GRAYVN TRADITIONAL BOWS

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MAY YOUR ARROW ALWAYS FIND THE MARK!

Bow Building Supplies Warranty
Bow Building supplies have NO warranty once you start work on the bow or use a tool on the bow.

Return Policy	Please contact store where you purchased your bow.

Floor Tillered Stave Instructions

Materials needed. Small chainsaw file, sandpaper, finish, stain if you prefer a darker color. Polyurethane works well. Tillering string (simple cord with a loop tied on ends.) Make sure it's the same length as the bow.

The new bow stave is not ready to be drawn back yet. Take a chainsaw file and shape, the string grooves, depth 1/8" deep or the same depth as your string is thick. Put the stave on the tillering stick. See illustration A. make sure it is square. In relation to the bow handle the tips should be bending about 5 inches. Illustration B shows what a hinge and a stiff area looks like on bow limbs. The goal is to get both limbs to bend evenly without any stiff spots or hinges thus spreading out the compression and tension in the bow. We will accomplish this in three separate steps in proper order. A hinge is an area in a bow limb that bends more than the rest of the limb. A stiff spot is where the bow limb doesn't bend enough and sort of looks flat. See illustration B. Both limbs should bend symmetrically without any stiff areas or hinges.

Step 1

Using the scraper, scrape wood off of any areas that are stiffer than the rest of the limbs. Start with the stiffer limb and then go to the looser limb (limb that bends the most.) get rid of stiff spots and hinges. Do not worry about even limbs yet. Just get rid of stiff areas and hinges first. Rule of thumb is, do not remove any wood from a hinge. Remove wood on a stiff spot so that it matches the arc of the rest of the limb.

Step 2

Now that all stiff spots and hinges are gone in both limbs identify the stiffest limb, which is the limb that bends the least. Scrape wood off of it all the way from the handle area to the tips about 30 times. Repeat until both limbs are even. Be sure to stretch the bow from 5" to about 15" repeatedly to begin stretching out the fibers. Once the bow limbs are bending evenly it's time for step 3.

Step 3

Now that both limbs are bending evenly with no stiff spots or hinges it is time to reduce the draw weight to whatever draw weight and length you need. Stretch the bow back to about 18' several times to stretch fibers. Every time wood is removed its best to exercise the bow by bending it back and forth. Now that both limbs are even and the bow is being exercised to about 18 inches it is time to shorten the tillering string to about 5 inches shorter than the bow is from tip to tip. String the bow. Using the tillering string measure, the bow weight Use a bathroom scale. See illustration C

When measuring the bow go 10 pounds past the draw weight you want. For instance, if you want a 40 pound bow, pull the bow to 50 pounds on the scale. Than after each measurement keep scraping wood off evenly on both limbs and measuring the weight until you achieve the draw weight you want at the specific draw length you prefer. For instance, if your preference is 50 pounds at 28", follow 60 pounds back to 28". Then Slowly take the weight down to 50-55 pounds. This way when you sand the bow it will lose a tad bit more and be close to what you want. Once you get to the draw weight you want shape the handle. See illustration D

It is time to sand the bow with 80 grit. Sand evenly on each limb keeping an eye on the limbs to make sure they stay even. Now apply the color stain you like and then the finish on top of the stain.

Steps to final sand and finish a floor tillered stave

1. Start with a heavy grit sandpaper or rasp and sand down the rough edges of the handle and arrow rest. 80 Grit
2. Sand the entire bow with 120 or 150 Grit including string grooves
3. Raise the grain by running a wet rag over the entire bow and let dry
4. Sand the entire bow with 220 Grit including string grooves
5. Sand the entire bow with 320 Grit including string grooves
6. Wipe of any sawdust
7. (Optional) Stain the bow with desired stain
8. Seal bow with bow with your choice of sealer: polyurethane, Tru-Oil, varnish, etc.
9. In between coats you can lightly sand with 320 grit or 0000 steel wool

Safety

This is a weapon and is dangerous. Do not, under any circumstance, aim at other people or fire in a direction where people are or may be present. Make sure the area is clear before releasing an arrow and make sure to check and comply with all applicable laws and ordinances in your local area.

Illustrations