

# Load Development

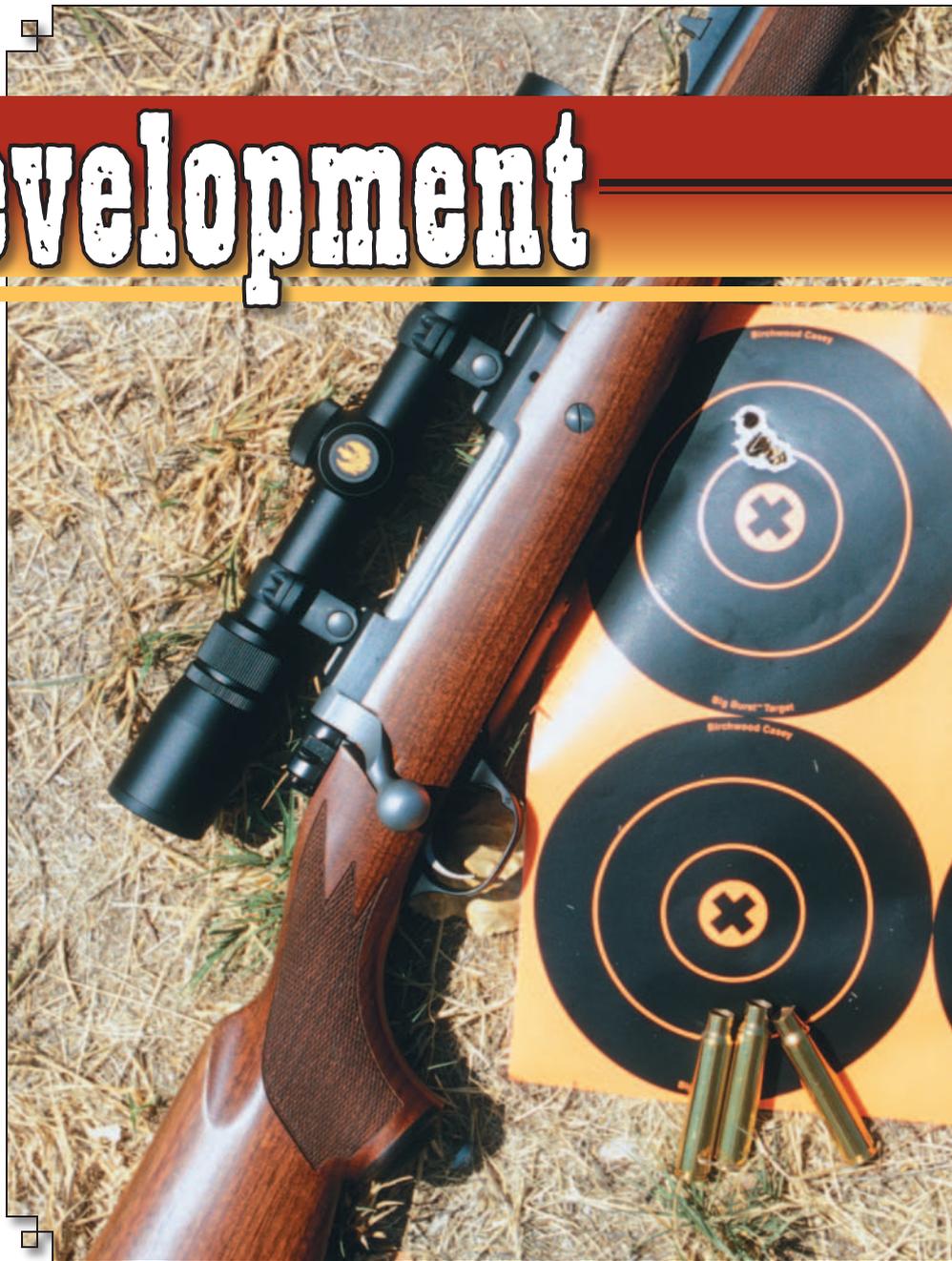
## Brian Pearce

Sturm, Ruger & Co. has once again teamed with Hornady Mfg. to offer a cartridge bearing its name, the .375 Ruger. The concept is sound – a beltless case that fits in a standard .30-06 length bolt action but offers performance that slightly exceeds the around-the-world proven .375 H&H Magnum. Through this development, Ruger has improved the Model 77 rifle. (More on that in a moment.)

The .375 H&H Magnum was first offered around 1912 and has become a standard among hunters taking large and dangerous game. It may be considered the .30-06 of Africa, where it regularly accounts for lion, buffalo, hippo, elephant and



*Brian used a Ruger Model 77 Hawkeye African version to develop loads for the .375 Ruger.*



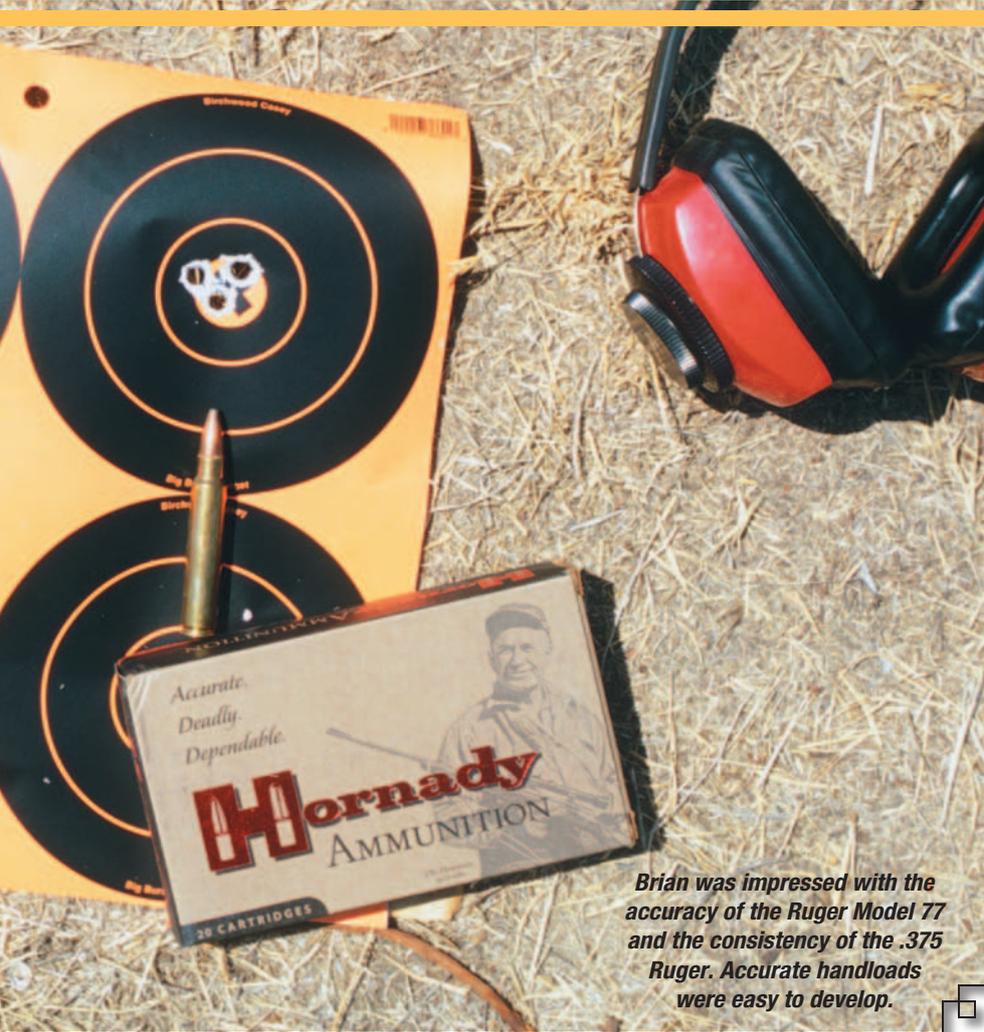
other dangerous game. Likewise it has been popular in Alaska for many decades, where brown bears and hunters occasionally tangle at close quarters, and a powerful cartridge capable of reliably ending fights is desirable. It's an excellent blend of caliber, bullet weight and velocity, yet offers a recoil level that can be mastered by most hunters. Although the average U.S. deer hunter may believe it is a big cartridge, it is not, being considered more of a "medium bore" by hunters of large game.

Although the .375 Ruger is being



*The .375 Ruger (middle) offers a slight performance edge over the .375 H&H Magnum (right) but has an overall cartridge length similar to a .30-06 (left).*

## Handloads for the .375 Ruger



*Brian was impressed with the accuracy of the Ruger Model 77 and the consistency of the .375 Ruger. Accurate handloads were easy to develop.*

*Industry specifications list a maximum cartridge length of 3.340 inches for the .375 Ruger, but Hornady factory ammunition measures 3.2470 inches.*

Model 77 Hawkeye rifle, I believe this combination is a real winner. I generally avoid comparisons, but the .375 Ruger will duplicate .375 H&H Magnum performance, using less powder (and in a rifle with shorter bolt travel making it less likely to end up in the shooter's face when cycling the bolt hard with the rifle on the shoulder). The folks at Hornady claim the .375 Ruger has a case capacity 6 percent greater than the H&H Magnum,



**Hornady Mfg. is currently offering 270- and 300-grain loads for the .375 Ruger. Through handloading, it was possible to duplicate factory load performance.**

touted as a “proprietary case,” it shares similar dimensions to the old Newton case. Regardless, it is of modern design and will easily handle its SAAMI maximum average pressure rating of 62,000 psi. According to Hornady’s “Maximum Cartridge” drawings, the rim and head measure .5320 inch, case length is 2.580 inches, while the shoulder angle is 30 degrees. Maximum overall loaded cartridge length is 3.340 inches.

Having worked with the new .375 Ruger and the new Ruger



**Powders that offer first-rate performance in the .30-06 and .375 H&H Magnum also give excellent results in the .375 Ruger.**

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and my water capacity measurements support this. Some may assume that .375 H&H data can be used with an additional 6 percent powder charge. **Do not attempt this, or dangerous pressures will probably result.** The shorter powder column utilizes powder differently, or what is commonly termed “more efficiently,” so charges are similar and sometimes less (especially with heavier bullets) in the .375 Ruger than the .375 H&H.

Nonetheless, the .375 Ruger can drive 270-grain bullets around 150 fps faster or 300-grain bullets around 100 fps more than traditional .375 H&H velocities with the same bullet weights. For reference the Hornady 270-grain factory load is advertised at 2,840 fps or the 300-grain roundnose at 2,660 fps. Velocities from the Ruger Model 77 African rifle with a 23-inch barrel clocked 2,859 and 2,745 fps, respectively. In terms of performance on game, there shouldn't be any practical differences between the .375 Ruger and the long-proven .375 H&H.

Handloading the .375 Ruger is straightforward. Be certain to adjust the sizing die to avoid pushing the 30-degree shoulder and “working” cases just forward of the head, which will lead to premature case separation. And keep cases trimmed within 2.580 inches to assure proper chambering. As previously stated the overall cartridge length is recom-



**The new Ruger Model 77 Hawkeye African rifle weighs less than 7½ pounds (without scope) and should prove an excellent rifle for field use. It has great handling characteristics.**

mended at 3.340 inches, maximum, but in using a variety of bullets to develop the accompanying data, they were seated to different depths to accommodate the differences in ogive profile. (The accompanying

When it comes to powder selection, there are many choices that will give excellent results. The same powders that have proven useful in the .375 H&H will work equally well in the .375 Ruger (or for that matter the .30-06). Examples include Hodgdon H-4350, H-4895, H-414, Varget, Alliant Reloder 15, Accurate Arms AAC-4350, Winchester 748 and others of similar burn rates.

When firing several hundred rounds over a chronograph, the .375 Ruger proved its excellent design by producing low extreme spreads. For example, the 270-grain Hor-



**Reloading dies are available from Hornady and RCBS, while Hornady also offers .375 Ruger cases to handloaders.**

Table II lists the length each bullet was seated.) It is also suggested to chamfer inside the case mouths, especially when using plain or flatbase bullets. If cases are not so prepared, bullets tend to hang up and can buckle the 30-degree shoulder when being seated.

None of the data in the accompanying table exceeded recommended industry pressure limits of 62,000 psi. All loads were developed using Hornady cases and capped with Federal 215 Large Rifle Magnum primers.

Table II	
<b>.375 Ruger Cartridge Overall Length</b>	
bullet (grains)	OAL (inches)
235 Barnes Triple-Shock flatbase	3.290
260 Nosler AccuBond	3.330
270 Barnes Triple-Shock	3.300
270 Speer spitzer boat-tail	3.340
270 Hornady Spire Point	3.305
285 Speer Grand Slam	3.300
300 Nosler Partition	3.290
300 Sierra spitzer boat-tail	3.320
300 Swift A-Frame	3.275
300 Hornady Spire Point boat-tail	3.305



**A variety of .375 bullets were used in the accompanying data.**

Table 1

**.375 Ruger Load Data**

bullet (grains)	powder	charge (grains)	velocity (fps)
235 Speer spitzer softpoint	H-380	80.0	2,815
		82.0	2,898
		84.0	2,990
	RL-15	74.0	2,814
		76.0	2,880
		78.0	2,950
260 Nosler AccuBond	H-4350	78.0	2,587
		80.0	2,645
		82.0	2,703
	RL-15	72.0	2,702
		74.0	2,769
		76.0	2,853
270 Barnes Triple-Shock	H-414	81.0	2,795
		83.0	2,851
		85.0*	2,912
	H-4895	68.0	2,637
		70.0	2,689
		72.0	2,747
	Varget	69.0	2,632
		71.0	2,670
		73.0	2,713
270 Speer spitzer boat-tail	AAC-4350	79.0	2,669
		81.0	2,722
		83.0	2,770
270 Hornady Spire Point	W-748	70.0	2,619
		72.0	2,667
		74.0	2,710
285 Speer Grand Slam	H-414	80.0	2,772
		82.0	2,820
		84.0*	2,880
	H-4350	79.0	2,593
		82.0	2,665
		83.5	2,707
300 Nosler Partition	H-4350	77.0	2,489
		79.0	2,545
		81.0	2,603
	RL-15	68.0	2,452
		70.0	2,510
		72.0	2,574
	H-414	76.0	2,643
		78.0	2,703
		80.0*	2,756
300 Sierra softpoint boat-tail	H-4350	75.0	2,486
		77.0	2,543
		79.0	2,603
		81.0	2,663
300 Swift A-Frame	H-4350	77.0	2,511
		79.0	2,577
		81.0	2,620
	H-414	78.0	2,701
300 Hornady Spire Point boat-tail	RL-15	68.0	2,477
		70.0	2,529
		72.0	2,588

\* Maximum, approach with caution.

**Notes:** A Ruger Model 77 Hawkeye African rifle with a 23-inch barrel was used to test the handloads. Hornady cases and Federal 215 Large Rifle Magnum primers were used throughout. Case length was 2.580 inches, and overall cartridge length was 3.340 inches. Maximum SAAMI pressure is 62,000 psi. Temperature during testing was 90 degrees Fahrenheit.

*Be Alert – Publisher cannot accept responsibility for errors in published load data.*



**A Nikon variable 3-9x Prostaff scope was used to check loads for accuracy.**

nady factory fodder had an extreme spread of 43 fps, while the 300-grain load ran 38 fps (each with a five-shot string). Every powder charge in the accompanying load data was weighed. In many instances the extreme spreads were less than 10 fps (again for a five-shot average).

The new .375 Ruger Model 77 Hawkeye African rifle has several virtues worth mentioning. First, rather than being heavy and blocky, like the Model 77 Express Magnum at 10 pounds, it is trim and weighs just under 7½ pounds. Hunters who carry guns will appreciate its lack of weight. The walnut stock is trim, without excess wood, and features a lug to help prevent splitting. There is a new trigger with a lighter pull (known as the LC6). The rear sight is a wide V, while the front is a white bead. The blueing is a “flat” finish with minimal glare, again designed with the hunter in mind. Finally the Ruger Model 77 controlled round feed action is stout, reliable and features a positive three-position safety.

Throughout firing hundreds of factory fodder and handloads, the new Ruger fed and functioned without a hitch. From a sandbag rest, it also proved accurate with a number of groups measuring around one inch, and several managed to cluster well under an inch.

An improved bolt-action rifle of sound design, combined with a new beltless cartridge of established performance, should prove popular with in-the-know big game hunters. ●