

## **Fixed Blade Broadheads**

### **Why don't my broadheads hit where my field points do?**

*Adapted from an Article Courtesy of Spot-Hogg*

As hunting season approaches, our attention turns from target shooting to hunting. We need to decide if we are going to use the same setup as last year or make some changes. It's time to replace field points with broadheads. For us, this means fixed blade broadheads, its illegal to mechanical broadheads in Washington.

You can get as much as a two-foot difference (at 20 yds) between the field points and the broadheads impact points. The broadheads themselves can vary from arrow to arrow such that it is sometimes difficult to have six arrows that are able to hit a paper plate at 20 yds.

Probably the biggest factor affecting broadhead flight is how the arrow is being delivered by the bow. Different bows can shoot the same broadhead tipped arrow and get different results. Even though the arrows are straight and the broadheads are straight with the shaft, the bow with the straightest nock travel always groups better.

A bow with straight up and down nock travel will probably still have left and right nock travel, which will affect the way a broadhead is delivered. Because the blades act like miniature wings, any variation from a true straight delivery of the arrow tends to cause the broadhead to steer away from a straight path, which causes the blades to catch even more air which in turn causes the arrow to steer even farther from the desired straight path.

We can minimize the effect the blades have on the arrow by causing the arrow to spin as it flies. Having large helical fletches on the arrows does a wonderful job of overcoming the steering effects of the blades on the broadhead, after it leaves the bow. The bottom line is, no matter what bow you have the arrow is probably not being delivered "perfectly straight". This means that before the arrow exits the bow, the blades of the broadhead are catching air and steering the arrow before the fletch can be of any help. The steering effect of the broadheads causes the arrows to be delivered differently than arrows with field points.

Often times because of the broadhead steering effect, adjustments in the location of the arrowrest can offset the steering effects and result in better grouping due to an increase in forgiveness. (This is one reason we like micro-adjustable arrow-rests so much.) Bows that store a lot of energy generally have a lot of left and right nock travel, and using an arrowrest that will provide side support can make a world of difference. Otherwise, a fall-away rest is hard to beat.

Sometimes just a small change in how the broadhead is oriented can be used to offset variations in arrow straightness and broadhead alignment. By tweaking the orientation of the broadheads it is possible to bring a paper plate size grouping at 60 yards down to a grouping the size of a softball. Be sure the insert is in straight such that the broadhead is perfectly aligned with the arrow. It's easy with aluminum arrows, tougher with carbon.

Because heat melt glue is so handy, we did a big no-no and tried it on inserts with carbon arrows. You have to screw a field point into the insert and then heat up the field point just until the glue melts. Then with the glue melted, the insert is pushed into the end of the shaft and aligned perfectly. Be careful not to melt the end of the shaft. It also helps to scuff up the inside

of the carbon shaft first and then clean with a q-tip soaked in acetone or alcohol so the inserts stay in. Also, don't heat up a broadhead because the torch can ruin the blades.