

This topic can be found at:

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

michael458

19 December 2012, 15:59

### Terminal Bullet Performance

quote:

Would not being a baboon be held against me if I volunteer?

Esskay

No man, I won't hold that against you, you are welcome anytime. I find myself only prejudiced against rednecks and Lawyers, and of course liberals top the list. But, when you need a good redneck or Lawyer, I am able to put those prejudices aside.



Now, I have a bit of bullet talk this morning before I am back on the range. While I don't plan any terminal tests probably until we return from DSC in January, I am making a few changes, and have some bullets on order, some new ones.

In the beginning Sam and I worked mainly with .500 caliber, the first BBW#13s from CEB, were .500 caliber as well. Nose projection as we learned, became a factor in solid penetration. When the first .474s and .458 #13 Solids came, we designed them with a .700 nose projection. The first .500s were, and are right around .585 for some reason, neither Dan nor I can pinpoint. I suspect that nose projection came from where Sam and I sent Dan samples of what we were testing, and it was copied direct from the samples, and never changed. So the current 500 gr and 550 gr BBW#13 .500 Solids have actually a rather short Nose Projection.

When we discovered how important that .600-.700 nose projection was to added penetration, I changed all the "Super Short" solids in .500 and .458. I thought about the .500s, but decided not to mess with it at that time, they were performing very good, and had proven themselves on buffalo, hippo, and elephant.

Not too long ago I ran a batch of .500 450 gr #13 Solids, and changed the Nose Projection to .700. I have been running load data for them in 50 B&M and 500 MDM. In 18 inches of 50 B&M I get 2250 fps, the 500s 2150. And in the 500 MDM 2530 fps with the 450s as opposed to 2400 with the 500s. About another 100 fps or so in each case. Not much, but I suspect these 450s will penetrate as deep, if not deeper than the 500s current. I will be testing this later. For my personal use in the field, I am going to drop down to the 450 weight, take that extra velocity and go with it. Now, I did not have a run of NonCons done to match. I was hoping that I could easy match POI with the current 450 #13 NonCon, but I have not been able to do that to my satisfaction. Close, but not close enough for me.

Remember some conversations about Same Weight POI or Same length/bearing Surface POI?????

Recently I sent one of my hunting buddies to Zimbabwe in November, he shoots a 50 B&M. He came down a few days before leaving to set his rifle up, and get new loads for the trip. I had hoped to set him up with the 450 Solid/450 NonCon, but we could not get them to close enough POI to work proper, so I dropped back to the old standby 500 #13 and it's MATCHING 450 #13 NonCon---Same hole at 50 POI. Duhhh! By the way, he took hippo, buffalo, crocodile, and hyena with his 50 B&M, and I am going to quote his words below;

quote:

Lou Imundo said on Nov 28, 2012 9:08 AM

I just returned from a very successful safari in Zimbabwe. I hunted with my friend Sam Perone and Andrew Schoeman, who, arguably, is the best PH in Africa. I successfully hunted Cape Buffalo, Hippo, Nile Crocodile (13'3"), Baboons, Impala and a Spotted Hyena. I used my .50 B&M on the dangerous game and my Browning 30:06 on the smaller game. I used 500 gr. CEB BBW #13 brass solids and 450 gr. CEB BBW #13 NonCon HP bullets for the dangerous game. Bullet performance was outstanding. The solids passed straight through all animals. The petals on the 450 gr. NonCon HP's sheared off as they are supposed to do and the wound channels were awesome. The 100 gr. ESP Raptors in my 30:06 were very effective on impala and baboons. I cannot say enough good things about my 50 B&M and CEB bullets. Michael's development work has raised the bar on bullet performance. Lou Imundo November 2012

With these 450 #13s I decided to go ahead and order another run of them, and this time I am getting matching #13 NoNCons to go with them. NonCon will probably come to 410-425, not sure, and not a big deal. The NonCon will also have a .700 projection.

More bullet talk, you know I am very enthusiastic about this new 250 gr .458 caliber #13 NoNCon, to say the least! I bothered to check SD at .170 and it is performing incredible--18 inches penetration if you recall, and reported here a few pages back. 18 Inches? Remember, a 500 gr .458 Nosler Partition, at 2250 fps from 458 Lott penetrates to 19 Inches, a 500 gr Woodleigh Soft to 20 inches! So there! If that tells you anything at all.

Right now, I am pissed at .474 caliber anything, including my own 475 B&M. So I don't give a shit about .474 right now! But, I am having SOME interest in .416 and a like bullet, so I ordered a run of 225 gr 416 #13 NonCons, bands forward, flat base, seat deep, use Talon Tips. This should be interesting I think.

That pretty much sums it up, just some Bullet Talk is all.

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.

**Esskay**

**19 December 2012, 16:21**

DocM, Sam, Beibs, Cap, Rusty, RIP, and everyone else

Best Wishes for a Very Merry Christmas and a Happy and Safe New Year. Long may the tribes prosper!

Warm regards

**416Tanzan**

**19 December 2012, 20:56**

quote:

More bullet talk, you know I am very enthusiastic about this new 250 gr .458 caliber #13 NoNCon, to say the least! I bothered to check SD at .170 and it is performing incredible--18 inches penetration if you recall, and reported here a few pages back. 18 Inches? Remember, a 500 gr .458 Nosler Partition, at 2250 fps from 458 Lott penetrates to 19 Inches, a 500 gr Woodleigh Soft to 20 inches! So there! If that tells you anything at all.

Right now, I am pissed at .474 caliber anything, including my own 475 B&M. So I don't give a shit about .474 right now! But, I am having SOME interest in .416 and a like bullet, so I ordered a run of 225 gr 416 #13 NonCons, bands forward, flat base, seat deep, use Talon Tips. This should be interesting I think.

That pretty much sums it up, just some Bullet Talk is all.

Bullet talk. Yes.

OK, let's discuss the super-light types. A sectional density of .170 is approaching half of the traditional .300 SD for dangerous game. More importantly, penetration is coming up shorter than Partitions and Woodleighs.

Is it good enough? Yes. But remember that addage 'penetration, penetration, penetration'. It would make the 458B&M 'short' a plains-game player at longer ranges but is it a wise choice for buffalo? Bullets are measured in buffalo in Africa.

Was there something wrong with the .204 SD of a 300 grain in .458?

Or the .206 SD of a 250 grain in .416?

Doesn't that extra weight of the .200 SD's buy 2-3 inches or more of penetration in michael-medium? Well if so, then that is a good trade off.

As for velocity, I am pretty sure that a Rigby could already send 250 non-Cons out at about 3225 fps, making it a prairie dog rig, or a 300 yard guinea fowl gun. I don't remember ever seeing a guinea fowl at that distance and the longest shot that I ever took on a spurwing goose was 200 yards. It was meat on the table, despite the mirage across the sandy river beach. And the 416 B&M might still do 2900fps with a 250 grain, tip weight included. Do you need something lighter or shorter?

+++++


"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**

**19 December 2012, 22:36**

So...the old same length/same bearing surface POI bit you in the hinny... 

The new nose profile length in the .500's is a positive move forward; not much else can be done to enhance their performance. Perhaps tweak the bands...

Banding:

After I had Dan design and produce the 420gr .500 CEB MTH copper HP Spitzer bullets I talked to him about a FN Solid to pair with it. We discussed narrowing the individual band widths and adding one or two additional bands while keeping the new banding surface/width to less-than or at a maximum equal-to the current 4-band bearing surface total width. We also discussed using the MTH's banding on the new FN Solid but decided to wait until my rifle was finished and I'd had a chance to shoot up some of my existing brass bullet inventory before getting serious about a new FN design - especially as I was already looking to tweak the .500 MTH...

Then two things take place... Michael and NF announced the new NF CPS and FPS nose design and Ron has commenced ballistics testing of the 12.7x68 and identifies that the copper constructed 450gr.500 NF FPS pairs perfectly with the 420gr .500 CEB MTH - so problem solved...at least with the 1st generation of the .500 caliber MTH...

Ok...interruption off...

Jim 🤔

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

**capoward**

19 December 2012, 22:59

Oh yeah... Geez mind must be going...

Michael, if memory serves me correctly the current .500 caliber nose length was a direct result of the prototype 8-band bullet that Sam cut for your pressure tests. Pressures were too high so every other band was eliminated which substantially reduced pressure levels while keeping straight-line penetration levels where you wanted them. Prototype went to Dan resulting in the 1st run 500gr.500 CEB FN Solid with the 4-Equidistant banding...soon replaced with the current 3/1 4-band profile... Revisiting the nose length really never came up until you had poor penetration performance with the light weight .458 caliber FN Solid when compared to the 330gr .458 Barnes BND SLD FN bullet...

I don't recollect the weight - perhaps 510gr or so - but I'm on my iPad rather than PC so can't access my PDF files, but I believe Sam had cut some prototype .500s using a banding similar to my .500 MTH bullets, that had a .700" or longer smooth nose shape with very good straight-line penetration...

Jim 🤔

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

**brent ebeling**

19 December 2012, 23:20

I find myself only prejudiced against rednecks and Lawyers, and of course liberals top the list. But, when you need a good redneck or Lawyer, I am able to put those prejudices. 🤔 🤔

Now listen here, I ain't no lawyer and I live in the country and like country music, so I guess you can go figure which one of those comments I want to fight about the most. Seems to me most "pie" is made and DELIVERED by redneck folk!! So you might want to rethink your prejudices. 🤔 🤔

**michael458**

19 December 2012, 23:35

quote:

Seems to me most "pie" is made and DELIVERED by redneck folk!

"Pie Delivery Rednecks" are exempt from all prejudices. I must have forgot to mention that?



<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**

19 December 2012, 23:37

quote:

So...the old same length/same bearing surface POI bit you in the hinnie...

No, just the opposite. I could not get the 450 Solid and 450 NonCon together. Same Weight, different length/bearing surface.

Same Bearing surface/length in the same hole.

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.

capoward

20 December 2012, 03:16

quote:

Originally posted by michael458:


quote:

So...the old same length/same bearing surface POI bit you in the hinny...

No, just the opposite. I could not get the 450 Solid and 450 NonCon together. Same Weight, different length/bearing surface.

Same Bearing surface/length in the same hole.

M

Hum... That's what I meant. Reckon I wasn't very clear with how I stated it though... 

Jim 

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

RIP

20 December 2012, 06:41

quote:

Originally posted by Esskay:

DocM, Sam, Beibs, Cap, Rusty, RIP, and everyone else

Best Wishes for a Very Merry Christmas and a Happy and Safe New Year. Long may the tribes prosper!

Warm regards

Esskay,

Thanks for including me in that Rogue's Gallery.

Merry Christmas and may you and yours be healthy, happy, wealthy and wise in the coming New Year.

Same to everyone else that reads and contributes here, and as expressed by Tanzanian PH Paul Olivier:

*Wishing you and your family  
a  
Merry Christmas  
and a  
Prosperous New Year 2013!!*

*Warmest Regards from Tanzania.*



*Paul Olivier* photobucket



Riflecrank Internationale Permanente



photobucket

Norwegianwoods

Happy Holidays and a great new year everybody!

I hope you all will have lots of safe and fantastic hunting in 2013.

20 December 2012, 12:16

**michael458**

**20 December 2012, 19:57**

Good Morning Chaps!

Well, I just got on to do the same, Wish Every Single one of you a Happy Holidays. But, then, I thought about "Tomorrow"? You Know, Friday, December 21st, 2012, end of the earth sort of thing? End of the Mayan Calendar? Earth cracking open to swallow all of us, and then what is left the oceans rising up to sweep us away, that sort of thing! 🤔

HEH..... Mercedes and I are watching "2012" AGAIN TONIGHT! We have only seen it 25 + times so far! LOL..... 🌐

So, wishing a Happy Holidays to everyone, that might survive 12/21/2012!!!!!!!!!!!!!!



Just wondering, should I drink all my "Pie" in anticipation of the coming events? Would hate for that to go to waste? Hmmmmmmm?

ENjoy  
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.

**boom stick**

**21 December 2012, 00:08**

If you are reading this then we survived the Mexican Y2k  
Merry Christmas/Chanukah/Winter Solstice ect and a grateful, healthy and prayerfully more prosperous and more free new year. May your pie be the drinking kind and with friends and loved ones. May your homes be filled with love and peace. To all my friends here I wish this blessing.

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)

**Paul Truccolo**

**21 December 2012, 02:46**

Hey you guys it's already Friday the 21st here in Aus and I can confirm for you that the world didn't end !

My very best wishes to you all for the festive season, may you stay safe and well and prosper in a new coming year.

For those going to D.S.C I hope you have time to pop your heads around the corner of Doc M's booth and introduce yourselves. I will be in the booth behind Mike's and would love to be able to put a face to the "name".

Cheers and all the best for now,

Paul.

**capoward**

**21 December 2012, 06:19**

Nice to know that 12/21/2012 falls into the same zipo box as Y2K...

Merry Christmas and Happy New Year to all...

Jim 🍷🍷

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

**michael458**

**21 December 2012, 15:41**

Paul  
I can report that South Carolina is still here this morning as well!  
😊

Happy Holidays to All!

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 December 2012, 17:52

North Carolina too!

**Cross L** 21 December 2012, 18:00

The day is young--we have till midnight for the world to come to an end--



Merry Christmas and a Happy , Prosperous New Year

**coyote wacker** 21 December 2012, 18:40

If it was going to end by snow there's a good start here in the U.P. 18" in 24 hours And its not going to let up for 24 hours more.

Happy Holidays to all!

Craig



**michael458** 21 December 2012, 18:55

Coyote

Been thinking about you, was going to photograph my little gift you sent- THANK YOU--Very appropriate as well! I have it on the bench, ready to hang, just have not got to it yet.

18 Inches of Snow!!!!!!

Beautiful, at least for me sitting here in SC! LOL.....

Merry Christmas, Happy Holidays!

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.

**coyote wacker** 21 December 2012, 19:24

Michael

You are welcome!

2- whitetails have fallen to the bark of the 50 B&M Super Short. A report to follow.

We got here Nov.11, heading down state tomorrow for the holidays. Hope the roads are clear it's a 6 hour drive.

Craig

**michael458** 22 December 2012, 01:22

COyote

Excellent, will look forward to your reports!!!!

Safe travels my friend.

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**

**25 December 2012, 16:13**

I trust and hope all of you are having a Merry Christmas!

We are here.

Small bore Christmas Report!

Christmas Eve we had a family Dinner. Family includes some of my closet and long time friends as well, my buddy John being one of those. John shoots a lot of deer each year, so I always send him off with bullets to try out! Of late I loaded him some 70gr ESP Raptors in 25 WSSM, and 100 gr ESP Raptors in 6.5 WSM. He took out 3 deer with each of these the last few weeks. Various ranges out to 300 yards. 6 deer took the DRT (Drop Right There) plunge, never to move again. John has taken a lot of deer with the 223 55#13 NonCon and 50 ESP Raptor, most all DRT. But, he shot one during the last couple of weeks with a 50 ESP Raptor 223 WSSM at 300 yards. Heart shot. Took off like a bat out of hell, 150 yards fell over stone cold dead. Upon study, heart was blown to hell, and lots of damage internals, John says he can't see how in the world the deer could go that far with that much damage? But, they do sometimes, regardless some just do not know when to lay down and give up. John reports as we increase in caliber, increase in effectiveness as well. He reports the 6.5 WSM 100 ESP Raptor absolutely Kicks Ass and Takes Names. None of this report comes as a surprise to us here, and all makes perfectly logical sense, and exactly what we would expect.

Another thing to keep in mind, our very own 450NE is in Africa as we speak today. Tanzania I believe, and busting buffalo! Our Boy Mike, took off with his 450 NE loaded with 450#13 NoNCons, and his 458 B&M Loaded with 420 #13 NonCons. He has been practicing for a couple of weeks now with a Home Made Double ended Buffalo, on top of a wagon, being pulled along by his lovely Wife!



HEH HEH HEH..... As the days moved on, I understand he was getting so good with his rifles that the rope doing the pulling got shorter every day! 😊

I have a lot to tease both of them about when they visit here on his return! HEH.....

DSC is getting closer! Please come visit with us if you get a chance.

Merry Christmas to All.

Enjoy

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.

**boom stick**

**26 December 2012, 01:58**

Merry Christmas Santa Michael!  
Merry Christmas to all you terminal elfs.

[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)

**boom stick**

**26 December 2012, 02:17**

As to the marathon deer... I would be curious to know the impact velocity since the 22 cal work best at high velocity imparting shock and awe-some damage. Im curious as to the width of dispersion of petals. I think the Raptors collapsing both lungs and shredding the heart is key to its quick kill. If the heart was shredded but one or both lungs still working with adrenaline its obviously possible to run 150 yards with a damaged heart. with larger calibers the odds of this happning diminish fast it seems. The Non Cons and Raptors lethality seem to be from something twice it's size.

[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**

**26 December 2012, 19:35**

Boomy and all

Marathon Deer, and other critters as well. While I have seen some spectacular take downs with the #13s, Raptors, and North Forks, every once and awhile you will find that critter that just does not read this thread! It does not know that it is supposed to DRT and never move again! If they all read this thread, then we probably would not have that occasional critter that decides to run a bit before falling over stone cold.

Back in April when I was shooting things with the 9.3 B&M, it started off like mad, wildebeast frontal shot, turned a flip, legs sticking



up, never got up again! 🤖

HOLY COW--210 Raptor and 9.3 the most deadly medium I have ever seen!!!!!!!!!!!!!!

Opps, next wildebeast shot took off in a mad dash for 40 yards and turned a flip on his head, stone cold dead, but he ran to start off. Several impala stone cold dropped to the shot! 3 zebra, all good hits, RAN LIKE HELL was chasing them, then died on their feet everything inside them jelly! How? Two hartebeasts, 1 blesbok, lung shots all three, dropped to the shot, kicked a few times, never moved an inch, never took a step! Amazing! Some do, some don't, but get it in the front end and its all over at that point.

Just have to get more animals to read this thread, then we won't do any chasing from then on!

HEH.....

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.

**465H&H** **26 December 2012, 23:44**

I have heard the hypothesis that whether you get a DRT with a heart shot depends on whether the heart is in the process of building up a blood supply or pumping it out at the time of the hit. I don't have an answer to that.

I have seen an adult mule deer doe DRT with a hit from a .22 long rifle hollow point to the heart and another run for 100 yards with the heart almost totally destroyed from a 270, 130 grain soft point.

At one time I was culling impala on a Zimbabwe ranch. When shot through the lungs with a FN-Fal with 150 grain soft points or a 243 with 100 grain softs they would run 50 to 100 yards before going down. When shot in the same location with a 375 H&H with 270 grain Partitions they were DRT. That included 18 in a row.

465H&H

**michael458** **28 December 2012, 21:03**

465HH

I have heard and read about the same hypothesis as you mention. I don't have nor would even attempt to have an explanation or answer either, beyond me.

Like you, and I am sure many of us, we have seen some wild things in the field, some just no real explanation for.

One thing I always like to point out is that it takes more than 1 or 2 experiences to actually know anything about how a bullet might cause an animal to react, in fact, it takes many to just get a basic Rule of Thumb, and even then every animal will not react the same. Some will, Some Won't. But what you look for is the Majority Of.

Range and impact velocity have much to do with animal reactions as well. Obviously, something shot at 300 yards may react far different than the same animal at 50 yards. One might have 5-10 DRTs at 50-150 yards, but stretch that to 300 you might have totally different results.

I will always remember the first time I ever took any sort of 416 to the field, which was only back in 2005. Using a 340 Woodleigh, an excellent bullet, in 416 Rem at 2550 fps. Very impressive test work. I had the 416 along for the light rifle for plains game only. 458 Lott for the heavies. First animal I shot was a hartebeast, what, 250 lbs or so? Damned thing ran off for a 100 yards? I was not impressed at all with 416!!!! I kept using it on several zebra, roan, sable, hartebeast, reedbuck and some other critters, and it just kept getting better and better, and when it was all over, my opinion of the 416 and the 340 Woodleigh was very favorable. There were several DRTs then and there, and nothing ran far at all, with the exception of that one hartebeast. Now if I would have stopped with that one hartebeast, I would have never went to the field again with a 416 anything, and my opinion of 416 would have been much different than today. I think the 416 is a dandy plains game cartridge with the right bullets of course!

To the best of my recollection I have NEVER seen a DRT with a lung shot, on anything I can think of, with a medium caliber. Up that caliber to 458-500 I think I have done some of these with the NonCons. But for sure did several with hartebeast and impala with the 9.3 B&M and the 210 ESP Raptor back in April of this year. Lung shot DRTs! I was amazed.

Sam and my Son Matthew are out in the deer patches yesterday and today. Matt shot a deer of some sort with the 458 B&M Super Short. Using the 250 #13 NonCon. Posted on the B&M thread, but thought maybe we should add it here as well.

quote:

michael458  
one of us

Posted Dec 28, 2012 7:07 AM Hide Post

quote:

Originally posted by rose:

Took Michael458's son Mathew hunting today for whitetail. He was using a 458 Super Short that Michael had all set up for

him. Had some kind of NON CON TIPPY THINGY of some weight in it. You'll have to get Michael to tell what it was. Well Mathew shot the nice buck quartering away and hit it in the guts right in front of the rear leg, bullet exited the front shoulder. Deer ran 40 yards how I don't know. You meat eaters better not shoot deer with the thing. Exit in the hide was .458 or close to that. Under the hide it was a pure mess with about a 4 inch hole. One petal exited the entry side about 8 inches forward of entry hole. No they can't do that. Mr. WEE WEE. Too much mess to go digging around in. About all else I can say is there was one happy McCoury today and the 458 SS is too much gun for whitetails.

Sam

Matt was excited leaving out yesterday. He dropped by, I sent him with the 458 Super Short and 15 rounds of 250 gr BBW#13 NonCon with tips, being pushed by 55/LilGun, 210 Federal, for 2712 fps in that 16 inch tube!

TOO MUCH GUN? NEVER, you can never have TOO MUCH! You might come up short if you go to the small bores, but never ever TOO MUCH! LOL..... Maybe if you guys can get one in the FRONT HALF of the deer, it won't be such a mess? Why don't you try that!

I really LIKE this 250 #13 in 458, and believe it is THE bullet for everything short of buffalo. If I was running 45/70 or thereabouts, this is the only bullet I would look at for it. I was running this at 2300 in one of my Marlins, and that is smoking. Of course, no tip, so velocity drops a lot with it.

In an 18 inch 458 B&M I was at 2850 with it, tip included. Excellent bullet for 458 Win and 458 Lott for light duty work anyway. Lot's of penetration there, at velocity I was getting 16-18 inches of penetration with it at 50 yds. This deer, what 24 inches, exited? Something like that or close.

I had contact with Sam earlier this morning, they are out trying to do another one this morning.

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.

**Skip Nantz**

**06 January 2013, 19:51**

Hey guys! Have 375 raptors on the way for 375 Ruger Alaskan. What velocity do I need to be shooting for? (No pun intended, lol). Intended for large game, brown bear, buff backup (extra gun) . . .  
Thank for all input!

Skip Nantz

**boom stick**

**06 January 2013, 20:56**

Good choice!  
I know CEB was doing testing with the 375HH so that should be a start for some load info. Also look at load info for the Barnes 235 tsx. The question is what powders for short barrels. If I got 2,800FPS from a 20" barrel with the 375 Raptors I would be happy.

[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)


**capoward**

**06 January 2013, 21:07**

quote:

Originally posted by Skip Nantz:  
Hey guys! Have 375 raptors on the way for 375 Ruger Alaskan. What velocity do I need to be shooting for? (No pun intended, lol). Intended for large game, brown bear, buff backup (extra gun) . . .  
Thank for all input!

Recommend you follow the link to Michael458's website - the post just above yours - and check Michael's loadings for the 9.3 B&M. Should point you in the direction of the correct powders to use as well as performance expectations.

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

**Skip Nantz**

**09 January 2013, 14:55**

Thanks for the info. Got them in and ready to start!

Skip Nantz

**michael458**

**09 January 2013, 23:39**

Skip

As per our PM conversation, please keep us posted, I am sure there are others that would like to share in your knowledge gained.

For the "**Woodleigh Cult**"

Yet Another Thread on Piss Poor Bullet Performance!

<http://forums accuratereloadin...781070481#6781070481>

<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.

**Biebs**

**10 January 2013, 00:01**

Soon to be babbling onto page 269 !!!

**Pyzda**

**10 January 2013, 05:05**

quote:

Originally posted by michael458:

What you will see below is a repeat of a recent post I did on the 45/70 penetration thread. I have some information that I would like to share, but to be honest it really needs to be on a thread unto itself. It is my hope that we can all learn from this, that we can have reasonable, logical, and intelligent conversation and share ideas, concepts and experiences in which we all can maybe learn something concerning terminal performance. It is an area that I have a great deal of interest in because in the end I believe that when it comes down to it, it's not the rifle, the cartridge, it's the bullet that does the work once it strikes the target. But since there may be many of you that have not been involved in the 45/70 penetration thread, I want to set the record straight right up front so that hopefully we avoid wasting time and energy where we do not need to. So those of you that have not seen this post please read, those of you that have can move forward, at least as soon as I can post part two! I apologize for the length of this post, however I want no misunderstandings concerning this thread, and rather just nip some things before they begin. For those few that have seen this post, I apologize again, just skip over!

michael458  
one of us

Posted Nov 1, 11:06 AM Hide Post

I make no claims at being any sort of expert at all concerning terminal performance of any bullets, nor terminal ballistics. I do claim to be an "avid" student of terminal ballistics however, and strive to learn as much as possible, either from others that are capable and experienced, or by my own tests and research both in the "lab" as I call it and in the field.

As stated there is no test medium that will exactly duplicate animal flesh. This is true, and rather "common" knowledge. Most hunters never test a bullet or load except by shooting game in the field. Shooting animals in the field is never a satisfactory way to conduct true and proper test work, no two shots can be alike, one may hit bone, another soft tissue, one straight on, one at an angle. This does not mean one cannot learn from field tests, quite the contrary, but this is not the arena in which to begin test work! I do not wish to go to the field "ignorant" of how any of my equipment may or may not perform, I would much prefer to have some prior knowledge of how a bullet may or may not work long before possible costly, and unethical "failures" occur in the field.

Again, for those who cannot comprehend the written word---No Test Medium Exactly Duplicates Animal Tissue! However, proper test medium will give one reasonable comparisons not only between different bullets, but will give us some insight into how a bullet may or may not perform in the field. There are many test mediums that can and have been used, Ductseal, Clay, Wooden Boards, Gelatin, wet news print, water, sand, dirt, and probably other materials I can't think of right now. Many years ago I tried some different mediums but settled on wet news print as it was readily available, reasonably easy to work with, and I believe a reasonable medium in which to put reasonable stress on a bullet for test purposes. I also decided that this would be the only medium that I would test with as I could record and keep data concerning performance, I could see wound channels, measure penetration, retain fired bullets for study. By gathering this data one could later correlate this back to findings in the field on animal tissue. Now one can do this with nearly any reasonable medium, but one has to stay with that medium and collect quite a bit of data over the years to be able to correlate the two. By "reasonable medium" I mean a test medium that will have some relevance to what you intend to accomplish in the field on targets you intend to destroy! For instance, if you are a hunter, then why would you want to test on cold rolled steel test medium??? If your intentions are to test armor piercing ammo, then by all means you need to test on a steel medium.

Being an avid student--not an expert--I have become better over the years at collecting and using my data. Twenty years ago it was enough for me to just shoot a bullet into the mix and see that it did not break up and then go hunting. Wound channels and penetration was looked at, not recorded. Ok it works, lets go to the field. Over the years I developed into recording even the impact velocities most of the time, depth of penetration, retained weight, noted wound channels--not really gathering volume of, and other information I deemed important to know. As much as possible I would also study these same bullets in animal tissue when it was possible to recover and study. There are many that exact depth of penetration, or wound channels could not be gathered, but where I could I did record this information as best as

possible, and then correlate the data back to the test work done BEFORE the field tests. Over roughly a 12-15 years of shooting various critters in the field I have been able to study and gather some data that gives me a very reasonable correlation between the test work and the actual field tests on animal tissue.

There are no absolutes in our shooting world. There are far more variables to consider in the field with animal tissue and one would be a fool to say that each and every bullet will perform exactly in the field as it does in the test medium. The test medium gives us consistent medium in which to work with, it does not have bones (although this can be injected into the mix) it does not have many of the various issues that you will run into in the field. There are no absolutes! But, if one is persistent with collecting proper data, then one is able to "predict" how most bullets may or may not perform in the field, if using a reasonable medium that is pertinent to the field tests.

Field work and tests on animal tissue is the number one priority, and is without doubt the most important and the one that counts the most. This is where the metal hits the meat, this is the one that can either give you success or failure. But I can tell you this, I would not go to the field to test or shoot animal tissue with zero knowledge of how a bullet may or may not perform. It is pure ignorant and stupid to do so in my opinion.

There are some people, that believe that no valuable information can be "learned" from doing prior test work in any medium. Those people are "correct"---Those people with that attitude cannot learn anything! In the meantime the rest of us common folks can usually learn a great deal from test work done prior to field trails.

This is true with any sort of bullet, expanding, solid, and non conventional bullets.

I do not have the time nor inclination to test everything there is. I mostly work with bullets that I intend to use in the field. Keep in mind, this is my personal data, I am not testing for you--I am testing for me, I do not wish to go to the field ignorant and stupid, and suffer possible failure in the field due to that. I also do not go to the field (normally) with bullets that have failed or performed less than expected in the test work in wet print medium. I have in my more ignorant youth done this on a few occasions, I did not listen to my test work, and I had those same miserable failures in the field every single time! Fortunately I am a decent student and sometimes I even learn from my mistakes. I take test work pretty seriously, regardless of whether it is simple load data when working up loads, cartridge development, bullet design and development, and of course terminal performance data. After all, it is the bullet that will make you successful or not. It is good to know the operating ranges of different bullets, especially with today's high velocity capable cartridges, and I think even more important with our big bore cartridges, which may be used in somewhat dangerous circumstances.

I shoot mostly big bore cartridges from 416-.500 caliber, and have paid a lot of attention to 458 and my own .500 caliber cartridges over the years. In particular the .500s in which proper dangerous game bullets had to be designed, as there were none available on a commercial basis. I dabble in other calibers from time to time, mostly .338, .358 and recently .366. Very little but some work done in small bore under .338 caliber.

You will see a reasonable variety of bullets available on my shelves.





I have a passion for Winchester M70s as most of you know, but I do love the lever guns, and the single shots, mostly Winchester 1885s and Ruger #1s. All of which are in bigger bore diameters.



I have an outdoor range behind my house with test benches at 50 yds, 100 yds, and 150 yds. Very little work is done there anymore, as I do most of the research and test work on my personal 50 yard indoor range with test benches at 25 yds and 50 yds. I have 3 chronographs set up to collect data at both these points and also one down range should I need to collect impact velocities.





The range is a complete facility set up to do load data and various other types of test work, which does include pressure tests when desired or needed.

I have over the years of doing the test work been fortunate enough to be able to put bullet to animal tissue, and be able to create some "rules of Thumb" to correlate back to the terminal performance tests done with my wet print mix, which for the last 5-6 yrs has consisted of a mix of 65-70% wet news print and 30-35% catalogs/magazine mix. This just happens to coincide with an increase of 30-35% tougher than wet news print alone. The paper of the catalogs/magazines



being thicker, glossy, and tougher overall. The following is a "rule of thumb" only, but from bullets recovered from animal tissue I find that one can expect from 80% to 100% more penetration in animal tissue than this wet print mix I use, for expanding bullets. For solid bullets one can expect 30-35% deeper penetration in animal tissue than that of the wet print mix. This data base is continuing to grow each year, as stated I consider it a "rule of thumb" and NOT an absolute! For expanding bullets I have found that a bullet tested in wet print mix expands and reacts very close, very similar, and sometimes indistinguishable from those found in animal tissue. How it expands and performs in the wet print mix is almost identical in every case to what a bullet will look like when recovered from animal tissue. Exceptions being bullets hit by bone. At times I add items that will put some bullets under more stress than normal wet print mix. I do this by adding some pieces of wood about 2-4 inches inside the front of the mix. No, this is not bone, but it does tend to put a particular bullet under more stress than normal to see how it reacts. It might just tell me if a bullet will break up on a 2X4 then it will for sure break up on bone, which is more dense and solid than a normal piece of pine 2X4 or even sometimes a 4X4. I have also stressed some solids with a piece of fiberboard up front (after initial positive tests in wet print mix alone) which is extremely dense, more so than bone, just to see if I could stress the bullet to the point of failure to penetrate properly. If it failed this test--THEN IT MIGHT BE POSSIBLE--MIND YOU "POSSIBLE" it could fail in the field. A bullet that could pass all the stress tests, would be very very likely to be successful in the field. However, as stated, there are no absolutes!

I have been able to collect a good many samples to be able to compare wet print bullets with animal tissue bullets;



Recovered from Eland-Kudu-Giraffe  
Reported 32-36 inches of penetration

416 B&M  
350 Barnes X  
73/AA 2520  
Muzzle Velocity 2417 fps  
21 yd Impact Velocity 2387 fps  
18 inches Penetration  
Retained Weight 350 grs



458 Lott  
500 Swift A Frame  
Muzzle Velocity 2260 fps  
25 yd Impact  
24 Inches Penetration  
Wet News Print Only  
Retained Weight 494 grs



Recovered From Elephant

458 Lott  
500 Swift A Frame  
Muzzle Velocity 2270 fps  
Buffalo @ 40 yds



458 Lott  
500 Barnes FN Solid  
Muzzle Velocity 2275 fps  
Buffalo @ 40 yds



458 B&M

Buffalo Australia 2009

500 Woodleigh 2130 fps

450 Swift A--2210 FPS

450 Swift A--2210 fps

450 Swift A--2210 fps

**458 B&M**  
**450 Swift A Frame**  
**Muzzle Velocity 2156 fps**  
**50 yd Impact**

**20 inches Total Penetration**  
**Retained Weight 445 & 449 grs**



500 MDM  
470 SSK HP  
95/H-322

Muzzle Velocity 2409 fps  
20 yd Impact Velocity 2352 fps  
24 Inches Penetration  
Retained Weight 357 & 356 grs



500 MDM  
470 SSK HP -- 2425 fps  
Buffalo Australia 2009

Impact inside 50 yds

Impact 75 yds +/-





These are but a few examples, I have many many more in from which to draw, and in nearly every case, correlating data can be drawn between wet print bullets to animal tissue bullets. Factors such as impact velocity in the field needs to be taken into account also.

My experience in the field includes calibers such as 6.5X55, 6.5 WSM, 308 Winchester, 300 Winchester, 300 Dakota, 338 Winchester, 358 STA, 35 Whelen, 38/55, 416 Remington, 416 B&M, 45 ACP, 45 Colt, 45/70, 458 Winchester, 458 B&M, 458 Lott, 50 B&M, 500 MDM. Of these calibers my percentage of animals taken is 8.78% with calibers of .308 and less, 27.03% taken with calibers from .338-.358, and 64.19% taken with .416-.500 caliber. By far the majority of my field experience is with the larger bores. As for my test work although I have tested many different bullets in several calibers, my main interests lie in 338-.500 caliber, and by far leans toward the large bores also. 71% of animals I have taken are with Winchester rifles. Some data to show where my interests are.

It is my hope that I will be able to continue to learn, study, and advance in my studies. Again none of this makes me an expert by any stretch of the imagination. I have done enough to have some fairly reasonable opinions on some matters. I shoot regular, each week. If I am in a serious load data session then I may have several sessions a week, shooting anywhere from 150-250 rounds a week, mostly big bore cartridges. Last year one way I was able to keep up with how many rounds went down range, either in the field, but mostly on the range, I had purchased 5000 Fed 215 primers--90% of which are used in 416 calibers and up, and also 5000 Fed 210 Primers in February of 2008. Those 5000 Fed 215s ran out in July of 2009, and I had fired 3000 of the Fed 210s--which for the most part were in cartridges such as the 50 B&M Super Short and 50 B&M Alaskans, along with some in other minor cartridges. That is 8000 rounds of rifle shooting in 17-18 months roughly. Now I do admit that was a bit much, but I was also doing a tremendous amount of work on my own various cartridges in 416 B&M--458 B&M--50 B&M--50 B&M Alaskan--50 B&M Super Short--and the 500 MDM during this time.

I really do not care if you agree or disagree with my methods, or any of the work I do here. I do not do it for you! I do not do it for \$\$\$. I am not in the gun, bullet, cartridge, business in any way, shape, form, nor fashion! I do this for myself, my own curiosity, to further my knowledge, to increase my potential for success in the field, and because I enjoy it most of all! Not for you! For those that are willing to learn, or would like for me to share my information I am more than happy to do so, it is in my nature to help anyone I can if desired. But what I will not stand for is for someone with very little test experience, or none, to attempt to discredit the things I choose to do. If you do not agree, fine, no issues with that, state it and move on. I stand behind the work 100% on the basis as I have stated several times. I have stated many times, see above this post, no test medium is equal to animal tissue, it is a test to compare performance of different bullets, if you do enough of this with nearly any reasonable test medium, then you can correlate data between animal tissue and test medium of your choice. Again, there are no absolutes, but I choose to NOT be ignorant when going to the field, what you choose is up to you, and really I could care less what you choose to do. This is my choice.

I keep complete data records and separate files on every rifle being shot and tested from the first shot to the last on each rifle. All load data is recorded after each range session, or field test and kept on separate spreads sheets per cartridge, divided within that per rifles individual data. These are all on computer, and backed up daily to two other hard drives. In addition books are kept in hard copy and new sheets printed out with each new entry within the cartridge/rifle category. One cannot possibly keep up with such a data base by memory. There are many times I refer to a file folder on

a rifle just to see where and what it is sighted in for last. But the info is there and available when I need it.

Also as most of you know SSK Industries (AKA JD Jones & Company) does all my work for my rifles. I have been extremely fortunate to become closer to JD and have learned a great deal from a true master, with experience most of us could only dream about, both in shooting, test work, and field experience. In many ways I think JD has taken me somewhat under his wing and I have to say that it has been a pleasure learning from him too! Without his assistance and that of Brian Alberts with SSK I would be far more ignorant, and many of the great bullets we have designed together for my .500s would be far less effective than they have proven to be. To be associated with such great people as that has been a wonderful and great learning experience for me. I have also had the great pleasure to be able to assist JD when he wanted some samples of other things tested both here at my range and in the field. There have been several occasions I have had this opportunity and it has been a pleasure for me.

Michael

ABSOLUTELY AMAZING!!!

How someone can shoot into the boxes full of wet paper for more than 3 years and not be sick of it to death.

However we all learned a lot. If it wasn't for Michaels swift working brain cells none of us would ever know, what the fine detailed art of the bullet performance really is.

Pyzda

**Skip Nantz**

**10 January 2013, 05:23**

Will keep you posted. Will be a few week before I can start reloading and shooting. That "work" thing will be in the way :-).

Again, thanks for all the info.

Skip Nantz

**Klein** **12 January 2013, 17:35**

Like so many others I learned a lot from this thread and when time came for my tuskless Ele hunt asked michael458 for some advise. I ended up loading CEB 480gr solids in my .458 Lott, MV at about 2250fps. Accuracy was spectacular to say the least, sub MOA and usually three round clover leaf groups at 100 yards.

I fired a total of 8 rounds hunting two elephants. Side brain shots and body shots from different angels, only one bullet did not penetrate completely trough. The longest path of penetration was with a bullet striking center of the neck on an Ele lying down on its side after a brain shot. That bullet went through the spine in the neck, traveled through the chest cavity and exited just behind/between the front legs. Not a huge Ele cow but still a long way to penetrate, shot fired from about 15 yards.

The one bullet not exiting was fired in to the back of the head of a downed Ele cow. It was found at the base of the trunk. Unfortunately I am unable to get Photobucket to work with me right now. I wanted to post a picture of that bullet, it took quite a beating. I have my theory on what happened to it but it would have been interesting to hear your thoughts about it.

All in all I am pleased with my bullet choice but on a few of the shots I have a feeling penetration was not absolutely straight lined. No real evidence to prove that, just a feeling, might just as well have miss judged the angles of the animals and my self when the shots were fired I guess.

Perhaps some one might find my little field report interesting.

**michael458**

**13 January 2013, 15:07**

Klein

Sounds to me as if your trip was very successful, congratulations!

8 rounds, 1 bullet recovered from elephant, pretty good penetration sounds like to me. The one that did recover sounds like it hit something hard, teeth? Who knows. Always hard to speculate on these things.

Probably somewhere in our conversations it was brought up 500 gr vs the 480 in the Lott. There is a 500 gr BBW#13, but as good as the 480 is, I never felt a need for it in the lott, so never messed with the 500. From all reports from the field with the 480 in the lott, I still contend that point is valid.

Your report is very important, all field reports are important and needed. All the heavy test work is pretty much finished here, there really is no where left to go! On occasion we will have a few new bullets to play with, special projects, but most reports now should be like yours, coming from the field.

Thanks  
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.

**coyote wacker**

**14 January 2013, 19:25**

I was doing a little surfing for load data for my FN 5.7x28 and came across this.

<http://www.fivesevenforum.com/...pic.php?f=19&t=13918>

**michael458**

**14 January 2013, 22:02**

Coyote

Yes, that guy is an idiot. He is the idiot that as I understand was turning the Barnes bullets down for the AR Pistols, and the one that started all the BS on the solids! And as WE all Know where the BBW#13s and CEBs Come From--Right here, and had nothing to do with GSC anything.

That guy is trouble and not good at all for our industry. I have also seen many other things about him in other areas.

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.