



African Perspectives

CLASSIC AFRICAN CARTRIDGES

The .303 in Africa:



The .303 and its contemporaries. L-R: Martini-Henry .577 / 450, the black powder cartridge that the .303 replaced in military service: Mk II .303, note that the bullet has a cupro nickel jacket: Mk V hollow point, the original "Dum-dum": The Mk VII round with the lighter 174 grain spitzer bullet, note that the bullet's jacket is the copper coloured gilding metal: The 7x57 Mauser introduced in 1892, note the cupro nickel jacket on the bullet.

Much has been written and expressed concerning the use of various calibres in the hunting fields of Africa, and many have come to be regarded as African classics. None were quite so ubiquitous nor so frequently used as the .303. However, a bit of a conundrum presents itself concerning this grand old calibre in early Africa. Upon introduction it was a sensation, but notwithstanding this one has to search hard and long in the hunting literature of old for any mention of the .303. It seems as though, after a while, the .303 became so common and so widely used that it was largely taken for granted, and attention was diverted to more exotic, more powerful and altogether newer calibres.

To find any sort of extensive and favourable mention of it, one has to peruse the literature covering the end of the 1800's up to World War

One. To place everything into proper perspective, one needs to be aware of the nature of things prior to the introduction of the .303.

In the 1880's the firearm of choice for big game in Africa was a large calibre, cartridge firing black powder rifle; preferably a double, frequently a single shot and hardly ever a repeater. Romantic as this may seem, the frustrations attendant thereto were many and varied. We cannot properly comprehend the full nature of these trials and tribulations until we try such weapons for ourselves in the field, and not many of us have had the opportunity to do so. Perusal of the hunting literature of the period is revealing, however. Arthur H. Neumann in his excellent book entitled *Elephant Hunting in East Equatorial Africa* is particularly eloquent in his condemnation of these old black powder cannons. In

his earlier expeditions, Neumann used a double .577", and was widely criticised for using a 'smallbore' on elephant! This would be the .577" black powder express, though, either 3 inch or 2 ¾ inch. As far as black powder rifles went, though, it was a smallbore! Neumann liked it, though, and had much success with it until some terminal mishap rendered it *hors de combat* and he was forced to replace it with a larger 10 bore rifle. This he did not like! Although the 10 bore was technically and theoretically more suitable, in his own words.... "the discharge of the (10 bore) was something of a shock, which, though its rubber heelplate prevented from hurting the shoulder, made one's head ache, and knocked one's fingers about cruelly. The volumes of smoke emitted, too, were appalling, and a source of danger; but its worst defect was that





A Martini-Enfield .303 sporter. Note the added safety catch, selected stock, fitted recoil pad and improved sights compared to the military versions.

the breech invariably jammed, and the empty cases stuck, so that they had to be knocked out with a stick. Altogether, I found my prejudices against big guns in no way removed..." For those of you who may be wondering, a 10 bore fires a bullet of approximately .775", and even this did not hold a candle to the 8-bores (.835") and 4-bores (1.052"), which were also recommended elephant slayers of the period. Although black powder develops more of a push than a punch, such massive bullets behind huge amounts of powder develops a recoil which can be described as prodigious (among other things!). Your esteemed editor Don Heath and myself can attest to the effects of firing a 4-bore cartridge single shot rifle once belonging to Frederick Courtney Selous. Indeed, I recall a video sequence of Don firing this awesome rifle; the bullet sped one way and Don and the rifle sped the other way, leaving only a cumulonimbus of black powder smoke in the frame which an entire herd of elephants could have lurked behind!

Neumann was not kidding about the effects of the recoil either, as he described later as to how his battered fingers (probably hammered by the trigger guard) became septic, and laid him low for a while. I can vouch from personal experience that there is nothing like the anticipation of imminent pain and suffering to affect ones' shooting in a profoundly adverse way! Recoil was not the least of it either concerning the old black

powder monsters; brass cases were generally thin, leading to the sticking cases already referred to. Accuracy was a considerable problem too, particularly with double rifles. I have read numerous accounts as to the problems connected with the old black powder doubles failing to shoot both barrels to the same point of impact, and I have had experience of this myself. I once had an otherwise delightful .500 black powder express double rifle, but despite my best reloading efforts I was never able to better minute-of-dustbin-lid at 50 metres when firing both barrels. It would appear that the mystical and arcane art of barrel regulation was not fully understood, let alone practiced, at this time. As if this were not enough, the lead bullets launched by these rifles lacked penetration, particularly when bone was struck, and described a trajectory which made hits at longer range more a matter of good luck than good judgement.

The .303 was a revelation when it appeared. Adopted by the British army in 1888, the Lee-Metford in .303 was Britain's first smallbore, high velocity military rifle firing jacketed bullets. The first ammunition was loaded with a compressed pellet of black powder, but I am certain that this was a stop-gap measure; this cartridge was intended to be loaded with smokeless powder, and in short order the British had perfected their new Cordite smokeless propellant. The military were duly impressed, but the sportsman was equally taken

with this new phenomenon. No more clouds of game-obscuring smoke, many rounds, minimal recoil, high velocity and flat trajectory and, best of all, a jacketed bullet which penetrated into the vitals of even the biggest game. Even the largest calibrated, heaviest bulletted black powder rifle could scarcely equal this penetrative performance, and all who witnessed it were amazed at its shooting qualities. Neumann acquired a .303 Lee-Netford rifle at about the same time as the despised 10-bore, and quickly became an advocate of the latter, describing its shooting powers as 'marvellous'. Dennis D. Lyell was another .303 fan, using a rifle identifiable from photographs as a Martini single shot sporter. Not many of us would fancy tackling elephant with a single shot .303, but Lyell did! Compared to the other (black powder) rifles available, he felt it was the better choice. Again, in his own words from *The African Elephant and its Hunters*, Lyell describes following a wounded elephant. "I wondered whether I would be safer with the big 10-bore, but decided to stick to the small rifle, for I am a great believer in accuracy and penetration. In my opinion, a six foot puncture from a solid .303 is likely to be more effective than half that distance with a larger bullet, so I stuck to the rifle I knew best". This is especially illustrative in that it is the only old hunting literature that I am aware of that attempts to give a comparative reference as to the penetration of a smallbore solid vs. the old black powder lead bullets. Although undoubtedly subjective and not as the result of scientific experiments, Lyell shot a great many elephant and his opinion is well worth noting. A level of extra penetration which even remotely approximates this is nothing to be sneezed at! At this point it must be made clear that the .303 variant being talked about is the old 215 grain fully jacketed round nosed bullet at a rated 2050 fps. Many modern shooters have had at least some experience with the .303 cartridge and its various rifles, but not many have come across this particular loading. This is not surprising, as it went out before the First World War! That long, parallel sided bullet at what is



A take down .303 built on a mauser '98 action



An exquisite Gibbs-Farqueson built on the medium sized action.

today very moderate speed (but high velocity in comparison to black powder) was the one which caught everyone's attention way back then.

After everybody's attention had been duly caught by this amazing new rifle and cartridge, the gunmakers of the era were not slow to supply the hunters with appropriately chambered sporting rifles. Most were based on the Lee bolt action, duly slicked up and suitably stocked. Refinements like tang safeties, five shot magazines and moderate engraving could be had, and I have seen some to-die-for wood on some of those old sporter stocks too! Those old Lee Speed Sporters were lightweight, accurate, easy on the shoulder and generally a delight to handle. I have seen a number of single shot .303's as well, most built on the Martini action. In fact, I recently came across a delightful Martini actioned .303 sporter which appears identical to the one pictured in Lyell's book it may even be the same one, for all I know! Some were made on the superb Gibbs-Farquharson falling block action, and double rifles could be had as well. I once examined and greatly coveted a superb double barreled sidelock ejector rifle by Rigby. Naturally, the owner was not interested in parting with it; even if he was, I have no doubt that my meagre resources would have proved unequal to the task of acquiring it!

W.D.M Bell, one of the best known of all the elephant hunters, is best known for his exploits with such smallbores as the 6.5mm and especially the .275 Rigby (a.k.a. the

7mm Mauser) on these huge beasts. He began his hunting career with a .303 (among other less suitable rifles), as did most of the ivory hunters of old, and it was the .303 which led him to favour the smallbores. Again, the alternatives were black powder rifles. He was particularly impressed with the reliability of the .303 Lee-Enfield (or

Metford) action, although he doesn't have much to say about it otherwise. Apparently it was the only rifle he had which could take the peculiar hunting conditions he sometimes found himself in following elephant after they had availed themselves of singularly glutinous mud baths, and which were now moving off in tall elephant grass up to 12 foot high. This mud would wipe off on the grass, and anyone following behind would find themselves liberally showered by vast quantities of dry and semi-dry earth. As one can well imagine, this would be very hard upon any rifle! Even the redoubtable Mauser would choke upon this treatment, but the Lee could shrug it off. I was surprised when first hearing of this account, as the Mauser '98 is supposed to be well-nigh unstoppable in adverse conditions. However, the open topped Mauser action does allow for considerable ingress of unwanted foreign matter from above, whereas the Mark 1 Lee-Enfield (and the Lee Speed sporters) were equipped with dust covers which would very effectively shield the bolt from such grit and grime. Interestingly, Bell was particularly scathing about finely fitted double rifles under such conditions; admittedly, they were well sealed when closed, but let any of that rubbish in when re-loading, and the rifle would now fail to close again.

Speaking of reliability, it is only fair to mention that the aforementioned Neumann, fan as he was of the Lee-Metford, was considerably worked over by a cow

elephant after his rifle failed to feed. It appears as though his Lee-Metford resolutely refused to feed another live round into the chamber after firing, despite much furious working of the bolt. A short stroke seems unlikely, as he particularly mentions seeing the empty case departing upon attempting to re-load. A defective or dirt-filled magazine is possible, but I'm wondering if the magazine cut-off didn't become inadvertently engaged. All of the early Lee actions had this device, and it wouldn't take much of a tap to push it slightly in. If this happened, rounds would indeed fail to feed from the magazine that was the cut-off's job! We'll never know, though, as Neumann offers no explanation as to why this happened; no doubt he had other things to occupy his mind with at the time! Later Lee-Enfields, made during the emergency conditions of 1916, were not fitted with a magazine cut-off, as the benefits of this device were found to be more theoretical than real. In his early days, Bell also mentioned using a single-shot Fraser .303 rifle (probably based on the Gibbs-Farquharson action). This rifle gave him endless problems with sticking cases: a combination, no doubt, of early thin brass cases, pressure sensitive cordite used in the tropics and lack of primary extraction. Such troubles were soon sorted out, though there were a number of problems associated with the adoption of smokeless powder and its far greater pressures, which tended to linger in the sporting rifle calibres. However, it is utterly unthinkable to have pernicious problems associated with one's military calibre, and all the resources of the government would be devoted to solving them preferably A.S.A.P., and no expenses spared! I did find an old hunting reference where the nimrod concerned was bemoaning the unreliability of the primers in many sporting calibres. Misfires and hangfires were all too common, and said hunter stated that the only dependable ammunition he had come across was the British military .303. He heartily wished that the ammunition makers would get their collective acts together, and make


their primers out of whatever the British army was making theirs from!

Another notable user of the .303 was Col. Patterson, who used a .303 to deal with the man-eating lions of Tsavo. This is accurately depicted (for once) in the movie version, *Ghosts and the Darkness*, as is the incident where one of the lions escaped when Patterson forsook his trusty .303 for a more powerful but unfamiliar single shot rifle. Patterson did feel (quite rightly) that the .303 was perhaps under-powered for this task, but he accomplished it in the end. In Rhodesia of old, though, "Yank" Allen was employed to shoot stock-killing lions in the huge Nuanetsi cattle ranching empire. He probably shot more lions than anyone else, ever, and he apparently used nothing but a .303 for the task.

The probable causes of the .303's fall into relative obscurity are now becoming apparent. It was so new, and possessed such magical shooting properties in comparison to the old black powder rifles, that it came to be used for the very largest of dangerous game. We know that the .303 is not the best lion, buffalo or elephant calibre to be had, but back then it was all that there was. The British Army soon found that the long, parallel-sided bullet was too penetrative, and lacked stopping power and effectiveness even on human beings. A considerable scandal developed over this, and the

.303 found itself in the centre of a major controversy. The expanding "Dum-Dum" bullet was developed in India (at Dum-Dum arsenal, hence the name), and was found to be gratifyingly effective on *homo sapiens*, but then allegations of beastliness were hurled at the Brits. The lighter weight Mark VII spitzer ammunition was eventually introduced in 1903 to abide by the letter of the new Hague convention, which banned the use of soft nosed or hollow point ammunition in warfare. The lack of terminal effectiveness was addressed by use of a bullet design which encouraged tumbling and break-up upon impact. Needless to say there is no way that Mark VII ammunition is going to penetrate reliably on a large and potentially homicidal animal, but hunters being as they are they tried to do so, and the .303 soon gained a reputation for erratic and potentially dangerous performance. More powerful nitro-express sporting calibres were introduced, with bullets designed specifically for hunting, and the .303's period in the sun was over. It eventually came to be regarded as the choice of the novice, the tyro, one who either knew no better or who couldn't afford anything more suitable. In John Taylor's book, the incomparable *African Rifles and Cartridges*, the .303 doesn't even warrant a mention!

Nonetheless, this does not alter the fact that the .303 is still one of the best bushveldt calibres there is.

When confined to use on soft-skinned, non-dangerous game and when equipped with suitable bullets, the .303 is hard to beat. It does not have a flat trajectory, but this is not a drawback considering the typical hunting ranges encountered hereabouts. Perhaps, too, this will discourage hunters from taking chancy shots at too great a range. Just because one has a rifle of blistering velocity which can reach out far doesn't necessarily mean one has the skill to try and do so! Rather brag about how close you stalked than how far you shot. Those moderate bullet speeds will not destroy half of a good eating animal, and also will ensure that standard, conventionally constructed, lead cored hunting bullets work just fine. Reliable bullet performance can be taken for granted, and there is no need for hi-tech projectiles. One should avoid the use of military ball ammunition on game, particularly the larger species. This is seldom a good idea, as not only is bullet performance erratic to say the least but most military ammunition is corrosively primed. I do wish that the older 215 grain bullet weight was more readily available. Most modern sporting .303 ammunition is loaded with 150 or 180 grain bullets, and while 215 grainers can be had, they are speciality items and correspondingly hard to locate and expensive. A 215 grain soft-nosed bullet would certainly be my No. 1 choice in a .303 hunting rifle, as this was the bullet weight which brought the .303 to prominence in the early days. It hits hard, and penetrates reliably and well. Sadly, no-one manufactures new rifles chambered for the .303 any longer. However, there are still a great many of them out there, and with a bit of T.L.C. and attention they can be made into anything from a first class utility rifle to a hunting rifle which can rank alongside the finest modern sporters. Under local law the .303 is deemed to be suitable for the larger soft-skinned plains game such as kudu, wildebeest, zebra and the like. Stick to game of this size, hunt with proper soft nosed bullets and you will find that the .303 is as effective as it ever was when it briefly ruled the hunting world in southern Africa. 



Two sporters built on early Lee-Enfield actions. Note the magazine cut-off fitted to both rifles so that they can be conveniently used as single shots.