



until desperation sets in and I'm running out of tinker room. That may take months.

**SEE FOR YOURSELF**

The truth is that a minute or two of video is worth a month or six of tender, warm, fuzzy feelings. If you don't have someone you trust to "see" for you, then it can't hurt a thing to see for yourself. Slow motion and frame by frame "film" advancement on a computer screen can reveal with clarity what we only suspected with the naked eye. You can even freeze frame the really

ugly parts – if you need to induce unremitting guilt!

I lucked into one of those Ebay deals on an unfinished stock for my 391. It was advertised as having a high comb – so few bid on it. (I have a rasp, so I didn't care how high the unfinished comb was.) I got it for \$63. It turned out to be darn near exhibition grade American walnut, one hundred percent figure on both sides. Needless to say, I proceeded slowly with the cutting, utilizing the best of my 'fit by Braille' technique, with an occasional peek in the mirror. It felt really good – several times. As the winter months slowly passed, I made the last minute (as in small,

Visit any shotgunning chat room on the net and you'll see the ubiquitous post, "I'm new to shotgunning. How do I know if my gun fits?" And of course, he or she is immediately inundated with more help than any one person can possibly use. These well-intentioned good Samaritans of cyber space could even confuse Einstein – relatively speaking. So, what's a guy or gal to do? No! Converting to golf is not an acceptable choice.

One very effective way may be to shoot yourself – video style. Some equipment is required, if you don't have it, maybe some of your friends will. It's darn near impossible to feel what we would see if we could only see what it is we are feeling. Believe me, I know. Every time I get a gun, I fit it by Braille. I choose this method because it takes forever, and I'm not happy if I'm not tinkering. I don't do the intelligent thing and get the video camera out



**ABOVE: AN INCREDIBLY USEFUL DIAGNOSTIC TOOL, A DIGITAL VIDEO CAMERA WITH THE RIGHT SOFTWARE IN THE COMPUTER CAN MAKE TIME AND TECHNIQUE STAND STILL. TOP LEFT: ACTION AT THE GUN CLUB. IT CAN BE FULLY EVALUATED BACK HOME – FRAME BY FRAME.**

# Roll 'em!

**DAVE HOLMES** TURNS TO THE VIDEO TO IMPROVE GUN MOUNT AND SHOOTING TECHNIQUE

not 60 seconds) but critical adjustments.

Spring came and I finally got out the video. It took two mounts into the camera lens to see that the pitch was off a tad. A couple of mounts viewed from the side quickly revealed that the back of the comb was a teeny bit high. After establishing these problems on the big screen, I lost all tentativeness and fixed both problems in short order. It looked like I had a smidgeon more shoulder move into the gun during the mount than I needed, so I added  $\frac{1}{8}$ " to the length of pull. It looked perfect on the video. I shot it, found I needed to take out the  $\frac{1}{8}$ " I had added on the LOP and it was dang near perfect. I could have accomplished everything I had done to the stock since I had taken it out of the shipping box in two days by using the video up front (excluding finishing) – but then I'd probably have been bored all winter!

## INCONSISTENCY

I started videoing my friends. Les had recently given a 34" Perazzi a home. Wonderfully balanced, he shot it well but every so often inconsistency would pop up. With video footage it was easy to see that the pitch was way off and he was taking all the recoil on the toe of the stock. His mount consisted of putting the butt into his shoulder, then rolling it from toe to heel as he "flipped" the muzzles 3 or 4 inches up – occasionally right over the top of the target. Sometimes it would grossly misbehave during recoil, causing the barrels to dip and making shot to shot recovery a challenge. But, it has a nice piece of wood and he was reluctant with a capital R to do anything to the stock – until I had him stop by the house and watch the frame by frame video of him shooting.

Frame by frame, he could see the muzzle flip as the gun came to his face. Frame by frame, he could

**EVEN IF YOU DON'T KNOW HOW TO FIT GUNS, YOU CAN SET A CAMERA ON A TRIPOD AND MOUNT TO THE CENTER OF THE LENS A HALF DOZEN TIMES. WHAT YOU WILL SEE WITH A GUN THAT FITS IS THE EYE COME TO REST OVER THE RIB AT THE PREFERRED HEIGHT, WHILE THE MUZZLE MOVES IN A STRAIGHT LINE TO THE LENS.**

see the muzzle dip that happened under recoil. He could see how light the mount was on his face on low targets. He could see himself practice mount and crunch his face into the comb, then shoot targets and barely touch the comb. It was an absolute tribute to eye-hand coordination that he was shooting

the gun as good as he was – and he could see why he just plain missed targets every once in a while. We changed the pitch. He can't flip the muzzle now if he tries – I stole his pivot point. He was shooting in the mid to upper 80s before, now he's going for upper 80s and low 90s by getting rid of those half dozen "whoopies" a round.

Right-handed Steve has been battling a left-eye that takes over whenever it feels like it. I can see it when he shoots. He can feel it, but it was never more graphic than when he was mounting into the camera and the muzzle crawled right over to the left eye. He would subconsciously move it back under the right eye – he didn't know it had happened. It's amazing what you can see and how believable it becomes when you *show* someone what's happening rather than just *tell* them.

## FIND FAULTS

Even if you don't know how to fit guns, you can set a camera on a tripod and mount to the center of the lens a half dozen times. What you will see with a gun that fits is the eye come to rest over the rib at the preferred height, while the muzzle moves in a straight line to the lens. If the pitch is off, or the heel of the comb is too high, you'll likely see an upward flip of the muzzle as the comb rolls into place on the face. If you have too much drop, you'll see the eye dip under the muzzles, then the head pop up to get the eye back over the gun. If you don't have enough cast, you'll see the pupil of the eye on the 'inside' (body side) of the gun. If you see the muzzles roll sideways, it can be a shooter trying to get the bead under the eye, 'cheating' the cast into the stock. It could also be the result of an improperly shaped grip, or sometimes a problem with the fit of the butt into the shoulder pocket. If you, like Steve, have a

**THIS COULD BE ONE OF THE MOST IMPORTANT SHOTS A SHOOTER TAKES ALL SEASON.**



problem with eye dominance, you'll see the muzzle wander to the off-eye. It may not happen every time you mount, but if you see it just once, you may have the answer to unexplained misses.

If you do a series of mounts with the camera on the gun side of the body, you can see if the length of pull is too long. If the heel drags up the shoulder during the mount, that is enough to slow the muzzle and hammer your hand-eye coordination. You'll get the muzzle where you want it to go a bit late, in the wrong spot, and have to hustle your buns off to straighten things out. You'll see the muzzles dip if the butt bumps the shoulder – followed by the attendant flip that is needed to get the muzzles back on the target plane. That flip will cause misses. If the stock is too short, you'll watch yourself pull it back into your shoulder. If you see the shoulder blade pushed back past a straight line down to the back hip, the stock is likely too long. That forces the center of gravity to the back leg. If that happens, it is difficult to maintain a smooth swing on crossers as your range of motion is restricted. It may also turn you into a punching bag for recoil as the energy applied to the shoulder rocks you back – causing a lot of unnecessary gun movement between shots. If the comb is too high at the heel, you'll watch it contact your face first, then see the head roll forward to get the face on the stock. If the comb is too low, you'll see the face contact the stock, then the head raise or roll up and rotate the eye over the frame of the gun. As you watch, realize that every correction made during the mount will likely result in some degree of over correction due to momentum in the gun, the body, or both.

If you don't see any pattern in your movements, you'll know that it is time to learn a proper gun mount. If you don't have one, you



**THE CONCLUDING FRAME OF THIS SEQUENCE LETS YOU SEE HOW THE HEAD GETS "SCRUNCHED" INTO THE STOCK FOR THE PERFECT EYE ALIGNMENT. THE HEAD HAS TO ROLL FORWARD TO GET THERE.**



**IN THIS FRAME, WE SEE THE IMPACT OF THE SHOT HIGH AND IN FRONT OF THE TARGET. MUZZLE FLIP IS HAVING ITS WAY WITH ACCURACY. THE HEAD HIGH OVER THE STOCK IS EVEN MORE APPARENT.**



***SLOW MOTION REPLAY, OR FRAME BY FRAME, YOU CAN ALSO USE THE VIDEO TO EVALUATE SHOT PATTERNS – HIT OR MISS!***

will be surprised at how much easier it is to shoot well after you develop one. Good technique always makes shooting easier. If you are working too hard, it can show in the video. You want to see

smooth, easy moves. No lunging, crunching or hunkering is allowed.

## **DIAGNOSTIC TOOL**

The video camera doesn't offer

cures. It is a diagnostic tool that reveals symptoms. You won't turn into an instant gun fitter or shooting instructor, but you may see that you really do need the services of one – or both. Your purpose remains diagnosing problems. Unless you are quite confident in your abilities, let a knowledgeable source guide you to solve the problems you can see. Hasty action can make things worse. There is a certain satisfaction in just finding out that there is a reason for a poor result other than blatant incompetence based on a deficient gene pool contributed by one or both parents. There are few people who can't learn to shoot reasonably well.

There are a bunch of video editing software products on the market, some of which are free for the downloading. I don't claim to be an expert – I'm still staying up till

2am to figure out the video just like I did the stills. I use Adobe Premier Elements because I use Adobe Photoshop. It does everything I need to do (I think!). For the purpose of diagnosing ills, you'll want software that allows slow motion replay at a minimum and if you can do it frame by frame, you'll soon learn how valuable a feature that is. My camera shoots 29 frames a second. You have no idea how graphic shotgun recoil can be until you see it split into a frame by frame progression at slow speed. I find it fascinating to watch the mount get chopped into so many definitive pieces. It could be a wonderful aid in deciding what shell to shoot when you see what recoil does to your body each and everytime you pull the trigger. I'll watch a shot over and over again, just to pick out the teaching points. My wife thinks I'm nuts! ■