

Hunting with the Cast Bullet

It seems the first question that comes to the mind of many neophyte users of cast bullets is, are they effective for hunting purposes? To which I will say, yes they are. Within their limits.

What are the limitations? It comes down to bullet design first, and velocity second.

The first deer I ever killed, was shot with a Bedford County Pennsylvania rifle, in .45 caliber. This was with a patched round ball, behind sixty grains of the now long gone, 3F Green River black powder. To sweeten the deal, it was also the first rifle for which I had ever cast any projectiles.

I had good success over the years with the patched round ball, supposedly the most inefficient design of projectile, but several hundred years of history have proven their effectiveness.

It wasn't until the early 1980's until I began casting any other projectiles. These were for the .44 Remington Magnum, and for a Martini Henry rifle I had acquired. Results were mixed, as I didn't know much about shooting cast bullets. I had severe leading in my pistol, and the rifle bullets had a great tendency to keyhole at longer ranges. I know now, that both bullets were undersized for the firearms in question.

As the years went along, I got a pistol that was agreeable to shooting the diameter bullets I was using. I shot thousands of rounds through that gun, and fortunately for me, I was using a good flat nosed Keith design bullet. With this, I killed a fair amount of deer and antelope. And the results were generally consistent. With a good hit on a deer or antelope, they were down in short order. Antelope when hit, if at a full run, tended to make a loop of about a hundred yards before they would pile up, and deer would generally go down where it stood. I can't remember any going more than maybe twenty-five yards after being properly shot.



**Buck taken by the author with a Ruger Redhawk .44 Remington Magnum,
240 gr. Keith semi wad cutter, Javalina Lube, 21 gr. 2400**

I still had a lot to learn, though. I didn't understand the "why" of the quick kills I was getting. It wasn't until a few years into my casting career that I saw the results of a poor bullet design on deer size game.

I had an 1886 Winchester, chambered in .45-70. I was shooting the same 500 grain round nosed bullets I was using in my Sharps. Accuracy was superb, and I assumed I now had the ultimate woods rifle. My hopes were dashed, at my first experience with a doe a few hundred yards from my cabin.

Back then, I had nearly exclusive hunting rights on over nine sections of mountain land. The only other hunters on it, were the landowner's family. That few people just doesn't put much pressure on nine square miles of mountain terrain,

so the animals were quite easy to see, once you penetrated into the timber. Hunting limits were generous, and the land was overpopulated with deer.

One morning, as I slowly moved through the fringe of timber, a doe was standing maybe seventy-five yards away. It looked like an easy piece of meat for the freezer, with a short drag to the cabin, so I slowly raised the Winchester to my shoulder, and took aim at the lung area.

When I squeezed the trigger, the doe disappeared in the thick cloud of black powder smoke, and it clung to the ground in front of me, in the cold, damp fog of an early winter morning. The smoke slowly cleared, and I fully expected the doe to be lying dead where I had last saw her.

I levered another round into the chamber, and pocketed the empty cartridge case.

Moving slowly, I approached where she had stood in a small clump of Douglas fir. And there was no deer. No blood.

I started searching more carefully, and found a few bits of hair that the bullet had cut as it had entered and exited.

I knew I had hit her properly, and was puzzled as to what had happened. So, I began the task of tracking the wounded animal. She had gone over a small rise, into ground covered with heavy pine needle duff, and rock outcroppings. The tracking was somewhat difficult, and I would only see an occasional scuff on the pine needles in the direction of travel.

After about fifty yards, I found the first drop of blood.

I marked the spot, and after looking over the terrain, I saw a small dip in the ridge, and headed for that point. It was a good guess, as I picked up the trail again there.

I was still only finding blood every forty to fifty yards. Even these were difficult to see, as the foliage was turning a deep ox blood red. The drops of blood would blend in perfectly. I would sometimes rub a leaf, to see if the color was natural, or blood. The fog dampened leaves were shiny, and it was nearly impossible to discern the differences in the color. I sometimes carry a small atomizer bottle with hydrogen peroxide in it, to check for blood spots, as a slight spray will show the blood easily as it foams up.

I was moving very slowly, watching the ground closely, and occasionally scanning ahead. Suddenly, there was a deer standing less than three feet away from me in heavy brush. I don't know which of us were more surprised, as it definitely startled me, and the deer left in high gear. It threw the rifle to my shoulder, and was ready to shoot again, when I realized it wasn't the same deer, but a small forked horn buck.

But I did find the doe down within another twenty yards. I figured the little buck was it's twin from the previous year, and stayed with it when it went down.

When I dressed it out, I was surprised. I had fully expected the five hundred grain slug to do great damage. It did not. The round nosed bullet slipped through both lungs, with no expansion. The wound was the same size as the bullet, or possibly even smaller, with tissue spring back. The hole was small enough, that nearly all the bleeding was internal. The body cavity was full of blood.

So, the bullet did certainly kill. But is this good performance? I don't think so.

In the late nineties, I stumbled into the late, lamented Shooters.com Cast Bullet room, and my real education in cast bullets began.

Through patient tutoring on the part of the members there, I quickly learned the secret to an effective hunting bullet, was a good flat meplate on the front end. I was also led to the information in Veral Smith's book, "*Jacketed Performance with Cast Bullets*", a source I highly recommend for those who want to know WHY cast bullets function as they do.

At the same time, I developed an interest in military surplus rifles, and casting bullets for them seemed like the natural thing to do.

My first venture into this realm was with the 6.5X55 Swedish Mauser, which I also learned was one of the most

finicky for cast bullets, and more specifically the speed at which they can be shot. 1700 fps is about the upper limits for consistent good accuracy with this bore size.

The load I ended up with was the Lyman mold #268645DV. The powder was 35 grains of military surplus powder WC 860. I had to bump the nose of these bullets in the lubrisizer slightly to get good accuracy. The one hundred yard group size is right around one and a half inches. This is shot with the issue military sights, so with a scope I believe it would shoot into half of that.

Having developed a good load, I was determined to try it out during the coming deer season.

I went to a friends' property, at the foot of the Swan Mountain range, in Northwest Montana. This is an excellent hunting area, abounding with deer, elk, mountain lion, grizzly and black bear, turkeys and grouse.

It was a cold, cold day, with a heavy overcast. The wind was blowing strong out of Canada, with a smell of coming snow in the wind.

I moved slowly along, barely covering a hundred yards in half an hour. I saw several does and fawns, and three bucks as I crept through the woods. I stood and watched them, hoping for them to turn to a good position, or possibly move closer. The wind was good for me. They couldn't smell me, and as long as movement is kept extremely slow, an animal usually won't notice you. It took me many years until I got to where I could go slowly enough to effectively hunt whitetail deer. Once I learned, I have managed to kill four bucks in heavy timber, while they were lying in their beds.

I took a break at midmorning, and made myself a cup of tea, had some jerky and chocolate, and enjoyed the fact the wind was dropping, and the sun was peaking out occasionally. I watched as does meandered by, and a flock of turkeys foraged through the brush about thirty yards away. I was enjoying the day so much; I had nearly forgot I was there to get meat for the long winter.

I finally gathered up my gear, and putting it back in my fanny pack, began to once more move along a mountainside trail.

Then I saw a flash of movement. Was it a bird? No. There it was again. It was an antler tine and an eye in the brush. I slowly sank to the ground by a stump, and waited.

Then here he came. A nice little buck, neck swollen with the rut, walking down a bank stiff legged, nose to the ground, following the trail of a doe.

I quietly moved the three position military safety to the fire position, and raised the Swede to my shoulder. The buck stopped to sniff the air, and I squeezed the trigger smoothly through the second stage.

The rifle made a gentle crack, launching the bullet across the seventy yards to the buck.

And he stood there. No reaction at all. I was somewhat baffled. I slowly chambered another round, and squeezed off another shot, as he turned, hitting him back further. He slowly walked about thirty yards, and went down. The bullets had done their work.



**Buck taken with 6.5 X 55 Swedish Mauser
Lyman #268645, 35.0 grains Milsurp WC 860.**

When I autopsied the carcass, I saw the first bullet had been all that was needed. I was just accustomed to more spectacular kills with high velocity rifles.

The first shot went through the lungs. The off side lung was pretty much completely destroyed, the near side had a hole of about 1 ¼" through it.

The second shot angled back through the liver. This wound was a star shaped wound, about four inches across.

All in all, I would say this was good bullet performance, as they did sufficient damage to kill reasonably quickly. And I will also say, I consider the 6.5 caliber minimum for deer with a cast bullet. That is just my personal experience, and your mileage may vary.

Stepping up in calibers, I then started experimenting with my Swiss Schmidt-Rubin K11, chambered in .308 Winchester. These are an interesting rifle of straight pull action design, and are the forerunner of the Schmidt-Rubin K31, a very popular sporting and target surplus rifle. These are strong actions, about on par with the 98 Mauser.

The load I ended up with in this particular rifle was 43 grains of 4350, behind the Lee 170 gr. FNGC bullet. This grouped into an inch and a half at 100 yards, and I seem to recall this load shoots in the range of 2250 fps. This is about as fast you want to push cast for hunting, to prevent severe meat damage.

The end use of all my cast bullet reloading is for hunting, so there was only one way to see what the effect of this load would be. So saying, I was off early one morning, before the sun was beginning to show in the east.

Parking the pickup at the end of the road near the end of a private shooting range, I put on my fanny pack and gloves. I then filled the magazine of the Swiss rifle, and slung a pair of rattling antlers around my neck.

I stood at the end of the shooting range, as the light began to strengthen. There were several does and fawns on the range feeding. I stayed there for some time watching them, as the rut was on, and I have found no better buck lure than does. However, the fawns had not been chased away, so I was pretty sure none were yet in heat.

After watching for about half an hour, I took the antlers from around my neck, and barely touched them together. And

again. Slowly, I became more aggressive with my rattling. To my amazement, the does and fawns didn't even look at me! The closest were within thirty yards, and I frankly had expected something of a reaction.

I continued rattling for about ten minutes, then sat silently for another forty-five minutes. The deer slowly fed away as the light grew stronger and stronger, heading for their bedding areas. No bucks appeared, so I decided to try another location in a wooded bowl over the ridge.

This had always been a good, productive area. I had shot several bucks here before, and a couple elk in the past.

I sat up for rattling next to a six foot spruce tree. I had a very good field of fire for over a hundred yard in a gulch below me, and the basin that was before me. I knew there were four main trails that intersected in this spot, and had faith it would be productive.

Kneeling down, I began with striking the ground with the tines of the antlers. I repeated this several times. Then sat quietly. After maybe five minutes, I tickled the tines together, just barely enough that I could hear it, but I knew the sound would travel well in the damp, quiet woods. And I waited again. Still nothing.

Convinced there was no bucks with in a couple hundred yards, I began a very aggressive series of rattles, going for about ten minutes, taking breaks occasionally, stamping my feet, raking the brush with the antlers, and just generally making as much buck fighting racket as I could come up with. I then stood motionless by the tree, waiting to see what would happen. I watched squirrels play in the trees, and a flock of turkeys working below me in the gulch.

But I had a problem. One that many of you have had if you have hunted for many years, and drink coffee. Yep, it was time to go. So, I put the rifle in the crook of my arm. Then the tail of my coat needed to be out of the way. Next, the fanny pack belt needed hitched up. And finally, burrowing into the layers of clothes, searching with ice-cold fingers. Finally successful, I was enjoying the relief. And if you are a hunter who has been in this position, you know that right then is when a buck came storming off a ridge at a hard run, looking for the fight. He slammed to a stop in the middle of the clearing about thirty yards away. I let nature take its course in some aspects of what was happening at the time, as I snapped the rifle to my shoulder. I forgot about the somewhat awkward safety of the Schmidt-Rubin, and fumbled with it momentarily. This commotion had clued the buck in that not all was right in the Salish Mountains, and I could see he was deciding there were no does to be had there.

Quickly finding his shoulder in the Scout mounted 1.5 scope on the rifle, I urged the trigger back through its smooth pull, and felt the rifle recoil. The buck fell immediately, a small cloud of hair gently settling to the ground around where he lay.



A Schmidt-Rubin chambered in .308 Winchester took this buck.

I chambered another round, but was sure I wasn't going to need it. I could see by the way he lay, he was deader than last weeks ball game.

The bullet had struck the point of the shoulder, angled back into the lung area, passed through the liver, and exited in front of the hip. Excellent penetration.

The major skeletal bones being disrupted; there was no chance he would have been able to travel at all before he died.

A week later, hunting in the same area, I shot an elk with a .30-40 Krag with the same bullet. There really isn't much to tell about that one, as he happened to almost run over me, at a range of under six feet. I shot him in the neck, immediately killing him. Pretty much any bullet would have done the job effectively at that range, and with the same bullet placement. Three vertebrae were shattered in the neck, ending his career.

I think any hunter would be well served for deer size game with a .30 caliber rifle, at moderate velocities. They penetrate well, leave a good wound channel, and a short tracking job. Over the years, I imagine I have killed over a dozen deer with the .30's, and they have always come through. As with any caliber, bullet placement is paramount. Put a well-designed cast bullet through the lungs, or skeletal structure of a buck, and he is yours.

Stepping up once again in bore size; we come to the .35 calibers, my personal favorite for mountain hunting. To me, they have all I need. A heavy bullet, with velocities matching, or surpassing, factory loads for the most part. Once you reach the .30+ bore sizes, things seem to get easier, as far as getting a rifle to shoot well for you.

In this bore size, we have some good chambering selections. There is the .35 Remington, the .358 Winchester, and the .35 Whelen, that come immediately to most hunters' minds.

I use a .358 Winchester that I built on a VZ 24 action, using a 1-12 Douglas barrel. I use a Lyman aperture sight on my rifle, to accommodate my aging eyes. To me, they have everything I need for game up to elk size up to two hundred yards or more. And I don't feel under gunned in the areas I hunt with big grizzly bear populations.

I like the case of this round, as you can load to, or near, 100% capacity. I feel this is always a plus with any cartridge, and believe these are some of the more efficient loads for hunting, as the pressures are low enough that the bullet gets a nice slow start up the barrel. My best accuracy comes with near case capacity loadings, and when I do my part, my bullets will stay under an inch at a hundred yards.

Some time ago, Wally Bator designed a pair of custom molds for the .35 bore size. The one I favor for my hunting purposes, is the "Bator Heavy", a designated 250 grain bullet, that, when lubed and gas checked, weighs 277 grains from my mold. It is a close copy of the Lyman 358009 bullet, a long time favorite of .35 shooters. The lighter bullet, designated 225, comes out of my mold, and ready to shoot, at 237 grains. This bullet has also shown great accuracy, and is most likely the bullet weight the average hunter may want to try.

I use a .358 Winchester that I built on a VZ 24 action, using a 1-12 Douglas barrel. I use a Lyman aperture sight on my rifle, to accommodate my aging eyes. To me, they have everything I need for game up to elk size up to two hundred yards or more. And I don't feel under gunned in the areas I hunt with big grizzly bear populations.

I have two good hunting loads for the heavy bullet. The first is with 41 grains of WC 852(F) military surplus powder. This is near the burn rate of IMR 4895. I use a bit of shot buffer for a filler, to give 100% capacity. All of my bullets are lubed with Felix' World Famous Bullet Lube. These average 2077 fps. and will group at under an inch. My other heavy bullet load is 43.5 gr. IMR 4895. I also use a bit of shot buffer in this load. Average speed is 2195 fps, and this one stays in a 2.25" group. So, you can see by comparing the burn rates, these powders are indeed pretty close in performance.

For the light Bator bullet, I came up with a load of 39 grains of 3031. These fly out at 1950 fps, and shoot into three quarters of an inch at one hundred yards. This is all the accuracy, and velocity, you need for clean kills in this bore size.

Let me add a caveat here. If you are not fully familiar with reloading, pressures, and military surplus powders in particular, stick to canister grade powders. Military surplus lots can vary drastically from lot to lot. They must be used with caution, starting at a low load, and working up slowly, watching for any pressure signs.

To the 250 gr. Bator out, I had an opportunity to shoot a two-year-old buffalo cow. To the best of my knowledge, this was the first big game shot with this bullet.

Any of you who have had the opportunity to shoot a buffalo, know it is more like going out and shooting a cow. They aren't particularly wily. They are big, and prefer open areas, so are easily seen. Most in the lower 48 are shot on farms or ranches, ranging from a couple hundred acres, to forty or fifty thousand acres.

The ranch I went to had the buffalo in a field of a couple hundred acres. And there really isn't much to tell, aside from the fact there was snow, and high winds driving temperatures down to thirty-five below with wind chill. Not my favorite hunting conditions, by any means.

I was able to get a good solid sitting position, and put a single bullet behind the bison's ear. It went down immediately, and was dead when I reached it. The bullet had shattered the neck vertebrae, instantly ending the game.



**Buffalo cow taken with a .358 Winchester
Bullet was a .35 250 grain "Heavy Bator"**

To end this story of hunting, I decided to add in nearly verbatim, the posting I made of my last elk, on the Cast Boolits room.

Today was the first day of big game season. So, I got up way before dawn, definitely earlier than I care to rise, as a rule.

I went across the valley to a friends' place I've hunted for years, and started moving through the woods in the still dark morning, heading for a particular area. I was seeing does and fawns pretty regular. I did have a doe tag, but don't like to shoot any for a few more weeks, until they are weaning the fawns.

I got to the back edge of the property, just after full daylight. It's incredibly rugged country, rough glacial breaks with heavy timber, and small parks scattered through it. I had been trailing a bull, and hadn't caught up with him. I had found his shed antlers for the last couple years, but had never been able to connect with him.

Then I was watching a buck, deciding whether to shoot him or not. Suddenly, a limb cracked, and he was gone. I stayed put, and in less than a minute, I made out an elks' outline. Then another. And another. Soon there were about thirty of them in the timber about 75 yards away. Then they turned and started heading to where they would pass very close by, in a clearing.

The lead cow stopped about thirty yards from me, in a classic broadside pose. I put the bead on the lungs, and squeezed one off. I could tell immediately it was a good hit. Her eyes kind of got an "oh, no" look in them. I squealed on the cow call, and busted her again as she started to move off. I called again, and she slowly meandered over a small rise. I kept cow talking to hold the herd, so they wouldn't lead her off. After what seemed like minutes, but was probably much less, they moved on out of the clearing, and disappeared into the drainage.

I gave her another couple minutes, locating my fired brass, before following on the heavy blood trail. She was standing just over the rise about twenty yards away; at least I assume it was she. I didn't shoot again, as I didn't want to have two elk down. She slowly moved off, and I continued following the trail slowly. Then I heard her groaning below me, and saw her lying, piled up where she had rolled another twenty yards down the mountain side, into some small fir trees.

I gave her a couple minutes to finish dying, as she was obviously just in her death throes, and more lead wasn't going to change the outcome.

She had traveled all of fifty yards until she was down for good.

When I dressed her out, I saw the first shot in the lungs had made a hole nearly three inches across. The second shot was back further, hitting the liver. A full third of the liver was absolutely destroyed. Exit wounds were a bit over an inch and a half. At the range I hit her at, I would imagine I had some expansion out of the Bator Heavy.

I was able to get my pickup to about three hundred yards away, and got the meat and hide out in four trips. I have one of those kids' six-foot plastic sleds, and they are a real help for getting game out of the woods.

I hauled her home, and have the quarters hanging in my meat shed. Liver and onions tonight!



**Cow elk taken with cast
.358 Winchester using a 250 grain "Heavy Bator"**

As a further note, I consider the cow call a necessary part of elk hunting. I've used it for nearly twenty years with good results. I've stopped bulls in their tracks, and been able to put another arrow or bullet into them. I've called entire herds back after they have been spooked, sometimes drawing them several hundred yards. If they are spooked from movement or something else, they will usually stop dead in their tracks until they can identify the source of disturbance, giving a chance for a good standing shot. It is also good to cover whatever noise you may make in the forest, as elk are noisy creatures, and are constantly breaking sticks and brush. If you can make them think you are just another clumsy elk, they won't panic. Calling immediately after a shot will almost always hold the individual elk, or the whole herd. With the proper tone, they find it to be a comforting natural sound of the herd, and don't panic. The only thing you can't beat is their nose. Today, I was standing in full view of this herd, but the wind was right, and I was moving slooooooowly.

So there you have it. These are some of my experiences with cast bullets in the field, and I hope these illustrations have answered some of your questions about the effectiveness of cast bullets for hunting purposes.

Get out there, and do it!

Ric Carter/Waksupi