

November 2009

I have been looking at buying a second hand Miroku shotgun to shoot Clays and to hunt with, but several people have warned me not to purchase this particular firearm because the wood in the stock has a couple of "knots" in it instead of the normal long "stripe" grain that you see in many guns. I was told that these knots will make the gun kick me in the face and will definitely recoil more than a stock which has the grain flowing parallel to the barrel. Can a knot in the wood effect recoil?

Robbie Collins, Bendigo, VIC

This answer will no doubt get the blood pressure up on some diehard "purists" but I think the people telling you about your knotted stock recoiling hard would also lead you to believe that John Howard goes pig shooting each weekend now that he is retired from office! It is an old wives tale and I would challenge anybody to prove otherwise. The last time I checked "actual" recoil in shotguns was measured with three variable components. 1) The weight of the shotgun; 2) the weight of the shot charge and 3) the speed the payload of shot (and wad) is discharged from the shotgun. I can't find mention in any physics book that the cosmetic appearance or composition of the grain in the wood is a factor in the recoil equation.

This is where the age old debate about "actual" vs. "perceived" recoil begins. Actual recoil is measurable whilst perceived is subjective. Here are the facts. If you shoot a gun that weighs 8 pounds and increase the weight by 12.5% to 9 pounds you will *decrease* actual recoil by approximately 12.5 %. However if you shoot a shot shell with 1 ounce of shot in it and then shoot another shot shell using the same gun with 1 1/8 ounce of shot (12.5% more) you will *increase* actual recoil by around 25 %. Twice as much! The same happens with velocity. Increase the shot speed by 10% and get "kicked" about 20% more.

Just about everything known to man has been claimed in shotgun shooting as helping to reduce perceived recoil. A gas operated semi automatic shotgun actually recoils the same as a fixed breech gun of the same weight, but the perception is totally different due to the recoil "pulse" or "shock" being broken down into longer sections because of the nature of the mechanism. That given, I won't however give in to the notion that a firearm with a knot in its stock when fired somehow has the recoil travel down through the breach and mechanism of the gun, down the neck of the stock, through the pistol grip then gets caught up in a circular knot beneath the comb and is somehow magically transferred at right angles up into your face to fracture your jaw instead of travelling down along the length of the gun and comfortably into your shoulder.

Robbie the best thing I know that helps in recoil perception is a correctly fitted shotgun particularly in the areas of stock length and "pitch" (basically the angle the pad of the gun sits on your shoulder). Get a reasonably thick, quality flat recoil pad fitted (> 15mm if possible) and don't hesitate on buying the gun if you think it can be altered enough to fit you properly. If the stock looks good then that's an added bonus, but the reality is a knot infested fence plank, if weighted the same, wouldn't "actually" recoil or "kick" any more or less than the prettiest piece of parallel grained Turkish Walnut.

Questions: russell@russellmark.com.au