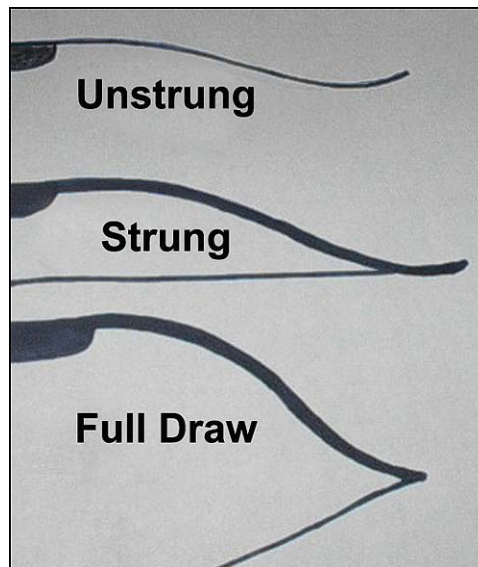


# 3Rivers Archery

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## Tips and Hints for tillering the deflex-reflex bamboo backed hickory stave.

This information is offered as a basic; "hints and helpful tips" sheet only and is not intended as a complete tillering instructional. The drawings are a rough guide to show you how the bow profile should look during the different stages of bending. Your results may vary and we assume no responsibility for your project or your results.



Refer to the drawing, study the three positions carefully and, as you tiller, strive to replicate the bend of the limbs for best results. (Disregard the riser to limb transition and concentrate only on the shape of the limbs as they bend.)

Notice that the first half of the limb is "deflexed" and bends back toward the archer while the second half of the limb is "reflexed" and bends away from the archer, thus making the tillering a two-part job.

The first part of the tillering process should focus on the inner limbs, where the limbs bend back toward the archer. Make sure there are no stiff spots or "hinges" in this area. Note: Each time wood is removed during any stage stretch the fibers out by working the limbs.

The second part of the tillering process should focus on the outer limbs. The outer limbs need to uncoil during the draw while the inner limbs coil. The outer limbs should uncoil at a rate slightly less than or equal to the bend rate of the first half of the limbs.

Once you've removed all stiff spots or "hinges" from the limbs, it's time to bring them into balance with each other. The lower limb should be slightly stiffer than the upper limb, but they should move in a smooth balanced motion when drawing the bow.

Once you have them bending nicely you'll concentrate on hitting your target weight by removing belly wood from each limb, not by narrowing the bow profile. During this last stage of tillering it's important to proceed with caution and to flex the limbs several times after each session of wood removal.

**CAUTION:** Never pull your bow to full draw until everything is bending evenly, the fibers are fully stretched out, and you are within five pounds heavy of your target weight.

**Limited Warranty:** These staves are warranted against delamination for 30 days after the purchase date. However, as soon as the stave is worked with any tool or sand paper the warranty is null and void.