



Beginner's & New Members Guide

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Welcome to Fenland Archery Club

We are a friendly club primarily involved in Target Shooting with Archers of all ages and abilities, shooting modern Olympic recurve and the more traditional Longbow and Compound bows. Other bow styles including American flatbow and Mongolian recurve can also be seen at the club on occasions. We welcome all archers, be they beginners or long established and encourage them to enjoy their shooting whether their interest is in socialising, fun or competition.

This booklet is particularly aimed at new members to help them have an idea of what the Club is involved in, how it works, and who the people are that you can ask for advice.

The Club was formed in 2006 by 12 local archers in response to a need for a credible archery club in the East Peterborough/Whittlesey area. The original membership of the Club was primarily its committee members. The original foundation members were:

David & Pauline Slack Glyn &
Rieko Dixon
Colin & Sarah Crowley
John (A) & Roz Payne (A)
Paul & Jill Anthony (A)
Joel Dilley & Derek Prescott

(A) - GNAS Associate member, Full member of Nene Bowmen

None of the founder members were well versed in running a club and there was a steep learning curve for those elected to the key positions. In a very short time - 3 months in fact, the club had established excellent permanent facilities and became financially self sustaining - a great achievement in itself.

During the Club's brief existence its members have represented both club and county and in both Longbow and recurve, with the former being particularly successful in winning county and regional titles.

The club is affiliated to the Cambridge Archery Association, Southern Counties Archery Society (S.C.A.S) and the Grand National Archery Society (G.N.A.S.) *a.k.a.* Archery GB.

The windmill club logo is derived from both a traditional common sight in the fens and the venue for the first club meeting - Windmill St. Whittlesey.

Shooting - Times and Venues

The archery year is divided into two seasons: -

Outdoor	-	Early April to Late September
Indoor	-	Early October to Late March

Outdoor

During the summer outdoor season the club shoots at the rear of Sir. Harry Smith Community School, Whittlesey. Our recognised shooting times are Tuesday and Thursday evenings commencing 6:30 p.m. to 9.00 a.m. *approx.*, and Saturday commencing at 9:30 am. We may run until 2pm.

Indoor

During the winter indoor season the club shoots in the gym at the rear of Sir. Harry Smith Community School, Whittlesey. Our recognised shooting times are Tuesday and Thursday evenings commencing 7:30 p.m. to 9.30 a.m. *approx.*, and Saturday commencing at 9:30 am.

Please note that there must be a minimum of two adults present before any shooting can take place, one of whom must be a committee/keyholder member.

Members

A club is only as strong as its membership - we try hard to ensure that new members feel welcome and that all members new or old are treated as equals, able to benefit from the club and contribute to its running. All members have equal rights irrespective of position within the club and therefore all members have equal responsibility to play their part.

You may wish to help by joining the Committee. You do not have to be an expert archer or long-standing member - the club welcomes fresh ideas. Currently, full committee members must be club members for at least 6 months at the time of the AGM, however we encourage members to contribute in any way they can.

All members without exception are expected to help with setting up/putting away of equipment. If you do not feel you can move or assist with moving heavier items, there are still tasks that you can assist with including putting target faces on the boss or measuring out of distances. Indoors, please assist with taking kit down before tending to your personal kit. In the interests of fairness, please play your part. Nobody wants to see others standing around chatting while they do the work time and time again.

Members Register

For insurance reasons, all members must sign the members register each time they attend the archery range. Please note that any incidents no matter how minor **MUST** be recorded in the accident book and register and countersigned by a witness.

Membership

All our members must have completed an approved G.N.A.S. Beginner's Course either at this club or elsewhere. Existing archers can apply for immediate membership; however, both practising archers and beginners must have their applications approved by the committee before being allowed to shoot or becoming a full member. Acceptance of membership implies full acceptance of, and adherence to the club constitution (available on line at www.fenlandarchery.co.uk, or via the club secretary) Archery GB Rules of Shooting, rules applied by our host facility and other club rules.

Membership fees are payable by the last week of August prior to the A.G.M., which is normally held in the first week of September. You must be a current and fully paid up member on the 1st September if you wish to attend and vote at the A.G.M. Shooting fees are payable quarterly in advance by standing order.

The membership fees that are collected are shared between the club and the following bodies:-

The Grand National Archery Society (G.N.A.S.) the governing body of the sport in the U.K. They provide an administrative function and cover clubs and archers with third party insurance. All G.N.A.S. members receive the society's magazine Archery U.K., four times a year. Full details are available at: www.archerygb.org

The Southern Counties Archery Society (S.C.A.S) represents our region on G.N.A.S. Committees. The S.C.A.S. organises competitions in various archery disciplines and holds regular meetings to discuss issues affecting clubs and archers in its area of influence. For more details see: <http://www.scas-archery.org.uk>

The Cambridgeshire Archery Association (C.A.A.), which governs the sport in this county, has its committee made up of members from different clubs within the region. Its role is not dissimilar to that of the S.C.A.S covering the same issues at a more local level. (<http://www.cambridgeshirearchery.org>)

First Aid & Medical Conditions

The club keeps a basic first aid kit in the kit box for both indoor and outdoor shooting. Several members are trained in first aid and there is usually a member trained first aid in attendance at all sessions. There is no requirement that a first aid trained member is present, however it is mandatory that 2 senior members are present at all times while shooting. Any incident requiring first aid treatment must be recorded in the accident book, even if no further assistance was required.

It is essential that you notify a committee member of any medical conditions or medications taken that may impact on your ability to shoot or could pose a danger to other members. The club does not discriminate against anybody with medical conditions or disabilities and each member is ultimately responsible for their own safety whilst attending archery sessions.

PROTECTION OF CHILDREN AND VULNERABLE ADULTS POLICY STATEMENT

Fenland Archery club aims to create an enjoyable environment for all juniors and vulnerable adults who wish to take part in archery and the social activities within the club.

This club believes that when dealing with children and vulnerable adults, their welfare should always be of paramount importance. We are committed to providing an environment where young people can learn and participate free from harassment and abuse. All club members and those people working with children have a moral responsibility to safeguard and promote a child's welfare. This club has therefore adopted the GNAS Protection of Children and Vulnerable Adults policy to ensure peace of mind for both adults and children.

The club has an adult who is specifically responsible for young people and vulnerable adults. For further information please contact any member of the committee. All club committee e-mail addresses are listed on the website.

Committee

The Committee normally consists of three executive officers; Chairman, Secretary and Treasurer, and five elected members. Non executive positions may be jointly held if necessary. All members are elected annually. Executive members can serve up to a maximum term of 3 years in their role.

The **Chairman's** duties are to ensure the club runs smoothly and to Chair the club committee meetings which take place every 2-3 months. The chairman may delegate the chair of any meeting to another executive officer.

The **Secretary** is the contact point for the club, responsible for administration of memberships, external competition details, rule changes, official correspondence and notifying members of information and change.

The **Treasurer** is responsible for dealing with all financial aspects of the club, such as the administration of membership fees and payments to other archery associations like G.N.A.S. The Treasurer produces an annual financial statement of Club accounts in September

The **Child Protection Officer (C.P.O.)** is responsible for the clubs compliance with the GNAS policy on the protection of children and vulnerable adults (PCVA) and is the members' first port of call in the event of an incident involving such an individual. The CPO has been vetted by the Disclosure and Barring Service (DBS) checks (previously CRB) and holds an enhanced disclosure DBS certificate specifically for archery.

The **Field Officer** is responsible for ensuring the range has been properly laid out, that safety rules (GNAS rules of shooting) are observed and to control the shooting at each club session. It is a condition of membership that all members obey the instructions of the field officer in accordance with the GNAS rules of shooting.

The **Records Officer** works out and publish handicaps, classifications and club records from information supplied by members submitting scores for any rounds they have shot.

The **Equipment Officer** ensures we have sufficient equipment to meet our requirements and that it is kept in good, safe condition. Each member has an obligation to report any defective equipment or material concerns to the equipment officer.

The **Tournament Officer** is responsible for organising the clubs two tournaments per year (1 indoor, 1 outdoor) and any other shoots the club hosts on behalf of the county organisation and other agreed bodies.

The **Web master** is responsible for the upkeep and general administrative duties of the website. The web master should be the first point of contact for dissemination of information by electronic means. It is the responsibility of members to supply information to the web master.

Members may be co-opted to the committee from time to time as non voting members to fulfil specific roles.

Membership of the committee does **NOT** afford members any additional rights or privileges other than being a key holder.

All members are entitled to attend committee meetings subject to the guidelines outlined in section 7.7 of the club constitution.

As with all members, the committee is bound by the club constitution. Up to date copies are available from the club secretary.

Communications

This is mostly done by announcements at the start of shooting or by e-mail. If matters are particularly urgent then communications will be by telephone.

We have a club Newsletter which *should* be published and circulated 3 times a year subject to sufficient material being available. If you have anything of interest we would welcome your contributions..... please don't be shy.

The club has a public relations officer who writes occasional articles for the local media.

You may of course approach committee members at any time and by any means if you have concerns/require assistance.

You may also see the club website
<http://www.fenlandarchery.co.uk>

Or search Fenland Archery Club on Facebook

Beginners Training - Coaching

The club runs regular beginners courses to ArcheryGB best practices throughout the year. These are run by licensed coaches and provide us with a healthy expanding membership. They are also of benefit to existing members giving them the opportunity to assist in instructing the beginners in basic technique and skill. Please don't think you can't help because you're new, believe it or not, assisting can boost your confidence and increase your knowledge. Suitably licensed/qualified members being involved in beginners' courses also ensure that if beginners join the club they don't feel isolated as there will be familiar faces around.

During the first year of membership the novice archer will need help. There are senior members who are qualified coaches within the club. These should be the first port of call in all instances as they have been trained to tackle many issues including equipment tuning, technique refinement and the mental aspects of archery. Please bear in mind that they are an archer too and will want to do their own shooting.

There are also other members with a great deal of experience and expertise. If you are experiencing difficulty then ask for assistance. Etiquette determines that they will not approach you to assist. In time, you may wish to become a coach, and the club/county will be in a position to assist you.

Club Clothing

Also available through the club, at very reasonable prices, are fleeces and polo shirts, both black embroidered with the club logo. The range of club clothing varies according to demand, however fleeces and polo shirts can usually be ordered.

The GNAS dress code is outlined in detail in the GNAS rules of shooting. You should familiarise yourself with the rules should you wish to represent the club in any competition. The rules allow club colours to now be worn - the registered club colours for Fenland archery club are black polo/t-shirts with single logo on the left breast and black trousers.

Safety and club rules

Members are reminded that we all have a responsibility for the safety of ourselves and of others. This includes the general public.

Commands

All shooting takes place under the control of a Field Officer, whose role has been outlined earlier in this booklet. The Field Officer will generally control shooting by blowing a whistle.

Single blast indicates shooting can commence.

Two blasts on the whistle indicate that all archers on the line have completed shooting and that it is safe to collect arrows.

Three blasts on the whistle signify the day's shooting is finished.

A series of rapid blasts means the same as the shouted command "**FAST**" explained in the next paragraph on verbal commands.

"Come Down" on hearing this - relax the tension on the bowstring without letting go of it. Then lower the bow so the arrow is pointing at the ground.

"Fast" this is normally shouted when unsafe situations arise.

It is of vital importance that whatever point of shooting you are at, you **MUST STOP IMMEDIATELY - DO NOT SHOOT**. Follow the procedure for "Come Down", then the arrow **MUST** be removed from the bow and replaced in the quiver. No further shooting must take place until a command to start shooting is given.

Field/Range Layout

The shooting range is between the targets and the shooting line. For safety purposes this is surrounded by a zone that extends 20 yards to either side of the outermost bosses and a minimum of 50 yards (100 yards where release aids are used i.e. compound bow) to the rear of the target line. This is to provide a safe overshoot area for arrows that miss the boss.

No one is allowed in these areas while shooting is taking place.

Shooting Line.

This is the point from which arrows are shot at the targets. Archers may stand astride the line to shoot but can only cross it on instruction from the Field Captain. The area between this line and the Waiting Line is normally kept clear.

Waiting Line.

This is situated a minimum of 5 yards behind the shooting line. After completing shooting archers retire behind the waiting line, taking their equipment with them to wait their next turn on the shooting line, or a command from the field captain to collect their arrows.

The area between this line and Spectator Line is where archers normally leave their equipment.

Spectator or Tent Line

This is situated a minimum of 10 yards behind the waiting line. It is where archers pitch their tents and shelters when competing. It is also the point that any spectators should remain behind.

Safety Rules

These apply whenever and wherever you shoot.

- NEVER point a bow and arrow at another person. A loaded bow should only ever be pointed down the range and while on the shooting line.
- NEVER shoot an arrow straight up into the air
- NEVER shoot an arrow into an area you cannot see is clear
- NEVER shoot a bow without an arrow on the string. Dry firing may damage the bow
- NEVER stand in front of the shooting line while shooting is happening, even if you are to the side of the archer(s)
- Only use (removed duplicate use) archery equipment at suitable ranges - where all reasonable measure have been taken to avoid risk of persons being hit by a stray arrow
- If looking for stray arrows, make others aware of your presence. It is easy to miss someone searching behind bosses
- Regularly check wooden arrows for damage. A damaged arrow may shatter upon firing, potentially injuring you and others
- Check your bow regularly for cracks and twisting
- Check you bow string regularly for wear
- Do not draw the bow further than the length of arrow for which it is intended. Overdrawing damages the bow, and possibly the archer
- Obey wise or verbal commands given by the field officer. (taken out line captain)
- Arrows should only be drawn from the quiver when preparing to shoot on the shooting line
- On hearing the command "FAST", cease shooting immediately, return any arrows to the quiver and step back from the shooting line until instructed it is safe to continue
- Approach bosses via the gaps in between. Arrows can be difficult to see end on, and approaching directly can cause injury
- Walk, don't run, to the boss. There may be arrows on the ground, and there may be arrows projecting from the boss around eye/neck height
- If archers are shooting concurrently at varying distances, stagger the targets, not the archers. Maintain a single shooting line
- Arrows should be pulled from the boss while standing to the side, and after ensuring the immediate area is clear. Care should be taken not to bend or otherwise damage each arrow
- Ask another archer's permission before touching their equipment or drawing their arrows
- Always remember the bow and arrows was, and can still be, a lethal weapon, therefore no acts of foolishness or misuse by our club members here or at any other venue can be tolerated and will be the subject of discussion and possible action by the committee.

Club Rules

These apply whenever you are shooting with the club

- The commands of the executive are to be followed in all circumstances
- A shoot can only take place when 2 or more adult members are present, one of which must be a committee member
- Archers deemed to be unsafe while shooting, or using unsafe equipment, may be instructed to cease shooting
- ALL new archers must be observed and instructed during the first two sessions at the club
- New members are allowed a maximum of one 'try out' session before they must either join the club or sign onto the next beginner's course
- All new members who are not experienced (at least one year) may be requested to complete an introductory course hosted by our club or other appropriate source
- To comply with our responsibilities under GNAS Protection of Children and Vulnerable Adults policy, anyone under 18 years old must be supervised by an adult at all times
- All members, irrespective of position, membership duration, or competitive status will enjoy equal rights within the club
- Visiting GNAS archers must arrange in advance (at least 24hours) if they wish to attend shooting sessions.
- Contact with the school only by made by the appointed school liaison officer(s)
- ALL arrows must be recovered from the field. Members are expected to make all efforts to recover a lost arrow, even if it means returning to the field between sessions.
- All-carbon arrows are banned from outdoor use. This is due to the difficulty in finding them should they miss the boss.
- No archer may shoot while under the affects of drugs or alcohol
- No smoking is allowed indoors or outdoors at the school premises
- Members with less than one years experience should refrain from instructing others
- Setting out and clearing away is the responsibility of everyone that shoots
- If the last to leave, ensure the range is clean and tidy, that all equipment is appropriately cleared away
- Rules and regulations requested by our host, the school, must be respected
- Archers will respect the spirit of fair play and non-violence
- Appropriate clothing must be worn at all times when shooting, including footwear on the field. At competition, club colours may be worn except where stated otherwise
- The club does not allow members to pay fees in arrears. In the absence of formal arrangements of pre-payment, shooting fees must be paid on the day of shooting
- Do not attempt to set up club bows unless you have been instructed how to do so by an experienced member
- Members may not store personal equipment in the club storage areas
- The club cannot accept responsibility for any damage or loss of equipment at any club events

Etiquette

- Do not talk in a loud voice while others are shooting
- Do not talk to others that prefer to be silent
- Do not join or exit the line when adjacent archers are at full draw
- Do not exclaim on the shooting line - either in joy or disgust
- Do not touch another archer's equipment without permission
- Do not pace the line comparing scores
- Do not touch arrows until all arrows have been scored
- Do not go behind the target before arrows have been scored
- Call scores in groups of three eg. "9-7-7" pause "5-5-3", highest value first, pointing at but not touching the arrow nock
- If you damage another's equipment through carelessness, offer payment
- Wait on the line for last archer if penultimate archer on the line each end
- Offer to do a fair share of scoring or arrow pulling

Bows

Longbows

In various forms, are among the oldest styles of bows known to man. They are more truly in the category of "straight" bows, descending from their shorter ancestors used by early man and still prevalent in many tribal civilisations.

Straight bows grew longer and more powerful in the need to reach farther and hit harder as it became more of a weapon than a tool for hunting. The English longbow is perhaps the culmination of this type of bow. Its mark in history places it at the highest rank of respect in the world of archery.



The Medieval English longbow was a superb weapon, and used most effectively by the English from the end of the thirteenth century to the beginning of the sixteenth, many battles being won on its deadliness. It was particularly decisive in the battles at Crécy and Agincourt against the French. Its long range and armour piercing qualities made it a formidable weapon.

Traditional style longbows are difficult and time consuming to master, but have their benefits. Modern longbows have little in common with their traditional ancestors and owe their existence to Victorian sports. They utilise advances in design that make them more efficient with greater speed and accuracy. Many people have turned back to longbows because of their inherent "pointability" and instinctive accuracy. The lack of a "cutout" shelf (as with a flatbow) is less distracting to the vision and helps bring the shooters focus to the mark, thereby reducing the time between target acquisition and release to a scant few seconds.

The English longbow can be crafted from several different types of wood. It can be crafted from either a single piece of wood (self bow) or from a mixture of different woods glued together to form a laminate.

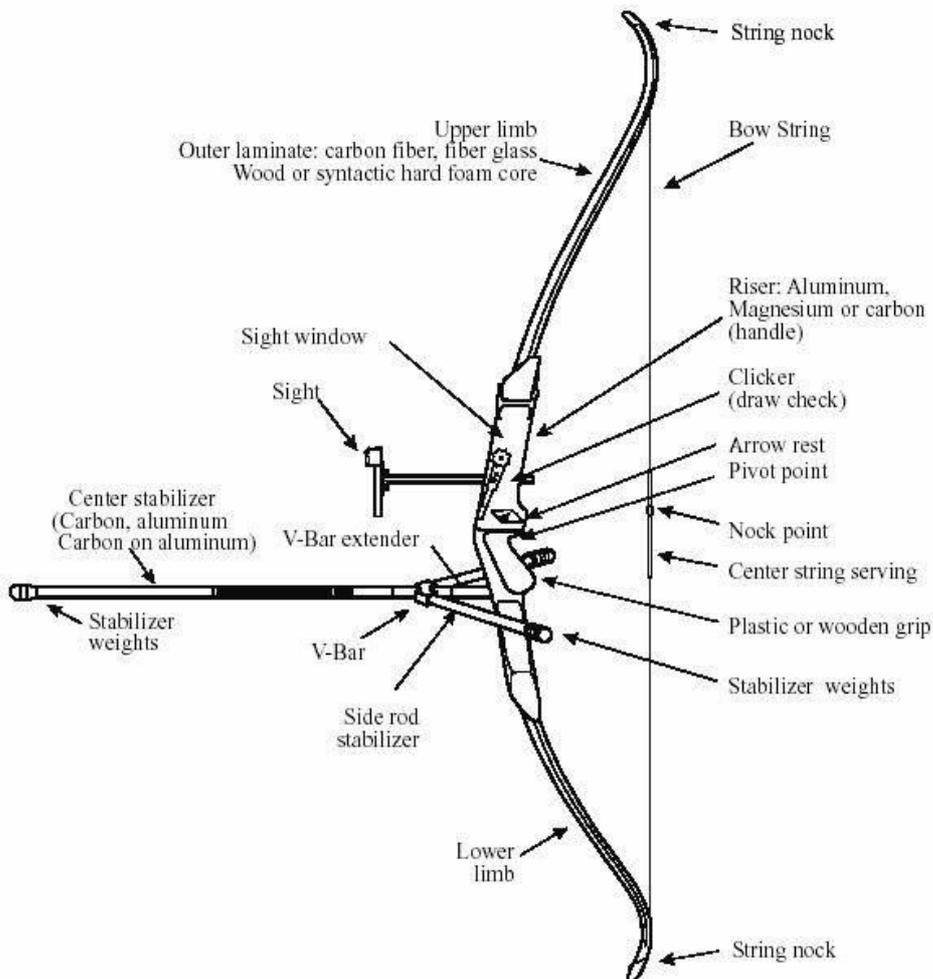


Recurve (take-down bow)

The recurve bow, as we know it, traces its ancestry to the Mediterranean region - Turkey in particular. The Turks were among the first to put a double bend in their bows, although this design could also be found in ancient Japan and other Asiatic countries. The recurve design is a stroke of genius for the age of its conception - some thousands of years BC. The "recurve" is simply refers to the shape and the way the limbs are constructed.

Building the limbs pre-curved at rest (hence, "pre-stressed"), the energy is gained rather than lost when drawn. This enables a bow to be compact, but with great power. Recurve bows typically give greater arrow speed than longbows of equal strength.

Modern take-down recurve bows retain the shape of there more traditional counterparts, but are constructed from more modern materials, often aluminium, timber and various forms of carbon fibre. 'Take-down' refers to the ability to dismantle the bow, into a central handle or riser, and a pair of limbs. Recurve bows are shot either barebow - with no sights or stabilisers (save perhaps some small weights) or more commonly freestyle. Freestyle recurve allows sights and balancing bars, and is the only bow type incorporated into the Olympics.



Compound

The Compound bow was invented in 1967 by Holless Wilber Allen, from Missouri, USA. Originally developed for hunting Allen spent six years developing this revolutionary bow. The compound bow relies on a range of cams and pulleys positioned at both ends of the limbs to provide its unique characteristics. Basically, as the bow is drawn to its full extent the “draw” weight is absorbed by this system of cams and pulleys. This means that at full draw the archer is required to hold significantly less weight on their draw arm, obviously allowing for a much more comfortable and controlled aiming. It also helps to offset the effects of fatigue, especially when a large number of arrows are being shot.

Similarly with the Recurve bow sights and Stabilisers are usually added to the Compound bow in order to improve accuracy. Also a special release aid “trigger” is normally used to release the string when shooting the bow.



Bow Characteristics

We've seen that there are various types of bow in widespread, and not so widespread, use. If you are considering buying a bow, you should be aware that there are a number of important properties that need to be matched to the individual archer. If you get these wrong, you'll either never hit the target, or injure yourself. So it's as well to think quite carefully about them.

Draw weight

The draw weight is the amount of force, usually measured in pounds, required to pull the bowstring back to full draw. It will vary with the draw length, so you'll need to know not only the weight, but the length at which it was measured. Bows weight is usually marked at a standard draw of 28" for recurve and traditional, 29" for compounds.

Draw weight is one of the most contentious aspects of bow selection, and it is something about which a great deal of rubbish is spoken. It is generally assumed that a higher draw weight will lead to a faster arrow speed and a flatter trajectory. In addition, a faster flight gives the arrow less time to be affected by wind.

This assumption is not necessarily true. It can be wrong for two reasons. First, a heavier draw requires a stiffer arrow. A stiffer arrow is a heavier arrow, and a heavier arrow will not accelerate as quickly given the same energy input. As a *weapon* the heavier draw is vital because, even though the arrow will not be travelling any faster than one from a lighter bow, the increased weight of the arrow will impart a greater amount of energy to the target, and therefore do more damage. For any kind of target archery, however, this consideration is irrelevant.

The second reason why a heavier draw is disadvantageous is a straightforward biomechanical one -- it is impossible to maintain a steady aim while pulling back a string at your full muscular strength. Even if you *can* pull a 55 lb bow, you're never going to be able to hold it as steady as a 35 lb bow.

In summary, for recurve archery there is an optimal draw weight for a particular person, and exceeding that draw weight offers no advantages at all. For most men the optimum is in the 30-40 lb range; for women it is 25-35 lb. No beginner should ever be required to draw a bow with a weight more than about 20 lb, even if he or she can do so without too much difficulty.

With a compound bow the situation is slightly more complex. Because draw weight decreases as you come to full draw, you can decide either to have the same peak draw as a recurve, but with easier sighting (because you'll be holding less weight), or you can accept the same weight at full draw and have greater peak draw. For example, if you can sight comfortably while drawing 35 lbs, maybe you could pull a compound bow with 60-70 lb peak draw. But, as described above, it would not be necessary do so. Note that for target archery in the UK, compound bows must not have peak draw weights exceeding 60lb.

Draw length

Although you can select your draw weight, you can only vary your draw length by a small amount. You need to ensure that you get a bow that is compatible with the length you want to draw. In general, it tends to be assumed that a longer draw is 'better', in the same way that a heavier draw is 'better'. This assumption

may be wrong. There are two reasons for this. First, if your draw is longer, the arrow is in contact with the string for a longer time, and this means that deviations in the side-to-side movement of the string have longer to affect the trajectory. Second, you'll find it harder to achieve a consistent 'anchor point' if you pull the string back much further than your chin. The expert recurve archers (with a few exceptions), only draw to their chins.

In summary, don't necessarily assume that you should buy a bow suitable for a 31-inch draw when your draw is only 29 inches, and hope that you'll work up to the longer draw. You probably can, but it might not be for the best in the long term.

Bow length

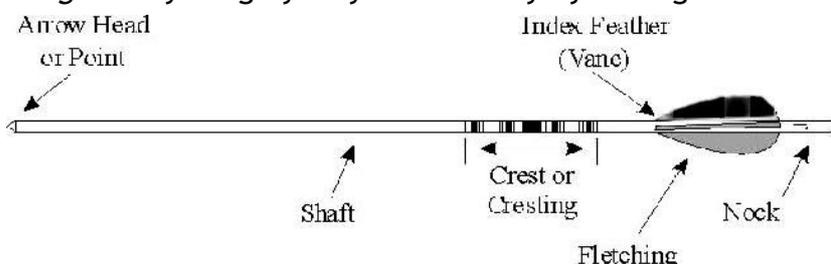
If you want to shoot in tournaments, you'll probably find that the maximum and minimum bow length is defined in the regulations. In general, you'll get slightly better accuracy from a longer bow, provided you have the muscular strength to hold the additional mass steady. This is because the velocity of the arrow will build up slightly more slowly for the same draw weight. In addition, with a very short bow, the angle that the string will make at full draw will be so acute that it will be difficult to hold steady and not pinch the arrow.

Arrows

The three main materials used for arrows are wood, aluminium and carbon fibre. All arrows comprise of the same components irrespective of the material they are produced from. Traditional longbow archers favour wood; indeed for competition use, nothing else is usually allowed. There will be a *pile* (point) at one end of the arrow, and *fletchings* (feathers or vanes) at the other.

Traditional arrows used feathers, tied by hand to the arrow shaft using gut or linen. These days, fletchings are usually plastic, and are stuck to the shafts using glue, except on longbow arrows which still tend to use feathers. The groove at the fletching end of the arrow which fits onto the string is called the *nock*. Usually the nock is a piece of plastic which is fitted into the shaft. Some wooden arrows are still *self-nocked*, that is, the nock is made by sawing a slot in the end of the shaft.

Arrows have to be matched to the draw weight of the bow, and the draw length of the archer. In general it doesn't matter too much if the arrow is a bit too long, but if it's too short you run the risk of it falling off the arrow rest and shooting through your hand. Your draw length will probably vary as you settle into your natural shooting style, so it's best to start off with arrows a bit too long. Of course, you don't *gain* anything by way of accuracy by having the arrow too long, and the extra weight slows down the flight, so it's best to get them cut to exactly the right length once you know what it is. Also, the more powerful the bow, the stiffer the arrow should be. A very powerful bow shooting a very weak arrow will cause massive distortion in the shaft, as the rear end of the arrow tries to accelerate faster than the front end. This will reduce accuracy, and in extreme cases break the arrow.



Archery Styles

Target archery

Target archery involves shooting a great many arrows at a well-marked target, either all at the same distance or at a small number of set distances. Target archery is practiced essentially the same indoors and outdoors, except that it is difficult to get very long distances at an indoor venue. The various governing bodies for archery set out which distances should be shot, how large the target face should be, how many arrows should be shot at each distance, and how the hits should be scored. This combination of distance, size, number, and scoring is referred to as a *round*. So, for example, a *FITA round* consists (for men) of 36 arrows shot at each of 90, 70, 50, and 30m. The distances are slightly shorter for women, because they tend to shoot less powerful bows. The target faces are 60cm diameter at the shorter distances, and 120cm at the longer. Scores range from 10 points for the 'gold' (bull's eye) to 1 to the outermost ring.

The archery event at the Olympic Games uses a fixed distance of 70m.

Most target archers shoot a recurve bow, but as with most clubs, we allow other types of bow. In fact, the club has a very good record of top level longbow shooting. Needless to say, you can't meaningfully compare the scores of a person shooting a compound bow with someone shooting a longbow. Arguably, you can't really compare the scores of a person shooting a beginner's budget recurve with someone shooting a top-of-the-range recurve bristling with high-tech gadgets - but we do. That's sport for you, I guess.

Field archery

Archers will shoot at a range of targets set out in a wooded course. Again, there are standard rounds defined by the governing bodies. In some rounds the target distances are defined, while in others the archers have to estimate distance on the course. The targets are usually straw bales set out on the ground, to which the target face is pinned. Very commonly the target faces show pictures of animals, and a hit scores more highly if it is in an area of the 'animal' that would result in its ending up on the dinner table. The scoring areas on these targets are generally much smaller than those used in target archery, but the corresponding distances -- usually 5m to 30m -- are significantly smaller. Field archery requires somewhat different skills than target archery. For a start, the shooter has to be able to walk (this is not entirely a glib comment -- target archery is one of the few Olympic sports where wheelchair users can compete on equal terms). In addition, it is necessary to be able to adjust for different distances without losing a shot. A willingness to grub about in the undergrowth to find lost arrows is also an advantage.

Field archery enthusiasts tend not to use a recurve bow, the favoured weapon of the target shooter. Instead they prefer either a compound bow or a traditional bow. In the UK, field archery is not as popular as target archery (in terms of numbers at least), mostly because in urban areas it's hard to find enough land to maintain a course on.

3D archery

3D is relatively recent innovation and came to the UK. 3D archery involves shooting at life-size, compressed foam models of animals. In order that archers with more modest skills can hit something, on some courses you'll be shooting at, say, a buck moose at 10 feet, as well as more challenging targets. Realism of the

fauna is not, in general, a limitation in this sport -- most courses seem to feature an alligator somewhere. There are such things as 3D tournaments, and some participants take the sport very seriously. Both 3D and field archery are practiced mainly under NFAS rules.

Others

There are other well-recognized archery disciplines as well as target and field (and maybe 3D). However, they seem to be practiced only rarely. *Flight archery* is a contest to see who can shoot arrows the furthest. *Clout archery* involves shooting up into the air, so that the arrows come down on top of targets placed on the ground a huge distance away (usually 140 or 180 metres). *Popinjay* involves shooting 'birds' made from feather dusters off a church steeple (often simulated by hoisting a frame containing the targets up a flagpole). There are other variations as well, but they tend to fall into the category of historical re-enactment rather than sport and are not practiced in the club.

In many countries, bows are actively used for hunting.

**Whatever you think of the ethics of this activity,
all bow hunting is illegal in the UK, even on private land.**

Target Scoring

Standard Target Faces which are made in different sizes are generally of five colours: gold, red, blue, black and white. Each coloured circle is divided by a central line, this format is used by both G.N.A.S. and F.I.T.A. Depending on the type of round being shot the colours can have different scoring values.

GNAS or Imperial outdoor rounds use 5 zone scoring

FITA or metric both indoor and outdoor rounds use 10 zone scoring



Note the extra ring in the gold centre. Given the improved accuracy of compound bows, when shooting 10 zone rounds, the ten score zone for compound shooters is the smallest of the centre rings, whereas the larger of the centre rings is the 10 for recurves and traditional bows.

You may also see tri-spot targets most commonly used during indoor Portsmouth rounds for compound bows. Given the likelihood of damaging one's arrows when shooting tight groups, the archer must place one arrow in each face. The 10,9,8,7,6 zone is the same size as the larger 10 zones for recurves, but there is no 5,4,3,2,1. This is similar to the Vegas targets below.



Score Sheets

Most score sheets follow a similar format; however, despite the differences in design, scoring always follows the same pattern. Examples of a score sheet and how to use it are shown below. The first example is a score sheet suitable for a single distance round, e.g. a Portsmouth (5 dozen arrows at 20 yards).

Name							Target No.			
Club										
		n/2 doz tot		n/2 doz tot	H	SCORE	R-TOTAL	G	R	B
1	10 9 8 10 10 7	54	10 9 9 10 8 7	53	12	107	107	5		
2										
3										
4										
5										
Target Captain:					TOTALS					
Archers Name:										

Arrows should be shot in threes. The score for the first three would be entered on line one - left to right - highest to lowest. The next three arrows would also be entered on line one using the same criteria. The score for the half dozen would then be totalled. The scores for the next half dozen would also be entered on line one, totalled and then added to the previous half dozen to give the score. The same format is followed through lines 2,3,4 etc. The score for each dozen is added to the previous score to form a running total.

- ROUND** - This is the name of the round you are shooting on that day e.g. ROUND - National (or the target face/type and shooting distance)
 - 10 9 7** - This is the first part of your score. If you are shooting three arrows or six arrows you must enter the highest number first, and the rest in descending order. This is also done in groups of three. e.g. 9 9 7, 7 5 3. Missed arrows are recorded with an M.
 - E/T** - This is the **END TOTAL** of the six arrows (or three) that you have shot - in one End
 - H** - Number of arrows that **HIT** the target and scored
 - S** - This is the total **SCORE** of the two ends
 - G** - Number of **GOLDS** e.g. for metric rounds only the ten ring counts as gold
 - R/T** - **RUNNING TOTAL** scored.
 - X** - Where a score sheet has a column labelled with an X, this is for compound inner ten scoring
- Some points to observe when scoring:**

Never touch the target face or any arrows until scoring is completed. To call your score point at the nock end of each arrow and call its value clearly. Arrows scores should be called in groups of three working from the highest values to the lowest. Arrows touching one of the dividing lines on the target will score the higher value. In the case of a line cutter being disputed, a decision should be given by the Target Captain - if that is not accepted then a judge should be called to give a final decision. Do not look for arrows behind the target until all the arrows in the target have been scored.

GNAS (Imperial) Outdoor Rounds

The following tables list all outdoor GNAS Rounds that can be shot. They are self explanatory giving the names of the Round, the size of the target face and the number of arrows that need to be shot, expressed in dozens, at each distance (in yards)									
GNAS Outdoor Rounds - 5 zone scoring i.e. (9,7,5,3,1) On 122cm Target Face - Distances in yards - Number of Dozens to be shot at each distance.									
Round	100	80	60	50	40	30	20	15	10
York	6	4	2						
Hereford		6	4	2					
Bristol 1		6	4	2					
Bristol 2			6	4	2				
Bristol 3				6	4	2			
Bristol 4					6	4	2		
Bristol 5							6	4	2
St George	3	3	3						
Albion		3	3	3					
Windsor			3	3	3				
Short Windsor				3	3	3			
Junior Windsor					3	3	3		
New Western	4	4							
Long Western		4	4						
Western			4	4					
Short Western				4	4				
Junior Western					4	4			
Short Junior Western						4	4		
American			2.5	2.5	2.5				
St Nicholas				4	3				
New National	4	2							
Long National		4	2						
National			4	2					
Short National				4	2				
Junior National					4	2			
Short Junior National						4	2		
New Warwick	2	2							
Long Warwick		2	2						
Warwick			2	2					
Short Warwick				2	2				
Junior Warwick					2	2			
Short Junior Warwick						2	2		

FITA (Metric) Rounds

Metric Outdoor Rounds - 10 zone scoring, distance expressed in metres														
Round	122cm Target Face								80cm Target Face					
	90	70	60	50	40	30	20	15	50	40	30	20	15	10
FITA Gents	3	3							3		3			
FITA Ladies		3	3						3		3			
Metric 1		3	3						3		3			
Metric 2			3	3						3	3			
Metric 3				3	3						3	3		
Metric 4					3	3					3			3
Metric 5							3	3					3	3
Long Metric (G)	3	3												
Long Metric (L)		3	3											
Short Metric									3		3			
Long Metric (1)		3	3											
Long Metric (2)			3	3										
Long Metric (3)				3	3									
Long Metric (4)					3	3								
Long Metric (5)							3	3						
Short Metric (1)									3		3			
Short Metric (2)										3	3			
Short Metric (3)											3	3		
Short Metric (4)												3		3
Short Metric (5)													3	3
Half FITA (G)	1.5	1.5							1.5		1.5			
Half FITA (L)		1.5	1.						1.		1.			
Half Metric (1)		1.5	1.5						1.5		1.5			
Half Metric (2)			1.5	1.5						1.5	1.5			
Half Metric (3)				1.5	1.5						1.5	1.5		
Half Metric (4)					1.5	1.5						1.5		1.5
Half Metric (5)							1.5	1.5					1.5	1.5
FITA														
Standard Bow				3		3								

GNAS Indoor Rounds

GNAS Recognised Indoor Rounds (Metric & Imperial) 10 zone scoring (except *)							
Round	80 cm Face	60 cm Face			40 cm Face		
FITA 18m	30 metres	25 metres	18 metres	20 yards	18 metres	18 metres	20 yards
FITA 25m					5 dozen		
Combined FITA		5 dozen					
Bray 1		5 dozen					
Bray 2		2.5 dozen			2.5 dozen		
Portsmouth				5 dozen			
Double Portsmouth				10 dozen			
Stafford	6 dozen						
Worcester							
Double Worcester							5 doz*
Vegas						5 doz**	10 doz**

* 40-64cm (16") 5 zone black face with white centre scoring 5,4,3,2,1
 ** 40cm three spot, 5 zone face, scoring 10,9,8,7,6

Worcester and Vegas Target Faces



Worcester rounds use a different 5 zone scoring face to the standard coloured one. Scores run from 5 in the centre, down through 4,3,2,1

Vegas rounds use a 5 zone tri-spot face - one arrow must be placed on each face. Two arrows on the same face would result in one of them being recorded as a miss. They may be shot in any order. The centre is worth 10, with the remaining bands being 9,8,7,6.



Classifications and Handicaps

When a member shoots a round under competition rules they should submit their score to the records officer who will then calculate, from the tables in their possession, the handicap value for that score and round. A handicap is finally given after three such scores have been submitted and an average of the three handicap values has been calculated.

The Records Officer, using the scores, handicaps and tables will also define personal classifications, i.e. 3rd Class, 2nd Class, 1st Class, Bowman, Master Bowman, and Grand Master Bowman.

Rose Awards

In 1992 GNAS introduced the Rose awards to give incentives for archers to shoot the traditional York and Hereford and Bristol rounds, and they start from a score of 800 on the York round (for men) and Hereford (for women) and Bristols for juniors.

Compound bows shoot the same target face and distances as Olympic bows. Rose Status is only available to tournaments that qualify for UK Record Status and pay the appropriate fee.

The Rose award is an enameled badge with a rose, the badge is square with truncated corners for Recurve archers (Freestyle or Barebow) and round for Compound archers. The Juniors' badges are small and square. There are different colours for the different score levels as for the Fita badges.

From 2006 a Shield shaped award was introduced for Longbow archers, the colours are as below but the score levels required are White-225, Black-300, Blue-375, Red-450, Gold-525 and Purple-600.



Why a Rose? In 1844 the first Grand National Meeting was held at York. The round shot then was called the York Round and has remained as 72 arrows at 100 yards, 48 at 80 yards and 24 at 60 yards ever since. The White Rose is the emblem of Yorkshire. The maximum possible score for a York or Hereford is 1296. Until 2000 the top award available was the 1200 badge, then the 1250 award was introduced. Many Compound archers have claimed their 1250 badge and at the British Target Championships in 2007 Naomi Folkard broke her own UK Record for the Hereford shooting a 1250 on the Saturday followed by a 1252 on the Sunday.

Six Gold End Badge

Shoot six consecutive arrows into the gold in one end at either of the two longest distances of a Metric or Imperial round for your age group at a Tournament or Club Target Day, and this badge is yours. You can claim a **Six Gold End Badge** in each of the disciplines i.e. Recurve, Longbow and Compound. Juniors can only claim this badge once in each discipline they shoot and not in each age group.



Your claim must be submitted to GNAS on an appropriate form and ratified by the Tournament organiser so you should call a judge over to witness your arrows and to initial your score for that end. If attained at a Club Target day, the Club Secretary must sign the claim form.

GNAS Arrow Awards for Juniors

The Arrow awards are open to juniors of the Society under 16 years of age and are in the form of Red, Blue and Black badges. Juniors may only claim the award once in each age group, but may shoot for an awards in age groups above, but not below, their own. Archers submitting valid claims for awards higher than their age group may also claim the lower awards down to their age group, providing they have not been claimed previously. Four rounds are required to be shot to make a claim in any calendar year, at least one must be a FITA/Metric round, and at least one must have been shot in an open competition. The eligible rounds and score levels required in each age group are published in the GNAS Shooting Administrative Procedures.

GNAS Handicap Improvement Medal & Handicap Shoots

GNAS publish **Handicap Tables** to enable archers to work out their handicap score. Your Club will have a copy of them, or you can acquire your own copy from GNAS.



The **Handicap Improvement Medal** may be awarded by a Club to the Club member that achieves the greatest handicap improvement made over a calendar year, and having shot at least 8 outdoor rounds. The medal is supplied to each Club by GNAS. The GNAS Handicap Regulations and tables must be used for calculating all handicaps in connection with the award of these medals.

Handicap competitions can also be run. Archers will submit their three best scores for the year so far to the organiser, with their current handicap. An allowance can then be added on to the score you shoot at the competition. The idea is that all archers can then score the maximum for the round shot when this allowance is added, and the archers who shoot above their level can win.

THE FIRST TWO YEARS

You've been taught the basics of shooting, the safety rules, field layout and etiquette. You will have been made aware of different forms of archery and of different types of bow. You've completed your beginner's course and joined the Club - ***where do you go from here?***

For your first year you will be classed as a novice archer obviously there is still much to learn. As with all sports or skills, improvement is achieved through practice and analysis. However, practice alone may not bring the improvement you seek, it needs to be structured and have benchmarks which you can measure against. There is no benefit to practicing bad technique and it may end your archery experience through injury or frustration. Once again - make use of the coaches as they will have seen it all before and can get you back on track.

Your aim now is to improve your skill and technique. You can achieve this by practising as much as possible. Set yourself goals, monitor and measure your performance, analyse your shooting, but remember it's just as easy to practice bad technique as it is to practice good. Don't feel shy about asking coaches & more experienced archers to watch you and comment on your technique and style but do be careful who you ask for advice.

In short the things you need to do are:

- **Keep your equipment in good order, find out about its function and how to maintain it and tune it.**
- **Practice regularly, both physically and mentally - it is important to develop a positive mental attitude towards your shooting.**
- **As an individual or in conjunction with a coach/instructor set some goals to be achieved.**
- **Try to achieve continual improvement - monitor your performance, keep your scores for various rounds - try to improve your personal best.**
- **Gain experience wherever you can. Enter competitions - your coach/instructor/fellow club member can advise you when you're ready and indicate suitable events. You may have already been to watch a competition so you will have a good idea of if you're ready and what's expected.**
- **Try different forms of archery. The club has field and clout equipment available. We also have basic compound bows that can be set up for you.**
- **Work with the club coaches to improve on all levels but be prepared to take a dip in short term form in order to make a longer term improvement.**

Hints and tips

Keep your bow arm straight, but relaxed.

Many people bend their bow arms slightly, to keep their elbows clear of the bowstring. The problem is that it is almost impossible to bend your arm exactly the same each time. If your draw is an inch shorter from one shot to the next, your hits are probably going to be several feet apart at a 70m range. If you rotate your elbow to point outwards -- which may mean rotating your hand on the bow riser -- you won't hit it with the string. An ordinary forearm bracer will not protect your elbow from being struck by the string -- you've either got to keep the elbow out of the way, or wear a long bracer. If you need a long bracer then your technique needs close attention.

Keep clothing well clear of the bowstring.

If the bowstring even lightly brushes a shirtsleeve during the release, that's enough to move the arrow by several feet at 50m.

Use a bracer, but make sure it doesn't foul the release.

Again, the string clipping the edge of the bracer will most likely send the arrow way off course. Those thick leather bracers that are traditionally worn by longbow archers are particularly bad for this - they need to be fastened up good and tight so the edges don't poke up into the path of the string.

If you're way off form, don't necessarily assume you're just having a bad day.

If you can normally shoot good arrow groupings, and you suddenly find you're missing the boss, something is wrong -- it's more than just a bad day. Things to check: Is your bowstring running centrally down the limbs? Have your kids been playing with your sight? Is the string brushing your clothing or your bracer at release? Are you dropping the bow down before the arrows are fully clear? Are you gripping the riser too hard, so it rotates on release? Have you changed your anchor point without realising it? Have you started sighting with the other eye? (This is not a joke - people do this because they don't really have a dominant eye. For target archery, many close one eye to sight, although this isn't a very good idea for field shooting without sights)

Close your mouth and clench your teeth when you draw

Particularly if you draw to the chin. The position of your teeth has a significant effect on the anchor point.

If you make occasional shots way of line to the left or right, consider whether you're plucking the string on release.

Ideally the string should roll straight forward off your fingers. If your draw length is, say, 76cm, and you're shooting 50m, then any lateral movement of the string will be magnified by a factor of 65 at the target. So the difference between the centre of the gold and missing the boss entirely corresponds to a finger deflection of about 9mm. *If you can shoot with both eyes open, you probably should.* Why? I don't really know, but most (maybe all) champion archers shoot with both eyes open. Various reasons are given; the one that is most convincing is that when you close one eye, the pupil of the other will automatically dilate. This makes it more difficult to focus on distant objects. When shooting with a sight, maybe you can't shoot with both eyes open because (a) you don't have a dominant eye, and (b) can't see the target

without spectacles. If you are wearing them you may see a double image in the wrong place. Some spectacle wearers are so keen to shoot with both eyes open that they put scotch tape over one lens to blur the image without restricting the light. When shooting without a sight, keeping both eyes open is considered to be essential, because you have to learn how the arrow looks against the target at different ranges, and you only have half a picture if you have no depth perception. Try different bow and archery styles.

Correcting Shooting Errors

After adjusting your sight, your arrows may still miss their mark. If possible, ask a coach or very experienced member to observe your shooting. Check your stance, point of aim and draw mechanics to achieve consistency. When you achieve consistent groupings, check these tips to correct for common errors.

Wobbling Arrows in the Air

- ◆ Some obstruction to the string -- clothing, etc.
- ◆ Following the string on release (creeping). This may also cause the string to catch on the arm guard.
- ◆ Faulty release, fingers unevenly placed on the string or fingers not letting go at one time.
- ◆ Bow arm wrist too far to the opposite side of the bow.
- ◆ Incorrect spine arrow for bow weight.

String Snapping Bow Arm (elbow, forearm, wrist)

- ◆ Bow hand too far to the opposite side of the bow.
- ◆ Tension in the bow arm and hand.
- ◆ Bow is understrung. Bow string too long.

String Snapping Nose

- ◆ Head not sufficiently turned toward target.

Arrow Falling Away from Bow on the Draw

- ◆ "Pinching" arrow between fingers instead of drawing string.
- ◆ Failure to draw straight back.
- ◆ Failure to keep string in close to the bow arm.
- ◆ Failure to let the string roll toward the tips of the fingers.
- ◆ Letting the string roll toward the knuckle of the fingers instead of the tips of the fingers.
- ◆ Back of the string hand cupped instead of perfectly flat.
- ◆ Tension in the string hand and knuckles.

Arrows Over-Shooting the Target

- ◆ Fringe vision space between the arrow tip and target is too small.
- ◆ Jerking the string hand down on release.
- ◆ Lifting the bow arm or jerking it up on release.
- ◆ Increasing slightly the pull on the string just before release.
- ◆ Lifting the index finger of the bow hand -- if there is no arrow rest.

- ◆ Nocking the arrow low on the string or nocking point moved down.
- ◆ Allowing the third finger to "slip" on the string.
- ◆ Dropping the elbow of the string hand just before release.
- ◆ "Peeking", or moving the head upon release, at short ranges.

Arrows Falling Below the Target

- ◆ Fringe vision space between the arrow tip and the target is too large.
- ◆ Not reaching or not holding at anchor point.
- ◆ Dropping the bow arm.
- ◆ Reaching forward with the chin to the string.
- ◆ Nocking the arrow too high on the string or nocking point moved up.
- ◆ Using an understrung bow which causes the string to hit the wrist.
- ◆ Holding low on the bow handle.
- ◆ "Peeking" at longer ranges.
- ◆ Holding too long so fatigued muscles "give" too quickly.
- ◆ Poor or weak release.
- ◆ Releasing from a point above or below your anchor point.

Arrows Flying to the Right of the Target

- ◆ Improper foot or body alignment.
- ◆ Pushing the bow arm to the right on release.
- ◆ Creeping or following the string away from the anchor point before release.
- ◆ Plucking the string on release.
- ◆ Canting or tilting the bow too much to the right.
- ◆ Failure to allow for wind from the left.
- ◆ Head tilt too far to the right.
- ◆ Pulling fingers off string too quickly, whether from lack of protection or soreness.
- ◆ Gripping the bow string too high on the fingers.
- ◆ Arrows may be too stiff for the bow -- too much spine for your bow (if left handed).
- ◆ Arrows may be too weak for the bow - too little spine for your bow (if right handed).

Arrows Flying to the Left of the Target

- ◆ Allowing arrow shaft to slip away from the bow before release.
- ◆ Throwing bow arm to the left.
- ◆ Plucking or jerking string hand away from face on release and not keeping it flat against the face.
- ◆ Too tight a grip on the bow or arrow.
- ◆ Tilting the bow to the left.
- ◆ Anchoring out from the cheek or not coming to an anchor point directly under the eye.
- ◆ Failure to have the arrow tip lined up with the centre of the target -
- fringe vision.
- ◆ Failure to allow for wind from the right.
- ◆ String touching hunched left shoulder.
- ◆ Using left eye to sight instead of the right.
- ◆ Weight on heels or swaying slightly toward heels.

- ◆ Sight to the left of the string.
- ◆ Arrows may be too stiff for the bow -- too much spine for your bow (if right handed).
- ◆ Arrows may be too weak for the bow - too little spine for your bow (if left handed).
- ◆ Make certain the bow is held perpendicular to the ground.

Nine Basic Steps in Archery

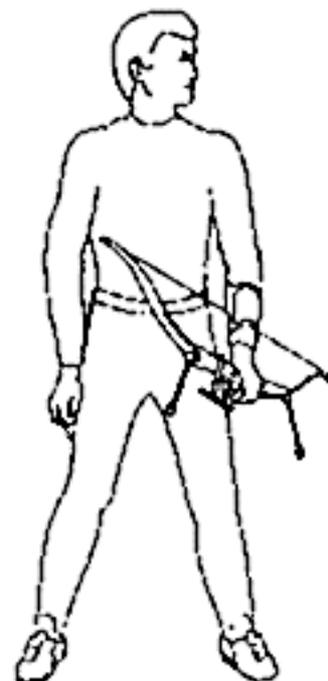
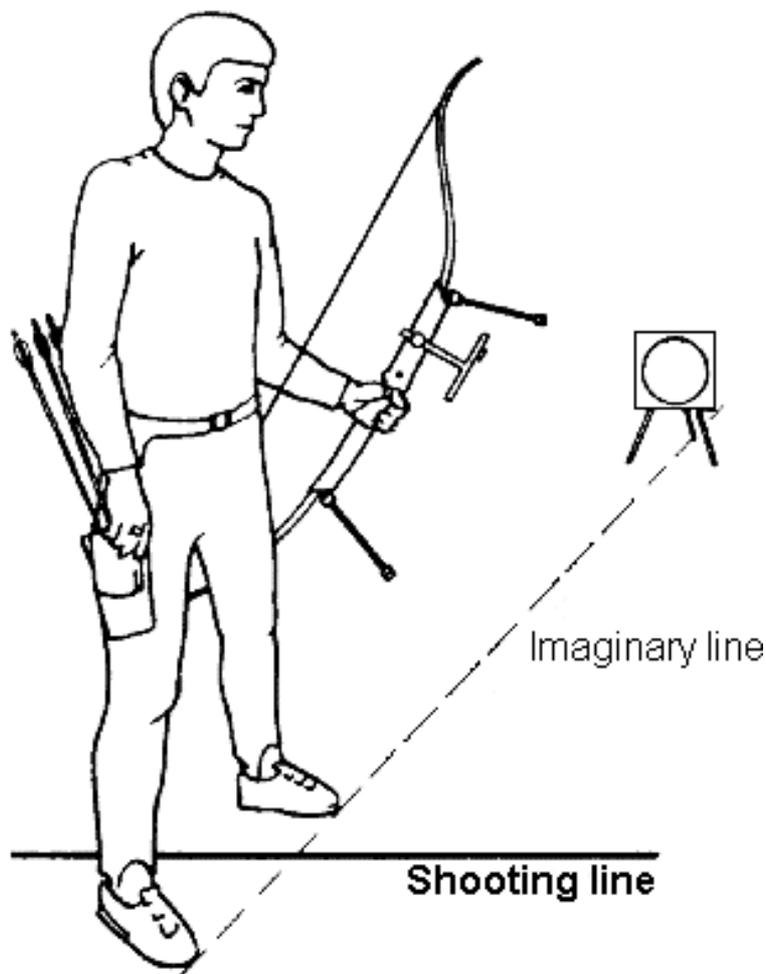
The following sequence of figures shows the basic steps of shot execution. Although it is depicted as a sequence of separate events, you should execute these steps in one single smooth motion.

Also keep in mind that these are **Basic** steps, individual adjustments are possible, but these are usually given by the instructor/trainer.

Notes are for a right-handed archer

1- Stance

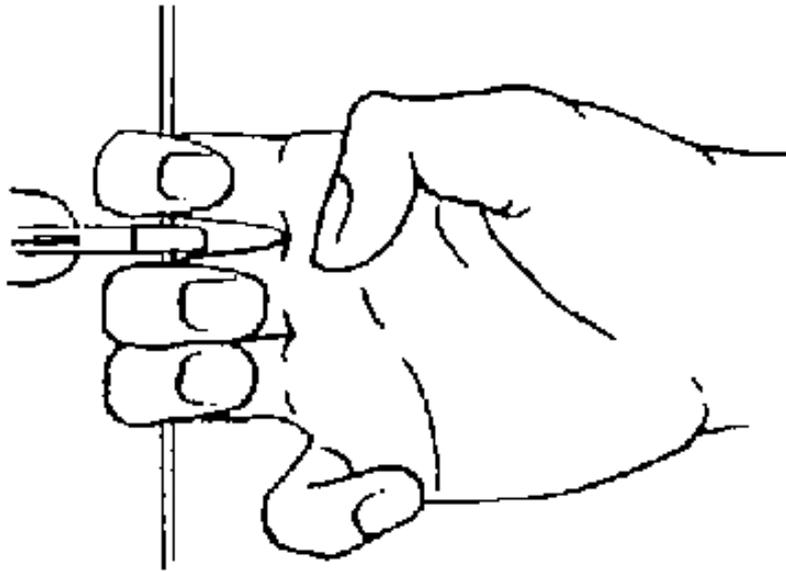
- Put the tips of you toes against an imaginary line towards the centre of the target
- Put you feet on both sides of the line
- Put you feet about shoulder width apart
- Try and relax



2 - Finger Placement

- Place your fingers in such a way that you hold the string with your index finger above the nock and the next two fingers under the nock.
- Hook the string in the first finger joint

Make sure to maintain a deep grip



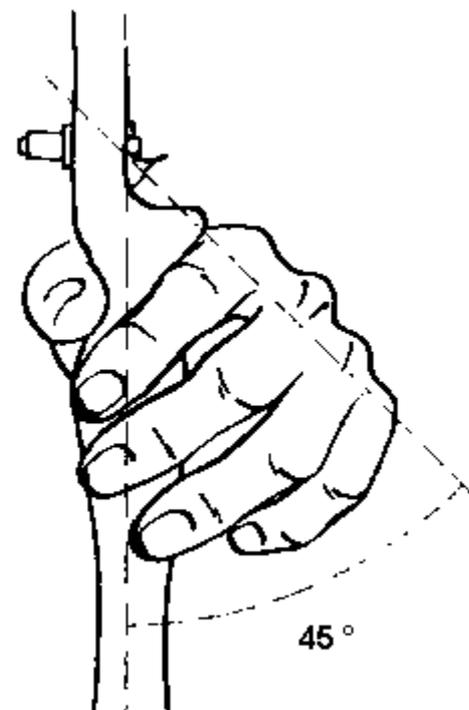
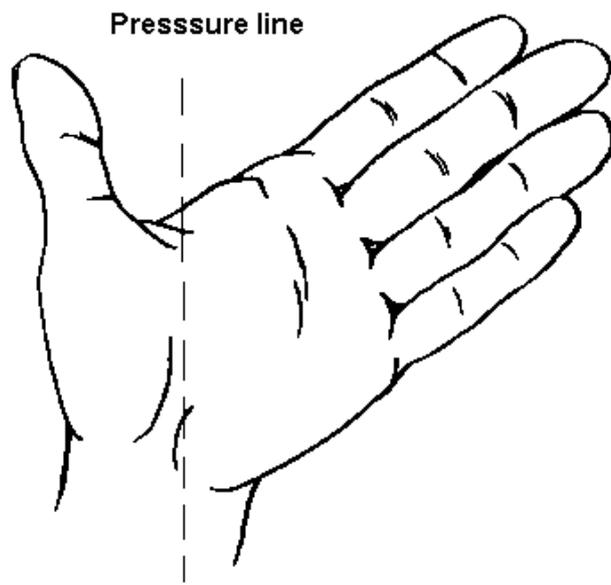
Finger position



Hook in

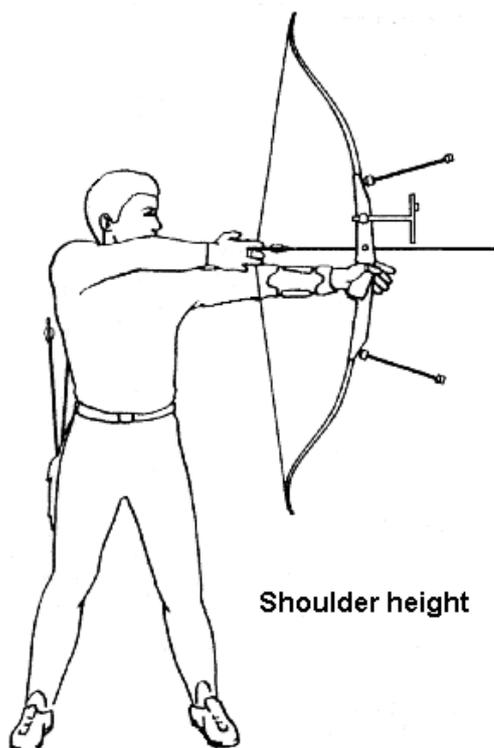
3 - *Bow hand placement*

- The pressure of the bow should be distributed along the pressure line
- Relax your fingers. The back of your hand should make an angle of approximately 45 degrees
- The tips of the thumb and index finger may touch in a relaxed manner



4 - Extend the bow arm

- Bring the bow arm to shoulder height
- The elbow of the bow arm is turned away from the string



Shoulder height



Right:
Turned away



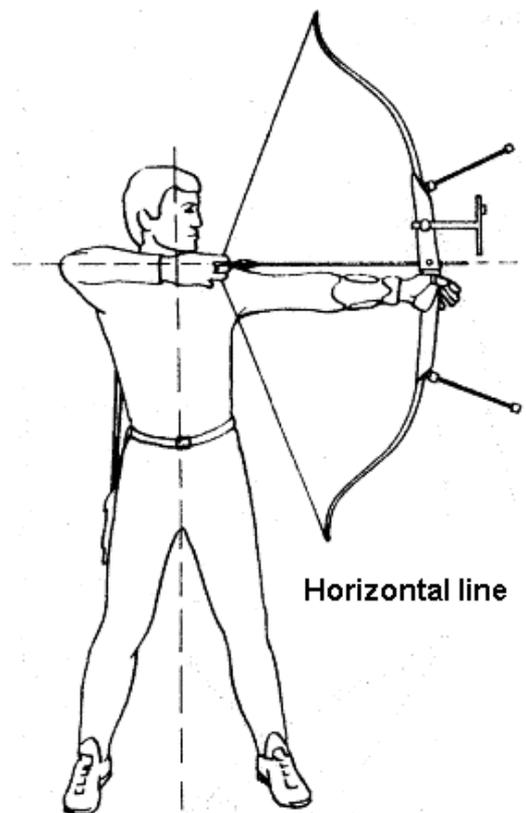
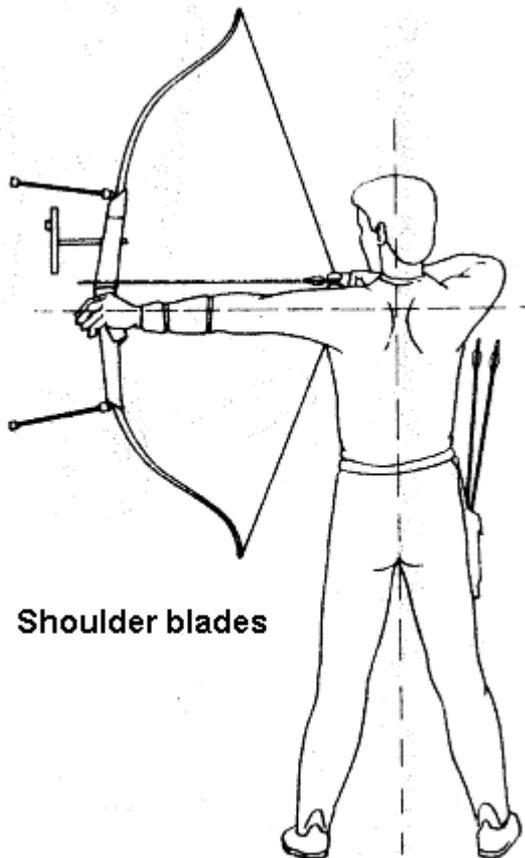
Wrong



One straight line

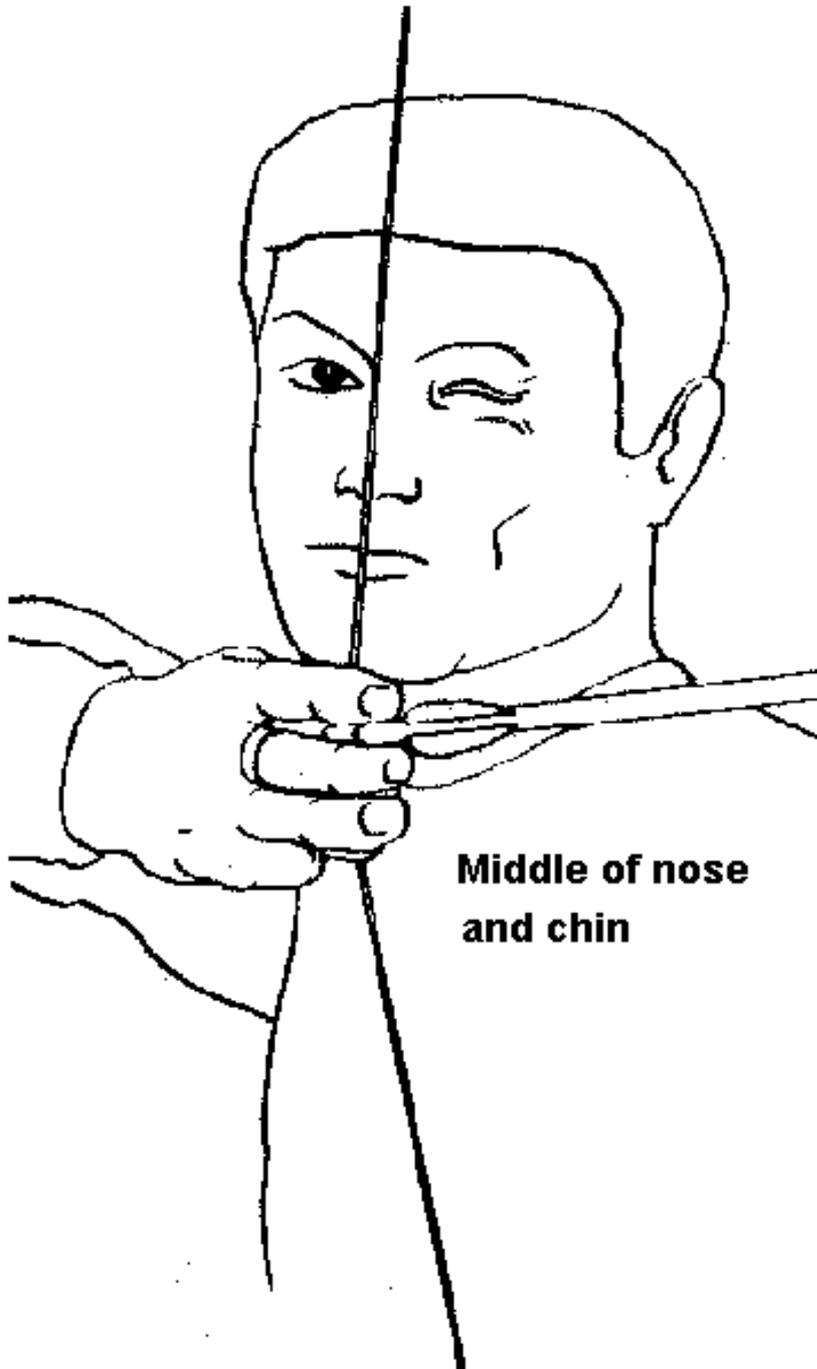
5 - Drawing the bow

- Draw the string along the bow arm in a straight horizontal line to the anchor point
- Draw with your back muscles, moving the shoulder blades towards each other. Keeping the rear elbow high may help
- Stand up straight and relaxed
- Keep both should low and level. Do not hunch up



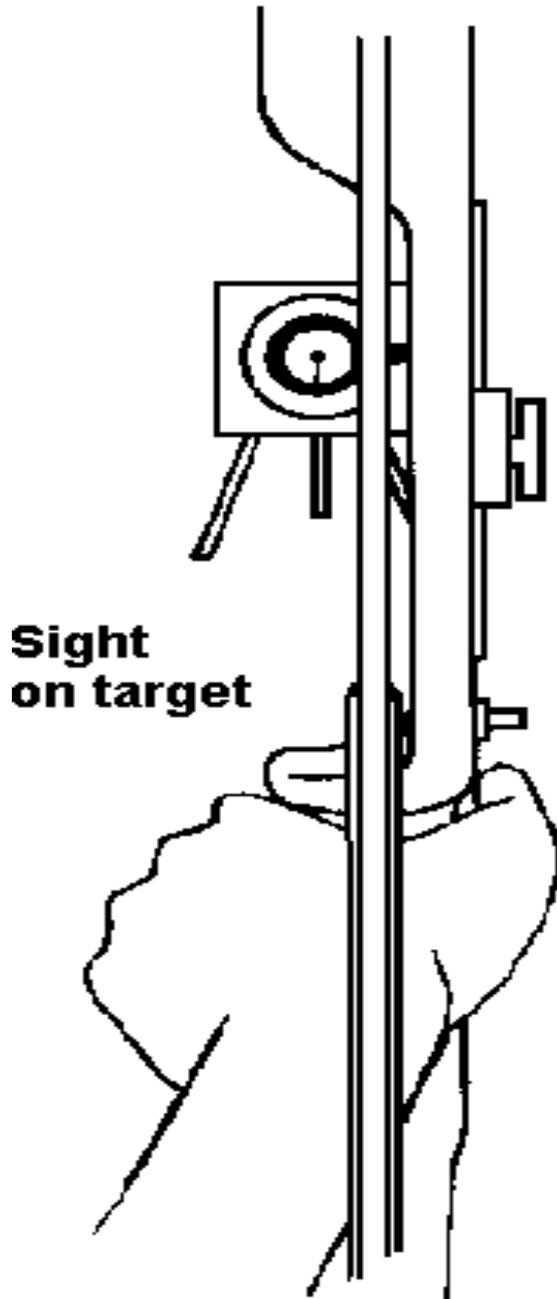
6 - Anchoring

- The string should touch the middle of the chin
- The index finger is placed under the chin
- Keep your teeth together



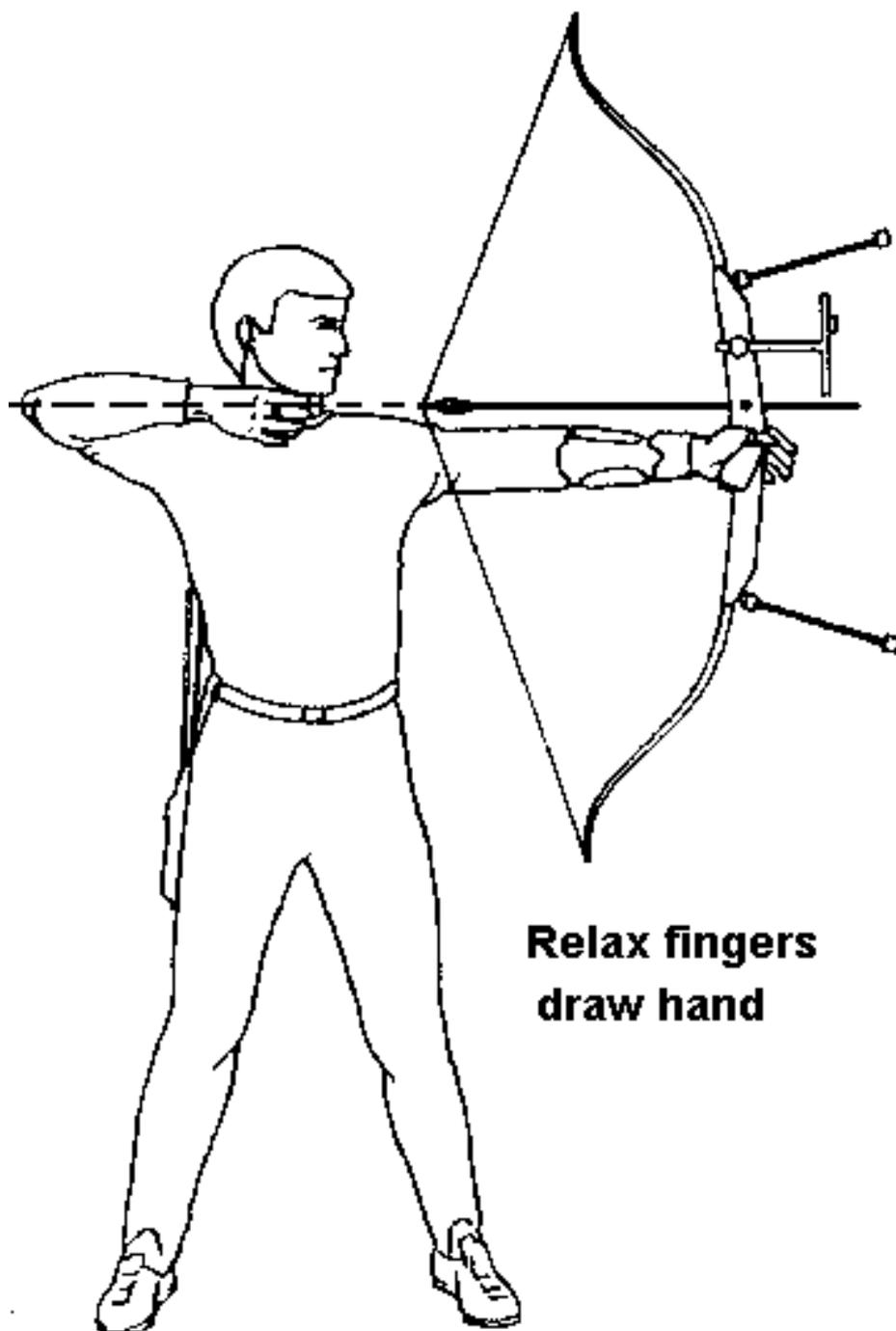
7 - Aiming

- Aiming is done with the dominant eye. Shut the other eye
- Keep the sight at the target
- Keep the string a little right of the sight



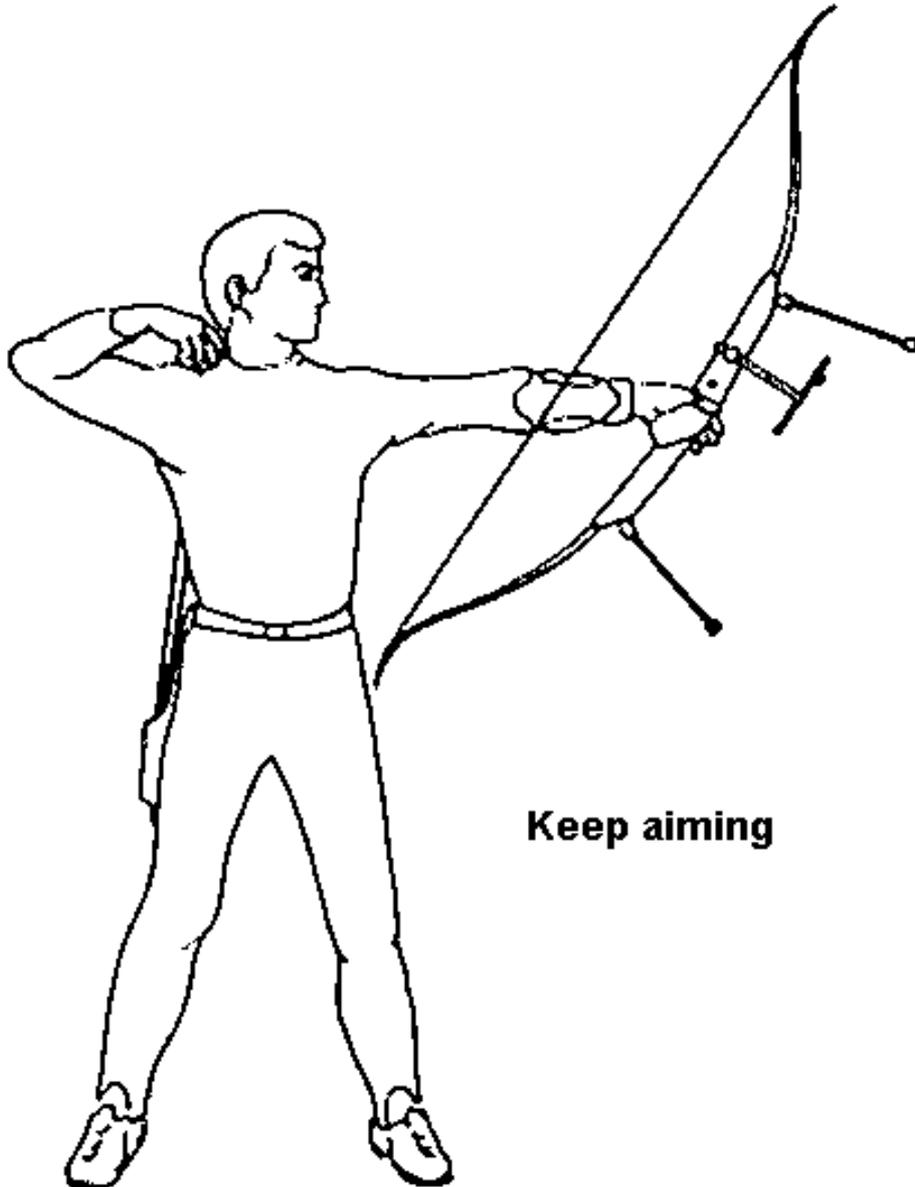
8 - Release

- Keep pulling the shoulder blades towards each other, while relaxing the fingers of the draw hand
- A relaxed bow hand will automatically move backwards
- Relax your bow hand - let the bow drop



9 -Follow through

- The draw hand should be relaxed and near or behind your ear
- Keep aiming until after the arrow hits the target



Equipment

The club has a selection of bows and arrows suitable for beginners. These are available for general use, free of charge, throughout beginner's courses and after becoming a club member. It should be noted that given regular practice using beginner's equipment, it will only be a short while before improvement becomes more difficult. This is due to the limitations (l-missing)of the equipment you are using and is the signal to seriously consider obtaining your own.

Club members often have, or know of, equipment for sale. The local archery shops have both new and second hand equipment at prices to suit all budgets. There are a number of specialist archery retailers in the region; and it would be inappropriate to recommend any one in particular. Members use the following on a regular basis:

Merlin Archery in Loughborough (www.merlinarchery.co.uk)

Quicks Archery (www.quicksarchery.co.uk)

Aim4Sport in Sandy, Bedfordshire (www.aim4sport.com) Clickers

Archery in Norwich (www.clickersarchery.co.uk)

CustomBuilt Archery in Notts. (www.cbarchery.co.uk)

Please be sure to mention to the retailer, that the club referred you to them!!

There is also a thriving mail order trade, which will supply any item you might need. Please do not buy anything from non professional archery sources without seeking the advice of fellow club members. This will ensure that you are buying equipment that is suitable, in good condition and reasonably priced. Whilst it is possible to get a good deal on internet auction sites, it is not recommended that you buy from this source until you are a more experienced archer. For further info on buying equipment, see the "Buying Equipment" section later in this document.

Buying Your own Equipment

Buying archery equipment can be a daunting prospect to any new archer, there are so many choices and opinions it can be difficult to know what to choose. You can spend as much money as you like on archery equipment. Some people spend more on arrows than others spend on all their equipment combined.

In the past, we have been advising and helping archers just like yourself through the maze and continuing this help as you progress in this wonderful sport. Putting to one side the different manufacturers' products, a good vendor will ensure that the equipment you are looking to purchase will be right for you.

In choosing a bow there are many factors to take in to consideration, your height, draw length, suitable limb weight, and the type of archery you will be participating in, building in room for growth and development and finally keeping to your budget.

Your draw length will have a bearing on the length of the bow you will need, a tall person can shoot a short bow but you will develop your shooting style better with a bow of the correct length. At this stage your draw length will be a bit erratic and will only settle down once you have been shooting for a while so we will factor this in when it comes time to decide on arrow choice, length and spine.

A bow that is too difficult to draw will do no favours to any archer. Likewise a bow that is too light will not give you good sight marks at longer distances. The great thing about our sport is that you do not have to be a muscle man to participate everyone can take part men, women and children, able bodied and disabled. Modern archery equipment is now very efficient so it is most important to select a draw weight which you cannot only handle shooting your first 6 arrows but also the 36th and later on the 150th.

As your shooting form improves factors like draw length and the amount of draw weight you can comfortably shoot will get better, this does not happen overnight and will probably change slowly during your first year in the sport. A good independent retailer can advise and recommend as well as highlight the pros and cons of different manufacturers' equipment, so you can select the kit you will be most happy with.

Unless you have somebody who is very experienced in helping you choose your archery equipment and is also prepared to set aside time to set it up correctly (tiller, bracing height, limb alignment, centre shot arrow spine for example) then it is not really a good idea to buy your bow and arrows off the Internet. For all the reasons mentioned above the chances of getting suitable equipment are quite low. It is true that clicking the "buy now" button will save you a few £'s but what price do you put on having an experienced fully trained archer help you select the right equipment for you and let you try before you buy.

A good vendor will want everyone to be delighted with their purchase, so they will ensure that when you walk out the door with your new bow you will be ready to go down to the range and shoot. You will not have to spend time adjusting your bow or make sure it is set up correctly. You can go and shoot and enjoy your archery. Finally remember if you do, or just think that you have a problem then feel free to get in touch or pop back in to the shop. Do not be embarrassed if you think the question might be silly. They have probably heard it all before!

Equipment and accessories

You can spend as much money as you like on archery equipment. Some people spend more on arrows than others spend on all their equipment. There are a number of sensible accessories that will make your archery life easier, and some relatively inexpensive bow equipment that will increase your scores. In the end, however, you will no doubt feel the need to spend a load of money to increase your scores even slightly, so unless you're already shooting on top form, you've got to wonder whether it's worth it. Apart from what is considered to be essential accessories -- a finger tab and forearm bracer, there are a few other things which generally represent money well spent.

Quiver

If you've got more than one arrow, you're going to need somewhere to keep your arrows between shots. Quivers usually hang from your belt or from a strap around your back. Most target archers use belt quivers-- back arrows are a bit of a pain, and are discouraged due to the risk of injuring adjacent archers. Quivers can be quite expensive, but if you've spent more than £25 you've probably wasted your money.

Stabilisers

Stabilisers are various combinations of rods, weights, and dampers that screw onto your bow to dampen oscillations during release. This is a complicated subject but it can be viewed relatively simply. During the release, not all of the energy stored in the string is transferred to the arrow; because the bow is not rigidly mounted, some of the energy makes the bow recoil. This recoil jolts the arrow rest, and deflects the arrow. By installing the right amount of mass and damping the right places, this recoil can be reduced by spreading the transfer of energy over a longer period of time (at least until the arrow is on its way). Most serious competitors use at least a 'long rod' on the front of the bow, and many use side rods as well. There is no magic formula for picking the right amount and distribution of weight -- it requires trial and error. Long rods start around the £20 mark, but full sets of stabilisers can shoot well into the hundreds of pounds.

People have mixed feelings about stabilizers. All archers have used them in the past, and know that they can improve scores. But that improvement has not come from an improvement in archery technique, but from superior technology. If you're competing against other people, you need all the technological help you can get. But if you're only competing against yourself, it's worth bearing in mind that these technological aids don't improve the archer, even if they improve the scores. Of course, if you take this argument to its logical conclusion, we'd all still be throwing stones.

Sights

Having a constant reference point by which to aim, one that doesn't move shot to shot, for 2 arrows or 200 is important. Cheaper sights perform this function, but usually have less options for adjustment, and are more likely to shake loose over time. A beginners sight shouldn't cost more than £30, but again, the most prestigious brands shoot into the hundreds.

For compound archery the situation is a bit different. In general, two-point sights are allowed, so the improved accuracy of the bow/sight combination means that it is sensible to have a more elaborate sight. For field and 3D archery, it is important to be able to shoot various distances without messing about with the sights too much. Moreover, a sight that sticks a foot out from the front of the bow is likely to get bent in half when it gets snagged in a tree. Consequently, many field archers prefer stumpy, multi-pin sights, which are both rugged and can accommodate different sighting ranges.

Release aids

These are normally only allowed in competitions if you're shooting a compound bow. A release aid is a device that allows you to release the bowstring without deflecting it with your fingers. Although some compound archers do still draw with their fingers, the reality is that compound bows are not really designed to be used this way, because release aids improve accuracy so dramatically. Because

compound bows are much shorter than recurve bows, the angle made between the arrow and the string at full draw is very acute, so it is difficult to avoid trapping your fingers and fouling the release.

Glossary

A

Anchor point:

The place where an arrows nock is drawn to before release, usually the chin, cheek, ear or chest. Used to help aiming.

Archer's guard:

See bracer.

Archer's paradox:

In period bows (without a shelf or centre shot) the arrow which is properly shot will fly in the line of aim, although the string propelling the arrow moves directly to the centre of the bow. The arrow in fact bends around the bow after release but after passing the bow returns to its proper line of flight.

Archer's Stake:

A sharpened wooden stake driven into the ground, pointing away from an archer to protect against cavalry.

Arrow:

The missile shot by an archer from a bow.

Arrowhead:

The striking end of an arrow usually made of a different type of material from the shaft such as iron, flint or bronze, depending the purpose of the arrow.

Arrowsmith:

A maker of metal arrowheads.

Ascham:

[1] A tall narrow cupboard for storage of bows and arrows. [2] Roger Ascham, 1515 - 1568, author of *Toxophilus* (1545).

Arrow spacer:
A circular piece of leather pierced by 24 holes used to keep the shafts of a sheath of arrows apart from each other and prevent damage to the flights during transport.

B

Back of the bow:

The surface of the bow furthest from the archer when the bow is held in the firing position.

Backed bow:

A bow consisting primarily of wood but having a thin strip of a material (wood or hide) attached to the back of the bow.

Barb:

A rearward turned point on an arrow head.

Barrelled:

An arrow which is thickest in the middle and tapers to the ends.

Belly of the bow:

The surface of the bow closest to the archer when they hold the bow in the firing position.

Bodkin:

A type of arrow head.

Bow arm:

The arm which holds the bow.

Bowman:

An archer.

Bow release:

The way a bow string is released when loosing an arrow. Varieties of release techniques included; primary, secondary, tertiary, Mediterranean, Flemish and Mongolian.

Bow stave:

A roughly trimmed length of wood from which a complete self bow is fashioned.

Bowstring:

The string of bow made from such materials as; plant fibre, silk or sinew, used to transfer the energy from the bow to the arrow. **Bowyer:**

A maker of bows.

Brace:

To string a bow.

Bracer, Archer's guard, Arm guard:

A covering for an archer's left wrist, used to protect the wrist from the slap of the string.

Breast:

The part of an arrow which touches the bow when the arrow is placed on the string ready to be drawn.

Broad arrow:

An arrow with a broad barbed head.

Broadhead:

A wide steel arrowhead used on hunting arrows.

Butt:

[1] An earthen mound used as a backing for a target.

[2] A target made from compacted straw.

Butt fields:

English public archery practice grounds, 15th century.

C Cast:

The ability of a bow to project an arrow.

Chrysal:

A crack in the belly of a wooden bow caused by the crushing of the fibres.

Cloth yard arrow:

An arrow of a certain length used for medieval English arrows, about 36 inches in length.

Clout:

A white cloth placed on the ground as a marker for long distance shooting.

Clout shoot:

An archery contest where the aim is to hit a target laid out horizontally on the ground.

Cocker:

A quiver.

Cock feather:

The feather at right angles to the string position when the arrow is nocked (on three feathered arrows).

Compound bow:

A modern bow using a system of one or more pulleys to develop mechanical advantage.

Composite bow:

A recurve bow made from a number of materials laminated together (eg. wood, sinew and horn).

Corytus, coryto: A bow case. **Creep:**

Allowing the arrow to edge forward at full draw just before the release of the arrow.

Cresting:

The identifying coloured rings applied to the arrow shaft forward of the fletchings used to mark ownership.

D**Draw:**

The act of bending the bow to full arrow length by drawing the string backwards while holding the bow steady.

Draw length:

The length the bow is drawn to the anchor point.

Draw weight:

The force required to draw a bow to full arrow length, usually measure in pounds at a certain draw length measured in inches.

F Feathers:

The flights on an arrow to aid stability in flight.

Fistmele:

The measurement of the distance from the grip to the string of a bow, usually measured by placing a fist on the grip with the thumb extended towards the bowstring.

Flatbow:

A modern bow with flat section limbs made from fibreglass and wood laminations, often referred to as a longbow.

Fletcher:

[1] An arrow maker.

[2] A person who attaches fletches to arrows.

Fletching:

To add flights to an arrow.

Flemish loose:

A loose using two fingers only.

Flemish string:

A bow string made in such a way that the loops are plaited from material without the addition of serving.

Flight shoot:

An archery distance shooting competition.

Flu Flu arrow:

An arrow with large feathers used for targets thrown in the air or shooting birds.

Footed arrow:

An arrow reinforced with a spliced hardwood foreshaft.

Fore shaft:

A supplementary hard wood shaft added to the front end of a shaft.

G

Group:

Used for a number of arrows close together on a target.

L Limb:

One of the arms of a bow, from grip to tip.

Longbow:

A self bow, usually the height of the user, preferably made of yew and made famous by the English at Crécy, and Agincourt.

Loose:

Releasing the string of a bow to propel an arrow towards the target.

M

Mediterranean loose:

The three fingered loose used by Western archers.

Mongolian loose:

The loose used by Asiatic archers where the thumb is hooked around the string.

N Nock:

[1] The end of an arrow with a notch in it for the string.

[2] The grooves in the tips of the limbs of bow to fit the bowstring. [3] The act of fitting an arrow to the string.

Nocking point:

The place on the bowstring where the arrow is placed before the loose.

P

Pile:

A type of arrow head used for target shooting

Q

Quiver, Querquer:

A bag or case to carry arrows.

R

Recurve bow:

A bow where the limbs bend away from the archer when held in the firing position.

S

Self bow:

A bow made from one piece of wood.

Shaft:

The body of an arrow.

Sheath of arrows:

A bundle of twenty four arrows.

Short bow:

A bow usually half the height of the archer using the bow.

Speed shooting, Shower shooting:

A contest to fire as many arrows as possible into the air at one time.

Spine:

A measurement of the amount of elasticity of an arrow shaft. In modern terms, it is the deflection in 1000ths of an inch when a 2 lb weight is suspended from an arrow supported at 2 points 28 inches apart.

Stave:

A piece of wood destined to be shaped into a bow.

Steelbow:

A bow made of steel, usually a flattened pipe (Europe) or a spring-like device (India)

Stele:

The wooden shaft of an arrow.

String:

[1] A bowstring.

[2] To fit a bow with a string.

Stringer:

[1] An aid to stringing a bow.

[2] A maker or seller of bowstrings.

T

Toxophilite:

A devotee of archery.

Toxophily:

The love of archery.

W

Wand shoot:

An archery contest where the target consists of a piece of peeled willow about 6 foot in length placed upright in the ground.

War bow:

A bow primarily used for use in war.

Whistling arrow:

An arrow with a large hollow head with openings in front and sides.

When shot the air rushing through the openings make a whistling noise.

Reference Documents

Archers Reference

This is a great and well respected reference guide for recurve archers. It was originally produced by Murray Elliott for Grange & Balbardie archery clubs.

http://www.archersreference.pwp.blueyonder.co.uk/archref_05.pdf

Compound Bows

A good guide to compound bow selection:

<http://www.huntersfriend.com/bowselection.htm>

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