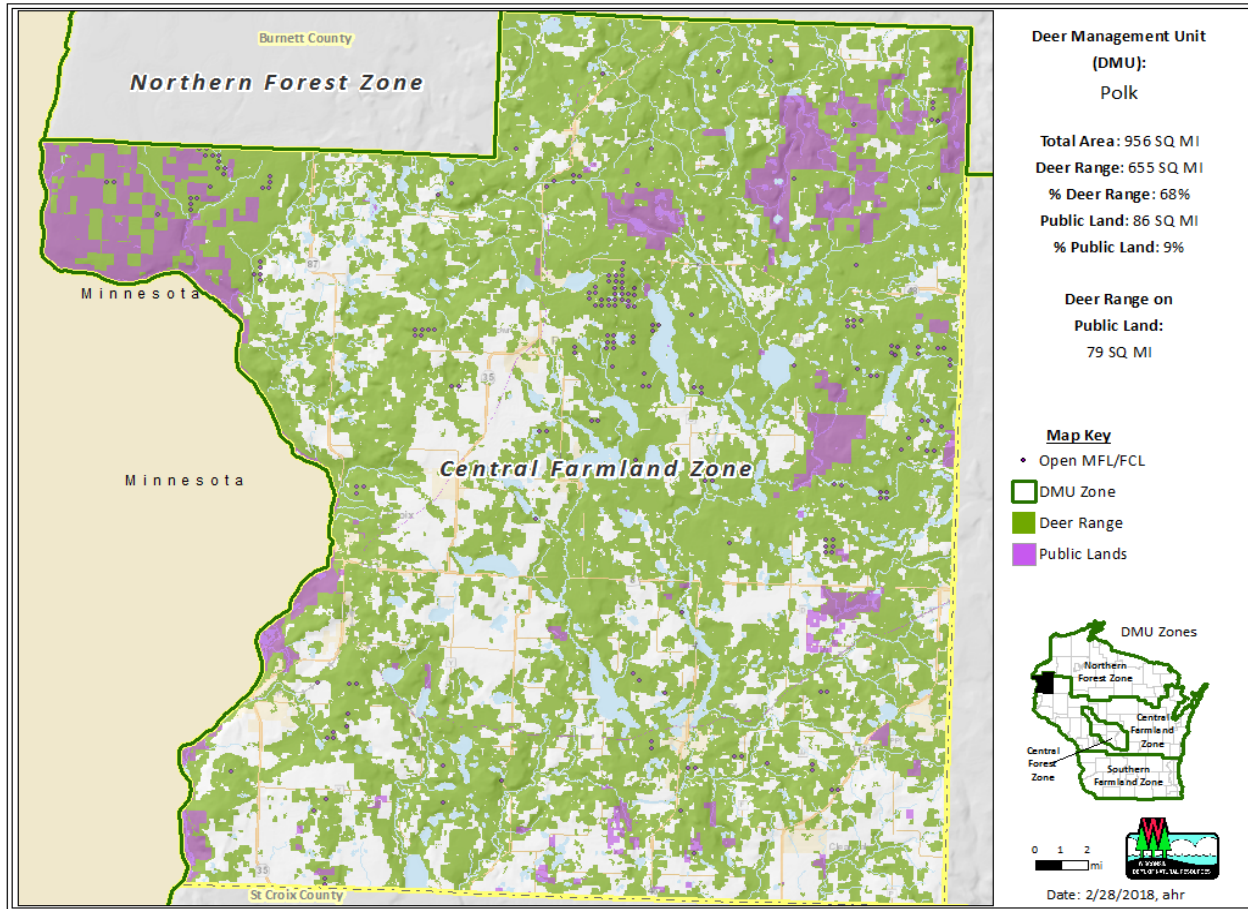


Polk County Deer Metrics Report

Spring of 2024

Management Unit:



Manager's Note:

The Polk County Deer Management Unit is located in the Central Farmland Zone. Approximately 69 percent of the unit is considered suitable deer range. Approximately 9 percent of the unit is comprised of lands open to public hunting. The northwestern portion of the unit is home to the Sterling Barrens, much of which is in public landownership. This relatively nutrient poor area is part of the Northwest Sands Ecological Landscape and is mostly forested, supporting jack pine, scrub oak and aspen. The remainder of the northern half of the unit is dominated by northern hardwoods mixed with some agriculture. Major public lands in the northern portion of the unit include McKenzie Creek Wildlife Area, Rice Beds Wildlife Area, Straight Lake Wildlife Area and Straight Lake State Park. Although it is still wooded, the southern half of unit transitions into a more open landscape with a greater agricultural presence. The very southern part is included in the Western Prairie Ecological Landscape. The majority of public land south of U.S. Highway 8, including Joel Marsh Wildlife Area, the Western Prairie Habitat Restoration Area and several Waterfowl Production Areas, are rich with prairies, grasslands and wetlands. Sometimes these cover-types are overlooked as a place to find deer, but good, warm season grass cover does a great job of hiding deer and they utilize it. Generally, the southern half of the unit receives more opening day hunting pressure than the northern half with an average hunter density of 20 hunters per square mile of deer range. One-third of bucks harvested in the unit are 2 ½ years or older and the average adult antlered harvest is 5 bucks per square mile of deer range. However, harvests vary depending on habitat type. The unit is usually in the top ten of units for deer harvest in the state. The current herd management goal is to stabilize the population.

Deer Management Unit Harvest History

Fawn to doe ratios collected in late summer give information on fawn recruitment and survival and are used as an input into the formula for annual deer herd abundance estimation. Fawn to doe ratios were summarized using groups of county deer management units. County deer management units were grouped based on location, habitat characteristics, and deer demography.

Central Farmland Management Zone

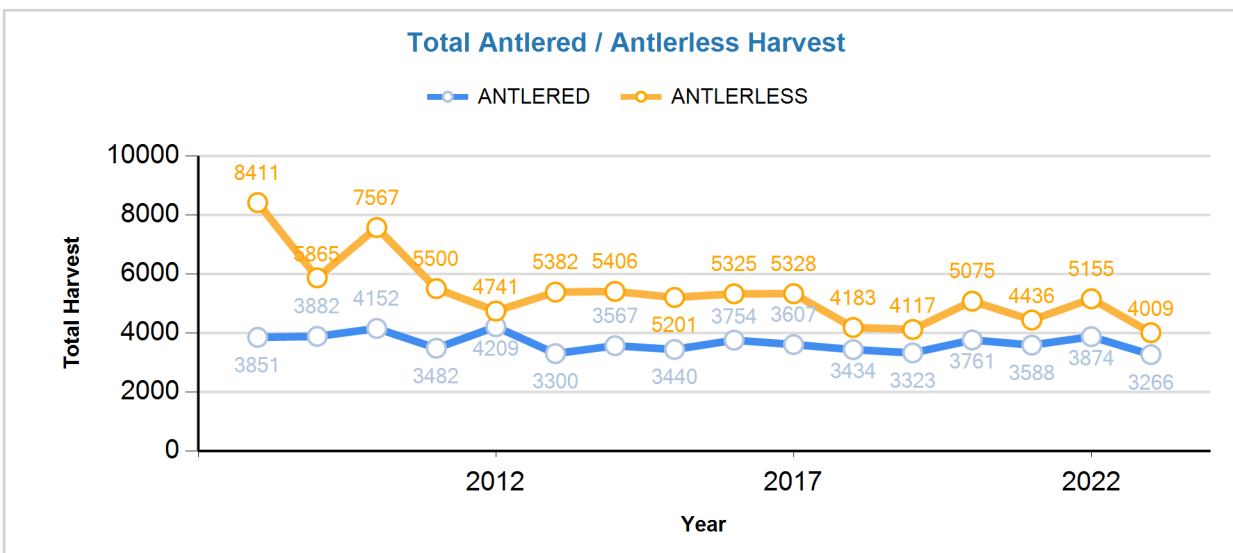
Total Area of Unit (Sq. Miles): 956.30

Deer Range of Unit (Sq. Miles): 655.00

Total Harvest for Polk County - Central Farmland Management Zone

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Harvest										
Antlered	3567	3440	3754	3607	3434	3323	3761	3588	3874	3266
Antlerless	5434	5201	5325	5328	4183	4117	5075	4436	5155	4009
Total	9001	8641	9079	8935	7617	7440	8836	8024	9029	7275
Gun										
Antlered	2690	2332	2652	2487	2448	2227	2316	2230	2520	2093
Antlerless	4575	4322	4338	4152	3236	3185	3690	3430	3876	3067
Total	7265	6654	6990	6639	5684	5412	6006	5660	6396	5160
Bow										
Antlered	625	700	638	596	478	545	660	594	543	468
Antlerless	596	570	565	613	487	446	623	408	499	377
Total	1221	1270	1203	1209	965	991	1283	1002	1042	845
Crossbow										
Antlered	250	397	454	516	505	547	783	760	805	700
Antlerless	260	306	419	559	458	483	761	596	779	565
Total	510	703	873	1075	963	1030	1544	1356	1584	1265
Tribal*										
Antlered	2	11	10	8	3	4	2	4	6	5
Antlerless	3	3	3	4	2	3	1	2	1	0
Total	5	14	13	12	5	7	3	6	7	5
Youth Antlerless*										
Antlerless	0	0	365	282	298	184	235	158	214	137

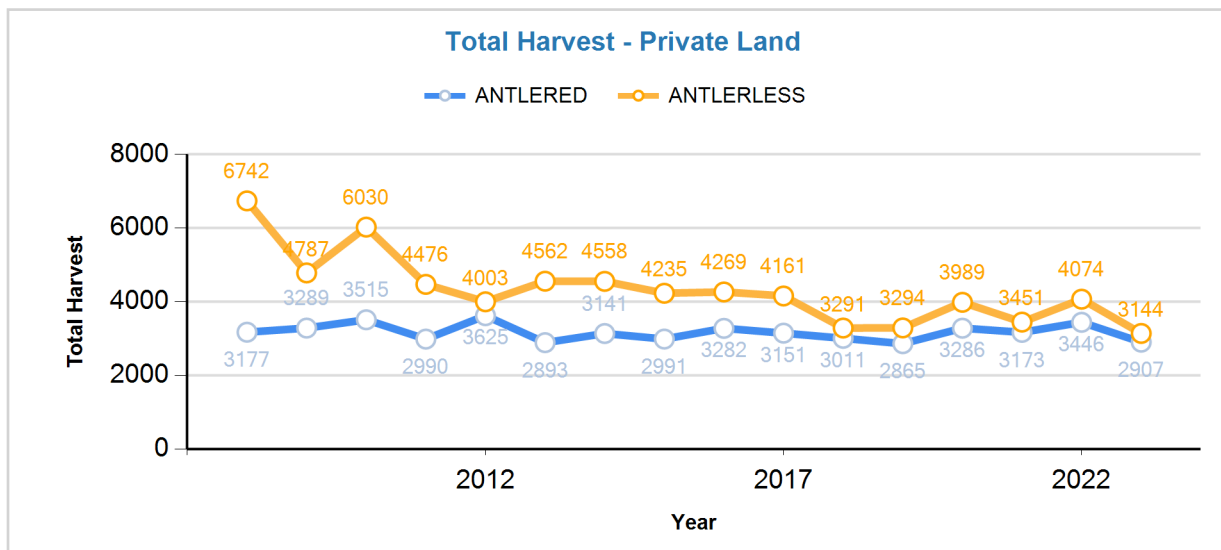
* Tribal and Youth Antlerless data are included in above totals where they apply



Total Harvest for Polk County - Central Farmland Management Zone - Private Land

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Harvest										
Antlered	3141	2991	3282	3151	3011	2865	3286	3173	3446	2907
Antlerless	4583	4235	4269	4161	3291	3294	3989	3451	4074	3144
Total	7724	7226	7551	7312	6302	6159	7275	6624	7520	6051
Gun										
Antlered	2365	2042	2326	2160	2138	1910	2005	1960	2240	1870
Antlerless	3831	3514	3500	3251	2562	2560	2925	2675	3088	2399
Total	6196	5556	5826	5411	4700	4470	4930	4635	5328	4269
Bow										
Antlered	546	592	544	509	415	457	564	511	466	394
Antlerless	518	464	431	470	363	339	458	296	372	283
Total	1064	1056	975	979	778	796	1022	807	838	677
Crossbow										
Antlered	230	357	412	482	458	498	717	702	740	643
Antlerless	234	257	338	440	366	395	606	480	614	462
Total	464	614	750	922	824	893	1323	1182	1354	1105
Tribal*										
Antlered	0	0	0	0	0	0	0	0	0	0
Antlerless	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Youth Antlerless*										
Antlerless	0	0	317	246	259	161	204	139	197	124

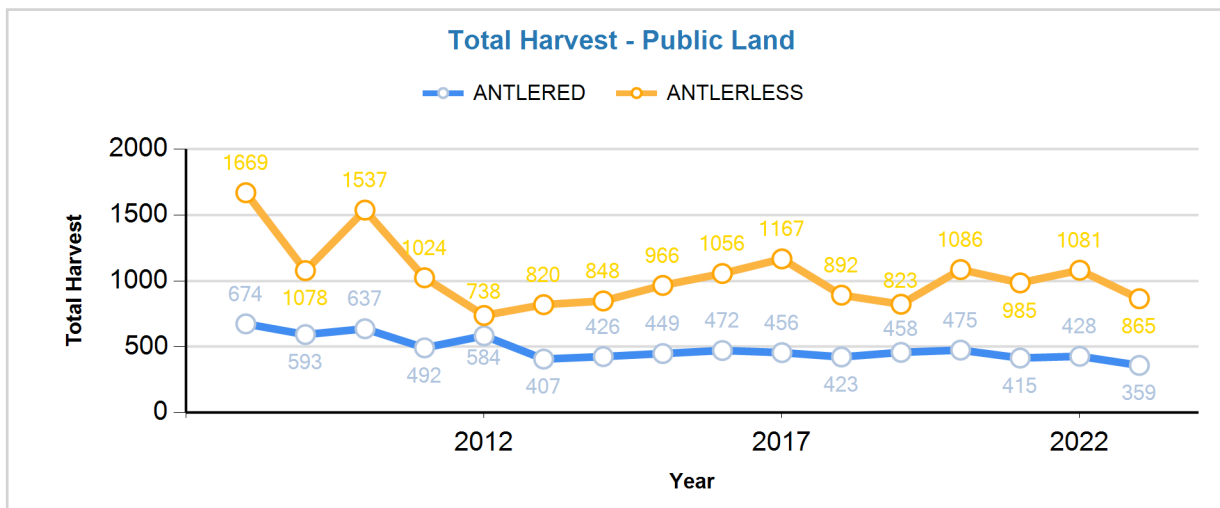
* Tribal and Youth Antlerless data are included in above totals where they apply

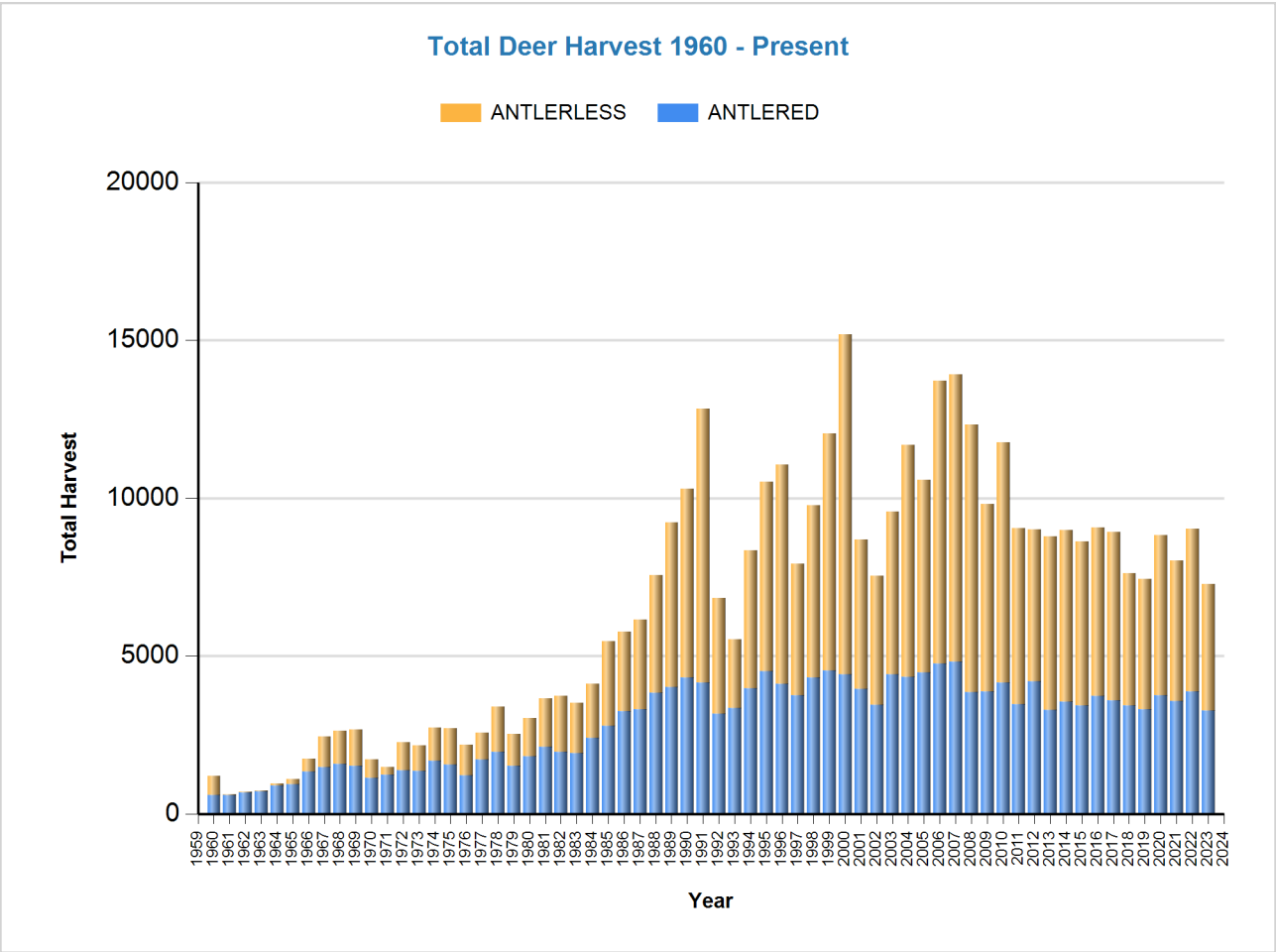


Total Harvest for Polk County - Central Farmland Management Zone - Public Land

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Harvest										
Antlered	426	449	472	456	423	458	475	415	428	359
Antlerless	851	966	1056	1167	892	823	1086	985	1081	865
Total	1277	1415	1528	1623	1315	1281	1561	1400	1509	1224
Gun										
Antlered	325	290	326	327	310	317	311	270	280	223
Antlerless	744	808	838	901	674	625	765	755	788	668
Total	1069	1098	1164	1228	984	942	1076	1025	1068	891
Bow										
Antlered	79	108	94	87	63	88	96	83	77	74
Antlerless	78	106	134	143	124	107	165	112	127	94
Total	157	214	228	230	187	195	261	195	204	168
Crossbow										
Antlered	20	40	42	34	47	49	66	58	65	57
Antlerless	26	49	81	119	92	88	155	116	165	103
Total	46	89	123	153	139	137	221	174	230	160
Tribal*										
Antlered	2	11	10	8	3	4	2	4	6	5
Antlerless	3	3	3	4	2	3	1	2	1	0
Total	5	14	13	12	5	7	3	6	7	5
Youth Antlerless*										
Antlerless	0	0	48	36	39	23	31	19	17	13

* Tribal and Youth Antlerless data are included in above totals where they apply

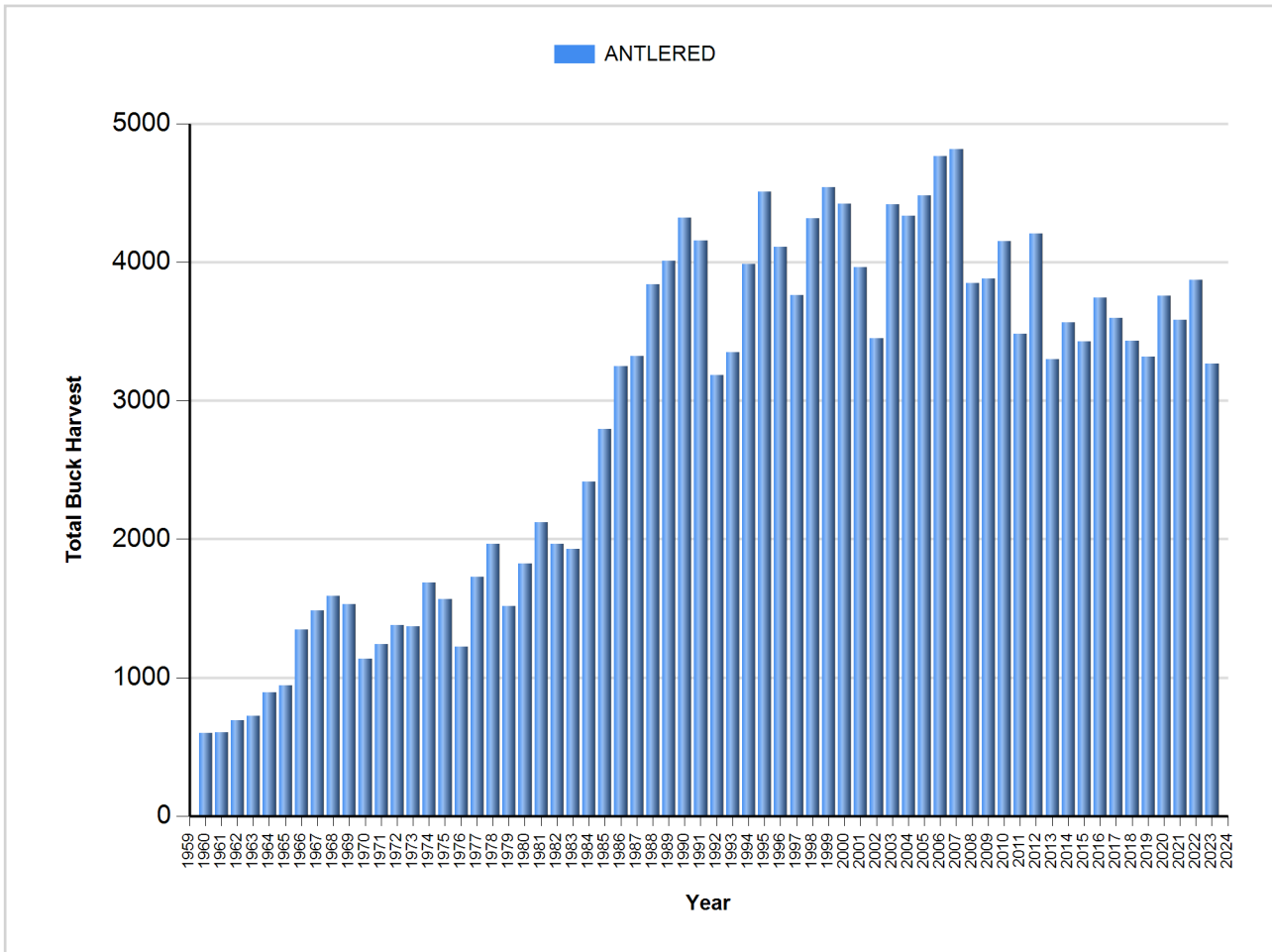




Total Buck Harvest 1960 - Present

Historic High: 2007 - 4,818

Historic Low: 1960 - 599

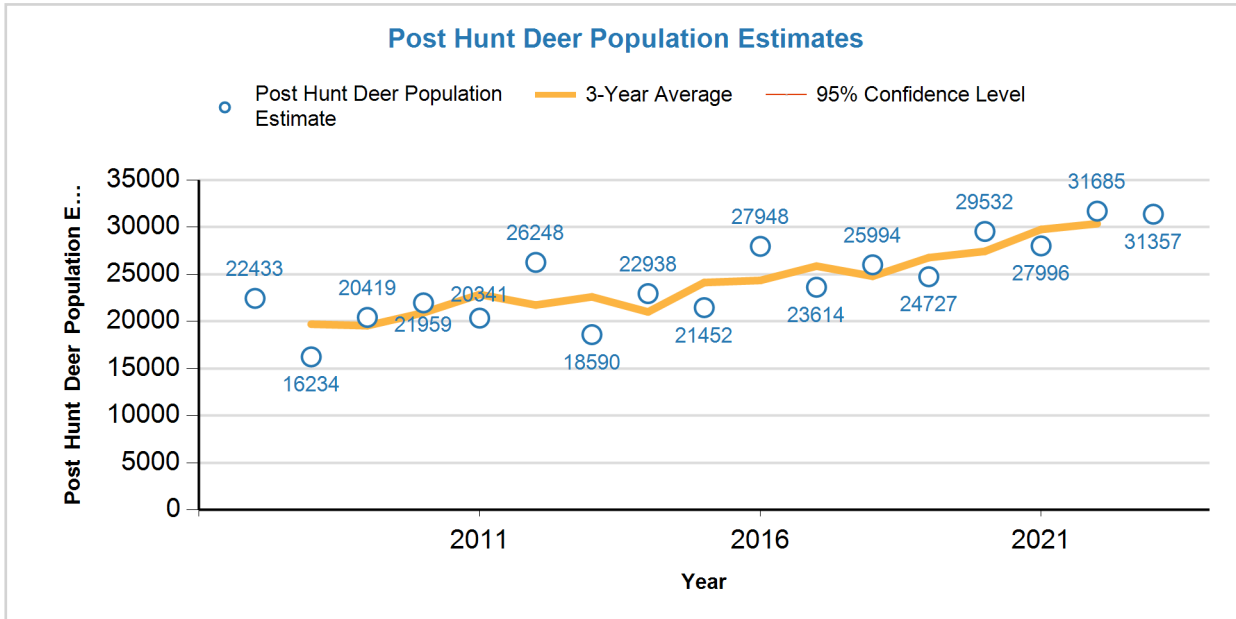


Antlerless Tag Issuance & Success for Polk County - Central Farmland

Year	2020	2021	2022	2023
Farmland - Public				
Issued	12,397	12,883	13,021	12,961
Killed	979	873	977	691
Success Rate (%)	7.9	6.8	7.5	5.3
Farmland - Private				
Issued	32,453	30,947	31,383	30,943
Killed	3,471	3,012	3,534	2,831
Success Rate (%)	10.7	9.7	11.3	9.1
Farmland - Total				
Issued	44,850	43,830	44,404	43,904
Killed	4,450	3,885	4,511	3,522
Success Rate (%)	9.9	8.9	10.2	8.0
Bonus- Public				
Available	1,000	1,000	1,000	1,000
Issued	530	541	529	532
Killed	61	79	82	63
Success Rate (%)	11.5	14.6	15.5	11.8
Bonus- Private				
Available	5,200	5,200	5,200	5,200
Issued	1,136	1,054	1,126	1,073
Killed	197	183	217	166
Success Rate (%)	17.3	17.4	19.3	15.5
Bonus- Total				
Available	6,200	6,200	6,200	6,200
Issued	1,666	1,595	1,655	1,605
Killed	258	262	299	229
Success Rate (%)	15.5	16.4	18.1	14.3

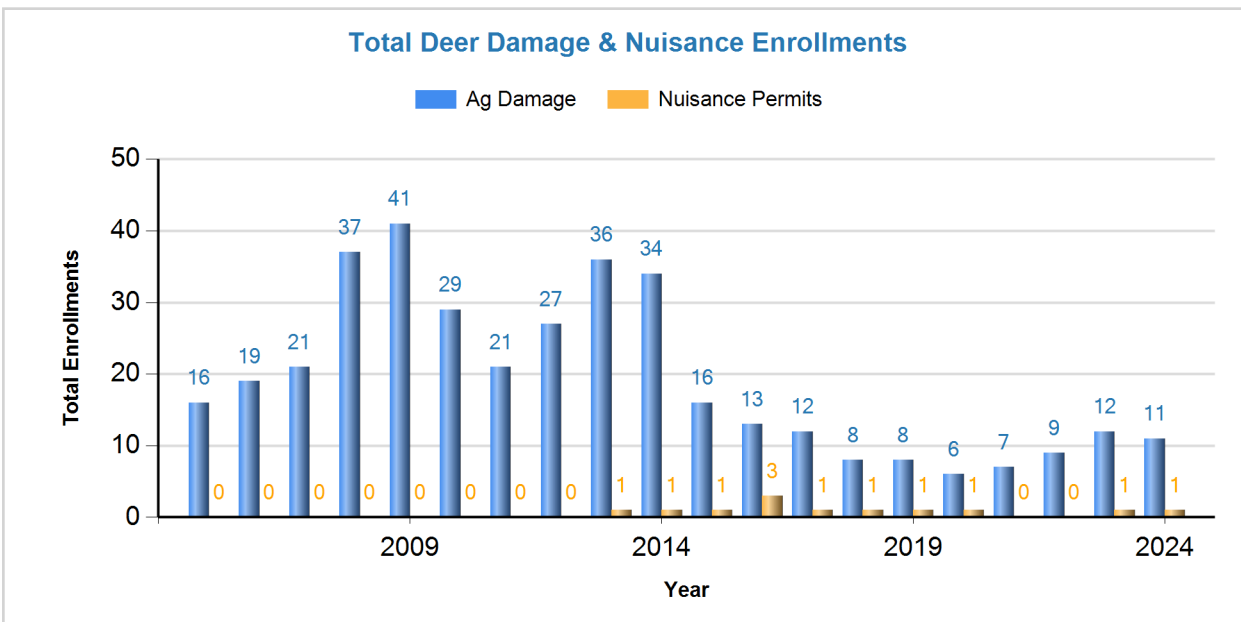
Herd Abundance

Deer herd abundance is estimated annually with hunter-collected data and a mathematical model to get post hunt deer population estimates.

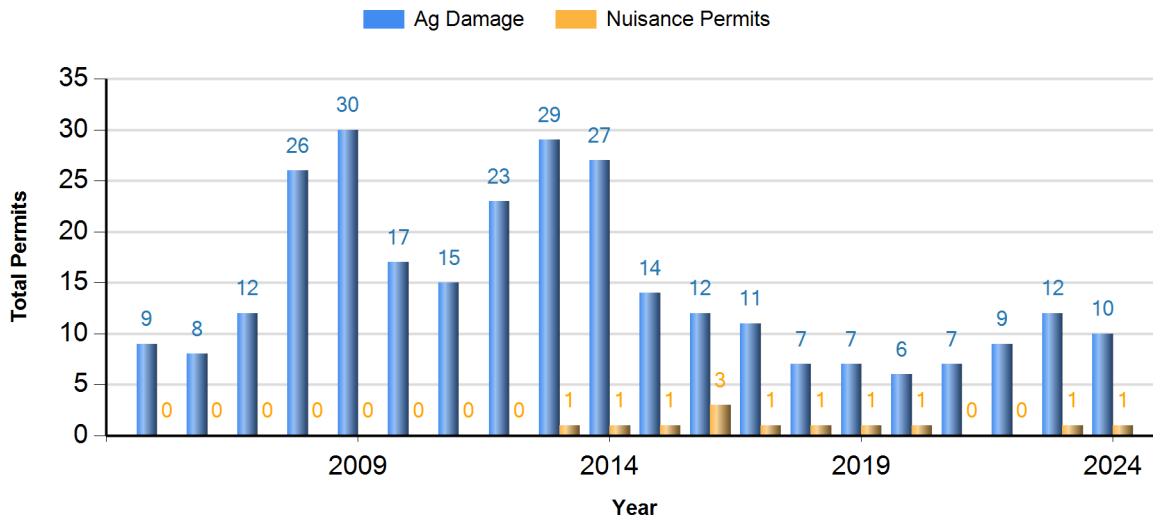


Deer Impacts – Agriculture & Nuisance Impacts

View trends in county and statewide enrollment, shooting permit, Ag Damage, and Nuisance harvest numbers over the years.



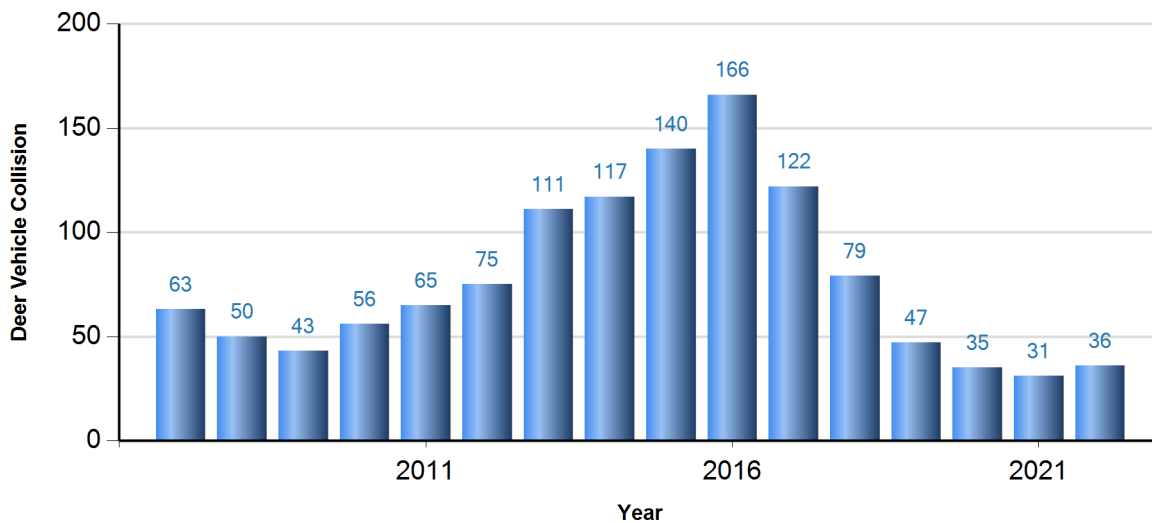
Total Deer Damage & Nuisance Shooting Permits Issued



Deer Impacts - Deer Vehicle Collision

Deer-vehicle collisions (DVCs) are one of the most visible negative impacts that deer populations have on society. As managing deer involves balancing the positive benefits of deer with their negative impacts, it makes sense to consider DVCs when making deer management decisions.

Deer Vehicle Collisions



Hunter Dynamics - Hunter Field Observations

This metric provides voluntary hunter observation data that is collected either during the process of registering a deer, or from submitted field observations through an on-line reporting form.

Deer Seen Per Hunted Hour

