

Whisper Loads

Making Ultra Light Loads

For whatever use you intend them, these are interesting loads and useful for a variety of purposes. It's an old concept and has been around for years and various authors have published much on it over the years. When I started digging, I discovered many threads in the old Shooters Talk archives on the subject, Paco Kelly on Sixgunner.Com has written much about these loads and searching back through the works of the old masters like Mattern, Narramore, Mathews, and Sharpe bring to light much more information on this type load.

Whatever name you apply to them; pest loads, whisper loads, quiet loads, gallery loads or sub-sonic loads, they all follow the same characteristics. Low velocity compared to other loads and we usually expect this to be sub-sonic. The use of a soft lead cast projectile, either plain base or gas check, or a cast round ball. The load will be quiet, usually possessing the noise level of a .22 short or thereabouts. They tend to be quite accurate and are designed for ranges up to about 50 yards. The loads are easy to assemble and in fact some use jacketed bullet although us bullet casters would never stoop to such a low class act.

Much ado was made of the famed .300 Whisper about 10 years ago as being designed to be fired from a suppressed weapon using a 190 grain Sierra Match King at sub-sonic velocities and used as a short range assassination round by paramilitary forces. This round achieved much notoriety as many shooters took it to their bosom as a "magic" round with all kind of capabilities. This cartridge, along with the 9mm sub-sonic rounds used by the SEALs in their suppressed modified MP-5 sub machine guns aroused high interest in subsonic loads.

Much discussion has been on the various talk sites about the accuracy advantages of sub sonic bullets.

But, the concept of low velocity and subsequently, low noise loads is not new. The Army had the old gallery loads and even though not sub-sonic in many cases, they were used to the extent that many old time Army, Marine Corps, and National guard units had government issued loading tools and moulds for making this type load.

I'd read about these loads over the years but had kind of tucked it back into the recess of my mind as something to try sometime until last week when a friend in Vermont asked about a quiet loads for his 7.62 X 39 mm Ruger.

I dug around in my stuff and came up with several of Paco Kelly's articles and sent those up to him. In several days, I received a reply and he'd settled on a 314299 bullet sized to .310" over 2.0 grains of Bullseye. No chronograph figures but he did state that they went into the same hole at 25 yards. More data will be forthcoming from tests at 50 yards but I expect accuracy to be at least "minute of blackbird" at 50 yards.

These tests got me to thinking that there might be interest in a load of this type so I checked the Shooters archives and there has been great interest in the past so I'll attempt to play with these loads a bit and see what I can come up with.

I won't address the gallery load, as normally, the velocity is a bit higher on these. Small game loads fall within almost the same velocity range as do the gallery loads and that's another subject. Instead, I'll try and look at the true "whisper" loads (sub sonic) and see how silent and accurate they really are.

Parameters of the Test

For these tests, I have selected four calibers as I have rifles in all of these calibers and I believe they are pretty much a cross section of the various case capacities you'll try these loads in.

.223 Remington
.30/30 Winchester
.30/06 Springfield
.45/70 Government

The bullets will all be plain based as I feel there is no need for the gas checks at these velocities even though accuracy might be enhanced.

I'll use the following bullets

225353 Lyman
30-150-FN-CM RCBS
457122 HP Lyman – Now, the hollow point is superfluous to these tests as it doesn't stand a chance of expanding. I felt that more folks would have this mould if they have a .45/70 and if they don't, they need one.

Powders will be of the fast burning variety. Many more are suitable but these are the ones that I happened to have on hand.

Clays
700-X
Bullseye
Red Dot
Tite Group
WW 231

I'll use a tuft of Dacron on top of the powder charge to hold the powder back against the primer for more reliable ignition. **Now, due to the controversy over fillers and chamber ringing , follow this practice at your own risk.**

I chose to test specific weights of powder in each cartridge. No attempt was made to “tweak” specific loads for optimum performance.

In working with this type load, be damned sure that after each shot, you either get a chronograph reading or insure that a hole appeared in your target. Normally, through a scope, you can see these bullets in the air, especially if the light is good. **There is always the danger of a bullet sticking in the barrel so insure that you check the barrel each time you fire to be sure the bullet exited.**



L-R: 225352 Ideal, 30-150-CM RCBS, 457122 Lyman

.223 Remington

For the .223 Remington, I chose an old Ideal bullet that has long fallen out of use. It's a #225353. It's a plain base design weighing 44.5 grains ready to load. I've never gotten this bullet to shoot very well at conventional velocities so I thought I'd give it a try with light loads due to the plain base. From my testing, it appears that almost any .22 bullet, either plain base or gas check will work at these velocities

Tests with the Ideal #225353 in the .223

Bullet	Weight	Powder	Weight	Average Velocity	Standard Deviation	Primer	Sized	Overall Length	Comments
Ideal 225353	44.5	Bullseye /dacron 1/4" square	2.0	1045	15.9	WSR	.2255	2.015	1.5" @ 50 yards
Ideal 225353	44.5	Red Dot /dacron 1/4" square	2.0	1026	20.2	WSR	.2255	2.015	1.1" @ 50 yards
Ideal 225353	44.5	Bullseye /dacron 1/4" square	1.5	855	33.5	WSR	.2255	2.025	1.5" @ 50 yards
Ideal 225353	44.5	Red Dot /dacron 1/4" square	1.5	859	27.3	WSR	.2255	2.025	2" @ 50 yards vertical stringing
Ideal 225353	44.5	Clays /dacron 1/4" square	1.5	754	20.0	WSR	.2255	2.025	1.5" @ 50 yards
Ideal 225353	44.5	700-X /dacron 1/4" square	1.5	857	10.2	WSR	.2255	2.025	1" @ 50 yards
Ideal 225353	44.5	WW 231 /dacron 1/4" square	1.5	699	18.8	WSR	.2255	2.025	2" @ 50 yards
Ideal 225353	44.5	Titegroup /dacron 1/4" square	1.5	761	21.6	WSR	.2255	2.015	1.25" @ 50 Yds
22-55-SP RCBS	57.4	700-X /dacron 1/4" square	1.5	763	13.9	WSR	.2255 No GC	2.019	1.5" @ 50 Yds
22-55-SP RCBS	57.4	Red Dot /dacron 1/4" square	1.5	737	17.6	WSR	.2255 No GC	2.019	1.5" @ 50 Yds

Test rifle was a Number 1-V Ruger with a 6-24X scope mounted. The 22-55-SP RCBS bullet tests were fired using sized bullets without gas checks.

Penetration tests were performed on 2" X 6" pine lumber with the .223. Penetration was complete at 50 yards and should be adequate for use on small pests.

.30/30 Winchester

For these tests, I chose the 30-150-CM RCBS plain base cowboy bullet as it was the only PB .30 I had in a configuration over 100 grains.

Tests with the 30-150-CM RCBS bullet in the .30/30

Bullet	Weight	Powder	Weight	Average Velocity	Standard Deviation	Primer	Sized	Overall Length	Comments
30-150-CM RCBS	150.7	Bullseye/Dacron 3/8" square	2.0	611	15.5	F210	.311	2.470	2.5" @ 50 Yds
30-150-CM RCBS	150.7	Red Dot/Dacron 3/8" square	2.0	579	14.5	F210	.311	2.470	1.5" @ 50 Yds
30-150-CM RCBS	150.7	WW231/Dacron 3/8" square	2.0	548	6.4	F210	.310	2.470	2" @ 50 Yds
30-150-CM RCBS	150.7	700-X/Dacron 3/8" square	2.0	614	6.7	F210	.310	2.470	1.5" @ 50 Yds
30-150-CM RCBS	150.7	Clays /Dacron 3/8" square	2.0	561	12.1	F210	.310	2.470	2" @ 50 Yds
30-150-CM RCBS	150.7	Titegroup /Dacron 3/8" square	2.0	602	6.8	F210	.310	2.470	2" @ 50 Yds

Test rifle was a Model 94 Winchester Legacy with a 2-10X Weaver.

.30/06 Springfield

Tests with the 30-150-CM RCBS bullet in the .30/06

Bullet	Weight	Powder	Weight	Average Velocity	Standard Deviation	Primer	Sized	Overall Length	Comments
30-150-CM RCBS	150.7	Bullseye /Dacron 1/2" square	2.5	616	9.7	HLP	.310	2.933	1.5" @ 50 yds
30-150-CM RCBS	150.7	700-X /Dacron 1/2" square	2.5	612	10.2	HLP	.310	2.933	1.5" @ 50 yds
30-150-CM RCBS	150.7	Red Dot /Dacron 1/2" square	2.5	583	6.3	HLP	.310	2.933	1" @ 50 yds
30-150-CM RCBS	150.7	WW 231 /Dacron 1/2" square	2.5	560	11.5	HLP	.310	2.933	1" @ 50 yds
30-150-CM RCBS	150.7	Clays /Dacron 1/2" square	2.5	556	16.4	HLP	.310	2.933	1" @ 50 yds

30-150-CM RCBS	150.7	Titegroup /Dacron 1/2" square	2.5	585	23.8	HLP	..310	2.933	1.5" @ 50 Yds
311291 Lyman	184.8	WW 231 /Dacron 1/2" square	2.5	470	6.6	HLP	.310 No GC	2.985	1" @ 50 Yds
311291 Lyman	184.8	Bullseye /Dacron 1/2" square	2.5	538	8.6	HLP	.310 No GC	2.985	1" @ 50 Yds

HLP = Herters Large Pistol

Test rifle was a Ruger Number 1-B with a 4-16X Weaver scope. The 311291 bullets were fired using sized/lubed bullets without gas checks.

.45/70 Government

Bullet	Weight	Powder	Weight	Average Velocity	Standard Deviation	Primer	Sized	Overall Length	Comments
457122 HP	338.0	Bullseye 1" square dacron	4.0	613	1.5	F210	.459	2.500	2" @ 50 yards vertical stringing
457122 HP	338.0	Red Dot 1" square dacron	4.0	579	13.8	F210	.459	2.500	One hole at 50 yards
457122 HP	338.0	700-X 1" square dacron	4.0	572	10.6	F210	.459	2.500	1.5" @ 50 Yds
457122 HP	338.0	WW 231 1" square dacron	4.0	468	21.3	F210	.459	2.500	4" @ 50 Yds
457122 HP	338.0	Clays 1" square dacron	4.0	524	10.4	F210	.459	2.500	1 hole @ 50 Yds
457122 HP	338.0	Titegroup 1" square dacron	4.0	574	14.1	F210	.459	2.500	2" @ 50 Yds

Test rifle is a Marlin M1895 with Ballard rifling. A Weaver 2-10X scope was used for all tests.



**457122 HP “whisper” bullet recovered at 100 yards.
Took a few dings but is mainly intact.**

Lessons Learned

In testing these cartridge, the .30/06 probably emerged as the best whisper cartridge candidate. It was the most silent considering case capacity.

The worst candidate, and this was hard for me to believe, was the old reliable .30/30. It was also the loudest.

The .223 works very well and so does the .45/70 at sub sonic velocities.

None of these loads is exactly silent but the noise level is low enough that they can be shot without muffs and recoil is negligible.

Power is adequate for 50 yard plinking and for small pests at that range.

In the .30s, it looks like the heavier the bullet, the more accurate it is and also the quieter it is. I don't think this would apply to the .45/70 as I feel that the 338 grain bullet is about optimum, for this purpose, in a .45 caliber cartridge.

There are vast differences between the point of impact between regular loads and whisper loads so the old theory of carrying a couple of light rounds while big game hunting for bagging small game is not a practical practice. Impact points ranged from 4-12” below normal point of impact and normally, slightly to the right.

Conclusion

Whisper loads are fun alternative loads with cast bullets. It requires readjusting the sights to regulate impact. They're very easy to load and ideal for teaching younger shooters to handle big bore rifles without the associated noise and recoil while still retaining the accuracy required.

One of the drawbacks to these loads is the potential for ricochets. Since the bullet is moving at slow speeds, they tend to bounce off backstops instead of digging in, fragmenting, or deforming. Insure that you have a safe backstop when using them. Even though the speed is slow, the kinetic energy still makes them as dangerous as a normal rifle round.

The loads I loaded are not silent. The noise level is seriously degraded to the point where they may be used in locations that normal loads would cause unwanted attention.

If you feel the need for some of these loads, give them a try. As I stated, I made no attempts to develop the ultimate load for each rifle. This will have to be done with your rifle and your bullets.

I feel that I have given you enough starting loads in cartridges of varying case capacity and pointed out the pitfalls to keep you out of trouble in getting started.

Now, if you want to “whisper”, the rest is up to you.

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