

Waverley City Archers

# **New Archer Equipment Guide**

# Introduction

This document is intended to guide new archers in choosing their equipment after completion of the beginner's course at Waverley City Archers. It covers the equipment compliant with the bow categories recognised by Archery Australia. While this guide provides a basic outline of what each category requires in terms of equipment, ***it is highly recommended that any new archer discusses their first purchase with an instructor before buying.***

Full equipment rules for recurve, compound and barebow recurve can be found:

<https://worldarchery.sport/rulebook/article/793>

Full equipment rules for longbow and barebow compound can be found in section 8 of the Archery Australia shooting rules:

<https://archery.org.au/constitution-and-shooting-rules/>

This document currently consists of three sections:

1. Arrows
2. Bow Types and Related Equipment
3. Equipment Purchasing Lists for Printing

Regardless of which bow type they wish to pursue, a new archer should read the arrow section. Although you will likely start off by purchasing pre-made arrows, some understanding of how to select arrows will help them select the right arrows to begin with. Additionally, it is expected that most archers will eventually start making up their arrows from component parts and some basic understanding now will make that easier to do in the future.

Sections 2 and 3 are divided by bow type, and it is only necessary to read the sub sections related to the archers chosen bow type. This will give them a reference for looking for equipment and having productive conversations with instructors regarding their purchases.

While this document is by no means an extensive guide to purchasing a new bow, it is a reference that can be used to give a new archer some basic information to assist their search. As with anything new it will take some time to learn all the ins and out of archery equipment. Making informed decisions about purchasing your first bow is key to a strong start in archery, ***so don't be afraid to ask questions.***

# Arrows

Regardless of bow type, arrows are required. While only up to 6 arrows are shot at a time, spares are a must. It is highly recommended archers start with 12 arrows, so that they have plenty of spares if a few get lost or broken.

Arrows can be purchased pre-made or the components can be purchased separately and assembled by the archer according to their requirements. Building their own arrows gives an archer complete control over their performance and is ideally what all archers should strive towards. However, a new archer is generally better served buying pre-made arrows until they have gained the knowledge necessary to choose components which are compatible and suited to them and their bow.

The most critical aspect for a new archer's first set of arrows is the spine. Arrow spine is the measure of an arrow's stiffness, which effects how much the arrow flexes when released. Typically, the spine of an arrow is measured by its deflection when supported at either end with a weight in the middle. Smaller numbers correspond to stiffer arrows, while larger numbers correspond to softer arrows. The higher the draw weight, or longer the arrow length, the stiffer the arrow needs to be. The appropriate spine for a particular bow can be determined from charts published by arrow manufacturers, such as this one from Easton archery:

Arrow length Recurve draw weight

**ARROW SELECTION**

COMPOUND BOW – Release Aid Calculated Peak Bow Weight–lbs

YOUR BOW				YOUR ARROW LENGTH FOR TARGET • FIELD • 3D												RECURVE BOW
Bow Rating - up to 225 FPS	Bow Rating - 226-300 FPS	Bow Rating - 301-320 FPS	Bow Rating - 321-340 FPS	23"	24"	25"	26"	27"	28"	29"	30"	31"	32"	Bow Weight - lbs. - Range Release		
25-35 lbs. (11.2-15.9 kg)				00	01	02	03	T1	T2	T3				30-40 lbs. (13.6-18.1 kg)		
35-40 lbs. (15.9-18.1 kg)	26-35 lbs. (11.2-15.9 kg)			01	02	03	T1	T2	T3	T4	T5			40-44 lbs. (18.1-20.0 kg)		
40-45 lbs. (18.1-20.0 kg)	35-40 lbs. (15.9-18.1 kg)	29-35 lbs. (13.2-15.9 kg)		02	03	T1	T2	T3	T4	T5	T6	T7		50-55 lbs. (22.7-24.9 kg)		
45-50 lbs. (20.4-22.7 kg)	40-45 lbs. (18.1-20.0 kg)	35-40 lbs. (15.9-18.1 kg)		03	T1	T2	T3	T4	T5	T6	T7	T8	T9	60-65 lbs. (27.2-29.5 kg)		
50-55 lbs. (22.7-24.9 kg)	45-50 lbs. (20.4-22.7 kg)	40-45 lbs. (18.1-20.0 kg)	35-40 lbs. (15.9-18.1 kg)	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	70-75 lbs. (31.8-34.5 kg)		
55-60 lbs. (24.9-27.2 kg)	50-55 lbs. (22.7-24.9 kg)	45-50 lbs. (20.4-22.7 kg)	40-45 lbs. (18.1-20.0 kg)	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	80-85 lbs. (36.3-38.6 kg)		
60-65 lbs. (27.2-29.5 kg)	55-60 lbs. (24.9-27.2 kg)	50-55 lbs. (22.7-24.9 kg)	45-50 lbs. (20.4-22.7 kg)	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	90-95 lbs. (40.8-43.1 kg)		
65-70 lbs. (29.5-31.8 kg)	60-65 lbs. (27.2-29.5 kg)	55-60 lbs. (24.9-27.2 kg)	50-55 lbs. (22.7-24.9 kg)	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	100-105 lbs. (45.3-47.6 kg)		
70-75 lbs. (31.8-34.5 kg)	65-70 lbs. (29.5-31.8 kg)	60-65 lbs. (27.2-29.5 kg)	55-60 lbs. (24.9-27.2 kg)	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	110-115 lbs. (50.0-52.3 kg)		
76-82 lbs. (34.5-37.2 kg)	70-75 lbs. (31.8-34.5 kg)	65-70 lbs. (29.5-31.8 kg)	60-65 lbs. (27.2-29.5 kg)	T6	T7	T8	T9	T10	T11	T12	T13	T14		120-125 lbs. (54.4-56.7 kg)		
82-88 lbs. (37.2-39.9 kg)	76-82 lbs. (34.5-37.2 kg)	70-75 lbs. (31.8-34.5 kg)	65-70 lbs. (29.5-31.8 kg)	T7	T8	T9	T10	T11	T12	T13	T14			130-135 lbs. (59.0-61.3 kg)		

For AXA Speed of 141-150 FPS. Start in 321-340 FPS column, drop down one row in chart. Examples: 580-110-140 FPS; drop down one row, still in Group T11. 480-120-140 FPS; drop down one row, still in Group T11 to Group T10.

For AXA Speed of 201+ FPS. Start in 321-340 FPS column, drop down two rows in chart. Examples: 580-110-135 FPS; drop down two rows, still in Group T11 to Group T14. 470-120-140 FPS; drop down two rows, still in Group T11 to Group T10.

Compound draw weight and speed Arrow group

Size	Spine	Model	Weight Grs/inch
<b>Group T4</b>			
*670-720R	0.670-0.720	A/C/E	5.9
*650-700R	0.650-0.700	X10	6.8
670	0.670	ProTour	6.5
*660-710R	0.660-0.710	A/C/G	6.9
3L-04	0.750	A/C/C	7.0
3-04	0.680	A/C/C	7.2
660	0.660	Carb1	6.6
630	0.630	Inspire	7.9
740	0.740	Apollo	7.2
1913	0.733	75	8.3
1914	0.658	X7	9.3

Different manufacturers may have different standards for measuring spine, so the spine chart from the correct manufacturer should be used. Alternatively some manufacturers have digital versions of these charts which allow archers to enter their arrow length, draw length etc and returns a recommended spine range.

Choosing an arrow that is too soft or too stiff will drastically affect performance, so it is critical to make an informed choice when selecting arrows.

***If you are unsure how to choose the right arrows for your bow, please consult an instructor for advice.***

# Bow Types and Related Equipment

The following section provides an overview of each bow type and the related equipment to guide new archers in purchasing their first bow. It is recommended that a new archers seek advice from instructors at the same time as doing their own research on what is available. The best equipment for each archer will depend on their budget and intentions in archery. For each bow type, there are crucial components that should be a priority and some which can be left for later if they do not fit into the budget.

A new archer should expect to add to or upgrade their equipment over time, so it is important to make the most of their initial purchase on the parts which are likely to last the longest. For example, a recurve handle, or riser, will last a long time if it is of good quality but an archer will grow out of their first set of limbs relatively quickly. Thus, it is better to prioritise a good quality riser over more expensive limbs when starting out. ***For information about what to prioritise for their chosen bow type, new archers should consult with an instructor.***

# Recurve

Also called “Olympic Recurve” as it is the only style of archery included in the Olympic Games, this is the category closest to what beginners will be familiar with as it is covered across the entire course. This division involves shooting a bow with recurved limbs using sights and stabilisers. The most common set up for a recurve bow is the “take-down” bow, which consists of a central handle (riser) and top and bottom limb. Most companies make their risers and limbs compliant with International Limb Fittings (ILF) so that they can be mixed and matched easily. However, some companies also have their own system (Hoyt’s Formula line, for example) which is only compatible with their own brand. Choosing an ILF setup will make obtaining new limbs easier, as you will have the flexibility to choose different brands depending on what is available at the time.

## Essentials

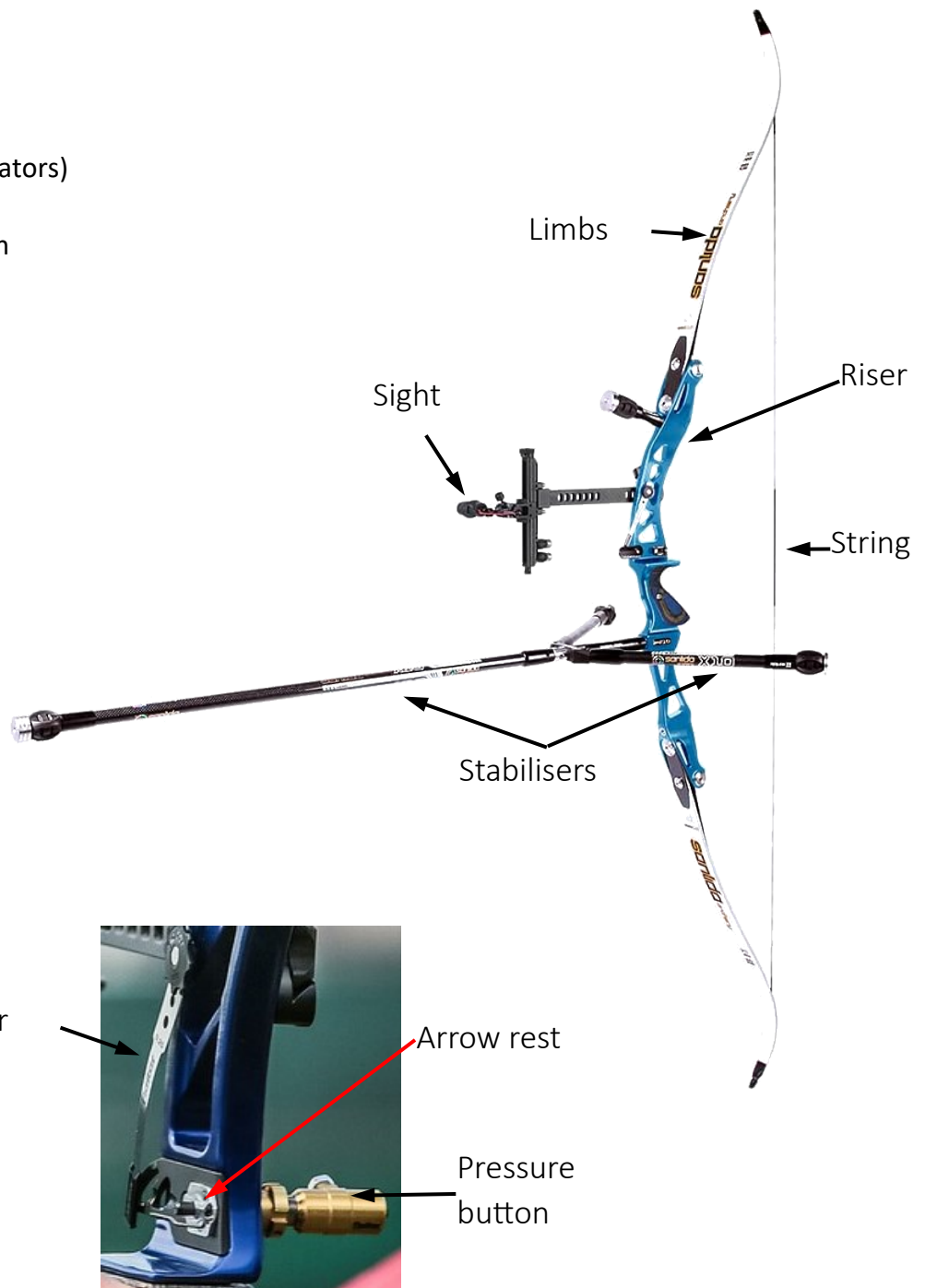
- Riser
- Limbs
- String (w/ nocking point locators)
- Arrow rest
- Plunger (or pressure) button
- Arm guard
- Finger tab
- Wrist or finger sling
- Sight
- 12 Arrows
- Quiver
- Bow stand

## Highly Recommended

- Bow stringer
- Bow square
- Bow case or bag

## Additional Equipment

- Stabiliser
- Clicker



# Compound

Compound bows are the modern extreme of competition archery. They feature cams which reduce the weight at full draw for easier aiming, magnified scopes and mechanical releases. These bows are high tech, high-speed and highly accurate. The compound division is highly competitive as a result.

## Essentials

- Bow
- Arrow rest
- D-loop
- Release aid
- Wrist or finger sling
- Sight and scope
- 12 Arrows
- Quiver
- Bow stand



Blade arrow rest



Fork arrow rest



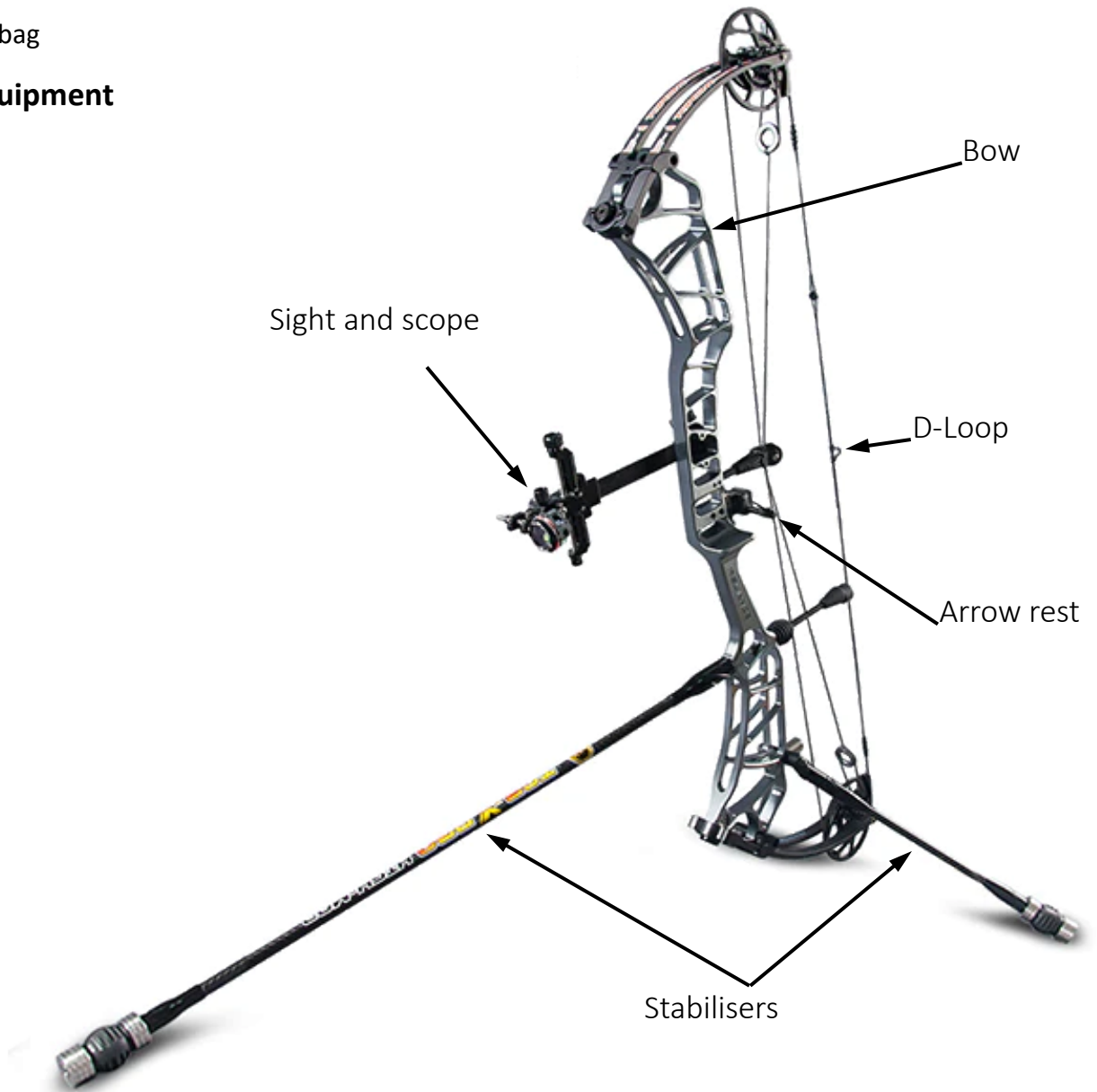
Drop-away arrow rest

## Highly Recommended

- Bow case or bag

## Additional Equipment

- Stabiliser



# Longbow

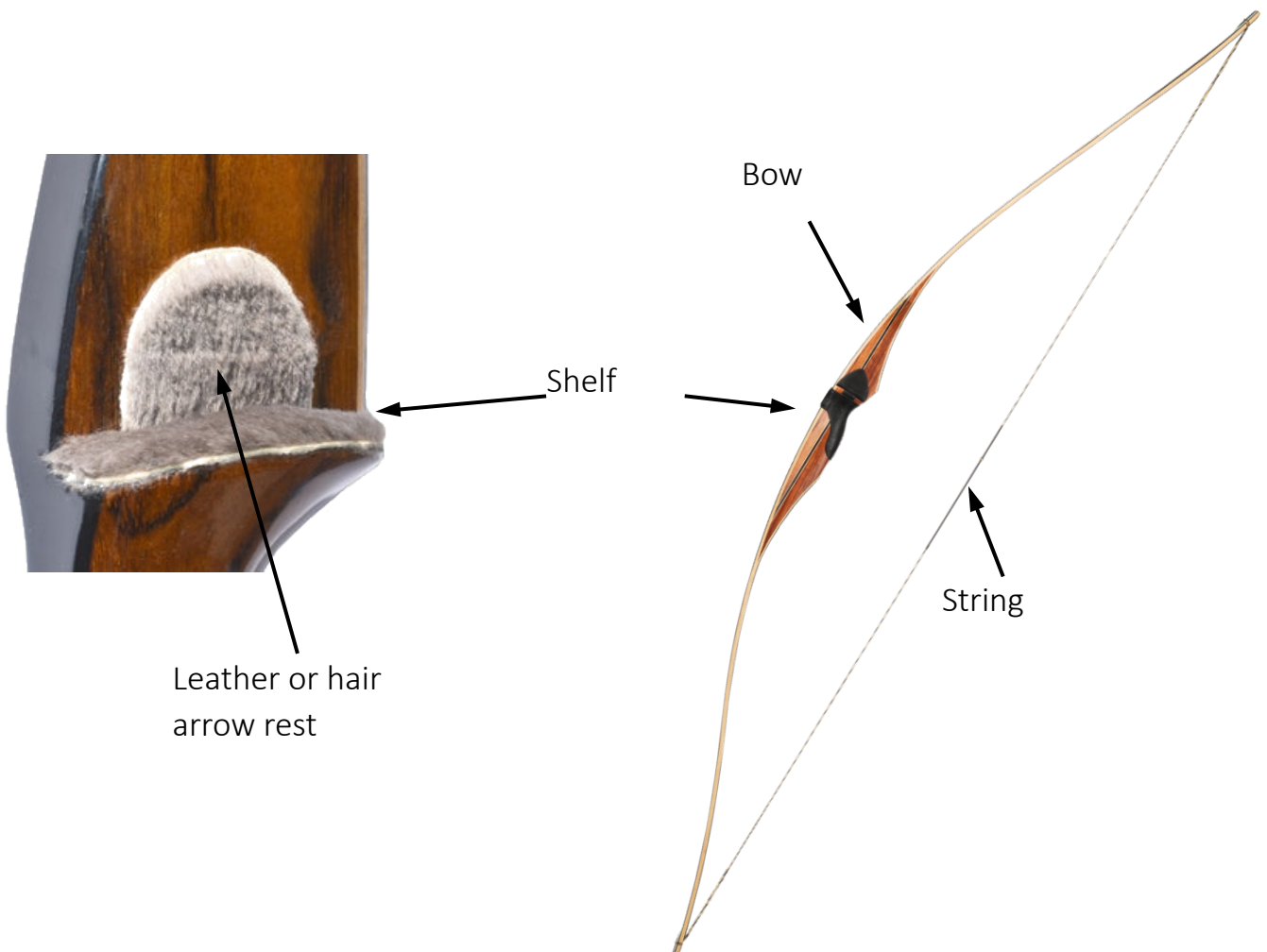
The simplest form of archery recognised in Archery Australia competitions, the longbow is a modern take on the traditional bow used throughout history, but made famous by the English in the Hundred Years' War. These bows allow no sights or stabilisers with all aiming done by the archers' intuition and experience. The only modern twist on these bows is that the arrows are shot off a "shelf" carved into the bow, rather than off the hand as was done historically.

## Essentials

- Bow, with arrow shelf
  - Minimum 150cm for females and male under 18s and below
  - Minimum 160cm for male under 21s and above
- String (w/ nocking point locators)
- Arrows with feathers
  - Wood or aluminium shafts only
- Arm guard
- Finger tab or shooting glove
- Quiver
- Bow stand (note not all stands designed for recurves will work for longbows)

## Highly Recommended

- A leather or hair "rest" can be attached to the arrow shelf for smoother arrow passage



# Barebow Recurve

A modern style with simplified equipment, barebow recurve allows archers to use modern recurve bows without modern aiming devices. The same riser and limbs used for sighted recurves can be used for barebow recurve, with the same considerations regarding ILF limbs. Sights are not allowed and archers must instead use the arrow to aim. This is usually done by “string-walking”, where the archer changes their hand position on the string to always place the point of the arrow on the centre of the target. Instead of stabilisers, archers may add weights to their bow for extra stability, but the entire bow (excluding the string) must fit through a 12.2cm ring.

## Essentials

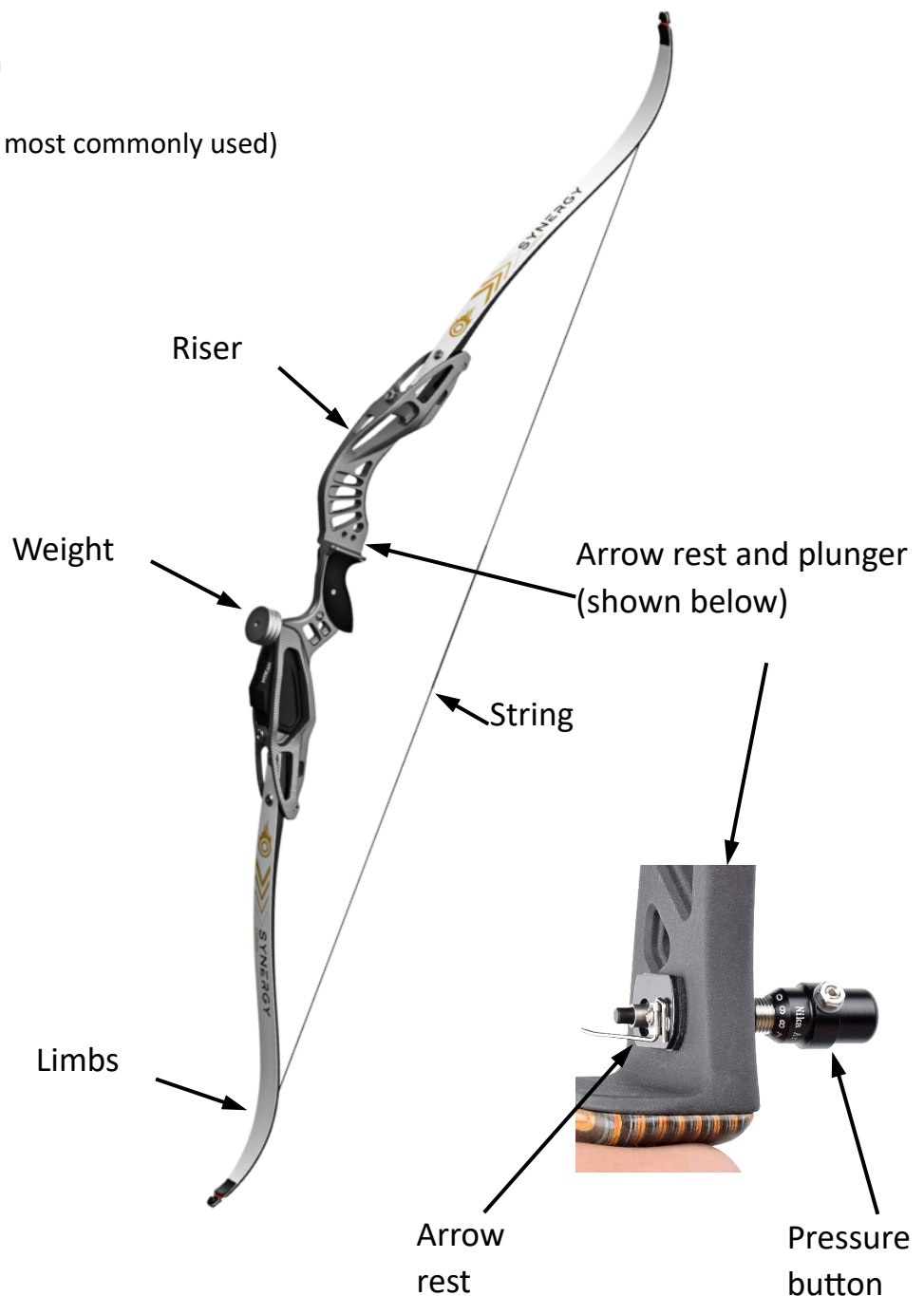
- Riser
- Limbs
- String (w/ nocking point locators)
- Arrow rest
- Plunger (or pressure) button
- Arm guard
- Finger tab (3-under tabs are most commonly used)
- Wrist or finger sling
- 12 Arrows
- Quiver
- Bow stand

## Highly Recommended

- Bow stringer
- Bow square
- Bow case or bag

## Additional Equipment

- Barebow weights





## ***Barebow Compound***

In the barebow compound division, the low holding weight and fast flight of compound bows are combined with traditional aiming. Barebow compounds are shot using the fingers like a recurve bow. Aiming is done by “gap shooting”, where the archer must gauge where the arrow point should sit relative to the target to hit the centre at each distance.

### **Essentials**

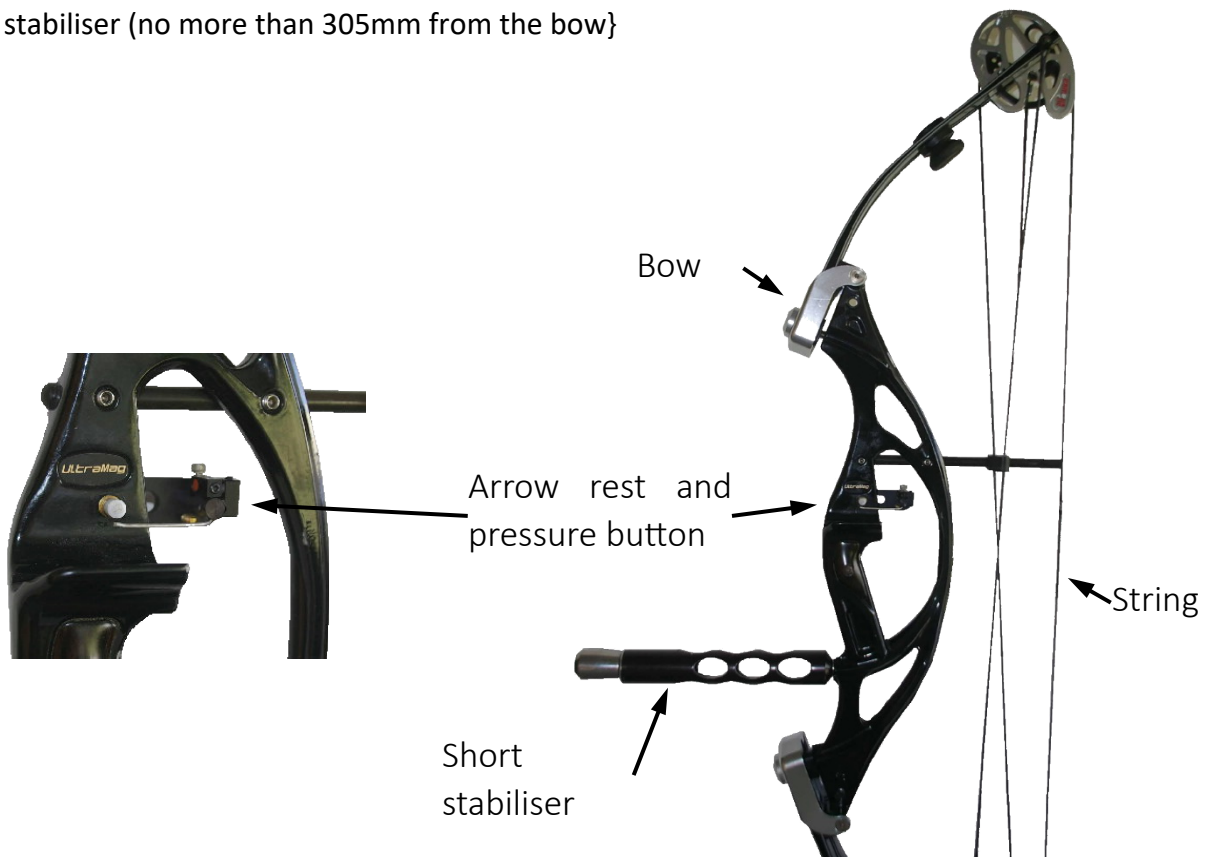
- Bow (no shoot through risers are permitted)
- Nocking point locators
- Plunger (or pressure) button
- Arrow rest (simple, recurve-style arrow rests only)
- Finger tab (release aids are not permitted)
- Armguard
- 12 Arrows
- Quiver
- Bow stand

### **Highly Recommended**

- Bow case or bag

### **Additional Equipment**

- Short stabiliser (no more than 305mm from the bow)



## Equipment Lists for Printing

The following section includes the equipment listed for each bow type in the previous section, with the addition of space for making notes. Additionally, it includes space to fill out archer-specific details such as draw length, arrow length, draw weight and bow length. As there is a lot of new information to consider when acquiring a bow for the first time, These lists are intended for adding notes as necessary for reference when purchasing equipment. **It is highly recommended that new archers consult with an instructor regarding their intended equipment before purchasing to get the most out of their first bow.**

# *Recurve*

## **Archer Details:**

Draw Length:

Arrow Length:

Draw Weight:

Arrow Spine:

Bow Length:

## **Essential Equipment:**

Riser:

Limbs:

String:

Arrow Rest:

Plunger Button:

Arm Guard:

Finger Tab:

Sling:

Sight:

Arrows (12):

Quiver:

Bow Stand:

## **Highly Recommended:**

Bow Stringer:

Bow Square:

Bow Case:

## **Additional Equipment:**

Stabiliser:

Clicker:

# *Compound*

## **Archer Details:**

Draw Length:

Arrow Length:

Draw Weight:

Arrow Spine:

Bow Length:

## **Essentials:**

Bow:

Arrow Rest:

D-loop:

Release Aid:

Sling:

Scope:

12 Arrows:

Quiver:

Bow Stand:

## **Highly Recommended:**

Bow Case:

## **Additional Equipment:**

Stabiliser:

# *Longbow*

## **Archer Details:**

Draw Length:

Arrow Length:

Draw Weight:

Arrow Spine:

Bow Length:

## **Essentials:**

Bow:

String:

Arm Guard:

Tab/Glove:

Sling:

Arrows (12):

Quiver:

Bow Stand:

## **Highly Recommended:**

Arrow Rest:

# *Barebow Recurve*

## **Archer Details:**

Draw Length:

Arrow Length:

Draw Weight:

Arrow Spine:

Bow Length:

## **Essential Equipment:**

Riser:

Limbs:

String:

Arrow Rest:

Plunger Button:

Arm Guard:

Finger Tab:

Sling:

Arrows (12):

Quiver:

Bow Stand:

## **Highly Recommended:**

Bow Stringer:

Bow Square:

Bow Case:

## **Additional Equipment:**

Weights:

# *Barebow Compound*

## **Archer Details:**

Draw Length:

Arrow Length:

Draw Weight:

Arrow Spine:

Bow Length:

## **Essentials:**

Bow:

Arrow Rest:

Plunger Button:

Finger Tab

Sling:

12 Arrows:

Quiver:

Bow Stand:

## **Highly Recommended:**

Bow Case:

## **Additional Equipment:**

Short Stabiliser:

# Archery Stores

To begin looking at equipment, a list of stores are included. *It is highly recommended that you consult an instructor for advice before purchasing equipment.*

## Oz Hunting and Bows

**Address:** 6 Blissington Street, Springvale, VIC 3171

**Website:** <https://www.ozhuntingandbows.com.au/>

## Topoint Archery

**Address:** 29 Carinish Rd, Oakleigh South, VIC 3167

**Website:** <https://topointarchery.com.au/>

## Eliza Archery

**Address:** 20 Stephenson Rd, Seaford, VIC 3198

**Website:** <https://www.elizaarchery.com/>

## Urban Archery

**Address:** 51A Freight Drive, Somerton, VIC 3062

**Website:** <https://www.urbanarcherysupplies.com/>