



Compared: The .308 Win., .30-06 Spfd., .300 Win. Mag., and .338 Win. Mag.

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Yep, this is yet another article on the .30+ caliber cartridges. The calibers named in the title of this comparison have accounted for every game animal that walks our continent (providing you follow rule number one: proper shot placement).

For this article, I used data obtained from the *Nosler Reloading Guide*, 5th Edition. To make the comparison as fair as possible, I selected the popular 180 grain Partition bullet (BC .474 / SD .271) for the .30 caliber cartridges and the nearest common equivalent bullet weight in .338 caliber, which is the 225 grain Partition bullet (BC .454 / SD .281).

For loads, I chose the middle load (of the three given for each) of the powder that gave the highest velocity in each caliber. That would be 69.5 grains of IMR 4350 in the .338 Mag. for a MV of 2808 fps, 71.0 grains of IMR 4831 in the .300 Mag. for a MV of 3070 fps, 59.0 grains of RL-22 in the .30-06 for a MV of 2777 fps, and 48.0 grains of IMR 4350 in the .308 Win. for a MV of 2593 fps. Recoil was calculated for 8.0 pound rifles.

The calibers compared are the .308 Winchester, 30-06 Springfield, .300 Winchester Magnum and .338 Winchester Magnum. They represent the most popular calibers for bolt action hunting rifles in the .30-.35 caliber range. All are available in a number of rifles from a variety of manufacturers, and factory loaded ammunition in many brands and a selection of bullet weights is widely distributed.

We will compare these cartridges and loads in velocity, energy, trajectory, Optimum Game Weight (OGW), and recoil. OGW is a method of comparing the killing power of various rifle cartridges invented by Edward A. Matunas and published in the 47th Edition of the *Lyman Reloading Handbook*. While no such formula is 100% accurate, OGW seems to have a positive correlation with real world results. Let's take a look at the data:

Velocity (fps)

- .308 Win / 180 - 2593 MV, 2412 at 100 yds, 2239 at 200 yds, 2073 at 300 yds.
- .30-36 / 180 - 2777 MV, 2588 at 100 yds, 2407 at 200 yds, 2235 at 300 yds.
- .300 Mag / 180 - 3070 MV, 2868 at 100 yds, 2675 at 200 yds, 2491 at 300 yds.
- .338 Mag / 225 - 2808 MV, 2610 at 100 yds, 2420 at 200 yds, 2240 at 300 yds.

Kinetic Energy (ft. lbs.)

- .308 Win / 180 - 2687 ME, 2325 at 100 yds, 2004 at 200 yds, 1718 at 300 yds.
- .30-06 / 180 - 3082 ME, 2677 at 100 yds, 2316 at 200 yds, 1996 at 300 yds.
- .300 Mag / 180 - 3767 ME, 3288 at 100 yds, 2860 at 200 yds, 2479 at 300 yds.
- .338 Mag / 225 - 3939 ME, 3402 at 100 yds, 2926 at 200 yds, 2506 at 300 yds.

Trajectory (Maximum Point Blank Range +/- 3")

- .308 Win / 180 Partition - 259 yards
- .30-06 / 180 Partition - 276 yards
- .300 Mag / 180 Partition - 303 yards
- .338 Mag / 225 Partition - 278 yards

Optimum Game Weight (OGW) at 200 yards

- .308 Win / 180 - 546 pounds
- .30-06 / 180 - 678 pounds
- .300 Mag / 180 - 930 pounds
- .338 Mag / 225 - 1076 pounds

Recoil Energy

- .308 Win, 8 lb. rifle - 17.2 ft. lbs.
- .30-06, 8 lb. rifle - 21.5 ft. lbs.
- .300 Mag, 8 lb. rifle - 27.7 ft. lbs.
- .338 Mag, 8 lb. rifle - 32.8 ft. lbs.

In the field the .308 Winchester with 180 grain Solid Base Ballistic Tip bullet have proven to be similar in killing power, particularly with lighter (130-165 grain) bullets. The .30-06 ultimately has the performance edge in all categories except recoil, and especially with bullets weighing 180 grains or more, due to its approximately 10% greater powder capacity. (The gap in performance is less when 150 grain bullets are compared, as that is the bullet weight for which the .308 case was designed.)

The .308 was originally intended for use in autoloading rifles and fits in short action guns of any persuasion, which can be an advantage in some circumstances. The choice between the two standard calibers is largely personal, and will usually be based on rifle preferences and intended use.

The .300 Win. Mag. is clearly closer to the .338 Mag. than to the .30-06 in the areas of kinetic energy and OGW (killing power), but it is about halfway between those two calibers in recoil energy. That is a point sometimes missed by the critics of the .300 Magnum, who mistakenly tend to equate it to the .30-06 in performance because it uses the same bullets, and to the .338 in recoil because it uses a belted magnum case.

The .300 also shoots appreciably flatter than the other cartridges/loads in our comparison. This is illustrated by its 25-27 yard advantage in MPBR over the .338 Mag. and .30-06.

There are major disagreements about the .300 Winchester Magnum and .338 Winchester Magnum. The difference in recoil of about 5 foot pounds may not sound like a great deal, but after you shoot both you can definitely tell the difference. While the .300 is not as pleasant to shoot as the .308 or .30-06, it is definitely more comfortable than the .338.

The short range energy of the .338 is impressive. However, by the time the bullets reach 200 yards the energies of the .300 and .338 are closer due to the superior BC of the .30/180 Nosler bullet. Add to that fact the heavier recoil of the .338 and the best argument favoring the .338 Magnum is its larger diameter and heavier bullet for "stopping" dangerous game.

It is questionable whether most hunters need a .338 Magnum. Animals are mostly inoffensive. They do not have titanium bones or steel joints. They are not wearing body armor, and a proper, well-placed, .30 caliber bullet will do the job in every instance that I can imagine (unless you are going after bison or the great bears).

So, why the argument? Evidently some folks just prefer the heavier, larger diameter medium bore bullet and feel that it kills large animals better or faster. I don't really know the answer. I have heard some hunters say that they like the "brush busting" capability of the .338 Magnum. Okay, but I prefer not to shoot through brush. I'd rather hold my fire until I have a clear, unobstructed view of the target.

That is probably why I passed on a royal bull elk in the Colorado Rockies 30 years ago. I never could get what I considered was a clear, clean shot, so I passed and he lived to see another spring. I never regretted it.

I've been hunting for almost 50 years, from PA to Wyoming, and never needed anything bigger than a .30 caliber rifle. And, I have rifles in .270 and .243 calibers for occasions when I consider the .308, .30-06 and .300 Magnum to be excessive. And which of the .300 Magnums do I shoot? Easy answer: the .300 Winchester Magnum. It's the only really popular .300, and I can load it up or down as the occasion demands. I don't plan on hunting grizzly bear anytime in the near future.

We won't resolve the argument over calibers here, but I hope that I have provided a little more "fuel for the fire" in the discussion. My dad always said that I liked to "stir the pot"! Walk softly, carry a good rifle, and shoot straight.