



# **A Training Guide for Clay Pigeon Shooting**

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## Disclaimer

We are not shooting coaches. This is information put together from years of experience. We hope the information here can provide you with a solid grounding in the fundamentals of shooting. We want to get you thinking about how you can improve, so you can go out and train with a purpose.

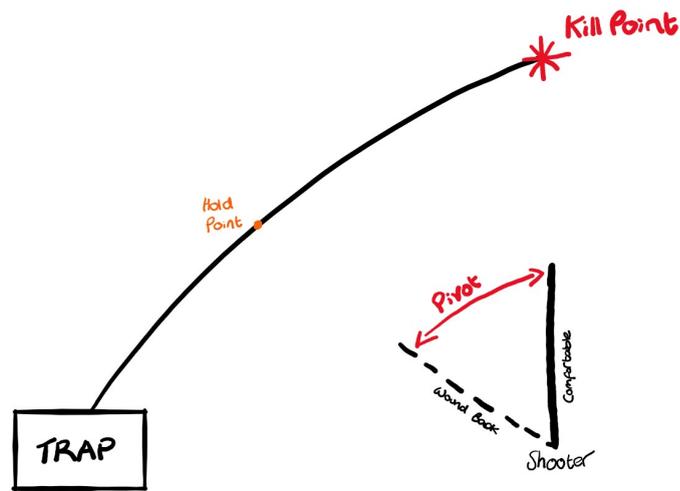
## Safety

- Never point a gun at anyone, even if it isn't loaded; assume that all guns are loaded unless proven otherwise in a safe manner.
- You should always know where the muzzle of the gun is facing, and this should be in a safe direction.
- The safety catch should always be on until the moment you are ready to pull the trigger.
- Exercise trigger discipline: your finger shouldn't be on the trigger unless you are ready to fire.
- Ear defenders and eye protection are compulsory when out on the clay ground and a cap is recommended in case of flying debris (plus it keeps the sun out of your eyes).
- Only use cartridges of the correct type for the gun and keep different cartridges separate. i.e. don't mix 20-bore and 12-bore cartridges together loose in the same bag.
- Your gun should always be broken and unloaded when not in use and when carrying it around the ground. The only exception is returning it to its gun slip, but it must still be unloaded. Likewise, the gun should be broken as it is being taken out of the slip.
  - When putting the gun back in the slip, insert the barrels first and check that it's unloaded before closing the gun in the slip.
- When passing a gun to someone else, it should always be passed open and empty.
- In case of a misfire, hold the gun mounted in your shoulder (still pointing in the direction you were going to shoot the clay) for 30 seconds in case of a hangfire and then if nothing happens remove it from your shoulder and break the gun carefully to see what has happened.
- When loading the gun, the barrels should be placed over the bar at the front of the cage when present, otherwise ensure the gun is facing in the direction that you will be shooting.
- When shooting high, driven birds, be cautious not to over-rotate backwards as your stance and grip will become unstable.
- If you load two cartridges into the gun and there is a no-bird on the second target, or you only shoot at one of them, remember that you still have one live cartridge in the gun. Unload or reload as needed.

# Basics

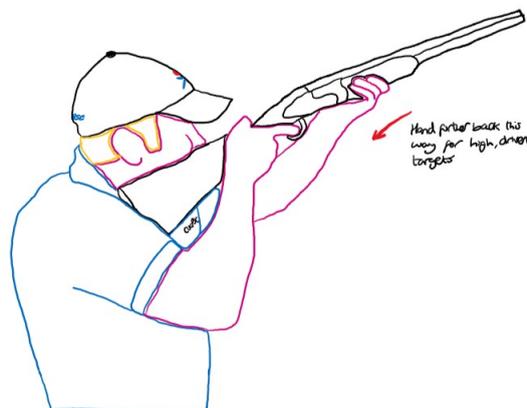
## Stance

- Stand at the front of the cage so you have a full range of motion.
- The angle of your stance will need to be adjusted slightly depending on where the clay is approaching from and where the kill zone is (**Fig. 1**).
  - For targets crossing you, set yourself up so that you can comfortably aim at the kill zone and then pivot at the hips to wind yourself back around to the hold point - this should allow for a smooth swing through following the target.



**Figure 1. The importance of stance.** You should be able to comfortably reach the kill point while maintaining a straight swing with your gun.

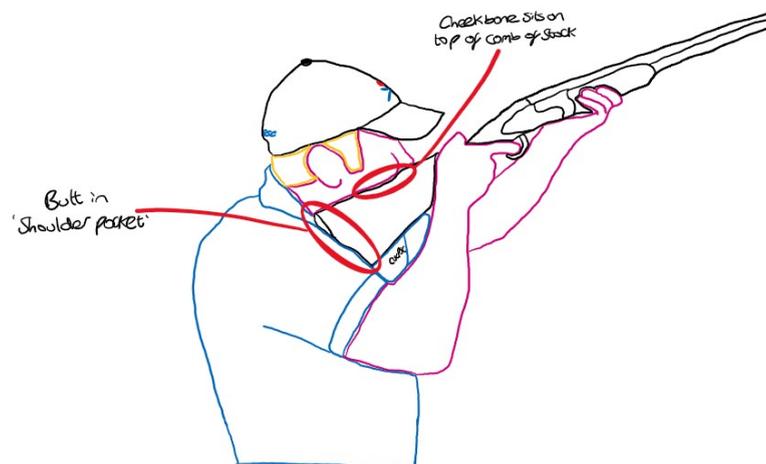
- For a high driven bird, move your hand further back down the gun so that you have a greater range of motion as the bird comes overhead (**Fig. 2**)



**Figure 2. Hand position for high driven targets.** The greater range of motion will allow you to comfortably shoot overhead.

## Gun mount

- You need to mount the gun correctly and in the same way every time you shoot in order to perform to your best. Over time you will build up muscle memory when mounting the gun.
  - You should wear comfortable clothing (possibly with added protection over the shoulder area) that allows for plenty of arm movement and doesn't restrict you from getting the comb of the gun flat against your face - i.e. no bulky collars on coats.
- The butt of the gun sits in your shoulder pocket and should not be mounted against the upper arm or the shoulder joint. You can find the shoulder pocket by shrugging your shoulders.
- The comb of the stock sits against your cheek tucked just underneath the cheek bone (Fig. 3)



**Figure 3. Correct mounting of a shotgun.** The mount should be secure and result in your eye lining up with the centreline of the top rib on the barrels, while allowing you to see along the rib to the end of the gun.

- Your head should stay vertical at all times. If you roll your head over so that your cheek is sitting on the top of the comb then your eye will look down the side of the barrels instead of down the top which will significantly affect your performance.

## Eyes

- It is generally best to shoot with both eyes open as this allows for greater peripheral vision to be able to see the target early.
- When the comb is underneath the cheek bone, your eye should line up down the rib of the gun, but you shouldn't be looking at the gun or the bead on the end of the barrels - instead you should be looking at the area beyond the end of the gun.

## Different types of clays

There are many different types of clays which you may come across, each of which fly very differently and can sometimes require a different approach to shoot (**Fig. 4**).

### Standard

- 110mm in diameter
- Slightly domed
- Most common

### Battue

- 110mm but very flat
- Fly further and faster than a standard target
- Often twist in the air

### Midi

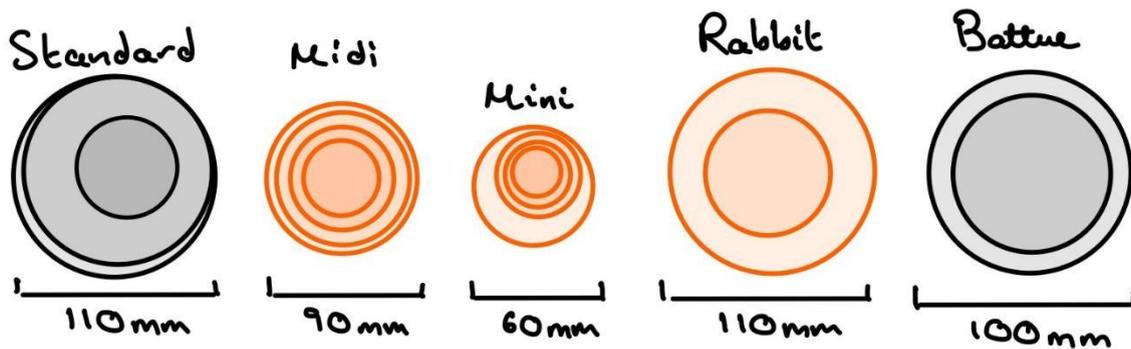
- 90mm in diameter
- Fly further and faster than Standard targets
- Can appear further away, causing the shooter to miss-read and overlead

### Mini

- 60mm in diameter
- Fly similar to the midi creating the same problems

### Rabbit

- 110mm diameter but thick and flat to provide strength
- Target is rolled along the ground to simulate a rabbit
- Often bounces if it rolls into debris on the ground



**Figure 4. A size comparison between different types of targets.** From left to right: Standard, Midi, Mini, Rabbit, Battue.

## Different types of targets (Fig. 5)

### A) Rabbit

- Rolled along the ground often causing them to bounce up as they go

### B) Simulated Teal

- Often placed near the shooter or just in front
- Fly vertically upwards, very quickly
- Often have to be taken early

### C) Quartering Targets

- Fly at an angle to the shooter, either towards or away.
- Need to assess where it is coming from and where it lands to work out flight path
- Often require less lead than initially thought

### D) Driven

- Require good swing through technique and practice
- Mimic a game bird flying towards and over you
- Require very good hand eye coordination as you often lose the clay behind the barrel of the gun

### E) Incoming

- Fly towards you at various angles
- The target will rise to an apex (the Kill zone), and then fall before reaching the shooter

### F) Loopers

- Start off rising before falling, and often quarter towards or away from the shooter.

- Can be taken as they rise or as they fall, but ideally as they “peak” in their loop

#### **G) Going away**

- Have to be taken quickly as they are travelling directly away from you

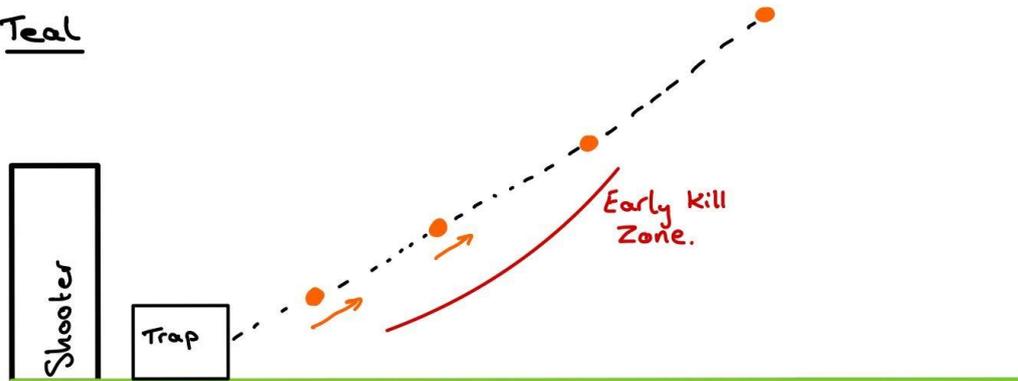
#### **H) Overhead**

- Approaches from above and behind the shooter, passing over their head as it travels towards the ground
- Gun position is key - too high and you either won't see it, or it will pass you too quickly
- Must be taken quickly as these targets are travelling away from the shooter and usually quickly to ground

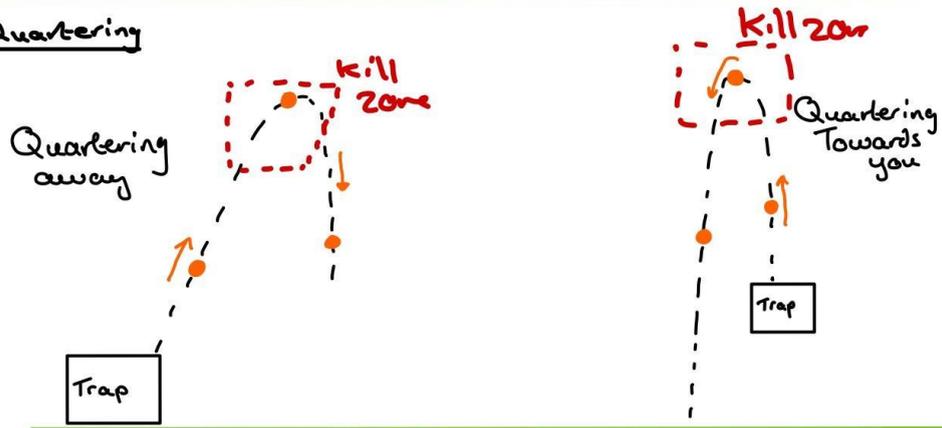
A) Rabbit



B) Teal



C) Quartering



D) Driven

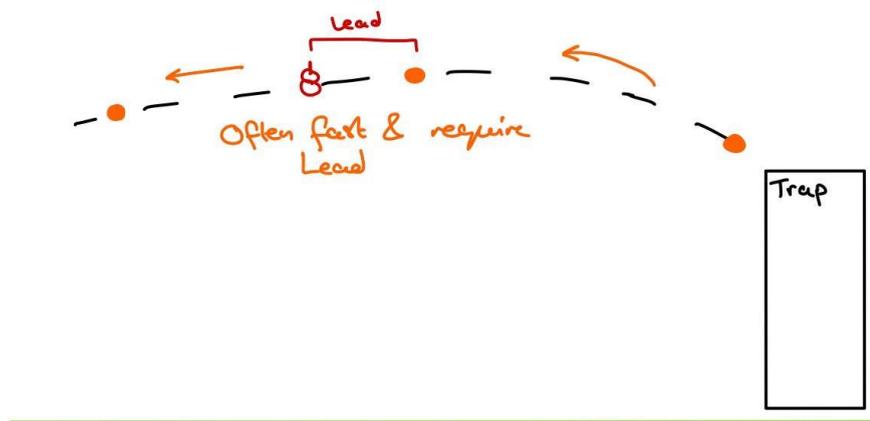


Figure 5: Typical trajectories of common target types.

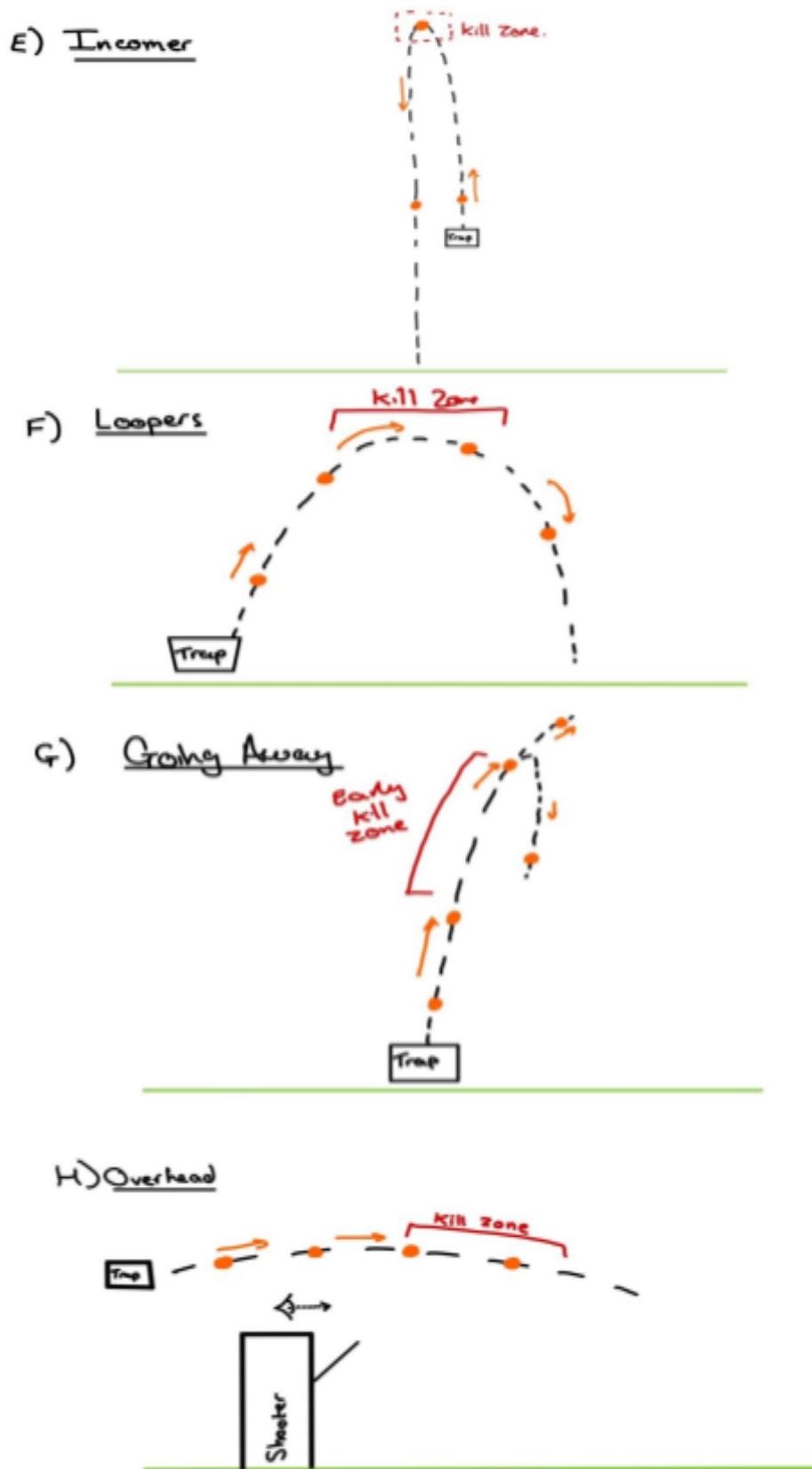


Figure 6: Typical trajectories of common target types, continued.

# Shooting theory

## Consistency and control

Consistency is key for shooting, and you can achieve this through controlling as many of the variables involved. This entails eliminating anything that might cause distraction and disrupt your focus, and developing a consistent and reliable approach to shooting.

## Equipment

If you are serious about improving, using the same equipment will eliminate some of the distractions you might have to deal with. Use the same gun, and make sure that it fits you well. Use the same cartridge when possible. Every cartridge has a defined velocity, shot size and volume, as well as specific shot and wad materials. Each of these features will affect how a cartridge feels to shoot, choose one that you shoot well with and stick with it, so that you can get used to how it travels.

## Preparation

Prior to shooting, use the time to study the targets that you are about to shoot. In a competition setting, you will be given a chance to see the targets before you shoot them; on report targets will be shown once each, and simultaneous pairs will be shown twice, so that you have the chance to study both individually.

This will give you the chance to determine how you want to shoot each target, and in turn how you will stand, where you will hold your gun, and how you will mount it. You should have made these decisions before you call the targets to shoot. Try to think about why certain targets have been set up in the way that they have - what mistakes are the course setters trying to force you to make? Predicting these can help you more quickly determine how to shoot a target.

## Pre-shot routine

Once you have mastered the basics and you have a comfortable set of equipment to rely upon, you should start to think about developing a consistent and reliable pre-shot routine. This entails having a predetermined set of steps that you can go through every time you step up to shoot. This is one of the most difficult steps to learn, but for many is one of the most important.

This is all about focus. Force yourself to focus entirely on the two targets you are about to shoot, and exactly how you are going to shoot them. It is important that you are able to approach each and every target in a controlled and consistent manner, regardless of whether it's the final stand of a competition or the first of a training session. For some guidance there is a great video on this topic by Ben Husthwaite:

<https://www.youtube.com/watch?v=lr9aw5rT040>

## **A new target**

The major factors that you will need to consider upon being presented with a new target are: its size, its speed and distance from you throughout its trajectory, and its trajectory itself. Course setters will use different sized targets to deceive you into thinking that they are travelling faster or are further away than they actually are. Know what you are shooting at to avoid misleading a target; the type of target will be indicated on the boards at the stand, or by the scorer at the stand during a competition.

### **Kill point**

The kill point is the location in which you intend to shoot a target. This should be the first decision you make.

While everyone will shoot differently, there are some general tips which will help you decide where to shoot a target:

- Where the target is closest to you
- Where it slows down at its apex or during its flight path
- Where it presents one of its faces to you, if it twists during its flight path
- Where it is easiest to see; passing over a higher contrast background for instance

Once you have decided where you want to shoot a target, you need to position yourself so that you can hit it. Your feet should be in a stable but not restrictive stance, with your weight over your front foot, pointing towards your kill point. You should never have to fight your body to reach the chosen kill point for a target.

### **Hold point**

The hold point is the area in which you will hold your gun. This is typically halfway between the chosen kill point and where you first see the target (the view point). This will serve as a reference point that you can return to; use objects on the horizon, or in your field of view, as points of reference so that you can consistently find your hold point.

The ideal hold point should allow you to clearly see the target and bring your gun up to speed with it, in a controlled manner, to meet it at your chosen kill point. The main aim is to position your gun such that you don't get caught out by the speed of a target, and give yourself the chance to reach the kill point without having to make an erratic and uncontrolled movement.

### **View point and sound cues**

The view point is the location in which you first see the target. This can vary dramatically, from being able to see the target released from a distant trap, to a target that is only visible for a brief moment through a gap in a hedge.

You as a shooter have little control over this, but there are some things that you can do to make it easier to see a target:

- Start with your gun low enough that you don't obscure an approaching target
- Position yourself to one side of the stand to more easily see a target approaching from an awkward angle
- Listen out for sound cues; you can often hear the trap release the target. Use this to anticipate when to expect the target to come into your field of vision

### **A note on pairs**

Shooting pairs is a game of compromise. You can choose to shoot one target earlier or later than is ideal in order to get a better view point or hold position on the other target. It varies from shooter to shooter, but generally speaking if you are more comfortable with one of the targets over the other, then give yourself more time on the harder one and trust that you can hit the easier target in a suboptimal position.

Positioning your feet for pairs can be difficult. Very rarely will you ever need to move your feet between shots, and it is generally only needed when presented with two very high driven targets from different directions. You should position your feet to face towards whichever kill point is closer to your weak side, as you will then have less difficulty reaching the other kill point on your stronger side. For a right hander, their right side will be weak as it is far harder to swing the gun in that direction while maintaining a straight line - they would face towards the right-most kill point of the pair.

## **Shooting method**

### **Gun speed and lead**

Target speed should be matched by your gun speed. Target distance should be countered with lead - that is, shooting ahead of it. Generally speaking, the further away and faster a target is, the more lead it will need. Many targets are close enough that very little or no lead at all is needed, but may still be moving quickly, so gun speed will be an important factor.

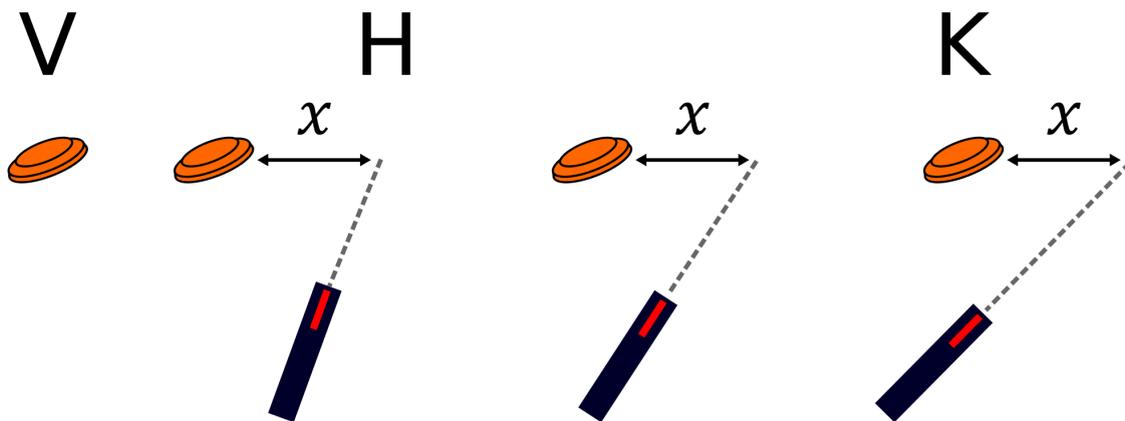
Accurately judging target speed and the required lead are absolutely fundamental to clay shooting, and will vary from target to target and person to person, there is no secret cheat-sheet of required leads for each type of target. It is a skill learnt through practice, but you can often get some hints by watching how other people choose to shoot a target.

Note that regardless of the method used for the same target, the view point, hold point, and kill point will all be the same - as will the required lead. The only differences between the methods are in how you move from the hold point to the kill point, relative to the target.

## Maintained lead

This method (**Fig. 7**) involves maintaining a predetermined lead ahead of the target once it approaches your hold point, until you reach your kill point. The target never passes your gun so you always stay ahead of it.

While this can be successful with extensive practice, it is difficult to reliably match both the speed and path of the target when attempting to stay ahead of it. For this reason using maintained lead is often discouraged in favour of the pull away and swing through methods.



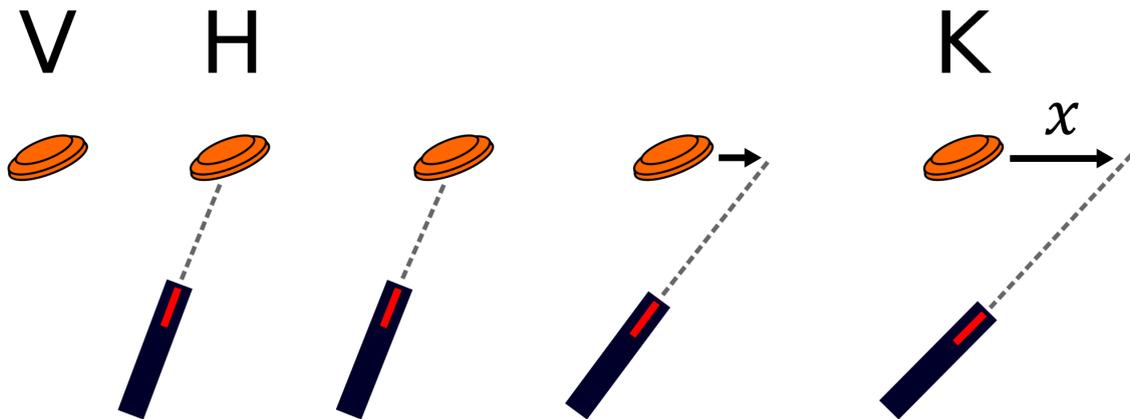
**Figure 7. Stages involved in shooting with maintained lead.** **V:** View point, **H:** Hold point, **K:** Kill point,  $x$ : a predetermined amount of lead. The direction that the gun is pointing at each stage is indicated by the dashed line.

## Pull away

This method (**Fig. 8**) involves tracking the target with the gun from the hold point until it approaches the kill point. Approaching the kill point you pull ahead of the target by a predetermined amount of lead in a smooth and controlled manner, before taking the shot.

This is effectively two separate movements; the first involves you following the target allowing you to match any change in speed or direction as it occurs, the second movement involves you adding however much lead you deem necessary to hit the target.

Pull away works well for targets which require a large amount of lead, as it allows you to learn how the target is travelling, which is necessary to be able to hit it consistently, and allows you to better control your gun speed between your hold point and kill point.

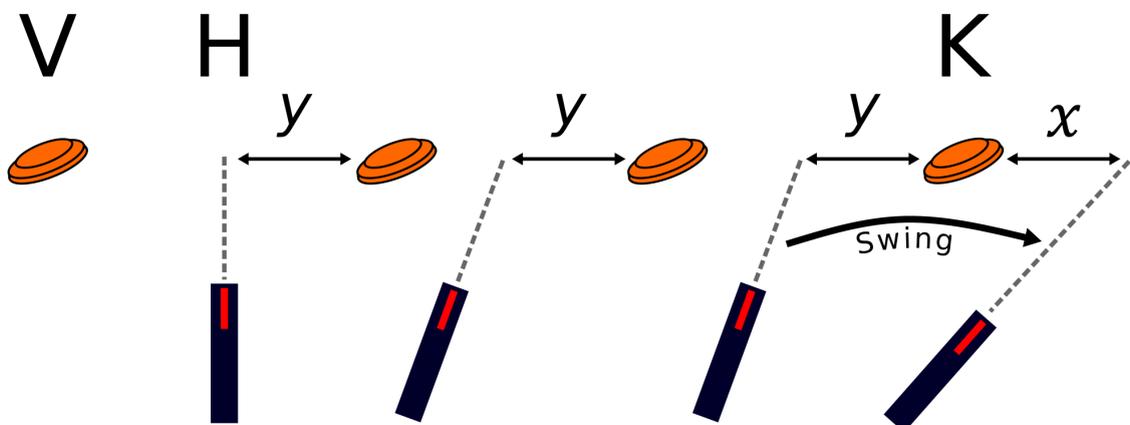


**Figure 8. Stages involved in shooting with pull away.** V: View point, H: Hold point, K: Kill point,  $x$ : a predetermined amount of lead. The direction that the gun is pointing at each stage is indicated by the dashed line.

### Swing through

This method (**Fig. 9**) is all about gun speed. It involves establishing a predetermined *negative* lead behind the target before swinging through it to your predetermined *positive* lead ahead of the target. Using a consistent amount of negative and positive lead allows you to produce a consistent gun speed at your kill point.

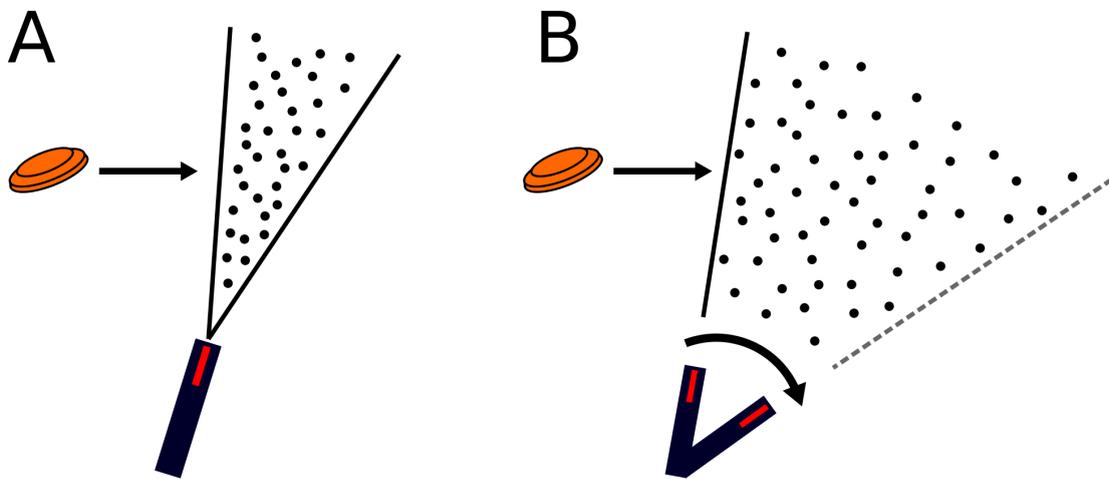
This should be executed as one single movement; allowing the target to pass your gun until it reaches your chosen negative lead, then swinging through it to achieve the required gun speed and positive lead. Having a consistent gun mount is critical for a consistent swing through, as the mount forms part of the movement. This technique is great for targets which need very little lead - particularly useful for close crossing targets.



**Figure 9. Stages involved in shooting with swing through.** **V:** View point, **H:** Hold point, **K:** Kill point, **y:** a predetermined amount of *negative* lead, **x:** a predetermined amount of *positive* lead. The movement from **y** to **x** should be completed in one sweeping motion. The direction that the gun is pointing at each stage is indicated by the dashed line.

### Completing the shot

The shot does not finish when you pull the trigger. Understanding this concept is important for hitting targets which are moving quickly. Finishing the movement of the gun with the target allows you to influence how the shot spreads in the sky (**Fig. 10**). Try to focus on continuing the movement as you pull the trigger.



**Figure 10. The spread of a shot is affected by gun movement during the shot. A:** A shot with no movement. **B:** A moving shot. The solid black lines indicate the initial zone of fire. The dashed line indicates an extended zone of fire through movement of the gun.

### Post-shot analysis and corrections

One of the biggest challenges with shooting is identifying why you are missing a certain target. This is especially difficult to do in the moment without any help; or even worse, with a crowd of other people behind you all throwing out conflicting advice. While in an ideal world you could always have a coach looking over your shoulder, that is rarely the reality, and in some cases they may not be able to identify the problem. So, how do you help yourself?

Stop and think, don't rush into the next shot without a plan. If you feel that the lead is the issue, make big changes - double or halve your lead, don't make micro-adjustments - you normally only have five shots at each individual target in a competition, that's just four chances to correct yourself.

The advice given here provides a framework from which to find faults and make corrections. Check your kill point, hold point, your stance. Think about how you should be shooting the target - did you use an appropriate method for it? If you ask someone for their advice on a target, have them justify their decision and see if you agree with their reasoning; what works for one person might not work for another.

If you want to take this a step further, keep a record of the targets you have been shooting. Being able to remember and visualise how you have shot certain targets in the past will enable you to recall that information when challenged with similar targets in the future.