### Recommended Shooting Distance and Calibers for Bullet Traps

## 3 Yards (Pistol Minimum Shooting Distance)

### 10 Yards (Rifle Minimum Shooting Distance)

<u>Always</u> Shoot directly facing the bullet trap, Do Not shoot the bullet trap at an angle. This counteracts the bullets trap's designed angled steels plate's ability to funnel the projectile properly into the collector tube. The steel plates are set at an angle to specifically deflect projectile momentum while funneling the projectile and collecting inside of the body tube. Shooting the bullet trap at an angle heightens risk of injury or damage.

### **Protective Gear:**

- Common hygiene practices at the range and while dealing with lead:
  - Do not eat, drink, or smoke while at the range
  - Wear ANSI approved ear protection/clothing while shooting
  - Wear ANSI approved eye protection while shooting or emptying bullet trap
  - Wear gloves while shooting or emptying bullet trap
  - Always wash your hands after shooting or emptying bullet trap
  - Wear a dust mask when emptying bullet traps
  - Have dedicated 'range clothing' to wear for each trip
  - Take a shower immediately after using the range
  - Wash your clothes immediately after using the range

## Configuration/Setup:

- Remember, ballistic science is based in theory. Unexpected ricochets can occur, regardless of the target type being shot. Always use caution when shooting, especially at steel targets.
- Always Shoot directly facing the bullet trap, Do Not shoot at the bullet trap at an angle. When doing so there is a greater risk of injury or damage.
- Spectators should stand 3 yards behind the shooter.
- Recommended minimum distances from bullet traps to shooter are 3 yards for pistols and 10 yards for rifles.
- BMoore Targets, LLC bullet traps are tested and designed to withstand many impacts from suitable and appropriate projectiles. However, they do not last forever.

## Apply firearm fitness and safety precautions to bullet trap fitness for use:

- If a bullet trap looks visibly damaged beyond shallow (≥2mm) depressions, discontinue use of the bullet trap.
- Failure to do so may create a dangerous condition, as a damaged steel target is more likely to ricochet projectiles, jacketing and lead back toward the shooter and spectators.
- The goal of an effective bullet trap is to absorb projectile energy and collect projectile fragments.
- If there are deep depressions in the bullet trap (≥2mm), the likelihood and danger of those areas redirecting projectiles back at the shooter are increased.
- Discontinue use of a bullet trap if there are any deep depressions on the face of the bullet trap, or any other changes to the face of the bullet trap, other than paint wear.
- BMoore Targets, LLC is not responsible for any injuries or damage that occurs from the use of a damaged bullet trap.

#### Ammunition:

- Full Metal Jacket Bullets (FMJ)- Most common form of lead bullets in use today, which
  are lead bullets with a copper jacket.
- **Solid Lead Bullets** Made purely from lead. From hunting and self-defense, to target shooting at the range, cast lead bullets.
- Soft Point Rounds (Best and provides longest life for Bullet Trap)- Soft point rounds are a lot like full metal jacket rounds except the soft point part of the lead at the tip is left exposed. The point of this is that the lead should flatten upon impact.
- Ammunition projectile velocity should not exceed (≥2000ft) per second. (≥2000ft)
  per second will liquify the Ballistic Rubber, canceling the rubber's self-healing
  properties.
- Bullet fragments and jacketing can sometimes deflect back in the direction of the shooter. While these fragments and jackets may cause injury, they typically have very little energy – dependent on several factors such as velocity, bullet design, jacket material, and correct ammunition used. Replacing the ballistic rubber face appropriately based on wear will minimize these risks.

### **Never Use:**

- **NO** Armor Piercing (AP) steel core or hardened type ammunition fired at any bullet traps. These types of ammunition are designed to pierce steel.
- <u>NO</u> Hard Cast Bullets (aka Cowboy Rounds) Made from lead alloys, and have additives like Antimony, silver, or tin, which make them a lot harder. This creates a dangerous situation as a bullet with these additives tend to bounce around, instead of breaking apart as intended with the correct ammunition. (<u>This</u> <u>ammunition greatly increases your chance of ricochet and bullet trap damage, Do</u> <u>Not Ever Use.)</u>
- **NO** Shotgun slugs, lead birdshot, and buckshot ammunition should be shot at the bullet trap.
- Use common sense to prolong the life of your high-quality bullet traps!!

### Calibers:

**Note:** Any caliber or ammunition used other than is prescribed below heightens the shooter's chance of risks stated herein.

# Most Common Calibers Acceptable for Use With the (T-1) Portable Bullet Trap

\*The chart [1] below only represents Handgun Statistics. Barrel length does affect and can increase caliber's ammunition muzzle velocity and must be considered when choosing your firearms and ammunition. Bullet velocity must not exceed 2000ft per sec.

HANDGUN CARTRIDGE	BULLET TYPE	BULLET WEIGHT	MUZZLE VELOCIT Y (FPS)	100 YD VELOCIT Y	MUZZLE ENERGY	100 YD ENERGY LB FT
.22 Caliber Handgun	Bullet Type	Bullet Weight	Muzzle Velocity (FPS)	100 YD Velocity	Muzzle Energy	100 YD Energy LB FT
22 Short	Lead/ FMJ	29	1010	857	66	47
22 Long Rifle	Lead/ FMJ	37	1085	923	97	70
22 Long Rifle	Lead/ FMJ	40	1060	918	100	75
.22 WMR	Lead/ FMJ	34	1690	1152	216	100
.22 WMR	Lead/ FMJ	40	1480	1071	195	102
.25 Caliber Handgun	Bullet Type	Bullet Weight	Muzzle Velocity (FPS)	100 YD Velocity	Muzzle Energy	100 YD Energy LB FT

.25 Automatic	Lead/ FMJ	35	900	742	63	43
.30 Caliber Handgun	Bullet Type	Bullet Weight	Muzzle Velocity (FPS)	100 YD Velocity	Muzzle Energy	100 YD Energy LB FT
30 Luger	Lead/ FMJ	93	1200	1021	297	215
7.62X25 Tokarev	Lead/ FMJ	85	1645	1307	511	322
30 Carbine	Lead/ FMJ	110	1790	1421	783	493
.31 Caliber Handgun	Bullet Type	Bullet Weight	Muzzle Velocity (FPS)	100 YD Velocity	Muzzle Energy	100 YD Energy LB FT
32 S&W	Lead/ FMJ	85	680	633	87	76
32 S&W Long	Lead/ FMJ	98	705	657	108	94
32 Automatic	Lead/ FMJ	60	1000	834	133	96
32 H&R	Lead/ FMJ	90	750	698	112	97
32 H&R Mag	Lead/ FMJ	85	1120	977	237	180
32 H&R Mag	Lead/ FMJ	95	1020	916	219	177
.35 Caliber Handgun Ballistics	Bullet Type	Bullet Weight	Muzzle Velocity (FPS)	100 YD Velocity	Muzzle Energy	100 YD Energy LB FT
380 Automatic	Lead/ FMJ	90	1000	846	200	143
9mm Luger	Lead/ FMJ	115	1155	971	341	241
9mm Luger	Lead/ FMJ	124	1110	971	339	259
9mm Luger	Lead/ FMJ	147	975	899	310	264
38 Special	Lead/ FMJ	110	1010	883	249	191
38 Special	Lead/ FMJ	124	900	817	225	185
38 Special	Lead/ FMJ	158	800	735	199	168

357 Magnum	Lead/ FMJ	125	1500	1153	624	298
357 Magnum	Lead/ FMJ	140	1350	1100	566	376
357 Magnum	Lead/ FMJ	158	1250	1073	548	404
357 SIG	Lead/ FMJ	124	1350	1108	502	338
357 SIG	Lead/ FMJ	147	1225	1072	490	375
.40 Caliber Handgun Ballistics	Bullet Type	Bullet Weight	Muzzle Velocity (FPS)	100 YD Velocity	Muzzle Energy	100 YD Energy LB FT
40 S&W	Lead/ FMJ	155	1180	980	479	331
40 S&W	Lead/ FMJ	165	1175	937	506	308
40 S&W	Lead/ FMJ	180	950	862	361	297
10 MM Auto	Lead/ FMJ	155	1265	1020	551	358
10 MM Auto	Lead/ FMJ	180	1180	1004	556	403
10 MM Auto	Lead/ FMJ	200	1050	948	490	399
.44 Caliber Handgun Ballistics	Bullet Type	Bullet Weight	Muzzle Velocity (FPS)	100 YD Velocity	Muzzle Energy	100 YD Energy LB FT
44 Special	Lead/ FMJ	180	1000	882	400	311
44 Rem Mag	Lead/ FMJ	180	1550	1173	960	550
44 Rem Mag	Lead/ FMJ	200	1500	1196	999	635
44 Rem Mag	Lead/ FMJ	225	1410	1111	993	617
44 Rem Mag	Lead/ FMJ	240	1350	1134	971	685
44 Rem Mag	Lead/ FMJ	300	1150	1031	881	708
.45 Caliber Handgun Ballistics	Bullet Type	Bullet Weight	Muzzle Velocity (FPS)	100 YD Velocity	Muzzle Energy	100 YD Energy LB FT

45 Auto	Lead/ FMJ	185	970	860	386	304
45 Auto	Lead/ FMJ	200	900	817	360	296
45 Auto	Lead/ FMJ	230	850	788	369	317
45 GAP	Lead/ FMJ	185	1090	960	488	379
45 GAP	Lead/ FMJ	230	880	811	395	336
45 Win Mag	Lead/ FMJ	260	1200	1021	831	602

<sup>\*</sup>Chart courtesy Gunnersden.com