

Richard P. Smith lacks facts and focus regarding Antler Point Restrictions in Michigan.

In the July-August 2013 issue of *Michigan Sportsman*, Richard P Smith wrote an article entitled "Michigan APR's: how are they working?" Although the article purports to be discussing APR's in general, it carefully avoids the one location in Michigan with the most complete data on APR's. Instead of investigating Leelanau County's results, he chooses to focus on the "Hunter's Choice" program in the UP. The rules of Hunters Choice are far different and less restrictive than a pure mandatory APR (i.e. Leelanau), as they allow hunters to take the buck of their choice if they choose a single season license. Only combo tag purchasers are subject to APR's on both bucks. It is important to note that the majority of UP hunters do NOT buy the combo, and are therefore "unrestricted" in the buck they harvest. This influence alone, and the fact that Smith misinterprets much of the UP data as well, easily disqualifies any of his conclusions.

Given Smith's widely expressed opposition to APR's it is a small wonder that he would avoid discussing Leelanau County, since he would be hard-pressed to find anything negative in the data. Leelanau County, located in the northwestern Lower Peninsula has had full APR's since 2003. In 2008, after five years of hunting under the restrictions, 72% of hunters supported continuing the

restrictions, as surveyed by the Michigan Department of Natural Resources (DNR).

The county has sandy acidic soils and is in a snow belt region with average annual snow fall of 120 to 140 inches. Nonetheless, it produces the highest percentage of 8 point and larger bucks of any county in the state! Over the last five years, 61% of bucks of Leelanau County brought in to check stations had eight total points or more. This is up from 34% in the three years prior to APR's, and far above the averages of 34%, 25%, and 36% in the UP, Northern Lower Peninsula, and Southern Lower Peninsula respectively. Yes, that's right! Leelanau produces more 8 point and larger bucks than any of the counties in the agriculturally rich southern part of the state!

Unlike Hunter's Choice in the UP and DMU 487 in the Northeast Lower, the APR's in Leelanau County have been very successful at advancing yearlings to older age classes. Prior to APR's, from 2000 to 2003, about 67% of Leelanau County bucks brought into DNR check stations were yearlings (bucks with their first set of antlers). Over the last five years, only 27% of the bucks have been yearlings! Before APR's, only 13% of bucks brought in to check stations were 3.5 years old or older. Over the last five years, 44% have been 3.5 years old or older!

Yes, Leelanau hunters did have to briefly sacrifice after implementation of the APR's. Prior to their introduction, the hunter success rate on bucks was about 22%. In 2003, the first year of APR's, hunter success rates fell to 15%. However, they quickly returned to prior levels, with hunter success being equal to or higher than pre-APR numbers in eight of the next nine seasons! To further combat the false assumption that APR's reduce hunter opportunity, key in on the fact that Leelanau has the best hunter participation rates in its region. Averaging over the last five years, the 12 area counties making up the Northwest Lower Peninsula have lost 20% of their hunters. Leelanau County has actually remained stable! Losses in the other 12 counties have ranged from 8% in Emmet County to 32% in Kalkaska County.

In an article supposedly about APR's in Michigan, Smith chooses to focus mainly on Hunter's Choice, which has been practiced in the UP and in DMU 487 for the last five seasons and three seasons respectively. He relies heavily on a chart produced by Brent Rudolph, Elk and Deer Program Leader for the DNR. That chart conveys little information about the impact of APR's on hunting in the UP. Rudolph has used the chart in the past to convey that Hunter's Choice has not been particularly effective at advancing age structure in the UP herd. In his words (my emphasis); "Some protection of yearling cohorts **may** be occurring." Smith cites this chart and includes it in the article as if it makes a statement about APR's. In reality, it merely shows the impact of winter severity on buck harvest

results. Such fluctuations frequently occur in the UP with or without APR regulations in place. Yet Smith would seem to want readers to believe that these fluctuations are dependent on APRs.

Why would Smith focus on a region that has only had a limited amount of experience under a program that is not even close to having stringent APR's? Leelanau County presents us with a much better example over a much longer time frame. Smith remains silent about Leelanau County until the last paragraph of his article. He then only presents biased speculation. Perhaps a better title to his piece should have been "Upper Peninsula Hunters Choice: How is it Working?" However, that would probably not be appropriate either as he primarily focuses on hunter fluctuations related to winter severity.

In addition to his perplexing Leelanau County avoidance, Smith has also presented data that is either overtly incorrect, or contradicted by other data from the DNR. Smith discusses a chart produced by the DNR in a 2012 report entitled "Evaluation of Upper Peninsula Buck Management Options" (see figure).

According to Smith, "Over [a] 10 year period...more than 15% of the bucks that were 2 1/2 years old had less than three points on an antler. Most hunters will probably be surprised to find out that about 8% of UP bucks examined at check stations that were 5 1/2 years old had fewer than three points on an antler. And about 11% of bucks that were 5 1/2 had fewer than four points on an antler".

Smith is incorrect in his interpretation of the chart. It is impossible to deduce how many points are “on an antler” because the chart does not document how many points are on a specific antler (side). It merely reports the TOTAL number of points on a buck’s entire rack. Under the methods used by the DNR, a half rack (only one antler side present) eight-point would be counted as a four-point. A five-point with one tine broken off would be reported as a four point. A buck with a leg injury that develops a poor antler on one side might have four points on one side and none or one point on the other side. Additionally, Smith would not know whether these bucks may have had more antler points earlier in the season or when they were younger.

Smith goes on to suggest that those bucks with fewer points in the older age class must be genetically inferior, and that under traditional management “hunters end up taking some of those older bucks with substandard antlers which benefits the population by preventing them from doing any more breeding.” Never mind that there is significant science to show that it is next to impossible for hunters to manipulate genetics in a free ranging herd... Never mind that it is likely that an older age buck with fewer than five points most likely sustained a pedicle or leg injury... Never mind that the buck may have already shed or broken off one of its antlers... Smith, nor anyone else, has any idea what the genetic potential of those bucks could be! Lastly, please remember that he’s

limiting his discussion to a region where it is perfectly legal to harvest those bucks with a single season tag as long as they have at least one antler that is at least 3 inches long. According to the DNR, over 60% of deer licenses sold in the UP are single season licenses. Smith speaks of these bucks as if they are not eligible for harvest.

Smith's article also touches on other DMUs that have had APR's since 2001: DMU 122 in the South Central UP and DMU 117, Drummond Island. He states that "only 11% of hunters from 122 reported bagging a buck during 2009 after APR's were in effect for nine years..." Why did he choose to cite one year of data from the Deer Camp Survey in lieu of more complete and readily available data? This statistic and several of his other citations of hunter success are directly contradicted by data in the DNR's 2009 "Michigan Deer Harvest Survey Report". In that document, the DNR reports that 3189 hunters harvested 1101 bucks in DMU 122 in the 2009 seasons, representing a success rate of 34.5%, not the 11% cited by Smith. By the way, 34.5% compares quite favorably to 23% for the entire UP that year. Smith chose to cite data from the smaller Camp Surveys, even though those surveys depend on hunter observations and are not random. In contrast, the Annual Survey is random and reflects a much higher sample size. According to Brent Rudolph, Deer and Elk Program leader for the Michigan DNR, "The Harvest Survey data is more robust and less biased than the Camp Survey

data.” According to him, the estimates from the Annual Survey are more reliable than those from the Camp Surveys.

Fluctuations in harvest success occur in every DMU in the state. The reasons vary, but winter severity has a significant impact on UP harvest rate. That is all Smith truly shows here! There are several comments in his article about hunter fluctuations, which he admits are due to winter severity, yet he discusses them in the context of APR's as if APRs have something to do with the fluctuations. What is unsaid in his article, is that after several years of APRs, 74% of hunters in DMU 122, and 80% of Drummond Island hunters surveyed by the DNR were in favor of continuing the APR's.

Smith compounds all his misrepresentations by grossly misrepresenting the age structure of the bucks in DMU 122 before and after APRs. In regards to four DMUs in the UP that had antler restrictions from 2001 to 2005, "...data from those five years compared to the previous five years shows hunters bagged more older age bucks when spikes or better were legal". This statement is remarkably misleading. The DNR carefully examined the age structure of bucks from check station data before and after APRs, and included them in a presentation entitled "Impacts on Deer Population" (available by request from Dr. Brent Rudolph). The final slide from that presentation shows the age structure of bucks from both DMU 122, and the combined data from DMUs 152, 155 and 252

(figure 2). In DMU 122, harvest of yearlings dropped from 49% to 21%, resulting in 2.5 and older bucks increasing from 51% to 79% of the harvest. Bucks 3.5 and older went from 22% of the harvest to 30%. In DMUs 152, 155, and 252, harvest of 1.5 year old bucks was reduced from 46% before APRs to 17% after, resulting in an increase in harvest of 2.5 year old and older bucks from 54% to 83%, and an increase in the harvest of 3.5 and older bucks from 23% to nearly 29%! Only one age class, 5.5 year old and older bucks, had a significant increase in harvest prior to APRs, but that age class makes up only 1/50th to less than 1/100th of the harvest. APRs requiring 3 points on one side in these DMUs were aimed at passing more young bucks to older age classes, where most become eligible for harvest at the age of 2.5 or 3.5 years of age. Mr. Smith's selective citation of partial data that is not readily available to readers appears to be designed to mislead readers into thinking that the APRs were not effective. They were, and achieved exactly what they were designed for. Not to create trophy bucks of 5.5 and older, but to advance more bucks to the 2.5 and 3.5 year old age classes.

Smith also makes some qualitative comments about APRs. First, he discussed the difficulty of identifying antler points under hunting conditions. "When a buck is moving through trees or brush, it's not always possible to determine how many points its antlers or even one antler might have--even if you can see antlers. When it's possible to count points, the opportunity for a shot could easily be gone

by the time you've determined the deer is a legal target.” One of the cardinal rules imparted in Hunter safety courses is "identify your target". Is Smith suggesting that hunters should consider shooting at moving deer or at deer in brush too thick to identify the target? I sincerely hope not. We have to hold our fire on pheasants and some ducks until we identify their sex. We have to hold off on spearing a pike until we determine its length. Are we now to consider it a burden to hold off on shooting a deer until we can clearly identify whether it is legal or not?

Second, he discusses the complexity of the APR regulations in various deer management units as if it is a major burden for a hunter to read the manual and understand the rules for that particular location. There are over four pages of county specific “exceptions to general regulations by county” in the Michigan Fishing Guide for 2013; all in fine print. There are over 20 management units on the Great Lakes for lake trout alone, not to mention Lake Trout refuges, all of which require a GPS for fishermen to determine what zone they are in. We will have over 100 distinct antlerless management zones in the 2013 season, each of which requires distinct licenses. Are we really to believe that fishermen and antlerless hunters are more intelligent and knowledgeable of the rules governing their pursuit, while area-specific regulations are too much for buck hunters to manage?

Smith ends his article with a snipe at the Michigan DNR regarding their survey sample size in the APR survey of hunters in the Northwest Lower Peninsula, conducted in 2012, stating that "An estimated 100,000 deer hunters hunt those counties and their future hunting opportunities were decided by a fraction (.02%) of their ranks." As a journalist, one might expect Smith to have done a modicum of research on statistical requirements for sampling populations. Sample determination calculations reveal that a +/- 5% confidence interval at a 95% confidence level is met by sampling only 383 respondents from a population of 100,000. The DNR far exceeded this requirement and sent out 2100 surveys, of which 1661 (80%) were returned! Consider this in comparison to Gallup polls, which typically use a sample size of 1000 respondents to represent the entire voting population of the United States to within a margin of error of +/- 4%! The DNR's sample size was sufficient to provide a confidence interval of +/- 2.3% for the Northwest 12 survey. Increasing sample size would indeed narrow the confidence interval but only at great cost and effort when +/- 2.3% is more than sufficient. Journalist Smith is either astonishingly ignorant of survey science typically used by the press, or he is simply using scare tactics to lead hunters to think that their opinion is not being represented. In fact, the DNR is going to great lengths to obtain a sample size far above what is needed to scientifically represent hunter's opinions.

In conclusion, it is clear that Smith's article is very short on reliable facts and filled with innuendo. It is aimed at making APR's seem like a burden when, in fact, in every single zone where APR's have been tried in Michigan, a majority of hunters have been in favor of continuing them when subsequently surveyed. They did not all pass, because some did not reach the required 66% support, but in every case the majority were in support. The 2012 Annual Survey tells us that when UP hunters were asked if they supported or opposed APR's, 58% said they supported them, whereas only 31% were opposed. This is a 65% margin of support among those who expressed an opinion. One would wonder why Smith presented what is essentially an editorial against APR's in the UP, rather than a balanced article on the subject of APR's in Michigan, as the title would suggest. One cannot read his article and glean much of anything about how APRs are working.

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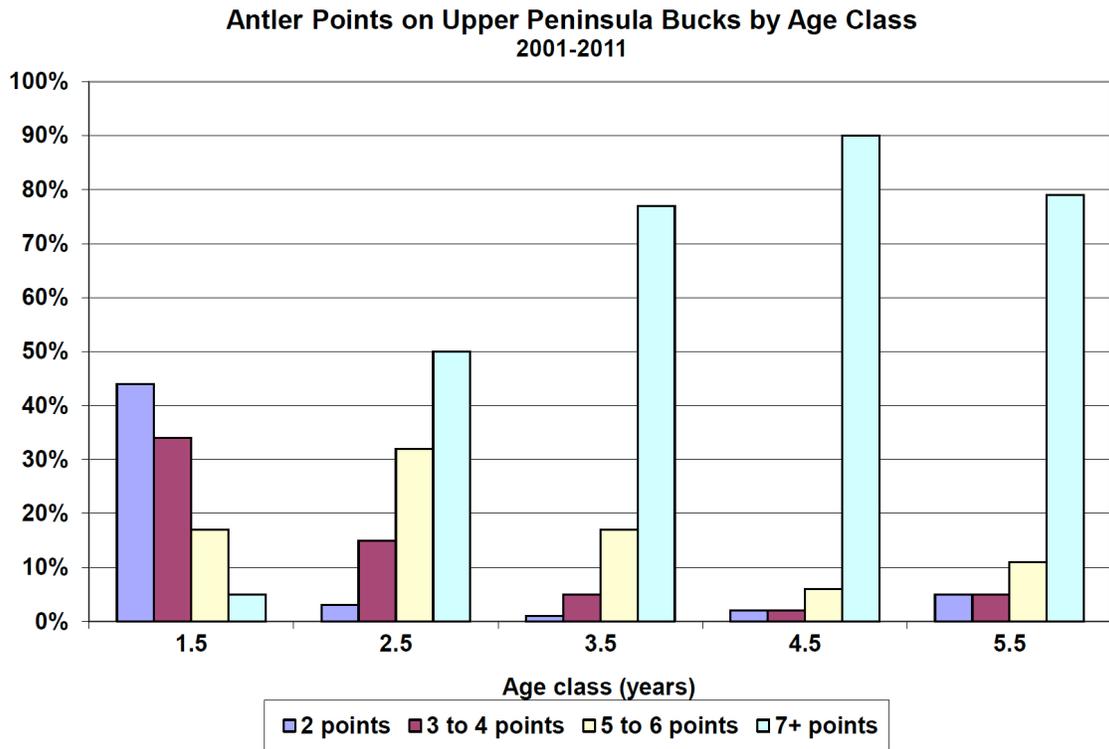


Figure 1.

Effect on Buck Age Structure

<u>Area</u>		<u>Pre-</u>	<u>Post-</u>	<u>Significant?</u>
<u>DMU 122</u>	1.5 yrs	49%	21%	
	2.5 yrs	29%	50%	
	3.5 yrs	16%	27%	
	4.5 yrs	5%	2%	
	5.5 yrs+	<1%	<1%	Yes ¹
<u>DMU 152, 155, 252</u>	1.5 yrs	46%	17%	
	2.5 yrs	31%	55%	
	3.5 yrs	16%	25%	
	4.5 yrs	5%	3%	
	5.5 yrs+	2%	<1%	Yes ¹

(¹p<0.001 ²p<0.001)

..DMU 122 and 152,155,252 ANTLER POINT RESTRICTIONS..

