

This topic can be found at:

<https://forums accuratereloading.com/eve/forums/a/tpc/f/4711043/m/2861098911>

capoward

13 October 2010, 06:31

Terminal Bullet Performance

quote:

Originally posted by boom stick:
I wonder what the long 577 BBW #13 in aluminum would weigh?
Would be interesting to see the penetration and velocity with the same charge. 4,000 FPS? Extreme trauma for sure!



Jim



"Life's hard; it's harder if you're stupid"
John Wayne

416Tanzan

13 October 2010, 10:34

quote:

Originally posted by michael458:
Tanzan

Thank You! Excellent field terminal report, and with bullets we have tested right here on terminals too! And they look pretty much the same as tested, at least the one recovered. Excellent job!

Can you give a estimate on depth of penetration on any of them?

Michael

Thank you. I wish that I had taken measurements of the exits. The hartebeest was probably about 3 feet (36 inches), maybe slightly less. The buffalo exit was a broadside, so probably something over 2 feet. The recovered bullet was taken out by the skimmers on our request, but we were not able to measure anything and do not know where in the whole hip area the bullet was recovered. Probably about three feet, maybe a bit more, maybe less.

In any case, such recovery and penetration of the second shot does underline standard wisdom in not taking a 3/4 away shot as a first shot on buffalo unless using a flatnose solid. Penetration up through the heart-lungs can only be guaranteed by a solid.

+ + + + +

"A well-rounded hunting battery might include:

500 AccRel Nyati, 416 Rigby or 416 Ruger, 375Ruger or 338WM, 308 or 270, 243, 223" --
Conserving creation, hunting the harvest.

michael458

13 October 2010, 15:12

quote:

In any case, such recovery and penetration of the second shot does underline standard wisdom in not taking a 3/4 away shot as a first shot on buffalo unless using a flatnose solid. Penetration up through the heart-lungs can only be guaranteed by a solid

Tanzan

Exactly what I have been telling the proponents of "premium expanding bullets only for buffalo no solids needed". But they are hard heads that don't listen!

As most of you know here, no one loves a solid better than me! I use solids on every hunt in which I embark when the game is bigger than impala! Reason being, soft or expanding up front, if said critter moves after that, 90% of the time he is running away from you, a proper flat nose solid just might stop that kudu, that eland, that moose or elk from being lost and spoiling expensive days of safari or hunt looking for said animal? It works for me. Soft or expanding non con first up, followed by good solids just might save the day sometime!

Michael

<http://www.b-mriflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

michael458

13 October 2010, 15:21

Tanzan

No harm done on post-mortems! I know all too well how things are in the field, and I always come up short on post-mortems. Seems that time is of the essence and proper field study can be time consuming and difficult at best. I try to do better myself, but it is difficult when you know that next buff is just around that next corner and some shooting needs to be done quickly! Post-mortems sometimes take a back seat at that point!

LOL

None the less however, seems that the bullets you used were very successful and did exactly what they are supposed to do.

Recall back in April I ended up having to use two 338 caliber 225 TSX on the muskox I shot, two bullets two muskox. Both were down before I could bolt up that left handed rifle I ended up having to use because the airlines lost my ammo for my 416 B&M. I had to use a wrong handed rifle and minor caliber to boot! But it sure did work well, and no bullets recovered, complete pass throughs. So I reckon that 225 TSX in 338 does rather well! Of course you recall we testing it rather vigorously right here on terminals and got very good results, the reason I loaded that for my buddy to use on his muskox too, which by the way accounted for two more, total of 4 muskox with the 225 TSX. Not too bad!

Michael

<http://www.b-mriflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

michael458

13 October 2010, 15:23

quote:

Originally posted by boom stick:

I wonder what the long 577 BBW #13 in aluminum would weigh?
Would be interesting to see the penetration and velocity with the same charge. 4,000 FPS? Extreme trauma for sure!

Oh no! NOT AGAIN!!!!!!!!!!!!!!!!!!!!



<http://www.b-riflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

Gusteaux

13 October 2010, 18:22

Sent this to Michael 458 in a PM a few days ago and he asked me to post it here. I have edited it a bit from the original PM to him. The intent of my editing is to help reduce potential reader bias of the info until after they read the results.

Just returned from Namibia a couple of weeks ago. I took .458 cal rifles and used four different .458 cal bullets at four different velocities. Velocities were chrono'd over the PH's chronograph "over there" with the chrono set up approximately 15ft in front of the muzzle.

- #1 - 300gr Nosler Partitions at 1850fps
- #2 - 330gr Barnes Banded Solid (458 SOCOM) at 2400fps
- #3 - 350gr Hornady JFP at 2400fps (the 330gr BBS and this one were shot from the same rifle and shot nearly to the same POA at 100yds)
- #4 - 405gr Cast Performance hard cast wide flat point /w gas checks at 1750fps.

Results:

#1 - 300gr NP - my girlfriend got her first game animal ever (Gemsbok), one shot broadside at 130yds exactly through the heart. Bullet stopped just under the off side hide. Last year I used them on a Gemsbok at about 100yds but loaded to 1950fps and it stopped just under the off side hide too. Only difference was the amount of expansion. The faster/closer one last year expanded all the way down to the partition with no lead visible on top of the partition. This year's at the lower velocity and longer distance it didn't open as much with maybe a 1/4 of the lead on top of the partition. Net result - two dead Gemsbok and one VERY ecstatic girlfriend, one very proud boyfriend and one very pleased PH.

#2 - 330 BBS: One old very smallish body Zebra, first shot was under 50yds broadside. Low under the heart - penciled through and it ran maybe 50yds., stopped and turned broadside again. We were in heavy cover and it didn't know where the shot came from. Second shot (again a little low) penciled through. Turned and ran - Texas hear shot from maybe 140yds. Entered just under the tail, right of the body center line, missed hip bones and exited the chest. Wound channels were basically just bullet diameter.

#3 - 350 Hornady: One Gemsbok (cull) from 40yds front chest. Was hit like a freight train - was sat back on it's hind quarters and then down. Bullet passed through the heart and deep into the guts but not recovered. Several baboons and jackals but obviously the small bodies didn't offer enough resistance and they just penciled through.

#4 - 405gr Cast Performance: One Gemsbok (cull), quartering front broadside from 90-100yds. Broke left front shoulder and passed through. VERY big wound channel - could probably push a golf ball through.

Take-a-way Lessons Learned:

1. The 300gr Nosler Partitions are great - they seemed to work well (achieved similar penetration) despite a big range of muzzle velocity, distance and therefore impact velocity. I hope Nosler will make these again.
2. With the distance the 330 BBS passed through the zebra (even though all it hit was one rib bone on exit, and Michael458's tests indicate it might work just fine on Jumbo.
3. The 350gr Hornady are HAMMERS and will probably use those as one of my primary hunting projectile because I can use them all .458 cal rifles I own.
4. The 405gr Cast Perf are HAMMERS too. A little less cost than the Hornady 350's and left larger wound channels.

Now that you have read the "results" I'll fill in the missing info - the rifles used.

- #1 was shot through a 1895 Marlin Guide Gun (18.5" ported barrel) in 45-70
- #2 & #3 were shot through a Siamese Mauser converted to 45-70 with a 20" barrel w/ 1:14 twist
- #4 was shot through a 1895 Marlin Guide Gun (18.5" ported barrel) in 450 Marlin

Edited to add (13 Oct 2010 @1539L)

5. While the penetration of the 330gr BBS is exceptional, reflecting back on it the zebra did not have any visible reaction to the impact of the first two shots - not even a flinch. I think the only reason it ran was in reaction to the sound of the shot. Not sure if I would ever use them again unless it was the third or fourth one "down".

6. Because the 330gr BBS body is so much longer than either a 300gr NP or 350gr Hornady - think projectile size similar to a cast 405gr/425gr bullet - in a Marlin lever it will be difficult to get enough powder in a 45-70 case to get enough velocity and keep the COL with the 2.58" max. I was able to run them in the Siamese Mauser because it had a very deep throat and the COL was close to 3" and the case was literally stuffed full of H4198.

7. Would like to see what the 330gr BBS could do in a full-house 458 Win Mag/Lott.

ptaylor **13 October 2010, 19:34**

shot #2 the TEX-ASS shot is impressive! What is that 4 or 5 feet of zebra?! Great post, I love reading about bullet performance in the field.

michael458 **13 October 2010, 23:49**
m3taco

Thanks for putting that up for everyone, an excellent report on terminals from the field.

Don't forget guys, this is exactly why we do terminals in the "lab" so to speak, to be sure we make proper choices in the field! Getting field reports like this, and many others that we have received is a great boost to what we do on the range in the terminal performance boxes!

I have worked with all the bullets you report on with the exception of the 300 Nosler Partitions, I have not worked with those either on the range or the field.

Yes, the 350 Hornady is an excellent bullet for what you have been asking of it, I have used it in the same capacity and performance is great. It performs great in the lab too. You know way back when it first came out it was probably the best 45/70 bullet on the market at the time. Only 8-10 yrs ago it was very hard to come up with a really good, tough, 45/70 bullet. This was, and still is a dandy.

Of course these days, and very recently I am all excited about the 330 Barnes Banded, I have lot's of uses for that bullet in the future, both in a 458 B&M, and even more import in the 458 B&M Super Short. We have tested it quite a bit here and performance is incredible, as you know now, and from one end of the zebra to the other, that's a fair distance!



**458 B&M Super Short
1:14 Twist Rate
330 Barnes Banded Solid
Muzzle Velocity 2215 fps
22 yd Impact Velocity 2132 fps
#1--52 Inches Dead Straight
#2--54 Inches Dead Straight**

Now guys, there is still a lot of "old school" in me. And it is extremely difficult, even for me, to let go of some things that have been ingrained in our minds since we were kids just beginning to learn to shoot, one of them is SD. The very thought that I would recommend a 330 gr bullet for buffalo and elephant is absolutely stark raving "MAD". Why it's a crazy thought to even let run through your mind! Isn't it? Or is it?

I have been meaning to tell you guys this for a long time, just slips my mind. But every time I look at this 330 Barnes Banded, and the performance it has given in the test medium, and especially comparing it to other bullets tested I remember this.

When I first got the 458 B&M Super Short up and running, only a couple of months ago now. Corbin and I are in the lab, and he is all excited about the little gun and cartridge. Had a cartridge in hand, loaded with the 330 Barnes. He looks at me and asks this "Could you take an elephant with this?" The first thought that ran through my mind was "Old School", not big enough, but I had to back up before I said that, my reply to him was this "Elephant had been taken efficiently and many times, with a hell of a lot less". When I look at bullets, my first thoughts are "buffalo" these days, then other things. I am not going to sit here and tell you that Michael thinks the 330 Barnes Banded is the perfect elephant bullet---But what I will tell you is this, they have been taken many times over with a hell of a lot less performance than what this little bullet dishes out, time after time! I will take this up one more notch too, if I had only two choices in which to go to work with, a 500 gr 458 caliber round nose solid, or this 330 Barnes Banded, today Michael will take the 330 Barnes Banded hands down!

I am reminded many times that the old round nose does much better in animal tissue than it does in the test medium! This is true, there is no denying that very valid point. But guess what? So does every flat nose solid, it performs better in animal tissue too, driving deeper. So my point is.....exactly that!

Zebra from stem to stem? I would think very close to 5 ft easy. I have shot a heap of zebra in my day, but never actually measured one from stem to stem? I would say that would be 5 ft easy without issue. That would correlate pretty close to what I have been saying for two years, about or close as a rule of thumb to 30-35% more penetration in animal tissue than the test medium. At least as I calculate, that is a nice conservative rule of thumb you might say!

I do love a good solid!

I am with you ptaylor, love these field reports!

Thanks again m3taco, great report.

Maybe some photos of recovered bullets when you can?

Michael

<http://www.b-mriflesandcartridges.com/default.htm>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

Gusteaux

14 October 2010, 01:23

quote:

Originally posted by ptaylor:
shot #2 the TEX-ASS shot is impressive! What is that 4 or 5 feet of zebra?! Great post, I love reading about bullet performance in the field.

Ptaylor:

The zebra was on the small side - had been hunting hard for 7-days and was nearing the end of our trip. He walked out while we were sitting and not really paying attention. The three of us were just sitting in some very heavy shade/cover just kind of goofing off - rifles resting against the trees and we were playing with the new Garmin 450 GPS I gave to my PH. Hard to explain but he (zebra) was the only one we saw at the time I decided to shoot. The scramble to grab guns and get into some kind/any kind of shooting position was akin to an old "Keystone Cops" movie - ergo the first and second free hand "snap shots" that ended up both low and just behind the front leg.

After the second shot the entire "herd" of 10-12 appeared with a huge stallion trailing. But since I had already drawn blood on the first I was pretty much committed to it.

I just realized I need to be a little clearer on the 3rd shot's exit from the chest. The bullet arced downward as it traveled through the body and came out on the left side bottom of the chest between the front shoulder and brisket. So...not a "true" stem-to-stern pass through. Once Michael458 posts the photos for me you will see it was not a "jumbo" zebra body. The rifle is the Siamese Mauser and is 40 1/2" long.

In the end I am glad it worked out the way it did. The one I got was very old and in decline. Teeth were pretty much gone so I did the old boy a favor and he will live forever in my memory and my wall.

I don't post photos anywhere but Michael458 just PM'd that he would post them for me. Michael they will be on the way in a few minutes.

michael458

14 October 2010, 02:59

m3taco

Received the photos and will get them up and posted in the morning.

Michael

<http://www.b-mriflesandcartridges.com/default.htm>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

michael458

14 October 2010, 14:09

Photos from m3taco.

Very excellent!





<http://www.b-mriflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

michael458

14 October 2010, 14:17

Now I am not an expert at this, but just taking a quick measurement of m3Taco rifle, I figured it's a 22 inch barrel (Guess), figured it may be about 42 inches overall length. Giving me a scale of 10.5 inches per inch, or close, I am figuring from the rear to the front of that zebra is between 5-5.5 ft give or take a bit of course. That's not too bad for a 330 gr pill with an SD of .225! What is "SD" anyway?

M

<http://www.b-mriflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

buffalo

14 October 2010, 15:15

excellent - over 100 pages now. Amazing.
I have just arrived back. Shot 3 ellies with the 458 AR. Excellent performance. All head shots exited. Shot some bodyshots post mortem. Exits all shots side on. But all shots shot into chest frontally were recovered in the hip joint area. And two rounds fired into left hip from behind, were recovered in the right shoulder muscles and in the lungs in front of the heart. Similar penetration for the 500 grs DGS and the 500 grs Barnes Banded bullets. Recovered two DGS bullets - both had a very slight fishtailing of the base, only slight and after penetrating very good. Might be instability at the very end of penetration. If deformation occurred earlier I guess that 1) Penetration would not be good and not in a straight line and 2) Fishtailing would have been more severe. I guess..
But good to be back and get an update on this awesome thread... 😊

michael458

14 October 2010, 15:45

Buffalo

BIG WELCOME BACK!!!! Sounds like an awesome trip and that the 458 AR did it's job very nicely!

And of course bullet performance as tested and as expected--Once again! As tested, the Barnes had a slight edge overall on the DGS--As tested both were successful in the test and also in the field! Both bullets successful and more than enough to accomplish the mission at hand.

Buffalo, we will give you a chance to recover, but photos and bullet photos, elephant photos and such when you get a chance, more details.

It's good to have you back too! Big Congrats on every part of a successful hunt!

Catch up, and we have been doing some pretty awesome tests while you were out, some very important pressure tests on the double rifles and some new BBW #13s! I think you will find interesting too. Also, have a thread down on the double forum on that subject you might check out too.

Excellent job!

Michael

<http://www.b-mriflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

Gustaux

14 October 2010, 18:48

Michael458:

Thanks for posting the photos for me!

Very close on the "guess" of rifle length. The barrel is 20" and the overall length is 40.5". The bullet exited on the opposite side of the zebra's "ampit" - so not a complete end to end pass through.

The lady with the Gemsbok is my girlfriend Anila. She "was" a city girl and had never been hunting or shooting until just before our first trip to Namibia in 2008. She "hunted" with us as an "observer" that year and loved it. Got back and got her her own rifle (in the photo). Started her out with light trapdoor level loads and worked up the power over the following year.

2009 she got on the sticks on a Gemsbok but it never settled down to give her a shot she was comfortable with and she held fire - I was very proud of her for passing up a shot she wasn't comfortable with. Spent the second year continuing to refine her shooting. Even pulled the trigger on some stout 375 H&H and 458 Win Mag rounds - off the bench no less.

This year she hiked and worked hard for her first animal ever, not to mention making a great shot - 130yds, broadside, off sticks, one shot centered through the heart. Gemsbok ran about 30yds and dropped just exactly how you see it in the photo. All we did was lay her rifle against it. We blooded her checks, put the blooded sprig in her hat but she drew the line at taking a bite of the raw liver - She did have some of it cooked the next night though.

She spent the rest of her time there trying for a Kudu. We had several good stalks and she got on the sticks once but the brush was too thick and something spooked it before she could pull the trigger....next year Kudu beware!

Sorry for not having bullet and wound damage photos. Only one bullet recovered Anila's Gemsbok - 300gr NP. I have the bullet but it is at my place in Tampa and I won't be back there until the beginning of Nov. and will send Michael458 a photo of it to add here.

michael458

15 October 2010, 02:19

m3taco

Piece of cake on the photos, no issues at all. Happy to do so.

Well, it appears I was only 1.5 inches off on the rifle, and maybe the depth of penetration was 4.5-5 feet instead of 5-5.5, if the bullet exited the ampit. Sound about right? Regardless, excellent penetration and confirms what I thought about the bullet to begin with.

Your lady is doing great! My girl is a big city girl too, but she don't do recoil at all! She would never handle a 45/70. I have her on a 6.5X55, little Win M70 FW. Finally after lot's of searching found her this and she is happy with it. Had her on a 308, even put a brake on it for her, but then she did not like the noise! But she does very well with her 6.5.

No sorry needed on the wound damage photos, or not having the bullet. Believe me, sometimes in the field there are other priorities that are present other than taking bloody photos of shot up meat! We take your word for it, no need to prove it here. And you did a great job of filling us in on the performance of everything. We all thank you!

Now we will be looking for other reports to come in, buffalo just got back, figure a few days to get settled and he can give us some photos and some bullet reports on the 458 AR, Hornaday DGS, and Barnes Banded! Among others I am sure!

Michael

<http://www.b-mriflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

michael458

17 October 2010, 15:58

Well, it seems we have taken a slight turn in our terminal thread, but I think we are entering a very important area of discovery, that is and does relate back directly to terminals.

Velocity and Pressures. I have said it a million times, "Velocity Is Not Always Your Friend". Well this is very true of many bullets, especially "conventional" lead core bullets both solids and more so expanding. Even some in between conventional/Non Conventional bullets, velocity does not always help you during terminal penetration.

However, in the case of the "Mighty Non Conventional" bullets, that many of us are growing to love so good, "Velocity Seems to be King" with those. In every case that I have worked with in the area of Non Cons, more velocity meant more trauma up front and deeper, straighter penetration!

There is only one obstacle standing in the path of velocity, "Pressure". Regardless of anything we can do as mere mortal beings, Pressure will catch up with us sooner or later. But I think we are learning some new tricks to fool "Mother Pressure".

As we know I am working close with North Fork, and Cutting Edge Bullets on several fronts right now. I have been letting my Pressure trace work lag for a couple of years now, but since Sam and I did the 470 Nitro work the other day, discovered what we did on that, it's got me interested in doing some pressure traces with my own things. I do a lot of development in .500 caliber, and that does not pertain directly to many of you, but anything done in .500 can be carried to other calibers easy enough. What applies to one, applies to others, so it is viable.

Recently I received my first order of 450 gr .500 caliber North Fork Cup Points. These are expanding cup points, and classify as first class Non Conventionals at their best! Different than our copper/brass HPs with blades, but none the less a NonCon. My favorite .500 rifle is the 50 B&M, WSM Win M70, 18 inch barrels, 38 inches over all, 6.5-8 lbs depending on the stock. Short, fast, handy, .500 caliber, and can throw 500 gr bullets at 2150--Conventional and non cons. My favorite powder for this is IMR 4198, but I started using that after I did the first pressure traces on the 50 B&M, so I had no data on IMR 4198. From prior case measurements and normal pressure signs with a 500 gr bullet with 70/IMR 4198 I knew I was getting close to top end pressures, but this load has been standard for a couple of years or more, and was doing just fine. So I went to 71/IMR 4198 with the 450 North Fork, figured that was close too. I did not even bother with case measurements or any close inspection. It worked, easy out, no worries.

Pressure trace time Yesterday. I got no big surprises on the 500 to 510 gr bullets with 70/IMR 4198. Pressures top end, and maybe even a little more 66000 to 67000 PSI. Probably a little more than many of you would like to work with. These are the brass and copper solids from SSK and CEB. 69.5/IMR 4198 dropped it to 65000 PSI, just to check it.

Now comes the really good part, and what I have been leading up to. 450 gr North Fork CPS, 71/IMR 4198 gave me 2225 fps and 51625 PSI. I did not expect that.

Immediately I was drawn to think about the bands that North Fork uses, small, less bearing surface and so forth! Then the work we did with the 2 bands!

Now I went to 73/IMR 4198, 2281 fps 55721 PSI. Very safe.

How far could I take this to even get up to 65000 or so? At 2281 fps I had already surpassed every velocity barrier I had run into in the past, by a wide margin!

Very carefully to 74/IMR 4198, 2314 fps at 59215 PSI. Breaking 2300 fps with this little gun and a 450 gr bullet is phenomenal! Now in the terms of BIG GUNS, no this is common, but remember the size of this rifle!

75/IMR 4198, 2341 fps at 61414 PSI.

76/IMR 4198, 2366 fps at 63298 PSI.

2366 fps 450 gr bullet! North Fork CPS bands do work! I quit there as you can tell we are getting close, and velocity gains are getting smaller, just as it should be. I could easy to to 77/IMR 4198, maybe get another 15-20 fps, might even push the limits IF I could get 78/IMR 4198 in the case, 76 grs is getting very close to the top of the case as it is!

For these reasons I think the North Fork will do well in our barrel strain and pressure tests in the 470 Nitro this week.

In addition I have changed the CEB BBW #13 Prototypes for the bolt guns that I have been working with. I tested yesterday with the 8 band prototype 500 gr BBW #13 in brass. 2188 fps and 67000 PSI. Well I have a lot of velocity to work with, and could drop the charge to 69/IMR 4198. But I am not going to, I have ordered new prototypes removing 4 of the bands! This should drop the pressure and maintain the velocity, and keep the integrity of the bullet in tact.

Good stuff, and directly effects terminal performance, in this instance for me. With that 450 North Fork CPS at 2350 fps I can impress upon buffalo to give up quicker than at 2225 fps! Never one to preach velocity of course, but in this particular case, yes, more velocity means better performance and terminal trauma and penetration.





Michael

<http://www.b-mriflesandcartridges.com/default.htm>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

capoward

18 October 2010, 01:07

Very nice testing Michael! Now if we can figure out how to program the parameters of the 450gr NF CPS into QuickLoad so match your performance and pressure levels we'll be there.

Jim 🤖

"Life's hard; it's harder if you're stupid"
John Wayne

michael458

18 October 2010, 02:44

Damn Capo--You of all people should be able to figure that out, you are the "QuickLoad" King!

Maybe soon the B&Ms will be easier to figure out on the QuickLoad Program, they are going to be plugged into the next update as I understand.

Michael

<http://www.b-mriflesandcartridges.com/default.htm>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

capoward

18 October 2010, 03:00

Problem is not the cartridges...well it is somewhat as QL does have some results accuracy issues with straight case cartridges...though very accurate with bottleneck cartridges...but that aside it is primarily the bullet specifics and how to properly tweak QL to accommodate minimal friction multi-band bore riding bullets.

Anyway, not having the specific dimensions of the 450gr NF CPS bullets, I used the 450gr SST FN and tweaked the friction specifics of the bullet and with 76.0grs of IMR 4198 came up with 2365fps BUT at 73654psi...slightly 10K psi more than your pressure trace testing! However it is about 6.5K less than an "untweaked" 450gr bullet.

Jim 🤖

"Life's hard; it's harder if you're stupid"
John Wayne

michael458

18 October 2010, 03:24

Jim

It seems you have done very well and pretty damn close. PSI is off a bit, but still on the money with the velocity. QL is a great asset and gets one started off right. Perfect it's not, but very good. Probably need a little more info on bullet too. I need to send you some samples of this!

M

<http://www.b-mriflesandcartridges.com/default.htm>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

buffalo

18 October 2010, 12:03

Michael. Later 2day or 2morrow - can I mail you some photos 2 post on this thread??

Ulrik

michael458

18 October 2010, 13:31

Ulrik

Absolutely send the photos I will get them up for you.

No Problem

Michael

<http://www.b-mriflesandcartridges.com/default.htm>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

michael458

20 October 2010, 02:21

Hey Guys! Well, I have been busy with pressure traces for days and days. Going to be tied up on that for awhile now I have things up and running! As for terminals, well, that's on a back burner for the moment. However, all is not lost. I received this today from my man John, the guy who is working with the 375 B&M. The first animal taken now with a 375 B&M is an elk that John took with a 270 Swift A Frame. I don't have the whole story yet, but it appears it was a 1 shot deal. Muzzle velocity is around 2750 fps, not bad I think for a 6.5 lb rifle and 20 inch barrel.



<http://www.b-mriflesandcartridges.com/default.htm>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

shootaway

20 October 2010, 02:42

I was just looking at the test results with the 500gr Hornady DGS and the 1:14 twist Lott.Sixty seven inch penetration! I think that is even better the the Barnes Banded solid.

Shootaway

67 inches, DGS?? I can't remember it all, maybe so. Sometimes the Hornady does ok, holds it's own with the big dogs, but it is just not quite reliable enough to be as good as the 500 Barnes Banded "overall". In my opinion, the Hornady comes up very short in the construction part of the equation too. Compared to the Barnes and others.

However, we will be getting elephant reports soon from Buffalo (Ulrik) in which he used both the Hornady DGS and the Barnes Banded, 500 gr in his 458 AR. So this will be coming soon as Ulrik gets some photos to me and catches up with himself.

So that should be a good report on both.

Michael

<http://www.b-riflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

shootaway

20 October 2010, 03:15

Thanks,Michael.I'll look forward to the report.I think the DGS would be a more accurate bullet compared with the BBS,especially out to 100yds.

michael458

21 October 2010, 01:18

Hey got a real treat for you guys! Buffalo sent some photos! I am going to break it into two posts, one with elephant pics and the other with bullet pics.

Then I will turn the floor over to Buffalo to tell us all about it.





<http://www.b-mriflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

michael458

21 October 2010, 01:22

Now For the really GOOD PART----THE BULLETS! HEH HEH!





I think that's all--No, wait there is one more here, where is that, oh, ok, here.....



OK, what did you shoot the tiger with? Details man, details! See those teeth? Stay away from that end!

Michael

<http://www.b-mriflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

buffalo

21 October 2010, 01:58

Thanks a lot Michael..

I hunted Chete from the 26. Sept to 2. Oct. Hot as hell - but beautiful area. The camp with view over Lake Kariba was just stunning. But not much bull ele activity there.. We saw lots of cows and calves, but only a very few (and old) bull tracks. Instead we caught some decent tigerfish. Several in the 5-6 kg category..

After a week we moved to Chirisa. Then the game began.. In 4 days I shot 3 ellies.

First one was in very thick jesse. A shot a 12-15 meters. Used a Barnes 500 grs BS - shot a bit low - through zygomatic arch and exit on the other side. But below the brain. The bull was hammered down for some seconds and when he tried to get up, he got a bullet in the neck which then was the only part I could see clearly.. Exit again. Then two more shots side on - both exits. All were BBS.

Next ele I shot the same way in equally thick jesse. No clear shot - lots of branches etc - so I took a shot which was clear but a bit low - again. Bullet exited. Same reaction - bull straight down and when he tried to get up, he got a bullet frontally - he was angled slightly - into his chest. Bullet exited his left side through the last ribs. Straight line penetration in all cases. Both

BBS.

This bull felt in the sfinx position - so I started a lot of test work at him postmortem.

Shot 10 bullets from different angles, all exited except two (one DGS and one BBS) shot into his rear left hip. One were recovered in the off side (right) shoulder and one recovered in front of the heart in the chest/neck junction.

All bullets seemingly penetrated 100% straight.

Last ele was an old cow. Just about to charge us at around 10-15 m distance, so she got a bullet... This time I used a 500 grs DGS frontally. Bullet penetrated the trunk and through the brain. Brainmatter out through both earholes. Bullet exited top of her back behind the shoulderblades. I fired two more frontally into her chest - one BBS and one DGS. Both were recovered in the hip region and thighmuskles. Very good and straight line penetration. I have only the best to say about both bullets. But when you study them on the pics you see that the DGS is slightly fishtailed in its base. Didnt see any effect of this, must have happened in the last inches of penetration I think!?

I would personally choose the BBS of the two. But must admit that the DGS performed as well in this limited test..

Ulrik

shootaway

21 October 2010, 02:14

Thanks,Ulrik.That 458,500gr DGS really penetrates deep and straight.

michael458

21 October 2010, 02:41

You are very welcome Ulrik--We all thank you for the shots of the bullets, elephants, and the report!

I love the ivory on the one elephant, looks nice and long?



When I was last in the Chete it was not much for elephants. Not being very patient I would only stay 10 days before getting antsy to go somewhere else. We saw only one decent bull the entire time, and he only had 1 tusk.

Now you talking--4 days 3 elephants--that's more like it!

Of the recovered Barnes Banded, the one on the left appears to have some nose issues? Maybe it hit some heavy bone? Or is that just the photo and my imagination?



On the two Hornady DGS again the one on the left looks like it's meplat is squeezed together, or possibly just through some bone and roughed up some around the edges? The bases do not surprise me at all, and probably had little effect if any at all.





Can't believe we just turned to page 102, after posting the photos on 101!

Michael

<http://www.b-mriflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

michael458

21 October 2010, 02:42

OH and one more thing--You PH's rifle is about a meter too damned long! JHChrist man, what was he carrying that had to have a rifle that long? Looks like some sort of musket, barrel must be 48 inches alone!

Michael

<http://www.b-mriflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

srose

21 October 2010, 03:37

Michael,

You could cut that PH's barrel in two and still have enough to make two B&M's. Maybe he has the end sharpened to use as a spear.

Buffalo looks like you had a great hunt!

Sam

michael458

21 October 2010, 04:06

I know someone else who is getting ready to leave soon for elephant!

Some chap taking some funny looking bullets?????



<http://www.b-mriflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

michael458

21 October 2010, 04:08

AND I HAVE NOT HEARD ONE WORD OUT OF ANYONE ABOUT THE 375 B&M Bullet?????????

One shot 270 Swift A Frame 375 B&M 2750 fps one elk down.

Since we turned a page and I heard ZERO, posting it again!



<http://www.b-mriflesandcartridges.com/default.html>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

michael458

21 October 2010, 04:10

Now, we have 270 Swift A 375 B&M to discuss!

Buffalo and his elephants and elephant bullets to discuss!

And those great big honker copper looking things to discuss, those look like, 750 gr .585 caliber, copper CEB BBW #13s, don't they?????

Come now!

Am I all alone here????

Maybe I will just go to bed!
It's dark now!

Sam and I have a long day tomorrow! Better get my rest!

Michael

<http://www.b-riflesandcartridges.com/default.htm>

The New Word is "Non-Conventional", add "Conventional" to the Endangered Species List!
Live Outside The Box of "Conventional Wisdom"

I do Not Own Any Part of Any Bullet Company, I am not in the Employ Of Any Bullet Company. I do not represent, own stock, nor do I receive any proceeds, or monies from ANY BULLET COMPANY. I am not in the bullet business, and have no Bullets to sell to you, nor anyone else.

capoward

21 October 2010, 08:28

Ah...finally some movement in one of the interesting threads! No you're not alone, just that some of us on the other coast are doing dinner while you're getting ready for bed is all!!!

Ulrick...Good hunt, very nice elephants...thanks for the report and photos (thanks Michael for posting). Good performance from the Banded Solids and DGS bullets...and obviously did you part just as well...well done. You just have to love fish that can bite back; bet they were good on the grill.

270gr A-Frame from .375 B&M...Not much to say, looks like perfect performance...one shot on elk...wouldn't expect otherwise... But where's the pictures??? We like pictures. No truly...great job John, congratulations on your elk hunt!

And those great big honking things...Yep CEB did a great job with the #13s. Almost makes you want something in .585 caliber just to use those babies! Ok Sam...the burdens on you to do us proud with the #13s. Dang, they just look good...look even better loaded up.

Ok... first page added to part three of the Terminal Bullet Performance.pdf file. Looking forward to the laboratory work tomorrow...when results are posted!

Jim 

"Life's hard; it's harder if you're stupid"
John Wayne

buffalo

21 October 2010, 13:36

Right Michael. Both bullets encountered heavy bone because I shot them into the hip from behind.. The two bullets shot this way have the most deformation. The other two were recovered from the cow I shot frontally into chest and which were recovered in the hip/thigh muscles. Otherwise impossible to keep bullets inside... 😊 They just zipped through..

I think the #13 585 bullets looks awesome. Have corresponded with Sam and he was so kind to offer me a few samples. I will have a guy copy them here in Denmark, made in brass. Next ele hunt I will be using these for sure at a moderate 2450 fps. Just have to cut my 577 barrel down from 24,5" to 21 or 22" first.. I have got this "short barrel disease" now.. With a 750 grs BBS I get 2580 fps with the long barrel - no problems. I am sure that with a 21-22" barrel it will give me at least 2450-2500 fps. More than ever needed.. Even for a "texas brain shot"... 🇹🇽

buffalo

21 October 2010, 13:41

And regarding the ph's rifle - its a William Evans 470 NE double. Inherited from his grand dad. Its at least 2 inches longer (overall length) than my boltaction rifle. Dont know whether it have 26 or 28" barrels!!? Probably it must be 28..