



Archery Fitness



In archery, as in many sports, physical training plays a key part in success, and yet is sadly often overlooked. Your strength and overall archery fitness need training just like your technique, and in this guide we will look at how we can do this, especially through practice at home. The information here comes from the Archery GB Olympic coach, Richard Priestman. He is very enthusiastic about this training (and insists that all the archers of the Olympic Squad practice in this way).

Richard Priestman has used these techniques for years, both as an Olympic archer in the 1980's and as the Olympic coach of not only Britain, but of numerous other countries. Here are some of the reasons he gives for practising these techniques:

Why do I like it/recommend it so much?

- While going to the gym makes people strong, these training techniques are sports specific, and use muscles and bone structure more effectively. They can also be practised anywhere, should a gym not be available.
- They can help you improve on weaknesses of fitness, strength and endurance.
- They can help you improve your technique.

Patrick Huston is also a keen advocate for these training techniques, and wrote an article for the Bow International Magazine, in which he says “being able to fully control your body whilst handling your bow, for a large number of shots and over extended period of time, is a prerequisite for good performance in archery. This allows you to aim your bow in a steady fashion front the start of a tournament to the end.”

“Most importantly this allows you to maintain the structural form which you have worked so hard to create, learn and embed!”

So when should we do this bow training? Here's the advice:

When to bow train

- When archer has poor archery fitness.
- To prepare for future increase in weight.
- When practice time is limited.
- During holidays.
- During study/exam or busy work times.

Just shooting does not maximise the archer. Gym work and shooting can help, but gym training often focuses on large muscle groups, whereas archery needs specific, small muscle groups to be developed.

To maximise the archer, you need shooting AND Bow Training!

How much bow training?

Ideally every day when not shooting - 1 hour every day! (Korean coach, Kisik Lee also says this).

If you have 3 hours available to train/shoot... 1 hour should be spent bow training.

If you only have 1 hour available for training/shooting - 1 hour bow training!!

Admittedly, this is what professional elite archers do, so we club archers may need to reduce the amount of time, but the ratios are certainly interesting. As Priestman himself says though “you don’t need to be a full time archer in order to be top level”.

Let’s now take a look at how this training is done....

Always warm up before doing any bow training

All these exercises are very simple, and are really just about using what equipment you have in different ways. Be creative. It’s recommended that you start off with a clini-band, and then move onto doing these exercises with a bow (with light limbs if possible, then your normal limbs).

Reversals

With a clini-band (or bow) start by drawing to full draw and holding for 10 seconds (if you can, if you shake a lot before this, then start with 5 seconds and build up). Come down and rest for 30 seconds. Repeat the hold at full draw. Do this 10 times – hold for 10 seconds, rest for 30 seconds, and so on. Take your time with this, making sure to retain your form and alignment throughout the exercise. Monitor your body carefully - if you feel any pain or discomfort at all, then stop.

This exercise can be done with your stabilisers on or off (try it both ways). Also do not worry about aiming or looking towards your sight pin.

Practice this several times a week. As you get more comfortable with this, you can build up to 30 seconds at full draw, 30 seconds rest – repeated 30 times. This will take time and patience, but if you can comfortably do an exercise like this, you’ll not only be stronger, but also much more in control of the shot. After all, if you can hold at full draw for 30 seconds, the 5 ish seconds needed at full draw in a real shot won’t be any problem.

Just to reinforce the stages of development, this is best done first of all with a clini-band you are comfortable with. You could then move on to a heavier clini-band, then onto your bow with light limbs (if possible) before advancing to your bow with your usual poundage.

**When you’re practising with a bow, be very careful not to release the string!
We must not ‘dry loose’ an unloaded bow.**

As you develop further, and increase the amount of repetitions, here’s what Patrick Huston recommends: “Once you reach 15 minutes without needing a break you should then increase your hold time to equal your rest. The goal standard you should aim for is 30 minutes of exercise, with 30 seconds hold followed by 30 seconds rest with your competition bow weight”.

Here's a photo Priestman took during a training session with the Colombian squad – the lines of force have been drawn on.

Exercise: Holding at full draw with normal bow set up



Here's Patrick Huston again "this is the base level fitness that will allow you to sustain technique and stability through tournaments, wind and technical change. It is well worth the commitment.

Reversals work builds underlying strength in your archery positions and muscles. This exercise alone can be a game changer for archers if done regularly!

This is actually a very small amount of training. The more you do in total, the more effect it will have on your muscles and your shooting! Reversals are the kind of thing you can easily add into your warm up at the beginning of a shooting session and as you put your bow down. Say ten minutes as part of your warm up and five minutes at the end".

Taking this further

Once you are really comfortable with the exercise, you can look to take it a step further. One way to do this, particularly if you want to increase your bow poundage in the future, is to try practising with some limbs that are 1 or 2 lbs heavier than your usual set. If you don't have any slightly heavier limbs available, then a great little technique is to tie your clini-band around the bow (between the string and the riser).

Here's another of Priestman's photos - note the stretch band tied to the bow, then to the string.

Exercise - Holding at Full draw with extra bow weight



In the photo below, the stretch band has been tied between the v-bar and the nock point on the string (stretch bands weren't always available at the time, so they often had to use bike inner tubes!)

Exercise - Holding at full draw with elbow sling and extra bow weight



At full draw practice '**mini squeezes**', which is like pulling through a clicker (but not releasing of course) then relaxing forward slightly, then pull through again. Do these in sets of six, then rest. Do 6 reps.

Reversals 2

Another exercise using reversals is known as the ‘**Seven Two**’. Basically you come to full draw, hold for seven seconds, go down to three quarters of your draw for two seconds and then back to full draw for seven. Once again, this is best begun with a clini-band before moving onto a bow. When you try this with a bow, as Huston says, “you will find that this very quickly becomes difficult and you likely won’t get past four or five. At that point have a couple of minutes rest and then go again. This exercise really builds draw specific strength and fitness!”

Some other things to try...

Try stopping at parts of the draw i.e. don’t go straight to full draw, introduce pauses.

To develop strength for shooting in a crosswind, tie a clini-band to the bow or your bow arm, and have someone gently tug on this.

Be creative!

Bow Arm Resistance Training

Bow training isn’t just for the muscles that draw the bow.

The bow shoulder muscles (which hold the bow up) are really important, and need training. A simple way to do this is with a clini-band – put one end under your foot, the other in your bow hand.

Once you’re comfortable with this, you can repeat these reps with your bow. To take it a step further, you can stand on one end of the clini-band, holding the other, whilst holding your bow, like the archer is demonstrating in this photo.



Always finish your exercises by doing a full cool-down.

Practice makes permanent. Always practice with quality thoughts and actions.

*Many thanks to Richard Priestman for the source information.
Patrick Huston quotes taken from Bow International Magazine (issue 131, pg 25).
Compiled by Thomas Keane.*