Shooting Mechanics- Follow Through

If you have been working on and perfected your position you can now work on the next important portion of shooting, follow through. In golf or baseball it is important to follow through on your swing after contact has been made. The same holds true in shooting. When you execute a shot the rifle will rise and then it will fall back into position. You need to let the rifle do what it wants and let it settle and wait a little bit longer till after it is done. Too often a shooter will rack the bolt to extract to round while the rifle is still in recoil. Be patient there is no hurry to get that piece of brass out of there. The other mistake is picking up the head through recoil. Keep that cheek down on the stock and ride it through recoil. If you pick your head up you are going to have shots go high. Do not been in a hurry to look at your shot. It is going to take them awhile to pull and mark the target. A good training tip is to follow through on recoil and stay in position, don’t extract the round; don’t look through the spotting scope till the target goes down. Not only will it help on follow through but it will also let you know they pulled your target in case your score keeper misses it.

The other key to good follow through is trigger control. Too often shooters will release the trigger as soon as the shot goes off. Think of touching something hot as soon as you touch a hot object you yank your hand away. This is what some people do with a trigger. This is a big mistake, as it does not allow you to have a good follow through. Pull the trigger all the way through and keep it pulled until the rifle settles. When the target goes down, release the trigger. This will allow for a more natural follow through motion for you and the rifle. If you are shooting a rapid string just wait till the rifle comes back down on the target and is still then release.

To visually see the difference of follow through will make we will use the SCATT trainer. This device is nice because it allows you to trace the muzzle before, during, and after the shot. With the SCATT we can adjust the F-coefficient which controls follow through. With a value of 0 the shot always lands right where the trigger was pulled. This negates the movement of the rifle during the firing phase (Fig 1)
The blue line is .2sec before the shot was taken and the red line is the follow through after the shot was taken. As you can see the muzzle was heading down and left as the shooter took the shot.

However if we adjust the F coefficient higher it adjusts for the bullet leaving the muzzle longer making follow through more critical. In the shot below you will see that the trace is all in the X and 10 ring so it should be a 10. However the shooter had poor follow through and you will see that the shot went in the direction where the rifle was moving when the shot was initiated. The rifle was moving to the right therefore the shot went right and the shot ended up being a 9.
This mimicks what we see in the real world, the gun may actually be pointed in the X/10 ring but because of poor follow through the shooter ends up with a 9.

We take the same shooter with the same settings and notice how with the same trace pattern the shot is now in the X ring. The difference was the follow through.

Now if we take the shot of figure 2 and negate the follow through phase we will have the shot we saw originally in figure 1 which is an X. Yes in real world shooting poor follow through can cause that much difference.
The other issue that is often associated with wind is vertical shots. It takes a lot of wind to push the bullet up (head wind), or push it down (tail wind). If this happens you are talking 10 ring to tight 9 ring at most. When I shooter fires a mid ring 9 or worse it is because of poor follow through. If it goes high usually it is because the shooter is picking their head up. If the shot goes low it is because the shooter relaxes their support arm.

The two other issues that can cause shots to be off due to follow through are snatching the trigger this will cause the shot to go low and towards the side of the trigger hand. Or punching the rifle with your trigger shoulder this will cause the round to impact high and to the side opposite of the trigger hand. Again these issue are cause by poor follow through.

A lot of highpower shooters think the only way target better at 600 yards or 1,000 yards is to go and shoot matches at those distances with their high power rifles. The best learning tool to get better at follow through, along with position, calling your shots, and reading the wind (all sections we talk about). It is smallbore rifle shooting. Yes you are only shooting at 50yd or 100yd, but if you make a slight mistake in smallbore it won’t be a 10 or an X. A lot of highpower shooters need to put their ego away to do this. But if they would, they would see the benefits very quickly. If you can shoot cleans on the 50yd and 100yd targets, you will shoot very good scores on the 600yd and 1000yd targets.