# **The Two Faces Of The .410**



8, 8 1/2 or 9-shot magnum loads from Fiocchi, Remington, Winchester or Mirage.

Is the .410 the ultimate sporting shotgun challenge or is it a bridge too far?

Well, first it must be understood the .410 does have a more restricted range but not quite as limited as some people may think.

With the best-quality ammunition and shot of appropriate size, this can be 35-40 yards for bird hunting, even with a true Modified (Half-choke) barrel (this refers to the patterns produced, not necessarily the amount of muzzle constriction).

At the .410/28-gauge Mini-F.I.T.A.S.C. shoots in England, clay shooting is often conducted with .410s at greater ranges with astonishing consistency using 7 1/2,

In fact, so tightly have the Remington, Winchester, Fiocchi shells patterned, they are really wasted on anything under 30 yards, for clay bird shooting.



Indeed, at the 2006 .410 World Championships at Litts' Treetops Shooting Ground, some excellent targets were presented and, although some were closer than the mini-F.I.T.A.S.C. series at West London Sporting Targets, they were still very challenging to shoot.

As the gauge of a shotgun reduces, the ammunition quality becomes ever more important. This is not to say the 12gauge will be happy with indifferent ammunition, but due to the amount of shot in the load, it will be less noticeable at short to medium ranges.

With the .410 in 3" magnum chambering, the quality of the ammunition is far more important than the degree of choke in the barrel. Indeed, cartridges can be loaded to produce all kinds of patterns with the same fixed-choke barrel.

The .410 is more sensitive to wad variations than any other caliber. This is explored in detail in my book covering all aspects of shooting the .410. To find

the best-performing combination, patterning is essential. It must be appreciated, however, that, for full-range shots, very hard (magnum) shot containing 5% or even 6% antimony will be required, together with very slow-burning powders and

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wadding that protects the shot as much as possible from the trials and tribulations of its journey along the barrel. Copper plated or even better, the new encapsulated lead Tshot pellets offer real improvements in the downrange patterning stakes, and for hunting use Tshot especially is going to be the best way forward.

A big mistake is to attempt a velocity that not only is unnecessary; but that can in fact be positively damaging to patterns. For long-range shots, no more than the U.S. standard of 1,100 fps at 3 feet from the muzzle is needed; which actually works out to be closer to 6 feet from the muzzle when chronograph testing.

If this is combined with lower peak operating pressures, it will yield the best patterns at the longer ranges. The return to the old standard heavy (for a .410) 3/4-ounce magnum load by Winchester gives the .410 more pellets in the pattern, albeit at the slightly lower velocity of 1,100 fps at 3 feet, when compared to the 11/16oz 1135fps three foot velocities.

If you wish to use buckshot, you will have to load your own, with U.S. 00 or 000 buck being the most effective, or alternatively obtain some of the new Winchester factory loads, which have proved to be quite satisfactory.

For the sheep farmer with one gun, a magnum .410 has the flexibility to deal with winged vermin as well as foxes with either buckshot or rifled slugs. In fact, the rifled slug is remarkably effective for this purpose out to a maximum of 100 yards, where sub-4" groups are entirely possible, with the correct combination of gun, sight and slug load.



It is a little-known ballistic fact the .410 slug is the safest form of single projectile for fox hunting. The maximum range is limited by poor aerodynamic shape and sectional density, but these very attributes also limit the distance it will travel to no further than about 775 yards, even when deliberately fired in the air at the optimum angle of 26.7 degrees\*. The slug will be down to about 150fps when it hits the ground with less than 4.5ft/lbs of energy.

## \*This is clearly not to be attempted under any circumstances, but is mentioned only for clarity.

With typical foxing rifles, this cannot be said

of even the humble .22 Hornet, let alone the .223, .22-250 or 220 Swift, with the .243 being in a class of its own in this regard.



The .410 slug also has a reduced tendency to ricochet compared to any lead .22 rimfire rifle bullet because its light weight, lowsectional density and soft-lead composition. tends to flatten completely when striking a hard object.

When fired with appropriate

backstops (as any solid projectile must be), the .410 slug is far safer than the ordinary .22 rimfire bullet and much more

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effective for shooting a fox. Shoulder shots are a practical reality with the slug, but the .22 rimfire is woefully inadequate in this regard, with headshots at close range being the only viable option available, if wounding is to be avoided.

When fired at a muzzle velocity of 1,830 fps (with 651 ft./lbs of energy), the Remington 1/5-ounce slug (87.5 grains) will drop about 8 from the muzzle line at 100 yards, retaining 1,040 fps of velocity and 210 ft./lbs of striking energy.

This may not seem like a tremendous amount, but the shocking power and knockdown effect of one of these soft-lead slugs is considerable within these limited ranges for a fox or coyote.

When group testing at an approved full-bore rifle range for my .410 book, using the Light Modified choked bottom barrel (about 7 thou of muzzle constriction) of an over & under .410 without a rear sight, a 1/2 group was obtained at 20 yards from a fully rested position! This would appear to indicate the potential to shoot into 2 1/2 at 100 yards (or 2.5 minutes of angle).

Perhaps if a scope sight were used, things could well be even better, but this rather limits things when out in the field to slug shooting only. But it is of no practical importance, as in any case this is excellent accuracy for Fox or Coyote sized



mammals; especially when it is appreciated that the realistic maximum range (with suitable practice) for the use of a non-sighted .410 would be around 50yards, where 345ft/lbs of energy is still available when connecting with the target.

For the sake of comparison, the .22 Rimfire magnum 40grain bullet (2000fps Muzzle Velocity) has this same energy level at the muzzle (24inch barrel), as does the 9mm Luger 125grain full power load (1120fps Muzzle velocity) from a 4 inch pistol barrel.

Similarly the 44-40 round with its 200grain bullet will be down to

around this same energy level at 100yards, (but with a much lower velocity and consequently much less bullet expansion) when fired from a single shot single barrel pistol like a Thompson contender with an eight inch barrel.

Now there is nothing wrong with the 44-40, but where the 1/5 ounce slug really scores over these other rounds for fox sized animals, is in the area of expansion, and the ability to transfer all of its energy to the target. At 50yards it is still traveling at 1335fps and the soft lead slug really does expand in a thoroughly rewarding manner, whilst also retaining excellent penetration. Conversely, over penetration is not helpful, and potentially useful energy is wasted on the backstop behind the target.

It appears that the .410 may be more versatile than many shooters believe. If you keep in mind the limited range and use the best-quality ammunition, together with appropriate shot sizes for both the quarry and range, you can enjoy some great target shooting and hunting with this diminutive bore!

## .410 Slugs Velocity & Energy

Muzzle: 1,830 fps & 650 ft./lbs. 50 yards: 1,335 fps & 345 ft./lbs. 100 yards: 1,040 fps & 210 ft./lbs.

For more info see the .410 book: Because It's there! Climbing The North Face Of The .410

(See <u>www.fourten.org.uk</u> home page for book stockist details)



From these figures, we can clearly see that the relatively poor sectional density of the .410 Slug, makes it a much safer proposition for fox or coyote shooting when close to populated areas.

From the chart we can see that each horizontal gray line is worth 20ft/lbs of energy, and each thicker blue horizontal line is worth 100ft/lbs of energy. When fired at 1830fps Muzzle Velocity the 1/5ounce (87.5grain) .410 Slug will drop around 8inches at 100yards, 22inches at 150yards, and about 48inches at 200 yards.

