

Fur Loads

By Tim Titus

The coyote came through the sage at a steady lope. Pivoting the rifle and bipod in his direction, I let out a “Woof”. The coyote came to a stop and almost simultaneously dropped like the proverbial sack of potatoes.

Walking up to the well-furred predator, the result was what I had come to expect... one small entrance hole and no exit. The bullet had entered, totally fragmented and then stayed inside the animal. Perfect.



The objective: a small entrance and no exit.

No time would be wasted in the fur shed sewing this pelt and no discounts would be taken from the fur buyer trying to maximize his profits at my expense. The outcome was predictable but not easily obtained. It came at the expense of a long quest for a consistent fur load and resulted from extensive research and experimentation.

As the fur market rebounds with the perceived economic recovery, harvesting a good useable hide becomes more attractive. Fur markets cycle with the economy and the world fashion trends. They always have and always will. But, the desire to cleanly harvest predators with a minimum of pelt damage goes beyond simple economics. The thought of leaving a marketable hide in the field is just as foreign to some as leaving the backstrap of their deer. Many have hauled hides to the buyer when the proceeds didn't even cover the fuel. It just seems right to use the resource. Others simply take pride in putting up a nice clean pelt. And, when it comes right down to it, most fur takers would rather hunt than sew; otherwise they would spend their time in front of the fire knitting mittens instead of hunting predators.

The first coyote I ever called was taken at 10 yards with a Hornady 110 grain Spire Point handload from my old Remington M725 .30-06. The tip of that coyote's tail graced the zipper pull on my favorite gun case for decades and, after the dust settled, the tip of its tail was about all that was left! That began my search for the perfect fur load. Like most, my testing started with a full metal jacketed bullet. But, like



Genealogy of a Fur Load- .22 Cal FMJ, Speer 52 gr HP, Horn 60 gr. V-max.

many, the FMJ's left me wanting—wanting more consistent performance and wanting fewer lost coyotes. Coyotes are tough animals that need and deserve a quick decisive kill whether you respect the animal or not.

After the FMJ phase, the next step on my journey came after reading Rick Jamison's book *Calling Coyotes: And Other Predators*. Jamison hunted coyotes for a living in the hay-days of the coyote hide market. He prescribed the Speer 52 grain hollow point over H380 if I remember correctly. The load was travelling around 3800 fps when it exited the muzzle of his .22-250. Rick

claimed the bullet would not exit a coyote on a straight-on frontal shot. I did kill one straight-on “drive-by” coyote with this load—a Texas heart shot that perfectly perforated the coyote's tail bone and failed to exit. However, this author's calling skills at that time must have been somewhat lacking compared to Jamison's because that was the only straight-on shot I ever took with that bullet. Shots at other angles left gaping holes so the search for the elusive perfect fur load continued.

The Factors

Predator hunters tend to talk about coyotes as if they are all created equal. They are not. Predators vary tremendously in a number of characteristics that impact (pun intended) the terminal performance of bullets. Body size varies not only by sex and age but also by longitude. Bergman's Rule states that a species' size in cooler climates tend to be larger than specimens in warmer climates. Coyotes in the Arizona desert weigh significantly less on average than coyotes from the Alberta plains. Therefore, all things being otherwise equal (and they rarely are) a big, northern coyote can absorb more bullet without an exit and will also take more energy to kill cleanly than a smaller desert coyote from the Southwest.

The second factor affecting terminal performance on predators is the thickness of the pelage. Again, hair coat varies not only by climate but by time of year. Testing a marginal load on early fall coyotes may lead to disappointment once the pelts prime in the middle of winter. Fat layers may also change the expected performance of fur loads. And, lastly, the characteristics of the species also affects bullet performance. The hair coat and



Varmint performance gives clues to pelt performance. A 300 yard rockchuck, a .204 35 gr Berger- no exit.

hide of the bobcat is not as tough as that of coyotes for instance.

Fox are a rarity in this area. And, all bets are off on these small predators. A shotgun may be the only sure medicine for a nice fox pelt and a quick kill.

Virtually all fur load testing has been done on Oregon desert coyotes and bobcats. Adult males range from 28 to 35 pounds. Females run about four pounds less. Occasionally individuals will weigh somewhat more but usually not significantly. Most of our predator hunting takes place while furs are prime. Any load recommendations should be weighed with these parameters in mind. One size doesn't fit all when discussing fur loads. Broad generalizations concerning terminal performance on fur may be well intended but they don't necessarily result in accurate conclusions. The local characteristics and species being hunted must also be factored.

The Options

So, what are the options for fur loads? The shotgun is probably the best if ranges are short but stories of 70 yard shotgun coyotes may cause predator hunters to overestimate the capabilities of their weapon even with the latest heavy metal shot and the greatest choke tubes. Pattern your shotgun and keep your expectations reasonable. Skinning coyotes with pellets under their hides from earlier encounters with hunters says that some hunters are overreaching their shotgun's capabilities.

As a rifle shooter at heart, this article focuses primarily on rifle loads for fur. This is the realm that becomes fascinating to the student of terminal ballistics. The information here has largely been developed on live targets. Gelatin blocks and wet newspapers are not this author's gig. A student of terminal performance can also legitimately garner some bullet performance insight from use on other species but actual performance on furbearers needs to be done before a hunter settles on The Load.



Twenty Cal bullets by increasing penetration.
32 BK, 39 BK, 40 V-max, 40 NOS BT, 35 Brgr, 40 Brgr

Occasionally, posts appear on forums from well meaning individuals espousing the virtues of a given bullet or load based on the two coyotes they have taken with said bullet and load. A couple of coyotes can give an indication of a load's usefulness on fur but it is only that—an indication. A small sample of predator kills will not touch the variety of velocities, angles, shot placements, etc that will determine the consistent performance on fur. Only day in and day out use on many animals in many different circumstances will determine if the chosen fur load will perform in a repeatable way in your area on your animals.

Bullet Characteristics

The primary consideration for bullets intended for fur is the bullet construction; specifically, how fragile they are. Although many use the term “explosive”, no readily available bullets actually explode. They fragment.

Long range predator loads may be best served with a heavily constructed bullet that can be placed through the rib cage. The heavier, high ballistic coefficient bullets required for this game generally don't lend themselves to fragmentation without exit. The exception to this may be the Hornady A-max bullets which tend to be fairly fragile for their weight. For calling distances, let's say 250 yards and less, our objective is to match the construction of the bullet to the impact velocity so the bullet penetrates to the vitals then fragments without exiting. As a general rule, the faster the impact velocity, the tougher the bullet construction required.

Bullets of any given caliber, make and style tend to be less fragile as the weight increases. A 50 grain .224 V-max bullet will tend to fragment easier than a 60 grain .224 V-max for instance. So, a low velocity round shooting the 50 grain V-max bullet may perform similarly to a high velocity load shooting the 60 grain V-max.

After using the Speer 52 grain HP in my .22-250, the quest for a fur load continued with various 52 and 53 grain match bullets. Results were very similar...a lot of fist size exits, especially on broadside shots. I took a short run with 40 grain Varmint Match bullets in my .22-250's and found that splashes (fragmentation on the surface without penetration) seemed to be the name of the game on short range shoulder shots. This resulted in large entrance wounds without penetration to the vitals so they were quickly abandoned.



Fur damage- the last thing you want when a bobcat arrives.

At this point, I purchased my first rifle in the .204 Ruger cartridge. It was a lovely Cooper M21 Varminter. The objective was to call my own shots on rockchucks but not long after the purchase, reports of fur performance with 35 grain Berger bullets began to surface. Such a nice piece of walnut was nerve racking to carry in the field but when a bobcat might be encountered, the .204 got the nod. (Ever notice how many coyotes show up when you start targeting 'cats?) The 35 grain Berger in the .204 proved perfect for our desert coyotes. Bang-flop performance and almost no fur damage. I felt I had reached Fur Load Nirvana. This load has served well as the primary calling cartridge for the last

few years. Eventually all the .22-250 rifles in the safe were replaced with .204's but that move would have been slowed or possibly abandoned if the quest for fur loads had gone more quickly.

A post on another forum by a well known and well traveled predator hunter, Byron South, suggested the Hornady 60 grain V-max in the .223 REM cartridge. My son was still shooting a .22-250 so we loaded a

moderate 60 grain V-max load in his rifle and after years of large exits, we suddenly started seeing good fur performance in the .22-250. The sample of coyotes shot with this bullet has not been definitive but it was the first acceptable results we had seen. No splashes and no exits except one coyote hit high in the back. The indications were that this would be an excellent fur load in this cartridge. Had this bullet surfaced before the .204 craze hit, the .22-250 may have stayed the number one calling cartridge in the stable.

However, load development didn't end there either. Reading some reports of .243 performance with the 58 grain V-max, my son began trying some of these bullets in his .243AI long range rig. Finding a load that shot to a similar POI as his 105 grain A-max load allowed him to carry one rifle for calling and the occasional "drive-by" or hung up coyote. The performance of this bullet on fur has been encouraging. However, as was stated earlier in the article, terminal performance on other game can give some indication of relative performance on fur. This load will literally tear a jack rabbit in half at close range. It is devastating and similar to a 32 grain V-max from a .204 leading to the conclusion that it may splash given enough quartering-on shoulder shots at calling ranges. There is a box of 65 grain V-maxes on the loading bench that need some fur time. They may be a better choice at .243 Ackley Improved velocities.

And, so goes the quest....

General Observations

The .204 Ruger cartridge has received some bad press concerning coyotes running off after being solidly hit. It's this author's contention that much of this has been the result of using the light, 32 grain poly-tipped bullets in this round. Berger bullets hold together much better than the Hornady V-max and Sierra Blitz King bullets. This has again been confirmed on varmint species. In this small caliber, use of more stoutly constructed bullets or limiting your shots to broadside opportunities is critical. The more fragile bullets have killed and can kill coyotes but there are better tools for the job.

Similarly, the various .17 centerfires make excellent fur cartridges with good bullets like the 30 grain Kindler Golds in the .17 Remington or even the Hornady 25 grain HP in the .17 Fireball. But, coyotes deserve to be taken with bullets of adequate construction to allow consistent, clean kills with these small calibers. Remember, the hotter the cartridge, the tougher the bullet needs to be constructed. Seventeen and twenty caliber cartridges with extremely fragile bullets designed for use on varmints need to be limited to perfect shots when used on predators. Avoid larger bones and heavier muscle mass.

In the popular "varmint" calibers, a list of increasingly tougher bullet construction would look something like this (most fragile to toughest): Hornady V-max, Sierra BlitzKing, Hornady A-max, Nosler Ballistic Tip, Berger Varmint Match, the various match bullets from Berger and other major manufacturers, then bullets designed for big game such as the Remington CoreLokt on up to the Barnes TSX's. The objective becomes matching the bullet construction to the impact velocity. Splashes indicate the need for a tougher bullet (either a heavier bullet of the same style or another bullet of stronger construction) or a lower velocity. Exits indicate the need for more fragile bullets or higher velocity (within safe limits, of course) or both. So, let's say your trusty .22-250 starts to give indications of splashing with your 55 grain V-max load. The next logical step is to either switch to the 60 grain V-max or possibly the 55 grain Nosler Ballistic Tip. Again, adjust bullet construction to the results you see in the field.

Hitting a balance between not exiting on broadside shots and not splashing on shoulder shots is the key. When your fur load can do that the bulk of the time, you are on the right track.

Limitations

Some circumstances negate proper fur performance. Raking shots, whether to the side of the animal, high or low, will likely result in Johnson & Johnson's stock going up. (Dental floss is a popular hide sewing thread.) Increasing ranges and the resultant lower impact velocities may cause more exits because there is not enough remaining energy to cause the bullet to fragment. Hitting grass or weeds prior to contact with the animal may cause premature expansion. And, occasionally, bad luck just happens as was the case one morning calling coyotes.

A few minutes into a stand I had a large male coyote running straight at me. I was shooting my .22-250 and I thought to myself that this was the perfect shot for this load. As I touched the trigger, I hit the coyote center mass but instead of the perfect end-on performance I expected, the shot exited downward and just opened the coyote up. As I approached the big coyote, I realized he had a whole jack rabbit in his stomach. Two things jumped out at me. First, this coyote was not hungry. He was coming to the prey distress sounds in a territorial defense mode. Secondly, the full stomach of this coyote had totally changed the expected performance of the bullet. Somehow, either by deflection or by the shear mass of the full belly, it had caused the bullet to exit the abdomen in a big way. If your perfect fur load has never let you down, just keep shooting—it will eventually.

Conclusion

Terminal bullet performance on fur is part art and part science. The tendencies of bullet construction as it relates to velocity and fragmentation of the bullet can help the fur taker to maximize the performance of his rifle on predators once an understanding of the principles is reached. Only through ongoing use on an increasing number of animals under your conditions can you draw meaningful conclusions as to quick kills and minimal pelt damage. So, leave the computer, load some ammo and do some field testing. After all, the in-field research is the most enjoyable part of this quest and knitting mittens isn't all it's cracked up to be anyway!

Good luck and good hunting.

God bless.

Tim