



## TRAP SHOOTING SHELL AND CHOKE SELECTION

by Steven Betts

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I have been asked by many adults, parents and youth shooters about what type of shells to purchase and choke tube selection for trap. These are only suggestions and by no means the only way to make selections.

### SHOTGUN SHELL SELECTION

There are many theories and tests that have been done for the professional shooters on shot size and powder types and amounts. For simplicity, I have narrowed it down to a few of the more popular choices for new shooters. While 12,16, 20, 28 and .410 gauges can be used for trap, I suggest only 12 gauge be used. 12 gauge has the most amount of shot and is usually cheaper to purchase shells. Any type of shotgun may be used, the least amount of problems occur with over/under (O/U) shotguns. O/U shotguns are also easier for coaches and parents to see if they are in safety position since the action is fully open when not being shot. The downfall with the O/U shotguns is higher cost and the recoil is generally higher. Pumps and semi-auto can jam or malfunction and shells have to be caught. If a pump is used, the sound of pumping can release a clay on voice activated traps. Pump actions have the highest recoil. You can pay a few hundred, all the way up to many thousands of dollars for a shotgun. **If the gun is only used for trap, a higher rib on top of the barrel is usually used to see the clay without ever covering the clay.** The higher rib also is advantageous on hot days because the heat convection currents do not distort the shooter's view when barrels become hot. Most beginners use a lower cost sporting type gun with a fairly low rib on top with either one or two sight beads.

When shooting trap from 16 yards, the most popular shells are Federal Top Gun Target loads, Rio and Remington Gun Club target loads. There's a good reason for this, they go bang every time you pull the trigger and they are usually the cheapest and are the most available.

The only lead shot size to be used is **7½, 8, 8½** or 9. By SCTP/ATA rules, no other size can be used. The smaller the number, the larger the shot size. 7½ is a little larger diameter shot and won't be moved as much by wind and size #8-9 used when calm. Do not purchase steel shot for trap!

There has been a lot of testing of shot deformation and patterning at different velocities. I suggest loads which are usually around **1145-1200 feet per second (FPS) in size #8** or **#7½** for beginners. 1145FPS are usually called "Light" loads. Recoil is a little more when going up to 1200 FPS and flinching can start to become a bad habit for beginners. A good coach can fine tune the shot and velocity to match a shooter by changing the shot velocity to match where the targets are usually being hit. If a 20 gauge is used, I suggest 1200fps lead shot.

**Do not purchase Handicap shells** (anything above 1200FPS) or sporting clay (1300FPS) for your new shooters. Handicapping is a way to lower scores for experienced shooters by backing shooters farther from the 16yd line to make it more difficult. Higher velocity (Handicap) shells are needed because the shot has to travel farther before hitting the clay.

Note that 1290FPS is the highest velocity allowed in trap competition.

Unless you are reloading the hulls, it is not worth the extra \$2-3/box for the premium shells like Winchester AA and Remington STS or Nitro, it will not make them a better shooter. **An exception** to this is when shooting in major competitions such as State or National meets. The Remington STS and Winchester AA shells in #7½ or #8, 1⅛ oz, either 1145 or 1200FPS can be used because it is 2-4% higher Antimony content in the lead. This makes the shot harder and may break an extra bird or two out of 100.

See below for two pictures of the box tops of the two I recommend, you can just bring the picture to Cabelas, Gander, Fleet Farm, Wal-Mart, Dicks or any other store and match them up exactly.

Note that there are special edition boxes of Federal that may be pink or red white and blue.

They should be in the \$5-7 range depending on sales. Buy a case or two of 10 boxes/case. We usually use two boxes/week. Boxes may also be purchased at the club.

**Federal: TG12 7.5, TG12 8, TGL12 7.5, TGL8 (TG12 means TarGet load 12 gauge 1200FPS. TGL12 means TarGet load Light 12 gauge 1145FPS) and the 7.5 and 8 are the shot sizes.**

**Remington: Gun club uses same designation with the “L” for light loads which are 1145FPS, but uses GC for gun club instead of TG of Federal brand.**

### CHOKE SELECTION

Below is a chart on choke sizes made by Briley and is considered the most common designation for chokes. Again, there is much research and every trap shooter has an opinion on which to use. My preference is to split the difference on both sides.

In general, all a choke does is to constrict the opening of the barrel to keep shot together, just like the nozzle does on a garden hose. The more you constrict the hose opening (Full Choke), the farther and tighter the shot pattern will go. Purists say to use only full (F) chokes to avoid being sloppy with shooting. My goal is to get the shooters breaking the most clays, not just turning the clay to dust. Since new shooters take a little longer to acquire a target, I suggest the **Improved Modified (IM)** for new shooters because the new shooters usually take a little more time to find the clay so they need a shot pattern to hold together a little longer. The choke can be fine tuned to the distance the shooter hits the clay in flight. At 16 yards (The only distance used for youth shooters in competition), most experienced youth shooters tend to go more to the Modified (M) or (IM) chokes because they shoot the targets at the maximum pattern where a clay will not go through the shot pattern without being hit. All guns pattern different and some have fixed chokes which you are unable to change.

Make sure chokes are always screwed in tight and match to the brand and type of shotgun!

Remove chokes and clean/grease or oil every couple of weeks so they don't seize in barrel.

I usually don't recommend a full choke until 25-27 yard handicap line.

**\*\*\*To summarize, use #7½ or #8, 1¼ oz shot with muzzle velocity 1145-1200FPS with a choke in any of the sizes circled in red below, with Improved Modified (IM) being recommended the 1<sup>st</sup> season and opening up to a Modified (M) thereafter.**



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#### Choke Bore Sizes and Constrictions

	CYL	LTSK	SK	IMK	IC	LM	M	IM	LF	F	XF	D
12 Bore	.000	N/A	.005	N/A	.010	.015	.020	.025	.030	.035	.040	.005
20 Bore	.000	.003	.005	.007	.009	.012	.015	.018	.021	.024	.027	.005
28 Bore	.000	.003	.005	.007	.009	.012	.015	.018	.021	.024	.027	N/A
.410 Bore	.000	.003	.005	.007	.008	.010	.012	.014	.016	.018	.020	N/A

CYL = Cylinder; LTSK = Light Skeet; SK = Skeet; IMK = Improved Skeet; IC = Improved Cylinder; LM = Light Modified  
M = Modified; IM = Improved Modified; LF = Light Full; F = Full; XF = Extra Full; D = Diffusion; N/A = Not Applicable