# The Los Angeles Silhouette Club

The .35 Remington: America's "Other Levergun"

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You put the terms "deer rifle" and "levergun" in the same sentence and most folks will immediately think of the Winchester 94 in .30-30. Sure, there will be some Savage fans shouting about their pet Model 99s in .250 or .300 Savage, and with good reason; and there will be some folks ballyhooing their light, short-action .44 Magnums; and let's not overlook those nostalgic souls who speak so lovingly of their .348s, but the bottom-line is that most folks still think of the .30-30 Winchester as America's levergun. Then there's that "other levergun", the one that folks don't talk much about; an awkward, almost judgmental, knowing silence, similar to that heard in years gone by when a young single woman had to leave town because she was "in a family way". You know, we just don't talk about "that one". Well, there's nothing shameful about the .35 Remington, and while the popular gun press doesn't generally say much about the cartridge or the rifle, Marlin has been making, and steadily selling, them for over half a century now. Let's pull the curtain back and take a closer look at the "other levergun".

The .35 Remington cartridge was introduced in 1906. Interestingly, it didn't have a rifle chambered for it for 2 years until the Remington Model 8 semi-automatic rifle was chambered for the .35 Remington in 1908. This combination quickly established itself as a hard-hitting hunting team, and was featured in many of the Remington-Peters advertising posters and tins of the day (these are classic!). Today, a century later, this rifle and cartridge remains a favorite with hunters who work the heavy timber, like my good friend Rob Applegate, who absolutely dotes on his .35 Remington's, and has an impressive pile of antlers in his garage as testimony to his personal history with the .35. Later, Remington chambered several pump action rifles (e.g. Models 14 and 141) in .35 Remington, and subsequently a number of other manufacturers made rifles chambered rifles for it as well.

In 1949, Marlin upgraded the Model 36 to include a better bolt, receiver and extraction system, and renamed the rifle the Model 336. The .35 Remington chambering was added in 1950, and they've been making them ever since. In the mid-1950s, Marlin went to a new form of rifling, which replaced 6 deeply cut grooves (in which each groove was individually cut by multiple passes of a single cutting head) with Micro-Groove rifling, in which 16 (or more, in some cases) much smaller, and shallower, grooves were cut simultaneously by a single pass of a more complex cutting tool (Micro-Groove rifling was original introduced in rimfire rifles in 1953, and then added to the centerfire line of rifles in 1955-6). The claim was made that these smaller grooves resulted in less distortion of the bullet, resulting in more stable, hence accurate, flight (I suspect another reason behind the change was to reduce production time and costs). The shooting community has always been reluctant to accept new ideas, and this one was no exception, but the bottom line is that these Micro-Groove barrels shot well, killed deer and were ultimately accepted as trustworthy hunter partners.



The Marlin 336 - the rest shown in the picture is one of the best I've ever used, and easy to make, I used three 12" pieces of 2x6, one cut in half at 45°, and some scrap carpet).

When viewed from the levergun cartridge perspective, the .35 Remington is kind of an anachronism for the cartridges of its time. It isn't slender, highly tapered, or rimmed. It doesn't have long skinny bullets or a gently sloping shoulder. It's a rimless case (it was designed for semi-automatic rifles after all) with a small, abrupt shoulder. It's short, squat and stout; and it's widely over-looked. But there are certain geographical pockets in which the .35 Remington enjoys some measure of popularity -- in the deep southeast, where

black bear and hog hunters get into the swamps and thickets deep in the heart of Dixie. The cold, snowy woods of Maine have some big-bodied whitetails (not to mention fat black bear and the occasional moose). These are areas where hard-core hunters work the woods for tough, smart animals, and need a quick-handling, reliable, medium-bore thumper to anchor them quickly.

.35 Remington factory ammo is good stuff, and is available from Remington-Peters, Winchester, Federal, etc. Today, this is almost invariably a 200 grain RN bullet, at about 2100 fps (Remington also lists a 150 grain load, but I haven't seen a box of that stuff on the shelf in years, and don't know if it's really still available). A 200 grain, .35 caliber, round-nosed bullet at 2100 fps offers a very useful combination of hard-hitting "thump", and deep penetration, from a fast handling rifle, without abusive levels of recoil. Factory ammo is accurate, affordable and available in just about every country store that sells ammunition. The glossy gun rags might not talk about the .35 Remington much, but country boys sure seem to (why else would the country stores stock all that ammo?).

Today, the .35 Remington is most commonly encountered in Marlin 336 levergun (it's also available in the Remington Model 7 and the Thompson Center Contender). The Marlin 336 has a Micro-Groove barrel, and while some people claim that Micro-Groove barrels won't shoot cast bullets very well, my 1964 vintage (i.e. a 40 year old bore) Marlin 336 in .35 Remington hasn't given me any grief in this regard. It's not that I systematically worked up a specially tweaked load that finally "clicked", it's just that the various cast bullet loads I've assembled have shot fine for me, so I didn't bother to figure out why. My friend (and fellow cast bullet gun-crank) Charles Graff has studied the cast bullet/Micro-Groove barrel interface in more detail than anybody I know, and he has deciphered what it takes to make this combination shoot. His insights have taught me why my loads worked. In addition to having shallow lands/grooves, it seems that Micro-Groove barrels tend to be a little over-sized in their groove diameters. Thus, for a cast bullet to get good traction in Micro-Groove rifling, the bullet needs to be 1) oversized, 2) of sufficient hardness, and 3) wear a GC. These were things that I was doing out of habit anyway, and so it turned out that my cast bullet loads shot just fine. With hardcast GC bullets, sized .359" this rifle will put 5 shots into less than 2" at 50 yards all day long, which is about all that can be asked from the factory buckhorn sights that this rifle wears (especially with middle-aged eyes). A scope would probably help, but I'm partial to iron sights on leverguns.

In terms of powder selection for the .35 Remington, those that seem to work best are the rifle powders in the medium to fast end of the burning rate spectrum (e.g. 3031, H322, 4895, 2520, etc.). In terms of primer selection, standard primers have worked just fine for me, when I'm shooting the .35 Remington from a rifle. When shooting a .35 Remington in the shorter barrels of the T/C Contender, the best results I've gotten have been built around the Federal 215 primer and H322 powder.

#### **Jacketed Bullets:**

**180 Speer:** This bullet has an excellent reputation for killing deer, expanding well and punching right on through. There is a handsome Oregon blacktail buck mounted in Rob Applegate's living room that found his way there courtesy of this bullet over a snootful of 4895. Rob has used this powder/bullet combination to kill several other deer; all one shot kills. To say that Rob likes this bullet is an understatement! And it's dandy; I have tried it over 38.5 grains of H4895 and 38.0 grains of H335, both of which delivered right at 2150 fps from the Marlin. The H335 load was somewhat more accurate in my rifle, but either load was more than adequate in terms of accuracy.



The 180 Speer FP, the 200 Sierra RN and the 220 Speer FP.

200 Round Nose: Both the Sierra and Hornady 200 grain RN bullets are fine hunting bullets, and each has a small, but fervent following. Just as with factory ammo, these are good all-round hunting bullets. The Sierra bullet has delivered consistently excellent accuracy for me (I must confess that I haven't worked with the Hornady bullet yet, but I would expect fine results from it as well). For folks who want to duplicate factory ammo, 38.5 grains of IMR 4064 is very accurate and delivers the 200 grains Sierra at 2087 fps, with very uniform velocities. The Accurate Arms loading

manual reports that 39.0 grains of 2520 underneath this bullet develops only 27,800 psi peak pressure. This combination is very accurate in my rifle and delivers an impressive 2205 fps, with remarkably consistent velocities (+/- 5 fps). Acc. Arms 2520 is an excellent powder for the .35 Remington.

**220 Speer FP:** The Speer 220 grain flat point is the bullet to choose for those times that a little extra penetration is needed (black bear, wild boar, elk, etc.). 36.0 grains of H4895 underneath this bullet delivered very good accuracy and 2008 fps. This load makes me think of big, smelly, wild boar, and smile to myself...

#### **Cast Bullets:**

The .35 Remington is well-suited for bullet weighing 180 grains and up. Because of the pressures/velocities that the cartridge operates at, and because this is a Micro-Groove barrel, a GC is called for to make sure the bullet gets the best "grip" possible on those small lands and grooves. The bullets need to be flat-pointed, or bluntly round-nosed, to function safely in a tubular magazine. And they need to fall from the mould blocks slightly oversized so that they can be sized .359". Four were chosen for use in the .35 Remington levergun; two from LBT (the 180 WFN and 200 LFN), the RCBS 35-

200-GCFP and the Saeco #352 (their 245 grain GCFP). Crimp-on Hornady gas-checks were used throughout.

The LBT .358 180 WFN was originally designed as a revolver bullet, and is one of my favorites for the .357 Maximum. Loaded somewhat unconventionally, I thought it might also be suitable for the .35 Remington. When crimped in the crimp groove, this bullet will cycle just fine from the magazine, but will not chamber due to the extended bearing surface that this bullet has forward of the crimp groove (and the short throat of the Marlin). Ignoring the location of the crimp groove (and filling it with lube), and seating the bullet deep enough to crimp the case



The cast bullets used in the .35 Remington- the LBT 358-180-WFN, the LBT 358-200-LFN, the RCBS 35-200-FP, and the Saeco #352 (245 grain FPGC).

mouth lightly over the ogive (OAL = 2.170"), results in a cartridge profile that feeds just fine from the magazine when single loaded, but if multiple rounds were loaded in the magazine, there were problems with jamming (OAL was too short). Loaded on top of 40.0 grains of H335, this bullet delivered respectable accuracy, and a remarkable 2288 fps! But the feeding problems preclude this from being a useful hunting load in the Marlin levergun (although it might be a real peach in the Contender).

The LBT .358 200 LFN has much the same problem as the 180 WFN -- crimped in the crimp groove it will cycle, but not chamber. Seated deeper (OAL = 2.325") and crimped over the ogive, it chambers and cycles just fine (both singly and multiply loaded -- no jamming problems experienced). Seated thusly, only the crimp-on Hornady GC is below the bottom of the case neck. A case full of powder will prevent the bullet from being seated deeper by recoil while waiting in line in the tubular magazine. 38.0 grains of H335 delivered excellent accuracy at 2154 fps, and cycled just fine. A more modest load was 41.0 grains of H414 with this bullet (similarly loaded), which gave 1776 fps and good accuracy.

The folks at RCBS clearly had the .35 Remington in mind when they designed their 35-200-FP. When crimped in the crimp groove, the base of the GC come down even with the base of the neck. The OAL is 2.410" (maximum allowable OAL for the .35 Remington is 2.525"), and as a result, it cycles perfectly in the levergun. When loaded over 38.0 grains of H335, this fine bullet left the Marlin at an impressive 2184 fps and gave excellent accuracy (5 shots into an inch at 50 yards with buckhorn sights). This is an excellent all-round load for the .35 Remington. This load could easily turn into a personal favorite for the .35 Remington levergun.

The 1-16" twist of the Marlin should be able to easily handle bullets heavier than 200 grains. Saeco was also clearly thinking of the .35 Remington when the #352 (their 245 grain GCFP) bullet was on the drawing board. The OAL of the cartridge when loaded with this bullet is 2.510", meaning that it just sneaks in under the maximum allowable length of 2.525". As a result, it cycles and chambers just fine crimped in the crimp groove (which leaves only the GC exposed below the bottom of the case neck). Bullets drop out of my mould blocks at about .360", making them an excellent fit for a

slightly oversized bore. The DuPont Handbook lists 31.0 grains of IMR 3031 as being a maximum load for a 250 grain jacketed bullet when loaded into the .35 Remington, so this was chosen as my starting point for the Saeco bullet (which weighs 241 grains checked and lubed when cast with WW alloy). This combination gave fine accuracy and 1906 fps. Similar excellent performance was turned in by 32.0 grains of Acc. Arms 2520 (1897 fps). These last loads are also candidates for personal favorite in the .35 levergun. I know I sure had fun spending a sunny afternoon bustin' basalt at 100-200 yards with them.

The bottom line is that while many powders work well in the .35 Remington, H335 and Acc. Arms 2520 are worth trying first; they're both winners.

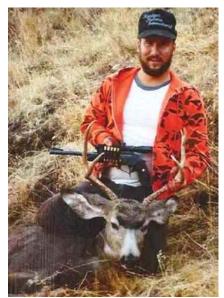
## **Hunting with the .35 Remington:**

The break-action single-shot T/C Contender allows the use of spitzer bullets. Also in the shorter barrels of the Contender, it's hard to beat H322 sparked with a Fed 215 primer, both in terms of velocity and accuracy, so these are my "go to" parameters for hunting loads with the T/C. The first deer I shot with the .35 Remington was a 3-point (western count) mule deer buck over in the basalt canyons lining the Snake River. I was hunting with the 200 grain Hornady spire point, loaded over 36.0 grains of H322. I don't recall the exact velocity, but it was a little over 1900 fps, and would group into about 1 1/2" at 100 yards. Anyway, I got a broadside shot opportunity at this buck, as he stood in the stubble of a harvested wheat field, about 50 yards from my position. The crosshairs dropped onto his left shoulder and the 200 grain Hornady sped across the stubble and hammered him. He went down hard, and it was clear that he was dying, but nonetheless he was struggling to regain his feet. A finisher in the neck was called for and applied. The 200 grain Hornady had broken both shoulders, centerpunched both lungs, and just clipped the top of his heart. The damage through the lungs amounted to a .35 caliber hole through them, with a total of about 1 1/2" of bloodshot tissue. The exit wound in the far shoulder was almost an inch in diameter. It was pretty clear from examination of the wound channel that this bullet hadn't expanded much at all until it hit the bone of the far shoulder, by which point there were no more vital organs for it to work on. This bullet really was designed for higher velocities and seems to be just a little too hard for the .35 Remington. A softer bullet was called for.

Just such a bullet was released by Hornady a little while later, their 180 grain Single-Shot Pistol (SSP) bullet, made specifically for the .35 Remington Contender. A little load development revealed that this fine bullet loaded on top of 39.5 grains of H322 (and sparked with a Fed 215 primer) delivered 2100 fps and good accuracy. That next year, I was hunting those same canyons on the Snake River with this load. As I worked my way through the rimrock, I spooked a big-bodied 3x3 mulie buck up out of his hiding place, along with his harem of 4 girlfriends. As they stood up and started to trot away from me, down the hill towards the protection of a nearby brushy thicket, I planted the Hornady SSP high into his right side, just behind the last rib, angling forward and down. He simply hunched up, fell over and slid about 20 feet downhill. He very feebly kicked twice, and died. Examination of the wound channel revealed that the

Hornady 180 SSP had expanded very nicely indeed. The liver was absolutely shredded, the left lung raked

and bloodshot for most of its length, and the quarter-sized exit wound was found in the



Author with Snake River mule deer buck taken with the .35 Remington.

center of the left shoulder. The liver damage folded this guy up pretty quickly, his blood pressure went to zero almost instantly. Since that day on the Snake River, I have seen other mule deer bucks killed with the Hornady 180 SSP bullet and I continue to be impressed with its performance.

I've heard the .35 denigrated for having a muzzle velocity of "only 2100 fps" and lots of bullet drop/drift at 300-400 yards. Usually, this criticism comes from some bright-eyed over-zealous newbie, citing chapter and verse from the latest ballistic tables, showcasing whatever golly-gee-whizbang magnum came out that week (eventually these kids usually learn that its more fun to learn how to hunt than it is to sit around a recite ballistics tables). The gun shop graybeards, you know, the ones whose hunting knives are worn down from

years of gutting and re-sharpening, tend not to worry over such stuff. Experience taught them long ago that most hunting opportunities come inside of 150 yards and that success often depends on being able to respond quickly, accurately and forcefully. At 75-100 yards, wind drift and bullet drop can pretty much be ignored. What matters is marksmanship, shot selection, and bullet construction (mass, diameter and expansion behavior). These are things that don't tend to be found in ballistics tables. While the tabulated numbers tend to get overshadowed by the latest magnum du jour, the .35 Remington gives the hunter exactly the tools needed for the job. The rest is up to the hands holding the gun.

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