



**Archery
Victoria**



Archery Instruction Program

www.archeryvictoria.asn.au

Who is Archery Australia?

Archery Australia is the national governing body for Archery in Australia, catering for all archery disciplines and equipment styles.

Archery Australia offers various coaching and development programs delivered through the Regional Governing Bodies and clubs. These programs provide a pathway for archers to develop their skills and knowledge and advance through the sport from basic beginner, to club, state and national levels advancing ultimately to high performance international competitor competing in events as the World Championships and Olympic Games.

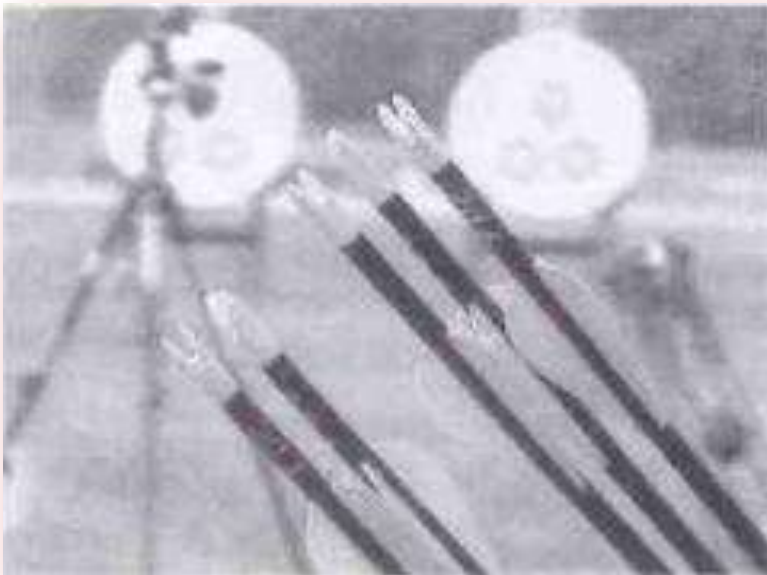
What is the OzBow Archery Instruction Program?

The OzBow Archery Instruction Program is the second step in the Archery Australia Pathway Program. This program provides athletes with the opportunity and tools to advance from basic beginner all the way to high performance competitor.

The OzBow Archery Instruction Program is held over a 6 week period with a 90 minute duration for each session. The cost for this program is \$135.

The program caters for people of any age, gender or disability.

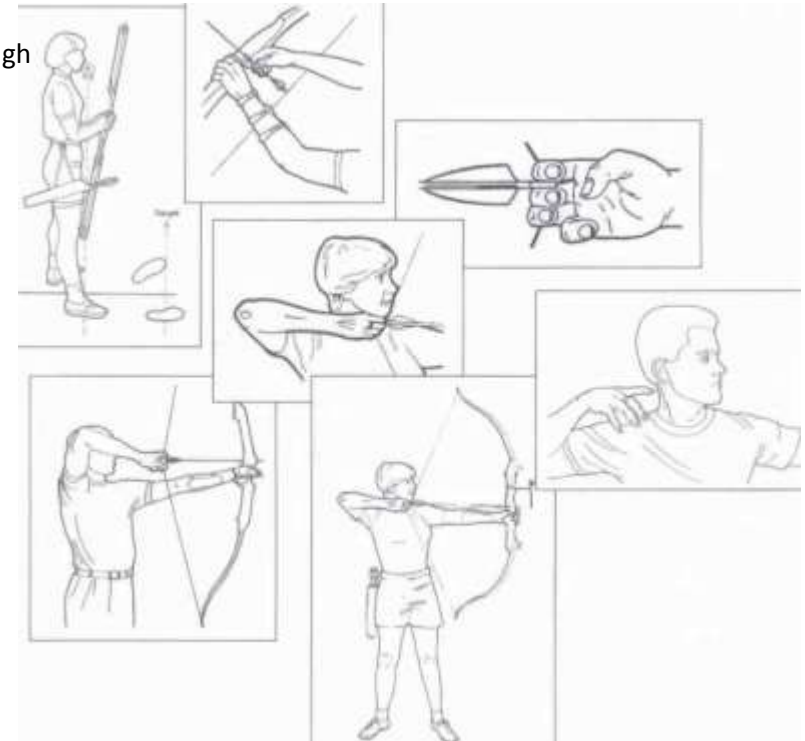
This booklet is intended as a reference guide for people undertaking instruction and fits within the frame work of the Archery Australia National Coaching Program.



The Ten Basic Steps

There are 10 basic steps to follow when learning to shoot a bow.

1. Stance
2. Nocking the Arrow
3. String Hand
4. Bow Hand
5. Drawing the Bow
6. Anchor
7. Target Alignment
8. Releasing the Arrow
9. Follow Through
10. Relaxing



Eye Dominance

The dominate eye is that eye which focuses on an object while the other eye (the non-dominate eye) gives depth of field.

When at the anchor position the arrow should be placed directly below the dominate eye, this allow you to automatically align with the target.

Eye dominance has a major effect on your body's co-ordination and has a great influence on aiming. It is usual that right handed people are right eye dominant and left handed people are left eye dominate. However, this is not always the case, so it is essential that eye dominance is checked before you commence shooting.

Shooting with one eye or two eyes open.

This is a personal choice. Recurve archers usually leave both eyes open although compound archers tend to close their non-dominate eye to enable them to see through the peep sight.

Determining your eye dominance



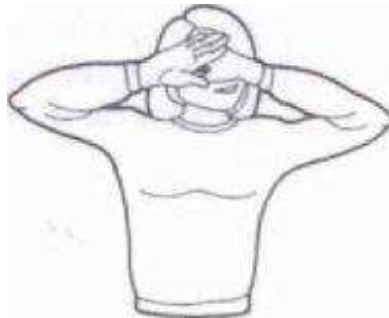
There are 3 commonly used methods of determining eye dominance.

The most popular and easiest method is;

Extend both arms directly in front at shoulder height with hands flat, fingers together and palms facing out, linking the hands together so that a "V" is formed by the index fingers and thumbs forming a small opening.

With both eyes open look at a distant object through opening, now bring the hands toward the face while focusing on the object.

Your hands will come to rest in front of the dominate eye.



Stance

The stance, or standing position, is how you stand on the shooting line. Ideally both feet should be shoulder width apart. Your body weight should be evenly distributed on both feet with 60%-70% of your weight on the balls of your feet and 30%-40% on your heels.



Stand astride the shooting line, stand upright with leg and knee muscles relaxed but not locked.

An open stance is recommended, the rear foot is positioned in front of the centre line to the target, this opens your body to the target.

The archer's hips should be positioned in the same line as the feet. The angle of the stance should be somewhere between 15 and 35 degrees from the target centreline depending on your preference and comfort levels.

What is important is that your hips and feet must remain in a constant position until the completion of the shot/s.

There is a certain amount of flexibility required to achieve this position as everyone is different. Each person should develop a stance which suits their own posture.

Nocking The Arrow

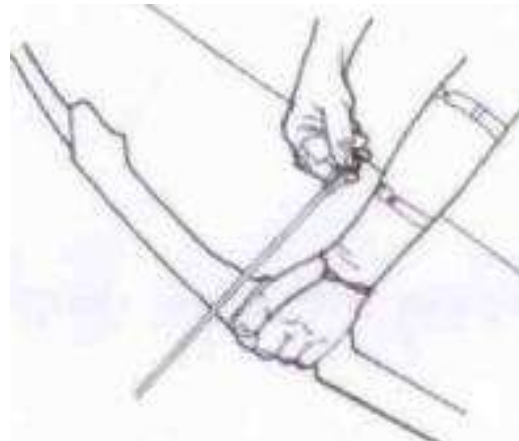
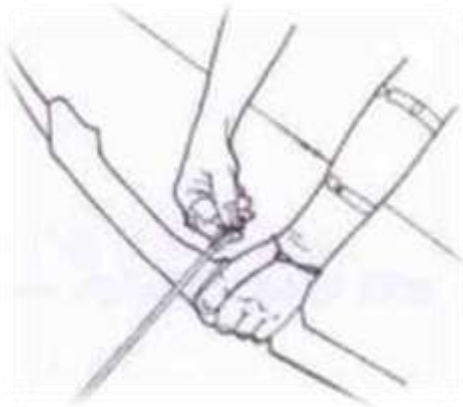
Nocking the arrow (placing the arrow on the string). The arrow is placed on the string at the Nocking Point, which is positioned slightly above the centre of the string. The index vane or fletch is placed so that it is pointing away from the bow.

Suggested Method

Hold bow across body canted at a slight angle.

Draw the arrow from the quiver, holding the arrow by your thumb and index finger between the nock and fletch.

Place the arrow onto the arrow rest.



Rotate the arrow until the index vane or fletch is square to the bow string.

Carefully draw the arrow back until the nock engages the bow string between the nocking points.

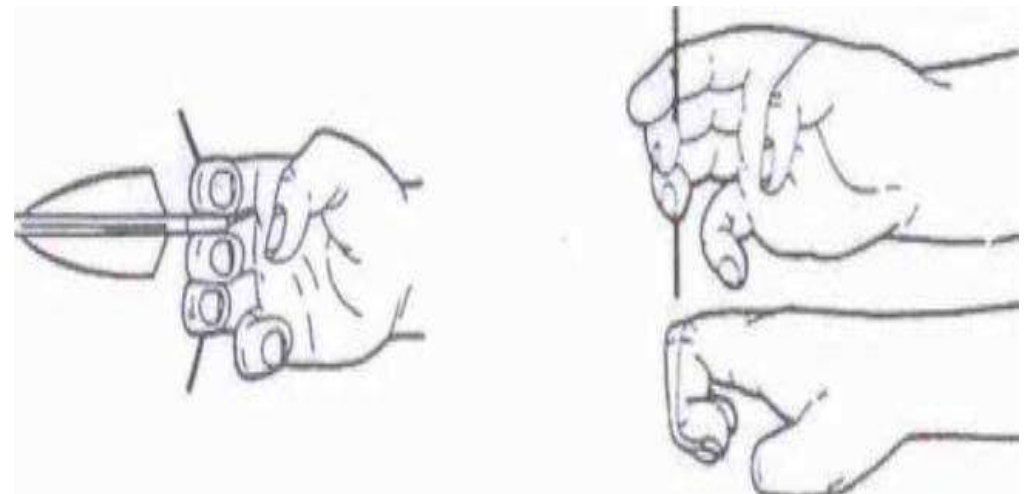
The String Hand

The String Hand (the hand that draws the bowstring).

When placing the hand on the string, the index finger is placed above the arrow and the middle and ring finger below the arrow forming a deep hook around the string.

Ensure the back of the hand is kept relaxed and flat. Ideally the string should be positioned in or behind the crease of the first joint of the three fingers.

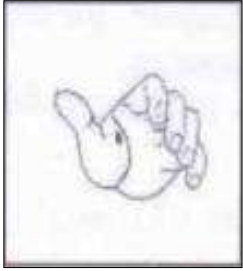
It is best to keep the fingers slightly apart so as not to touch the arrow when drawing the bow. This avoids finger pinch, which will often twist the arrow off the rest.



The little finger is turned in and the thumb relaxed across the palm.

The Bow Hand

Bow Hand (The hand which holds the bow).



When placed on the bow, the hand and fingers should be relaxed. To assist with the rotation of the elbow the hand should be positioned so that the knuckles of the hand are positioned at an angle of about 45 degrees to the bow when at full draw.

The bow hand should be positioned directly behind the centreline of the bow.



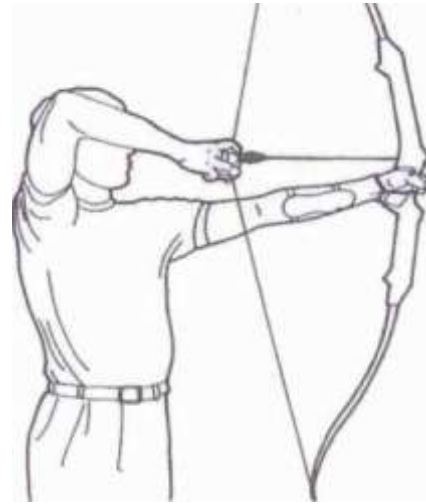
Place the hand on the bow grip so that the pressure point is as high as possible into the pivot point of the bow handle.

The bow when being shot is not gripped.



Ideally a bow sling should be used to ensure the bow does not fall from the hand.

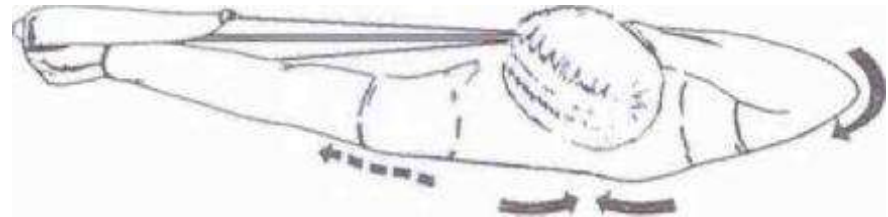
Drawing The Bow



Raise the bow arm and drawing arm together in a single action. This process should never be forced but the arms should be raised in a relaxed manner, this is called the Pre Draw Position.

When drawing the bow, roll the bow side shoulder back and down to help lock the shoulder in place and prevent the bow shoulder from rising and shortening the draw length.

The drawing arm should be raised to shoulder height so that the forearm is in line with the arrow and you can set your right (right hand archer) shoulder blade (Scapula) used to draw back and down. The bow is then drawn back in a straight line until your index finger comes into contact under the chin, you should rotate your entire right shoulder (right hand archer), moving your Scapula down and across your back, without dropping your drawing elbow below horizontal.



When drawing, twist at your waist so that your shoulders are line with the target but it is important that your hips and the feet remain in a constant position until the completion of the shots.

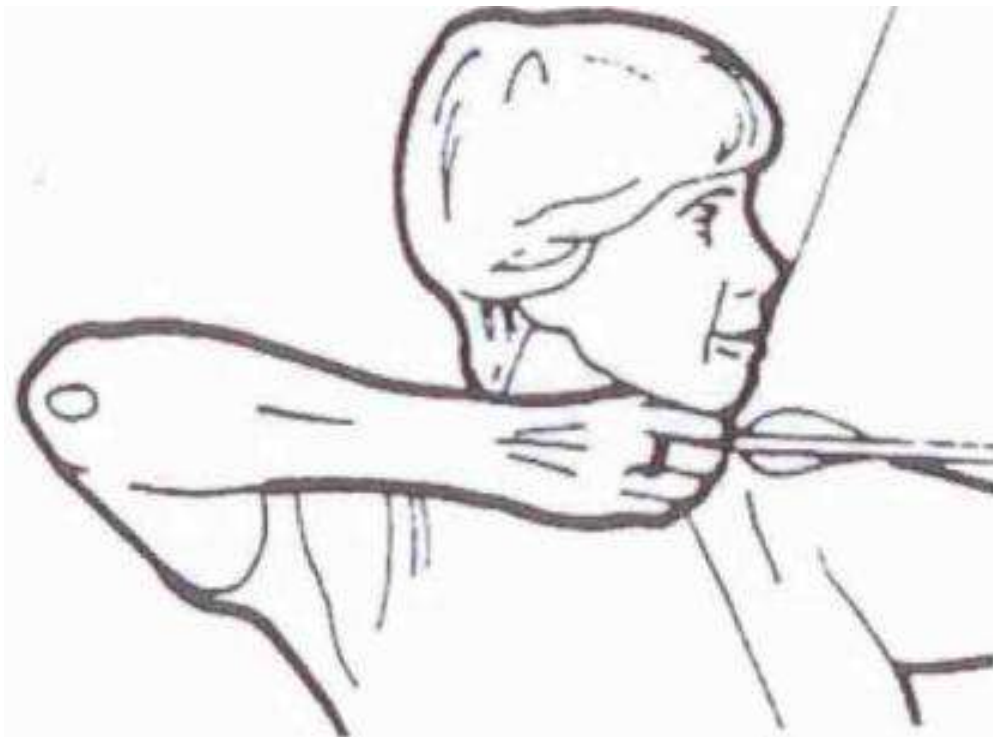
Anchor

Holding and extending sequence.

The anchor is the term used to describe the position where the drawing hand makes contact with the face; you should consider this to be your rear sight.

The position must be consistent and repeatable; usually this is a point where the index finger of the drawing hand makes contact under the jaw with the string lightly touching the chin and the tip of nose.

This gives you three contact points to keep a consistent anchor from shot to shot.

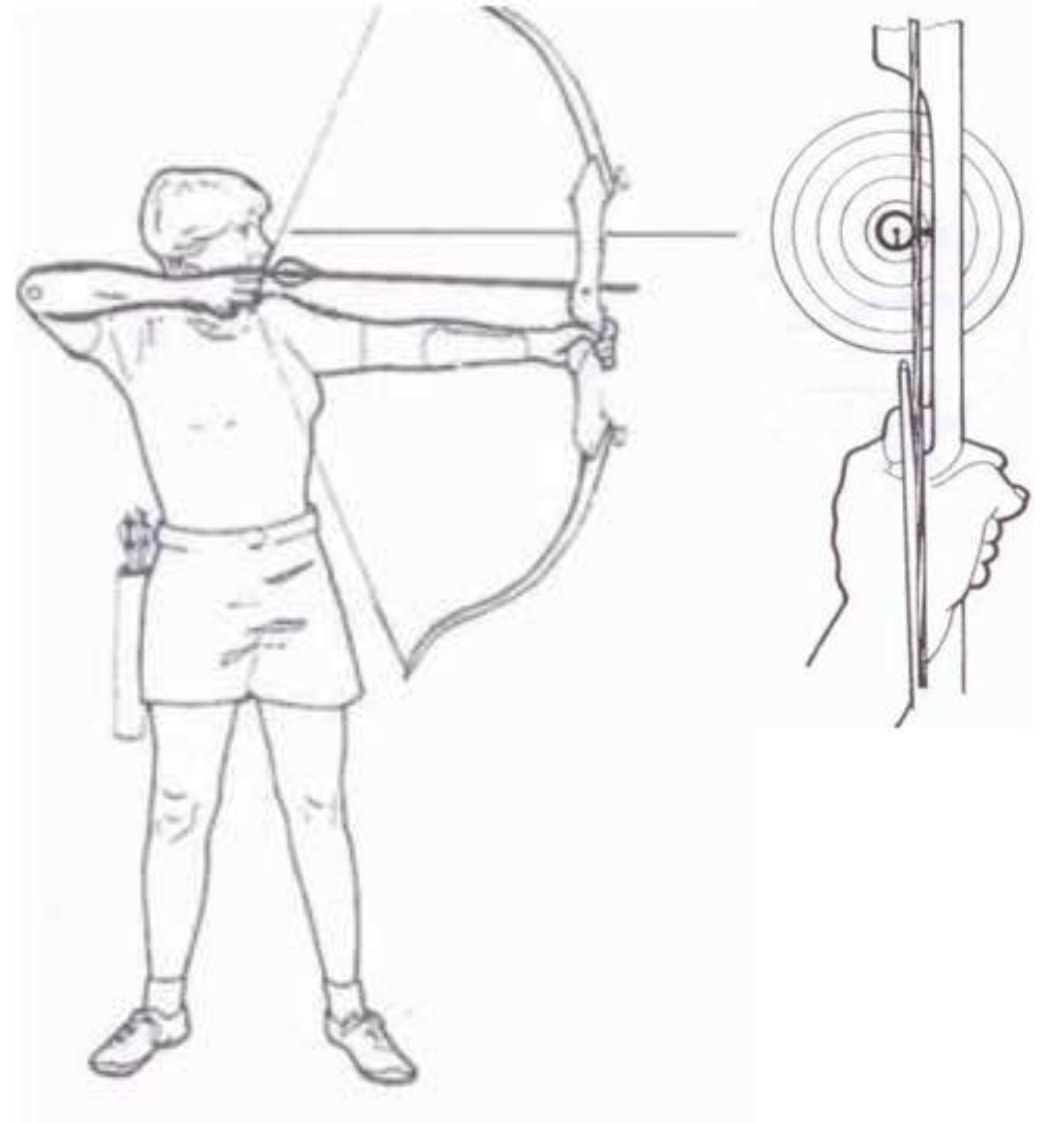


During this step a backward extension of your Elbow and Scapula should be maintained.

Target Alignment

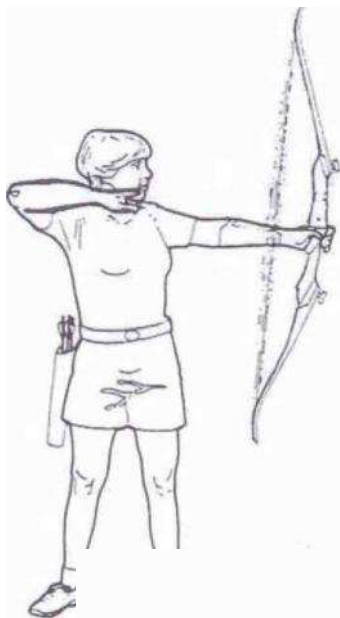
(Also known as sighting or aiming)

While maintaining tension and backward extension of your draw you now aim by sighting through the aperture on the sight mounted on the bow.



Endeavour to hold reasonably steady without developing tension in your body and place the sight pin on the centre of the target.

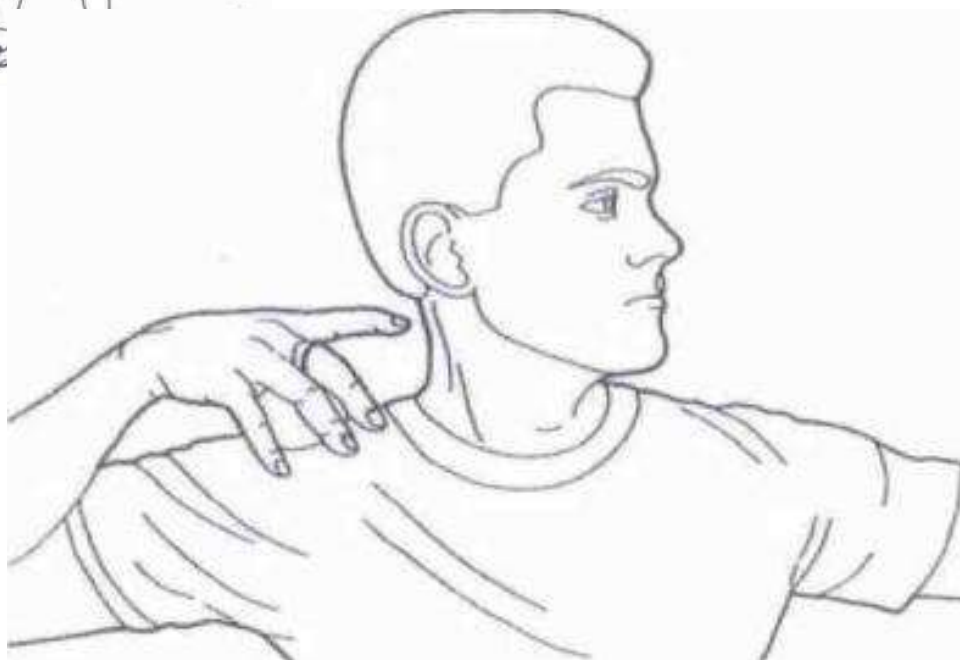
Releasing The Arrow



The release or loose is the most critical and the most important step to achieve good arrow flight.

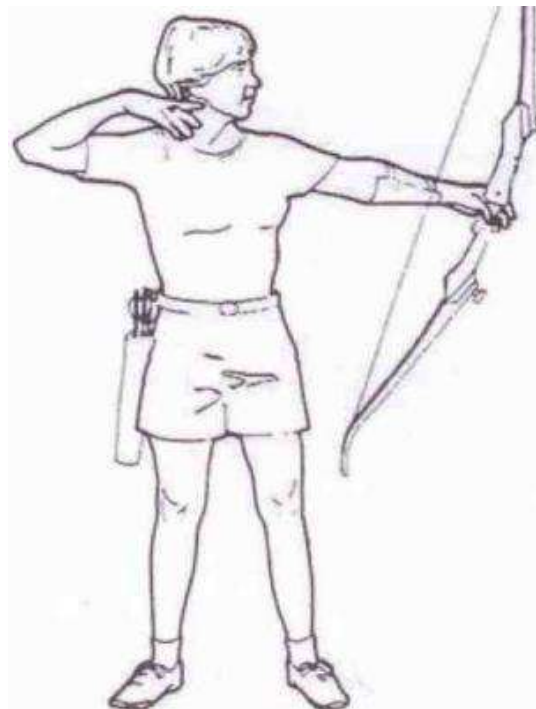
The release is achieved by relaxing the drawing fingers allowing the weight of the bow to pull the string from your fingers: the resulting reaction being the drawing hand moves slightly backwards. When releasing the arrow, it is recommended that the hand be maintained close to the face, while maintaining backward tension.

To release you simply relax your hand, the pressure of the string on your fingers will flip your fingers out of the way and allow for a good release.



The release should not be forced but should be a natural reaction to the weight coming off the relaxed fingers.

Follow Through



The follow through occurs after the arrow has left the bow and is travelling toward the target.

You should keep your focus on the target, holding your bow up where you had it when you released the arrow, and keeping your string hand up close to where it was when you released the arrow.

This position is held until the arrow hits the target (about 2 seconds is all that is needed).

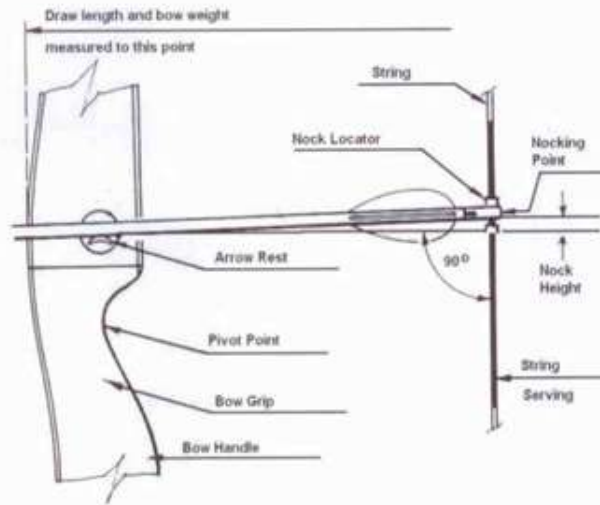
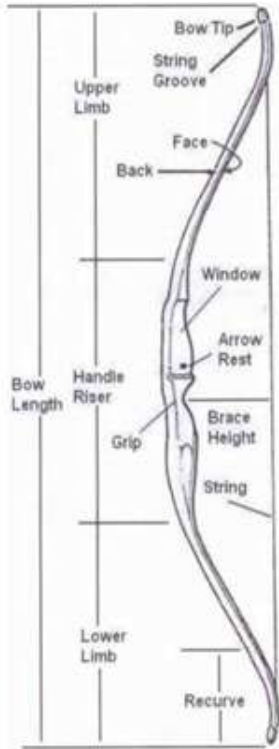
Relax

After the arrow has hit the target you may then bring your bow arm down so that the bow is across the front of your body or with the limb tip resting on your foot and your string hand is down at your side.

This is the time to recover from the shot, analyse the shot and prepare to shoot the next arrow. This time should take longer than the act of shooting the arrow.



The Recurve Bow

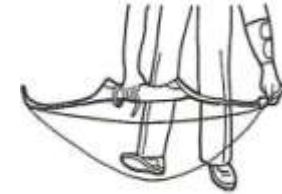


Stringing A Recurve Bow

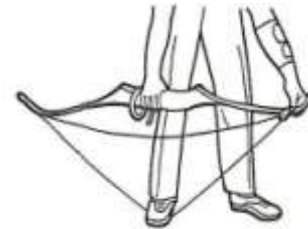
For safety always use a stringer to string a recurve bow.



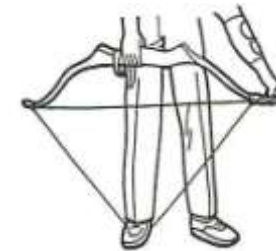
1. Fit the stringer to the bow



2. Step onto the bow stringer cord (use the ball of your foot not the instep). Some people prefer to use both feet for extra strength.



3. Lift the bow by the handle, against the resistance of the bow with your foot on the cord.

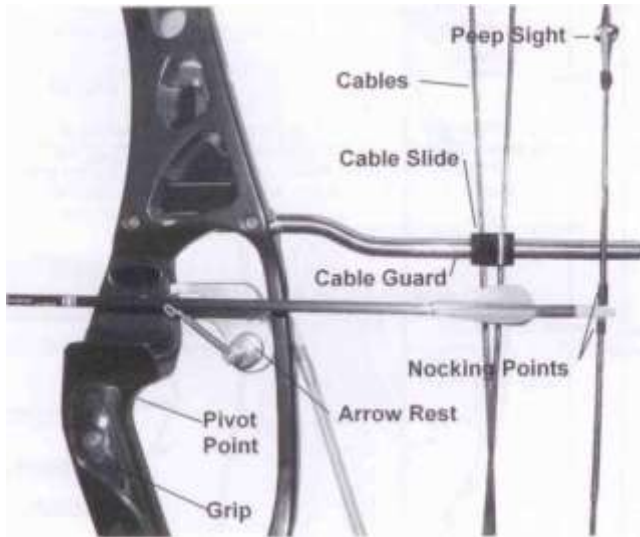


4. Slide the top loop of the bow string along the limb until it is fitted into the string grooves of the bow limb.

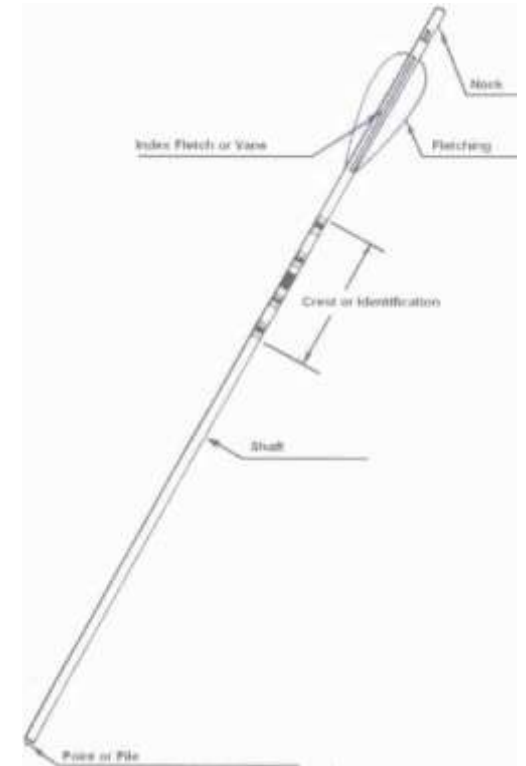
5. Let the pressure off slowly, checking that both top and bottom string loops are safely in their grooves.

6. To unstring the bow, reverse the procedure.

The Compound Bow



The Arrow



For archers using fingers (usually Recurve bows) the index fletch should always point out from the bow — to the left for Right Hand archer and to the right for Left Hand archer.



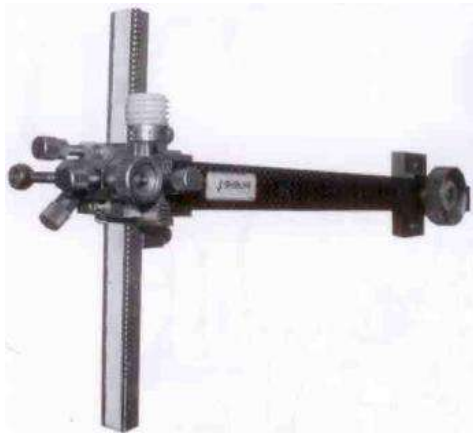
For archers using a mechanical release aid (Compound bows) depending upon the style of arrow rest the index vane or fletch should ideally be either pointing up or down.

The Bow Sight

Bow sights come in a variety of designs; simple sights for beginners bows to precision engineered sights for competition bows.

Strict rules govern the use of bow sights, the type of sight pin and accessories that can be used.

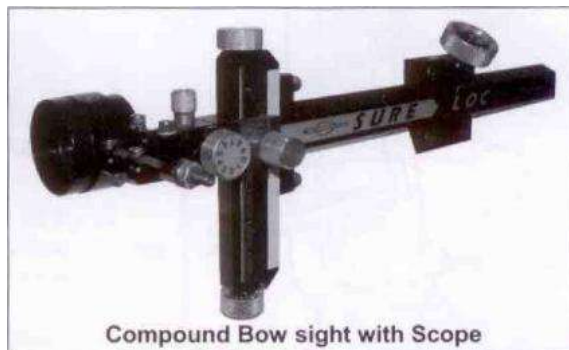
On recurve bows you can only use standard sight pins, while on compound bows you may use a magnifying scope sight fitted with a bubble level to assist in keeping the bow vertical.



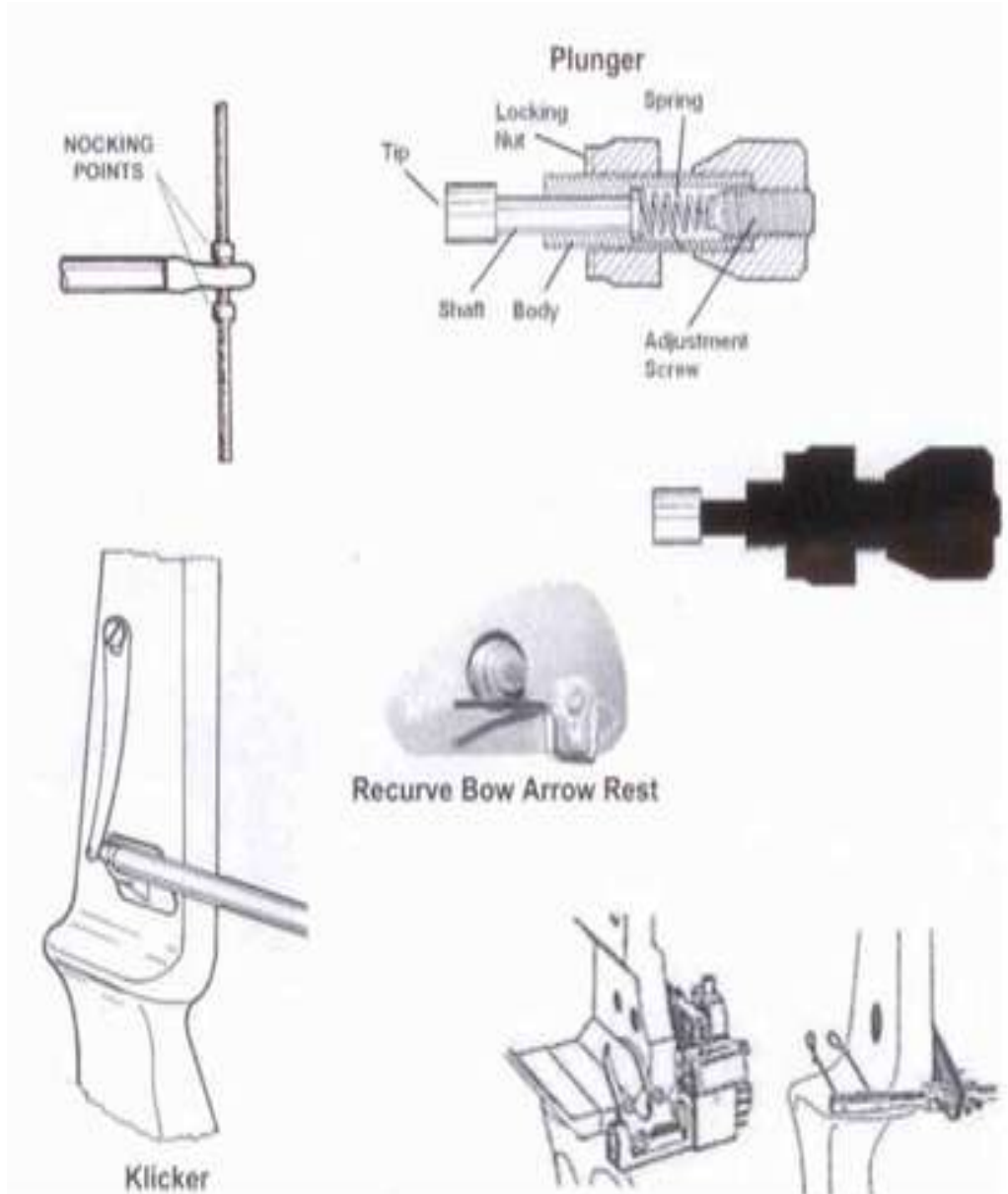
It does not matter what type of sight you use as the same principles apply when making adjustments and it's quite simple. To make adjustments and change where your arrows are landing, you simply move the sight pin in the direction of the error. For example, if an arrow is going low move the sight pin down, if the arrows are going to the right move the sight pin to the right.

Bow sights usually come with graduated scales although this scale does not refer to any established distances or settings; it is simply a scale. Sight settings vary depending upon a range of variables such as bow weight, arrow weight and size and where you anchor in relation to your eye.

Instead of using the scale it is best to place a plain piece of white tape on the sight and directly mark your sight marks onto the tape. You obtain your sight marks by shooting arrows at each distance so this gives a range of accurate sight marks that you can use.



Equipment Accessories



How To Score

Target archery events are called rounds and these consist of a number of ends at different distances. Either 3 or 6 arrows are shot in an end and there are a specific number of ends shot for each distance. There can be up to 4 distances shot for a round. A round may also see different target face sizes used at different distances.

To score the archer calls out the value of their arrows in descending order of score for that end such as 10, 10, 9, 8, 8 and 6. These scores are then written by the scorer onto the scorecard in the area provided.

The score total for that end is then added up (i.e. 51) and written in the area provided. If a running progressive total is being used the end score is then added to the progressive score.

This process is continued until all arrows for the archers on the target are scored; the arrows can then be removed from the target butt.

Prior to all arrows being scored the target face and arrows must not be touched or moved in any way. Under no circumstances should another archer's arrows be withdrawn without their prior consent.

During tournaments scoring is usually done by "Double Scoring". This is where two score cards are used and two archers on the target score.

There should not be any comparing of scores until all scoring has been completed for that end and prior to any arrows being removed from the target butt. If arrows have been removed from the target butt and an error is found it cannot be corrected. The lowest arrow value will stand.

At the completion of the round the archer must sign the scorecard to confirm the value of the arrows. When double scoring the archer should check to confirm that both of the scorecards match; if they don't the lower score will be used.

A witness, usually another archer on the target, must also sign the score to confirm they also agree with the scores.



End	Arrow 1	Arrow 2	Arrow 3	Arrow 4	Arrow 5	Arrow 6	Total
1							
2							
3							
4							
5							
6							
7							
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9							
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30							

Removing Arrows From The Target

The use of the correct technique in removing arrows from the target butt is very important as it prevents damage to arrows such as bending.

The correct technique will also reduce damage to the target face as well as reducing fatigue caused by struggling when attempting to remove arrows.

The technique is quick and simple requiring little effort on the part of the archer.

Grasp the arrow shaft with one hand as close as possible to the entry point into the target, the other hand is held flat against the target with the shaft between the thumb and index finger. This helps to support the target butt when withdrawing the arrow.

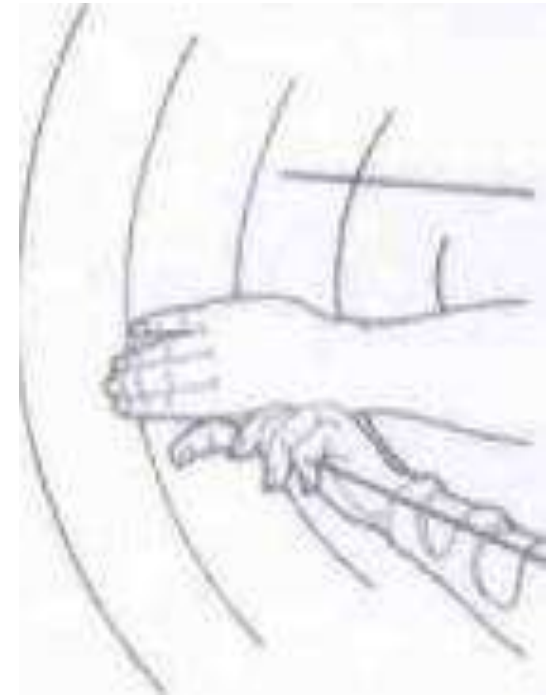
Now withdraw the arrow with a slight twisting motion along the line of entry into the target butt. Remember to support the target with your other hand.

Some butts are very tight and it may be necessary to lean your body against the butt and use both hands gripping the arrow shaft at the point of entry to remove the arrow. In this case rest your forearm against the butt and use your elbow as a lever to exert additional force onto the arrow.

It may even be necessary for two archers to work together to remove arrows.

The important point is to remember to support the target butt to ensure it does not pull forward when withdrawing arrows.

Never hold the arrow along the shaft or at the end of the arrow: this may cause the arrow to bend but most importantly you will not be able to exert enough force to easily remove the arrows from the target butt. The technique incorporates the use of your body's weight and natural levers.



Week 1

10 Metres

Name: _____

Eye Dominance: Left Right
 Left Handed Bow Right Handed Bow

Range Safety

The Instructor will explain the local rules regarding range safety.

The bulk of these rules are from the Archery Australia Club Management Manual but may have additions depending on the layout of the range you are on.

Field Captain

The Field Captain may also be known as the Director Of Shooting (DOS) and they are responsible for the safety of all archers on the range. You must follow their instructions at all times for everyone's safety.

The Shooting Line

The Instructor will show you how the shooting line works. For everyone's safety it is important that you stand in the correct position.

The 10 Basic Steps

Your instructor will run you through the 10 basic steps of archery. As you learn more about our sport you may find there are lots of sub-steps to help you get an understanding of the technique that best suits you.

The top archers always use some form of the 10 basic steps. Please keep this booklet handy along with the notes your instructor will write in the comments section. They will be of great assistance over time.

Instructors Signature _____

Stance _____

Nocking The Arrow _____

String Hand _____

Bow Hand _____

Drawing The Bow _____

Anchor _____

Target Alignment _____

Releasing The Arrow _____

Follow Through _____

Relaxing _____

Week 2

10 Metres

Equipment

Your Instructor will show you the various types of bows you can use. You may have seen most of these in your OzBow Come'n'Try classes and unless you have already locked yourself into a particular bow type then we recommend you have a go with all of them.

The various bow types recognised in Australia are;

- Longbow
- Limited Compound
- Barebow Compound
- Compound
- Barebow Recurve
- Recurve

Target Safety

The Instructor will explain the correct procedure for pulling arrows out of the target. The Instructor may also get you to do a practical exercise of removing and replacing a target face on the target.

Clothing

There is a choice to be made about the type of clothing you may wear. Because you pull the string across your chest it will invariably pick up loose clothing, pockets and necklaces when you let the string go.

Comfortable, snug fitting tops are preferred. If you do have shirt pockets or similar then all items like pens or brooches should be removed.

Instructors Signature _____

Stance _____

Nocking The Arrow _____

String Hand _____

Bow Hand _____

Drawing The Bow _____

Anchor _____

Target Alignment _____

Releasing The Arrow _____

Follow Through _____

Relaxing _____

Week 3

10 Metres

How To String A Bow

In the previous pages we described how to string and unstring a recurve bow.

During this session you will get the chance to string and unstring your bow.

The exception to this are the compounds that require a bow press. If your club has a bow press then the Instructor will give you a chance to use it.

Adjusting Your Sight/Point Of Aim/String Walking

By week 3 you should be capable of adjusting your sight in the correct direction. Knowing how much to adjust comes with experience and the type of bow you are using.

If you have been aiming using the point of aim method then the Instructor will give you some exercises to test your skill so far.

If you have decided to use the barebow compound or barebow recurve bows then now is the time the Instructor will introduce you to string walking.

Footwear

It is important that you wear the correct footwear when you are shooting a bow.

A comfortable pair of sneakers will usually do unless the weather or the ground is very wet.

All footwear must have the toes enclosed so you should not shoot in sandals or anything similar.

Of the 10 basic steps the stance is first so it is important that you can stand and walk comfortably for a long period of time. Shoes with elevated heels that may upset your balance should be avoided.

Stance _____

Nocking The Arrow _____

String Hand _____

Bow Hand _____

Drawing The Bow _____

Anchor _____

Target Alignment _____

Releasing The Arrow _____

Follow Through _____

Relaxing _____

Instructors Signature _____

Week 4

20 Metres

Rhythm

This is the most important step in understanding the technique of archery and sets the foundation for your future growth.

There is a big difference between shooting quickly and snap shooting.

The recommended method of using the rhythm is to shoot the arrow within 3 seconds of achieving your anchor.

It will take you a few seconds to settle the stance, nock the arrow and set your string and bow hand. You should now stand up straight and set your body position ready to draw the bow.

You should breathe in gently and lift the bow pointing it at the target. Now gently exhale as you draw the bow and anchor. It is from this point you should shoot the arrow within 3 seconds.

Having shot the arrow you now relax for around 10-15 seconds and repeat the process.

Snap shooting is where you rush to shoot your next arrows. Your body has just expended energy. If you want to shoot your sixth arrow as well as your first you must let your body recover.

Conversely, aiming for a long period of time like 10-20 seconds doesn't help your scoring. After 5 seconds tensions start to build up in the wrong parts of your body or you start to lose tension in the correct parts of your body. You may aim as tight as you like but it will result in a poorly executed shot.

Your instructor will spend the majority of this week working on your rhythm but it is up to you to always practise this concept.

Instructors Signature _____

Stance _____

Nocking The Arrow _____

String Hand _____

Bow Hand _____

Drawing The Bow _____

Anchor _____

Target Alignment _____

Releasing The Arrow _____

Follow Through _____

Relaxing _____

Week 5

20 Metres

Bow Tuning

The Instructor will demonstrate and discuss bow tuning including;

- Brace height and its effects
- Nocking Point height and its effects
- Bow tiller and its effects
- String types and their performance
- Matching of arrows to bow weight

Different Types Of Archery

Over the past few weeks you have been doing Target Archery.

The Instructor will spend some time explaining the different types of archery that you can participate in and what the main differences between them are.

- Target Archery
- Matchplay Archery
- Indoor Archery
- Field Archery
- Clout Archery

If your club has an indoor range then you probably understand some of how indoor archery works. The Instructor would now give you a tour if required.

Some clubs in Victoria have a filed course where we do field archery. The Instructor would now give you a tour if available.

Instructors Signature _____

Stance _____

Nocking The Arrow _____

String Hand _____

Bow Hand _____

Drawing The Bow _____

Anchor _____

Target Alignment _____

Releasing The Arrow _____

Follow Through _____

Relaxing _____

Week 6

20 Metres

Scoring

You would have been scoring for the past few weeks but this week you are going to learn how to fill out a score card completely.

The Instructor will give you an overview of the categories and how that information is shown on the score card.

Competition

What better way to show off what you have learnt than to have a small competition. Your Instructor will run through 5 ends at 30 metres for which you will score.

At the completion of the 5 ends, depending on time and number of participants, the Instructor will run you through a quick Matchplay session.

Group Discussion

This is a chance to discuss your six weeks of archery, what you have learnt and what you would like to do next.

Etiquette

Archery is a gentle and relaxing sport and should be conducted in good spirits.

- Try not to talk in a loud voice whilst others are shooting
- Try not to exclaim on the shooting line in joy or disgust
- Try not to walk off the shooting line while a neighbour is at full draw
- Try not to touch another archers equipment without their permission
- Try not to disturb people with loud mobile phone ringtones
- Try not to smoke near the shooting or waiting line

Instructors Signature _____

Stance _____

Nocking The Arrow _____

String Hand _____

Bow Hand _____

Drawing The Bow _____

Anchor _____

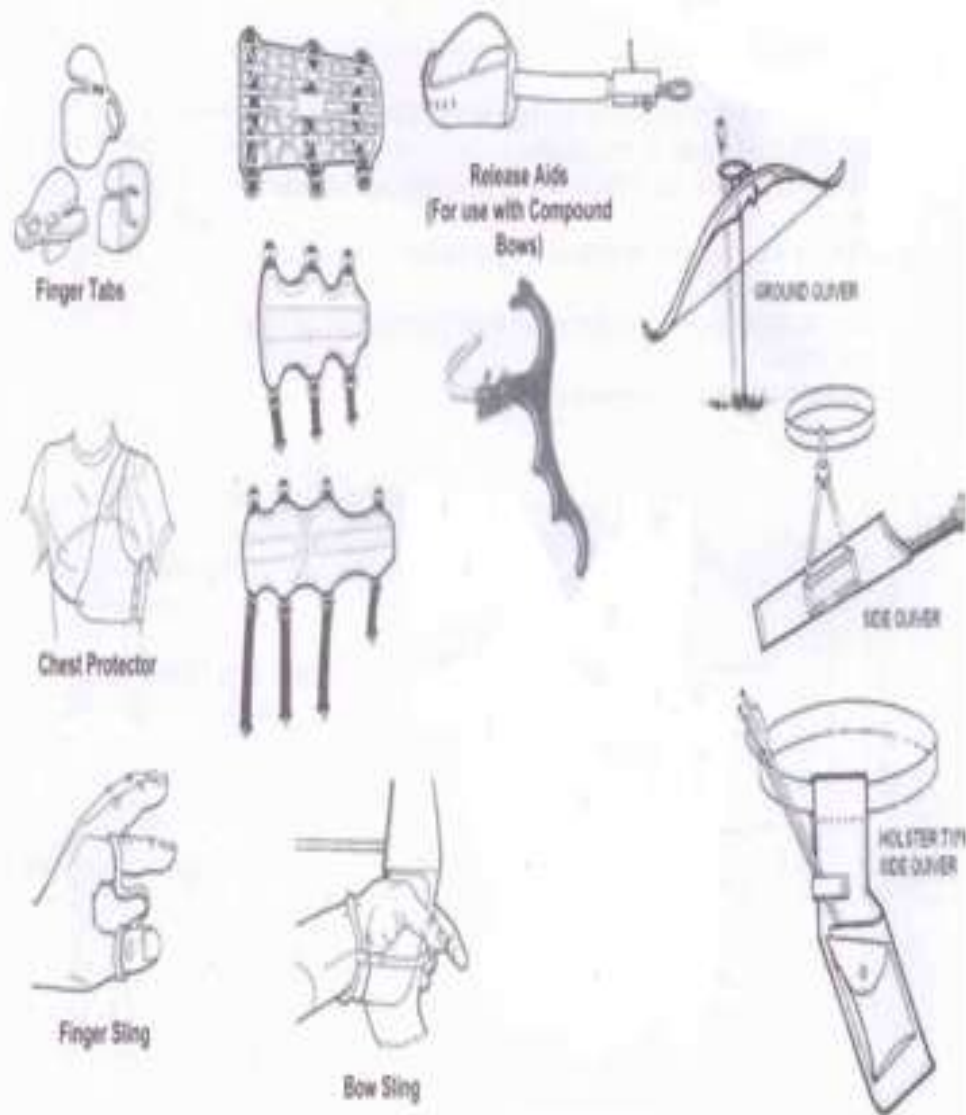
Target Alignment _____

Releasing The Arrow _____

Follow Through _____

Relaxing _____

Personal Accessories



Where To From Here?

Tim Cuddihy
2002 Youth World Target Champion
2004 Youth World Target Champion
2004 Olympic Bronze Medallist



Simon Fairweather
1991 World Target Champion
2000 Olympic Gold Medallist



Deonne Bridger
2005 National Target Champion



Clint Freeman
2003 World Target Champion

