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HOW TO SIGHT IN YOUR RIFLE - PART ONE

MYGGUNS



This will be a two-part newsletter on how to zero, or sight in, your rifle. The first part will cover the basics of rifle scopes and bullet trajectory, while the second part will cover the steps to sight in your rifle. Sighting in a rifle can be a costly exercise if you do not know what you are doing – I have seen people shooting out two boxes of ammo, and their rifle was still not sighted in.

Before we delve into the process of zeroing your rifle, let's first equip ourselves with a solid understanding of some key terminologies. This knowledge will not only empower you to navigate the zeroing process with confidence and precision but also make you feel informed and prepared.

Zero – Adjusting the scope turrets so that the bullet hits the target at the point you aim.

Reticle – A series of lines and marks visible when looking through a scope. It is also known as the scope's crosshair.

Turrets – The adjustment dials on top and side of a rifle scope

Windage – The side turret to adjust the crosshair moving left and right about the path of the bullet Elevation – The top turret adjusts the crosshair moving up and down about the path of the bullet Bore – The inside of the barrel

Boresight – Process using special tools to zero a scope without shooting ammunition.

Trajectory – The path a bullet travels due to its weight, velocity, gravity, and air resistance.





When one looks through a scope, the line of sight is straight, but the trajectory of a bullet, leaving the barrel, travels in a parabolic arc. So, how does a straight line meet up with a curved line? The only way for a straight line (represented by telescopic view) to cross a curved line (defined by bullet trajectory), at a distance, is for the bullet trajectory line to cross the line of view twice. The second point of crossing is also the point of zero. Please have a look at the picture below.

You will notice the blue line represents the line of view, and the red line represents the trajectory path of a bullet. Remember that bullets with different weights and speeds will have different trajectory paths. A lighter, faster bullet will have less parabolic arc than a heavy, slow bullet. For that simple reason, you must re-zero your rifle when you change ammunition. Next month's newsletter will cover the steps on "how to zero your rifle at the range."

WHATS HAPPENING

- I. For Calgary Fish and Game Association members, the CFGA "Sight in your Rifle Day" is at the Rosebud Rifle Range. There are still some seats open...
- 2. Olds Gun Show is at Old Agriculture Society this weekend, the IO/IIth of August.
- 3. Gun and Knife Show in High River next weekend, 17/18th August.
- 4. I have upgraded my website. New students can now book and pay online for scheduled courses.
- Remember: Any successful referrals will receive a gift card from Friends Café, but you must inform me.

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