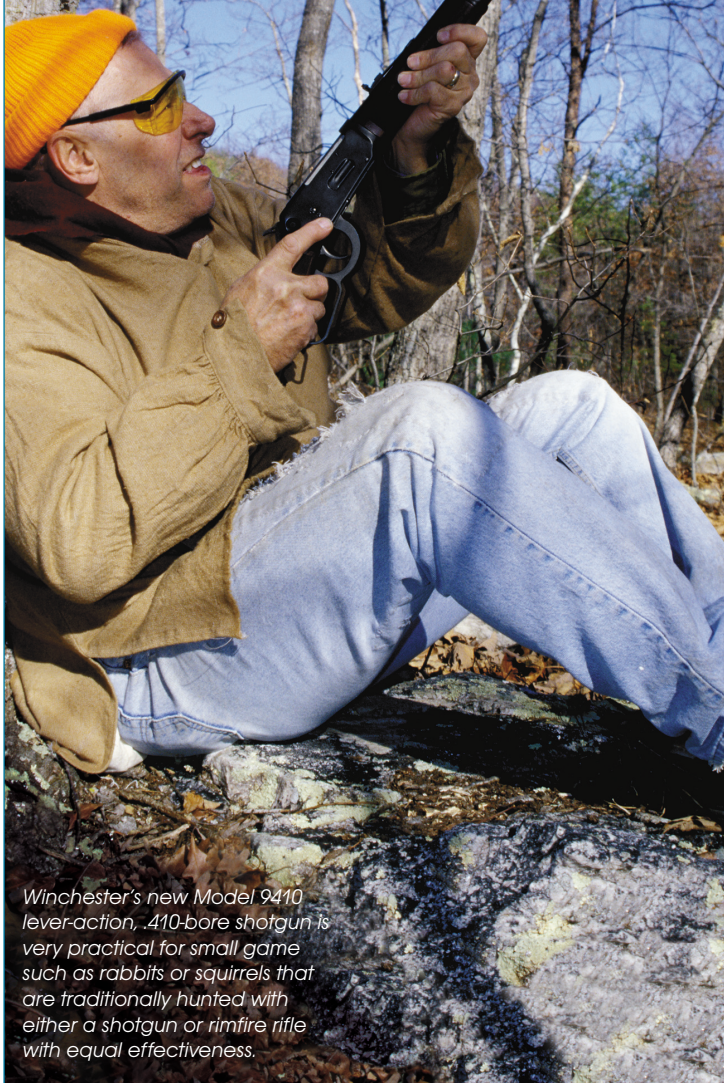
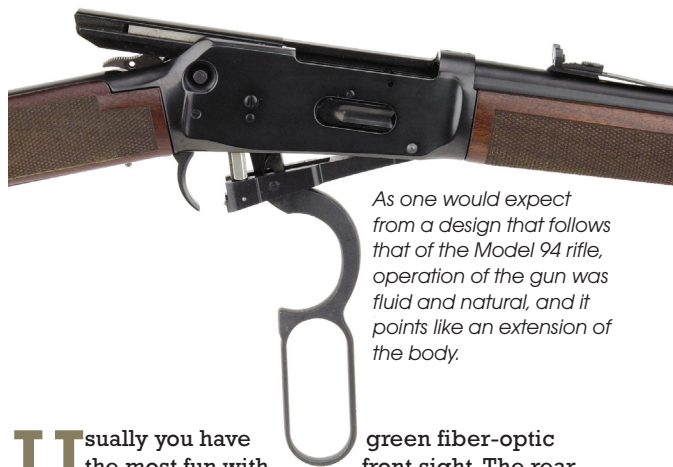


Winchester Model 9410 Lever-Action Shotgun



Winchester's new Model 9410 lever-action, .410-bore shotgun is very practical for small game such as rabbits or squirrels that are traditionally hunted with either a shotgun or rimfire rifle with equal effectiveness.



As one would expect from a design that follows that of the Model 94 rifle, operation of the gun was fluid and natural, and it points like an extension of the body.

Usually you have the most fun with the guns that make you wonder what you'd use them for. Take, for example, Winchester's new Model 9410 lever-action .410-bore *shotgun*. It looks like a deer rifle, but isn't. It's a shotgun, but you'll never find one in a duck blind or being used seriously in competition. You will, however, find yourself having a good time with your friends trying to see which of you is fast enough to bust both clay pigeons at skeet or sporting clays with the Winchester Model 9410. You'll also find it a very practical gun for small game such as rabbits or squirrels that are traditionally hunted with either a shotgun or rimfire rifle with equal effectiveness.

Made in the U.S.A. in U.S.R.A.C.'s New Haven, Conn., plant, the Model 9410 is walnut and blued steel, as many believe guns should be, and follows the established lines of the venerable Model 94 rifle. The only concessions to modern tastes are the crossbolt safety button and neon

green fiber-optic front sight. The rear sight is a steel, shallow "V" notch unit with a steel, stepped elevator for elevation adjustment. Windage adjustments are accomplished by drifting the rear sight in its dovetail.

Chambering is for 2½" .410-bore shotshells only, as longer shells will not function properly through the action. Either shotshells or slugs can be fired and, as with the Model 94 rifle, the Model 9410 is drilled and tapped for scope mounting. Though the Model 9410 retains the appearance of a top-eject lever-action rifle, the extractor and ejector are arranged in Winchester's Angle Controlled Eject (ACE) manner to kick shells from the gun at an angle so they clear the scope. A spring-loaded ejector ensures that cases eject positively, even when the lever is operated slowly.

Recoil from .410 shotshells is minimal, so U.S.R.A.C. saw fit to equip this shotgun with a simple, black, 3/16" solid rubber butt pad, separated from the wood by a 3/16" black plastic spacer.

The *American Rifleman* has used the phrase "Dope Bag" at least since 1921, when Col. Townsend Whelen first titled his column with it. Even then, it had been in use for years, referring to a sack used by target shooters to hold ammunition and accessories on the firing line. "Sight dope" also was a traditional marksman's term for sight adjustment information, while judging wind speed and direction was called "doping the wind."

WARNING: Technical data and information contained herein are intended to provide information based on the limited experience of individuals under specific conditions and circumstances. They do not detail the comprehensive training procedures, techniques and safety precautions absolutely necessary to properly carry on similar activity. Read the notice and disclaimer on the contents page. Always consult comprehensive reference manuals and bulletins for details of proper training requirements, procedures, techniques and safety precautions before attempting any similar activity.

SHOOTING RESULTS

AVERAGE OF 10 PATTERNS AT 25 YDS.



Improved Cylinder Choke

■ = Point of Hold

Federal Gold Medal Sporting Clays
.410-bore, 2½"—1½ oz.—No. 8½ lead

Average Pellet Count: 249

Measured Velocity @ 3 ft.: 1230 f.p.s.

Total hits: 190 (77%)

21" Inner Circle: 111 (45%)

30" Outer Ring: 79 (32%)



The hammer-blocking cross-bolt safety button is one modern concession to the otherwise traditional design that faithfully follows that of the Winchester Model 94 rifle.

Checkering is machine-cut on the wrist and fore-end at a very functional 16 lines per inch. Steel barrel bands are located at the front of the fore-end and near the muzzle just behind the plastic front sight housing. At 24", the barrel is 4" longer than the currently offered "Traditional" Model 94 rifle and features a fixed, cylinder bore choke. If you figure your pattern percentage based on the number of pellets in a 20" circle at 25 yds., as the late Don Zutz suggested when patterning .410-bore shotguns, then our patterning indicates the Winchester Model 9410 throws a "skeet" choke pattern (45 percent). If you instead follow the guidelines in the *NRA Firearms Fact Book* that counts the pellets within a 30" circle at the same range when using a .410, then the Model 9410 throws a "full" choke pattern (77 percent). The full-length tubular magazine holds nine rounds plus

one in the chamber, and a magazine limiter that reduces magazine capacity to two is included with the gun for field use in localities where capacity is restricted for hunting.

We patterned the Winchester Model 9410 at 25 yds. using Federal Gold Medal shells with the results shown in the accompanying table. We also took the lever-action shotgun afield on a squirrel hunting trip as part of the function evaluation and fired a single three-shot

group of slugs at 50 yds., just out of curiosity. The slugs were fired off-hand using the iron sights and printed a 6" group, so there might be some potential for the Model 9410 in a limited capacity on close range game the size of coyotes.

Patterns are easily centered to where you point the gun simply by adjusting the sights as you would on a rifle. We found the pellets evenly distributed and the big green fiber-optic unit easy to

pick up and point, though its use may be of little value on moving targets where the shooter should be concentrating on the target and not the sight.

Afield, the Model 9410 performs as would any other .410-bore shotgun on small game, but also offers the light weight and handiness of a single-shot while exceeding the magazine capacity of most repeaters.

Trigger pull left a lot to be desired, had this been a rifle, but it was acceptable for a shotgun that will be used for plinking and small game. There was 1½" of take-up followed by a clean but heavy break with no overtravel. As one would expect from a design that follows that of the Model 94 rifle, operation of the gun was fluid and natural, and it points like an extension of the body. It also has that classic appearance adored by Americans that, when combined with the inherent "fun factor" of a lever-action .410-bore shotgun, is likely to make the Winchester Model 9410 a hit.

NRA

Winchester Model 9410

MANUFACTURER: U.S. Repeating Arms Co. (Dept. AR), 275 Winchester Ave., Morgan, UT 84050-9333; (801) 876-2711; www.winchester-guns.com

GAUGE: .410-bore, 2½"

ACTION TYPE: lever-action shotgun

RECEIVER: blued steel

BARREL: 24" blued steel

CHOKES: fixed, improved cylinder

MAGAZINE: nine-shot tubular

TRIGGER: single-stage, non-adjustable, 5 lbs. pull

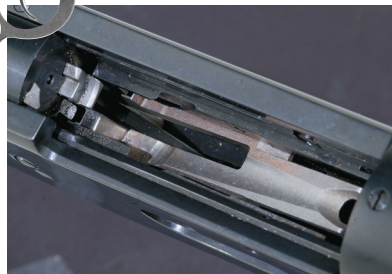
STOCK: walnut; length of pull, 13½"; drop at heel, 2"; drop at comb, 1"

OVERALL LENGTH: 42½"

WEIGHT: 6½ lbs.

ACCESSORIES: magazine limiter

SUGGESTED RETAIL PRICE: \$553



Capacity of the tubular magazine is nine 2½" shotshells, plus one in the chamber. A limiter is provided to restrict magazine capacity to two for hunting in localities where required.



The extractor and ejector (l.) are arranged in Winchester's Angle Controlled Eject (ACE) manner that throws shells far from the gun, even when the lever is operated slowly, and at an angle so there is no interference with ejection if a scope is mounted.



A bright, neon green, fiber-optic front sight makes it easy to get on stationary or slow-moving targets. The rear sight is step-elevator-adjustable for elevation and drift-adjustable for windage.



Armalite AR-180B



buttstock. In the AR-180, the carrier slides on two parallel action rods carrying both recoil springs. Although the new AR-180B from Armalite retains the bolt and gas system of the original AR-180, there are changes in its construction and materials that take advantage of modern manufacturing methods, as well as some different features that reflect a changing market and political landscape.

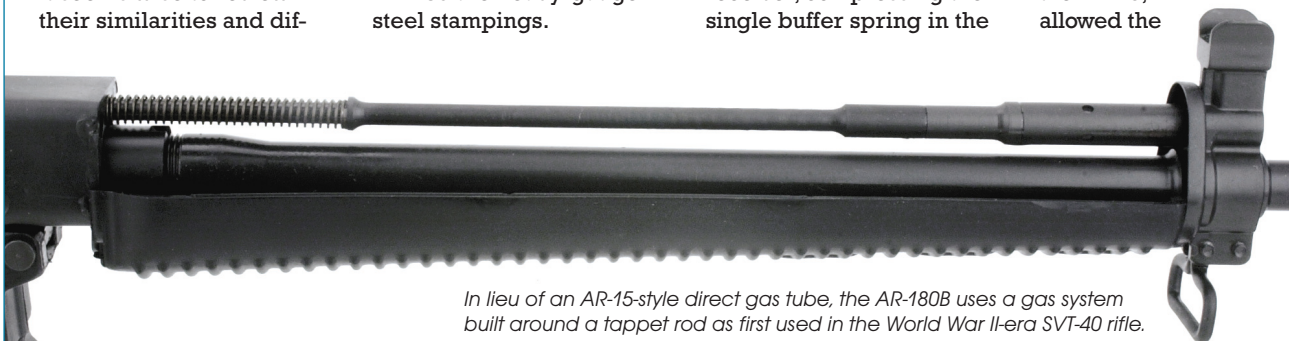
The magazines for the original gun were similar to those used in the more common AR-15, but they were not interchangeable. AR-180 magazines were scarce and expensive long before the cessation of the original rifles' production many years ago. Thankfully, the new AR-180B accepts readily available AR-15-style magazines.

One of the advantages of the AR-180 design was that the recoil springs, being contained in the upper receiver itself rather than in a buffer extension as with the AR-15, allowed the

For those who love how an AR-15 can shoot, but cannot love or live with it, the AR-180 has been the holy grail. Its scarcity has helped it develop a mystique and has created a pent-up demand that Armalite has decided to meet with the new AR-180B. Given that the AR-180 is seen as an alternative to AR-15-style rifles, it seems wise to review their similarities and dif-

ferences. Both are gas-operated, semi-automatic rifles chambered for the .223 Rem. cartridge. The designs feature synthetic stocks and a short-stroke, multi-lug rotary bolt that locks to an extension threaded onto the breech end of the barrel. In contrast to the high-tensile strength aluminum alloy receivers of the AR-15/M16 rifles, those of the original AR-180 are heavy-gauge steel stampings.

The gas system of the AR-180 is also different in that instead of the bolt being unlocked by direct gas pressure as in the AR-15/M16, gas tapped from the barrel is directed through a short gas tube to impinge on a tappet rod/piston arrangement that unlocks the bolt. In the AR-15/M16 rifles, the bolt carrier slides in a tubular guideway in the upper receiver, compressing the single buffer spring in the



In lieu of an AR-15-style direct gas tube, the AR-180B uses a gas system built around a tappet rod as first used in the World War II-era SVT-40 rifle.

Armalite AR-180B

MANUFACTURER: Armalite, Inc. (Dept. AR), P.O. Box 299 Geneseo, IL 61254; (309) 944-6939; www.armalite.com

CALIBER: .223 Rem.

ACTION TYPE: gas-operated, semi-automatic rifle

RECEIVER: stamped, sheet steel upper; polymer-reinforced lower

BARREL: 19.8"

RIFLING: six-groove, 1:9" RH twist

MAGAZINE: 10-round, detachable, AR-15-style box

SIGHTS: rear aperture adjustable for windage, post front adjustable for elevation

TRIGGER: single-stage, non-adjustable, 6 lbs. pull

STOCK: synthetic; length of pull, 13 3/4"; drop at heel, 1 1/2"; drop at comb, 1 1/2"

OVERALL LENGTH: 39"

WEIGHT: 6 lbs.

ACCESSORIES: trigger lock

SUGGESTED RETAIL

PRICE: \$650

use of a folding stock. The new AR-180B, however, must comply with laws restricting that feature. Though now fixed, the stock of the AR-180B retains the same slim profile and short length of pull of the original gun. The buttplate is retained by two steel machine screws and features an AR-15-style trapdoor that covers a storage compartment for a G.I. cleaning kit or other shooting accessories.

For similar reasons, the threaded muzzle of the original was dropped in favor of a muzzle brake integral to the 19.8"-long barrel. The 1:12" rifling twist of the first-generation AR-180 has been

increased to 1:9" in the new AR-180B to stabilize heavier bullets now available for its .223 Rem. chambering.

Sights on the AR-180B include a post front unit screw-adjustable for elevation in the same manner as an AR-15. The two-leg rear sight with short-range (less than 200 yds.) and long-range (beyond 250 yds.) apertures is adjustable for windage by hand-turning the drum on the right-hand side rear sight ear. The diameter of the apertures and the windage drum are consistent with M16A2-style components, but the range adjustment wheel has been eliminated, and the front sight base and rear sight ears match the shape and dimensions of those used in the original AR-180.

Additionally, the AR-180B is equipped with a scope mount base, atop the receiver, identical to the original gun. In the near future, Armalite plans to offer a scope mount as an accessory that will work with both the old and new upper receivers.

The new upper receiver is stamped sheet steel as was the first-generation gun, but the lower receiver of the AR-180B is now a polymer extrusion reinforced with steel inserts. The exterior shape and dimensions are similar to the original gun, and an old upper will fit a new lower and vice versa, but the internal specifications have

SHOOTING RESULTS						
.223 Rem. Cartridge	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Group Size in Inches			
			Smallest	Largest	Average	
Black Hills 52-gr. JHP	3112 Avg. 22 Sd	1118	1.18	2.21	1.54	
Federal 223A 55-gr. SP	2833 Avg. 15 Sd	980	1.32	2.31	1.61	
Remington R223R6 62-gr. HP Match	2821 Avg. 18 Sd	1095	1.24	2.49	1.78	
Average Extreme Spread:					1.64	
Measured average velocity for 10 rounds from a 19.8" barrel. Range temperature: 66°F. Humidity: 70%. Accuracy for five consecutive, five-shot groups at 100 yds. from a sandbag. Abbreviations: HP (hollow-point), JHP (jacketed hollow-point), Sd (standard deviation), SP (soft-point).						

been changed so the gun can accept certain AR-15 parts such as the magazine, magazine catch and release button. Also, the AR-180B's single-stage trigger group uses the same hammer, sear and trigger blade as Armalite's standard M15-type rifles.

The trigger of our test gun broke cleanly at 6 lbs. pull with minimal take-up and little discernable overtravel. No scope mount was available at the time of our testing, so we resorted to the rifle's standard iron sights. Results from our tests are shown in the accompanying table. No magazines were provided with our test gun, but a selection of AR-15/M16 magazines that had proven reliable with other guns seated positively and dropped free of their own empty weight. Moreover, there were no failures to feed, fire, extract or eject.

The AR-180B shares the good ergonomic features



Unlike the first-generation gun, the new AR-180B takes standard AR-15 magazines.

of the original gun, which are comparable to an A1-style AR-15. It is lightweight, and the short length-of-pull of its in-line stock helps the firer bring the gun quickly to the shoulder. Two things that make it different from an AR-15-style rifle that drew universal praise were the absence of a carrying handle that allows for



The barrel of the AR-180B features a 1:9" twist and a fixed muzzle brake with six ports.




The hammer, sear and trigger blade are the same as in standard Armalite M15 rifles.

Although the AR-180B utilizes the same bolt as the AR-15, the unique features of its bolt group include a fixed handle, rectangular carrier and buffer springs housed within the upper receiver.

lower scope mounting, and the fixed bolt handle that provides the user with peace of mind that the bolt is fully in battery when chambering a round. The new gun also inherits some of the not-so-good features of its parent, such as the slim shape and smooth

surfaces of the pistol grip and a fore-end that can work against a solid hold for some shooters.

The combination of its legendary origin as the work of Eugene Stoner, its sound performance and popular price will likely provide fertile ground for the return of the AR-180. 

The rear sight aperture, windage drum and front sight post are all M16A2-style components, though their bases match the profile of the original gun.



Savage Model 10 ML-II



There are many reasons for hunting with a muzzleloading rifle. Some like the satisfaction of taking game with primitive firearms. Others relish the chance to take to the field when there is less hunting pressure, but most take up muzzleloading because

they want to take more game. Whether filling the freezer or simply taking advantage of additional hunting opportunities, they put up with the two banes of muzzleloading firearms: rainbow bullet trajectories and time-consuming, messy maintenance requirements.

While in-line muzzleloading rifles meant for Pyrodex loads have utilized the full ballistic potential of muzzleloaders, little has been done to mitigate muzzleloader cleaning requirements until now. The Savage Model 10 ML, the first production

muzzleloader built to handle the increased pressure of smokeless powder, has created a stir within both the shooting industry and the hunting community alike. The use of smokeless powder in a muzzleloader designed to accommodate it combines simplified



Those familiar with the Savage Model 110 rifle will have no trouble with the 10 ML-II. Not only does it utilize the same trigger system, but also the same tang-mounted safety.



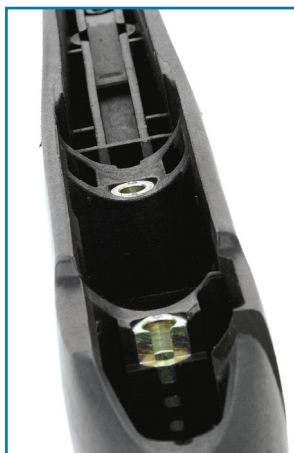
The breech plug includes a vent liner that serves the same purpose as a nipple. Because of the heat and pressure generated by smokeless powder, it must be replaced after every 50 to 60 shots. Tools for replacement are included as accessories.

Though smokeless powder burns hotter than blackpowder, it is also harder to ignite. Reliable ignition requires a 209 shotshell primer.

cleaning and maintenance with the ballistic performance of modern in-line muzzleloaders. In addition, since a pound of smokeless costs about the same as a pound of blackpowder, shooting 47 grs. of smokeless in the Savage 10 ML is much less expensive than shooting 150 grs. of the sooty stuff.

Since its introduction, Savage has made many changes to the ignition system of the Model 10 ML rifle. Although smokeless burns hotter than blackpowder, it is much harder to ignite and requires a 209 shotshell primer for reliable ignition. On the first Model 10 ML, the firer placed a primer into a re-usable ignition module that was then inserted into the breech much like a metallic case.

Ignition of the new 10 ML-II, however, is much simplified. After powder charge and projectile are loaded through the muzzle, a 209 primer is inserted into a recess in the boltface that resembles a shellholder for a reloading press. It is loaded easily with a gloved hand, and no capping tools are required for insertion. While the bolt of the first Model 10 ML retained the front locking lugs of its center-fire ancestor, the bolt of the 10 ML-II locks at the rear like many rimfire .22s. Both systems are meant to ensure a tight seal of the vent liner (the



Aluminum bedding blocks limit shifting of the action in the synthetic stock of Savage's 10 ML-II.

nipple) to prevent hot gases from leaking back toward the firer. However, heat and pressure from burning smokeless powder will eventually erode the vent liner and the manual recommends changing it after every 50 to 60 rounds. Wrenches for turning out the breech plug and an extra vent liner are included as standard accessories.

The .50-cal., round-contour barrel of the 10 ML-II is cut with a 1:24" twist for use with sabot bullets. It is mated to the receiver with the same collar arrangement for which Savage's center-fire rifles are known. The 10 ML-II's 22" barrel puts the balance point between the action and fore-end, making it

easier to carry and faster to shoulder than some muzzleloading rifles.

The ML-II's smooth, black, synthetic stock features diamond-pattern checkering molded into its fore-end and wrist. Additionally, a 1/2" thick soft rubber butt pad helps reduce slipping and perceived recoil.

Metallic sights consist of a V-notch rear adjustable for windage and elevation and a ramped fixed front post topped by a black bead. Those inclined to hunt with the aid of a scope will be glad to hear that the 10 ML-II is drilled and tapped to accept bases and rings compatible with the Savage Model 110 center-fire action. The trigger guard of Savage's smokeless muzzleloader is generous enough for use with a gloved hand and protects a single-stage trigger that breaks at 5 lbs. pull after minimal take-up.

In testing of the new ML-II rifle, we found that sabots offering greater resistance when ramming down the barrel performed better. Sabots that fit too loosely could be unseated by primer detonation before the propellant charge starts burning. Poor performance and misfires can result.

After reviewing the loading data supplied with the rifle, we selected 250- and 300-gr. Hornady bullets in MMP sabots. We fired them with two smokeless powder loads and one with Pyrodex Pellets. Results are shown in the accompanying table.

Shooting the ML-II meant breaking with many of our usual muzzleloading habits. Our experience with blackpowder guns has taught us to be generous with protective oils and blackpowder solvents. The more the better for a smooth day at the range, but with the ML-II any residue from oil, cleaning solvents or moisture was bound to cause misfires. Both the barrel and breech need to be bone dry for reliable ignition. Additionally, the greater heat and pressure of smokeless powder means the ML-II requires tough sabots. In the manual, Savage speci-



Loading the 10 ML-II is much simplified from the first model. A 209 shotshell primer is inserted into a recess in the boltface, which resembles a shellholder for a reloading press.

SHOOTING RESULTS

.50-Cal. Loads	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Group Size In Inches		
			Smallest	Largest	Average
.452" Hornady 300-gr. XTP 46-grs. IMR 4227	2142 Avg. 39 Sd	3056	2.62	3.54	3.06
.452" Hornady 250-gr. XTP 41-grs. Vihtavouri N110	2178 Avg. 32 Sd	2633	2.59	3.96	3.18
.452" Hornady 300-gr. XTP Three, 50-gr.-equivalent Pyrodex Pellets	1949 Avg. 46 Sd	2530	2.84	3.79	3.46
Average Extreme Spread:					3.23
Measured average velocity for 10 rounds from a 24" barrel. Range temperature: 64°F. Humidity: 72%. Accuracy for five consecutive, five-shot groups at 100 yds. from a sandbag. Abbreviations: XTP (Extreme Terminal Performance), Sd (standard deviation)					

Savage 10 ML-II

MANUFACTURER: Savage Arms, Inc. (Dept. AR), 100 Springdale Road, Westfield, MA 01085; (413) 568-7001; www.savagearms.com

CALIBER: .50

ACTION TYPE: in-line muzzleloader for smokeless powder

RECEIVER: steel with matte-stainless finish

BARREL: 24"

RIFLING: eight-groove, 1:24", RH twist

SIGHTS: adjustable rear and post front with bead, drilled and tapped for scope mounts

TRIGGER: single-stage, 5½ lbs. pull

STOCK: black synthetic; length of pull, 13¾"; drop at heel, 1¼"; drop at comb, 1½"

OVERALL LENGTH: 44"

WEIGHT: 7½ lbs.

ACCESSORIES: composite ramrod, disassembly and loading tools

SUGGESTED RETAIL

PRICE: \$527

cally recommends those from MMP. With smokeless powder, a dry gun and the proper sabots, misfires were few.

The generous recoil pad kept perceived recoil to a minimum. Shooters received a good shove from the loads, but there was no sting in the shoulder or cheek.

As much promise as Savage's smokeless muzzle-loader offers, the gun has stirred up a fair amount of controversy as well. Among the broader issues at stake is that the existence of the Savage is not proof that all muzzleloaders can take smokeless. The Savage Model 10 ML II is different, its ignition system and other features make it the only muzzleloader that can shoot smokeless. Other muzzle-loader manufacturers have taken great pains to emphasize that their guns are made only for blackpowder and blackpowder substitutes. Additionally, every gun demands a certain amount of user responsibility for safety, and every shooter needs to know the particular demands of his gun. Muzzleloaders with no experience hand-loading smokeless cartridges will have to shed the mindset that powder is powder is powder if they want to safely use smokeless propellant in Savage's 10 ML-II muzzle-loader. The ban on swapping components when hand-loading metallic cartridges extends to loading smokeless muzzleloaders as well. Stick to tested data from the manufacturer.

It cannot be denied that a muzzleloader, even a smokeless one, is more demanding on the shooter than a fixed cartridge breechloader. There is no doubt, however, that the Savage Model 10 ML II has reduced the cost and burden of shooting a high performance in-line muzzleloader.



Very often, the manufacture of scopes is considered a series of trade-offs—a compilation of concessions if you will. Make scopes more powerful, the image gets dimmer; make the image brighter, the scopes get bigger; make them bigger, they get heavier; make them better, they get more expensive—maybe. BSA Optics has taken the position that being good and being affordable need not be mutually exclusive in the world of optics. That position is reflected in its line of Catseye riflescopes, such as the 3.5-10X 50 mm unit with illuminated reticle we received recently for evaluation.

Immediately noticeable is the amber tint given the large objective lens that gives it a yellow appearance when the light hits it just right. The glass is fully coated to provide a bright view without glare or reflections and, as we've reported on several occasions, the amber color adds contrast without reducing illumination. That's helpful on overcast days, or at dawn



and dusk when a shooter wants contrast, but needs the additional illumination. It really makes a deer stand out in dark woods, or prairie dogs more visible as afternoon gives way to dusk.

Eye relief on our sample was 4½" with a field of view varying from 10½ ft. to 30 ft. at 100 yds. depending on scope power setting. Exit pupil, one of the more significant factors in scope brightness, ranged from an adequate 5 mm to a generous 14.3 mm, again, dependent on power setting.

A single 3-volt battery housed in the top of the ocular bell provides seven levels of red light to the crosshairs. Changing brightness settings is simply a matter of pressing the small button beside the battery compartment.



The amber tint given the lenses adds contrast without reducing illumination. That's helpful on overcast days or at dawn and dusk when a shooter wants contrast but needs the additional illumination. It really makes a deer stand out in dark woods, or prairie dogs more visible as afternoon gives way to dusk.

For even more usefulness in low light, the Catseye has what BSA terms a "European style reticle," which is not to be confused with the European preference of having a reticle that magnifies with each increase in scope power. Instead, it refers to essentially BSA's duplex-style reticle. Also making the crosshair easier to see is the illumination option, a feature that uses a single 3-volt battery housed in the top of the ocular bell to provide seven levels of red light to the crosshair. Changing brightness settings is simply a matter of pressing the small button beside the battery compartment. Each "click" of the button provides tactile

and, for those with exceptional hearing, audible feedback of the change. An eighth click turns the illumination off, or the unit can be switched off by holding the button in for approximately two seconds. Battery life is reported to be at least nine hours of continuous use.

Construction is a one-piece, 1"-diameter aluminum tube with BSA's "Shadow Black" finish, which is a thin rubber coating that buffers the scope body from impacts, and provides a surface into which the scope rings can "bite" to reduce the likelihood of the scope shifting in the rings during recoil. The eyepiece has a fast-focus ring, but no means of locking the setting in place. A power adjustment ring at the front of the ocular bell has a single, large lug to grasp when turning the ring. We found the ring very easy to turn by hand, but not so easy as to suggest that it wouldn't keep its setting afield. Weight is 17¼ ozs., and length is 13¼".

The turret has finger-adjustable windage and elevation adjustment knobs marked in increments of 1/4" at 100 yds. with rubber-coated metal covers that seal out dust and water. Detent balls provide positive clicks that can be both felt and heard when turning the knobs. "Shooting the square" at 50 yds. using 32 clicks between corners verified that scope adjustments

are repeatable, and the 4" square that formed verified that the increments are correct.

All Catseye scopes are claimed to be waterproof, fogproof and shockproof. We tested the two former claims by submerging the scope in a bath of 110 degree water for 10 minutes. Though we observed lots of bubbles coming from the ocular bell area, there was no leakage of any kind. Moving the scope from the warm water into a freezer until the temperature stabilized produced no interior fogging, nor did the scope fog when we removed it from the freezer and brought it back to room temperature. As for the illuminated reticle, it lights up satisfactorily, and if that's a feature that appeals to a shooter then there should be no complaints with this one.

With the Catseye line, BSA has put into the hands of consumers a product that can stand up to the competition regarding features, construction and quality. Where the BSA line stands out from the rest, however, is at the bottom line in that its price falls at the low end while the value remains at the high end.

Available from: BSA Optics (Dept. AR), 3911 S.W. 47 Ave., Suite 914, Fort Lauderdale, FL 33314; (954) 581-2144; www.bsaoptics.com. Price: \$192.



The turret has finger-adjustable windage and elevation knobs marked in increments of 1/4" at 100 yds. Rubber-coated covers seal out dust and moisture while detent balls provide positive clicks.



BSA Optics has taken the position that being good and being affordable need not be mutually exclusive in the world of optics. That position is reflected in its line of Catseye riflescopes.

The Catseye has what BSA terms a "European style reticle," which is essentially BSA's duplex-style reticle. Also making the crosshair easier to see is the illumination option.

