

# Arrow Building in the Off Season

## Don't Let the Season Sneak Up on You

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The hunting seasons have ended and you have stored away all of your equipment. With spring setting in and not a lot to do for the next few months, bowhunters have many things they can do to prepare for next season. Of course, scouting, equipment maintenance, and shooting practice are all important if you expect success in the fall, but another way to prepare is by building and repairing your own arrows.

### Equipment

Arrow building does not require much equipment and is a way you can add your own touch to the hunt. I find it very satisfying to take a deer with an arrow that I put together myself. Besides the satisfaction, you know the job is done right.

To get started you will first need to purchase a few items. Perhaps the most important piece of equipment is a good fletching jig. Though there are many fine manufacturers available, I prefer one made by Bitzenberger. The most important thing is to find a jig that is solidly built. You'll also need to purchase an arrow cutoff saw, or have your local pro shop cut your shafts when you purchase them. Just make sure you take along an old shaft or have the shop measure you for the correct length. You will also need to buy vanes and glue. I personally shoot 4" Bohning vanes and use Bohning glue. Although these are my personal favorites, you should use products you are familiar with, and that work best for you.

### Shaft and Vane Preparation

The first step in fletching is to clean the shaft. On aluminum shafts, I like to scrub them with Comet or a similar cleanser. Rinse them well and let them air dry standing on end. Be sure to not touch the shaft near the fletching area after washing as your hands can leave oils on the shaft that will affect the adhesive. If you do touch the shaft, it is best to rewash it. On carbon shafts, I prefer to wipe them down with rubbing alcohol and allow them to air dry.



The next step is to set up your jig for the fletching angle and nock position you use. Most jigs can be used to apply vanes straight, or at offsets and left or right helical. Most times different clamps are used for each variation. Believe it or not, it is best to read the instructions that came with your particular jig!

Once the shaft is dry and you have your jig set, you need to prep the vane or feather. With feathers, I simply place them in the clamp and glue them on. Vanes, on the other hand, require another step. Once placed in the clamp, I prefer to clean the base of the vane with denatured alcohol. Denatured alcohol can be hazardous to work with so be careful when using it. I prefer to pour it in a small bottle and

**A complete fletching kit may be the best way to acquire all of the tools you need at one time. They typically retail for around \$75.**

refill as needed. Follow all precautions on the container. Never smoke or use it near an open flame. The best method I've found for applying it is to use a clean cotton swab (Q-Tip). Simply swipe a small amount across the base of the vane and allow to dry. When using smaller vanes, such as 1.5" to 3", I prefer to scuff the base with an emery board or fingernail file before wiping with the alcohol, as this seems to help with adhesion. Always be sure to prep the entire surface of the base.

## Applying Vanes and Inserts

After the vane is prepped, it is time to apply the glue. I've found Bohning's Fletch-Tite to work with all shaft materials. The important thing is to coat the entire base with a steady bead of adhesive. You don't need a lot, just a fine, steady bead. Once the glue is applied, attach the vane to the shaft and do not disturb it for at least 10 minutes. This is the time to be patient. If you are fortunate enough to own more than one jig, you can move on to another shaft, or you can begin to prep other shafts or vanes. I simply set a kitchen timer and

return to install the second vane when the alarm dings. Remember, this is not a race but something to bring satisfaction and help pass time during the off season.

Once the vane is set, carefully remove the clamp, rotate the jig, and repeat the installation process for the other vanes. Once the vanes are installed, remove the arrow from the jig and begin with the next in the same sequence. I also like to apply a small drop of glue to the front and rear of each vane once the arrow is removed from the jig. I feel this helps secure it to the shaft in the event it passes through a target.

Once the arrow is fletched, you need to install the insert at the front of the arrow. For aluminum arrows, I prefer to use hot melt glue. Simply heat the insert with a propane torch while holding with small pliers. You can also purchase an insert tool that you screw the insert onto and then unscrew it after the insert is placed into the shaft. After the insert is heated, which should only take seconds, simply roll it on the hot glue stick and place into the end of the shaft. Make sure it seats firmly and square. Place the arrow aside to cool. Take care as the end of the shaft may be hot. After you complete the arrow, you need to place it on your rest and be sure the nock is rotated to provide vane-to-rest clearance.

## Conclusion

These are the very basic instructions needed to build your own arrows. After some experience, you can experiment more and decide what works for you. I always test my completed arrows by pulling on the vanes after they have dried for 24 hours. You should not be able to pull them free. In fact, you should actually tear them in half before they pull free if they are attached correctly. Remember, follow the instructions that come with your jig and purchase quality products. The arrow is not the place to try to save a few dollars.

You can also add a personal touch to your arrows by cresting them, but this would be better left to a future article as it is another skill and process in itself. There are also arrow wraps available, though I have yet to try these. Many people like to wrap the end of their arrows in white so that they show up better in the woods.

I hope you give arrow building a try this year. I have found it to be an enjoyable and rewarding pastime. At least when the shot presents itself this year, you'll have the confidence in knowing the arrow you built will perform flawlessly while adding a touch of personal satisfaction to your setup.



Nick Pinizzotto

**Building your own arrows allows you to choose the various components you like, while saving a few bucks on set-up fees charged by stores. You can also customize your arrows in a way that makes them uniquely your own.**