

The 200 Yard Deer Cartridge

By Chuck Hawks

A South Carolina Department of Natural Resources deer hunting study [Answering Questions About Guns, Ammo, and Man's Best Friend](#) revealed, among many other interesting things, that when hunters took shots beyond about 150 yards their chance of wounding or missing increased dramatically. (If you are a metric shooter, just mentally substitute meters for yards; it will be close enough for the purposes of this article.) Note that all hunters in the SCDNR study were placed in elevated, permanent stands with seats and rests to facilitate marksmanship; they were not shooting offhand or from hurriedly acquired field positions.

Having at least five decades of experience as a shooter and hunter and having observed with interest a great many shooters at outdoor rifle ranges shooting hunting rifles from bench rests, I am not too surprised by these results. There seems to be a great fascination with sub-MOA accuracy and long range shooting these days. A great many outright lies are being spread on internet forums, but the fact is that most deer hunters are hard pressed to even hit the paper at 200 yards, let alone shoot an acceptable group. Many cannot do so at 100 yards, shooting from a bench rest!

Nobody wants to admit it, but 150 yards is a long way and 200 yards is a very long way. A deer hunter who cannot shoot a 10 MOA group offhand should not be obsessing about whether his or her rifle will (theoretically) deliver 1/2 MOA groups.

For the purposes of this article, let's assume we are adults, sufficiently mature to understand and accept our limitations. We want humane, quick kills on game animals. Wounding is not an option; our first shot should always be a kill shot and we do not shoot unless we *know* it will be. No one is perfect, of course, so we also reload after firing, prepared to drive in a second shot to "make sure."

We intend to confine our shots to no more than 150 yards, but we know distances can be deceiving in the field and we want to leave room for error. Therefore, we want a hunting cartridge/load with a maximum point blank range (MPBR) +/- 3 inches of at least 200 yards. That is, we want our hunting bullet to neither rise above nor fall below the line of sight from the muzzle to at least 200 yards.

We understand that calibers smaller than .24, a centerfire .22 for example, will kill deer under ideal conditions, but also know that conditions in the field are not always perfect.

We know experience has shown the greater cross-sectional area of .24 caliber bullets makes them more reliable all-around deer slayers. We are willing to accept .24 as the reasonable minimum caliber for Class 2 game.

We also accept that 800 ft. lb. of energy on target is a reasonable minimum figure for hunting Class 2 game, such as deer. Therefore, we need a deer rifle/cartridge/load combination of at least .24 caliber that can deliver at least 800 ft. lb. of energy at 200 yards.

Being mature adults with nothing to prove, we are willing to admit we can shoot better with a rifle that kicks less; anyone can. We know that most guys won't admit it, but careful observation has shown us that they do not do their best shooting with powerful "all-around" rifles in the .270 Winchester, 7mm Magnum, .308 Winchester and .30-06 class.

Such rifles usually generate recoil energy in the 20 ft. lb. class with full power loads, so we want to keep our rifle/cartridge/load combination well below that level. 15 ft. lb. of recoil has proven to be a reasonable maximum for most shooters. As long as the cartridge and load are adequate for the job, it is bullet placement, not raw power, that produces quick kills.

We are closing in on a realistic set of specifications for possible 150-200 yard deer cartridges and loads. The cartridge should be at least .24 caliber, have a MPBR +/- 3 inches of at least 200 yards, deliver at least 800 ft. lb. of energy at 200 yards and kick no harder than 15 ft. lb. in the rifle of our choice. In addition, ammunition with expanding hunting bullets designed for killing Class 2 animals (and bullets for reloaders) must be available where we live. (This will vary from place to place.)

Looking at the Federal, Hornady, Remington, Weatherby and Winchester ammunition catalogs, here is a list of some reasonably common cartridges and factory loads that fit our criteria when fired in rifles of typical weight.

(Cartridge, bullet weight at MV: bullet energy at 200 yards; rifle weight - recoil energy)

- **.243 Winchester, 100 grain at 2960 fps:** 1332 ft. lb. at 200 yards; 7.5 lbs. - 10 ft. lb. recoil
- **6mm Remington, 100 grain at 3100 fps:** 1470 ft. lb. at 200 yards; 8 lbs. - 10 ft. lb. recoil
- **.240 Wby. Mag., 100 grain at 3200 fps:** 1470 ft. lb. at 200 yards; 8 lbs. - 12 ft. lb. recoil

- **.257 Roberts +P, 117 grain at 2780 fps:** 1115 ft. lb. at 200 yards; 8 lbs. - 10 ft. lb. recoil
- **.25-06 Remington, 117 grain at 3030 fps:** 1650 ft. lb. at 200 yards; 8 lbs. - 13 ft. lb. recoil
- **6.5x55mm SE, 140 grain at 2650 fps:** 1585 ft. lb. at 200 yards; 8 lbs. - 12 ft. lb. recoil
- **.260 Remington, 140 grain at 2750 fps:** 1712 ft. lb. at 200 yards; 8 lbs. - 12 ft. lb. recoil
- **6.8mm Rem. SPC, 115 grain at 2625 fps:** 1082 ft. lb. at 200 yards; 7.5 lbs. - 8 ft. lb. recoil
- **7x57mm Mauser, 140 grain at 2660 fps:** 1585 ft. lb. at 200 yards; 8 lbs. - 14 ft. lb. recoil
- **7mm-08 Remington, 140 grain at 2860 fps:** 1793 ft. lb. at 200 yards; 8 lbs. - 14 ft. lb. recoil
- **.30-30 Winchester, 160 grain at 2400 fps:** 1305 ft. lb. at 200 yards; 8 lbs. - 12 ft. lb. recoil
- **.300 Savage, 150 grain at 2630 fps:** 1462 ft. lb. at 200 yards; 8 lbs. - 14 ft. lb. recoil
- **.308 Marlin Express, 160 grain at 2660 fps:** 1762 ft. lb. at 200 yards; 8 lbs. - 13 ft. lb. recoil
- **.32 Win. Special, 170 grain at 2250 fps:** 891 ft. lb. at 200 yards; 7 lbs. - 12 ft. lb. recoil
- **8x57mm Mauser, 170 grain at 2360 fps:** 994 ft. lb. at 200 yards; 8 lbs. - 13 ft. lb. recoil
- **.35 Remington, 200 grain at 2080 fps:** 841 ft. lb. at 200 yards; 7.5 lbs. - 14 ft. lb. recoil

Note: These recoil figures are only approximate and rounded off to the nearest full ft. lb. of energy, which is close enough for the purposes of this article. There is a comprehensive [Rifle Recoil Table](#) on the *Guns and Shooting Online* "Tables, Charts and Lists" index page.

This is a reasonable selection of cartridges and at least some of them should be available at your local gun shop. Except for the under-appreciated .240 Weatherby, there are no magnum cartridges on the list. An ultra-long range cartridge or super powerful caliber is not required for shooting deer. Standard cartridges can deliver more than adequate range and killing power with acceptable recoil.

BUT WAIT! (Yes, I watch too much late night TV.) There are a few more options many deer hunters overlook. I am referring to the reduced recoil loads offered by Remington

and Federal/Fusion for some of the popular all-around hunting cartridges. Remington calls their line [Managed Recoil](#) and claims 50% less recoil. Available calibers include .260 Remington, .270 Winchester, 7mm-08 Remington, 7mm Rem. Magnum, .30-30, .308 Winchester, .30-06, .300 Win Magnum and .300 RUM. [Fusion Light](#) reduced recoil loads are available in .270 Winchester, .308 Winchester and .30-06. Here is a list of possible Remington Managed Recoil loads we can add to our caliber list.

- **.270 Winchester, 115 grain at 2710 fps:** 1161 ft. lb. at 200 yards
- **.308 Winchester, 125 grain at 2660 fps:** 1249 ft. lb. at 200 yards
- **.30-06 Spfd., 125 grain at 2660 fps:** 1249 ft. lb. at 200 yards

Here is a list of possible Fusion Lite loads we can add to our caliber list.

- **.270 Winchester, 145 grain at 2200 fps:** 1070 ft. lb. at 200 yards
- **.308 Winchester, 170 grain at 2000 fps:** 860 ft. lb. at 200 yards
- **.30-06 Spfd., 170 grain at 2000 fps:** 860 ft. lb. at 200 yards

All of these reduced recoil loads claim around 10 ft. lb. of recoil energy in standard weight hunting rifles. In other words, the kick is similar to that of a standard .243 factory load. These loads are effective to at least 200 yards and excellent for our self-imposed 150 yard shot limit.

In a sense, reduced recoil loads are a way to have your cake and eat it too. Use them as your standard ammunition for hunting Class 2 game (deer) and switch to full power loads if the occasion arises to hunt Class 3 game (elk).

The manager of my local sporting goods store told me that young hunters today are buying 7mm Magnum and .300 Magnum rifles for deer hunting. Apparently they see the .308 and .30-06 as old mens' cartridges. This is a prescription for flinching, bad bullet placement and wounded/lost game animals.

I hope that you, gentle reader, having read this article will take it to heart. Shoot a moderate caliber and load within 150 yards and you will have far more success than the guys shooting more powerful rifles at longer ranges. Less game will be wounded and lost, which means more animals and better hunting for all of us.