

Federal's Heavy Hitter

The .370 Sako Mag.



**Federal Premium
Ammunition and Sako
have taken an innovative
approach to the big-game
cartridge. In Europe, it's
called the 9.3x66 mm
Sako, but in the United
States it's called
the .370 Sako Mag.**

BY BRYCE M. TOWSLEY, Field Editor



he partnership between Federal Premium Ammunition and Sako rifles goes back to the introduction of the .338 Federal cartridge in 2005. I first spotted a prototype of the cartridge on the desk of Federal's former director of new products during a July 2005 visit to the Minneapolis-area factory. At the same time, Drew Goodlin, who is the current holder of that position, was on a plane thinking he was headed to Finland to discuss Sako chambering rifles in that cartridge. But Northwest Airlines employees had other ideas. They staged a strike, and he sat on the tarmac for hours and hours. I think I was on my way home the following day before he was airborne for Finland. His mission, however delayed, was successful, and he forged an alliance with Sako to chamber the then-new .338 Federal cartridge.

Federal and Sako have teamed up again for a cartridge introduction, or at least for the introduction of a cartridge here in the United States. This time it's Sako's turn to claim the name. The latest cartridge from Federal is called the .370 Sako Mag., and it is an innovative and interesting approach to big-game cartridges. The cartridge is called the 9.3x66 mm Sako in Europe (where it's been available since 2002), but with the U.S. introduction, Federal changed the name to .370 Sako Mag. to give it a more "Americanized" ring.

While virtually unnoticed here in the United States, the 9.3 mm—0.366"-diameter—bullet is popular in Europe, where it can be found in a multitude of cartridges. My first encounter with one was in a deer-hunting camp on Quebec's Anticosti Island back in the late '80s. There was a European hunter in camp with a double rifle in 9.3x74 mm R. It was pretty exotic stuff for American hunters, as most of those in camp were unaware of the existence of double rifles or that they were used exclusively for dangerous game in Africa. Many of the hunters laughed at the German for his "odd" gun and oversize cartridge. But I thought it was a great combination for still hunting in the thick brush on the island. His two big bucks proved that correct. I still have one of the cartridges that he gave me for my collection, and an empty case that he used to take one of the whitetails. I grilled him on the ballistics, which he knew well; but in metric, so I could not convert them in my head. So, when I got home I checked it out and learned that this long, almost straight-wall cartridge drives a 286-gr. bullet to a muzzle velocity of 2360 f.p.s. It's very popular in Germany in break-action single-shot rifles, as well as double rifles and combination guns in which the rim works very well for controlling headspace and for extraction. It is an excellent cartridge for boar and European red deer.

That was all interesting from a "gun guy" perspective, but the design of the 9.3x74 mm R is incompatible with popular American rifle designs. In fact, that style of cartridge went out of fashion here in the states about the time smokeless powder was invented.

I didn't think much more about the 9.3 mm cartridges until many years later when I ran into a German hunter in a Zimbabwe buffalo camp. He was hunting with a 9.3x62 mm Mauser, which looks a lot like one of my favorite cartridges: the .35 Whelen. Despite its 1905 birth date, this was a more modern-style cartridge with a rimless, bottleneck case. The ballistics were identical to the 9.3x74 mm R, with a 285-gr. bullet at 2362 f.p.s., but in a more compact configuration—and one better suited for bolt-action rifles.

But the 9.3 cartridges have remained mostly in Europe's domain. There are bullets available from a few American companies such as Barnes, Hornady, Nosler, Speer and Swift, but loaded ammunition and brass have been hard to find. About a year ago Hornady added the 9.3x74 mm R to its lineup. But, I didn't think any major American ammunition company offered any of the 9.3 mm cartridges designed for use in bolt-action rifles—until now. Federal's cartridge, the .370 Sako Mag., is the first modern 9.3 mm cartridge introduced to the American market by a U.S. ammunition company.

In Europe, the .370 Sako Mag., or 9.3x66 mm Sako as it is known there, ups the ante just a little bit from the 9.3x62 mm Mauser. The longer case gives it more powder capacity and adds velocity. This is a good thing, as it flattens the trajectory a little and boosts the energy levels. This cartridge's power level and bullet diameter put it right between the .338 Win. Mag. and the .375 H&H Mag. This is good company as both have excellent reputations as big-game cartridges. That's not a big gap to fill, but that probably is not the point. Both the .338 Win. Mag. and .375 H&H Mag. are belted cartridges. A belt on rifle cartridges has been controversial in recent years as it takes up space that could be used for powder capacity, and it makes feeding a bit less smooth. If the belt is used for headspacing, accuracy and case life can suffer. The .370 Sako Mag. does not have a belt. The powder capacity, however, is not an issue as the body of the .370 Sako Mag. is 2.598", which is just more than 0.10" longer than a .30-'06 Sprg. case. Nonetheless, the maximum cartridge overall length (COL) for the .370 Sako Mag. is 3.346", which is just 0.006" longer than a .30-'06 Sprg. That means actions that can handle the



.370 SAKO MAG.

.30-'06 Sprg. cartridge should be capable of being manufactured to handle the .370 Sako Mag. The body diameter also means the magazine should hold four or five cartridges in most rifles instead of the three common to the .338 Win. Mag., .375 H&H Mag. and other belted cartridges. Magazine capacity is an often-overlooked area, and one where a case's lack of a belt helps it earn its keep.

So we now can have medium-bore, magnum performance from a standard-size rifle with increased magazine capacity. Suddenly, this cartridge is starting to look like a good concept. It doesn't require long and expensive "magnum"-style actions. The bolt throw is shorter, making it faster, and with the multitude of rifles with a .30-'06 Sprg.-length action, it's easy for new companies to add the cartridge or for a gunsmith to re-barrel an existing rifle in .370 Sako Mag.

As the table shows, this cartridge certainly lived up to the accuracy potential. The *American Rifleman* protocol for testing is five consecutive, five-shot

groups at 100 yds., which is a justifiably tough standard. This rifle did exceptionally well and is one of the most accurate big-game, sporting-style cartridge/rifle combinations I have tested.

Specifications for the .370 Sako Mag. have been submitted to the Sporting Arms And Ammunition Manufacturers' Institute (SAAMI). It is expected that when they are finalized, the Maximum Average Pressure (MAP) will be 62,000 p.s.i., which is the same as the .308 Win. and slightly higher than the .30-'06 Sprg., which is listed at 60,000 p.s.i.

Federal initially introduced the cartridge with three loads: two with expanding bullets and one solid. They all weigh 286 grs. and have an advertised muzzle velocity of 2550 f.p.s. and 4,129 ft.-lbs. of muzzle energy. The bullets are the Barnes Triple-Shock X-Bullet (TSX) and the Nosler Partition in expanding bullets, and the Barnes Banded Solid. The Barnes TSX is a solid copper, expanding bullet with an outstanding reputation for deep penetration and nearly 100 percent weight retention. The Nosler Partition



Sako offers its Model 85 rifle action chambered in .370 Sako Mag. in Classic (above) and Kodiak variants. They are imported by Beretta U.S.A. Corp. (Dept AR), 17601 Beretta Drive, Accokeek, MD 20607; (301) 283-2191; www.berettausa.com. Another option is the surprisingly affordable custom Mark VII rifle in .370 Sako Mag. available from E.R. Shaw Co. (Dept.AR), 5312 Thoms Run Road, Bridgeville PA 15017; (412) 221-3636; www.ershawbarrels.com.

—BRYCE M. TOWSLEY



SHOOTING RESULTS (100 YDS.)

.370 SAKO MAG. CARTRIDGE	VEL. @ 15' (F.P.S.)	ENERGY (FT.-LBS.)	GROUP SIZE IN INCHES		
			SMALLEST	LARGEST	AVERAGE
FEDERAL PREMIUM No. P370B 286-GR. NOSLER PARTITION	2486 Avg. 15 SD	3926	0.97	1.52	1.21
FEDERAL PREMIUM No. P370C 286-GR. BARNES TS	2409 Avg. 13 SD	3686	1.31	1.85	1.53
FEDERAL PREMIUM No. P370A 286-GR. BARNES BS	2500 Avg. 14 SD	3969	—	—	—
AVERAGE EXTREME SPREAD					1.37
THE TEST RIFLE WAS A SAKO MODEL 85 WITH A 24" BARREL. VELOCITY MEASURED 15 FT. FROM THE MUZZLE WITH AN OEHLER 35P CHRONOGRAPH. GROUPS ARE THE AVERAGE OF FIVE CONSECUTIVE, FIVE-SHOT GROUPS AT 100 YDS. ABBREVIATIONS: TS (TRIPLE-SHOCK), BS (BANDED SOLID), SD (STANDARD DEVIATION).					

was the first premium bullet on the market and is still the standard by which the others are judged. It is a dual-core bullet. The front lead core expands easily and quickly on impact until the expansion is arrested by the "partition." I doubt there is any game animal on earth this bullet has not taken.

The Partition bullet's terminal performance is different than that of the Barnes, so the two complement each other well and were a good choice for the initial two offerings. The Barnes Banded Solid has a proven track record for deep, straight penetration. Solids are required for some dangerous game such as elephant and hippo and are preferred by many for follow-up shots on buffalo. This bullet makes the .370 Sako Mag. a true dangerous-game cartridge.

New in 2010 will be a 286-gr. Swift A-Frame bullet. The A-Frame uses a cross-member to separate the two cores and arrest expansion, similar to the Nosler

Partition. But the A-Frame bonds the front lead core to the jacket. The result is high-retained weight and a large frontal area. It will not penetrate as deeply as the Barnes, but it will have a larger diameter on the expanded bullet. This is an excellent big-game bullet with a different type of terminal performance than the Barnes or Nosler, and it provides yet another option for the hunter trying to match the bullet to the game.

When I hunted moose in British Columbia in 2008 with the .370 Sako Mag., I picked the Barnes TSX bullet for two reasons. First is my deep trust in its performance based on years of use around the world with many different rifle cartridges. Second is that we were in grizzly country and I wanted a deep-penetrating and tough bullet if I had to extract myself—or my unarmed guide—from a problem involving a bear.



A comparison of cartridges using 9.3 mm bullets (l. to r.): the 9.3x62 mm Mauser; the new .370 Sako Mag., which is known in Europe as the 9.3x66 mm Sako; and the 9.3x74 mm R. The .370 Sako Mag. has a flatter trajectory than either of its older relatives. The .30-'06 Sprg. and .370 Sako Mag. (above) have nearly identical COLs, but the .370 Sako Mag.'s slightly larger powder capacity provides magnum performance with a medium-bore bullet from a standard-size action.

.370 SAKO MAG.

We had watched a moose for two mornings as the bull was tending cows along the edge of a lake. The second morning we were hidden on an island and waiting when it became light enough to shoot. The bull stood out of range for nearly an hour before it followed some cows into the lake to feed on the aquatic plants. It was a longer shot than I would have liked, but with a ballistic coefficient of .411 this bullet carries well out to reasonable distances, and I was very confident the bull was close enough.

Perhaps I was overconfident, and I either pulled the shot a bit or misjudged the wind. But, I hit it too far back and we had to track the moose down. Drew Goodlin found it lying in its bed a couple of hundred yards away and ended it. I truly believe this bigger bullet made all the difference in finding the bull lying down so close after my first shot. It is another addition to the long list of why I like big bullets for hunting.

For moose, elk, bears and African plains game the .370 Sako Mag. is an excellent cartridge. The Europeans have known about the performance of 9.3 mm bullets for more than a century. I became a convert more recently, and I can only hope the American shooting public will soon come to see the light as well. 🦌

A number of manufacturers offer 9.3 mm bullets, including Barnes, Hornady (below), Nosler, Speer and Swift, but only Federal offers the commercially loaded .370 Sako Mag. cartridge in the United States.

