

### FAQ 17003: Why is my Recurve Bow rattling or noisy when I shoot?

There could be several reasons for this. Don't leap to conclusions and whatever you do **don't** think that the limbs need tightening where they fit into the bow riser (handle). When the bow is not under tension the limbs should feel loose (floppy) even when clicked into the riser. They do not fit firmly **until** the bow and string are under tension. The adjustment is for the purposes of tiller and brace height adjustment (see FAQ 17004 for explanation of this).

So firstly lets look at some of the causes for a noisy bow in order from simplest to most complex.

1. Is anything loose? Check the weights on your stabiliser are screwed on tightly. Check your stabiliser is screwed on firmly to the bow riser. Check your sights are screwed on firmly. Check the sight pin is screwed firmly into the sight.
2. Is the string too long? A string must be the right length for the bow. Each string should be twisted several times to bind the strands together. These twists also make the string the right length to work with the bow. On the tip of each limb is a shallow vertical groove where the ends of the string sit. When the bow is strung check how much of this groove can be seen as the string departs from it. About roughly  $\frac{1}{2}$  an inch should be visible at both the top and the bottom limb tips. This gives you a very rough indicator that the string is about the right length. If you cannot see any of the groove, then the string is too long and is sitting too much into the groove and "clinging" to the curve of the limb. This will be one cause of a noisy rattling bow when you shoot. Unstring the bow, twist the string a few turns to shorten it and restring the bow. It will sound much quieter when you take a shot.
3. If your string is too short then it will be likely to come off the limbs when you attempt to shoot it as you will have overdrawn the bow. Therefore this scenario is very unlikely to be causing rattling. If you are uncertain what length string you require seek advice.
4. The right length string will also contribute to having the correct brace height (the distance from the string to the bow handle measured through the handle at right angle to the string.) This should be between  $8\frac{1}{2}$  - 9 inches once the string has sufficient twists to make it the right length.
5. Its important to remember that if your string is too long to start with you cannot twist it so many times that it becomes inflexible and so this won't work as a solution. The string must be suitable for your size of bow in the first place. ie you can't try to make a 70 inch string work for a 64 inch bow.
6. So if everything else seems OK perhaps your brace height and tiller are incorrect. As stated above DO NOT think you should tighten the limb bolts in the mistaken belief that you are tightening the limbs. Read FAQ 17004 to explain brace height and tiller.