The Los Angeles Silhouette Club

The Model 71 Winchester
And the .348 WCF Cartridge

By: Jim Taylor

The Model 71 Winchester was the culmination of the large-frame leverguns produced by the famed old company. Introduced in 1936 it was an upgrade of the famous Model 1886. Designed to make manufacturing a bit easier with improvements to handle the new cartridge that was introduced with it, this was the last of the big-frame leverguns made by Winchester.

The Model 1886 was designed during the black powder era for large black powder cartridges. Chambered for a variety of calibers including the .45-70, the Model 1886, was adapted to a new smokeless powder medium bore cartridge called the .33 WCF in 1902. The .33 Winchester was intended for hunting large North American game and used .338" diameter bullets, the same size used in today's .338 Magnums. However, by the 1930's the .33 WCF was looking a bit underpowered. That and the increased costs for the production of the 1886 (along with the slowdown of the economy) had Winchester looking around at ways to cut costs in the production of the big lever-action.

THE RIFLE

A redesign of many of the internal parts along with the introduction of a new caliber was Winchester's plan to get the costs down and to market the package. The redesigned '86 was renamed the Model 71 and the rest, as they say, is history. The rifle was produced in only one caliber, the .348 WCF and it is the only factory rifle ever chambered for this round.

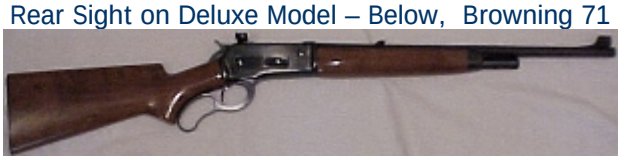
(see the exploded views of the Model 71 and Model 1886 for comparison ... see if you can spot the changes made)

It was introduced in two different models, the Standard and the Deluxe versions and was produced in 2 barrel lengths, 20" and 24" (carbine & rifle). Both models used a pistol-grip stock. The Deluxe version had checkering on the forend and stock, along with snap-on sling swivels, pistol-grip cap and a really cool bolt mounted aperture sight.

By the mid-1950's with costs again rising, the Model 71 was discontinued. Because all parts were totally machined from steel (vs. cast as with most newer firearms) the rifle was pretty expensive to produce. Too expensive to build and still make a profit. In 1956 Winchester stopped it's production and the last big levergun was no more. About 47,000 of the Model 71's were made during it's 20 year history.

Winchester Model 71

Rear Sight on Deluxe Model – Below, Browning 71



In 1987 Browning produced a modern version of the Model 71 that was made in Japan. These have different thread sizes in places, most notably the barrels, and many parts will not interchange with the originals. The Browning version was a limited production model only.

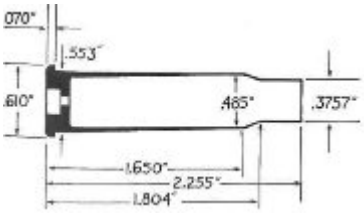
Left - Winchester Model 71 barrel
Right - Browning Model 71 barrel

THE CARTRIDGE

The 348 was based on the old .50-110 WCF cartridge and is the largest-sized rim diameter used in factory leverguns. Original loadings for the .348 were in 2 different bullet weights: 150 gr. and 200 grain jacketed. (The 250 gr. loading was added later on.) The velocity's listed originally for the 150 gr. and 200 gr. loads were 2920 fps and 2535 fps. These were later reduced to 2890 for the 150 gr. and 2530 for the 200 grain loads. The 250 gr. loading which was introduced some time after the 150 gr. and 200gr. loads was rated at 2350 fps.

Only the 200 gr. factory load is produced today by Winchester. Buffalo Bore, a small custom ammunition company in Idaho, offers a High Velocity 250 gr. loading.

Top - .30-30 Winchester
bottom - .348 Winchester



Cartridge dimensions

Handloaders do not have a large selection of bullets to choose from. Hornady makes a 200 gr. JSP bullet. Barnes produces a 220 gr. and a 250 gr. bullet. Alaska Bullet Works makes a 250 gr. bullet also. This is the bullet that Buffalo Bore uses in their .348 ammunition. Limited testing that I have done shows this to be a tough bullet that should work well on large and/or dangerous game.

There are several bullet molds available for the .348" diameter projectile. I don't know of too many people who use this caliber, let alone cast bullets for it. I have used the gun for some years and even though I have a bullet mold and dies, I have yet to run cast bullets in the gun. As little as I use it I prefer my own handloads with jacketed ammo. Most of the game I have taken with it have been with original Winchester 200 gr. Silvertips. I know that on large Mule Deer the Winchester loading worked just fine.

Left to Right
Old Winchester 200 gr.
Hornady 200 gr.
Barnes 250 gr.
Alaskan Bullet Works 250 gr.
250 gr. cast gas check

BALLISTICS

Ballistically... at least on paper... the .348 Winchester falls somewhere between the.350 Remington Magnum and the .358 Winchester I say "on paper" since in real life the

paper figures do not always turn out to be totally true. For all practical purposes the.358 gives identical performance as the .348 Winchester.

Cast bullet sized .348"	powder and charge	velocity
Lyman #350447 87gr.	IMR 3031 35 gr.	1818
	IMR 3031 47 gr.	2338
	IMR 4198 25 gr.	1672
	IMR 4198 35 gr.	2150
Lyman #350482 255 gr.	IMR 3031 35 gr.	1798
	IMR 3031 46 gr.	2217
	IMR 4198 27 gr.	1661
	IMR 4198 38 gr.	2096

Jacketed bullet 200 gr. Winchester JSP - OAL 2.78"	Powder and charge	Velocity
	IMR 4198 34.5 gr.	2100 fps
	IMR 3031 43.0 gr.	2200 fps
	IMR 4320 52.0 gr.	2470 fps
	IMR 4064 53.6 gr.	2535 fps

Above tables are from early Lyman Reloading Manuals

I have used the .348 and the Model 71 Winchester to make good hits on targets to 800 yards. While the paper ballistics would have you to believe that the trajectory would make it impossible to do, in actual practice the gun and ammo work pretty well for long-range rock busting.

I used handloads with the 250 gr. Barnes Original bullet and found them to work very well at extreme distances. One June I was in Cody, WY with The Shootists, shooting targets from 300 to 800 yards using the above loads. Dick Casull was watching me and I asked him if he wanted to take a shot. He took my rifle, asked where I was holding on the 800 yard target, and proceeded, offhand, to hit the target! He handed the rifle back to me and said quietly, "There are no flies on that one."

HUNTING

With a 200 yard zero you can basically hold "on" to 250 yards.
That is further than I would take a shot at game animals, using the iron sights. To be fair the to animal I would stalk closer.

I have not hunted with the Model 71 all that much. I have shot some coyotes and deer with it. I used it in Arizona while hunting horseback and shot Mule Deer and Coues Deer with it. In Missouri I have used it to hunt and take Whitetail Deer. I found the Hornady200 gr. bullets too tough to expand well on the smallish Whitetails in S/W Missouri. The Winchester Silvertip bullet is much better on deer. The Hornady and Barnes bullets are better suited for larger game... I would say Elk and larger/heavier animals. I haven't tried the Alaska Bullet Works bullets on game but from limited testing I would say they fall into the same category as the Barnes bullets, great for Big Game.

HOT-RODDING IT

The Model 71 has been used as a basis for caliber conversions over quite a few years now. P.O. Ackley's .348 Improved was made by blowing the case out straight to get rid of the tapered body. Combined with Ackley's sharp shoulder, case life was dramatically improved over the factory cartridge and ballistics were increased. Standard loads in the Improved case gave up to 500 fps increase over the unmodified cartridge with some loads.

Bob Hutton (who was at Guns & Ammo at the time) developed a series of wildcat cartridges based on the Ackley Improved .348. There was a .30 caliber design called the

Velocity Comparisons

caliber	load	muzzle	100 yards	200 yards	300 yards	400 yards	500 yards
348 WCF	200 gr. Silvertip	2520	2215	1931	1672	1443	1253
	200 gr. Silvertip	2490	2171	1876	1610	1379	1194
350 Rem	200 gr. Corelokt	2710	2410	2130	1870	1631	1421

Trajectory Comparisons with a 200 yard Zero

caliber	load	muzzle	100 yards	200 yards	300 yards	400 yards	500 yards
348 WCF	200 gr. Silvertip	-.9"	+3.7"	0	-13"	-53.3"	-99.2"
358	200 gr. Silvertip	-.9"	+3.8"	0	-13.7"	-40.9"	-86.3"
350 Rem	200 gr. Corelokt	-.9"	+3.1"	0	-10.8"	-31.6"	-65.4"

Above - Model 71 & Model 94 Winchester's compared side (above) & top views (below)

Below - Model 71 & Model 94 Win. compared open action.

with cartridges that are a bit different. .30-348, the case being necked to .30 caliber. There was also a .35-348 (which proved to be the most efficient of all the conversions), a .40-348, and a .450-348. The .450-348 proved a very powerful cartridge, running a 350 gr. bullet at nearly 2500 fps and 400 gr. bullet at 2300 fps... very close to .458 Winchester Magnum ballistics from a levergun. It was noted for tearing the magazine tube off the rifle during recoil unless a special fixture was attached to hold the magazine in place.

The .450 Alaskan was developed around the same time. The only difference between it and the .450-348 was the latter is the straight-walled Ackley design while the .450 Alaskan has about a .020" body taper. It is noticeably smaller at the shoulder than the Ackley cartridge. The .450 Alaskan has slightly reduced ballistics when compared to the Ackley design, but because of the slight taper the cartridge feeds better in the levergun.

Today the .50 Alaskan is a very popular conversion of the .348 Winchester cartridge. Blown out to a straight case, the big gun hits hard on both ends! Regan Nonneman of Nonneman Custom Rifles is a premier builder of these big bores, as are a few other custom lever-smiths around the country.

FINI

For my use the big levergun is fine just as it came from the factory. It has all the power I will need for what I use it for. I would have no hesitation using it for most any of the large North American game animals. While it never caught on with the public like the .30 or .35 calibers - most likely due at least in part to its odd caliber - the .348 is a very good one for those who like to play

The rifle that was built for it - the Model 71 Winchester - remains an excellent example of what was being produced by gun companies during the days when craftsmanship was put into the "assembly line" firearms.

Jim Taylor Article Index Complete LASC Article Index

LASC Home Page