

Colchester and District Archery Club

Established 1954



Beginner's Guide

Version 12

Beginner's Guide

Welcome to Colchester and District Archery Club. We shoot all year round at our clubhouse and ground at the Colchester Sports Park, with indoor shooting in winter. We hope you will enjoy the experience. We want you to get the most out of the sport, so these guidelines are to help you get the most out of archery and – especially important – to be safe at all times. If you have any questions, please don't hesitate to ask any member of the club. Good shooting!

About Colchester and District Archery Club

Colchester and District Archery Club (CADAC) is a group of archery enthusiasts based in Colchester, Essex, UK. We have members that shoot Compound, Recurve, Barebow and Longbow. Whatever your choice you will find someone to shoot with and plenty of people willing to help out with any problems, (archery related that is) that you may encounter. The club shoots in both County and National leagues, has a strong competitive element with international junior archers, nationally ranked archers and national record holders. In the past our archers have placed high in the top division of the Essex recurve league. We also have a good core membership of those who just shoot to enjoy the sport, including several traditional archers.

Shooting Times and Venues

The archery year is divided into two seasons with **indoor** running from October to March and **outdoor** running from April to September.

During the indoor season we shoot at the Highwoods Sports Centre at the Gilbert School, Highwoods, Colchester on a Tuesday evening. Shooting starts from 7:30pm and continues until about 9:30pm or 10:00pm depending on the round being shot.

During the Outdoor season, club evenings are held on Tuesdays & Thursdays from around 4:30pm at the Colchester Sports Park, off the A12, near the Colchester Rugby Club.

We shoot at the Colchester Sports Park ground on a Sunday morning all year round, from 9:30 a.m.

Club Colours

Archers traditionally shot wearing green or white clothing. Changes were then introduced to allow clubs to register their own colours. Rules have since been completely relaxed and garments of any colour may be worn, although blue denim, olive drab and camouflage are prohibited at record status tournaments along with strapless tops and vests. Sandals are never acceptable as footwear must fully enclose the toes.

Despite the relaxed rules, archers often wish to be identified with their own club and club colours are still very much in evidence at tournaments. CADAC colours (seen below) will often be worn to our monthly handicap shoot and for our recurve league matches. Short and long sleeve shirts as well as jackets can be purchased through the club via the Club Secretary if you wish, but this is entirely optional. See the noticeboard in the hut for details.



Communications

Information is passed on to club members on the notice board in the club hut, by monthly newsletter and by email. Please ensure the club secretary has your correct contact details.

Club website www.colchesterarchery.co.uk

Club Secretary secretary@colchesterarchery.co.uk

Types of Archery

Target Archery

Target archery is the only form of archery allowed in the Olympic Games and has over 140 member nations throughout the world. These nations are represented by the *World Archery Federation* or *WA* for short (<http://www.worldarchery.org/>). This is the international governing body for the sport. You will sometimes hear it referred to as *FITA* which is the acronym for its original name of *Fédération Internationale de Tir à l'Arc*. This translates as *International Federation of Archery* for those whose French isn't up to the task.

In Great Britain and Northern Ireland, archery is governed by *Archery GB* (www.archerygb.org/) which is the trading name of the *Grand National Archery Society* or *GNAS*.

GNAS is currently responsible for over 750 clubs and 32,000 registered members, so there is most likely one near you.

Visit www.archerygb.org/support/clubs/club_finder.php to find clubs by post code or address.

Target archery is the most popular form of archery, in which archers shoot at stationary circular targets. There are a number of officially recognised *rounds*, each consisting of a set number of arrows being shot at one or more set distances. Each *end* typically consists of 6 arrows outdoors, and 3 arrows indoors.

Archers of mixed ability can compete on an equal footing using a handicap system.

Field Archery

Field archery involves shooting at targets of varying distance, often in woodland or over rough terrain, where the archer walks from one target to the next. Distances can be either marked or unmarked, and targets vary from black and yellow circular targets to lifelike 3D animal shapes.

Field archery takes various forms depending on the governing body for a given shoot. The *World Archery Federation* and *Archery GB* who we have met already under Target Archery have specific styles of field archery. The *National Field Archery Society (NFAS)* and the *English Field Archery Association (EFAA)* are also very common in the UK.

As an example, an NFAS field shoot takes place from three coloured pegs set into the ground. The archer shoots first from a **red** peg which is set furthest away from the target, then advances to a **blue** peg if they miss followed by a **white** peg which is set closed to the target. The archer stops shooting as soon as they score. There are different scoring zones on each target. A typical scoring scheme might be 20 points for the inner zone and 16 points for the outer zone with the 1st arrow, followed by 14 or 10 points for the 2nd arrow, followed by 8 or 4 points for the 3rd. Some shoots use coloured pegs to distinguish between sighted and unsighted archers, or between adults and juniors. On other types of round a set number of arrows are shot and all that hit the target will score.

In some cases the shots will be made more difficult by clever use of the intervening ground or the positioning of the peg from which you have to shoot. This forces the archer not only to estimate distances where they are not marked, but to compensate for the slope of the ground or perhaps allow for an intervening tree or bush.

Colchester and District Archery Club is primarily a Target Archery Club, however several members are active within the Field Archery community. We do run a Field Championship each year using novelty/animal targets. While this is always good fun, we do unfortunately have to limit ourselves to setting the targets out on a flat field.

Clout Archery

Clout is a form of archery in which archers shoot arrows from a relatively long distance at a flag set in the ground. Points are scored depending on how close each arrow lands to the flag. Scoring zones can be marked as circles on the ground using the standard target colours of gold, red, blue, black and white. More commonly a non-stretch tape marked in the target colours is attached to the flag pole and swept around to determine which arrows are in which zones. Scoring is from 5 in the gold down to 1 in the white, with 0 for a miss.

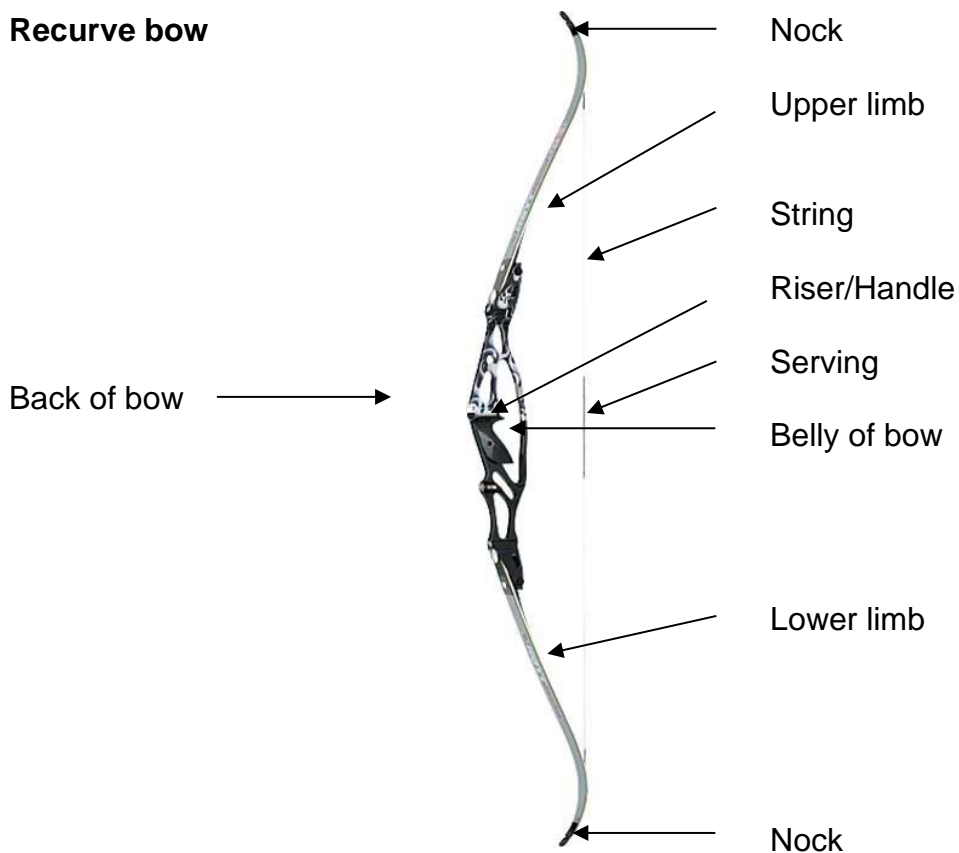
For *Archery GB* clout shoots, the distance shot can vary from 80 yards to 180 yards depending on age and gender. *World Archery* shooting distances vary from 125 metres to 185 metres based on bow type and gender (not age), although in practice shorter distances are often used for juniors.

Shoots can be one-way with a shooting line at one end and the flags at the other, or two-way with a shooting line and flags at both ends. One-way shoots tend to involve more walking as you have to go back to the same shooting line each time. Two-way shoots involve less walking, but they require more space as an overshoot area is required at both ends.

Safety is paramount due to the large number of arrows sticking out of the ground, and care has to be taken to avoid accidentally stepping on and breaking arrows.

Equipment

Recurve bow

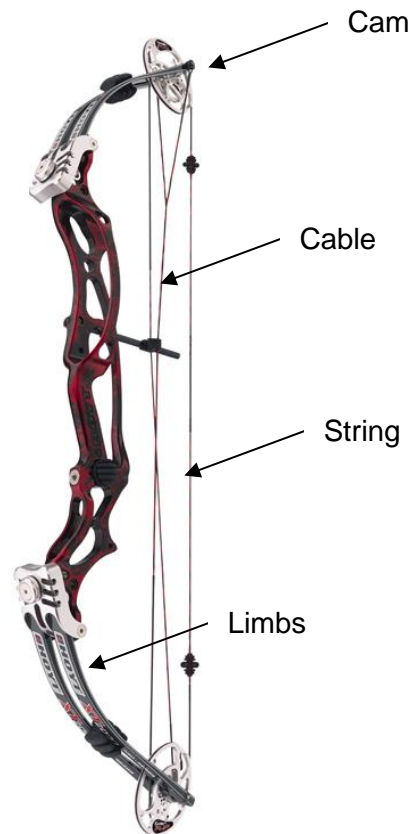


A recurve bow has tips that curve away from the archer when the bow is strung. By definition, the string touches a section of the limb when the bow is strung. A recurve stores and delivers energy more efficiently than an equivalent straight-limbed bow such as the English longbow, and will impart more energy and therefore speed to the arrow.

Modern risers are manufactured variously from plastic, wood, aluminium/magnesium alloy or carbon fibre. Basic limbs are manufactured with wood and fibreglass, with more advanced limbs being manufactured from laminated wood/carbon fibre, or in some cases from solid carbon fibre.

A recurve bow is typically fitted with sights and stabilisers to improve accuracy.

Compound bow



The compound bow was first developed in 1966 by Holless Wilbur Allen in Missouri USA. The compound bow has become increasingly popular, and it is the dominant form of bow in the United States.

It uses a levering system of cams and cables to bend the limbs. This levering system causes the bow to rise to a peak weight as it is drawn, after which it "lets off" to a lower holding weight. The "let off" is typically 65-75% which allows the archer to hold the string at full draw for a much longer period when compared to a recurve bow.

Similar to a recurve bow, a scope and stabilisers are usually fitted to improve accuracy. A special release aid "trigger" is used to release the string when shooting, as opposed to a recurve where the string is held on the fingers.

Longbow

These more properly belong in the category of “straight” bows, and are among the oldest styles of bow known to man. The earliest longbow discovered in England, found at Ashcott Heath in Somerset, is dated to 2665 BC.

The English longbow is perhaps the culmination of this type of bow. It was a decisive weapon in battles against the French during the Hundred Years' War, particularly in the battles of Crécy, and perhaps most famously at the Battle of Agincourt in 1415.

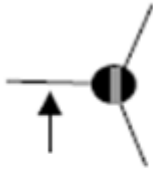
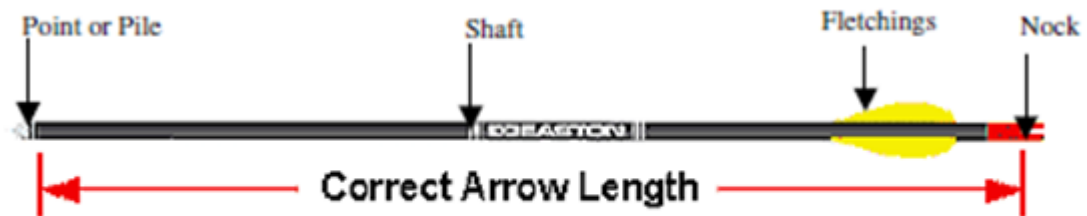
Strangely no longbows survive from the period 1250–1450 when they were dominant, although famously over a hundred longbows were recovered from the Mary Rose which sank in 1545.

Traditional style longbows are difficult and time consuming to master, but have their benefits. Modern longbows utilise advances in design that make them more efficient with greater speed and accuracy. Many people turn to longbows because of their inherent "pointability" and instinctive accuracy.

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



Arrows



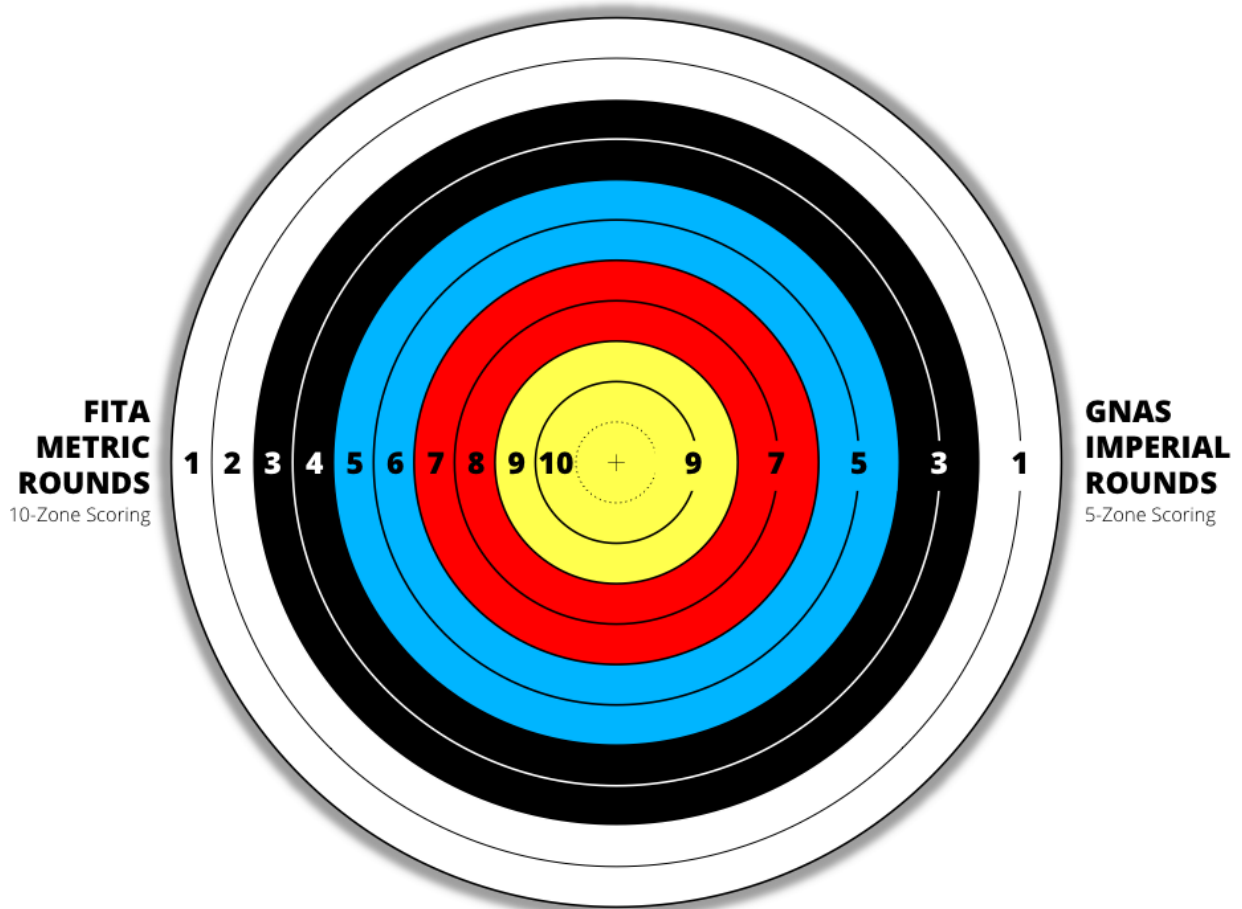
For Recurve and Longbows the cock or index fletching is at right angles to the string position in the nock.

For a Compound bow the cock or index fletching is vertically in line with the string (not shown).

Arrow lengths are measured from the nock groove to the end of the shaft (not including the point). Arrows come in various sizes and have to be matched to an archer's draw length and to the draw weight of the bow.

Arrows are made out of three main materials: wood (for longbow and traditional archery), aluminium or carbon. Most competitive target arrows are of a mixed carbon/aluminium construction. Care has to be taken buying carbon-only arrows as they cannot be used at all shoots. Lost carbon-only arrows cannot be found with a metal detector which presents problems when a shooting ground is used for other sports. Carbon-only arrows are acceptable at CADAC.

Target Faces



Target faces come in sizes of 122cm and 80cm for outdoor shooting. Indoor sizes are 60cm and 40cm.

For non-compound archers using 10-zone scoring, the Outer Gold scores 9 and the Inner Gold scores 10. In the centre of the gold is a third ring called the Inner 10. If hit then it is recorded as X and counted as 10. If there is a tie on scores at the end of a tournament then the archer with the most Xs is declared the winner.

When shooting indoors only, compound archers score 9 for both the Outer Gold and the Inner Gold, and only score 10 if they hit the Inner 10. They are disadvantaged in this regard over recurve and longbow archers as compound bows are expected to be more accurate.

Scoresheets

Despite minor differences in design, most scoresheets follow a similar format and scoring always follows the same pattern. The example below shows a partially shot Warwick round which comprises two dozen arrows at 60 yards and two dozen at 50 yards. It uses imperial scoring (9, 7, 5, 3, 1). Arrows are shot six at a time and scores are entered across the page in groups of six with the highest scores listed first. Each dozen is totalled, the number of hits and golds are entered (a gold being the highest possible arrow score, so only 10s would count for metric scoring), and a running total is maintained as each dozen is completed:

Distance: 60 yds						E/T							E/T	Dozen	Hits	Golds	R/T
9	7	7	5	1	1	30	9	9	7	7	7	3	42	72	12	3	72
9	9	9	7	5	5	44											

Distance: 50 yds						E/T							E/T	Dozen	Hits	Golds	R/T

Grand Total

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The completed scoresheet might look like this, including the use of a M to indicate a miss:

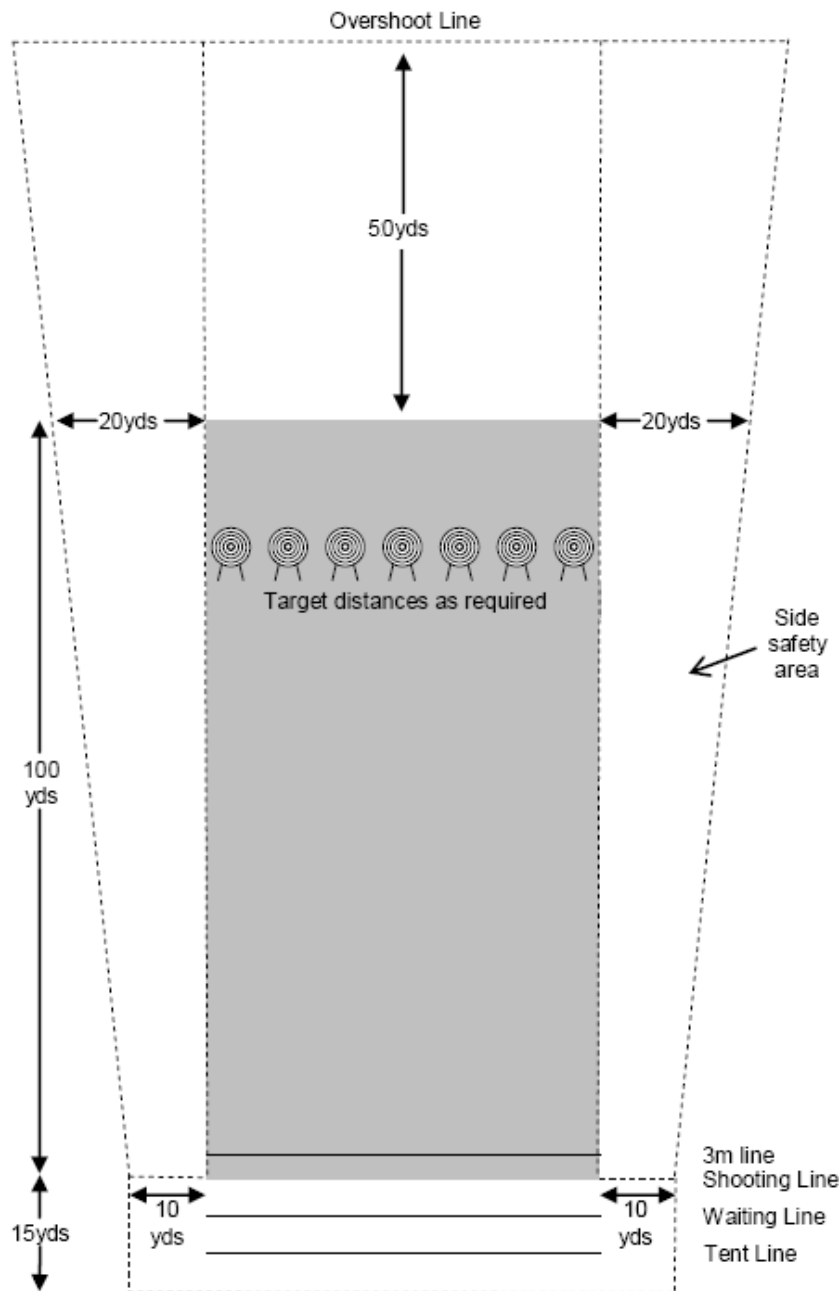
Distance: 60 yds						E/T							E/T	Dozen	Hits	Golds	R/T
9	7	7	5	1	1	30	9	9	7	7	7	3	42	72	12	3	72
9	9	9	7	5	5	44	9	7	5	5	3	M	29	73	11	4	145

Distance: 50 yds						E/T							E/T	Dozen	Hits	Golds	R/T
9	9	7	5	3	1	34	9	9	7	5	5	5	40	74	12	4	219
9	9	9	7	5	3	42	9	9	9	7	7	7	48	90	12	6	309

Grand Total

47	17	309
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Range Layout



Shooting line - the point from which arrows are shot at the target. Archers may stand astride the line but must only cross it on instruction from the field captain.

Waiting line - 5 yards behind the shooting line - archers should retire behind this line on completion, taking their equipment with them.

Tent /Spectator line - 5 yards behind the waiting line - all tents and all spectators should remain behind this line.

Rules of shooting

The rules of shooting are to ensure everyone's safety. Please observe them at all times.

Shooting

1. Shooting shall conform to the rules of GNAS.
2. Someone must take on the duty of Field Captain.
3. All shooting archers must conform to the whistle.
4. Shooting will be from a common line (the shooting line).
5. Never draw a bow, even without an arrow, except when facing the target standing on the shooting line.
6. Never aim a bow anywhere except at a target.
7. As soon as you hear the word 'FAST' stop shooting at once, bring your bow down and return the arrow to the quiver. The word 'FAST' can be shouted by any archer at any time who sees any sign of danger.

Scoring

8. Always walk carefully towards the target and beware of any arrows that may have fallen short.
9. Never stand behind an archer who is pulling arrows from a target. Archers drawing arrows should check no-one is behind them before pulling.
10. Do not retrieve arrows from behind the target until scores have been recorded.
11. All completed score sheets to be handed in should be countersigned and handed to the Records Officer or left in the hut in the appropriate container.

General

12. Everyone in the ground must observe the rules of etiquette and safety.
13. An adult GNAS member must be present when children under 18 are shooting. All children under 18 must be directly supervised by a parent or guardian whilst on the ground.
14. Equipment should be handled with care, using appropriate aids. Bows and kit should be stowed tidily behind the waiting line.

Etiquette

A good archer:

- Does not talk in a loud voice whilst others are shooting.
- Does not talk to another competitor who obviously prefers to remain silent.
- Does not make any exclamation on the shooting line which might disconcert a fellow archer in the act of shooting.
- Does not go behind the target to retrieve their arrows before their score has been recorded.
- Does not touch anyone else's equipment without permission.
- When calling scores, points to their own arrows and calls in sets of three, starting with the highest eg '9 – 7 – 7' pause '5 – 5 – 3'.
- On breaking another's arrow through their own carelessness pays for it in cash on the spot.
- Thanks the Target Captain at the end of each round for the work on their behalf.

Handicaps

In target archery shooting takes the form of rounds, with a round comprising a set number of arrows shot over set distances. A listing of all the outdoor rounds is displayed in the club hut for both Metric and Imperial Rounds.

When an archer shoots a round, either at the club or at an external shoot, they should submit the score to the Club Records Officer. Scoresheets can be left clipped to the board on the wall of the hut.

Scores that have been submitted will be used to calculate your handicap. You need to shoot a minimum of 3 rounds to obtain a qualifying handicap rating. Your handicap is then used at the club's monthly handicap shoot and club championships to allow you to shoot on an equal footing with more experienced archers.

Classifications

Different scores for different rounds are variously categorized as 3rd Class, 2nd Class, 1st Class and Bowman. Shooting three scores of a given category in one season would class you, for example, as a 1st Class archer. You receive a badge the first time you achieve each classification. There are two higher classifications of Master Bowmen and Grand Master Bowman that are only achievable when shooting at record status tournaments.



The classification scheme can be useful when shooting a round you have never shot before. If you know you are shooting to a 2nd Class standard you can look up the 2nd Class score for any round to give yourself a predicted score. As different rounds comprise different numbers of arrows at different distances it can otherwise be difficult to gauge your own progress. Classification scores are also listed in the hut.

Shooting technique

Archery GB suggests teaching according to the 'T' draw technique, named in reference to the shape the body makes when using the correct posture. It has the following eight basic steps. Many archers break this down further to ten or twelve steps. Some archers adopt a shot sequence that consists of sixty or more steps.

1	Stance	Feet square to the target and in the same spot each time Body upright, shoulders back
2	Nock arrow	Arrow nocked with index fletching towards the archer Listen or feel for the 'click'
3	Set hands	Pressure on the bow hand in the correct spot Bow hand knuckles at 45 degrees One finger above arrow, two below Fingers correctly on the string at the first joint Back of the drawing hand and wrist relaxed and flat
4	Prepare	Light push with bow arm and a light pull to tension string Breathe in and out to relax Ensure posture remains upright Turn head to look at the gold
5	Raise	Bow arm and draw arm raised together while breathing in Both hands level with the mouth Keep bow vertical and string centred Bow arm straight, wrist and fingers relaxed, bow shoulder down Straight line between draw elbow, string fingers and pressure point on the handle (draw force line) Teeth together, lips closed, eye closed if preferred
6	Draw & anchor	Draw smoothly taking 1-2 seconds Pull from the drawing arm's elbow Shoulder blades move together Bow shoulder kept down Index finger of drawing hand under the jawbone String touching nose and chin
7	Aim	Keep focus on the gold Sight should appear 'blurred' over it String alignment still correct Tension between shoulder blades maintained Steady sight on aiming point
8	Release & follow through	Relax fingers rather than consciously 'letting go' Hold aim and posture until the arrow hits the target Don't move the bow to see where the arrow has gone Draw arm should move backwards Draw hand should end up behind ear

Archery Glossary

AFB	See flat bow
Anchor point	Fixed point on archer's face to which the string and loosing hand are drawn
Archery GB	Trading name of the Grand National Archery Society (GNAS)
Arrow	Made of metal, carbon or wood, the projectile shot from a bow
Arrow rest	A shelf on the bow handle on which the arrow rests during the draw
Back (of bow)	Part of the bow away from the string
Barebow	Style of shooting in no form of sight or other aid to aiming is used
Belly (of bow)	Part of the bow nearest the string
Boss	Circular straw target
Bouncer	An arrow that hits the target and rebounds
Bow sight	An adjustable device used for aiming
Bow sling	A strap attached to the bow that allows the archer's hand to remain in contact with the bow without gripping it
Bow stringer	A device used for bracing the bow whilst attaching the string
Bow window	The cut out section above the bow handle on recurve and compound bows
Bowyer	One who makes and designs bows
Brace	To string the bow by placing the string loops into the bow nocks
Bracer	Worn on the bow arm to keep loose clothing out of the way
Bracing height	Distance between the string and the bow when braced
Cant	Tilting the bow to the left or right when shooting
Carbons	Arrows made of carbon
Cast	Distance and speed a bow shoots an arrow
Centre shot	A bow designed to allow the arrow to lie on the centre line of the bow
Clicker	A device attached to the bow to tell the archer the draw is complete

Clout shoot	Long distance shooting, derived from military practice
Cock feather	The odd coloured feather at right angles to the string
Colours	Regulations have now been relaxed, but originally green or white clothing or club colours had to be worn for some competitions.
Composite	A bow with limbs made of two or more kinds of material
Compound	A bow using a cable system with eccentric wheels at the limb tips. The archer has a holding weight less than the actual draw weight of the bow
Creeping	When the drawing hand edges forward before or during aiming
Cresting	The coloured bands on the shaft of an arrow
Dacron	Polyester string material
Dead loose	A loose where only the fingers move on release
Draw	The act of moving the string from the bracing height to the anchor point
Draw length	The distance to which the archer needs to draw the bow
Draw weight	The force in pounds needed to draw a bow to the draw length
Dry loose	Releasing a drawn bow without an arrow nocked
EFAA	English Field Archery Association
End	In a round, three or six arrows shot before scoring and collection
Fast	The warning cry to stop shooting
Field archery	A form of shooting over various distances, usually in rough country
Field Captain	The person in charge of shooting
FITA	Federation Internationale de Tir a l'Arc, previous name of WA
Flat bow	The American equivalent of the long bow, made with a mixture of materials
Fletchings	The feathers or vanes on an arrow
Flight shoot	Shooting for the longest possible distances
Follow through	The natural reaction of the body after a loose
Foot markers	Small discs used to mark the archer's position on the line

Forward loose	A loose in which the drawing hand moves forward during the loose
GNAS	Grand National Archery Society, the UK national governing body
Gold	The central scoring zone on a target face
Ground quiver	A stand for arrows and bows
Grouping	Shooting arrows close together in a target
Handicap	A shoot where the archer's previous performances are taken into account when calculating the final score
Handle riser	The part of the bow held in the hand
Heeling	Applying pressure on the handle below the point of balance
Holding	Maintaining the aim and draw length before loosing
Imperial	A method of scoring (usually for outdoor rounds)
Kevlar	A non-stretch string material
Kisser button	A small disc placed on the string which reinforces the anchor point by being placed between the lips
Lady Paramount or Lord Patron	Honoured guest at a tournament meeting who presents the prizes. They may or may not be an archer
Limb	The working sections of the bow either side of the handle riser
Long Rod	A long stabiliser
Longbow	A bow made solely from wood in a traditional style which may have horn nocks
Loose	The act of releasing the string
Metals	Arrows made of metal (usually aluminium)
Metric	A method of scoring (usually for indoor rounds)
NFAS	National Field Archery Society
Nock (arrow)	The slot in the end of the arrow that fits over the string
Nock (bow)	The slots on the end of the limbs which retain the string
Nocking point	The point on the string that receives the arrow nock
Overbowed	Bow which is too strong for the archer to shoot comfortably
Peep site	A small aperture on the string which acts as a rear site for compound

	bows
Petticoat	The area of the target outside the scoring zone
Pile	The point of an arrow
Pinch	Squeezing the nock of the arrow during a draw
Pinhole	The exact centre of the target marked with a small cross
Plunger button	Device with a spring and plunger used for tuning a bow
Point	See pile
Popinjay	Shooting at artificial birds at the top of a mast
Quiver	A holder for arrows when shooting
Recurve	A bow that curves forward at the limb tips
Release aid	A mechanical device for loosing the string of compound bows
Round	A specified number of arrows shot at a given distance eg York, Hereford, Western, National
Serving	The thread whipping on the centre of the string and at the loops to prevent fraying
Shaft	The tube of the arrow, may be metal, carbon or wood
Shooting line	The line across which all archers stand when shooting
Sight mark	The place on a bow sight when it is correctly adjusted for a particular distance
Sighters	Unscored arrows shot before a round to adjust sights
Spine rating	A measure of the stiffness of an arrow
Stabilisers	Weighted rods attached to bows to improve stability
Stacking	An unwelcome increase in draw weight as draw length is reached
String	The cord attached to each end of the bow which gives the bow tension and causes the arrow to fly when drawn
Tab	A piece of strong material (leather/ plastic) to prevent abrasion on the fingers during the loose
Target Captain	Responsible for scoring on a target
TFC	Torque flight compensators – rubber dampers used with stabilisers

Tiller	The alignment of limbs with respect to the string when braced
Torque	Turning force applied to a bow
Toxophilite	An archer, a lover of archery
Underbowed	Using a bow too weak for effective shooting
Vanes	Plastic fletchings
WA	World Archery Federation (formerly FITA), the international archery governing body
Waiting line	Line behind which the archers retire after shooting, at least 5 yards behind the shooting line
Weight in hand	The physical weight of the bow (not its power)