

IMPROVE YOUR SHOOTING

Before we start talking about the do's and don'ts of shooting, first some words about the equipment.

You may not have your own rifle, but other equipment that you can buy for your personal use will help you to be more comfortable on the firing point. For example, a single point sling, a shooting glove or mitt, elbow pads or a shooting jacket (has built in pads.)

Don't be in a rush to buy a rifle. Even a second hand one can be expensive (several hundred pounds), so have a good look around to see what will suit you. Try the various Club rifles, both the light and heavier weight ones. A heavy rifle is more stable and experiences less reaction when firing the small .22 bullet.

POSITION AND RELAXATION.

It is very important to be comfortable in the firing position, and this enables you to relax properly while shooting. No matter how good your rifle, it is the person firing it that determines the gun's performance.

Be consistent in the clothes that you wear for shooting. If possible wear a proper shooting jacket – there are a few Club ones available. Make sure the jacket is a snug fit, not too tight or too loose. If there isn't a jacket to fit you then an ordinary one will do. Avoid nylon anoraks as they are too slippery.

Don't wear tight clothing. Have an open neck shirt and wear a cotton or woollen sweater between that and your shooting jacket. Avoid tight underwear and don't wear a wristwatch while shooting, as it is liable to restrict the blood flow to the fingers.

Prone Shooting Position (For right handed shooters.)

The body should make an angle of about 20 degrees with the line of sight, with the left leg straight and the right leg cocked out sideways and bent at the knee. This position of the right leg has the effect of lifting the chest off the ground, and reducing the effect of breathing and heart beat on the rifle. It may seem rather ungainly and uncomfortable to start with but it is used widely among experienced and accomplished shooters. Watch some of the better shots in the Club to see what they do. No one will mind you sitting in on firing details as long as you are quiet and still.

Also check the following points:-

- Have the rifle supported on the left hand so that the wrist is straight and the fingers relaxed and away from the barrel. Do not grip the rifle with the left hand.
- The sling should pass along the back of the left hand to the left upper arm. Where the strap divides to go around the arm it should form a perfect "Y" (See later).
- The butt of the rifle should be just below the collarbone of the right shoulder.
- The left elbow should be positioned directly below the rifle so that the left hand, the left elbow and the right shoulder are all in line with the sight line. This will keep the rifle in a very stable position.

- The right elbow should be positioned so that the right hand is relaxed on the woodwork, with the right forefinger on the trigger and the right thumb around the woodwork behind the trigger. This will enable you to make a pincer movement with forefinger and thumb, thus squeezing the trigger.
- The head should be as upright as possible.
- The right eye should be 2 to 4 inches back from the rear sight aperture. (This distance is called "eye relief"). It is much easier to centre the foresight ring in the centre of the rear sight aperture when the eye is held back, instead of the eye being right up to the rear sight. Try it for yourself.

SIGHTS, SIGHTING AND AIMING.

The following applies to the normal sights consisting of ring foresight and aperture rearsight.

Rearsight.

For greatest depth of focus (i.e. being able to have foresight clear as well as the aiming mark), you need to have the smallest possible rearsight aperture for the prevailing light conditions. Some rearsights have a fixed aperture, however, so you just have to live with that. The diameter of the aperture is normally in the range 0.9 to 1.4mm, with 1.1 probably being the most common. It depends on individual eyesight as well as light conditions.

Use of an Eyeshield for the Non-aiming eye.

It is always best to shoot with both eyes open to allow an equal amount of light into each eye and avoiding eyestrain. To aid concentration, use an opaque shield fitted to the rearsight – a section cut from a large plastic ice cream box is ideal.

Foresight.

Focus the aiming eye on the foresight ring, and the aiming mark will also be in focus as described already. You may well be tempted to use a small foresight element, but the potential accuracy that it seems to produce is an optical illusion.

With a larger element you can see movement of the aiming mark within the foresight ring, caused by slight movement of the rifle. With a small element, the wobble is still there but you can't see it. The minimum diameter of the foresight ring should be 3.3mm, with an optimum size of 4.0mm.

CANT

This is a term used to describe the rotation of the barrel around the line of sight of the rifle, when in the firing position. (These two lines converge to meet at the aiming mark). CANT occurs when the rifle is not held in an upright position, but is tilted to one side. The effect is to make the shots go to the 3 o'clock or 9 o'clock side of the bull, depending on the sense of the tilt. If the rifle is tilted to the left, the shots will go to the right and vice versa. 6 degrees of CANT will give an "8" at 100yd.

For beginners, it is best to hold the rifle in an upright position. As you get more experienced and a better shot then it is recommended that you CANT the rifle slightly to the left. This means that you don't have to strain the head over to see through the sights, but are tilting the sights over towards the aiming eye.

If you choose to shoot with CANT remember to keep the angle of CANT constant. When shooting at different ranges, the vertical adjustments you make to the sights will have to be accompanied but a small horizontal adjustment.

SLING AND SLING POSITION.

The double point sling, which you won't see very often now, has many drawbacks which will not be elaborated on here, but here are a few of the ADVANTAGES of the SINGLE POINT SLING.

It is easy to put on, easy to adjust and permits a lower and more stable shooting position. The butt can be removed from the shoulder without disturbing the sling and the left elbow can remain in the same position.

Technique.

The sling tension should be such that it is verging on discomfort, but should not be tight enough to be painful or to produce a "trussed up" feeling. Too slack – it won't support the rifle properly.

Too tight – it restricts the blood flow to the hand and you get "pulse bounce".

The sling should pass from the fixed point on the rifle, along the back of the left hand, to the left upper arm and should be as high as possible on the left arm. At the point where the sling divides to go around the arm there should be the shape of a "Y".

The left arm is there purely to support the rifle and the hand should be relaxed. DO NOT grip the rifle barrel with the fingers, but have the hand relaxed and half-open. Remember that the left hand, left elbow and the right shoulder should be in a straight line.

TRIGGER.

The right elbow should be positioned so that the right hand is relaxed on the woodwork, with the right forefinger on the trigger and the right thumb around the woodwork behind the trigger. This will enable you to make a pincer movement with forefinger and thumb, thus squeezing the trigger as you squeeze the thumb and forefinger together. The forefinger should be at right angles to the trigger and not touching the trigger guard or the woodwork. The point of contact between the trigger finger and the trigger should be the flat part of the top joint.

Trigger control is essential and your shooting will suffer if you do not take heed of the preceding paragraph. DO NOT PULL or SNATCH the trigger.

BREATHING

Just before releasing the shot you need to hold your breath so that the rifle is completely still for a few seconds.

The object of this section is to point out the correct point in the breathing cycle where you briefly pause before firing. The correct way is the natural way, so the method is known as the "natural pause" method.

1. Before settling down to fire the shot take a couple of deep breaths. This gets a good supply of oxygen in the blood and helps to sharpen the vision.
2. Having done this continue to breathe naturally.
3. At the point of the natural pause between exhaling and inhaling, stop breathing.
4. Get the shot away within about 5 seconds. If you hang on longer the vision will start to blur and body movements will begin. If you realise that you have held your breath for too long, don't fire the shot and hope for the best, go back to stage 1.

While breathing, the foresight will move up and down over the aiming mark. Make sure it does so vertically and not diagonally, otherwise your position is suspect.

As a final check to your position, breathe naturally, hold your breath, **CLOSE BOTH EYES**, but **DO NOT** fire. Hold this for about 5 seconds and then open your eyes. If your position is correct you will still be on target. If the rifle has drifted to the right or left, you were straining so move your legs a little in the opposite direction. If the rifle has moved up or down make a small adjustment to the position of the butt in the shoulder.

RANGE MANNERS.

Remember that other people are shooting as well as you, so don't create a disturbance on the firing point. Don't squirm about needlessly. If you have to talk, do so quietly and as little as possible.

When you have finished shooting before others on the detail, stay down in the firing position. Don't shuffle or get up and move around. At best this is distracting to other shooters, and at worst your movement can be transmitted through our wooden floor to other shooters.

The golden rule is to treat others as you would wish to be treated.

AMMUNITION

The modern .22 calibre bullet is greased; the purpose of which is to provide lubrication as it travels along the barrel. The grease also leaves a protective coating in the barrel after the shot has passed, and so corrosion is rarely a problem. The barrel does not therefore need cleaning very often – a few times a year is sufficient for the average shooter, and this is to remove stubborn deposits from the rifling.

If you happen to drop a round of ammunition, wipe it carefully, as small pieces of grit can easily stick to the grease and could score the barrel. For the same reason keep your ammunition block clean as well – or better still, use it straight from the box.

The normal .22 calibre bullet has a muzzle velocity of about 1070 ft/sec (720 mph), which is just sub sonic under most conditions. The rifling in the barrel causes it to spin at about 50,000 rpm. This spin keeps the bullet stable as it travels through the air, but gives it considerable "drilling" power when it hits an object. If this object happens to be flesh or bone it can do considerable internal damage by producing a hydraulic shock wave within the body.

On the bullet box it used to say that they are "dangerous within 1 mile."

This point leads on to the final and very important section – that of **SAFETY.**

SAFETY.

No set of notes is complete without some do's and don'ts regarding safety. This applies to YOU whether you are a beginner or an experienced shooter and you should always be aware of, and practice, the basic safety rules. Here are some of the main points.

1. **ALWAYS** have the breach open when the rifle is unpacked unless you are on the firing point and are preparing to shoot.
2. **ALWAYS** carry the rifle with the muzzle pointing UP.
3. **ALWAYS** make a visual check that the breach is empty after you have finished shooting, then leave the breach fully open of course.
4. **ALWAYS** store your firearms in a secure place and keep the bolt or trigger mechanism and ammunition in separate places. The law now requires this.
5. **NEVER** point a firearm at anybody, even in fun.
6. **NEVER** put a round in the breach unless you are on the firing point and are preparing to fire.
7. **NEVER** shoot at anything other than proper targets on an authorised range.

Accidents have happened in the past, some fatal, because of carelessness or thoughtlessness. They will happen in the future because of human failing, but rifle shooting is one of the safest sports going – make sure you keep it that way.

Good shooting.

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