Want to make your own warbow?

Making a warbow is actually something everyone with a fair portion of patience and basic skills at using tools are able to do on their own. Still, some guidance make the process a lot easier. This is a "warbow- ABC", that wil help you on your way to make your own warbow.

MORE WILL COME, WORKING ON THE TEXT :)

Seasoning the wood:

Cutting the wood durig winter is a good idea, as it makes the drying process easier. Reducing the wood closer to bow-size is also a good idea, as it reduce the chances of the wood to devellop cracks.

What wood to use:

There are several types of wood that will make fine warbows. This is a short list of the woods we use for self wood warbows:

YEW:

Yew is the best known wood for this type of bows. Yew has a natural "lamination". The dark heartwood is good at handling compression, and the light coloured sapwood is good at handling tension. The quality of yew vary from extremely good to rather average. What you want is a piece with as few knots and pins as possible, and with as high as possible pecentage of resin. Often that means you want to find wood with close rings.

Good yew is hard to come by, and poisenous to work. If you're about to make your first warbow, choose another wood until you have made a few successful bows from easier accessable woods.

WYTCH ELM:

Wytch elm is a very good choice for warbows. It takes both tension and compression well, and with a good piece of it you can make bows up to the 200#-league. You can find wytch elm with dark heartwood, but it's not necessary to have a combination of heartwood/sapwood, like it is with yew. Still it makes a fine contrast and looks good to have the bow made with a heartwood belly.The growth rings should favor the latewood over the early wood by as much as possible. If you want to heat treat the belly, w. elm increase it's ability to make good warbows even further.

Good wytch elm is easier to find than good yew, (at least in southern scandinavia), and also better for your health to work with.

LABURNUM:

Laburnum makes very fine warbows. Like yew, it has a dark heartwood and light sapwood. The sapwood is not necessary though, but it makes the bow look good. Laburnum is rock hard to work, and require good tools. It can match yew in quality, and in being poisenous. Look for the same growth rings as for wytch elm.

Good laburnum is fairly hard to come by, as it like to grow all gnarly and twisted. Might be easier to come by further south in Europe.

ASH:

Ash make fine warbows. The quality of ash vary from excellent to poor, but our local ash has a good average SG (specific gravity-density), and are able to handle warbows at least up to 150#. Ash do like to soak humidity though, so a good idea is to use a finish on ash bows as close to waterproof as possible. To make the really heavy weights from ash, heat treating the belly is almost required. It makes fine warbows up to 120# even without that, but it's a good idea to toast the belly no matter what weight you're aiming for. Look for the same growth rings as for w. elm. Ash is a good wood to work with.

LILAC:

Lilac is a common bush/ tree in gardens and parks. It might be hard to come by straight and large enough pieces though, but when you have one it will make an excellent warbow.

OSAGE ORANGE:

Osage is not a native tree in our part of the world, but imported from the states or Hungary. Osage is, like laburnum, a wood where you don't need the sapwood. It just looks good to keep it on. Osage is a very hard and dense wood, able to handle heavy bows over 200# if wanted. The best osage has growth rings like the best w. elm.

For some reason, osage doesn't like the long, narrow warbow design before you heat treat the belly. Once you do though, it's a really excellent wood for the heavy weights.

HAZEL:

We have made a few warbows from hazel, and without heat treating it's not a good choice. Once heat treated though, it makes fine warbows at least up to 130#. Hazel bows that have a heat treated belly makes really fast bows, and look really mean. They need to be made a bit larger than the other woods to end up with the same poundage, and a 120# hazel bow looks about the same as a 220# wytch elm bow.

Shaping of the bow

RECOMMENDED TOOLS:

If you're using hand tools, we recommend an axe, a draw knife, rasps and files (rough to fine), a good knife, a scraper, and different grained sand paper. Make sure all your tools are sharp, as working with bad tools kill some of the fun.

If you have access to a band saw, some like to use that. Be careful though, as it's easy to end up with a weak spot making your bow a 50#'er instead of a warbow. With some practice a good axe and a draw knife do the same job in almost the same time.

THE PROCESS:

Making the bow is actually easy enough. Start by rough shaping the bow with the axe and the draw knife, then move on to more safe and accurate tools as you approach the final shape. Drawing measurements and profiles of the bow on the wood is a good idea.

Here are some measurements from some of our bows: (WILL COME SOON, NEED TO MEASURE THEM :))

ROUGH SHAPING:

(Axe, draw knife, rasps and files, scraper)

If you have yew, wytch elm, lilac, osage, laburnum or good ash theese measurements might be a good starting point.

IMPORTANT:

You probably need to adjust the tiller from theese measurements, both to make the limb facing down a bit heavier than the one facing up, and to make adjustments to your stave. Often you can also take off more woods on the outer 20-40cm to make the tiller perfect- but it's different from stave to stave what you need to do after this rough shaping.

For Hazel and other softer woods you need more width.

Theese measurements have 10cm between each measure point. The quality of the wood can give you bows that end up lighter or heavier than this, but on average theese measurements should be correct. Remember that the last measure point in theese tables are 10cm from the nock. The nock area should get down to +/- 12/12mm on bows up to 130 lb, and no more than 16/16mm are needed for the heaviest ones up to 200#. Remember the importance of horn nocks (or at least horn overlays) on such heavy bows.

90-120lb bow:

17	22	25	27	29	30	31	32	33	**34**	33	32	31	30	29	27	25	22	17
15	18	21	23	25	27	28	29	30	**31**	30	29	28	27	25	23	21	18	15

100-130lb bow

18	23	26	28	30	31	32	33	34	**35**	34	33	32	31	30	28	26	23	18
16	19	22	24	26	28	29	30	31	**32**	31	30	29	28	26	24	22	19	16

110-140lb bow

18	23	27	29	31	32	33	34	35	**36**	35	34	33	32	31	29	27	23	18
17	20	23	25	27	29	30	31	32	**33**	32	31	30	29	27	25	23	20	17

130- 160lb bow

20	24	28	31	33	34	35	36	37	**38**	37	36	35	34	33	31	28	24	20
19	22	25	27	29	31	32	33	34	**35**	34	33	32	31	29	27	25	22	19

150+ lb bow

21	25	29	32	34	36	37	38	39	**40**	39	38	37	36	34	32	29	25	21
20	23	26	28	30	32	33	34	35	**36**	35	34	33	32	30	28	26	23	20

Once the bowstave are roughed out to theese dimensions, round the edges on the back and "rough smooth" the areas you have worked.

TILLERING:

Tillering the bow means making a good bend to the bow, without some areas doing all of the work. An even tiller is required on theese bows that are meant for such a long draw as 32". If you use the measurements above, you are on a good way to a good tiller, but you probably need to adjust it before it's perfect. You need to adjust it if there are areas that are too stiff. On warbows I like the tiller to be circular, meaning the bow looks like a part of a full circle at full draw.

FINISHING:

Once you are happy with the tiller, you are ready to make a smooth finish to your bow. Start using a scraper or a rough sand paper, then finer sand paper until you have a smooth surface. Once the bow is finished, add a couple of layers finishing oil then wax it two-three times.