

This topic can be found at:
<https://forums accuratereloading.com/eve/forums/a/tpc/f/4711043/m/2861098911>

boom stick

23 January 2015, 00:13

Terminal Bullet Performance

quote:

Originally posted by Ralfboy:
I wonder what the relative penetration of an BBW13 turned from aluminium instead of brass might look like.

Been asking about that for a while. I think it would be awesome for short range and limited penetration for defense and not having to worry about hitting something 600 yards away on a bad shot.

[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)

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23 January 2015, 00:20

quote:

Originally posted by Gerard:
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.

That bullet would be interesting with say a high BC 50 grain copper tip in an aluminum hollow point for a 90 ish grain bullet at around the same 4k velocity.

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Gerard

15 August 2015, 21:22

Fitting a copper tip to the bullet would shift the center of gravity forwards, the bullet would then have to be shorter as it will require more gyroscopic stability. What you would gain with a copper tip, you would lose through shortening the bullet and, eventually, the price of the bullet would go up for no gain in performance.

boom stick

14 October 2015, 03:19

Might have to have a front and rear insert. A solid and HP like the ESP Raptor.

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14 October 2015, 03:20

https://m.youtube.com/watch?v=f8XcVc_0ykJ



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Gerard

14 October 2015, 04:15

Should this not be in the Humor section? 😊

boom stick

14 October 2015, 07:48

Half of this thread deserves to be in the humor section 

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capoward

22 October 2015, 03:16

Happy 10th Anniversary to Michael and the B&M journey!!!

Jim 

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

Big Wonderful Wyoming

21 November 2015, 20:18

I JUST FOUND THIS, SO WONDERFUL.

SORRY ABOUT THE CAPS LOCK, SPILLED COKE ON MY KEYBOARD LAST NIGHT. THIS IS WHAT IT DOES.

CHEERS,
SETH

Nakihunter

30 November 2015, 08:10

Thanks to Michael & Sam for this great contribution to the history of Big Bore shooting. I be that this info will be used for a long time in the future.

It might well be worth compiling into a documentary "book".

"When the wind stops....start rowing. When the wind starts, get the sail up quick."

Brian Canada

01 December 2015, 06:38

I agree, This is an important body of work. Very progressive contribution to a sport that can get stuck in it's own concepts sometimes. Brian

IHMSA BC Provincial Champion and Perfect 40 Score, Unlimited Category, AAA Class.

boom stick

06 April 2016, 02:38

<http://www.peregrinebullets.co...r-reloading-bullets/>

These guys bullets look a lot like CEB. Even patented the brass tips I thought of a few years ago.

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14 May 2016, 01:35

<http://sploid.gizmodo.com/liqu...atermelon-1776456142>

Looks pretty cool but is it legal?

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frankinthelaurels

20 September 2016, 13:11

How come no new posts, this was one of the best threads ever !

416Tanzan

08 October 2016, 14:10

quote:

Originally posted by frankinthelaurels:
How come no new posts, this was one of the best threads ever !

Yes, it is.

Here is a technical article from another thread that pretty much explains everything that Michael was discovering and observing, and does so with physics and a useful summary table and some simple formulae for additional loads.

<http://ammoguide.com/myag/arti.../penetration0802.pdf>

I highly recommend saving this article for future reference. Something mentioned but not developed in the article is the increased destructiveness of the flat-nosed solid over round-nose, besides the straighter and deeper penetration.

+ + + + + + + +

"A well-rounded hunting battery might include:
500 AccRel Nyati, 416 Rigby or 416 Ruger, 375Ruger or 338WM, 308 or 270, 243, 223" --
Conserving creation, hunting the harvest.

boom stick **24 October 2016, 23:01**

A worthy read. Grab a six pack or bottle of bourbon. This is a long read.

<http://www.rathcoombe.net/sci-...listics/methods.html>

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medved **07 December 2016, 08:48**

quote:

Originally posted by 416Tanzan:

quote:

Originally posted by frankinthelaurels:

How come no new posts, this was one of the best threads ever !

Yes, it is.

Here is a technical article from another thread that pretty much explains everything that Michael was discovering and observing, and does so with physics and a useful summary table and some simple formulae for additional loads.

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I highly recommend saving this article for future reference. Something mentioned but not developed in the article is the increased destructiveness of the flat-nosed solid over round-nose, besides the straighter and deeper penetration.

sorry your link is not working.

RyanB **06 February 2017, 10:19**

Does the Woodleigh hydrostatically stabilized bullet do what they say?

para-frame **13 February 2017, 15:50**

I clicked on this thread, having just bought a CRF model 70 .375 H&H, excited to see how some good .375s do...303 pages later and now I have to get a .458. Boo, granted I never intend to hunt DG, but the ability to do so is something I wanted.

...Takedown switch barrel .375 H&H/.470 Capstick anyone?


capoward **17 February 2017, 20:11**

PF,

There's extremely good empirical information in this thread - especially for bullet-type selection but for caliber considerations as well.

Michael would tell you that the .375 caliber is only good for rat hunting and very marginal for DG whereas others would tell you that it perfectly adequate for DG with proper bullets. All would tell you that accurate shot placement is paramount and should be your primary consideration followed by bullet selection.

My recommendation; get extremely proficient with your 375 H&H. If in the future you will book a DG hunt you can have your rifle re-barreled to .458 Lott well before your hunt; otherwise just select the proper bullets to use and enjoy your hunt...

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

aephilli **22 November 2017, 18:22**

this is not a sticky?????

capoward **22 November 2017, 22:24**

quote:

Originally posted by aephilli:
this is not a sticky????


It was, apparently no longer...

Jim 🤖

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

boom stick

22 November 2017, 23:00

Reading this thread and being tested on it should be required before membership 

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aephilli

23 November 2017, 02:37

quote:

Originally posted by capoward:

quote:

Originally posted by aephilli:
this is not a sticky????

It was, apparently no longer...

Good, that means I'm not crazy. (because I thought it was, those other reasons are still up for debate...)

medved

07 February 2018, 07:01

found the link

h t t p ://ammoguide.com/myag/articles/hunt/penetration0802.pdf

Gustavo

07 February 2018, 08:13

quote:

Originally posted by medved:
found the link

h t t p ://ammoguide.com/myag/articles/hunt/penetration0802.pdf

Cool! 🍻

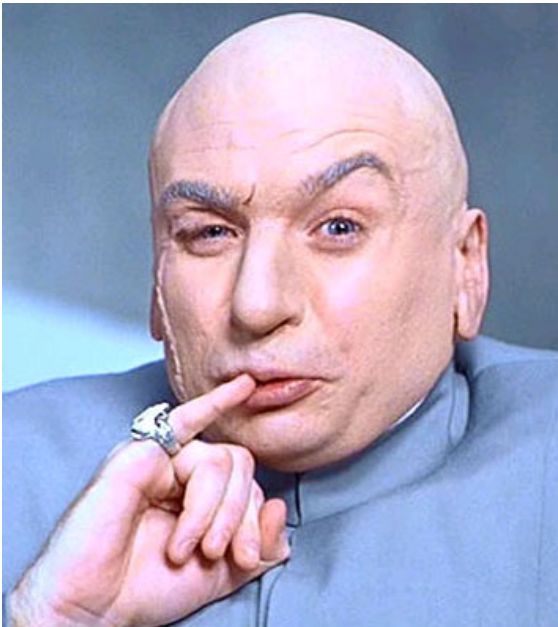
ColdBore 1.0 - the ballistics/reloading software solution

<http://www.patagoniaballistics.com>

boom stick

27 June 2018, 08:29

An impressive marker for how good this thread is... Approaching "one million views"



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Nakihunter

26 November 2018, 02:00

Next you will get a Double rifle 470 or 500 NE!

That is what happened to me. I got a 416 Rigby in CZ action and now a VC 470NE! Having fun shooting paper Elephants 😊

quote:

Originally posted by para-frame:

I clicked on this thread, having just bought a CRF model 70 .375 H&H, excited to see how some good .375s do...303 pages later and now I have to get a .458. Boo, granted I never intend to hunt DG, but the ability to do so is something I wanted.

...Takedown switch barrel .375 H&H/.470 Capstick anyone?

"When the wind stops....start rowing. When the wind starts, get the sail up quick."

4sixteen

01 June 2019, 05:34

.375 300gr Nosler Accubond recovered from Bull Moose. 2300 fps estimated impact speed. Spined it broadside DRT.

Moderate impact speed no bloodshot meat loss. Recovered bullet weight 209gr or 70% weight retention. More bullet weight loss than expected for a bonded core bullet thereby limiting penetration.





<https://www.nosler.com/accubond-bullet>



boom stick

05 October 2019, 19:44

All things being equal, will a "Bowl Nose" BBW#13 penetrate deeper or cause more trauma to flesh? Think Hydro and BBW#13 has a love child. Create a concave tip and Voila! cavitation crater critter killer. Hydra? I like the "Bowl Nose" name. A "coup de gras" if you will. BNBBW? Anyone with a lathe want to make some prototypes?

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416Tanzan

05 October 2019, 20:04

Boomy,

I'm guessing that a bowl-nosed meplat would allow a wee-little expansion so that it would theoretically have a wider meplat than on impact and would create a slightly wider wound channel (better for incapacitating an animal), dissipate more energy faster, and thus penetrate slightly less although much more than a softnose.

+++++

"A well-rounded hunting battery might include:
500 AccRel Nyati, 416 Rigby or 416 Ruger, 375Ruger or 338WM, 308 or 270, 243, 223" --
Conserving creation, hunting the harvest.

boom stick

06 October 2019, 01:33

The tip portions are different... the hydro has parallel sides behind the meplat while the BBW being a conical shape has more material to support the meplat edge and thus theoretically having a strength advantage if made from the same alloy. A bowl nose BBW might be the best of both worlds of maximizing penetration while achieving more trauma.

Again... testing would be needed.



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Bret Ittel

08 February 2020, 20:17

michael458 ok out of all the testing two questions what round load bullet ? gives the most penetration? and what round load bullet gave the best and largest bullet wound size? thank you ?

Bret

boom stick

08 February 2020, 20:34

A good first post. Michael has his own website now and no longer posts here.

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tanks

09 February 2020, 00:56

quote:

Originally posted by Bret Ittel:
michael458 ok out of all the testing two questions what round load bullet ? gives the most penetration? and what round load bullet gave the best and largest bullet wound size? thank you ?

I don't think MIke was impressed with round nose bullets (you can search through the past posts). That is one of the reasons he helped develop the flat nose CEB solids.

338madhunter

10 June 2020, 15:59

quote:

Originally posted by michael458:
Todays test work! I was spurred on a bit to do a couple of tests, actually repeat some with 458 Lott, and add some with the 458 B&M. The goal was to use some big bore solids at different velocities, which we did, but really did not prove a whole lot, except once again to confirm some prior data gathered on these particular bullets anyway.

I wanted to test a 500 gr Woodleigh from 458 Lott--was hoping for 2200 fps or so, but only got 2100 fps with the load I used. I wanted to also compare this velocity to a lower velocity in the 458 B&M. Not as low as I wanted, but 1827 fps was what I got. In addition the 500 gr Barnes Banded FN Solid in 458 Lott at 2209 fps and the same bullet in 458 B&M at a reduced 1815 fps. In addition to these tests I wanted to test the new Barnes 330 gr Solid made for the 458 Socom in the 458 B&M. POI for this solid is the same as all 350 gr bullets I use in the 458 B&M and would make a good addition for those loads.



The rifles used are shown below.



The shooting was done at the 25 yd bench, actual impact was 22 yds. Velocity was recorded at the front end, and then again at impact.





The test medium was fresh and soaked well, 62 inches of mix in the box.



First up was the 458 Lott with the 500 gr Woodleigh FMJ and the 500 gr Barnes Banded FN, both loaded with 82/RL 15. Muzzle velocity was lower with the Woodleigh at 2100 fps and 2051 fps impact at 22 yds. Muzzle Velocity was 2209 fps with the Barnes, and 2160 fps at impact.



If you see the phone books on top of the box that is to prevent the Woodleigh from leaving the top of the box when it veers off course. Yes, I already know what the Woodleigh is going to do, as I have tested them before. Maybe I can prevent damage to the range!

As expected the 500 Woodleigh started to veer off course at 31 inches exiting the medium to the side of the box at 35 inches as you can see below.

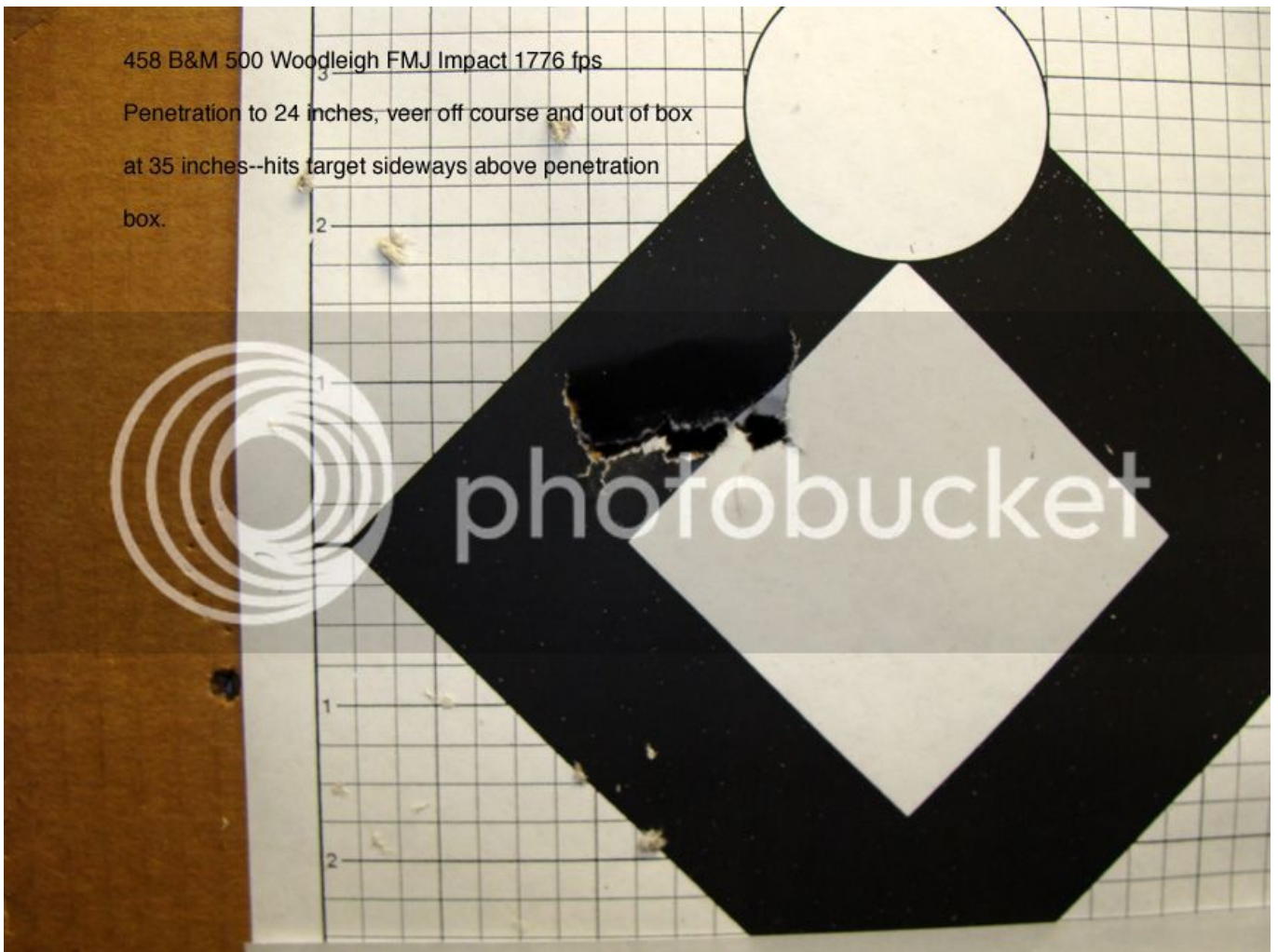


The 500 Barnes Banded FN zipped thru the entire 62 inches of test medium and exited the back of the box, 2X6 and into

the impact berm not recovered. Penetration was straight through and through.



Now for the reduced loads in the 458 B&M. the 500 gr Woodleigh with 63/AA 2520 gave 1827 fps at the muzzle and at impact 1776 fps. It went to 24 inches before it started to veer off course, it found a void down the side of the box and out the top at 35 inches, hitting the target behind the box sideways.



The 500 Barnes Banded FN at 1815 fps at the muzzle and 1780 fps at impact once again drilled straight completely through the 62 inches of medium, exiting the back of the box and into the berm behind, not recovered. I was somewhat surprised, I expected it to come up a bit short, but was wrong. I do believe that had velocity been lower it would have stopped in the box, as it was just making it's way through with little disturbance at the end.

The last test was in the 458 B&M with the 330 Barnes Banded FN solid. With 72/RL 10X it started at 2331 fps and impacted at 2281 fps. They drove straight and true to a total penetration of 50 inches. Not bad for a little bullet and far better than the 500 Woodleigh FMJ.

Now what did this tell us? Something most of us already know, once again--Nose Profile is everything! The 500 Woodleigh becomes unstable, veers off course, and penetration is severely effected. We also learned that the lower velocity it penetrated much less, before going off course, a little more velocity kept it going a little further. Proving that with this RN design, more velocity will keep it stable longer. With RN bullets this challenges the "garrett" tests seriously.

Of course the 500 Barnes Banded FN far exceeded the 500 Woodleigh FMJ RN, this comes as zero surprise and has been repeated many times. The 500 Barnes fired from the 458 Lott hit with far more authority at 2209 fps than from the reduced load in the 458 B&M at 1815 fps. Both penetrated straight, both exited box. It is my belief that even lower velocity that the box would have contained it. I will most likely attempt lower velocity in the near future to also challenge the "garrett" tests. I am pretty positive that if I can get down in the 1500 fps range the bullet will be recovered in the box, and for sure putting the nix on garrett.

Of little surprise, but none the less pleased with the results is the 330 Barnes banded solid. At 2331 fps it did far better than the 500 gr Woodleigh. With a small Sectional Density of only .225 as compared to the mighty 500 Woodleigh FMJ RN with an SD of .341 the little Barnes exceeded the Woodleigh by an easy 35-38% increase in penetration. What is the most important aspect of SOLID PENETRATION? NOSE PROFILE---NOSE PROFILE---NOSE PROFILE! All other factors including Sectional Density--Velocity--barrel twist--construction and materials, are in the back seat, being driven by Nose Profile!

Michael

hi mate my name is Peter I have just bought a c z 550 magnum 458 ackley improved from what I understand this is also called a 450 ackley magnum I was wondering if you had any load data for this rifle in 300 to 350 grain any help would be appreciated thank you

boom stick

20 June 2020, 20:39

I wonder how a non deforming solid hydro-Wadcutter would perform terminally. Instead of having a funky shoulder on the nose, just a radius edge and a concave nose. The BC would be bad but it would be heavier for bullet length. Perhaps a good lever action or pistol bullet. I will TM them as Bullnose Solids or BS Bullets 🤖



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

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crshelton

20 June 2020, 21:04

Sounds a bit like the North Fork Cup Point Solid (CPS for short).

I can tell you how one in .405 performs on a water buffalo. Shot through both shoulders and made a mess of internals nearby. Bang flop!
MV of only 2250 too.

NRA Life Benefactor Member,
DRSS, DWWC, Whittington
Center, Android Reloading
Ballistics App at
<http://www.xplat.net/>

boom stick

20 June 2020, 22:14

Yes, like a NF CPS but full bore diameter with no taper.

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Hannay

03 December 2020, 03:39

If anyone's interested, I saved this whole thread to a PDF. It's 128 MB, 7377 pages. It can be downloaded here:

[Hannay's Dropbox](#)

[Muskox-Greenland, 2020](#)
[Roe buck and muntjac in England, 2019](#)
[Unkomaas Valley, RSA, 2019](#)
[Kaokoland, Namibia, 2017](#)
[Wild boar hunting in Sweden, 2016](#)
[Moose hunting in Sweden, 2014](#)

[How to post photos on AR](#)