CHOOSING YOUR FIRST ARCHERY EQUIPMENT

(this is the first draft – so information is rather basic, but with luck it will be improved eventually)

Things you'll need to know:

(which determine both bow size and arrow specification)

- Your draw-length
- Your preferred draw-weight
- Whether you shoot Left- or Right-handed

DRAW-LENGTH

The term 'draw-length' really means the length of arrow you should be using – which is measured in a standardised way laid down by the Archery Manufacturers Organisation, usually referred to as 'AMO'. The AMO draw-length is the distance from the arrow nock where it clips onto the string at full-draw to the 'pivot' point of the bow handle (where the web of flesh between your thumb and index finger nestles into the bow grip) PLUS 1 ¾ inches (to give a safe over-hang on the arrow rest which is usually a little forward of the pivot).

Individual draw length depends on the proportions of your body, in particular the width of your shoulders and the length of your arms (and so will be fairly closely related to your height, but the actual value will vary among people of the same height). We can measure your Draw-length, using a light-weight bow and graduated arrow. Archery shops will also do this.

Note that draw-length isn't totally static, it will usually get an inch or two longer as you get used to shooting, then may reduce slightly as your style beds-down.

For this reason it's advisable to buy arrows that are say two inches / 5cm longer than measured, however, if you have been measured using a very lightweight bow, and if your posture was good when you drew, the required safe additional length will be minimal.

MOST PEOPLE WILL START WITH RECURVE BOWS

Suggested Draw-Weight of your first bow:

For beginner ladies 24 to 28 lb will usually be a suitable draw-weight For gents, 28 to 32lb is recommended for a first bow

Choosing a bow of moderate weight (as above) will allow you to shoot well at reasonable distances, and will allow you to keep and improve the good posture and style (often called 'form') you were taught. Choosing a too heavy bow too soon can ruin a good form. As you practice you will gain strength and improve the way you carry the load, and after nine months or a year you will probably be ready to increase your bow-weight, maybe by four to six pounds. This may be all you ever need, but if you are strong and competitive you may eventually go quite a bit further.

Many bows are 'adjustable-weight' – which means the draw weight can be adjusted UPWARDS from the rated weight by about 10%, so 30-pound limbs would be adjustable to around 33 pounds, which is less than 'four to six pounds'. So, even with adjustable limbs, there is a fair chance you will need to buy a new set of limbs if you eventually decide to increase your draw weight. But you will probably be able to offset the cost of the new limbs by selling your beginner limbs to someone who has just completed a Beginners Course – unless you decide to keep the lighter limbs for indoor shooting.

Note too that the weights stated above are meant to be the weight you carry on your fingers at full draw. This 'real' weight depends on how far you draw the bow – your measured draw length. Bows are measured in accordance with AMO requirements, stating the draw-weight at

a draw-length of 28 inches. If you don't draw 28 inches, the weight on your fingers will be different – at a rough calculation, DEDUCT 2 pounds draw weight for every inch draw length LESS than 28 inches, or ADD 2 pounds draw weight for every inch draw length MORE than 28 inches.

Now you may be wondering what is a typical draw-weight as used by experienced archers. These days it doesn't require particularly large draw-weights to shoot target archery distances up to 90 metres / 100 yards compared with what previous generations needed to pull, for instance in the 19th century when everybody was using a Longbow and wooden arrows, a man would be using a draw-weight of around 50 to 55 pounds, and the top archers would making scores of possibly 450 in the York Round; but by the mid 1970s when most people were using composite bows with glass-fibre laminated limbs and aluminium arrows, a man would be more likely to be shooting between 38 and 44 pounds, and the best archers would be scoring around 1000 points; and now, with the help of modern string materials and carbon-fibrealuminium arrows, a draw-weight of 34 pounds is enough, indeed one of our club members shot the highest York Round score (1100) recorded by any Sussex archer in 2004, using a 32 pound draw-weight bow (the York is a particularly demanding round as it involves making 72 shots at 100 yards. Shooting scores at the 1100 level puts you in among the Master Bowmen - average male archers would shoot a score of around 700 - many of whom will be using heavier bows, maybe as much as 50 to 55 pounds, so that their arrows fly faster and are less influenced by the weather, and the best will be scoring nearly 1200 points). This example shows that a skilled archer, in this case one who had been obliged to reduce his draw-weight because of injury, can shoot extraordinary scores using equipment within the grasp of a beginner.

The recommended draw-weights of beginners bows, used with the recommended aluminium arrows, would just about enable a man to shoot 80 yards / 70 metres, or a lady to shoot 60 yards / 50 metres, but would be rather under-powered for the maximum distances (100 yards for men, 80 yards for women).

Bow Size:

Essentially, the bow size should be chosen to suit the user's draw length, but draw-length is usually related to height as well, so the following table is a fair guide...

Height	Draw-Length	Bow Size	Limb in 23" handle	Limb in 25" Handle
5ft 2 in	24"	62"	Needs Junior Bow	
5 ft 6 in	26"	64"	Short	-
5 ft 9 in	28"	66"	Medium	Short
6ft	29"	68"	Long	Medium
6 ft 2 in	31"	70"	-	Long
6 ft 4 in	33"	72"	Needs 27" handle	Long

You will note that there's more than one way to achieve a particular bow length, by mixing and matching the handle and limbs. Choosing the shorter handle and longer limbs will usually give a smoother draw sensation, but give a slower arrow speed, conversely the longer handle and shorter limbs will be faster and feel a little stiffer.

ARROW SPEED and HOW TO GET SOME MORE

Arrow speed is the Holy Grail of Archery. The faster you can get your arrows to fly, the sooner they will get to the target, and the less high they will need to be lofted. Both of which mean their flight will be less influenced by the wind, so they are more likely to hit where they were aimed.

Things that increase arrow speed are...

• Greater draw-weight

- Better Limb Construction
- Higher-tech Arrow Construction
- Higher-tech String Material

At this stage you are a bit limited in your options...

- You need time to develop strength and style so you can handle a heavier draw weight, for the moment you should be using the beginner weights recommended above
- Limb Construction has improved over the years, and with improvement comes increased price, but most of the improvement in performance has been in stability and consistency rather than in arrow speed, so it isn't cost-effective to try to buy additional arrow speed by getting higher-spec limbs
- Lighter, smaller diameter, arrows will fly dramatically faster than large diameter aluminium ones, but all the same you would be unwise to buy high-specification arrows yet, you would lose and break too many.
- Which leaves String Material. Big speed increases result from using modern fibres that have very little 'give'. Beginners bows use a polyester material called Dacron, which is somewhat elastic, and cushions the shock as the limbs reach their limit of travel at the end of the shot. This also reduces the efficiency of the transfer of energy from the bow to the arrow. Modern materials such as Kevlar, Dyneema and Spectra stop the limbs almost dead, and as result more energy is transferred and the arrow leaves the bow much faster. But you need to have a bow that's strong enough to withstand the increased shock which usually rules out wooden or plastic handles, and some of the cheaper limb constructions, such as economy limbs with foam cores.

WHAT TYPE OF RECURVE?

Your choice should be influenced by how you see your involvement with archery progressing. If you think you're going to get a lot of use out of your new kit, then it will make sense to buy kit that can form the basis of your equipment as you move on up the skill ladder, rather than need replacing guite soon because it hasn't got the capabilities.

The bows you use in the lessons are mostly 'Beginner' bows, but some are also capable of being 'Intermediate'.

On the whole, Beginner Bows are only suitable for casual, occasional use, and will be adequate if you would like to shoot now and then for a bit of fun, but are not intending to practice on a regular basis. If you do shoot at all frequently your skill will probably soon exceed the performance of the bow, which is highly frustrating and unsatisfactory.

On the other hand, many Intermediate Bows are capable of very high scores, given a good set of arrows and a few good-quality peripherals, like a good arrow rest. Indeed we have a story of a young man who had been a very good Youth Archer who joined our club after a 10-year lay-off spent getting qualified and married, and after buying himself a pretty basic Intermediate bow kit, within eight months came Third in the All-British Field Championships with a Grand-Master-Bowman level score. He thought "If I can do this well with a cheap Korean Bow, how well will I'll do if I get a Top-Quality Bow?". The answer was: Not so well actually.

Intermediate bows generally offer an economical upgrade path. You can interchange the Limbs, to accommodate your changing strength. You can fit better quality peripherals, such as arrow-rests and pressure buttons, grips, sights and stabilisers. Experience with this type of bow and its accessories provide the knowledge you'll need to make informed decisions if you ever get to buy a Top-of-the Range bow.

Most of the recurve bows you will encounter will be 'Take-Down' bows that have two removable limbs attached to a solid handle section (often called a 'riser', a term originally used

to describe rather graphically the wooden block glued onto the back of a longbow to thicken up the handle). Risers tend to be made out of Wood, Plastic or Metal, although some of the most expensive bows may be wholly or partly carbon-fibre composites.

Wood Riser Take-Down Bows

Most are Korean-made Club Bows, which are very good value, but are prone to mis-alignment and dimensional instability that makes them unsuitable for serious use. But there are also some very high quality and high performing wood-handled bows (and expensive because they involve exotic timbers and high craft skills), and many that are currently in production incorporate strengthening laminations made out of carbon-fibre composites, which make it possible to use modern bowstring materials without risking damage to the bow. All the same you should be cautious about buying a wood-handled bow at this stage, because on the one hand it doesn't seem wise to buy a high-quality high-cost bow before you have developed a lot further as an archer, when you will know what kind of bow specification will suit you in the long run, and on the other hand the older good-quality bows that you may find on the second-hand market are not capable of being used with modern bowstrings, so in order to get an acceptable arrow speed (particularly with the heavier aluminium arrows that were contemporary with the bow) the draw-weights tended to be rather high – and some manufacturers used to mark the draw weight two pounds or so less than the actual weight, to give the impression their bows were a little faster for their weight. And the nicer bows - such as the Border Mistral – still fetch quite high prices, often more than a new intermediate standard bow.

Wood handles tend to be light in the hand, but are felt to be less consistent in performance. Most, if not all, wooden take-down risers use some kind of bolt to hold the limbs in place, and so the choice of limbs (for when you need to change draw-weight) is limited either to basic quality Trainer limbs, or to limbs from the same manufacturer.

Wood-handled One-piece Bows

Some bows do not 'take-down', the limbs emerge smoothly out of the riser / handle. The one-piece bows available on the second-hand and new markets tend to fall into two categories: Old target bows, at least twenty five years old, and Hunter / Field Archery Bows, both old and new.

Of the target bows, the ones by the Quality Manufacturers are often old designs with drawforce characteristics that are slightly unpleasant when compared with newer designs.

Perversely, it's the mass-produced cheaper bows, such as the later Greenkat models, that feel
nicer to shoot because they used later limb designs, when the higher-quality makers had gone
over to making take-down bows. There are a few exceptions such as the Forest Knight made
originally by Marksman but more recently by Bakewell Bows, but these are expensive.

Hunter / Field Bows are short in length and high in draw-weight poundage, and are not
suitable for target archery.

Plastic Riser take-Down Bows

Plastic riser bows (mostly polypropylene or ABS) straddle between the Beginner and Intermediate categories. These handles generally use the same type of limb attachment as many of the Wood-Handle Club Take-Down Bows, but in addition to the glass-fibre/wood laminate limbs that are usually supplied with the wood handled bows, these plastic handle bows often have limbs with plastic foam cores, which are fine so long as you always take care to use a bow-stringer when bracing the bow.

The best known at the present time are Rolan and KAP Surprise, although BowSports stock an ABS-handled Youth Bow. The Rolan handles are quite lightweight, but a good proportion of people don't find them comfortable to use, you should try before buying. You have probably already used a KAP Surprise (we have several). They are relatively heavy in the hand, but feel very like a proper Intermediate bow. Unfortunately this model is no longer made because the manufacturer is promoting other models, but if you are thinking of shooting reasonably frequently, but perhaps not on a weekly basis, this bow could be a good choice if you can find a used one for sale.

Metal Riser Take-Down Bows:

Usually made out of Aluminium-Magnesium Alloy.

'Club' Take-Down (non-'International' limb-fit)

A few metal-handled Club-level bows are made that use bolt-on limbs of the same type used with wood-handled club bows. The advantage is that these bows are less prone to distort than the wood handled bows, and they also use a good-value readily-available limb type, so you can change limbs without great expense. They also look a bit more credible than a wood handled club bow.

There are two basic types, machined and die-cast. The CNC machined versions are usually made by PSE as the Optima bow, although they are often badged as 'Petron S2'. Provided these haven't been damaged by heavy impact, these handles are accurately made and well-aligned. Still available new from Chiltern Archery, although I have a suspicion they are changing to a re-badged die-cast handle (see below).

The die-cast handle is usually made by KAP, and often called Pro-Style. While basically good in concept, experience has shown the alignment of the limb attachments can be inaccurate, which can be fixed in a slightly crude way by a reasonable experienced D-I-Y club-mate, but then it's nice to have a good one from the start.

A discontinued diecast bow that has bolt-on limbs, but is often very satisfactory for the beginner to intermediate stage is the Win & Win Trigger Bow. Another good model that has slot-in limbs, which are not the almost universally interchangeable 'ILF' fitting, is the KAP Evolution bow (which later evolved into the Evolution II, T-Rex and SF Axiom Bows, that do take 'ILF' Limbs – see below)

Beware of the short metal handled take-down recurves bows sold on eBay and in leisure shops, length about 60 to 64 inches, draw weight about 30 to 40 pounds – these are not suitable for proper target archery

'International' Limb-Fit Take Down

In recent years nearly all bow manufacturers have adopted a type of limb attachment that originated in the Hoyt Gold Medallist bow, which was one of the most successful designs ever, and has only just stopped being made after being in production for 25 years. This means that it's very easy to find replacement limbs when the time comes to change draw-weight, and there are some real bargains to be had as a result – limbs that cost several hundred pounds three of four years ago can be bought for maybe 30 to 40% of the new price. The Gold Medallist limb attachment is now called the International Limb Fitting, often shortened to ILF.

Recognising this trend, there are now several really rather good low-price Beginner-to-Intermediate Entry-Level ILF Bows on the market, but these are all made in the 23 inch riser size only, so will suit Ladies, Juniors and Gents up to about 5ft 11" in height. Good ones include the KAP T-Rex (also called Evolution II), SF Axiom, Samick Privilege. Model names change rapidly for marketing purposes, and some are already superceded by another model that's effectively identical but has a new name. The new price of these bows is around the £100 level by mail order.

Proper Intermediate Bows are likely to cost at least £140 new, if fitted with Entry-Level low-cost limbs, but it is possible to find used bows, either current or preceding models for perhaps 2/3rd the price. New bows usually need some additional basic extras fitting, adding perhaps £10 to the cost, and on top of that you will need a sight and other shooting accessories. The cost spectrum of intermediate bows extends upwards to beyond £200, and at this price level you can also find second-hand top-level bows from time to time.

Recommended Current and recent Intermediate ILF Bows are Samick Mizar (a 23" handle suitable for Ladies and smaller men), Win & Win Winstar 2 (and also its predecessors the Winstar and Striker bows and a number of similar bows such as Toz and Sidewinder), Samick Agulla

Desirable 2nd-hand ILF Bows include Hoyt Avalon, Matrix, Elan and Gold Medallist, Win & Win Winact and Ex-Feel, Samick Master, PSE X-Factor, KG Kudos, and Spigarelli

Non-'International' Limb-Fit Take Down advanced Bows

There are a number of high-performing bows that do not conform to the 'International Limb Fitting' attachment, and so replacement limbs have to originate from the same manufacturers, and consequently second-hand replacements are harder to find. Current models include Stylist, Perris Whitehart and some KG bows.

Bows made before the widespread adoption of the ILF attachment are also available second hand, and some are very good indeed, and also very good value for the quality, subject to the potential problem that replacement limbs are no longer made, plus the fact that it may be hard to find a bow of low-enough draw weight – these bows may be more suitable for the second stage of your archery rather than as a first bow. Makes to look out for (as well as the ones named above) are Marksman KG1 and Portland 2000, Samick Progress, Hoyt TD3 Promedallist, and Yamaha YTD II, Eolla and EX. Ask for advice from experienced clubmates.

COMPOUND BOWS

There are many more fundamental differences between individual Compound Bows than there are between Recurves. Whereas 'mainstream' Recurves are generally bought simply by length and draw-weight (non-'mainstream' bows would include Hunting Bows and Asian / Mongol recurves, which are designed to be much shorter for the same draw-length). Compound Bows are bought according to Peak Weight, Holding Weight and Draw-Length. For the same results of these values, the actual bow-length (and the 'attitude' of the limbs – in terms of angle with the horizontal) can be quite different. Most bows have significant scope for adjustment, but some of the adjustments involve swapping components. But it is important to know that a Compound Bow almost always has a very short correct draw-length range (often called the 'Valley' because at this length the draw weight gets lower and lower, then levels for a short distance, then rises very sharply as it hits the other 'wall' of the valley), so the bow must be set up to operate at the user's personal draw length.

If you go to a shop to buy a Compound Bow, you will be offered a choice of 'let-off percentages' – which depends on the design of the bows on offer. One of the big advantages of a compound Bow is that it's less of a beast to hold at full draw, so you can select a low 'holding-weight' which you can resist without pain or tremors. The other advantage is that the force that actually projects the arrow increases from the instant you let the string go, unlike a conventional bow where the force decreases, so the arrow will accelerate more, and leave the bow at a higher speed. Consequently, most Compound archers use a bow that has a Peak weight that is about 25% greater than the weight they would pull if using a recurve (this is because the peak maximum weight is only experienced briefly, the same kind of thing applies to Longbows where the archer tends to hold on for a shorter time, and also the dead-weight of a longbow in the hand is far less) and use a Holding Weight of about 66% of their recurves weight – for instance an archer who might draw a 40 lb recurve would have a 50 lb peak-weight Compound with a 25 lb Holding Weight – which in this case is 50% Let-Off.

For beginner ladies 30 to 35 lb peak-weight will usually be suitable. For gents, 35 to 40lb is peak weight recommended for a first bow.

ARROWS

It's a good plan to start off with a set of medium-to-good quality aluminium arrows. You need something that is reasonable cost, and won't hurt your pocket too much if you lose or break an arrow or two. And you need something that is not too fragile, and isn't prone to take bends very easily, or likely to snap if you try to straighten a bent shaft. And you need something that can be found relatively easily in the grass by the club's metal detectors.

Easton Aluminium make more aluminium shafts than anyone else, and for target archery the three most widely used shafts are Jazz, Platinum and Eclipse X7. I would suggest buying Platinum arrows, as they strike a good balance. Jazz shafts are a bit too soft-tempered, and take bends rather easily; Eclipse X7s are too brittle to be used by beginners.

XX75 and Easton 24 arrows are older series that have a specification similar to Platinum arrows, and are suitable for use by beginners so long as they are in good condition.

Fibre-glass arrows tend to be heavy and sluggish, and have a disappointing performance. Carbon-fibre arrows are too fragile for beginners. They offer the advantage of flying significantly faster as they are much lighter and thinner than the equivalent aluminium arrow, but you need to have achieved a reasonable level of skill where nearly all your arrows hit the target boss rather than risk hitting the surrounding woodwork before you transfer to carbon or carbon-aluminium. Fibreglass and Carbon arrows are very difficult to find if they bury themselves in the turf, and also can break and splinter quite easily, which is potentially hazardous if the fibre gets under your skin. Most high-performance arrows have carbon-aluminium composite shafts, but they are also fragile and too expensive to break on a frequent basis, so are not suitable for beginners.

Selecting the right arrow specification:

You need to know...

- Your draw-length
- The type of Bow you will be using
- The draw-weight 'on your fingers' at your individual draw-length

And you need Selection Tables for the types of arrow you are interested in. (Or Archery Shops have arrow selection software that will suggest several possible specifications to suit you).

Of the several specifications that would work for your individual set-up, the one you choose would be influenced by how you will be shooting, for instance...

If you are a beginner you might select a thicker-walled shaft as it would be more robust — Aluminium arrows are graded by a four digit number etched onto the shaft, such as 2016. The first two digits indicate the external diameter in 64ths of an inch, i.e., 20/64" in this case, about 8mm. The last two digits indicate the wall thickness in thousandths of an inch of the tubing, in this case 0.016", about 0.4mm. So, if the selection table offered 2012 or 1814 or 1716 shafts, a beginner should take the 1716 size.

If you are going to shoot longer distances, say 80 and 100 yards, you might select a lighter shaft, choosing the 1814 shaft in the example above. The selection table or software will show the weights of the shafts.

If you are going to be shooting indoors you might select the largest diameter because it might gain you a few extra points in 'line-cutters'. In the example above you would choose the 2012 shaft.

Nocks and Fletchings

If you have a choice, select something that is distinctive and will be easy to spot in the target face at a distance. I shot recently with a compound archer who had the tail ends of his arrow shafts covered in blue adhesive wrap-film, and blue fletchings and blue nocks, which made them very easy to pick out when you were scoring standing right next to the target. It was a dismal rainy day, and when he started shooting his 'sighters' he put his arrows in the Blue ring of the target. They were invisible, even through a large good quality spotting telescope. Bright fluorescent colours are best, but don't all go and get the same colours!

And remember to get some spares, as nocks and fletchings will get broken, particularly if you start to group your arrows very close together.

SIGHTS

The problem with bow-sights is that good ones are relatively, or very, expensive. There are a number of intermediate-level sights that look very similar to the expensive ones, but don't work that well mechanically.

All the sight has to do is provide an aiming point that can be adjusted easily and accurately into position, and once in position will stay there. It's the 'staying there' that causes most problems in lower-cost sights. Basic sights have a screw clamp to hold the slider in place, however vibration will loosen the slider, and you will need to check and re-tighten constantly, otherwise you may find your arrows are gradually going higher and higher, as the slight slider block shakes its way down the sight bar. Sights with vertical screw-adjustment tend to hold their position better, and should be easier to put in position and adjust, however the 'worm and rack' system used by many intermediate, and even higher-cost, sights has a tendency to snarl-up and spring out of the rack. Sights that have a long vertical lead-screw operated by a knob on top are usually better mechanically, but they do tend to add more weight into your bow hand and put more inertial strain on the mounting screws.

Many of the lower-cost beginners sights have plastic sight rings / cross-hairs / beads, which soon break. Metal is better, or a properly designed plastic component such as by Beiter.

If possible get a sight that can be extended 20cm or so in front of the bow riser. You won't always be able to have it in the fully extended position, for instance at longer ranges you may need to slide it inwards, but you will certainly be able to extend it out at short range. The further away the sight is from your eye the easier it will be to focus on both sight and target, and also the easier it will be to aim accurately because a small movement on the alignment of the bow will show up as a larger movement of the sight.

At £25 or less, sights such as the Cartel Championship, Cartel 2000 or SF Axiom will be a good start, but the Arten Europa or Arten Summit are better mechanically, but cost about £30 - £40 more. Unfortunately these are no longer made, so it will be increasingly hard to find these new. There are some well engineered 'lead-screw' sights available, such as the Petron Dual Click for Chiltern Archery, and the Booster sight from Merlin.

Note that there are differences between sights used on Recurves and those used on Compounds. Compound Bow sights need to be much more robust, with better clamping arrangements, and they are both heaver and more costly. Compound Archers are also allowed to use some extra assistance, they can all use a small spirit level so they can be sure their bow is upright, and those who shoot 'Unlimited' – which is almost all of them – can use a optical magnifying 'scope' lens, in conjunction with a 'peep sight' that's inserted into the bow string and acts as an accurate rear sight.

All kinds of sight may require a drop of Loc-Tite in the mounting screws to keep them secure.

STABILISERS

For the last thirty years or so nearly all bows have been designed in the expectation that the users will be adding some kind of stabilisation. Even bows specially designed to be used in conformity with the 'Barebow' style of shooting are equipped to receive weights attached directly to the lower part of the riser. So it makes sense to fit a stabiliser if you are intending to shoot conventional 'Olympic Recurve' style.

A good place to start is just fitting a Long Rod, which as the name suggests should be quite long, not less than 28 inches for a Lady or Teenager, and not less than 30 inches for a Gent. However, if you're thinking of getting a really long rod, say 36 inches long, remember you may have to buy a special bag to keep in it, as standard sized bags won't take anything bigger than a 32" rod with it's weights and screw threads.

Simple long rods such as Cartel cost less than £15 and work well. Once you've developed a bit more strength and control you have the option of adding side stabilisers to resist sideways

rotation, a 'full rig' of the same type, with two additional side stabilisers and a 'vee-bar' to connect the three elements together, would cost an additional £45 or so, or you could splash out on a more sophisticated multi-rod system that could cost between £80 and £175 or even more.

PERSONAL PROTECTION

Finger Tab

This is an important accessory and it's worth spending a little more to get a hard-wearing good quality tab that gives a smooth release. The best tabs have at least two layers of material, and usually attach to the hand using a loop around the middle finger, so the tab is worn rather like a finger-ring. Many good tabs also have plastic or rubber 'separator' that fits between the index and middle fingers, in line with the arrow shaft if you think about it, which reduces the chance of you pinching the arrow nock. One very good tab that bucks this trend is the Wilson tab, which has felt tabs in place of the separator, and is actually intended to pinch the arrow nock, but in a regulated and gentle way. Recommended tabs with separators are Petron Europer (not always available, but there are clones) and Gompy.

Consider whether you'd like to try a 'platform' tab — which usually improves accuracy and gives a better 'sightmark', which means the sight ring doesn't need to be moved quite so far down at long distances. Most platform tabs have a metal plate which holds the tab flat in the plane of the bow and the back of your hand, and they are all adjustable to different degrees. Recommended Platform Tabs are A&F Dutch Tab, JVD, Spigarelli Comfort (which can be set up with or without a platform) and Cavalier Elite

Arm Guard

If you set your bow arm correctly, and have your bow braced with the string the correct distance from the handle, you shouldn't need a bracer! Yeah, right...

The type of bracer that will work for you depends on where and how you tend to hit yourself. If you repeatedly find the string hits your arm above or near the inside of the elbow, you will need an extra long bracer that can bend at the elbow.

If you repeatedly hit your arm just above the wrist you'll need a tough wide bracer, maybe a hard plastic moulded type.

If you only hit your arm occasionally, a bracer that takes the form of a narrow rib or bar (such as the Beiter bracer or it's clone by Cartel) will probably be best for you.

In the summer you're likely to be outside with bare arms and the sun beating down onto your bracer, which can cause perspiration under the bracer and a white patch on your bronzed arms. These problems can be minimised if you have a either a ventilated or narrow bracer.

Shirt Guard

This is a bit like an Amazon's bra, it's a net or smooth fabric triangular tailored protector worn over the bow-hand-side breast, to keep the clothing tight to the body and to provide a smooth surface. Some people have no trouble at all with the bowstring brushing past their chest and rubbing their shirt or jersey, but a great many do find a proportion of shots go astray because the string is snatched by the clothing. Look at Olympic Archers, and you'll find they nearly all wear shirt guards.

ESSENTIAL ACCESSORIES

Bow Sling

Gives you the confidence to hold the bow without gripping it.

Three basic types:

- Slings that attach to the bow itself, and provide a strap or loop that goes over the top of
 the wrist.
- Finger slings that slip over thumb and first finger, or thumb and middle finger, and loop around the front of the bow riser.
- Wrist slings that you keep looped round your wrist, which have a cord or strap that can be run round the front of the bow riser and attached back to the loop around your wrist while you are shooting. The best ones are very simple and have a lasso-like

attachment for the wrist loop, and a hook on the end of the long cord that slots under the wrist loop – but most are over-complicated with adjustment buckles and clip-in attachments which are not easy to operate (bearing in mind you use one hand to fit it). Whatever type of sling you decide to get, make sure it has enough slack so it can hang loose while your are making the shot, ready to catch and steady the bow when it reacts to the shot.

Quiver

There are also three basic types of quiver:

- Side Quiver The arrows lie at about 45 degrees, and point forward, so the fletchings are clearly visible, and the arrows are easy to pick. On crowded shooting lines, such as at indoor tournaments, your arrows may prod the person in front of you. The slightly more expensive side quivers often have more storage pockets.
- Holster Quiver The arrows stand almost vertically behind the catchers back, the
 fletched ends of the arrow are well out of the way, but the point end is close to hand,
 visible, and easy to select. Holster quivers are ideal for indoor shooting where there is
 very little space on the shooting line. Usually have one smallish storage pocket.
- Back Quiver a favourite with re-enactors, Elves and Hobbits, but not recommended
 for target archery because the arrows are not visible, and are well out of reach and
 have to be rotated about 270 degrees to be in the correct position to load the bow (and
 not much use in Field Archery either, because whenever the archer leans down to pull
 a missed arrow out of the ground, all the arrows in the quiver are likely to cascade over
 the shoulder).

Score Pad & Pen

Bow Bag / Case

USEFUL EXTRAS

Foot markers

Spotting telescope

Folding Chair

Tent

