The Los Angeles Silhouette Club

The .32 S&W Long:
A Handgun Hunter's Perspective
By: Glen E. Fryxell

The .32 S&W Long is regarded by some as an archaic artifact of another time, best left to the dust of the Ages. I would suggest a less hasty conclusion. Yes, it was originally introduced by Smith & Wesson in 1878. Yes, it was originally housed in the weak Model 1 1/2 top-break revolver. Yes, it was originally a black powder load only generating 680 fps with an 85 grain lead round nosed bullet. Yes, it was introduced as a pocket pistol for self-defense, and yes it was marginal in that application. Yes, smokeless powder, stronger steels and the Magnum Age would come along and make such pip-squeak ballistics "yesterday's news". So what? Is there a problem with all that?

While the hinged-frame top-break revolvers are indeed very weak and need to be treated with care (i.e. loaded to black powder pressures *only*), S&W entered the modern era with their first Hand Ejector (the Model 1896), and it was chambered for the .32 S&W Long. The fixed frame of the Hand Ejector series of revolvers would revolutionize the handgun world, and ultimately lead to the first Magnums. With the introduction of smokeless powder, factory ballistics for the .32 S&W Long were upped only slightly to a 98 grain lead bullet at 705 fps (undoubtedly out of deference for the weaker top-break revolvers). I have shot small game and vermin with lead round-nosed bullets at roughly 700 fps -- head shots are effective, body shots leave a great deal to be desired. The bottom-line is that these slow round-nosed bullets are just not a humane hunting combination.

However, the fixed-frame Hand Ejectors were stronger than the older top-break revolvers, and could be safely loaded to somewhat higher pressures (i.e. 15,000 CUP). This increased pressure allows 90-100 grain cast bullets to be pushed 900-1000 fps safely (for example, see the pressure-tested load data in Phil Sharpe's "Complete Guide to Handloading"). Coupling this added velocity with improved bullet designs bearing a decent meplat, and you now have an excellent hunting combination for small game.

If this sermon sounds familiar, others have preached it long before me. In "Sixguns" Elmer Keith summarized the .32 S&W Long as, "...a wonderfully accurate target cartridge...but in factory loadings is a very poor game cartridge." He went on to say, "Properly handloaded with a bullet like the Ideal 313445 and 4.0 grains of Unique for a velocity of 1000 fps, it is a wonderful small game cartridge." In "Hoglegs, Hipshots and Jalapenos" Skeeter Skelton also sang the praises of the .32 S&W Long as being very accurate, although underpowered for anything but the smallest game, and that its performance as a hunting cartridge could be significantly enhanced by handloading. The load he cited was comprised of a 95 grain cast bullet over 4.3 grains of Unique for 1010 fps. Generally speaking, when Skeeter was looking for this level of .32 caliber ballistics, he usually turned to the .32-20

cartridge, but I suspect that was in large part due to the fact that the .32-20 was available in his beloved Colt Single Action Army, while the .32 S&W Long was not.

Several other gun writers have gone on record in favor of the .32 rimfire rifle as a preferred small game load. For those of you that might not be familiar with the ballistics of the old black powder .32 rimfire loads, they generally had an 80-90 grain lead bullet at 950-1050 fps. The .32 rim fires had a reputation for adequate accuracy out to about 50 yards (black powder fouling could be problematic), and would kill small game cleanly without spoiling a lot of meat. When .32 rimfire ammo became scarce and hard to find, many of these shooters moved on to reproduce these ballistics in a .32-20 rifle or revolver, but the extra case capacity isn't necessary to achieve this ballistic level and a solid-framed .32 S&W Long revolver is just as capable of reproducing the old .32 rimfire ballistics (and accurate loads will probably be easier to find than with the .32-20). This, I would argue, is the special niche that the .32 S&W Long now occupies -- the ~95 grain bullet at 900-1000 fps, useful for hunting small game.

Yes, we now have stronger steels and modern CNC machine capabilities, and we can build better, stronger, more powerful revolvers than ever before. Yes, we now have the .32 H&R Magnum and the .327 Federal, both capable of delivering significantly higher velocities than the ancient .32 S&W Long. So what? For the small-game hunter the bottom-line is that a rabbit is still a rabbit, and a squirrel is still a squirrel. I really like Brunswick stew, and I'm not a big fan of a whole lot of bloodshot goo. The .32 S&W Long kills small game cleanly (it is significantly more effective that the .22 Long Rifle), and doesn't spoil a lot of meat in the process. The .32 H&R Magnum and .327 Federal are both fine varmint cartridges, but their extra velocity equates to a certain amount of wasted meat when the quarry is intended for the dinner table. I have (and hunt with) more powerful handguns, but when edible small game is on the menu there is a strong probability that a .32 S&W Long revolver will be along for the ride. Simply stated, when properly loaded, the .32 S&W Long is the perfect small game cartridge.

Handloading the .32 S&W Long:

The .32 S&W Long is pretty much a definitive "small case" in terms of powder capacity. Uniform ignition is not a problem since the brisance of pretty much *any* primer will completely fill the available volume in the loaded round. The small case capacity, combined with the pressure limitations, make the .32 S&W Long best served by the medium to fast burning pistol powders, ranging from Bullseye on the fast side out to about HS-6 on the slow side. I have gotten excellent results with Red Dot and W231 in the .32 S&W Long. Red Dot in particular, bulks up well in the tiny case and has given me excellent accuracy over the years in the .32 S&W Long. Bullseye, PB and American Select are also excellent choices for the .32 S&W Long. A pound of powder goes a LONG ways when it's metered out in 2.0 to 2.5 grain doses!

One of the things that appeals to me about the .32 S&W Long is how well it performs with cast bullets. In fact, in all of the thousands and thousands of rounds of .32 S&W Long that I've shot over the years, fewer than 1% of them have involved

jacketed bullets. At ~900 fps and 15,000 CUP, cast bullets are right at home, and just make sense. With a gang mould and a pot full of lead, you can make bunch of .32 cast bullets in a hurry from a few pounds of scrap wheel weights! As far as mould designs go, there are some excellent .32 wadcutter moulds available from RCBS, NEI (I like #79 in PB form) and H&G (originally listed as #66 by H&G, now available from Ballisti-Cast), and at one time Lyman made a couple of very interesting variations on the .32 wadcutter theme that make for very interesting field loads (the 95 grain 313445 SWC and the 93 grain 313492 Type III wadcutter). Other .32 cast bullet designs worthy of note are the timeless Lyman/Ideal 3118 (now labeled the 311008), the RCBS 98 grain SWC, the RCBS 88 grain Cowboy bullet, and SAECO also makes some good-lookin' .32 moulds (I have an old Cramer 95 grain SWC that I am very fond of, a design that SAECO still offers). Several years ago, I had Mountain Molds make a mould for me to produce a 98 grain .312" Keith-style SWC (73% meplat, three equal driving bands, beveled crimp groove and a big flat grease groove). A couple of years later, this bullet was used as inspiration for one the Lee custom mould Group Buys for a 6-cavity gang mould to make a .315" diameter 98 grain Keith-style SWC (there were some changes made to the ogive and driving bands). The bottom-line is that there is no shortage of good bullet moulds available to the handgun hunter who wants to hunt with the .32 S&W Long.



Some of the excellent cast bullet designs available for the .32 S&W Long (I-r: H&G #66, NEI #75, RCBS .32-90-Cowboy mould, Cramer #52D 95 grain SWC (now available as the SAECO #325), Lee custom Group Buy 98 grain Keith-style SWC, Mountain Molds Keith-style 98 grain SWC, Ideal 31133 (the 109 grain HP version of the 3118), and the 115 grain Lyman 311008).

My preferred load for the Type I wadcutters (i.e. the button-nosed target bullets that are seated deeply) is 2.0 grains of Bullseye (which, conveniently, is the lightest load I can get my Dillon 550B powder measure to drop), which averages about 750 fps or so (depending on barrel

length), and with that full-diameter meplat it anchors grouse very effectively. For the lighter field bullets (like the RCBS cowboy bullet and the Lyman 313492, both of which weigh about 90 grains when they drop from my moulds), I like to load them on top of 2.6 grains of Red Dot for about 965 fps, a load that delivers excellent accuracy. Both of these loads drop small game effectively, and don't waste a lot of meat in the process. For the 98-100 grain SWC bullets, like the RCBS 98 grain SWC and Keith-style SWC's, I have gotten very good results with a variety of powders (from Red Dot to HS-6), but commonly turn to 2.5 grains of Red Dot or 3.0 grains of W231, both of which produce a little over 900 fps (depending on barrel length) and excellent accuracy.

Another thing that I like about the .32 S&W Long is that the brass seems to last forever. I can't recall ever having a case wear out, or split.

The guns:

That brings us to the guns -- ah yes, the guns! As mentioned earlier, the .32 S&W Long was originally brought out in the weak, top-break S&W Model 1 1/2. I am going to skip over the old black powder hinged-frame guns since the focus of this

article is on the optimum small game hunting loads, generally operating in the 900-1000 fps range, and these loads are entirely unsuitable for the old top-break guns. That brings us to the Hand Ejectors -- as this is written, I have no first-hand experience with the Model 1896 (I hope to change that in the near future), but I have plenty of experience with the Model 1903 (and the various changes associated with that Model). This dainty little I-framed sixgun is just about the definitive "grouse gun" in my mind -- light, easily carried in a vest pocket or bib



.32 S&W Long ammo, loaded with a few of the excellent cast bullet designs available (I-r: NEI #75 wadcutter, RCBS .32-90-Cowboy bullet, Lyman 313445, Lee custom Group Buy 98 grain Keithstyle SWC, Mountain Molds Keith-style 98 grain SWC, RCBS 98 grain SWC, and the Ideal 31133 HP).

overalls when hunting big game, and able to dispatch a grouse quickly and cleanly without wasting a lot of meat (and without making a lot of noise). The Model 1903 was available with 3 1/4", 4 1/4" and 6" barrels. I have shot all three, and they have all shot very well for me. The one issue that I've encountered is that the sights are rather fine, and with bifocals sometimes it can be a challenge to quickly get a good, clean sight picture. But these little I-frames sure do shoot! The 3 1/4" I have has a bore that still has decent land/grooves, but is spider-webbed with pitting throughout the length of the barrel -- and it will still put 12 shots into 1 1/4" at 50 feet! The other I-frame .32 S&W Longs I've shot have displayed similar capabilities. I ran some tests on 4 different I-frame .32 S&W Long revolvers -- all 4 guns would allow a Hornady 85 grain XTP (that mikes .312" on the nose) to pass smoothly (the 3 1/4" Model 1903 was a little snug, but it still passed), and none would allow a cast bullet sized .313" to pass. Clearly, a good place to start with cast bullets for these little guns is .312".



The I-frame .32 S&W Long (Model 1903) was available with 3 1/4", 4 1/4" and 6" barrels.

S&W built the I-frame (and the improved I-frame) up until 1961, when they introduced the J-frame. By this point, the revolver was known as the Model 30 (round butt) or Model 31 (square butt). Years ago, I picked up a 3" Model 31, and it not only shoots to the fixed sights, it groups quite nicely to boot! I haven't carried this little J-frame very often because it's just too pretty to get beat up when I'm in the black timber hunting elk, but it has nonetheless accounted for a handful of vermin and small

game in the off-season. Throats on this revolver run just a little over .313", so that's what I size cast bullets when I'm loading for it.

S&W also built a few .32 S&W Longs on the K-frame. These tend to be rather rare, and you don't run across them every day. I was fortunate to pick up a 4"



The J-frame .32 S&W Long (Model 31-1), with a 3" barrel and fixed sights.

M&P in .32 S&W Long a while back, and it has quickly turned into one of my personal

favorite revolvers. The bluing on the barrel is worn, but mechanically this gun is in very good shape, and it is one fine shooter! In this revolver, cast bullets sized .313" are a snug fit in the throats, and so that is how I size them.



S&W made a few M&Ps (K-frame) chambered for .32 S&W Long.

I have always wanted a K-32 Target Masterpiece, but given the steep prices they tend to command, I just haven't been able to find one that I could afford. So a number of years ago I decided to have a custom gun built instead (and still ended up saving a bunch of money). I bought a 6" full-lugged Model 16 barrel (from the .32 H&R

Magnum production run) and a K-22 cylinder, and had these fit to a K-38 frame. I also commissioned a set of very tight reamers to be made up (.0015" clearance on the chamber dimensions, and .3125" for the throats), and took all these parts over to my good friend Dave Ewer and asked him to build the gun. This gun is mechanically VERY tight, and it shoots superbly! In hindsight, I probably should have gone with about .003" clearance on the chamber dimensions, as occasionally variations in crimp dimensions can cause problems with getting ammo to chamber, but boy does this gun shoot! When hunting, this gun gets cast bullets sized .312", at 900-1000 fps, and it shoots them all day long into little-bitty groups. This is truly a connoisseurs small game handgun.

Well that covers the I, J and K-frames. Believe it or not, I have seen exactly one N-frame .32 S&W Long. Now before anybody gets their "tail tied in a knot" over that statement and calls me a liar, this was most certainly NOT a factory gun! This was a fixed sight 3 1/2" .45 caliber N-frame that somebody had



Custom K-32 target gun built by Dave Ewer. This tight little gun is exquisitely accurate!

sleeved the chambers and re-chambered/re-throated them for .32 S&W Long, and then they had lined the barrel with a .32 liner, and nickel plated the whole mess. Why somebody went to all that work, I don't know, but it was certainly a unique handgun. Who knows? It might have been a real tack-driver.

Applications:

The .32 S&W Long makes an excellent target gun. The custom K-frame described above was originally built as a bullseye gun, intended for wadcutters (either home-cast or commercial hardcast, and the Oregon Trail Bullet Company makes a fine 98 grain .313" double-ended wadcutter), loaded over 2.0 grains of Bullseye. Years ago, I shot a number of bullseye matches with this gun for the centerfire stage and it served extremely well. It is extremely accurate, and the trivial level of recoil makes recovery very easy during a rapid fire string. The full-lug barrel makes the gun slightly muzzle heavy, so the sights "hang" on the target very nicely. All in all, a very nice bullseye package.

Anymore, I don't shoot as much bullseye as I used to, so this gun gets used mostly for small game hunting now. It is big enough and heavy enough that it doesn't really fit in as a "second gun" when I'm hunting big game, so this gun gets carried main as a primary gun when hunting edible small game, a role in which it excels. It is particularly well-suited for cottontails with the 90-100 grain cast SWC's at 900-1000 fps, and it is notably more effective at anchoring small game than a .22 handgun, yet it doesn't spoil a lot of meat. My favorite way of fixing rabbit is to quarter them, bread the pieces, adding a little black pepper and garlic salt to the flour, and pan fry them. Quick, simple, easy and tasty!

When hunting tree squirrels, I like to use the .32 S&W Long loaded with wadcutters. Since squirrel hunting commonly involves shooting upwards into the tree canopy, in the event of a miss a wadcutter tends to become unstable (especially if it hits branches) and start to tumble, shedding velocity quickly and falling to earth a short distance away. A more stable profile (e.g. SWC or round-nose) could potentially maintain its stable nose-forward flight, fly great distances, and return to earth at high velocity, potentially causing property damage or personal injury. A 98 grain wadcutter at roughly 750 fps will take a bushytail cleanly, but not fly into the next county if the shooter misses. I lived in the southeast for a number of years and became a big fan of Brunswick stew while there. For squirrel, I throw the skinned carcass (whole) into some salted water and put it on a slow simmer for a couple of hours. Then I pull the meat out and let it cool, and pull all the meat off the bones, putting the meat back into the soup-stock with a little Worcestershire sauce, onions, carrots, potatoes, barley, salt and pepper and simmer till the veggies are done. Don't be late for dinner, or you won't get any!

The .32 S&W Long also makes a good varmint round. For critters like ground squirrels and prairie dogs, I will commonly use the Keith-style SWC's loaded to around 1000 fps, and it pops burrowing rodents smartly. For jack rabbits, I generally want a little more "thump" and will commonly load the .32 S&W Long with a cast HP like the Lyman/Ideal 31133 (the 109 grain HP version of the 3118), cast soft (BHN of 9 or less, e.g. 25-to-1 alloy) and load it to 1000 fps with 3.0 grains of Red Dot (this load is too hot for the I-frame guns and only gets shot in my K-frame .32s). This load does not produce the explosive expansion that magnum cast HP loads commonly deliver, but it does offer notably better killing power for moderate-sized vermin like jack rabbits, nutria, rock-chucks, and such.

Perhaps my favorite application of the .32 S&W Long is as a grouse gun. Here in the Pacific Northwest, grouse are commonly encountered in the mountains during deer and elk season. These encounters are typically at close range (commonly ~15 yards or less), and in country where big game (the primary quarry) is likely to be nearby. This means that a small, accurate, quiet handgun, capable of killing grouse cleanly without wasting a lot of tasty meat makes a sensible companion. The .32 S&W Long, loaded with wadcutters at target speeds, does a fine job putting grouse in the game bag (so do the Keith-style SWC's, but the target wadcutter loads are a little quieter, and thus less likely to spook big game). My favorite way to prepare grouse is to bone out the meat and slice it into bite sized chunks, simmer it gently in

some white wine (preferably Riesling), butter, a little dab of Dijon mustard, some garlic, onions, and sliced mushrooms, and it becomes a meal fit for a king.

Yes, in some ways the .32 S&W Long is a relic from a by-gone era, a 19th century pocket pistol for self-defense. More effective cartridges have since been developed for that application, but the .32 S&W Long still has a place in a handgunners battery. While the .32 S&W Long lead round-nose factory ammo isn't particularly effective, when the cartridge is loaded with wadcutters at 750 fps or SWC's at 900-1000 fps, it makes an outstanding small game round for the modern handgun hunter.

- Glen E. Fryxell

Addendum on cast SWC's in the .32 S&W Long:

Commonly, when I am working up new loads for the .32 S&W Long, I will do all the shooting and chronographing with the custom Ewer K-32 bullseye gun described above. It is very accurate so I know that I'm getting everything out of the load that it has to offer, and if the chronograph tells me that the loads are a little too warm for the I-framed guns, I don't have to worry about damage to the very strong K-frame. The realization hit me that I had chronographed the wadcutter loads out of the I-framed revolvers, but I had just taken the other loads out and shot stuff with them, without knowing exactly how fast they shot in the various guns. This last weekend, I decided to rectify that oversight.

All cast bullets cast of range scrap (BHN \sim 10). Sized .312" lubed with 50/50 beeswax/Moly grease. Winchester Small Pistol primers. Temperature \sim 75^F.

Velocity data for .32 S&W Long loads

3.0 grains of W231 with the		2.5 grains of Red Dot with the Mountain	
Lee 98 grain SWC.		Molds 102 grain SWC.	
Ewer K-32 (6")	974 fps	Ewer K-32 (6")	857 fps
3 1/4" Model 1903	820 fps	3 1/4" Model 1903	727 fps
4 1/4" Model 1903	908 fps	4 1/4" Model 1903	782 fps
6" Model 1903	866 fps	6" Model 1903	734 fps

3.0 grains of W231 with the Mountain Molds 102 grain SWC

Ewer K-32 (6")	911 fps
3 1/4" Model 1903	766 fps
4 1/4" Model 1903	836 fps
6" Model 1903	792 fps

The first thing that jumps out of these numbers is that these loads are going notably slower from the old I-framed guns than they are out of the tight custom K-32 bullseye gun. This in and of itself isn't surprising, but the margin of difference

between the 6" K-32 and the 6" I-frame took me by surprise (~120 fps). The other thing that jumps out of these numbers is that the 4 1/4" is consistently the fastest of the I-framed guns, and it is consistently ~40 fps *faster* than the *longer* barreled 6" Model 1903. As my friend John Taffin has said for years when people ask him about revolver velocities, "Each sixgun is a law unto itself.". John's right.

All of these guns have cylinder throats that run less than .313", so these observations got me to thinking about the cylinder gaps in these various revolvers, so I broke out the feeler gauges and made a few measurements.

Ewer K-32 bullseye gun	.0025"
3 1/4" Model 1903 (5th change, 1914)	.004"
4 1/4" Model 1903 (2nd change, 1906)	.0025"
6" Model 1903 (5th change, 1910)	.005"

Sure enough, the slow 6" Model 1903 has the largest gap, and the fast 4 1/4" Model 1903 has the smallest gap.

Next, if we compare the two bullets by examining the data from the two loads using 3.0 grains of Winchester 231, we see that the Lee custom Keith-style SWC is consistently ~60 fps faster than the Mountain Molds Keith-style SWC. The Mountain Molds SWC stays true to the design parameters laid out by Elmer Keith (3 driving bands of equal width, large flat-bottomed grease groove, beveled crimp groove, large meplat), and was designed with a 73% meplat. This is a design that has proven itself for over 3/4 of a century. The Keith-style SWC that we got as a part of the custom group buy from Lee has a meplat of .205", which equates to about 66% (very similar to what Elmer used when he designed his first SWC, the 429421, which leaned heavily on the 429336, the so-called "Heath bullet" designed back before World War I; Elmer would use larger meplats on his later SWC designs, varying between 70% and 75% of bullet diameter). There are two possible explanations for this velocity difference between the Mountain Molds SWC and the Lee SWC -- 1) the weight difference, and 2) the difference in thickness of the base bands. These bullets were cast with range scrap with a BHN of about 10 (similar to WW alloy) and the Lee SWC weighs 98 grains, and the MM SWC weighs 102 grains. Is a 4 grain difference in weight enough to cause a 60 fps difference in velocity? Maybe, maybe not. Changes in base band thickness are known to have an impact on how well the bullet's base can seal the propellant gases. The MM SWC has a base band that is .075" thick, whereas the Lee SWC has a base band that is .110" thick. Which parameter is responsible for the velocity difference? I don't know, but I suspect that it could be the base band difference. In any event, I think it would be appropriate to use this example to modify Taffin's Axiom to, "Every bullet is a law unto itself.". As for the 60 fps difference, I'm not going to get too wound up over it since both of these loads use good flat-pointed bullets and there isn't a grouse in the world that could ever tell the difference between these two loads.

Lastly, if we compare the two loads using the Mountain Molds SWC (over 3.0 grains of 231 and 2.5 grains of Red Dot), we see that the 231 load tends to be about 50 fps faster. In my experience, the Red Dot load is more consistently accurate (from

gun to gun). Some guns shoot the 231 load well, others don't, but they all seem to like the Red Dot load, so that's a load that I generally tend to gravitate towards.

The bottom line is that these loads were going a little slower than I thought out of the old I-frame guns, but these flat-pointed bullets still kill rabbits, grouse and squirrels just fine, thank you.

- Glen E. Fryxell

Warning: All technical data mentioned, especially handloading and bullet casting, reflect the limited experience of individuals using specific tools, products, equipment and components under specific conditions and circumstances not necessarily reported in the article or on this web site and over which The Los Angeles Silhouette Club (LASC), this web site or the author has no control. The above has no control over the condition of your firearms or your methods, components, tools, techniques or circumstances and disclaims all and any responsibility for any person using any data mentioned. Always consult recognized reloading manuals.

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