

# BIG TIMBER

## RIFLE AND PISTOL CLUB

www.btrpc.com

May 2024

### Range and Event Schedule

- May 4 Work Party  
9:00 am-3:00 pm. All ranges closed  
Contact: Mark Mills, 541-410-0530
- May 4 Range Orientation  
9:00 am-10:30 am  
at the Range Classroom  
Contact: Lurlyn Patrick, 541-270-0785
- May 11 Non-Lead Ammunition Testing  
9:00 am-3:00 pm  
At the rifle Rifle Range  
see insert for more information
- May 14 OHA Meeting  
5:30 pm Dinner, 6:00 pm Meeting  
Rogue Public House, Newport  
contact: Todd Thompson,  
OHALincolnCountyEditor@gmail.com
- May 17-May 19 Lincoln County Sheriff's Office  
12:30 pm- 6:00 pm  
Rifle Range Closed  
Contact: Mark Mills, 541-410-0530
- May 17 DPSST Training  
9:00 am-2:00 pm Classroom  
2:00 pm-5:00 pm Pistol Range  
Pistol Range open and shared  
Contact: Chris Miller, Logical Response  
541-272-1770
- May 18 Cast Bullet Match  
9:00 am-1:00 pm  
Rifle Range closed  
Contact: Mark Mills, 541-410-0530
- May 18 DPSST Training  
9:00 am-5:00 pm Pistol Range  
Pistol Range open and shared  
Contact: Chris Miller, Logical Response
- May 20 BTRPC Membership Meeting  
6:00 pm, Timbers Restaurant, Toledo  
Contact: Jim Patrick, 541-270-2767
- May 22 Parole and Probation  
8am-4pm, Pistol Range Closed  
Contact: Mark Mills, 541-410-0530

### **President's Message**

We have installed the new year's lock on the gate. It is the silver lock. When July 1st arrives it will change to the black lock. We will be emailing all the members in early May with the new year's application and updated rules. There is fillable PDF on the website also. We really encourage you to use it as then we can read it. Those of you that are local will be asked to pick up your keys at Wesley's Trading Post and mail keys to those who request it. Looking forward to the new year and starting construction on the fifty yard range shed as soon as the groundwater lowers enough. Will put the schedule on the website as soon as able to. Be safe out there.

Jim Patrick

### **Range Manager's Notes**

We have cleared more trees and brush at the archery range and established a firing line with targets at 10, 20, 30, 40, 50 and 75 yards.

We expect more dirt to be brought in for the next few months, most will be deposited on the rifle range for future projects. Remember to go "cold range" when the trucks show up to dump.

Construction for the new building at the 50 yard range should be starting soon, expect intermittent closures of that range during construction.

Be safe!

Mark Mills

### **Lead Core vs. Monometal Hunting Bullets**

by Philip Massaro

posted on April 24, 2024

NRA American Hunter, News, Guns & Gear, Ammo  
[www.americanhunter.org/content/lead-core-vs-mono-metal-hunting-bullets/](http://www.americanhunter.org/content/lead-core-vs-mono-metal-hunting-bullets/)

Whether you may feel technology is the driving force behind the change in bullet technology, or the recent legislation in a number of states which calls for lead-free projectiles only, there is no doubt that the copper monometal bullets are here to stay. But are they so good that they warrant abandoning lead-core ammunition altogether? Or are those lead core designs—at least in those areas where they are

legal—just as valid as they were years ago? Let's take a look at the pros and cons of each style.

The good old lead core/copper jacket design has been with us since 1882, when a Swiss Colonel by the name of Eduard Rubin introduced the world to the full metal jacket bullet. Adding a jacket of copper gilding metal—harder than the lead core, yet still malleable enough to be engraved by the barrel's rifling—allowed the projectile to be driven to higher velocities, as well as resulting in improved terminal ballistics. For the hunting world, the jacketed bullets had either a hollowpoint or a bit of exposed lead at the nose, both concepts employed to initiate expansion.

The Hornady InterLock round nose cup-and-core bullet shown in profile and in cross section. The Hornady InterLock roundnose cup-and-core bullet shown in profile and in cross section.

As velocities increased—smokeless powder being implemented at the end of the 19th was a big help—stronger projectiles were developed to combat that speed, as often the jacketed bullets would exhibit premature bullet breakup, especially in speedier cartridges. The year 1939 saw both Remington's Core-Lokt and Winchester's Silvertip enter the market, both in an effort to slow expansion and reduce the risk of jacket/core separation; the former used a groove in the jacket, pressed into the core, to keep things together, while the latter used an aluminum cap over the nose slow expansion.

Though the shortcomings of the early lead-core bullets led to an entire market—names like Nosler, Jack Carter's Trophy Bonded Bear Claw, Swift and other premium bullets came to light as a result—in a multitude of applications a standard cup-and-core bullet will work just fine. I've taken a wide variety of game animals with a simple jacketed rifle bullet; though some had polymer tips, the principal is the same. For varmints and furbearers I prefer frangible bullets with thinner jackets, and for big game species I like thicker jackets and a bit more sectional density. The Remington Core-Lokt, Hornady InterLock and ELD-X, Speer HotCor, Nosler Ballistic Tip, Sierra GameKing and Winchester Power-Point have all been good, on game animals from pronghorn, whitetail and black bear, up to mule deer, caribou and elk.

.275 Rigby ammunition on Texas boar. The Texan wild boar fell to a single Hornady 140-grain cup-and-core from a .275 Rigby.

The cup-and-core softpoint bullet is built for expansion, but there can be too much of a good thing. A light-for-caliber bullet delivered at high speed will see explosive expansion, and poor penetration, as the

projectile can actually come apart. Jacket/core separation is a reality, but there are means of combating that. Bullets with a partition between two separate lead cores—namely the Nosler Partition and Swift A-Frame—keep the rear of the bullet intact while allowing the front to expand, giving a good balance of both features. Chemically bonding the core and jacket is a great method of nearly eliminating chances of bullet failure; even when penetrating thick hide and large bones. The Trophy Bonded Bear Claw, Swift Scirocco, Woodleigh Weldcore and Hornady's DGX Bonded are all great examples of bonded bullets, and all have a great reputation when pitted against tougher game species. Retained bullet weight is very high, expansion is reliable, and penetration into the vital organs of even the largest species is no issue.

A 250-grain bonded core Woodleigh Weldcore recovered after penetrating an old kudu bull. A 250-grain bonded core Woodleigh Weldcore recovered after penetrating an old kudu bull lengthwise; bonding the core helps prevent jacket/core separation.

In the quest for a bullet which wouldn't breakup, Randy Brooks—then the owner of Barnes Bullets—had the brilliant idea of removing the lead core altogether, leaving a projectile made entirely of gilding metal. The Barnes X was quite the radical concept when it came onto the market in 1989, and being honest the original design didn't agree with my rifles at all. Grooves were added to the shank of the bullet, to reduce bearing surface and minimize copper fouling as well, and that made a huge difference in performance. In the 35 years since the Barnes X came onto the market, nearly all the major manufacturers offer a copper monometal bullet of some sort. The Winchester Copper Impact, Remington Core-Lokt Copper, Federal Trophy Copper, Hornady CX, Norma EcoStrike and Nosler Expansion Tip all share many of the same characteristics: high weight retention, reliable expansion, and because of the integrity of the design, deep penetration. These bullets have neither jacket nor core so there's nothing to separate—with the exception of the Cutting Edge Raptor and the Lehigh Defense Controlled Chaos, which are both designed to have the front section of the projectile break apart to intentionally cause trauma.

A trio of Peregrine BushMaster monometal bullet from the 470 NE, recovered from some Cape buffalo in Zimbabwe. A trio of Peregrine BushMaster monometal bullet from the 470 Nitro Express, recovered from some Cape buffalo in Zimbabwe; they were found against or near the offside skin.

Looking at the differences between the two designs, you'll immediately see that a copper bullet of the same diameter and weight will be longer than its lead-core counterpart; this is simply because lead is denser than

copper. The center of gravity of a copper bullet will be a bit more rearward than a lead-core bullet, and for that reason there are times where the traditionally heavier bullet weights for a bore diameter can't be properly stabilized. But that's mitigated by the fact that a copper bullet of lighter weight will often mimic the terminal performance of heavier lead-core bullet. For example, on a plains-game safari to South Africa, I loaded 150-grain copper monometal bullet in my .300 Winchester Magnum, where I'd usually load a 165- or 180-grain, and had no issues at all. Both a kudu bull and a waterbuck bull fell to a single shot from that .300 Winnie, and I wouldn't hesitate to use that combination again for plains game.

This past fall I used a bespoke rifle from Todd Ramirez in 9.3x62mm Mauser, loaded with 286-grain Barnes X, for deer and black bear. Despite being a bit on the heavy side, I had the opportunity to take a good eight-point whitetail; the deer dropped to the shot, and surprisingly I recovered the bullet. It had expanded 1.68x original diameter, and retained 100 percent of its weight. I had used the same rifle three months prior, this time handloaded with a 286-grain Hornady InterLock cup-and-core, to take a good tom leopard in Zimbabwe. I opted for the lead-core bullet for the leopard as I felt it would give more expansion upon impact on the thin-skinned cat, and chose the stiffer Barnes-X for the New York season because there was a very large black bear sighted on the property I hunt in the Catskills, and felt that copper monometal hollowpoint would handle the largest of black bears. In fact, that 286-grain Barnes X would handle, and has handled, game animals as large as grizzly bears and Cape buffalo.

The Barnes TSX, a derivative of the original Barnes X, first expanding bullet design without a lead core. The Barnes TSX, a derivative of the original Barnes X, first expanding bullet design without a lead core.

If your hunting area mandates that you must use lead-free ammunition, don't feel that you are necessarily missing out on something. Nor should the hunter who has spent a lifetime using a tried-and-true lead core bullet feel that there is some sort of magic in a lead-free monometal. In the opinion of the author, the situation at hand and game species pursued can best dictate the type of bullet chosen. For example, I've taken Cape buffalo cleanly with both varieties of bullet, albeit the lead-core bullet was the bonded and partitioned Swift A-Frame, and the monometals were the South African Peregrine BushMasters—both are stiff, rugged projectiles and both worked wonderfully.

On a lighter species like whitetail deer, I generally opt for the lead-core projectiles, as the majority of them transfer their energy a bit faster than the majority of

monometals do, and the deeper penetration isn't really required on those species. For thick skinned animals and larger species, I have no issue with the monometal performance, as I feel it does offer an advantage, removing the concerns of premature bullet breakup or any penetration issues. Looking at things financially—like all else, the price of ammunition and component projectiles have certainly increased—the lead core bullets will almost always be more affordable, and depending on the volume of shooting you do, that may be an important factor.

Several Swift A-Frame bullets recovered from African game animals. A bunch of Swift A-Frame bullets recovered from African game animals. This bullet has a partition of copper separating dual lead cores and the front core is bonded.

The bottom line here is that while the copper monometal bullets do have their own unique characteristics and performance traits, a hunter could spend the rest of his or her days in pursuit of game, big and small, without issue. On the flip side of that coin, the copper jacketed, lead core bullet is better than it ever has been, and despite the political efforts to demonize lead-core projectiles, that formula remains one of the most efficient and economical means of filling your freezer. As an unabashed bullet junkie, I use both varieties, and will continue to do so as long as they remain legal for hunting.

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### 2023/2024 BTRPC Officers:

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**Bookkeeper,**  
Lurlyn Patrick

**Newsletter/Range** (541) 270-0785

**Orientation Instructor:** newsletter.btrpc@gmail.com

The Big Timber Rifle and Pistol Club would like to invite you to join us for a **non-lead ammunition testing day!** This event is hosted in cooperation with the Lincoln County Chapter of the Oregon Hunters Association and the Non-lead Hunting Education program.

**May 11, 2024**

**9:00 am**

**Big Timber Rifle and Pistol Club  
Siletz, OR**

The range day will include a **ballistic demonstration** of lead and non-lead ammunition, and a discussion on research examining how lead affects wildlife. The ballistic demonstration involves shooting lead and non-lead bullets into ballistic gels and water to examine performance. **Attendees will be able to test non-lead ammunition at no cost until 3:00 pm, so bring your rifle!**

For more information:

**BTRPC/OHA Contact:**

Dave Boyce

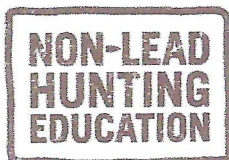
email: [ddboyce@charter.net](mailto:ddboyce@charter.net)

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Hannah Dinell

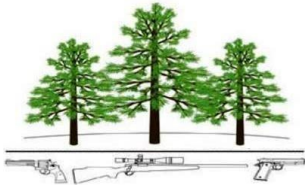
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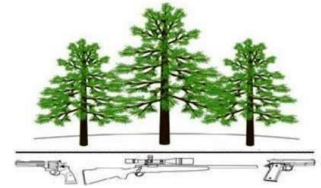
**Lincoln County Chapter  
Oregon Hunters Association**  
Protecting Oregon's Wildlife, Habitat and Hunting Heritage

The Non-Lead Hunting Education program was established in 2015 and funded by the Oregon Zoo and ODFW. This program focuses on outreach, education, and incentive programs to increase the voluntary use of non-lead ammunition in the state of Oregon. Voluntary use of non-lead ammunition can help protect the future of hunting by continuing hunters' legacy as good stewards of the land and wildlife.



# **BIG TIMBER**

## **RIFLE AND PISTOL CLUB**



### **Father's Day Raffle**

**Tickets**

**\$1 each / 6 for \$5**



### **Heritage Arms**

### **Single Action .22 LR Revolver**

Donated by Jeffrey Stich

***Drawing at the June 17, 2024 Meeting***

***Must be 21 to enter***

***Don't need to be present to win***

***Only 500 tickets available***

***For more info: Jim Patrick 541-270-2767***

***Raffle tickets available at Wesley's Trading Post  
or from Board Members at special events***

# BIG TIMBER

## RIFLE AND PISTOL CLUB

MAY 2024

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1	2	3	4 Range Day 9am-3pm Range Orientation 9am-11am
5	6	7	8	9	10	11 Non-Lead Ammunition Testing 9am-3pm Rifle Range
12	13	14 OHA Meeting 6pm, Rogue Public House	15	16	17 LCSO Rifle Range DPPST Pistol Range	18 Cast Bullet Match & LCSO Rifle Range DPPST Pistol Range
19 LCSO Rifle Range	20 BTRPC Member Meeting 6pm Timbers Rest. Toledo	21	22 Parole & Probation, Pistol Range	23	24	25
26	27	28	29	30	31	