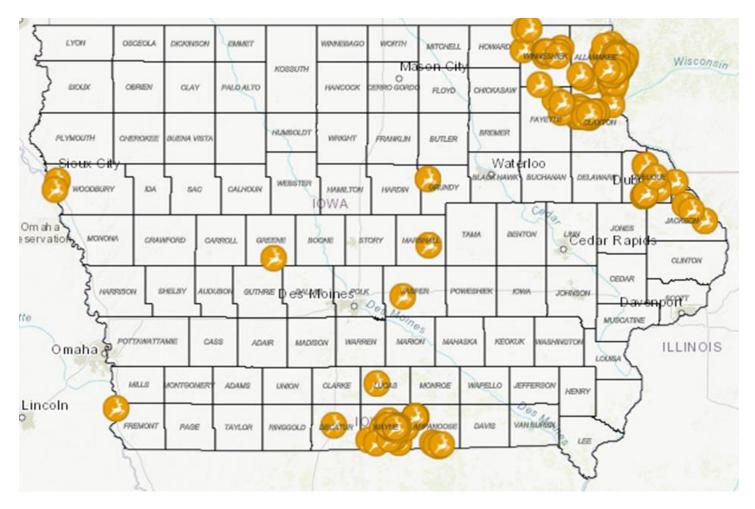


Figure 1.5. Locations of deer that tested positive for Chronic Wasting Disease (CWD) in Iowa, 2013-2023.

TABLES

Table 1.1. A summary of the number of licenses issued, hunters, reported harvest and success rates from the 2022-2023 season.

	-	T			•		orted Harve			Success	Percent
Season	Group ¹	Туре	Licenses	Hunters	Does	Antlered	Buttons	Sheds	Total	Rate ²	Does
Youth	Paid	Either-sex	12,552	12,551	1,531	2,993	249	39	4,812	38%	32%
		Antlerless	1,060	890	371	10	44	NA	425	40%	87%
	LOT	Either-Sex	61	61	3	14	3	0	20	33%	15%
		Antlerless	63	59	18	NA	8	NA	26	41%	69%
		Total	13,736	12,638	1,923	3,017	304	39	5,283	38%	36%
Disabled	Paid	Either-sex	374	347	43	69	9	NA	121	32%	36%
		Antlerless	62	41	31	NA	2	NA	33	53%	94%
	LOT	Either-Sex	20	20	2	2	NA	NA	4	20%	50%
		Antlerless	15	13	2	NA	NA	NA	2	13%	100%
		Total	471	366	78	71	11	0	160	34%	49%
Early	Paid	Either-sex	6,814	6,814	633	1,476	101	9	2,219	33%	29%
Muzzleloader		Antlerless	1,547	1,170	578	3	67	NA	648	42%	89%
	LOT	Either-Sex	1,099	1,099	68	175	15	1	259	24%	26%
		Antlerless	941	875	207	3	30	1	241	26%	86%
		Total	10,401	8,427	1,486	1,657	213	11	3,367	32%	44%
Shotgun 1	Paid	Either-sex	44,575	44,564	4,540	11,628	1,217	118	17,503	39%	26%
		Antlerless	17,738	11,359	7,059	54	1,065	22	8,200	46%	86%
Shotgun 2	Paid	Either-sex	47,474	47,468	4,314	7,603	1,121	123	13,161	28%	33%
		Antlerless	19,094	11,708	6,098	25	902	43	7,068	37%	86%
Shotgun 1 & 2	LOT	Either-Sex	22,906	22,899	1,336	3,476	294	44	5,150	22%	26%
		Antlerless	19,351	15,731	4,902	78	702	31	5,713	30%	86%
		Total	171,138	48,213	28,249	22,864	5,301	381	56,795	33%	50%
Late	Paid	Either-sex	19,655	19,651	1,662	3,067	252	147	5,128	26%	32%
Muzzleloader		Antlerless	10,268	6,820	2,636	9	339	114	3,098	30%	85%
	LOT	Either-Sex	2,220	2,220	131	232	21	7	391	18%	34%
		Antlerless	3,679	3,302	695	8	71	32	806	22%	86%
		Total	35,822	16,538	5,124	3,316	683	300	9,423	26%	54%
Archery	Paid	Either-sex	54,299	54,286	1,260	11,369	230	96	12,955	24%	10%
		Antlerless	22,642	15,892	5,336	42	665	9	6,052	27%	88%

Saaan	Cuam1	Tuna	Liconoco	Humbous		Rep	orted Harve	est		Success	Percent
Season	Group ¹	Туре	Licenses	Hunters -	Does	Antlered	Buttons	Sheds	Total	Rate ²	Does
	LOT	Either-Sex	5,148	5,145	154	1,153	28	10	1,345	26%	11%
		Antlerless	5,450	4,748	1,162	22	103	7	1,294	24%	90%
		Total	87,539	57,504	7,912	12,586	1,026	122	21,646	25%	37%
Senior Crossbow	Paid	Antlerless	924	866	198	1	32	2	233	25%	85%
Special Hunts		Antlerless	2,963	1,236	1,320	2	116	15	1,453	49%	91%
Depredation		Antlerless	5,763	2,073	2,876	17	258	31	3,182	55%	90%
January Antlerless	Paid	Antlerless	7,251	3,878	2,182	1	237	112	2,532	35%	86%
Nonresidents ³	Paid	Either-sex	6,059	6,056	71	2,625	22	16	2,735	45%	3%
		Antlerless	9,096	9,080	1,982	179	215	13	2,389	26%	83%
Total			328,979	166,153	53,622	46,470	8,454	1,054	109,600	33%	49%

¹LOT = landowner/tenant licenses; Paid = non-landowner/tenant licenses.

Table 1.2. A comparison of the number of deer licenses issued and the reported harvest in 2022-23 with 2021-22 by season.

Saacan	2021	- 2022	2022	- 2023	% Ch	ange
Season	Licenses	Harvest	Licenses	Harvest	Licenses	Harvest
Youth	12,858	4,520	13,736	5,283	7%	17%
Disabled	422	124	471	160	12%	29%
Archery	87,264	21,257	87,539	21,646	0%	2%
Early Muzzleloader	10,285	3,473	10,401	3,367	1%	-3%
Shotgun 1 (Paid) ¹	61,877	23,889	62,313	25,703	1%	8%
Shotgun 2 (Paid) ²	65,694	20,211	66,568	20,229	1%	0%
Shotgun LOT ³	40,726	10,203	42,257	10,863	4%	6%
Late Muzzleloader	36,684	8,407	35,822	9,423	-2%	12%
Special Hunts	2,958	1,369	2,963	1,453	0%	6%
Depredation	4,522	2,486	5,763	3,182	27%	28%
January Antlerless	3,811	1,448	7,251	2,532	90%	75%
Nonresidents ⁴	15,204	5,063	15,155	5,124	0%	1%
Total	342,305	102,810	350,239	109,600	2%	7%

²Percent of licenses that reported harvested deer.

³Nonresident licenses for either shotgun 1, shotgun 2, archery, late muzzleloader, disabled hunter, or holiday antlerless-only season. Quota of 6,000 nonresident general deer/antlerless-only licenses, 35% of which can be archery licenses. An additional 4,500 antlerless-only licenses are available for either one of the shotgun seasons or the disabled hunter season.

Table 1.3. Historical data on deer harvest by license type (1953 to present).

		Regular Gun			Muzzleloade			Grand
Year	Paid	Landowner	Total	Early	Late	Total	- Archery	Total*
1953	2,401	1,606	4,007				1	4,008
1954	1,827	586	2,413				10	2,423
1955	2,438	568	3,006				58	3,064
1956	2,000	561	2,561				117	2,678
1957	2,187	480	2,667				138	2,805
1958	2,141	588	2,729				162	2,891
1959	1,935	541	2,476				255	2,731
1960	3,188	804	3,992				277	4,269
1961	4,033	964	4,997				367	5,364
1962	4,281	1,018	5,299				404	5,703
1963	5,595	1,017	6,612				538	7,151
1964	7,274	1,750	9,024				670	9,694
1965	6,588	1,322	7,910				710	8,620
1966	9,070	1,672	10,742				579	11,321
1967	7,628	2,764	10,392				791	11,183
1968	9,051	3,890	12,941				830	13,771
1969	6,952	3,779	10,731				851	11,582
1970	8,398	4,345	12,743				1,037	13,780
1971	7,779	2,680	10,459				1,232	11,691
1972	7,747	2,738	10,485				1,328	11,813
1973	10,017	2,191	12,208				1,822	14,030
1974	11,720	4,097	15,817				2,173	17,990
1975	15,293	3,655	18,948				2,219	21,167
1976	11,728	2,529	14,257				2,350	16,607
1977	10,737	2,051	12,788				2,400	15,188
1978	12,815	2,353	15,168				2,957	18,125
1979	14,178	1,971	16,149				3,305	19,454
1980	16,511	2,346	18,857				3,803	22,660
1981	19,224	2,354	21,578				4,368	25,946
1982	19,269	2,472	21,741				4,720	26,461
1983	27,078	3,297	30,375				5,244	35,619
1984	29,912	3,537	33,449		307	307	5,599	39,355
1985	32,613	5,344	37,957		457	457	5,805	44,219
1986	41,352	10,378	51,730	349	728	1,077	9,895	62,702
1987	53,230	10,270	63,500	1,509	1,027	2,536	9,722	75,758
1988	66,757	13,298	80,055	1,835	1,294	3,129	9,897	93,756
1989	67,606	12,963	80,569	2,619	3,715	6,334	11,857	99,712
1990	69,101	9,095	78,196	2,819	5,884	8,703	10,146	98,002
1991	56,811	11,575	68,386	3,120	2,766	5,886	8,807	83,635
1992	50,822	10,453	61,275	3,316	3,231	6,564	8,814	77,684
1993	52,624	8,354	60,978	2,219	2,883	5,102	9,291	76,430
1994	59,054	8,735	67,789	2,610	3,196	5,806	12,040	87,231

.,		Regular Gun			Muzzleloade	er		Grand
Year	Paid	Landowner	Total	Early	Late	Total	Archery	Total*
1995	65,206	7,917	73,123	2,831	3,408	6,363	13,372	97,256
1996	71,577	10,896	82,473	2,895	4,558	7,453	12,314	107,632
1997	77,169	10,588	87,757	4,062	5,508	9,570	14,313	118,404
1998	73,165	9,989	83,154	4,448	5,343	9,791	12,302	112,608
1999	74,362	12,966	87,328	5,277	5,329	10,606	15,266	121,635
2000	77,743	13,189	90,932	4,585	5,936	10,521	17,727	126,535
2001	82,721	14,801	97,522	4,593	7,320	11,913	18,798	136,655
2002	77,940	18,932	96,872	5,091	7,772	12,863	20,703	140,490
2003	96,757	25,353	122,110	6,155	12,049	18,204	26,486	182,856
2004	97,830	26,333	124,163	6,818	13,550	20,368	30,025	194,512
2005	96,110	27,988	124,098	7,209	13,930	21,139	32,986	211,451
2006	76,218	14,956	91,174	5,431	8,698	14,129	22,008	150,552
2007	67,175	13,862	81,037	4,462	10,530	14,992	22,240	146,214
2008	63,330	12,762	76,092	4,342	10,254	14,596	21,793	142,194
2009	58,801	12,630	71,431	4,495	9,482	13,977	23,172	136,504
2010	56,511	11,455	67,966	4,026	8,838	12,864	21,154	127,094
2011	52,130	11,009	63,139	4,427	8,165	12,592	21,983	121,407
2012	49,110	10,931	60,041	3,896	10,823	14,719	21,981	115,608
2013	42,442	9,271	51,713	4,027	6,828	10,855	20,319	99,414
2014	44,910	10,701	55,611	3,700	8,793	12,493	21,128	101,595
2015	45,214	11,041	56,255	4,042	9,604	13,646	22,489	105,401
2016	43,205	10,358	53,563	3,450	9,560	13,010	22,389	101,397
2017	46,559	11,161	57,720	3,423	9,629	13,052	22,665	105,578
2018	47,401	11,837	59,238	3,594	9,885	13,479	21,271	107,857
2019	43,154	9,967	53,121	3,347	7,564	10,911	22,142	99,999
2020	46,167	11,091	57,258	4,074	9,505	13,579	23,746	109,544
2021	44,100	10,203	54,303	3,473	8,407	11,880	21,257	102,800
2022	45,923	10,863	56,795	3,367	9,423	12,790	21,646	109,600

¹Grand Total includes special management unit hunts, nonresidents and youth. Harvest estimates from 2005 and prior are not comparable to subsequent years.

Table 1.4. Total reported deer kill by county during the 2022-2023 deer season.

		tarreporte	u ueer kiii k	y county during t	116 2022-20		ent of kill	
County	Antlered Bucks	Does	Button Bucks	Shed-antlered Bucks	Total	Does	Antlered Bucks	Antld. Kill /Sq. Mile
Adair	462	546	89	10	1107	49	42	0.81
Adams	412	454	60	5	931	49	44	0.97
Allamakee	1341	1905	246	51	3543	54	38	2.11
Appanoose	867	1144	163	29	2203	52	39	1.66
Audubon	194	104	12	6	316	33	61	0.43
Benton	427	460	89	15	991	46	43	0.59
Black Hawk	318	323	66	7	714	45	45	0.56
Boone	558	577	103	12	1250	46	45	0.97
Bremer	436	461	95	3	995	46	44	0.99
Buchanan	392	445	104	6	947	47	41	0.69
Buena Vista	154	71	11	2	238	30	65	0.27
Butler	489	484	82	14	1069	45	46	0.84
Calhoun	115	26	9	1	151	17	76	0.2
Carroll	172	85	20	3	280	30	61	0.3
Cass	306	225	29	10	570	39	54	0.55
Cedar	472	530	87	6	1095	48	43	0.81
Cerro Gordo	275	231	36	6	548	42	50	0.48
Cherokee	273	206	23	4	506	41	54	0.48
Chickasaw	432	433	91	14	970	45	45	0.86
Clarke	649	983	124	16	1772	55	37	1.51
Clay	280	199	24	6	509	39	55	0.49
Clayton	1469	2291	318	59	4137	55	36	1.89
Clinton	549	514	100	9	1172	44	47	0.79
Crawford	235	110	20	1	366	30	64	0.33
Dallas	609	813	140	15	1577	52	39	1.02
Davis	706	1017	190	17	1930	53	37	1.39
Decatur	776	1033	103	16	1928	54	40	1.46
Delaware	561	863	135	19	1578	55	36	0.98
Des Moines	589	708	104	6	1407	50	42	1.44
Dickinson	183	112	25	6	326	34	56	0.48
Dubuque	765	1186	233	9	2193	54	35	1.25
Emmet	159	85	15	1	260	33	61	0.4
Fayette	696	1064	191	27	1978	54	35	0.96
Floyd	399	441	72	5	917	48	44	0.79
Franklin	262	202	44	6	514	39	51	0.45
Fremont	255	128	21	2	406	32	63	0.49
Greene	258	180	40	7	485	37	53	0.45
Grundy	99	44	3	1	147	30	67	0.2
Guthrie	778	1234	193	27	2232	55	35	1.31
Hamilton	225	137	24	5	391	35	58	0.39
Hancock	172	155	19	1	347	45	50	0.3

						Perce	ent of kill	- Amelal IV:II
County	Antlered Bucks	Does	Button Bucks	Shed-antlered Bucks	Total	Does	Antlered Bucks	Antld. Kill /Sq. Mile
Hardin	411	400	43	11	865	46	48	0.72
Harrison	405	377	54	4	840	45	48	0.58
Henry	614	722	135	15	1486	49	41	1.4
Howard	272	384	75	7	738	52	37	0.58
Humboldt	163	75	13	3	254	30	64	0.37
Ida	93	41	10	0	144	28	65	0.22
Iowa	704	608	91	14	1417	43	50	1.21
Jackson	889	1103	225	28	2245	49	40	1.38
Jasper	452	350	68	6	876	40	52	0.62
Jefferson	602	904	158	8	1672	54	36	1.38
Johnson	667	908	142	17	1734	52	38	1.08
Jones	703	922	143	11	1779	52	40	1.2
Keokuk	564	537	76	9	1186	45	48	0.97
Kossuth	250	120	17	2	389	31	64	0.26
Lee	873	1124	171	13	2181	52	40	1.66
Linn	795	955	169	22	1941	49	41	1.11
Louisa	549	569	121	9	1248	46	44	1.36
Lucas	791	1012	144	19	1966	51	40	1.82
Lyon	205	141	16	4	366	39	56	0.35
Madison	1008	1697	194	36	2935	58	34	1.79
Mahaska	436	449	82	5	972	46	45	0.76
Marion	809	943	177	21	1950	48	41	1.43
Marshall	303	245	40	7	595	41	51	0.53
Mills	237	143	23	2	405	35	59	0.53
Mitchell	387	321	51	3	762	42	51	0.83
Monona	338	321	35	3	697	46	48	0.48
Monroe	779	1273	167	37	2256	56	35	1.79
Montgomery	270	235	32	1	538	44	50	0.64
Muscatine	531	599	133	6	1269	47	42	1.2
Obrien	140	101	11	2	254	40	55	0.24
Osceola	85	42	5	2	134	31	63	0.21
Page	302	231	29	1	563	41	54	0.56
Palo Alto	204	132	17	2	355	37	57	0.36
Plymouth	284	119	23	6	432	28	66	0.33
Pocahontas	141	52	8	1	202	26	70	0.24
Polk	344	597	86	10	1037	58	33	0.58
Pottawattamie	380	288	46	5	719	40	53	0.39
Poweshiek	428	344	56	5	833	41	51	0.73
Ringgold	685	829	118	16	1648	50	42	1.27
Sac	222	122	14	3	361	34	61	0.38
Scott	310	363	50	10	733	50	42	0.68
Shelby	201	80	17	4	302	26	67	0.34

						Perce	ent of kill	— Antld Kill
County	Antlered Bucks	Does	Button Bucks	Shed-antlered Bucks	Total	Does	Antlered Bucks	Antld. Kill /Sq. Mile
Sioux	170	92	19	1	282	33	60	0.22
Story	291	203	35	2	531	38	55	0.51
Tama	707	691	101	7	1506	46	47	0.98
Taylor	739	905	92	10	1746	52	42	1.4
Union	516	752	108	10	1386	54	37	1.21
Van Buren	1083	1540	246	29	2898	53	37	2.22
Wapello	548	754	110	22	1434	53	38	1.25
Warren	1022	1163	203	17	2405	48	42	1.79
Washington	713	958	179	12	1862	51	38	1.26
Wayne	773	1132	138	20	2063	55	37	1.45
Webster	496	381	60	8	945	40	52	0.69
Winnebago	175	110	23	4	312	35	56	0.44
Winneshiek	815	1433	214	39	2501	57	33	1.18
Woodbury	343	266	38	8	655	41	52	0.39
Worth	237	135	26	7	405	33	59	0.59
Wright	243	114	24	4	385	30	63	0.42
Total	46,466	53,616	8,454	1,055	109,591	43	47	0.71

Table 1.5. Results from controlled hunts in special management deer zone 2022-2023.

Deer Management Zone	Tags Available	Tags Sold	Harvest
AMANA COLONIES ZONE	100	100	26
AMES (CITY)	75	36	14
AMES (PERIMETER)	50	24	6
Backbone State Park	200	112	68
BELLEVUE STATE PARK	50	14	4
OSKALOOSA (CITY)	100	32	11
BETTENDORF & RIVERDALE	125	77	39
CEDAR RAPIDS (CITY)	400	143	71
CLINTON (CITY)	75	35	11
CORALVILLE (CITY)	200	109	49
DAVENPORT (CITY)	250	154	72
DENISON (CITY)	50	17	6
DE SOTO NWR	50	12	3
DUBUQUE (CITY)	225	186	118
ELK ROCK STATE PARK	25	23	8
LAKE AHQUABI STATE PARK	30	14	5
GREEN VALLEY STATE PARK	35	26	15
IAAP	1,200	293	167
IOWA FALLS (PERIMETER)	30	5	1
IOWA FALLS (CITY)	80	45	26
CORALVILLE (PERIMETER)	600	410	128
KENT PARK (ARCHERY)	50	32	9
LACEY-KEOSAUQUA STATE PAR	75	6	1
LAKE DARLING STATE PARK	100	41	19
LAKE OF THREE FIRES S.P.	40	20	4
LAKE WAPELLO STATE PARK	50	24	15
LEDGES STATE PARK	40	28	9
CEDAR RAPIDS (PERIMETER)	500	251	79
MOUNT PLEASANT (CITY)	50	8	6
ELDORA (CITY)	50	18	7
MUSCATINE (CITY)	150	87	29
OTTUMWA (CITY)	175	158	91
PIKES PEAK S.P. /MCGREGOR	100	40	18
PINE LAKE STATE PARK	30	24	12
POLK-DALLAS ARCHERY ONLY	1,000	542	288
SCOTT COUNTY PARK	50	23	9
SQUAW CREEK PARK	100	47	17
WATERLOO & CEDAR FALLS	290	231	114
POLK-DALLAS RURAL ZONE	75	11	2
WILDCAT DEN STATE PARK	50	21	5
JEFFERSON COUNTY PARK	25	19	11
SMITH WILDLIFE AREA	3	3	2
COUNCIL BLUFFS (CITY)	300	103	43

Deer Management Zone	Tags Available	Tags Sold	Harvest
LAKE IOWA COUNTY PARK	50	16	5
LAKE IOWA COUNTY PARK	75	9	5
KNOXVILLE (CITY)	25	3	0
MARSHALLTOWN (CITY)	60	22	9
MARSHALLTOWN (PERIMETER)	40	22	4
STONE STATE PARK	75	73	29
KEOKUK (CITY)	50	50	40
MAQUOKETA CAVES	30	14	6
HONEY CREEK STATE PARK	75	48	12
ELKADER (CWD PERIMETER)	450	128	68
HARPERS FERRY (CWD PERIM)	300	139	98
CORYDON (CWD PERIMETER)	350	116	100
BOBWHITE STATE PARK	100	6	4
MASON CITY (CITY)	175	73	46
BURLINGTON (CITY)	200	70	39
IOWA CITY (CITY)	200	44	28
ALLAMAKEE COUNTY CWD (PERIMETER)	900	30	8
CLAYTON COUNTY CWD (PERIMETER)	750	13	3
DECATUR COUNTY CWD (PERIMETER)	500	33	31
DUBUQUE/JACKSON/JONES (CWD PERIMETER)	600	476	164
WAYNE COUNTY CWD (PERIMETER)	50	19	4
WINNESHIEK COUNTY CWD (PERIMETER)	400	31	3
WOODBURY COUNTY CWD (PERIMETER)	200	180	42
SMITH WILDLIFE AREA	10	7	1
FREMONT/MILLS (CWD PERIMETER)	100	100	26
PANORAMA (PERIMETER)	200	115	61
TOTAL	13,268	5,456	2,474

Table 1.6. Results of deer population surveys (1976-present)

			able 1.6. Results	-	 	Traffic K		Bowhu	nter Obs
Year	Spotligh	nt Survey	Aerial Sur	vey	Traffic	Billion Veh	nicle Mi.		1000 hrs)
rear	Mean Count ^a	Percent Change	Weighted Count ^b	Percent Change	Kill	Number	Percent Change	Number	Percent Change
1976			-	-	2,537	225	-1%		
1977			-	-	2,929	252	12%		
1978			-	-	2,872	241	-4%		
1979			-	-	3,005	259	7%		
1980			-	-	3,743	335	29%		
1981			-	-	4,164	365	9%		
1982			-	-	4,805	412	13%		
1983			5,903	-	5,335	448	9%		
1984			6,387	8%	6,177	500	12%		
1985			7,607	19%	5,925	495	-1%		
1986			9,790	29%	7,225	593	20%		
1987			-	-	8,440	678	14%		
1988			10,289	С	9,248	707	4%		
1989			9,672	-6%	8,914	655	-7%		
1990			7,070	-27%	8,799	607	-7%		
1991			9,191	30%	8,428	590	-3%		
1992			8,235	-10%	9,135	616	4%		
1993			8,680	5%	9,576	624	1%		
1994			10,483	21%	10,438	663	6%		
1995			10,877	4%	11,167	699	5%		
1996			12,051	11%	12,276	748	7%		
1997			13,902	15%	13,148	778	4%		
1998			12,651	-9%	12,427	714	-8%		
1999			14,928	18%	11,366	637	-11%		
2000			15,375	3%	11,114	642	1%		
2001			15,793	3%	14,243	799	24%		
2002			13,107	-17%	12,377	662	-17%		
2003			15,676	20%	13,720	726	10%		
2004			18,028	15%	15,361	803	11%	1,455	
2005			15,324	-15%	14,364	760	-5%	1,533	5%
2006	55		12,565	-18%	14,940	783	3%	1,564	2%
2007	59	8%	13,445	7%	13,730	720	-8%	1,528	-2%
2008	71	20%	13,427	0%	10,961	602	-16%	1,392	-9%
2009	68	-4%	13,528	1%	13,518	726	21%	1,359	-2%
2010	58	-15%	13,591	0%	10,153	547	-25%	1,418	4%
2011	58	1%	13,707	1%	10,626	570	4%	1,368	-4%
2012	51	-13%	discontinued		10,358	554	-3%	1,524	11%
2013	71	40%			9,174	481	-13%	1,241	-18%
2014	61	-14%			9,085	471	-2%	1,417	14%
2015	66	8%			9,418	478	1%	1,447	2%
2016	66	0%			9,041	459	-4%	1,336	-7%

	Spotligh	at Curvoy	Aprial Su	Aerial Survey		Traffic Ki	ll Per	Bowhunter Obs		
Year	Spotligi	nt Survey	Acital Julvey		Traffic	Billion Vehi	icle Mi.	(Deer per 1000 hrs)		
	Mean Count ^a	Percent Change	Weighted Count ^b	Percent Change	Kill Number	Percent Change	Number	Percent Change		
2017	70	4%			8,609	430	-5%	1,493	12%	
2018	79	13%			8,017	312	-28%	1,673	12%	
2019	86	9%			7,851	248	-21%	1,543	-8%	
2020	83	-3%			7,145	229	-8%	1,627	5%	
2021	73	-12%			7,690	discontinued		1,502	-8%	
2022	89	24%			6,924			1,827	9%	
2023	79	-11%								

^a Mean count represents average number counted per 25 miles of transect

^b adjusted for missing counts

^c change from 1986 to 1988

^d Total number observed per 1,000 hours hunted **Data missing at time of report