

To Bee or 223, That is the Question (Revisited)

*(Reprinted with permission from The Varmint Hunter Magazine, July 1999)
by James Calhoon*

Or is it nobler to shoot a 223 as a Bee, could that be the answer?



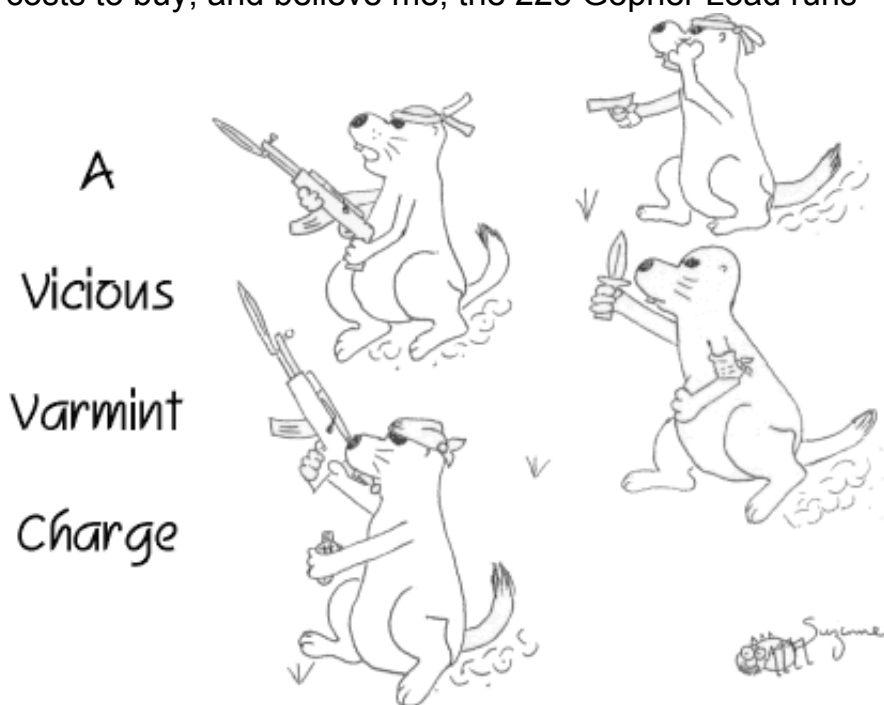
Back in the October 1995 issue of the "Varmint Hunter Magazine", Barry and I did an article on reduced loads for the 223. In that article, we discussed both the standard load and the reduced load, or "Gopher Load" as it has become known. By using the gopher Load in a 223, one can easily duplicate the performance of the 218 Bee, an all time favorite. Your trusty 223 varmint rig can now become two entirely different rifles, simply by changing ammo.

Using Gopher Loads, twice as many rounds can be fired before barrel over-heating. This is most important when gophers mount a vicious charge! Other than being a lot of fun to shoot (recoil and noise levels are like the 17), the Gopher Load costs the same to load as the 22 Rimfire Magnum costs to buy, and believe me, the 223 Gopher Load runs circles around the 22 Rimfire Magnum both in accuracy and range. With the Gopher Load, 1/2" groups are the norm at the effective range of 200 yards. Finally, because of the greatly reduced powder quantities, expect barrel life to increase by several thousand rounds. (I guess this doesn't excite Barry, as he belongs to the Gun-a-Month Club.)

When we wrote the original article, IMR 800X was considered the champion powder of the gopher load. The 800X Gopher Loads were: 11.5gr with a 37gr bullet (3150 ft/sec), and 10.5gr with a 42gr bullet (2850 ft/sec) all in a 24" barrel. (For more detailed loads see chart.) In 14" barrels, such as the Super Contender, deduct 200 ft/sec respectively. The 800X loads have proven very reliable, accurate and, some say, the best loads in 223 Contenders and XP's.

Drawbacks of the 800X loads are the amount of powder fouling and the lack of meterability. 800X leaves a black soot residue that needs to be brushed out every 75 rounds to keep top accuracy. This is not a big problem since barrels should see a cleaning every 75 rounds anyway. BUT.....

Just discovered.... a NEW old powder. "Blue Dot"! Blue Dot is an old tried and true powder, used for years in 357 and 44 Mag pistol loads as well as magnum shotgun loads. Blue Dot is



a product of the Alliant Powder Co. I spoke with Ben Amonette of Alliant powders (1-800-276-9337, ext. 3) and they still produce the same line of tried and true powders. Only the name has changed (formerly Hercules). Ben is a very friendly fellow who is very happy to tell you all about Alliant powders.

Blue Dot is superior to 800X because it meters better and burns cleaner (about half way between 800X and 4895). Blue Dot is also capable of producing higher velocities although slightly more powder is required. The actual volume (bulk) of Blue Dot comes out to be the same as 800X at their respective maximum loads.

The reason we are using 800X and Blue Dot for our Gopher Loads is that these powders are flake powders that are bulky and fill the case to around 75% capacity. Also, flake powders ignite very easily and therefore, reduced quantities ignite reliably and efficiently. Blue Dot, by the way, has a burning rate slightly faster than 4227. Gopher Loads using Blue Dot are found in the chart below.

CHART A -- GOPHER LOADS

Reduced Charge Loads for the .223

Using a 37-Grain Calhoon Double HP Bullet

800X		Blue Dot	
Powder Charge	Velocity	Powder Charge	Velocity
3.0 gr	1,250	4.0 gr	1,275
4.0 gr	1,350		
10.0 gr	2,900		
11.5 gr	*3,125	14.0 gr	*3,240

Using a 42-Grain Calhoon Double HP Bullet

800X		Blue Dot	
Powder Charge	Velocity	Powder Charge	Velocity
3.0 gr	1,170	4.0 gr	1,165
4.0 gr	1,270		
10.5 gr	*2,850	13.0 gr	*3,000

*MAX LOADS

Velocity: In feet per second

Test Rifle: Remington 700 BDL Varminter, 24" barrel, LC brass, CCI 400 Primer

Upon sighting, you'll find the point of impact to change little when changing from your regular 223 loads to the 800X or Blue Dot Gopher Loads, especially with a heavy barreled rifle. The probable reason for such little change is that the Gopher Loads produce "firm" pressure (40 - 45 thousand psi), similar to a full load, but they don't produce the volume of gas.

Blue Dot is primarily a pistol/shotgun powder and is practically burnt up in 16" of barrel length. This explains the excellent performance in T/C's and XP's. The Blue Dot Gopher Load also makes a great load for a 20" barreled walking gun.

The Gopher Load is mild on brass and all that is needed is a neck sizer. For this job, the Lee Collet Die is wonderful. No lube is needed and bullet run-out is practically non-existent when coupled with a Benchrest seater from Bonanza or, now, Redding.

So, now there are two powders to make "Gopher Loads" for your trusty 223; 800X or Blue Dot. For comments or questions, call 406-395-4079 (Mon. through Fri., 8-5 MST).

Goodnight Barry!

*******UPDATE, FEBRUARY / 2001*******

Until the development of the 19 Calhoon (Hornet), all I shot gophers with was the 223 GOPHER LOAD (Blue Dot). Ask Fred! That little "Pop-gun" sound used to bug him! Now I have to honestly admit that the 19 Calhoon (Hornet) has become my mainstay gopher gun (and that's not just because we sell them). Advantages of the 19 Calhoon (Hornet) over the 223 Gopher Load: the 19 Calhoon (Hornet) shoots 3 times more rounds before a barrel cleaning, has about 75 yards more range, and a "pocket full" of ammo holds three times as many cases. The 19 Calhoon (Hornet) even has less recoil. It truly is the best squirrel/gopher cartridge!