



Being over-gunned beats the alternative — Elmer Keith

Use Enough Gun — Robert Ruark

But How Much Gun is Enough?

Walter W. Matera

MSG (ret.) USAR

Africa! I remember, a couple of decades back, reading that the most common daydream of the American male wasn't really a date with a supermodel; it was an African safari. Does that sound fair to you? I'm sure that the author of the original study included eco-tourists and photographers in the group but if you're like me, you dream of the hunt. But what shall we hunt? The game animals of Africa range from dik-dik antelope so small that you can take them with a .22 to the elephant. And don't elephants bring to your mind daydreams of belted khaki jackets, pith helmets or broad felt hats and double-barreled rifles loaded with cartridges that look like brass bananas?

Elephants! That's the ticket, and lion and leopard and rhino and buffalo. The traditional Big Five, plus hippo and crocodile make up the Dangerous Game. And they are hunting completely unlike what most of us are used to. Putting a whitetail or two, even an elk, in the freezer is Man the Predator feeding the band. Stalking a Southern buffalo that stares back, "I hate you," is like combining of a *matador* with a warrior. It brings an odd feeling that mixes bravado with tragedy, challenge with stoicism.

Years before the actual hunt, it will come together in your mind. "Come Nyati," you will say to yourself, "come Simba, come Chui, come Tembo, let's dance!" And eventually there comes a time of life when finances and the end of child rearing combine to make the dream a possibility, perhaps even an approaching reality. This can bring a bucket of cold water onto the imagination. You want to go after a beast that can kill you if you make a mistake and all you have in the closet is a well-worn 30'06. Perhaps it is time to consider just what it takes to go hunting dangerous game. What does it take to make a Dangerous Game Rifle?

From the beginnings of the British Raj, when well-heeled aristocrats and officers in colonial regiments first took on *really* big game, there have been many books and articles giving one sportsman's or another's opinions on the proper firearm to use when stalking the beasts that hunt back. British, Continental and, at last, American gun companies all came up with their own answers to the problem and there have been a great many. Some of these have remained in common use since their introduction while others have faded into the oblivion of the cartridge collection. Still, there are an enormous number of choices and making sense of them all is difficult.

Many writers have simply given the novice their personal favorite as the Best Possible Bullet while others have tried valiantly to cover all bases. This latter isn't an easy task as new cartridges are frequently introduced, old ones resurrected and wildcats abound. How is the hunter who has finally raised the capital for the Trip of a Lifetime supposed to decide what to buy in the way of a rifle that may save his life, even knowing that there will be a Professional Hunter backing him or her up with something that looks like it should have wheels and a lanyard? A hunter who loves his way of life and respects his quarry wants to make sure that through a combination of good marksmanship and proper caliber he takes the animal alone without any assistance. This can't always happen. But it can usually happen with the right tools and the right skills. The skills each of us are responsible for. The tools we will discuss.

Very large game has been taken with the .22 rim fire. This has always been an accident, you'd be fool to try it, the PH won't let you and it's illegal. Famous ivory hunters of the past used very light rifles like the 6.5x57 and the .303 to harvest hundreds of elephants. That was then, this is now, your PH won't let you, and those calibers aren't legal, either!

Legal Dangerous Game Rifles are defined differently in different countries, but since more Americans seem to hunt leopard, lion, buffalo and elephant in Zimbabwe than any other country, it seems reasonable to use their rules. In Zimbabwe, the *minimum* caliber for use on buffalo and elephant is the 9.3x62. This cartridge is not common in the United States but it has a great following in Europe and Southern Africa. It resembles the .35 Whelen Improved and can push a 300-gr. bullet at around 2400 fps. The sectional density of this bullet is amazing and it can penetrate a buffalo bull through both sides even with expanding bullets. On the other hand, one hesitates to describe what the *maximum* caliber that can be, or has been, used. The .475 A&M generates over 10,000-ft lbs. at the muzzle out of a true, magnum-length bolt action. The .700 NE fires a 1,000-gr. bullet from a \$120,000 double rifle. The recoil of either must be fearful and the rifles weigh upwards of 15-20 lbs. Our question becomes where, within this wide range of cartridges, is the one for the first-time *bwana*?

To simplify things, I propose that we group the various legal Dangerous Game calibers into four classes. Once we understand the capabilities of each class and the allowances that have to be made for each class, then the choices are narrowed down significantly. Therefore let's take a look at the classes as I see them: Class I, the Legal Minimum; Class II, the Entry-level Stoppers; Class III, anchoring rifles; and Class IV, the BIG KILLERS

Class I: The Legal Minimum

Though many dangerous game animals have been killed with almost every imaginable caliber, as tourist hunting became popular in East Africa it was decided that certain things were *not* good for business. Having to write home that someone's beloved husband had gotten himself eaten by a lion or smashed into jelly by a pachyderm was bad publicity and unlikely to encourage other members of the departed's community to essay a similar venture. Experienced hunters, both professional and amateur came to the conclusion Holland's .375 Belted Rimless Magnum was sufficiently powerful. A guest on safari would have to work rather hard to get into trouble shooting it and so it was decided that it should be the minimum for all the dangerous species. Resident hunters, though, had some disagreements and Europeans had their own metric equivalent. This resulted in three calibers, the 9.3x62, the 9.3x64 and the .375 H&H, Queen of Calibers.

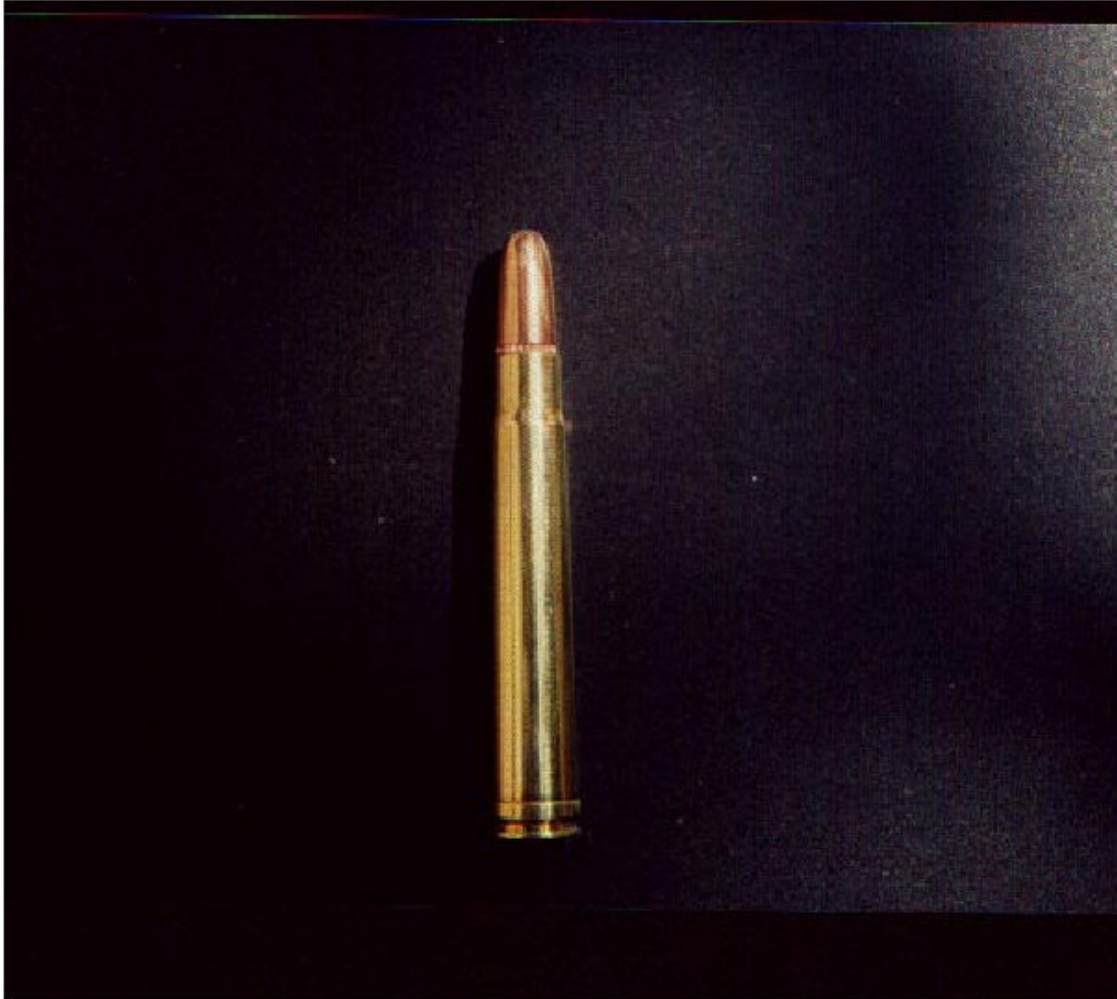
These three calibers generate between 3500 and 4500-ft. lbs. of muzzle energy but those energy figures are deceiving. Long for caliber bullets driven at moderate velocity (2300-2500 fps.) have a surprising capacity to penetrate through the vital organs of a large animal and to continue on out the other side, even with conventional softnose bullets. With modern premium bullets and monolithic solids you will find that you rarely recover a spent slug from any animal under the size of the buffalo. They simply kill all out of proportion to their specifications. However, these are the *minimum* legal calibers for dangerous game not the optimum ones. Unless you are a world class shot who has ice water in your veins these, except for the .375 H&H, are very poor choices to take into the grass after a really angry lion. Don't take any of them into the *jess* after a wounded buffalo or elephant. Magnificent rounds that they are, they lack the frontal area to qualify as true stopping rifles.

Some of you will reach for your ballistic tables and point out that the .338 Winchester can easily match this energy threshold when loaded with 300-gr. bullets. This is absolutely true and in some countries where there are no minimum caliber restrictions a 300-gr. Woodleigh driven at 2400 fps. will do just as well. However, some of the African countries have set specific cartridges as the minimum allowed, no matter what the potential energy figures of others might be. When planning for your first safari, get in contact with your professional hunter or safari outfitter well ahead of time to find out what you may and may not use. The customs desk at your destination is a poor time to find that your new, prized African Rifle is too light for the intended quarry.



9.3 x 64, 9.3 x 62 and 8 x 57 (for comparison)

Plate 1.



.375 Holland & Holland: One Planet, One Rifle

Plate 2.

Class II: Entry Level Stoppers

Once smokeless powder had been developed, the British discovered that it allowed what had previously been good deer cartridges to replace the fearsome eight and four *gauge* rifles that had heretofore been the adventuring sportsman's choice *de rigueur*. It was John Rigby & Co. that just about defined what an "elephant rifle" ought to be when, in 1898, they brought out the .450 NE. Its standard of .45 caliber, near 500-gr. bullet and a muzzle energy of around 5,000 ft. lbs. quickly proved to be just what was needed when the hunt "went South" and a really unhappy beast had to be dealt with. The British stiff upper lip could really be put to the test when a wounded lion, elephant or buffalo decided to take out his displeasure on his tormenter and on the native staff. Good frontal area, heavy bullets and sufficient

velocity to provide the time-honored two-and-a-half tons of energy effectively define Class II. It is a remarkably large class. We can say that it overlaps Class I because, in plain energy levels, it runs from 4,000-ft. lbs. to 5,500-ft lbs. As before, this is deceiving. The increase in frontal area from the .375 to .411 allows an increase in what John Taylor called Knock-Out value that makes Class II rifles a much better choice when a charge has to be stopped.

Class II would have been much smaller if the only things that mattered were ballistics and performance. The .450 NE was so effective and so popular that it would have likely remained *the* choice for single shot and double rifles to this day. However, around the turn of the XX Century the British were faced with revolt in both India and the Sudan. Since the rebels were arming themselves with stolen 577/450 Martini-Henry's, the Foreign Office decided to ban the use of all .458 caliber rifles in those areas with the intent of cutting off the rebels' supply of ammunition. Whether or not this ploy was effective in its intent is unknown but it was effective in greatly enlarging the sportsman's choice of dangerous game calibers.

Under the quaint British proprietary system, Kynoch loaded all ammunition but only distributed a given caliber to "authorized" dealers. That way, if you were absolutely taken with the looks and performance of the .475 NE, you had to be outfitted by Westley Richards because that company had the exclusive use of the cartridge. All the major rifle makers in Britain brought out their own replacements for the .450 NE. None was particularly more or less powerful than any other. Today, the only factor to consider in choosing a caliber for a new double rifle is ammunition availability. While it is possible to obtain components for most the rimmed Class II cartridges, the .470 NE is the easiest to feed. This is because, unlike most of the others, it was released to the general gun-building trade when it was first designed. It was probably the most popular of the group at the time and since Federal began providing factory ammunition for it in 1989, it remains so today.



Representative Class II cartridges for falling block and double rifles

450/500 NE, .470 NE, .475 NE #2, .476 NE

Plate 3

Many hunters love and admire double rifles and they have a long-standing reputation as *the* thing to have in your hands when aroused, aggressive animals are likely to come at you from very close range. Unfortunately, they are and always have been expensive. An impoverished, young aristocrat shipping out to an African regiment, a German farmer looking for a new life in the highlands of Tanganyika or a colonial official wanting to equip the Game and Wildlife Department would find such arms prohibitively costly. Instead, such individuals would be far more likely to turn to a solid “magazine” rifle built on the renowned Mauser action. The gunmakers were as glad to provide such weapons as they are today and the ammunition designers have spent the last hundred years happily coming up with different answers to the same basic question. How do you most effectively fit Class II performance into a rifle the average hunter can afford?

The .450/400 doesn't really measure up to the .450 NE when the chips are down, but it did so well that when the time came to build the first Class II on a Mauser action, it was the lower level of performance that set the standard. The .404 Jeffery, in the hands of hunters and of hundreds of game scouts over the decades, has probably accounted for more large animals than any other caliber. It might have even accounted for more than all the other calibers. It did so with what we might consider anemic ballistics, but it worked. It worked all through the first half of the XX Century and it still, with improved velocity, works today.

To match the 5,000 ft. lb. standard of the .450 NE and to compete with the .404, John Rigby and Sons brought out their famous .416 and Westley Richards their effective, but odd-looking .425. In both of these cartridges, as well as the more modern .416 Remington and a host of wildcats, a 400-gr. bullet approximately the same size as the .404's is driven at 2400 fps and yields two and a half tons of impact. This obviously results in considerable recoil, as well, but when 1,600 lbs. of angry pot roast decides to put you out of his misery you are unlikely to complain . . . or even notice. The prospect of being gored, eaten or smashed has a tendency to wonderfully focus the mind.

The .416 twins, Rigby and Remington, provide the hunter with everything he or she needs in the way of power. And if, by chance, you are one of that group who enjoys the rifle and its history as much as the activity of hunting, who can't help but order a gin and tonic at the bar of the Victoria Falls Hotel or who wonders why in the world the good old pith helmet ever went out of style, few chamberings match the *panache*, the nostalgia, the sheer *style* of the Rigby. Its overall length of 3.75" takes a true magnum action and that adds to the expense of the rifle. However, even though that huge case was originally designed to avoid failure due to high temperatures in the African heat with Cordite powder, its sheer size and weight gives confidence to the hunter and certainly impresses the ballistically unsophisticated friend. "Geez, what is that thing, and elephant gun?" It assuredly is, and many other things, besides.

Periodically, there is an attempt made to bring back the .425 Westley Richards. Sometimes referred to as the Poor Man's Magnum, it has the seemingly useful characteristic of both fitting into a standard length bolt action and using a standard .470" bolt face. This would seem to make it ideal for the hunter who wants to hunt Africa but wants to spend his money on the safari rather than the rifle. Unfortunately, the rebated rim turns out to be trouble. Westley Richards, in their magnificently crafted rifles, solved the problem of unreliable feed by developing a very clever set of clips that fit into the rails of the action and force the cartridge up into the bolt face *every* time. Unfortunately, Westley Richards rifles are British Best and very expensive. When others have tried to simply rebarrel a Mauser 98 action into a .425 the results have been disastrous. Tack driving accuracy in a Dangerous Game Rifle simply isn't necessary. The heart of a Cape buffalo is as big as a man's head, for Heaven's sake. Reliability, on the other hand, is everything. Just as in combat, a rifle used on game that can hunt back must work every shot of every trip. Too many hunters and game scouts have been laid to rest when their sub-standard .425's failed to feed. Either get a genuine Westley Richards or try some other caliber.

Remington matched the performance of the Rigby when they slightly modified George Hoffman's design for a .375 H&H necked up to .416. It may not look as grand and it certainly doesn't have the history or the literary connections of the older cartridge, but by the red gods it surely works. In many ways, the .416 Remington can be considered the most practical Dangerous Game caliber available today. It fits into a normal .375 length action, can be formed out of .375 H&H brass, uses bullets available from most of the major bullet makers and can put a stop to any problem you are likely to run into very quickly. There may be some animal it isn't big enough for, but that animal either doesn't live on our planet or went extinct sixty million years ago.



.426 Westley Richards & .404 Jeffery



.458 Winchester, .450/400, .450 NE, .500 NE, .500/465 Nitro, .472 #2

Plate 5

The .458 Winchester Magnum has been both sworn by and sworn at by more hunters, professional and amateur than any other dangerous game cartridge. Early ammunition was loaded with ball powder that fused in extreme heat and didn't burn properly. Rifles were often built with 22" barrels that cut nearly 100 fps off what could be somewhat marginal ballistics. Jack Lott never forgot the tossing a wounded Cape buffalo gave him. He blamed the .458 Win for it and designed his own answer. But when properly loaded with appropriate bullets, the undersized-looking belted cartridge brings unpleasant proceedings to a halt. No less an authority than Finn Aagaard, who hunted elephants for 10 years, stated, "Given good handloads . . . there is still nothing I would rather have in my sweaty paws, in a hairy situation with dangerous game, than my Winchester M-70 or my old Westley Richards in .458 Winchester Magnum." Too many professional hunters have bet their lives and the lives of their clients on the .458 Winchester for it to be discounted in a discussion of Dangerous Game Rifles. It might not be everyone's first choice, but, like other Class II cartridges it *is* a stopping rifle and, for many hunters, as much as they can reasonably expect to shoot accurately when things go South.

“ . . . suitable for dinosaur and small armored cars” Craig Boddington

Class III: Anchoring Rifles

For the Professional Hunter who has to get his client and his staff out of really bad trouble *right now* and for the tourist hunter who wears both a belt and suspenders because he leaves nothing to chance, Class III is the answer. Generating between 5500 and 6500-ft lbs. of energy these various .458 to .510 caliber cartridges would likely stop a charging blue whale if you found yourself facing one on the beach.

It is interesting to note, by the way, that they are nearly all rimless, and therefore designed for use in bolt action rifles. So effective were the various .450 NE clones in good double rifles that anyone wanting more seemed to frequently go really up to the .577 and .600 NE and these fall under Class IV. Only the .500 NE fills the requirements of Class III among the venerable British rimmed classics and though its following was loyal there always seemed to be the cloud of immanent extinction hanging over it. The fear of discontinuance kept orders low and low orders seemed to be a good reason for obsolescence but it has hung on through thick and thin and for those who can afford the cost of a medium car, it is a nearly ideal double rifle caliber. Not much keeps coming when it runs into a 570-gr. .510 caliber bullet at over 2100 fps.

The others in this class all seem to fit Terry Wieland's description of the .505 Gibbs "—the heavy, graceless but terribly efficient cartridge of the professional." From the .458 Lott through the other .450's designed by Watts, Ackley, Dakota, and Rigby, the .470 Capstick and topping out with the magnificent .505 Gibbs, closing an action on one of these cartridges gives you the feeling that you can set your jaw, snarl "Right, then!" through clenched teeth and sound General Quarters as you wade confidently into all manner of frays. I have watched .450 Rigby's knock Cape buffalo *down*. Even when one struggled back to its feet, it seemed dazed, stunned by the impact of a 500-gr. bullet going nearly 2300 fps. This kind of power does have price, however. Isaac Newton wasn't kidding when he said that, "For every action there is an equal, but opposite, reaction." To describe the recoil of a Class III rifle as "brisk" It is, conversely, manageable. Because these large bullets are driven at moderate (under 2500 fps.) velocities, their recoil isn't the vicious, joint-loosening snap that often accompanies faster rounds. If you work up to them, brace yourself and hold on tight you will find that there is great satisfaction in riding so deadly a dragon.

Choosing among them is difficult. Probably the most common today is the .458 Lott. Quite a few knowledgeable shooters consider this straight tapered, .375 length .450 the caliber Winchester *should* have brought instead of the short .458 Winchester Magnum. "Whatever *were* they thinking . . . with?!" goes the phrase, and there is some merit to it. However, though the Lott is a very effective cartridge on large game, it is not the easiest round to make feed reliably and that is a major shortcoming. Reliability of feed is the absolutely necessary characteristic of a rifle in this class. Other cartridges in this class and based on the .375 H&H case are the versions by Watts and the Ackley. Both have their fans but neither offers any ballistic advantage over the others. The .470 Capstick is basically the same idea in .475 caliber.

The next step up the ladder is to use the big .416 Rigby case and neck it up to .458. This formula has been used by both Dakota and by Rigby to turn out nearly identical cartridges. This is the same basic case that Roy Weatherby adopted when he developed his fearsome .378, .416 and .460 proprietary cartridges. Because he had built up all the rest of his line on the belted case from the .375 H&H, he added a belt and his trademarked venturi shoulder to the old Rigby case and filled them to the brim with powder. This takes the result up into the next class. In this writer's opinion, just because something is possible doesn't make it a good idea. Better it is, I believe, to use the big brass tube to drive a heavy bullet at moderate velocities and to keep the pressures (and recoil velocity!) low while still providing power aplenty. These cartridges have a lot of energy, great frontal area and considerable recoil.

Finally, there is the Great One, the .505 Gibbs. Factory specifications for this torpedo of a round would give the impression that it really isn't any more effective than the .450 Rigby and those who think that paper ballistics explain everything there is to say about game shooting make this argument. I believe that they are seriously wrong. Though no one has come up with a realistic way of measuring the effect of frontal area in a bullet, a century of field experiences leaves no doubt. The difference between a 500 gr., .458 bullet and a 525 gr., 505 caliber bullet is clearly visible when they strike large, potentially deadly animals.

The Gibbs certainly isn't ideal for most hunters. The cases are huge and very expensive. It won't fit into anything but the largest of magnum actions and those tend to be very expensive. The bullet choice is small and the sources of bullets in this odd size difficult to find. But I seriously doubt that there is a cartridge that can be managed by *most* serious rifleman that will have quite the Thor's Hammer result on really riled up pachyderms as this one. Though I personally shoot a .450 Rigby and can't say enough good things about it, I still dream of a Gibb.



.450 Ackley, .450 Rigby, .500 Nitro, .500 Jeffery (Class IV), .505 Gibbs

Plate 6.

"When you care enough to send the very best . . ." Hallmark Cards

Class IV: THE BIG KILLERS

In every group there are always those who believe that too much of a good thing is wonderful and that anything worth doing is worth overdoing. For these stalwart individuals there is the Class IV Dangerous Game Rifle, or perhaps the Class IV's. You see, there actually are two different categories of Class IV DGR. One of them takes a class II or III and increases its velocity above 2500 fps. The other rifles a tube that would ordinarily be used to direct excess floodwater out to sea. Make no mistake, in either case the results are impressive.

A Class IV Dangerous Game Rifle is basically any rifle that generates more energy, has greater Momentum Value or throws a slug with greater frontal area than is actually necessary to do the job of bringing a charging beast to a sudden, terminal stop . . . even in the most extreme circumstances. Does this mean that there is no need for such a thing? After all, the recoil of such a cannon is positively ferocious and the weight necessary to control the recoil a positive burden when carried through the bush for hours or days at a time. The answer is "Absolutely not!" for it a great comfort to the hunters who can manage them to know that yea, through they walk through the Valley of the Shadow of Death, they need fear no Evil for they carry the Baddest SOB's in the Valley.

With his great success in North America selling the idea that faster is better, Roy Weatherby decided to apply his theory to Dangerous Game. Looking around for the largest case that was readily available, he settled on the cavernous .416 Rigby. After reshaping it with his signature venturi shoulder and applying a belt (because everyone knew that *all* magnum calibers had to have a belt) he decided to neck it down to the venerable .375 bore. The Rigby case was huge in order to avoid dangerously high pressures in the African heat when using Cordite powders. American grain powder didn't cause the same problem at high temperatures so Roy felt safe in pouring every last grain of powder that would fit into the cartridge. The paper ballistics were awesome. The same bullets that the Class I .375 H&H sent down range at a modest but effective 2600 fps was driven from the new Weatherby at 3,000 fps and therein lay both the glory and the problem.

Though a 300 gr bullet at 3,000 fps only generates a bare 6,000 ft. lbs (ordinarily a Class III) the vicious recoil velocity that results puts the .378 up a class. Recoil comes in two packages. There is the recoil energy, computed the same way as bullet energy and there is recoil velocity that takes into account just how fast that energy is delivered to your personal body. Felt recoil is greatly affected by velocity and the man who has no great difficulty shooting and hunting with the Class III .458 Ackley may, after three shots, decide that he not only won't go out and buy a .378, he won't ever *fire* one again.

The other problem that the .378 had was that all .375 bullets available at the time were designed to travel 2600 fps. When you tried to increase their speed by another 300 fps, they had a terrible tendency to shatter on game leaving gaping, ugly and thoroughly non-fatal wounds. This is not what most of us consider acceptable when the wounded beast not only takes offense at such treatment but is perfectly capable of taking out his displeasure on the hunter. Today, super-premium bullets and monolithic solids have made this a problem of the past. In fact, with the most advanced designs, the faster you shoot them the better they penetrate. Unfortunately, the only thing that really works to reduce the recoil is a muzzle break and then the muzzle blast gets physically harmful. If you can handle this monster, it now kills like the proverbial hammer of Thor, but if *you* can handle it, you're a better man than I am, Gunga Din!

Recoil velocity is a factor whenever a heavy, large caliber bullet is driven above 2400 fps. It is their moderate velocity that makes the Class II and III rifles so manageable while being, at the same time, so effective. High velocity Class IV's like the Weatherby .378, .416 and .460 are very effective when properly loaded but their manageability is far less. The same thing applies to the large A-Square chamberings like the .500 or the nearly identical .510 Wells. If you really feel a need for more oomph than your current bore gives you, you'd likely be more comfortable by going to the other kind of Class IV, the portable naval rifle.

During the British Raj, rice was an important crop in Ceylon (now Sri Lanka) and elephants were an important pest in the crop. Rich rewards were offered to anyone who could reduce the depredation and in 1943, young Samuel White Baker took up the challenge. Baker was a remarkable physical specimen who stood well over six feet and was powerfully muscled. It should come, then, as no surprise that he pioneered the use of *very* large caliber rifles as he was one of the few men alive at the time who could stand up to them. His most celebrated piece, a muzzle loader he nicknamed Baby, was a twenty-one pound 2 bore.



.460 Weatherby, .470 Mbogo, .500 A-Square, .577 NE, .577 Tyrannosaur,
.600 NE and .700 NE

Baby had a thirty-six inch barrel and such power that on at least two occasions killed two buffalo standing one behind the other. It's recoil was so enormous that Baker reported that it spun him around twice and knocked him down every time he fired it. Baby set the standard for BIG bore sporting rifles and to this day, I am not aware of anyone who has seriously tried to match her. This is probably a good thing for Sir Samuel, even with his extraordinary physique, ended his days punch drunk from the beatings she gave him and had to be led around by the hand.

With the opening of Africa to the tourist hunter, the standard DGR became the black-powder eight bore double rifle. Less intimidating than Baby, these were still fearsome tools and it took a resolute man, indeed, to wield one. Thus it can be believed that the development of the .45 0 Nitro Express was reason for celebration in the game fields, giving solid, life saving performance in a much more manageable package. Still, there were always those who didn't feel comfortable with so "small" a bore when things went wrong. Professional ivory

hunters, especially, may have done the majority of their work with one of the .450 NE clones but many of them wanted something more when a hunt went sour and potential disaster had to be settled very fast. For these men, the .577 and eventually the .600 NE double rifles must have been very comforting. Far too heavy to be carried as a primary weapon, these were emergency guns carried by the hunter's most trusted local employee. This wasn't because the Europeans were wilting violets by any means. No one can carry a 20 lb. rifle for days through heat and thick brush and then swing it up "like a shotgun" quickly and accurately enough to stop an angry elephant or black rhinoceros. Like other Class IV guns, these were insurance policies taken out in the event of catastrophe.

The giant double rifles are still available though they now cost as much as a comfortable home. They have been joined by an even larger descendent, the .700 NE developed because Holland and Holland sold what they declared the "last" .600 Nitro ever built just in time for a well-heeled American to decide that he wanted one, too. Since H&H wouldn't build another .600 he had a .700 instead. Since that time H&H has relented and will again build the .600 but there still seems to be some call for the larger version as well.

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After WWII, there was a shortage of truly giant cases to build super rifles around, at least until Roy Weatherby came out with the .460 Wby. Now the wildcatters had a stunning new toy to play with and play they did. Necked up to .475, it became the .475 A&M. This cartridge was alleged to produce 10,000 ft lbs and ten rounds rapid fire was compared to going 10 rounds with the Heavyweight Boxing Champ. A larger expander die, say .510 and you got either a .510 Wells or a .500 A-Square described as the only rifles guaranteed to drop a Cape buffalo with a single shot.

One would think that such monsters would be sufficient for any hunter, no matter how robust, but no. In 1993 Art Alphin produced his masterpiece, the .577 Tyrannosaur. Designed around a completely new case, this unholy creation will drive a 750 grain solid at an honest 2470 fps. The resulting 10,250-ft. lbs. will definitely get rid of any elephant that gets into your cornfield and probably the one behind it as well. The recoil . . . well, let's not even go there.

How much gun is enough? The normal international hunter will find that a .375 H&H, Queen of Cartridges, will do everything he or she needs. François Edmond-Blanc of Paris hunted the world and made over 20 African safaris usually armed with nothing but a pair of them. He never seems to have felt handicapped by using a "mere" Class I. Someone who feels a need for a bit more punch can go to any gun store and order a Winchester M70 in the Class II .416 Remington. Such an individual can feel secure in the knowledge that not only can he hunt anything on the planet but can back up his friends, too, if things go south. Personally, I am the sort who doesn't think it's a bad idea to wear both a belt and suspenders at times so I like the .450 Rigby. The effect on game of a Class III rifle has to be seen to be appreciated. Craig Boddington agrees allowing, "these things numb buffalo." Frankly, a Class IV rifle is for bragging and anyone who can effectively use one has a lot to brag about. However fearsome the effect on the shooter, make no mistake, these things work. So, how much gun is enough?