

**October 2007**

*I have been shooting Sporting Clays with a particular 32 gram shot shell for targets that are in the range of 35 metres and further with limited success for the past year. Recently I bought some new shells which are no where near as fast ( about 50 feet per second less ), but I can honestly say my scores on longer shots improved dramatically when I changed to the lighter load. I don't think I am leading the targets any less either. Is this in my head or is lower velocity shot shells the way to go?*

*Michael Carroll, Manly, NSW*

I am not surprised that you do not have to lead the target any more. You may get a shock to know that at 35 metres the ACTUAL difference in lead required between the two shot shells is only 30mm. Yes that's right, just over an inch!! The faster of the two shot shells arrives at the target a whole .004 of a second before the slower one. There has not been a shooter yet born that can lead a target 30mm more at 35 metres because they are using a slower shot shell. Don't get confused by the muzzle velocity that may be written on the box. Muzzle velocity is all it is. Faster shot shells slow down quicker and by the time the shot column has reached its target the velocity is nearly half of its initial muzzle speed and slowing down fast.

Michael I would think the better results with the slower loads can be attributed to first of all better patterning of the shot at 35 metres. The slower load may not be blowing the pattern apart as much thus giving you more effective shot pattern density and therefore a far greater chance of breaking the target. Second of all, the better patterns may be to simply harder and rounder actual shot pellets. Round, hard polished shot will give you far better long range results than softer, deformed shot. See if you can find out if the slower loads actually have harder shot. This means finding out what percentage Antimony the shot is loaded with. Generally hard high quality shot has 5% or 6% Antimony. If this is the case the manufacturer will generally label this on the packet as it is a good marketing tool. Antimony costs more and the manufacturer generally likes giving you a reason why you need to pay more for their shot shells.

Provided the shot is round and hard I would have no hesitation picking a lighter load over one that travels faster, but has soft and rough shot pellets.

*Is there such a thing as "Tracer" shot shells that I can purchase? I have seen video of footage of army shooters training with military firearms using tracers. I have no idea why I miss some Skeet targets and I thought these may help. I also think they would be great when hunting.*

*Rocky Mantello, Laverton Vic*

The idea of a tracer round that could work effectively and safely is great in theory. I have seen a couple of companies advertise a similar product over the years. Neither I believe actually had phosphorus coated shot pellets like the rifle projectiles you are probably referring to, but instead a magnesium component in the shell on the powder side of the wad that ignites and burns with a bright light as it goes away from you. At

over a \$1.50 per round they never took the shooting world by storm. I don't know how effective they would be at such short ranges and more importantly I don't know how legal they are so I think you need to check that out before going any further. I would worry some what about the fire danger anything like this may cause.

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