Basic Coaching Manual

Introduction

This coaching and training manual has been designed to provide coaches with a standard format for teaching the novice and club level competitors.

Its basis is formulated using basic information relating to stance, vision and mental approach. Coaches not only need to know these basics, but have the ability to pass the information onto other shooters.

This basic coaching manual is not intended for the elite performer, but is sound in knowledge and continually refers to basic. It is from these basics that our future club, State and National Champions will be born.

The manual is printed in the best interests of coaching by the National Coaching Council of the Australian Clay Target Association (Inc).



TRAP & SKEET
A COMMONWEALTH AND OLYMPIC GAMES SPORT

Contents

Introduction

The National Firearms Safety Code

Safety

Shooting Etiqette

Points for the Coach

Cartridges

Characteristics of Shotguns

Pitch

Cast

Shooting Methods

Vision

Sports Psychology

Doun the Line Shooting

Stance

Points of Aim

Down the Line

Coaching Session

Skeet

Reference Markers

Individual Skeet Stations

Feet Position

Skeet Coaching Session

Double Rise

ISSF Skeet

ISSF Trap

Being a Winner

Summary

The National Firearms Safety Code

- 1. Treat every firearm as if it is loaded.
- 2. Your firearm is your responsibility.
- 3. Always ensure your firing zone is clear and identify your target beyond all doubt.
- 4. Never point a firearm at or near another person.
- 5. Never load a firearm until you are ready to shoot.
- 6. Keep your finger off the trigger until you are ready to shoot.
- 7. When you have finished shooting remove the magazine (if fitted) unload and then check that the chamber is empty.
- 8. Make sure that all firearms are transported securely to prevent misuse or theft.
- 9. Never allow unauthorised access to your firearm(s) or ammunition.
- 10. Do not climb fences or obstacles with loaded firearms.
- 11. Encourage safe and responsible handling of firearms in the field, on the range, and within the community.
- 12. Never mix shooting with alcohol or drugs.
- 13. Understand the operation of your firearm, keep it in good repair and always use the correct ammunition.
- 14. Never store firearms and ammunition together. Ensure they are safely locked away when not in use.
- 15. Be familiar with the legal requirements for safe storage, firearm ownership, possession and use in your state or territory, or in the state or territory you are visiting.
- 16. Dispose of unwanted firearms lawfully. Surrender them to the police or sell them to or through a licensed dealer.

OBSERVE THE CODE - INSIST OTHERS DO THE SAME

LEARN
PRACTICE
TEACH AND PROMOTE

Safety

For ALL disciplines of shotgun shooting safety can never be over emphasized and you should instruct pupils to treat all guns with the respect due to a loaded gun.

- Be muzzle conscious and in control at all times.
- Only load the gun when it is your turn to shoot.
- Coach to control ammunition for rank novice.
- Coach to be in a position to be able to "regain control" if required.
- Explain the use of the "red flag" and that you have to unload the gun immediately when the flag is shown or upon the Coach or Referee's command. Some clubs will use orange witches hats, red flashing light each State is different so make sure you explain what is required of the shooter.
- If you suffer a misfire keep the barrels of the gun pointed towards the trap and await the Referee or Coach.
- Recommend that hearing and eye protection be used at all times.
- Carry the gun "broken" at all times.
- Do not rely upon the "safety catch".
- Load one shell only for the rank novice.
- Re-enforce the fact that Firearms and Alcohol do not and never will mix.

Shooting Etiquette

A shooter is requested to abide by the following guidelines:

- Show respect for the Club Officials and the Referee, they are usually honorary and deserve your assistance and co-operation.
- It is your responsibility to ascertain your squad and layout and to be on time.
- Be considerate of and respect the other shooters right to participate without interference
- In the trap disciplines, do not move from your track until the shooter on your right has shot or a vacant one exists.
- In Trap disciplines remain on your track until the next shooter has shot and a vacant lane exists. Before leaving Track 5 to proceed around to Track 1always unload and remove all cartridges from the gun.
- In the Skeet/Tower disciplines, always open the action of your firearm, unload, before moving off the lane or station.
- Only close your gun when it is your turn to shoot.
- Where ever possible place your empty shells in the bins provided.
- In ALL competition do not leave the field before the last competitor is finished.
- Dress in a clean, neat and tidy manner with suitable footwear.
- Respect a Referee's decision and do not obstruct their field of view.

General Tips for the Coach

As a coach you are often the first point of contact that a novice shooter has in Clay Target Shooting, use this opportunity to listen to and answer their questions, and explain the "what and why" of shooting.

Do not frighten a novice with "information overload". It is often better to give them a written overview of the basics to take away with them at the end of the first session. This will help to reinforce the words of wisdom provided by the coach when they re-read the document.

The coach is usually the first contact a novice shooter has in clay target shooting, so use this contact wisely and patiently.

Explain in simple terms, make technical items understandable. (The K.I.S.S. method 'Keep It Simple')

Talk to your shooters and listen to their comments

Understand a shooters individual characteristics

Endeavour at all times to build the shooters confidence.

Take time to explain the layout and basic shooting principles of the discipline to be coached.

Reinforce Safety and Shooting Etiquette

Do not allow the shooters to become distressed by the recoil of the firearm.

Ensure that light cartridges are used in a firearm fitting the individual.

Down the line novices are best started on straight away targets from Lane 3. To see a target break, is a big confidence builder.

Skeet novices are best started on low targets from Station 1 or 7, again breaking targets builds confidence.

Dry firing will assist the shooter in visualising lead and follow through, establishing a sight picture.

Reinforce hearing and sight protection and explain the benefit of suitable clothing and footwear

Explain the benefits of comfortable clothing and practical footwear.

At all times, explain and reinforce Firearm Safety and Shooting Etiquette procedures.

Pay particular attention to gun fit and "comfort" for junior and female shooters.

Decide whether each session is best conducted as a group or as a "one on one" with the coach.

Cartridges

With the ever-increasing number of cartridge manufacturers, the choice of cartridges in Australia today, is large. This large range offers competitors an infinite choice in quality, speed and shot size.

A cartridge can be selected to meet individual needs, both for the discipline and the physical stature of the person.

All too often a cartridge is selected for the wrong reasons and without thought being given to the best cartridges for that particular purpose.

These purposes could be:

- Discipline being shot i.e. Standard Skeet as against ISSF Skeet
- Physical stature of a competitor
- Style of shotgun being used
- Experience and the ability of the individual

For the novice shooter, care should be taken to select a cartridge with minimal recoil, so as not to create ongoing problems which excessive recoil can cause. It is a fact in our sport that the slowest competition cartridge available will break clay targets, if the shotgun is pointed and controlled correctly.

It is the coach's task not to allow the pupil to lose confidence because of poor cartridge choice.

Down the Line 28 gram (1 oz) 7, 7 1/2, 8

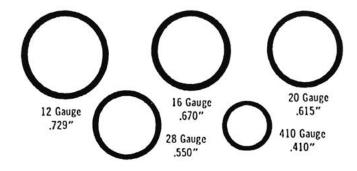
Skeet 28 gram (1 oz) 8, 9

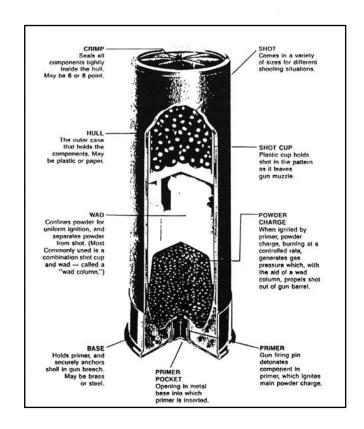
ISSF Trap 24 gram (7/8 oz) 7, 71/2, 8

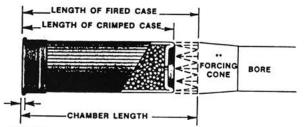
ISSF Skeet 24 gram (7/8 oz) 9

12 gauge is the most commonly used shotgun gauge in Australia, followed by the 20 gauge in small numbers.

Shown below is an actual size comparison of 12 gauge through to 410 gauge.



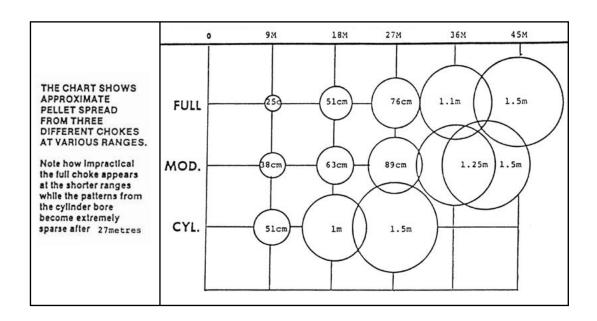




*HEADSPACE

**A tapered section of the barrel, forward of the chamber, which eases the passage of shot from case mouth to the bore.

This illustration shows the chamber, forcing cone and bore of a shotgun. Pictured is a cartridge case as it might appear in the crimped stage. While it is quite permissable to use a short shell in a long chamber, the reverse is never true.



Characteristics of Shotguns

As with cartridges, the range of shotguns available to the competitive shooter is both large and varied.

It is imperative that the coach has a sound basic knowledge of their characteristics and fundamental differences, so that they may impart this knowledge to their pupils.

When advice is given, careful attention should be taken of the physical makeup of the pupil and directly relate it to the firearm. Items such as left or right handed, height, weight, neck and arm length should be noted.

These individual characteristics should mate to the firearms dimensions i.e. Monte Carlo, flat trap or skeet stock as well as barrel length, chokes and overall weight.

A wrong choice can make the process of learning the sport of clay target shooting difficult. The individual may have preconceived ideas of a preferred brand, use this knowledge, coupled with logical explanations to enable them to make the right choice.

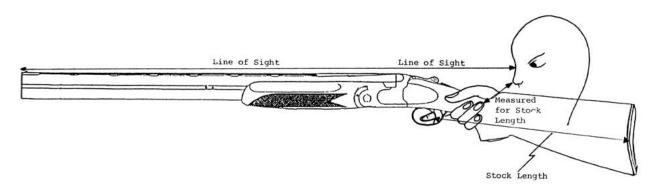
STOCK LENGTH

Stock length is given as the length of pull measured from the face of the trigger to the centre of the butt. This measured length varies according to individual characteristics and may be calculated using various methods.

One method is to measure the distance between the leading finger (of the hand holding the pistol grip) and nose. Average measurement will be 30 mm to 40 mm.

Another is by measuring the distance between the rollover of the thumb (of the pistol-gripped hand) and the nose.

Average measurement will be 25 mm to 40 mm. Measurements are taken with the shotgun in the mounted position.



BUTT

This is the flat end of the stock to which the recoil pad is fitted. The upper point is called the heel and the lower point is called the toe. It is by altering the angle between the two, that the required barrel pitch is obtained when the gun is shouldered.

FOREND

The forend is the under barrel handgrip forward of the action that enables the user to grip, balance and direct the shotgun. The shape and size of forends are varied and the individuals hand will dictate the choice.

GRIP

The grip is the section of the stock held with the rear hand. This grip hand is used to bring the stock to the face and hold the firearm to the shoulder.

A semi pistol grip style is generally designed into Skeet and Trap shotguns. As with the forend, the individuals hand will dictate the size and shape.

BALANCE

Most of the 'off the shelf' over and under shotguns have a balance point at or around the barrel / action hinge pin.

BARRELS

Depending on the discipline being shot, barrel dimensions are reasonably static.

Skeet 70 cm choked, Skeet and Skeet

Trap 76 cm choked, Modified (1/2 choke) & Full

Barrel weights are becoming increasingly important in the choice of shotgun. Individual characteristics, styles and discipline being shot will dictate the required weight.

CHOKES

The easiest way to describe the variation of choke bores to a novice, is to state "as the inside diameter or bore is decreased at the muzzle, the shot charge is held more tightly together over a longer distance. Conversely, the more open the bore is at the muzzle, the more spread the shot charge will be at a similar distance".

INTERCHANGEABLE CHOKES

PITCH

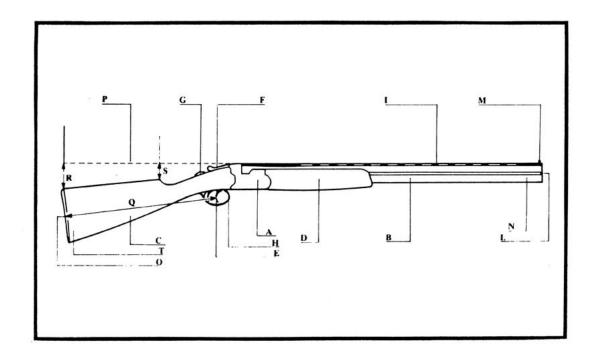
Pitch is the relationship between the flat line of the barrel rib and the heel and toe of the butt. The measurement is obtained by placing the gun against a 90 degree upright with the butt / recoil pad flat on its base. When the area of the top lever touches the upright, the gap between the rib at the muzzle and the upright is the PITCH.

Trap 40 mm Skeet 60 mm

The amount of pitch required is dependant on the individuals physical proportions i.e. shoulder, neck and chest.

Too much toe may cause the muzzle to rise.

Too much heel may cause the muzzle to drop.



A action
B barrel
C stock
D fore-end
E trigger
F top lever
G safety
H trigger guard
I ventilated rib

L side rib
M front sight
N muzzle
O but plate
P line of sight
Q stock length
R drop at heel
S drop at comb

T toe

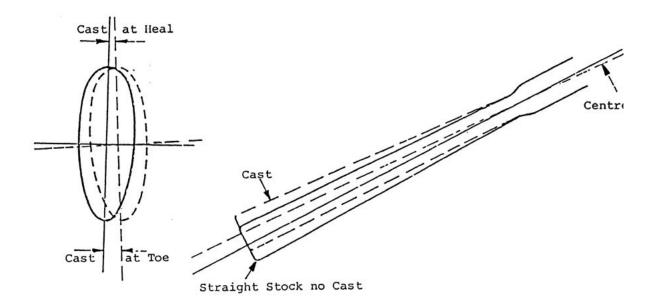
CAST

Cast is the term used to describe the deviation of the buttstock from the centre line in either the vertical or horizontal plane.

This is termed "Cast at the heel or cast at the toe".

Individuals with wide shoulders may require more cast tan a person of average build. This may average out at 5 degree at heel and 10 degree at toe.

"Cast can become technical and should be discussed with an expert"



Shooting Methods

The shotgun as distinct from a rifle, is a smooth bore pointing firearm, used for shooting moving targets.

Shotguns fire a cartridge containing a quantity of lead shot, unlike a rifle which fires one projectile.

Because of the time lapse between pulling of the trigger and breaking the moving target, a different style of shooting is required.

This style has become know as Lead, Swing or Forward Allowance.

1. SWING -THROUGH

The gun muzzle starts from behind the target and is swung through the target.

The trigger is pulled as the muzzle passes the target; the momentum carries the muzzle through to obtain lead.

Care must be taken not to stop the swing as the trigger is pulled.

2. POINTING OUT

Here, the shooter passes the muzzle through the target and when the re quired lead is obtained, pulls the trigger maintaining the lead.

The muzzle must not stop after the trigger is pulled.

3. SUSTAINED LEAD

The shooter positions the gun with the muzzle in front of the target obtains the correct lead and pull the trigger.

This is a similar style to 'Pointing Out', and often used in Skeet.

4. SPOT SHOOTING

With this style the shooter estimates the required forward allowance and pulls the trigger while the muzzle is stationery. This method is extremely difficult to master and is least used.

All four (4) methods may be used as occasion's demand.

To assist the shooter in understanding swing and follow through, have them complete this simple task.

Place two (2) easily seen pegs approximately 20 metres away from the pupil and 10 metres apart. At the midway point between the pegs, place another clearly visible object (this represents the target).

Have the pupil start from one peg and swing the mounted gun through to the other peg. As the gun muzzle passes through the central object, have a pupil pull the trigger and without stopping the gun, complete the follow through to the second peg.

This demonstration should enable the shooter to see and understand the gun swing and follow through required to break targets.

THE MECHANICS OF SHOOTING CLAY TARGETS

The coach should explain that although there appears to be many similarities in shotgun shooting, each form has its own peculiarities. Take the time to explain the different cartridges able to be used (i.e. 24g, 28g and 32g loads).

Explain the variations in the firearms able to be used (i.e. sporting, trap and skeet guns together with the varying barrel lengths and various chokes available).

Vision

Seeing the target is the most important part of shooting, to be able to shoot targets a shooter has to be able to ascertain target flight and obtain a "sight picture" to develop consistency.

As a shotgun is pointed and not "aimed" like a rifle, the novice has to learn to focus on the target.

The shotgun sight is only there to assist in correct gun mounting and in developing a sight picture. Explain that initially it is up to the novice and either way is okay.

Coach to do the "dominant eye test" to assist with the initial decision of what shoulder should the novice mount the gun.

A common question asked by novice shotgun shooters is "should one eye be closed or should both eyes be open?" In reality, the shooter should be asking be asking, "Which eye should I be using?" To answer these questions, it is necessary to know which is the master eye. For most people, one eye is more dominant that the other. The more dominant eye should dictate which shoulder the gun should be fired from. To decide which eye is dominant perform this simple test.

Point the index finger at an object with both eyes open, and then close first the right eye, then the left eye. If the finger stays at the object either the right or left eye, that eye will be dominant. If the finger movement appears with both eyes, then they are approximately equal.

When eye dominance is established, consider the advantages of shooting with both eyes open.

Explain the benefits of developing a binocular view, with improved perception of:

distance judgment
 Better judgment of distances

depth of field Improved depth perception

• greater peripheral Increase in peripheral vision

By seeing the target quicker and clearer, the chances of hitting the target are greatly improved.

Some shooters are right handed, but left eye dominant (and visa versa), but are able to change shoulders. This may sound difficult, but shouldering a gun becomes habitual and with practice a change can be effected if deemed necessary. Another method used to correct opposite eye dominance is to place a small patch of paper onto the left lens of the shooting glasses, alleviating the eye dominance (right lens for a left hander). This leaves the shooter with good depth perception and an unimpaired field of view.

These possible solutions do not mean that one cannot nor should not shoot with one eye closed. It is to the shooters advantage to shoot with both eyes open. An example of which would be shooting Doubles in Skeet. The shooter using only one eye could be more disadvantaged in seeing the second target, than the shooter using both eyes with the extra peripheral vision.

There are many techniques used to exercise and strengthen eyes. If a novice has dominance problems explain the use of "opaque patches" on their glasses or simply closing the eye, and advise of the existence of "sport optometrists" to give specialist assistance for eye problems. An optician will be able to explain suitable exercises even though glasses may not be necessary.

The ability to see a target clearly, visualises its' flight path and precisely point the gun, will ensure a well timed and accurate shot - paramount in clay target shooting.

Shooting Equipment

The coach should explain the reasons behind using the various pieces of equipment to assist in shooting Clay Targets:

- Shooting glasses to provide eye protection
- Earmuffs or earplugs for ear protection to reduce the repetitive noise of the shotgun or aid concentration
- The shooting vest to provide a stable gun mounting position, carrying cartridges or empty shells or providing additional recoil protection
- Comfortable clothes, footwear and a hat; Clothes to assist with gun mount and swing; Footwear to assist overall shooter stability and a hat to reduce the affects of sun and glare
- The benefits of good wet weather gear, etc

GUNS, GUN MOUNT & GUN FIT

A coach should always explain the "basic" of gun fit and a gun that is "fit for purpose". This is often easily visible when a novice is having their first few shots at clay targets. Do not discourage the novice if their gun is obviously not suited for the particular discipline the novice wishes to shoot. If there is a problem, explain that the particular gun is not ideal for this particular discipline but would be good for (x) type of shooting.

Explain how to correctly mount a shotgun and that once the pupil know how to mount the gun and just how important it is to mount it the same way for every shot.

In doing this the coach should explain how to:

- create "the pocket" by raising the trigger-hand up to horizontal
- fit the gun into the pocket, remembering that juniors and ladies may need to raise the gun barrels up into the air to position the gun
- position the cheek upon the gun and what sight picture a shooter should see
- grip the gun with the trigger-hand elbow bent about 90% and to be raised no higher than horizontal
- position the trigger in the first joint of the trigger-finger (on the firm bit) and explain how to hold the pistol-grip to ensure the trigger-finger does not lay along the woodwork of the gun

• position the forehand in the middle of the checkering on the forend of the gun, grip it comfortably but not tightly, and extend the index finger along the forend parallel to the barrels

If a novice is not performing well with their firearm encourage the shooter to try a few other guns that may be "more suitable" after they have tried their own gun. Explain that until the novice gain some experience it may be best to use the "club gun" or a borrowed gun if their gun is unsuitable. Explain the value of taking some time and trying different guns until they have gained the basic knowledge to purchase their first competition gun. Attempt to direct them to a reputable gun dealer who is involved in the sport and can assist in the buying decision.

Initially, do not bewilder a novice with all the technical issues of pitch, cast, length of pull and height of comb, etc. A coach should concentrate on and explain stock length, how to grip a shotgun and the height of the comb to aid good gun fit. The additional information can and should be explained after the novice has got over the initial shock and has digested the basics of clay target shooting. If a novice insists on buying a gun early definitely explain the detail prior to any buying decision.

Sports Psychology

Sports psychology is the thinking side of sport. Any sport requires more than just the conditioning work or practicing and performing the skills. Every competitor has to think his or her way through the event.

In training, when it really doesn't matter if you make a mistake, endurance is sometimes tested, skills are often developed, but thinking is not taxed in the same way that it is when you are actually competing.

Today's athletes no longer have to battle the process of trial and error in finding a 'Mental Approach' that suits their sport. The principals and training programs of applied sports psychology have now been developed to a level where coaches and athletes can easily avail themselves of material that relates to their sport and which very effectively de-mystifies the psychological factors of sport.

MENTAL PREPARATION

Mental preparation is sport involves the design and practice of structured thinking approaches. Often, to be an effective competitor, an athlete must think and do certain things that are completely unnatural, such as being composed, focussed and controlled when the entire stadium is going crazy, trying its best to distract them.

If athletes base their mental preparation on things beyond their control, they will waste a considerable amount of mental and physical energy in the process of worrying about what might happen, given certain unforeseen circumstances.

On the other hand, if athletes base their mental preparation on things they can control and spend their time in training and practicing these skills, by the time of competition they will have very little left to worry about and will be able to approach the event with a much more focus and confident attitude.

The key to mental preparation is then to identify what can and cannot be controlled in your sport. Many of the 'psychological factors' in sport are the subject of every day conversation, to be an effective coach you must be able to look at them from the perspective of what can be controlled.

Motivation

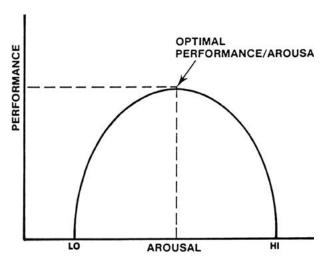
Coaches cannot control the motivation levels of their athletes. They certainly cannot control their athlete's reactions to various imaginative 'motivational techniques' sometimes adopted in the name of lifting performance. Through the programming of training sessions and competition support. Coaches can assist athletes to continue to work towards desirable goals.

If an athlete prepares for a competition and is concerned about whether they will be able to lift enough for the event, or worse still, if they are relying on the coach to provide that 'little bit of magic', they are basing their preparation on something they cannot directly control.

The athlete, who with the help of their Coach, establishes clear goals to work towards each day and who plans for competition - mindful of those goals, is directly controlling their own motivation to compete. Focussing on efforts levels and what can personally be achieved, is much more motivating than focussing on uncontrollable factors.

AROUSAL AND PERFORMANCE

The classic representation of what happens to an athlete's performance as their level of psychological arousal increases in shown in the diagram below. The suggestion is that as your heart rate, blood pressure, respiration rate, tension levels, etc increase, performance increases to an optimal point and thereafter decreases at an alarming rate.



Whilst this is a good representation of what does happen to athletes under competitive pressure, we must not so readily accept that it is inevitable.

The athlete who is worried about the result of the event, the other competitor, the conditions of the venue, the weather or recent training sessions is certain to feel uncomfortable going into competition and will almost certainly be a victim of the 'inverted U' (or is it really a victim of their own thinking - none of those things can be controlled)

Coaches who make last minute changes to strategy or tactics or who stress striving for results are not helping here.

The athlete who is aware of the relationship between arousal and performance and who has spent time in training and developing self control skills, knows that they can move up or down the arousal scale to match their current needs. The athlete, who has developed an understanding of what they should be concentrating on at various stages of their event, knows what to focus on when competing and how to regain concentration when they have been distracted.

Athletes can control their level of arousal and their concentration. With practice, a competition can become something to look forward to, a chance to test their skills under 'pressure'.

Down the Line Shooting

The secret to Trap shooting is in gaining muzzle control. This can only be obtained if the following points are learnt and practiced.

Listed below is what is considered to be 10 easy to remember basic principles of shooting. Set out

THE 10 BASIC PRINCIPLES OF SHOOTING - THE 10 F'S

FEET – positioning

FORWARD LEAN – transference of weight to the front leg.

FIREARM FIT – gun mount, fit to face, free and easy, no force

FRONT OF TRAP – gun hold position

FOCUS OF EYES – out past trap.

FINGER ON TRIGGER - firm pressure, feeling first joint of index finger.

FORGET OUTSIDE INFLUENCES - your call for the target should be a flowing loud, clear and precise call (due to the phono-pulls) NOT faint, feeble or faltering. Be flexible, relaxed but alert.

FIRE AT TARGET - Focus on target, not foresight in front, target may break if behind, forever flying! (see the target move - shoot the target)

FOLLOW THROUGH - Go to next station for your first target of the rest.

FEED BACK – self assessment.

To explain points in more detail:

GUN FIT

The gun butt should be placed to the shoulder, inside the point of the shoulder, never out on the upper arm.

If the gun is mounted to the shoulder correctly, then the eye should be directly in line with the rib of the gun, with no undue pressure placed on the neck or arms to obtain alignment.

If this alignment can not be obtained in a relaxed manner, then the reason may be found by checking the following:

- Is the stock of the gun too long or too short
- Is the stock too straight or does it have too much cast

A coach will help determine which of the above is a problem.

Hold the gun firmly in both hands, making sure the gun feels balanced. The arms should be held out from the body with the right arm (the left arm for left-hand shooters) just below the level of the shoulder. This should then create a relaxed position and a feeling of total gun control.

So Shooter X comes to you with a new gun and asks your help to see that it fits. Use the following steps:

- Check the pull: 367mm or 14 ½ inches
- Check stock length with gun mounted. The line of fingers and the nose and chin, then look at the gap, it should be 40mm or 1 $\frac{1}{2}$ inches.
- Eye Rib alignment: Have the shooter mount the gun with eyes shut. When he is comfortable, open the eyes. The pupil of the eye should be straight down the rib.
- Comb Height: With the gun mounted, place 2 x 20 cent pieces on the rear
 of the rib and the shooter should be able to see over them to about half
 way along the rib.
- Pitch: is the relationship between the line of the kick pad to the line of the barrel rib. The gun will need negative pitch. Check this in a doorway start with 50mm or 2 inches. Many shooters need more than that.
- Patterning: Pattern from 30 to 33 metres. Have the shooter shoot at the mark as he would a straightaway target....don't rifle shoot it. Continue patterning until the centre of the pattern is 60/40 above then the top barrel will be about 70/30.

To change the pattern centre downwards, place a wedge in the heel of the kick pad, 2mm or 1/8 inch will move the pattern a fair amount, Keep at it until 60/40 is reached.

- Now Test: it by having the shooter mount the gun straight out from the body and fire the gun. By standing to one side you can then observe the barrel. It should remain still.
- Last Test: Set the trap straight. Have the shooter shoot the straight away at 6 o'clock on the target. He should break the target very well. The shooter should have the feeling that the gun shoots itself.

THE GUN NOW FITS.

BODY POSITION

Correct body position can be obtained by the following two (2) simple tasks:

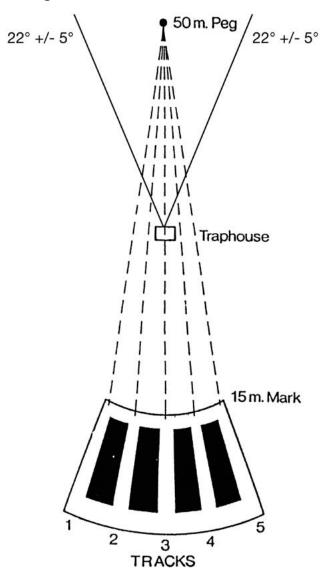
• Stand upright, there is debate as to whether or not to bend the front leg. As there is no right or wrong way however, it is important to transfer the weight onto the front foot.

• Lean forward from the waist so that the points of the shoulder are in front of the hips. This will bring the body to a position that will allow the recoil of the gun to be absorbed without losing balance. This will benefit a smooth follow through.

This last point is very important, as the shooter needs to be balanced after the first shot to enable to second shot to be fired correctly. This then is the muzzle control, first mentioned at the beginning of this section.

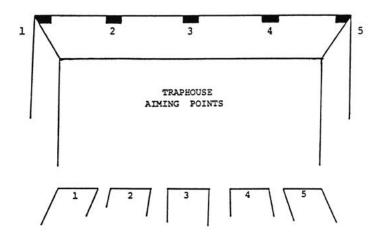
FEET POSITION

The feet should be positioned far enough apart to give a feeling of balance, a little practice will determine how far apart this is. Try 200 mm to 300 mm between the feet for a start. The feet need to be aligned differently for each of the shooting lanes (1 to 5). The reason for this is to make allowances for covering all angles, including the hardest target thrown, as viewed from each lane.



GUN POSITION

The trap house should be divided into 5 sections, one for each lane (as per diagram). This then sets the shooter up to be able to cover the hardest target thrown in relation to each lane

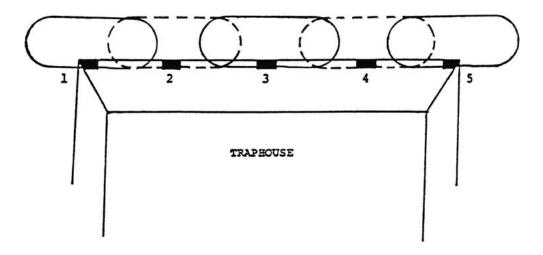


EYE FOCUSSING

Having now obtained the correct gun mount, feet position and gunpoint on the trap house, the next thing to do is focus the eyes into the right area.

The diagram below shows you the correct field of focus for each lane, allowing total visibility of the area in which the target will appear.

When focussing the eyes, make sure that the head does not lift from the gun stock comb. Simply raise the vision to take in the required area. This act before calling 'pull', should only take a few seconds.



STANCE - GENERIC

One of the most important aspects in shotgun shooting is to have a simple basic stance, which allows the shooter balance both before and after the firing of one or more shots, enabling control with smooth follow through.

A shooters stance should be comfortable and natural so that it can be consistently applied.

Exaggerated or varying stance puts stress on the shooter, which leads to fatigue and imbalance with resulting inconsistencies, particularly in trap shooting where target angles are varied.

If practiced, a shooter can easily adopt a correct stance, which will be consistent, using the following pointers:

- Facing the target area, the feet should be far enough apart to give the body natural balance. For persons of average height, this distance will be approximately 200mm to 300mm. If right handed, the left foot will be slightly forward of the right. If left handed, the right foot will be slightly forward to the left.
- Feet positioned too closely together will make the shooter top heavy and feet positioned too far apart will restrict the body swing to either the left or right side.
- Bend the forward knee slightly and allow approximately two thirds of the body weight to bear on the front foot. With the weight forward, a much freer swing to the left and right can be attained, than with the front knee locked. NEEDS TO BE RE-WRITTEN RE: WEIGHT TRANFERANCE
- Lean slightly forward from the hips. This assists the body to absorb the guns' recoil and allows for a better pivot. Hips should never be forward of the shoulder (a common fault with new shooters.)
- To provide stability for the shooter to swing, footwear should be comfortable and have a wide flat sole.

In Down the Line shooting, the targets are shot from five (5) different lanes, radiating out at varying angles from the centre of the trap house. Targets are thrown at random angles from an oscillating trap and therefore correct feet positioning is essential, to make the shooting of extreme angle targets easier.

Correct feet positioning on each lane can be achieved if the shooter places their feet, as if to fire a shot at the fixed 50 metre peg. This peg is in line with lane number 3 in front of the trap house. To check these positions, raise the gun to the shoulder (in a standard shooting position), it should be pointing approximately towards the 50-metre peg.

POINTS OF AIM

In addition to the shooter adopting the correct stance and feet positions and to further assist them with angling targets, points of aim relative to the particular lane and trap house should be used.

Points of aim should be on or slightly below the leading edge of the trap house, so that when instantly the target appears, the shooter can identify the targets line of flight.

Points of aim over the trap house may cause the shooter to jump the target, rather more than follow its line of flight. As a shooter gains experience, so the point of aim may alter to suit their individual technique.

Lane One

The point of aim should be the top left hand corner of the trap house to cater for left swinging targets.

Lane Two

Point of aim is between the left corner of the trap house and the centre point of the leading edge.

Lane Three

Point of aim is the centre of the leading edge of the traphouse.

Lane Four

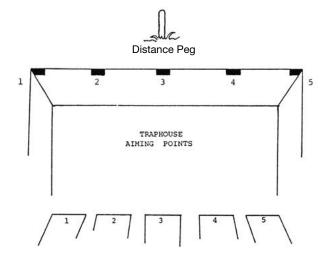
Point of aim is between the centre point and the top right hand corner of the leading edge of the trap house.

Lane Five

Point of aim is the top right hand corner of the trap house to cater for the right swinging targets.

These points of aim, together with correct feet positioning, give the shooter a distinct advantage when shooting acutely angled targets.

All the above points should be adopted and practiced not only by novice shooters, but also by experience shooters, who may find that this extra attention to detail will improve their shooting performance relative to a particular target.



Down The Line — Coaching Session

Have Trap layout set for minimum legal distance and straight away targets.

- i. Briefly review of safety rules, gun handling on club grounds and shooting lanes.
- ii. Discuss previous shooting experience and shooters initial introduction to Down the Line shooting.
- iii. Check individual shooters firearms for Down the Line discipline suitability.
- iv. Proceed to trap layout lane 3 and 15 metre mark (an alternative is the 11 metre mark)
- v. Explain, demonstrate and have the shooter adopt:
- Correct stance
- Correct gun mount position
- Correct aim / reference points
- vi. Show the shooter a target and have them shoot at as many targets as required to form an opinion of technique.
- vii. Suggest and explain correction i.e.
- Stance
- Follow through
- Visual references
- viii. Proceed shooting 5 10 targets. The average person will hit some targets, but basic techniques are the required result.
- ix. Allow shooters to relax at this stage, demonstrate and have them adopt feet and aiming reference positions from Lanes 1, 2, 4 and 5. Explain angles and swinging onto and through targets.
- x. Shoot 5 -10 more targets from Lane 3.
- xi. Finish the session by shooting 2 targets from Lanes 1 through to 5.

Conclude the session with a general discussion, giving the shooter encouragement and positive advice.

Skeet (Standard)

The standard discipline of Skeet, or as it is more commonly known 'American Skeet', may be shot using two different styles of gun mounts.

- Gun mounted up to the shoulder
- Gun down or off the shoulder.

The gun mounted up to the shoulder is accepted as the standard position.







Alternative Skeet ready position

POINTS TO BE REINFORCED.

- Feet positioning and balance is first and foremost in importance.
- Gun to trap house point positions are important.
- Using the gun hold markers, position the muzzle slightly beneath the target flight line.
- Targets must be seen before the gun is moved.
- Never Call before completely ready.
- A good follow through is essential
- Do not all the first target in doubles to be a rushed shot.
- Do not allow Station 1 High or Station 7 Low to be a rushed shot.
- Explain that backgrounds can affect gunpoint positions.
- Crossing point is OUT from Station 8.

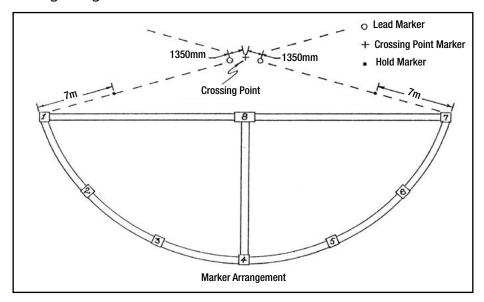
REFERENCE MARKERS

The use of reference markers cannot be understated as a coaching aid in Skeet shooting.

When used correctly, they leave no doubt in the pupils minds as to where the gun is held in relationship to the trap houses, the placement of feet and the estimated lead needed to break targets at a particular point.

A good marker is one that can be easily seen, yet not obtrusive i.e. orange conduit or road marker cones.

These markers are set out as per diagram and may be varied according to the technique being taught.



- The gun point marker for the High Trap is placed 7 metres from the house and under the flight line.
- A marker is placed at and under the target crossing point.
- The gun point marker for the Low Trap is placed 7 metres from the house and under the flight line.
- A High house lead marker is placed 1.3 metres (4ft) to the left of the target crossing marker (under the flight line)
- A Low house lead marker is placed 1.3 metres to the right of the target crossing marker (under the flight line)

As the shooter starts from Station 1 and moves around the stations, they will observe the lead markers getting further apart until Station 4 is reached.

The distance will then appear to decrease as the pupil reaches Station 7. This distance, seen between the markers is the estimated lead required to break single targets at or around the crossing point.

The gunpoint markers will also appear to vary, but will enable the pupil to correctly position the gun / muzzle for each station being shot.

INDIVIDUAL SKEET STATIONS

Station 1 and 7 Outgoing Targets

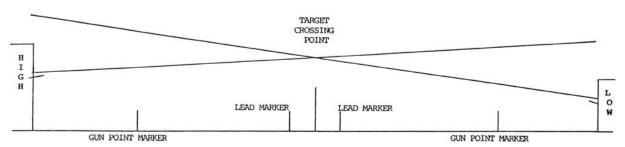
These two are the only targets that move directly away from the shooter. High 1 must be shot as a target falling onto the gun muzzle and Low 7 is shot as a rising target where the gun muzzle passes through the target.

Station 8

As these targets must be shot before the target crossing point, care must be exercised to see the target clearly. The gunpoint markers are still used with the gun muzzle held at the height of the lower edge of the target chute.

Doubles 1, 2, 6 and 7

The first target should be shot as the single target was, except after a short follow through, reverse the guns direction and shoot the second target as the muzzle passes through it.



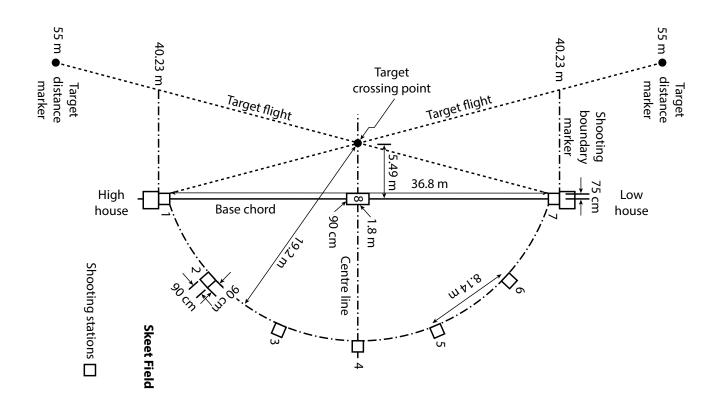
FEET POSITION - SKEET

Positioning the feet correctly for a novice is and will be variable until a moderate level of skill is learnt. The shooters feet should be positioned to enable them to shoot a single target in the area of the target crossing point (out from Station 8).

Body position is perhaps the most important single factor in successful Skeet shooting. When shooting, avoid any body position, which requires the use of muscles not normally used in a relaxed standing position. Extraneous movements or an exaggerated stance will contribute nothing to the score. A proficient Skeet shooter must remain well balanced while swinging, delivering the shot and following through.

A transference of weight should be applied to the forward leg. The body may lean forward from the hips, but not over exaggerated to the point of being off balance or tense. Feet should be placed at a comfortable distance apart, best described as no wider than the shoulder.

Too close or too far apart will create balance problems and unnecessary muscular tension. The body must be relaxed, balanced and comfortable.



Skeet Coaching Session

Have the Skeet layout set for correct height and minimum legal distance with markers in position.

- i. Brief review of the safety rules, gun handling on club grounds and shooting stations.
- ii. Discuss previous shooting experience and shooters initial introduction to Skeet shooting.
- iii. Check individual shooters firearms for Skeet discipline suitability.
- iv. Proceed to Skeet station Number 7
- v. Explain, demonstrate and have the shooter adopt:
 - Correct stance
 - Correct gun mount position
 - Correct aim reference point
- vi. Show targets and have the shooter start with Low 7
- vii. After initial targets, discuss and adjust for High 7
- viii. Suggest and explain correction i.e.
 - Stance
 - Follow through
 - Visual references
- ix. Doubles may be attempted from Number 7 to reinforce demonstration in timing and follow through.
- x. Move to Station 1 and repeat the procedure. After satisfactory progress, move to Station 2 and then 6, shooting incoming targets followed by High 2, Low 6 and the Doubles.
- xi. Station 8 may then be used to finish this practical session.

Conclude the session with a general discussion, giving the shooter encouragement and positive advice.

SKEET DOUBLES

Doubles are an integral part of Skeet Shooting in Australia. Doubles are used as an option to determine ties in regular Skeet and as part of the High Gun at State and National Championships. Shooters need to be proficient at Doubles. It is important to note that in America (the home of Skeet shooting) all shoot offs to determine positions are conducted on Doubles.

Points to be reinforced.

- i. Gun position is optional however gun must be on the shoulder when shot is fired. (majority of shooters shoulder the gun prior to calling for targets)
- ii. Doubles need to be made as easy and simple as possible and must be enjoyable.
- iii. A foot position needs to be taken at each station favoring the hardest target.
- iv. Shooters balance and a smooth swing is essential.
- v. Targets must be seen before the gun is moved.
- vi. Head must be on the gun when the shot is fired.
- vii. Both shots in Doubles must not be rushed.
- viii. After the first shot, second target must be seen before the gun is moved back for the second shot. (A flick with the eyes from the first to second target while keeping the head on the stock will achieve the best result)
- ix. Timing is of the utmost importance. (Remember the second target will be at an equal distance from the crossing point when the first shot is fired)
- x. Normal doubles (as per standard skeet) on stations 1,2,6 &7.
- xi. No need to rush stations 3,4,&5.
- xii. Remember low target shot first on return from station 7 to 1.
- xiii. Shooters need to have confidence in their equipment and ability.
- xiv. All smooth bore guns not less than 63 cm in 12 gauge or less can be used.
- xv. Ammunition of 28gm or 1oz is the maximum allowed.
- xvi. Heavy shells causing excessive recoil, muzzle flip and flinching are undesirable.

Note: all targets at skeet doubles can be broken with 24gm shells with no9 shot at 1200 ft per sec. with skeet chokes.

- xvii. Swing through and sustained lead are the preferred methods used to shoot skeet doubles.
- xviii. Shooting glasses and hearing protection is mandatory. Refer to earlier sections on:
 - cartridges.
 - characteristics of shotguns.
 - shooting methods.
 - vision.
 - sports psychology.

All these sections equally apply to skeet doubles.

Double Rise

Double Rise shooting requires good timing, smooth gun / muzzle and body control.

Two methods are used to shoot this discipline, using a standard Trap gun.

- Shoot the straightway target first, followed by the angled target i.e.
 From No. 1 Lane the right target is straight
 From No. 5 Lane the left target is straight
- Shoot the right hand target first (from each lane) followed by the left target (visa versa for left handed shooters)

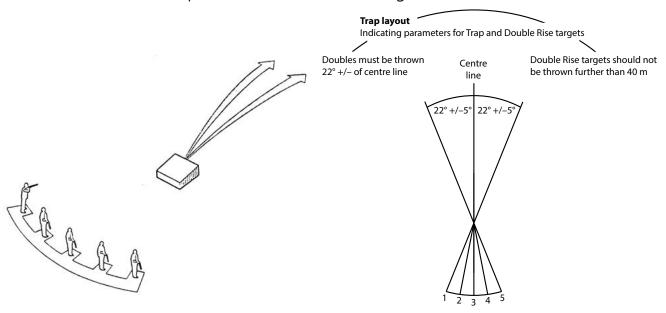
Stance has to be carefully considered, as the ability to reverse direction and shoot the second target, demands both smooth body and gun movement.

Care must be taken to ensure that the head does lift from the comb while moving to the second target, consequently breaking gun eye co-ordination.

The first target should be shot slightly faster than the same target in DTL, but knowing the target direction facilitates this without extra effort. The second target is then shot after a fast but smooth crossover.

With the target flight line know (per lane), the barrels may be lifted to that line, in a trap high point position. This will enable a quicker first shot. The second target, when taken with a fast but smooth swing, does not need visual lead, for the trigger is pulled as the muzzle passes the target and lead is automatically established.

The above method is used by good doubles shooters, but to start with, a more traditional gun aim reference point on the trap house will enable the novice to understand the technique of Double Rise shooting sooner.



Tower

This information is still to be completed.

ISSF Skeet

The discipline of ISSF Skeet shooting has a higher degree of difficulty than the Standard Skeet.

Contained here is a basic overview of the fundamentals involved.

The significantly different sections of ISSF Skeet are:

- The starting position of the gun
- The variable time (0-3 seconds) release of the target
- The different shooting procedure, station to station

Body position is perhaps the most important single factor in successful ISSF Skeet shooting. When shooting, avoid any body position which requires the use of muscles not normally used in a relaxed standing position. Extraneous movements or an exaggerated stance will contribute nothing to the score. A proficient shooter must remain balanced while swinging, delivering the shot and following through.

The knee of the forward leg should be bent slightly, with the larger proportion of the weight being placed over this leg. The body may lean forward from the hips, but not over exaggerated to the point of being off balance or tense. Feet should be placed a comfortable distance apart, too close together or too far apart will create balance problems and unnecessary muscular tension. The body must be relaxed, balanced and comfortable.

Irrespective of the Station being shot, the basic fundamentals apply, with only the foot placement angled to the trap houses and the perceived distances altering. With the body positioned to face the target breaking point, position the gun with the toe of the stock touching the body at hip bone height. The barrel muzzle is pointed just under the flight line at a point 3 to 4 metres from the trap house. Turn the head and look at the target opening, but not directly into the actual chute.

Concentrate on broadening the field of view to encompass the entire area immediately around or forward of the target chute. Prevent the eyes from becoming locked at the actual target opening. Concentrate entirely upon seeing the target appear.

When the target emerges, start the gun moving with the target and diagonally upwards towards the face and shoulder. When gun swing and reflex timing is correct, the eye, gun and target should come together in one flowing movement for the correct delivery of the shot.

Do not rush or jab at the target. Accept the fact that the target will break at the

target crossing point or beyond. Smoothness of swing, co-ordination of eyes, gun, target and follow through are the major factors in consistently breaking targets.

Doubles are shot using the same method. Shoot the first target and after a short follow through, reverse the gun direction and shoot the second target as the muzzle passes through it.

The correct choice of gun is of paramount importance to achieve optimum scores. The gun should be well balanced with weight evenly distributed, being neither muzzle or butt heavy. A gun which is muzzle or butt heavy is difficult to handle and awkward to control. In the same vein, a gun that is too light can cause a jerky swing, gun whip and excessive recoil. The comb should be parallel to the rib. The height of the comb determines the position of the eye over the gun, therefore dictating the point of impact.

In ISSF Skeet it is important that the jacket being worn be of a design which permits a smooth upward movement of the gun butt, followed by a free swing and follow through.



ISSF Skeet ready position

ISSF Trap

The discipline of ISSF Trap shooting has a higher degree of difficulty that the standard DTL discipline.

Contained here is a short basic overview of the fundamentals involved.

with the traps of an ISSF layout being mounted below the ground level, a different sighting picture is presented to the shooter. Because of increased target speed, greater variety of height and angles in the ISSF targets, this sight factor cannot be over emphasized. It is further compounded because the target does not appear at one point in relation to the trap house.

With a bank of three (3) machines directly in front of the shooter, the target may appear at any point along a 1 metre horizontal span, dependant upon the trap released.

Therefore vision along the sighting plane must cover the entire area from which the target may appear. The shooter must see the target at the earliest point possible and determine the exact direction of flight and facilitate a smooth swing. The gun must remain stationary until the target is clearly seen, thereby reducing the tendency to jab or snap at the target.

Because the five shooting pads are parallel to the roof line of the trap house, the feet position / stance for each is as per Lane 3 in the standard DTL discipline.

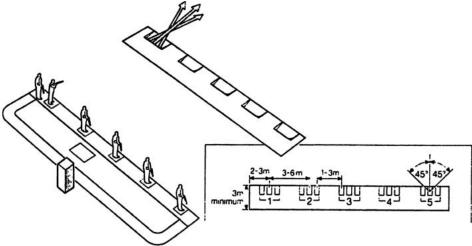
For good body - gun relationship, ensure that the body is relaxed by alert. Excessive body tension is a primary cause of a jerky swing.

Bend the forward knee slightly and allow approximately two thirds of the body weight to bear on the front foot, as with DTL. The weight forward allows for a much freer swing. Lean slight forward from the hips. This assists the body to absorb the gun recoil as well as allow for a better pivot.

Targets are released by a voice-activated microphone, giving the appearance of a quicker release and promoting the incorrect idea of a faster gun movement and shot.

Preparation prior to calling for the target is extremely important for better execution

of the shot.



Being a Winner

WHAT IS A WINNER?

A winner is not necessarily a person who comes first - many do so however.

PRACTICE THE DOUBLE WIN

If I help you win - I win. If I help my family or country win - I win.

A winner picks up a can from the gutter and puts it in the rubbish bin.

TOTAL WINNERS PRACTICE AND DEVELOP

- Positive self awareness
- Positive self direction
- Positive self discipline

Notice positive - always look to the positive side of everything first.

POSITIVE SELF AWARENESS

Be aware of the abundance within you - you can do anything if you want to enough and plan for it.

Be aware that you need to work for things that you want - nobody owes you anything

Be aware that you need to be responsible for your own actions - no excuses.

POSITIVE SELF DIRECTION

You need to decide where it is you are going and then plan for it - set goals:

- Short Term Goals out of reach, but not our of sight
- Mid Term Goals out of sight, but obtainable in the near future
- **Lifetime Goals** the Ultimate Goal

POSITIVE SELF DISCIPLINE

The most important trait of all.

Gain self-discipline and anything is possible.

Teach yourself to do the hard things first, so as to achieve the good things later on.

Practice self-discipline each day

Complete the things you start - there is only one thing easier than giving up the first time and that is giving up the second time.

REMEMBER WINNERS MAKE IT HAPPEN LOSERS LET IT HAPPEN

Summary

While instructing novices, it should be stressed that missing targets is part of the learning process and is not a sign of incompetence. If they are going to learn any skill, they must accept that part of the learning process of skill acquisition is to make mistakes. Without mistakes there can be no progress.

The basic fundamentals of shooting is the foundation on which a novice's shooting future is built, so teach them well, for it is you job as a Coach to impart the benefit of your experience and expertise to the best of your ability and in the long term interest of the sport.

Acknowledgements

ADDITIONAL REFERENCE MATERIAL

Books

The inner Game of Golf – Timothy Galloway

Videos

Move Mount Shoot – John Bidwell Guide to Perfection Sporting Clays – George Digweed