

IS THE .220 SWIFT STILL KING?

By Don Lewis
Photos by Helen Lewis



The .220 Swift (middle) stands above its contemporaries. While several .224 cartridges can equal the Swift's 4,000 fps muzzle velocity, they haven't unseated the old champion and they are fading fast from view.

A 'chuck emerged from a rail fence den that was 296 steps from where Helen and I were hidden behind several bales of hay. Although we were in plain sight from three sides, I still made a miniature flag pole from a 3-foot stick, tied a white handkerchief to it, and stuck in the top bale. In those days, Pennsylvania didn't require varmint hunters to wear blaze orange caps or hats. For some strange reason, "mistaken for a woodchuck" accidents happened three or four times each summer. I used the flag setup to prevent a careless hunter from making a mistake.

"That's a pretty large 'chuck," Helen exclaimed as she looked through her 8x Bausch & Lomb binocular. "Since that's a long shot, should I hold slightly above the 'chuck's rib cage?"

"If my calculations are correct, the Swift should be right on the money at 300 yards, and that's just several yards short of the 300 mark. I have it sighted in just a bit over 2 inches at 100 yards. I used a factory velocity sheet to calculate the trajectory arc."

I'll break into this episode to explain that before starting this article, I brought up Barnes' new 2.0 ballistic pro-

gram on the computer screen to find how my estimated trajectory arc compared to the computer readout. From old records, I assumed the load used was 40 grains of 4895 behind a 55-grain Sierra Spitzer bullet. Estimated velocity was around 3,800 fps. I entered this data into the new Barnes 2.0 program and asked for a trajectory chart showing a 300-yard zero. The Barnes program shows the bullet being 2½ inches high at 100 yards, 3.3 inches high at 200 yards, 2.23 inches high at 250 yards, and dead on at 300. My rough calculations were close to the Barnes printout.

While discussing the shot, the 'chuck bolted upright, giving Helen a clear view of its right side. I heard the rear trigger being set, and after a half dozen seconds passed, the .220 Swift cracked and the 'chuck folded.

This is just one of dozens of successful shots made at long distances using the .220 Swift. Admittedly, the one Helen used looked a good bit like a boat oar instead of a super accurate varmint rifle. The original rifle had been a type B Mauser Sporter that had factory set triggers (the Model B is sometimes called the Normal Model), and when a heavy varmint barrel was installed the old stock simply wouldn't work. Not having a stock available, the barreled action was bedded temporarily in a discarded 8mm Mauser stock. Temporarily lasted for about eight years. With a rifle capable of shooting 5/8-inch five-shot

100-yard groups, I was in no hurry to “fancy up” the rifle. It eventually did get a decent looking wooden stock that had been taken off another rifle.

The Winchester .220 Swift is almost as controversial today as it was shortly after its inception in 1935 in Winchester’s Model 54 bolt action rifle. Because it could push a 46-grain bullet out of the muzzle at velocities over 4,000 feet per second, it generated a good bit of suspicion among the varmint shooters of that era. Most varmint buffs in the 1930s were being wooed from the .22 Long Rifle and .25-20 Winchester to the new .22 Hornet. With the Hornet’s 2,650 fps muzzle velocity, it was head and shoulders above the rimfire Long Rifle and .25-20. At that time, the .22 Hornet cartridge was the epitome of a varmint round.

There’s somewhat of a paradox that is hard to believe. The .22 Hornet appeared around 1930/31 and still is given credit for being the first small-bore cartridge marketed in the United States that was primarily designed for varmint shooting and other small pests. That is not exactly true, but saying the .22 Hornet was “primarily designed for varmint shooting” probably does make it true. The .22 Savage High Power saw the light of day way back in 1912 and was mistakenly advertised as both a varmint and medium size big game cartridge. Since its heaviest bullet was only 70 grains and not basically designed for



Helen Lewis' first Swift finally was stocked with a respectable wood stock. The Model B Mauser is topped with a 10x Unertl Ultra Varmint scope.

penetration, the High Power was more at home with 55-grain bullets that offered muzzle velocities well above 3,000 fps. The .22 Savage High Power had a fairly strong following, but it lacked in varmint-type accuracy in a lever-action rifle. However, Savage stuck with their Model 99 lever-action outfit. Custom rifle builders soon learned that the .22 Savage High Power offered top accuracy in single-shot bolt-action rigs. It’s obvious that the .22 Hornet was not the first small-bore cartridge, but perhaps it was the first offered strictly for varmints and small game shooting.

When the .220 Swift arrived, it, too, was introduced as a combination varmint/deer cartridge. Here again, the heaviest factory bullet used in that era weighed just 48 grains, and, in the early 1960s, 60- to 63-grain bullets were available. Just to prevent arguments, it’s possible custom bullet makers offered .224

bullet weights above 55 grains in the Swift’s early years. Basically, these were varmint bullets, and varmint bullets are designed to disintegrate quickly on varmint-sized animals. The critics heaped wrath and condemnation on the Swift, and, on the other side, those writers who were Swift fans went overboard with their claims that the Swift could drop literally any big game animal. Mostly, they based that assumption on the Swift’s 4,000 fps velocity. However, they apparently didn’t take into consideration how fragile a 48-grain bullet is. The heated arguments continued, and both sides were positive they were correct about the Swift. Although the .220 Swift was finally relegated to the ranks of the unwanted, there was a segment of varmint shooters who did not believe the wild claims being made about the cartridge by either side, and these shooters generally accepted the Swift for what it



Bob Brahs fires his .220 Swift. He is shooting Hornady factory Varmint Express shells loaded with Hornady's 40-grain V-Max varmint bullets.

truly was — a superb long-range varmint cartridge.

Other factors that helped make hunters suspicious of the Swift were the numerous statements made about throat erosion and short barrel life. Now, it is true that the powders of that era did cause throat erosion, and possibly even more so when the Swift was pushed to the extreme limits of velocity. I bought a decrepit looking Swift built on an Enfield action in the late 1950s for \$35.00 (the action alone was worth that much). The Enfield was part of an estate sale, and the reason I got it for such a low bid was the belief that since it was a Swift, it was shot out. I fired hundreds of rounds at velocities just below 3,800 fps, and never detected any serious accuracy problems.

Being a Swift admirer ever since the late 1940s, I've often thought that

the Swift was treated unfairly. For one thing, Swift owners had to use factory loads since handloading was still down the road a few years. It's true that a handful of varmint fans had reloading tools when the Swift was introduced, but not many varmint buffs were interested in laboriously reloading shells on the Ideal Model 3 "plier-type" reloading tool. Also, at that time, handloading components weren't available at the local gun store. Well, at least not in any great amount or variety. When home reloading made its appearance in force in the late 1940s, Swift handloaders pushed the velocity envelope to the limit and hastened the demise of a truly great long-range varmint round.

The .220 Swift languished in obscurity for decades and finally was dropped from production. I believe there was a long period of time when no rifle



These two three-shot groups were fired with Hornady factory Varmint Express shells loaded with Hornady's 40-grain V-Max varmint bullets.

manufacturer chambered for the .220 Swift, and it seems to me that Ruger finally broke the ice in the early 1970s by offering the .220 Swift in their Model 77 heavy barrel bolt-action rifle. I do recall vividly that a Ruger representative told me at the NRA show in Washington, D.C., that only a limited number of Swifts would be produced. He jabbed me lightly in the ribs and more or less whispered with a big smile "for a bunch of old Swift fans like you." I told him that it would take more than a limited production to satisfy the demand, and I think my words weren't too far from the truth since the Swift is still offered in several models by Ruger and also by several other firms. Custom rifle

builders are turning out a fair share of heavy-barrel Swifts.

There's some uncertainty about who developed the Swift, but it is known that Grosvenor Watkins experimented with the Savage .250-3000 case in an attempt to gain higher velocities. Firearms history is clouded on exactly what Watkins did accomplish, but by necking down the .250-3000 case to .224 diameter, it's safer to say he was the inventor of the .22-250. That's pure speculation on my part, but Winchester settled on the 6mm Lee cartridge as the basis for their .220 Swift.

The .220 Swift started out as the fastest (highest muzzle velocity) of any factory varmint cartridge and still holds that distinction today. It is true that several wildcat cartridges can duplicate the Swift's muzzle velocity. A few years back, Jim Carmichel introduced the .22 Cheetah wildcat which was supposed to leave the muzzle at 4,200 fps. In a velocity chart on the Mark I Cheetah, 46 grains of IMR 4064 behind a 50-grain bullet from a 27-inch barrel generates an instrumental velocity 15 feet from the muzzle of 4,284 fps. Actual muzzle velocity would possibly push the figure beyond 4,300 fps. It's worth noting that most of the instrumental velocities shown in the chart are in the 4,000 fps category. Also, the very highest velocities come from maximum powder charges, which should be used with extreme caution.

Custom rifle builder Jim Peightal of Ernest, Pennsylvania, built a Cheetah for me on a Model 98 Mauser action using a Douglas No. 6 27-inch heavy barrel with a 1 in 16-inch twist ... the same twist Carmichel recommended. Jim fitted the barreled action in a Brown Precision fiberglass thumbhole stock which was painted red with a wrinkle texture finish. Although I didn't chronograph all his load combinations, the best velocity I obtained was an instrumental velocity at 15 feet of just over 4,135 fps. True muzzle velocity would up that to around 4,150 fps.

Another wildcat that can match the Swift's 4,000 fps velocity is the .19-223 Calhoon. The .19-223 Calhoon comes as a rebarrel kit that includes a chambered stainless steel or chrome moly barrel. The barrel is to be threaded by a local gunsmith and fitted to the owner's action. Rebarrel kits for the .19-223 are available from James Calhoon, Shambo Rt. 304, Havre, Montana 59501. Calhoon also offers .19 caliber bullets ranging in weight from 27 through 44 grains. The kit includes loading data, 100 Calhoon bullets, cleaning brushes, and complete gunsmith instructions for threading the barrel.

I don't have the ballistics on the 44-grain Calhoon bullet, but Calhoon's velocity chart shows that 27 grains of AA 2530 produces a muzzle velocity of 4,025 fps using a 32-grain Calhoon bullet. The 36-grain bullet can be pushed

to 3,800 fps and the 40-grain slug is well above 3,600 fps. All in all, the .19-223 is a volatile varmint cartridge with long-range potential.

Remington's .17 caliber cartridge is capable of going above 4,000 fps with maximum loads, but my 200-yard tests at velocities over 3,800 fps didn't impress me in the accuracy column. On a still day, the .17's 25-grain bullet is a 300-yard varmint killer, but just a little cross wind makes the tiny slug stray.

While the .220 Swift was the victim of detrimental wild claims and bad publicity, it is today considered an outstanding long-range varmint cartridge. My friend Bob Brahs from Slippery Rock, Pennsylvania, built a custom heavy barrel .220 Swift using a Remington 40-X action, Hart 27-inch heavy barrel, and Brown Precision Hunter/Bench stock. He topped it with a 6.5-20x Leupold scope. He brought the outfit to my range and fired several groups using factory Hornady 40-grain V-Max Varmint Express cartridges. Hornady's velocity and trajectory data shown on the shell box says the 40-grain Varmint Express load generates 4,200 fps. My experiences with 40- to 45-grain bullets in the Swift at maximum velocities left a bad taste in my mouth. I had plenty of reservations about the factory shell, but my doubts were unfounded. Brahs' three-shot groups could easily be covered with a nickel, and the second group measured half an inch. Even if the cus-

tom Swift never got below half an inch, that's top accuracy and undoubtedly would gladden the heart of any dedicated .220 Swift fan.

Admittedly, Brahs' custom outfit far exceeded the cost of a factory rifle, but I've fired a number of factory .220 Swifts that had no problems printing five-shot groups that fell into the $\frac{5}{8}$ -inch category. Although Hornady's Varmint Express 40-grain V-Max factory shell produces more than 4,000 fps muzzle velocity, I seriously believe the 52- to 53-grain match bullets at velocities around 3,700 fps are better suited for long-range field shooting. The .220 Swift can easily handle 55-grain bullets at velocities in the 3,600 fps range. The 55-grain bullet may have a slight edge over the 52- to 53-grain bullets if conditions are windy.

There are no exact load combinations that guarantee accuracy. It's a matter of trial and error. Don't start out with maximum loads. Sometimes consistent accuracy loads have lower velocities than max loads and they are just as effective in the field. Stick with the primer/powder/bullet combination that prints the tightest groups at 100 yards.

The Remington .22-250 cartridge pretty much dominates the varmint scene today, and there's no question that it is an excellent varmint round. It began life back in the 1930s as a wildcat. Before being standardized by Remington in 1965, it was made by necking

down the Savage .250-3000 to accept a .224 bullet. For many years, it made an impressive showing on the benchrest line and won many matches. It is still somewhat popular today as a competitive cartridge, but the 6mm PPC and 6mm BR Remington are the favorites with benchrest competitors.

The old Swift has had a long and controversial life. It spent many years standing in the shadows of inferior varmint cartridges, and was finally dropped



This 1992 photo shows Lewis with a large 'chuck dropped by a Ruger No. 1 heavy barrel chambered for the .220 Swift. The scope is a 2-inch Unertl 10x Ultra Varmint. Lewis is using a 7x42 Swarovski binocular. He thinks the 'chuck was almost 300 steps away.

by Winchester in 1964 and replaced with the .225 Winchester. The life span of the .225 was short, ending sometime in the early 1970s. Many claimed the .225 was similar to the .22-250 in performance but, in my book, not in accuracy. It simply had nothing to offer that wasn't already on the market. Even Weatherby's .224 Magnum offered muzzle velocities in the 3,900 fps range, which was several hundred feet or more faster than the Winchester .225. With two tough competitors, the .225 Winchester was bucking insurmountable odds. From a personal viewpoint, I didn't like the semi-rimmed head on the .225, which looked like a rimmed head. That's not a fair way to judge a cartridge, but it's these little idiosyncrasies that often determine the way we look at life. I don't like hunting boots with hook-type speed laces. I have the unusual ability to cut myself on the hooks when lacing up the boot. I know, you never heard of anyone doing such a dumb thing, but I'll settle for some type of eyelet on my boots.

The .220 Swift may never be accepted by the varmint hunting crowd, but it is the epitome of a long-range varmint cartridge. It truly was one from the very beginning, and it still is more than six decades later. I may be a voice crying in the wilderness, but the .220 Swift has no peers in the .224 varmint realm and rightly deserves to reign as King of the Varmint Cartridges.

