Bayfield County Deer Metrics Report
Spring of 2024

Management Unit:

Deer Management Unit (DMU):

Bayfield

Total Area: 1482 SQ MI
Deer Range: 1391 SQ MI
% Deer Range: 94%
Public Land: 814 SQ MI
% Public Land: 55%

Deer Range on Public Land:
803 SQ MI

Map Key
- Open MFL/FCL
- DMU Zone
- Deer Range
- Public Lands

DMU Zones

Date: 2/28/2018, ahr
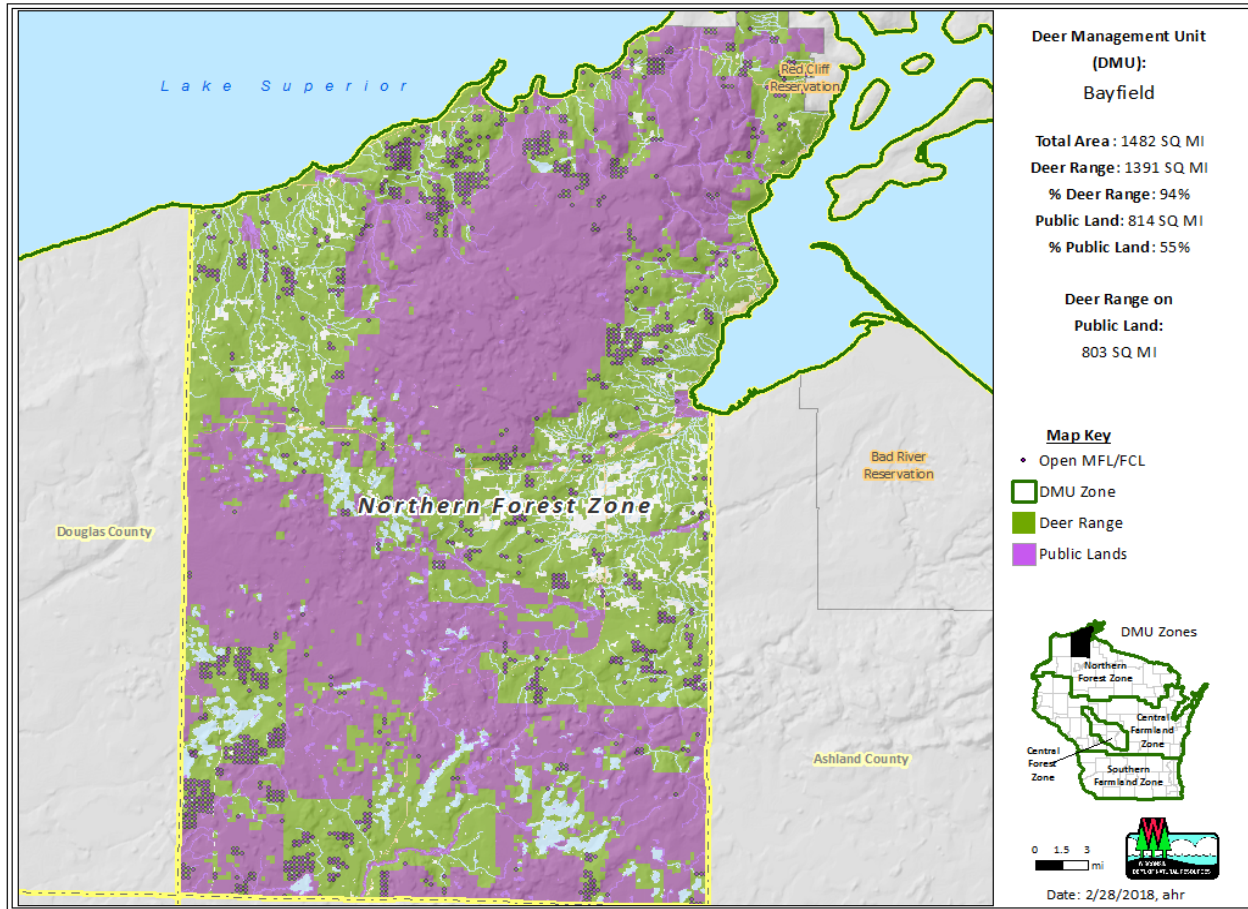
Manager's Note:

The Bayfield County Deer Management Unit is located in the Northern Forest Zone. Approximately 94 percent of the unit is considered suitable deer range. Approximately 55 percent of lands in the unit are open to public hunting, with the largest landownerships in the Chequamegon-Nicolet National Forest and the Bayfield County Forest. Numerous state fisheries areas, wildlife areas and natural areas are also available for public hunting, as well as large blocks of industrial forest lands and private lands enrolled under the open Managed Forest Law program. Habitat types vary throughout the unit, generally corresponding to soil type and land management practices. A mix of farms, woodlands, diverse forest and orchards near Bayfield are found on the heavy red clay soils that follow the Lake Superior shoreline. The greatest densities of deer in the unit are found in and around agricultural areas. Pine Barrens-related habitat is found in a large band of sand soil that extends from the center of the Bayfield peninsula southwest to Barnes. Hunting in "the Barrens" can be popular, but is most productive during years with good acorn crops. Mid- to late-successional northern hardwood forests dominate the loam covered glacial till soils in the south-central portion of the unit extending east, and more diverse aspen and mixed-northern hardwood forests exist around the many lakes in the southern quarter. Annual snowfall in the Bayfield peninsula and higher elevations in the south-central portion of the unit can significantly affect deer populations. Variations in habitat and climate result in an unevenly distributed deer herd throughout the unit. Hunter density is light to moderate with an estimated 7-12 hunters per square mile, with most hunters located in the western one-third of the unit. The average annual buck harvest is about 2.1 bucks per square mile of deer range. The current deer herd management objective is to maintain 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.
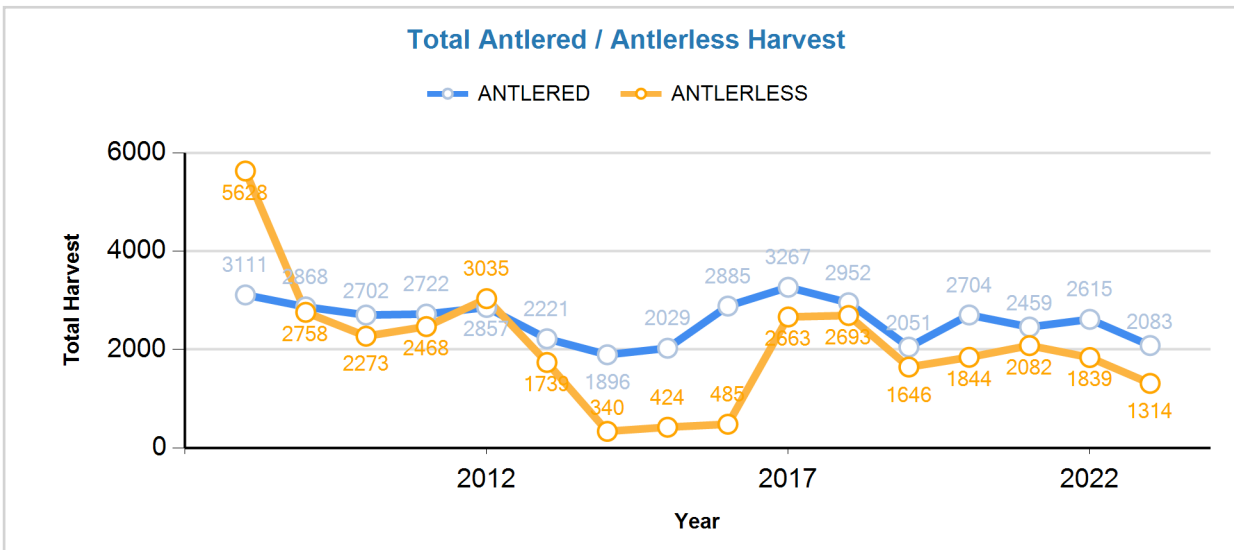
Northern Forest Management Zone

Total Area of Unit (Sq. Miles): 1,482.30

Deer Range of Unit (Sq. Miles): 1,390.50

Total Harvest for Bayfield County - Northern Forest Management Zone

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Harvest										
Antlered	1896	2029	2885	3267	2952	2051	2704	2459	2615	2083
Antlerless	357	424	486	2663	2693	1646	1844	2082	1839	1314
Total	2253	2453	3371	5930	5645	3697	4548	4541	4454	3397
Gun										
Antlered	1372	1424	2134	2337	2171	1339	1526	1579	1826	1434
Antlerless	243	287	316	1811	1988	1009	1082	1424	1305	886
Total	1615	1711	2450	4148	4159	2348	2608	3003	3131	2320
Bow										
Antlered	253	277	263	318	238	230	350	233	215	178
Antlerless	23	13	11	282	225	211	203	184	138	121
Total	276	290	274	600	463	441	553	417	353	299
Crossbow										
Antlered	204	260	349	465	442	438	727	553	501	425
Antlerless	15	33	29	384	386	372	453	409	343	266
Total	219	293	378	849	828	810	1180	962	844	691
Tribal*										
Antlered	67	68	139	147	101	44	101	94	73	46
Antlerless	76	91	130	186	94	54	106	65	53	41
Total	143	159	269	333	195	98	207	159	126	87
Youth Antlerless*										
Antlerless	0	0	312	300	243	180	270	179	185	109

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

Total Antlered / Antlerless Harvest

Total Harvest for Bayfield County - Northern Forest Management Zone - Private Land

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Harvest										
Antlered	1182	1158	1689	1864	1742	1305	1749	1573	1721	1361
Antlerless	193	222	242	1555	1385	965	1092	1411	1543	983
Total	1375	1380	1931	3419	3127	2270	2841	2984	3264	2344
Gun										
Antlered	884	809	1273	1373	1298	862	1005	1012	1212	939
Antlerless	166	183	213	1138	1016	609	653	989	1112	655
Total	1050	992	1486	2511	2314	1471	1658	2001	2324	1594
Bow										
Antlered	150	162	157	175	130	133	213	140	128	101
Antlerless	16	10	8	163	117	120	129	117	119	98
Total	166	172	165	338	247	253	342	257	247	199
Crossbow										
Antlered	148	187	259	316	314	310	531	421	381	321
Antlerless	11	29	21	254	252	236	310	305	312	230
Total	159	216	280	570	566	546	841	726	693	551
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	210	210	147	121	202	124	116	82

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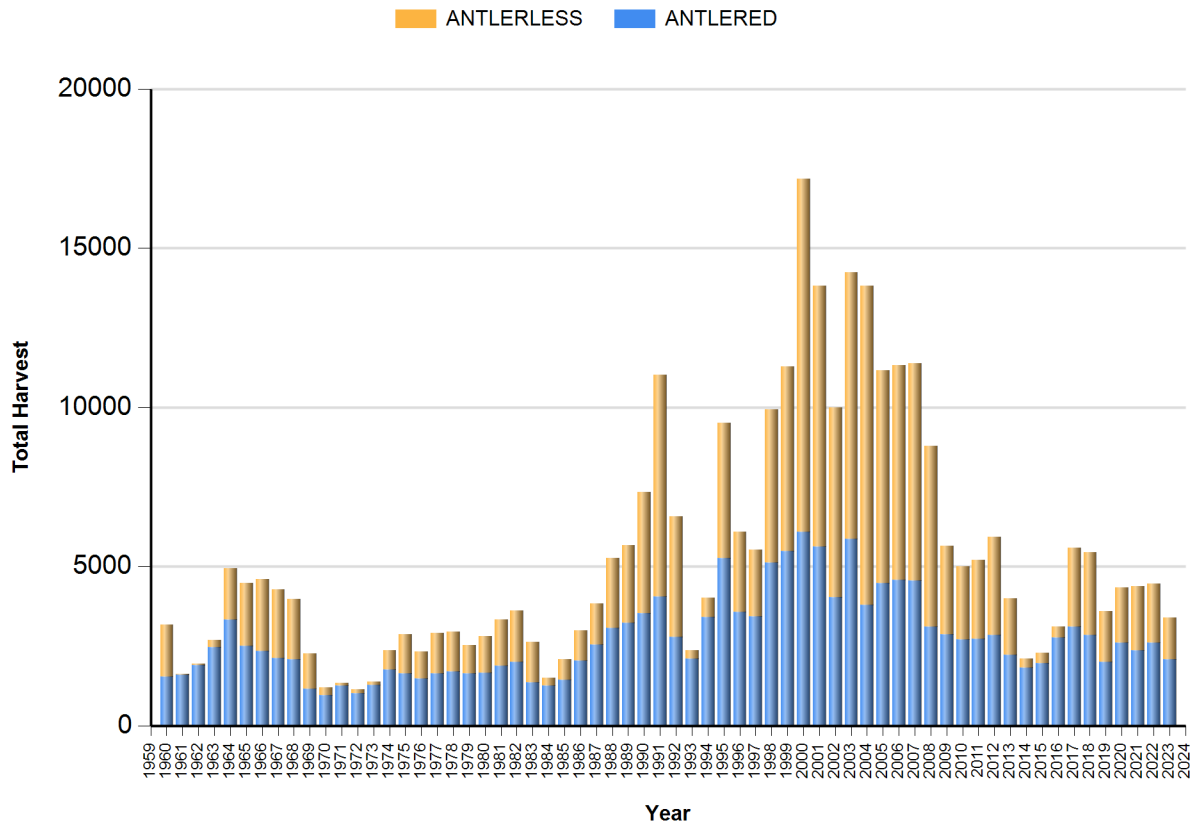

Total Harvest - Private Land
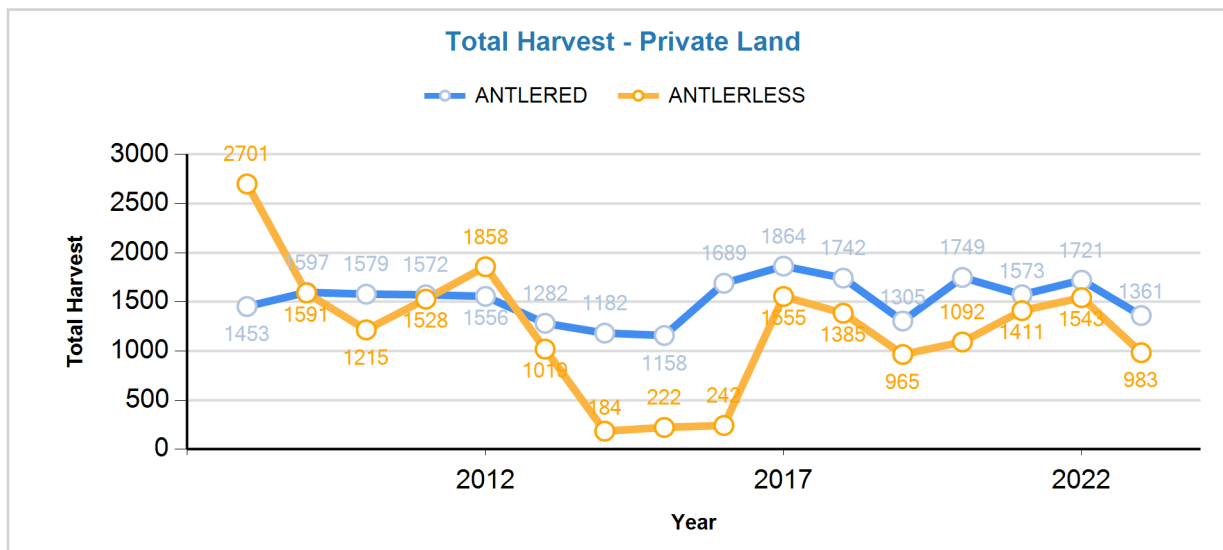
Total Harvest for Bayfield County - Northern Forest Management Zone - Public Land

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Harvest										
Antlered	714	871	1196	1403	1210	746	955	886	894	722
Antlerless	164	202	244	1108	1308	681	752	671	296	331
Total	878	1073	1440	2511	2518	1427	1707	1557	1190	1053
Gun										
Antlered	488	615	861	964	873	477	521	567	614	495
Antlerless	77	104	103	673	972	400	429	435	193	231
Total	565	719	964	1637	1845	877	950	1002	807	726
Bow										
Antlered	103	115	106	143	108	97	137	93	87	77
Antlerless	7	3	3	119	108	91	74	67	19	23
Total	110	118	109	262	216	188	211	160	106	100
Crossbow										
Antlered	56	73	90	149	128	128	196	132	120	104
Antlerless	4	4	8	130	134	136	143	104	31	36
Total	60	77	98	279	262	264	339	236	151	140
Tribal*										
Antlered	67	68	139	147	101	44	101	94	73	46
Antlerless	76	91	130	186	94	54	106	65	53	41
Total	143	159	269	333	195	98	207	159	126	87
Youth Antlerless*										
Antlerless	0	0	102	90	96	59	68	55	69	27

* Tribal and Youth Antlerless data are included in above totals where they apply
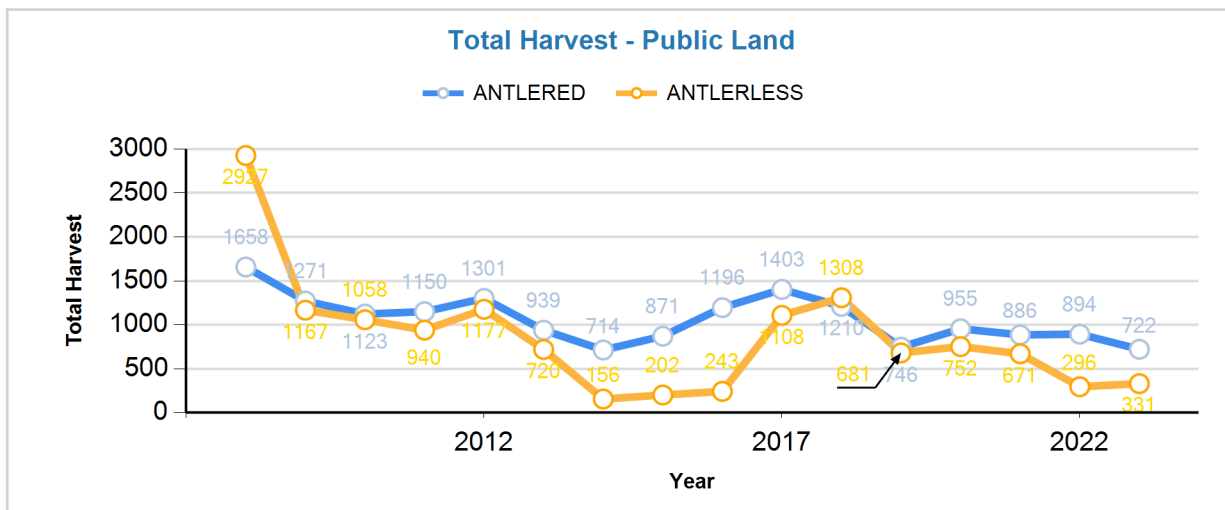
Total Deer Harvest 1960 - Present

Legend: ANTLERLESS (orange), ANTLERED (blue)

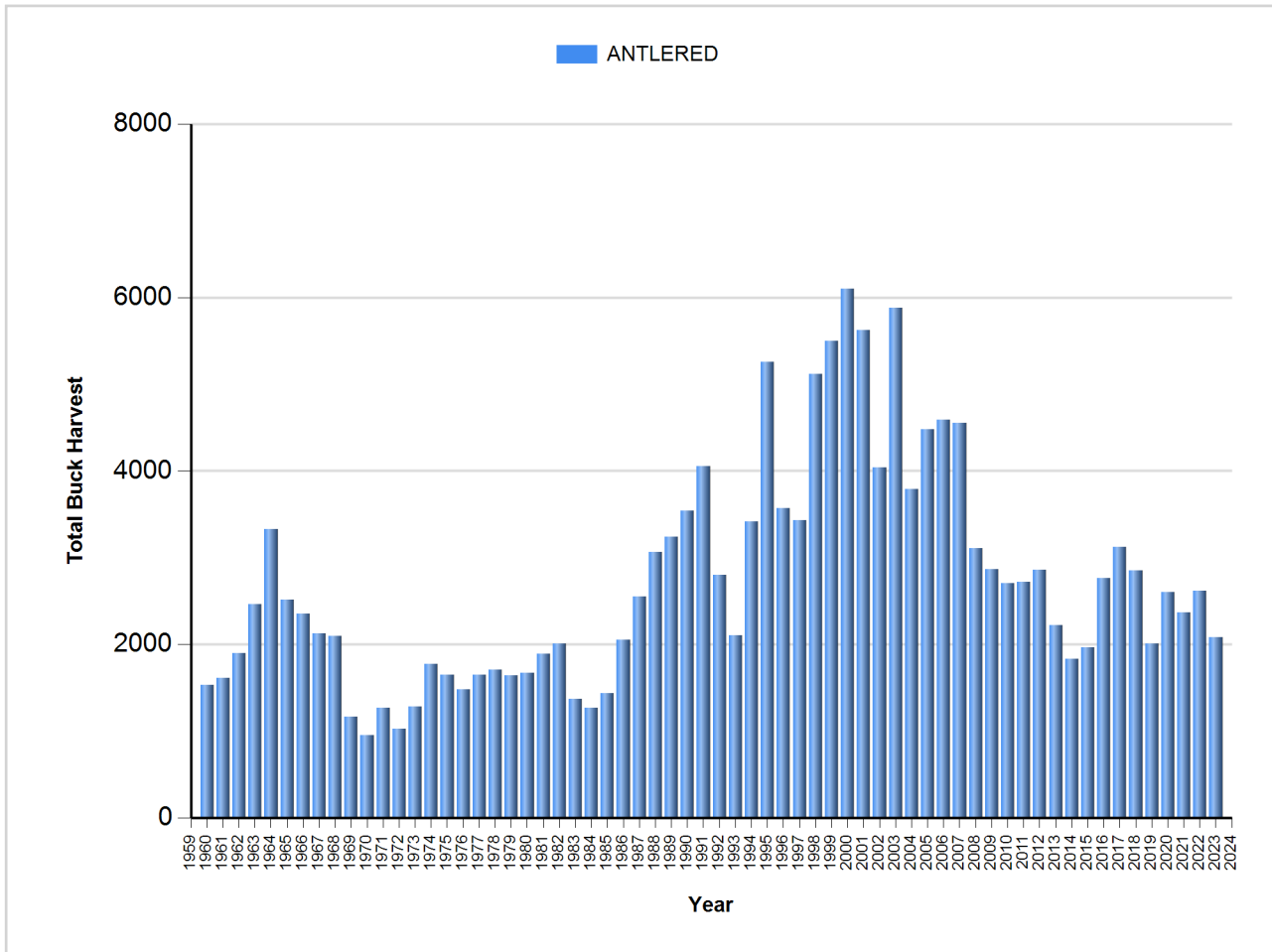Chart: Total Harvest vs Year (1959–2024), stacked bars of Antlered and Antlerless deer harvest in Bayfield County.

Total Buck Harvest 1960 - Present

Historic High: 2000 - 6,099

Historic Low: 1970 - 950

Antlerless Tag Issuance & Success for Bayfield County - Northern Forest

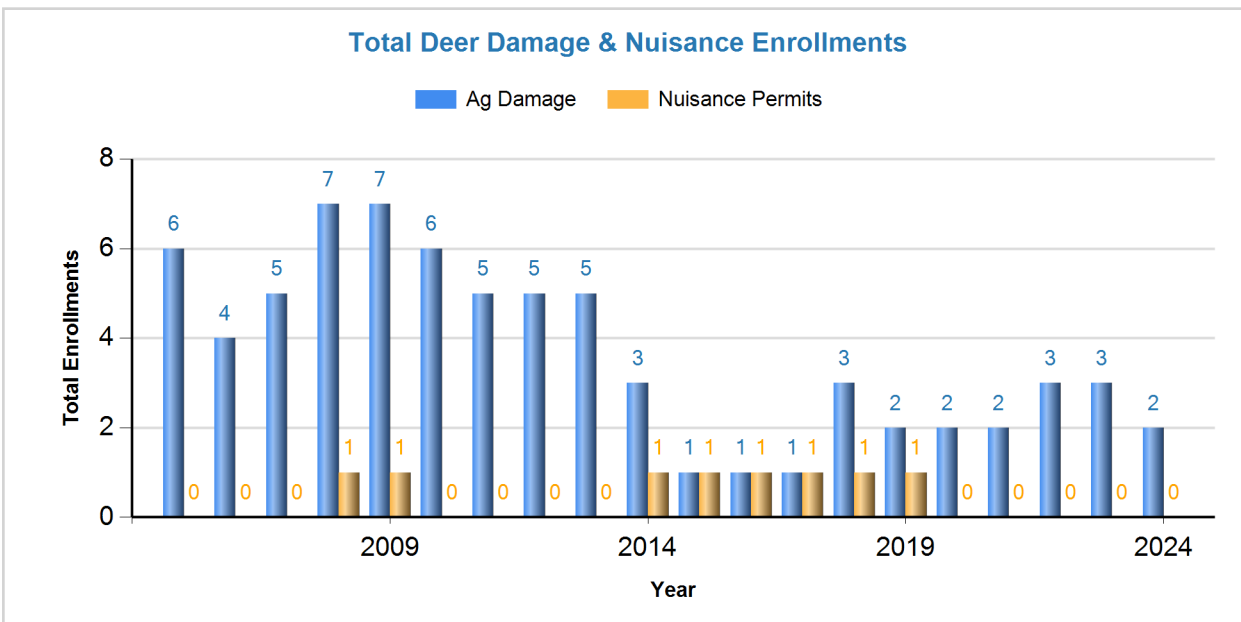| Year	2020	2021	2022	2023
Farmland - Public				
Issued				
Killed				
Success Rate (%)				
Farmland - Private				
Issued				
Killed				
Success Rate (%)				
Farmland - Total				
Issued				
Killed				
Success Rate (%)				
Bonus- Public				
Available	2,000	2,340	500	1,500
Issued	2,000	2,339	499	1,501
Killed	566	537	164	224
Success Rate (%)	28.3	23.0	32.9	14.9
Bonus- Private				
Available	2,575	8,675	8,250	5,500
Issued	2,575	5,282	5,644	4,857
Killed	865	1,242	1,389	905
Success Rate (%)	33.6	23.5	24.6	18.6
Bonus- Total				
Available	4,575	11,015	8,750	7,000
Issued	4,575	7,621	6,143	6,358
Killed	1,431	1,779	1,553	1,129
Success Rate (%)	31.3	23.3	25.3	17.8

Herd Abundance

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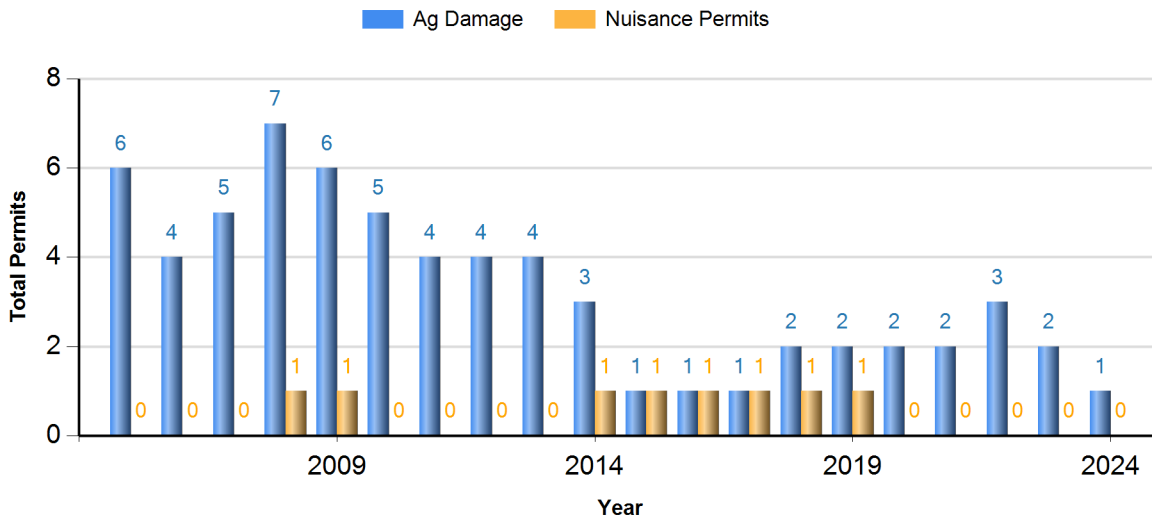
Post Hunt Deer Population Estimates

○ Post Hunt Deer Population Estimate ── 3-Year Average ── 95% Confidence Level

(Chart: Post Hunt Deer Population Estimate vs Year)

Data points: 37962, 24836, 24907, 26657, 27262, 28804, 21205, 18033, 18340, 29314, 33012, 33125, 24325, 32270, 26705, 29671, 25285

Y-axis: Post Hunt Deer Population E... (0 to 40000)
X-axis: Year (2011, 2016, 2021)
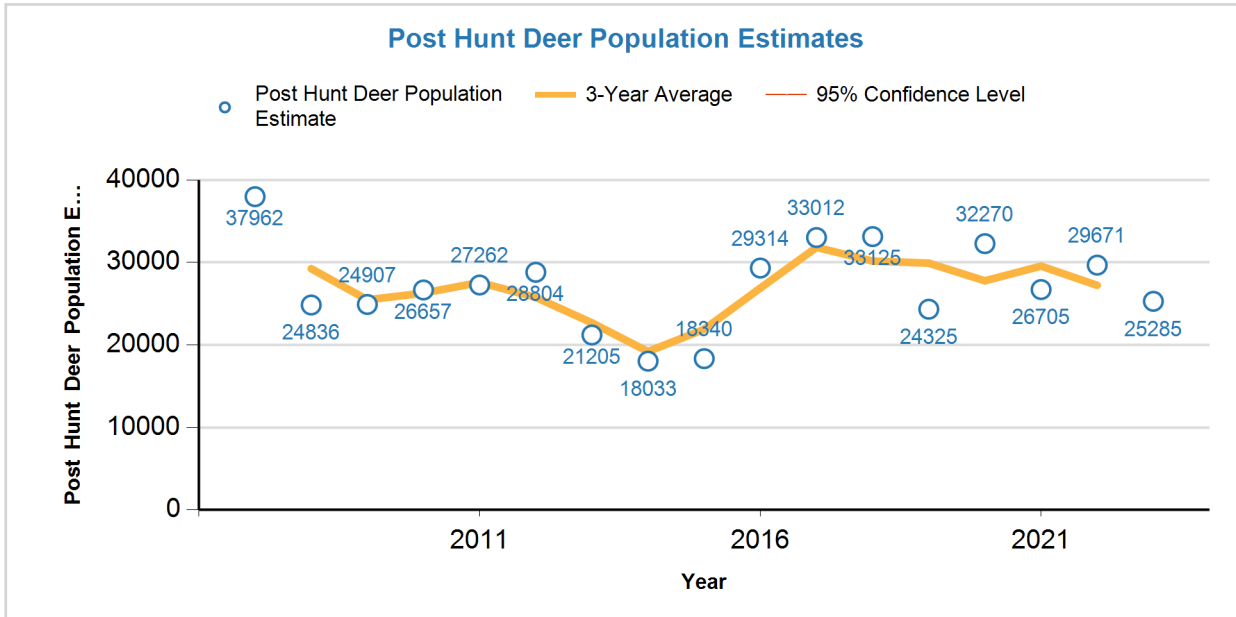
Deer Impacts – Agriculture & Nuisance Impacts

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

Total Deer Damage & Nuisance Enrollments

▮ Ag Damage ▮ Nuisance Permits

(Bar chart)

Ag Damage values: 6, 4, 5, 7, 7, 6, 5, 5, 5, 3, 1, 1, 1, 3, 2, 2, 2, 3, 3, 2
Nuisance Permits values: 0, 0, 0, 1, 1, 0, 0, 0, 0, 1, 1, 1, 1, 1, 1, 0, 0, 0, 0, 0

Y-axis: Total Enrollments (0 to 8)
X-axis: Year (2009, 2014, 2019, 2024)

Total Deer Damage & Nuisance Shooting Permits Issued

Legend: ■ Ag Damage ■ Nuisance Permits

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
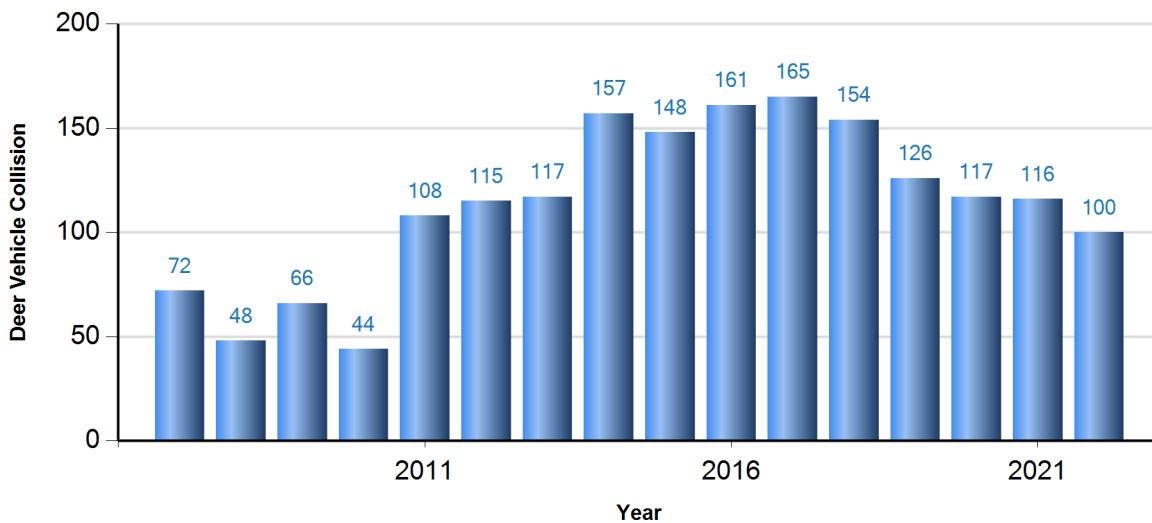
Hunter Dynamics - Hunter Field Observations

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