

Ruger Bird's Head Vaquero Revolver



RUGER VAQUERO

MANUFACTURER: Sturm, Ruger & Co. (Dept. AR), 200 Ruger Road, Prescott, AZ 86301; (928) 541-8820; www.ruger-firearms.com

CALIBER: .45 Colt

ACTION TYPE: single-action center-fire revolver

FRAME: color case-hardened investment cast carbon steel or high-polish stainless steel

BARREL: blued or stainless 3 3/4"

RIFLING: six-groove, 1:16" RH twist

CYLINDER CAPACITY: six
SIGHTS: fixed, blade front; notch in slot rear

TRIGGER: single-action, 3 1/2 lbs. pull

OVERALL LENGTH: 9 1/2"

WIDTH: 1 1/2"

HEIGHT: 5 1/4"

WEIGHT: 38 ozs.

ACCESSORIES: plastic carry case, trigger lock

SUGGESTED RETAIL PRICE: \$576

According to the Single Action Shooting Society (SASS), Cowboy Action shooting (CAS) is the fastest growing shooting sport in America. Cowboy Action competition requires entrants to use a Western-style, single-action center-fire revolver of at least .32 caliber. At most CAS shoots, approximately half the competitors pack Ruger single-action revolvers, with the Vaquero far and away the most popular choice. In 2002, Ruger expanded the Vaquero line with a new model that will surely have strong appeal for Cowboy Action competitors. Called the Bird's Head Vaquero, this new model combines a standard Vaquero frame and cylinder with a short, 3 3/4" barrel and a "bird's head" grip frame with smooth,

black stocks. While the Single Action Army was never offered by Colt with a bird's head grip, the double-action Colt Lightning and Thunderer revolvers were made with a bird's head frame, and that shape has become extremely popular with today's cowboy shooters. Offered only in .45 Colt, the Bird's Head Vaquero is relatively compact for a

large-bore revolver.

Bird's Head Vaqueros are available in traditional carbon steel with a blued finish and a color case-hardened frame or in high-polish stainless steel that looks very much like a nickel-plated finish. Sights are in keeping with Western tradition as well—namely a fixed blade front sight and a rear sight consisting of a notch in a slot



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cut into the top strap.

Ruger developed the original Vaquero for modern cowboys, and the design has proven to be a very rugged and reliable single-action six-gun. All versions of the Vaquero, including the new Bird's

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

.45 Colt Cartridge	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Group Size In Inches		
			Smallest	Largest	Average
Winchester CB45C 250-gr. LRN	687 Avg. 9 Sd	262	1.66	6.30	3.10
Federal C45LCA 225-gr. SWCHP	819 Avg. 38 Sd	335	2.77	4.4	3.34
PMC 45 CA 250-gr. LRN	741 Avg. 11 Sd	305	2.67	6.29	4.95
Average Extreme Spread:					3.80

Measured average velocity for 10 rounds from a 3¾" barrel. Range temperature: 73°F. Humidity: 31%. Accuracy for five consecutive, five-shot groups at 25 yds. from a sandbag. Abbreviations: LRN, (lead round-nose), Sd (standard deviation), SWCHP (semi-wadcutter hollow point).

Head model, are built with coil springs rather than leaf springs and employ a modern transfer bar safety system—making these guns safe to carry with the hammer down and all six chambers loaded. With this safety system, the hammer cannot reach the firing pin unless the trigger is pulled. Pulling the trigger releases the transfer bar to snap into position where it transfers the blow of the hammer to the firing pin.

Due to the abbreviated barrel, the base pin of the Ruger Bird's Head Vaquero is about 1" shorter than those found on standard, longer-barreled Vaqueros. The pin has a large, flat head that proved easy to remove for cleaning and routine maintenance. The ejector rod on the Bird's Head Vaquero is also shorter than those on standard Vaqueros. When pushed to its rearward limit, the ejector rod does

not push fired cases fully clear of the cylinder. However, we found that pointing the gun's muzzle upward while unloading allowed the fired cases to fall clear.

We fired the Bird's Head Vaquero for accuracy from a sandbag rest with three different brands of factory .45 Colt ammunition. The revolver proved capable of shooting five-shot groups averaging around 3¾" extreme spread, which we judged very good for a short-barreled revolver. Groups were consistently about 2" left of center and right on point of aim. Right out of the box, the test gun sights were regulated well enough with factory ammunition for the large, close-range targets used in CAS competition.

When shooting full power factory loads, the Bird's Head Vaquero barks with authority, but remains controllable and comfortable to shoot. When firing



The transfer bar safety system prevents the hammer from reaching the firing pin unless the trigger has been pulled (1). The ejector rod is nearly 1" shorter than on standard Vaqueros and does not push fired cases fully clear of the cylinder (below).



Cocking the Bird's Head Vaquero causes the fire-control mechanism to make multiple, audible clicks that are sure to please tradition-minded Vaquero customers.

the mild, lead bullet handloads popular with CAS competitors, we found the Bird's Head exceptionally pleasant to shoot, and bullet impact points very near point of aim at 25 yds. As expected, the short barrel produced muzzle velocities lower than catalog figures with factory ammunition normally fired from longer barrels. We found this discrepancy amounted to about 10 percent of catalog muzzle velocity: about 80 f.p.s. with Federal ammunition and 60 f.p.s. with Winchester factory ammunition. The reduced muzzle velocities did not have any effect on the vertical point of bullet impact at 25 yds. Nonetheless, light handloads that barely meet the SASS requirements of 650 f.p.s. minimum in longer-barreled revolvers should be checked in the Bird's Head Vaquero and adjusted upward if necessary.

We found the stainless steel sights hard to see and difficult to align properly in bright light. Blackening the sights helped consider-

ably. Although the front blade is of sufficient width for a clean sight picture, the small notch rear sight was difficult for some older shooters to use and prompted younger shooters to wonder how shootists in the "Old West" hit anything. Trigger pull was long with considerable take up, but a crisp break measured at about 3½ lbs. When cocking, the fire control mechanism makes multiple, audible clicks that are sure to please tradition-minded Vaquero customers.

We experienced no malfunctions whatsoever in our tests. Despite its compact dimensions, the revolver balances well, and the grip is comfortable. Shooters with small hands will especially appreciate this model.

Ruger's new Bird's Head Vaquero revolver combines tradition, reliability, safety and a modest price to offer real value to shooters seeking a Western-style, single-action revolver for CAS events.





FABARM Paradox Over-Under

FABARM recently resurrected the Paradox name with its Paradox Lion over-under field shotgun. Available in 12 or 20 ga., both with 3" chambers, the lower barrel of these

shotguns is rifled for the last 6" in the Paradox tradition. However, unlike the Paradox ball and shot shotguns of a century ago, the FABARM Paradox shotgun is not intended for shoot-

ing slugs. Rather, the FABARM is intended for hunting fast game birds such as dove, quail, rail or other small game at close ranges. The slow rate of twist rifling in the lower, fixed choke barrel is designed to open the pattern quickly but evenly for fast, close-in shots. We recently received a 20-ga. Paradox Lion for NRA test and evaluation.

Paradox Lion barrels are 23 $\frac{3}{8}$ " in length with a ventilated mid-rib between the barrels and a 0.25" diameter ventilated, steel top rib. Mounted on the rib are a high-visibility, fiber-optic red front bar sight and brass mid-rib bead. The chrome-lined, smoothbore upper barrel has FABARM's Tribore three diameter bore contour system with interchangeable, screw-in choke tubes. The chrome-

The lower barrel of the Paradox Lion is rifled (l.) for the last 6" to open patterns evenly and quickly. The steel monobloc has two lumps—the rearmost having a bite for the sliding locking piece in the bottom of the standing breech in classic Browning fashion (below l.). The casehardened finish contrasts nicely with the high-polish blue barrels and gold-plated trigger (below).



FABARM PARADOX

MANUFACTURER: FABARM S.p.A., 31 Via Averolda, I-25039 Travagliato, Italy
IMPORTER: Heckler & Koch, Inc. (Dept. AR), 21480 Pacific Blvd., Sterling, VA 20166; (703) 450-1900; www.hecklerkoch-usa.com
GAUGE: 12, 3"; 20, 3"(tested)
ACTION TYPE: boxlock over-under shotgun
RECEIVER: casehardened alloy steel
BARRELS: blued, 23 $\frac{3}{8}$ ", chrome-lined, Tribore upper, Paradox rifling lower with red fiber-optic front and brass mid bead
CHOKES: interchangeable, screw-in choke tubes upper barrel only: full, modified, improved cylinder
TRIGGER: single, selective: 5 $\frac{3}{4}$ lbs. pull upper; 6 $\frac{1}{4}$ lbs. pull lower
STOCK: oil-finished walnut: length of pull, 14 $\frac{1}{2}$ "; drop at heel, 2 $\frac{1}{2}$ "; drop at comb, 1 $\frac{1}{2}$ "
OVERALL LENGTH: 41"
WEIGHT: 6 lbs., 5 ozs.
SUGGESTED RETAIL PRICE: \$1,199



SHOOTING RESULTS

AVERAGE OF 10 PATTERNS AT 40 YDS.



Improved Cylinder Choke



Paradox Choke

■ = Point of Hold

Federal Field Load AE20F
20-ga., 2 $\frac{3}{4}$ ", 1-oz. No. 6 Lead Copper Plated
Average Pellet count: 222
Measured Velocity @ 3 ft.: 1175 f.p.s.

Total Hits	81 (36%)	Total Hits	58 (26%)
21" Inner Circle	45 (20%)	21" Inner Circle	31 (14%)
30" Outer Ring	37 (17%)	30" Outer Ring	27 (12%)

lined lower barrel is rifled for approximately the last 6" with six lands having a right hand twist of approximately 1:28".

Selective, automatic ejectors are standard, and both alloy steel barrels are silver-soldered into a steel monobloc with two lumps—the rearmost having a bite for the sliding locking piece in the bottom of the standing breech in classic Browning fashion. The trigger is a single-selective type with a selector switch on the sliding safety button. The safety is non-automatic and blocks the sears. There are also inertia blocks in the fire control system that prevent doubling by using recoil to reset the sear of the

unfired barrel.

Both barrels and the trigger guard are finished with a high-polish blue while the receiver has a casehardened finish. Light fleur-de-lis engraving embellishes the bottom of the trigger guard, top lever, monobloc and receiver sides and bottom. The trigger is gold-plated for contrast and there is a small gold lion escutcheon in the bottom of the receiver. The overall result is tasteful, yet different, as casehardened finishes are somewhat unusual on modern, over-under shotguns. We found the wood-to-metal fit evenly proud around the upper and lower tangs, but level on the receiver sides. Blueing and polish

The FABARM Paradox sports an attractive casehardened receiver—a feature being seen more often on modern over-under shotguns—and a schnabel fore-end tip.

were even and attractive; the crosshatching on the upper surface of the ventilated rib was particularly well done and the rib itself was perfectly flat and straight.

High-grade walnut with a semi-gloss finish is used to stock Paradox Lion shotguns. The fore-end has a very distinctive schnabel on the front end and the butt stock has a full pistol grip. Checkering is of the cut type with 22 lines-per-inch of a flat diamond pattern with a double border on both the fore-end and pistol grip. A soft, black rubber recoil pad is standard as are front and rear quick detachable sling swivel studs. A Wundhammer swell on the right side of the pistol grip will find favor with right-handed shooters.

The Paradox Lion balances approximately 1" behind the pivot pin in the receiver. This is somewhat behind the balance point of many over-under shotguns, but it makes for a more lively gun that dove shooters prefer. Indeed, we found the FABARM Lion had very fast handling with excellent balance. Perceived recoil with field and target loads proved moderate, however,

recoil with magnum loads—especially with 3" loads—was very heavy. In this connection, we suggest FABARM consider porting both barrels of the Paradox Lion to reduce recoil and speed recovery for a second shot.

Paradox barrels as offered by FABARM are intended to offer open choke or improved cylinder performance with shot loads as the rifled section has no choke and the twist rate is not fast enough to impart sufficient spin to blow the patterns. To test this, we patterned the lower, Paradox-rifled barrel with the same shot load as the upper barrel with the improved cylinder choke tube installed, then compared the two in the accompanying table. Both offered open choke performance; however, the lower, Paradox-rifled barrel opened up the pattern evenly an additional 10 percentage points. This would prove a big advantage on close, fast targets.

The FABARM Paradox Lion shotgun re-opens an old, but proven, perspective on fast-handling, over-under field shotguns that will have appeal to dove, quail, rail or small game hunters.



The Paradox sports a high-visibility, fiber-optic red front bead and a brass, mid-rib bead on its ventilated steel rib.



Gamo Multi-Shot Air Rifle

Airguns have always been attractive to shooting enthusiasts interested in low-cost marksmanship practice or shooting fun at home in a garage or basement. Since airguns produce little noise and even less recoil, they allow a shooter to focus on shooting fundamentals, such as breath and trigger control or sight picture and alignment, or specific techniques such as position or weak-hand shooting.

Gamo has made a strong presence in this market by focusing on special-purpose airguns, such as those that match the profile of standard firearms or high-velocity models for plinking or hunting. Recently we received the new Multi-Shot air rifle for testing. The Multi-Shot features an eight-shot repeating system consistent with its name paired with

break-barrel, single-cocking operation.

As the action is opened, a steel arm on the left side of the receiver rotates the cylindrical magazine. The magazine is removed by depressing the projections on both sides and pulling upward after the action is opened. An arrow molded into the face of the magazine indicates its clockwise rotation. For single loading, one must place a pellet or steel air rifle shot in the cylinder at the 12 o'clock position, since the magazine rotates when the action is opened. The Multi-Shot cannot be loaded or fired without the magazine because its absence creates a gap between the cylinder and the bore.

Although the magazine capacity is eight rounds, the action must be opened after every shot to re-set the trigger, cock the action and compress the piston spring in the air cylinder

whose energy drives the pellet downrange. Gamo lists the Multi-Shot's cocking effort as 33 lbs.

With a length of 17½", the barrel is made up of an inner rifled steel sleeve 1/4" in diameter that is bonded to a black synthetic shroud running the full length of the bore.

The Multi-Shot's sights feature contrasting colored fiber-optic inserts in both front and rear units. The front assembly is a fixed post with a 0.4 mm diameter red insert. Slightly larger, yellow, 0.6 mm diameter inserts enhance the rear U-notch. The rear unit is finger-adjustable for windage and elevation via knobs on its top and left side. Additionally, the Multi-Shot's receiver is grooved for the attachment of a scope and is provided with a scope stop to help prevent rearward scope slippage.

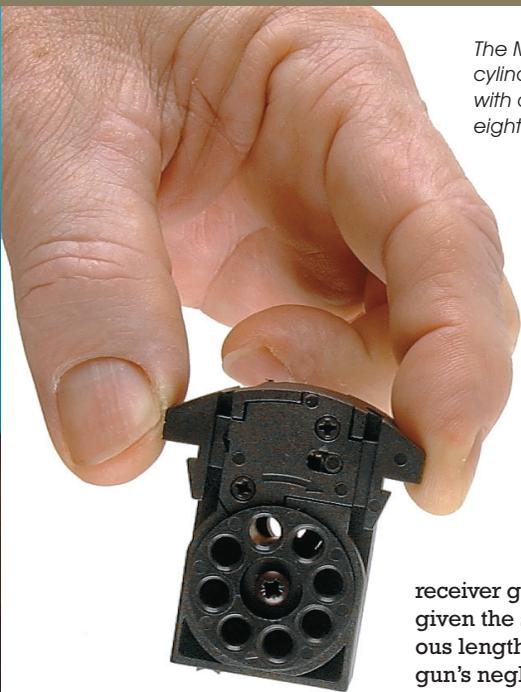
For the stock, Gamo chose beech hardwood

GAMO MULTI-SHOT

MANUFACTURER: Gamo Industrias S.A., P.O. Box 16, Barcelona, Spain E-08830
IMPORTER: Gamo USA (Dept. AR), 3911 S.W. 47th Ave., Suite 914, Fort Lauderdale, FL 33314; (954) 581-5822; www.gamo.com
CALIBER: .177
ACTION TYPE: break-action, single-cocking air rifle
RECEIVER: blued tubular carbon steel
BARREL: 17½" blued steel
RIFLING: 12-groove, 1:9" RH twist
MAGAZINE: eight-round synthetic cylinder
SIGHTS: fixed front post, adjustable U-notch rear with fiber-optic inserts, receiver grooved for scope attachment
TRIGGER: two-stage adjustable, 4½ lbs. pull
STOCK: length of pull, 13½"; drop at heel, 1½"; drop at comb, 1½"
OVERALL LENGTH: 43"
WEIGHT: 6 lbs., 7 ozs.
ACCESSORIES: scope stop
SUGGESTED RETAIL PRICE: \$189

with a satin oil finish. Its bulky dimensions and silhouette are a significant aid to better offhand shooting. Contours for the stock include a pronounced pistol grip, raised Monte-Carlo cheekpiece and a hard rubber buttplate that is curved so that the toe is more pronounced than the heel.

The Multi-Shot's manual



The Multi-Shot has a cylindrical magazine with a capacity of eight rounds.

safety consists of a finger lever inside the trigger guard just forward of the trigger blade. An "F" and an "S" molded into the bottom, the trigger guard provide the shooter with a visual index of the safety's condition. Just behind the safety lever is the trigger blade with a gently curved contour and smooth face. The trigger is a two-stage design adjustable via a Phillips head screw mounted flush to the bottom of the trigger assembly just behind the blade.

Take-up in the trigger of our test rifle proved to be a bit mushy and it broke at 4½-lbs.-pull with minimal overtravel. For accuracy testing we attached a BSA CatsEye airgun scope to the Multi-Shot using the grooves on the receiver. There is no more than an inch or two of front to rear adjustment for eye relief in the Multi-Shot's

receiver grooves, but given the stock's generous length of pull and the gun's negligible recoil, short eye relief did not prove to be a problem in our testing. Gamo match and hunting pellets and also steel air rifle shot were used in our accuracy and velocity testing and pellets from Crossman and RWS tested for functioning as well. Results shown in the accompanying table are consistent with similar break-action air rifles we have tested in the past decade.

The eight-round magazine enhanced shooting pleasure by cutting down on reloading time and tedium. It eliminates the need to fish a tiny pellet or steel air rifle shot out of its container after every shot, and its capacity is generous enough that you would probably want to change or re-set targets once you've shot it dry. A 13½" length of pull makes the Multi-Shot an adult-

SHOOTING RESULTS

.177	Vel. @ 15' (f.p.s.)	Group Size in Inches		
		Smallest	Largest	Average
Gamo Match 7.5-gr FN	1163 Avg. 35 Sd	0.66	1.29	0.83
Gamo Hunter 7.7-gr. RN	1198 Avg. 38 Sd	0.79	1.53	1.14
Gamo Magnum 7.5-gr PTD	1297 Avg. 36 Sd	0.75	1.43	1.08
Average Extreme Spread:				1.02

Measured average velocity for 10 rounds from a 17½" barrel. Range temperature: 65° F. Humidity: 82%. Accuracy for five consecutive, five-shot groups at 10 yds. from a sandbag. Abbreviations: FN (flat-nose), RN (round-nose), PTD (pointed) ,Sd (standard deviation).



Gamo's Multi-Shot is a break-action airgun (bottom l.) that includes dial-adjustable sights (top l.), a screw-adjustable trigger (top r.) and a non-slip, synthetic buttplate (bottom r.).

sized airgun. Youths or small-statured shooters may find the gun bulky if not over-heavy. The Multi-Shot initially breaks open for cocking with little effort. Often the grip of shooter's hand was enough to release the barrel, but resistance increases so much that we found two hands were needed to finish the cocking stroke even with the gun braced

solidly against the shooter's leg or hip.

When looking at airguns, beauty is often in the eye of the beholder. Some can seem like overweight popguns and others like flimsy toys. But if you want a full-size airgun accurate enough for impromptu practice or casual shooting fun that is easy to load, the Multi-Shot may be just what you are looking for.



The bulk and power of Gamo's Multi-Shot make it an attractive airgun for adult shooters.