

Welcome To Archery

The New Archers Guide

Produced by

The Australian National Archery Association Inc



Archery

The Family Sport

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Welcome to Archery

This is the first step in enjoying the many facets of this great sport. You may choose to be involved in

- Field Archery
- Target Archery
- Indoor Archery
- Competition & Travel
- Or just the social side of the sport
- Hunting

Out of this you will almost certainly achieve pleasure, relaxation, friendship and fitness. We hope that this will be the beginning of a long and enjoyable relationship with the sport of archery in its many forms.

This book will help give you an insight into what archery is all about from the basic structure of an archery club to the basic skills required to enjoy this sport. We have included a Glossary of Terms to help you become more familiar with the words used in our sport.

Bows and other equipment are also covered to help make you aware as to what equipment is available for use in Field Archery.



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Chapter 1

Clubs

Club Structure:

How your club is structured depends on the types of games played. Clubs are often affiliated with one of the Australian Archery associations or are independently insured. Target archery is conducted on football size fields while field archery is held in more rugged terrain usually in a bush setting. Your club will be set up to accommodate the type of archery shot.

Club Ranges:

- Target ranges require a flat area with shooting lines, equipment lines and waiting lines for the competitors. The World Archery round colourful targets are shot on these ranges at varying distances depending the age of the participants or the game that is being played.
- Field ranges require larger areas of land with up to 28 targets placed along a track with marked lanes and the target butts placed at varying distances. Round, animal and 3D targets are all shot on field ranges. Practice areas are situated at the club for coaching and practice purposes.
- Indoor ranges can be set up within large buildings. These can accommodate national and international competition plus being a great place for coaching and training.

Club Facilities:

Most clubs have toilet and canteen facilities for their members and visitors. Some clubs can accommodate camping and provide showering facilities as well.



Field Archery Club house & facilities



Field Archery Practice area

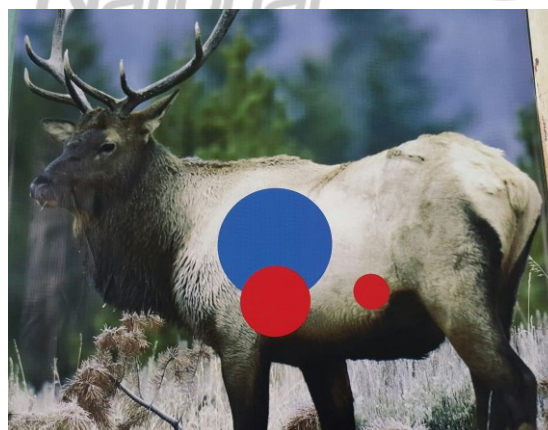
Chapter 2

The Field Archery Rounds

Marked and Unmarked Distance Rounds:

Field Archery is a very popular sport enjoyed all over the world. There is a choice of round target rounds, animal target rounds and marked or unmarked distances. The targets are set at varying distances with minimum and maximum distances.

The marked and unmarked rounds can be round targets or animal targets. The marked round will have a peg or marker that will tell you the distance you are standing from the target in either metres or yards. The unmarked rounds will have a peg or marker where you shoot from but without any distance information. This way you have to estimate the distance you are standing from the target and then you shoot accordingly.



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The 3D Rounds:

3D targets are free standing rubber, animal targets. They are set out in a similar way to the paper target rounds within field archery. The targets are placed at varying distances with natural catching areas behind the targets. These are usually shot as an unmarked round.

3D archery is well established in the USA and many clubs in Australia also enjoy this style of archery. There are many 3D targets that are made in Australia now with Australian Feral animals being the main sort of targets shot.



www.anaainc.com.au
www.3daaa.com

Target Archery Rounds:

Target Archery is the name of the style of archery games that are related to the Olympics. The targets are set out on a flat field similar to a football field. The archers shoot at varying distances during the rounds and shooting the furthest distance first. Target archers are able to shoot recurve, longbow, compound and cross bows within competition but only recurve bows are able to be shot in the Olympics



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The Indoor Rounds:

Indoor archery is very popular in many countries. It is a great way to practice your form and shot execution within a controlled environment. There are national and international rounds that can be shot at an indoor venue.



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Chapter 3

Safety

Personal Safety:

Think and live safety.

- Make sure you are wearing safe clothing for your sport – NO CAMO CLOTHING on field archery ranges – this includes pants, shirts and hats. We are not hunting.
- You should have good firm and comfortable shoes / boots. – No thongs or open sandals.
- You should have a hat for protection from the sun and glare.
- Sun Block cream and insect repellent can help make your sport safer and more pleasant.
- Make sure you have plenty of water.
- A small first Aid kit carried in a bum bag, and any personal medication that may be required.

As with “Drink Driving” there are strict rules on drinking alcohol & the sport of archery.

Range Safety:

- Take time to become familiar with the rules of the association.
- Be aware of the rules and by-laws of your club.
- Be aware of your surroundings.
- Be prepared for the unexpected.
- Be aware of your ranges under all conditions.
- Never rush an action on the range take time and take care.

Equipment Safety:

It is in your best interest to set up a regular maintenance program for your archery equipment. Gear kept in top condition produces better scores.

Things to look for:

- Splits in limbs risers, arrows nocks and tips.
- Fraying on bow strings and cables.
- Quivers in good order, make sure there are no holes for arrows to poke out of the bottom.
- Carry enough spares to finish a round in the event of an equipment failure.

Remember it takes but a few seconds after each target to do a quick check on your equipment. Eg: Are the vanes or feathers still on the shaft properly?

Is the shaft still straight? Has the nock split or come loose?

Chapter 4

EQUIPMENT

Archery is a sport where the equipment **must fit you**, not you fit the equipment.

When selecting equipment, make sure that it fits your needs. Equipment should be chosen which will grow with you both in poundage and draw length. It is advisable to try as many types of equipment as you can before you make a purchase.

Consult your club coach before buying gear, as he or she may be able to advise you on what you will need. The highest priced bow is not necessarily the best bow for you, however, it is always better to buy the best equipment you can afford, as it will always work out cheaper in the long run.

Always check on the workmanship of the gear you are buying before you make your mind up eg: guarantees, after sales service, parts availability.

Compound, Recurve and Longbow:

There are three main types of bow that are allowed within archery. They are the Compound, Recurve and Longbow. The choice of which you prefer is up to you. Cross Bows are only able to be shot competitively within Target Archery clubs and these bows must be target Cross bows and not hunting bows.

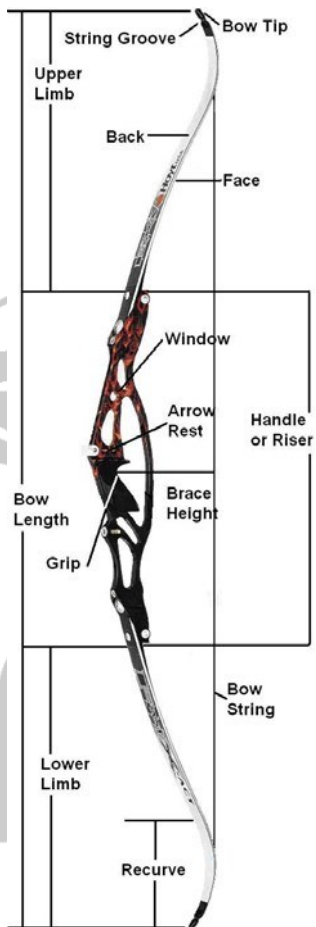
Archery is as old as Man and has been important throughout history from the Longbow up to the evolution of the modern compound bow.

Many beginners learn the basic skills with a Recurve bow and then progress to their bow of choice. The choice is up to you and where you see your archery progressing to. Many archers use different bows and shoot different styles over their archery careers. For example an archer may start off with a basic compound bow and shoot it without any added equipment, this is called shooting Barebow, they may then decide to put sights on and shoot either in a sighted division. Whatever you decide your club coach is there to help you with your choices.



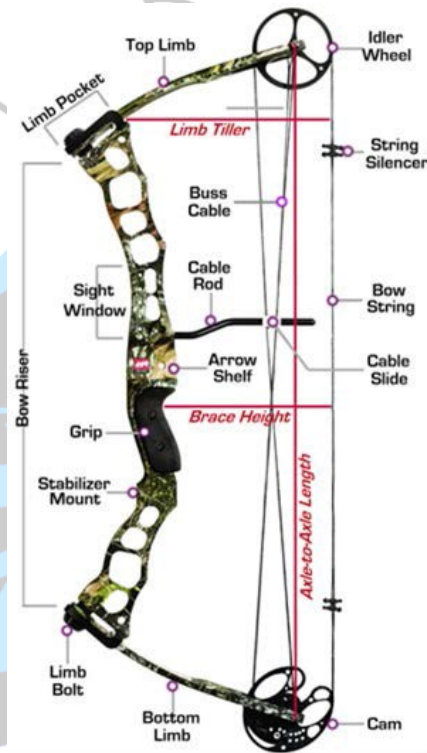
The Recurve Bow:

This bow can be a more traditional wooden design or a modern aluminum and carbon fibre combination. The Recurve bow is used often in Target archery but many field archers enjoy the challenge of the Recurve. The recurve bow is the only bow used in the Olympics.



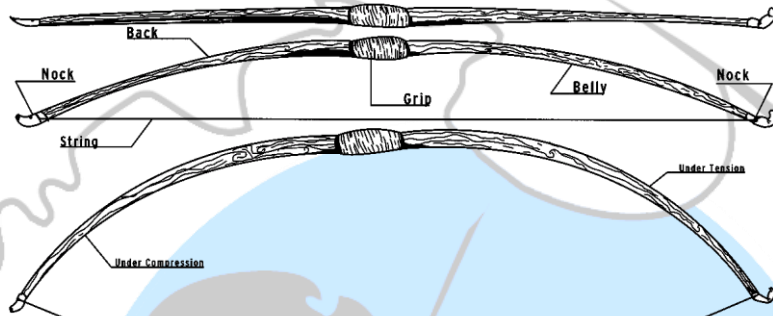
The Compound Bow:

This is a modern and innovative bow used by many archers. The wheel or cam system makes it easy to use and it allows the arrow to be shot at a greater speed.



The Longbow:

This is the oldest and more traditional of the three bows. Many modern archers still enjoy the simplicity and tradition of shooting this style of bow.

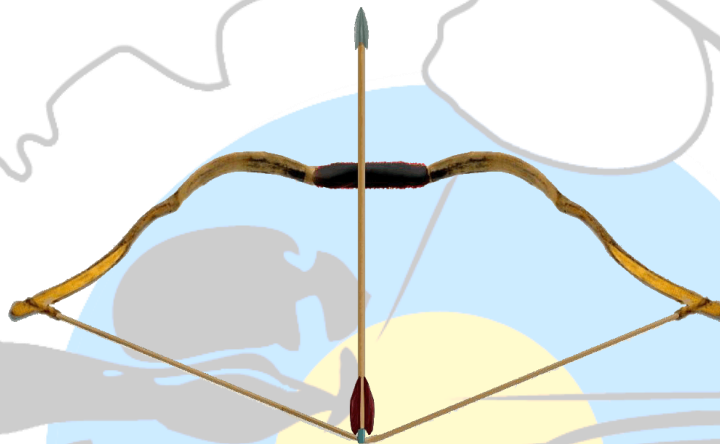


Historical Bow:

The historical bows are replicas of bows with that were in use before 1900.

Some of them are based on designs that are over 2000 years and are often made of a single piece of wood.

This style is slowly increasing in popularity.



Left or Right Hand Bow

Eye Dominance versus Hand Dominance:

There are several schools of thought on which is best choosing a bow with regard to your eye dominance or using your hand dominance. A large part of the population is what is called "Cross Dominant". This means that the hand that a person uses to write with and perform most of their tasks is on the other side of the body to their strongest eye. When choosing which hand to shoot with it is important that we know which is your dominant hand and which is your dominant eye

Your dominant hand / arm may be stronger but as a new archer you will be a little uncoordinated to start with when learning to shoot any way. Your dominant eye will be the one that wants to stay open when aiming and if you are cross dominant shooting with your strong hand yet aiming with your dominant eye you will find that your arrows will group to the side that your dominant eye is on.

You can patch, close or veil your dominant eye and use your dominant hand to draw the bow with. Or, you can use the hand that is non dominant to draw the bow to the side of your face that the dominant eye is on.

Great success has been achieved by using the dominant eye to determine which hand you will shoot with. If you are cross dominant you will be surprised how quickly your body adapts as you will be more accurate by aiming with your dominant eye. Those archers who do not wish to shoot using their dominant eye or who have come with a bow that does not suit their eye dominance will need to close their dominant eye to successfully shoot the target. This is for novice archers who are not yet established.

A simple Eye Dominance Test

1. Extend both of your arms out in front of your face and make a triangular opening with the palms of your hands. Focus on an object through the centre of the opening and then bring the hands back to the face. Whichever eye the triangular opening ends up on is the dominant eye.
2. If you have another person with you get them to stand in front of you and again extend both of your arms out in front of your face and make a triangular opening with the palms of your hands. Look through the triangle at the face of the other person and ask them which of your eyes they can see through the triangular opening. This will be your dominant eye.

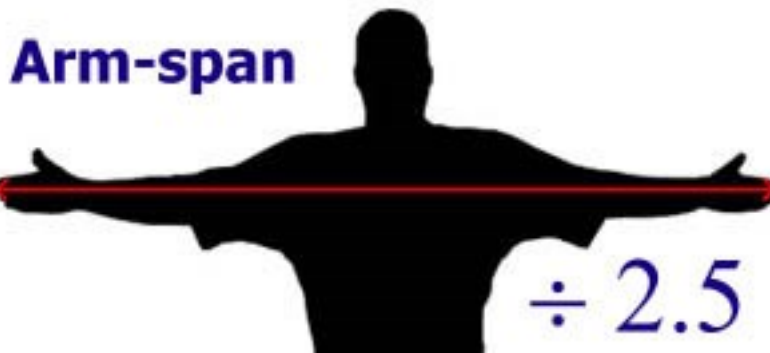


Draw Length

It is very important that all archers know their Draw Length so that they can purchase a bow that is the right for them. For this advice please see your club coach or accredited archery distributor for correct measurements.

Arm-Span divided by 2.5:

As the diagram suggests you make a measurement across your chest from the tip of each middle finger while the hands are set to either side of your body. Make sure that your shoulders are not hunched and that your elbows are not hyper-extended. This measurement is taken in inches.



E.g.: A measurement of 68 inches would work out to be a draw length of 27.2 inches.

Un sighted Shooters: This measurement is correct for those archers who shoot without sights. The unsighted shooter will use the “Field Archers Anchor”

Sighted Shooters: You will need to add approximately half an inch to an inch in length to the draw length calculated when setting the draw length for a sighted shooter. The sighted shoot will need to adopt the “Target Archers Anchor” or “Release Aid Anchor” so that the back of the arrow is lower allowing for more cast of the arrow when sights are attached.

Wall to mouth measurement: Measuring the draw length by standing side on to the wall a placing your fist on the wall with your arm stretched as if holding a bow. Make sure your shoulder is not hunched and that your elbow is not hyper-extended. Your head should be facing the wall. Measure from where your fist touches the wall to the corner of your mouth. Again do this in inches.

By using both methods of measurement together you can obtain a pretty accurate draw length. If your arms or shoulders are not exactly the same length this will help you determine your draw length correctly.

Important Note: It is very important to note that for a new archer, often the draw length that you are measured at when you start shooting a bow will be different 6 to 12 months later. Why does this happen? When we first start shooting we often are very tense and it will take a while for our muscles to relax and start to get used to correct shooting position and form. Once we begin to relax the muscles will lengthen giving us a longer draw length. It is important to purchase equipment that will allow for this to happen.

When purchasing equipment for children please buy equipment that is correct for their ability and strength again with the ability for th equipment to grow with them.

Bow Poundage

The poundage of the bow is extremely important. If this is too high it can cause permanent damage to the muscles, tendons and joints of your upper body and this will affect the development of good form and may cause long lasting damage to your body.

Purchase a bow that suits your requirements now for your needs and skill level, and ensure it has the ability grow in draw length.

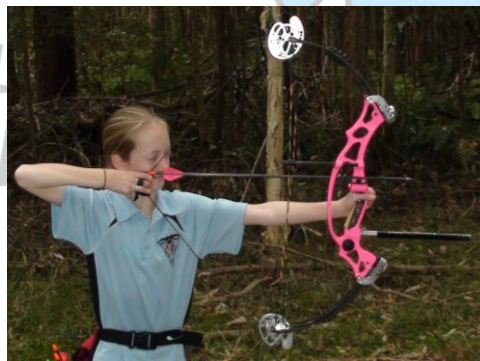
Signs of an over poundage bow

- Grunting while pulling back the bow.
- Pointing the bow towards the sky and drawing it down to anchor is dangerous.
- Pointing the bow at the ground and drawing back to anchor.
- Pointing the bow at the target and dipping the elbow while drawing the bow back.
- Arching the back and leaning back when drawing the bow back to anchor.

Correct Drawing technique

Stand with your feet shoulder width apart, raise bow level with the target, draw the string back to an anchor point beside your face while keeping the elbow level with the target and not allowing it to dip down and up.

The three phases of drawing the Bow Correctly. Note that the Drawing arm elbow does not dip down.



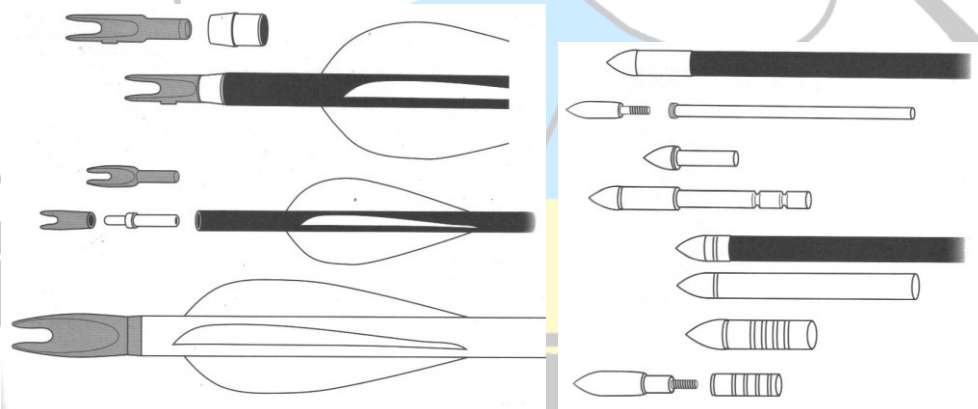
Other Equipment

Arrows:

Typically arrows are made these days of carbon fiber or aluminum. The more traditional Recurve and longbow shooters often use wooden arrows. Arrows have a point at the front and a nock at the rear end. The nock attaches the arrow to the bow string which has a nock locator on it. Arrows have feathers or plastic vanes located at the rear to stabilize arrow in flight. They are collectively called arrow fletching.

It is important to match the arrow to your bow poundage (see club coach or archery shop for "Arrow Spine Chart"). An incorrect arrow can cause injury to the archer as well as bow damage.

Care of you arrows is important, making sure they are free from dents and bends and that the fletching, nocks and points are kept in good order.



Arrow Nocks

Arrow Tips

Arrow Rest

This is a devise on the side of the Riser of the bow (the handle) where the arrow sits. The arrow rest aids in the stabilizing of the arrow after release.



Release Aid Rest



Fingers Arrow Rest

Finger Tabs & Finger Gloves

Finger Tabs and Finger Gloves are commonly used by many archers to protect their fingers while shooting. There are a great variety of finger tabs and gloves available.



Finger Tab



Finger Glove

Arm Guards

Arm Guards are a leather or plastic piece of safety equipment worn on the forearm. The arm guard is designed to the impact of the string once the arrow is fired.



Quivers

A quiver is the holder used to contain the archer's arrows. There are side, back and bow quivers available in many styles and colours.



Hip Quiver



Back Quiver



Bow Quiver

Chest Guards

These are more often used with recurve or longbow shooters and aid in keeping clothing away from the string.

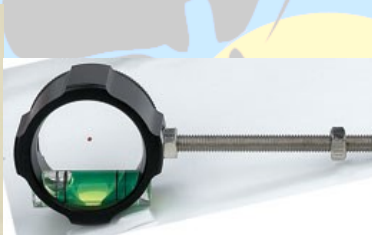


Sights

There are many styles of pin sights and scopes available. What you chose to put on your bow will affect what division you will shoot when competing. Check with your club coach to work out what will best suit you.



Pin Sights



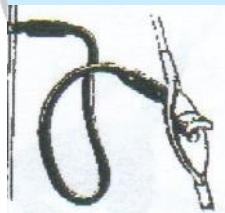
Scope



Sliding Sight

Peep Sights

This is a rear sight attached to the string. The archer looks through the peep sight, at the same time lining up the sight or scope with the middle of the target.



Self Aligning Peep Sight

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Stabilizers

These are a weight which is attached to the front of the bow to take any shock out of the bow when fired and to stop the bow from rocking backward upon release.

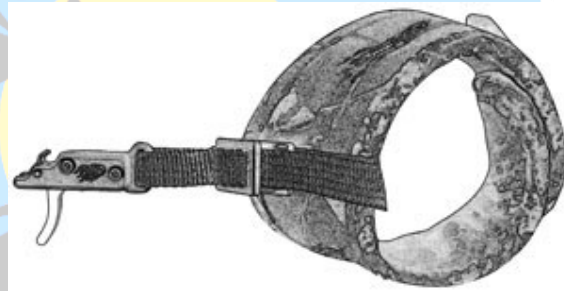


Short Stabiliser Release Aids

A release aid is a mechanical device which attaches to the bow string. It is set off like a gun trigger to release the string and push the arrow forward. There are many types of Release aids available.



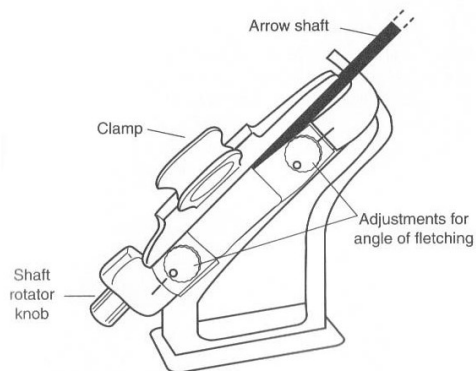
Hand Held Release Aid



Wrist Strap Release Aid

Fletching Jig

This is a device used to put fletches, feathers or vanes onto the arrow shaft.



A fletching jig.

Chapter 5

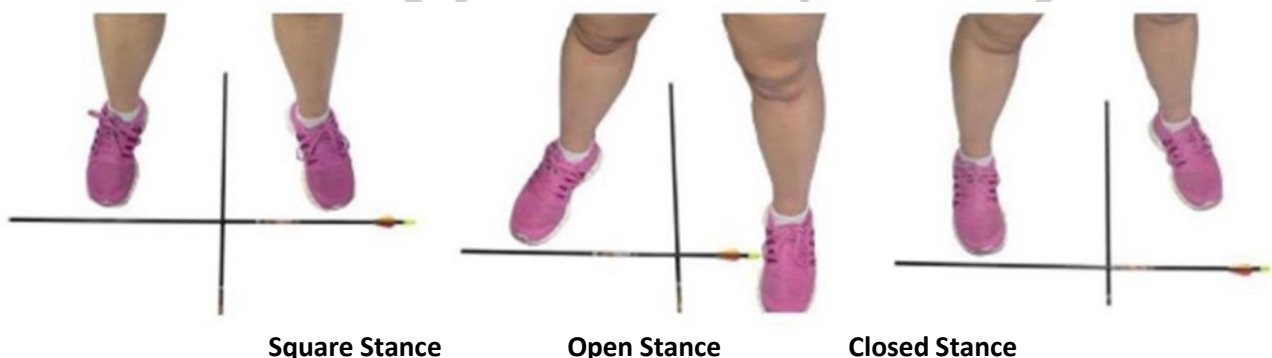
The Basic Steps

Stance and Posture

The way you stand is the first basic step of our sport. We usually adopt a square stance to begin with and then adapt to an open stance. The Closed Stance is usually only used for those people who have difficulty at first with clearance of the chest by the string. The closed stance helps that archer adopt the correct technique of string placement (it is best only used for a short period of time). Having your feet shoulder width apart and your weight evenly placed between your feet, is the optimum stance. In field archery the terrain will often be uneven and you may find it difficult to recreate the perfect stance.

- The Square stance requires the archers to stand with their feet side onto the target they are aiming at with their feet shoulder width apart and their toes in line.
- The Closed Stance has the archer starting in the square stance then moving their back foot backwards until their toe of the back foot is in line with the archer of their front foot. (This is usually used if there is interference with the string and the archers chest and should only be a short term solution.)
- The Open Stance is the optimum stance for our sport and starts with the archer standing in the square stance then moving their back foot forward so that the arch of the back foot is in line with the big toe of the front foot. The front foot is then turned slightly so that it is in a 45 degree angle to the target.

At all times the archer should strive to keep their body straight, keeping their ribs and chest down and their bottom tucked under. This will assist in creating a strong core.



Nocking the Arrow

Putting the arrow on the string in the same way and in the same place each time is important to consistency. There is usually either a brass or thread nock locator on the string and the arrow is placed either below or above this locator, depending how the bow has been set up.

The “index” fletch or vane should be positioned away from the bow if your archer is shooting with fingers. With release aid shooters the index fletch or vane should be either positioned to shoot through the arrow rest (for a prong rest) or directly above the arrow rest.

Make sure the nock fits firmly onto the string. If it is not firm there may be a crack in the nock which may result in a dry fire situation if the arrow is fired.



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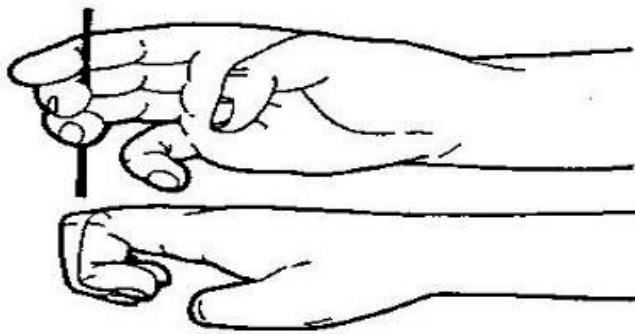
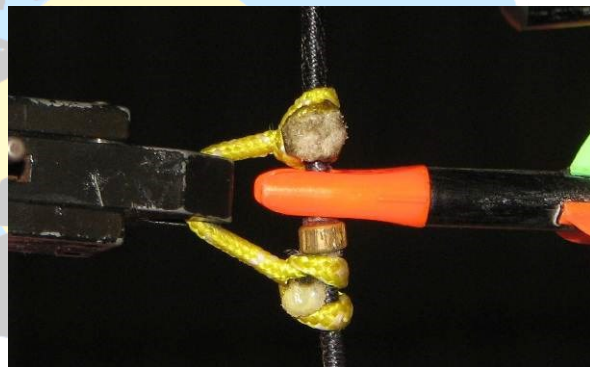
Hook Up

This means either hooking your fingers onto the string, or in the case of a release aid hooking the release aid onto the string or “D loop”.

For fingers shooters the string should sit in the first groove of your top three fingers. The fingers should be slightly hooked and not scrunched around the string. Whether to hook up with one finger over the arrow and two fingers under or placing all three fingers under the arrow is the archer's choice. (There are certain divisions within IFAA where the archer is required to use the “Mediterranean” loose, where the index finger touches on top of the nock: e.g. Longbow. It is also useful when shooting with fingers and sights e.g. Bowhunter Limited or Freestyle Limited, as it allows for a greater distance to be achieved).

For release aid shooters the caliper should be hooked on to a D loop which is tied to the string. The D loop is used to protect the string from being compressed by the caliper or hooking mechanism.

Hooking up again should be done the same way every time.



Bow Hand

Placing the bow hand comfortably onto the grip of the bow is the next step. For most beginners the hand is just placed around the grip, remembering not to hold the grip too tightly as this will cause problems with torque or moving the bow.



The pro grip is the preferred grip used by most top archers it helps lessen the movement of the bow upon release and helps get the bow arm out of the way so it is not hit by the string upon release. The hand is placed in a Y position onto the grip of the bow.



Pre-draw

This is the time we move the bow arm up in line with the target we are about to shoot. The elbow of the bow arm should be rotated out or bent slightly for beginners. This allows the string to travel forward without connecting with the archers arm. The bow is then in place to draw the string back. Make sure that you do not hitch your shoulder in this position.

Draw

Once you have your bow pointed at the target it is time to pull the string back. This is done smoothly and without dipping your drawing arm elbow. If you have to dip your elbow to draw the bow it may mean that the bow is too heavy in poundage for you.



Anchor

Once your archer has drawn the bow it must come to a stop. This is what is called an anchor. An anchor is a facial reference that the hand is drawn back to each time we shoot.

When the anchor is consistent this gives that archer consistency. There are four main anchors used in field archery.

1. The field archers anchor
2. The Target Archers Anchor
3. Apache (high anchor)
4. Release Aid Anchor

Where you anchor on your face will differ when you use fingers to release the string or a release aid.



Target Archers Anchor



Field Archers Anchor



Apache or High Anchor



Release Aid Anchor

Holding & Aiming

Make sure your anchor is correct and comfortable. Establish that the drawing elbow is in line with the arrow and that the bow arm is not locked straight but slightly relaxed.

The next step is to start aiming. There are three basic aiming methods:

1. Instinctive Aiming

This is where the archer stares at the target and then releases the arrow without using any reference points on the bow or with the use of the tip of the arrow. Many archers start with an instinctive style and develop an aiming method as they progress.

2. Method Aiming (Gap Shooting)

This is where the archer uses a reference point either on their bow or by using the tip of their arrow to aim with.

3. Sights

Sights are an attached mechanism which allows the archer to become more accurate. There are a wide variety of sights available which put the archer into different shooting styles.

Whatever method you use you need to be consistent and focused on aiming.



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Release

With a fingers shooter this requires you to relax your fingers and let the string push the arrow forward towards the target. The less movement when the release happens, the better the result will be.

To obtain consistency when shooting a smooth and consistent release is imperative.

With a Release Aid shooter the archer gently squeezes the trigger which opens the calliper or rope for the string to move forward. Punching or jabbing at the trigger will cause the release to be jerky and inconsistent and can cause other problems later on.



Static Release



Natural Release

Follow Through

The Follow Through starts immediately on release of the arrow, and lasts until the arrow has hit the target. It should consist of the natural backward movement of your release hand into a comfortable not forced position. This is the time the archer can analyse the shot and take mental note of how the shot felt in relation to where the arrow landed.



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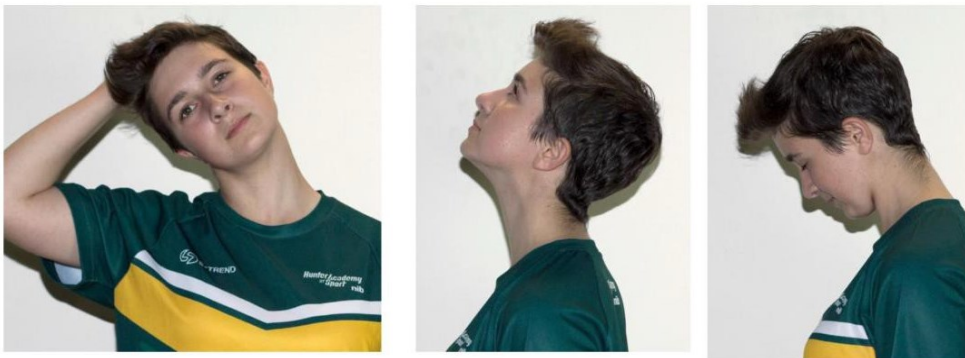
Stretching Exercises

It is important to warm and stretch the muscles we are going to use before we start shooting. In all sports a warm up is essential to injury prevention. Below are stretching exercises recommended to get the upper body prepared for drawing and shooting a bow. Hold each stretch for the count of ten seconds.

The exercises should be done on both sides of the body to give even stretch and flexibility. Leg stretches are also advisable prior to walking onto the field range.



Neck Stretches



Shoulder and Triceps Stretches





Forearm Stretches



Chest Stretches

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Chapter 6

Archery accidents

The College of Health and Human Services, George Mason University, Fairfax, VA, USA, did a study concerning the safety in Archery as a sport and as a recreational activity and concluded :

“Contrary to the prevailing perception that archery is inherently dangerous, the evidence shows that recreational archery is a very safe sport; safer than popular field sports where people risk collisions or falls, such as soccer, basketball or baseball.

The data suggest that nearly all acute injuries in target archery can be prevented through participation in an accredited training program and the use of basic protective gear (arm guards and shooting gloves). All archery education programs should focus on proper archery stance and joint strengthening to minimize chronic shoulder and back injuries.”

ACUTE INJURY

- Instant, short term
- Bruising, haemorrhaging, open wounds.
- Normally caused by:
 - Carelessness
 - Equipment failure
 - Incorrectly set-up equipment
 - Incorrect draw length
 - Incorrect arrows
 - Improper posture
- Short term treatment

CHRONIC INJURY

- Gradual, long term
- Inflammation, Muscle strains, tendonitis, bursitis, CTS
- Normally caused by:
 - Improper form
 - Poor hand/elbow/shoulder position
 - Jerky draw motions
 - High bow draw weight
 - Long aiming periods
 - Inadequate shock absorbers
- Long term treatment

Damaged arrows

The picture shows the result of a carbon arrow that “shattered” on release as the result of a crack in the carbon, which was not noticed by the archer.

Injuries caused by shattered carbon arrows can be very traumatic and removal of the carbon fibre from the wound may take several operations.

Recommended viewing:

<http://safearrow.com/>



Incorrectly set-up equipment

Incorrect draw length

An incorrect draw length normally results in an incorrect alignment between the bow arm and/or the chest with the draw of the bow. This normally results in a “slap” on the arm by the bow string and consequent bruising of the arm.

Incorrect arrows

Most arrow manufacturers have a chart that shows what type or size arrow is suitable for a specific draw weight and associated draw length of the bow.

Using arrows that are not suited will make bow tuning very difficult, if not impossible. Arrows that are too light may in time result in breakage of the bow and/or arrow, causing possible injury to the archer and/or by-standers



Improper Posture

Improper posture of the archer while the bow is in draw is the main reason for bow string to hit the bow arm and is the most common injury in the sport.

Improper posture can be the result of:

- Incorrect equipment
- Over drawing
- Over-extending the bow arm
- Not rotating the bow arm
- Lack of back tension
- Being tired



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Preventive measures

It is imperative that an archer attends to a certain protocol to minimize the chance of injury:

- ALWAYS inspect your equipment before shooting your bow. This includes bow, string & cables, arrows, and all accessories.
 - Check your bow regularly for cracks or twisting. If in doubt, have it checked by a professional before shooting it any more.
 - Check the condition of your bowstring regularly. It's cheaper to install a new string than to replace the bow.
- Check you arrows regularly for flaws in the point, shaft and nock. Mark damaged arrows clearly and do not put them back in the quiver. Shooting a damaged arrow can result in what is called a "catastrophic" failure to the archer.
- Don't draw a bowstring back further than the length of the arrow for which it is intended. Overdrawing can break the bow and injure the shooter in the process. There is an old saying that a fully drawn bow is 7/8 broken!
- Don't draw the string back except with an arrow on it and, especially, don't release the bowstring with no arrow on it. Doing so is called dry firing and can damage the bow.
- Use protection gear such as an arm guard, a chest guard or a finger tab or glove.
- Use a drawing tool to draw arrows from the target/butt

General Safety measures

- NEVER point a bow or shoot an arrow at another person.
- NEVER shoot an arrow straight up into the air. You can end up hitting another person or yourself.
- NEVER shoot an arrow off into the distance where you cannot see where it will land. You could end up hitting another person.
- Only use archery equipment in places that are especially set up for target practice - such as indoor and outdoor target ranges. Targets should be set up to insure that no one can be accidentally hit by a stray arrow.
- Allow at least 20 yards behind the targets and a 30 degree cone of safety on each side of the shooting lane. Try to place targets against a hill or rising terrain as a safety measure.
- If you are looking for a lost arrow behind a target, always leave your bow leaning against the target face so that it will be seen by other archers coming up. If possible, have one archer from your group stand in front of the target to prevent anyone from shooting.
- When on an archery course, be sure to stay on the marked path and travel only in the direction in which the targets are laid out while shooting is in progress. Going backwards on the trail or across an unmarked area could place you in the path of a flying arrow, resulting in serious injury.
- At practice ranges, the only safe place is behind the shooting line.
- Never shoot an arrow until you are positive that no one is in front of you or behind the targets.
- Never stand in front of a bow while it is being shot, even if you are to one side of the shooter.
- Arrows should be placed on the bow only when you are on the shooting line and pointing in the direction of the targets.
- After you are done shooting, wait for word from the other shooters before going toward the targets to retrieve your arrows.
- WALK, don't run toward the targets. Remember that the arrows are sticking out and can injure you. When pulling arrows out of a target, stand to one side and insure that no one is directly behind you.
-

Shoulder injuries

- Muscle and joint inflammation
- Inflammation is the initial response of the body to harmful stimuli (in our case over stimulation of untrained and weak muscle tissue of the shoulder, arms and back) and is achieved by the increased movement of plasma and leukocytes from the blood into the injured tissues.
- Inflammation is part of the body's immune response: it shows that the body is trying to heal itself.
- Extended rest, warm compression, non-steroidal pain relievers and light massage may help relieve the pain and increase the healing process.
- The archer is expected to reduce the bow draw weight and start building up sufficient muscle strength to draw his/her bow at the preferred draw weight.

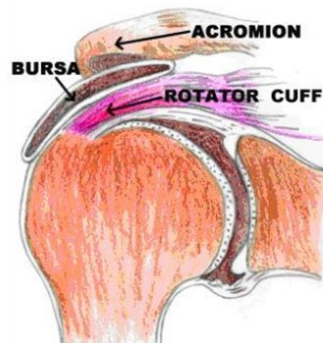
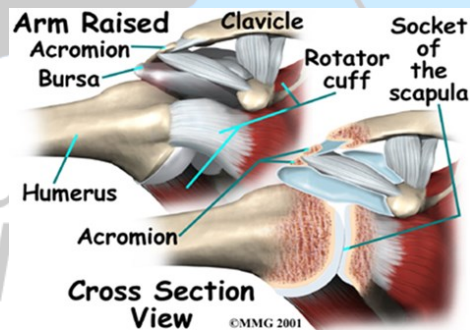
Tendonitis / Tendonosis(chronic tendonitis)

Tendonitis of the shoulder is an inflammation of the rotator cuff and/or biceps tendon. Shoulder tendonitis is usually the result of a tendon being pinched by the acromion (see picture).

Tendonitis is especially common in target archery with recurve and longbow archers.

An archer with tendonitis may not be able to raise the bow hand for a long period of time without (severe) pain.

- Treatment may include:
 - Rest
 - Ice or heat
 - Non-steroidal anti-inflammatory medications
 - Strengthening exercises
 - Ultrasound therapy
 - Corticosteroid injection
 - Surgery (for severe injuries)



Chapter 7

A Glossary of Archery Terms

Anchor	This is also called the “Facial Reference”. It is the facial contact and final position the archer brings the bow string to prior to aiming.
Arm Guard	A purposely made piece of leather or vinyl worn on the inside of the bow arm to protect the forearm from the bowstring during shooting. It protects the arm from being hit by the bow string.
Arrow Rest	An extraneous device on the bow to provide a contact point. It is also a resting point, or shelf to support the arrow
Back of Bow	The side of the bow that faces away from the shooter.
Bare Bow	Shooting a bow without a bow sight.
Belly of Bow	The surface of the bow facing the archer during shooting (also the face)
Bow Arm	The arm that holds the bow
Bow Press	A mechanical device used to relax the pressure on the bow limbs to allow work on a compound bow, e.g. replacing cables
Bow Window	The cut out section on the arrow side of the bow to allow the arrow to pass through or near the centre of the bow.
Butt	The backing that the target is attached to and which the arrow penetrates.
Brace Height	A term describing the height in measuring the distance between the bow and the string when the bow is strung.
Cams	The irregularly shaped wheels at the end of the limbs of a compound bow.
Cant	Tilting of the bow to the left or right
Compound Bow	A modern bow with a system of pulleys and wheels designed to maximize draw weight while minimizing the hold weight.
Creeping	Letting the drawing hand (the hand on the string) edge forward when at anchor.
Draw	To Pull the bow string back to anchor.
Draw Weight	The force (in pounds) needed to pull back the bow.
Dry Fire	Shooting the Bow without an arrow on the string. If this is done the bow may explode. Never shoot your bow without an arrow nocked onto the string.
End	A number of arrows shot at one time, as required by the particular archery round being shot at that time.
Finger Tab	A manufactured piece of leather or vinyl worn over the fingers during shooting to protect the fingers. It also allows for a smoother release.
Finger Shooter	An archer who draws the bow back using fingers placed on the string.
Fletching	The feathers or plastic vanes attached to the arrow to stabilize flight.
Follow Through	Holding the release position after completing the shot until the arrow has hit the target. Also analysis of the shot.
Form	The structure of an archer while executing their shoot routine. Eg: an archer may have good or bad form.
Glove	A three finger glove specifically manufactured for fingers shooters.

Grip	The handle of the bow. Also the way the archer hold the bow.
Launcher	An arrow rest designed to be used for Release Aid shooters. The launcher aids in stabilizing the arrow upon release.
Limbs	The two ends of the bow from the riser outward. The limbs bend which give the propulsion to the arrow when fired.
Nock	The plastic device on the end of the arrow that attaches the arrow to the string.
Nocking Point	the marked place on the bow string where the arrow nock is placed .
Over Bowed	Using a bow that is too strong for the individual.
Over Draw	Drawing the bow back too far, so that the the arrow tip passes the face of the bow.
Peg	The marker used to set out where the shooter is to stand while shooting each target on the field range.
Peep	The small sight opening that is fixed to the string for the archer to sight through.
Plucking	Flicking the string with the fingers on release leading to a sideways force on the arrow. The string should be allowed to simply roll off the fingers.
Point	The tip on the end of the arrow.
Quiver	A holder to contain the arrows.
Recurve Bow	A type of bow with curved back limbs
Release	To let the bow string slip out of the finger tips. Or to depress the trigger on a release aid to release the string.
Release Aid	A mechanical device used to hold and release the string.
Riser	The central part of the bow. This is the solid and unmoving part of the bow.
Round	A shooting session where a set number of arrows are shot at a set number of targets.
Serving	The thread wrapped around the bowstring at the ends and middle of the string to prevent fraying of the string.
Shaft	The main body of the arrow.
Sling	A piece of cord attached to the fingers of the bow hand to help prevent bow torque.
Spine	Refers to the stiffness of the arrow. The spine of the arrow must be matched to the draw weight of the bow.
Stabiliser	A weighted rod attached to the front of the riser that absorbs the shock on release of the bow.
Torque	Movement of the bow in the hand often caused by the archer gripping the bow too tightly.
Trajectory	The curved path the arrow follows to the target.
Vane	The plastic "feather" on an arrow.
Windage	The amount of drift in the flight of the arrow caused by the wind.
Window	The cut out section on the arrow side of the bow to allow the arrow to pass through or near the centre of the bow.



The Author

Lynne Fairhall

ANAA Level 3 Coach

NFAA Level 3 Coach

IFAA Master Instructor

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