## **Terminal Bullet Performance**

# Cross L

# **Terminal Bullet Performance**

28 June 2011, 05:56

quote:		

quot	2:
Lots Good Havii me t	nally posted by boom stick: of great info Michael! to see the petals doing some damage too. Seems this is a multi projectile solid. ng seen the testing done with the 500 Cyrus with similar bullets in ballistic gelatin it does not surpris ne secondary damage from the petals. The pair of these non conventional bullets is changing things nd the world of much convention.

Do the petals corkscrew through the target around the direction set by the body of the NonCon or do they go straight after separating from the body? There is a radial direction at separation, I am wondering about the axial direction. 🙁

Are you channeling ALF again?



#### SSR

#### Cross L

28 June 2011, 06:01

My bet is they retain their forward momentum, modified by the resistance and some radial spread. IE momentun and resistance has more effect than radial impetous. IMHO

# SSR

# I Bin Therbefor

28 June 2011, 06:34

uote:
riginally posted by Cross L: Iy bet is they retain their forward momentum, modified by the resistance and some radial spread. IE momentun and esistance has more effect than radial impetous. IMHO
SR

I tried a little experiment. I took a ball on the end of a string, spun it, threw it forward, letting go of the string at the end of my throw. Sure enough, it corkscrewed forward in the direction I launched it while expanding the diameter of the corkscrew.

If you look at the site that Boomstick posted, you'll see that the pedals appear to be going backward in the ballistic jell? I think it appears that way from the quick loss of energy in the pedals due to resistence of the target compared to the energy in the body of the bullet. By the by, when the bullet sheld its pedals the body should pick up a small amount of vel. Be fun to do some stop frame

photography on what happens if I could figure out how to set up the experiment. 😕 🛱 🖼

#### **I Bin Therbefor**

quote:

# 28 June 2011, 06:46

Originally posted by Cross L:

quote:

Originally posted by I Bin Therbefor:

quote:

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	Are yo	ou channeling ALF again?
SSR	6	႞ႍႜၮႝႍႍ

I miss ALF.

I've always said that I learn more from those who disagree with me than from those who agree with me. The ALFs of the world make me think about how to present my case better and warn me about the dangers of believing I'm omniscient. Which of course I am, but being humble prevents me from pointing that out.

The other thing that the ALFs of the world make me do is examine my models by which I filter the data I see and apply my meanings to it.

I'd like ALF back. I wouldn't respond to most of his postings, but once in a while I would ask for clarification and think about what he said.

# Cross L

28 June 2011, 07:29

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quot	
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my meanings to it.

I'd like ALF back. I wouldn't respond to most of his postings, but once in a while I would ask for clarification and think about what he said. 🛱

To each his own 😌 🕯 📴

#### SSR

#### michael458

Jeffe

quote:

come on, MM,, you KNOW your testing media can't relate to ANYTHING in the field.. all dem der exspurts toll us'in dat! no way that media testing means ANYTHING in dah real world...

28 June 2011, 10:09

Oh yes, I understand your comments ALL TOO WELL. Like I said on page one, believe it or not, regardless thereof, I do what I do for myself, and those who choose to use the info, not for profit, not for gain, but for myself to be more successful in the field, and for those that choose to use the data and info to be more successful in the field. As for myself, I believe I have achieved that goal. But I will never "Walk Into Darkness" on speculation alone, I'd much rather shed a little light on the subject at hand BEFORE going to the field. The test arena starts in the lab, on the range, and in the loading room---NOT IN THE FIELD!

#### Boomy

I concur, there is far more damage to tissue than a conventional projectile can transfer. I had the whole camp investigating these issues, and no one had ever seen so much damage done to vitals.

Sam,

That's one photo I missed--the BBW#13 sticking out the rear! Yes, I would have loved to have that too. I can't see how we missed it? I did not expect it to go that far! Not after going through the nose, skull, neck, vitals, stomach and the rest. After the two nose shots I quickly went around to the side and busted one thru both shoulders, which of course exited, drove into the dirt the other side, which we dug out, and found it dead straight nose forward even in the dirt hitting rocks and such as it dug in. Nose is deformed from the rocks, somewhat like our T'Rex tests. I do have photos of the bullet sticking in the dirt straight.

IBT

#### quote:

Do the petals corkscrew through the target around the direction set by the body of the NonCon or do they go straight after separating from the body? There is a radial direction at separation, I am wondering about the axial direction

My simple answer: I don't know? In the test work at home, it is easy to trace the path, the blades shear, then appear to go straight and away from center. Each inch forward is a continuous movement away from center. The way they penetrate so deep, for such a light and insignificant weight, is that they slice their way thru material, not push or bully their way thru.

Animal tissue? As far as I can tell it's impossible to see that star pattern in the vital tissues, everything is way too fluid and unstable. For sure, upon entry into the buffalo's shot with these, there are no signs of shearing at all on the skin, rib cage, or inside of entry of ribcage. They are for sure shearing after they enter the body cavity, either before vital tissues, or upon entry of vital tissues. Lung tissue being what it is, is hard to distinguish, comes out in mush, heart tissue which is much more dense, it seems to me that the blades are shearing very close to entry of this tissue, and staying together for passage, as this is the only conclusion I can come to with such a massive hole in the heart tissue. This hole in the heart measures well over 2 inches to 3 inches! And it's continuous, not a blow up and then narrowing down! No blades were found in the hearts, all passed through, another significant fact. This heart tissue is tough as well.

Now another significant fact about the heart photo above, this is NOT a result of ultra high velocity, that one sees with very high velocity bullets. This is the 420 gr BBW#13 NonCon at 2250 fps at the muzzle, at 40 yds or so that velocity has dropped to an impact velocity of a mere 2125-2150 fps! Meek by modern velocity standards.

#### Boomy

A good point about post mortem shots. Many times I have done so in the past, for reasons of bullet recovery and penetration depth. However, I elected to not do this on this trip. The reason is, post mortem shots would have done more damage to vitals and would have been impossible to tell what bullet did what sort of damage. So no post mortem shots were taken for this reason.

#### 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

Would be good to see some baboon explosions with fast moving noncons  $\Theta$ 

## 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)

#### srose

Michael,

Sorry that you didn't get that photo of the bullet sticking out of the rear. I know how it is when the skinners are getting started and all the other things going on after the animal is down. Never quite figured out why there is such a rush to skin the animals you barely have time to take proper photos. I'm sure you have plenty of interesting photos to show when you get back. Have fun and relax while you are in that beautiful place. Wish I was there with you.

#### Sam

#### 416Tanzan

quote: Originally posted by srose: Michael, Sorry that you didn't get that photo of the bullet sticking out of the rear. I know how it is when the skinners are getting started and all the other things going on after the animal is down. Never quite figured out why there is such a rush to skin the animals you barely have time to take proper photos. ... Sam

Yes, that would have been a picture. But life goes on. Life going on takes on special meaning on some occasions, too. And we are grateful for the pictures that you can share. We are certainly learning a lot. High speed 'X' bullets have been nice but that heart showed incredible destruction.

As for skinners speed, it may relate to two things: beer and roasted meat. When I used to hunt with locals on foot, one person would immediately start making a fire beside a downed animal. The idea was to have glowing coals ready ASAP so that the liver could be roasted and eaten on the spot by the hunters, even as the skinning was finishing. Then of course, the skinned animal, legs, haunch, neck, stomach filled with remaining heart/kidneys/pieces, etc., would be carried on poles back to the village, where warm or cold beer (or something that goes by the name of beer) would be waiting. All of this contributes to getting the skinning done fast.

+- +- +- +- +- +- +

"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.

# CCMDoc

28 June 2011, 16:18

9:	
ally posted by	I Bin Therbefor:
quote:	
My bet is the	ed by Cross L: retain their forward momentum, modified by the resistance and some radial spread. IE d resistance has more effect than radial impetous. IMHO
SSR	

I tried a little experiment. I took a ball on the end of a string, spun it, threw it forward, letting go of the string at the end of my throw. Sure enough, it corkscrewed forward in the direction I launched it while expanding the diameter of the corkscrew.

28 June 2011, 14:54

28 June 2011, 11:13

28 June 2011, 15:42

Do you think the reason it did so was the trailing string which tethered it to a central point? Otherwise its angular momentum would allow it to travel in a straight line once released from its central anchor.

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 tomorow

Esskay	28 June 2011, 17:15
Doc M,	

As I think I have said before, my favorite thread just got more interesting!

What an incredible adventure with the elephant.

I am thrilled to see your work, and the others who helped, validated. Must be an incredibly good feeling to actually prove what you thought/felt/knew was the case.

Regards

Saeed Ansari

Esskay Doc M, and the rest of the gang, <sup>O</sup>

Some thoughts

Assumptions:

Twist 1 in 12; Impact Velocity 2000 fps; 0.5" in bullet diameter

@ 2000 fps, bullet will revolve 2000\*12 times/sec. Rotational velocity of surface of bullet will be: Circumference =  $2*\Pi*r$  or  $\Pi*d = 3.14159x.5'' = 1.573''$ The bullet's rotational velocity will be 1.573\*2000\*12 = 37752 inches/sec = 3146 fps

The petals shear when the nose encounters resistance that is greater than the structural integrity of the nose (by design). Now, when they shear, the petals are moving forward at 2000 fps (the velocity of the bullet) while also tangentially moving away from the bullet at 3146 fps. It is a combination of these two vectors that would determine the final vector, the direction and speed of the petals.

This is extremely simplistic, as I am also not taking into account the profile of the nose, the meplat etc, just assuming that the bullet is a cylinder 0.5" in diameter. In an ideal situation, you could predict the angle away from the bullet (the path) and velocity of the petals. However, the petals when they do shear, will move away from the path of the bullet. How far they will go will, of course, depends on many other factors.

This is all "back of an envelope" stuff, but basically as I understand what is happening.

Regards

Saeed Ansari

Dave Bush	28 June 2011, 18:25
Michael:	

If I use these bullets, can I just use my 18.5 inch barrel 45-70 for everything? 😏

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

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

"If the biggest, baddest animals on the planet are on the menu, and you'd rather pay a taxidermist than a mortician, consider the 500 NE as the last word in life insurance." Hornady Handbook of Cartridge Reloading (8th Edition).

I Bir	n Therbefor	28 June 2011, 20:44
	quote:	
	Originally posted by CCMDoc:	
	quote:	
	Originally posted by I Bin Therbefor:	

28 June 2011, 17:47

quote:

Originally posted by Cross L: My bet is they retain their forward momentum, modified by the resistance and some radial spread. IE momentun and resistance has more effect than radial impetous. IMHO

SSR

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Do you think the reason it did so was the trailing string which tethered it to a central point? Otherwise its angular momentum would allow it to travel in a straight line once released from its central anchor.

Didn't think of that. Esskay's post is food for thought.

#### Phatman

Saeed????

OK, I'm just an old Redneck but: 2000 fps @ 1 in 12 twist is 2000 Revs per sec 2000 rps x 1.53= 3060 inches per sec or 255 FPS

I dont want to seem argumentative, but I think you got it wrong Boss.

No Offence John

Give me COFFEE and nobody gets hurt

#### Phatman

NonCons and Progressive Twist Rifling????

Do you think the NonCons can handle it ok? I'm thinking about "soft launching" these things.

Cheers, John

Give me COFFEE and nobody gets hurt

# boom stick

quote: Originally posted by Dave Bush: Michael: If I use these bullets, can I just use my 18.5 inch barrel 45-70 for everything? 😂

In the future once the animal kingdom hears of these bullets all you will need to do is just show off the bullets and the animals will die of fear 😏

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

quote:

Originally posted by boom stick:

quote:

Originally posted by Dave Bush: Michael: 28 June 2011, 21:30

28 June 2011, 21:02

28 June 2011, 21:15

28 June 2011, 20:46

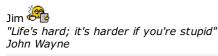
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unta

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5	ari
Saeed Ans	ari
Saeed Ans quote:	oosted by Phatman:
Saeed Ans quote:	posted by Phatman:
Saeed?? OK, I'm jus 2000 fps @	posted by Phatman:
Saeed Ans quote: Originally p Saeed?? OK, I'm jus 2000 fps « 2000 rps x	posted by Phatman: ??? St an old Redneck but: © 1 in 12 twist is 2000 Revs per sec

Not only am I old but I've already been painting this morning so head is already stuffed up and braining isn't firing on all cylinders. So for an old "stuffed up head guy" ya'll are discussing the petal shards after they've sheared from the bullet shank? Correct? And then ya'll are attempting to identify the proper "forward velocity?" or the proper "rotational velocity?", or is it the proper "forwardrotational velocity" of the individual shards? Or am I totally off base here?



Esskay

28 June 2011, 21:39

Phatman,

I stand corrected Sir in my calculations!

However, I believe the logic is sound. This would also explain why the petals after shearing are still moving forward more than they are moving away from the path of the bullet. Not sure I am explaining that quite correctly...but then again sometimes Scotch has been known to interfere with analytical thought. Thanks for catching the error 😉

Saeed

I almost forgot, I received this email from Dan at CEB while I was out. I think it's rather relevant to what we are discussing. I will share it with you.

#### Michael,

Just wanted to let you know we had a guy from Canada that shot a 450lb spring black bear in Newfoundland with the 9.3mm 255gr NonCon a week or so ago and he called me all excited. He said when he shot the bear behind the front shoulder it pounded the s##t out of it and almost knocked it off his feet. When they cut it up the internal organs were completely destroyed and the bear only went a very short distance. He has never seen such destruction and the tail of the bullet did exit. They shot another 250lb bear quartering slightly away and the same thing happened. Heart and lungs had multiple holes and the far front shoulder was smashed with 2" pieces of bone in the exit hole. The bear was blown off of his feet.

More confirmation of field experience.

#### Boomy

I had some opportunities at some baboons from time to time, however most of the time was in the middle of running down a buffalo or something else, so I passed on the opportunity in favor of larger animal tissue. But you bring up something that I did not get nearly as much trigger time in as I had planned to do, and that was several thin skinned species. I had planned on working with several thin skinned species, primary target was wildebeast. I was very disappointed that I was not able to accomplish this as well this trip. The only chance I had at any thin skinned game was one waterbuck that I used the lion bullet on. I really wanted to do more of this work. But it just was not to be for several reasons. I may try and work in a quick trip early spring next year to do just this sort of thing and nothing else, thin skinned game like zebra, wildebeast and such. This work would be very important to thin skinned DG hunting, lion, leopard, bear and such.

It's my hope that I am not the only one in the field this year with both the CEB and North Fork bullets? I hope that we get many such reports this hunting season from lot's of folks!

Sam and 450NE, CCMDoc, and many other double rifle fanciers out there watching! Upon leaving camp in Zimbabwe a chap came in on our bush plane from Germany. He was regular in camp and had hunted there a few times, and he was a double kind of fellow. But he was very serious into his "nostalgia". Sad to say the guys were all looking forward to a hard time, as he was after buffalo. Very nice fellow, and he had a very special rifle with him! A Holland & Holland Royal in 450 NE, made in 1889 or possibly 1898? One of those years, but I remember 1889, and his cartridges had to be loaded with black powder. This is one of the reasons the guys at camp were looking for a hard time with the buffalo possibly.

Now, further more, this did not look like an "OLD" rifle. It looked like it just rolled off the Show Room Floor! He had bought it from "Christies", as he did most of his rifles. OK..... Honestly, it was some piece of work. Also, I never laid a finger on it, I had no desire to do more than LOOK from a short distance. On one of the cameras I took a lot of photos, but not sure which camera, I think one of the girls as mine were packed away, and I have not found those photos yet. Just FYI and thought you might like.

Tanz

#### quote:

We are certainly learning a lot. High speed 'X' bullets have been nice but that heart showed incredible destruction.

Yes we are, and the we includes me too! My point exactly, that heart was serious destruction for a bullet that impacted at 2125-2150 fps or so eh? I have never seen anything like that in all my days of shooting, not with any bullets at that velocity. I have never shot a buffalo with a super high velocity cartridge either, so I don't know much about that sort of thing. But I have busted a few with big bores at medium velocities and I never seen an expanding conventional bullet do that!

EssKay,

quote:

Doc M,

As I think I have said before, my favorite thread just got more interesting!

What an incredible adventure with the elephant.

I am thrilled to see your work, and the others who helped, validated. Must be an incredibly good feeling to actually prove what you thought/felt/knew was the case.

Regards

Saeed Ansari

Thanks Saeed! I appreciate it, and yes it is good to see a lot of hard work get to the field, and be as successful as it was in all the tests! I had plenty of good help along the way, and I have to include the best test partner a fellow could have, Sam Rose! He has got us to where we are today, and perhaps without his persistence we would still be a long way out from where we are now! SAM-

#### -You Da Man!

Now concerning all these calculations you, phats, and IBT are into, I will leave that to you guys, I never did really good in math, barely add and subtract, and forgot how to do that without a calculator! HEH.....

Dave

quote:

If I use these bullets, can I just use my 18.5 inch barrel 45-70 for everything? Wink

Yes, I think you can do just that if you have a notion too! Now I ain't saying that's the tool to choose, but with a combination of the new North Fork Cup Points, and the CEB Solids and NonCons I just got in a few weeks before leaving, I'd say that right now today we have the very best 45/70 bullets that have EVER existed. Now don't forget, I have always been a huge guide gun fan, and probably helped lead to the B&M rifles. Some short years ago, from late 90's to around 2002 I did a lot of work in the field with 45/70, but even that short time ago, there were no real bullets for those guns! Today, a fellow has a great choice and can do a hell of a lot with North Forks and CEBs in the tube!

Getting close to my bedtime here! At least it's not as cold as it has been for the last few days! Blood is mighty thin these days, been freezing to death at night and early morning, 40 degrees + or minus a tad. Imagine that! Hell should have brought my arctic gear! In fact, I don't think I was this cold when I was in the Arctic last year! I suppose I won't have that problem when I get home to nice balmy 100 degree temps eh?

Later

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"

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#### srose

Thanks Michael and if it wasn't for you I'd still be shooting RN solids. Your testing showed me things I had never known before so you get most of the credit.

#### Sam

#### Phatman

There is no doubt in my mind that I have learned more about bullet performance on this thread than I have in the last 40 years combined.

I am deeply in debt to all the players involved.

Cheers, John

#### Give me COFFEE and nobody gets hurt

#### capoward

As an end user...all I can say is, "Thank you Michael for your extensive testing, interest, and perseverance! Thank you Sam for bringing us the BBW #13 Nose Profile, as well as the many other very interesting (and some very proficient) nose profiles, hollow points, and hollow bases!" You guys did exceptionally good!! Kudos as well to CEB and NF for their delivery of the goods!

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

#### Phatman

Ok, Bullet radial velocity vs forward velocity. It seems, I might need some Bourbon for this, that the fragments are moving outward in a cone shaped fasion at about a 1 to 9 ratio.

NO, that cant be right. They were expanding faster than that.

WHY, are they expanding faster than the radial velocity?  $\bigcirc$ 

I'm going to get some Bourbon to get my mind right for this. The only time I did my taxes sober I owed money... 😉

# 28 June 2011, 23:10

#### 29 June 2011, 00:56

#### 29 June 2011, 00:50

29 June 2011, 00:48

Give me COFFEE and nobody gets hurt

# 29 June 2011, 01:10 Cross L

A theory,

The fragments are moving out ward faster than radial velocity would acount for because of resistance. As they peel back they are changing from an edge on profile to a plane surface profile. Since they still retain their forward momentum that surface pressure helps push them outwards even though they surely are tumbling and shearing.

29 June 2011, 01:32

29 June 2011, 02:10

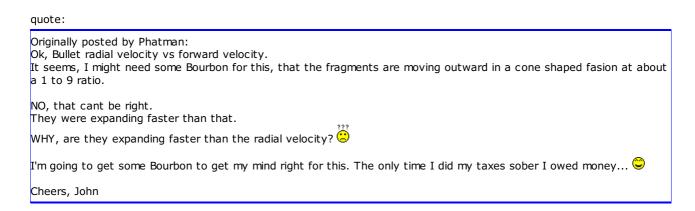
Just a thought.

SSR

## boom stick

I am a bookers bourbon kind of guy but I tried Willett 13 year and it was amazing. Give it a try some time.

Hijack off



#### 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)

Esskay

auote:

Originally posted by Phatman: Ok, Bullet radial velocity vs forward velocity. It seems, I might need some Bourbon for this, that the fragments are moving outward in a cone shaped fasion at about a 1 to 9 ratio.

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Cheers, John

Cross L: A theory, The fragments are moving out ward faster than radial velocity would acount for because of resistance. As they peel back they are changing from an edge on profile to a plane surface profile. Since they still retain their forward momentum that surface pressure helps push them outwards even though they surely are tumbling and shearing. Just a thought Cross L:

Cross, thank you. As I said earlier, these were just some thoughts...which sometimes a glass or 3 of Scotch liberates. I did not take the 3rd force here into account i.e. the resistive force of the flesh/medium which is responsible for peeling back the petals and eventually shearing them.

Phatman, this resistance will "expand the cone"..and instead of say a 1:9, it might end up being 1:6 or whatever.

I think there are so many variables/indeterminates here that it will be almost impossible to predict exact path. I was just trying to explain to myself the how and the why 🙂

Saeed Ansari

## Esskay

# This **might** help: If we think of Doc M's test medium results and how they correlate to actual "field" penetration. He finds that the bullets penetrate about 80%-100% more in living animal tissue than they do in his medium. Now we know, in general, the path the petals take in his medium. Perhaps extrapolating from that might help with a better model to explain things?

As I said earlier, a scotch or two, reading this thread and some lights started going off and I wondered if one could'nt come up with some explanation here - never said it was the RIGHT one 🚳

#### Saeed Ansari

# **465H&H 29 June 2011, 02:33** Michael,

Congrats on a very successful hunt. I am looking forward to more reports of your observations on bullet behavior. One question, What was your PH doing while you were on your back in front of a PO'ed elephant? Did he ever fire? if not , why?

#### 465H&H

# boom stick

Seven projectiles is better than one.

If the "goo" affect of the petals keeps you from losing game due to lung and vitals damage this is great. It is better to track 20 yards vs 100 or 200 and having a potential wounded animal.

## 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)

#### I Bin Therbefor

"I may try and work in a quick trip early spring next year to do just this sort of thing and nothing else, thin skinned game like zebra, wildebeast and such. This work would be very important to thin skinned DG hunting, lion, leopard, bear and such."

Gee Michael, a quick trip early next spring is a terrible burden to take on, but what the heck someone has to do it. Keep telling the

wife how important the work is to the advancement of science. She won't believe you but she may humor you. 🚳 🚳

By the way, the reason you're having all these close calls and back problems is because you offended the goddess of women's hair by demeaning the importance of shampoo in your luggage. I trust you have learned your leason and will not do so in the future. Have you made sufficient sacrifice to appease the goddess? She's a female and will never forget your offense, so you can be sure she will visit you with her little reminders in the future. You'll never be off the hook but maybe if you grovel enough she'll have a little mercy on you.

#### boom stick

Question is would the petals go as far without the base solid? Does the solids tissue disruption aid the penetration of the petals?

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#### MikeBurke

Michael,

Congratulations, the outcome was never in doubt. Cannot wait to see all of the pictures.

We are lucky to have so many good bullet choices. I read one of the NF Cup Points dropped the buffalo in its tracks. Same experience as I had this year.

#### Esskay

quote:

Originally posted by boom stick: Question is would the petals go as far without the base solid? Does the solids tissue disruption aid the penetration of the petals?

Boom Stick: I don't think the petals would go as far without the bullet. Also I don't believe the bullet's tissue destruction is aiding the petals - however, the bullet is doing all the "hard work", so to speak, by penetrating the 1st 2-4" or so, getting through the tough hide, ribs, etc. and the petals then shear off, on their conical path away from the bullet, doing their Ginsu slicing & dicing. "7 projectiles better than 1" - without a smidgen of a doubt. Just look at what Doc M and the Non Con did to that buff's insides. Incredible.

29 June 2011, 02:18

# 29 June 2011, 03:42

29 June 2011, 02:37

#### 29 June 2011, 06:29

29 June 2011, 09:49

29 June 2011, 06:53



29 June 2011, 10:03

29 June 2011, 10:12

quote:	
Originally posted by boom stick:	
Would be good to see some baboon explosions with fast moving noncons $\heartsuit$	

I shot two baboons with the .395/310-grain brass NonCon at 2750 fps, on Saeed's 2010 Expedition. One in the guts, one in the heart, face-on, taking out central great vessels even in the high gut shot. They both died quickly, but their elastic limits were not exceeded.

Ditto the heart shot zebra, topi, hartebeest.

The gut shot warthog went over 400 yards though, bad shooting there for sure. If you gut shoot from the side and it is low in the abdomen, the blast cone from the NonCon may be too narrow to get vitals.

I have only recovered a petal from game when eating a tenderloin from a deer, killed in 2008.

I think the evidence is getting pretty strong for brass hollow point effectiveness.

IBT:

No one has challenged you on these phenomena from an alternate universe?

"If you look at the site that Boomstick posted, you'll see that the **pedals appear to be going backward** in the ballistic jell? I think it appears that way from the quick loss of energy in the pedals due to resistence of the target compared to the energy in the body of the bullet. By the by, when the bullet sheld its pedals the body should pick up a small amount of vel."

I don't see that or get that at all.

#### boom stick

I am wondering if the petaless solids uneven full diameter meplat is causing more destruction than a flat cylinder or a mushroom with its unique fluid dynamic signature.

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#### boom stick

Maybe the larger diameter will have exponential results but dead is dead. Maybe these bullets should be called overkill bullets  $\bigcirc$ 

I was thinking about the possible advantages of 4 petals vs 6. A square hole could make the sheering better at lower velocities and the petals would weigh more. Maybe the four petal design would be better for lower impact velocity bullets for like the 45-70 or pistol bullets. The six petal design seems to do more damage though.

quote:
Originally posted by RIP:
quote:
Originally posted by boom stick: Would be good to see some baboon explosions with fast moving noncons 😊
I shot two baboons with the .395/310-grain brass NonCon at 2750 fps. One in the guts, one in the heart. They both died quickly, but their elastic limits were not exceeded.
Ditto a gut shot warthog, and heart shot zebra, topi, hartebeest.
I have only recovered a petal from game when eating a tenderloin from a deer, killed in 2008.
I think the evidence is getting pretty strong for brass hollow point effectiveness. ≽

## RIP

I had to correct the above haste on the poor warthog shot. He did not explode or die quickly.  $\bigcirc$  That was a tricky pig!

"Ditto the heart shot zebra, topi, hartebeest.

The gut shot warthog went over 400 yards though, bad shooting there for sure. If you gut shoot from the side and it is low in the abdomen, the blast cone from the NonCon may be too narrow to get vitals."

But that slow bleed out and septic shock will surely be hastened by the storm of blades, even with a "worst" shot.

Exponential bullet diameter effect?

.395\*2 = 0.156025 .500\*2 = 0.250000

Maybe that would exceed the elastic limits of a baboon? But give credit for red mist effects of higher velocity.

# michael458

465HH

29 June 2011, 10:54

quote:

Michael,

Congrats on a very successful hunt. I am looking forward to more reports of your observations on bullet behavior. One question, What was your PH doing while you were on your back in front of a PO'ed elephant? Did he ever fire? if not , why?

465H&H

Thanks 465! I actually had two PHs with me, the guy that owns the concession and one of my most regular PHs from RSA, both are really good friends and have hunted together for many years. Young Andrew gets a lot of quota from Coris there in Zimbabwe. They did excellent actually. As you know these things are very fast, and very fluid. Andrew was directly behind me, but still on his feet, he had taken 2-3 steps back to be in position, Coris had stepped off to the side in perfect fighting form to cover our left side and try to get a shot. At my #3 shot, neither Andrew (which would have been frontal) nor Coris (which would have been right side of the elephant) had a shot at all, they still could not see the head of the elephant, nor from their position they could not see anything of the chest area, only glimpses of gray mass and no defined shot. Both were waiting for it to just clear the brush. Coris did drop the hammer on gray mass thru the brush, but his shot went through the flap of the right ear and did not touch the head or body of the elephant, exactly how that could miss body or head I don't know, but it never drew blood on either. From my position on my back I could, through some gaps in the bottom of the brush, see the chest area and just pointed at it and dropped the hammer on the 3rd shot. Lucky Lucky is all, no skill involved!

Now while I concur with both the PHs strategy of trying to get a clear shot, I might have turned a few loose in that brush myself in the general direction, which is what Coris did but to no avail! HEH HEH.... WHy hell, that's exactly what I was doing anyway, and the last one got lucky! LOL

It was quick, and for my part unexpected, which I should have known better anyway, this ain't my first rodeo. There are many things that might have been done different, but they were not. Later, after the fact, we found a path that would have lead to a clear shot around the brush, but at the moment we were following blood trail so we did not know that. We all three should have recognized that from what we could see he was facing us--He knew damn well we were on his trail and knew without a doubt we were there. The brush probably both saved and damned us at the same time. Had the brush not been so thick I would have had a shot upon immediately coming onto him, but then again, the brush most likely helped save me in the end as once he hit the brush it did slow him up some too? So it goes.

Michael

## http://www.b-mriflesandcartridges.com/default.html

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#### michael458

29 June 2011, 11:34

We are going on a road trip tomorrow, and won't be back in Pretoria until the 6th or so. I am not sure if I will have any service there or not.

I am going to try and get a buffalo report up this morning for you. Sometime I also want to get some photos of the recovered bullets for you too.

IBT and all concerned about my shampoo issue! Correct, I did, I committed an offensive act, that I did not fully comprehend by

limiting the number of pounds of shampoo coming over! I had no idea? I have tried to make up for that by now carrying around roughly 10 lbs of shampoo and related female products that are so needed while in the bush! Being a "Manly Man" I did not understand that, even at 52 years it seems I will never learn many of these things when concerning the female mentality concerning such things!

Mike buddy! Yes, I never really had a doubt about performance of the NonCons. I knew we had penetration, with penetration one cannot actually have a failure on the part of the bullet. Big questions were how far do the blades penetrate, do they get into the body cavity of buffalo and do damage --Answer--Yes they do, and extensive damage. The other big question; Trauma inflicted upon taking the bullet. Yes, it is noticeable and yes there is great trauma that takes effect quickly after the shot. Having shot a few Australian buffalo, and a few Cape Buffalo, both now with the same cartridge and near the same bullets, I have to say that in my opinion that cape is a bit tougher than Australian by some measure overall. Of the 7 cape shot this trip I did have two go down in their tracks and never get up again. The other 5 never made it further than 20 yds speaking for the effectiveness of the Bullets. One buffalo dropped to the shot of one of the North Fork Cup points designed for my various .500s, the other to a BBW#13 460 NonCon both from the 500 MDM and both cows. Cow Capes are tough, and in many cases in my opinion just as tough as the bulls! They make excellent hunting and shooting!

#### How about a buffalo bullet report?

OK, we caught some bulls one morning actually out in the open. Picking one of them I found him quartering to me at roughly 35 yds or so, just looking. Using the 500 MDM 460 BBW#13 NonCon I hit him on the point of the shoulder, later finding this bullet traversed thru both lungs tearing them to shreds, and totally disabling his left leg, shoulder and that entire front left side, breaking bone. He bucked up, and ran on 3 legs to the other side of some thick brush out of sight. There was no time for a second shot at that point. I ejected and loaded a fresh 460 NOnCon. Going around the thick brush we found him DEAD laying on his side, not moving at all, only 10-12 yds from he took the initial shot. We could not angle around from the side, or the rear for an insurance shot, it was from the front only. As soon as I approached he jumped up and was trying to get on his feet to come to me. This was not about 5-6 yards away, he was trying his best to get his bulk up under him and did so, but unstable. With his nose pointed at me I busted him under his left eye and to the right of it with the 460 NonCon, this caused him one hell of a headache, but not quite enough yet for my taste, so the next one was a 500 gr BBW#13 Solid just to his right side of the NonCon, this was more than he wanted and he sank back down, I quickly went around to his right side and busted another 500 gr BBW#13 through his right shoulder exiting behind the left one, which we later found in the dirt on his left side.



Here I think you can see the damage to the left shoulder from the first 460 NonCon that hit him. Completely broken up.



Here is a closeup of the two shots to the head. Neither hit the brain of course, both were rather hasty shots. The 460 NonCon blew a hole inside the skull under his eye big enough to fit your fist into easy. Found blades inside the skull. For some reason we never recovered the remaining bullet, and now I can't recall as why? The 500 BBW #13 solid was found sticking out the rear end, nose forward, and according to the guys dead straight. It had traversed the skull, neck, through all insides and vitals, stomach the works. 6-7 feet or so I reckon. Plenty good!



This is the exit from the right side shoulder shot, and a photo of digging the bullet out of the dirt the other side, you are looking at the base of the bullet where it entered dead straight into the dirt.



This was excellent fun here! I swear I love buffalo!

Michael

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