

Varmint Rifles

THE FIVE CHECK-PATED MODELS WERE ACCURATE ENOUGH TO HIT SMALL VARMINTS AT LONG RANGES

The varmint hunter is in some ways more fortunate than his fellow Nimrods who go out for big game. He can usually hunt near home in any season and without limit on his big; and some farmers, bederiled by crows, woodchucks and soch, will allow the varminter to shoot in their fields.

But while an old 30-30 may still bring home the venison, the parminter needs a long-range precision rifle. It will normally be a rifle chambered for a cartridge with a rather deavy powder charge and a comparatively light bullet of small diameter. That combination results in a flat trajectory and long effective range cup to about 400 yards for some caliberant, and in a bullet that tends to disintegrate when it hits an obstacle, rather than ricochet dangerously.

Varming nanture have used many calibers, from the little 22 Long Rifle to the 2000 At the lower extreme, you have a short-range contridue with a slow-moving, high-trajectory bullet that ricoclete easily-not suitable or safe oir most cornainting. At the other extreme, you have a biggame casterdge, that has a large-diameter cullet with too high a trajectory for accuracy over long range, plus a lot of crord and a report load enough to make your ears ring and to startle someone taken unawares. In between is anyman's land. The venerable .22 Hornet is on the small side by today's standards and seems to have lost much of its copularity. And the famed 220 Swift, which delivered nigher velocity and "atter trajectory than any commercial cartridge before or since, proved to have drawbacks, (It was extremely loud, some claimed it tended to wear out harrels empidiv, and its relatively light bullet was too easily deflected by the wind, among other things.)

Among the most popular varmint-hunting cartridges today are the 222 Remington and the 22-250 Remington. The 222 has ar effective range of up to about 300 yards and a relatively mild report; the 22-250 has a maximum effective runge of about 400 yards, but a considerably bigger bang. On the advice of our consultants, we decided to finit our report largely to rifles of those two calibers. Two other colibers, the 243 Finchester and the 244 Remington, have been widely used for varmint shooting in the West But they're a bit heavy for varmints smaller than the covote or fox, and a bit loud for use away from the wide open spaces.

We purchased 13 models in 11 major brands. Eight rifles were .22-250s and four were .222s (models available in both calibers were tested in .22-250). The other tested rifle, the popular Winchester 70, was not available in either cali-

ber at the time we purchased our test models, although has now being made in .22-250. Our Winchester fired a .225 caliber bullet, slightly shorter in runge than the .22-250.

All the models we tested are repeaters, except for the top-rated Ruger. That unique rifle has a dropping-block, single-shot action. You operate it by pushing down a hinged lever extending beneath the trigger guard.

The rifle versus the varmint

Above all, the varmint rifle must be occurate. A bullet that hits the target a couple of inches off your aiming-point can still bring down a deer, but it may completely miss a prairie dog, crow or woodcheck. To meet our consultants' standard of accuracy for a rifle often called upon to hit small targets at long distances a rifle must be capable jof grouping all its shots within a circle of about one lich diameter at '00 yards tone rainute of angle, or MOA). We fitted each rifle with a high-quality, high-powered telescopic sight and, after a 50-shot "break-in," fired groups of five shots from a rest.

We tested all the rifles with commercial animunition updichecked most of them with carefully hand-loaded animunition as well. As would be expected, the rifles fired with both types of amme proved more consistently accurate with the hand-loaded type than with the commercial product. The check-rated Tradevinds, for example, shot slightly outside the MOA with commercial ammo, within the MOA with hand-loaded ammo.

Nine models were judged consistently capable of MOA accuracy with either type of ammunities. The H&R was only slightly outside the MOA limit; the Savage 340 and the similar Westers field were strottenable further and

the similar Western field were significantly further out.
We checked the red cases for excessive expansion. All checked out satisfactorily, indicating that cases fixed in these rifles could probably be retorded up to about 20 or 30 times.

While firing for accuracy, we judged the quality of the trigger pull and the smoothness and case of operation of the bolt and the repeating mechanism. As a group, but varmint rifles exhibited better trigger performance than most gons of other types CU has tested in the past. That is as it should be since a good trigger pull—light and without noticeable creep—contributes greatly to the accuracy a varminter must have. A pull of four or five pounds is about right A heavier pull may cost you in steadiness; a lighter pull risks accidental discharge.

156 MARCH 1968

PLAINTIFF'S EXHIBIT

You may have to adjust the trigger pull—or lave a gunsmith do it—once you get the rifle home. We trigger pulls on most of the tested rifles a little heavy as received, but the pull was adjustable on all but howest-ranked models. Where a trigger showed creep, it's mentioned in the Ratings.

The lightest trigger pull was on the Tradewirds, which has a double-set trigger. To set the front trigger, the but that fires the rifle, you must first pull the rear trigger refrest (about seven pounds on our sample). Then the front trigger responds to a pull that can safely he set very light indeed. Ours was adjusted for less than a one-pound pull.

The five check-rated models were judged very good in both trigger pull and mechanical operation (see table, page 158), and, of course, they were judged consistently capable of meeting the minimum MOA criterion, at least with hand-loaded ammunition.

The sixth-ranked rifle, the Remington 700, exhibited a potentially dangerous flaw as first tested. There was so little clearance between the trigger and the trigger guard that when the trigger was pulled with the safety on homething you or a friend might do when sighting down the rifle or trying it for feel), the trigger sometimes failed to return to its forward position. And with the trigger in the back position, the rifle would fire without warming the next time the safety was moved to the fire position. The multimotion persisted for more than 100 firings before the trigger wore in and performed normally. An unwary layer might have caused a serious accident by then.

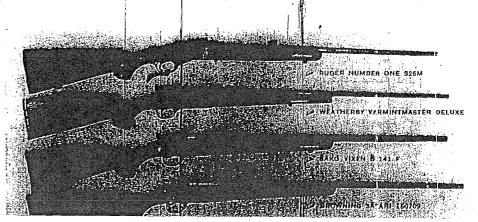
Although we judged the deficiency more a sample deficit than a design shortcoming, we nevertheless do variated the Remington 700 because of it. We would warn dayone buying a rifle to test the safety is the store. If the trigger can be moved will the safety on, make sure it returns to its full forward position after you pull it.

We also have weight in the Rutings to checkering and other grip improving devices. Those qualities affect not only the aboerance of the rife (an important matter to many purchasers) but also the case of holding and firing Good, shall checkering helps you keep a firm grip; raised checkpiece helps you position your head for a good sighting pit jure. The stocks of all but five models (Ruger, Savage 11/C, Remington 7011, Savage 340 and Westerk Field) had prised checkpieces, and all but the Remington 7111 had peckered grips and fore-ends. Cut checkering formed by actual removal of wood) generally provides a better grip than impressed checkering. The Ruger, Weatherly, Salls, Browning, Tradewinds, BSA and II&R models had checkering. The Winchester, Savage 1100-cls had checkering. The Winchester, Savage 1100-cls had checkering to the provider of the checkering on the Remington 700, though impressed, did provide enough friction to improve the grip.

Special reeds, special features

The variant hunter may drive around a good deal between shot, looking for his game. So he should be able to unload his rifle quickly, without working each cartridge through the decion (it's dangerous to carry a loaded gun in a car, and figually illegal). With eight of the tested repeaters you could remove cartridges easily through a bingel floor plate of the bottom of the magazine. Five models had a removable flox magazine, also judged satisfactory.

Rather than load and unland a megazine, many varming



VARMINT RIFLES continued

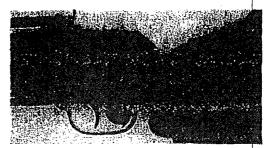
hunters prefer to load a single cartridge into the chamber, since a missed varmint seldom stays put for a second shot anyway. The single-shot Ruger, judged the smoothest-operating model tested, was also judged the most convenient for loading a single cartridge.

The Savage 310 and similar Western Field were the only tested rilles that were sometimes difficult to load singly. The tip of the cartridge occasionally jammed against the rear edge of the firing chamber.

The varminter generally profess a bolt action to other repeater actions. Its strength, rigidity and corresponding potential for accuracy recommend it. Except for the single-shot Ruger, all the tested models have bolt actions. And they are all drilled so that they can be fitted easily for telescope sights, which are essential for small targets at long ranges. The Ratings also note five models that are equipped with open iron sights. But open sights are next to useless for varmints at ranges beyond about 75 yards.

In the past, files made specifically for varmint shooting typically had heavier barrels than other rifles; heavy barrels presumably contributed to the accuracy varmint shooting demands. Among the tested models, only the Winchester 70, Remington 700 and Sako were available with heavy barrels, an extra-cost option on each of them. The heavier barrels of those three did help in holding the rifle steady. But most varmint hunters shoot prope or from a rest; and our regular-barrel rifles shot about as accurately from a rest as did the heavy-barrel guns.

The sportsman who displays his guns in a tack or on a wall will want a rifle that is as good in looks as in performance. Some models are offered in several "grades," or price lines that differ from each other chiefly in finish and



To operate the double-set trigger on the Tradewinds, you first pull the year trigger hard. That sets the front trigger for a light pull. As on most models, trigger, pull, is adjustable

workmanship. Where a choice was offered, we bought the lowest grade. Some models, as the Table shows, were nevertheless judged high in quality of finish and workmanship.

Choosing your varminter

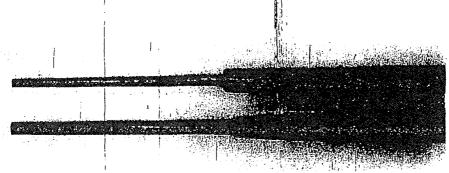
The five check-rated models are rated about equal in those factors that may spell the difference between a hit and a miss. We rated the Ruger and the Weatherby above the other check-rated models because of their excellent finish and workmanship. However, those models are priced epositionally higher than the Sako Vixen and Browning Suffri (whose finish and workmanship were judged nearly as good) and more than \$100 higher than the Tradewinds, the other check-rated model. Kegp in mind, too, that you can cut about \$15 from the price of the Sako by buying it with a standard barrel. For a utility or knockabout gun with good accuracy, the Remington 788, listed at \$84.95, or the Savage 110C, at \$127.50, would be good buys.

CHARACTERISTICS AND SPECIFICATIONS OF VARMINT RIFLES

KEY: E. Excellent; VG, Vary Good; G. Good; F. Fair

•	Mechanical operation	l/lygar pull	finish and gidensmasew	Weight (nearest ¼ lb.)	Magazine capacity (2)
ACCEPTABLE—Yery Good	594.44.77	yuis	was among my	(11021001 /4 10.)	tayeon) (g
PUGER NUMBER ONE S25M	y G	YG	E	В	
WEATHERBY VARMINTMASTER DELUXE	٧G	VG.	ε	61/4	3
SAKO VIXEN B 141 F	VG	٧G	VG	7 1/4	6
BROWNING SAFARI 150709	УG	УG	УG	В	5
TRADEWINDS 607%	YG	y G	G-to-VG	61/4	3
ACCEPTABLE-Good					
HEMINGTON 700 BDL #5928	G-to-YG	УG	G	81/4	4
BSA MONARCH DELUXE :	УG	G	G-ta-VG	7	6
WINCHESTER 70 VARMINT	G	٧G	F-to-G	9	5
SAVAGE 110 C	G	G	F-to-G	81/4	4
H & R 300 ULTRA	F	٧G	G-to-VG	71/4	5
REMINGTON 788, #9736	G	G	F-10-G	71/4	Э
ACCEPTABLE—Fair					
SAVAGE 340	g	F	F	71/2	4
WARDS WESTERN FIELD Cat. No. 714	G .	F	F	7	4

A Figures give capacity of magazine only; they do not include carridge in chamber.



The stender, topored barrel of the Weatherby is in considerable contrast to the extracost beavyweight various barrel of the Remington 700. A heavier burrel may sometimes help you hold a ritle steader, but the standard burrels were no negarate when fired from a rest

RATINGS OF VARMINT RIFLES

Listed in order of estimated overall quality based of field tests and engineering judgments. Closely ranked models within groups diffired little in overall quality. All models provide for mounting a telescopic sight. Except as noted, each has a bolt-action repeating mechanism, trigger-pull adilistment, hinged floor plate, 24-in, barrel of standard weight, sling attachments single trigger with no appreciable creep and a stock with raised checkpiece and checkering judged of adequate sharpness to provide a good grip. Unless otherwise indicated, each was tested in .22-250 caliber and was judged clipable of MOA accuracy, that is, of placing 5-shot groups within a Lin. circle 100 yd. Except as noted, none has sights. Prices are list; discounts may be dvailable on some models.

ACCEPTABLE-Very Good

I Except for finish and workmanship the following five models were judged approximately equal in overall quality (see table on facing page).

PRINCER HUMBER ONE SIEM (Sturm, River & Co., Inc., Southport, Coun.), \$280. Dropping-block, lever-action, single-shot, Barrel length, 26 in. No raised cheekpiece. According to the manufacturer, model available with 22-in. barrel, medium-weight or lightweight, at same price (not tested), and in .222 caliber (not tested), at same price.

WEATHERST YARMINIMASTER DELUXE (Weathorny, Inc., South Gate,

141 F Firearms International Corp., Washington D.C.), \$206. 222 caliber. Tested with heavyweight barrel; similar model with standard barrel available at \$192.55 (not tested).

LOW BROWNING SAFARI 160709 (Browning Arms Co., Morgan, Utah), \$207.50. Also available in .222 caliber (hot tested),

TRADEMINDS 607K (Tradewinds, Inc., Tacoma, Wash.), \$169.50. Barrel length, 231/4 in. Fired with MOA accuracy with hand-loaded ammunition, but not with commercial ammunition. Removable hox magazine. Only model tested with double set trigger, judged an aid to accuracy (see story). Also available in .222 califor (not tested).

ACCEPTABLE-Good

PERINGTON 700 BDL #5928 / Remington Arms Co., Inc., Bridgeport, Conn.), \$169.95. Tested with heavyweight barrel; similar model with standard barrel available at \$154.95 (not tested). Under certain circumstances, it was possible to fire our sample accidentally when releasing the safety (see story).

BIA MONARCH DELUXE (J. L. Galef & Son, Inc., NYC), \$149.95. .222

caliber, Burry length, 22 in. Slight trigger creep. Has iron sights

with CHESTER 7 (YARMINT (Winch ter-Western, New Haven, Com.), \$169.95. Tester in .225 catiller because not available in .222 or .22.250 in title for testing. According to the manufacturer, should now available in .22.250. Tested with heavyweight burrel; similar model with a supard barrel available at \$149.95 (not tested). Checkering judger 66 inadequate sharpness for good grip.

savage 110 M Savage Arms Div., Emhart Corp., Westfield, Mass., \$127.50. Restrictle box inagazine. Slight trigger creep. No sling attachments of raised checkpiece. Checkering judged of inadequate sharpness to trood grip.

HER 300 ULTE (Harrington & Richardson, Inc., Worcester, Mass.), \$205. Fired eight slightly less than MOA accuracy. Barrel length, 22 in, Has n sights.

REMINISTON 7 #9736 (Reminington Arms Co., Inc.), 384.95. Removable box marketine. No trigger-pull adjustment, sling attachments, checkering dipiaced checkpiece. Has iron sights.

ACCEPTABLE-Fair

I The following two models were considerably less accurate than those freeding.

14VACE 140 Mayoge Arms Div., Emhart (Prp.), \$73.50. .222 colliber. Removable Mx magazine. Slight trigger ereep. No trigger-pull Removable has magazine. Slight ingger creep. No trigger-plus adjustment, ing attachments, or raised checkpice. Has iron sights. Checkering idaged of inadequate sharpness for good grip. Sometimes jammed when spaded singly.

WARDS WEST & FIELD on, He. 714 (Montgomery Ward), \$59.99 plus shipping. A Sears sighlar to Savoge 340, preceding, except made of soft wood. All other comments apply.

CONSUMER REPORTS 159