

Long Range Shooting at the Green Mountain Regulators. Bronco Birnbaum

Picking a long range gun:

The most popular single shot guns that appear on the GMR long range field are Sharps 1874, Rolling Blocks and High Walls. We have also seen Trapdoors, Handi Rifles, Sharps 1875 and Martinis. When picking a gun, find one with a shotgun butt and a 30 inch barrel as a minimum length. A rifle with a crisp 3lb standard trigger or a rifle equipped with a single or double set trigger is required for accurate shooting. Legal single shots require an exposed hammer and thus the Martini is not a valid SASS touney gun, but the Martini is exceptionally beautiful and fun to shoot. We allow Martini's and other single shot Creedmoor style guns at GMR just because we like them.

Lever repeating guns most seen at GMR are Marlin 1895s and 336s, Winchester 1894s, Winchester 1876 and Browning 86s. The triggers on these guns are usually very bad and some work on them is a good idea. Legal lever guns require a tubular magazine and an exposed hammer.



Calibers:

The most frequently seen caliber in single shots on our range is the 45-70 Govt. Other calibers are 40-65 Win, 45-100 and 38-55 Win. Bullet size in 45 caliber is between 400 and 500 grains. I recommend 400 grain bullets in 40 caliber. The traditional 38 caliber weight is 265 grains.

The Marlin and Browning lever guns come in 45-70 and the Marlin and Winchester can be found in 38-55 Win. Some shooters choose to shoot 30-30 and 32-40 in lever guns, but these are not considered "big bore". I have not seen a lever gun in 40-65. Winchester 1876 guns can be had in 45-60 and a few other obsolete calibers.

Sights:

Front sights should be a globe style with interchangeable inserts. Adding a bubble level to the front globe is a great idea because if the gun is tilted left or right, then bullet will follow the sights and miss the target. A third option that can be added to a front globe sight is a wind gauge. This is a micrometer mechanism that allows the front sight to move left or right to augment windage.



Rifles with period correct $\frac{3}{4}$ inch diameter scopes are also used at GMR. The scopes can be from 24 inches long, to full barrel length. They are mounted in Creedmore Malcolm-Style mounts on 17 in. centers and are adjustable for parallax and focus. These scopes are usually 6x power and may be modified with an interchangeable reticle. Scopes can be mounted on single shot guns or lever guns.



Rear sights can either be Soule or Creedmore style. Rear sights must have vertical and horizontal adjustment. One minute of angle (MOA) scale is the only recommendation. Finer scales can't be read by our old eyes, coarser scales won't let you be accurate enough. A Hadley style eye disc gives the shooter a competitive edge. A deeper eyecup, along with a black matte finish, helps to reduce glare plus it supplies different aperture sizes. I recommend Sharps bases on Sharps and Winchester bases on Rolling Blocks and High Walls. Lever guns require special bases because the bolt drives back to where the sight is mounted. MVA makes a base specifically designed for Marlin rifles.



We do not allow any shooter to shoot past 200 yards with open buckhorn style sights. There is no way to measure bullet placement with open sights at longer ranges. Bullets can't be allowed to exit our range onto neighboring property. We require shooters to know where their bullets will land at every yardage prior to shooting on our range. There are calculators on the web that can plot the path of the bullet given: weight, diameter, speed and ballistic coefficient. The shooter must be able to transform inches of bullet drop or windage to the MOA micrometer

scale on the sights. Knowing how air temperature, wind direction and speed will affect your trajectory is helpful. Knowing how to adjust for those natural functions are what separate winners and losers on the range.

Ammo:

Lead bullets only. 1000 fps to 1500 fps should work well for any caliber. The club has a chronometer and every once in a while we pull it out to measure load speed.

Club Rules:

1. All bullets must be lead.
2. Period correct micrometer sights only.
3. The rifle butt stock can only be supported by the shooters shoulder.



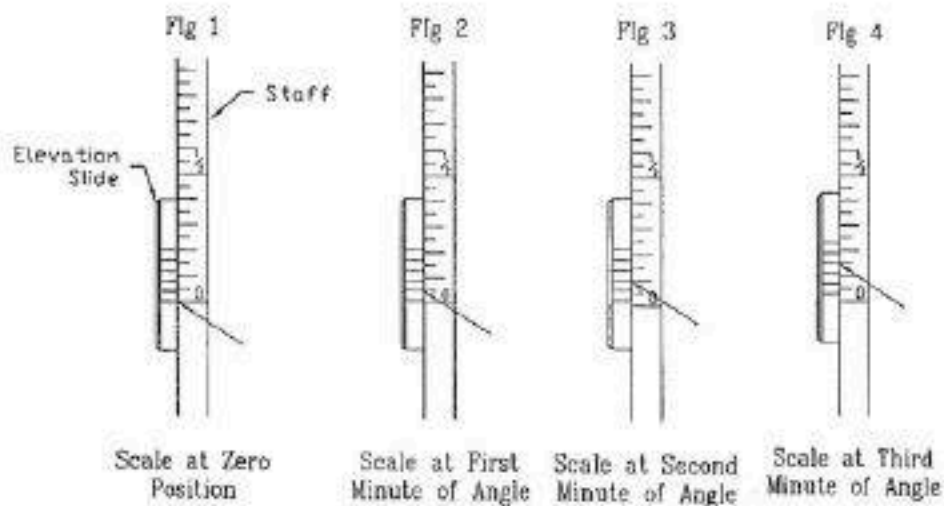
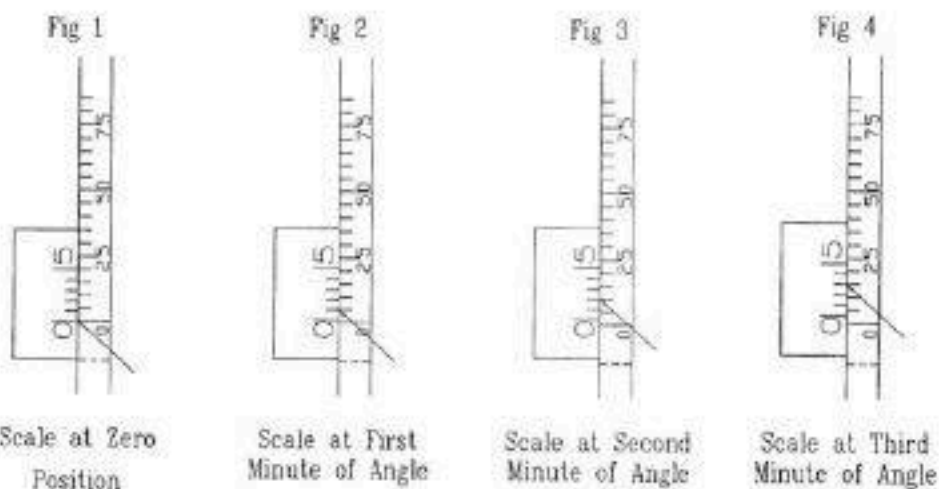
Our Game:

We call it Cowboy Gong Shooting. We simulate a buffalo hunter in the 1870's. For the buffalo hunter, every shot should generate revenue. The shooter can take advantage of the best solid rest that they can to make a money shot, but must adhere to the three Club Rules, specifically how the rifle butt can only be supported by the shooters shoulder. Steel targets of all shapes and sizes are placed

at 100, 150, 200, 250, 300 and 400 yards. Three targets at each distance, one shot at each target = 18 rounds per tournament. Shooters can use any position they want: table supported forearm while sitting, stick supported forearm while lying or sitting, standing, sitting, lying or whatever is the shooters desire. The course of fire is determined by the Range Marshall just before the match starts. We currently charge \$15 per shooter, all money goes to the club.



Minute of Angle definitions. Pictures drawn by Montana Vintage Arms Corp.



A Minute of Angle (MOA) is an *angular* measurement. An MOA is 1/60th of a degree.

1 MOA spreads about 1" (1.047") per 100 yards. 1 MOA is a different size at different distances.

100 yds	200 yds	300 yds	400 yds	500 yds	600 yds	700 yds	800 yds
1"	2"	3"	4"	5"	6"	7"	8"

Scoring:

A bullseye hit is two points. A non-bullseye hit is one point. A miss, with no hit on the steel is zero points. Tie scores are broken by number of bullseyes. Further ties are broken by shoot off with shoot-off rules being extemporaneously designed by the Range Marshall. Only one person shoots at a time. Other competitors are required to use spotting scopes, when not shooting, to watch the target and pass judgment on the quality of the hit. Bullseyes, non-bullseye hits and misses are determined by multi-person argumentative agreement instantly. There are no appeals.



Original Sharps Creedmoor Rifle at the Autry Museum of the American West



GMR shoots long range on the Sunday following the scheduled Saturday cowboy action shoot. This is typically the fourth weekend of each month.

<http://www.greenmountainregulators.org/>