

Beginning Archery in the S.C.A.

by THL Robin Arthur Kyrke, Forester

You step up to the line, standing shoulder-to-shoulder with your fellows. Carefully you select an arrow and bring it to rest across the bow, fitting the nock to the string. Looking up, you focus on the target. Keeping your eyes on the mark, you raise your bow and start drawing back the bowstring. As the arrow is pulled back, you feel the brush of a fletch against your cheek. Ignoring the soft feather, you concentrate intently on the target as your bow hand moves into position. A half-breath of air into your lungs and your fingers relax. The arrow takes flight, beginning its long arc towards the distant target. Then time itself seems to slow to a crawl as your missile moves gracefully through the air, straight and true. As it nears its destination you have a feeling, a feeling that this is "IT"... and then it hits! It strikes the target squarely with a clear "thud". Not just any thud, but the very special sound an arrow makes when it strikes the gold. A perfect shot! The others, your comrades of the bow, hear it and know what it means. Then there is much back-slapping and congratulations. Well done!

Sounds exciting, doesn't it? But you've never even picked up a bow before?! Hopefully this article will help get you started in the style of archery that we practice in the Society and have a great time doing it!

First of all, do NOT rush out and buy just any bow and arrows! Your future enjoyment of this sport is going to be dictated in part by your first experiences. If you buy equipment not suited for you, or just equipment in bad repair, you will lose interest REAL fast.

You should first seek out some help and ask questions. Talk to the archery marshal or other archers in your group. Write a letter or an email to your regional archery marshal. Or read this article. In these ways you should be able to get enough advice to help you choose what equipment to purchase and how to maintain it and the basic rules of SCA archery.

Archery in the SCA

The spirit of medieval archery is what archery in the SCA is all about, to try to get a feel for what archery MIGHT have been like in the Middle Ages. Any equipment that we use must remain true to this spirit. We use wooden arrow shafts with real feathered fletches, shot from recurve or longbows and medieval-styled crossbows. We do NOT use sights, stabilizers, kissers buttons, trigger releases, or bows with compound pulleys. These items convey an unfair modern technological advantage. They did not have such devices in period, so we do not use them. Bows constructed with modern materials, however, are allowed because their performance is still very much the same. Forbidding the use of these bows, and only allowing handmade bows of period materials and techniques, would make shooting archery expensive and labour-intensive, doing little to foster our art.

The types of targets and tourneys in the SCA are as varied as the imagination! There is something for everyone, from woods walk ranges with varied distance targets to moving targets

with ropes and pulleys. There are several competitions that are run Society-wide with fixed sets of rules, enabling anyone anywhere to shoot and send in their scores for comparison. Hopefully you will find many that YOU enjoy!

Choosing a Bow

Choosing what style of bow you wish to shoot will be one of the most important decisions you make. There are just so many different types to choose from! Longbow, recurve, magyar, or crossbow. Should it be a take-down or a one-piece bow; self-bow or laminate; wood, fiberglass or both? Do you want something to match your persona or just something to enjoy on the range? Do you wish a fancy (expensive) or simple (cheap) bow? All very important considerations indeed and not to be taken lightly.

As this article will deal with first-time archers, the primary consideration will be expense and ease of use. Would you want to part with \$600 for a bow and then after shooting it twice decide that archery just isn't for you? I didn't think so.

Magyar bows shoot well, but depending on the model, can be very expensive. Expect to pay anywhere from \$300-600 for a new one. Medieval reproduction crossbows are also expensive and tricky to get shooting straight and true. Longbows can be found for a good price but are a little harder to master and more tiring on the arm muscles. In my opinion, the best bow for a beginner is just a simple recurve bow. They can be relatively inexpensive and are easy to shoot. The recurved limbs make drawing the string feel much smoother than that of a longbow and there is considerably less hand shock on release as well. Too much hand shock from a bow means less energy propelling the arrow and it can make using the bow very fatiguing. For a beginner, this can be very frustrating!

The next important consideration is choosing the draw weight of the bow. The draw weight is the amount of force (in pounds) exerted by the bow when it is held at full draw. This will be the energy that is transferred into the arrow when the string is released. Now everyone's draw length will be different and this effects the draw weight. The farther you pull back the bow, the heavier the draw weight becomes. So in order to make it easier to compare bows, a standard for marking the draw weights on bows has been adopted. On just about every bow you will find the draw weight marked on the lower limb, rated at a draw length of 28 inches. Once you know your own draw length and what weight you can pull, you can easily compare different bows.

To find your draw length, get some assistance from a friend. Draw your bow back to your anchor point, the place on your face or head that you consistently draw to, and have your friend measure quickly from where the arrow nocks onto the string to the very front of the bow. Now ease the bowstring back to its resting position. Never release a bowstring with no arrow in place! This is called "dry-firing" and with no arrow to absorb the energy, all of it goes into the limbs, possibly causing serious damage to the bow.

You should find a bow that you can draw comfortably and hold for 10 seconds at your anchor point without shaking too much. If you shake a little, with regular practice your muscles will

strengthen sufficiently to properly control the bow. If you have access to an archery tackle dealer or range, it may be possible to try out (or even rent) several types of bows with different draw weights and find what suits you best. If your SCA group holds regular archery practices you may be able to ask other archers about their bows and they may allow you to try pulling them. Then you will have a much better idea of what to look for for yourself.

If you are a taller gentler, do not try to pull a bow with short limbs all the way back to your anchor point. The short limbs will not be designed to be pulled back so far and will be under enormous stress. Too much of that treatment will lead to breakage.

Now that you have a better idea of what to look for, there are many places that you can purchase bows: custom ordering from the manufacturer, archery equipment dealers, SCA merchants, friends, magazine ads, on the Internet, even garage sales. But a word of warning!!! If you set out to find a really CHEAP bow, remember that you WILL get what you pay for. Unless you know what defects to look for, you may wind up buying a bow that may fail on you unexpectedly and catastrophically! Protect yourself by taking someone with you that has some experience with bows. Your friendly neighbourhood archery marshal should be able to help with this. Seek them out!

Selecting Arrows

Now that you have obtained a bow, you need arrows to shoot! Any wooden arrows with feathered fletches are legal for use in the SCA but you still have some decisions to make. Cedar, pine and ash are the best woods for use in arrow shafts and they can be obtained fairly easily from an archery dealer. You can choose to use three or four feathers on your arrows, plastic nocks or self-nocks (grooves cut directly into the wood for the bowstring), field points (pointed tips for better target penetration) or target points (rounded tips for use with lighter bows). You can even get fletches in a variety of colours and shapes and coloured stains for your shafts to fancy them up and make them easier to identify. You can buy them "off-the-rack" as complete arrows, or you can buy everything separately and make them yourself.

However, there are two important things that you need to know before you buy ANY arrows. Firstly, if you plan on making your own arrows do NOT use dowels bought from a hardware store or lumberyard. It is vitally important to your safety that the grain of the wood in an arrow shaft run completely from one end of the shaft to the other. Commercially available arrow shafts are cut this way but dowels are NOT. If the grain of the wood runs perpendicular to the length, across the diameter of the shaft, there is a very serious danger of the arrow exploding when shot from a bow. There is a tremendous amount of energy stored in a bow and when the string is released, the arrow bends before it starts to move. If the grain is the wrong way at any point in the shaft, it will break there and shatter the entire shaft. The potential for injury is great, with wood splinters flying everywhere. So please....buy only commercially made arrow shafts.

Secondly, the most important characteristic for the true flight of an arrow is its "spine". The spine of an arrow is the amount of stiffness in the shaft, measured in pounds to make it easier to match shafts to the draw weight of your bow. As I mentioned above, an arrow bends upon

release of the bowstring and how limp or stiff your shaft is plays a big part in the arrow's trajectory out of the bow. If the arrow is too stiff it will bend very little and shoot to the left (for a right-hander). If the arrow is too limp it will bend more and fly to the right. It will also "fishtail" as the arrow flies, first bending one way then springing back and bending the other way again and again until the arrow reaches the target. Another warning here - if the arrow is far too limp, it will bend enough to break and shatter. When the spine of the arrow is just right, the arrow will bend around the bow when the string is released, but it will straighten immediately after passing the bow. It will remain straight for the rest of the flight to the target. This is also known as "Archer's Paradox".

A good rule-of-thumb for selecting the right spine of shaft for your bow is take the draw weight of your bow at 28 inches, add five pounds of spine for every inch that you draw over 28 inches or subtract five pounds of spine for every inch under 28 inches. If you are using a longbow with no arrow shelf (shooting off of your hand), subtract an additional five pounds. However, if you are already using a bow rated at 35 pounds and you draw less than 28 inches, you do not need any shafts spined lower than 30 pounds. As an example, if you are using a bow rated at 47 pounds and your draw length is 29 1/2 inches you should be looking to buy shafts spined between 52-57 pounds. You do not need to match the spine exactly, because of the nature of wood it will almost certainly be impossible to get all your shafts matched precisely.

One other aspect of arrows to consider is the physical weight. Arrows are normally weighed in grains, allowing for fine accuracy in measurement. If the weight of the arrows in a group varies too much, the lighter arrows will shoot slightly higher than the heavier ones. If you can get the weights of your arrows to differ less than 20 grains, you have a fine set of matched arrows. If the weights vary less than 5 grains, you have a great set!

Other Essentials

Besides a bow and some arrows you need some other pieces of equipment, some for convenience and some for your own protection.

One very important accessory is a glove or a tab. The pressure of the narrow bowstring against your bare fingers at full draw will numb your fingers and with shooting on a regular basis, there is the very real risk of nerve damage. Using a glove or tab will also reduce the formation of calluses from regular shooting. Gloves should be slightly tight-fitting to prevent them from slipping after releasing the bowstring. Loose gloves may cause you to fumble. Tabs are specially shaped pieces of leather that fit over one finger of your shooting hand. It is placed between your fingers and bowstring before you draw. Personally, I have never liked using a tab as it is especially awkward to use for me. However, they are very inexpensive and if your money is tight, it is much better than using bare fingers!

As you learn to shoot, you may find the bowstring hitting the forearm on your bow hand. Not only will this hurt, but after several hits there will be some bruising. Leather armguards will prevent this damage and do not cost much at all. Their design is even simple enough to be able

to make your own. And don't think that it won't happen to you! I have been shooting for almost 12 years now and still hit myself there occasionally!

For convenience, a belt quiver will hold your arrows where you can easily reach them without having to stick them into the ground at your feet. You may wish to use a back quiver but these can be awkward and expensive to buy. Until you learn to shoot well, I would advise you to use a belt quiver.

That's all you really need! Anything else like bow cases, boxes to store your arrows, perhaps an archery bag to transport your bow and accessories are nice to have but you do not HAVE to have them. You can save some money now by just buying the basic essentials until you have decided that you really LIKE archery. After that, you just may want to start making all your own stuff!

Maintenance

Now you should have everything you need to start shooting archery. Here I would just like to give you some tips on taking care of your equipment to keep it safe and to make it last longer.

Never, ever leave your bow strung for long periods of time. It is okay to leave it strung for the day at an event but you should unstring it at the end of the day. Leaving it strung for weeks or even months will result in shortening the lifespan of the bow due to long term stresses on the bow limbs. It will lead to fatigue and cracking and also to "string follow" which is a condition where the bow limbs will remain in a strung position, even when unstrung. Without the limbs ability to snap back into their proper position when the string is released, your bow's performance will be drastically reduced.

Treat your bow with respect. Rough handling will put dents and dings into the wood or fiberglass, weakening those areas. Store it in a safe place where it cannot be accidentally damaged. Store it horizontally if you can, unless you have a case for it.

The same goes for your arrows. Don't store them bunched tightly together, this will compress the feathers badly and possibly warp the shafts as well. If your feathers start to look a little pushed down, you can breathe some new life into them by gently steaming them. If your arrow shafts do warp slightly, you might be able to straighten them gently by hand. Be careful, too much pressure will break the arrow. An arrow straightening tool will do a much better job, but it can be expensive.

Keep your bowstring well waxed. This will lengthen its life by preventing the small amounts of fiber fraying that will lead to string breakage over time. Use a proper bowstring wax whenever the string feels dry or shows signs of small frays. Work it in well with your fingers, creating a bit of heat by friction to soften the wax.

Be prepared! If you are going to go to an event, take a few extra things with you to ensure that you will be able to participate completely. Carry a few extra arrows, you may lose or break some. Carry extra arrow tips and nocks and glue to replace any that get broken or fall off. And

take an extra bowstring! Nothing ruins a day of archery faster than a broken string and no way to replace it.

Learn to inspect your own equipment for defects. Have your local archery marshal show you how and have him explain what he is doing. It really is difficult to convey this sort of knowledge by the written word. You can certainly check for obvious cracks in your bow and arrows, fraying bowstring, broken nocks and such. However, you really do need to be shown some of the finer points to be able to judge limb-twisting, string-seating, delamination, etc.

Remember, the archery marshals are there to serve YOU and to help keep everyone safe. Do not be afraid to approach them with your questions. I am more than certain they will be glad to help!

Hopefully you now know a little bit more about archery equipment for SCA use. Now get out to your nearest archery range and enjoy!