

March 1, 2010

DeVault Industries LLC

Custom Engineered Shooting Solutions



I am not sure who sent me this photo but it's great. The name of the collection was babysitting!! There are days that I sit and wonder what life is all about and I think that this picture says it all for me. I long for the days when life was simple and the biggest decision of the day was, "Am I going out to play?" Make each day as if it is your last, be kind to people and if there is an opportunity to make a person smile, you are truly blessed.

"DeVault Winners Box"

Phil Berkowitz— DeVault custom shotgun, North Carolina State Veteran 1st Team, 2nd position

Bill McGuire—Blaser F3 DeVault custom stock and add-on rib, Rhino Rally in February, Five stand champion
48 x 50 ~ Prelim. Champion **96 x 100** ~ HOA Runner up **182 X 200**

Congratulations to everyone and remember if you have a winning score and you are shooting a DeVault Industries product or you have taken a Double D Shooting Clinic let us know so we can put you on the winners board.

We had the Drawing for The DeVault Industries Promotional raffle on Friday February 26, 2010 Congratulations to the following people:

The Grand Prize goes to ticket # 101 Phil Berkowitz

2nd Prize went to ticket # 107 Bernard Manderine Jr.

3rd Prize went to ticket # 9 Eric Olson

4th Prize went to ticket # 22 Richard Dewoskin

Thank you to all the participated and we look forward to doing this again in the future

The World According to Me ~ "Dennis DeVault"

Last month I asked for subject material that readers wanted us to write about and I thank everyone who wrote in with suggestions. Through this year Dean and I will try and cover the items that you asked about as best we can. David from California asked about trigger lock time.

In recent years there have been many discussions about trigger lock time, some good discussions but also a lot of bad information as well. Is lock time important yes and no?

Lock time by definition is the measured span of time from when the trigger sear breaks loose and the hammer smacks the firing pin. That time sequence is normally measured in milliseconds.

In all the studies that I had done over the years, the most important item about a trigger is consistency. Does the trigger repeat its lock time from shot to shot or does the trigger lock time vary. An example: I had a shooting friend bring a particular shotgun to me complaining that the gun shot too high at times. The part that puzzled me was the "at times comment." So I had the shooter explain the "at times" problem. Although I pretty much knew the answer to the problem; I wanted to investigate further. The shooter told me that when he patterned the gun and on paper it was right where he wanted the pattern to be. But often times through a round of trap he would just shoot over a target for no apparent reason. We went to the gun club and started shooting targets. After my friend got comfortable, and forgot that I was there I gave him a no target. What I wanted to see was how he reacted to the next target. When a target failed to appear on his call he would kick the gun off of his shoulder and point the muzzle straight in the air. He then took a breath, remounted, called for the next target and missed it. Over the next 100 targets I repeated that same situation of not letting him see a target and in all but one instance the next target was missed. From there we went back to the shop. In my shop we have an electronic trigger scan machine that measures five items about a trigger and plots a graph of the results. The machine measures lock time, creep, total travel of the trigger before it goes off, pounds of pull and the peak pressure required to get the trigger to move. I set my friends gun in the machine and started to chart the lock time of the trigger with the cocking rod pulled all the way out as far extended as it would go. I did this three times and got lock times of 3.3 to 3.6 milliseconds, which is pretty consistent. Next I did three more tests but this time I pushed the cocking rod in half of its extended length. The lock time went to 5.8 to 6.0 milliseconds. For the next test I pushed the cocking rod all the way back against the hammer and did three more test. The lock time was now 10.7 to 11.6. So what we had was a potential of an 8.3 millisecond difference in lock time from shot to shot. The question becomes how far can you move the muzzle of the gun within that amount of variation. Analyzing the situation, it was very apparent, that in the shooters set-up, when he kicked the gun and raised the muzzle end in the air that the cocking rod would slide back against the hammer. That slowed the lock time down and resulted in a missed target.

During the time that we had the gun apart I noticed that the cocking rod had lots of grease on it and that concerned me. As a last test I placed the receiver in a freezer for about three hours. I pulled the receiver out of the freezer and checked the lock time with the cocking rod against the hammer and found the lock time went to 19 milliseconds. The last thing that I did was to remove all the heavy grease from all the parts and we put a little dry graphite powder in place of the grease.

My solution for the shooter was to change his dismount after a broken or no target by pointing the muzzle down and allowing the cocking rod to slide forward before remounting the gun.

In the final analysis I can say that if you do the math by calculating target speed, angle of target trajectory and a perfectly placed shot the element of error is about 1" per millisecond. But there are many other things to consider that will turn that couple of inches to a couple of feet. There is a time span from when your eyes acquire the target. That signal goes to the brain then the brain sends the signal to the muscles in the hand, finger, arm and wrist to pull or release the trigger. Another factor that should also be considered is how do you approach a target? With a sustained lead, pull away, or pass through? All of these things relate to swing speed and create a very big equation so that it is difficult to factor in the precise amount of error on a missed target.

Here I would like to show another point of how important lock time and consistency can be for some shooters. A very good shooter that I knew was at a club and I noticed he was having a problem with his first barrel shot. I had never seen him ever shoot this bad. As he walked off of the Doubles trap he was shaking his head and talking to himself. I could tell that he was very frustrated and not having a good day. I approached him and ask what the problem was today. He stated, "I don't know for the last month I have been having problems with hitting anything on the first shot." I asked if anything had changed on the gun. He answered, "No." I pushed a little more about any changes and he did say that he broke a hammer spring on the lower barrel but his local gunsmith just replaced the spring and the pull weight was the same as before 3-1/2 lbs. That evening after dinner he and I went to my shop and put his gun on the trigger machine. I charted the trigger lock time and trigger pull weight. After the charting I took the gun apart and removed the new hammer spring. I happen to have a brand new spring for that gun in my parts bin and set the two springs side by side. My spring was a lot longer than the spring in his gun. What had happened was an old gunsmith trick. To maintain the same pull weight the gunsmith started cutting coils off the spring to weaken the spring and bring the pull weight down to 3-1/2 lbs. The weight the customer wanted it to be. Almost two and a half coils were cut off the spring and that made the hammer fall very slow. When the gun was returned the gunsmith put a trigger pull weight gauge on the gun to show the customer that the pull weight was right where it was supposed to be. What wasn't detected was the change in lock time. After I installed the new spring and honed the sears to bring the weight of trigger pull in, we put the gun back on the stand and the lock time increased by 2.5 milliseconds. The next day in a Doubles marathon he broke three 100 straights. Problem solved.

The bottom line, keep your equipment in as good of condition as you can and check your trigger from time to time to be sure that the pound of pull has not changed. Also keep good records of any maintenance you do on your guns. Record your scores and especially after any gun work and compare that to past performances. At all of our DD Shooting Clinics we teach our students to keep a diary and good records of all that they do. Keeping good records can save you from a lot of frustration down the road. It can also save you money when you get pissed at your favorite gun and trade it in for another one when a simple record log would have told you the problem and where to look to find a solution.

**This is the,
Rodeo Man Out**

Looking for the target ~ Seeing the Target

This month's topic is one of the most important parts of shooting a moving object.

A friend asked me a couple of very good questions; he said

“What is the difference between looking for and seeing the target?” His second question was how to “be reckless on the first shot of Doubles, yet stay in control for the second shot?”

There are many variables to each of these questions because it is so individualized to the shooter; such as, are they a one-eyed shooter or a two eyed shooter, do they hold a high gun, or use a low gun hold, are they right handed or left handed? This is why you will probably; never hear of DD Shooting Clinic doing a video (I did say probably).

Please understand that videos are fine for beginners or to find out how someone else shoots. However many of the people who come to us are not beginners, but are people who are trying to take their game to the next level. Here is my opinion on looking for the target verses seeing the target. It does not matter where you hold your gun as long as it is not blocking your ability to acquire the target and you are comfortable and in control of your gun. I think this is where some people get confused. Acquiring and Seeing the target are two very different things. You want to acquire the target leaving the house as soon as possible and identify the direction it is going so you can start your move. That does not mean trying to shoot it as a blur or starting your move before the blur clears up; or trying to always be ahead of it. When it clears up as a whole target then make or take the shot. Just let it happen and stop trying to make it happen.

There have been many articles written over the years on Bird to Bead relationship. This to me is a very confusing statement. You cannot look at two things at once and trying to do that is what gets so many shooters into trouble right out of the gate! We have a “Middle 50” pot going at our local club and the pot has continued to grow, for 10 weeks since before Christmas.

Last weekend I watched some shooters, who I know are very capable, shoot straight only to miss targets out of the last 10 or so. I watched a new shooter who is a good friend, as his hits got lower and lower on the targets until he shot under them completely. He started thinking instead of reacting, aiming and trying not to miss, and went right into the tank. Everyone's reflexes are different, and so is their eyesight which is why some shoot faster than others. A one eyed shooter cannot successfully hold a high gun and pick up the target as it leaves the house; there are exceptions to every rule but I have yet to see it work. A two-eyed shooter can hold about where ever they want as long as they can control the trigger, and not run out of ammo before they get to the target. My point being, “Control the eyes and they will control the trigger”.

Nothing will make you short stroke a target and shoot behind it, over it or under it, quicker than not acquiring the target leaving the house. A miss is a miss no matter where it is. It is why not where the target breaks that counts. Your body will do whatever it can to try to make things happen for you. Sometimes you may have had the funny feeling happen, that is called a flinch! When the eyes and trigger finger are uncoordinated, that can cause real problems that aren't so funny.

Now for the second question; the first shot of Doubles, and the move to the second shot. Most shooters do not practice Doubles as much as the games of Singles and Handicap. In my opinion, Doubles are the key to learning everything mentioned above in this article. Doubles targets are going to come out within a few inches of the same place every time. So why do most shooters shoot the first target as if they are shooting a 22 rifle? They are not shooting it; they are trying not to miss it! So what we have to realize is we are shooting a shotgun

and that Doubles targets are going pretty much in the same place every time. Point, shoot and quit aiming and trying not to miss. The first target is a gift, set yourself up for the second target, and let it happen. If you watch the first one puff you are wasting valuable time, the second target is still going.

I have had numerous people tell me over the years, “I cannot shoot them as fast as you do”. I will never ask you to. All I ask is for you to shoot the first target as fast as you can and go to the next, and stay in control of the pair of targets at hand. Remember we are human, but God made shotguns so we do not have to be perfect! We can be off a bit and still get the job done. The season is right in front of us. We have not had suitable weather to get out and practice. So keep doing your indoor gun lifts and eye exercises, while thinking “Acquire ~ See ~ Break” the target.

It is going to be a good year, because there is a Champion in each and every one of you.

Until next time,

Dean DeBow

Grandslam-62

Precision and Grace it defines what shooting is all about. Establish a routine and polish it until it is second nature.





DOUBLE D SHOOTING CLINICS

We have clinic dates already scheduled for 2010. Go to the web site below and see if there are openings at a clinic near you. If anyone wants to schedule a clinic at their favorite club let Dean or Dennis know so we can set you in the schedule. Watch the web site for the dates and locations as we post the schedule www.ddshooting.com Contact Dean @ 270-886-2095 or Dennis @ 330-456-6070. We look forward to seeing everyone this year.



There's nothing like a good friend to take you on a walk, explore the unknown and watch the world as it passes by.

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