

Deer Management Unit

122

Area Description

DMU 122 is located in south Dickinson County and includes a small portion of west central Menominee County. It encompasses 163 sq. miles and has remained unchanged since 2002. Public land comprises 9% (15 sq. miles) of the unit. Private lands make up 91% of this unit. CFR lands comprise just 7% (11 sq. miles) of the privately-owned lands. This is one of two units, in the U.P., that has been managed under Quality Deer Management (QDM) regulations since 2001. Bucks must have at least three points on one side to be legal, in this unit.

Land use and habitat quality for deer

Agricultural damage complaints are common in this unit. DMU 122 is located primarily in the “farm belt” of southern Dickinson County. The combination of farms interspersed within quality forest lands and extensive private ownership, coupled with relatively mild winters, provides for excellent deer habitat. The towns of Iron Mountain, Kingsford, and Norway fall within the boundary of DMU 122 and provide a productive refuge.

Typical winter weather, as related to deer

DMU 122 falls in the low snowfall zone and winter weather is typically mild compared to most of the U.P. As a result, over-winter survival and fawn recruitment are usually high.

Management Guidance

Antlerless harvest opportunities are normally desirable in this unit for several reasons. Local farms are impacted by agricultural crop damage and antlerless licenses are a tool to address this problem. Secondly, forest managers believe antlerless harvesting helps to reduce deer browse impacts on forest regeneration. Lastly, the majority of sportsmen and landowners in this DMU supported continuation of their Quality Deer Management program. Current APR rules require hunters to bypass bucks with less than 3 points on a side to allow them to grow older. The issuance of antlerless licenses aids this harvest philosophy.

Deer Harvest Analysis

DMU 122 regularly ranks as one of the top 3 units for buck harvest in the U.P. region, averaging about 5 bucks harvested per sq. mile between 2006 and 2015. This level of historic buck harvest indicates high deer densities compared to other units in the region. Buck harvest per sq. mile dropped significantly after the difficult winters of 2013, 2014 and 2015. An average harvest of 1.8 antlerless deer per sq. mile has been sustained during the past 3 years also ranking as one of the highest harvest rates, in the U.P. This harvest is reduced from the long-term average of 3 antlerless deer per sq. mile, due to difficult winter's impacts on deer densities, discontinuation of antlerless harvest using archery equipment and reductions in antlerless quotas within this unit.

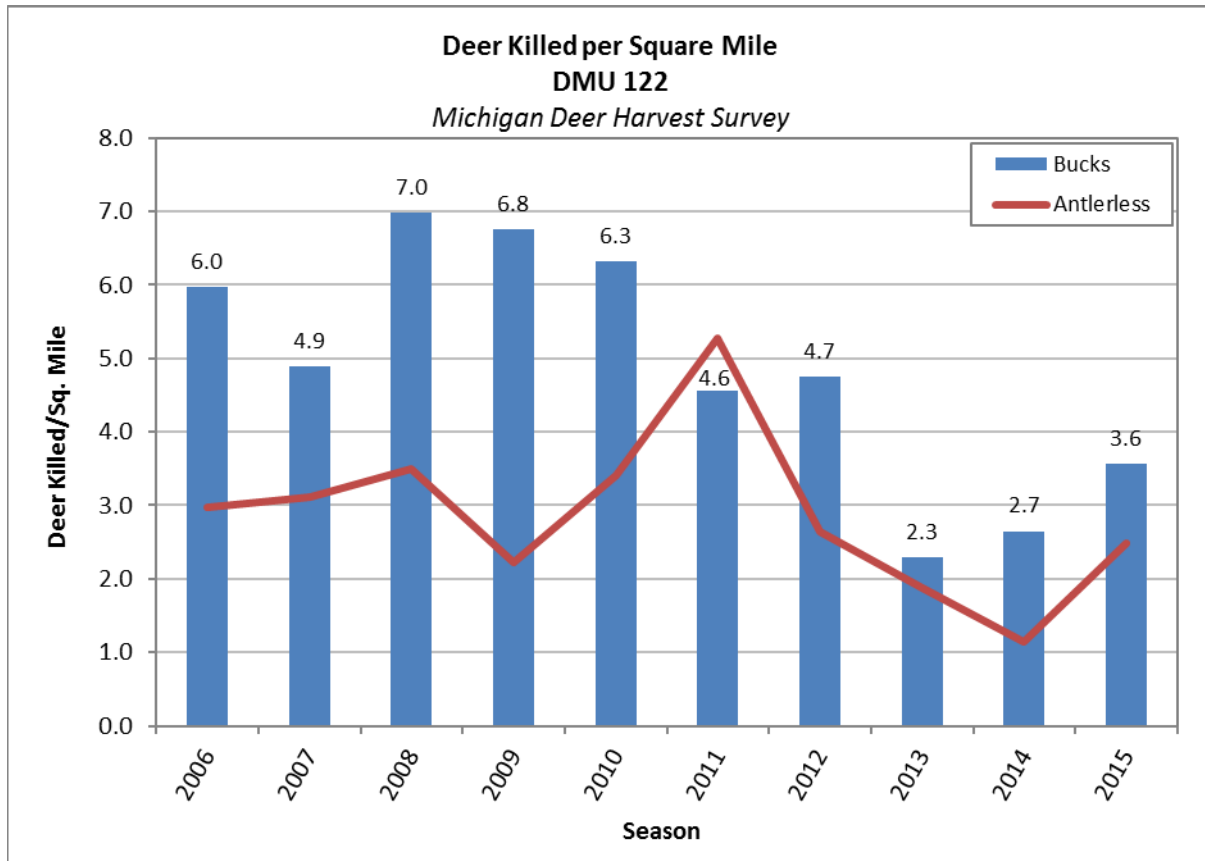


Figure 1: Graph of deer kill per square mile in DMU 122, 2006 – 2015, based on Michigan Deer Harvest Survey results.

Deer sightings and hunter success/satisfaction trends

DMU 122 hunters report observing 4 to 5 deer per hunter day when responding to the 2016 U.P. Deer Camp Survey (firearm season). This is the highest deer sighting rate in the U.P. region and corresponds with a fawn to doe ratio that is one of the highest reported in the region. Quality habitat and mild winters, compared to other areas in the U.P., make these high sighting rates possible. Although buck kill success averages a moderate 30%, this unit is among the leaders for “bucks observed by hunters that did not result in a kill.” Regulated by the unit’s QDM harvest program, hunters opt to pass on small-racked bucks, therefore, harvesting a low percentage of bucks they observe.

DEER MANAGEMENT UNIT 122											
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Camps	5	7	5	10	7	6	3	6	6	6	7
Hunters	22	35	27	37	34	23	9	27	26	25	25
% killing a buck	9%	34%	37%	11%	24%	22%	22%	26%	27%	16%	16%
Deer seen per day	6	7.1	4.3	4.8	5.1	6.8	6.1	4.9	5.6	3.6	4.8
Fawns seen per 100 does	56	61	35	76	49	56	58	72	57	63	74
Does seen per buck	7	3	5	3	4	4	2	4	3	3	2
More deer than last year	0%	0%	0%	0%	14%	50%	67%	0%	0%	0%	43%
Same number deer	80%	80%	40%	30%	29%	17%	0%	17%	0%	50%	57%
Fewer deer	20%	20%	60%	70%	57%	33%	33%	83%	100%	50%	0%
Season good-to-excellent	40%	40%	60%	20%	43%	50%	33%	17%	33%	0%	57%
Season fair-to-poor	60%	60%	40%	80%	57%	50%	67%	83%	67%	100%	43%

Figure 2: Deer Camp Survey data in DMU 122.

Research Results

A research project focusing on the role of predators, winter weather, and habitat on deer fawn survival is being conducted in the western U.P. by Mississippi State University in cooperation with the DNR. Results of this research conducted in the low and moderate snowfall zones to date suggest the following:

- high pregnancy rate among adult females despite uneven buck to doe ratios;
- low fawn annual survival following harsh winters;
- under mild to moderate winter severity, the most important factor influencing the growth (positive or negative) of a deer population is the proportion of fawns surviving their first year and becoming potential breeders;
- under severe winter conditions substantial mortality of adult females can occur, replacing recruitment of fawns as the most important factor effecting the growth of a deer population, until the adult female segment of the population recovers;
- severe winter weather can have multi-year effects on deer recruitment and population trends;
- annually, winter severity and habitat conditions influence the amount of predation, which overall was the dominant source of mortality of adult females and fawns. This illustrates the importance of considering all potential limiting factors and their interactions.

These results support results of other surveys suggesting that consecutive harsh winters that have occurred since 2008 have resulted in low deer populations in the region, including in this DMU.

Agricultural Crop Damage

During recent years, about 16 Deer Damage Control Permits have been issued to farms to address crop damage. This is a decline in requested permits, as lower deer densities have resulted in less crop damage in the DMU. The issuance of private land antlerless permits has also helped to reduce Deer Damage Control Permit requests. Deer Management Assistance Permits (DMAP's) have been used to address silvicultural and crop damage, and urban deer issues. The cities of Iron Mountain and Kingsford have participated in an urban deer removal program, in recent years, in an attempt to reduce deer numbers, associated deer-vehicle accidents, and herbivory issues.

Forest Regeneration Concerns

DNR and Corporate forest management personnel have expressed concerns about tree regeneration problems, in this DMU. Forest managers typically welcome antlerless deer harvest opportunities in this unit.

Deer-Vehicle Collisions

Reported deer-vehicle accidents, adjusted for traffic volume, have declined in the U.P. during the past decade.

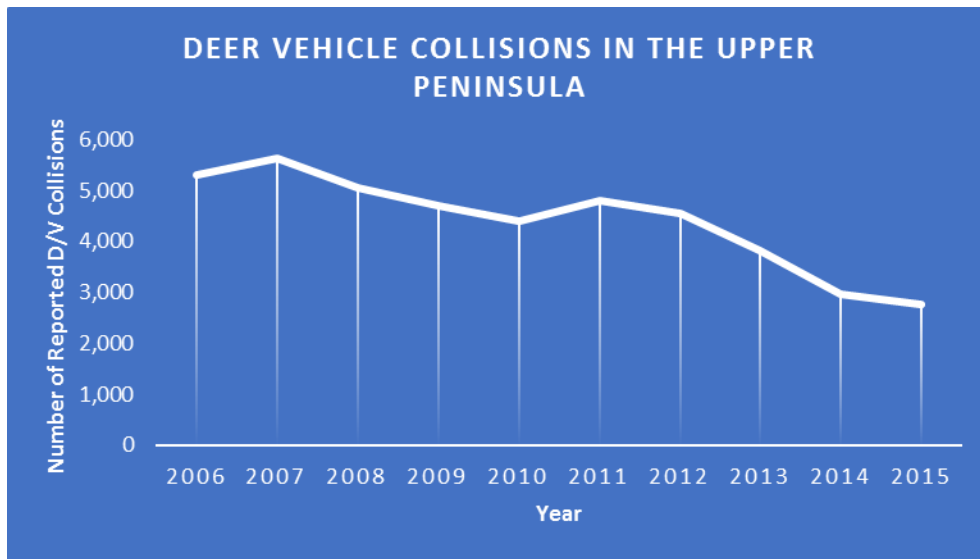


Figure 3: Deer-vehicle collisions in the U.P., 2006 – 2015.

Deer Condition Data

A sample of hunter-harvested deer is examined at check stations each fall. The diameter of antler beams, measured 1 inch above the pedicel, is measured on 1.5-year-old bucks as an index of physical condition. Antler beam diameters have varied little in the U.P. Region during the past decade.

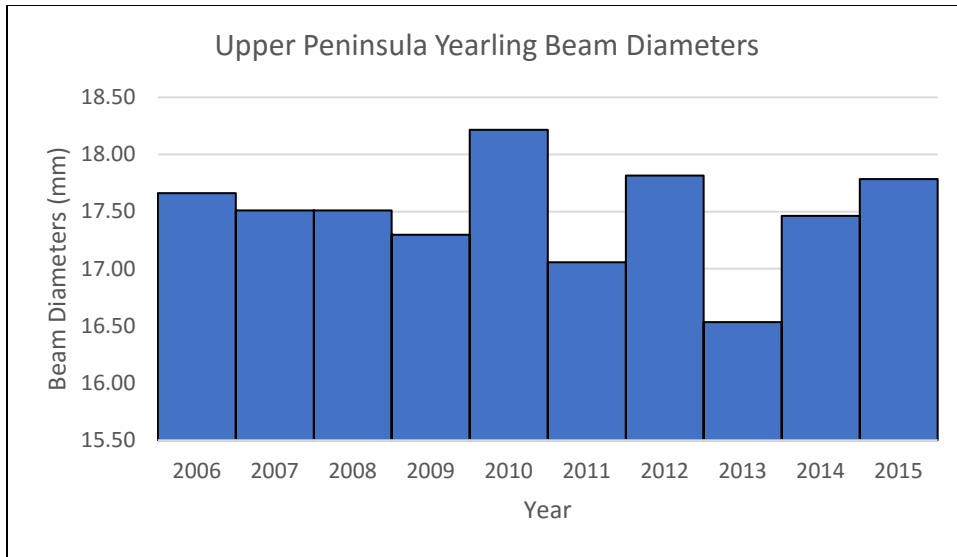


Figure 4: U.P. Yearling Beam Diameters, 2006 – 2015.

Deer Management Recommendations

We recommend DMU 122 be “open” for the issuance of private antlerless licenses. Deer population indicators, such as buck kill per sq. mile and deer observed per hunter day are consistently among the highest in the U.P. region. The recent winters of 2013, 2014 and 2015 were consecutive difficult winters even in this unit where winters are typically mild. These winters impacted the unit’s deer herd for the last several hunting seasons and resulted in lower antlerless license allotments. The winter of 2016 was exceptionally mild and resulted in excellent fawn recruitment and adult deer survival. If deer numbers continue to increase due to favorable winter conditions this year and next, antlerless licenses quotas may be increased. Increased antlerless quotas may provide additional opportunity while archery antlerless harvest is restricted.

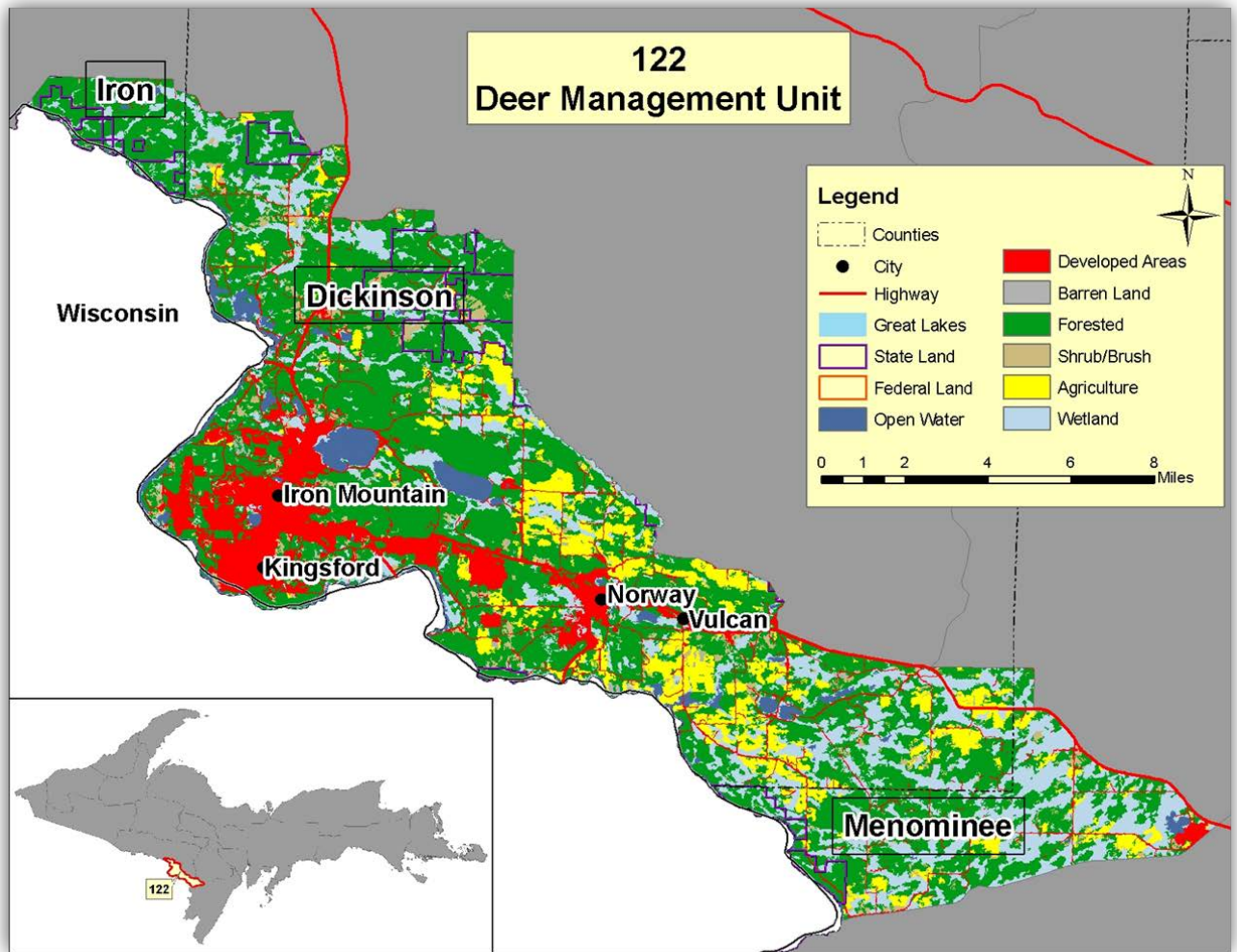


Figure 5. Cover type map of DMU 122 in the Upper Peninsula Region.