

Rethinking Stabilizers

Article Courtesy Spot Hogg

Stabilizers..... What are the right kinds? How should it be balanced? How much weight? What about vibration absorption? Do I even need one? Many of us have pondered these questions, but finding an answer is hard with all the different thoughts and theories out there.

Early on, we learned that putting a stabilizer on our bow meant holding steadier. Soon after, we learned that a heavier stabilizer meant holding even steadier. Over time our bows got heavier and heavier. When we were shooting spots it was awesome, we could hold like a rock. But, when we went hunting we stripped off all the extra weight. Packing around a heavy bow all day was bound to make one of our arms longer than the other. (We like the circus, but it doesn't mean we want to be in one).

Amazingly, the steadiness that we had come to enjoy disappeared during hunting season. Our holding patterns tripled in size, and so did our groups (and that was before we even put broadheads on). So, it didn't take us long to put back on that heavy stabilizer, and we learned to use one of our most valuable pieces of hunting equipment, a bow hook. (We attach a bow hook to our hunting belts so we can use it to carry our bows on our hips.)

Recently while hunting, one of us accidentally left his bow hook at camp. And he had to pack his bow all day in his hand. What a mistake. People who pack their bows don't hunt with 9-pound bows. Needless to say he nursed a sore shoulder for two days. But, the thought of hunting without a stabilizer never crossed his mind. When better to hold like a rock than when that big buck steps in front of you.

We get asked all the time, "What can I do to upgrade my equipment? What can I do to help me shoot better?" One of our number one answers is put on a stabilizer. Most hunters either overlook it completely or have a little 4 inch one on that is more for looks than function. Put a 10-12 inch one on and you will add 10 yards to your effective distance. It matters try it!

It is not just the in hunting area that people are missing out. In the competition arena so many have just plain overlooked the value of the right weight distribution. I've heard too many comments like; it's too cumbersome, or all you really need is to put on just enough weight to balance your bow, or you don't need all that junk to shoot well, or stabilizers makes my arm tired.

We were recently talking with some professional archers who were oblivious to how much difference a properly weighted stabilizer could make. We gave them one of our stabilizers to shoot and needless to say they both went out and got similar stabilizers. (Making it that much harder to beat them.) And these are top archers who were missing out.

The search for the best stabilizer started several years back. We looked for information everywhere. There just didn't seem to be a lot of information out there that had any real logic behind it. So, it left us with really no other alternative but to educate ourselves.

In our search for the best stabilizer, we had the option of using about 7 different kinds. Some of which were borrowed from friends. As we tried each stabilizer it became quite obvious which was the best.

What we found was, the ones with all the weight out on the end, were by far superior. Our holding patterns went from large, fast and jittery to small, slow and smooth. Sure, we had the nifty adjustable stabilizers and the ones with noise and vibration dampening abilities. But the ones that helped us hold the steadiest was also the most simple. It held the weight as far away from the hand as possible. The further away from the hand and the more weight we added, the steadier the sight picture became.

However, this caused a new problem, when we would shoot our bow, all that weight out front would cause our bows to dive to the floor when the shot was executed. So some of us added the dreaded V-bars. This allowed us to put heavy weight out at the tip and use the leverage of the V-bar to create a nice balance. This stabilizer set up holds steadier than anything we have ever tried. We found that adding weight to the tip of the stabilizer and V-bars, and distributing the weight as far away from the bow hand as possible, really helps us hold steadier and shoot better.

To further understand this we had to look to the laws of physics and the laws of inertia, in particular. The laws of inertia state that things at rest tend to stay at rest, and with more mass at rest it takes more force to get it moving. This explains why more weight in the stabilizer made the bow steadier to hold and shoot. (It just plain takes more force to get it bouncing around.) The laws of physics state that the less leverage you have in a system, the more force is required to move the weight. Because the shooter is the fulcrum (pivot point) for the stabilizer this means that there is less leverage, as the stabilizer gets longer. This explains why, when the weight is farther away it takes more force to get it to bounce around.

So it does make sense, if the stabilizer is long enough and the weight is heavy enough, the force required to move it exceeds the force you are applying and it won't move. And if the stabilizer is RIGIDLY attached to the bow, then the bow won't be moving either, resulting in a very steady bow hand and sight picture.

The problem is that stabilizers of today have really focused a lot on noise and vibration reduction. But that's really not the most important function. We can deal with a little vibration if we can hold steadier on the target and during the shot execution. Wouldn't you? Besides, most of the bows nowadays are a lot smoother and have more built-in vibration damping technology than they used to. So the need for the noise and vibration reduction stabilizers becomes less critical. These vibration reduction stabilizers generally are not rigid, causing you to lose some of the stabilizing effect while it enhances noise and vibration reduction. They are not always balanced the way they should be either. The weight is not all at the end. So if you do need these reducing stabilizers for your bow, try to find some with the dampening devices at the far end of your stabilizer. (They will do a better job of stabilization.)