



# Foundation Coaching Manual



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# NINE STEPS TO THE 10 RING

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## Course Programme

### Foundation Coach

The “Foundation Coach” course is for those persons who wish to work with “grass-roots archery – school camps, club “have a go” sessions, and “Archery in Schools” programmes.

Anyone aged *16 years of age* or older can undertake the course, applicants do not need to be a member of “*Archery New Zealand*”.

This course is also suitable for ANZ members with less than *two years* archery experience who wish to become involved with *club coaching and* assist with club “*Have-a-go*” days and *club beginner courses*.

### Development Coach

The “Development Coach” course is available for those who wish to act as a club coach.

Candidates must be *18 years of age*, a member of ANZ, and have been involved in archery for at least two years.

This course will enable candidates to lead club beginner courses, as well as work with club members to support their development and growth from their first lesson to major tournament level.

### Other Archery New Zealand Courses

In line with an athlete-based coach approach, ANZ offers a “High Performance Coach Course” for those persons intending to work with Performance Archers and take archers from shooting in regional tournaments onto New Zealand representation.

### **Liability**

“Archery New Zealand” undertakes no liability what-so-ever for coaches who submit themselves for these qualifications. It is the responsibility of coaches to arrange their own professional indemnity insurance.

The coaching certification gained through these courses is intended to ensure a minimum standard of archery knowledge and coaching skills. Archery New Zealand administers the courses and strive to keep the information outlined in this manual current; we do not place any conditions on how the individual might choose to make use of these qualifications.

We recommend that you, however, as a newly qualified coach, discuss with your club (or other organisation that may be considering using your services) other requirements such as.

- If working with children or vulnerable persons, whether a police check is required.

- Whether the organisation has a safety management system that is implemented at their place of shooting. It is strongly recommended, however, that coaches have their own Health and Safety/Risk Assessment/Hazard Identification documents in place for all places at which you are instructing.
- Understand the coverage of the organisation's insurance/whether you will need your own.

### Coach Development

The "ANZ Coaching Panel" organises coach development seminars in each of the districts every year. Coaches should take advantage of these opportunities to keep up to date and improve their skills. Above all keep an open mind to all sources of information and opportunities to further your knowledge.

A good source of information are instruction Manuals on the sport of Archery

- "*Archery, The Art of Repetition*" (2012) and
- "*The Competitive Archer, Skills, Tactics and Techniques*" (2015)
- Video: "*Archery in Action*" (2007)

all by the British Archer, and former Olympian, *Simon Needham*.

### Drug Free Sport

It is a requirement that **all prospective coaches** visit the "*Drug Free Sport New Zealand*" website and complete

1. *Clean sport 101*
2. *Support personnel*

modules of the "*Drug Free Sport*" training **before** attending the Foundation Coach course.

### First Aid

It is strongly recommended that all coaches undertake a Basic First aid course and that they keep that qualification current.

## Section 1

### Introduction:

*“Coaching is about communication.*

*If you are not able to communicate your thoughts and skills to someone else, then you will never be an effective coach even though you are the best archer in the country, and it would be better if you found some other field of endeavour.”*

The purpose of this manual is to act as a teaching resource and lesson plan for the instructors of “*Foundation*”, but also the candidates to use in their studies.

It also contains the information that will be discussed at the conclusion of the course. It is also intended to be used by coaches as a reference guide and should be consulted as necessary.

- Instructors of the course should introduce themselves followed by course participants
- Course instructors shall conduct a safety briefing, and if indoors, the location of emergency exits and assembly points, toilet facilities, and break times.
- Explain course outline and requirements. This is a good time to discuss the Schedule and to discover any problems that might arise. Schedule changes should only be made if the whole class agree.
- Participants must be encouraged to participate in the discussions and ask questions. Emphasis should be placed on that “there are no silly questions”.

### Course requirements

- Candidates must attend all sessions of the course.
- Development Candidates must pass the written test with a score of 75% or better. It is not a requirement for Foundation Course Candidates to pass a written test.
- All the range rules and procedures

### Coach Code of Ethics

Course Instructors must discuss the “*Sport NZ Coach Code of Ethics*” and each student coach shall sign the statement at the end. This signed statement shall be retained by the club secretary or appropriate administrator.

All coaches and coach candidates must adhere to this code. Breaches shall be reported to “ANZ Coaching Panel”.

# Coaches' Code of Ethics

## 1 RESPECT THE RIGHTS, DIGNITY AND WORTH OF EVERY INDIVIDUAL ATHLETE AS A HUMAN BEING

- Treat everyone equally regardless of sex, disability, ethnic origin or religion.
- Respect the talent, development stage and goals of each athlete in order to reach their full potential.

## 3 BE A POSITIVE ROLE MODEL FOR THE SPORT AND ATHLETES AND ACT IN A WAY THAT PROJECTS A POSITIVE IMAGE OF COACHING

- All athletes are deserving of equal attention and opportunities.
- Ensure the athlete's time spent with you is a positive experience.
- Be fair, considerate and honest with athletes.
- Encourage and promote a healthy lifestyle – refrain from smoking and drinking alcohol around athletes.

## 5 MAKE A COMMITMENT TO PROVIDING A QUALITY SERVICE TO YOUR ATHLETES

- Seek continual improvement through ongoing coach education, and other personal and professional development opportunities.
- Provide athletes with planned and structured training programmes appropriate to their needs and goals.
- Seek advice and assistance from professionals when additional expertise is required.
- Maintain appropriate records.

## 2 MAINTAIN HIGH STANDARDS OF INTEGRITY

- Operate within the rules of the sport and in the spirit of fair play, while encouraging your athletes to do the same.
- Advocate a sporting environment free of drugs and other performance-enhancing substances within the guidelines of the New Zealand Sports Drug Agency and the World Anti-Doping Code.
- Do not disclose any confidential information relating to athletes without their written prior consent.

## 4 PROFESSIONAL RESPONSIBILITIES

- Display high standards in your language, manner, punctuality, preparation and presentation.
- Display control, courtesy, respect, honesty, dignity and professionalism to all involved within the sphere of sport – this includes opponents, coaches, officials, administrators, the media, parents and spectators.
- Encourage your athletes to demonstrate the same qualities.
- Be professional and accept responsibility for your actions.
- You should not only refrain from initiating a sexual relationship with an athlete, but should also discourage any attempt by an athlete to initiate a sexual relationship with you, explaining the ethical basis of your refusal.
- Accurately represent personal coaching qualifications, experience, competence and affiliations.
- Refrain from criticism of other coaches and athletes.





## 6 PROVIDE A SAFE ENVIRONMENT FOR TRAINING AND COMPETITION

- Adopt appropriate risk management strategies to ensure that the training and/or competition environment is safe.
- Ensure equipment and facilities meet safety standards.
- Ensure equipment, rules, training and the environment are appropriate for the age, physical and emotional maturity, experience and ability of the athletes.
- Show concern and caution toward sick and injured athletes.
- Allow further participation in training and competition only when appropriate.
- Encourage athletes to seek medical advice when required.
- Provide a modified training programme where appropriate.
- Maintain the same interest and support toward sick and injured athletes as you would to healthy athletes.

## 7 PROTECT YOUR ATHLETES FROM ANY FORM OF PERSONAL ABUSE

- Refrain from any form of verbal, physical or emotional abuse towards your athletes.
- Refrain from any form of sexual or racial harassment, whether verbal or physical.
- Do not harass, abuse or discriminate against athletes on the basis of their sex, marital status, sexual orientation, religious or ethical beliefs, race, colour, ethnic origins, employment status, disability or distinguishing characteristics.
- Any physical contact with athletes should be appropriate to the situation and necessary for the athlete's skill development.
- Be alert to any forms of abuse directed towards athletes from other sources while in your care.

# Coaches should:

- Be treated with **respect** and **openness**
- Have access to **self-improvement** opportunities
- Be matched with a level of coaching **appropriate** to their ability



# Coaches' Code of Ethics Agreement Form

I, .....  
(Full Name)

of .....  
(Address)

Sport (and discipline if applicable) .....

Level/Qualification .....

**I agree to the following terms:**

1. I agree to abide by the Coaches' Code of Ethics above.
2. I acknowledge that the National Sport Organisation (NSO) training provider responsible for qualification of coaches in the sport listed above, may take disciplinary action against me if I breach the Code of Ethics. I understand that the NSO is required to implement a complaints handling procedure in accordance with the principles of natural justice in the event of an allegation against me.
3. I acknowledge that disciplinary action against me for a proven or established breach may include de-registration of my qualification, depending on the seriousness of the breach.

Signature .....

If under 18, parent/guardian .....

Date .....

**Please send this page to your National Sport Organisation.**



## Section 2

### Leading a new course

As stated, earlier, coaching is about communication. It is essential that you set a good example, in your:

- personal presentation,
- punctuality,
- use only language that is relevant to the age group you are instructing,
- Introduce yourself and the group to everyone else
- The more you use a person's name the easier it is to remember it.
- It is essential that the coach "grabs" the attention of the group as quickly as possible.

### Coaching children

Getting their attention and retaining it is vital when coaching children as they are very easily distracted.

#### **NOTE:**

- When coaching children, it is good practice to ensure that you are never in the situation of being the only coach present. Always ensure that there is another coach or parent present. **THIS IS FOR YOUR OWN PROTECTION!!**
- If it is necessary to adjust any person's body position **ALWAYS** ask permission first. **AGAIN, THIS IS FOR YOUR PROTECTION.**

### Safety/orientation

- Archery is a safe sport because it must be! Safety is paramount in all you do on the range.

The bow has been used as a weapon of warfare, and hunting for food, since the early days of human history and if not used in a safe manner has the potential to kill or maim.

With a Recurve bow capable of sending an arrow down range at speeds of more than 200ft/sec and a Compound bow at more than of 300ft/sec the potential for a serious accident is evident.

- It is essential that your new students are made aware of this from the beginning of your coaching sessions.

It is vital, that as a coach, you plan so you have a lesson planned of what you are going to cover during each session with your students and time is not wasted with setting up the range and other tasks.

- Teach only what is needed, at the time it is needed, to prevent too much information having to be absorbed.
- Set targets up at a MINIMUM of **10m** from the shooting line. This is for safety reasons as arrows can bounce back when hitting hard surrounds of the target butt.

At this stage of the orientation session suitable equipment needs to be issued after checking their *dominant eye*.

Safety rules require that closed toe foot-ware is always worn on the range. Long hair must be secured with a hair tie or covered by a hat to prevent hair being caught in the string upon release.

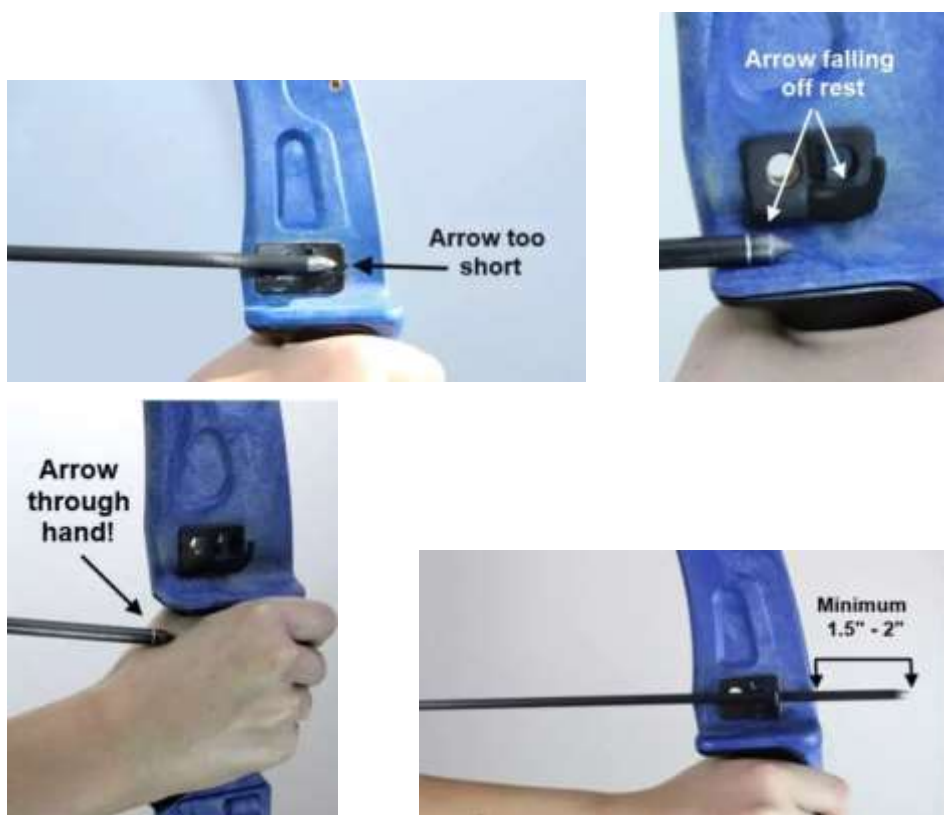


- Bows must be suitable for the user. Shooting a bow that is of too heavy a poundage will be counterproductive as the student will struggle with it, and possibly be injured by it. They will become discouraged, and you will not see them again. It is better at this stage to issue a bow that the student can easily draw without too much effort.

The student will also need to be measured for arrow length.



It is vital that the arrows issued are not too short for the user as there is a high risk that they could shoot themselves in the hand with an arrow that is below optimum length. They should extend *at least 2 inches* (50mm) beyond the students' fingertips.



Other safety equipment must also be issued such as

- ✓ Tabs and
- ✓ Arm protectors
- ✓ quivers/ground quivers.
- ✓ Chest protectors if available
- It is essential that they are shown how to use Safety equipment and that it is used to prevent injury to their fingers and forearms.



**Arm Guards (long/short)  
finger tab, finger sling**



**Chest protector**



**Ground quiver**



**Field quiver**

**hip quiver**

Photo:EastonArchery.com

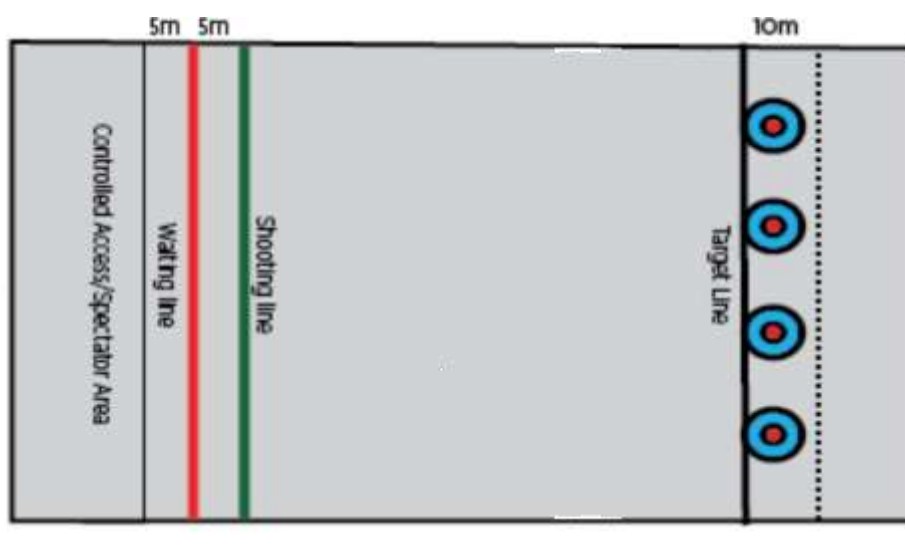
Before going out onto the range students must be instructed on the safe method to carry arrows emphasizes should be placed on that both ends are sharp

- It is good practice for the coach to make a written note of the identification number of the club bow (whether Left or right-handed) and arrow length/set number for future use.
- DO NOT rely on the student's memory!

Now it is time to introduce them to the range.

The following must be shown to them along with an explanation of each one

1. The waiting line
2. Shooting line
3. Target line



- It is essential that they are completely familiar with what lines are for before moving on to shooting.

## Shooting technique

This part of your lesson is fundamental to coaching!

- A useful mnemonic

## **DEAR**

- **Demonstration:** Demonstrate the technique in its entirety: in this case, a shot.
- **Explanation:** Give an explanation. It is not wise to go too deeply into the explanation at this stage only what they need to know to execute their first shot.
- **Assimilation:** Students are encouraged to ask questions and you should check understanding by asking questions. Emphasise that there are no silly questions.
- **Repetition:** Students now practice what they have been taught under your close supervision.

Before getting them shooting now is a good time to

- introduce the whistle commands along with the duties of the RANGE CAPTAIN.
- It is good practice that this important lesson be done in stages.

Introduce the whistle commands and **use verbal** commands as well to reinforce this.

- **TWO** blasts pick up your bow at the waiting line and go to the Shooting line
- DO NOT PUT AN ARROW IN YOUR BOW until.
- **ONE** blast

**NOTE:** It is essential that you are present with each student to shoot their first arrow. No student should shoot an arrow until you are standing alongside them.

- **THREE** collect your arrows

- **FOUR** or more EMERGENCY **stop** take arrow from bow, put it in quiver and step back behind waiting line. **DEMONSTRATE THIS.**

**Note:**

People learn in different ways. For example, some learn by doing, some are visual,

It is vital that you keep the lesson fun and positive

The coaching session

It is one of the skills of being a coach that you ensure that your class is fun and interesting and that you leave them wanting more. Essential when coaching children!

Various methods can be used to achieve this.

- ✓ Balloons attached by target pins to the target face. 5points per balloon.
- ✓ Pick out different parts of a 122cm target face and assign different points at random.
- ✓ Archer with smallest group of 6 arrows wins

There are others, communicate with more experienced coaches to find out what they do.

There will always be something new to learn!



## Problem Correction

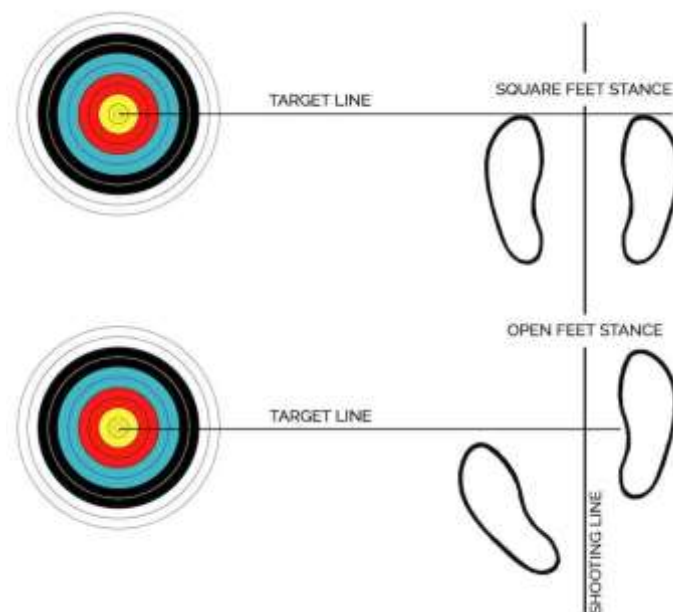
- **Stance**

*Keep feet shoulder width apart*

- **Standing to open or to closed**

*Stand sideways on to the target*

*Demonstrate with an arrow on the ground pointed towards the target with their toes touching it.*



## **Posture problems**

*Stand up straight and tall with your weight equal on both feet*



## **Moving feet between shots**

*“Keep the feet still or in place” or “glue or nail feet to the ground” -Show how it affects body alignment.*

*Suggest that in the early stages of training that they use foot markers e.g., golf tees.*

## **Both feet in front or behind the shooting line**

*Put one foot either side of the line*

## **Nocking the arrow**

- Putting the arrow anywhere except on the arrow rest i.e., on top of, or through, the sight ring. On the shelf or knuckle.

*Put the arrow on top of the arrow rest for them so that they can see what it looks like. Watch the next shot to see that this is done correctly.*

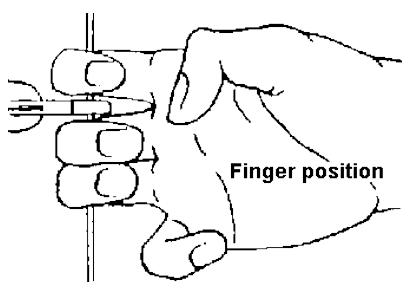
- Nocking the arrow anywhere but tight in between the nocking points; not snapping it on.

*Snap the arrow on the string tight up against the nock locator for them so that they can see what it looks like.*

## **Set string fingers**

- Hooking the string with the whole hand, too many, or too few fingers, hooking only on the fingertips.

*Shape the hand into correct position and hook onto the string in the first groove of each finger.*



**Note:** It is good practice to show this as an example as it is difficult to explain this skill. Hands on is necessary.

- Pinching the arrow so that it comes off the arrow rest; maybe caused by too much tension in the back of the hand or holding the arrow too tight between the fingers.

*For the first go, try three fingers under the arrow for new shooters.*

*Have them relax the back of the hand and keep their fingers away from the arrow.*

*Use a tab with a spacer.*

### **Set Bow Hand**

- Holding with thumb only
- Gripping with the whole hand /Healing

- Gripping the bow too low (common on straight, fibreglass bows with a flat grip).

*Place hand in correct position.*

### **Pre-draw**

- Raising or moving bow shoulder forward when raising bow arm

*Keep the bow shoulder down*

*Put your hand on their bow shoulder*

### **Note**

*Many children do not have the muscle awareness to hold the bow shoulder down. Sometimes it helps to have them hold their bow arm out and raise their shoulder up as high as it will go. Then tell them to pull down and hold it there. That is where they want to keep it while shooting.*

### **Locking front elbow**

*Explain elbow rotation*

*Explain the “slight bend” method, explaining that a straight arm is better than hyperextending.*

### **Leaning back when raising bow arm**

*Check that they are standing up straight and tall, shoulders and hips over the feet.*

*Place your hand on their right hip and under left arm and stand them up straight (right-handed archer).*

### **General Alignment Problems**

*Mould them into a “T”.*

### **Draw**

- Drawing Bow with low string elbow

*Keep your elbow up and lift elbow to parallel*

- Moving head forward to meet the string

*“Keep your head straight and pull the string all the way back to your face”*

**At full draw**

- **Canting**

*“Keep your bow straight up and down”*

- **Creeping**

*“Continue pulling with one motion all the way through the release”*

- **Leaning forward**

*“Stand up straight and tall, keep your bottom under your head”.*

**Reference**

- ✓ **Inconsistent**

*Explain that the arrow goes where it is pointed*

*Help the archer find a consistent reference point. Third joint of index finger underneath jaw line (good bone on bone contact)*

- ✓ **Aim**

**Aiming with the wrong eye**

*This is hard to detect if you are not watching them from the front. One sure clue is the arrows going off the target to the left (for right hand shooters). Check eye dominance tell them to close left eye or watch string alignment.*

**String picture**

*Line the string up just to the right of the sight pin*

- ✓ **Release**

**Plucking**

*A form of collapsing where the hand goes from the face. “Continue to draw the bow as you relax your fingers, keeping your hand close to your face”.*

**Collapsing**

*Continue pulling, explain release control, how moving the release hand affects the shot.*

**Peeking**

*The archer is trying to watch the arrow fly. This shows up with the bow arm moving down and right, the head moving left. "Focus on the centre of the target"*

### **Gripping the bow**

*Keep the bow hand relaxed throughout the shot or have them touch only index finger and thumb together around the grip. Use a bow sling.*

✓ **Follow through**

### **Dropping bow arm**

*"Keep your bow arm up until arrow hits the target"*

✓ **Arrow patterns**

*Explain how watching where arrows go on a target face can be an indication of a shooting form problem.*

✓ **Injury prevention**

If a student advises of pain, they MUST stop shooting. If pain persists, they must seek medical assistance.

The adage that "No pain no gain" is very wrong and extremely dangerous.

## Nine Steps to the 10 Ring



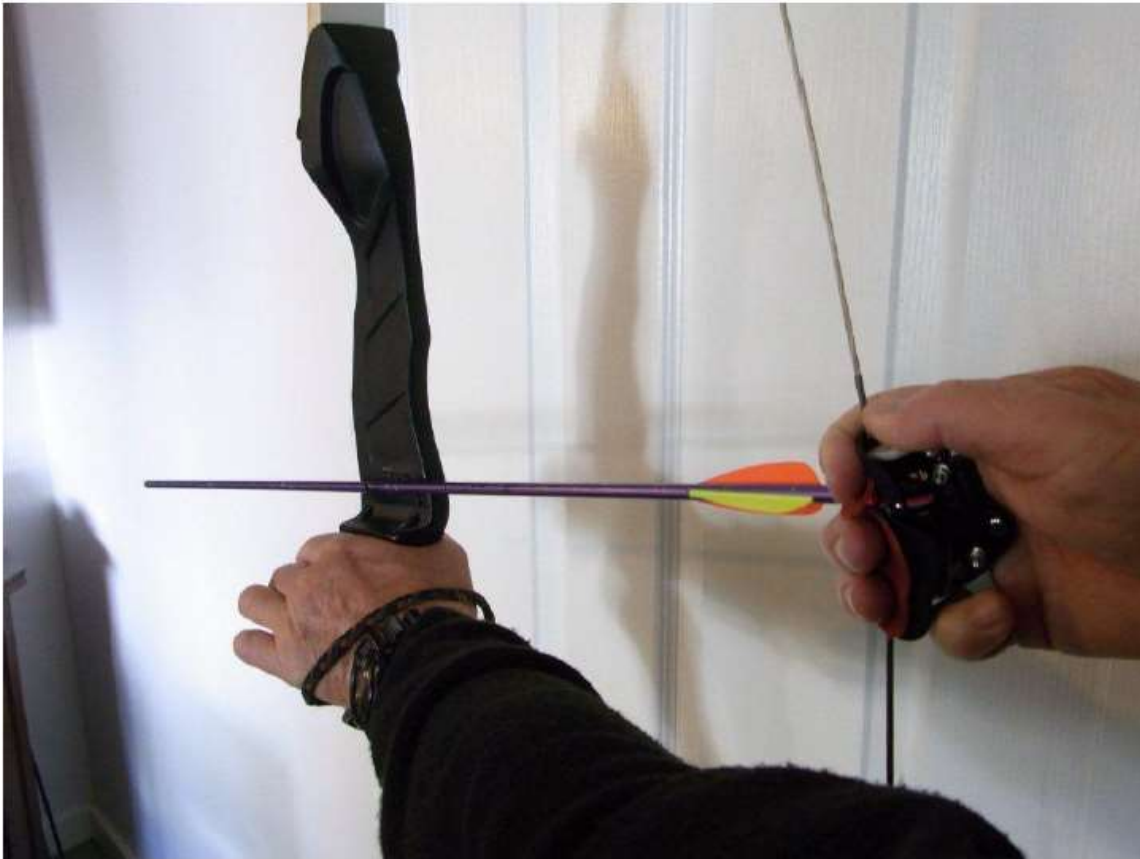
# *NINE STEPS TO THE 10 RING*

## 1 STANCE



- This photo shows a square stance, side on to the target.
- An open stance would have the lead foot 20cm back from the centre line (and vice-versa for closed).
- Feet are shoulder width apart.
- Knees are relaxed, not locked backwards.
- An upright spine indicates good posture.

## 2 NOCKING/STRING GRIP



- Index Vane is away from the side of the bow.
- The arrow is nocked firmly between nocking points of the string, on the arrow rest.
- Use the three drawing fingers (the index, middle and ring fingers).
- Index Finger on top of the arrow and the other two fingers below the arrow, gripping just behind the first joint with the middle finger, just in front of the first joint with the index and ring fingers.
- Get a good grip on the string while also keeping it relaxed during the pre-draw.



### 3 BOW-HAND PLACEMENT



- The bow should fit between the index finger and thumb of the bow-hand, with the finger and thumb forming a loose ring around the bow handle.
- The bow-hand should be positioned with knuckles at 45 degrees from vertical, completely relaxed throughout the drawing, aiming and release steps of shooting.

## 4 PRE-DRAW



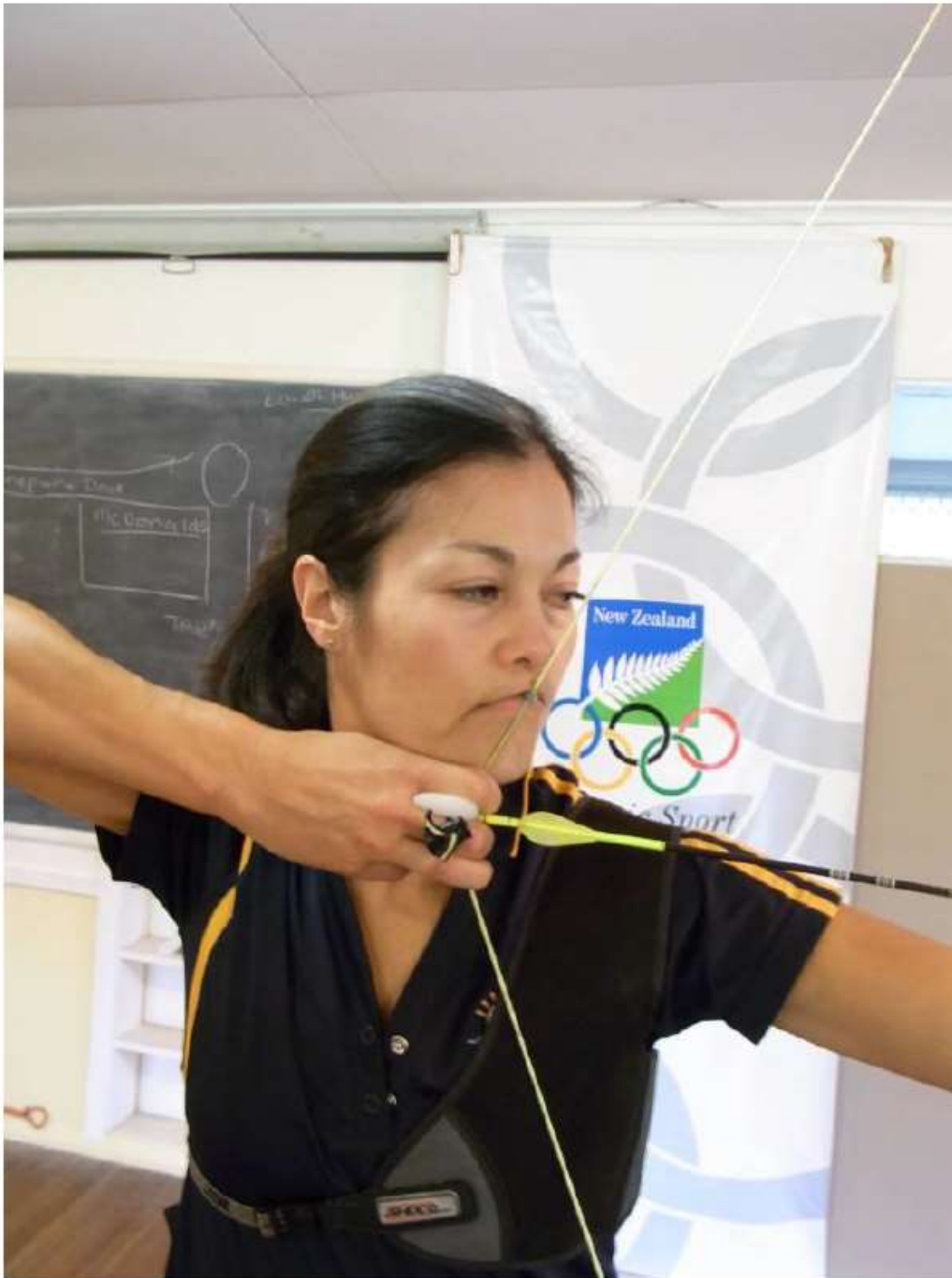
- Bow-arm is extended at shoulder level.
- Elbow joint is turned downwards away from the path of the string.
- Shoulders are set low.
- Pressure of the bow is centered in the 'Y' formed by the thumb and index finger of the bow hand.
- String arm is high, wrist extended, in line with the arrow, and relaxed.

## 5 DRAWING



- Muscles of the shoulder and back are used to draw the bow.
- Right elbow moves in a line parallel to the ground.
- String moves in a line close to the bow arm during the draw.
- Drawing should be continuous and smooth.

## 6 REFERENCE



- Bow string touches center of the nose and chin.
- Index finger references firmly under the chin.
- Neck should be relaxed.

## 7 AIMING



- The focus should be on the centre of the target.
- The sight pin is super imposed over the center of the target, with focus remaining on the target.
- String is positioned on the center line of the bow, just to the right of the sight pin.
- Aiming should be relaxed, not forced.
- A continuous expansion while aiming is essential for a good shot.

## 8 RELEASE



- The release is activated by relaxing the entire string hand from the wrist forward.
- The string should feel like it is sliding in a smooth straight line through the fingers.
- Back tension must be maintained throughout the shot.

## 9 FOLLOW-THROUGH



- The follow through is an extension of the release.
- As the arrow is released from the string, the string elbow rotates around.
- The string-hand should come to rest besides the neck with fingers relaxed.
- Upon release, the bow-arm will move naturally left and down from the centre of the target (for a right-handed archer), but should remain extended until the arrow hits the target.

### Stretchy Bands

The use of stretchy bands should not be underestimated. These are a useful tool for beginners to use not only for warm up exercises but also for practicing the shot sequence before they use a bow.

## Second session and beyond.

Always start with a general revision of your previous session by a few minutes of question and answer. For example.

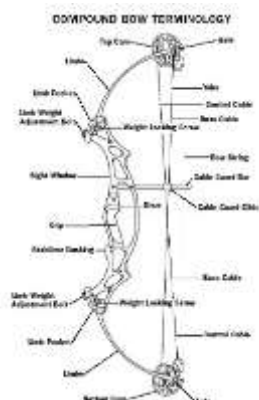
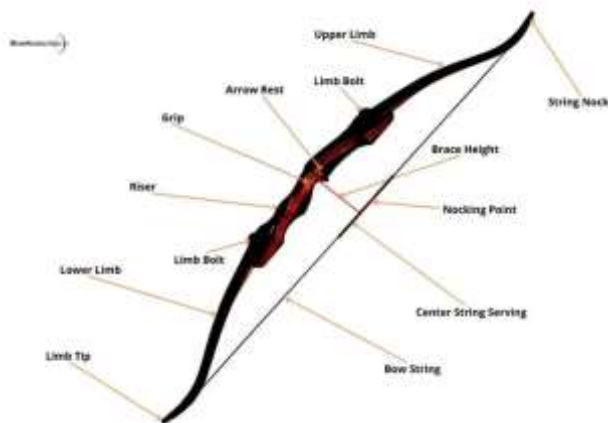
What does a range captain do?

What are some of the safety rules of the range?

How do the whistle commands work? etc.

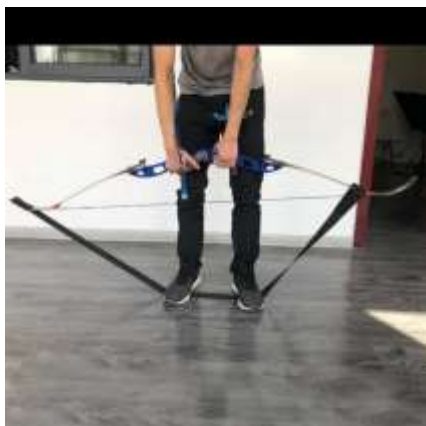
## Coaches' general knowledge

- Equipment





- **Stringing a recurve bow**



An important topic of your instruction of new archers is that you demonstrate the correct method of stringing a recurve bow particularly if they have purchased their first Takedown bow.

Two important things to look for

- ✓ are the limbs the right way round and
- ✓ is the string on the bow the right way round? *“Big loop goes on the top”*

- **Brace Height**

An important tool that all recurve archers must have, is a *“bow square”* so that they can ensure a consistent brace height is achieved according to the bow manufactures specifications.

The correct brace height range for their bow should be marked on the bow square. You should demonstrate this, and demonstrate how, and why, this can be adjusted.

### BRACE HEIGHT RANGE CHART

Riser	Limb	Short	Medium	Long
27"	Length	62"	66"	69"
	String Length	89" (150cm)	91" (150cm)	93" (160cm)
	Brace Height	8" - 8.5" (20-21.5cm)	8" & 8.5" (20-22cm)	8.5" - 9" (21.5-23cm)
27"	Length	66"	69"	69"
	String Length	91" (160cm)	93" (160cm)	93" (160cm)
	Brace Height	8" & 8.5" (20.5-22cm)	8.25" - 9" (21-23cm)	8.5" & 8.75" (21.5-22.5cm)
29"	Length	66"	69"	70"
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Always check arrows for broken nocks, or frayed strings particularly on club equipment.

## Competing in Adverse Weather Conditions

**Note: This topic is a Health and Safety issue and it is vital that it is taken seriously.**

For obvious reasons, shooting when “Thunder Storms” are in the area is dangerous, and has led to fatalities. It is vital, that all shooting outdoors ceases and everyone takes cover inside. Sheltering under trees is also not advisable, again, because of the danger of lighting strike.



As a coach, it is your responsibility to ensure everyone is safe once the storm begins.

### **Hypothermia and Hyperthermia**

As a coach, it is vital that you understand, and are able to react to adverse weather conditions so that you can protect your athletes from possible serious harm as a result of these two conditions. In an effort to simplify this subject, efforts have been taken to keep the information, in what is a complex subject, as brief as possible.

The Human body functions within quite a narrow temperature range. Normal body temperature is 37.5 degrees Celsius, but if the body temperature increases, or decreases, by as little as 4-5 degrees Celsius, then this can lead to a rapid decline in the human bodies ability to continue functioning and death will result.

**Hypothermia** is where the body temperature falls below the normal and is the result of the person being exposed to 3 factors.

- ✓ Wet
- ✓ Wind
- ✓ Cold

These 3 factors can be found when shooting on the range outdoors at any time of the year including here in New Zealand.

Research has shown, that standing on the shooting line, drawing and shooting arrows towards a target, unfortunately, does not generate very much, by way of body heat, when the archer is exposed to rain, strong cold winds, and cold temperatures.



How does the body lose heat?

- ✓ Radiation
- ✓ Direct contact from being wet
- ✓ Wind carries away layer of warm air from surface of skin.

Symptoms:

- Shivering
- Slurred speech or mumbling
- Slow shallow breathing
- Weak pulse
- Clumsiness or lack of co-ordination
- Drowsiness or low energy

- Confusion or memory loss
- Loss of consciousness
- Shivering ceases
- If left untreated, death will result from multiple vital organ failure

### Treatment:

- ✓ Get the person out of wet clothes and into dry clothes after getting them quickly into shelter.
- ✓ Warm them with **warm** sweet drinks. Note: It is dangerous to give HOT drinks.
- ✓ Seek urgent medical intervention.

### Clothing

Protection is obviously the best method of treatment. Protection is needed against the three causes of Hypothermia.

This means layers of clothing with small gaps in-between the layers. This traps air which warms and keeps the person warm.

It must be part of the coaches' range first aid kit that an emergency, thermal blanket is carried.

1. A thermal layer against the skin. Wool or polypropylene.
2. Research has shown that the body can lose up to 70% of its body heat through the head so it makes sense to wear some kind of head covering such as a woollen "beanie" to trap that heat in from radiating away from the body.
3. An insulating layer followed by;
4. A waterproof layer.

### Hyperthermia

This is the opposite of Hypothermia and is the result of high temperatures and humidity. This condition is also known as "Heat Stroke".

Can be extremely dangerous when competing in Hot, Humid, climates such as most Asian countries and Central America where the athlete has not acclimatised to the conditions.

## **Symptoms**

- Body temperature above 39 degrees Celsius.
- Red, Hot, dry skin
- Rapid strong heartbeat
- Throbbing Headache
- Dizziness
- Nausea
- Confusion
- Unconsciousness
- Death

This condition can be tolerated by acclimatising to the conditions, but of course, this is not always possible.

Treatment is fairly straight forward. Firstly, seek urgent medical attention.

The coach must monitor the athletes fluid intake.

Drink plenty of cool fluids containing Electrolytes i.e., Sports drinks, or water with Electrolytes added. E.g., "Hydrolyte" which is a new product available from chemist. It is purchased in sachets and just added to the athletes water bottle.

**NOTE:** Too much water is just as dangerous as too little.

Wear loose clothing, preferably white in colour, NOT Black.

Wear a well ventilated hat.

Cooling towels can be beneficial, and are worn around the neck. These are available at most Safety Equipment outlets and come in a range of colours. They are kept in the fridge until needed.

Of course, this means that the coach will need a portable cool store on the range to carry these in, e.g., "Chilly bin". Two or three towels will easily last for the duration of the event.