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This Month's Cover

The Schuetzen rifle on this month's cover was made by John Meunier of Milwaukee in the mid-1800's for Phillip Best of the Best Brewing Company. Best had two daughters, one of which married Fred Pabst, who later changed the name to the Pabst Brewing Company. The ornate lock plate and trigger guard are silver-plated bronze castings, while the barrel is inlaid with silver. The rifle was loaned for photographing by Bill Atkinson. Photo by Rick Jamison.

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Dear Editor

Ruger's Swift

I'm in agreement with Bob Hagel and Bill Trousdale, whose letter appeared in Rifle 39, concerning their statements and comments about the Ruger .220 Swift. Like these two gentlemen, I also have one of the finest (if not the best) varmint rifles I've used; it's also one of the most untemperamental rifles I've loaded for.

Just about every load I've put down its 26-inch tube has printed an inch, most staying around the .3/4-inch mark and some even less. I've narrowed my varmint hunting load down to 38 grains of 4064, behind a Speer 52-grain hollow point, which jumps along at a respectable 3,800-plus fps and when I do my job, it prints a consistent 3/4 to 1/2-inch group at 100 yards. Trajectory is very low, which I'm sure has been the forgiving factor in some 300-plus-yard kills.

I've had no fouling problems, but then I always take my time between shots and run a brass brush, dipped in Hoppe's No. 9, down the barrel after each session.

As mentioned by Hagel and Trousdale, the only fault with this rifle was the trigger, which I replaced with a Canjar Single Set Trigger. I can't account for why the triggers on these rifles have had such a heavy weight of pull because I own two other M-77's (.243 and .30-06) and both had crisp, light and easy to adjust triggers. I'm a Ruger fan of the first order, but I do wish he would redesign the M-77 trigger or perhaps offer an optional trigger at extra cost, such as the Canjar.

From the many articles I've read about the new Swifts, the trigger has been a consistent complaint and usually the only complaint.

Lonny H. Weaver
Owings Mills, Md.

Gun Control "Answer"

Canadian gun laws are heading in the wrong direction. In 1965 our Canadian Association of Gun Owners (CAGO) proposed what we still believe to be the best answer (despite being turned down by the politicians): 1) Scrap the present system totally. 2) Test the individual person re. a) safety; b) basic competency; c) knowledge of the law. 3) Issue permits to the person, all based on factual tests. 4) Increase severity of criminal misuse penalties and enforce them.

With these restrictions, any citizen who can show he is capable of using a firearm safely would be able to do so — with no restrictions on the number or type of firearms within his capability area.

R.A. Laycock
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RIFLE Magazine
The .25-06 on BIG GAME

A four-year field test

By BOB MILEK

THE .25-06 IS CERTAINLY no stranger to American shooters. The first custom rifles for this cartridge, often referred to as the .25 Nieder in the old days, were marketed by A.O. Nieder beginning back in 1920. In the years following, many gunsmiths turned out custom rifles for the .25-06, not all of which used the same shoulder angle. Interest in the cartridge was minimal until the advent of very slow-burning powders which made it possible to achieve some pretty spectacular velocities with the .25-06. Once we had IMR 4350 and H-4831, interest started picking up and by 1969 there were enough .25 caliber advocates clamoring for a commercial .25-06 that Remington started chambering their popular Model 700 bolt action rifle for a factory version of the cartridge.

Today, after only seven years of commercial life, the .25-06 is one of the most cussed and discussed cartridges on the

Bob Milek, Jr., dropped the five-point bull elk above with a load of 55.0 grains of H-4831 behind Speer's 120-grain .257-inch spitzer in the .25-06. The mule deer at right was anchored with a 120-grain Sierra hollow point boat tail from the .25-06.
Early in 1971 I started shooting my first .25-06 and have since taken a pretty lengthy list of big and small game with it over the past four hunting seasons. Living in Wyoming where a lot of game shooting, even for elk, comes at relatively long range, I felt there was ample justification for my giving the fast, flat-shooting .25-06 a try. However, my approach to the cartridge has been to make a realistic evaluation of its merits as a big game cartridge. I didn’t go into the thing with any preconceived prejudice for or against the .25-06. I wasn’t interested in building a case for it as a super big game cartridge, nor in gathering facts to show that it was just a good varmint cartridge. What I wanted to know was how it would perform on big game and at what point a man started getting onto soggy ground when armed with it.

My first .25-06, one which I still use extensively when my oldest son doesn’t get to it first, is a Remington Model 700 BDL fitted with a 4X Redfield scope. I have since done some hunting with another rifle that I like very much, the Browning Model 78 single shot whose barrel, at 26 inches, is two inches longer than the Remington. Both of these rifles are quite accurate, but the bolt action Remington performs better, particularly with near-maximum loads.

The .25-06 cartridge is just what the name implies, a .30-06 case necked down to .25 caliber. The Remington commercial version uses the 17½-degree shoulder of the parent cartridge, an angle that has proved to be as good as any for this particular cartridge. The .25-06 case has a maximum overall length of 2.494 inches and can be easily formed by merely running a .30-06 case into a .25-06 full-length sizing die. The same thing can be done with a .270 Winchester case, but the resulting .25-06 will be too long and will have to be trimmed back. Whenever this, or any other case is sized down, the handloader should be aware of neck thickness. Reducing the diameter of a case neck increases wall thickness, and to maintain safe pressures the neck may have to be thinned by reaming or turning to allow adequate room within the chamber for bullet release. When .25-06 cases are made from .30-06 brass, a little bulge sometimes will show up at the top of the shoulder. This should be of no concern since it blows out the first time the case is fired. However, since Remington has been producing factory cartridges, the handloader doesn’t have to worry with forming cases; .25-06 ammunition is available almost any place you can buy .30-30 or .30-06.

The .25-06 cartridge can be loaded to its full potential only when the handloader is able to realize all of its capacity with slow burning powders. As long as the overall length of the cartridge can be held around 3.145 inches, the bullet will not extend into the case far enough to affect powder capacity. However, some rifles chambered for this cartridge aren’t throated long enough, or the magazine is too short to allow use of cartridges of this length. The prospective bayer who wants to extract the most from his .25-06 should make sure a rifle will handle long cartridges before he makes the purchase.

My first hunt with the .25-06 was for antelope in Wyoming and I decided to try 100-grain bullets, a weight that served me well in past years in the .257 Roberts. I pushed the 100-grain Sierra spitzer bullet with 59.0 grains of N-205 powder — a hot load which chronographed 3,478 fps and grouped in 2 3/4 inches at 200 yards. After a couple of days of hunting, I found the buck I wanted and got a good broadside shot at just over 200 yards. I set the crosshair square on the buck’s shoulder and pulled the trigger.

That was a mistake! The buck went down like a polkaed steer, hardly even a quiver, and I was pleased — until I opened him up and jerked the hide off. That little 100-grain bullet had done more damage than a fragmentation bomb. It had broken and penetrated the shoulder, no big job on a small-boned pronghorn, but in doing so it had blown to pieces. The buck was bloodshot from the base of the neck to the flank and the bloodshot area covered the entire left side from the backbone down to the sternum. The buck’s inards looked as bad. The heart and lungs were ripped to pieces and a couple of chunks of the bullet had even penetrated the liver. The bullet had so thoroughly destroyed itself that not even one sliver exited the opposite side. The entrance hole through the shoulder was hard to measure because the bone was pulverized for inches around the entrance point. Some guys might call this great bullet performance, but not me. I like to eat antelope, but thanks to the explosive performance of that bullet, I had a lot of ruined meat.

A few days later my oldest son dropped his antelope with this same powder charge behind Speer’s 100-grain hollow point bullet. The range was 300 yards and he put the bullet behind the shoulder where there was no heavy bone. Again, internal organ destruction was total, but the bullet exited, leaving a hole big enough to put your fist in. This buck, too, dropped in his tracks.

That same day, my son killed his buck deer with that 100-grain bullet. The buck was facing him at an angle of about 30 degrees. Bob’s shot took the buck in the center of the chest, angled back, taking out the heart, lungs and liver, then caught a corner of the paunch and really stirred things up. That’s when I decided that the 100-grain bullet, obviously designed for .257 Roberts-class velocities, was just too explosive for use on big game when pushed at .25-06 velocities. It will certainly put antelope and deer down, but...
This sectioned view of a .25-06 cartridge with a 120-grain Speer bullet seated to give an overall cartridge length of 3.145 inches shows how little the bullet encroaches on powder capacity. Dimensions for the cartridge drawing, which indicate a maximum overall length of 3.250 inches were taken from the Sierra manual.

it ruins too much meat to suit me. I tried a couple of different makes of 100-grain bullets, but all of them performed about the same — explosive.

From then on my work to create good .25-06 big game hunting loads centered around the variety of 117 and 120-grain designs on the market. These proved to be mighty tough to beat in just about any situation. For antelope hunting where shots get way out there, my favorite load for the .25-06 is 55.0 grains of Hodgdon's 4831 behind the 120-grain Sierra boattail hollow point bullet. This one leaves the 24-inch barrel of my Remington at 3,182 fps and it's still traveling along at a respectable 2,230 fps at 400 yards. My sons and I, and a few friends interested in the .25-06, have taken quite a number of antelope with this particular load. It's seldom that a bullet is recovered from these small animals. However, vital organ destruction in every case has been adequate to insure quick, one-shot kills. The only bullet I ever recovered from an antelope was from one I shot at a quartering angle from 420 paces away. The bullet broke the on-side shoulder, ranged lengthwise through the buck and lodged against a hip bone. The bullet was perfectly mushroomed and weighed 68.2 grains.

For mule deer hunting, where I'm dealing with an animal considerably bigger than a pronghorn, I like to use Speer's 120-grain spitzer bullet pushed by 55.0 grains of Hodgdon's 4831. This load is as accurate as the Sierra bullet load, yet my observations on its performance on game indicate that it hangs together just a little better than the Sierra when a lot of bone has to be smashed. On deer this bullet breaks the shoulder bone without ruining a lot of meat, yet it does adequate internal organ damage and exits the body.

Only once have I failed to put a buck down in one shot with the Speer bullet load, and that was my fault. The buck was 300 yards away and I placed my shot a bit too high so that the bullet passed between the spine and the lungs. In doing so it just ticked the backbone and got only the upper tip of the lungs. The buck dropped, but got back up a few minutes later and made its way to the bottom of a canyon where I anchored him for good with a second shot. Had a .300 Winchester Magnum bullet passed through that buck in exactly the same place, it would have been no more effective in keeping him down than was the 120-grain .25-06 bullet.

So far I've been talking about the .25-06 as a medium-size big game cartridge, a job for which few people will disagree that it's well suited. But, how does it perform on big animals like elk and moose? My Remington .25-06 has accounted for five elk at ranges from 100 to 350 yards. All but one were one-shot kills and I managed to recover a bullet from only one elk, a young 5-point bull that my son dropped at a range of 350 yards. This was a 120-grain Speer spitzer that broke the bull's shoulder, took out the lungs, then mashed into the opposite shoulder and stopped without breaking the bone. When recovered the bullet weighed 65 grains and the jacket and core were still intact. Despite all that, after being hit, the elk ran downhill through heavy sagebrush for almost 100 yards before going down.

The 117-grain Nosler semi-spitzer bullet is an excellent performer on elk. It lives up to its reputation for toughness and will break a lot of bone and do tremendous organ damage without going to pieces. I've never been able to recover one of Nosler's bullets from an elk, but both times I used them the range was relatively close so I wouldn't expect to. I believe if I had to figure on breaking a shoulder in order to get my elk, I'd choose the 117-grain Nosler bullet over any other to get the job done right.

One thing I noticed with every elk taken with the .25-06 is that these big animals give no outward sign of being hit unless the shot breaks them down. Last fall my youngest son put a bullet behind the shoulder of a big five-point bull that was walking broadside to him at 100 yards. I saw the dust and hair fly, but the bull kept right on walking without so much as a flinch. He walked for a good 50 yards before he stopped, stood for a minute, then fell over. If I hadn't been there with binoculars to see the bullet hit, Bill would have pumped another round or two into an elk that was dead on its feet. When we dressed that bull, he didn't have a lung left in him. However, this isn't a phenomenon peculiar to the .25-06. I've seen it happen with the .30-06, and even a .300 Weatherby Magnum.

The bulge at the top of the shoulder on the case at left often appears when .25-06 cases are made from .30-06 brass. The reloader shouldn't concern himself with this bulge, as long as the cartridge headspaces properly, because it disappears after the case is fired, as shown on the right. Of major importance, however, is the neck thickness; if the loaded cartridge neck fits the chamber too tightly, dangerous pressures can be produced.
I've never been fortunate enough to draw a permit so I could try my .25-06 on moose, but I did get an account of a kill made last fall by my hunting partner. He hit a big bull in the neck from about 150 yards away and it put him down instantly. Actually, this doesn't tell us a thing about how the .25-06 works on moose because a neck shot is no gauge of performance. However, from past experiences with these biggest of the deer family, if the .25-06 will handle a tenacious bull elk, it will do the job on moose as long as the bullet is properly placed.

Just what conclusions do I draw from four years of field testing the .25-06 on game? To begin, there's no doubt in my mind that, in the hands of a capable shooter and hunter, the .25-06 is enough cartridge to handle any big game animal in North America. But, this same statement can be made about many less powerful and some more powerful cartridges that some people insist are inadequate for anything bigger than deer.

Personally, I think moose is a good place to stop with the .25-06 and a man might find he has more than he bargained for when he ties into a big Alaskan moose with this cartridge, particularly if he hasn't selected a tough bullet. Grizzlies and Alaskan brown bear? Sure, it'll do the job under perfect conditions, but a man who hunts dangerous game with the .25-06 is courting trouble.

The .25-06 is actually no better nor worse than three other .25 caliber cartridges that have been around for awhile. Ackley's .257 Improved, the .25-284 and the .257 Weatherby Magnum are right in there when it comes to performance. The .257 Improved and the .25-284 aren't quite as powerful as the .25-06 while the .257 Weatherby shades it just a bit on velocity. The big thing going for the .25-06 is that it's available in a number of good, accurate, reasonably priced commercial bolt action and single-shot rifles.

For the average hunter who has a yen for a good .25 caliber hunting rifle and whose antelope and deer sorties with an occasional elk or moose thrown in, the .25-06 is a good choice in cartridges. It wouldn't be the best bet in heavy timber because the fast, relatively light bullet might tear up on an intervening limb. But then, close-range timber hunting isn't what the .25-06 is designed for. It's for open or semi-open country where its high velocity will give a man a decided edge at ranges beyond 200 yards.

Recoil with the .25-06 isn't bad, cases are cheap, especially if you make your own from good government surplus .30-06 brass, and the hunter has a big choice of rifles chambered for this cartridge. If you've had a .25-06 on your mind, but have hesitated about making a purchase because of the stories, based on paper ballistics, denouncing it as a suitable big game cartridge, set your mind at ease. Field tests on big game shoot holes all through the theories of the big-bore opponents of the .25-06. It's an adequate cartridge for most of the hunting the average American big game hunter does.

Milek's tests on big game indicate that these light and medium-weight .257-inch bullets should be used only for varmint hunting. All three will put down antelope and deer with no trouble, but they are so explosive at .25-06 velocities that a lot of meat may be ruined.