

Wisconsin crossbow data analysis

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History:

In 2014 Wisconsin offered its first crossbow hunting season for deer. Prior to that, only crossbow hunters that were handicapped or assumed to be incapable of archery hunting by virtue of their age of 65 or older, could hunt an extended deer season, and in those cases they didn't have a license of their own, but hunted on the Wisconsin deer archery license.

Crossbow proponents argued that it wasn't fair that crossbow shooters didn't have an equal opportunity to hunt with their weapon of choice. They also argued that the only general opportunity they had was during the gun season in November when the weather wasn't as enjoyable for them to hunt as it would be earlier in the Fall.

Crossbow promoters also argued that despite several obvious advantages over hand-drawn, hand-held archery equipment, crossbows are no more effective than archery equipment for deer hunting.

Legislators worked with the hunting groups to then establish a crossbow license and hunting season that would be regulated separately from other seasons like the firearms or archery seasons.

Because it was felt that allowing a third buck per hunter would be generally unacceptable, the crossbow license allowed either sex harvest, but if the crossbow hunter also chose to buy an archery license, the hunter could take no more than one buck between the two licenses, and vice-versa.

And finally, because there has been no hard data amassed to measure crossbow effectiveness compared to archery equipment (until now), with the agreement of the other hunting groups, legislators established the crossbow season to run concurrent with the existing archery season – for two years, until the data could be collected and evaluated – and then the Dept. of Natural Resources could adjust subsequent crossbow seasons to insure an equitable allocation of the resource.

The Data:

The data from the 2014 and 2015 deer seasons is now available, and not surprisingly, given crossbows many advantages over all types of archery equipment, crossbows are clearly shown to be much more effective. Crossbow hunting success on bucks in a long season is not only substantially higher than the same measurement of archery hunting, it's also much higher than for firearm hunters in harvesting bucks in the shorter gun season. Historically, Wisconsin has always maintained a good balance between the success percentages on bucks in the longer archery season compared to the success percentage on bucks in the shorter firearms season. Year after year, the chances of shooting a buck during the gun season compared to shooting a buck during the archery season have remained almost identical. Not so with crossbows.

In 2014, the chances of getting a buck with a crossbow were over 40% better than getting one with a bow or a gun. In 2015 crossbow hunters enjoyed over a 31% higher success rate than either gun hunters or bowhunters. The actual DNR numbers and graphs are attached.

There are some that will claim these numbers are not accurate and the success percentages weren't that different. However, to claim this they must add all patron license holders to the crossbow ranks to increase the theoretical number of crossbow hunters in relation to the crossbow harvest. Although it's unlikely that a large number of patrons hunted with crossbows, the fact is, nobody, even within the DNR, knows how many did or didn't. Also, because success percentage is determined by comparing the number of hunters of a given weapon type to the harvest with that weapon type, adding all the patrons to each weapon type further skews the success percentage comparisons. Assuming every patron hunted with both a crossbow, a bow and a gun approximately doubles the number of crossbow hunter numbers, while because there are many more bowhunters and gun hunters, adding all the patrons has far less effect on the archery and gun success percentages.

What we do know is how many hunters bought crossbow licenses, archery licenses and gun licenses, as well as those that bought an archery or crossbow "upgraded" license to hunt with the other weapon. It's safe to assume that because hunters paid for these specific licenses, they generally intended to hunt with them. The only way to get an accurate picture of the differential success percentages would be to eliminate what we don't know – the number of patrons that hunted with each weapon – and the corresponding harvest by patrons, that we do know. A reasonable assumption would be that patrons harvested in roughly the same percentages with similar success as the rest of all deer hunters.

By removing the patron numbers from both sides of the success percentage equation, for all weapon types, we have the most accurate measure of the effectiveness of each weapon type.

Another thing the data shows is that the addition of a crossbow season didn't bring the increase in hunter numbers that crossbow proponents had promised. The numbers shows that most crossbow hunters just switched from archery hunting or gun hunting, undoubtedly because of their much better chance of bagging a buck, while others just quit. The bottom line is that after years of modest increases in total deer hunter numbers, primarily due to the continued popularity of archery hunting, once the crossbow season was established in 2014, total deer hunter numbers dropped sharply. Please note the attached data and graph. Gun hunters in particular noticed the rush to this new weapon and crossbow's exceptional effectiveness on bucks during the rut – before they are able to hunt.

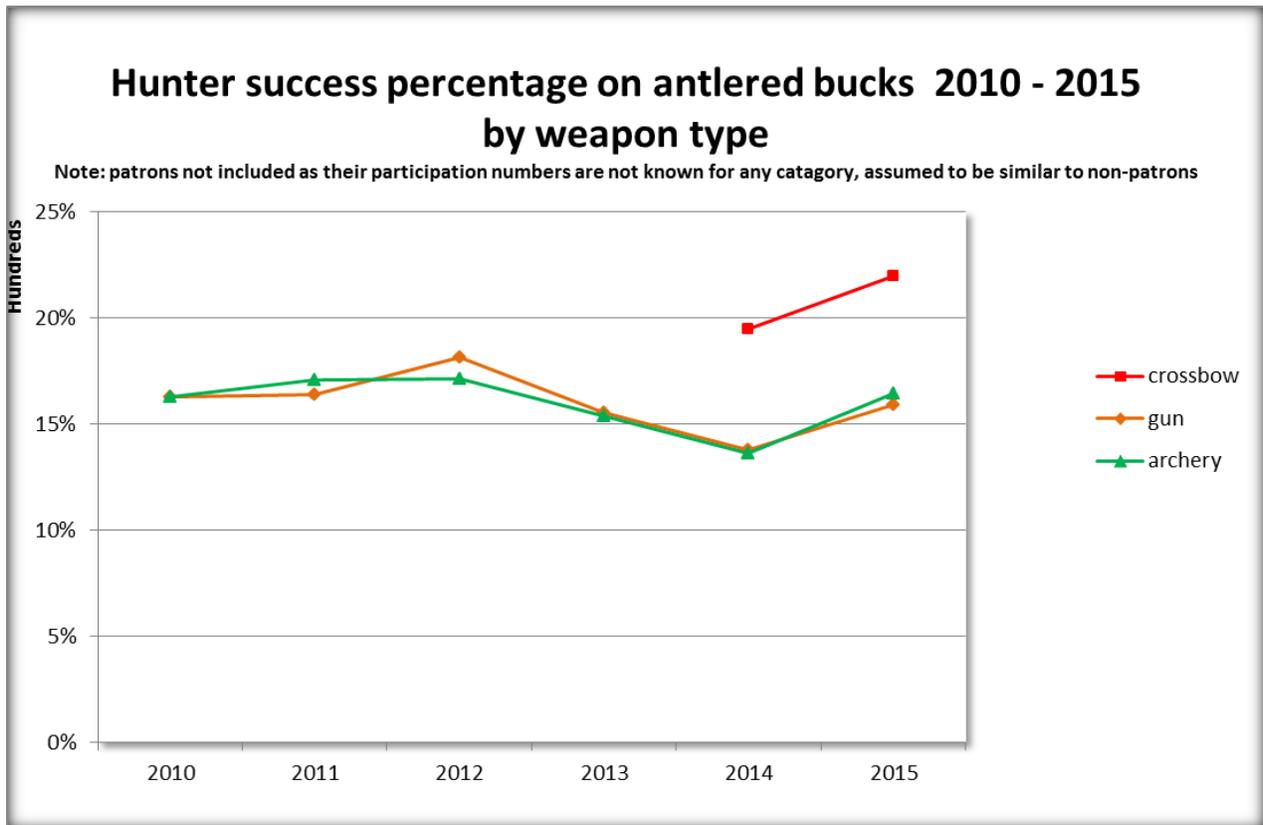
What's next:

Crossbow proponents lobbied long and hard for a season that would give them a fair and equal chance at the resource. And they insisted that the season should be earlier in the Fall when the weather was nicer. They either knowingly or unknowingly exaggerated the ineffectiveness of their weapon to legislators, as well as exaggerating the boost to hunter numbers when we have seen the same drop in overall deer hunter numbers in other states when crossbows were added. Fortunately, legislators provided for much of this and gave the authority to the DNR to correct the inequities after these two years of data collection. The ball is now in the DNR's court. Fortunately, because the gun and archery

seasons were left alone and their harvests remain in balance, the adjustment only needs to be made to the crossbow season to provide an equitable balance for all weapon types. At this point, the most common recommendation, considering the impact of crossbows on bucks during the rut, would be to end the crossbow season before the rut and perhaps resume it for the December late season. As for the handicapped, the DNR has the authority to again allow them the advantage of a longer season, which they effectively lost when all crossbow shooters were given the same advantage.

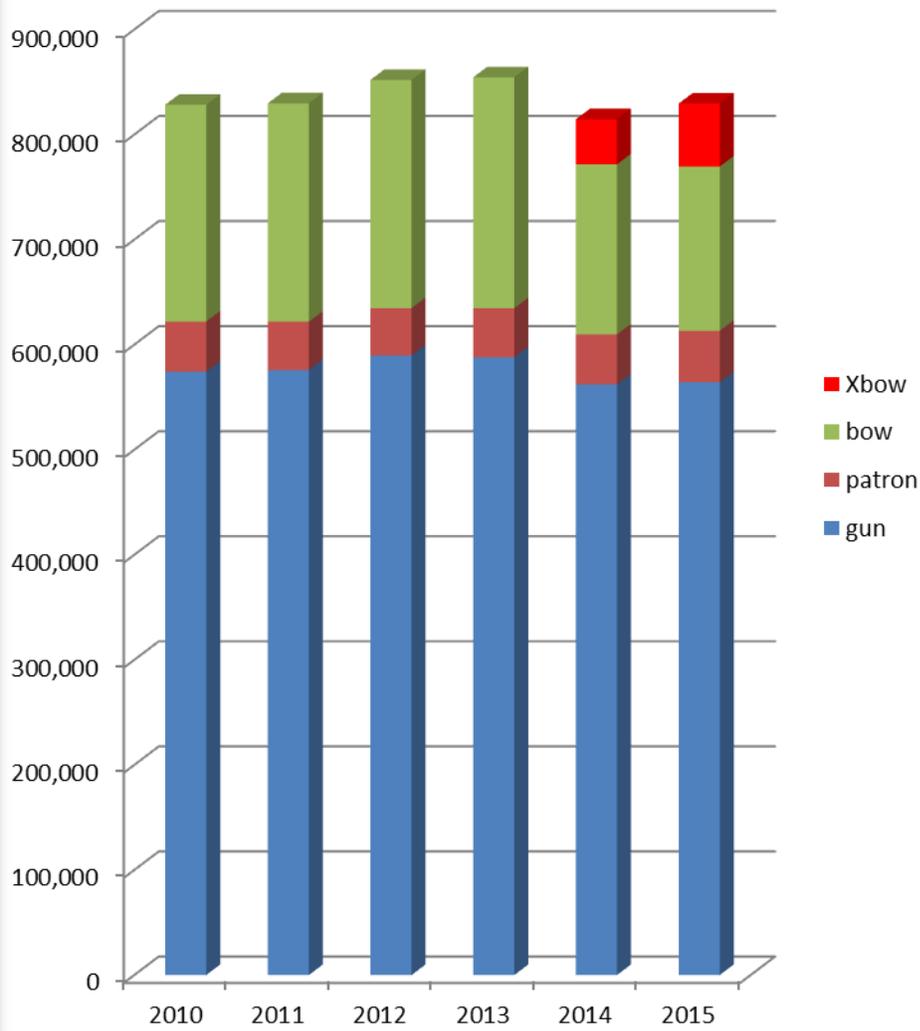
Hopefully, with adjustments that provide equity for all, disgruntled deer hunters will return to the sport.

Hunter Success:



Deer hunter numbers:

Total Deer Hunters 2010 - 2015



The raw numbers:

