Proper Nocks

Your string and nocks must work together or grouping problems will result. What follows is a number of bow string factors you should be checking to ensure optimum performance from your bow setup no matter if it`s for hunting, 3-D, or field shooting.

"You usually get erratic high arrows or groups spread out vertically with loose nocks."

For starters, push a nock onto your string and check how tight it fits. Can you slide it up and down the string fairly easily or does it fit so tight that you can`t move it. Proper fit can also be tested by pulling the arrow off of the string with just your index finger and thumb. A slight tug should "pop" the nock off the string. If you hold the bow so the string is horizontal and the arrow falls off by its own weight, then the nock fit is too loose.

If the nocks are too tight to move, your groups are probably not what they should be. The grouping I usually get with too tight nocks is a horizontal spread that can be a foot wide at sixty yards. Check the tabs or "ears" of the nock to see if they stay spread apart after the nock is snapped onto the string (see Fig. 1). If so, the fit is too tight.

If your nocks fit too loosely, they may slide down the string as the string is released. I usually get erratic high arrows or groups spread out vertically with loose nocks. You can easily overlook this little problem because a high nocking point and a weak launcher can also cause vertical grouping. Check all of these items to be sure.

"When nocks are properly fit on a string, the nock should look much like it does off a string. If the string is too large or the nock too small, you may see the "ears" of the nock spread when on the string."

In either case, one of two remedies must be employed. If your nocks fit too tightly you must either reduce the diameter of the bowstring or increase the throat size of your nocks. If you`re using the Easton "G" nock series you can move from the .088" throat size (Small Groove) to the .098" size (Large Groove) and maybe have the proper fit. This may be enough, but if not or if you are already using the larger size, you must reduce your string diameter.

Decreasing the number of strands of string material in your string is a good way to get the fit you need. Count the number of strands in your current string, there are probably 18 or 20. Build a new string with two fewer strands and the same serving size, typically #18 monofilament. Testing someone else`s string is a good idea at this point because it may tell you the exact number of strands you need.

Be sure to use the same string material as the original since each type of material has its own strand diameter. The various "Dyneema" products like Fast Flight by Brownell and Dynaflight by BCY Fibers have smaller diameters, so I use 16 strands of these materials with #18 center serving to establish a good fit for my Small Groove Easton "G" nocks; 18 strands fit the Easton Super Nocks on my 2413 XX75 arrows.

The BCY 450 PLUS material is a little fatter than the Dyneema products, so use fewer strands.

Twelve strands fit the .088" Easton "G" nocks nicely while 14 fit the Super Nocks well. An alternative to using fewer strands in your string is to use smaller diameter center serving material. If your current string has #21 monofilament serving then switch to #18 monofilament. You can go as low as #15 if you want, but durability becomes a factor with small diameter serving materials. Going up in serving size is good when your nocks fit too loosely and you don`t want to make a new string. You can even add several extra strands of bowstring material along just the center section of your string before you serve it in order to increase string diameter.

Always check the number of strands in any new string before you buy it. Then check the nock fit after it`s installed. If the fit is not correct, make it right or you`ll spend some frustrating hours trying to shoot groups and failing. Do the same when you switch brands or styles of nocks. Remember that the throat size must always match the string size if you want good groups with less tuning.