

Design your own 'green' shooting range

One big benefit of having property in the country is the ability to set up a shooting range. Commercial shooting ranges have not only decreased in number, but have some gone politically correct by banning silhouette targets, limit some types



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of firearms and ammunition, and severely restrict numerous shooting drills and techniques due to stringent insurance policies and liability paranoia.

Next to playing around with technology, my other hobby is target shooting which over the past 13 years has grown to handgun firing to steel and long-range shooting at 800 yards.

During that time I have also integrated technology to help me acquire specialized ammunition, plan range upgrades, estimate and manage lead residues, film tracer round trajectories, and measure my draw to fire timings.

After Obama was elected in 2008 ammunition sales skyrocketed and inventories fell like a rock. Over the past year most calibers of ammo have been hard to get with the exception of one source: AmmunitionToGo.com.

This online ammunition dealer, owned by John Hueske, is one of the largest in the southwest United States and it is based right here in Washington County. After the big ammo purchasing rush came in 2008, they stopped accepting walk-in customers, but you can still place your order online and pick it up at will-call to avoid shipping charges.

Their Web site is hosted out of Virginia but the 20-person operation with all the inventory and shipping is based here. The AmmunitionToGo.com site is easy to navigate and you can find almost any type of ammu-

munition available for civilian use. This includes .22-caliber to .50-caliber, match ammo to incendiary rounds and boxes of 20 to cases of thousands.

Back in 2008 I opened up my gun range to our sheriff's department for their deputies to train and qualify. We soon outgrew the original facility and started planning a larger, safer setup to provide a more dynamic shooting experience.

Thanks to a mountain of donated sand by Rock Crushers and Mr. Hemphill followed by a strong effort by the road and bridge department, the Washington County Sheriff's department now has a one-acre shooting enclosure surrounded by a 12-foot wall of sand.

I laid this out with Google Earth and Microsoft PowerPoint to ensure line-of-sight for the 0.43-mile sniper rifle course. Next I used MS Excel to calculate and estimate future lead deposits from 30 deputies shooting throughout the year over a 10- and 20-year period.

Then I got scared when the spreadsheet showed me the amount of lead deposited over a one acre area was much larger than I imagined along with the possible cost of cleanup and removal. Excel calculated that between the deputies combined with me and a few of my shooter friends, we would be firing around 12,000 rounds annually, thereby dumping 260 lbs. of toxic lead into the sand berm and enclosed surface ground.

That added up to over a ton of lead in just a 10-year period which could result in a \$50,000 cleanup soon there after! So, I developed a new range layout before any shooting began to eliminate the future lead poisoning problem.

Using MS PowerPoint I designed three shooting walls that were each 8'x8' large and 1.5 feet thick filled with four tons of sand. These bullet absorbing walls retain all the lead ammo therefore keeping all lead out of the sand enclosures.

For shooting to steel we ad-

opted a change in ammunition by shooting only lead-free (compressed copper) rounds to avoid spattering lead all over the ground. The PowerPoint presentation (viewable at DeansConsulting.com) was presented and approved by the sheriff deputies in October which enabled us to have a hybrid gun range that was split in two halves with lead shot to the walls which can be cleaned out for \$100 every 10 years and lead-free ammo to the steel targets.

With those two healthy range practices we have zero lead residue in the sand barriers, on the ground, down water runoffs or in underground aquifers. We could call it a "green range," but I'd rather just say we're being environmentally responsible.

Reaction time is critical for law enforcement officers. Being able to quickly draw their weapon and shoot an attacker is a matter of life and death.

For those intense drills we have a digital timer at the range

which gives an audible tone at random times and counts the seconds until the office fires his weapon in response to that tone. The digital timer stops the clock when it hears the shot.

A person stands behind the shooter with the digital timer calls out the draw-to-fire times to help the deputy decrease his reaction time and get the shot off faster. The \$119 Speed Timer 3000 available at RUGReady.com is the size of an iPhone and provides automated shot timing with a 1/100 second accuracy.

Long-range shooting has been a passion of mine for years now and to hit a silhouette at 800 yards (eight football fields), math is just as important as match level ammo and precision scopes. I put together a laminated spreadsheet for quick reference to calculate my MOA clicks, bullet drop and wind drift to make those long shots.

Of course I have an iPhone

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App for that! It's called iSnipe, available at iTunes for \$5.99, which automatically calculates all those ballistic settings for all calibers instantly. This enables me to pre-calculate and verify other shooters' scopes setting to make sure they do not shoot over our sand wall.

Last year my brother-in-law and I digitally filmed a 500-yard shot of a .308 caliber tracer round just after sunset. We used two camera angles and it came out great. So great that we put it on YouTube.com and it has been viewed by over 17,800 people.

My new shooting project involves an 800-yard shot to our lead bullet wall with another tracer round at twilight with three high-definition cameras rolling.

One HD camcorder filming over my shoulder from the shooters view, another on the hill viewing at a 45-degree trajectory angle viewing the complete bullet flight and a third sitting atop the target wall seeing the lit bullet come right at the camera.

It should be a spectacular shooting video clip that shows a bullet illuminated with a red

burning phosphorus tail streaking across our ranch at just under one half mile. That will be a YouTube hit for sure.

Bottom line: When you get serious shooting, don't forget the technical tools, software and Web sites that keep you sharp and safe.

Next week's column: Company calendar.

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