

Accurize it

by Greg Rodriguez

You don't have to spend a fortune to make "Ole Betsy" shoot better. Here are a couple of ways of fixing accuracy on a tight budget.



Though HCR only guarantees that each Harvester will group three rounds of factory ammunition under an inch, many shoot much better, as evidenced by this 0.256-inch group.

A few months ago, Matt Bettersworth of Hill Country Rifles (HCR) came out to the ranch to do a little hog hunting. When he arrived, I trotted out to his Chevy like I always do to see what kind of cool custom rifles he'd brought along. I was a bit disappointed to see that he'd only brought a few of the company's semi-custom Harvester rifles. But when he told me why, I couldn't fault his logic.

According to Bettersworth, HCR is very busy despite the tough economy. However, the firm has seen a shift in its business. Today, the bulk of the work consists of accuracy packages and semicustom Harvester rifles rather than full-blown custom rigs. The company still does a brisk custom business, but an increasing number of its customers are content to enhance their old deer rifles with a \$450 accuracy package, or they are choosing less expensive Harvesters over customs. Who can blame them? After all, both options are affordable and come with a sub-inch accuracy guarantee.

I spent some time that weekend interviewing Matt and discussing why HCR's accuracy packages work, as well as shooting two new additions to the Harvester line. Bettersworth also shared some easy accuracy fixes for folks on a tight budget.

HCR's Accurizing Package

Consistency is the key to accuracy, so Hill Country begins every accuracy package with a thorough inspection of the barrel and chamber with a Hawkeye bore scope. Headspace is carefully checked before lapping in the locking lugs to get them to lock up as close to even as possible. A crisp, light trigger pull is essential, so craftsmen also clean and tune the trigger.

Few people consider the importance of scope rings and bases in the accuracy equation, but poorly fitting scope rings or bases can keep even the best rifle from shooting up to its potential. For example, if the rear of your one-piece scope base doesn't sit flush on the receiver with the front side screwed down, it will stress your receiver once you torque it down. Hill Country's gunsmiths have seen many guns that wouldn't shoot with one-piece bases improve dramatically when fitted with a two-piece design. That's why they make sure each base fits level or they replace it with two-piece bases. They also lap the scope rings until they are perfectly concentric, further reducing stress on the receiver and the scope tube.

All those steps are important, but the key to Hill Country's success with accuracy packages is the way their gunsmiths pillar and glass bed receivers and bottom metal. Aluminum pillars are used to give strength and rigidity, and the receiver is glass bedded from the tang all the way to the recoil lug to keep the action locked in place. Bedding the bottom metal keeps it square with the receiver and further minimizes the effects of torque. This bedding, combined with a re-cut barrel crown and free-floated barrel, helps every accurized rifle meet HCR's demanding three-shot, sub-inch accuracy guarantee with factory ammunition.

The Harvester Line

Each Harvester starts life as a factory rifle (usually a Remington 700 XCR, PSS, or SPS). The Hill Country guys then discard the factory stock and perform their complete accuracy package, which includes bedding the barreled action into a new McMillan stock. The result is an attractive rifle that shoots about as well as a custom but costs significantly less.

The Harvester doesn't offer the flexibility you get with a full custom gun, but you can get a shorter barrel, and you can specify the length of pull and stock color or camo pattern of your choice. Harvester rifles won't appeal to benchrest shooters, but they have everything a hunter needs.



The HCR Harvester is great for hunters. Here, HCR's Matt Betterworth shows off a fine Texas boar he took with a Harvester rifle in .270.

If you're an accuracy fanatic, don't be put off by HCR's sub-inch accuracy guarantee. Most of the Harvesters I've seen shoot well under an inch. In fact, the three Betterworth brought averaged under a half-inch, and my old 7mm-08 Harvester shoots right at a half-inch. Over the years, I've shot enough Harvesters to know such accuracy isn't unusual.

The three rifles Betterworth brought to the ranch represented the current Harvester line: a standard Harvester, a Harvester Safari, and a Tactical Harvester.

The standard Harvester was built on a Remington 700 XCR in .270 Winchester. Though the \$1,895 rifle came from the factory with Remington's Trinite coating, the test rifle was finished in an optional black Cerakote and topped with a Swarovski Z5 3.5-18X scope in Leupold mounts. Its test target measured an impressive 0.256 inch with Federal's 140-grain Barnes TSX load.

The .308 Tactical Harvester comes with a Cerakote finish and retails for \$2,295. The test gun was green, which matched the green in the GAP camo pattern of the rifle's McMillan A-5 stock. It started out as a Remington PSS with a 26-inch barrel, but HCR cut it down to an easy-to-handle 22 inches. It came ready to roll with a NightForce 20-MOA scope rail, NightForce rings, a 5.5-15X NightForce scope, and an optional Badger tactical bolt knob. The included test target, which measured 0.35 inch, was shot with Federal's 168-grain Match load.

The \$3,895 Harvester Safari is built on a Winchester Model 70 action that is tuned and ruggedized for dangerous-game hunting. The scope base mounting holes are drilled and tapped to accommodate beefier 8x40 screws, and the sights are replaced with NECG's excellent express-style rear sight and barrel band front. The sights are screwed and

soldered into place and regulated to hit dead-on at 50 yards with the client's preferred load.

Customers can choose McMillan's Winchester Supergrade stock with standard Sunnyhill bottom metal for a three-round magazine capacity or McMillan's Winchester Safari stock with Sunnyhill's drop box magazine assembly, which holds four rounds. A black Cerakote finish is standard. The .375 H&H test rifle came with a Swarovski Z6 1-6X scope mounted in Talley rings and bases and a test target that measured 0.420 inch with Federal's 300-grain Trophy Bonded Bear Claw load.

I spent the better part of an afternoon shooting targets from field positions at 100 yards with all three rifles. I worked the bolts briskly to simulate hunting conditions. All three rifles fed perfectly and shot groups consistent with their test targets at 100 yards. We shot the .308 out to 400 yards and had no trouble hitting my 6-inch MGM steel target with the Tactical Harvester in tough wind conditions.

Though my test was far from scientific, I've dealt with the guys at Hill Country Rifles since 1996, and I am confident that the accuracy and reliability of those guns was no fluke. Whether it's an inexpensive accuracy package, a Harvester rifle, or a full-blown custom rig, I've come to count on the guys at HCR to deliver that kind of accuracy and reliability.

Courtesy of www.shootingtimes.com