





.21 SHARP

WINCHESTER'S SMALLBORE CARTRIDGE WAS PURPOSE-BUILT FOR BULLSEYES AND HUNTING.

BY TOM BECKSTRAND | PHOTOS BY MARK FINGAR

IF A GUY WANTED to get serious about hunting with a rimfire cartridge, the .21 Sharp is the way to do it. Winchester's creation was announced in 2024, and much of the initial reaction from the shooting community was, "It doesn't do anything my .22 Long Rifle (LR) doesn't already." Well, let me to explain why it exists and what it does.

I love the .22 LR. My first rifle as a kid was a .22, and it's where I learned everything from safe firearms handling under Dad's watchful eyes to backyard competitive shooting where my buddies said, "... I bet you can't!" Rimfires is where my love of firearms began. However, the rimfire world has been rather stagnant for some 100 years. The upside of that statement is that .22 rimfire ammunition is — and will remain — the cheapest ammunition available, probably forever.

Winchester's .21 Sharp is not meant to be a replacement for the .22 LR or .22 Winchester Magnum Rimfire (WMR). What the .21 Sharp allows riflemen to do is shoot rimfire with "big boy" jacketed bullets, just like our centerfire rifles. It is also a top contender for rimfire shooters who are subject to restrictions or want lead-free ammunition that is accurate.

THE LEGACY OF THE .22

The .22 rimfire has been in continuous manufacture for more than 100 years, so we've had time to figure out how to make them well. The most common bullet used in the .22 is a heeled round-nose (RN) projectile made entirely from lead. Sometimes manufacturers put a hollow cavity in the nose creating a hollowpoint (HP), and occasionally these bullets are plated with copper to help keep barrels and suppressors cleaner. There have also been many attempts to improve the .22s with segmented projectiles, plastic coatings and lead-free bullets.

I appreciate the efforts made to clean up rimfire shooting, and many of the alternative coatings have been somewhat effective, however, the shape of a .22 rimfire bullet will always be its Achilles' heel when desiring anything other than pure lead bullets. Lead bullets are great for the .22 because they can be had in everything from cheap blasting ammunition to premium match ammunition capable of printing small groups at 100 yards.

Where the .22 rimfire fails is when the shooter wants centerfire bullet performance out of a rimfire rifle. Great centerfire bullets have



The case size and powder charge for the .21 Sharp are equal to the .22 LR. This approach eases high-volume manufacturing, saving Winchester tooling costs and keeping the price for each round low.



The copper-jacketed .22 LR is heeled at the base (above, left), compared to the .21 Sharp's flat base (above, right). The flat-base design improves the accuracy potential of the .21 Sharp.

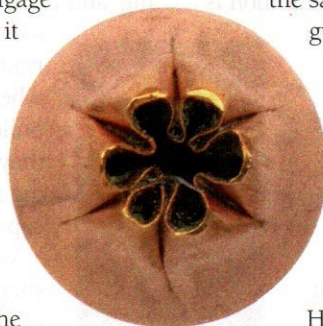
soft lead cores wrapped in thin copper jackets. Put a flat bottom on that bullet if you want the best accuracy at close range, and put a boattail on it if you want great aerodynamics for long-range. The soft lead core allows the back of the bullet to obturate or swell to solidly engage the bore's rifling, and the copper jacket gives it great terminal effect on target.

A .22 rimfire has a diameter of .2255 inch, but the back of the bullet is smaller than that to fit into the brass case. This type of bullet is frequently referred to as "heeled." Even with the smaller diameter inside the case, at the .22 LR pressure of 24,000 pounds per square inch (psi) the lead bullet still obturates enough to engage the

rifling and get great accuracy. Problems arise when anyone tries to put a jacket on a heeled bullet, though.

No jacket can be drawn tightly enough around a heeled bullet to hug the lead core. There will always be gaps, which means the bullet will not be concentric — it flies out like an out-of-balance tire. Accuracy is abysmal when the bullet is not concentric within the case. Curious types will wonder why anyone would want to put a jacket on a rimfire bullet, heeled or not. Putting a jacket on a rimfire bullet will give it consistent expansion and upset, unlike firing lead blobs at varmints and pests. Successfully putting a jacket on a rimfire bullet suddenly gives us access to proven hunting-bullet technology from rimfire rifles. Recovering pure lead bullets from rabbits and such as a kid, I noticed that the shapes of the recovered bullets varied greatly. Some didn't change shape at all, while other flattened out quite a bit. With the big variations in shapes on impact, terminal results varied just as much. If I made the same shot on two jackrabbits, there was no guarantee the results would be the same.

The good news is jackrabbits are a pest, so it's not like anyone is trying to preserve meat or make sure the jackrabbit doesn't elude recovery. I still wanted to kill them cleanly, though. My .22 bullets worked well, but they weren't ideal.



ENTER THE .21 SHARP

Hunting is where the .21 Sharp shines. Having

At launch, the .21 Sharp was offered at between \$18 and \$27 for a box of 50 rounds, depending on the loaded projectile.



Since the .21 Sharp shares the same case size as the .22 LR, it is compatible with standard box-fed and rotary magazines for rimfires.

a legitimate jacketed bullet means the bullet-to-bullet performance is going to be more consistent than solid or hollowpoint soft-lead projectiles.

Of Winchester's four initial .21 Sharp loads, the 34-grain jacketed hollowpoint (JHP) is my favorite. I can't help but think of the mayhem 14-year-old me would have raised with the jackrabbit population in the farming community I once called home.

The .21 Sharp's case is almost identical to a .22 LR case; the headstamp is the biggest visual difference. The case capacity, priming and powder are all identical to a similar .22 LR cartridge, so economies of scale should keep the .21 Sharp relatively inexpensive. The difference is the bullet.

Each .21 Sharp projectile is .2105-inch, meaning the bearing surface of the bullet sits inside the brass case, just as about every other rifle and pistol cartridge. This traditional arrangement does away with the bullet's heel but requires a slightly smaller bore to ensure good contact



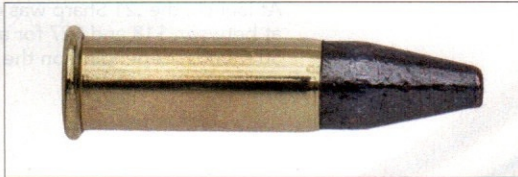
between the bullet and rifling.

The .21 Sharp will be available with four initial projectiles. The one that's got me all worked up is the aforementioned 34-grain JHP. Allow me to throw some numbers at you; while that can be tedious, the juice is worth the squeeze. I'd estimate the G1 ballistic coefficient (BC) of the 34-grain bullet to be about .2. I measured the average muzzle velocity to be 1,578 feet per second (fps). I called Winchester and asked them for the lowest impact velocity that still yielded consistent bullet expansion, and after shuffling through some papers and checking with the lab, the technicians claimed "840 fps." Whipping out my trusty ballistic calculator, I input all the above, and in a standard atmosphere (sea level), the .21 Sharp

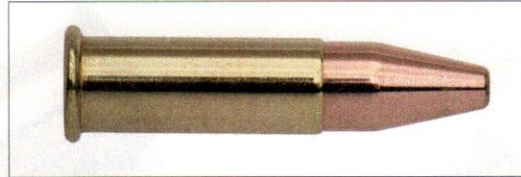
34-grain JHP stays greater than 840 fps to 475 yards. That is much farther than I'd ever shoot at any animal, pest or not. However, I think this is the first time we've ever had a legitimate hunting bullet in a rimfire cartridge, and I'd be willing to shoot at pests out to 150 or 200 yards if the wind wasn't blowing. What most excites me is that consistent bullet expansion is finally available in .21- and .22-caliber rimfires. That's not a huge deal to many, but it is a first — for all of us.

THE LEAD-FREE VARIETY

The next load to consider is a 25-grain Copper Matrix, a sintered bullet with a tapered-but-flat nose that is lead-free. Interesting to note, Winchester started the .21 Sharp



The Winchester 37-grain black copper-plated offering was not available for G&A's test protocols, but it should be a great option for the range.



Winchester's 42-grain FMJ load is the heaviest available for the .21 Sharp. It should prove to be popular for plinking.

Winchester Arms is launching .21 Sharp-chambered rifles in conjunction with the cartridge, but other rifle manufacturers — including Savage — are expected soon.



PERFORMANCE

LOAD	VEL. (FPS)	ES	SD	BEST GROUP (IN.)	AVG. GROUP (IN.)
Winchester 25-gr. Copper Matrix	1,831	79	32.5	.39	.52
Winchester 34-gr. JHP	1,578	60	19.6	.65	.73

Notes: Accuracy is the average of five, five-shot groups at 50 yards using a Winchester Xpert with an 18-inch barrel. Velocity is the average of 10 shots measured with a Garmin Xero C1 Pro chronograph set adjacent to the muzzle.

project with the goal of creating accurate, lead-free rimfire ammunition. If you've ever fired lead-free bullets from a .22 rimfire, you're familiar with the disappointment that usually comes when it's time to measure group sizes. It's bad because sintered bullets aren't soft enough to engage the bore's rifling. The .21 Sharp doesn't suffer from this problem because the bullet's bearing surface is in continuous and firm contact with the bore. I fired several test groups using a Winchester Xpert in 21 Sharp (\$320, winchesterguns.com), and prior to heading downrange to inspect the results I stopped to genuflect and say a quick prayer. The results made me very happy.

WINCHESTER XPERT	
TYPE	Bolt action
CARTRIDGE	21 Sharp (tested)
CAPACITY	10 rds.
BARREL	18 in.
LENGTH	36.25 in.
WEIGHT	4 lbs., 8 oz.
STOCK	Composite
TRIGGER	3 lbs., 9 oz. (tested)
SIGHTS	Post (front), notch (rear)
MSRP	\$320
MANUFACTURER	Istanbul Silah A.S., Turkey
IMPORTER	Winchester Repeating Arms, winchesterguns.com

One aspect I'm interested to see play out is what types of terminal effects will come from the flat on the tapered nose. Revolver shooters figured out a long time ago that a flat nose on the front of a hard-cast bullet generated superior terminal effects when compared to the old, lead round-nose that dominated revolvers for decades. Where the round nose slips through tissue, the flat nose forcefully re-directs fluid and tissue away from the flat, shredding tissue and blood vessels if the velocity is high enough. I bet the .21 Sharp with a flat nose solid will have improved terminal effects when compared to the classic

.22 LR 40-grain, lead, round-nose bullet. I'm sure Winchester will look at this in the future.

FOR PLINKERS & TARGET SHOOTERS

Two additional projectiles will be offered for the .21 Sharp, but they were unavailable at the time of this evaluation. I was unable to test the loads at the range, but they are a 42-grain full-metal-jack (FMJ) and a 37-grain black copper-plated round. Both have truncated and flat noses like the 25- and 34-grain bullets. Both the 37- and the 42-grainers should be ideal for plinking and range ammunition.

NOT TO BE OVERLOOKED

Don't be fooled into thinking the .21 Sharp is just an accurate, lead-free rimfire substitute for states that mandate non-toxic ammunition for hunting such as California. I feel the .21 Sharp is the best .2-caliber rimfire hunting cartridge that we've ever had available to us. It'll never eclipse the .22 LR, but the .21 Sharp definitely has a place with rimfire hunters. **GA**