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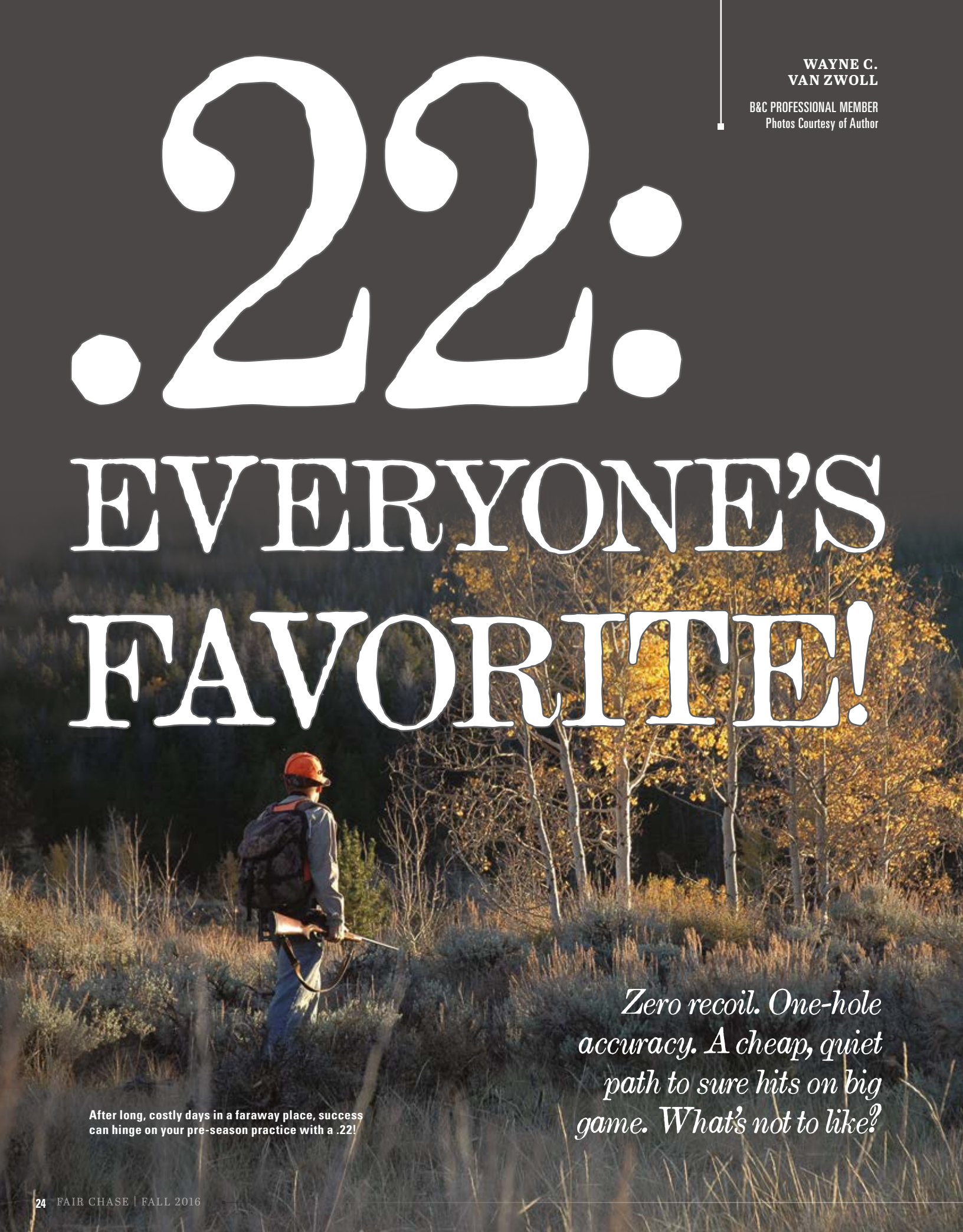
Photos Courtesy of Author

.22: EVERYONE'S FAVORITE!



Zero recoil. One-hole accuracy. A cheap, quiet path to sure hits on big game. What's not to like?

After long, costly days in a faraway place, success can hinge on your pre-season practice with a .22!

One-hole accuracy from .22 match rifles sets high standards for young competitors, here a biathlete.

RIGHT: Not just a "kid's cartridge," the .22 helps riflemen hone shooting and field skills for results like this. BELOW: Rimfire .22s date to the 1850s, the .22 Long Rifle to 1887. Now in many forms, the LR is still a hit!

More than 40 years ago in Mishawaka, Indiana, I snugged my sling for a go at a berth on the U.S. Olympic Shooting Team. Centered in the black disk that appeared as a fly-speck in my iron sights was the *real* target, a 10-dot the diameter of a finishing nail, inside a nine-ring slimmer than a .22 bullet. To reach the finals, almost all my shots had to erase the dot.

You might say that effort has little to do with hunting. In fact, it was part of a long apprenticeship—one I've yet to finish. No matter what manner of magnum you carry for big game, you probably learned much about shooting with a .22 rimfire. It is, arguably, the most useful family of cartridges ever; certainly .22 Long Rifle ammunition accounts for more civilian sales than any other type.

Horace Smith and Daniel Wesson developed the first successful .22 round in 1857, after trying to adopt Flobert's self-contained cartridge to the recalcitrant Hunt-Jennings lever rifle that would evolve to become the Henry, then Winchester's first rifle, the 1866. Smith and Wesson's rimfire, essentially the .22 Short, was fashioned then much as it is now. A disc punched from thin sheet metal was drawn into a tube with a closed end. A rim was "bumped" onto that end, and the fold filled with fulminate of mercury. The fulminate exploded when the rim was crushed against the rear of the barrel

by hammer or striker. Smith and Wesson charged their .22 cartridge with 4 grains of black powder and chambered a revolver for it.

The original Flobert round became the BB (Bullet Breech) Cap, launching a 16-grain bullet at 750 feet per second (ft/s). It was intended for indoor target shooting. Conical bullets replaced the original round ball before U.S. ammo firms stopped loading it. The CB (Conical Bullet) Cap arrived in 1888, a BB Cap with a pinch of black powder and the 29-grain bullet of the .22 Short. It is still loaded but seldom seen.

The .22 Long Rifle preceded the CB Cap by a year. Introduced by the J. Stevens Arms & Tool Company, it launched a 40-grain bullet with 5 grains of black powder. It's easy to think of the .22 Long as a hybrid: a .22 Short bullet with the Long Rifle's case and powder charge. But the Long appeared in 1871, well before the Long Rifle.

In the late 1880s, these rimfires evolved to take semi-smokeless powder. Smokeless loads soon followed. Remington announced its "Kleanbore" priming for the .22 Short in 1927, several years after the Germans came up with "Rostfrei" non-corrosive priming. Remington introduced a high-speed LR load in 1930. Between 1880 and 1935, a few companies loaded the .22 Extra Long, first with 6 grains of black powder in a hull a tad longer than the LR's. Its 40-grain bullet clocked a modest 1,050 ft/s.

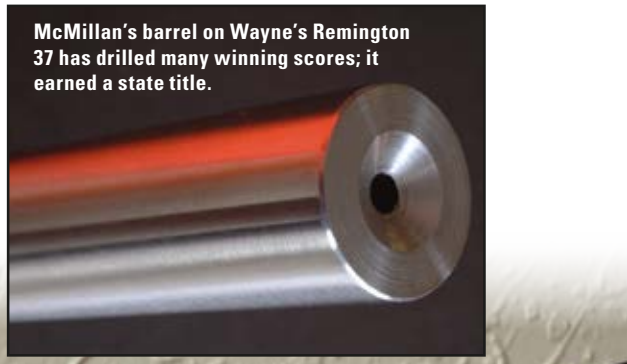
Among other early .22 cartridges that went public are the .22 Remington Automatic, developed in 1914 for that firm's Model 16 autoloading rifle and dropped in 1928. Like the .22 Winchester Automatic, made until 1932 for Winchester's 1903 self-loader, it used a 45-grain .222 inside-lubricated bullet. Cases for both were bigger at the mouth than the .224 hulls of .22 Short, Long and Long Rifle rounds, so it would not enter S, L or LR chambers. These two smokeless cartridges ginned up only about 1,000 ft/s.

Friskier—and longer, by half—was the .22 WRF made for Winchester's 1890 pump rifle. It sent inside-lubricated 40-grain hollow-point and 45-grain solid bullets at 1,450 ft/s. Remington followed with an interchangeable round: the .22 Remington Special.

By far the most popular, useful, and efficient .22 rimfire cartridge is the Long Rifle. For as long as I can remember, muzzle velocity for its high-speed 40-grain solids has been listed at 1,335 ft/s. That speed yields 158 foot-pounds of energy—twice what you'll get with the Short; 60 percent more than you'll wring from the Long. Zeroed at 75 yards, a rifle firing this LR ammunition puts bullets 3¾ inches low at 100. (Hike velocity from the traditional ceiling of 1,300 ft/s to 1,600 ft/s with lightweight hollow-points, and you get more violent upset on impact; but the arc is little changed.)

By the way, three brands of high-speed LR ammunition I've chronographed from a 22-inch barrel averaged 1,247 ft/s, or 88 ft/s shy of advertised speed. In truth and charity, I must add that the fast-burning powder in .22 loads gives bullets their quickest exit from 16-inch barrels.

Hollow-point loads for small animals had appeared by the time a kindly farmer let me borrow his Remington 121 to shoot barn rats. The rifle wore a J4 Weaver the diameter of a spark plug. Despite pond-water images behind a thick, hairy crosswire, many rats fell to the snap of that slide-action .22. Feeding it Shorts instead



McMillan's barrel on Wayne's Remington 37 has drilled many winning scores; it earned a state title.

ABOVE: Wayne got his first taste of hunting shooting barn rats with .22 Shorts in a Remington 121 like this.

BELOW: Among the most popular .22s ever, Ruger's 10/22 has sold in the millions—an ideal cottontail rifle.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BUILT FROM
THE BULLET UP.
A rifle, born of copper, lead and brass.
Backed by a legendary name.
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This African farmer killed his first kudu with a .22 single-shot. The .22 has taken many big animals!

The variety of .22 LR target and hunting loads makes it most versatile. You can even get shot loads!

of LR ammo, I saved a few cents. Better sights, an able coach and a DCM Remington 40x later drew me to competition. After shooting on a university team, I bought an Anschutz 1413, a Redfield 3200 scope. Like the McMillan-barreled Remington 37 that followed, the Anschutz snared a state title.

The variety and quality of .22 sporting rifles available to post-war youth was astounding. We in that era took both for granted. A Winchester 67 gathering dust under a dustier moose in a local hardware was tagged at $16.50—a bit steep for a single-shot, thought I, albeit Remington's Nylon 10 cost $25.75, Mossberg's 320 with receiver sight $27.15. Bolt-action repeaters and autoloaders brought more than $40. Winchester's 61 pump, at $69.95, and Marlin's 39 lever-action at $79.95, were pricey indeed. Youngsters lucky enough to have parents partial to shooting-sports (mine weren't) learned about marksmanship and woodsmanship on weekend treks for small game into oak woodlots and along stone hedgerows.

Hunting alone with borrowed .22s, I muffed many chances at game. But finding my way in the woods would have been harder—and more costly—with centerfire rifle in hand! Actually, in Michigan's populous southern counties then, .22 rifles served for whitetails as well as for small game. "Deer rifles" were *verboten*. Hunters could carry .22s or shotguns with slugs, buckshot or cut-shells—shotshells scored so the front of the hull exited with the shot charge, keeping it together, crimp unopened. Up close, a cut-shell acted like a slug. But forcing hull and shot through bore and choke red-lined pressures! Though .22 bullets could be placed more precisely than any shotgun load, they were widely considered marginal for deer. A .22 hollow-point weighed 37 grains, a 12-gauge slug 437!

In a pinch, the .22 LR will kill big game. I once tracked an injured whitetail and dropped it at 80 yards with an iron-sighted .22. An Africa hunter showed me a single-shot .22 with which he had killed his first kudu. In the Arctic, I met an aged Inuit with a similar rifle. It looked as if it had been snagged in saltwater and skidded home over sea ice. This stooped, nearly toothless hunter bore six caribou hides twine-tied to his back, all collected in one morning with that .22, its sight a soldered nail.

Whitetail hunters in rimfire-only country were blessed in 1959 with the .22 Winchester Magnum Rimfire pushing a 40-grain bullet at an advertised 2,000 ft/s. That claim proved optimistic, and published velocities for 40-grain WMR loads now hover at 1,900 ft/s. With poly-tipped 34-grain bullets, you'll get 2,100 ft/s. These small-game missiles afford half again the reach of Long Rifle hollow-points, with better accuracy than the .22 Magnum offered early on. Incidentally, WMR bullets are jacketed, not heeled.

A .22 Magnum rifle costs three or four times as much to feed as one in .22 LR, but falls well shy of the energy of traditional deer cartridges. The LR—even the .22 Short, still available with

One of Wayne's favorite .22s, the classic Marlin 39, hails from lever rifles used by Annie Oakley.

.22: EVERYONE'S FAVORITE!

Choice of champions

Before the evolution of modern match rifles and dead-center bullseyes in Olympic rimfire events, exhibition shooters worked their magic with .22s. Phoebe Ann Moses was one. Born in an Ohio cabin in August 1860, she had a hard childhood. But subsistence hunting, then shooting for market, would propel her to fame. Annie's natural talent showed when she began killing quail on the wing with her .22. At local turkey shoots, she beat all comers—including, at one match, visiting marksman Frank Butler. She was 15. A year later Butler married her. Phoebe joined his traveling show as Annie Oakley. When Captain A.H. Bogardus left Buffalo Bill's Wild West Show, Annie replaced the sharpshooter, aiming in a mirror to fire over her shoulder at glass balls Frank threw in the air.

Born Phoebe Ann Moses in 1860, Annie Oakley used .22s in jaw-dropping shooting exhibitions.

Petite at 100 pounds, Annie became an audience sweetheart. Germany's Crown Prince, later to become Kaiser Wilhelm II, asked her to shoot a cigarette from his lips. She did, allowing in the wake of World War I that a miss might have changed history. Annie shot coins from Frank's fingers. Firing 25 shots in 25 seconds, she'd tear one ragged hole in a playing card–or with careful aim, split it edgewise. In 1884, with a Stevens .22 in Tiffin, Ohio, she shattered 943 glass balls of 1,000 tossed. Johnny Baker, another Wild West Show deadeye, tried for 17 years to outshoot Annie and never did. "She wouldn't throw a match," said Baker. "You had to beat her, and she wasn't beatable."

Annie used iron sights for exhibition shooting, and often Marlin lever rifles. At age 62, after an automobile accident had crippled her, she could still cheek a .22 and hit every one of 25 tossed pennies.

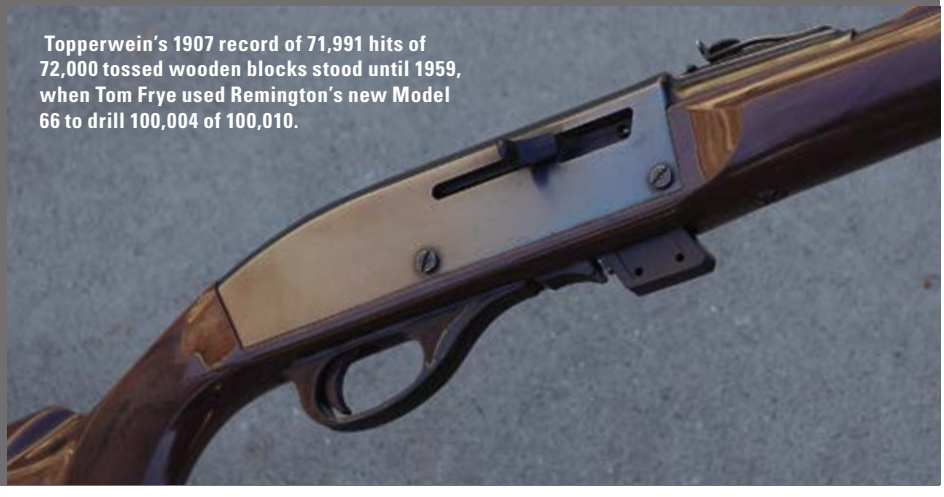
Another rimfire prodigy, Ad Topperwein, was born in Texas in 1869. A cartoonist early on, he brought his artistic talents to shooting exhibitions. "Indian-head" profiles, drilled into tin at the headlong rate of a shot a second, were snapped up by collectors. Ad specialized in aerial targets; in 1894 he broke 955 of 1,000 tossed clay disks, 2¼ inches in diameter. Disappointed, he fired at 2,000 more and minced 976. Standard clays proved too easy; he ran 1,500 straight with his .22. Ad reportedly centered postage stamps stuck on airborne washers, and hit the bullet of a tossed centerfire cartridge without tearing the case. After Winchester hired Ad, he put a Model 63 autoloader in his routine. Firing it with ejection port up, he hit with another bullet the .22 hull spinning through the air! Perhaps his most remarkable exploit was a 1907 marathon in San Antonio. He fired at 72,000 tossed 2¼-inch wooden blocks and missed just nine!

Ad Topperwein met his wife Elizabeth at Winchester. Both shot for the company, she as "Plinky."

That record, set with Winchester 1903 autoloaders, lasted until 1959, when Remington introduced its Nylon 66. Exhibition shooter Tom Frye tested that .22 auto on 100,010 tossed blocks and missed only six! An aging Topperwein graciously sent congratulations.

Other exhibition shooters, from Herb Parsons to Tom Knapp, have left crowds agape. Knapp told me he could hit a tossed golf ball as many as three times with .22 bullets, keeping it aloft by shading low! He said he could hit air-gun BBs about a third of the time. "But spectators can't see 'em."

If your marksmanship doesn't reach that level, take heart. Practice will make you better. With a .22, practice is both pleasant and cheap!



Topperwein's 1907 record of 71,991 hits of 72,000 tossed wooden blocks stood until 1959, when Tom Frye used Remington's new Model 66 to drill 100,004 of 100,010.

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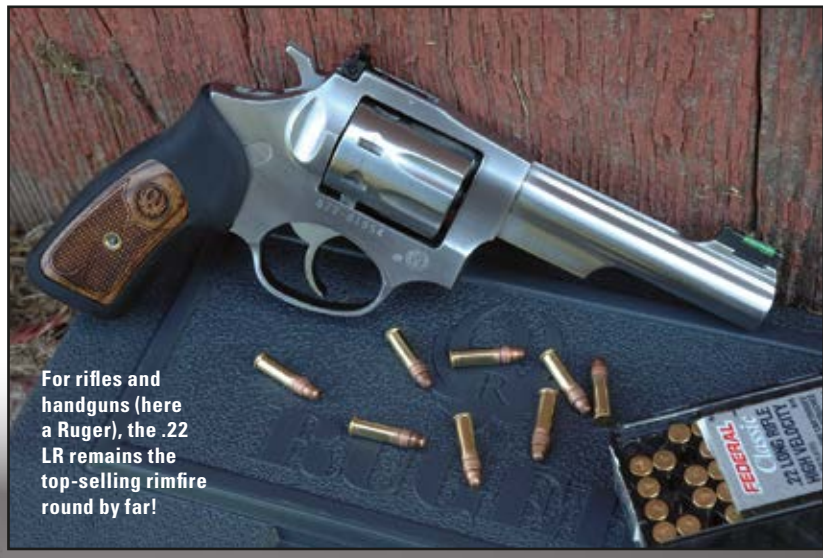
hollow-points—handily takes garden pests, fox squirrels and cottontails. Ballistic coefficients? At .083 for the 29-grain .22 Short and .115 for the 40-grain LR (solids), they are truly abysmal. Short, Long or Long Rifle, the .22 was intended for close shooting!

Among the .22 LR's most endearing traits is its mild report. Ear protection makes sense indoors, but I don't wear it while hunting with .22 rifles. (Handguns bark louder and warrant ear plugs). Recoil is so slight as to be negligible with the lightest of .22 survival rifles, some of which slide under the 3-pound mark! LR bullets yield readily to quarter-inch plate angled 45 degrees behind paper targets—a common set-up in basement ranges. The plate directs spent lead into beds of sand or sawdust. Lightweight steel spinners endure many hits from .22 bullets, while centerfire rifles soon shred heavier plate. As the cost of deer-rifle ammunition ratchets past a dollar a shot, you can still trigger a .22 for less than a nickel! And despite dire warnings of continued shortages, the supply of .22 ammo on the shelf is steadily increasing. "There never was a real shortage," confided a fellow who works in a plant turning out .22 cartridges. "At capacity, we box several million rounds a day. So do our competitors. Ammo flew off shelves because shooters started squirreling it away. Rumor sparked a run. Store quotas to customers kept the rumor alive. Because .22 ammo is so affordable, it sells like candy at grocery check-outs."

The variety and number of .22 LR loads have increased a great deal since 1977, when CCI broke the mold with its Stinger cartridge. It shared the LR's overall length but spat a lighter bullet downrange at 1,680 ft/s. Winchester countered with its Xpediter, Remington with its Yellow Jacket. The pendulum is now swinging the other way. Eley's new 40-grain *subsonic* hollow-points combine match-ammo accuracy with hunting-ammo lethality. The other day, in my CZ 455 sporter, this Eley load printed a .35-inch five-shot group at 50 yards; velocity: 1,085 ft/s. Keeping velocity below the speed of sound delivers the best accuracy—long the standard practice in the manufacture of match ammo.

But whether your rifle nips one-hole groups or ekes out minute-of-rat accuracy with the cheapest ammo you can find, you're using the most popular, arguably the most versatile cartridge ever developed—and getting practice that should boost your odds on big game!



For rifles and handguns (here a Ruger), the .22 LR remains the top-selling rimfire round by far!


Moment of truth on safari! If you've paid your dues with a .22, a killing hit is a trigger-touch away!