

Springfield, Inc. M1A Scout Rifle

With its handy length, quick target acquisition, self-loading speed and rugged, proven design, the Springfield, Inc., M1A Scout Rifle might well serve as a police patrol or ranch rifle and proves that this classic design is worth adapting to new roles.

Springfield, Inc.'s M1A rifle—the commercial, semi-automatic-only version of the select-fire U.S. M14—was first introduced in *The American Rifleman* 26 years ago (March 1974, p. 36). Today, the benchmark of the Geneseo, Ill., firm is still going strong having long since displaced the M1 Garand in highpower competition only to be surpassed in recent years by civilian derivatives of the AR-15/M16.

Like the first M1As, today's rifles begin with investment cast receivers onto which a mixture of vintage U.S. G.I. M14 and commercial parts is assembled. Buyers can choose from various grades of rifles with different stock materials and configurations, barrels and sights, to fashion their M1As into service-grade clones or match-winning thoroughbreds.

Fit and finish is consistent with both Springfield's reputation for quality and with service-type rifles in general.

The M1A Scout rifle, perhaps the most significant model variation to date, taps into the current market demand for a breed originally postulated by Col. Jeff

Cooper and epitomized in the Steyr-produced .308 Win. bolt-action Scout rifle he endorsed. While Springfield's adaptation of the concept to the M1A was not difficult—requiring only a shorter barrel and clamp-on optic mount—the result is something Col. Cooper might argue suffered a bit in translation. Cooper's weight limit for such

Adequate space exists between the barrel and the rifle's operating rod to install the mount and still allow clearance for cycling of the action. The mount's top is milled with cross slots to accept Weaver-style rings. Our Scout sample came with an Aimpoint Comp XD unit that mounts with a single, wide aluminum ring. The company also markets its

own 2x20 mm Scout Scope, with a reticle that features tapered crosshairs terminating near a "floating" central dot, along with conventional 1" aluminum rings with top-mounted pinch bolts.

Staffers accustomed to the standard



The muzzle stabilizer's profile allows mounting of a standard front sight. It also makes the rifle legal in California.

a rifle was established at "three kilos," or 6.6 lbs., while the Springfield weighs in at 9 lbs. Of course, Springfield, Inc., is betting that what its Scout lacks in lightness is more than made up for in ruggedness, familiarity and its autoloading design.

Many of the M1A's features are readily adaptable to the Scout role. Aside from the facility for a forward-mounted optical sight, the Scout rifle differs from its Standard M1A counterpart only through an abbreviated barrel—18" rather than the standard 22"—and through a proprietary muzzle stabilizer design whose profile approximates that of the original M14 flash suppressor and allows mounting of a standard military front sight. (The stabilizer also makes M1A Scout rifles legal in California under that state's law restricting the possession of semi-automatic rifles equipped with flash suppressors.)

Key to the conversion is a machined aluminum mount that clamps onto the military-profile barrel with six Allen-head screws.

M1A SCOUT RIFLE

MANUFACTURER: Springfield, Inc. (Dept. AR), 420 W. Main St., Geneseo, IL; (309) 944-5631
ACTION TYPE: gas-operated, rotating bolt, semi-automatic, center-fire rifle
RECEIVER: investment cast steel
CALIBER: .308 Win.
FINISH: matte black phosphated
OVERALL LENGTH: 44½"
BARREL: 18" chrome moly
RIFLING: conventional; 1:11" RH twist
WEIGHT: 9 lbs.
MAGAZINE: detachable, staggered-column 10-round capacity box
SIGHTS: post front; aperture rear adjustable for windage and elevation
TRIGGER: two-stage, 5½-lb. pull
STOCK: G.I. fiberglass with textured black epoxy finish; length of pull, 13½"; drop at heel, 1¾"; drop at comb, 1¼"
ACCESSORIES: U.S. military field manual; optional \$45 stock modification for QD sling swivel stud for mounting Harris bipod (\$72)
SUGGESTED RETAIL PRICE: \$1,830 with Aimpoint Comp XD sight (tested); \$1,644 with Springfield 2x20 mm scope; \$1,499 (rifle with 10-round magazine and iron sights)

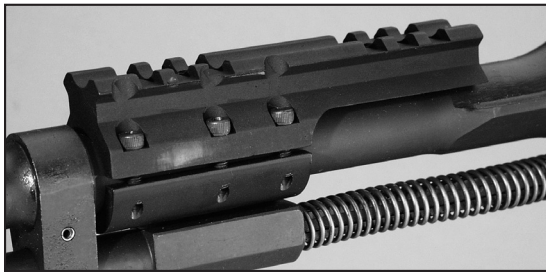
The *American Rifleman* has used the phrase "Dope Bag" at least since 1921, when Col. Townsend Whelen first titled his column with it. Even then, it had been in use for years, referring to a sack used by target shooters to hold ammunition and accessories on the firing line. "Sight dope" also was a traditional 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

.308 Win. Cartridge	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
Hornady 8096 168-gr. HPBT	2465 Avg. 16 Sd	10.7	1.88	4.88	3.85
Federal GM308M2 175-gr. HPBT	2382 Avg. 16 Sd	11.7	3.50	5.25	4.25
Winchester S308M 168-gr. HPBT	2492 Avg. 30 Sd	12.1	2.75	4.25	3.13
Average Extreme Spread:					3.74

Measured average velocity for 10 rounds from an 18" barrel. Range temperature: 66° F. Humidity: 32%. Accuracy for five consecutive, five-shot groups at 100 yds. from a sandbag rest. Abbreviations: Sd (standard deviation), HPBT (hollow point boattail).



Key to the M1A's Scout configuration is an aluminum mount that clamps onto the barrel with six Allen-head screws. A gap allows adequate clearance between the mount and the rifle's reciprocating operating rod.

M1A found the Scout's length a welcome boon to handling—especially in a .308-cal. rifle of such robust construction. It proved very convenient when mounting for the kind of fast, instinctive shots for which the forward-mounted sighting system was conceived.

We fired the Scout rifle at 100 yds. using the supplied Aimpoint Comp XD whose 3 m.o.a. dot is intended to allow quick hits on short- to medium-range targets rather than ultra-tight groups on paper. The unit's placement well forward of the rifle's action keeps its optics clear of ejecting cartridge cases. Shooting results, using three brands of match-grade ammunition, are found in the accompanying table.

The Springfield Scout rifle's utilitarian fiberglass stock is actually a refurbished G.I. unit originally made under government contract for the M14 program. The company modernizes it by filling in the original fire control selector shaft cut-out near the right rear of the receiver and follows with an all-over coat of crinkle-finish black paint. The stock's business-like

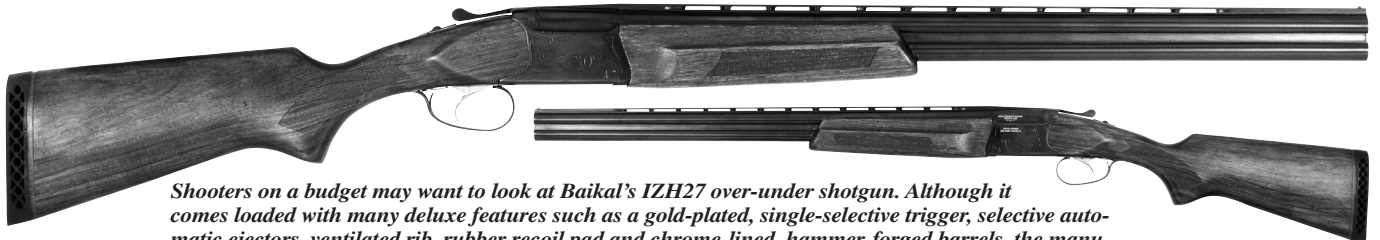
Our test rifle came with a rugged Aimpoint XD sight with a 3 m.o.a. dot well suited for fast, instinctive firing.

appearance is capped off with a ribbed, non-slip rubber recoil pad fastened with standard M14-type hardware.

The Springfield M1A Scout rifle, while considerably heavier than a comparably equipped .223-cal. carbine, offers the advantage of extra downrange energy provided by the .308 Win. cartridge. It also offers the advantage over turnbolt-type Scout rifle systems of not requiring manual manipulation the action between shots, which may contribute to increased opportunities to concentrate on the target. With its handy length, quick sight acquisition, speed of operation, rugged design and acceptable accuracy, the rifle may well find niches with police patrol officers, ranchers and other shooters desiring a ready, rugged, powerful carbine. The M1A Scout proves that a classic design is worth adapting to new roles.



Baikal IZH27EM Over-Under



Shooters on a budget may want to look at Baikal's IZH27 over-under shotgun. Although it comes loaded with many deluxe features such as a gold-plated, single-selective trigger, selective automatic ejectors, ventilated rib, rubber recoil pad and chrome-lined, hammer-forged barrels, the manufacturer's suggested retail price is considerably less than that of many pumps or semi-automatics.

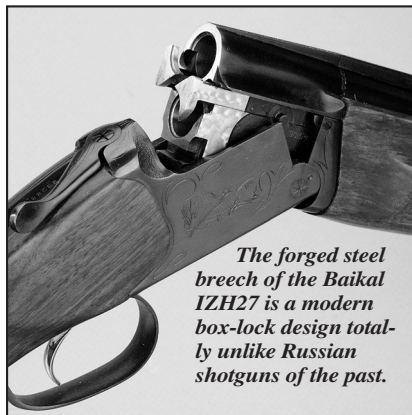
Spending \$1,300 or more to purchase an over-under shotgun remains a tough family decision for most shooters. One's tastes may lean toward an over-under, but most budgets dictate a pump-action or semi-automatic instead. Enter European American Armory, importers of the Russian-made Baikal over-under series of shotguns. With the Russian rouble at historic lows, Russian shotguns

offer genuine value at attractive prices.

First, it must be made clear that the new Baikal shotguns bear no relation to older models of Russian shotguns imported in earlier years. Gone is the indifferent workmanship, poor finish, out-of-date styling and overweight design. Today's Baikal shotguns are modern designs offering the features and handling American shooters expect from a good quality over-under. And

Baikal guns are backed with a one-year parts and labor warranty and a 30-day warranty on the wood. We received a Baikal IZH27 in 20 ga. for test and evaluation.

Picking up the IZH27 for the first time, one cannot help but notice standard equipment includes all the features shooters expect in an over-under shotgun. They include a gold-plated, single selective trigger; selective automatic ejectors; ventilated



The forged steel breech of the Baikal IZH27 is a modern box-lock design totally unlike Russian shotguns of the past.

rib; detachable, screw-in choke tubes; hammer-forged, chrome-lined barrels and a black rubber, ventilated recoil pad. Pride of ownership has not been neglected either—the IZH27 comes with modest game scene engraving on the receiver fences, scroll engraving on the top lever and fore-end mounting bracket, stippling on the breech top, and a walnut stock with cut, 18 line-per-inch, diamond-pattern checkering on both sides of the fore-end and pistol grip.

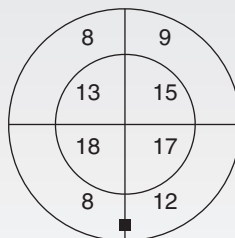
Mechanically, the IZH27 has a forged steel standing breech with a sliding locking piece and a steel monobloc with dual underlumps. The operational system is a conven-

tional box lock with a top lever, spring-retracted firing pins, an automatic tang safety and a mechanical trigger with an inertial blocking system. In addition, two unique features are found on this shotgun. The first is the method of selecting the barrel firing order. Breaking open the gun automatically resets the action to fire the lower barrel first. To change that, simply push the trigger forward until a click is heard and the upper barrel will fire first. The second unique feature is the method of setting the selective, automatic ejectors. They may be engaged or disconnected quickly by means two small screws located on the hinge mounts in the frame.

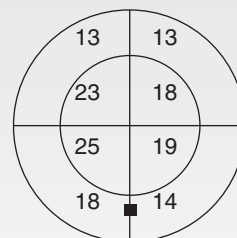
Baikal takes special pride in the quality of its hot hammer forged barrels which are silver-soldered in a machined-steel monobloc. Both barrels and detachable, screw-in choke tubes are compatible with steel shot. Bores and chambers are chrome-lined, and the space between the barrels is closed with a fixed, solid rib of blued steel. The .265"-dia. ventilated rib is grooved on the top surface to prevent glare. The fore-end is held on the lower barrel by means of a hanger and release lever that grips a lug on the underside of the lower barrel. Choke tubes are made in the U.S.A. by Colonial. Each IZH27 is delivered with improved cylinder, modified and full choke tubes and

SHOOTING RESULTS

AVERAGE OF 10 PATTERNS AT 40 YDS.



Modified Choke
Lower Barrel



Full Choke
Upper Barrel

■=Point of Hold

Winchester Xpert Light Field Load
20-ga., 2¾"—7/8 oz.—No. 7½ lead

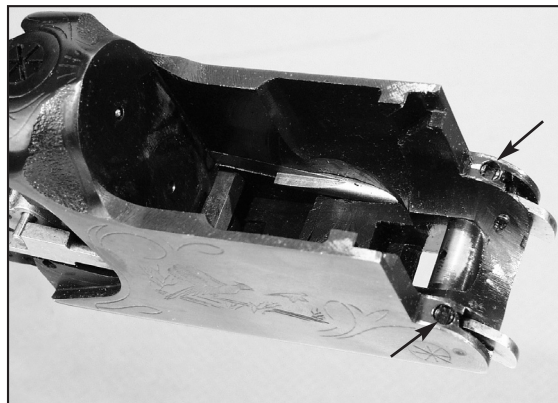
Average Pellet count—306

Measured Velocity @3-ft.—1167 f.p.s.

Remaining Energy Per Pellet @40 yds.: 1 ft.-lbs.

Recoil: 12.6 ft.-lbs

Total Hits	100 (33%)	Total Hits	143 (47%)
21" Inner Circle	63 (21%)	21" Inner Circle	85 (28%)
30" Outer Ring	37 (12%)	30" Outer Ring	58 (19%)



The receiver is of investment cast then machined steel. The selective automatic ejectors (arrows) may be engaged or disconnected via two screws at the receiver's front.

a choke tube wrench. Additional tubes in other constrictions are available from Colonial. IZH27 models in 16-ga., 28-ga. and .410-bore have fixed, integral chokes.

All steel parts are finished with a medium polish blue except the gold-plated trigger. Stock and fore-end have a semi-gloss oil

finish rather darker than normal. On our test gun, the quality of the polish and bluing on the metal parts was good. We found the engraving, while modest in coverage, was pleasing and lent an expensive flavor to the gun. Metal-to-metal fit was also good, however, wood-to-metal fit left considerable room for improvement. We also felt that while wood quality was above average for a shotgun in this price

BAIKAL IZH27EM

MANUFACTURER: Izhevsky
Mekhanichesky Zavod (Baikal),
8 Promyshlennaya St., Izhevsk
426063 Russia

IMPORTER: European American Armory
Corp. (Dept. AR), P.O. Box 1299,
Sharpes, FL 32959; (407) 639-4842

GAUGE: 12, 3"; 16, 2¾"; 20, 3" (tested);
28, 2¾" and .410-bore, 3"

ACTION TYPE: break-open, over-under,
box-lock with two under lumps

RECEIVER: machined from forged car-
bon steel

FINISH: medium polish blue with gold-
plated trigger, light engraving on
receiver fences

OVERALL LENGTH: 43½"

BARRELS: 26½" (tested) or 28½"
chrome-lined and hammer forged

WEIGHT: 7 lbs., 8 oz.

CHOKE SYSTEM: fixed integral in 16-,
28- and .410-bore; detachable,
Colonial TS screw-in choke tubes on
12- and 20-ga. models

SIGHTS: steel ventilated rib with grooved
upper surface, brass bead front sight

TRIGGER: single, selective, mechanical
with inertial block, 7-lb. pull

STOCK: walnut with semi-gloss finish;
length of pull: 14½", drop at heel, 1½";
drop at comb, 1½"

ACCESSORIES: improved cylinder,
modified and full choke tubes, choke
tube wrench

SUGGESTED RETAIL PRICE: \$419
(12-, 16- or 20-ga.), \$469 (28-ga. or
.410-bore)



The trigger is mechanical, and pushing forward on the trigger blade from behind when the gun is cocked allows the shooter to switch barrel selection to the upper barrel first.



Handling, balance and overall quality of the Baikal IZH27 are good, making this shotgun a solid value for shooters on a budget who want an over-under instead of a pump or semi-automatic.

range, the quality of the wood finish needed improvement. According to EAA, fixes to both these problems are well in hand. The ventilated recoil pad worked well, but fell short on appearance due to the fiber-reinforced resin mounting plate that resembled a wood insert.

We fired several hundred rounds of various types and brands of 12-ga., 2 $\frac{1}{4}$ " and 3" shotshells through the IZH27 without any problems. Extraction and ejection were flawless, and we found the trigger pull crisp but slightly heavy for our taste. In particular, we liked the fast, easy operation of the barrel selection system—simply push the trigger forward to switch barrel firing

order. The automatic tang safety worked smoothly and easily.

Over-unders are often difficult to break open when new and stiff. After the parts break in, they generally loosen up, but this may take several thousand rounds. Many female and youthful shooters will particularly relate to this situation. Interestingly, we found the IZH27 broke open smoothly and easily almost immediately—all the more unusual in view of the price.

Handling and balance of the Baikal IZH27 were judged good. Overall gun fit for a shooter of average build proved comfortable.

Our IZH27 in 20-ga. was built on a 12-ga. frame due to the 3" Magnum chambering. At first, we felt this might result in an overweight gun, but that did not prove to be the case. None of the test personnel felt the IZH27 to be overly heavy, and recoil proved mild.

We believe the features, price and value of the IZH27 will appeal to hunters who now own pump-action or semi-automatic shotguns and who were previously priced out of the over-under market. Also, experienced hunters looking for a value priced over-under field gun will appreciate the IZH27 as well. Either

way, Baikal's IZH27 is an entry level over-under shotgun of good quality for shooters on a limited budget.



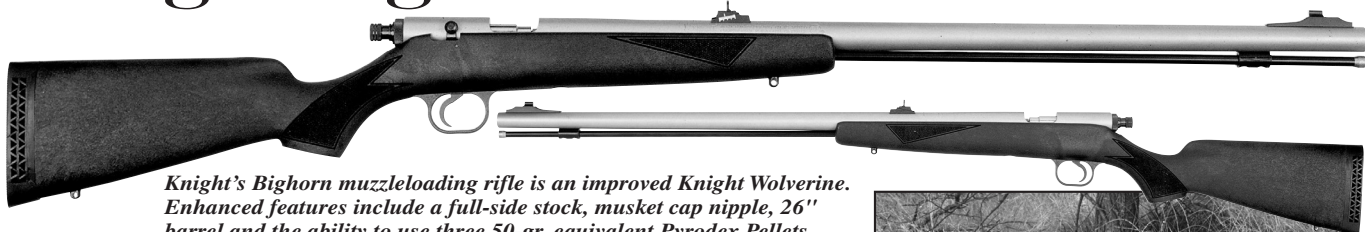
Baikal IZH94 Combo Rifle/Shotgun

Combination rifle/shotguns are intended for hunts where more than one type of game may be encountered. Until recently, such hunts were rare in the United States, which limited the sales appeal of such guns. The rebirth of turkey hunting changed that. Another factor has been the designation of deer hunting areas for rifles or for shotgun slugs only. Often, such areas are adjacent and hunters may hunt in both types of areas. Still another factor is a survival gun that can be broken down into a compact package for storage in aircraft or boats. And a combination rifle/shotgun just makes sense—ask Savage, which has offered its Model 24 combination gun to hunters for decades and Springfield, Inc., which sells its M6 Scout survival gun.

EAA targeted such markets with the Baikal IZH94 combination rifle/shotgun made in Russia. Built on a machined, forged steel receiver, the IZH94 features 24" chrome-lined, hammer-forged barrels, walnut stock, single selective trigger and adjustable metallic sights as well as a built-in scope mount. The upper barrel is chambered for 12-ga., 3" magnum shells and has detachable, screw-in choke tubes. The lower rifle barrel is offered in several popular American calibers such as .222 Rem., .223 Rem., .308 Win. and .30-'06 Sprg. In addition, several European calibers are offered such as 6.5x55 mm Swedish, 7x57R mm Mauser, 7x65R mm, 7.62x39 mm Soviet and 7.62x54R mm Russian. And, the importer advises more calibers are on the way.

But here is the best news—the manufacturer's suggested retail price of the IZH94 combination rifle/shotgun is approximately \$450.

Knight Bighorn Rifle



Knight's Bighorn muzzleloading rifle is an improved Knight Wolverine. Enhanced features include a full-side stock, musket cap nipple, 26" barrel and the ability to use three 50-gr. equivalent Pyrodex Pellets.

Knight's Bighorn magnum muzzleloading rifle represents the latest from Modern Muzzleloading, Inc.—the company that legitimized in-line muzzleloading rifles. The Bighorn can be thought of as an improvement of the already-successful Knight Wolverine. A full-side stock, the ability to handle loads of up to three 50/50 (.50-cal./50-grs. equivalent) Pyrodex Pellets and a longer 26" barrel for more complete combustion of heavy loads constitute the differences between the guns. The Big Horn is part of a new

generation of so-called "three-pellet" muzzleloading rifles.

Green Mountain makes the Big Horn's 26" stainless or blued steel barrel for Knight with a 1:28" twist. Eight grooves are about 1 $\frac{1}{2}$ times the width

Like every Knight rifle we have ever tested, the Bighorn is plenty accurate for hunting big game. Its accuracy and ease of operation make it suitable for hunters looking to expand their hunting opportunities.



of the shallow lands for easy loading of sabot bullets. A dished crown at the muzzle protects the origin of the rifling.

As with all Knight rifles, the barrel extends back to form an efficient and practical receiver. A removable stainless steel breech plug with a removable Red Hot musket cap nipple threads into the barrel just in front of a generous priming port. An optional Red Hot No. 11 nipple is included with each Bighorn. The entire top half of the receiver is milled away at the priming port for easy capping from either side of the rifle, even with a scope mounted over the receiver.

Five drilled and tapped holes allow easy mounting of scope bases or an optional receiver sight. Sights provided with the rifle consist of a sturdy, blackened, aluminum post front with white bead and blued steel, Williams-pattern semi-buckhorn rear fully adjustable for windage and elevation. Both sights are attached to the barrel with screws.

A heavy coil spring powers Knight's familiar cylindrical striker to fire either a musket cap or No. 11 percussion cap, depending on which nipple is selected. Cocking is by simply pulling the rear of the striker until the sear engages and an audible click is heard. The trigger unit is fully adjustable, and detailed instructions for doing so are provided in the owner's manual.

Dual safeties are one of the hallmarks of Knight rifles and the new Bighorn is



Cocking is by pulling back on the striker until the sear engages and an audible click is heard. Dual safeties consist of a trigger blocking lever on the right of the receiver, and a knurled ring at the rear of the striker that is turned down so the striker cannot fall far enough to hit the cap.

no exception. A conventional trigger-blocking safety operates by way of a lever on the right side of the receiver. A red, plastic insert inletted into the synthetic stock indicates the "fire" position. Additional safety is provided by turning down the knurled secondary safety ring at the rear of the striker. That ring blocks forward movement of the striker so it cannot move far enough forward to strike the cap on the nipple.

Stocks on the Big Horn are synthetic with molded-in checkering on the wrist and fore-end, 1"-thick, ventilated recoil pad and integral, steel quick-detachable sling swivel studs. Finish options available include black, Advantage or Mossy Oak Break-Up. Inside, the stock is molded precisely to mate with the recoil lug, as would be found with a good glass bedding job. A large flat spring secured by the front sling swivel mounting screw applies pressure against the ramrod for retention of that tool. A single thimble attached with screws to the underside of the barrel further aids retention of the ramrod. Unfortunately, this part is now plas-

SHOOTING RESULTS

.50 Caliber	Val. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Recoil (ft.-lbs.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
Hornady 300-gr. XTP 90-grs.* Pyrodex RS CCI musket caps	1183 Avg. 15 Sd	932	12.3	2.40	3.54	2.92
Knight 250-gr. Red Hot Three 50/50 Pyrodex Pellets CCI musket caps	1972 Avg. 23 Sd	2159	26.9	1.94	2.60	2.31
Lyman 335-gr. Shocker 100-grs.* Clean Shot CCI musket caps	1409 Avg. 22 Sd	1477	19.3	3.50	5.00	4.31
Average Extreme Spread:						3.18
Measured average velocity for 10 rounds from a 26" barrel. Range temperature: 72° F. Humidity: 68%. Accuracy for five consecutive, five-shot groups at 100 yds. from a sandbag. Abbreviations: Sd (standard deviation), XTP (Extreme Terminal Performance), * (by volume)						

tic, rather than metal as we have become used to on Knight rifles. It may keep costs down, but we don't have to like it.

We mounted a Leupold Vari-X III scope on the Bighorn and fired it for accuracy using pelletized and loose powder. Like every Knight rifle we have ever tested, accuracy was good, especially with Knight's all-copper, sabot Red Hot bullets.

While the increased barrel length provides a little more velocity, it does make the Bighorn muzzle heavy. Carrying the sample Bighorn afield with rifle slung over the right shoulder with the muzzle pointed up usually resulted with the butt of the gun swinging forward, which made carrying the Bighorn afield awkward. We found that using a sling with a rubberized or coarse suede shoulder pad helped keep the muzzleloader in place.

The Knight Bighorn offers the same efficient and simple design of the proven Wolverine. It adds to that a full-side stock, increased power for enhanced performance and the choice of musket cap or No. 11 percussion cap ignition. Its accuracy and ease of operation make it suitable for hunters looking for a new muzzleloader to expand their hunting opportunities.



KNIGHT BIGHORN

MANUFACTURER: Knight Rifles
(Dept. AR), 21852 Highway J-46,
Centerville, IA 52544;
(515) 856-2626

CALIBER: .50

ACTION TYPE: in-line, percussion muzzleloader

RECEIVER: chrome moly or stainless steel

FINISH: blued or natural stainless steel

OVERALL LENGTH: 45"

BARREL: Green Mountain 22", 26" (tested)

RIFLING: conventional eight-groove,
1:28" RH twist

SIGHTS: White bead on post front,
Williams-style, fully adjustable semi-buckhorn rear

TRIGGER: single stage, adjustable,
5/8-lb. pull

WEIGHT: 7 lbs., 5 ozs.

STOCK: synthetic: black, Advantage or Mossy Oak Break-Up: length of pull, 14 1/4"; drop at heel, 15/16"; drop at comb, 13/16"

ACCESSORIES: instructional video, combo tool, Allen wrench, cleaning jag with extension

SUGGESTED RETAIL PRICE: \$330 to \$470



As with all Knight rifles, the barrel extends back to form an efficient and practical receiver. That results in a relatively compact overall length of 45" with the 26" barrel. Accuracy at 100 yds. was good, especially with the all-copper sabot Red Hot bullets.