

Hunting Rifle Accuracy Fixes

By Ben Evans

I was just reading the articles on rifle accuracy and thinking back on some of the amazing comments I have heard from other shooters. Sometimes I wonder if they gleaned their information from that profound book on accuracy, *The Cat in the Hat*.

Numerous times we hear of a major manufacturers rifle using big box discount store ammo shooting "same hole" groups. I ask, how many groups did you shoot? The answer is something like two shots. Hummm, do you think that is a true test? Remember that mass produced factory guns are usually made to shoot 1.5 to 2.5 MOA groups. This is sort of the standard for a hunting rifle. One minute of angle equals 1 inch at 100 yards.

Once a co-worker brought me his high dollar hunting rifle for a tune-up. Seems it was shooting around 1.5 MOA and he was sure something was wrong. At the price he paid, he was expecting that "same hole" accuracy with factory ammo. He eventually sold the rifle because it "wouldn't shoot straight."

A shooting friend of mine, who quits jobs to go to Camp Perry every year, has a saying for these "same hole" accuracy experts: "If you can shoot a ten shot group into 1 MOA then you have a 1 MOA gun. If, in a ten shot group, a flyer moves out to 2 MOA, then that gun is a 2 MOA gun, nothing better."

What can you do to make a factory hunting rifle shoot better? One of the first things is to properly bed the barrel so that it is fully supported without pressure points for the full length of the forend. If it is supposed to be free floating, make sure the barrel doesn't touch the forend under any circumstance. Next is to bed the action. Both can be done at home using regular tools and a steel bed kit from Brownell's. The accuracy improvement with Brownell's Steel Bed is so dramatic that I bed every bolt gun I own.

Be sure to get a can of release agent and use a lot of it on all metal parts during the process. If you don't, you will need a chain saw to get the action out of the stock. The stuff does bond well. Free floating the barrel is simple, just trim the wood where it touches the barrel. Leave enough of a gap that two business cards can easily pass between the stock and the barrel. No, this isn't so large a gap that it will trap small animals.

OK, is the gun new or used? "This barrel is shot out, the gun is worthless." Heard that? According to the techs at Sirra bullets, to begin to see a drop off in *match* accuracy for .30 cal. barrels, you have to run approximately 3000+ rounds through them. That is "three thousand" rounds. It usually turns out these barrels were just dirty. I have fixed many a "shot out" barrel with a good cleaning and JB lapping compound from Brownell's. Just follow the instructions on the jar.

With a new gun, Tubb's barrel lapping process is a good way to start. Again, just follow the directions that come with the kit. This will result in a barrel break-in process that leaves a smooth bore to start your load tuning. These accuracy fixes are cheap and easy enough to be done by most shooters.

The next item is tweaking loads for the rifle. There are plenty of reloading articles already, so I won't go into it here.

The above techniques have worked well for me. I am no expert, just an amateur gun bug, but I am an expert at trial and ERROR. From Camp Perry to training snipers to hunting, my guns all shoot better than I do. I know that any misses are my fault, not the bullet launcher I use. I hope this helps someone down the line.