

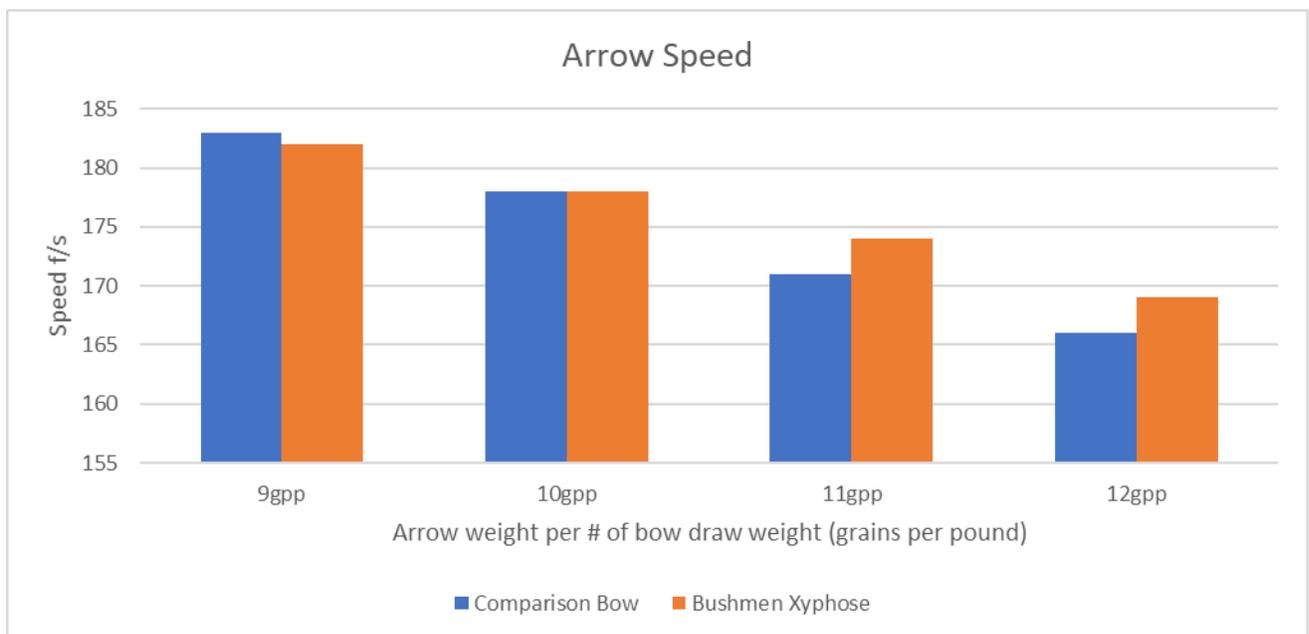
Bushmen Xyphose Testing and Review

For the purposes of this review, I evaluated the Xyphose using three criteria. Performance, shootability and craftsmanship. In some cases, there is data that is used to provide a quantitative basis for the conclusions drawn. In other cases, the evaluation is somewhat qualitative. In addition, for the performance section of the evaluation I compared the Xyphose to another recurve bow that is generally recognized in the industry to be a “performance bow”. Regarding any of the qualitative results I offer in this report, they are offered as my opinion based on my judgement only. With that said in the past 2 years I have owned and shot more than 25 different bows (recurves and longbows), nearly all of them in the \$1200 and up price range. Therefore, I would consider my observations to perhaps be less qualified than a few other archers, but probably more qualified than the average.

Performance:

For the performance portion of the evaluation, I measured speed and cast as the primary considerations. It should be noted that my draw length is 27.75” and at that draw length the Xyphose pulled 48.75# and the comparison performance recurve pulled 45.25#. It is also important to note that the Xyphose is 64” in length and the comparison bow is 58” in length.

For evaluation of speed, I shot arrows of 9.0, 10.0, 11.0 and 12.0 grains of arrow weight per pound of draw for both bows. The graph below illustrates the data collected.



Of interest here is that the Xyphose was as fast as the comparison performance bow at the lower arrow weights but was faster at the higher arrow weights. There are multiple factors here that I believe contribute to the faster speeds at higher arrow weights, but I will not speculate on them here. The point to take from this graph is that if you prefer higher arrow weights (and there are a number of reasons that I do), the advantage goes to Xyphose.

Next I evaluated the arrow cast of both bows. For everyone shooting traditional, whether you shoot gap, string walk or instinctive, the sight picture matters. The arrow cast data is a graphical representation of that sight picture. Recall that the two bows had different draw weights. To overcome this difference, I normalized the data by evaluating each bow by shooting arrows that had the same weight per pound of draw. It has been my experience that two bows of the same model with different draw weights will shoot identical speeds when the grains of arrow weight per pound of draw weight is identical. That is to say that a 45# bow will shoot an arrow of 10.0 grains per pound the same speed as the same bow model at 50# shooting an arrow of 10.0 grains per pound. I have proven this multiple times with bows of various manufacture. If you accept that evidence, then it is perfectly appropriate to compare two different bow models of differing draw weight so long as the grains per pound are identical for both bows.

The graph below illustrates the cast of arrows weighing 11.1g/# for both bows.

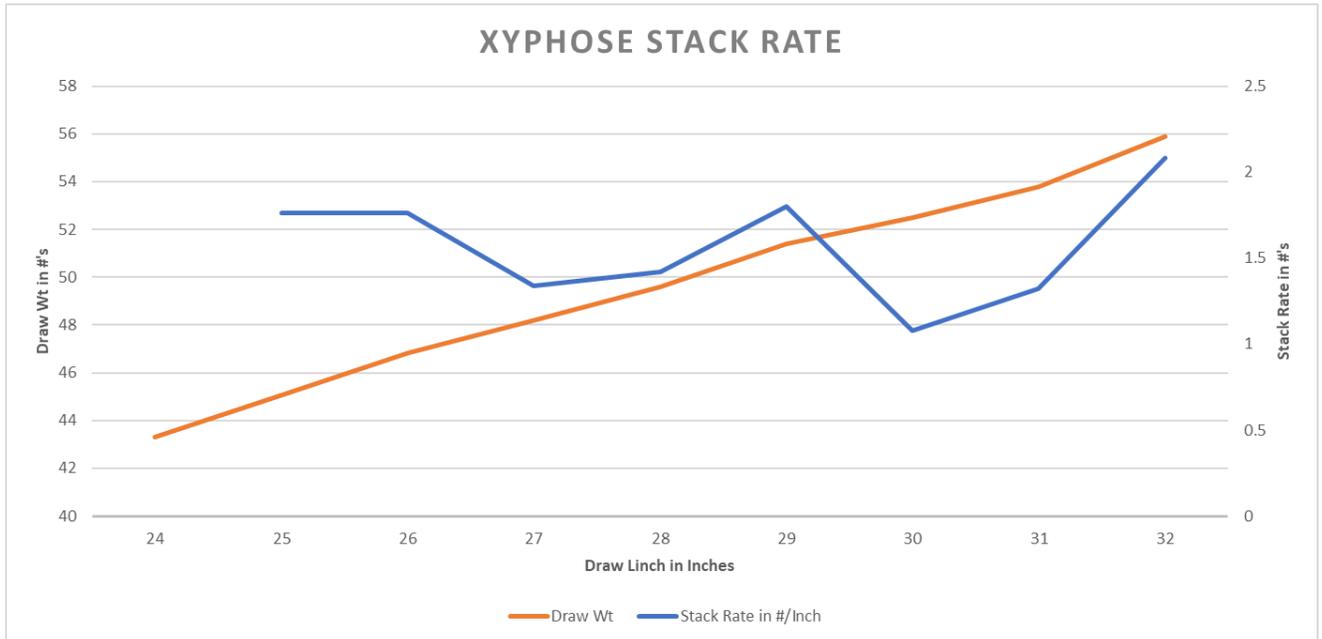


It should be noted that I chose 11.1g/# because I prefer to shoot arrows between 10.5 and 11.5 for all of my bows. It is quite simply the best all around ratio for the shooting and hunting that I do. The important point to take from this graph is that the trajectory of the arrow is flatter for the Xyphose than for the comparison bow. That makes the sight picture more compact at closer ranges which is always a concern for me. I believe there are multiple factors that contribute to this characteristic, but the most obvious is arrow speed. In the previous graph the Xyphose was faster at heavier arrow weights so it makes sense that the cast of the arrow is flatter. I would anticipate that at 9g/# the cast of the two arrows would be close to identical, but I don't shoot that arrow weight so for my personal evaluation that data was not relevant to me.

Shootability:

There are a number of factors that I evaluated when I considered shootability and most of them are qualitative. The qualitative aspects that I considered were noise, hand shock, ease of tune and impact of form change on shot quality. The exception and only quantitative consideration was draw cycle.

The graph below illustrates the draw cycle of the Xyphose from 24" – 32" as well as the stack per inch as the bow is drawn.



The smooth slope of the orange line demonstrates that there is no real stack or increase all the way up to 32". While not applicable to me, many with a 30"+ draw length should find this very appealing. What I found pleasing was after 24" the draw was very smooth and stacked at 1.75#/" on average. This gave the impression that you were shooting a bow several pounds less than the actual.

Regarding noise, I have always preferred longbows as they are inherently quieter than recurves. The Xyphose has some pretty significant hooks on it (see pics at end of the report) and as such I expected some significant twang and vibration. Much to my surprise it was about 50% of what I expected when I shot the bow at the middle of the recommended brace. I had a third party stand equidistant 3' behind me and another shooter who was shooting a longbow at an outdoor range. To his ear, he could not tell the difference between the two bows. After experimenting with the brace height I ended up about 3/8" higher and the noise was reduced by 50%. It is quieter than any other recurve I have shot and quieter than many of the higher end longbows I have shot.

When evaluating hand shock I was very pleasantly surprised. Based on the speed and the aggressive hooks you would expect the bow to be a bit violent on the release. However, the bow is quite dead in the hand. The bow was much more pleasant to shoot than the comparison performance recurve. I believe the primary two factors are design and physical mass. The comparison bow weighed in at 1.33# while the Xyphose weighed in at 2.47#. Of note here is that the Xyphose had equal or less hand shock than many of the high-end, three-piece recurves I have owned that weigh 3.5# or more. It is that fact that also points to the design of the bow being superior in regard to reducing hand shock.

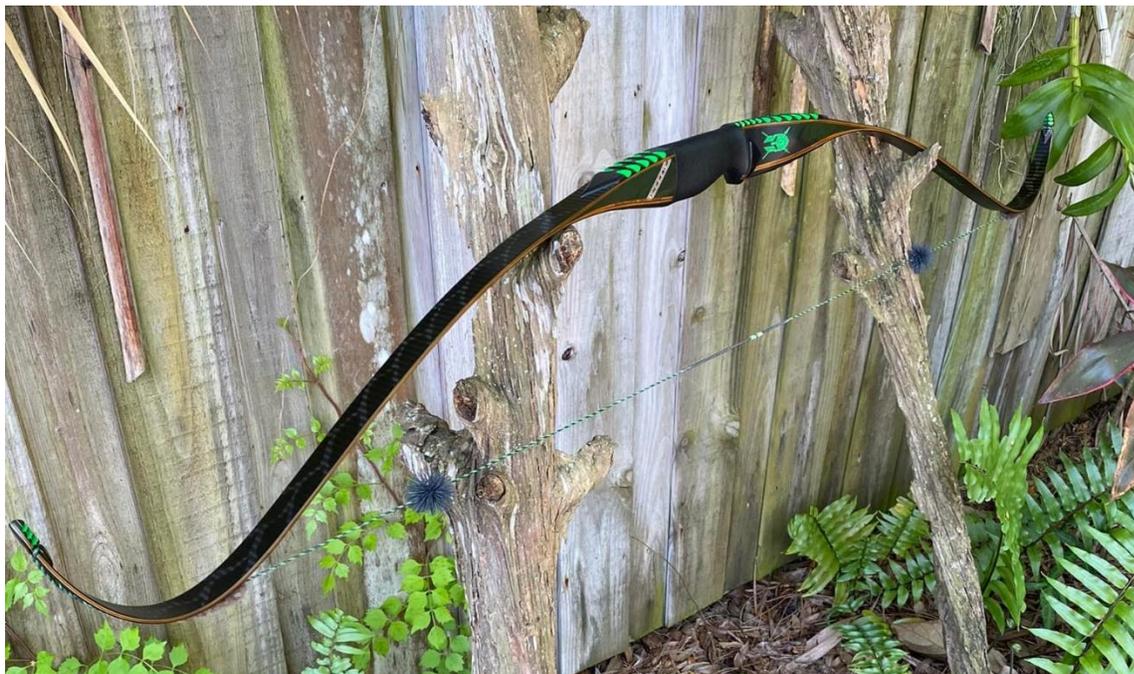
Ease of tune is what really set this bow apart from almost all others for me. I was very surprised at how flexible the bow was in regard to the spine, length and point weight when setting up arrows. I was able to easily tune 500 spine arrows and 400 spine arrows out of the bow. In fact, a 500 spine of the same length and point weight as a 400 spine only showed modest differences in tune. Both spines flew

cleanly when evaluating fletched arrows. 400 spine bare shafts were slightly stiff at 30 yards and 500 spine shafts were slightly weak at 30 yards. It took significant adjustments in point weight (50 grains or more) to have any measurable impact in tuning. I found the bow to be very accepting of arrows of all lengths and weights. I tested bare shaft arrows that I believed would have impacted the target 2-3 feet of center (both weak and stiff) at 40 yards only to find that they were 8-12" off center. This is a feature I can attribute only to bow design. It has been my experience that most performance bows are extremely temperamental in regard to tuning and I usually find this to be the most frustrating characteristic of performance bows. In this case, ease of tuning may very well be my favorite characteristic of this bow.

Just as the Xyphose is accepting of various arrow spines it is also pretty forgiving of form changes. Specifically, hand pressure on the grip and finger pressure on the string. Don't get me wrong, altering either of these pressure points impacted arrow impact at 30 yards, but at about half of the difference seen using the comparative performance recurve.

Craftsmanship:

To anyone that has ever owned or held a Bushmen bow you know there are very few bows on the market that could be considered a peer in regard to beauty and quality. For the particular bow that I have and evaluated, Steve calls it a "special bow" and it certainly is. His bows are truly heirloom quality. Perhaps one of the most underrated benefits of a Bushmen is the nearly infinite number of ways the bow can be customized. If you can dream it, Steve can do it







Overall Conclusions:

For my preferences and tastes, the Xyphose is the all around best combination of bow characteristics that I have ever shot. There are bows that are lighter and there are bows that are heavier, but the Xyphose, for me, is the best compromise. There are bows that may be faster, but I rarely see a bow that will shoot 180f/s at my draw length with an arrow that weighs more than 8.0g/#. Forgiveness, tunability, hand shock and noise just make it a pleasure to shoot. And she ain't bad to look at either.