

ARCHERY EQUIPMENT GUIDE



CONTENTS

EYE DOMINANCE

PAGE 1

RECURVE (BAREBOW AND OLYMPIC)

PAGE 2

OLYMPIC RECURVE SPECIFIC EQUIPMENT

PAGE 7

COMPOUND

PAGE 9

GENERAL EQUIPMENT

PAGE 14

WHERE TO BUY

PAGE 17

ARCHERY EQUIPMENT GUIDE



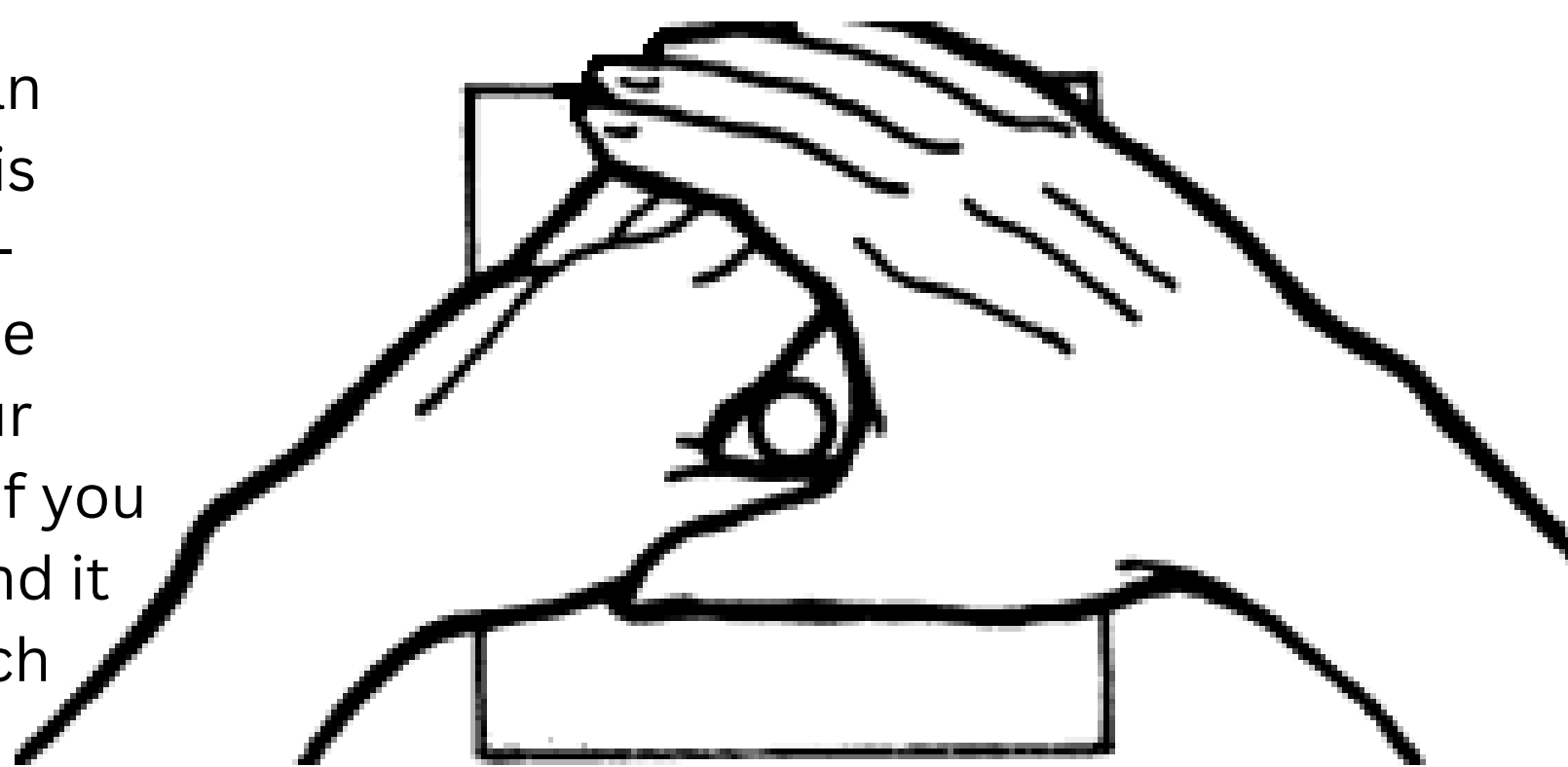
So, you have started your archery journey and are interested in taking the next step from the Ozbow program to being able to have your own equipment. This is a big step and can be quite daunting with so many different options and combinations available. This is a brief guide to try and help make it easier to make a decision and understand the costs associated for the equipment needed.

This is not a recommendation for any specific products or suppliers but is intended to provide an understanding of the different pieces of equipment and associated costs. Three generic levels have been provided for each piece of equipment to provide some initial guidance on what the expected cost would be to purchase.

Each of the example options provide a guide as the brand and model of parts that are available in this price range. This is not an exhaustive list but gives you something to look at as a starting point.

EYE DOMINANCE

Eye dominance in archery is more important than being left or right-handed. Your eye dominance is usually used to determine if you are left or right-handed archer and should be checked before the purchase of equipment. This is important as your brain will use the vision from an eye for aiming. If you are using the incorrect eye for aiming you will find it harder to hit the target consistently as you switch between using each eye without realising. To determine your eye dominance, follow the below steps:



1. With both arms fully extended, create a small triangle between your hands
2. Focus on a small object in the distance and centre in the triangle.
3. Slowly bring your hands back to your face until you are looking through one eye only. If you are looking through your right eye, you will need a right-handed bow. If you are looking through your left eye you will need a left-handed bow.



For some people, this may need to be repeated a couple of times where there is not significant eye dominance. Do not force yourself to use a specific eye as this will create greater issues for you later if you are just trying to use a specific handed bow.

If you do choose to shoot with your non-dominant eye, you may wish to practice closing your dominant eye while you are learning to shoot. This is something you should chat to your coaches about.

BOW TYPES

RECURVE (BAREBOW AND OLYMPIC)



The following provides a brief overview of the different parts that you will need to have as either a barebow recurve archer or an Olympic recurve archer. This is not specific to you as an archer but tries to provide a bit of an understanding of what you need to consider.

RISER

This is the part of the bow that you will keep the longest. The metal risers have a consistent standard, International Limb Fitting (ILF), that allows for different brand limbs to fit with most risers. Metal risers come in 2 forms:

- Cast – They are made from melted metal that is poured into a mould.
- Machined – They are carved from a single block of metal.

Risers have adjustments that allow for changing the weight of a set of limbs down by about 5% (or 2 pounds on average). The riser comes in varying lengths but normally they are 25 inch in length for target shooting.

Ideally purchasing a machined riser will provide greater longevity.

For barebow archers, most people prefer a heavier riser as it does not have stabilisers to balance the bow as much at full draw. This can always be adjusted by adding weights to the riser itself.

Timber risers are also available at a low cost but have limitations with limited options available with the ILF system. Old Mountain is an example of one of these types of risers.

RISER EXAMPLES		Bronze	Silver	Gold
Price Range		\$100-\$300	\$300-600	\$600+
Examples		Wiawis Explorer Krossen Xenia WNS Liberate WNS Delta NX	WNS Elnath WNS Vantage Fivics Vellator Kinetic Sovren Wiawis Quantum	Kinetic Invisio WNS Vulcan Fivics Titan Hoyt Xceed Wiawis ATF-X

LIMBS

The limbs of a bow come in 2 pound increments in weight. Selecting a weight that is close to what you have been shooting at the club will allow you to become familiar with your equipment without having too much weight. The lower weight limbs will help with form while learning to use the equipment. Limbs come in lengths of 66, 68 or 70 inch for a 25 inch riser. The length is based on a person’s height with most people using a 68 inch bow.

Limbs come in various construction including:

- Fibreglass – These are the cheapest to produce and they are not as smooth to draw as the other limb options but are a significant improvement over club equipment.
- Wood or bamboo – These offer an affordable range of limbs that are reasonably smooth to draw. They offer more consistency than the fibreglass option but at a slightly higher price.
- Carbon – These limbs are also in an affordable range that offer greater speeds to help shoot longer distances at lower draw weights. They are also more consistent that wood or bamboo limbs.
- Foam core – These are the highest quality available and provide the greatest consistency across all weather conditions.

As a new archer, you are likely to need to upgrade limbs as you build strength and improve technique. It is best to start with a lighter weight limb (close to what you have been using at OzBow) over getting heavier limbs to start with. Starting with lighter limbs allows for good technique, endurance and strength to be built while learning the sport. Good technique will allow for you to use heavier limbs in the future.



LIMB EXAMPLES		Bronze	Silver	Gold
Price Range		\$100-\$300	\$300-600	\$600+
Examples		Samick ideal WNS Explore WNS Delta Kinetic Advantage Krossen Xenia	Fivics Vellator WNS Hyperion Kinetic Fury	WNS FC-100 Fivics Titan Gillo C77 Hoyt Metrix Win & Win NS-XP

ARROW REST

- ▶ The arrow rest is the part that the arrow leans on the bow to hold it in place. For club bows they are a stick on, thick plastic style that is durable for many users. Arrows rests can be either stick on or wrap around.
- ▶ The plastic stick-on style are similar to the plastic ones on the club bows. As they are plastic and prone to wear it is probably worth having a spare.
- ▶ There are also metal stick-on arrow rests that provide some level of adjustment to centre the arrow shaft. These arrow rest are sturdy and last for a long time.
- ▶ Wrap around arrow rest are bolted to the bow and have a metal arm that the arrow sits on. This allows for the most amount of flexibility to adjust in all directions. They also have good durability.
- ▶ It is more common for barebow archers to use a wrap-around arrow rest.



ARROW REST EXAMPLES

	Bronze	Silver	Gold
Price Range	\$1-20	\$20-50	\$50+
Examples	Hoyt Super Rest Hoyt Hunter Rest Avalon Tyro Avalon Classic	Decut Nova Bicaster Hover Avalon Tec One Wiawis SP	Shibuya Ultima AAE Free Flyte Znipr RFD Arco Spigarelli

PLUNGER BUTTON

The plunger button is the part that helps tune the arrows to fly straight. They allow for your arrow to be correctly centred on the arrow. Club bows do not have a plunger button but they are an essential piece of equipment for recurve bows. Plunger buttons are able to be tuned to the arrow and the archer to ensure the arrow travels off the bow in a straight line. If using a wrap-around arrow rest you need to make sure the plunger button is long enough to go through the arrow rest and riser.

PLUNGER BUTTON EXAMPLES

	Bronze	Silver	Gold
Price Range	\$1-30	\$30-80	\$80+
Examples	Avalon Tyro Cartel Triple	Krossen Xenia Avalon Tec One AAE Master Shibuya DX	AAE Gold Beiter Wifler

STRING

The string is designed based on the combination of riser and limbs you have purchased. For anyone shooting greater than 20lb limbs a 16-strand string is suitable and provides the most suitability for the nocks to attach correctly to the string. Dacron strings have a tendency to stretch a lot so require a lot of monitoring to ensure they are a consistent length. It is recommended that strings made with fast flight or BCY or custom strings are made. A custom string can be in various colours and you can even pick multiple colours to your liking.

A string with 16-18 strands will suit for a longer period of time and allow for using with new limbs in the future without needing to buy a new string. If you have a longer draw length then it would benefit getting a higher strand string to better support the arrow nocks fitting correctly.

STRING EXAMPLES

	Bronze	Silver	Gold
Price Range	\$10-20	\$20-50	\$50+
Examples	Dacron W&W Black Wolf	W&W BCY Nitro BCY Avalon Tec One	Custom

FINGER TAB

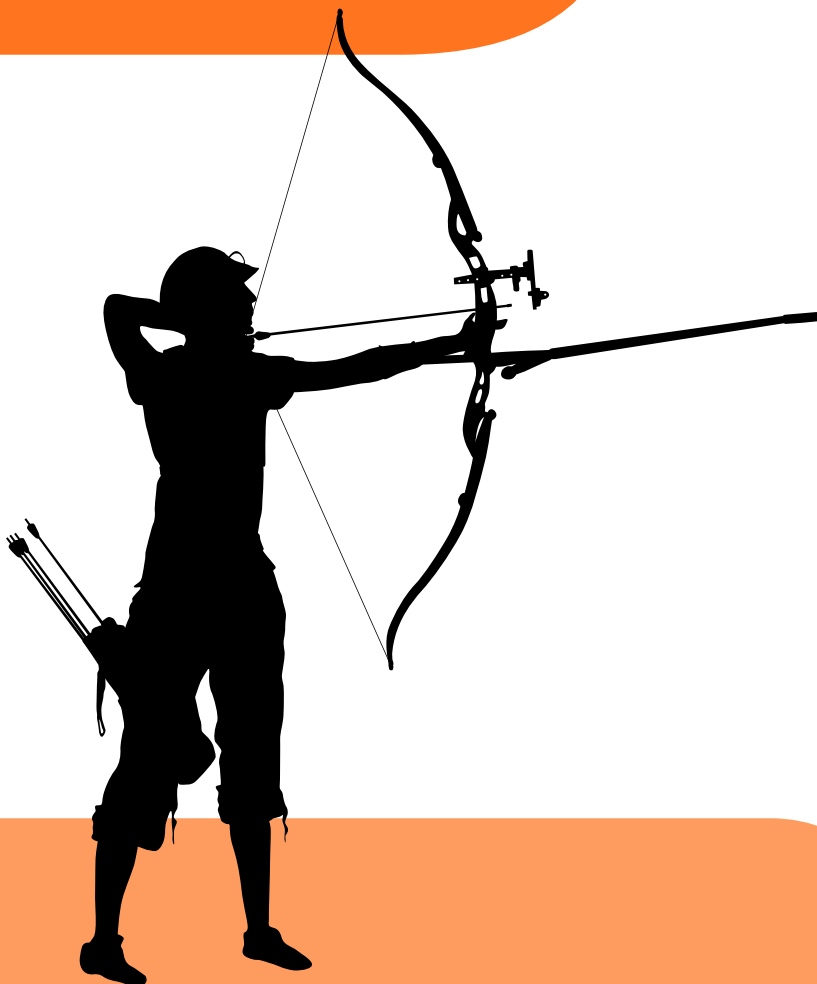
A finger tab is what you use to protect your fingers when holding the string. Club bows have the three plastic grips on the string that act as a finger tab. A finger tab comes in different sizes and should be sized appropriately to your hand. Barebow archers normally have a finger tab that allows for all three fingers to be together whereas an Olympic style has a space for where the arrow sits between the index and middle finger. This does not mean that the Olympic style cannot be used for barebow but the barebow one is not suitable or Olympic shooting.

For the Olympic style, a spacer is helpful to avoid pinching the arrow at full draw. Pinching can change the flight of the arrow and also cause the arrow to lift off the arrow rest.

FINGER TAB EXAMPLES		Bronze	Silver	Gold
Price Range		\$10-20	\$20-50	\$50+
Examples		Bicaster UCC Avalon Classic	WNS SF-100 Bicaster SP3 Avalon Tec OnE	Bicaster ASA Pro AAE elite Fivics Falcon

OLYMPIC RECURVE SPECIFIC EQUIPMENT

The following covers Olympic recurve specific equipment that is not used by barebow recurve archers. This equipment can be an add-on to the above general recurve equipment.



SIGHT

The sight is the part of the bow that is used to aim at the target. They allow for movement up, down, left and right to be able to aim at the centre of the target at all distances. Sights with micro adjustment ability make it easier to move the sight small distances to adjust for both distance and windage (left and right).

Sights are either made of aluminium or carbon with carbon becoming more affordable for the sight bar.

The sight pin for an Olympic recurve bow has a small dot that is used to aim at the centre of the target. Most sights come with these but many people buy specific ones for how they like to aim, including with fibre optic pins that make the centre extremely bright.

SIGHT EXAMPLES		Bronze	Silver	Gold
Price Range		\$0-100	\$100-300	\$300+
Examples		Avalon Classic Bicaster Aura	Shibuya Dual Click WNS SPR Avalon Carbon Tec One Shocq Align Pro Fivics FV-300	Shibuya Ultima Axcel Achieve Axcel XP Pro

STABILISERS

Stabilisers provide balance to the bow for when aiming by changing the centre of balance without adding significant weight. The main front stabiliser comes out the front of the bow. V bars rods are shorter stabilisers that are pointing out the back of the bow at an angle which helps to keep the bow level.

Stabilisers can have varying levels of weights attached to them and still provide good stability for a new archer with no weights attached.

Stabilisers (especially V bar rods) are not necessary when first shooting but are valuable in being steady on the target. The below table is only referencing the main front stabiliser as these are the first step to using this type of equipment. The below table covers only the main stabilisers and does not cover V bar rods or V bar brackets.

STABILISER EXAMPLES		Bronze	Silver	Gold
Price Range		\$0-100	\$100-300	\$300+
Examples		Krossen Xenia WNS Sat Topoint Black Carbon Bicaster Anchor	Fivics Soma Ram Rods XP Easton Z Comp	Ram Rods Vector Shrewd Revel B-Stinger Doinker Shibuya Ultima MZS



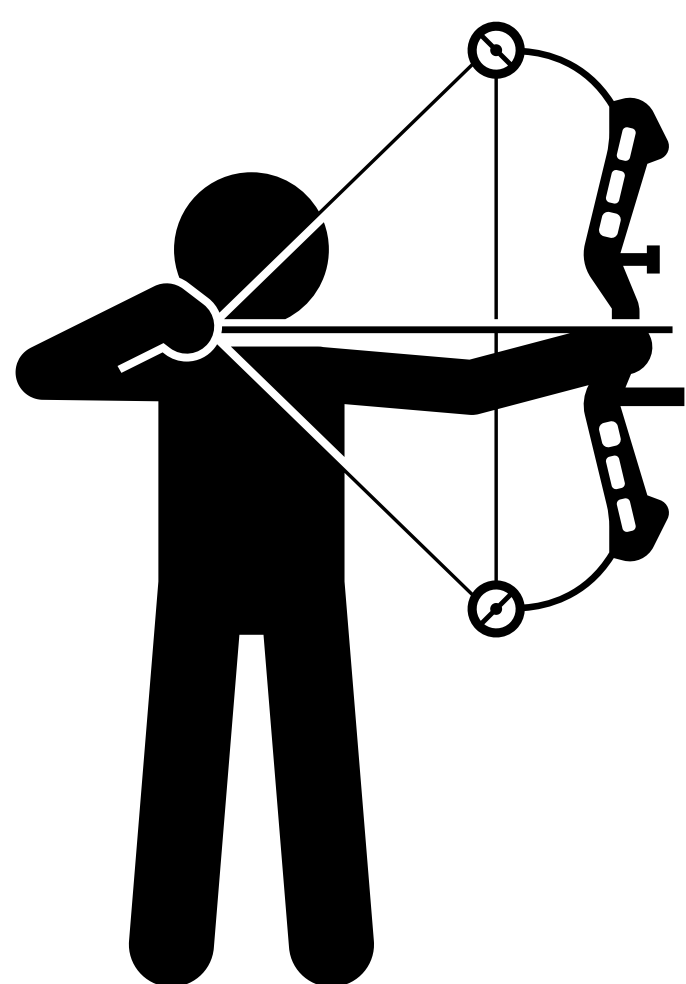
CLICKER

A clicker is a simple item used to ensure consistent draw length for Olympic style archers. They are not an essential product until you have good form and shooting regularly. They can be purchased at a later date when you are ready for this upgrade.

CLICKER EXAMPLES		Bronze	Silver	Gold
Price Range		\$0-20	\$20-50	\$50+
Examples		Bicaster Fizz Clicker	Beiter Clicker Avalon Magnetic Wiawis Colour clicker	Wiawis ARC Carbon Clicker AAE Gold Micro Clicker

COMPOUND

Compound bows are designed with wheels/cams at each end of the bow to create greater speed than a recurve bow. They are much shorter than a recurve bow but allow for a lot more technology including scopes (magnifiers in sights) peep sights (located in the string) and mechanical release aids to hold and let go of the string. The wheels/cams allow for the overall draw weight to be reduced by normally between 60 and 80% when holding at full draw.



COMPOUND BOW

The length of most compound bows is normally between 30 and 40 inches. The longer the bow the easier they are to shoot as a target archer.

Compound bows are very specific in the draw weight and draw length with some bows having a large range allowing for flexibility to grow with the bow with ranges of between 10 and 70lbs on some. High end compound bows have very limited draw weight range variance of about 10lbs and normally come in 40, 50 or 60lb maximum draw weight. Canberra Archery Club enforces the World Archery rule that compound bows are not allowed to exceed 60lbs for insurance purposes.

The draw length of the bow needs to suit the specific archer based on their arm length and draw style. This can be adjusted with some bows allowing for long ranges (20-30 inch). High end compound bows may have very small draw length adjustments of only 2-3 inches.

The highly adjustable bows are a good starting point and very suitable for younger archers as they allow for low draw weights and also shorter draw lengths. These are normally shorter in length but do allow for growth into the equipment.

The following are some of the highly adjustable bows available in alphabetical order:

- Bowtech Amplify
- Elite Ember
- PSE Stinger
- Diamond Edge

COMPOUND BOW EXAMPLES

	Bronze	Silver	Gold
Price Range	\$0-700	\$700-1500	\$1500+
Examples	PSE Stinger Diamond Edge	Elite Ember Bowtech Amplify PSE Lazer	Hoyt Concept X Mathews Title PSE Supra



SIGHT

The sight for a compound bow is normally a lot sturdier than a recurve sight due to the significant forces that are applied. The sight is purchased separately to the scope. They have the same adjustments as a recurve sight.

SIGHT EXAMPLES	Bronze	Silver	Gold
Price Range	\$0-200	\$200-500	\$500+
Examples	Avalon Classic Avalon Tec X Decut DC-CP	WNS SPC-300 Avalon Power Shibuya Ultima	Shibuya Ultima CBE Axcel Achieve

SCOPE

The scope is similar to a sight pin on a recurve but has the ability to have a magnification to make the target look bigger. It also allows for a spirit level to ensure that the bow is vertical when shooting.

They can have dots, circles, fibre optic pins or a combination to allow for personal preference. The magnification is also able to be varied for personal preference.

Scopes can be purchased as individual parts (housing, lens etc.). The below is based on a complete scope.

SCOPE EXAMPLES	Bronze	Silver	Gold
Price Range	\$0-100	\$100-300	\$300+
Examples	Decut Topview Cartel Infitec	Beiter Scope 029 Myob Ten Zone Shrewd	Axcel AV/AVX Ultraview



PEEP SIGHT

The peep sight is installed inside the string and allows for direct alignment between the string and the scope. They come in various sizes (aperture) and can contain a clarifier which allows for the magnification from the scope to make the target become clearer.

A good peep sight will allow for the various different aperture sizes to be installed in the single housing. They will also allow for the clarifier to be installed. The base level peep sights are normal a single size and do not allow for the installation of a clarifier.

PEEP SIGHT EXAMPLES

	Bronze	Silver	Gold
Price Range	\$0-20	\$20-100	\$100+
Examples	Avalon aluminium Tru glo	Avalon Classic Specialty Archery Pro series	Hamskea

ARROW REST

Arow rests for compound bows are different to that of recurve. They are normally a fork that has the arrow balance between the prongs. They are bolted to the bow and allow for adjustment in all directions.

ARROW REST EXAMPLES

	Bronze	Silver	Gold
Price Range	\$0-100	\$100-300	\$300+
Examples	Infitec Compound	Trophy Taker Hoyt Pro Blade Spot Hogg Edge AAE Pro Blade	Hamskea Hybrid AAE Freakshow Hamskea Trinity Beiter Compound



RELEASE AID

The release aid is used to hold the bow string and release it for you without the need to use a finger tab. They have 2 main styles being:

- Wrist release – these have a loop that your hand goes through and you normally use your index finger to trigger the release. They are less common but a cheaper option.
- Thumb release – these are held in the hand and have between 2 and 4 finger spaces to hold it. They are released by using the thumb trigger. These are more common but are at a higher price.

RELEASE AID EXAMPLES

	Bronze	Silver	Gold
Price Range	\$0-100	\$100-300	\$300+
Examples	Tru Ball Stinger Scott Aspen Tru Fire Patriot	Tru ball Champ Spot Hogg - Whipper Snapper	Stan (all options) Carter (all options)



GENERAL EQUIPMENT

The following is general equipment that you will need regardless of the shooting style you decide on.

ARROWS

Arrows are an item that you will use and replace over time. They are a bit like golf balls where you eventually need to replace them. Arrows are purchased in sets of a dozen and come in specific spines (how much they are designed to bend) for different weight limbs and draw lengths. Arrow spine refers to how much the arrow flexes with a specific weight. A 900 spined arrow will flex 900/1000 of an inch which would be more suitable to an archer with a low draws weight. A 400 spined arrow will flex 400/1000 of an inch being more suitable for an archer with a high draw weight.

A correctly spined set of arrows will allow for the best shooting but it may be best to get a spine that is slightly higher if you are expecting to replace your limbs. And under spined arrow can bend too much and become damaged due to its over flexing.

Each arrow manufacturer has recommendations on the spine based on your draw weight and draw length. To determine your draw length, the club has a measuring arrow available in the container.

Carbon arrows are the most common nowadays for most shooters. They are a tube made of carbon fibre that allows for the points to be glued in. The nock end of an arrow is frequently provided with pins that allow for the nock to be replaced easily while sliding over the pin that is inserted in the back of the arrow.

Arrows can also be made of aluminium but these are normally much wider in diameter. The narrower in diameter the arrow, the less they are affected by the wind when shooting outside. Aluminium arrows are used frequently for indoor shooting where the distance is short and having a larger diameter allows for more chance of hitting the line to get a higher score.

Top range arrows are made of an aluminium core with a carbon fibre outer layer. These are normally extremely thin allowing for the least impact of wind and weather when shooting longer distances.

Arrows can be purchased 'pre-made' with all fletching and can be cut to length by the supplier so all you have to do is install the points. This is a good starting point as you don't need to learn how to use a fletching jig to install fletches on the arrows.

For gluing in points, you can either use a specific archery hot melt glue or a 2-part epoxy glue. Most arrow manufacturers recommend not to use a hot melt glue as overheating the shaft can weaken the glue used in carbon arrows.

ARROW EXAMPLES		Bronze	Silver	Gold
Price Range		\$100-200	\$200-500	\$500+
Examples		Pandarus Champion Pandarus Icepoint 003 Easton XX75 Jazz Gold Tip Kinetic	Pandarus Icepoint 001 Easton Axis Easton Avance	Easton X10 Easton ACE

QUIVER

A quiver is where your arrows are stored in a pouch on your hip while not shooting them. They can be either traditional (arrows are facing forwards) or field (arrows are facing backwards). This is a personal preference as to how you would prefer to have the arrows available while shooting. A good quiver will have enough storage to be able to put things in like spare nocks, Allen keys and other parts that you may need while shooting. Having tubes or multiple separate spaces for arrows makes it easier to store arrows and know how many you have shot.

Price range – \$20-\$200

BOW STAND

A bow stand is what is used to keep the bow off the ground. It is not essential but stops wear and tear on either the strings or the ends of the bow.

Price range - \$10-\$100



CHEST AND ARM GUARDS

A chest guard protects your upper torso when shooting. It also stops the string from catching on clothing, especially when wearing lots of layers during winter. A chest guard is sized for the individual to allow for different body sizes and shapes.

Price range – \$20-\$50

An arm guard protects the forearm from the string hitting. They can be either just for the forearm or go past the elbow up towards the shoulder.

Price range – \$10-\$50

WRIST/FINGER SLING

A wrist/finger sling is essential when shooting to allow for a relaxed bow hand. A tense bow hand can apply a twisting force to the bow which can change the path of the arrow through the air. Allowing the bow to naturally move after the shot allows for better arrow flight and accuracy. Although not essential when first starting, the earlier you start to use one the easier it is to adjust.

A wrist sling is attached to the bow and goes over the wrist. These are more commonly used on compound bows over recurve bows. They are still less common on compound bows to finger slings.

A finger sling is a strip of fabric or leather that attaches to your thumb and either index or middle finger. It allows the bow to 'jump' out of your hand but allow you to not drop the bow.

Price range – \$5-\$50

BOW CASE

A bow case is where you store your bow and other equipment. They can either be a hard plastic case or soft fabric style. Hard cases are good for protection, especially travelling on flights) but normally have limitations on their storage as they are not flexible. Soft cases allow for flexibility of storage of equipment.

A recurve bow case can be in a backpack form that allows for easy transportation. A compound bow case with a strap allows for easier carrying due to the additional weight.

Price range – \$50-\$400

GENERAL TOOLS

The following covers a number of tools that you will find helpful in being able to look after your archery equipment.

While most equipment comes with **Allen keys** for each of the different things that can be adjusted, a good set of Allen keys allows for easier finding of the right sized Allen key when needed. They are also much easier to store in the quiver.

A **bow square** allows for measuring of different parts of the bow that you need to keep an eye on.

For a recurve, a **stringer** helps to install the string without twisting the limbs inadvertently.

WHERE TO BUY

Shop	Web	Location
Abbey Archery	www.abbeyarchery.com.au	Sydney/Brisbane
Apex Hunting	www.apexhunting.com.au	Brisbane
Archery Supplies	www.archeryshop.com.au	Adelaide
Benson Archery	www.bensonarchery.com.au	Sydney
KM Archery	www.km-archery.com.au	Canberra
Pats Archery	www.pats-archery.com	Victor Harbor
TOBAS Archery	www.tobasarchery.com.au	Marulan South
Urban Archery	www.urbanarchery.com.au	Melbourne



There are a number of stores located around Australia with different suppliers stocking different brands and levels of stock. The above is a short list of some of the stores in alphabetical order.

Archery equipment can also be purchased second hand from some of the above stores or through Facebook groups, eBay etc. There is also a 'for sale' board in the club house where members can post any equipment they are looking to sell. Second hand is a good option to be able to purchase a complete setup from a single person but the equipment may not be in as high a condition as expected. Ideally, second-hand equipment should be able to be checked in person before purchasing to make sure you are happy with the product.

NEED SOME HELP?

Getting started with your own equipment can be daunting! If you feel like you need some more help to decide what is right for you, or if you need help to set up your equipment once you have bought it, we have a number of coaches at Canberra Archery Club who are able to help!

You can book a private session with one of our coaches at <https://www.canberraarchery.club/coaching>

