## Posture for Archers - introduction

1st Part of a series of articles produced by Andrew Knight during the COVID -19 pandemic

Jane has written about assessing and practicing your technique in terms of how you interface with your equipment and the process of delivering the arrow to your chosen target; this article is going to concentrate on how you hold yourself to give the best foundation to your shot. This may prompt you to develop your basic shot and result in you reworking your original shot sequence. But now you are familiar with the process Jane described, this should be a fairly easy task and form part of the regular review and update cycle you use to underpin your shooting form.

This article about posture for archers is the beginning of the process of understanding how you hold yourself to give the best foundation to your shot and the following articles build a deeper understanding of each element. It is advised that, when working on this, you take time to absorb each part, the order is aimed at being a process of building from start to finish.

#### Section 1 - Basics

# **Overall Posture principles**

The perfect posture is the one that costs you least in terms of energy expenditure, it is the most efficient.



Fig 1 demonstrates this in an ordinary upright stance.

Note how the ear is vertically above the shoulder and that vertical line runs into your lower back and through the hip, knee and then down the front of the shin so the line goes into the top of the arches of the foot.

The natural line falls slightly forward of the ankle and this is desirable to produce a slight forward / backward sway. This sway makes the calf muscles pump to return fluids toward the heart. If you were completely still and at perfect equilibrium, you would end up fainting as the blood pooled in the lower leg.

Maintaining a taught core provides integrity to the front of the spine, the front core is naturally less strong than the lower back muscles so work needs to be done here. Conscious engagement of the muscles for a shot to maintain a good foundation and minimise lower back discomfort is a worthwhile addition to your routine.

Fig 1

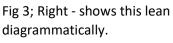
ideal

All that said - this is not the most ideal archery posture as it leaves the "upper Triangle" somewhat enlarged and the string pushing into the chest.

See section 2 below.



Fig 2; left - taken from the London Olympics, shows how the stance is adjusted, slightly sacrificing efficiency for better overall shot alignment.



Note how straight the line from ear to ankle is but that it is tipped forward to the extent that the ear is now over the ball of the foot.



This position requires good core muscles and learning to engage them.

#### First exercise

Stand, be aware of drawing oneself up through the crown of your head to full height, tuck your tail under you and draw up the abdominal muscles, keep breathing!

Let your shoulders settle.

Become aware of how this feels to you.

Concentrate on the feet and focus on how the knees are above that arch of the foot.

Then recognise how the hip sits on that vertical line, keep the abdomen tucked and allow the focus to move up the body and note how the shoulder sits on that line and then up to the ear and through the crown.

Practice this every time the kettle boils and it will be come easy.

## **Second Exercise**

Once this the posture from the first exercise has been achieved, let your ears move forward so they achieve a position in a vertical line above the ball of the foot.

Please don't look for this but feel it.

The movement is at the ankle alone and is a slight lean forward.

Practice this new position, it is the basic standing place you will work from when shooting.

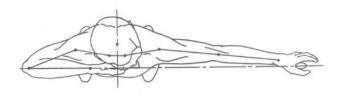
This can still be achieved in the many environments demanded by Field shooting. The basic principle remains the same, that the spine is in the slight forward lean from the vertical (weight slightly to the toes) with core engaged, whatever the legs to pelvis need to do to place yourself for the shot.

The position offers stability, even muscle power to draw the bow, limiting the openness of the upper triangle and eyes horizontal to judge distance. All necessary to achieve your shot.

# **Section 2 – Upper Triangle**

The upper triangle is formed by the arrow and the continuing line to the draw elbow on one side, the upper arm to the imagined point below the head vertex and from that vertex down the bow arm to the arrow rest.

It is accepted practice to have this as flat as possible to align sighting to the trajectory of the arrow once released. It is naturally hampered by the chest, hence the forward lean and is often (erroneously) dipped achieved by shifting the head alone forward or a bend at hip and / or waist. These variations introduce instability and cost a lot of energy; over time the fatigue will progressively impact on your shot.



In fig 4, - left - the vertex is marked, and the force lines are drawn as they pass through

the body, the apparent deviation from the vertex is where the forces passing through the collar bones. In this example the archer is standing in the "ideal" posture (fig 1) but not the best one for shooting (figs 2 and 3).

Visualise the vertex of the head drifting forward so, in this diagram, the feet would be obscured by the shoulders; this allows a tighter triangle to be achieved.

#### Third exercise

Once you have achieved some familiarity with the first and second exercise add this to the process.

Adopt the first exercise position and then add the lean of the second exercise.

Now without your equipment in hand, raise your arms to the full draw position – follow Jane's process for doing this by imagining you are holding the bow.

Some will suggest they need the bow in hand and for them the physical presence will help, however, I encourage you to rely on your body awareness — this is the point of this exercise; to engage the neurological pathways in your body. With the equipment in hand your focus and experience of it will only get in the way.

For some that will be a challenge, but that's the point – without challenge you will not grow!

This is a good place to break, take some time to practice this and then in the next article I'll go on to talk about the foundation unit. Following that, the power and aiming units will be looked at together in one article and to finishing the series I will drawing all the strands together in a worksheet.