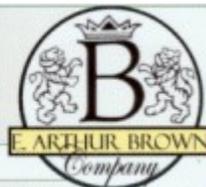




E. Arthur Brown Company Presents...

Muzzleloader Accuracy

How to Get Tack Driver Accuracy from your Muzzleloader Rifle



Muzzleloader Accuracy - How to get Accuracy from Muzzleloaders with better sights, loads, and loading methods.

[T/C Home](#) * [209X50 Accuracy Tips](#) * [Encore Muzzle Loader Menu](#) * [TC Dimension](#) * [View Cart](#)
[25 ACP Breech Plugs](#) * [Muzzleloader Cleaning Tips](#) * [Custom Riflestocks](#) * [EABCO Home](#)



©2004-2022 E. Arthur Brown Co., [CONTACT US](#), 4088 County Road 40 NW, Garfield, MN 56332
ph. 800-950-9088, FAX 320-852-2871, [Visit Our Online Store at eabco.net](#)

Muzzleloader Rifle Accuracy...

How to get Accuracy with Better Sights, Accurate Loads, and Accuracy Loading Methods

by Eben Brown, **For Reference Only - Use This Information at Your Own Risk**

There are three big factors that influence accurate shot placement with muzzle loading rifles: The ability to aim accurately, the accuracy of your loads, and use of a loading method that results in consistent accuracy.

Aiming Accuracy... Better Sights - Muzzleloaders are often required by hunting regulations to use "primitive" sights. This is a funny way to think of it because it really just means "No Scopes". There's nothing primitive about the top quality iron sights you can get, nor the small amount of knowledge and skill it takes to get precise shot placement when using them.

Accurate Loads - The truly golden age of black powder and muzzle loading accuracy reached its pinnacle with the Creedmore-style rifle matches. We started there with the 45-70, 45-90, 45-100, and 45-110 (Quigley) accuracy loads... then added in the improvements of modern propellants, [small rifle primers](#), and high ballistic coefficient sabot bullets.

Accuracy Loading Methods - The heavy fouling that occurs after each shot with a muzzleloader causes unpredictable accuracy... This is compounded when shooters choose an inferior, loose fitting bullet just because its easier to shove into a fouled muzzleloader barrel. We've worked out a loading method that gives consistent, shot-after-shot accuracy.

Sights - An aperture sight (aka peep sight), mounted as close to your eye as possible, removes a huge amount of aiming error by simply increasing the sight radius (the distance between front and rear sights). Also, aiming error from rear sight light reflection is virtually eliminated with an aperture sight... so that the angle of the sun will not change your point of impact. Finally, the aperture itself improves the focus of your sight picture by funneling the light through a hole. (A camera will do much the same thing when you reduce the size of its aperture... the depth of field improves).

Our new **PeepRib® Aperture Sight** for TC Encore and Omega combines a precision aperture sight with a scope mounting base. You can position a riflescope on and off your gun without upsetting your aperture sight! Its great for using a scope to fine tune your handload accuracy and you can just remove the scope when hunting regulations don't allow it. The PeepRib® Aperture Sight itself is precision adjustable for windage and elevation and comes standard with a special High Definition Aperture for the clearest possible sight picture. [For more on the PeepRib® Click Here.](#)

Our **WGRS® Aperture Sight** gives the peep sight advantage to several brands of muzzleloader rifles. Improve your aiming accuracy by simply installing this sight on your favorite muzzleloader.

Loads - When poor muzzleloader accuracy is due to your load, it can most often be blamed on a magnum (150 grain) powder charge. A look at the names of the most match-accurate black powder rifle cartridges in history will give you a hint: 45-70, 45-90, 45-110, etc... The first number is 45 caliber, the second is the powder charge. They never went higher than 45-120... or 120 grains of black powder! For further confirmation, ask among experienced muzzleloader shooters and they will usually say your best accuracy comes from loads between 80-120 grains of black powder, Pyrodex®, Triple Seven, or other black



**** Click Photos to Enlarge ****

Top - PeepRib w/Scope on a TC Encore
Middle - PeepRib Sight on TC Encore
Bottom - WGRS Receiver Sight on a TC Encore

[Info/Order 127-812 PeepRib Sight](#)
for TC Encore Omega Rifles
[Info/Order 23-10042 Interlok Rings Pair](#)

[Info/Order 716-63304 WGRS Peep Sight](#)
for TC Encore/Omega Rifles

Accuracy Loading Method.. If you don't clean between shots, the bore fouling keeps changing the bore from one shot to the next. And consistent accuracy becomes impossible. A lot is made of shooting from a CLEAN barrel but the barrel must also be CONSISTENT. If there is any solvent or lubri-cant residue after cleaning, it will screw up your accuracy. Add into this

powder substitutes.

Another accuracy consideration is the over blast and fouling from the 209X50 primers used by so many modern muzzle loaders. We recommend adapting to small rifle primers... Either with a 25 ACP Breech Plug or the new Variflame small rifle primer system- - [Click Here for Info](#).

Magnum 150 grain powder charges are supposed to give you a harder hitting, flatter trajectory for long range shooting, right? Well first of all, long range shooting requires ACCURACY. If the magnum load isn't accurate, the flatter trajectory isn't going to help. Second, the magnum load only gives 100-250 fps more velocity so its not a dramatically flatter trajectory anyway. And finally, the US Cavalry was knocking over Volkswagen sized buffalo with 45-70... only 70 grains of powder. You don't need 150 grains to hit hard.

Here's the truth about shooting flatter trajectories: Smaller diameter, longer bullets have higher ballistic coefficients and shoot flatter trajectories. In 50 caliber muzzle loaders, this can be achieved by using sabots and 45 caliber bullets. For example, consider the TC Shockwave 250 grain 45 caliber bullet. Seated in a 50 caliber sabot and loaded over 90 grains of Pyrodex RS powder, it shoots approximately 1623 fps. Zeroed for 150 yards, it is about 4 inches high at 100 yds and 10 inches low at 200 yds. The load itself is an absolute one-hole tack-driver out of a TC Encore, and shoots with manage-able recoil... A 200 yard muzzleloader without a magnum load.

Velocity	BC	50yds	100yds	150yds	200yds
1623 fps	.210	+3.29"	+4"	0.0"	-9.87"

For deer, aim center chest out to 150yds, slight hold-over out to 200

Here's the truth about knock-down and penetration: With muzzleloaders, you increase knockdown and penetration by going with a heavier and/or harder bullet. The powder charges that produce accuracy are still between 80-120 grains but, the heavier bullet carries more momentum into the target. TC has sabot bullets up 300 grains. Thompson Center has soft, expanding lead Maxi-Hunter bullets up to 470 grains and hard, deep penetrating lead Maxi-Ball bullets up to 460 grains in weight. How much you need depends on the size and toughness of your game animal.

Bullet Recommendations: The relatively lightweight 250 gr. Shockwave Sabot 200 yard load listed above broke through rib bones, lungs and exited breaking more rib bones of a 150 lb. whitetail doe at 80 yards last fall. I highly recommend that load. If your local hunting regulations don't allow sabots, I would recommend the Thompson Center 350 gr. Maxi-Hunter lead bullet for Deer and their 460 gr. Maxi-Ball lead bullet for Elk or Bear.

Powder Recommendations: I use and recommend Pyrodex® RS granular powder. If you use the new Triple 7 powder, remember it's a little faster than Pyrodex so work your loads up from a lower starting point. I believe granular powder gives me more flexibility and reliability than pellets.

Accuracy Products for the Encore 209X50 Muzzle Loader

[Info/Order 207-7003 Encore Seasoning Patches \(100\)](#)

[Info/Order 207-7037 Encore Dry Cleaning Patches \(100\)](#)

[Info/Order 207-9500 Bronze 45 Caliber Ramrod Brush \(10/32 thread\)](#)

[Info/Order 207-8236 TC Shockwave 50 Cal Sabots/250 gr. Bullets \(30\)](#)

[Info/Order 129-6684 TC Shockwave 50 Cal Ramrod Tip](#)

Note: - The 250 gr TC Shock Wave and Hornady 250 SST at 1623 fps, use ED value .0667 in the BRC software with [Hawke Ballistic Scopes](#).

my personal experience with cleaning was that I'd run a patch down the bore and the jag would stick down there and end my shooting session. So for the best Accuracy, what's needed is a way to clean the barrel between shots, without get-ting the jag stuck, and leave the bore in exactly the same condition from one shot to the next.

[Click for Pictures](#).

Here's what I do: For a 50 caliber bore, instead of a jag I use a 45 caliber bronze cleaning brush. [Wrap a TC "Seasoning" Patch around the brush](#) and scrub it down the bore all the way to the breech plug. Seasoning patches are impregnated with borebutter that loosens the crud while seasoning the bore surface. Scrub the ignition area at the bottom especially well until you can feel that you are scrubbing smooth, bare metal. Usually its about 20 strokes. Next, wrap a DRY cleaning patch around the brush and scrub the barrel like before... about 20 strokes. This method results in a clean, consistent barrel that also loads easily and consistently. And the brush/patch combination never sticks in the barrel. Now, refer to the TC Muzzle Loading instruction manual for details of loading muzzle loader rifles, fully seating bullets, marking your ramrod for depth reference, etc... **Then adapt that information to all loads at your own risk.....**

Small Rifle Primer Adaptors

The 209X50 primer has a potential for disrupting accuracy in muzzle loading rifles.

[Click Here](#) to use Small Rifle Primers

Note: The supplies at left will get you by just fine in the field. But for convenience and speed of loading while you are working up your load and practicing at the range, I recommend you use a separate, standard cleaning rod and brush to do the cleaning between shots and use your ramrod just for seating bullets...

Consider these items:

[Info/Order 715-26-22-26 Cleaning Rod](#)

[Info/Order 715-45R Bronze Brush .45 Cal](#)



For Extremely Accurate Muzzle Loading Bullets, [Click Here!](#)

EABCO Home * Web Store * Checkout/ViewCart * Shipping/Ordering Info * Join NRA * Join AGC * Free Tech Reports * Email Bargains
[Thompson Center](#) * [Ruger 10/22](#) * [Savage](#) * [E. R. Shaw](#) * [Single Shots](#) * [Riflescopes](#) * [Muzzle Brakes](#) * [Reloading](#) * [Berger](#) * [Lapua](#) * [Timney](#)
[Hawke](#) * [Mueller](#) * [Swift](#) * [Warne](#) * [Redding](#) * [Lee](#) * [SK/Wolf](#) * [Aguila](#) * [Peltor](#) * [Choate](#) * [Harris Bipods](#)
E. Arthur Brown Company, Inc, CONTACT US, 4088 County Road 40 NW, Garfield, MN 56332
ph. 800-950-9088, FAX 320-852-2871, Visit Our Online Store at [eabco.net](#)