HITTISES BULLSEYE

YOUR PERSONAL GUIDE TO ARCHERY



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Introduction

The concept of archery goes back all the way to the Paleolithic and early Mesolithic eras, in the period between 10,000 to 9,000 BC. In those times, arrows were made of pine and ranged in length from 15 to 20 centimeters (5.9 to 7.9 inches). In the beginning, they were actually thrown by hand—bows as we know them came a bit later. The first ones were found in 1940, on the territory of modern Denmark and are estimated to date back to 8,000 BC.



A lot of time has passed since then, yet the art of archery still lives on. Despite the huge leaps in projectile technology, using bows and crossbows has remained popular to this day—whether they are used for hunting (as they were originally developed for), an Olympic sport, or just an interesting hobby.

In this book, we are going to introduce you to the main aspects of archery. We will start by comparing the modern version against the medieval, give a detailed breakdown of the two main tools of the trade, and wrap it up with some advice for newcomers to the sport.

This book is suitable for both novice and seasoned archers. A mix between basic advice and interesting facts about the art, this book has something for everyone who is interested in archery.

Chapter 1: Archery Through Time

Bows have always been a popular tool. As we mentioned in the Introduction, they have been around for thousands of years. However, archery reached the peak of its popularity during the Middle Ages. It was one specific bow that made the difference—the English longbow (also referred to as the Welsh longbow). Historical records first mention this weapon around 633 AD as it was the one used to kill the heir to one of the English Kingdoms at the time—Northumbria.



Medieval Archery

An interesting fact that many people seem not to be aware of is that the crossbow was also a very popular projectile weapon in the Middle Ages. In fact, the whole armies of some countries (such as 600 AD France) were equipped with crossbows rather than bows. The former required very little training and could be fired by almost anyone. Combining that simplicity of use with high-penetrating power gave the crossbow the capability to turn an untrained villager into a dangerous individual on the battlefield.

However, when it came to range and frequency of delivery the longbow held the much bigger advantage. A crossbow could deliver 1 or 2 bolts per minute over a range of between 20 and 40 yards, while the bow could match that with 6 arrows per minute with an effective range of 300 to 400 yards. Not only that, but the longbow was also much easier to make. In fact, today, a longbow can be built in less than a day.

A popular question amongst novice archers (as well as fans of history and fantasy novels) is whether a longbow arrow could penetrate armor or chain mail. In this case, a very important (and overlooked) factor is the type of arrow used. People tend to forget that arrows and their variations are just as an important part of archery as the bow.

The so-called "bodkin arrows" are believed to have been developed exactly for the purpose of penetrating heavy armor. The standard arrows with broadheads were much better suited to hit flesh, due to their wider cutting radius. On the other hand, the bodkins are purposed towards making a smaller hole with more penetrating power.

There is still an ongoing debate amongst historians and archery enthusiasts about the capability of a bodkin arrow to effectively penetrate solid armors, especially plate. However, everyone seems to agree that light to medium strength armor was easily penetrated by bodkin arrows-especially at a range of under 50 yards.

Modern Archery

As we know, firearms were quick to replace the bow and arrow. It didn't take long after the development of gunpowder and canons to come up with the design of the basic rifle. However, archery has remained a popular activity, mainly as a kind of sport and a form of recreation. There are even people who prefer to use bows and crossbows in hunting, despite access to firearms.

In fact, some companies develop and sell bows purposed specifically for such activities. Based on data provided by the US Fish and Wildlife Service, there are nearly three million people bow hunting in the States. It is quite an industry, too, in that these people spend nearly a billion dollars each year on equipment!

Contrary to the longbow we discussed at the beginning of the chapter, today's hunters have chosen the compound bow. How does that modern design compare to the one that used to win battles in the days of old? Stay tuned, as we are going to examine the different types of bows and their specifics in the next chapter.

Chapter 2: The Versatility of Bows

As we mentioned in Chapter 1, bows have seen a long period of evolution before arriving at what we use today for sports and hunting. Over the ages, the designs have varied greatly, not only when it comes to time period but also region. Here, we are going to do a quick review of each of the main types of bows that were used over the years.



Recurve (or Traditional) Bow

The name of this one comes from its iconic shape. The <u>recurve bow</u> is probably the most popular type of bow for the general public due to its popularization by movies and TV series. The main attribute is the curve of the limbs going towards the archer and then bending backward, with the limbs' ends ending up pointing away.

It is a popular design because it does not require a lot of strength from the person shooting. Such a bow is, in fact, perfect (and recommended) for beginners. In its simplest form, it consists only of the bow limbs, the string, an arrow rest, and for the sake of balance, a riser. More features and equipment can be added with the progress of the archer in training.

Takedown Bow

This is a variation of the recurve bow, which allows for the limbs to be taken apart. This helps greatly in making upgrades, transportation in a compact space, and storage. Such bows usually have a wooden center and fiberglass limbs.

Inexpensive and easy to use and repair (you can simply disassemble the broken part and get a new one), they are even better for beginners than the classic recurve bow. The ability to make upgrades allows the archer to put heavier limbs with more pull. Therefore, as your strength and skill increase, you will be able to adjust your bow with minimum effort.



Longbow

This is the classic medieval weapon that we discussed in Chapter 1. It is also of very simple design, consisting basically of a long and curve piece of wood, usually cut to match the height of the archer. There is no arrow rests or sights of any kind, which makes such bows harder to aim and slower to use than the recurve bow.

Compared to the other, more modern designs, the longbow takes much longer to practice and is suitable for professionals or enthusiasts who are seeking a challenge.

Compound Bows

These are the "high tech" bows developed in the '60s and are engineered to involve pulleys, cams, and cables supporting the archer's hold at full draw. Compound bows are manufactured for their light weight as well as high accuracy and speed.

They are made of primarily of light materials such as fiberglass, magnesium, carbon, and aluminum. The limbs of these types of bows are much stiffer than the other types, which is why they have better accuracy and are more energy efficient.

Although it sounds like these bows are very easy to use, there is one huge challenge that the archer has to face upon deciding to use the compound bow—choosing the right one. There is a plethora of different sizes, upgrades, configurations, and styles that you can choose from. There is a ton of research that needs to be done, especially with regards to matching skill, weight, height, and personal strength with the right type of bow.

Reflex Bows

The reflex bow is characterized by its very specific limbs, which are curved to face away from the archer. This curve is the reason why when you remove the strings, the whole main part bends into a forward C shape. It is different from the recurve bow in that, in the latter, only the ends curve away. This shape puts a lot of pressure on the main body of the bow, which is why it is a very popular design for short bows.

A short reflex bow will have a very high draw weight and a long draw length. This is why it can shoot with at least the same, if not greater, speed and power as the recurve and longbows while having a more compact size that is comfortable enough to be used in many more scenarios such as on horseback. This is the type of bow that the Mongol tribes used to conquer Asia and Europe.

Chapter 3: The Power of Crossbows

<u>Crossbows</u> can be basically considered just another, more elaborate type of bows. Contrary to their older relatives, they have a horizontal rather than vertical assembly, which is held in place by a frame in a similar manner to the stock of a gun. While bow projectiles are called arrows, the crossbow ammo is referred to as bolts or quarrels. Let us examine some of the basic types.

Types of Crossbows

Similar to its older and simpler counterpart, crossbows also come in a variety of types. Each one offers its own set of features and functionalities. Let us examine some of the more basic ones to help you determine which type is the more suited to your needs and preferences.

Recurve Crossbow

The recurve crossbow has a longer draw length in comparison to the most basic, ordinary one. This feature equips it with less recoil and faster acceleration of the projectile. The drawback, however, is that the recurve design puts greater pressure on the structure, which results in higher maintenance and more often breakdowns.

Such weapons are used mostly by advanced archers. This type of crossbow is also popular amongst hunters due to its piercing power. However, it is noisy and requires a bowstring silencer in order not to scare the game.



The Compound Crossbow

There are many versions of the compound crossbow, but all of them operate under the same basic principle. Just as it is with the bow counterpart, the string is attached to a system of pulleys, which in turn are connected by cables to the opposite limb.

When preparing for a shot, the string is naturally drawn back. The pulleys turn, and the cables move with them, which results in the limbs bending to store the energy for the shot.

Due to the stiffer limbs and the design relying on extra pressure, archers using these crossbows will need to apply greater pressure.

Pistol Crossbows

Just as the name suggests, this type of crossbow is compact in size. Pistol crossbows can be essentially any of the basic types, generalized in a different category only due to their size. Unsuitable for hunting or long ranges, these are mostly used for self-defense and rarely for sport.

Rifle Crossbows

Yet another association to guns, the rifle crossbow is designed for improved aiming in a similar manner to assault rifles. This type of crossbow is one of the most advanced and polished models. They are used for both hunting and sport and come with a variety of features such as adjustable sights, reinforced construction, and foot pull.

Modern technology has greatly improved their effective range, as they can now reach and penetrate a target up to 250 feet away. However, if you want to use such power, you also have to invest it. Using a rifle crossbow requires a lot of strength to cock the device and launch a successful shot.

Bullet Crossbows

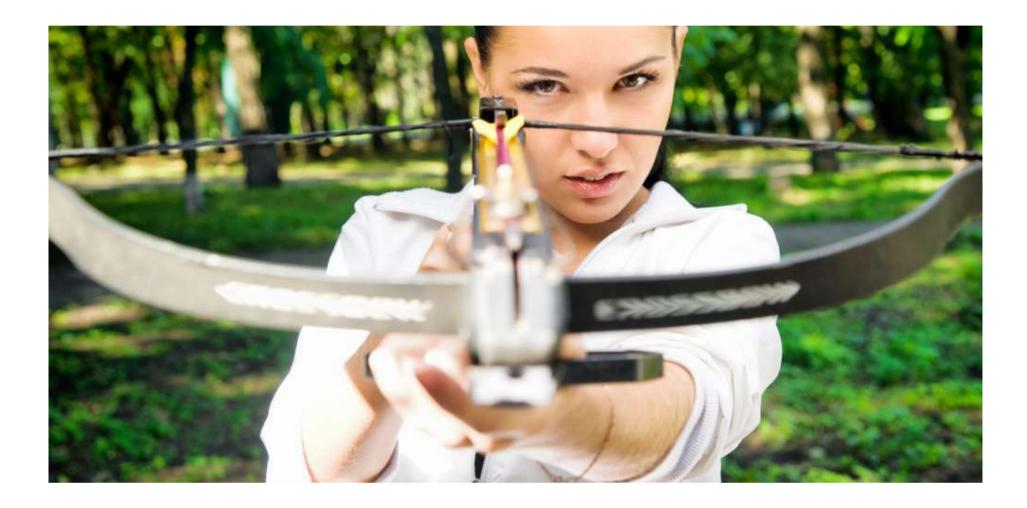
Bullet crossbows are quite an interesting concept. They shoot stone or lead projectiles that are similar-looking to bullets. They come either with a string slot and a barrel or with a double-string system.

Repeating Crossbows

Repeating crossbows kind of defeat the basic idea of archery, as they provide a shortcut to the process of shooting projectiles. It only takes a quick movement, and the design takes care of everything, starting from the bowstring up to the launch and the shooting. As the name suggests, this type of weapons allows you to shoot with a much faster rate than the usual compared to any other type of crossbow.

Chapter 4: Taking On Archery

Before we start learning actual techniques, it is important to highlight the importance of safety. With guns being the primary weapons of violence in the modern world, people tend to forget that the romanticized art of archery was developed and perfected primarily for the purpose of killing.



Common Misconceptions about Archery

Whether for hunting, for sport or simply for shooting a target in your backyard, remember that you are handling a weapon. Before we proceed, let's break some common illusions regarding archery that might put a novice in danger.

It is Easy

Shooting either a crossbow or a bow is not a simple task. It requires proper breathing, rhythm, steady hands, mental calculations about parabolas, distances, speed, and direction of the wind, and so much more. There are so many things to consider in order to take a good shot, that it is hard to list them all without missing a couple.

As you are trying to perfect your shot, you will realize that there are a plethora of small details that you have never considered. This becomes even more valid when it comes to shooting moving targets—a goal that is very different from the classic archery with stationary targets.

Flat Shooting

It is not as simple as you releasing an arrow and it going in a straight line. Arrows and bolts alike fall with the force of gravity. The less powerful your crossbow or bow is (and chances are, you will start with the weaker ones), the more gravity comes into play.

It is estimated that arrows shot from a modern compound bow with a 60-pound draw force drop between six and 10 inches for every 10 yards. Using older bows further complicates the issue, which is why you see archers in movies aiming up, in order to make a rainbow-shaped parable.

Weight and Size are Irrelevant

In movies, we regularly see children as well as smaller men and women, shooting bows with ease and compensating for their physical disadvantage against stronger opponents. While archery provides a place for everyone, that doesn't mean that everybody has the same capabilities. Chances are, some types of bows simply won't be available for you to use effectively.

Shooting a longbow with an intention to kill, for instance, requires significant amounts of upper body power. You are going to need between 80 and 120 pounds of force, especially if you need to pierce game with thick skin (or in the old days, armor).

In order to avoid both injury and disappointment, it is recommended to start with smaller bows that require a lighter draw (as said in Chapter 2, recurves are great for the task). A lot of manufacturers have actually started to develop lighter models purposed specifically for female archers. If you are interested in learning more about that, a good place to start is here.

Basic Archery Tips & Techniques

Now that we have stressed the importance of being careful and realistic, it is time to learn some practical tips for beginners. Here, we are going to focus only on bows, as they are generally the much harder weapon to master due to the need to hold a draw and the time restriction on aiming.

As we mentioned several times in the previous chapters, the best option for a novice in the sport is the recurve bow. However, there is more to that than just choosing the right design of bow—you also need to choose the right type. The same way you need golf clubs, boxing gloves, or any other equipment to fit, you also need a bow that fits.

Find a Bow for You

In the beginning, just focus on matching the bow to your height and draw ability. As you are going to

be using a recurve bow, the good news is that you will be able to switch the limbs and experiment until you find the right size for you. You will also be able to switch to heavier and heavier pulls as you progress, without the need to buy a whole new bow each time.

Mind Your Stance

The second piece of advice we have for you is also pretty basic—mind your stance. It is not as simple as just standing there and releasing arrows. You need to keep your feet in the same place, with your lower body supporting the upper one and keeping it stable and mobile for the task it is about to perform.

The stance you choose is pretty much up to you. You can go square towards your target, or you can be turned slightly away. Experiment to see what feels right for you.

Practice Proper Alignment

Once you have figured out the stance, it is time to think about the alignment of your upper body. Especially when you are shooting a recurve bow, it will be important to keep your shoulders straight. This is needed in order to allow your bone structure to carry the weight of the bow.

This way, you will tire much less and will be able to practice for a longer period of time. You will also avoid back problems. In order to assume the right posture, think of a straight "T" letter when you are drawing on the bow.

Know When to Release

Last but not least, be mindful when releasing the arrow. It is, essentially, the most fun part of the whole activity. However, you need to be cautious there, too. The key is to try and minimize the movement of the bowstring. You will have to experiment in order to find what feels natural to you. You can either pull through with extra force or simply open your fingers.

In order to properly release, relax your fingers and pull your elbow back. Keep the hand you are drawing with close to your face—it should end up just behind your ear after you have taken the shot.

Conclusion

That was quite the journey, wasn't it? And we have barely scratched the surface about the intricate delicacies of archery! However, don't get intimidated just yet—those come naturally. With time and with practice, it will all become a deeply rooted instinct, rather than something to be worried about. With the information in this book, we are confident that you are well-suited to take your first attempt at archery.

What We Have Learned So Far

We learned quite a lot, didn't we? It is pretty amazing how far archery dates back in time – up to 12 000 years from now! It reached its peak during the medieval times, which were also the era that popularized the crossbow. Medieval archery doesn't have a lot to do with the modern art (unless you specifically want to practice the old way), as its purpose and the design of the bows have changed greatly since then.

We also learned about the basic types of bows: recurve, takedown, longbow, compound, and reflex. They all have their positive and negative sides, but generally, the longbow is the hardest to master and requires the most strength.

We also examined the types of crossbows, ranging from the classic recurve, all the way to the fun pistol, heavy rifle crossbow, and the bullet crossbow.

Last but not least, we covered the basics of archery, breaking a few myths (such as that it is as easy in the movies) and gave you some tips on how to start. Essentially, you will need to keep a steady, unmoving posture, with your back straight and your arms resembling the letter "T" when you have drawn.

A Few Extra Words

It was a pleasure to take this journey with you. If you are interested in learning more practical tips and advice, we strongly recommend visiting <u>our website</u>. In there, we provide a good base of materials covering all levels of archers. We also feature plenty of products and promotions that can equip you with the right tools for your archery experience.

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