



Wyke Archers

of Hull and the East Riding of Yorkshire

Club Help Guides and Documents

Traditional Wooden Arrows – How to make your own.

Making wooden arrows is relatively easy once you get going, and each set you will often find better than the last as you learn different techniques, and preferences.

Buying supplies: First stage of this is deciding what you want your arrows for, indoors/outdoors, close or long range. This will help you narrow down what you need in terms of pile weight and fletching size. (Larger fletchings for indoors and closer range, smaller fletchings for outdoors and longer ranges).

Woods: What you would like is down to your opinion and use, Port Orford Cedar (POC) is common but others prefer pine, or silica spruce. The general rule of thumb is to get shafts that are spined 10lb less than your (English) longbow weight. So if you have a 40lb bow, you should buy 30lb spined shafts.

Piles (points): Steel/Brass, Bullet/Field, the choice really is yours each has pros and cons e.g. Steel is more hard wearing than brass, but still rust if gets wet and not dried and oiled properly after shoots. You'll also have to choice between tapered or parallel. Personally I prefer tapered piles as I find them easier and quicker to fit, and easier to make sure they are centre. Though others prefer parallel.

Once you have your bits bought it's only a question of putting things together. Personally I tend to weight shafts and piles before putting them together and try and match up so that each arrow is roughly the same weight.

Stage 1:

I start with putting the pile on first, prep the wood using either a tapering or parallel fitting tool and push the pile on, gluing with a 2 part epoxy resin, slow drying works best. Araldite is good and easy to come by, put glue down one side of the inside of the pile and push hard onto the shaft, turn the shaft whilst pushing to allow the glue to spread all around the inside of the pile and push out any air. Once this is done wipe any excess glue and leave to dry. Keep an eye on them, if air is trapped it can push the pile off the wood (which is a problem I've found more with parallel tips), also more glue can run out and needs wiping off. To make sure you get a really good fit, get a scrap bit of wood and place the tip against it. Hold the shaft right behind the head and force point down on to the wood, this shouldn't damage the point and should allow you to get a good fit.

Stage 2:

Once dry I spin the pointed shafts on my hand to check for straightness. If straight it is put to one side. If bent I take it to the kitchen and using steam from a boiling pan of water through a funnel onto the bent bit of the shaft I can then straighten the shaft out once more.

Stage 3:

Measuring each shaft in turn I cut them down to size (it doesn't matter if you do this before stage 2, but if you do just check to see if it's still the same length it may have gained a few mm from being straightened). Once cut to size, taper the back end and glue on the nock (I use super glue for this) making sure that the groove in the nock is at a right angle to the grain of the shaft.

Stage 4:

It's now time to treat the wood. I use Danish oil for this other use varnish. I apply the oil with a paint brush and then rub down with a cloth (one of those yellow polishing cloths); I do it again and then allow to fully dry. Repeat once more to give a quality finish.

Stage 5:

I tend to put on the fletchings at this point, it's best to use a fletching jig to make sure they are in the right position; there are lots of opinions on what is a good one to use. Also BEFORE gluing on your fletchings make sure they are all from the same wing. If it doesn't say on the packet, lay them out in front of you, you will notice they have a slight curve and like a white strip at the bottom. To know they are from the same side the white strip and curves should all be the same, if one isn't then it's likely to be from the other side to the rest.





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I glue my fletchings on with fletching glue, though again there are many opinions about what glue to use. I apply the glue along the bottom of the fletching and stick it on using the jig allowing 10 – 20 mins between fletchings, glue depending. Once done, rotate the arrow and repeat until you have the three fletchings on. Some people tend to put an extra bit of glue on the fletching tip to help against the sharp leading point. Personally I whip mine on, firstly it protects the fingers from the sharp point, and also makes sure your fletchings aren't going to go anywhere (my whipping has turned aside compound arrows stopping the shaft being damaged) and also gives it the medieval look.

You can buy whipping thread from archery shops, or anywhere that sells either linen or silk thread, your choice. There are videos on YouTube on whipping for guidance. Personally I put down a layer of PVA on the wood, lie the end of the thread straight out from the tip of the cock feather and holding it in place wind it around the shaft and tip and then carefully through each fletching in steady stages. Once at the top end of the fletching I just wrap it and glue it. You can try trapping it under the wound thread using a needle but I generally don't. Once the glue has dried apply a layer of clear (or your own colour preference) nail varnish on at either end to seal and water proof. You can also use wax for this as well.

Stage 6: Cresting

This is an optional choice, though if you go to competitions it's good to have to help recognise your arrows. Also some competitions require your initials and that the arrows are numbered. I tend to draw/paint a symbol on mine, with either water based acrylic, or a sharpie pen, and after giving it time to dry go over it with another coat of oil/varnish. Note some varnishes/oils might smudge your design so it's good to test them on an off cut before you mess your arrows up. Often cresting is just bands of the same colours around the shaft, but it's really up to you, but I would suggest you keep any cresting more towards the fletching end rather than the point end for two reasons;

- 1) Some judges get a bit picky about cresting towards the point as it could be used as an 'unfair' aiming aid.
- 2) They'll wear off faster towards the point through hitting the straw/foam/ground.

Stage 7: Treatment and upkeep

Though optional it's again a good idea to give your arrows a rub down occasionally with beeswax, or a polish containing beeswax. It helps keep dirt out and helps stop things sticking to it.