

This topic can be found at:

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

MJines

28 September 2014, 22:14

Terminal Bullet Performance

You missed the point. Try again.

Mike

tanks

29 September 2014, 02:54

I don't want to get involved with your crusade against FN bullets. The PH mentioned that in the past he had killed two elephants with one shot from his 458 Lott and another PH had killed two elephants with one shot from his 500 A-Square. Both of them use round nose solids in their guns.

He was just being extra cautious in a herd situation, nothing more.

MJines

29 September 2014, 03:03

I think the crusade is frankly waged by the FN solid proponents. They rarely miss an opportunity to tell anyone choosing to use another bullet that they are just one small step removed from using lead cast bullets. Your post is a great example of why just one type of bullet is not necessarily appropriate for all applications and circumstances. Penetration is great, but too much penetration is not necessarily necessary or desirable.

For the record, I have shot several elephant with FN solids. They are fine bullets used in the proper context, i.e., lone bulls or small bull groups. But there are other bullets that are just as effective and in fact a better choice when hunting cows in herds.

Mike

capoward

29 September 2014, 04:05

Congratulations on a successful hunt Andy!


Jim 🙄

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

John Wayne

boom stick

29 September 2014, 18:54

I wonder if those second pachyderms died because of a squirrely RN bullet did not go where it was intended after impact? 

[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)

cnm123

30 September 2014, 06:01

What bullets would you recomend for cow elephant ? I have had pass thrus with woodleigh solids on bull elephant

mdvjrp93

05 October 2014, 05:16

Maybe this is the place to ask this question. I had someone tell me that the 338 mags have a problem opening the Berger and nosler bullets past a 1000 yards (below 1800 fps). Does anyone know are have heard of a problem with them.

1 shot 1 thrill

Gerard

05 October 2014, 17:04

cnm123,

No matter what bullet you use, a pass through is always possible. The exception is when the shooter is so ill equipped that the cartridge/bullet is always incapable of a pass through, even on a broadside shot that hits no bone at all.

The best strategy is to use a bullet that is predictable and will always give linear penetration. That way you have to ensure that the trajectory behind the animal is clear and then you take the shot. If it exits, chances are things will be ok.

If you use a bullet that has a reputation that it breaks up or deforms in a manner that will cause it to curve the path in the animal, you cannot be sure where it will go if a part of it exits.

mdvjrp93,

Bullets will act differently depending on how they are constructed. Some construction methods change a little from batch to batch and some are intended to do different jobs. Calculate roughly what the striking velocity will be with the combination that you are considering and see what the manufacturer says about expansion and terminal performance. Do not assume that all bullets that are made in a certain way will react in a similar manner. For example, one would not expect the same terminal performance from a jacketed lead bullet intended for varminting and a jacketed lead bullet for hunting plains game. Design makes a big difference.

jwp475

05 October 2014, 18:25

quote:

Originally posted by Gerard:
cnm123,

No matter what bullet you use, a pass through is always possible. The exception is when the shooter is so ill equipped that the cartridge/bullet is always incapable of a pass through, even on a broadside shot that hits no bone at all.

The best strategy is to use a bullet that is predictable and will always give linear penetration. That way you have to ensure that the trajectory behind the animal is clear and then you take the shot. If it exits, chances are things will be ok.

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mdvjrp93,

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Spot on!

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

mdvjrp93

06 October 2014, 00:47

I was told in a general statement that the 338 mags (rum , lapua and edge) hunting bullets needed min of 1800 fps to open properly no mention of pass thru. Berger and nosler was the companies quoted. I just can't take that on somebodys word. No facts no references just because I say so. That is why I'm trying to research it. I left the sight and will not be back but I want to know what the real facts are. I will be talking to the companies tomorrow.

1 shot 1 thrill

465H&H

06 October 2014, 02:09

quote:

Originally posted by cnm123:

What bullets would you recomend for cow elephant ? I have had pass thrus with woodleigh solids on bull elephant

cnm123,

There are several factors that determine whether a bullet will pass through a cow elephant on a broadside body shot. One is the caliber. Calibers with relatively high velocity and heavy for caliber bullets such as the 375 H&H, 416 Rigby, 458 Lott and 505 Gibbs will usually do so no matter what their nose design. Others such as 458 to 475 diameter calibers with RN solids that weigh from 480 to 500 grains and with velocities no higher than 2,150 fps, usually will not. That assumes that the cow is an adult of normal size.

If you place the bullet a little more forward than straight on so that the bullet impacts the off side shoulder, there is very little chance that those RN solids will exit. I have taken 6 or 8 cows and a couple of bulls with those calibers with heart/lung shots and none have exited. I did take a large cow with the 458 Win with a 500 grain Hornady DGS solid. All of us thought that she was clear but the bullet exited the far side and hit and killed a young bull that was screened by brush behind her. That was a big problem to explain to Park's. Your PH was very smart to not let you shoot in the circumstance that you described.

I personally wouldn't use any FN solid in that type of circumstance. They all penetrate so well that you can't have any confidence at all that they will stay in the animal.

You haven't mentioned what caliber that you use. If you do so, we may be able to make a recommendation.

465H&H

MikeBurke

24 October 2014, 19:01

On November 3rd it will be five years this thread has been active.

Through all the testing, arguing, disagreements, cynicism, and sharing of good information my personal knowledge of bullet performance has increased dramatically over the past five years. And that is not to say I agree with everything posted here by people I respect, but there has certainly been good information shared between parties.

So to everybody that has participated and especially Michael and Sam I would like to offer a big thanks for all of the effort put forward. And of course wish a Happy Five Year Anniversary to a very interesting, informative, and at times, entertaining thread.

Things of beauty



tanks

24 October 2014, 20:38

quote:

Originally posted by 465H&H:

...
I personally wouldn't use any FN solid in that type of circumstance. They all penetrate so well that you can't have any confidence at all that they will stay in the animal.
...

There lies the dilemma. FN bullets are too good to use?

But then you say:

quote:

Calibers with relatively high velocity and heavy for caliber bullets such as the 375 H&H, 416 Rigby, 458 Lott and 505 Gibbs will usually **do so no matter what their nose design** ...

So, is it the bullet design or the caliber?

My take is that always be cognizant of what is behind one's target as there is always a possibility that the bullet might exit. With that I will use the best bullet I can find, in my case it is the CEB solids.

Below are couple of 500gr solids at 2350fps (500MDM) that were recovered. The one on the left (and bottom depending on the photo) went through the head and was found in mid spine (instant CNS) about 6+ feet of penetration. The other one was a quartering shot where it went through the left shoulder and was found on the right hip, almost 10 feet of penetration. They did the job.

No distortion at all either. I could probably re-use them if I wanted 😊



RIP 25 October 2014, 02:37

Why the hole drilled in the center of the CEB .500/500gr Brass FN SOLID meplat?

Is it supposed to make them whistle on the way to target? 😊[#]

capoward 25 October 2014, 02:44

quote:

Originally posted by RIP:
Why the hole drilled in the center of the CEB .500/500gr Brass FN SOLID meplat?

Is it supposed to make them whistle on the way to target? 😊[#]

Doncha know you're only supposed to be concerned when you're looking at a large hole, so keepin the hole small keeps ya calm and unconcerned! 🇺🇸

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

BaxterB 25 October 2014, 03:49

quote:

Why the hole drilled in the center of the CEB .500/500gr Brass FN SOLID meplat?

Plastic insert to make it a round nose while feeding?

Sako416

25 October 2014, 16:39

Not actually a "hole", it is just where a center drill kissed the nose. This allows the bullet to be placed between centers in a high precision lazer comparator for super precise measuring when setting up the Swiss CNC lathe. Hardly more than a little dimple. I think CEB is going to try to get away from that, but it was the best way to get laser measurements. In no way does this tiny dimple effect performance.

Gerard

25 October 2014, 17:34

tanks,

You can be assured that any bullet will distort when it impacts an animal. Measure the bullets on the shaft just behind the cone and compare it to the measurement of the shaft diameter just in front of the base or to the diameter of an unfired bullet. You will be surprised.

The only way to load it again is to turn it to a smaller diameter as Saeed did.

RIP

25 October 2014, 23:24

Got the messages, public and private: CEB does not dimple the noses of their solids anymore. Noted.

You can see some slight bulging of the brass FN solid in the nose portion after it hits water at about 2800 fps (S&H .395/330-gr).

The copper FN solid nose bulge is more noticeable with the GSC FN .395/340-grainer that impacted just under 2800 fps, propelled by same powder charge.

I think 2700 to 2800 fps is a good velocity for soft or solid used on game.

No more than that is necessary. 😊



tanks

26 October 2014, 00:02

quote:

Originally posted by Gerard:

...

You can be assured that any bullet will distort when it impacts an animal. Measure the bullets on the shaft just behind the cone and compare it to the measurement of the shaft diameter just in front of the base or to the diameter of an unfired bullet. You will be surprised....

Obviously, I was not talking about micrometer caliper measurements, but what it looked like to my eye. 😊 I would never clean or reuse these bullets, as they are part of my memories from my elephant hunt. 😊

brent ebeling

27 October 2014, 03:51

Not big bore, but just got back from aoudad hunt in Tx. Paul and I shot an aoudad each.

He used some nosler bullet, wont discuss that. I was shooting 145 gra CEB raptors in my 300 WM. shot was 420 yds. Sheep was angled away pretty hard. Entrance wound was just in front of left hind quarter, exited just behind the opposite front shoulder. Animal went about 20 yds and fell over dead, although shot was a couple inches too far back. There was one petal in front of the neck and one behind front shoulder. The one in the neck went through close to 32" of sheep!!

Once again thanks to Dan and gang, this bullet is freaking awesome

boom stick

29 October 2014, 05:35

Good report! Should post that in the medium bore terminal performance thread. Was that an ER Raptor?

[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

31 October 2014, 15:06

Good Morning Gents.....

Many reports have come across my desk the last few weeks..... Some medium calibers as well.... Congrats to Brent and Paul, both good friends of ours. Locally I have several of my guys using 308 for our local deer. Again this year the little 100 gr ESP Raptor is showing its stuff having taken several deer this year as well, and as always 100% success, devastating success from what I am told. Just guessing I estimate 20+ deer with this bullet here in the last two years, all DRT.....

Another very good friend of ours, returned a few weeks ago from a very successful 3rd Safari, for lion, leopard, crocodile +++..... Using his 458 B&M and the 420 Safari Raptor at or around 2280 fps.

A couple of years ago I had a chap PM me about this very bullet for lion. I had not used it on lion, in fact I had not shot a lion since 2000, in which I took 3 that year. But I had used the 420 Raptor in 458 B&M for many other things including buffalo, with devastating results. After a couple of days back and forth I told this chap that the 420 Raptor would turn lion inside out and then some. I suppose he did not believe me, as he posted on another thread that he did not wish to be a guinea pig and using that bullet for the first time on lion. So he turned "Chicken Crap" and used something else later on. Lion are not hard to kill if you hit them hard enough, and big enough. I used a 400 Swift A Frame on all three of mine in 458 Winchester at 2325 fps, it hammered the hell out of them all three DRT.

From the report given me my friends lion took the hit from the 420 Raptor at 2280 fps and rolled over on his back with legs kicking in the air, DRT and that was it. 5 of the six blades made it all the way across to the other side, and internal damage was incredible, and of course the remaining bullet exited, not sure but I think one or more of the blades actually exited as well..... His leopard was dead at the base of the tree, croc never made a move after the shot, so the 420 Raptor was successful on yet another great safari. Exactly as expected.....

Sam and our good friend Mike just returned from Gache Gache hunting with Andrew and Corris. Good report over on the Hunting Reports, go look it up. Sam using his 577 Nitro with the 600 Raptor/650 #13 Solid combo, and Mike using his 500 Nitro with the 475/510 Combo, both very successful on buffalo, elephant, hippo. My pal Sam in addition took a spotted demon with some sort of rat gun and Raptor as well..... I will let them tell you about this adventure and how the bullets did.....

I posted a bit of this a couple of weeks ago on the B&M thread here, but it is well worth repeating again here. Just a couple of weeks before leaving with Sam for Gache Gache, Mike went to Alaska with his 458 B&M outfitted for moose using the 250 Socom at 2900 fps. Getting ready for this hunt Mike was regularly shooting 300 yard MOA groups with this combo. CORRECTION FROM MIKE (**Not that I am that fussy, but I actually shot a 1 inch group at 300 yards!**) And even shooting to 400 yards with it and hitting anything he wanted to hit. Mike is a very good shooter. Mike hit his moose on the shoulder at 200 yards, moose goes down, still wiggling when approached Mike hits him again. Both remaining bullets of the 250 Socom exits this big moose, and blades make it to the far side of this moose, with one sticking out of the rib far side..... Pretty amazing..... But I had used this same bullet, same velocity, same cartridge on 15+ plains game in 2013 including zebra, wildebeest and such with the same results.... Hammered. This big moose was hammered too.....



Another report involves our own AR member, and friend Stan. Stan is an elephant hunter. He got a 500 MDM a couple of years ago or so and has taken many elephant with it in his quest for the "100 Pounder". Using a 500 gr Safari Solid Stan has taken upwards of 25+ elephant with his 500 MDM and the 500 Solid. I am taking a bit of a guess at this number, so it may not be exact. This year Stan was indeed all over his 100 Pound goal however with this incredible 90+ pounder taken with his 500 MDM and the 500 Safari Solid.





If Stan is looking in he can chime in and give us more direct info on it..... Huge congrats to Stan on this.

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.

michael458

03 November 2014, 17:12

quote:

Originally posted by Mike70560:

On November 3rd it will be five years this thread has been active.

Through all the testing, arguing, disagreements, cynicism, and sharing of good information my personal knowledge of bullet performance has increased dramatically over the past five years. And that is not to say I agree with everything posted here by people I respect, but there has certainly been good information shared between parties.

So to everybody that has participated and especially Michael and Sam I would like to offer a big thanks for all of the effort put forward. And of course wish a Happy Five Year Anniversary to a very interesting, informative, and at times, entertaining thread.

Things of beauty

Sorry.

This image is currently
Unavailable

photobucket

Indeed, many thanks to everyone that has participated in our little adventure, and Mike, many thanks to you as well, you were a major part of this effort, doing test work on your own as well. There has been a great deal of education put forth here by many, and we have all learned much from it. We learned exactly the factors that make a big bore solid work, we learned how and why a Non-Con works, we learned much about our current bullets available. Thousands of rounds have been tested and fired downrange, and all proven worth in the field on everything we use big bore rifles for.

Five Years!..... Seems quite a long time, but look at all that has been accomplished in that relatively short period of time when you really think about it. Very near the point that I don't know where one can go from where we are currently? There is no doubt in my mind that we have been successful on our adventure and the reports that come back from the field on very nearly every single hunting adventure prove it, over and over again. Terminal test work has very nearly ended, not much need for that these days. I have a few things lingering that will be done this winter, but of little consequence.

As we progressed over the last 5 years I personally became attached to two bullet companies, Cutting Edge Bullets and North Fork Technologies. Both willing to work with us to increase and enhance performance. And both companies continue the research on their own to improve our performance in the field. I believe we as shooters and hunters should support the companies that support us, that support performance over everything else. Smaller companies lean in this direction, CEB, North Fork, GSC, in my opinion do this and deserve our support in return.

As for our test work here, recently John from North Fork and myself made some changes in the bands on a few of the North Fork solids. For a lack of better term, I call them the B&M bands. I have these new bullets on hand, .500 caliber 450 gr FPS, .458 caliber 450 gr FPS, and a .416 caliber 350 FPS. All which have the improved North Fork Nose Profile, and in addition I shortened the nose projection on these from .700 to .600. The bands include 2 top bands at .050 wide, with a .075 gap in between for crimping if required or needed, followed below those two bands are the normal North Fork bands, and at the bottom a third .050 band. Now, in my opinion these two bands at the top give a more firm grip on the bullet as it starts into the bore, then guided by the 3rd bottom band to keep everything aligned properly, adding consistency to accuracy. What limited work I have done so far tends to prove this out, but there is more to be done in that area. In addition I will be doing pressures studies to make sure the bands equal or do not increase pressures, which I don't think they will in and by themselves, as total bearing surface should be close to the same as without the wider bands. Reason, there are less normal NF Bands, so it should come close to equal. What might increase pressures is more bullet in the case, by shortening the nose projection. However, I don't think there will be a lot of difference there, and maybe none at all. I will be doing several tests in this regard over the coming weeks, or months as I can get to it. I will also do some limited barrel strains as I still have a .458 barrel hooked up for that purpose. Goal to compare the old style bands with the new bands to see if there is a increase in barrel strain or not. I don't suspect there will be, but can test anyway.

Here is a look at the new bands compared with some of the older bands and some older nose profiles.....



Michael

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

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capoward

03 November 2014, 20:38

Happy 5-Year Anniversary!!!! Boy how did I miss that yesterday????

Tremendous amount of work and conversation over the years. I look forward to the pressure tests of the B&M NF bullet testing. I personally don't believe the new banding with increase the initial start pressure vs the original banding. I do however believe the testing will give us greater insight into banding alternatives that both maximize within barrel stability for maximum accuracy while lowering (or maintaining low) initial start pressure. Alternatives are always a good thing for accommodating long, intermediate, and short cartridge cases and final COAL.

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

michael458

05 November 2014, 00:36

After 5 Years, it might just be an appropriate time to come to an end too.....

Michael

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

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boom stick

05 November 2014, 19:32



Michael! Need to print up some doctorate degrees for those who passed the class.
I want to frame my doctoral degree in the science of bullet terminal performance.
That's Dr. Boom!

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)

Texas Killartist 05 November 2014, 23:13

Doc M, I greatly appreciate all the hours you have invested in the lab and typing. I wish I could have been in the lab w/ you. I don't know if I earned a degree, but I am sure studied and learned alot!

Paul Truccolo 07 November 2014, 01:52

My sincerest thanks to all here positively involved for all of the time, expense, work, shooting, thinking, developing etc, etc.

This thread, the content and the people involved have had quite a positive impact on my hunting/shooting results and for that I will be eternally grateful.

Thank-you,

good health and good hunting to all of you.

Paul Truccolo.

Santa Claus 07 November 2014, 14:52

What a 5 year ride in terms of money spent, time and dedication, and finally an improved solid over many others.

Santa Claus

ledvm 08 November 2014, 04:33

Here is to my good friend Michael! 😊👍😊

~~~~~  
J. Lane Easter, DVM

Socialism is slavery to government regulation. To be pro socialist is to be pro slavery. You can't have Freedom if you have socialism.

**D R Hunter** 14 November 2014, 05:58

I extend my personal heart-felt **THANK YOU !!!**



**D/R Hunter**

**Correct bullet placement, combined with the required depth of bullet penetration, results in an anchored animal...**

**Mauser458** 14 November 2014, 09:36

Hello everyone !! My name is Javier I'am again, One greeting from Argentina!!  
Excuse my writing, I do not know English and use a translator.  
Dear Michael458, I read the whole report and is awesome.  
I own a Mauser 458WM with a barrel of 20", I use it for night waiting for boars with Hornady tips of 350 grs and 71 grs of RL7.  
I would like to try the bullet horandy MonoFlex 250 grs recharge strong.  
Is You tried or could try this bullet at 2800 fps?  
It would be very useful for me. I have only RL7 powder.  
Greetings to all !! I keep reading

**capoward** 15 November 2014, 13:10

quote:

Originally posted by Mauser458:  
Hello everyone !! My name is Javier I'am again, One greeting from Argentina!!  
Excuse my writing, I do not know English and use a translator.  
Dear Michael458, I read the whole report and is awesome.  
I own a Mauser 458WM with a barrel of 20", I use it for night waiting for boars with Hornady tips of 350 grs and 71 grs of RL7.  
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Is You tried or could try this bullet at 2800 fps?  
It would be very useful for me. I have only RL7 powder.  
Greetings to all !! I keep reading

Mauser458,

Welcome to the AR Forums.

I checked Michael's B&M webpage for the 458 B&M cartridge (approximate 458 WinMag case capacity):  
<http://www.b-mriflesandcartridges.com/default.html>  
I did not find any reference to his having used the 250gr Monoflex bullet. He does have reference to the 325gr FTX bullet which you already use.

I hope this helps your quest...

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

**Mauser458** 16 November 2014, 02:23

Hello and thanks for answering capoward !!  
I watched the performance of the FTX bullet !!  
The little information that I have of monoflex 250 grs is to used at speeds not exceeding 2400 to 2500 fps according Hornady .  
But I found nothing about expansion and the retención weight of bullet to those speeds. Much less to 2800 fps, maybe someone can prove and can display information.  
Again sorry my writing.

**capoward** 16 November 2014, 02:35

No worries, you're writing is just fine.

quote:

The little information that I have of monoflex 250 grs is to used at speeds not exceeding 2400 to 2500 fps according Hornady. But I found nothing about expansion and the retención weight of bullet to those speeds. Much less to 2800 fps, maybe someone can prove and can display information.

If you're desiring Michael to accomplish this testing you might PM him to request he do so.  
Otherwise, if you have the bullets you might load and try them at different velocities. Pigs would be a good testing animal for your testing.

Jim 🤖

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

**Mauser458**

**16 November 2014, 02:59**

Things are tough here in Argentina. If I could see someone who has done the test I would do, in order not to spend money on MonoFlex bullet inesesariamente. Here the MonoFlex bullet cost 60 dollars 😊 .  
I appreciate your response !!

**capoward**

**16 November 2014, 04:07**

quote:

Originally posted by Mauser458:  
Things are tough here in Argentina. If I could see someone who has done the test I would do, in order not to spend money on MonoFlex bullet inesesariamente. Here the MonoFlex bullet cost 60 dollars 😊 .  
I appreciate your response !!

PM (private message) Michael regarding this bullet.

Jim 🤖

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

**Ralfboy**

**16 December 2014, 02:13**

I wonder what the relative penetration of an BBW13 turned from aluminium instead of brass might look like.

**Gerard**

**16 December 2014, 03:00**

If the experimenting I did is anything to go by, penetration will not be good. The 46gr bullet below ran almost 4000fps out of a 30-06 and, although fouling was low and accuracy was good, it virtually fell out of the sky at anything over 100m. It was as long as was prudent from a 1:10" twist so, in jacketed lead it would have been about 180gr and in copper it would have been about 160gr. It had a hollow base as well and that was to accept a tungsten dart. It was intended for a special application and the funding of the department and manufacturing permits were not forthcoming so I shelved it.

□