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P.O. Ackley's Big .450



Still Good After
All These Years

Terry Wieland

In 1990, Jack Carter, developer of the Trophy Bonded Bear Claw, made his last safari in Africa, hunting first in Tanzania, then in Botswana. He took two rifles. One was a pre-64 Winchester Model 70 .243 Winchester, the other a pre-64 .450 Ackley Magnum. The big .450 was for use on Cape buffalo. It was a rifle Jack carried for 20 years and the one that set him on his quest for a good, premium big-game bullet in the first place. In East Africa in the 1970s, hunting elephant, a conventional 500-grain bullet had riveted, bent into an L shape, and caused all manner of problems. Jack set out to correct them.

Throughout the development of the Trophy Bonded Bear Claw, that .450 Ackley was his major test rifle, and when I saw it, I fell for it instantly. Jack loved that particular rifle, but he was a realist. "If you're going to get a .450," he told me, "You're better off with a .458 Lott." The Lott, even back then, was on its way to becoming a factory cartridge that would do everything the Ackley would do but with a lot less trouble. In the 27 years since, the Lott has become a standard while the .450 Ackley has largely faded from sight.

Needless to say, I did not take Jack Carter's advice. Instead, I came home, surveyed my meager inventory of rifles and actions, and chose a rather poorly customized .375 H&H on an FN Supreme action as the starting point. I delivered it to a veteran German gunmaker named Siegfried Trillus with instructions to turn it into a .450 Ackley.

Siegfried removed the barrel and stock and threw them away. He replaced the FN shroud and trigger safety with a new shroud and Model 70-style wing safety, then installed a 22-inch Douglas barrel. He

carved a stock out of American black walnut from a tree he had cut down, sawn into blanks and seasoned. Claw mounts were ordered from Germany and a 26mm Swarovski Habicht Nova 1.5x20 scope was installed. With a few odds and ends to come, I had my longed-for .450 Ackley. Little did I know what travails lay ahead.

The .450 Ackley Magnum (*not Improved*) was developed by Parker Ackley in the 1950s, during the heyday of converting Enfield P-17s to cartridges for elephant and Cape buffalo. The Ackley was not alone. There was also the .450 Watts that enjoyed brief fame, because Jack O'Connor took one on an early safari, and a couple of others. The Ackley gained exposure, however, through P.O. Ackley's 1960 *Handbook for Shooters & Reloaders*, and it came to stay. Like most of its brethren, it was based on the .375 H&H case necked up and blown out, so it would also fit in the Winchester Model 70.

The introduction of the .458 Winchester in 1956 cut the ground out from under most of the wildcat



Facing page, in some African countries, it is important that the cartridge headstamp match the rifle. This can be a critical concern with wildcat cartridges, like the .450 Ackley. Quality Cartridge specializes in wildcat, obsolete and hard-to-find calibers. Right, the Big .450s include (left to right): .458 Winchester, .458 Lott and .450 Ackley.

P.O. Ackley's Big .450

.450s, but problems with the factory cartridge soon manifested themselves. This ultimately resulted in Jack Lott developing his own .458 in 1971 – merely the .458 Winchester lengthened by .3 inch, which solved the problems. Most of the serious hunters who owned an Ackley, Watts or other wildcat .450, already having loading dies, and with brass easy to make, stuck with what they had. Jack Carter was among them.

Although articles have been written arguing that one of these wildcats is better than another, in this way or that, the harsh truth is they were all very similar: belted cases for reliable head-spacing and tossing a 500-grain bullet at between 2,150 and 2,400 feet per second (fps), depending on how adventurous you were or how much you liked being belted around.

Most were the full-length 2.85-inch .375 H&H case. The Ackley was a little different in that the case was blown out to give it the



Terry with a Cape buffalo in Tanzania in 2006. The .450 Ackley and 500-grain Swift A-Frame bullets accounted for two bulls in the space of a couple of minutes.

most miniscule of shoulders – utterly pointless as a shoulder, and any resulting increase in case capacity is imaginary. It does have the one advantage of giving the case a definite neck, and this allows for more consistent grip tension on the bullet. It also reduces wear and tear on case mouths, which is important when fashioning your own brass.

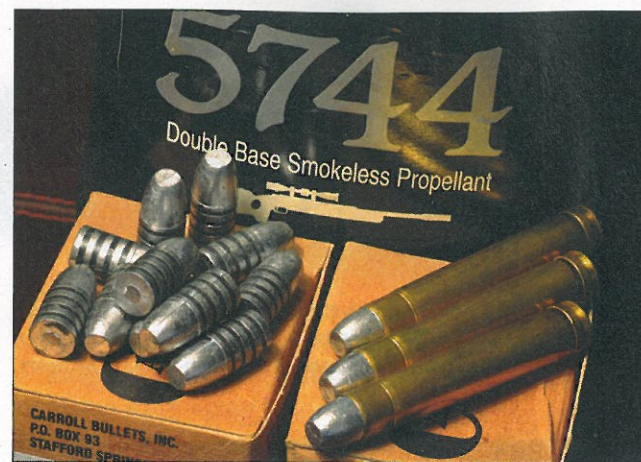
For years, it has been an article of faith that these cartridges should reach 2,400 fps with a 500-

grain bullet. When starting off with this cartridge, I used Carter's favorite load, which was a compressed charge of W-748. At the time, it was about the only powder that would deliver the goods.

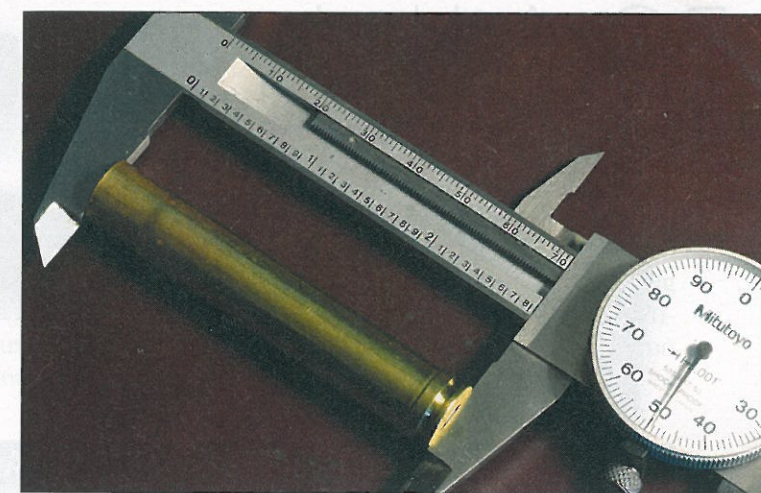
It took a number of bulged cases, creeping bullets and wear and tear on my shoulder before I concluded that this is a losing game. In reality, 2,250 to 2,350 fps is just as good – whatever is most comfortable and accurate for the hunter, the rifle and for the cases themselves.

To begin with, case length is an immediate concern. If all brass is made from one brand of .375 H&H, you're fine. The process of necking up and blowing out shortens each case slightly, so while the charts show the .450 Ackley to be the same length as the .375 H&H (2.85 inches), in reality it is not. There are even variations among different types of factory brass that has been produced, off and on, over the last few years.

Another consideration is the headstamp. Some African countries with ammunition restrictions require that headstamps match the rifles you're bringing in. In the 1980s, Art Alphin started making .450 Ackley brass under the A-Square name, but it was spotty of quality and inconsistent length. Later, some brass was produced



The .450 Ackley can be loaded down to .45-70 levels using lead bullets like the Carroll Bullets 405-grain bullet and Accurate 5744 powder.



Quality Cartridge's .450 Ackley brass is of excellent quality and made to exact dimensions.

under the Barnes Brass name. It was better than the A-Square and had no caliber stamp at all, but that is still better than having the wrong one. Like A-Square brass, length varied.

In a cartridge of this power, you need to properly crimp every bullet. This is partly due to recoil and partly the constant pressure against the base of the bullet if

the powder charge is compressed. Like most things in handloading, a domino effect can be set off. If a bullet is not solidly crimped, the combination of recoil and powder compression will cause the bullet to creep, which can create feeding and seating problems in the chamber. These you most definitely do not want with a Cape buffalo bearing down. Cases of slightly

different lengths – even a few hundredths of an inch – can place the crimp incorrectly or cause case bulging by crimping outside the bullet's cannellure. Even a slight bulge, so slight you can't see it and barely feel it with your fingertips, can prevent a cartridge seating in the chamber.

One of the problems with the .458 Winchester, early in its life,

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P.O. Ackley's Big .450



A custom .450 Ackley built on an FN Supreme action with Douglas barrel, Swarovski scope and German claw mounts.

.450 Ackley Magnum Select Handloads

bullet (grains)	case	powder	charge (grains)	primer	velocity (fps)
300 Sierra HP	A-Square	H-4198	80	F-215	2,820
300 Barnes X	A-Square	H-4198	80	F-215	2,816
350 Speer FN	A-Square	H-4198	75	F-215	2,526
350 Barnes X	A-Square	H-4198	83	F-215	2,713
400 Trophy Bonded Bear Claw	A-Square	H-335	90	F-215	2,538
450 Swift A-Frame	Quality	H-4895	85	F-215	2,410
500 Swift A-Frame	Quality	R-15	82	F-215	2,215
500 Trophy Bonded Bear Claw	A-Square	W-748	95	F-215	2,296
405 Carroll Bullet Inc. cast	Quality	Unique	23	F-215	1,355
		Trail Boss	27		1,346
500 Hayley's Custom Ammunition cast	Quality	A-5744	34	F-215	1,220
		Trail Boss	27		1,126

Be Alert - Publisher cannot accept responsibility for errors in published load data. Listed loads are only valid in the test firearms used. Reduce initial powder charge by 10 percent and work up while watching for pressure signs.

was the severe powder compression needed to even approach advertised ballistics. This caused the powder to cake and resist ignition. At one point, I decided to deactivate some loaded .450 Ackley loads, pulled the bullets, then had to use a dental pick to remove the powder that had caked like cement. Since then, I have used mainly extruded powders, and preferably docile ones such as H-4198.

This gives some idea of the problems that can be encountered (or created) by mindlessly pursuing a questionable goal, such as a

velocity of 2,400+ fps. Art Alphin himself helped to aggravate this by publishing statements about the radically increased killing power of 2,500 fps in any cartridge. As opposed to what, 2,480? Or 2,450? I have seen loading data alleging a velocity of 2,500+ fps with the Ackley and the Lott, but I have never pursued them.

Bullet weight is another consideration. The standard for a big .450 is 500 grains. It is the Hammer of Thor. Some advocate 400 grains, because of increased velocity, and truth to tell, you can easily get velocity exceeding the .416 Rigby by dropping bullet weight to 400 grains. Personally, for anything requiring a .450, I want 500-grain bullets.

One of the great advantages of all the .450s, however, is their versatility. I have loaded and hunted with bullets ranging in weight from 300 to 500 grains. At one point, I took my .450 Ackley to Africa and left it for two years, with a supply of ammunition of different types,

intending to have a rifle ready and waiting whenever I went back. During that time, I used the .450 exclusively, hunting everything from greater kudu, gemsbok and zebra to Cape buffalo, and even carried it one time while tracking a leopard. If reduced to just this one rifle for all the hunting I will do in the future, I would not feel too badly.

It should be noted that, in a pinch, .458 Winchester or .458 Lott ammunition can be used in a .450 Ackley rifle. Obviously, the reverse is not true. However, should your ammunition get separated from the rifle en route to Deepest Darkest, either of the above cartridges is available, you're back in business. Lott ammunition works best, while .458 Winchester tends to lose velocity because of the roomy chamber, which is something most factory .458 ammunition can't afford. Neither is ideal, but it beats being unarmed.

This year, with a possible Cape buffalo in the offing, I decided

it was time to go through all my brass, use up old handloads and start fresh. I found that I had such a hodgepodge of brass, it was long overdue to relegate it to "practice only" and acquire a lifetime supply of good stuff. Quality Cartridge, in Maryland, offers excellent .450 Ackley brass. It has the right headstamp (important for border crossings), is the exact length and removes all the concerns about crimping in the wrong place, case bulging and the assorted ammunition headaches that have accompanied the Ackley since I got it.

The accompanying load table includes some loads from years ago, and they are included here as a guide to show what can be done with various bullet weights. None of the loads are maximum, and all are, I believe, a reasonable starting point for load development. With 300-grain bullets, it is possible to get well over 2,900 fps, and with 400-grain bullets to exceed factory ballistics of the .416 Rigby at 2,410 fps. Conversely, the cartridge can be loaded down to duplicate ballistics of the .45-70 or to create excellent practice loads using powders like Trail Boss and Accurate 5744. Most light bullets, like the Sierra 300-grain HP, are not intended to handle really high velocities, and this should be kept in mind.

Although the .450 Ackley is capable of some very impressive ballistics, in my experience, the best all-around load is found somewhere just below the point where velocity jumps and recoil jumps geometrically. If recoil could be charted on a graph, it would look like a reversed L, climbing gradually as velocities increase until, at a certain point, it suddenly jumps, with or without any commensurate increase in velocity. With my .450 Ackley, using 500-grain buf-

falo slammers, this point is just below 2,300 fps.

A final word about the overall configuration of a .450 Ackley rifle, like my FN. Because of its physical size, it does not require a magnum

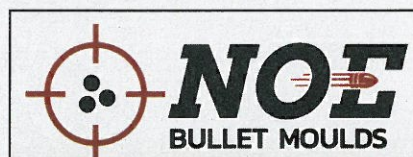
action, and a rifle can be made that handles with the ease of a fine bird gun. This is no small matter with dangerous game. It's important that it handle easily, quickly and instinctively with reasonable accuracy. The .450 Ackley accomplishes these things, combined with the power to down anything on earth, under almost any conditions. It is really too bad no one ever made it a factory round. •

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