

THE ACCURATERELOADING.COM BIG BORE FORUMS



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Terminal Bullet Performance Login/Join

prof242
one of us

posted 06 March 2012 21:41 Hide Post

Michael,
Thanks for the data on the .338 WSM using the Raptors. I used the 210gr Nosler Partition in Africa on my last trip. They worked well, but I definitely will use Raptors next year.

The 175gr Raptor, I think, will really make a great elk bullet for here in Colorado. Will you be running tests on this one?

.395 Family Member
DRSS, po' boy member
Political correctness is nothing but liberal enforced censorship

Posts: **3490** | Location: **Colorado Springs, CO** | Registered: **04 April 2003**

michael458
One of Us

posted 07 March 2012 00:01 Hide Post

I have things being shipped out, so many its taking TWO DAYS to ship and get them out! The FIRST BIG BORE RAPTORS---Some 175 338 Raptors too. And I can't even remember what else there is so much.

I don't know, I just feel like getting NAKED when the bullets get here, and just roll around in them!

<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"

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Posts: **8426** | Location: **South Carolina** | Registered: **23 June 2008**

michael458
One of Us

posted 07 March 2012 00:02 Hide Post

quote:

The 175gr Raptor, I think, will really make a great elk bullet for here in Colorado. Will you be running tests on this one?

Bears still crap in the woods, eh?

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Posts: **8426** | Location: **South Carolina** | Registered: **23 June 2008**

boom stick
One of Us

posted 07 March 2012 00:11 Hide Post

quote:

I don't know, I just feel like getting NAKED when the bullets get here, and just roll around in them!

Just don't insert the tips don't want any penetration

But seriously I am curious for the big bore raptor tests. Would be good to have some loads for double rifles for longer range PG stuff. The 300 grain 458 could be a great leopard dropper. 300 yard Baboon shots with your 458 Lott.

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

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

Posts: **27557** | Location: **Where tech companies are trying to control you and brainwash you.** | Registered: **29 April 2005**

capoward
One of Us



posted 07 March 2012 04:52

[Hide Post](#)

Ok .338 caliber ESP Raptor bullets. Tan raised the questions regarding length of the 225gr and 200gr as well as the potential instability of the 225gr bullet. So I alerted Dan Smitchko, President of Cutting Edge Bullets, to the concerns posed on page 221. And here are Dan's responses:

quote:

Jim,

If you are referring to the discussion about the length of the .338 Raptors here is what we think we know.

ESP Raptor D225 .338 225gr- Length is **1.839"** with the tip. Even though a 1-10" twist barrel should stabilize this bullet well we have not had great success in doing so. Our groups were larger than we like to see at 600 yards in our 1-10" twist rifles but we are going to be testing them again soon (maybe this weekend). We will be testing in a 1-10" and 1-9" twist. At their length they should stabilize in the 1-10" twist unless something stupid is going on like the tips are coming loose traveling to the target.

ESP Raptor D200 .338 200gr- Length is **1.695"** with the tip. They shoot very well in a 1-10" twist as we expected. Vertical dispersion was 1.5" at 600 yards with groups size of 3/4 MOA and was accomplished with little load development.

Do not shoot through sticks unless a cat is going to eat you.

Daniel J. Smitchko
President
Cutting Edge Bullets

Jim,

I gave you some false information. The tips are .100" longer than what I calculated the length of the bullets to be so those lengths should be .100" longer. That is why we are having a hard time stabilizing the 225gr Raptors in the 1-10" twist barrels.

Sorry for the bad information.

Daniel J. Smitchko
President
Cutting Edge Bullets

I've corrected the bullet lengths to reflect this information.

Jim,

There are more and more .338 rifles coming out with faster twist rates than a 1-10" so we are going to keep the 225gr active. I believe we added a minimum twist rate in the description a week ago but if not we certainly will. A 1-9.5" twist like some have would be perfect.

Daniel J. Smitchko
President
Cutting Edge Bullets

As you can see Dan's a really nice guy and is more than willing to share information. And as Dan has noted, the .338 caliber ESP Raptors have the following recommended minimum twist rates to assure bullet stability.

175gr = 1:12" or faster twist rate

200gr = 1:10" or faster twist rate

225gr = 1:9.5" or faster twist rate

I also noted that minimum twist rates have been added to the other ESP Raptor bullets (except the .375 caliber).

Hope this is helpful.

Jim 🍌

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

Posts: **4954** | Location: **Central Texas** | Registered: **15 September 2007**



capoward
One of Us



posted 07 March 2012 09:13

[Hide Post](#)

Good info Michael...definitely a reminder of why the ESP Raptors are of such interest.

Boomy/Tan...

The .338 caliber ESP Raptors are definitely a good plains game option...load a few FN forward for the bottom of magazine for those situations that might dictate their use and you're ready to go... They're also inline as 1st option stateside for everything up to and including brown bear.

Mr. Mbogo...I haven't shot one but in this case I'm with Tan on this one - NonCons and solids in at least a .416 caliber - at least for the moment while awaiting the results of the .416 caliber and above ESP Raptors come in.

Jim 🍌

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

Posts: **4954** | Location: **Central Texas** | Registered: **15 September 2007**



michael458
One of Us



posted 08 March 2012 03:42

[Hide Post](#)

Alf is back! He has been down on mediums for several days now spouting BS about penetration!



I left him a laughing animal like above!

Here we go again!

Michael

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

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Posts: **8426** | Location: **South Carolina** | Registered: **23 June 2008**



michael458
One of Us



posted 08 March 2012 03:50

[Hide Post](#)

Of way more interest than alf, I have been working with the 50 BMSuperShort. You know those longer nose projection solids? Well, I did the 375 BBW #13 in .500 with a .600 nose, and followed right behind it with the 345 NonCon. Both .600 Nose Projection. No, I have not done terminals yet.

Added benefit to the longer nose projection is, less pressure with the same powder charge. Which in turns means you have some more case capacity, which also means you can turn it up a notch. Seated to the top band now we get about 100fps more velocity with both bullets and staying at Safe max pressures. It's a plus all the way.

Data is on the 50 B&M Super Short page on the B&M Site, FYI.

I did manage to get a strain gage on the 500 Nitro this morning. This means we finish up the barrel strains on 500 Nitro soon as possible. Along with new load data with H414. See the 500 Nitro thread downstairs in a few days or so. Also, all this will be on the B&M site too as it gets done. These things will finish the 500 Nitro work.

Big Bore Raptors by the weekend! Will take photos and such and post for you.

Michael

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

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Posts: **8426** | Location: **South Carolina** | Registered: **23 June 2008**



CCMDoc
One of Us



posted 09 March 2012 04:15

[Hide Post](#)

Looking forward to the next installment on the 500NE 🍌

NRA Lifer; DSC Lifer; SCI member; DRSS; AR member since November 9 2003
STILL waiting for my Taksdale double or a refund

Don't Save the best for last, the smile for later or the "Thanks" for tomorrow

Posts: **3448** | Location: **In the Shadow of Griffin&Howe** | Registered: **24 November 2007**



boom stick
One of Us



posted 10 March 2012 03:01

Hide Post

The natives are getting restless. The drums are getting louder. Excited to see the latest batch of big bore raptors!

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

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

Posts: 27557 | Location: **Where tech companies are trying to control you and brainwash you.** | Registered: 29 April 2005



michael458
One of Us



posted 10 March 2012 14:20

quote:

Originally posted by boom stick:
The natives are getting restless. The drums are getting louder. Excited to see the latest batch of big bore raptors!

UPS was not kind yesterday--No Big bore Raptors! I was busy yesterday with some other things, namely the 9.3 210 Raptor. They came in the other day, and this is the bullet I am using in a few weeks. So I not only had a rifle to get ready, but a load to confirm, and most important bullet works, and what the low end velocity shear point is on that bullet. I have new Talon-N tips, short and stubby, so I use. Yes, it is a compromise, a shorter stubby tip, less BC, but for this, better than no tip.



There is a longer tip for the 9.3 bullets, but they are too long for the B&M, so I requested some short fat ones! HEH.....

Currently with 74/IMR 4320 and the 210 Raptor I am able to run the 210 Raptor at 2900 fps in the 19 inch barrel, 61000 PSI. NonCon, Solid, and now the short tipped Raptor all are in the same hole and do my part. The estimated BC with the short fat tip is .228. With no tip I think it's .133 or so, and the solid near the same.

Terminals are great with it, big shear, and lots of destruction, massive you might say.



But here is the kick! The BBW #13 NonCon and now the ESP Raptor like everything in life, they have a Working Range we must stay within, to get the performance they can provide. A "Range" is not re VELOCITY issues, the more velocity the better, unlike many conventionals--Therefore one reason the term, NonCon. But, they do in fact have what I call a "Low End Velocity Shear Point". The point on the bullet becomes basically a BBW #13 Solid.

As we see, at impacts of less than 1900 fps it does NOT SHEAR--becomes more or less a solid at that point.



Up the velocity by only around 100 fps and we get perfect shear, and better performance than I expected. At the low end velocity shear point, there is still a good bit of trauma inflicted, more than wh



I have not done such a good job of getting all of these bullets Low End Velocity Shear Points. Some I have, I have all the .458 caliber NonCons and a few of the others, but a long way from finished.

I needed the 210 Raptor "Low End Velocity Shear Point" as it is directly related to what I am doing in just 2-3 weeks from now. I need to know at what point my bullet no longer performs as a NonCon. So now I know the Lower Limitations of this bullet, and place it at 2000 fps IMPACT VELOCITY, as Low End Shear Point. If impact velocity drops below 2000 fps with this bullet, it's not going to shear ar

Nothing new about that to us really, all of our conventional bullets have Low End and Upper End Ranges of performance. We need to know these things and utilize that knowledge in the field. If we do problems in the field.

Now, with a BC of .228, and at 2900 fps at the muzzle, my longest range that I can shoot and maintain above Low End Velocity Shear Point, is 225 yards. If I stay under 225 yards on my shots in a few beyond that point, and I have a solid.

Oh there are lot's of things one could do to extend the range of the bullet--Longer tip of course would give a higher BC, maintain velocity further and so forth, but really I am not so interested in that as so I am perfectly happy to work within that range limitation for what I am going to do.

I am working on a data sheet that will have most of the BCs of the Raptors and in the calibers I have I am going to try and get Low End Velocity Shear Points on all of them. When I get enough valid data for you. Armed with this information you can make better decisions with your shots in the field.

Of course I maintain strongly and remind all of you the entire Purpose of the BBW#13 NonCons is for Dangerous Game. One does not shoot dangerous game at 200 yds, and should not at 100 yards! opinion to begin with. I think inside 25 yards is where one needs to be, with a 50 yard outside limit! OH I know we always don't do that, and I have been guilty as sin myself on one or two occasions, always accomplish that end!

I would put a couple more bullets into the same Low End Velocity Shear Point as the 210 9.3. I would put the 338 Raptors, and the 375 Raptors at a low point of 2000 fps as well right now. I will test it better, consider the .375 230 Raptor at 2000 fps.

Michael!

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Posts: 8426 | Location: South Carolina | Registered: 23 June 2008

I Bin Therbefor
One of Us

posted 10 March 2012 16:27

[Hide Post](#)

Interesting work on the short tip 9.3mms. I don't know why, but I expected the design to be a pointed tip, just shorter. That would make the cone have steeper sides but I don't know what that would do to maintaining velocity.

I noticed that the 338 in 200 grain almost matches the 9.3 (366) in penetration. Does the extra caliber size in the 9.3 cause greater tissue damage?

Posts: 404 | Registered: 08 May 2005



boom stick
One of Us

posted 10 March 2012 20:25

[Hide Post](#)

Michael, you usually only need one bullet so will you single load the longer tip and keep the stubby tips in the mag?

[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)

Posts: 27557 | Location: Where tech companies are trying to control you and brainwash you. | Registered: 29 April 2005



capward
One of Us

posted 10 March 2012 22:48

[Hide Post](#)

Michael,

The 9.3 Talon N Tips have a larger diameter blunt nose than I envisioned from my email discussion with Dan...no doubt my brain malfunctioning and not truly absorbing the information.

Is there a possibility that a couple of the tips could be reshaped to give the steeper sides noted by IBT so that the tip length is maintained while BC is enhanced? Basically try to match the tip point of the original Talon D Tip with the shorter length of the Talon N Tip.

If within mass terminal performance is maintained with the shorter pointed tip I'd think the slight extra BC would more useful to a wider range of individuals than with the flat tip.

Original post edited.

Jim

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

Posts: 4954 | Location: Central Texas | Registered: 15 September 2007



drewhenrynt
One of Us

posted 11 March 2012 01:08

[Hide Post](#)



Thanks Michael

PM Sent.

Andy

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

Posts: 2969 | Location: South Texas | Registered: 15 January 2008



I Bin Therbefor
One of Us

posted 11 March 2012 02:08

[Hide Post](#)

<http://blog.burrard-lucas.com/...ecam-is-back-teaser/>

You got to check this site.

Wonder what a herd of buf would do?

IBT

Posts: 404 | Registered: 08 May 2005



capward
One of Us

posted 11 March 2012 03:38

Ok...following up on my earlier post regarding a 3rd generation Talon Tip shape...

quote:

Originally posted by Michael458:

Oh there are lot's of things one could do to extend the range of the bullet--Longer tip of course would give a higher BC, maintain velocity further and so forth, but really I am not so interested in it yards anyway, so I am perfectly happy to work within that range limitation for what I am going to do.

Ok... up front I'll acknowledge Michael's needs - 1st) 9.3 B&M cartridge using 210gr ESP Raptor with Talon Tip must function from magazine. And 2nd) 300yd shooting is not a requirement. And also state accomplishes Michael's needs.

And as a quick reference so that folks don't have to page back...



9.3 B&M

Here's the 1st generation 9.3 Talon Tip: has an estimated .403 BC.
Here's the 2nd generation 9.3 Talon Tip:

with its pointed nose ar



9.3 B&M

with its blunt nose and when inserted into the 210gr ESP Raptor the bullet has an estimated .228 BC.

Now I seem to recollect that both the 1st and 2nd generation 9.3 Talon Tips were designed to maintain the 13° nose angle (26° cone nose angle) of the BBW #13 bullet...2nd generation with larger diameter. So... back to the issue that IBT raised. Would it be possible to enhance the ESP Raptor bullet with Talon Tip inserted to around .320 BC or greater by using the 1st generation tip size while keeping the cone angle changing the nose angle (cone nose angle)?

I'm sure the answer to the above question is yes it can easily be accomplished...which then raises the question..."Would it be worth the effort?"

Here's my opinion...for what it's worth... 'If a 3rd generation 9.3 Talon Tip would, 1st) keep the ESP Raptor with Talon Tip functioning from Michael's magazine, 2nd) still maintain the within-mass terminal generation tip inserted, and 3rd) boost the BC above .300 then I believe it would be worth the effort...as well as likely eliminate the need for stocking the 2nd generation Talon Tip.'

Opinions?

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

Posts: 4954 | Location: Central Texas | Registered: 15 September 2007

416Tanzan
One of Us



posted 11 March 2012 11:03

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It's always seemed obvious that a curve that moves from the edge of the hollow-point circumference to a top tip would be the best.

The curve would start out at the 13° angle so that a disturbance-causing ridge doesn't form, and then rapidly move toward a final straight line that aims at the center point tip that is set for max COL. Thus at the base of the plastic tip there would be a little bevel.

As calibres get larger the BC should get better because the lightweight plastic can fill up shapes that would have otherwise made the projectile too heavy. BC's in the .4 to .5 range would be nice for those that want the option of 200-400 yard shooting.

+++++

"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.

Posts: 4253 | Registered: 10 June 2009



338User
One of Us

posted 11 March 2012 12:58

[Hide Post](#)

Hi Michael 458 this is a very interesting thread. Thanks for starting it. I have viewed the results of 338 160gn Barnes TTSX with interest. I get much higher velocities with my 338 Win Mag. I use 81 gn Reloader 17 for 3390 fps. I would like to see some results for the 160gn Barnes TTSX at higher velocities if you are able to test them.

Posts: 424 | Location: Australia | Registered: 11 August 2007



michael458
One of Us



posted 11 March 2012 18:15

[Hide Post](#)

Boomy--No I won't be using the longer tips, even one at a time. I will stick with the shorter and a magazine full for consistency. I don't have the time before leaving to sort the long tips out in my rifles. Leaving in two weeks, I stay with the short fat tip, and keep my range to under 225 yards. Probably well under 100 for near everything.

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Posts: 8426 | Location: South Carolina | Registered: 23 June 2008



michael458
One of Us



posted 11 March 2012 21:05

[Hide Post](#)

I think it's an important issue to know a bullets limitations! Nothing new about that, that's why we test and work with terminals to begin with. What is new is a bullet that has few limitations, the BBW #13 NonCons, and similar Noncons. But limitations it does have, and the only one I can think of is on the Low End of the Velocity Scale.

There is no upper end that I can find, or have capabilities of finding. Lower end? Yes, the Point at Which NO SHEARING of the blades occurs. While this is NOT a TOTAL Failure, the bullet does not transfer the amount of trauma by not shearing the blades, as when it does shear the blades. If blades do not shear, it becomes basically a solid and continues to penetrate. Penetration is not lost, but that transfer of trauma is lost.

BBW #13 NonCons, once again, are not long range bullets to begin with. They are primary Dangerous Game Bullets. Dangerous Game is not shot at long range! Long Range for Dangerous Game is 50 yds! Proper Range for Dangerous Game is inside 25! This is my opinion of course. Much of the time we are not concerned about the BBW #13 NonCon working at it's intended ranges, for Dangerous Game.

But many of you, myself included, would like to have this massive transfer of trauma in other calibers than just Dangerous Game calibers, and would like for the bullet to work a bit further out than DG Ranges. The Raptor is part of that solution, another part is the available tips for the already established BBW #13 NonCons. These tips add Range, by adding BC. Now, what we need to know is what the "Operating Range" of the bullets are? No upper limits that I know of. Lower end shear Points is what we need to know.

If we know the BC--NonCon or tipped, Raptor or NonCon, and we know what the "Low End Shear Points" are for each bullet, then we can calculate our furthest Range that we are going to get positive shear of the blades.

Above, with the 9.3 B&M 210 Raptor with fat N tip, BC .228, 2900 fps at the muzzle, and a 2000 fps low end shear point, then I am good to go to 225 yards and still get positive shear of the blades. This is good enough for what I wish to be doing in a couple of weeks. I am not on a trophy hunt, not after anything specific, I am just going shooting. So it is easy for me to limit myself to a point. I'd much rather shoot close than far anyway! I am a CQB sort of chap!

But, we all need to know what low end shears are for all of them. And I am busy trying to get that for you. It is a slow process, not as easy as taking a top load and testing it at either 22 or 48 yds. You might have to do 5 tests to find that Low Velocity Shear Point. If you are really lucky, you might get it in 2-3 tests! So it is an undertaking and time consuming to say the least.

I have a few done, we did some on 458s back in the day, I have that data of course. I needed on this 9.3 210 Raptor myself, so we have that. Yesterday I did a few more, they are next. As soon as I get enough data I am going to put it on the B&M website, pdf format, complete with estimated BC and Low Velocity Shear Points. I have so little info now, it's hardly worth the effort. In the meantime, what I do have, I would guess that you could estimate for some of the ones I don't have yet. For instance, we know the 9.3 210 Raptor is 2000 fps--I would estimate the 375 230 Raptor to be the same or very close, as I would estimate the 200 338 Raptor would be no more for sure, maybe a 100fps better--or slower I should say.

When I get data posted on the B&M site, I will let you know.

Michael

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

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Posts: **8426** | Location: **South Carolina** | Registered: **23 June 2008**



michael458
One of Us



posted 11 March 2012 21:10

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quote:

Originally posted by 338User:
Hi Michael 458 this is a very interesting thread. Thanks for starting it. I have viewed the results of 338 160gn Barnes TTSX with interest. I get much higher velocities with my 338 Win Mag. I use 81 gn Reloader 17 for 3390 fps. I would like to see some results for the 160gn Barnes TTSX at higher velocities if you are able to test them.

338User

Glad you find something of use 338! I am happy to take requests, but right now sorta covered up in it for a few weeks or more. Give me some time, and then please remind me again and we will get it done for you.

You see, I don't do any special load data on a cartridge to get the highest velocity for a bullet that I have not worked with, or used, or going to use. I picked a load from a past time, and loaded the 160 TSX and tested, end of story. Whatever the velocity was, that was it. Same in the 338 RUM, loaded, tested, the end. I do not have the time to get upper end velocity with every bullet we test. Special requests I can do, but can't do with everything all the time. Hell, we will put it in the 338 RUM and turn the heat to it if you want. Ain't nothing to me, just gotta get the time in to do so.

LOL

Michael

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

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Posts: **8426** | Location: **South Carolina** | Registered: **23 June 2008**



michael458

One of Us



posted 11 March 2012 21:11

Hide Post

Small Bores that think they are BIG BORES with Raptors stuck in them! LOL



I did the little 25 the other day, and forgot about it!

M

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

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Posts: 8426 | Location: South Carolina | Registered: 23 June 2008



michael458

One of Us



posted 11 March 2012 21:18

Hide Post

Doing the Low End Velocity Shear Points yesterday, I spent NO TIME looking for blades, none at all! I did not need to be wasting time doing that, I walked 20 miles yesterday back and forth looking for Low Velocity Shears! Load two, test, load two, test, walk and walk and walk. I get a workout, I don't give a crap what my Doc says!

First lets start with little, work our way up.

.264 caliber 100 gr ESP Raptor with G-Tip.

Excellent Shear at 2027 fps. To get to this point there were 3 prior tests working down in velocity each time.



Down at 1862 fps Impact both bullets still sheared, however one was just starting to show signs of instability and not shearing. So, this is as low as I went, and declared that 1900 fps impact is the Low Velocity Shear Point for this bullet. Below 1900 fps impact I think it starts to get iffy at best as you can see.

6.5X55
Twist Rate ???
3/10/12
100 ESP Raptor G-Tip
Muzzle Velocity 2006 fps
48 Yd Impact Velocity 1862 fps
LOW END VELOCITY SHEAR
POINT--1900 fps
X1--11 Inches
X1--14 Inches



POINT--1900 fps
X1--11 Inches
X1--14 Inches



Michael

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Posts: 8426 | Location: South Carolina | Registered: 23 June 2008



michael458
One of Us



posted 11 March 2012 21:21

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9.3 255 BBW #13 NonCon--On regular NonCons I am not going to use tips for this work. They are designed as NonCons, they will be shot and tested as such. Raptors, are designed either way, but offer great advantage by using the Talon Tips, so they all with be tested with the tips designed for them.

9.3 B&M
1:12 Twist Rate
3/10/2012
255 BBW#13 NonCon HP
Impact Velocity
1760 fps to 1813 fps
All Sheared Blades



9.3 B&M
1:12 Twist Rate
3/10/2012
255 BBW#13 NonCon HP
Muzzle Velocity 1808 fps
48 Yd Impact Velocity 1640 fps
LOW END VELOCITY SHEAR
POINT--1650 fps
X1--15 Inches
X1--17 Inches



9.3 B&M
1:12 Twist Rate
3/10/2012
255 BBW#13 NonCon HP
Muzzle Velocity 1724 fps
48 Yd Impact Velocity 1589 fps
NO SHEAR
Loosing Stability
X1--24 Inches
X1--38 Inches



<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"

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michael458
One of Us



posted 11 March 2012 21:23

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416 BBW #13 NonCons, I got lucky with them, basically two tests for both 325 BBW #13 NonCon and the 370 BBW #13 NonCon.

I did get slack, I did not have enough medium in the box for a NonCon that did not shear, the first 325 BBW #13 NonCon exited the back of the box after 42 inches of medium, and out the back through the 2X8s.



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Posts: 8426 | Location: South Carolina | Registered: 23 June 2008



416Tanzan
One of Us



posted 11 March 2012 22:01

[Hide Post](#)

quote:

Originally posted by 338User:
Hi Michael 458 this is a very interesting thread. Thanks for starting it. I have viewed the results of 338 160gn Barnes TTSX with interest. I get much higher velocities with my 338 Win Mag. I use 81 gn Reloader 17 for 3390 fps. I would like to see some results for the 160gn Barnes TTSX at higher velocities if you are able to test them.

338User:

That Reloder17 is pretty good with light bullets in medium capacity magnums. Michael's results for the 338RUM loads at 48 yards are what your rifle will produce at 165 yards with the 160TTSX and a 3390 muzzle vel. He did have more trauma at that impact velocity than with the lower impact of the WinMag. At some point the 160TTSX (BC .342) will blow its petals, let's guesstimate at 3100 and higher. That would mean that up to 120 yards your load may 'blow its petals' and could be expected to penetrate deeper.

However, if you are hunting an animal that needs deeper guaranteed penetration, then you should consider a heavier bullet. For example, the 185TTSX has a much better BC of .432. At your rifle's energy levels that equals a 3153 fps muzzle velocity and virtually any impact should still retail petals. That means an 11" test penetration, which is about standard for most of the heavier lead bullets in .338" and should be just fine for most medium, non-dangerous game, producing 20" +/- 2" of actual penetration. You only give up -1" drop at 300 yards or -2" more drop at 400 yards over the 160gn, but you retain quite a bit more energy (+300 ftlbs at 400 yards, 2450 [185TTSX] vs. 2150 [160TTSX]).

If you are shooting something really big or perhaps an Aussie buffalo, then by all means choose the 225TTSX (.514 BC!) or the 200Raptor (BC .470). Followed by flatnosed solids, of course. The 225TTSX will get you about 30" +/- 3" penetration in game and the 200Raptor will get you 38" +/- 3" in game. Both have a good chance of exiting a buffalo on a broadside hit.

+++++

"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.

Posts: 4253 | Registered: 10 June 2009



Cross L
One of Us

posted 12 March 2012 00:19

[Hide Post](#)


Michael

Thanks much for the 416 update. the 325 gr noncoms are looking good to me even for buff in my 416 B&M. what say you?

SSR

Posts: 6725 | Location: central Texas | Registered: 05 August 2010



michael458
One of Us


posted 12 March 2012 04:41 [Hide Post](#)

quote:
Originally posted by Cross L:
Michael
Thanks much for the 416 update. the 325 gr noncoms are looking good to me even for buff in my 416 B&M. what say you?
SSR

I say that you are correct! The penetration is there, no doubt about it. Starting out at 2535 fps in a 20 inch gun, you have Shear up to just over 150 yards, no tip. Of course, you will be shooting at 50 or less so they will hit that buff pretty hard. Zero issues with buff and the 325 BBW #13 NonCon in the 416 B&M.

M

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Posts: **8426** | Location: **South Carolina** | Registered: **23 June 2008**


Ackley Improved User
One of Us

posted 12 March 2012 08:54 [Hide Post](#)

Michael, I'm excited about the CEB NonCON HPs, but are you sure the sheared pieces will make into the chest cavity of a Cape buffalo - for example, the 370 gr. .416 NonCON HP with a muzzle velocity of 2700 fps or a 275 gr .375 NonCON HP with a muzzle velocity of 2950 fps. Possibly, the sheared fragments will not get past the shoulder muscles and chest cavity, or with a frontal shot, not make it into the anterior chest cavity. Your thoughts.

AIU

Posts: **3720** | Registered: **03 March 2005**

michael458
One of Us


posted 12 March 2012 14:55 [Hide Post](#)

AIU

I shot 7 buffalo last year with the 458 B&M and the 500 MDM, all with BBW #13 NonCons, in 458 the 420 and in 500 the 460. In every case there were blades found inside the body cavity, and came out with the goo and internals. At least 3 of those were frontal shots, 1 of which was point of the shoulder.

No blades were ever found in the shoulder muscles or caught up before entering the chest cavity. Any and all that were found were inside. None exited of course, and I did not expect blades to exit a buffalo.

This was a particular interest to me as well. Seems the blades shear exactly or nearly exactly as they do in the test medium here, about 2 inches from the beginning of penetration. They appear to disperse exactly as they do here in the test medium as well. The frontal shots the heart is closer to the beginning of penetration and as the bullet hit the heart the blades were still traveling close to the bullet, and totally destroyed the heart blowing big gaping hole through them. On one, nearly cleaving the heart in two. From broadside the blades had dispersed before getting to the heart and were hitting other vitals, which we found. Frontal heart shots are devastating on the buffalo I shot. The one big bull took a point of the shoulder hit, absolutely breaking everything in it's path. Blades were found inside the body cavity, there as well, and we did recover that bullet, one of the few that we did.

I can see zero reason that the 375 or 416 would be any different. They all do pretty much the same here, shear at two inches, blades found from 4-8. That velocity will absolutely transmit to target too!


Michael

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

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Posts: **8426** | Location: **South Carolina** | Registered: **23 June 2008**


Todd Williams
One of Us


posted 12 March 2012 19:12 [Hide Post](#)

Michael,

With this focus on the low end shear of the Non-Cons, and I assume different calibers are constructed differently, what can we expect with a 535gr Non-Con in the 500NE that only starts at 2000fps or so out of a 24" barrel?

Posts: **8366** | Registered: **09 January 2011**

CCMDoc
One of Us


posted 12 March 2012 23:10 [Hide Post](#)

quote:
Originally posted by michael458:
AIU
I shot 7 buffalo last year with the 458 B&M and the 500 MDM, all with BBW #13 NonCons, in 458 the 420 and in 500 the 460. In every case there were blades found inside the body cavity, and came out with the goo and internals. At least 3 of those were frontal shots, 1 of which was point of the shoulder.
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hear at two inches, blades found from 4-8. That velocity will absolutely transmit to target too!
Michael

Michael,

I can't be made to believe that bullets behave in living tissue, in live animals, as they do in your wet newsprint test media. Just not possible despite what you and many, many of others have witnessed in the field.

NRA Lifer; DSC Lifer; SCI member; DRSS; AR member since November 9 2003
STILL waiting for my Taksdale double or a refund

Don't Save the best for last, the smile for later or the "Thanks" for tomorrow

Posts: **3448** | Location: **In the Shadow of Griffin&Howe** | Registered: **24 November 2007**

srose
One of Us

posted 12 March 2012 23:27 [Hide Post](#)

Yeah animals are inconsistent in weight and structure. You will never be able to prove anything on how bullets work.

Posts: **2823** | Location: **NC** | Registered: **08 July 2006**

LionHunter
One of Us



posted 12 March 2012 23:43

[Hide Post](#)

quote:

Originally posted by CCMDoc:

Michael,

I can't be made to believe that bullets behave in living tissue, in live animals, as they do in your wet newsprint test media. Just not possible despite what you and many, many of others have witnessed in the field.

So what is the alternative? You haven't made a suggestion. As you know, once upon a time, live hogs were used as test medium for ballistic performance. I think PETA has put a stop to that.

No substitute medium will provide 100% predictability, but then neither did live hogs. Simply too many variables on living tissue, as you suggest. So, we do the best we can in developing medium and use observed performance on game animals to support the evidence from test medium as a valid predictor of bullet behavior. This practice is followed by the FBI, DOD, etc.

Mike

DSC
DRSS (again)
SCI Life
NRA Life
Sables Life
Mzuri
IPHA

"To be a Marine is enough."

Posts: 3577 | Location: Silicon Valley | Registered: 19 November 2008



srose
One of Us

posted 13 March 2012 00:27

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I was being sarcastic!

Posts: 2823 | Location: NC | Registered: 08 July 2006



michael458
One of Us



posted 13 March 2012 00:40

[Hide Post](#)

quote:

Originally posted by srose:

I was being sarcastic!

Doc and Sam

Both of you!



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Posts: 8426 | Location: South Carolina | Registered: 23 June 2008



CCMDoc
One of Us



posted 13 March 2012 01:13

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quote:

Originally posted by michael458:

quote:

Originally posted by srose:

I was being sarcastic!

Doc and Sam

Both of you!



Why would PETA object?
People
Eating
Tasty
Animals

Lionhunter, I'm with you and believe michael has done incredible work

NRA Lifer; DSC Lifer; SCI member; DRSS; AR member since November 9 2003
STILL waiting for my Taksdale double or a refund

Don't Save the best for last, the smile for later or the "Thanks" for tomorrow

Posts: 3448 | Location: In the Shadow of Griffin&Howe | Registered: 24 November 2007



Ackley Improved User
One of Us

posted 13 March 2012 01:38

[Hide Post](#)

Thanks Michael for the response. I'm going to use the NonCons on my next trip to Africa - a two buffalo hunt in Tanzania with Luke Samarus. From reading this thread they also appear to out penetrate the corresponding TSX or A-frame by about 10" in your test medium.

What do you think of the NonCons being the one bullet that can do everything - the one bullet one gun Africa safaris?

I know you'll say...not for elephants. One could use the raptor tip for long shots.

Regards, AIU

Posts: 3720 | Registered: 03 March 2005



LionHunter
One of Us



posted 13 March 2012 01:39

[Hide Post](#)

CCMDoc-

I should have noted: Sarcastic. I know you are a user and fan of the BBWs. I did think others might take your comments seriously, hence the reply.

Mike

DSC
DRSS (again)
SCI Life
NRA Life
Sables Life
Mzuri
IPHA

"To be a Marine is enough."

Posts: 3577 | Location: Silicon Valley | Registered: 19 November 2008



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