

This topic can be found at:

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

michael458

28 July 2011, 22:19

Terminal Bullet Performance

Small Bore bullets on a Big Bore Forum in a Big Bore Terminal Performance Thread? Hmmm? Hope the Big Bore Police are not watching?

Anyway, here is the scoop on the 62 gr BBW#13 Solid. At the end, I will summarize and explain my thoughts.

-
-



OK, if you recall, the prototype of this bullet that Sam made some weeks ago, we ran it at a muzzle velocity of 2800 fps and change, I forget the impact velocity, but we got a dead straight 50 inches, but was only one prototype bullet.

Dan did an incredible job of duplicating the prototype bullet!

As you see above, a little more velocity on the first test Muzzle at 3015 and impact at 2911 did indeed give us deeper penetration to 54 inches, both of them nose to nose, side by side. Dead Straight.

BUT, take a look at what another 200 fps impact velocity gave us? Some erratic behavior, deeper penetration, but not even, and one was about 1 inch off course?

Then take velocity up almost 400 fps faster than test number one, and very erratic behavior, with 1 bullet giving less penetration, the other giving more???

Inconsistency of the medium? That was my first inclination, and the simple answer, but no, some inconsistency sometimes yes, to the tune of 1-3 inches maybe, but not 7-10 inches no.

Then what is the answer?

Look at the meplats as velocity goes up and I think you will see why.



Starting to get the metal moving around at the higher velocity, upsetting the bubble or the stability of penetration. More velocity would have only given more erratic behavior. So there is a limit on optimum performance as velocity goes up. I see no reason to run this little bullet much past 3000 fps. If you do run velocity up, then you must be very aware of your impact velocity. Of course I don't think the BC is very high on this bullet, as it lost around 100 fps at a bit less than 22 actual yards. So one must just account for such things is all.

People used to say test work is useless! How would we have ever known this without testing?

Absurd at best!

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"

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jwp475 **28 July 2011, 22:27**

Great work Micheal...

I have gotten blasted in the past for saying that more velocity doesn't always mean more penetration. Once the velocity limit of the bullet material is reached then more gives less in my experience

A 9mm may expand to a larger diameter, but a 45 ain't going to shrink

Men occasionally stumble over the truth, but most of them pick themselves up and hurry off as if nothing had happened.
- Winston Churchill

capoward **28 July 2011, 22:35**

quote:


Originally posted by jwp475:
Are you guys going to start shooting past 300 yards on a routine basis, if not I don't see the need for tips on a bullet that has proven its self as is

jwp,

I do own a couple of M77 SA SS Ruger rifles chambered in 300 RSAUM that I can do long range work with. But as I'm having two rifles build right now in .423 and .500 calibers I want to do virtually all of my shooting over the next few years with these two rifles.

And yes living in the US Southwest 300yd - 400yd shots for mule deer just might be the only shot that you have during your hunt due to their skittish nature after the 1st shot is fired marking the commencement of the rifle deer season. Basically the same for Black Bear in Oregon where the clear cuts will range from perhaps 50yds wide by 300-400yds wide to anywhere in between...and deer and bears move through that "clear cut crap" like it's a super highway where it'd take me quite some time to climb through and over that crap.

So yes...shooting can be up front and personnel or it can be 300yds -400yds if you want the get the "onlyest critter" that matches your tag. And I'm not a trophy hunter...I intend to use the meat from my hunt...well I do admit that I'm not quite sure about bear though!

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

jwp475 **28 July 2011, 22:39**

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I'd use any nose shape to 300 without a qualm

Trajectory is the easiest part of long range shooting to correct as it is a known entity

A 9mm may expand to a larger diameter, but a 45 ain't going to shrink

Men occasionally stumble over the truth, but most of them pick themselves up and hurry off as if nothing had happened.
- Winston Churchill

I Bin Therbefor **28 July 2011, 22:49**

The devil made me do it

<http://www.rei.com/search?quer...utton.x=0&button.y=0>

Ask any seasoned traveler, and he'll tell you: Travel shampoo bottles are a huge pain in the ass. They're a nightmare to fill, they never squeeze stuff out properly, and hotel rooms rarely have enough shelf space to store them.

Humangear's solution: a slick squeeze tube called GoToob. GoToob has an ultra-wide mouth that fills up without spilling shampoo everywhere and built-in suction cups that cling to the side of the shower for easy dispensation. The eminently squeezable, soft silicone body spits out liquids hassle-free. A "no-drip" valve around the cap keeps the shampoo from dribbling and oozing onto the sides. And an adjustable window lets you identify the contents in a snap. Never again mistake the body soap for conditioner (eek!).

[The cap can also be twisted to reveal different labels for what's inside the bottle]

We don't know what's more impressive: The fact that GoToob manages to solve all these problems or that it's a travel shampoo bottle and we just wrote an entire post about it. Sigh. GoToob comes in packs of three and costs \$16.95 to \$24.95 depending on size. Available at REI.



boom stick

28 July 2011, 23:25

Those 22 elephant acupuncture bullets look great!
Maybe could improve penetration with a slightly larger edge radius. The tip on the fastest bullet tested looks to be concave. Can you confirm. Slight niggles... I think the bands can be narrowed a tad.
Awesome stuff!!!!
I dub thee the "Mighty Mouse" bullet lol 😊

[577 BME 3"500 KILL ALL 358 GREMLIN 404-375](#)

we band of 45-70ers (Founder)
Single Shot Shooters Society S.S.S.S. (Founder)

michael458

28 July 2011, 23:35

IBT

OMG-- I am never going to hear the end of the "Shampoo" incident am I? If not from Momma, then it's you!

Boomy

The higher velocity impacts are damaging the meplats and the shape of the nose, yes, the last ones at 3295 fps impacts did cave in the nose, and cause some erratic behavior- 50 inches on one, and 57 on the other. I think the best idea, limit the velocity to the working range of the metal, or bullet. 3000-3100 fps is plenty!

NonCons? Maybe a different story, we will see. But for all practical purposes test work is complete now on the solids, I really don't think they can be tweaked much or changed and get anything of consequence. Pretty good just like they are!

M

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boom stick

28 July 2011, 23:36

As a tactical purpose these bullets could be used to be a cover penetrating antipersonnel bullet for those hiding behind things like cars or buildings or trees. Zip through the cover and reach the target.

[577 BME 3"500 KILL ALL 358 GREMLIN 404-375](#)

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boom stick

28 July 2011, 23:43

Just for the sake of knowledge
Can any brass be made selectively harder by heat treating the tip?

[577 BME 3"500 KILL ALL 358 GREMLIN 404-375](#)

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michael458

29 July 2011, 00:13

quote:

Originally posted by boom stick:
Just for the sake of knowledge
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boom stick

29 July 2011, 00:51

I guess brass hardens by heating and then cooling slowly. If the tips are hardened the goal would be to have a nose that does not deform while the shank and bands remain softer to prevent barrel wear and the bullet from breaking. These perform amazingly so not much need here but just asking for knowledge sake if it's a good idea like selective heat treating a knife or sword edge.

[577 BME 3"500 KILL ALL 358 GREMLIN 404-375](#)

we band of 45-70ers (Founder)
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michael458

29 July 2011, 00:58

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TOO MUCH WORK---- Just Keep Velocity to work with the bullet!

You are thinking way too much--going to burn all your brain cells out! Then you know what happens to you? You turn into Shootaway! Do you want to end up like that?

Better listen to me!



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boom stick

29 July 2011, 01:07

Yes too much work for limited returns but was asking in a more hypothetical vs practical.

[577 BME 3"500 KILL ALL 358 GREMLIN 404-375](#)

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Single Shot Shooters Society S.S.S.S. (Founder)

srose

29 July 2011, 01:41

Boomy you have to work harden brass. Heating it softens it. Same with copper. A different alloy might help or you could put a tungsten point or heat treated steel point on it. I think the bullet is good as is. At 2800 fps it went 50 inches deep and only gained 10 inches with another 500 fps.

boom stick

29 July 2011, 02:18

<http://chestofbooks.com/crafts...Annealing-Brass.html>

[577 BME 3"500 KILL ALL 358 GREMLIN 404-375](#)

we band of 45-70ers (Founder)
Single Shot Shooters Society S.S.S.S. (Founder)

drewhenrytnt

29 July 2011, 10:34

Fantastic work on the mini bullets! I can't wait to try them in my 22Homet. Especially at subsonic levels with a can.

Michael you have created THE monster. Now it is time to develop bullets for 25-20 and turn my rabbit gun in to a Gnu Gnasher! 😊

We Band of Bubbas
N.R.A Life Member
TDR Cummins Power All The Way
Certified member of the Whompers Club

Cross L

29 July 2011, 14:46

"Gnu Gnasher"



SSR

michael458

29 July 2011, 15:41

Here is what I have with .458 CEB BBW #13 NonCons thus far. Not much.



BC is for sure increased by a good margin with these. Too soon for estimates, as I have not done any 50 yd work yet. Very long, the tip coming in at .550 added length. Personally I would rather see a tip half this length, but I am no BC expert, Dan is.

I will test all these side by side at 50 yds for difference in POI and to see if I can get an estimate of BC on both at 50 yds. I think it will be close enough to give us some ideas, of course much longer range would be more precise but I am not going outside for that! Sorry, here is why! No way!

quote:

Today: Sunny. Near record high temperatures. Heat index near 110F. High 99F. Winds WSW at 5 to 10 mph.

Sunny in the morning with isolated thunderstorms developing later in the day. Near record high temperatures. Heat index near 110F. High around 100F. Winds SW at 5 to 10 mph. Chance of rain 30%.

Even on the indoor range is not that great! Better by about 15-20 degrees, but still waiting on the new AirCon too!

The other day we did a very quick test with a few of the tipped 420 BBW#13s out of some of the already loaded ammo I brought back from Africa in the 458 B&M. This was not a

very detailed test, and much more work is required, sorta quick and dirty just to see if they would shear, and they do, at close range 22 yds. I think there is some instability, and it seems to start moving off course. Shearing does not seem to be consistent, some blades shearing as normal, some not and seeming to remain inside the wound channel??? But, not confirmed. I had not really been prepared, had no witness cards at all. I will be making a bunch of witness cards to retest all these, placing every two inches to about 10 inches. I need to see exactly what these are doing and how. Probably next week on much of this work at this point.



Another thing that needs to be done, if I can get a half way BC at 50 yds, then I can estimate what the velocity would be at say 250 yds, and then drop that velocity to that range, and test terminals at lower 250-300 yd velocities as well. This for sure will be a very important part of the test, as this is what the bullet is all about.

Michael

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416Tanzan

29 July 2011, 17:21

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Michael

The BC for this bullet test above is quite high, so high that I won't bother to quote the calculations. With a sampling of "1" and inherent chronograph fluctuations we can only say that the BC promises to turn out quite nice for long shots.

+ + + + +

"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.

srose

29 July 2011, 17:28

You know that 370 grain bullet with tip in looks like it would mag feed fine also the 295 grain. Humm you may have something there!

416Tanzan

29 July 2011, 17:34

PS:
The BC for the .22 above was .23.

That is why people prefer .40 and higher for hunting at 300 yards.

+ + + + +

"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.

capoward

29 July 2011, 21:16

Sam...You may be on to something.
Michael...Are the 370gr and 295 gr bullets designed for use in Marlin lever guns? Maybe that's the key for magazine feeding with the tip inserts.

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

michael458

29 July 2011, 21:28

quote:

Originally posted by capoward:
Sam...You may be on to something.
Michael...Are the 370gr and 295 gr bullets designed for use in Marlin lever guns? Maybe that's the key for magazine feeding with the tip inserts.

Nahhh boys, not going to fit in the magazine of damn near any bolt gun, at least none of my Winchesters. Not with the tip added. Most certainly not in my short action B&Ms and I tried one in one of my lotts and that's a no go too. It's still WAY long for that. As I figured.

M

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capoward

29 July 2011, 21:45

Well that's a bummer... What's the length from the upper seating groove to meplat on the two bullets...they look to be the same.

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

416Tanzan

29 July 2011, 22:03

Yo dudes,

if that bullet has a .500+ BC for the .416 bore
AND the terminals stay true,
you can bet that we will find a way to use it.
That would be truly awesome.

+ + + + +

"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.

srose

29 July 2011, 22:06

I've been thinking about these tips and I'm going to say this. Interesting concept but these bullets are made for shooting big bad mean stuff up close and personal end of story! If you want a long range bullet use one designed for that. The thought of a bullet with high BC to drop into my double when I'm taking a long shot just don't make it or even a big bolt gun. Sorry guys! If its so far away that I need a high BC bullet then I'm going to use a smaller caliber bolt gun. The only use I see for a tip in the Non Con is to improved feeding in some of those bastard guns that won't feed a flat nose. Then the tip would need to be a short RN one at that. Round nose YUK!!!!!!!

416Tanzan

29 July 2011, 22:17

But Sam--

We are (at least I am) using a small calibre bolt gun:
That's why they made the 416Rigby!

2800 fps, 350 grain, .416", 6100 ft lb.,
just what is needed for general all purpose walkabout.

+ + + + +

"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.

boom stick

29 July 2011, 22:34

I think the tip shafts are too long
There needs to be a cavity for the tip to collapse into to ensure consistent petal sheer. The tip acts as a cam to push the petals out.

[577 BME 3"500 KILL ALL 358 GREMLIN 404-375](#)

we band of 45-70ers (Founder)
Single Shot Shooters Society S.S.S.S. (Founder)

michael458

30 July 2011, 17:23

quote:

Originally posted by boom stick:
I think the tip shafts are too long
There needs to be a cavity for the tip to collapse into to ensure consistent petal sheer. The tip acts as a cam to push the petals out.

Boomy

Sam thought the exact same thing when we first attached some of the tips to those 420 .458 NonCons. In fact, Sam went so far as to clip the bottom of the shaft half off to see, which is one of the 3 bullets tested quickly in the test the other day. It seemed to make no difference in the 3 bullets in performance or shear. At least for that test.

Also, even at 1/2 the length of the tip, should we shorten it, it still would not fit in most magazines, so little to gain actually. If you want to fit a larger bore BC bullet in the magazine, this is not the answer, this is merely a reasonable option for those that want a high BC BBW#13. If you want a High BC big Bore bullet all around bullet that fits in the magazine, it can be done, contact Dan at CEB and go to work on it. Very much like RIP and Max just did on the .395s.

I spent a good portion of my day yesterday on the range! I did Pressure Traces at 50 yds, hovering under my Window AirCon, which is able to keep it cool at the 50 yd bench. Normally I like to do traces at 25 yds, but with no AirCon down at 25 yds, well, get the picture!

With all the recent activity concerning the 50 B&M Alaskan and the lever guns, I had to set priority getting some of the new bullets up to speed and pressures. So I completed the first generation loads with 5 different powders, H-4198, IMR 4198, H-322, RL 10X and RL 7 to get a beginning with the 375 BBW#13 Solid & Matching 345 NonCon, 405 BBW#13 Solid and Matching 375 NonCon, and of course the new 450 gr North Fork Premium Bonded bullet, all designed for the 50 B&M Alaskan. The rifle I use for doing pressure traces is the very same Marlin that Layne used in the RifleShooter article.

I have to share some of these targets with you, to show you that a lever gun can indeed shoot very well with these bullets! I was pleasantly surprised!





This coming week I will be taking these loads to 2cd generation, and many of these loads will be the last generation depending on their pressures. For the lever guns I like to hang under 45000 PSI. I had a few loads go into 47000 and 49000 psi yesterday, that is over max as far as I am concerned for a Marlin, so those will be dropped to come below 45000 PSI. I had one load with the 450 North Fork go to 52000 PSI, and the action got real sticky, locking up--WAY over max!

Just FYI is all! Once max safe pressure and velocity is reached, I will do some terminals on these.

Have some guys with 50 B&M Alaskans getting ready for hunting season this fall, coming very soon. So I am trying to help get them ready with some of these bullets.

Michael

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Dave Bush

30 July 2011, 18:23

Michael:

I picked up a copy of *Rifleshooter* yesterday. It was a great article and, being all in to lever guns right now, I was very interested. Do you just form the brass simply by running the Starline 50 Alaskan brass with a pass through a 50 B&M Alaskan die? Are there any cases out there with a proper head stamp? What do you see as the advantage of the 50 B&M Alaskan over the 50 Alaskan? What's the best 500 grain bullet?

Dave
DRSS
Chapuis 9.3X74
Chapuis "Jungle" .375 FL
Krieghoff 500/.416 NE
Krieghoff 500 NE

"Git as close as y can laddie an then git ten yards closer"

"If the biggest, baddest animals on the planet are on the menu, and you'd rather pay a taxidermist than a mortician, consider the 500 NE as the last word in life insurance."

michael458

30 July 2011, 18:53

Hi Dave

Thanks, I was pleased with the article myself. I think Layne did a credible job, on both the Shooting Times Article and the RifleShooter as well.

Simple as that, run a piece of 50 AK .510 Starline in the 50 B&M die and load. Not even a separate operation, size and load. Easy.

No, I don't ever see a need to put the B&M on the brass,waste of money and effort, no one anywhere is even going to look further--once they see 50, that's it. They would not know the difference between .510 and .500 anyway.

The 50 B&M AK has a huge huge advantage over .510 caliber. Bullets--probably 10 times or more bullets that are perfectly suitable, and cheap, and very well suited to the 50 B&M Alaskan capability, and plus the North Fork and CEB bullets designed specifically for the 50 B&M AK for really big game. For instance, just go to the Midway site look at .510 caliber bullets that are suitable for the 50 AK and lever guns--I count 4 different bullets, not including cast or lead. For .500 caliber I count 21 different jacketed bullets that will work great with the 50 B&M AK and I have shot and tested most of them. Then add the North Fork and Cutting Edge Bullets to this list and it grows substantially. There is no comparison in the two. Anything a .510 can do, there are bullets available in .500 that will not only match it, but do a hell of a lot better as well. I also understand from Layne that Woodleigh is now working on a bullet that will hold up better under rifle velocities, and specifically the 50 B&M AK. I have both .510 and .500, the .510 is put to the side, just not much I can do with it when compared to the .500.

Michael

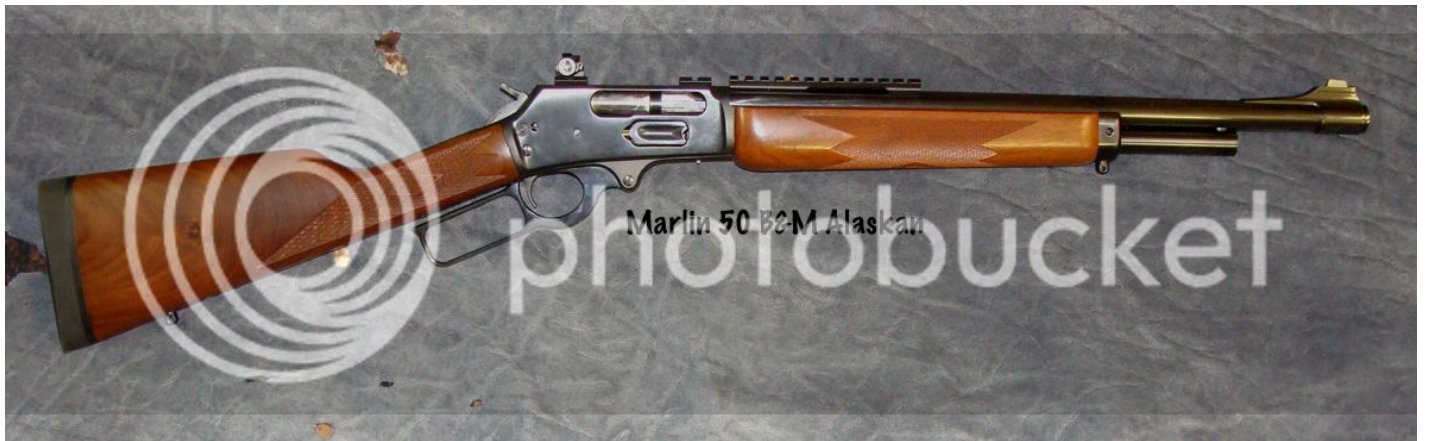
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michael458

30 July 2011, 18:57







I like lever guns too, been known to shoot one on occasion!

HEH..

Michael

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capoward

30 July 2011, 21:10

quote:

Originally posted by jwp475:

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Trajectory is the easiest part of long range shooting to correct as it is a known entity

jwp,

Sorry I didn't get back to you yesterday. With a heck of a lot of practice with the particular bullet nose shape at multiple ranges I might feel the same way. Unfortunately I live in the LA metroplex and the nearest range is 1 1/2hr driving time in the best of traffic conditions; also unfortunately the range is not set up to easily accommodate shooting at multiple ranged targets from a single location.

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

capoward

30 July 2011, 21:12

quote:

Originally posted by michael458:

quote:

Originally posted by boom stick:

I think the tip shafts are too long

There needs to be a cavity for the tip to collapse into to ensure consistent petal sheer. The tip acts as a cam to push the petals out.

Boomy

Sam thought the exact same thing when we first attached some of the tips to those 420 .458 NonCons. In fact, Sam went so far as to clip the bottom of the shaft half off to see, which is one of the 3 bullets tested quickly in the test the other day. It seemed to make no difference in the 3 bullets in performance or shear. At least for that test.

Also, even at 1/2 the length of the tip, should we shorten it, it still would not fit in most magazines, so little to gain actually. If you want to fit a larger bore BC bullet in the magazine, this is not the answer, this is merely a reasonable option for those that want a high BC BBW#13. If you want a High BC big Bore bullet all around bullet that fits in the magazine, it can be done, contact Dan at CEB and go to work on it. Very much like RIP and Max just did on the .395s.

Michael

Michael,

The Tip Inserts are a happy-sad situation currently. They most definitely raise the BC of the BBW#13 HP which was half the goal...but in their current "makeup" they're inhibiting the bullet's proven petal shearing ability and they're a "within the tube only" situation.

I do have a question. I seem to recollect one of the photographs of your work with the .458 300gr Barnes TTSX bullets, prior to your hunting trip, where the tip insert was recovered from your mix and was displayed in the photograph next to the recovered bullet. So...a couple of quick questions:

1st - What's the length of the Barnes tip insert?

2nd - And finally, what is the overall length of an unfired .458 300gr Barnes TTSX bullet?

Thanks,

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

prof242

31 July 2011, 02:28

for some reason, was away for a couple of days.

Now, don't let RIP read this or hear of it (disloyalty to the .395?), but, a .458 noncon without a tip would be great for elk in Colorado's forests and still be useful with the tip for open glade shots which could range 300+ yards. A one-gun-does-it-all thing. For bear and other Alaskan beasties, also capable.

Now, for RIP's benefit...The .395 Can Do It All.

.395 Family Member

DRSS, po' boy member

Political correctness is nothing but liberal enforced censorship

Cross L

31 July 2011, 03:01

quote:

Originally posted by srose:

I've been thinking about these tips and I'm going to say this. Interesting concept but these bullets are made for shooting big bad mean stuff up close and personal end of story! If you want a long range bullet use one designed for that. The thought of a bullet with high BC to drop into my double when I'm taking a long shot just don't make it or even a big bolt gun. Sorry guys! If its so far away that I need a high BC bullet then I'm going to use a smaller caliber bolt gun. The only use I see for a tip in the Non Con is to improved feeding in some of those bastard guns that won't feed a flat nose. Then the tip would need to be a short RN one at that. Round nose YUK!!!!!!!!!!

That expresses my opinion also.

Carry 3 down -2 BBW#13s and Non-con on top. a long enough shot to need the higher BC-well single load a NF SS Barnes, or tipped Non-con. If its over 150, much less 300 yds you have the time.

Elmer Keith would have loved this tread--He might have adopted Michael. 🤖

SSR

RIP

31 July 2011, 05:10

That .223/62-grainer has a puny SD of .178 so it is amazing that it penetrates to 60" at 3200 fps.

After that the velocity increase causes expansion of the nose and decreases penetration.

Even the brass FN nose expands if the medium is hard enough/velocity high enough.

3 or 4 years ago I found that impact of water at 2800 fps will expand the nose of a brass FN .395/330-grainer.

This was in a series of flat-sided water buckets about 9" deep backed by 1" of plywood between buckets, in series. 10" per compartment in that setup.

Water at 2800 fps impact is harder on a bullet nose than Doc M's medium, harder than hide and flesh for sure.

A GSC copper FN .395/340-grainer at 2700 fps expands more than an S&H brass FN .395/330-grainer at 2800 fps.

The S&H wins the penetration contest

(same powder charge for both bullets in the .395 Tatanka):

Sorry.

This Image Is currently
Unavailable

photobucket



80 inches with the S&H:



69.5 inches with the GSC:



This is the IWBB contraption that held the buckets and boards, front end entry into water bucket:



And back end yet to be reached by a bullet (100" capable IWBB):



Sectional density drives expansion.
Hence the low SD .223/62-grainer can be pushed up to 3200 fps with minimal expansion and excellent penetration at 3200 fps velocity.
Higher velocity than that and penetration deteriorates for the low SD brass solid,
because of nose expansion.

The higher SD (.302) with the .395/330-grain brass FN's need to be limited to 2800 fps.
Significant/visible/measurable expansion starts there in water!

Regarding the Hi-BC tips:

I think it is a wonderful idea.
That nose contour blends beautifully with the 13-degree BBW nose profile on the NonCon HP.
The longer and higher BC of the tip, the better.
One-shot loading directly into the chamber, bypass the magazine box, no problem.
Keep the box full of the short ones for life insurance.
Load the long ones as needed for the long range shots.
That can never be dangerous game at long distance!
The longer seating shank on the Hi-BC tip makes it more secure.
Doesn't seem to worsen the expansion on impact.
Leave it long!

Max,
I have a .458 B&M.

Sign me up for some tips for the CEB .458 bullets. 🤖

Better go load some more of those CEB .395/340-grainers for the .395 Tatanka test tomorrow.
Hope to approach 3300 fps with those. 🤖

michael458

31 July 2011, 14:39

RIP

quote:

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Higher velocity than that and penetration deteriorates for the low SD brass solid,
because of nose expansion.

As always you are able to sit back and analyze the issues and hit the nail on the head. It can only take so much velocity, any of them, and there are upper limits before starting to deform somewhat and be less predictable.

Something that I don't run into a lot because of the lower velocities I run here with most all the bigger bore rifles. I really should see what happens to those 375 gr FPS North Forks in the 500 MDM at 3000 fps just for giggles. But it too is low SD but it is copper too? Sometime.

quote:

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Leave it long!

Again, correct on every point. There is NO REASON at all to shorten it. Regardless of how short you get it, most will not fit the magazine anyway, so there is no point in shortening the Tip. Leave it as it is, let me test in the terminals to see what happens, with witness cards every two inches to analyze the shear and path. Tips are not for DG at all, these are for the elk, zebra, kudus at 250 300 yd or so. Keep the 13 as is for the DG at close. Don't need tips out to 150 yds either.

When everything is finalized I will have tips here for all of the 13s so will get some for you, no worries!

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.

MikeBurke

01 August 2011, 01:15

I performed a small test with my 450-400 3 1/4" double with the 400 Grain BBW #13.

To start I tested velocity and accuracy out of my 105 year old Boswell double. Started low and easily worked up to 2060 FPS which is where it regulated with Woodleighs. Accuracy appears to be good but more shooting at further distances will be needed to make certain. My barrels have been slugged at .410 and these bullets mic out at .4090. It seems to be close enough. If .410 are available that is what I will order next time.

I set up the same test as I have in the past.

12" Saturated Newsprint
2 by 6
60" Saturated Newsprint
2 by 6 Removable to stop bullets

Fired four shots.
Average velocity slightly over 2050 FPS

All bullets stopped in the 2 by 6 after traveling through 72" of wet newsprint. Three were dead straight (within an 1" across 72") one veered about 2" over 72", not at any one point just a slow curve throughout the test box.



Same boring results as the 470 and 375. The mark on the bullet second from right is from my vice when I pulled the bullet out of the 2 by 6.

In the past I tested some 400 Grain DGS from this rifle. Results were dismal. The DGS tested OK from my 470 but not the 450-400.

I know there are fans of the 450-400 DGS that have successfully taken African game. They were just too inconsistent in testing for me. Out of every bullet I tested the .410 400 grain DGS had the worst results.



Typical DGS result, stuck in the side of the test box.

See Michael I am still alive.

RIP

01 August 2011, 03:58

Mike,
Good to know about those DGS for the 450/400.
Must be too small a meplat and too much like a Round Nose.
The BBW #13 nose profile from CEB seems to be perfection. 🍌

Doc M,
Another thought on the long BC tips:
They may make the fast twist DGR rifles perfect for 1000 yard shooting.
Maybe someone could figure out the proper length of bullet for accuracy match to twist.
Make them as long as it takes to match the fast twists so prevalent nowadays in DGRs.

Or just shoot them at 600 yards or longer to verify that they are flying true ...
Hey someone has already done that, eh? 🤔

Good work all. 🍌