

The
VARMINT HUNTER[®]
Magazine



The Less-Than-One-MOA Mini-14

By Dave Biser

CALLING THE CRITTERS

I was sitting on the point of a juniper/pinon covered ridge, looking out across a sage flat that held a large population of cottontail rabbits. In summer and early fall there had been many more bunnies, but the dumb, the slow, and the unlucky had long since been recycled by the local predators.

I had carefully and quietly worked my way down through the small forest from the top of the mesa off which this ridge ran. My truck was parked back up on top. Daylight consisted of a slight brightness of the sky in the east, but the moon was up and in its gibbous form, so there was light enough to walk, if not quite enough to shoot.

I sat down and watched and listened to the shift change. The diurnal critters were stirring while the nocturnal ones were heading for cover or trying to grab one last bite before hitting the sack. As the sky in the east slowly brightened, a great horned owl let go with several hoots that very likely brought chills to the spines and terror to the hearts of every small mammal and bird in the area, and some not so small. The spooky hooter sent his question out into the dark again. From a couple of ridges away came a similar call, but with one less syllable – a female, letting hubby know where she was. There was no more noise out of the big guy behind me; he must have moved closer to his mate.

I had come here to try calling coyotes by, at least in part, howling like coyotes. I had been watching the Randy Anderson DVDs, "Calling All Coyotes," volumes I and II, and "The Verminators." These are some of the finest hunter training and entertainment programs I've ever watched. They are long – I believe "Calling All Coyotes I" and the "Vermigators" are about two hours each and "Calling All Coyotes II" is more than four hours. There is a great deal of hunting action. Instructions are broken down into simple concepts even a writer can understand. Best of all, Randy Anderson and his hunting buddies are real people on the programs. The programs show mistakes and missed shots as well as successes, and



The original Mini-14 Stainless Ranch Rifle looked like this (except for the scope) right out of the shipping carton.

the guys heckle and play jokes on each other like you or I would do with our friends. Finally, the concepts one learns from these programs really work.

Anderson, one of the most credible and well-liked coyote callers in the country, uses several different types of coyote howls to entice the little dogs to come to him. Depending on the situation and on the howls used, the coyotes come out of curiosity, the urge for social contact, the urge to whip some trespassing coyote's butt, the urge to mate with the new girl in the neighborhood, hunger, or whatever.

Often, Randy starts off a calling session with a series of different howls. The sequence and timing of these different howls are critical. If no coyotes show up in a reasonable time, Anderson often will switch to a rabbit or bird distress call. Once the coyote is within several hundred yards, Anderson will switch to rodent squeaks produced by

making a kissing sound on his hand. (Randy says that the best predator coaxer in the world is right on the end of your arm.) Usually, the idea is to give the resident coyotes the impression that one or more strangers are moving in on their territory. Often, sounds indicating that these interlopers are killing one of the local rabbits or prairie dogs is enough to close the deal. The residents can't abide some stranger dropping by and eating their food.

It was light enough to shoot when I spotted a big coyote coming up the ridge next to mine. He was across a small side canyon, perhaps 200 yards away, and traveling at an angle that would bring him closer to me as he climbed the ridge he was on. "Wow," I thought, "this howling stuff really works! I have one coming in, and I haven't even called yet."

As this clairvoyant coyote casually trotted up the ridge, pausing here and



The customized Mini-14 looks much the same as the original, but in many regards it is very different.

there to sniff out the places that might hold rodents, rabbits, or birds, I slowly turned to my right to get a better angle for shooting. I brought the short, heavy-barreled Ruger Mini-14 around slowly. It is stainless, but has a beautifully subdued finish. I've had no trouble with the rifle reflecting light and spooking animals. In the woods, it simply looks like a dead, weathered limb.

I tracked ahead of the coyote with the little 3-9x Burris Fullfield II scope. As the coyote approached an open area, I barked sharply, bringing the sound from deep down, near my diaphragm. The little dog stopped instantly and looked directly at me. The cross hairs settled on his shoulder, my right forefinger released the safety, and then settled on the wide, smooth trigger. When I squeezed the trigger, the rifle barked and the coyote rolled over onto his side, kicked a few times, and lay still.

THE RIFLE

Bill Ruger was not only a superior gun designer, he was a genius at creating the right rifles to fill neglected niches in the firearms market. If he was not doing that, he and his people (he also was uncommonly adept at surrounding himself with the best experts) were coming up with significant improvements to existing technology. Finally, Bill Ruger was also a man of great integrity and courage.

The Ruger No. 1 is a prime example of all these talents and characteristics. Mr. Ruger saw the open niche, the absence of a strong, high quality single-shot rifle. The older single-shot rifles, from Remington, Winchester, Sharps, and many others, had been dropped from production by their respective companies.

Ruger examined all the existing technology (such as the old Farquharson single-shot rifle action), but those venerable rifles were only a starting place. Externally, the Ruger No. 1 looks somewhat like the Farquharson rifles, but internally it is a greatly superior single-shot action unlike anything ever made before.

The introduction of the No. 1 took great courage; many of the experts around him told Ruger that no one would be interested in a single-shot, given all the great bolt actions on the market. They also cited the fact that most of the leading gun makers had discontinued their single-shot rifles. Ruger went ahead with the No. 1 project at great personal financial risk. He hired Lenard Brownell to oversee the design of the rifle. The results are history; the No. 1 has been and still is a phenomenal success.

The development of the Ruger Mini-14 required of Bill Ruger the same attributes as had that of the No. 1. Here again,

it was hard for anyone to be a visionary to see a significant niche in the market into which the Mini would fit. The most serious argument against bothering with the development of this gun was the fact that the U.S. Armed Forces had chosen a new carry rifle just a few years before. That slot likely would not be open again for decades to come. So the largest potential market was effectively closed.

The Mini-14 can trace its ancestry back to the venerable M1 rifle. That's not to say that it is a simple copy of the M1, M1 Carbine, or the Mini-14's direct ancestor, the M14. Its basic principles of operation are somewhat similar to and were inspired by the M1 and M14 rifles. But decreasing the size of the M14 rifle to accommodate the small .223 cartridge required several complex geometrical changes in the internal design. Also, parts that worked well in the M14 were not usable in the Mini, so other parts had to be invented and engineered to take their places.

It was a difficult task that took five years or more of hard work by many brilliant minds to accomplish.

The Mini-14 actually is a distant relative of the Russian-invented AK-47 and AKM firearms. Russian designers copied extensively from the M1's internal mechanisms, particularly the bolt and trigger assembly. The AK rifles are, like the Mini-14, extremely dependable.

Ruger's idea was to make a small, light M14-like rifle to fit the little .223 cartridge instead of the powerful and recoil-heavy .308 Winchester. Some years before, the bureaucrats finally had figured out (even a blind hog finds an occasional acorn) that their M14 was too heavy and powerful to be an effective combat gun.

The men who made the decision to adopt the M16 as the U.S. armed services standard rifle very well may have gone for the Mini-14, had it been available when they were making that decision. As Ruger once said after talking with one Colonel Studler, an official deeply involved in choosing ordnance for the U.S. armed services, "I have often said — and I know I am correct here — if we had brought the Mini-14 out five years earlier, it would have become the standard Army rifle." It was a considerable stretch for these battle-seasoned old officers to switch from the familiar M1 Garand-type action to the strange, new AR-15/M16. The Mini-14 would have seemed friendly and familiar. Several times, Bill Ruger had occasion to hand a Mini-14 to a seasoned old Army or Marine veteran. Invariably, these guys, who had cut their teeth on M1s, M1 Carbines, and M14s, would feel right at home with the little Ruger. They would slap it open, slap it closed, and fire away. No doubt Colonel Studler and his staff

would have had similar reactions to the Mini-14 rifle.

The Mini-14 first came out in commercial production in 1975. Prototypes had been around for testing from '71. The AC-556, with full auto and, later, three-shot burst capability, came out in 1976. A stainless steel Mini-14 appeared in 1978, the Ranch Rifle with side ejection and a receiver with integral scope mount bases, came along in 1982. The stainless Ranch Rifle was introduced in 1986, as was the Mini 30, a slightly more robust Mini-14 chambered for the 7.62x39mm cartridge. A few Ranch Rifles were chambered for the .222 cartridge in or around 1986, but most of those were sold overseas.

During the mid-1980s, the Ruger Company did considerable work on a rifle like the Mini-14, but chambered for the .308 Winchester cartridge. Mr. Ruger wanted it to be as dependable as the Mini-14 as well as extremely accurate. Prototypes were produced, but they didn't live up to Ruger's requirements. So far the .308 rifle, called the XGL, has not been released to the market. I don't know if they have completely abandoned this project, but a dependable, accurate, rugged, lightweight rifle chambered for the .308 cartridge would be highly interesting to medium to big game hunters. It might make a fine sniper rifle for law enforcement and military purposes, also.

The Mini-14 is considerably more popular among hunters of coyotes and other small- to medium-sized predators than most people realize. Two reasons are ruggedness and dependability, areas in which the Mini-14 excels over most other gas operated semiauto rifles. I believe the Mini-14 could pass most of the punishing tests that technicians have cooked up for Glock and Ruger semiauto pistols. I believe you could bury a Mini-14 in the mud, beat it across a fence post (or over the head of a pit bull), drop it from a helicopter, and leave it in the ocean for a month, freezing it in a block of ice after taking it out, and when you thawed it, it would still function perfectly. Oh yes, somewhere in that process, one should run over the tough little gun with a truck.



A trigger shoe was placed on the rifle by Accuracy Systems after their trigger job. The trigger now has a pull of 3.5 pounds, but with the extra leverage of the shoe, the pull feels more like 2.5 pounds. The wide, smooth trigger shoe feels great when one is shooting.

This is speaking of the action. To keep weight down, the Mini-14 is equipped with a light barrel. Here, portability and quick handling are the properties sought. The barrel might not make it through the above referenced tests without being bent.

The Mini-14 was never designed to be the most accurate rifle on the market. It was not designed as a match or prairie dog rifle. It was designed for agility, mobility, ruggedness, and dependability. It excels in all these areas.

Some owners go to great pains finding the best ammo for their guns and making small changes to enhance accuracy. One fellow whose article I read recommends glass bedding the barrel tightly in the stock to add support to and, in effect, stiffen the barrel. The next step, he says, is installing good sights or a scope. Finally, one should have a gunsmith hone the trigger components smooth. By doing this, some shooters achieve 1.5 MOA accuracy or better. That's probably good enough for most predator calling applications.

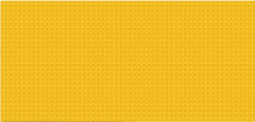
I recently read an article that claimed the Mini-14 is the ideal predator calling rifle. It was pretty convincing. I believe the Mini-14 is as good a choice for many situations as a predator caller could make. The Mini's dependable semiauto action is indeed an

advantage when calling coyotes or foxes. With the semiauto, one often can take more than one animal when more than one come in. This is not so much because of speed of firing the second and third shots, although the speed certainly is there. I think a bigger advantage is that one often can get off a second or third shot without spooking the critters at which he is shooting.

Animals do not always react to the sound of a gunshot by skeddaddling at Mach IV. Often, depending on the species, they stand in confusion, not knowing where the big noise came from. Nearly as often, they act as if nothing at all has taken place. This is less true of predators than of most herbivores, but occasionally it applies to predators.

The working of an action is different. That noise, much more easily pinpointed, will cause animals to flee more often than will the rifle's report. Too, there is the motion required to work said actions. This motion may well be detected by the quarry's sharp eyes.

With the Mini-14, the next round is loaded and ready before the sound of the previous shot has faded. Any noise made by the action is covered by the sound of the shot. Even if, as frequently happens, the predator spooks at the sound of the shot, often he is not so frightened as he would be if he lo-



cated you while you were working your bolt action. Often, a howl or a sudden bark will cause him to stop and look back long enough for a shot. A rodent squeal also may work for this.

The Mini-14 is great fun to shoot, whether the target is a can, a silhouette, a marmot, a prairie dog, a pit bull, a feral house cat, or a coyote. The little rifle will fire any old cheap ammo and never complain. It'll shoot dependably when the last several cleaning sessions have been forgotten, or when the temperature is well below zero. I believe it is as dependable as a gas-operated semiauto rifle can be.

The design of the Mini-14 is, like that of many Ruger guns, ingenious. One key to the toughness of this little gun, and to the fact that it continues to function so well under dirty and adverse conditions, is the design of the gas system. Instead of using a moving piston inside a stationary cylinder, as most gas operated firearms systems do, the Mini-14 uses a hollow, stationary piston and a moving cylinder that cleans itself with each shot. Unburned powder and other waste particles are blown out of this mobile cylinder and vented from the system, so the rifle continues

to function extremely well with minimal care. The breech bolt lockup is designed on similar principles as the old Garand system, but with several important improvements. The action is extremely strong and dependable. The extractor spring is very strong, making the failure to extract fired brass very unlikely. I cannot say this about any other gas-operated semiautomatic I have used, but I can't remember having ever seen a Mini-14 rifle jam.

There are various hypotheses flying around concerning the Mini-14's inability to shoot like a target rifle. The one that seems most credible has to do with the venting of gas to operate the action and the light barrel on the Mini-14. Like the barrels of most gas-operated semiautos, the barrel on the Mini-14 has a gas vent in the side that bleeds off a little jet of gas to work the action. As this gas exits the vent while the bullet is traveling down the barrel, it creates a force similar to a small rocket and oriented at a 90-degree angle to the barrel. This thrust, being perpendicular to the axis of the barrel, sets up waves of vibration in the barrel that are in addition to the waves created in any barrel when fired. To a much lesser extent, but

in a similar manner, the barrel is whipping back and forth somewhat like a fire hose when it is turned loose with the nozzle open. This barrel whipping seems to be the major factor that inhibits tack-driving accuracy in the Mini-14.

There are several ways to deal with the vibrations. One is to use the stock to support the barrel by tightly glass bedding it, as mentioned earlier. Another way is to install a harmonic stabilizer. Finally, one can install a heavy, stiff barrel, one that will resist being whipped back and forth. Any of these techniques will help, but to varying degrees depending on the quality of the work done.

Several gunsmithing firms around the country that work on semiautos are advertising some sort of harmonic stabilizer for the Mini-14 and Mini Thirty. These devices, which consist of a hollow metal cylinder, attach near the muzzle with the body of the cylinder enclosing, but not touching, the barrel back as far as the gas block.

The stabilizers work, I believe, in two ways. First, the extra weight out at the tip of the barrel, though not very heavy, adds to the inertia of the barrel and deadens vibration to some extent. I proved this, or more accurately, gathered a little supportive evidence, by clamping a weight to the muzzle of a stainless Ranch Rifle. This technique, though the weight was only about six ounces, and though the result was excruciatingly ugly, cut the size of the groups I was shooting by approximately 20 percent.

Second, the hollow, cylindrical part of the harmonic stabilizer sets up its own vibration when the shot is taken. If the hollow cylinder is designed correctly, the vibrations in the cylinder tend to cancel those in the barrel and minimize the effect. Accuracy Systems Inc. of Edgefield, South Carolina, the gunsmith I deal with, predicts groups in the 0.75" to 1.75" range, depending on the ammo used. For \$319.00, Accuracy Systems will true the barrel to make sure it is perfectly straight, shorten the barrel if desired, install their stabilizer, do an excellent trigger job, and install an extended magazine release. When they are finished, the rifle simply looks like it has a heavy barrel. A fringe benefit: the stabilizer significantly enhances the barrel's cooling ability.

Methods of attaching these harmonic stabilizers vary. Some are put on with Loctite. Others require threading

Custom Mini-14 Ballistics Charts

Factory Loads		
Load	Average Muzzle Velocity (FPS)	Average Group (100 yards)
Black Hills 52 HP	3,182	0.92"
Win. 40 BST	3,634	1.37"
Win. 45 J&P	3,461	0.61"
Rem. 50 Green BT	3,236	1.44"
PMC 52 HP	3,177	0.07"
Hornady 55 V-Max	3,148	0.61"
Hornady 40 V-Max	3,674	0.96"
Federal 55 NBT	3,177	0.81"
Federal 40 NBT	3,648	1.21"
Handloaded Ammunition		
Load	Average Muzzle Velocity (FPS)	Average Group (100 yards)
27.0 gr. H335/52-gr. Sierra BTHP	3,081	1.28"
27.9 gr. Win. 748/52-gr. Sierra BTHP	3,120	0.98"
25.5 gr. Win. 748/55-gr. V-Max	2,973	0.77"

the end of the barrel; the cylinder is then threaded on, followed by a locknut. Accuracy Systems machines the barrel so that the stabilizer becomes, for all intents and purposes, an integral part of the rifle. All these devices have one thing in common; they touch the gun only near the muzzle.

Installing a heavy barrel is more expensive than is installing a stabilizer, but greater accuracy is achievable. Accuracy Systems offers quite a variety of replacement barrels, from plain barrels slightly more stiff than the Ruger stock barrels to top of the line Douglas Stainless Ultra-Match Air-gauged Models worth hundreds of dollars just for the barrel. These barrels range in diameter from 0.750 to 1.000 inch.

A good trigger job always will enhance accuracy. Pillar bedding seats the receiver into the stock more solidly and increases accuracy also. A thicker, more robust recoil buffer, a small pad that sits behind the bolt and cushions the bolt's impact with the stock, quiets the action and decreases vibration. The point is that there are two or three major and many minor alterations that can be made to this fine little rifle, each of which has the potential of enhancing accuracy.

With the right barrel, three-point pillar bedding, a trigger job with enhancer shoe, a large gas block to fit the new barrel, a more robust recoil buffer, and a few other tweaks, a Mini-14 can be turned into a real tack driver. I decided that, liking the basic action and dependable performance of this fine little semiauto so much, I wanted to spend a few bucks and have a Mini-14 customized to the point where its accuracy would live up to its dependability and durability.

It was after quite a bit of research of the various gunsmithing firms out there that I decided to work with Accuracy Systems (803/813-0254). This gunsmithing firm, owned by Carl Emmite, specializes in, among other things, making Mini-14s and Mini Thirties shoot accurately. They also work with Remington Model 7400 semiautos, AR-15 type rifles, Remington Model 700 bolt-action rifles, and others. What I saw of their work appeared to be done with great care and skill. The work they did on my Mini-14 proved that to be true. Many of their custom Mini-14s and Thirties are guaranteed to fire sub-minute of angle groups. Mine certainly does that, and I did not buy their most accurate package.

The Mini-14 I sent to Accuracy Systems was a stainless Ranch Rifle with the black synthetic stock. From the first day, it never jammed or malfunctioned in any way. It shot groups in the 3 to 6 MOA range, depending on ammo. It seemed to like Hornady ammo, as groups with Hornady fodder averaged down near 3 inches, most of the time. Sometimes, I could not stay inside 5 or 6 inches, regardless of ammo. Careful

handloading may have helped this, but I did not take the time to try that, as I had acquired the rifle to have it customized. I shot three coyotes with it. All of those critters were shot at less than 100 yards, and two were less than 30 yards from the muzzle when the little rifle spoke. Right out of the box, the Mini-14 did its job perfectly. I could have continued to use it as a calling rifle indefinitely with never a regret. I simply wanted a Mini-14 that would drive tacks.

I pondered the options of harmonic stabilizer, mid priced barrel, or top of the line barrel. I finally decided to go top of the line. I requested the following changes: installation of a Douglas Stainless Ultra Match air-gauged stainless barrel, 0.750" in diameter with a 1 in 9" twist, 20 inches long, hand lapped, and with a crown. A 0.90" or 1" diameter barrel would have further enhanced accuracy, but I didn't want the extra weight. I also requested a 0.750" gas block, a full trigger job with a shoe added to the trigger (trigger pull is thus reduced to feel like about 2.5 pounds), and three-point pillar bedding. While Carl and company were working on the gun, I called and had them add a No. 10 Tactical carbon fiber stock with recoil pad to the order. This exceptionally light but stiff and durable stock is made by Bell and Carlson. The stock was not necessary, as the Ruger synthetic stock is

excellent; it's just that I had never had a gun customized before, other than installing trigger mechanisms or sights myself, so I wanted that premium stock. I also had Carl install a recoil buffer.

Carl Emmite is a good man to work with. He's extremely busy, but he's willing to talk, has abundant good information to share, and inspires tons of confidence. He's extremely conscientious regarding his work, and the quality of the work that comes from his shop shows that attitude. He and Chris and another employee were kind and patient as I made changes in midstream. They kept me reassured, though I had no idea what I was doing.

I had AS make my rifle look much like the original black-stocked Ranch Rifle, because I wanted a tough, hard working, practical gun that would be difficult for a predator to see, and that would not give me a coronary when I put a scratch on it.

If a shooter wants them to, these guys can turn out Mini-14s that are surprisingly beautiful. If you've never thought of a Mini-14 as a pretty gun, you'll think again when you see some of the guns Carl and his people have made with fancy laminated thumb-hole or target stocks. The work and the parts are not cheap, but you get back something really special. As a good friend of mine often says, "Dave, it costs only a little more to go first class."

When UPS delivered my rifle, I could not wait to shoot it. I cleaned it thoroughly, fitted it with a good scope, and bore sighted it. Taking cleaning supplies, a bunch of ammo, and some targets, I headed up into the desert. I set up a target at about 30 yards from my truck and proceeded into the seemingly endless shooting and cleaning, shooting and cleaning, shooting and cleaning of the barrel break-in process. I'm not completely convinced this is necessary, but Carl advocated it, so I thought I would go ahead, knowing he knows orders of magnitude more than I do about this stuff.

I have had two scopes on the Mini. The only scope I had available when the rifle was delivered was a Simmons Whitetail Classic 2.5-8x36. The Whitetail Classic is an outstanding scope for the price; Simmons outdid themselves when they contracted the manufacture of this scope. A friend of mine, Glen Fuller, owns a great gun and archery shop called East Main Trade in Farmington, New Mexico. Glen knows

shooting products as well as anyone I could name. Years ago, when the Simmons Whitetail Classic scopes were available, Glen recommended them to shooters who wanted a good scope, but who did not have the pesos for a Leupold or Burris.

With the Simmons scope, I sighted in the rifle to hit point of aim at about 30 yards. Had it been a big-game rifle, I would have sighted it in at 25 yards. This throws the bullet about 2 inches high at 100 yards, somewhere near dead on at 200, and about 7 or 8 inches low at 300, depending on bullet weight and muzzle velocity.

After I installed the Burris Fullfield II scope with the Ballistic Plex reticle, I sighted in the rifle to hit point of aim at 100 yards. According to my Burris chart for the .223 cartridge, I would be dead on at 200 yards with the first crosshair below the main one, about an inch high at 300 with the second crosshair down, 2 inches low at 400 yards with the next crosshair, and about 11 inches low at 500 with the bottom crosshair. I tested the gun for myself at various ranges, modifying the table as needed. The table was made for a load with a 55-grain bullet fired from a 24-inch barrel. I was shooting 52-grainers from a 20-inch barrel. The two differences must have cancelled each other out, because the little Burris Ballistic Plex chart was very close.

With the Mini-14, I really didn't care about anything over 300 yards, as the .223 does not have a lot of punch beyond 200 or 250, to my way of thinking. It's great for prairie poodles out to any range you can hit the little rascals, but a big, tough, muscular coyote is a different story. I like coyotes; I don't want to wound one and have him die a slow death any more than I would want to do that to an elk, deer, or turkey. I have a self-imposed, loose, and occasionally broken rule that mandates me not to shoot at coyotes much over 250 yards away with the .223.

I like the Burris Fullfield II scope with that Ballistic Plex reticle. The Ballistic Plex is quite easy to use, and it has the little charts to help you use the reticle with different cartridges and loads. Typically, you have to make your own chart for the load and rifle you are using, but the charts Burris furnishes with the scope give you a place to begin. The scope is a 3-9x40 with matte finish. It seems to be very well made.

To give this little scope a rough

and serious test, I loaned one of mine to a friend. This guy has a Remington Stainless Model 700 chambered for the .375 Remington Ultra Magnum. This beast is not all that far behind a .378 Weatherby. The guy was getting ready for a hunt in Alaska for moose, caribou, and bear. I figured if the scope could take the recoil of the .375 Ultra Mag and the wet cold of Alaska, most of us probably could depend on it for anything we are likely to do with it.

This friend, Lyle, lives to hunt. He's serious about his sport, and he kills a lot of game each year. Any firearm he carries is going to get a workout. Lending Lyle the scope helped him while giving me a chance to subject the scope to a great test at the hands of a very competent outdoorsman in a severely harsh environment.

The scope worked perfectly in Alaska. Lyle drug it along as he slogged through miles of tundra, almost always in a fairly hard drizzle. He killed quite a bit of game with the rig. The little glass never fogged, and it was always there, still zeroed in and clear as air, when he needed it. He liked it so well that when he returned he didn't want to take it off the rifle.

On that first day with the customized Mini-14, I was shooting across sandbags laid out on the hood of my pickup. I would have preferred a bench rest, but I don't always have access to one, and I was eager to see how this gun shot. I soon found out. At 30 yards, groups were one ragged hole.

I set up targets at a laser-measured 100 yards. Even over my truck mounted sandbags, I was staying below an inch most of the time. I could hardly believe having a gun I had liked so much in every other respect for so long finally shoot such tight little groups. The work Accuracy Systems had done on it had turned the little rifle from a very fine rifle into a truly splendid rifle.

If I were big on prairie dogging, groundhogging, or rockchucking, I would have Carl build a Mini-14 off the stainless Ranch Rifle with all the additions he installed in mine. I would, however, go heavier, with a 22"- or 24"-long, 1-inch diameter Douglas Ultra Match air-gauged stainless barrel. I would have the rifle equipped with one of those beautiful laminated thumb-hole stocks that Accuracy Systems offers. I would mount a good, high power tactical or target scope from Burris, Leupold, Nikon, Swarovski, or one of the other

fine optics companies out there. It also might have Accuracy Systems chamber this new rifle for the .204 Ruger cartridge or their Norma 6mm PPC offering. Any prairie poodle within 500 yards would be in grave danger, because if my little custom Mini-14 with its light stock and 20" long, 0.750" diameter barrel will shoot as well as it does, the heavier, longer, and fatter barreled rifle should be remarkable.

I shot the little gun often over the next few weeks, running several brands of factory ammo through it, as well as a few handloads. As Carl Emmite had predicted, the gun really likes Winchester 45-grain jacketed hollow-point commercial loads. Carl had included a box of this ammo with the rifle when he returned it to me, and it did shoot extremely well. It shot even better when I shot from a bench a few weeks later. I shot mostly Black Hills 52-grain match BTHP reloads, however, as I had a big supply of those and they shot quite well. They shot much more accurately than I could shoot under field conditions, even with a bipod.

THE REASON

On a clear, cool Thursday morning, I decided to take the Mini-14 and my Burris Signature 10x50 binocular for a little stroll. I drove to a place I like that has three different types of habitat and is not far from a fourth. In the higher places are groves of ponderosa pine intermixed with patches of Gambel oak. Here and there, in the relatively damp draws, are small patches of quaking aspen. Lower down, the vegetation turns gradually to ponderosa pines intermixed with piñons and then to piñons mixed with junipers. Lower yet, past the all-juniper level, one encounters large patches of big sagebrush. Beyond and around these, where farmers have reached with their irrigation pipes and ditches, one encounters lush green fields of alfalfa or grass and an occasional garden. Most of the irrigation water is in open ditches, and hundreds of Russian olive trees are invading those wet areas. There also are a few cottonwood trees.

The area is a wild animal magnet. Deer, turkeys, pheasants, quail, cottontail and jackrabbits, prairie dogs, voles, and various other bird, reptile, and amphibian species abound. Of course, with all that food around, there is no shortage of coyotes, bobcats, badgers, foxes, and an occasional mountain lion or black bear. Hawks too are abundant.

I took my FoxPro caller and hung it from the limb of a Gambel oak. I then walked about 40 yards downwind and sat against the trunk of a large ponderosa. I sat there for several minutes, then put on my face mask so as not to frighten the critters with ugly. I pushed a button on the FoxPro controller. The long, high-pitched notes of a coyote's interrogation call filled the air. I let the FoxPro howl a few times, then went quiet. From several hundred yards came a return call.

After trying to reason with these stubborn and overly smart coyotes by using several howls, I finally resorted to having my electronic coyotes kill an electronic jackrabbit. That rabbit just squalled his electronic head off, but no coyotes. They did howl several more times. They must have been liberals, as they seemed to have no interest in defending their homes and families. In desperation, I switched to a woodpecker distress call.

Ten or 12 minutes later, I saw a movement in the brush at about 60 or 70 yards, but I could not make it out. Then the image jumped out at me, clear as crystal. Right there in plain sight sat a small fox, but he looked different from



This is the Accuracy Systems gas block with sling swivel stud. Note the Douglas Premium Match Grade barrel and the matte gray finish, which is excellent for low visibility.

any fox I had seen. He was interested in a bird lunch, as he was looking in the direction of the FoxPro. I was surprised he had come in after all that coyote commotion, but there he sat, brazen as could be. "You could quickly be transformed into a pile of coyote do-do with that attitude and lack of caution," I thought. Oh well, his problem.

I watched the strange little fox through the binocular for two or three minutes. I was starting to think I was looking at a swift fox, a critter I knew about but had never encountered. At one time, swift and kit foxes were considered different species. The swift fox was *Vulpes macrotis*, and the kit fox was *Vulpes velox*. The taxonomy and ranges of these little dogs are confusing. Collectively, the two species, both of which are now considered subspecies of *Vulpes velox*, live in a sort of vast U-shaped range that begins in south-central Canada, drops down through the Midwest and Rocky Mountain states through West Texas, New Mexico, and Arizona into Mexico, west to the coast, and back north through much of California, Nevada, and Utah into southern Oregon and Idaho.

Swift and kit foxes have had a rough time in the last several decades,

because of habitat modification, road kills, increasing human populations and related development, unintentional poisoning as an accidental byproduct of rodent poisoning programs, and increasing populations of coyotes.

This little guy sort of resembled a gray fox, but he was even more dainty than that already graceful animal, and he was lighter in color over much of his body. His fur along the sides of his muzzle was dark. Near the line between the darker fur on his upper body and the nearly white on his belly, there were streaks of light rufus. Also, the ears seemed larger for the animal's size than are the ears of a typical gray fox.

The fox was starting to lose interest in the bird. I cut off the bird and started a rodent squeak by sucking in air between my upper incisors and my lower lip. This makes a higher pitched noise than kissing the palm of your hand, and some critters are fascinated by it. It sounds much like a chipmunk, small ground squirrel, vole, or mouse getting beaten and eaten.

Suddenly Mr. Fox was interested again. His attention turned my way. I kept it up, intermittently, leaving quiet periods in between series of squeaks. Foxy started to come toward me. He

was cautious; his behavior sort of reminded me of that of a bobcat. Perhaps he wanted to make sure there were no coyotes around. Good thinking.


I was back in the shade, well camouflaged, and the morning sun was shining in his eyes. He kept coming until he was about 15 yards away. Then he sat down, looking right at me. I was wishing I had a dead rat or bird lying out there for him to pick up. I'd wasted his trip. Finally I said in a normal conversational voice, "Nice day, huh?"

The fox instantly knew he'd been had. He got this frightened yet embarrassed look on his face (anthropomorphism), but I didn't get to see it for long. He was running like a scalded cheetah, making tracks for safer country. He still had the pedal to the metal when he went out of sight.

I had only a short time on the next stand, as it was getting late. The sun was getting high, and the critters would be less active than they had been earlier. I let the FoxPro do its rendition of an interrogation howl, those long, drawn-out almost squeaky sounds with a minimum of barking. I thought I would do that a few times, then go into something more insistent and controversial, from a coyote's point of view - a male challenge perhaps.

I didn't get the chance. Seconds after the FoxPro emitted the first interrogation howl, a coyote stood up and barked and howled back. He was about 250 yards out. "With this Burris and its Ballistic Plex reticle," I thought, "I can hit that critter right in the boiler room." It was not windy. As quickly as possible I adjusted the bipod and settled the 200-yard reticle atop the yodel dog's back. Still cooperating, he remained broadside to me. He rolled when the little Mini-14 barked.

His pelt was rubbed as one would expect this late in the winter, so I left him lay where he was. I would have

taken him to a friend who traps and works with furs, had he been fit. Carrying the little rifle in one hand and the FoxPro and bipod in the other, I strolled back to the truck. The binocular, hanging inside my jacket, gently pounded on my chest as I walked. It was bright now, and I had errands to run, work to do, I let out a sigh of satisfaction as I stopped to look over the good, wild country below. The sigh was mainly a reaction to the beauty and solitude, but a good part of it was because of the feel of the superb little rifle in my hand. 

MINI-14 DETAILS

- Model:** K-Mini-14/SRP, Mini-14 Stainless Ranch Rifle
- Caliber:** .223 Remington
- Metal finish:** Matte Stainless Steel
- Action:** Gas-operated semiauto with stationary hollow piston and mobile self-cleaning cylinder.
- Stock:** Black Synthetic
- Barrel Length:** 18.5 inches
- Rifling:** 6 grooves, 1 turn in 9"
- Safety:** Garand type on front of trigger guard
- Magazine:** 5 rounds, detachable box. Larger aftermarket

- magazines available.
- Overall Len.:** 37.3 inches
- Weight:** 6.75 pounds
- Sights:** Front, blade. Rear adjustable peep sight.
- Features:** 1" scope rings furnished with gun. Integral bases on receiver.
- MSRP:** \$770.00
- Manufacturer:** Sturm, Ruger & Co., Inc. Lacey Place Southport, CT 06890 (203) 256-3860 www.ruger-firearms.com

BURRIS FULLFIELD II DETAILS

- Model:** Barris Fullfield II 3-9x40, Matte finish, Ballistic Plex, #200162
- Overall Len.:** 12.2 inches
- Weight:** 13 ounces
- Features:** 1" one-piece tube, waterproof, click value 0.25 in. @ 100 yards, FOV ft. @ 1,000 yards = 35-13, Eye Relief 3.1-3.8
- Market Price:** \$230.00
- Manufacturer:** Barris Company 331 E. 8th Street Greeley, CO 80631 (970) 356-1670 www.burrisoptics.com

ACCURACY SYSTEMS

- Services:** Accuracy enhancement of the Mini 14, Mini 30, AR15, Rem. 7400 and 742, and the Rem. Model 700 bolt action. Other usual gunsmithing services. See Web site.
- Contact:** Accuracy Systems, Inc., Custom Gunsmithing 44 Republican Road Edgefield, South Carolina 29824 (803) 613-0452 www.accuracysystemsinc.com

FOXPRO SYSTEMS

- Products:** Light, compact, rugged electronic callers. Housed in a casing similar to 6-volt lantern. Excellent design and remote control. Sounds are changeable and recordable on chip. A chip holds 8, 16, or 32 calling sounds, depending on model. FoxPro has about 143 sounds available to record.
- MSRP:** Approximately \$200.00 and up.
- Contact:** FoxPro Systems 609 W. 4th Street Lewiston, PA 17044 (717) 248-2507 (866) 463-6977 www.gofoxpro.com