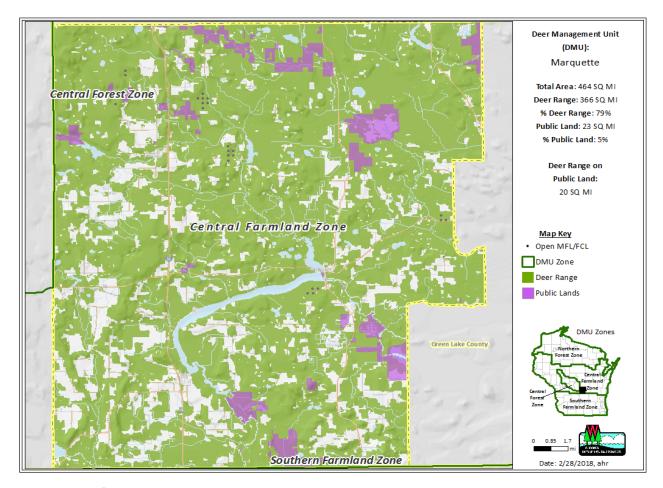
# Marquette County Deer Metrics Report Spring of 2024

### **Management Unit:**



## Manager's Note:

The Marquette County Deer Management Unit is located in the Central Farmland Zone. Approximately 79 percent of the unit is considered suitable deer range. The county is dominated by large wetland areas, of which many have been drained for "muck farming" and are highly productive for farming. The majority of upland habitat is dry sandy soils and has recently seen an increase in the use of center-pivot irrigation systems in agricultural fields. Although it is predominately of private landownership, there are several public areas open to hunting and fishing. These include French's Creek Wildlife Area, Germania Marsh Wildlife Area, Grand River Marsh Wildlife Area, White River Marsh Wildlife Area, Mecan River Fisheries Area, Caves Creek Fisheries Area, Lawrence Creek Fisheries Area, Lawton Creek Fisheries Area and the Fox River Wildlife Refuge. The unit has traditionally had high buck harvests per square mile of deer range, although a decrease in the number of one year old bucks harvested each year and a corresponding increase in the number of older age and larger bucks in the harvest has occurred. The deer herd has the potential to be very productive but is very unevenly distributed throughout the unit. Winter weather typically has little to no impact on survival and recruitment, which has led to high levels of agricultural deer damage and liberal hunting season frameworks. High hunter densities on opening day of the 9-day gun deer season average about 25-30 hunters per square mile of deer range. The current deer herd management objective is to decrease 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.

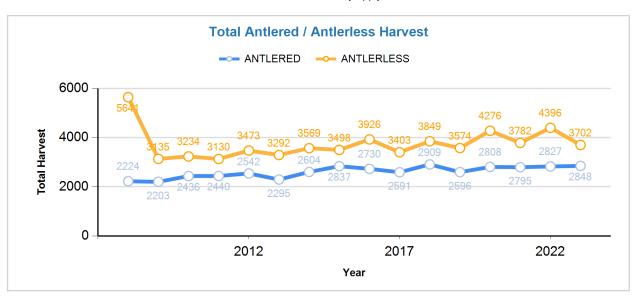
#### **Central Farmland Management Zone**

Total Area of Unit (Sq. Miles): 464.00 Deer Range of Unit (Sq. Miles): 365.60

#### **Total Harvest for Marquette County - Central Farmland Management Zone**

	-	-				_				
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Harvest										
Antlered	2604	2837	2730	2591	2909	2596	2808	2795	2827	2848
Antlerless	3583	3498	3926	3407	3849	3574	4276	3782	4396	3702
Total	6187	6335	6656	5998	6758	6170	7084	6577	7223	6550
Gun										
Antlered	1743	1844	1796	1637	1966	1517	1661	1655	1781	1660
Antlerless	2780	2667	3095	2553	2938	2642	3016	2856	3355	2802
Total	4523	4511	4891	4190	4904	4159	4677	4511	5136	4462
Bow										
Antlered	575	603	499	488	426	517	518	485	411	493
Antlerless	525	530	479	480	431	448	585	432	447	390
Total	1100	1133	978	968	857	965	1103	917	858	883
Crossbow										
Antlered	286	390	435	466	517	562	629	655	635	695
Antlerless	278	301	352	374	480	484	675	494	594	510
Total	564	691	787	840	997	1046	1304	1149	1229	1205
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 Antierless*										
Antlerless	0	0	170	133	131	102	145	119	105	73

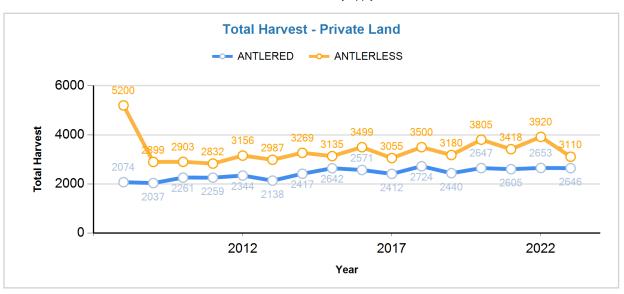
<sup>\*</sup> Tribal and Youth Antlerless data are included in above totals where they apply



#### Total Harvest for Marquette County - Central Farmland Management Zone - Private Land

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Harvest										
Antlered	2417	2642	2571	2412	2724	2440	2647	2605	2653	2646
Antlerless	3283	3135	3499	3058	3500	3180	3805	3418	3920	3110
Total	5700	5777	6070	5470	6224	5620	6452	6023	6573	5756
Gun										
Antlered	1628	1726	1706	1544	1854	1443	1572	1568	1688	1561
Antlerless	2548	2398	2785	2332	2693	2406	2734	2615	3049	2351
Total	4176	4124	4491	3876	4547	3849	4306	4183	4737	3912
Bow										
Antlered	521	549	456	436	385	467	479	419	372	435
Antlerless	479	461	408	408	385	374	484	369	355	315
Total	1000	1010	864	844	770	841	963	788	727	750
Crossbow										
Antlered	268	367	409	432	485	530	596	618	593	650
Antlerless	256	276	306	318	422	400	587	434	516	444
Total	524	643	715	750	907	930	1183	1052	1109	1094
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	149	129	126	101	141	114	101	69

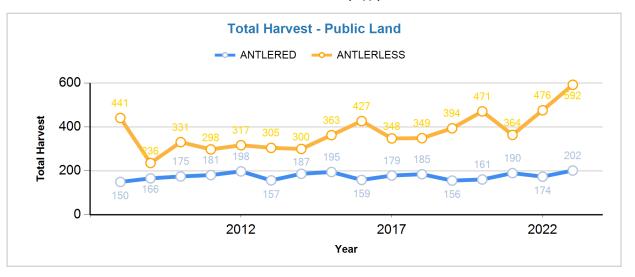
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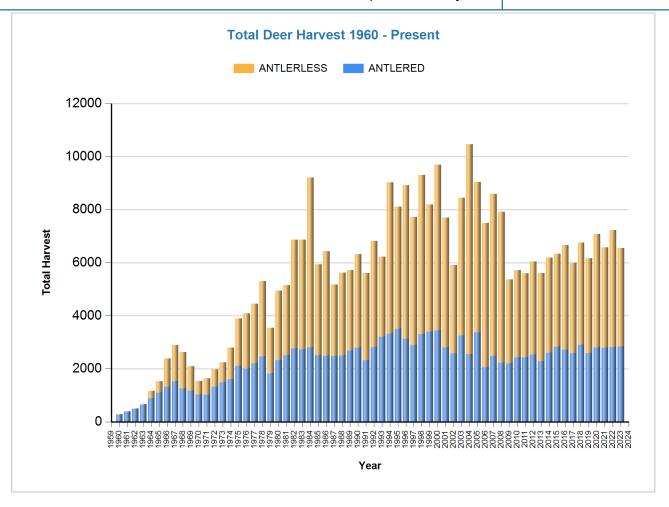


#### Total Harvest for Marquette County - Central Farmland Management Zone - Public Land

	-	-				•				
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Harvest										
Antlered	187	195	159	179	185	156	161	190	174	202
Antlerless	300	363	427	349	349	394	471	364	476	592
Total	487	558	586	528	534	550	632	554	650	794
Gun										
Antlered	115	118	90	93	112	74	89	87	93	99
Antlerless	232	269	310	221	245	236	282	241	306	451
Total	347	387	400	314	357	310	371	328	399	550
Bow										
Antlered	54	54	43	52	41	50	39	66	39	58
Antlerless	46	69	71	72	46	74	101	63	92	75
Total	100	123	114	124	87	124	140	129	131	133
Crossbow										
Antlered	18	23	26	34	32	32	33	37	42	45
Antlerless	22	25	46	56	58	84	88	60	78	66
Total	40	48	72	90	90	116	121	97	120	111
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 Antierless*										
Antlerless	0	0	21	4	5	1	4	5	4	4

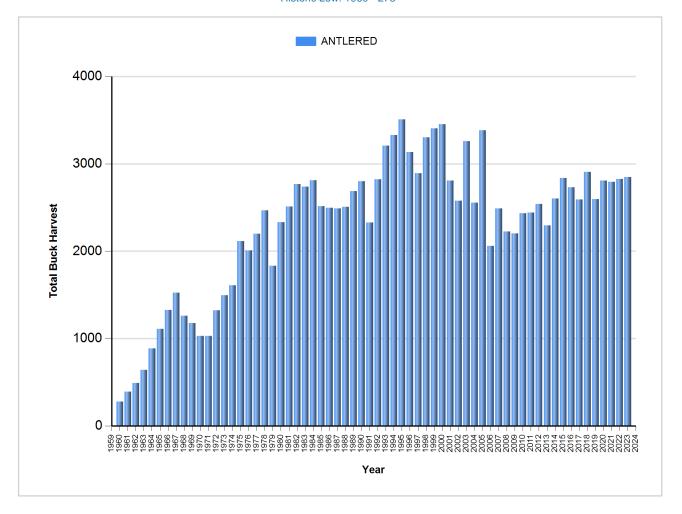
<sup>\*</sup> Tribal and Youth Antlerless data are included in above totals where they apply





#### **Total Buck Harvest 1960 - Present**

Historic High: 1995 - 3,509 Historic Low: 1960 - 278

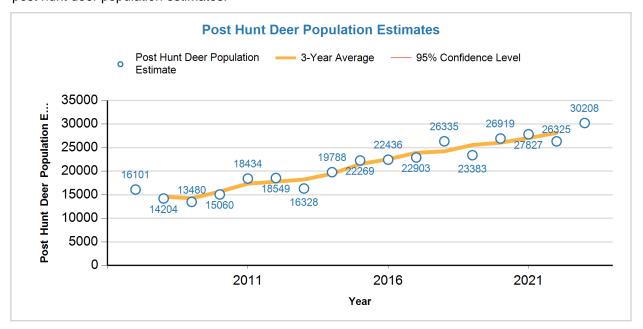


## Antierless Tag Issuance & Success for Marquette County - Central Farmland

=		-		
Year	2020	2021	2022	2023
Farmland - Public				
Issued	10,686	7,499	10,463	10,317
Killed	438	324	436	368
Success Rate (%)	4.1	4.3	4.2	3.6
Farmland - Private				
Issued	45,402	33,775	44,381	44,187
Killed	3,444	3,028	3,496	2,970
Success Rate (%)	7.6	9.0	7.9	6.7
Farmland - Total				
Issued	56,088	41,274	54,844	54,504
Killed	3,882	3,352	3,932	3,338
Success Rate (%)	6.9	8.1	7.2	6.1
Bonus- Public				
Available	2,000	2,000	2,000	2,000
Issued	324	385	306	313
Killed	26	28	30	22
Success Rate (%)	8.0	7.3	9.8	7.0
Bonus- Private				
Available	8,000	8,000	8,000	8,000
Issued	446	537	516	510
Killed	73	98	91	85
Success Rate (%)	16.4	18.2	17.6	16.7
Bonus- Total				
Available	10,000	10,000	10,000	10,000
Issued	770	922	822	823
Killed	99	126	121	107
Success Rate (%)	12.9	13.7	14.7	13.0

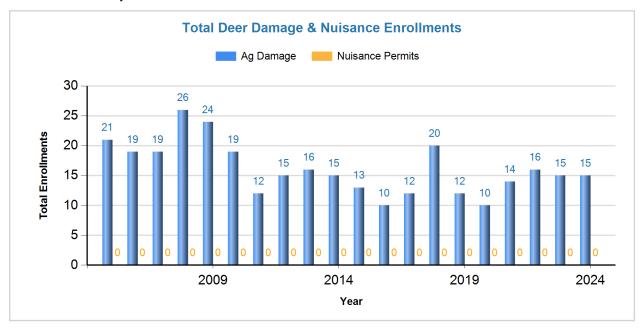
#### Herd Abundance

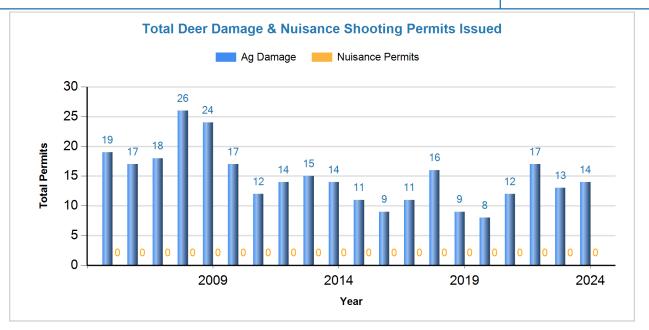
Deer herd abundance is estimated annually with hunter-collected data and a mathematical model to get post hunt deer population estimates.



## Deer Impacts - Agriculture & Nuisance Impacts

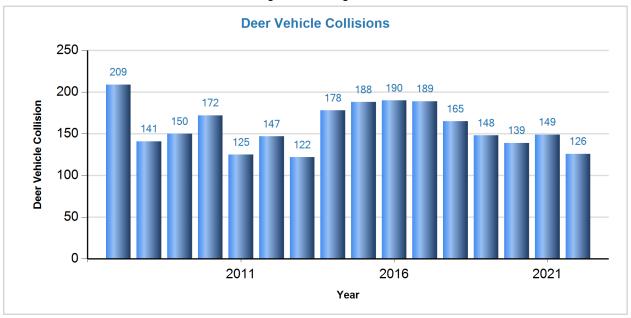
View trends in county and statewide enrollment, shooting permit, Ag Damage, and Nuisance harvest numbers over the years.





## 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.



# **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.

