Become a Better Shotgunger Part 1: Basics

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Dedicated to my father.

Before cleaning, disassembling, making any modifications to a shotgun, or installing any accessories or upgrades, make sure that your shotgun is <u>UNLOADED</u>.

Check the chamber and magazine tube, making both visual and touch verifications.

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INTRODUCTION: THE COMBAT MINDSET



That awful moment when you realize you have failed; the moment when you understand you have been in denial all this time. You failed to *get* ready because you thought you *were* ready. People always over estimate their own capabilities because they cannot face the truth. You are not physically prepared just because you think you are. You believed you had instinct, when in reality instinct is a learned reaction. You must be taught how to react. How would you know how to counter an attack if you have never encountered one before? You thought instinct was part of the will to survive. Your only defense is wishing you had trained and listened better. Even if you do survive the situation, you have shattered your confidence. You have just seen your true self; reality hurts, and it may ruin you. You feel shame and horror, and worst of all you feel helpless.

It Is a Mindset

First, no matter how good you are in combat situation there is *always* someone better. Someone faster and better trained someone who will never underestimate the enemy. Someone who knows they will always rise to the level of their training, training that goes on every day. They do not speculate on how good you are. They naturally assume you are as good as they are, so they never take anything for granted. They are efficient and they do not

think about the mechanics of what they need to do; muscle memory takes over. They fully understand their own capabilities and will never be in a situation where they are left wishing they had trained better. They live because they come to the fight prepared mentally as well as physically.

Anyone can train, but it takes a combat mindset to *use* that training. You have to be able to pull the trigger at the critical moment. Hesitation is fatal; your life and the lives of others are in jeopardy if you hesitate. Training gives you the mechanical skills to use a weapon but you need to be able to *pull the trigger mentally*.

People

There are predators, humans that prey on other human; people that have no empathy for the suffering of others. They attack without provocation and never have remorse for their actions.

There are those that would rather avoid confrontations; they have never struck another human in anger. They go to work every day and hope they never meet an assailant because they know they cannot defend themselves against such aggression. These upstanding citizens see the good in everyone and many, if not most, will never have to deal with a human predator.

Then there is the person who does not seek out others to hurt, but will do what it takes to defend themselves and their families. They will confront a predator, a killer, at the risk of their own lives to save the lives of family members or even strangers. They help balance the scales and many never realize who they are or that this type of person even exists. They must have a capacity for violence but also have a love for their fellow humans, and will avoid hurting anyone without a good cause - a combat mindset. They know when to use lethal force and when not to; there is no hesitation. There is no desire to hurt just for the sake of causing pain. They train, and they know they will do what it takes when the time comes because they can pull the trigger mentally as well as physically. They do not question themselves; they just do what has to be done.

CHAPTER 1. SHOTGUN MYTHS



Unfortunately, too many would-be shooters get their firearms training from movies and various online videos. Others may have been brought up with firearms and naturally pick up habits from family members who have picked up their training and habits from their own family members, and so on. Keep in mind: just because you were trained a certain way does not necessarily mean you were trained the right way. No doubt, everyone has the best intentions, but before we realize what's happening bad habits have a way of becoming the norm because that's what we've been taught to do. Bad habits become "truths," and myths get started because of this.

This article will discuss some of the more common myths associated with shotguns and try to explain the facts and misconceptions.

Myth: The racking of a shotgun will cause an intruder to run off.

Stop and think about this for a minute. If you are only chambering a round just as you spot an intruder then you are behind the game. Your home defense shotgun needs to be at the ready-to-fire position prior to encountering an intruder so that you are ready to act immediately.

The racking of a weapon, while a very distinguishable sound, is not really much of a deterrent; before you rack it a weapon cannot be fired, and if someone hears you racking they may choose to shoot at you because they know you can't retaliate until the cycling is complete. In movies you will often see someone emphasizing their commands by cycling the weapon while they hold it on someone. In that type of situation your weapon would make a more effective club because you would not be able to fire it until it was cycled. Additionally, the sound of racking your weapon would give away your position. Your weapon is not meant to be used for intimidation purposes; this will get you hurt. By the time you see an intruder your weapon had better be ready to shoot!

Myth: You do not have to aim a shotgun.

This myth came about because in years past many shotguns were called "scatterguns." The guns were loaded with anything that could inflict harm including nails, pebbles and rock salt. The barrels on older weapons, known as a blunderbuss, were funnel shaped to help spread the shot as it left the muzzle's end. While the shot did expand, it was only enough to injure more than one person if everyone was within a few feet of the muzzle, meaning it was still very important to aim before firing.

Shotguns loaded with slugs need to be aimed just like a rifle or revolver. The muzzle has to be pointed at the target, because the round inevitably follows the muzzle. You can expect shot to spread as it exits the barrel at approximately 35 to 40 yards. Close quarter combat is just that: close quarters. Close quarters are usually measured within just a few feet and most shots fired are at ranges of 3 feet or less. There is no spread, and the weapon must be aimed.

Myth: Load birdshot, buckshot and then slugs; if the birdshot doesn't do the job then you have buckshot and slugs as backup.

Some people say 3 feet and 3 seconds are the typical range and length of time of a non-military firefight, while others say the average firefight lasts 7 seconds at 7 yards with three shots fired. Whether 3 feet and 3 seconds or 7 feet and 7 seconds, the point is that the first shot better count, meaning it needs to have stopping power. Whether or not the first shot is lethal it at least needs to incapacitate the assailant long enough for you to get control of them and their weapon. Birdshot can stop a person, but buckshot and slugs leave no doubt; therefore, there is no point in mixing rounds in the magazine. Having to keep track of the amount and type of rounds you have in the chamber and magazine may confuse you and if you have to knock down a charging bear or human you need your first shot to be the best that you have.

CHAPTER 2. 12 GAUGE VERSUS 20 GAUGE SHOTGUNS

Both 12 and 20 gauge shotguns are very popular; each are used for hunting, skeet shooting, competition shooting and for home defense. There are several models available in both gauges such as a double barrel, single barrel and over-and-under.



12 Gauge

The 12gauge is the larger of the two, with a bore diameter of 0.73 inches/18.5 millimeters. The range is usually longer and it will have greater recoil. The 12 gauge is chosen for migratory bird hunting and skeet shooting because of its range.

While recoil can be considerable for anyone when using certain shells, physically smaller individuals in particular may find the recoil is not tolerable on this gauge; this is something that must be considered for extended hunting trips. People that seem able to tolerate recoil on a practice range may find it becomes more difficult as the hunting trip gets longer and as they use various sized loads.

If there is more than one person in the home that may use a shotgun as a home defense weapon you must consider the recoil. Young adults and others need to be able to tolerate the recoil of a 12 gauge, or you will have to make a 20 gauge (or both weapons) available for use.

Because the loads in a 12gauge are heavier, the damage done to small game such as rabbits and squirrels will be greater. Heavier loads may very well destroy an animal to the point where they cannot be used as a food source and the skins would be unusable.

The standard 12gauge load is 1 1/8 ounces of shot. You can load 1 1/4 for longer ranges and heavier birds, but once again the recoil with the heavier load will be considerable for some individuals. Because the heavier loads

carry more pellets, avid bird hunters tend to choose the 12gauge as more pellets mean more contact with the target.

20 Gauge

The bore diameter of a 20gauge is 0.615 inches/15.6 millimeters. This weapon is commonly used for bird hunting, hunting in general and for skeet shooting. According to some, this range is more than adequate for bird and duck hunting. This weapon is also an ideal home defense shotgun as typically range is not a critical factor in such situations. Many hunters will choose a 20gauge over a 12 gauge based on the recoil and lightweight, especially when they expect to cover a lot of terrain.

The standard shot load for a 20gauge is 7/8 ounces and you can load shots up to 1 ounce. A 1 ounce load in a 20 gauge will have less range than in a 12gauge. For home defense, many use the heavier loads in their 20 gauge for the stopping power without the recoil associated with the 12gauge.

Type of Actions

Both the 12 and 20gauge shotguns come with various actions, including a single shot that is loaded manually, bolt action, pump and semi-automatic. The 20gauge is traditionally the less expensive of the two, but prices will vary depending on the model and manufacturer.

CHAPTER 3. PUMP ACTION SHOTGUNS



Until recently, the typical combat shotgun was usually a pump action and sometimes a slide action. Pump action shotguns were used primarily because of their reliability. This is important in a tactical situation where your weapon may be covered in dirt or mud, because you can pump through various obstructions. You are relying on your actions to cycle the round and not the energy of a fired round to cycle a new cartridge, which is how many semi-automatic shotguns operate.

A pump action allows the shooter to mix cartridges in the tube and to use low power or specialty rounds. The forend is pumped to cycle a cartridge. In older model pump actions there was not a trigger disconnect, so rounds could be fired as fast as you could pump if you held the trigger down; soldiers called this slamming.

A pump action usually allows 4+1, meaning you have four rounds in the magazine and one in the chamber. You can get a two round magazine extension bringing the total rounds up to seven, and in some cases you can adapt for even more rounds. Some state laws, however, may have restrictions; be sure to check with your local authorities before making modifications. Most states call for a duck plug, which only allows a three round capacity when hunting migratory birds.

A pump action shotgun is not considered a semi-automatic, but rounds can be fired quickly and some people claim they can fire faster than a semi-automatic. Older models of pump actions could fire faster than a semi-automatic because of the ability to slam, but today the speed in which you can pumps determines how fast you can fire. It is impossible to pump at the same consistency for very long - your arm will get tired and slow down. Recoil is greater with a pump action than with a semi-automatic. The semi-automatic uses the round's energy for cycling rounds, therefore somewhat reducing recoil.

Pump actions are inherently safer than semi-automatics because before you can fire you must pump the forend, and it is for this reason that they are preferred for hunting. Pump actions are also preferred for hunting because of their reliability even when dirty. Some prefer to skeet or trap shoot with a pump action, while semi-automatics are now becoming more popular for sport-skeet shooting competitions. Some ranges have specific rules about cycling a pump action after shooting, so make sure you know your range's policy.

Pump actions make excellent home defense weapons, and simply chambering a round may be enough to send an intruder running, though you should never rely on just that alone. Every situation is different, but in a home invasion having five rounds will more than likely be enough. Some people believe they may need more if the fight goes outside, but if the intruder is fleeing and you continue to fire you may have a harder time proving that you fired purely in self-defense. You can mix up the shells in a pump action, so if you want a very light load for home defense you do not have to worry about it being strong enough to cycle the rounds. Having powerful rounds loaded for home defense can cause injuries to others in the home and in the neighborhood because of round penetration through walls and doors.

CHAPTER 4. HOW TO AVOID A SHORT STROKE ON YOUR PUMP ACTION SHOTGUN

Short stroking, or short cycling, means you have not brought the bolt back far enough to eject the cartridge, meaning you cannot chamber a shell. In some instances the shell may eject but there is not enough force to chamber a round and it can jam on you, which is not what you want to happen. On semi-automatics the work is done by the exploding gas from the propellant or gunpowder. Shells designed for less recoil can cause a short stroke on semi-automatics because there is not enough energy produced by the powder to slam the bolt back and then propel it forward. With a pump action shotgun, the work is done by you. Sometimes not allowing the trigger to reset or a failed reset will cause a short stroke, but this is not typical.

Short strokes can happen to anyone at any time, but it is usually at the fault of the shooter rather than the weapon. Short cycling seems to occur more often when someone is under stress or in a cramped position. Trying to cycle the weapon while crouched or in the prone position can cause you not to draw back far enough to eject the empty shell. Always come all the way back until you can go no further, then reverse the action, count one then count two. "Count one" is when you pull back all the way and "count two" is when you move forward. Coming back ejects the shell and the forward movement chambers a round.

Engaging multiple targets will cause some shooters to short stroke because the brain is processing information too fast for the hands to keep up; you are on target and your mind says shoot but your hands have not caught up yet, causing you to try to speed things up and short stroking. This requires concentration; your hands need to do the one-two stroke enough times where it becomes locked into muscle memory.

Short stroking on most pump actions will result in a jammed weapon. This, of course, will cause problems in any situation. In many cases you can clear your weapon by trying to cycle it again. Some consider the "flexi-tab" modification made by Remington® a fix to weapons jamming from a short stroke. The flexi-tab is a modification for the carrier. The carrier has a small groove cut into it that allows more clearance for the shell, which makes it less likely to cause a jam from a short stroke. This modification allows the carrier to flex, preventing jams. Otherwise you would have to clear the jam by trying to manipulate the pump action or by disassembling the weapon.

Your grip on the forend may be causing you problems as well. Gripping low on the action may cause the pump action to short stroke because you are not positioned correctly to properly draw it back fully until it stops. Depending on your position you may only be able to draw back so far, and may incorrectly assume you've drawn back far enough because you don't have the range to pull back further. You always need to come back until it stops **and** you see the shell eject. In the heat of competition or battle you may not be paying attention to the shells, but if you do not see one you have to draw back farther and then reverse to make sure you actually chamber a round.

CHAPTER 5. ONE HANDED PUMP ACTION MANIPULATION OF YOUR SHOTGUN

There are many situations where you may need to work the pump action on your shotgun one-handed, including having an injury to your arm or hand or helping someone to safety. In these situations you may need to cycle the weapon and fire it one-handed. This is not as easy as it looks in the movies, and many people have practiced this manipulation with a loaded weapon only to end up with a few holes being blown in the roof of their garages and hunting lodges. Practice this with an empty weapon because the only time you would need to cycle the pump action single-handed is if you are in a life-threatening situation. It is important to practice this maneuver so that you become proficient with both hands, not just your shooting hand, as you never know which hand or arm might become injured.

Nearly all pump actions involve a back and forward motion of the forend to cycle. The forend is connected to the bolt by one or two arms. Having two arms mean a more precise cycling and reduces binding. It also makes cycling with one hand a lot easier.

The forend is not centered on the weapon, so the weight is below the pump action, meaning the weight has to be picked up and then released so the action can cycle by holding the forend. The weapon has to be picked straight up and then jerked to some extent to move the pump action back and then forward. This is accomplished under normal circumstances by the non-shooting hand grasping the forend and racking back then forward.

Grasp the forend with whatever hand you want to start with. Try to move the action by moving your hand up and down. Once you get a feel for the movement, jerk the weapon to rack the action back then forward. Both the back and forward actions will have to use the weight of the weapon to move the pump action through its cycle. This action is made difficult because the pump action has to move back first and then forward. It is a downward motion with the hand and then upward motion to bring it back in the other direction.

Another method would be to prop the weapon against your hip to rack the pump. This will require practice because once the weapon is against your hip you have to keep the stock from sliding off when pulling back. It would be extremely difficult to place the weapon stock against your stomach to perform this move.

You can place the butt of the weapon on the ground/floor and balance it enough to work the action. This also requires practice because the weapon will tend to roll away from you as you pull down. Keep in mind you are only using one hand to perform this maneuver, and with an injured limb your balance will be off.

Movies often show an individual walking or running while cycling the pump action. This would be extremely difficult to perform while moving quickly. If the action is loose from wear it's possible that it may slide easier. Some individuals have stated that they feel one-handed manipulation can damage the action. This is not something you want to worry about in a firefight; however, excessive practice with your weapon may wear the action faster than normal, not to mention the wear and tear from all the times the weapon will likely be dropped during practice.

CHAPTER 6. SEMI-AUTOMATIC SHOTGUNS WITH MAGAZINE TUBES



A tubular magazine usually runs under the barrel, allowing rounds to be loaded from the tip to the primer. This works well for shotgun shells because there is not a pointed protrusion that can trigger the primer on a shell. The magazine load is limited by design particularly on shotguns because of waterfowl laws and other local, state and federal laws. Usually you can load four in the tube and have one chambered for a total of five (4+1). Some people believe that leaving five rounds loaded for extended periods may wear out the magazine's spring, choosing instead to leave only three in the tube to reduce stress. This is only conjecture, as it appears that springs can wear out from use and not just because they are compressed for long periods of time.

Leaving five shells in the weapon is also a safety issue; it is never recommended to store a weapon loaded. If you feel you will need the weapon soon, keep four in the tube and chamber a round when ready to fire; you can then top off as needed.

On a semi-automatic shotgun with a tube magazine, the barrel and bolt recoil together. The bolt stays back to allow the shell to be ejected and then moves forward to chamber another round. No pumping or other action is required by the shooter. When the trigger is pulled, one round is fired; pull the trigger again and another round fires. Rounds are fired downrange as fast as you can pull the trigger.

Most semi-automatics use the force of the gas created by the ignition of the propellant to cycle rounds into the chamber. There is some debate on which is a better: firearm pump actions versus semi-automatics. Each has their

own advantages and disadvantages, and much depends on what you are accustomed to shooting. Either weapon is ideal for home defense and hunting. Semi-automatics are used for bird hunting when you have multiple targets; however, you are restricted to three shots when shooting at migratory birds and you are required to have a plug inserted that restricts the number of rounds you can load.

Some semi-automatics use recoil to cycle rounds. The backward thrust causes the bolt to unlock, moving to the rear, allowing the spent shell to eject. The recoil tension then allows the bolt to move forward to chamber a round. On gas operated weapons you may have to make adjustments occasionally.

Low recoil loads are a problem in some semi-automatic shotguns because the cycling action requires a certain amount of energy to be generated to chamber a round. Therefore, if you reload your own shells you must carefully consider your charge. Load the shotgun by "thumbing" or pushing a shell past the tang until full and then you can chamber a round and top off; the weapon is now ready to fire.

Anyone that has been in a firefight should know to top off his or her weapon. Fire and then load before you fire the weapon empty, because once empty you will have to feed rounds into the tube, which will take time you may not have. Many firearm courses in the past actually taught shooters to fire until empty and then reload under cover, but now the emphasis is on tactical reload: fire one, load one.

CHAPTER 7. SEMI-AUTOMATIC SHOTGUNS WITH DETACHABLE MAGAZINES



Various semi-automatic shotguns can have a detachable magazine. This typically means the rounds are loaded into a box type magazine or clip, which is then inserted into the shotgun just as you would with a rifle or even a handgun. The magazine is loaded and then inserted, versus loading the under-the-barrel tube magazine.

This means you can fire empty, slap a fresh box magazine into the weapon and continue to fire. Essentially, you can have a semi-automatic shotgun loaded with up to sixteen rounds and can have another 16 loaded in a matter of seconds. Tactical or combat reloads are not necessary with a detachable box magazine.

Some models also have detachable tube magazines that, once fired to empty, have to be removed and reloaded. In addition, you may have to turn the loaded tube magazine into place as one empties. You can purchase models that hold anywhere from eight to sixteen rounds. Some models can be adapted for a ten-shot, tube magazine extension. The weapon is loaded as you normally would without having to remove the tube.

Many states currently have, or are considering, new regulations on magazine capacities. Additionally, weapons with certain characteristics are also under review and some states may ban specific styles of weapons. Laws may make a distinction between tubular extended magazines and box type magazines.

Box magazines allow the shooter to reload very quickly, whereas if you fire empty using a tube magazine you will have to reload by feeding the shells one at a time. The laws, according to some, are designed to reduce the

number of deaths during an active shooting. Assumedly, if the shooter had to stop and reload it would reduce the number of fatalities.

Military and law enforcement may use extended capacity magazines to have superior firepower in a firefight. The typical game hunter would probably not need an extended detachable box type magazine. The extended capacity magazines can be used on some firing ranges designed for tactical training, but your typical public firing range is likely to have a ban in place.

Semi-automatic shotguns with detachable magazines can be used as home defense weapons, but homeowners are cautioned on the type of rounds loaded because of possible injury to others in the home. Having a ten-round magazine loaded in the weapon and one ready to replace the one that's ready to shoot is probably all of the firepower you would ever need. You would not have to reload while under cover; all you need to have is extra magazines available.

Firearm training experts put a lot of emphasis on being able to reload quickly in a combat situation. Trainers now teach the "if you fire one, replace one" rule. If you are a shooter and you know your opponent is reloading, you may see an opportunity. Fast loaders, however, may not give the shooter enough time to take advantage of the situation, and having the ability to insert a magazine ensures you do not give your opponent any chance to advance on you while reloading.

CHAPTER 8. SINGLE AND DOUBLE BARRELED SHOTGUNS



Typically a double barreled shotgun will be a breakaway, where the barrel bends forward to load the shells. The breakaway position is how the weapon is usually carried when unloaded so everyone can plainly see that the firearm is not loaded. This method of display is particularly important when you are at the firing range.

The barrel configuration can be a side-by-side or an over/under. One significant advantage of a double barrel over a single barrel is the separate choke settings for each barrel for hitting targets at different ranges. Some sport skeet shooting competitions deploy targets at different ranges, so the choke setting must be different for each barrel. This is also an advantage while bird hunting.

The recoil is off center as well as the shot pattern, which usually converges at about forty yards. Using a double barrel at close ranges means you can have an open choke because of the shot pattern coverage. For longer ranges tighten the choke for optimal shot density on your target.

Double barreled shotguns have been used for centuries for defense of homes and businesses. The advantage for home defense is that you can load one barrel with birdshot and the other with buckshot. People that lived in very rural areas even just a few decades ago sometimes kept a double barreled shotgun by the back door to deal with wolves, coyotes or to take care of the occasional snake and other four-legged and two-legged vermin.

Early models of double barreled shotguns had two triggers, usually one behind the other. One finger inside the trigger guard pulled both triggers one at a time. Some tried the two-finger method discharging both barrels at once, which typically knocked the shooter out of position or on to the ground. Big game hunters used this method for large game. Using one finger made it nearly impossible to discharge both barrels at once. Newer models

adapted to one trigger called a single select trigger, which meant the trigger had to be pulled once for one barrel then pulled again for the other. The second shot can be taken immediately after the first shot. The two shots can be fired in succession faster than a shotgun with a pump action because there is no cycling of rounds required.

A single barreled shotgun is the classic hunting shotgun used for squirrel, rabbit and even deer, and is an alternative to the more expensive double barrel shotgun. This weapon is easily loaded and fired, and usually the barrel breaks away for loading and transport. The single barrel is not typically used in shooting competitions because of the need to fire multiple shots in a short time. The single barrel is designed for hunting where firing a single round is adequate. It can also be used for bird hunting, but you are at a disadvantage where multiple shots may be required with fowl such as duck or pheasant.

Usually farmers and others that lived in the country carried their single barrel with them to take advantage of game wandering nearby and for protection while out plowing or tending their crops. They also carried them to the livestock barns to deal with snakes and other varmints. Usually they carried birdshot, slugs and buckshot with them and loaded whatever was called for at the time.

CHAPTER 9. SHOTGUN MAINTENANCE



In years past, breakaway shotguns could be cleaned literally in minutes using kerosene, oil, rags and a stiff piece of wire. Today some shotguns can be cleaned the same way, but kerosene may not be readily available and transporting it is often a concern. In a field situation you can use WD-40 and kerosene for lubrication and cleaning the fouling from your barrel. Ideally you would have a shotgun cleaning kit with solvents and oils readily available.

It is important to have bore solvent to maintain your shotgun, as well as lubricating oil designed specifically for firearms. As stated earlier, you can use other solvents and lubricants in an emergency, but you should get in the habit of carry products designed specifically for your firearm. Some shooters have their rituals and may even make their own solvents; this can be a safety hazard unless you have specialized knowledge of the chemicals you are using. It is easy to be overcome by vapors from various solvents that are not designed for firearms.

Gun oil is important because certain parts of your shotgun become extremely hot and having the wrong oil may mean some moving parts may not be properly lubricated. Heat can literally evaporate some oils, leaving the moving parts susceptible to wear by friction. In a field or survival situation motor oil can be used as a last resortyou can even pull the dipstick from your vehicle's engine block to get oil. Use a clean cloth to absorb the oil from the stick to wipe down metal parts. Do not use oil on wooden or composite parts.

Pieces of t-shirts can be soaked in solvent and pushed through the barrel; let the solvent work on the buildup for a few minutes before pushing more cloth through the barrel.

Some shooters do not clean their shotguns until they notice its accuracy is off. You can go for some time before cleaning your weapon if it is a breakaway single or double barrel, but pump actions and semi-automatic gas operated weapons should be cleaned if not every time you shoot, then at least every other time.

The more moving parts a weapon has, the greater the amount of friction and heat there will be. Grit buildup will cause faster wear and can cause some pump actions and semi-automatics to jam due to short strokes. Dirt will build up in the receiver and carrier and lifter, which can also cause problems. In a shell carrier or lifter for an 870, you can easily see the small moving parts that would be affected by grime buildup and that may fail to function if not cleaned properly.

Oil wherever metal touches metal, and occasionally strip it all off and reapply a fresh coat. Dust and dirt will mix in the oil over time and may create an abrasive compound that can cause wear to moving parts, so it is a good idea to remove everything periodically and start over with fresh oil.

After you have cleaned your shotgun and put it away it is a good idea to bring it out once a month to give it another wipe down. This is especially important if you store your weapon in any kind of case that may wick oil from the metal parts.

CHAPTER 10. SHOTGUN SHELL LENGTHS

Shotgun shells are measured after the shot or slug has been discharged, so if your shotgun is chambered for 2 ³/₄ inch shells before discharge, it will measure less than 2 ³/₄ after. Your shotgun will have a forcing cone that the crimped, open portion of the shell will make contact with once the shot is discharged. The position of the cone is determined by the length of shell the shotgun is chambered to use.

The cone forces the shot down to the bore size, and there is tremendous pressure at this point. Using longer shells than what your shotgun is chambered for will increase the pressure and can cause damage or injury. Additionally, using longer or shorter shells than what the gun is designed for can deform the shot, causing you to lose accuracy and range. Using a 3-inch shell in a shotgun chambered for 2 % means the shot is closer to the cone and will not allow the shot to expand safely, and therefore compression on the shot can cause damage.

Your shotgun has essentially two forcing cones, one at the breech and one at the muzzle end, known as the choke. The hot gases will push the wad down the barrel and the mass of shot will expand, so using the shell size that your weapon is chambered for means there will be a smooth transition from the end of the hull into the forcing cone.

If you fire 2 ¾inch shells in a chamber that is designed for 3 ½inch shells, there will be a jump from the hull end to the forcing cone. This means the shot is unsupported during its short trip and the expansion will cause the shot to move or migrate. The shot will not be lined up properly and will become deformed as it is forced into the cone and ultimately into the reduced bore.

You can, of course, shoot a 2 ¾ inch shell in a shotgun designed for 3-inch shells; in this case the gap is less, which results in less deformity of the shot, and you may not even see a difference in your shot pattern. As stated earlier, however, shooting longer shells in a chamber designed for shorter shells can be problematic and even dangerous in some cases.

Some shooters believe that firing shorter shells in a shotgun chambered for longer shells produces a better shot pattern. There is really no hard and fast information concerning this, and much of what has been stated is speculation not backed up by ammunition manufactures. There is a reason why weapons are chambered for specific shells, so it is recommended that you only fire shell sizes that your shotgun is chambered for. The length of the shell determines how much shot is in the shell.

All shell lengths fire at the same velocity, so you would purchase a shotgun chambered for a specific length shell based on how much shot you want in the shell. Much comes down to personal preferences and the type of game you plan to hunt.

CHAPTER 11. SPARE PARTS EVERY SHOTGUN OWNER SHOULD HAVE ON HAND

Anything mechanical will break down at some point, often at the worst of times. Your week-long hunting trip can be ruined on the first day if you do not have the necessary extra parts and a few basic tools to make field repairs to your shotgun.

Anything on your shotgun can be replaced, but like a motor vehicle it can get to the point where buying a new one makes more sense economically. Springs and firing pins can be changed out in a matter of minutes, as can the barrel, and the parts and tools are easily carried wherever you travel with your shotgun.

A field repair kit should contain a firing pin, firing pin spring, retaining pin, an extractor, a plunger, spring for the extractor, along with front and rear trigger detent springs.

You should also carry an extra forend; they are relatively inexpensive and can be easily changed out by removing the barrel.

Examine your particular weapon to make sure the forend is not riveted to the slide tube, known as a one-piece. If this is what you have you would have to purchase an after-market slide tube to attach a new forend. Also carry an extra bolt, and practice changing it out in the field.

Some of you may have several barrels, one smoothbore and one rifled; rifled barrels use particular ammunition, and most experts will tell you that firing steel lead shot through this type of barrel will wear the rifling off. Have a smoothbore barrel as a backup because they can fire any type ammunition. If you ruin your rifled barrel because of overheating or some other mishap, you must be able to change it out.

Some of you may not consider a sling to be a spare part, but a sling is vital in certain situations and you should always have a backup one. Some people may not use a sling when hunting or in a tactical situation, but it is still advisable to have one available. You will need to be able to sling the weapon if you use a tree stand or have to get into a tree for any reason, or if you have to climb a hillside. There will be times when you cannot set your weapon down and yet you still need two hands, so a sling is a vital spare part.

You can also purchase drop-in trigger kits that can be replaced in the field.

Basic Tools

You should always carry a small ball-peen hammer and a small nylon or brass hammer, a gunsmith screwdriver set, precision punch set in steel, brass and nylon, needle nose pliers and regular pliers.

CHAPTER 12. LESS LETHAL ROUNDS FOR YOUR SHOTGUN

While they want to protect their family and possessions, most homeowners do not necessarily want to cause a fatality in the process. If this is the case, you can consider using "non-lethal" rounds in your home defense

shotguns. The shells would be of the same gauge as your shotgun and can be loaded as just like an ordinary shell. The most typical non-lethal rounds are beanbag and rubber slugs or shot.

You can also load your own shells with rock salt (ice cream salt), or you may be able to purchase them already loaded. The salt is very coarse and may even resemble chips of rock. Load the salt just as you would birdshot. The rock salt will cause pain and may even cause minor wounds on bare skin but the salt will not penetrate and cause permanent damage. Non-lethal shells will still make the same noise as other shells.

You can purchase rubber buckshot or single projectiles to load yourself, or buy the shells already loaded. You can also get the shells loaded with rubber shot and pepper spray combinations. These are close range shells and have a muzzle velocity of between 280 and 550 feet per second (FPS). The effective range can vary between 10 and 50 feet, with pepper spray being effective up to 25 feet in some cases. Even though these shots state they are non-lethal, the shells are extremely dangerous and at very close ranges and under the right circumstances the rounds *can* cause a fatality.

Non-lethal rounds can be used for training and practice. They are ideal for teaching younger adults how to handle loaded weapons without the fear associated with using lethal ammunition. Always check with your local municipalities about firing non-lethal rounds inside city limits.

Non-lethal rounds can also be used for crowd control to minimize fatalities while providing immediate stopping power. A person hit with a beanbag round will suffer bruising and, in most cases, will be incapacitated and out of the fight without suffering permanent damage. Pepper spray rounds are used to disperse crowds and not to necessarily incapacitate anyone for a lengthy period of time.

Some may consider the ferret round to be non-lethal, but it is not classified as such. The ferret round is used to deliver tear gas and are designed to penetrate light barriers such as windshields, building windows and hollow core or light wood doors; this allows the delivery of the tear gas from a safe distance. Typically a ferret round would not be available to the public. The rounds are not to be used against a person or crowd, but are designed only to deliver the gas contained inside by penetrating light barriers.

CHAPTER 13. SHOTGUN STOPPING POWER

To most people, stopping power is taken to mean a projectile fired from a weapon will incapacitate an animal or person, or "stop them in their tracks" as it were. Stopping power and lethality are two different things. Energy transfer and shock is what determines stopping power. Certain projectiles penetrate more easily and may cause a through-and-through injury that may be lethal, but may not stop a person or animal immediately if it has not struck a vital organ. These projectiles have limited contact, so energy transfer is less. A person in a combat situation that receives a through-and-through hit may function long enough to discharge a round in your direction.

Shotguns have tremendous stopping power. The projectiles may be numerous, as in the case of buckshot or birdshot, so there is maximum contact, or they may be slugs that maximize energy transfer. Rarely will a person be able to function even for a few seconds, regardless of the lethality of the shot, after being struck. Simply put, the person goes down. Your objective in any combat situation is to neutralize the threat immediately. You need to know that once struck your aggressor is down for good; this is crucial when there are multiple targets and you cannot focus solely on just one.

The momentum of a shotgun shell is greater than any handgun cartridge available. The sheer physics of this will abruptly stop the forward motion of any individual, and may even force an assailant back a few steps. The momentum from a handgun cartridge is simply not enough to move anyone back or pick anyone off their feet as depicted in many Hollywood movies.

Typically when a person is shot for the first time they experience disbelief, fear of traumatic injuries and then physical pain all in a microsecond, which accounts for the so-called "one-shot" claim. The person may be alive but is so surprised by actually being shot that they have been stopped from engaging in combat. This contributes to a weapon's stopping power.

Ammunition and distance also play a key role in stopping power. The shotgun shell must be of sufficient strength to penetrate and destroy vital organs. Slugs and buckshot have this stopping power, while birdshot only will if it is fired at a very close range. Usually stopping power is of a greater concern when engaged in close quarter combat. Your aggressor may only be feet away, so they have to go down for you to escape or to engage other targets; distance is therefore not always a factor when determining the shell. Energy transfer, distance and shell size all affect the actual penetration, which is essential for stopping power.

Shotgun stopping power is important in hunting and self-defense. Not putting an animal down may cause you to go hungry and causes unnecessary suffering on the animal's part. In a self-defense situation, stopping power may mean the difference between whether or not you survive.

Remember: regardless of the shotgun, shells, distance and other factors, there are no guarantees when it comes to stopping power. Having the proper training and knowing your weapon also plays a role. What you think is a one-shot-stop may not be the case, so always be prepared to fire multiple rounds and never assume anyone can be stopped with one shot.

CHAPTER 14. READY-TO-SHOOT POSITIONS

A ready-to-shoot position may mean different things to different people, and a lot of that has to do with a person's training; where you are at may also change the meaning. When holding a shotgun in the ready-to-fire position, ensure the stock is above any holstered weapon or ammunition pouches on your hip.

One ready-to-shoot position is where the safety is on and your finger is along the trigger guard, but not inside. The weapon should be pointed in the direction of expected fire or slightly up or down, but not down to the point where your feet would be in the line of fire. Once the target is spotted or the command for fire is given, take the safety off as you bring the weapon to bear on target, sight and depress the trigger.

The low-ready position is one of the more complicated ones because it is used in close quarters combat. It is sometimes called the "inside position" in reference to its use in home defense. If you are in close quarters and have your weapon pointed out away from your body, it may strike obstructions as you clear rooms and may give the aggressor an opportunity to grab the barrel. The low-ready position has your weapon pointed to the ground and your body slightly bent. In close quarters this keeps the weapon's muzzle from hitting objects, and it also keeps you from firing prematurely. This is important in home defense to prevent accidentally shooting other family members. Your weak hand should be on the forearm of the shotgun and the back of your hand should be in contact with your thigh (your left thigh if you shoot right handed), providing support for the weapon and shooting hand. In this position you can move around, but you should not advance on an aggressor unless you raise your weapon and disengage the safety.

The low-ready position is used when there is not a clear threat identified. Remember that a clear field of view is important, and merely peering along the sights does not give you that view; until a target is identified keep the muzzle low so the shotgun does not obstruct your view. It is always faster to bring a weapon up into the right position than trying to bring it down - you inevitably will have to reposition if bringing a weapon down because gravity will lower it beyond where you need it to be.

You can be blocked from shooting if your gun is raised high, whereas if someone attempts to block or take your weapon as you bring it up you only have to pull the trigger. A gun in the low-ready position is ideal for moving through tight quarters. This position also makes it easier to keep the weapon and your eyes pointed in the same direction by shifting your hands and body slightly. You've likely seen movies where a shooter has their gun pointed up by their ears and they are looking in the opposite direction; this is incorrect - you want the muzzle pointed where you are looking.

CHAPTER 15. USING COVER PROPERLY

Do not confuse *cover* with *concealment*; there is a very important distinction between the two. Cover can be concealment, but concealment is not always cover.

Cover is protection from rounds, shrapnel and blowing debris.

Concealment prevents someone from seeing you, which may be vegetation you are crouched behind or even something as simple as being concealed in the shadows. This article will discuss how to use cover in a tactical situation.

Cover in an urban environment would be concrete, stone or brick walls. You can also use vehicles if the engine is between you and the shooter, wooden walls and even certain doors. It is easier to find cover from direct, small arms, like handguns or even rifles. What you may consider cover can deteriorate or be destroyed if you are receiving heavy, indirect fire from mortars and other larger artillery, so you must always be prepared to abandon your position. Typically in a combat situation you will be receiving direct and indirect fire, and you may have to make your own cover.

Soil and sandbags can be used for cover by building up a berm of soil and reinforcing it with sandbags. In some cases you would only have cover from the direction of incoming rounds, and not on your flank or back. If you had the time you would ideally also dig a depression and encircle your full position with soil and sandbags. You'll want to ensure you can escape quickly, so always make sure you can easily climb over the sides of your cover.

Returning Fire from Cover

You need to be able to return fire from cover without becoming a target yourself. You should not attempt to return fire over the top of your cover because you will be silhouetted and a large portion of your body will be exposed, making you an easy target. Additionally, resting your weapon on any hard surface will cause it to bounce when fired, causing you to not maintain target discipline. Realistically you cannot always choose ideal cover; fire over the top of your cover only if you absolutely have no other options.

Firing from the sides of your cover may mean you have to switch shooting hands. Right handed shooters would find it difficult to fire from the left side of the cover because you would have to expose more of your body unless you switched shooting hands, and vice versa.

Cover is used to reload, call for help, catch your breath and to analyze the situation. Unless you have previous knowledge of the area you are in, you will have to choose your cover as the situation dictates and it may not end up being ideal cover. In many cases you will end up crouched behind something or you will use a brick wall that you have to peer around to return fire.

Once behind cover you have to determine the force you are dealing with and the potential for being flanked by other shooters. You may have to seek cover from multiple shooters in various locations. A good shooting team will make it difficult for anyone to find cover from all shooters. Experienced shooters will have already determined the likely cover that their target would choose and will have set up shooters to cover those areas.

An ambush situation makes it difficult to find cover, and in the initial burst of gunfire the ground can be cover for a few seconds while you scan the area. Ambushes occur when the shooting team is concealed and the target is in the open.

Home Defense and Cover

As the homeowner you have the advantage when it comes to cover at your home because you already know where everything is. Intruders will typically be armed with handguns, shotguns and sometimes even large caliber rifles. The average sofa or sitting chair would not provide cover. Large wooden sideboards or cabinets might be adequate depending on the size and type of wood used. Counters and large appliances such as refrigerators and washers and driers can also be cover. Hot water tanks can be used in some cases, but they are usually tucked away in a corner of the laundry room, garage or even the basement. Walls can provide some cover, but large caliber rounds, shotgun slugs and rifle rounds can penetrate most walls unless they hit the wall studding.

Know what cover is available outside of your home as well as inside. Cover outside can include vehicles, tool sheds and detached garages, large decorative rocks and stone retaining walls.

Always scan whatever area you may happen to be in for cover. As you walk into a restaurant, Movie Theater or mall look for potential cover; shooting can start anywhere and at any time, regardless of the location.

CHAPTER 16. TRANSITIONING FROM SHOTGUNS TO HANDGUNS DURING A FIREFIGHT

You can't bring too much firepower to a gunfight. Unless the fight is choreographed by a Hollywood producer, however, you can only fire one weapon at a time. If the weapon you are firing fails, jams, or runs out of ammunition, you will need to transition to another firearm; this is where additional firepower comes in handy.

If your shotgun fails and you are within handgun range, it is better to sling your shotgun and engage the enemy with your pistol. This may give you time to fix the jam or to begin a combat reload. You cannot allow the aggressor to advance on your position as you fiddle with a jammed weapon. You need a sling to maintain control of the shotgun. If you do not have a sling you will have to drop the shotgun to engage properly with your handgun. You really do not want to give up control of the shotgun if it can be helped.

Crouch as you sling the weapon while beginning the transition to make yourself a smaller target. One hand should be pushing the shotgun barrel down between your knees so the barrel is not banging on the ground or tilting you off balance because the muzzle struck the ground, while the other hand is reaching for your handgun. Practice crouching with the shotgun slung and notice how the muzzle will hit the ground if it is along your side. You need to position the muzzle so it is not dragging or banging into you; to position it properly, try pulling the muzzle between your legs.

If on the move, sling the weapon as you move latterly toward the shooter in a crouched position. Both hands have a function: one should secure the shotgun while the other brings the pistol to bear. It is difficult to shoot on the move with a slung weapon unless you have it across your chest or even across your back. You have to lower and rotate your shoulders to fire on the move, and this is made more difficult if you have a shotgun on your shoulder.

Practice is important; make sure you practice with snap caps to protect the firing pin. For safety reasons, never practice at home with a loaded weapon. Some firing ranges are set up for transition drills, so try to find one where you can conduct live fire exercises.

In addition to transitioning from your shotgun to a handgun, there may come a time where you do not have a second weapon and you may need to find a new one or "pick up a weapon." The military and various other organizations may train individuals to pickup weapons. Some shooting competitions also employ this tactic. The shooters start out with their own weapons and advance through several drills. They are then instructed to shoulder or holster their weapon, pick another weapon up and engage the targets. The sequence is timed. The pick-up weapon is made available during training and competitions. The pick-up weapon is loaded and is a different type than what the shooters started with. This new weapon may be holstered on an injured person, lying on the ground or in some other likely position from being dropped.

This practice teaches shooters to use whatever resources are available during a firefight. It is not likely a homeowner would need to do this to carry on a firefight, though they would need to secure the intruder's weapon on their person if it is dropped or the intruder is injured to prevent it from being used against them again.

CHAPTER 17. TRANSITIONING FROM ONE TARGET TO ANOTHER WHILE FIRING

At some point you may be faced with multiple targets that are shooting back at you. Most firing ranges are set up so that you only focus on one target at a time unless it is a specialized training facility. Normally you will fire, the buzzer goes off and then you bench your weapon; it is all synchronized to some extent, while firefights are not. Therefore, most shooters focus on becoming proficient while shooting at one target in a controlled environment, rather than dealing with multiple targets in a chaotic environment.

Once the gunfight has started you simply do not have time to "prepare," so many of the basic skills you have learned such as stance, breathing control, trigger control and so on, go out the window. If you are taking fire from multiple shooters your only option is to seek cover if you have not trained how to transition from one target to another.

You may very well be moving while engaging targets, so your head and eyes have to lead the way. Decisions have to be made as to which is the greater threat. If you have two shooters you must be able to decide which one to neutralize first. Common sense tells you to fire at the target you feel you can hit, but the second shooter may be closer, is not in your line of sight, and may pose a greater threat. This means you will have to transition from one target to another.

If you have a scoped rifle and are moving laterally to a target you will have to raise your eyes from the scope. You have to keep your eyes on the target; you will get tunnel vision if you try to maintain a scope on the target. You will have to practice bringing your eyes to the target and then bringing the weapon and body in line. Keeping your stance is important, meaning you need to have the weapon positioned as if you are firing at a stationary target so that all it takes is some repositioning to engage the second target. When your weapon is stabilized and in position you can fire at one target while your eyes and head find the other, allowing the weapon to follow.

It is important to shoot with both eyes open; otherwise you will lose your peripheral vision. You may need to be able to track multiple targets, making it even more important to have mastered shooting with both eyes open. Shooters tend to close their weak eye, and it can take hours of practice to overcome this bad habit.

Identifying the Threat

Practicing on a firing range or gallery range that allows pop-up targets is extremely useful. In some cases you will be able to advance along a corridor where targets pop up randomly, forcing you to decide if they are friend or foe. Multiple targets may pop up, both being foe, and you may be timed; you will need to be able to identify both as a threat and neutralize the greatest danger before the target can, in theory, return fire. In a real life situation your targets can emerge from anywhere, and you need to be able to take down the greatest threat first and then engage the next target immediately.

CHAPTER 18. COMMON MISTAKES MADE WHILE SHOOTING

Keep in mind that however common, mistakes can lead to accidental discharges. Lack of training and poor training will lead to mistakes being made. Careless behavior leading to an injury when a shooter knows better should be considered negligence and not be considered an accident caused by a mistake. When you know better and still do not follow proper safe handling procedures, you are negligent.

1. Jerking the Trigger

Jerking the trigger is probably the biggest mistake that results in missed shots. Some people believe there is a difference between making a mistake and simply not knowing any better. A shooter may not be aware they are jerking the trigger, for example, so is it a mistake or poor training? Can it be called a mistake if you do not know any better?

2. Sight Alignment and Natural Point of Aim

Some shooters do not understand natural point of aim and assume it is sight alignment. **Sight alignment** is having your sights centered on the target. Once aligned, some shooters will pull the trigger right away and then wonder why they missed.

Not achieving a natural point of aim is a mistake many make. **Natural point of aim** is when your body is positioned in such a way that it will not interfere with point of impact and so that you do not lose sight alignment. This means you have your breathing under control and have supported your weapon with bone and not muscle. Close your eyes for a count of three, then open them - if you are still aligned then you have achieved your natural point of aim; if you are not aligned then you have poor weapon support and/or you have not controlled your breathing properly.

3. Safety is still on

Unbelievably, a very common mistake is not disengaging the safety. Shooters will be positioned, lined up, pull the trigger and nothing happens. If you do this while hunting you may go home empty handed. If you are in the heat of battle, the consequences can be even more costly.

4. Anticipating the Recoil

New shooters will cause the gun to recoil before it naturally does by anticipating the recoil. They generally release the trigger too soon, causing the muzzle to rise off target.

5. Squeezing the Trigger at an Angle

This happens when the index finger is not positioned properly, and depressing the trigger causes the weapon to move sideways. Make sure your finger is centered on the trigger and covers it enough to draw back straight.

6. Closing One Eye

New shooters will typically close their weaker eye. This, of course, limits your vision. In a combat situation you may not see an aggressor, and on a firing range this can be a safety issue because you cannot see to the side of your target. Peripheral vision is important, and for this you need to have both eyes open.

7. Not Riding the Recoil Properly

This is part of following through; even if you do not plan on firing another shot you must follow through and maintain target discipline. Once you depress the trigger maintain your position and sight alignment. If you pull the trigger and then immediately look over your sights for the shot, you are not following through. Over time you will train your arms, head and hands to do this every time, and soon it will become nothing more than a mere flinch as you fire.

CHAPTER 19. SHOTGUN SLUG CHANGE OVER DRILLS

Slug change over drills can seem somewhat elaborate depending on your weapon, and some may question why it is even needed to begin with. If you do not believe in the need for a slug change over it is unlikely you will ever master the technique. It is not typically something you do as a hunter, but it would be used during the defense of your family and property.

You may have birdshot loaded when an indoor fight moves outside, where you need more range out of your rounds. You have to be prepared to dump the birdshot cartridges to load slugs. Some people will attempt to catch their birdshot to put them into a dump pouch. This is fine for practice, but in a combat situation don't worry about dropping what was previously loaded.

Slug Change Over

Place the middle finger of the left hand behind the forend. Depress the action lock and open the action. The middle finger will limit the travel so the chambered round is extracted, but the first round in the magazine is not released onto the shell lifter. Pick the round off the extractor or turn, dump and replace with a slug.

Another way to perform this sequence is to hit the action release, place your thumb into the bottom port and press against the round to reset. Move the pump action back, then hold the round forward and pull the forearm back just enough to clear the bolt, making room so that you can then manually load a slug (combat load, as it is called by some). Now you can also load a slug into the magazine tube. Dumping out the ejection port appears to be the fastest technique.

When they want to change over, some shooters will have palmed a slug earlier and will perform the moves with the slug in their palm. This is called "prepping" for the slug change over.

Some weapons cycle by trigger pull, so sliding the bolt back does not automatically chamber a round. If this is the case, hold the release, pump back halfway and push the cartridge that is there to reset and then combat load and fire. If the round is released into the chamber from the magazine because you pulled back too far, turn and dump the round. Some have stated this method does not work because the round will not dump; it depends on your weapon, so practice with what you will use for home defense.

Some firearm classes will use pick-up weapons to train people in combat situations to use whatever is available; you should always practice with the weapon that will be available in your home. Pick-up weapons are weapons you may find on the battlefield or are weapons dropped by another person during a firefight that can be utilized for your own defense.

Many experts will tell you when you have fired two rounds to replace two rounds. When dumping rounds to perform a slug change over, always put a new one in the magazine tube so that the weapon is topped off. Never fire a weapon until empty because you will then have a single-fire weapon because you will have to load your cartridges one at a time if you are taking fire.

CHAPTER 20. SHOTGUN SHOOTING POSITIONS



You can literally shoot a shotgun from any position; some positions, however, are better than others. In an ideal world you would get to choose your position as needed, but everyone knows ideal situations are never part of the equation when it comes to a firefight. To be prepared you therefore have to practice and conduct drills in various positions, such as prone (lying on the ground), kneeling, standing, shooting around corners and so forth. Keep in mind that in a firefight someone is shooting back, so cover and concealment are important parts of surviving. One position you will need to practice and become proficient at is shooting from cover. **Cover** is protection from rounds, while **concealment** is out of the shooter's vision.

Toe-to-toe shooting is not an option in any firefight; you always have to make sure that you are a small or an invisible target while being able to return fire. To practice, set up your shooting area using 50gallon barrels as cover. Place targets at various ranges to simulate the aggressor's movement. Remember, when in a tactical situation you will only know what to do according to your level of training; if you have only trained one way, then that is the way you will react in a firefight.

Kneel and shoot around the barrel. Once all rounds are downrange begin loading as you swing around to the other side of the barrel while still kneeling. You should have finished reloading by the time you have swung around to the other side. You will notice that your body is in the wrong position for firing left or right handed depending on which side of the barrel you started with. You will not be able to sight on the target you initially fired at; this is simulating movement by the intruder. Fire all rounds downrange and then reload as you move to the next barrel and next set of targets that are set at a different range and angle to your position.
In your home you will be shooting around furniture, doorways and over and around counter tops. You may have to get into the prone position to safely fire from around a corner. Learn to fire left and right handed. The ejection of shells across your dominate eye (left-handed shooter firing a right-handed weapon) may distract you at first. If you practice you will soon realize that if you have to perform a slug change over the ejection port is facing you if you shoot left-handed. Remember: the safety will be different if you switch hands to fire. It is important to learn to fire offhand because at some critical point you may have to unexpectedly switch hands.

Practice until you can be reloaded and ready to fire as you move into a new position while always having eyes on the target. Reload by feel only, and if you have practiced with a slip-on stock shell holder, make sure you always have it attached to the weapon. Some people can reload from a belt pouch, but fumbling at the belt can take up time; whatever works best for you should be used.

Facing your target head on makes *you* a target. Intruders and shooters that target groups of people typically fire from a standing position, and if you are also in a standing position then you have become a target. Getting below the field of fire is critical, and you must be able to return fire from that position, whether it is prone, squatting or kneeling. Of course, the recoil may throw you off balance even if you are properly positioned; it takes practice and dedication to fire from any position, but it is necessary to be prepared to deal with difficult situations and to have the training to adapt to whatever you end up facing.

CHAPTER 21. PROPER TRIGGER PULL

You can have your sights lined up perfectly, jerk the trigger, and miss your mark. Trigger manipulation is something that must be worked on for better control. Your sights may be perfectly zeroed and you may have sandbag supports, but if you jerk the trigger you *will* miss. You can pull to the left or right and fire high or low with poor trigger control. An excellent way to practice your trigger pull is by using snap caps, which are cartridges without primer or shot that allow you to dry fire without damaging the firing pin.

Use snap caps to know how much slack is in the trigger. New shooters get impatience when they depress the trigger slightly and nothing happens, and then they jerk the trigger to get a response. Many people say that the shot should be a surprise; this is incorrect. It should *not* be a surprise if you practice and know how much slack you have. Use steady pressure, and over time it will begin to feel like the weapon has fired on its own. You can fire more quickly without jerking, but during practice take it slow so you can really feel the slack being taken up.

You may have to fire quickly in any number of situations, but it doesn't mean you should jerk the trigger to make your weapon fire faster. Simply apply steady pressure, faster. Your trigger finger has a joint at the end, one in the middle and one where it meets the palm, which means the end of the finger can move independently from the rest of the finger. Some shooters' trigger placement is past the first joint, meaning just flexing the tip will not fire the weapon. To pull the trigger with two joints of the finger over the trigger essentially means you are moving more than just the trigger finger to complete your pull. This is not control; you cannot feel the slack and cannot really feel how much pressure you are bringing to bear and will end up jerking the trigger. Try using just the tip of your finger, where all you have to do is flex the joint without moving the whole hand or finger; this will give you the greatest amount of control.

If you take the time to observe your fellow shooters on a range, you may notice their entire hand moves when they pull the trigger. The more mechanics you employ to depress the trigger, the less control you have, and this will be reflected in how well you shoot. Often it is not the weapon's sight, but your trigger pull that causes you to miss your target.

Experienced shooters find and know the spot on their fingertip for the best pull, which is usually on the side of the finger where there is limited cushion and more sensitivity. Your index finger needs the thumb for most jobs, so when the trigger finger has a job to do the thumb wants in on it. It can sometimes be difficult to isolate the two because the opposable thumb is needed for most activities, such as picking up coins or grasping items tightly. This is called sympathetic movement: when one moves, the other tries to move as well. You must keep the thumb from moving by having a tighter grip where the thumb makes contact with the weapon.

CHAPTER 22. SHOTGUN SHOOTING STANCE



Above is depicted a frontal shooting stance, which is used by most competitive, law enforcement, and military shooters.

1. Lean forward. This is very important and enables you to control recoil, even after numerous shots.

2. Cheek weld. Put your face down on the stock. The shotgun should be placed between your eyes and the target. That means that you need to learn how to put your shotgun exactly on a target when lifting it up.

3. Bring your shotgun tightly to your shoulder. If it is loose, the stock will hit your shoulder shot after shot, and you will come back from the range covered in bruises.

4. Flex your knees, this way you will be able to control recoil with your body.

5. Don't stick your right elbow out. Hold your elbows tucked in close to your chest. This will minimize your silhouette, which is very important in a home defense situation. Also, this ensures better maneuverability in a close quartered environment.

6. Stand with your feet about shoulder width apart to have a stable position.

7. Don't put your left hand too far forward on the forend. Remember that the forend on the Remington 870 is located far from the shooter, so you will need to find a comfortable position or install a longer forend.

Practice often and you will have a proper shotgun shooting stance, which will help you to shoot fast and accurately.

Tips

Here are some tips which will help you in shotgun shooting:

- Proper shooting stance. It is very important to train a proper shooting stance. Train every day with dry fire; this builds your muscle memory. Dry firing will improve your results dramatically.
- Control your breathing when shooting slugs. It is not that important when you shoot birdshot or buckshot.
- Control your trigger finger. This is important when shooting slugs. Pull the trigger smoothly.
- Don't anticipate recoil. This is very easy to test, ask your friends to load your shotgun with several rounds; one of them will be a dummy shell. If you are anticipating recoil you will notice how you push a shotgun forward when pulling the trigger, thinking that it is going to fire.
- Keep both eyes open. This is very important. Using both eyes when aiming will give you better depth perception and a peripheral vision. This is a very good habit for defensive shooting.
- Choose a stock of a proper length.
- Test the ammunition and find one that works best with your shotgun.
- Push the trigger with the pad of the your joint.
- Aim at the center of a mass, the biggest part of a target.

Your shooting stance is important in a firefight; as always, remember that your target shoots back.

You stance is what sets you up for your next move because in a tactical situation you both fire and move. Place your left foot in front of the right if you are a right-handed shooter, feet shoulder width apart. Your weight needs to be shifted slightly forward so that your feet are braced and your body is balanced for the recoil. Flex your knees slightly to help keep your balance after the recoil, and make sure your weapon is tight against your shoulder so that it moves your body and does not slam into your shoulder. Having slack between the stock and shoulder means that after a day of firing you will not be able to lift your arm the next morning.

Cheek-to-stock weld is the position your cheek naturally finds when you bring the weapon to your shoulder. Your cheek is against the stock and your eyes should be on the target. Practice will ensure you automatically assume this position when bringing your shotgun to bear.

Have your hand on the forend in such a position that you do not strain it so it begins shaking. Make sure your elbow and forearm act as support by having a bend in your elbow instead of it being held straight out. Keep your elbows in close to your body; you want to make a smaller target, and when swinging through doorways and around corners you do not want your elbows to be banging into walls and doorjambs.

Once you fire you can maintain your stance by swinging around to focus on another target or by moving forward or sideways. Keep your eyes on your target or scan your surroundings while maintaining your position. You may have to break your stance to seek cover, but you can always regain it if shooting from around your cover.

Point shooting is usually a reflex action where you perceive a threat and fire instinctively, generally from the hip. This is not sight shooting, but rather is a reaction to an immediate threat. In this position you are pointing the barrel and not lining up the sights on target. It is quite similar to drawing a pistol from a hip holster and firing from the hip; you must intuitively know where the barrel is pointed. Typically the stock would not be against your hip but to the side, and the weapon would be pushed back from the recoil but still retain its target discipline. You can swing your entire body to fire at a moving target. Try practicing this shooting stance to improve accuracy.

Quick-draw gunfights in years past were not always as depicted on television. Usually the shooter fired before the barrel was level with the target, meaning they shot into the ground or they shot their own foot. It was common for both shooters to empty their revolvers without scoring a hit on the other person, as they simply did not have time to draw their pistol and bring it up into a tactical, two-handed stance.

If a situation erupts and you are carrying your ready-to-fire shotgun in one hand, firing from the hip may be the fastest way to get rounds downrange. For right-handed shooters, bring your left hand around and grasp the forend of the weapon while the trigger finger, which is already close, finds the mark. You can crouch slightly as you move your feet into position while you swing onto target. This stance is not recommended unless you are surprised by an attack, because in some cases you can prematurely fire before the barrel has swung on target; you have less target discipline and stand a greater chance of causing collateral injuries.

CHAPTER 23. ZEROING YOUR WEAPON: SHOTGUN, RIFLE OR HANDGUN

You finally have the rifle out of the box and are anxious to shoot it; you can barely wait until you get to the range! Once there you set up your target; the silhouette at 25 meters looks close enough that you feel you could throw a stone and hit it. You fire a round, scope it, and see that it missed the black. You try again, same problem. You move the weapon and find your next shots are even farther from the black, almost off the target completely. You blame the weapon and then you blame yourself. What you may not realize is that you have to adjust the weapon to you. The weapon may or may not have come from the factory with a mechanical zero, or what some may call a "battle sight" zero. You have some adjustments to make.

First, you have start from scratch. Make sure your target is scaled to size and has grid squares so you can check your elevation and windage; in other words, the target should allow you to adjust your sights so that your weapon is zeroed out for whatever range you want.

300 meters should be an adequate range to work with, unless you plan on competition shooting, or 50 meters for a shotgun.

Windage is the horizontal adjustment of your sight.

Elevation is the vertical adjustment of your sight.



If you see this type of group on your target, adjust the windage to the right.

If you have an adjustable rear sight, also move it to the right.



If you see this type of group on your target, adjust the windage to the left.

If you have an adjustable rear sight, also move it to the left.



If you see this type of group on your target, raise the elevation.

If you have an adjustable rear sight, also raise it up.



If you see this type of group on your target, lower the elevation.

If you have an adjustable rear sight, also lower it down.

Mechanically zero your sights. Start with the windage adjustment; you may have a dial on the rear sights that goes left to right to make adjustments. Some weapons will have a small stop that has to be depressed with a nail or punch to move the dial; this keeps the adjustment from moving unnecessarily. Move it all the way to the left or right and once there count the clicks as you move the dial all the way to the other side. Then, move the dial in the other direction and stop at the halfway mark. Do the front sights the same way for elevation, except you are moving up and down. If your rifle has a scope you will have to zero it to the weapon; it is always prudent to have your adjustable sights zeroed.

Once you have a mechanical zero you can then make and record your adjustments because you now have a baseline. Make sure you record the clicks so you can always take the sights back to zero. Typically you would fire three rounds and note their positions. Make sure you have the weapon stable so that you can be sure your shots are not affected by movement. If you believe you jerked the trigger, fire an additional three rounds. Once you see where the rounds are being placed you can then begin adjusting the sights to fit you.

Left two clicks (squares) from the center of the target will mean your windage needs a two-click adjustment to bring it to center. Up one click off the center means you are shooting high at mechanical zero, so drop one click to lower elevation. The type of sights will vary from weapon to weapon and from rifle to pistol; however, if they are adjustable rather than fixed, you can make windage and elevation adjustments as necessary. Sometimes it may require a small punch and wooden mallet to make the adjustments, while others weapons will have a dial. The harder a weapon is to adjust, the harder they will be to knock out of alignment.

CHAPTER 24. SHOULD YOU USE A SLING WITH YOUR HOME DEFENSE WEAPON?



There will always be a debate about whether or not you should have a sling on your home defense weapon.

Some people believe a sling on a home defense shotgun or rifle is a kin to having a holster for your handgun, and believe no gun should be without.

Others believe a sling will snag on door handles and furniture while you rush to the sound of an intruder. Before deciding whether or not a sling is right for you, consider what a sling's actual purpose is and how it may be used in a tactical situation.

To be less confusing, this article will purposely leave out the uses for slings in a hunting situation.

Tactical Carry

Your weapon will need to be at the ready at all times. The military train soldiers to carry their weapon at port arms if there is reason to believe there is an immediate threat that has not been identified. The weapon is carried diagonally across the chest with the barrel pointed toward one shoulder or the other, depending on if you fire left or right-handed. One hand should be grasping the hand guard/forend, while the other grasps near the trigger guard and a simple movement will put your trigger finger in position. At that point it is simply a matter of target

acquisition. In some cases you can have a weapon slung and still maintain the port arms position; this does take some maneuvering, but can prevent you from dropping the weapon if you need to use both hands.

Most tactical weapons will have a sling. Some shooters will bind the sling tight, taking the slack out with a "ranger band" (heavy black rubber band), and when they need the sling they just have to tug on it to remove the band. You will want to maintain the sling's size so you don't have to adjust it every time to remove the slack. You can make your own ranger band by cutting 1-inch sections out of a bicycle inner tube. The rubber bands will last for years before dry rotting, and are non-reflective.

When a Sling is Not Useful for a Home Defense Weapon

If you are startled awake at night and realize an intruder is in your home, you should be carrying your weapon at the ready (port arms), or the barrel will lead through doorways and around corners; you cannot do this if the weapon is slung on your shoulder. Weapons that are slung over-the-shoulder are not weapons at the ready. Additionally, if you are carrying your weapon at port arms or leading with the barrel, your sling will be hanging and knocking into things. Slings can also give an opponent a place to grasp the weapon.

It is not likely you would need a sling as a shooting aid while defending your home unless there is a prolonged siege. Slings can be wrapped around the forearm to steady the weapon for shooting, but for quick return fire when an intruder suddenly enters the home, a sling is not useful.

When a Sling is Useful for a Home defense Weapon

While they may seem to take forever, most firefights are quick with the intruder either neutralized or retreating from the area. If you have to take the fight outside or to switch to a handgun because you do not have time to reload, a sling will secure the weapon to your person. You may also need to grab small children or others, and will need both hands free. You should never place your weapon out of reach, so having it shouldered will ensure you have it handy.

The only way to decide whether or not to use a sling is to practice with and without one. Learn the various ways you can shoulder a weapon and bring it to bear quickly while using a sling. There are various slings available that have quick detachment couplings, and in some cases you can sling the weapon in the ready position.

CHAPTER 25. THE IMPORTANCE OF A FLASHLIGHT ON YOUR FIREARM



Unless you are a member of the military or law enforcement, you probably do most of your home and self-defense tactical weapons training in daylight hours. Shotgun and handgun drills are usually conducted on an approved firing range with ample light. Nighttime tactical training has inherent safety issues, and live fire exercises are not commonly conducted in the dark at your home.

When a situation becomes bad quickly, you can only respond as well as your training allows; if that training was only conducted during daylight hours you will be at a disadvantage in the dark unless you have trained in low light conditions with a gun mounted flashlight. Seventy four percent of all shootings occur between dusk and dawn or, in other words, in darkness. When training, most homeowners and individuals train for defense, which means all of your actions when a situation occurs are reactionary.

Keep in mind a firearm-mounted flashlight will temporally disorientate/blind an intruder when shined in their eyes. If you are confronted with anyone utilizing night vision goggles, you will render the night vision equipment useless for a few minutes.

Training with a Flashlight Mounted On Your Firearm

You need to be able to see in darkness to identify your target. The most logical answer to identifying your target in low light is by using a flashlight that is mounted on your weapon. It is important to have both hands free during a

confrontation with an intruder; you cannot aim and fire with any accuracy with one hand, while trying to lock on the target with a flashlight held in your other hand.

With today's technology there are flashlights, or flashlight holding brackets, that can be mounted on most home defense pistols and shotguns. Tactical lights are made especially for weapon mounting, and are designed where the bulb can withstand recoil shock. The lights/brackets are also aligned with the barrel, allowing you to aim at what the light is illuminating. In an emergency you can use tape or cable ties to secure a flashlight to the barrel, but this is not recommended. Lights must be permanently mounted to your weapon so they will be there when needed. You simply cannot try to mount a light as someone is crashing through your front door or window; it must be ready for action immediately.

Taping a light to the barrel and leaving it in position may cause pitting/rust because moisture will collect under the tape. The tape will eventually dry out and fail, most likely during a crucial moment. You can purchase universal adapters that are designed to hold tactical flashlights or laser sights that are relatively inexpensive. After purchasing the adapter you would need a flashlight that is compatible and fits securely in the mounting bracket.

When choosing your flashlight make sure the bulb is designed to withstand recoil and has the proper illumination for your situation. Remote pressure switches that can be adapted to certain flashlights are also available, allowing you to operate the light by pressing down on the pressure pad that is mounted close to where your hands would naturally grasp the weapon in a self-defense situation. You do not want to have to fumble for the on switch during a confrontation.

CHAPTER 26. SHOTGUN AMMUNITION: WHAT TO USE AND WHEN TO USE IT

Introduction



The extremely large caliber of shotgun shells has led to a wide variety of different ammunition.

You can even reload shotgun shells yourself and set them for any purpose or change the spread.

Smooth and Rifled Barrels

Your ammunition choice depends on what you are shooting at. A shotgun shell sometimes referred to as a "shot shell," is loaded with either shot or slugs. Most shotgun loads are designed to be fired from a smooth bore barrel, meaning the barrel is not rifled. There are, however, dedicated shotguns with rifled barrels that are more accurate, but they are unsuitable for firing shot; shot would wear the rifling away, and this would defeat the purpose of the rifled barrel. There are shells for self-defense and various shells for hunting game. Shot is traditionally for bird and small game, whereas slugs and buckshot are for larger game.

Birdshot: Lead, Steel, Bismuth and Tungsten

Birdshot is typically called shot or BB shot. Because of environmental concerns steel, bismuth and tungsten is replacing lead shot for bird hunting. The problem with steel shot is the hardness, which can cause damage to the bore and choke in older shotguns. Unlike lead, there is no give to steel and it can damage the bore, especially if the choke is on full. Tungsten is also very hard, but it is often alloyed with other metals to make it softer so it causes less damage in older model shotguns. Bismuth falls in between tungsten and steel, being the softer of the two by far.

Buckshot

Buckshot is very common, and the most commonly produced buckshot shell is the 12 gauge #00 ("double-aught"). Buckshot is used for large game and home defense. Double-aught buckshot, having nine pellets, is also ideal for self-defense because there is no question of stopping power and penetration.

Shotgun Ammunition for Hunting and for Home Defense

BB or birdshot is obviously for birds, and while #4 is much larger shot, the #00 or double-aught is considerably larger still. Though this slug is for large game, it can be used for home defense as well. With home defense you have to consider over-penetration; you want stopping power, but do not want the slug penetrating and exiting through an intruder and striking someone else. The #4 and #00 are therefore the most popular choice for home defense.

You must also consider your choke setting. The tighter the choke, the less spread you have, which is ideal for short range. If you have multiple targets, however, and want to disable two intruders at once, loosen the choke to allow more spread as the shot exits the barrel. One pellet of #00 will certainly disable a person if fired from close range.

When hunting birds you want range, yet you do not want excessive damage to the bird. When hit, you want penetration and knock down. You do not want to have to wade for miles hunting for an injured bird; you want the bird to drop immediately.

What shot for what game?

Turkeys can be hunted with BB and #2 and #4 shot, with a full or modified choke. Duck hunters prefer #1 and #2 shot using a modified or full choke. Pheasants are typically hunted with #6 shot with a modified choke.

Squirrel and rabbit can be hunted with #5 and #6 shots with a modified choke; keep in mind the damage to the animal and distance from it when deciding on your choke. Larger animals like deer can be hunted with a rifled slug or #00 buck.

Some people are of the mindset that any round out of the barrel toward an intruder works. This is true in a situation where you simply grab any available weapon. Normally, however, you will have the opportunity to choose your ammunition for home defense. Some people prefer rifled slugs because of the range, but home intrusions by their very nature are close quarters so range is generally not important unless you are defending a large estate where the firefight is taken outdoors.

Some people may prefer birdshot because in the back of their mind, while they want to stop an intruder, they do not necessarily want to cause a fatality. At close range birdshot is devastating, but not as guaranteed as a rifled slug would be. The other option is buckshot, which will stop an intruder and create enough damage to ensure the assailant stays on the ground and is no longer a threat. Remember: your number one objective is to neutralize the threat by any means possible and as quickly as possible.

SLUGS



A shotgun slug is a heavy lead projectile, which may have pre-cut rifling. It is intended for use in a shotgun, and is often used for hunting larger game. The first effective shotgun slug was introduced by Wilhelm Bernice in 1898, and his design remains in use today.

Most shotgun slugs were designed to be fired through a smoothbore barrel, which meant that they must have been self-stabilizing and capable of passing through a choked barrel.



Less lethal shotgun ammunition is available in the form of slugs and is made of low-density material, such

as rubber.

Rubber slugs or rubber buckshot are similar in principle to bean bag rounds.

Composed of flexible rubber or plastic and fired at low velocities, these rounds are probably the most common choice for riot control. Shapes range from full bore diameter cylinders to round balls of varying sizes.

BUCKSHOT

Buckshot is very common and the most commonly produced buckshot shell is the 12 gauge 00 ("double-aught"). Buckshot is used for large game and home defense. Double-aught buckshot, having nine pellets, is also ideal for self-defense because there is no question of stopping power and penetration.



Larger sizes of shot, large enough that they must be carefully packed into the shell rather than simply dumped or poured in, are called "buckshot" or just "buck." Buckshot is used for hunting larger game, such as deer, and also in riot shotguns and combat shotguns for defensive, police, and military use. Buckshot size is designated by number, with smaller numbers being a larger shot; sizes larger than "0" ("ought") are designated by multiple zeros. "00" ("double-ought") is the most commonly used size.

A standard 00 buck shell holds 7-9 pellets. Two types of 00 buckshot are commonly available from suppliers: regular 00 buckshot shells and reduced-recoil shells, favored by law enforcement and for home defense use. Low-recoil 00 buckshot allows the shooter to make fast follow-up shots, which may be needed in a combat situation but

are not typically required in hunting (where the main goal is to cleanly take out the game with a single shot). It's also useful as a stepping stone for shooters who are not yet used to the recoil of full-power shells.

BUCKSHOT SIZE TABLE:

Size	Nominal diameter	Pellets/oz
0000 ("quadruple-ought")	.38" (9.7 mm)	5
000 ("triple-ought")	.36" (9.1 mm)	6
00 ("double-ought")	.33" (8.4 mm)	8
0 ("ought")	.32" (8.1 mm)	9
1	.30" (7.6 mm)	10
2	.27" (6.9 mm)	15
3	.25" (6.4 mm)	18
4	.24" (6 mm)	21

BIRDSHOT: LEAD, STEEL, BISMUTH AND TUNGSTEN



Birdshot sizes are numbered similar to the shotgun gauges; the smaller the number, the larger the shot. Birdshot is typically called "shot" or "BB shot", such as "number 9 shot" or "BB shot."

Because of environmental concerns steel, bismuth and tungsten is replacing lead shot, for bird hunting. The problem with steel shot is the hardness, which can cause damage to the bore and choke in older shotguns. Unlike lead there is no give to steel and it can damage the bore especially if the choke is on full. Tungsten is also very hard, but it is often alloyed with other metals making it softer causing less damage in older models shotguns. Bismuth falls in between tungsten and steel, being the softer of the two by far.

A useful method for remembering the diameter of numbered birdshot is simply to subtract the shot size from 17. The resulting answer is the diameter of the shot in hundredths of an inch. For example, a number 2 shot gives 17-2 = 15, meaning that the diameter of number 2 shot is 15/100 or 0.15". B shot is .170 inches, and sizes go up in .01 increments for BB and BBB or Pellets.

Birdshot Size Table:

Size	Nominal diameter	Pellets per oz (28 g) Quantity per lb.		Quantity per lb.
		Lead	Steel	
FF	.23" (5.84 mm)		35	
F	.22" (5.59 mm)		39	
тт	.21" (5.33 mm)			
т	.20" (5.08 mm)	36	53	
BBB	.190" (4.83 mm)	44	62	550
ВВ	.180" (4.57 mm)	50	72	650
В	.170" (4.32 mm)			
1	.160" (4.06 mm)	72	103	925
2	.150" (3.81 mm)	87	125	1120
3	.140" (3.56 mm)	108	158	1370
4	.130" (3.30 mm)	135	192	1720
5	.120" (3.05 mm)	170	243	2180
6	.110" (2.79 mm)	225	315	2850
7	.100" (2.54 mm)			

7½	.095" (2.41 mm)	350		3775
8	.090" (2.29 mm)	410	686	5150
8½	.085" (2.15 mm)	497		
9	.080" (2.03 mm)	585	892	7400

EXOTIC AMMUNITION

Thanks to Charles Wolf from Wolf Hill Trading Co. for the ammunition provided for tests.

Special thanks to Tommy Geraci, for making this review!

Flechette Shotgun Rounds



The flechette round carries about 30 1 inch steel dart shaped projectiles. Flechette is French for "little arrow" or "dart". Flechettes have been used in taking out snipers hiding in thick brush or trees. This round was dispersed into action in the Vietnam War era. With the thick brush and guerrilla warfare the probability of hitting your target was greater. Flechette's are also known for their light body armor piercing abilities. Some also refer to this round as "The Beehive". The 12 gauge flechette rounds are chambered in 2 3/4" 12 gauge shot shells. Flechette's are recommended to be fired using an improved cylinder bore barrel rather than a barrel equipped with a modified or tactical choke.



The Flechettes have an overall spread of 19X10" at 15 feet. Other than the enormous amount of spread, off camera the Flechettes pierced through a phone book proving it has tremendous penetrable capabilities.

Dragon's Breath Shotgun Rounds



Dragon's Breath is a magnesium-based pyrotechnic shotgun round that emits sparks and at times flames. These exotic 12 gauge rounds are similar to a short-range flamethrower, which can produce flames up to 100 feet. It can be used as a flare in distress situations.

There is little to no combat record of dragon's breath being used in the field. At close range this round can be very effective however dragon's breath rounds are not relied on in tactical scenarios. It is not practical to use an incendiary round when there is a risk of catching a house or building on fire, which could possibly cause civilian casualties.

These rounds offer great fun for recreational shooting. Just ensure there are no flammable materials in the general direction that the round is fired.



Pictured above is me shooting a Dragons Breath round. This round is great fun to shoot at night, but fires can break out so be sure to have a fire extinguisher handy or have the fire department on standby. Because this round is an incendiary round and the chance of not fully eliminating a target is high. It would cause severe burns and would catch light clothing on fire. However it's just not practical to use for anything other than a novelty round and or for a nice pyrotechnical display at nighttime.

Ball and Chain Shotgun Rounds



Some refer to this round as the Bolo round. It features two .58 Caliber musket balls connected by a 4 inch seven strand wire cable, some refer to the cable as piano wire. The ball and chain causes massive devastation to the impacted area.



The Ball and Chain caused an impact area of approximately 2X3" at 15 feet. Off camera I was able to slice through two 600-page phone books like a hot knife through butter. If you want a fun powerhouse of a round look no further.

Buck and Slug Shotgun Rounds



The buck and slug features a 1oz sabot slug followed by 9 / 00 buck shot balls. This powerful round has plenty of knock down power, and would be devastating to anything you put in front of it.



The overall spread of the Slug and Buck is approximately 4X6" at 15 feet. I was aiming center mass, I would not recommend this round in a situation where accuracy is key.

Armor Piercing Incendiary Shotgun Rounds



This exotic round features a 500-grain heat-treated alloy slug with an incendiary exploding tip, packed on a magnum charge. This surprisingly light recoil load bursts out around 1,700 feet per second or fps and can produce a 3000-degree flash upon impact of a hard surface. This round is claimed to pierce ¼" steel as well as body armor.



The Armor Piercing Incendiary round failed to pierce through ¼" steel. I shot two rounds at the steel target and both times it was unable to puncture the steel. The incendiary tip did in fact work and ignite upon contact of the steel plate.

But since this round is specifically advertised as an armor piercing round that can pierce through ¼" steel, but was unable to do so I would call this round a fail.



Here is the Incendiary Armor Piercing tip in action. Upon impact to the steel plate it did have ignite a flash followed by yellow and white smoke.

Super Rhodesian Shotgun Rounds



The Super Rhodesian features nearly 400 #8 birdshot bb's stacked on top of 9/ 00 buck shot balls. This round has massive spread and takedown power, talk about adding insult to injury.



The Super Rhodesian round has a nice tight grouping of approximately 7X8" at 15 feet. This round packs a powerful concentrated punch strong enough to take out most anything that would regrettably cross its path.

Ultra Buck Shotgun Rounds



Wow! The Ultra Buck utilizes 8 quadruple-ought or (0000) buck shot balls packed on top of a magnum charge. Lets clear this up, one 0000 ought buck ball has the diameter of a .380/9mm projectile.

That's equivalent to shooting a target 8 times with either a 9mm or .380, in one shot. The 0000 buck is fairly hard to find on the market and most shotgun shooters don't know it exists. Due to the massive size of the quadruple ought buck as well as being placed on a magnum to charge, this round will cause an enormous amount of damage to a target or foe.



The Ultra Buck had a devastating spread of approximately 7X7" at 15 feet. This is a very uniquely designed round that has a similar force to that of a freight train (figuratively speaking that is).

Incendiary Slug Shotgun Rounds. 50 BMG/M17 Tracer Shotgun Rounds



Truly one of the most unique exotic 12 gauge rounds on the market. The .50 BMG Tracer round is effective from 0-400 yards which is 1200 feet. Though accuracy should not be expected at great distances, coming from a shotgun platform which famously known for close range devastation.

This round is pure insanity and clearly revolutionizes the overall situations in which a shotgun could and should be used. This awesome round emits a trace that will last about 3 to 4 seconds after the round is fired and can burn out to about 400 yards.

This round can be fired out an improved cylinder, modified and tactical choke barrels. These rounds have to be loaded and fired one round at a time due to their length. Place these rounds directly through the receiver into the barrel. When I tested the .50 BMG tracer, the round worked great but the trace did not work. I took two shots in the dead of night and both times I could neither see a trace nor catch it on my camera. I give the round a pass but the trace a fail.

12 Gauge M855 Shotgun Rounds



The M855 utilizes 40 tungsten steel cores out of the SS109 5.56 round. This is a lighter load with minimal wall penetration and nice spread. This round can stop any intruder while also being somewhat home defense friendly. If you're looking for a home defense round check into the M855.



The M855 has a spread of approximately 13X6" at 15 feet. This round I would consider using for home defense, due to the fact that the M855 cores are designed to tumble upon impact slowing them down substantially and further reduces the possibility for over penetration.

Incendiary Slug Shotgun Rounds



The incendiary slug also known as dragons slug, makes use of a lead slug topped with an incendiary tip.



A flash from the tip of the Incendiary Slug could not be seen upon impact. However, this shot was taken around dusk so I can't rule it a total failure. It could have been that it wasn't dark enough outside to see any of the pyrotechnics. I will have to conduct another test on it at a later time.

Afterword

These rounds are not legal in all states be sure to check out http://www.wolfhilltradingco.com to learn more.

All the exotic rounds reviewed above are chambered in 12 gauge 2 3/4" shot shells and can be shot out of a barrel equipped with an improved cylinder, modified, or tactical choke.

NOTE: It is highly recommended that the flechette round be fired out of an improved cylinder for greater performance. For any further questions you may have please contact wolfhilltradingco.com. (The barrel used to create this review is an improved cylinder factory Remington 870 barrel).

CHAPTER 27. SHOTGUN SHOOTING DRILLS

Practice is what makes anyone proficient in anything. You must have trained to the point where movements become natural, where your hands, fingers and eyes know what to do without hesitation.

Always practice with the weapon that is most likely to be used in a confrontation. In the middle of the night when it is dark and your stress level is high, is not the time to be handling an unfamiliar weapon.

It is recommended during shotgun practice drills to use snap caps. Snap caps allow you to dry fire your weapon without putting stress on the firing mechanism. They also allow you to practice handling ammunition in general while being an excellent way to practice loading your weapon without handling live ammunition. It is important to actually pull the trigger in tactical shotgun drills, and snap caps will allow you to do this. Practicing loading live ammunition anywhere other than a certified firing/practice range can be dangerous.

Practical drills are typically done at a firing range where you can get used to the sound and recoil from live ammunition. Practical drills allow you to focus on the weapon so you become familiar with it. You will practice loading live ammunition using a belt or stock/receiver carrier. Fast loading is the key to containing and putting down any aggressor against you or your home; you want your ammunition to be close to your hands while engaging an aggressor. A belt carrier/caddy is not recommended for a tactical situation.

During practice drills you will fire a series of rounds downrange at a fixed target and reload using your eyes before reengaging the target. Normally you will not practice tactical shooting unless the range you are at is designed particularly for that activity. One day of shooting will not make you proficient; it will, however, introduce you to the noise, recoil, feel of the ammunition, range and accuracy of your weapon. Practice, and know your weapon inside and out.

Know your field of fire. What can you see from your bedroom door, your front door and every room and doorway in your home? Keep in mind you may have to engage outside of the home as well. **Never conduct tactical shotgun drills with live ammunition.** You cannot use your eyes to load in a tactical situation; your eyes must always engage the target. You cannot look down to check your footing or to look for ammunition; it must all be done by feel. You must be able to load while moving your weapon to engage additional targets, and to be able to engage any target your eyes need to be on it. It takes hours of practice to be able to load your weapon by feel as you are moving. Your hands must naturally seek ammunition as you move your body and weapon to seek cover or to reengage the threat.

You are not only defending your home, you are also defending *yourself*; you must practice seeking cover. Do not confuse cover with concealment. Cover is protection from rounds, whereas concealment means the aggressor cannot see you. You must practice engaging the aggressor from a covered position. You should begin loading as you seek cover, and then reengage. You weapon must always be topped off with one in the chamber.

Set up tactical shotgun drills in your home. Some people suggest setting up barriers to practice cover and concealment inside your home, which is fine, but unless you expect your furniture to be moved around by the aggressor you should really practice using the current configuration in your house. The moment you step out of your bedroom door you must have eyes on the target. Your weapon must be loaded to capacity as you step out of your bedroom, and as you fire you must instinctively reach for ammunition as you move your weapon to engage.

This article mentions having your eyes on the target a lot, and with good reason. Failing to know where the threat is coming from means you have lost, and **you** are now the target. You do not control the situation if you lose sight
of the aggressor, and you cannot fire and contain any threat without a target in sight. That is why it is extremely important you practice loading with your eyes on the threat.

CHAPTER 28. SHOTGUNS FOR SURVIVAL, HUNTING AND HOME DEFENSE

When deciding on a weapon, particularly a shotgun, for home defense, there are several factors to take into account. One major consideration is the ability to secure the weapon while still maintaining accessibility. This is a balancing act where you must decide on how accessible the weapon will be while still keeping it out of inexperienced hands.

Keep in mind there is a distinction between shotguns for home defense and hunting. There are laws that prohibit the number of shells one can load in a pump shotgun when hunting waterfowl, for example. In most cases, shotguns will have a plug that prevents you from loading more than three shells. This number may vary by what type of migratory birds you are hunting.

Shotguns such as the Remington 870[™] Express Tactical[™] can hold up to seven rounds with a 2-shot factory installed extension. For home defense you will want as many rounds loaded as possible. You must consider safety as well, however. A chambered round means the weapon is ready to engage an intruder.

A recommended self-defense load for home use is tungsten pellets with a mixture of #2 and #4 pellets manufactured by Remington[®], called HD Ultimate Home Defense[™]. Unlike full-jacked rounds, pellets will not normally penetrate through walls, bodies and other objects to injure others. This load is designed for close quarters, and contrary to what many believe, you need to have the weapon on target for full effect because the spread is insignificant even at a very close range.

Members of the military have been known to call this type of shotgun a "room organizer" because of its use in close quarter combat in clearing confined spaces. A shotgun is ideal for home defense because shotguns not only are visually intimidating (allowing them to act as a deterrent), but they have tremendous stopping power.

The Remington 870[™] Express[®] Tactical with a synthetic stock and 18-inch barrel is ideal for home defense, and is considered an outstanding self-defense weapon in any situation. Check with your local authorities for specific local, state and federal regulations concerning barrel length, pistol grips or collapsible/adjustable stocks.

Several models of the Remington 870[™] have adjustable synthetic stocks with 18.5-inch (or longer) barrels, making them ideal for both males and females. Some shotguns may be designated for law enforcement only, so certain options may not be available or you may not have the ability to modify or add various features.

Shotguns used for home defense must be easily to maneuvering tight spaces such as around corners and through doorways, which is why 18 to 18.5-inch barrels are ideal for home defense. Your weapon must be short enough to bring it around on target in confined spaces. Slings are not recommended for close quarters or home use because they can be grabbed by the aggressor and they may hang up on doorknobs, nails, protruding hooks and any number of other objects. It is recommended you have a sling mounted on any weapon used for hunting because carrying a weapon at port arms becomes tiresome and can lead to accidents with the weapon. Having the right weapon at the ready can mean the difference in a survival situation, whether that situation is in your own home or in the woods.

So-called "backpacker" shotguns are gaining popularity as a survival and home defense weapon. Some shotguns with an adjustable stock and 18-inch barrel can be reduced to an overall length of about 36inches, making it ideal for all around survival use.

Hunting for Survival

Many people are finding out that hunting is a great way to supplement their food source and are turning to hunting as a means of survival. Shotguns for hunting will need a longer barrel. The Remington 870[™] Wingmaster[®] is available in 12, 16, 20, 28 and 410 gauges. Its barrel sizes include 25, 26, 28 and 30 inches, making this the ideal hunting and wilderness survival shotgun. You will have to decide if you want a synthetic stock or the traditional wood stock, which is typically made from American Walnut.

The Remington 870[™] Marine Magnum[®] Pump is ideal for woodsmen because of its durable and weatherproof finish. All metal is nickel-plated, including inside the barrel. This weapon is easy to maintain and does what it is supposed to do; it is a 12gauge and is considered an all-around utility pump action shotgun. You want this weapon with you if you become lost or stranded in the wilderness. Some may find that they prefer a .410gauge round, but various states and local governments prohibit certain ammunition used for hunting.

When planning a hunting trip, have sufficient ammunition not only for the game you are hunting but shells for other game as well, such as birds, squirrels and so on; if you do become stranded or injured you will want to have options available.

You must also consider self-defense if you are lost or stranded, and you must keep distances in mind when choosing ammunition. You will be at greater distances in the woods and concealment of the aggressor is a real possibility, so self-defense shot used for close quarters will not be adequate. You will be firing through heavy brush and you will need rounds that can penetrate. Consider cover and concealment as a means of self-defense, as well as movement away from the aggressors if possible.

Hunting for survival differs from hunting for sport. When you realize someone will go hungry if you fail, hunting takes on a very different perspective.

Wilderness Survival

Some inexperienced hunters will leave for a day of hunting with limited supplies, feeling confident that all they need is a weapon. Your weapon is important, but you will also need materials and supplies for fire starting, fishing, building shelter and collecting and purifying your drinking water. Prepare for the worst and hope for the best, because a short walk into the woods for a few hours of hunting can turn into days (or longer) if lost.

You should consider carrying some, or all, of the following items when you venture into the woods for any reason. You should have tools and materials that will allow you to collect and purify water, build a shelter, make fire and forage for food.

CHAPTER 29. HOW TO CLEAN YOUR SHOTGUN

Experienced shooters realize that a dirty weapon can and will let them down. Your shotgun needs maintenance to keep it accurate and dependable. Regardless of the bluing or plating, the metal parts on a shotgun will rust from neglect. Moisture is everywhere, and unprotected metal rusts. Your shotgun case is also important in preventing rust. You can oil your firearm, put it in a cloth or nylon case, and in a matter of days the oil will have wicked into the material of the case leaving your weapon unprotected. It is recommended to use a hard-shelled case with quality foam protection.

Prior to cleaning always ensure the weapon is unloaded, or cleared. Read your manual carefully on the proper way to dismantle your weapon.

Cleaning Kit

All cleaning kits perform the same functions, and in many cases your kit will be based on personal preference. All kits should contain the proper tools and materials for your weapon. Your cleaning rod must be long enough to clean the entire inside of the barrel. Your kit should contain a bore brush, patches; bore solvent, toothbrush and gun oil for rust prevention and lubrication. Some people like to have steel wool on hand to help remove rust. Use quality cloth to apply oil to exterior metal parts; you do not want to use paper towel or cloth that leaves lint or threads behind.

Bore solvent is used to loosen fouling in the barrel and from the receiver. Patches are for cleaning and applying solvent and oil. The bore brush is made from stiff wire, usually brass, and is for scrubbing the barrel. You would not typically use the bore brush on any metal other than the inside of the barrel; a wire bore brush can damage the bluing or other plating on the exterior metal parts of your weapon. Remove surface rust promptly using fine steel wool, or even by scrubbing with cheesecloth and oil.

If you have cleaned your weapon previously and have not fired it since, you can check for rust in the barrel by using your rod and a clean dry patch. Run the patch through the barrel and check for rust colored residue. If there is evidence of rust, run a small piece of steel wool down the barrel or use the bore brush to remove it. Swab the barrel several times with a clean patch, then oil a fresh patch and run it down the barrel.

To clean the barrel of fouling use a patch dipped in the bore solvent (but not dripping), and push it down the barrel. Let the solvent work for several minutes before using the bore brush. You may have to run the bore brush through five or six times depending on how much residue has built up. If you have not cleaned your weapon after the last shooting it will require more effort to clean it properly. After running the bore brush through the barrel swab it several times to see how much residue remains. Inspect the barrel for shine and if you do not see any dull spots you can now oil the inside.

Once the barrel and receiver are cleaned you can oil the exterior metal components. You do not want oil dripping from any parts after oiling, so always apply oil using an absorbent cloth. You want a protective sheen without oil pooling. Inspect the weapon periodically if you store it for long periods between shootings; excessive oiling without firing the weapon will gum up the works as the oil will collect dust over time, which must be removed. Reapply fresh oil after touching up.

Use the solvent and a toothbrush to clean the weapon's receiver. Make sure to oil the receiver after swabbing up the solvent with clean patches, and be careful that you do not leave any brush bristles behind. Build up on the receiver can cause a malfunction.

Follow the manufacturer's recommendations to clean and protect your wooden stock. Otherwise, you can treat it like any other fine wood, using quality wood cleaners and preservatives. Do not use gun oil or gun solvent on a wooden stock, as it will remove wood preservatives and protective coatings, causing the wood to dry out, shrink and crack.

CHAPTER 30. SHOTGUN CHOKES EXPLAINED

Many shooters are puzzled with shotgun chokes.

A choke is a tapered constriction of the gun barrel's bore at the muzzle end. Some shotguns have fixed chokes, and some can be equipped with a choke. The exit end of the choke is smaller than the actual bore of the barrel. Chokes tighten the shot pattern and enable you to shoot farther distances, which is useful for trapping and hunting. It is recommended to use a Cylinder or Improved Cylinder choke for home defense.

The following illustration shows the difference between chokes and how they control the pattern.



Remember, the choke is located on the end of the barrel, so if you have a Modified choke and cut the barrel, you will end up with a Cylinder choke.

Generally, there are several choke types available: Cylinder, Skeet 1, Improved Cylinder, Skeet 2 (Light Modified), Modified, Improved Modified, Full, Extra Full and Turkey.

The most widely used choke types are: Cylinder, Improved Cylinder, Modified and Full.

Cylinders and Improved Cylinders

Cylinder bores don't have a restriction. An improved cylinder has a minimal restriction, and is recommended for short distances using birdshot and buckshot (20-30 yards) and self-defense. The shot pattern is much more spread out, and your chances of hitting a target are better.

It is recommended to use slugs with a cylinder or improved cylinder for better accuracy.

Modified Choke

A modified choke has a moderate constriction. It is good for medium distances of up to 30-40 yards.

Full Choke

A full choke has the tightest constriction, and is best used for distances beyond 40 yards.

Chokes and Slugs

Cylinders and improved cylinders are recommended for use with slugs for better accuracy.

Purpose of chokes

A choke is designed to alter the distribution of the shot as it leaves the firearm. For shooting most game birds and clay pigeons, a desirable pattern is one that is as large as possible while being dense enough to ensure multiple hits on the target. Shotguns intended for defensive use often have cylinders or improved cylinder chokes for the widest shot pattern possible at a typically short defensive range.

TABLE OF SHOTGUN CHOKES FOR A 12 GAUGE SHOTGUN USING LEAD SHOT											
Constriction	Constriction		Percentage of shot	Total spread at 37 m	Total spread at 40 yds	Effective range	Effective range				
(micrometres)	(inches)	American Name	in a 76 cm (30 inches) circle	(cm)	(inches)	(m)	(yd)				
			at 37 m (40 yd)								
0	.000	Cylinder	40	150	59	18	20				
127	.005	Skeet	45	132	52	21	23				
254	.010	Improved Cylinder	50	124	49	23	25				
381	.015	Light Modified									
508	.020	Modified	60	117	46	32	35				
635	.025	Improved Modified									
762	.030	Light Full		109	43						

889	.035	Full	70		37	40
1143	.045	Extra Full				
1270	.050	Super Full				



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Interchangeable Chokes

Shooters are able to change chokes on some shotguns. Remember to check chokes often because they can become loose!

AFTERWORD

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Feel free to contact author at: info@rem870.com with any questions or suggestions you may have.



See you on the Remington 870 forum: <u>http://rem870.com/forum/</u>

Recommended website for shotgun parts, accessories and upgrades: <u>Brownells.com</u>

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