

## CHAPTER 7: COMMON PROBLEMS

The role of the Coach when teaching archery basics is to promote a conventional/basic form of archery upon which an individual's style can be developed. While the basics are being developed it is the coach's responsibility to ensure that faults in the archer's style do not become established. This implies that the basics being taught are correct and will not require significant interventions later.

Most novices encounter common problems at some stage of their development as part of the learning process. Coaches should not only become familiar with these problems but also with the methods of overcoming them.

A coach should focus the archer's attention on the process not the result during training sessions.

### 7.1. The archer cannot close the non-dominant eye when aiming.



Shooting with both eyes open will eventually enable the archer to concentrate on the correct sighting process but developing this style of aiming can be frustrating in the early stages. Refer to Chapter 4, paragraph 4.2.2.1, for how to determine which eye should be used during the sighting process. If the novice is unable to close their non-dominant eye its vision should be blocked.

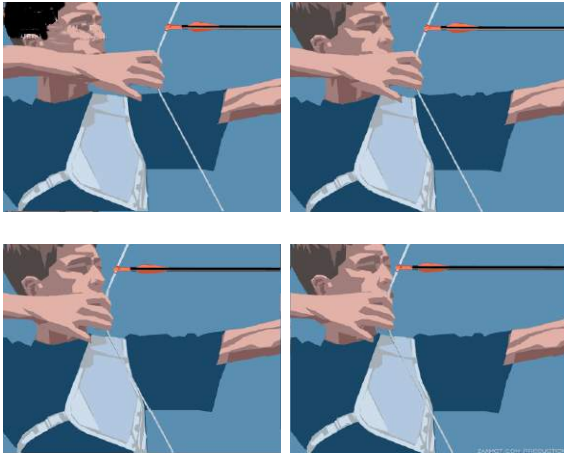
- a) An eye patch covering the non-dominant eye is one approach to solving the problem.
- b) Alternatively, a small opaque shield in a medium-density colour (beige or grey, for example) could be fixed to the peak of a cap or the brim of a hat and then lowered in front of the non-shooting eye. In this arrangement both eyes are open and fully able to focus, but the non-shooting eye has nothing to focus on, thereby allowing the shooting eye to focus on the target.

### 7.2. Shoulders moving up while raising the bow.



If the physical weight of the bow and attachments are too heavy for the archer to control while bringing the bow to the pre-draw position, the shoulders will rise to compensate for the downward load being applied to the archer's bow arm. To avoid this problem the coach has to teach the novice how to elevate the arm whilst keeping the shoulder low. Refer to chapters 6.5. "Body Pre-setting" and 6.6. "Raising the Bow" for details on how to solve this problem.

### 7.3. Drawing the bow with the arm instead of the muscles from the posterior parts of the shoulders and the back.



Drawing with the arm instead of the back is a very common problem faced by novices and one that cannot be solved while using a bow of any substantial draw weight.

To get the feeling of the correct action of drawing the bow using the muscles in the back, without a bow, the beginner should simulate the action from Pre-Draw to Full Draw while concentrating on movements of the blades. Keeping their eyes closed will help the archer feel and understand the correct draw action step properly.

Please refer to chapter 6.8. "Draw" for more information on teaching a proper draw action.

Care should be taken to ensure that muscular activity is felt in the back part of the shoulders while drawing the bow. With little or no activity in the muscles in the back the drawing action will be instigated using the muscles in the drawing arm, which is undesirable.

When the correct feeling has been established through mimicking without a bow, an elastic band should be used to introduce a light load to the drawing action. As confidence increases the load can be increased until a bow of appropriate weight can be used.

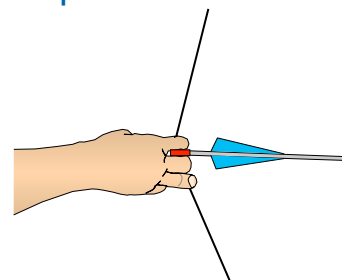
From there, the use of a harness connecting the string elbow to the bow string with a rope is suggested.



Focus should remain mainly on the beginning of the draw, followed by the eyes closed for a better feel of the action.

To enable the correct drawing action to be established there should as little tension in the drawing hand or arm as possible.

### 7.4. Variations of string fingers pressure on the string.



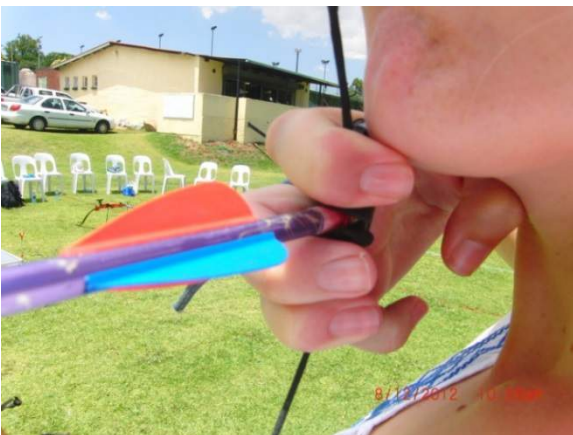
The most common reason for a finger slipping, lifting off the tab or not gripping the string consistently is a poor pre-setting of the wrist and fingers. Ensure that the archer is consistent in their drawing hand and wrist procedure.

To correct an archer whose finger slips or lifts off the tab or string, or just does not grip the string as firmly as the others:

- (a) Check for correct pre-setting of the string hand and wrist.
- (b) If the problem persists, ask the novice to lift the middle finger when gripping the string.



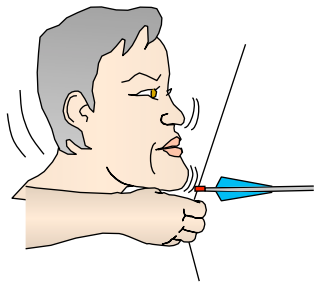
Let the middle finger lift, then get a grip in the string.



Now the three fingers "work" the same.

- (c) Another correction worth considering is to place the string in the first joint of the index and ring fingers, then place the middle finger on the string where the string lays naturally i.e. between the first and second joints.
- (d) Ensure that the draw elbow position is consistent. Variations in the draw elbow position will alter the pressure on the fingers of the drawing hand. A high elbow will cause more pressure on the ring finger while a low elbow will change the pressure to the index finger.

## 7.5. Moving head towards the string.



Moving the head towards the string can be attributed to:

- (a) The archer trying to find a correct facial reference, e.g. trying to get the string to touch the tip of the nose when using the quadrilateral method of sighting. The string should be drawn to the facial reference rather than the head moving towards the string.

Movement of the head towards the string uses more neck muscles, which increases tension in this area leading to muscular fatigue. If the muscles in the neck and shoulders are relaxed while drawing the bow, the head will not move towards the string. Refer to the "Neck and Shoulder Relaxation – Exercise" section in Chapter 6.9.2. for suggestions on how to improve head stability during draw.

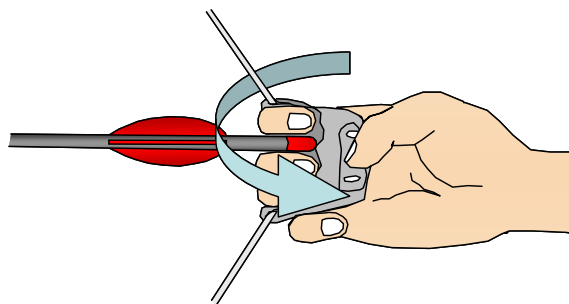
- (b) A bow that has a draw weight that is too heavy for the archer to control will cause the archer to tire. This leads to the archer not drawing the bow to the same anchor position and thus moving their head to achieve the usual facial reference.
- (c) Incorrect use of a kissers button can also contribute to this problem. The archer moves their head to the kissers button instead of the kissers button being drawn to the appropriate facial reference.

## 7.6. The arrow falls off the rest while drawing.

- (a) First the coach must check the body position. An overly tense right handed beginner may cant the top of the bow toward the left in the effort to pull the bow back. Beginners also often curve their back due to the physical weight of the bow, which can cause the arrow to drop down from the arrow-rest.

- (b) Another major cause of this problem is placing the fingers against the nock of the arrow prior to the commencement of the draw when using the Mediterranean Release, i.e. one finger above the arrow and two below. As the bow is drawn the angle of the string around the fingers becomes more acute causing the fingers to pinch the nock. The extra pressure of the middle string finger on the nock forces the arrow off the rest. This problem can be exaggerated by the use of a short bow by someone with a long draw length. The solution is to position the fingers, particularly the finger below the nock, so that there is no contact with the nock of the arrow prior to commencing to draw the bow. A finger tab fitted with a finger spacer between the index and second finger may help to correct this problem.

- (c) The next most common cause is increasing tension in the fingers or palm of the drawing hand while drawing the bow will cause the string to twist (anti clockwise for a right hand archer) which will cause the arrow to be pulled off the rest.



A tight nock fit on the string will exaggerate this problem. The novice archer needs to ensure that the fingers of the drawing hand are hooked far enough on the string to be confident that they will not need to increase the curve of the drawing fingers as the string is drawn. To minimize twisting the string, the drawing hand should be completely relaxed during the drawing process. Refer to Chapter 6 Para. 6.1.2.3.

and weight evenly distributed on both feet.

- (d) Refer to Chapter 6 Para. 6.1.2.4 for correct "Body Pre-setting".

## 7.8. Moving body weight onto the rear foot.

## 7.7. Moving body weight onto the bow foot.



- a) This problem is generally associated with a draw length that is too long causing the archer to overdraw, especially if a clicker is being used on a Recurve bow.

- (a) This problem is generally associated with a bow that is too heavy in draw weight for the novice or has a mass (weight in the hand) that is too heavy for the archer to lift to the correct height (and is more common with archers shooting compound bows). To compensate for the increasing draw weight of the bow the novice pushes the front hip forward instead of pushing forward with the bow shoulder.



- (b) The coach must place emphasis on the archer having equal weight on both feet at full draw.
- (c) The use of a light draw weight bow, elastic band or elastic string will enable the novice to practice the drawing action while maintaining an upright posture with the spine erect

- b) This problem can also be encountered on a compound bow if the draw length has been adjusted so that the draw length is too long. Overdrawing causes the archer's weight to be transferred to the rear foot.

- c) A facial reference (anchor) needs to be established that will enable the



archer to come to full draw without moving their weight towards the rear foot. The use of a light draw weight bow, elastic band or elastic string will aid the development of a draw length and facial reference that is appropriate for the archer. The archer should be encouraged to ensure that their weight is evenly distributed on both feet at full draw.

- d) A bow that is too heavy in draw weight may force the archer to use the entire upper body in drawing the bow causing the body to lean away from the target i.e. the weight being transferred onto the rear foot. This is particularly noticeable in archers shooting compound bows that have an excessive peak weight.
- e) Failure to push the bow shoulder forward to take the force generated by the bow being drawn will also cause the archer to lean towards the rear forcing body weight onto the rear foot.  
Refer to Chapter 6 Para. 6.1.2.4 for "Body Pre-setting".
- f) Emphasis should be placed on an upright posture being maintained while raising the bow to the pre-draw position. The physical weight of the bow can cause the archer's weight to be shifted to the rear foot to compensate for the weight of the bow being held at arm's length from the body i.e. the archer's centre of gravity moves backwards towards the string foot. This can also occur in more experienced archers who have too many or too long, attachments on their bows and lack the strength that is needed to hold the bow in the correct position.
- g) Lack of strength in the abdominal muscles can also cause this area to collapse during the drawing process allowing the archer to transfer weight towards the string foot. Strengthening of the abdominal muscles is essential to maintain correct posture.

## 7.9. Bow shoulder moving upwards and backwards.



The most common reasons for the bow shoulder moving upwards and backwards is:

- (a) Commencing the draw with the draw arm below shoulder height. As the load increases, the shoulder will shift to an unstable position. The draw should be commenced with the bow arm level to or above shoulder height. This ensures that, as the draw weight of the bow is exerted on the shoulder joint, the head of the humerus is pushed firmly into the glenoid fossa. This way the forces applied are taken efficiently by the skeletal system without the use of muscular activity. Section 6.6 "Raising the Bow" in Chapter 6 deals with this issue in greater detail.
- (b) The bow shoulder should be relaxed and held down. Refer to section 6.5.2 "Exercises" for practical techniques to properly set the shoulder.
- (c) Pushing forward with the shoulder while keeping the bow arm relaxed will enhance the position of the shoulder.

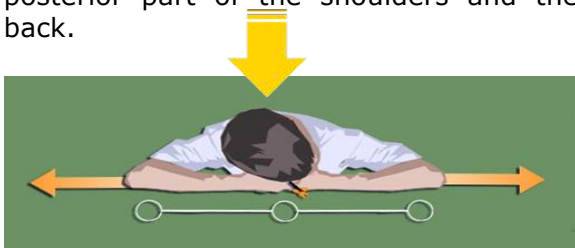
## 7.10. Expanding at full draw with the arm instead of the muscles from the posterior parts of the shoulders and the back.

Like drawing (see section 7.3.), at full draw expanding with the arm instead of the back, is a very common problem faced by novices and it cannot be solved while using a bow of any substantial draw weight.

To get the feeling of the correct full draw expansion using the muscles in the back, without a bow, the archer should locate the string hand at their normal facial reference point and then concentrate on drawing the string shoulder blade towards the spine.



The focus of the novice should be on the posterior part of the shoulders and the back.



See Chapter 6.10. "Draw Expansion" for a more detailed description.

Care should be taken to ensure that muscular activity is felt in the back. Without activity in the muscles in the back the expansion action will be instigated using the muscles in the drawing arm, which is undesirable.

When the correct feeling has been established through mimicking without a bow, an elastic band should be used to introduce a light load to the extension action. As confidence increases the load can be increased until a bow of appropriate weight can be used.

From there, the use of a harness connecting the string elbow to the bow string with a rope is suggested



Eyes closed should help the novice to remain focused on the action of the muscles from the posterior parts of the shoulders and the back.

To enable the correct extension action to be established there should be a minimum of tension in the drawing hand or arm.

For exercises for introducing a proper Draw Extension, please refer to section 6.10. in chapter 6.

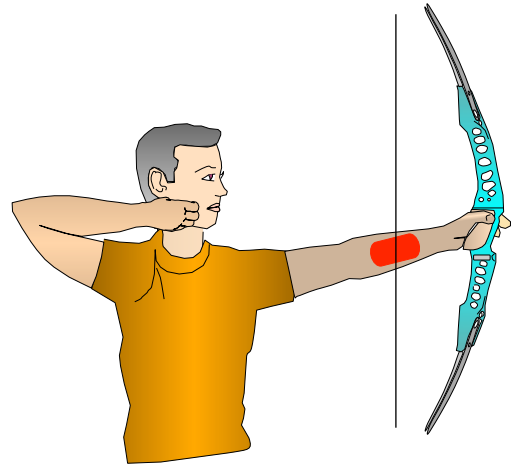
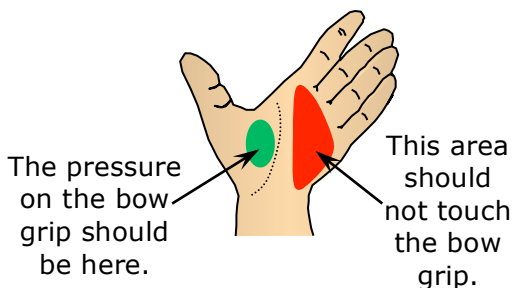
## 7.11. Canting the bow whilst aiming.

- An overly tense right handed beginner may cant the top of the bow toward the left in the effort to pull the bow back. Beginners also often curve their back due to the physical weight of the bow, which can cause the arrow to drop down from the arrow-rest.
- Many novices cant the bow whilst aiming, generally to the right if a right handed archer and to the left if a left handed archer.

## 7.12. The string hits the bow arm, elbow or forearm.



This is primarily due to the bow hand not being set correctly on the bow grip during the set-up procedure. This in turn is generally caused by a novice gripping the bow with the bow hand because they are afraid of dropping the bow when the shot is made. The pressure point on the hand should be as shown in the illustration below, along with the bow elbow being rotated so that the elbow joint is at right angles to the bow. This means that the hollow of the elbow joint is parallel to the bow string.



If the string hits any part of the arm it can be very painful and impede the archer's progress by creating anxiety that the string may hit the arm on the next shot. This leads to the novice distorting the position of the bow arm to try to ensure string clearance. This problem can be caused by:

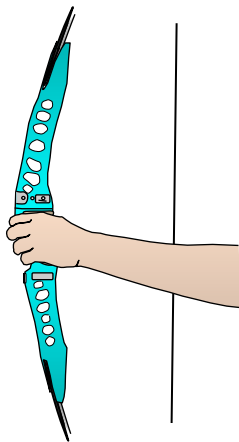
- (a) Bows with a low brace height, which will allow the string to make contact with the lower part of the forearm. It is better to have the brace height on the higher side of its range for novice archers to ensure that the string travel is not interrupted by contact with the arm.
- (b) Incorrect placement of the hand on the bow. For correct placement refer to section 6.4.1 Complementary Knowledge from chapter 6.4. BOW HAND AND ELBOW The usual cause of this is the archer gripping the bow too tightly. The archer should place their hand in the bow with the fingers relaxed, the knuckles away from the bow at an angle of between 30° to 45° and the heel of the hand not touching the bow.
- (c) Incorrect position of the bow arm elbow. At full draw the elbow should not be pointed towards the ground but should be pointed at right angles to



the bow. For more details, please refer to the same section as in (b).

- (d) Allowing the bow shoulder to move forward or inwards (i.e. towards the bow) will bring the whole arm into the path of the string. The archer should set their shoulder low and push towards the target without allowing it to roll forwards or inwards. The coach should ensure that the archer understands that the push comes from the shoulder and not from the hand or arm.

### 7.13. Grabbing the bow upon release.

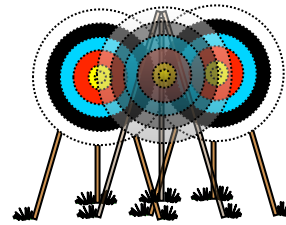


Grabbing the bow is usually associated with the archer being afraid of dropping the bow as it jumps forward on release. The bow's movement should be natural and dynamic on release, uninfluenced by the archer's bow hand.

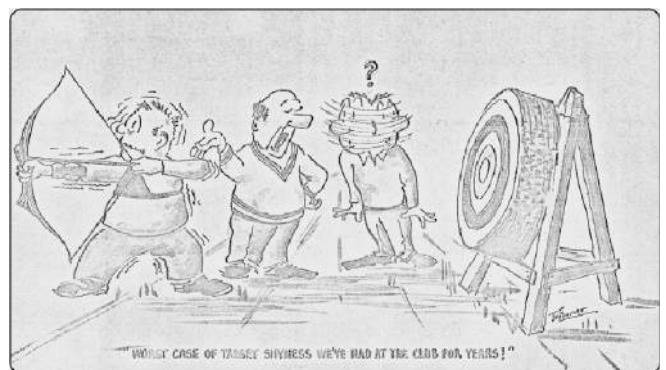
Introduction of a finger sling or wrist sling will help to alleviate the fear of dropping the bow and encourage a more passive bow hand. A very relaxed bow hand will promote a more consistent launch of the arrow and better results at the target. To encourage a more relaxed bow hand, refer to the exercises under section 6.14.2 from the chapter 6.14. "Follow-Through".

This problem can also be associated with the archer diverting concentration from staying focused on the process of "following-through" to watching the arrow impact the target. Ensure that the archer's attention remains on the execution of a good shot.

### 7.14. Target panic.



Target Panic is a psychological problem that takes on various forms when an archer faces the target. It is not generally associated with novice archers but can occur at any stage of an archer's development.



As all forms of target panic are psychological the only cure for the problem is to divert the archer's attention from the problem area and have them concentrate on other aspects of their form. It is imperative to correct any indication of target panic before it becomes established.

Some of the forms that target panic may take are:

- Inability to sight on the point of aim (Gold Shy).
- Involuntary release as soon as the sight nears the point of aim.
- Discontinuing the aiming process prior to release.
- Premature release.
- Inability to release the arrow.

Any of these problems rarely arise if the archer is taught sound basic form with the emphasis being placed on the process of shooting the arrow rather than the outcome or score.

Target Panic can be caused by lack of confidence in some part of the archer's basic form, which diverts the archer's

attention to the area of concern after the aiming process has been commenced. Confidence in the fundamentals of their basic style has to be established by the archer so that there is no cause for the archer's concentration to be diverted from the sighting task.

- (a) Practice with eyes closed at short distances from the target will help to alleviate areas of concern in the archer's basic form.

When shooting at close range with closed eyes, it is important for the novice to understand fully why they are doing it. Mindless repetition of shot after shot with no understanding will not lead to any progress. The reason for this shooting process is that at the short range the archer cannot miss the target and can, therefore, concentrate on all the other aspects of the performance of a good shot. In other words the archer has to be mindful of the feel of the good shot in his mind, to get to know the smooth flow of effort from the start of the draw to the follow-through. Ideally short-range shooting should involve guidance from the coach.

- (b) Emphasis should be placed on the archer maintaining their head in an upright position with both eyes firmly fixed on the centre of the target before commencing the drawing process. The act of aiming (aligning the sight with the target) should only commence after the archer has come to full draw and established their facial reference. Starting to aim too early in the archer's set up will inhibit their ability to maintain concentration on the process.

For example, if aiming is started as the draw commences the archer's focus is directed towards holding the sight on the target and other aspects of the archer's form are neglected. Starting too early can lead to focus on the aiming process being maintained over an extended period, causing a loss of concentration, leading to the aiming process being aborted prematurely.

After coming to full draw with the correct facial reference, obtaining the correct sight picture and releasing should take no more than 2 to 3 seconds for a recurve archer.

For archers using a sight, the removal of the post and pin from the sight and using the ring sight only alleviates the need to hold the pin on the point of aim. By doing this, the sighting process becomes less critical and allows the archer to concentrate on other areas of their form. Without a definite aiming point in the sight the subconscious mind will take over and centre the point of aim within the sight ring.

Placing too much emphasis on the sighting process is a major contributor to target panic. The archer should be encouraged to realize that sighting is only one of the stages that encompass the launching of an arrow towards the target and is not the critical area in the process

- (c) The inability to release the string may be caused by tension in the draw hand.



The exercise described in section 6.12.2 will allow the archer to become accustomed to relaxing the string hand while simulating the release action without the use of a bow. The novice can gain confidence in their release by practicing with an elastic band. Varying the length of the band to increase the tension as the archer's confidence in their release grows will help them transition to using a bow of

similar or equal draw weight to their own.

progressively allowing more shots with the original side.

- d) The archer should practice coming to full draw and then concentrate on increasing back tension i.e. expanding, while keeping the string hand relaxed. This exercise should start at 2 to 3 meters from the target, increasing the distance as the archer's confidence grows. During the release emphasis should be placed on relaxing the fingers rather than releasing the string.
- e) Some forms of target panic can be cured by the use of a clicker which is used as both a draw length check and release generator. The correct use of a clicker diverts the archer's attention from the sighting process to the use of the muscles controlling the drawing and release of the arrow. Emphasis needs to be placed on setting the clicker to the correct draw length of the archer and ensuring that the archer understands the procedure to draw the arrow through the clicker. A clicker gives an audible signal to release the string but should not be used as a trigger if the sight is not centred on the point of aim. Emphasis should be placed on the archer controlling the shot; if the shot is properly set up and executed the clicker will indicate the correct draw length.

That being said, a clicker should not be introduced until the archer's form is consistent and an understanding of executing the shot by the use of the muscles in the back is fully understood.

- f) Some other methods to try to cure the problem of "gold shy" are:
- Temporarily use a bow that the draw weight/poundage is lower than the bow normally used
  - Use the "dry fire" system, see section 5.2.1
  - Temporarily change the shooting side. When ease and confidence are encountered on the non-dominant side, alternate shots from side to side while

## Comments:

Always make allowances for novices; remember people learn by “*doing*”.

Set the novice at ease and always be positive in your approach, but do not talk too much.

As archery requires a lot of co-ordination, concentrate on one point at a time to avoid overwhelming beginners.

Do not keep the novices at full draw whilst you make adjustments. Have them to let down, show them what you want, and then start again.

When dealing with novice archers keep this in mind. *They have not done archery before – what is simple to you may appear impossible to them.*

## Conclusion

The process to a good shot can be full of complications for a beginner. Fortunately the majority of mistakes are commonplace and can be corrected easily when caught early enough. By keeping an eye on your novices and using these techniques, their progress towards good shooting technique will be smoother and easier