## From the Coach



KiSik Lee National Head Coach

## Why are Aussie archers weak in strength?

A major concern of mine with Aussie archers has been their inability to have and therefore maintain a solid connection top and bottom. When the archer holds their bow, most cannot stand firm (separation, heap uncoiling, hollow back, shoulders too high, etc). This inability is the first weakness I see in nearly every archer that comes to the AIS, irrespective of the fact that you are generally bigger and stronger than your Korean and other Asian counterparts.

At every opportunity I have told and demonstrated the importance of stance and correct, biomechanic structure which provides strength, stability and improves endurance. I wonder if it is because we are too tense (relaxation problem) or perhaps utilising incorrect muscles (more hand than back tension).

Either way, it is difficult to both teach and learn the biomechanically correct method.

In a new approach, I've invited a martial arts instructor to make my archers understand the importance of correct posture and low centre of gravity. They understood the principle but still struggled to adopt the practice

Have a look at the pictures and you will see some of the problems associated with poor connection and stability/posture issues.

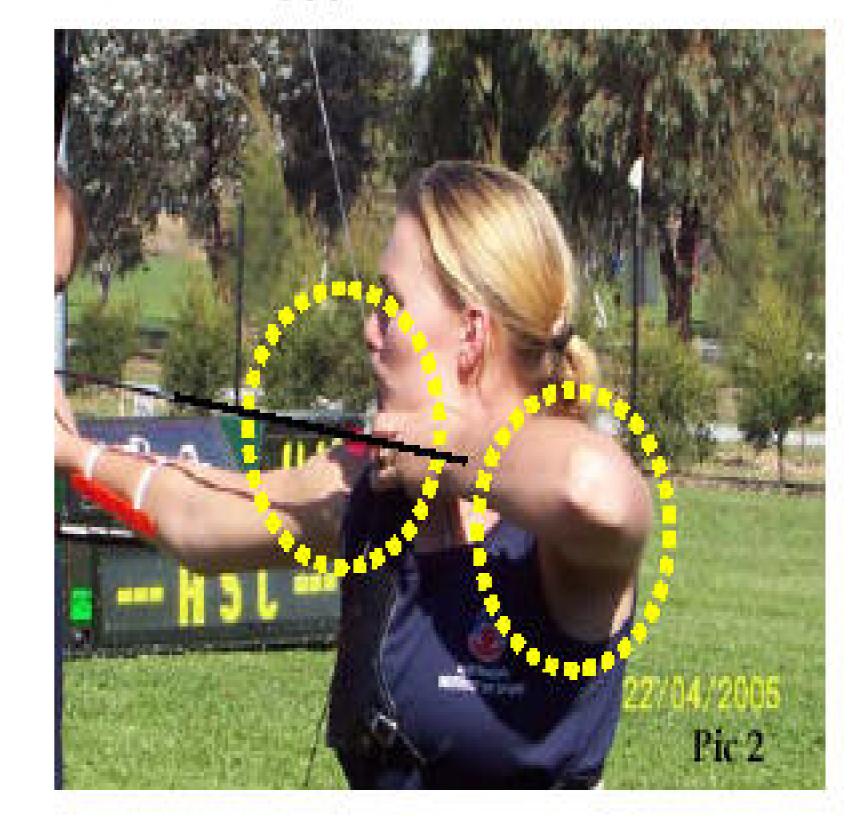


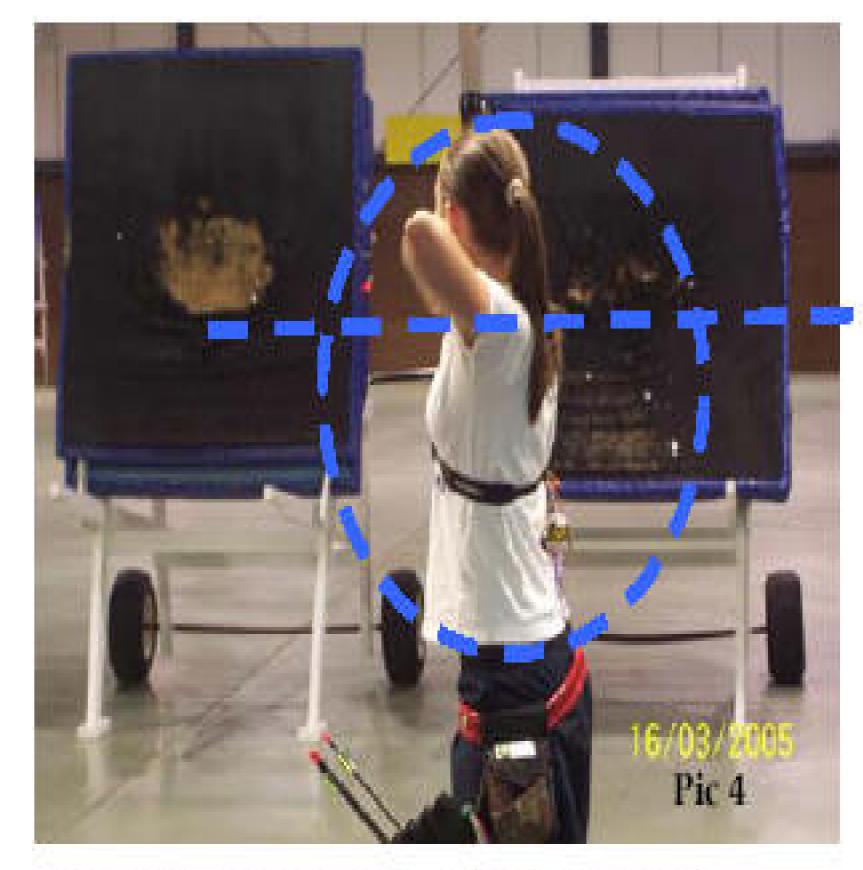


Easily visible in Picture 1 is the archer shooting whilst lifting her heel. No matter the distance you can see the head leaning back (Pic 3), bow shoulder rising up and the draw elbow being too high (Pic 4) or low. These posture, stance and technique issues can all lead to ongoing and painful injuries.

When archers start hanging to their bow instead of bringing the bow to the body they lose the ability to maintain their centre of gravity and problems occur – hollow back, draw elbow too high and not in line, bow shoulder too high, tilting head, etc (Pic 2). This is why our junior archers always find it difficult to apply control through the shot and to use efficient bow poundage with proper technique.

In this development phase at the AIS, I am happy because most of





the archers are quick learners and are making good progress however; for me, it still looks like most of them are hanging to their bow instead of bring the bow to their body!

These are reasons why this is happening;

- Drawing too carefully.
- Drawing with forearm instead of upper arm
- 3. Aim starting far too early
- 4. Sight pin moving up to the centre after holding
- When using shoulders to raise the bow the archer also raises the centre of gravity
- Too much concentration on pulling back bow rather than focussing on keeping a low centre of gravity and maintaining 'core' stability.

## To improve in these areas;

- Concentrate on maintaining your centre of gravity (in a vertical sense). When you raise your arms, try to lower your centre of gravity.
- Try to draw with more 'core' muscles. Concentrate on moving and rotating back and shoulder muscles rather than lifting or rotating the elbow.
- Coach can use both hands to push down archer's shoulders while archer raises arms for draw.
- As much as possible, keep the bow arm shoulder low and positioned in the socket (V-dipper / Total Archery page --)
- Don't start aiming until after holding
- Rhythm up when pull back the string.
- Strengthen up body, particularly your core or trunk, and arms in Gym.











We recently visited Korea for a training camp and this was demonstrated even more clearly when able to make a direct comparison with the Korean juniors. I've included some photos showing the Korean juniors in

action for you to make your own comparison with the photo's of the Australian's.

Good shooting and good coaching!

Regards, KiSik Lee