

INSTINCT SHOOTING: ITS PLACE IN THE
TEACHING OF SAFETY AND ACCURACY WITH GUNS AND FIREARMS

by

DANIEL JOSEPH LANKAS

B. A., Kansas State University, 1969

4871
A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Physical Education

KANSAS STATE UNIVERSITY

Manhattan, Kansas

1970

Approved by:



Major Professor

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ACKNOWLEDGMENTS

I wish to express my appreciation to David Lauire, physical education instructor at Kansas State University, Raymond Wauthier, Assistant Head of Physical Education Department, and T. M. Evans, Head of Physical Education Department at Kansas State University for their patients and understanding throughout this paper.

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INTRODUCTION

According to Kansas State Game Commission more hunting licenses are being obtained and applied for than ever before. With the growing number of hunters in the field, hunting accidents are also soaring to an all-time high. These accidents are due to lack of knowledge of firearms and guns or just plain carelessness. Many of these accidents could be avoided by introducing a gun program in the secondary school.

The BB gun trap shooting program would be an ideal method of teaching proper care and use of guns. It is also an effective, inexpensive way of teaching a large group the sport of hunting and marksmanship while also improving speed and accuracy. The BB gun trap shooting program could also instill in young people a valid interest in the "sport" of hunting as a carry-over activity in later years.

STATEMENT OF PURPOSE

The purpose of this study is to show the value of instinct shooting through the operation of the BB gun trap shoot and to develop this program into a workable daily schedule of a secondary physical education program. This phase of the physical education program, itself then generates into four main objectives (1) develop a sense of firearm safety (2) develop and maintain shooting accuracy through practice (3) build speed and quickness in shooting (4) establish an interest in the sport of hunting and marksmanship.

REVIEW OF LITERATURE

The BB gun trap shoot is a very current and new innovation, therefore, there has been only limited printed material done on the subject. After checking Kansas State Library and the Physical Education Library at Kansas State University, there have been no books published on the subject.

National Rifle Association and the National Safety Council have published various articles on the subject. Remington Peters publication and Federal Cartridge Company have publications on the BB gun trap shoot included in their catalogs.

Much of the information obtained came from personal experiences and interviews with those conducting a BB gun trap shoot program.

HISTORY AND DEVELOPMENT

The following information was obtained by the author through a telephone conversation and personal letter from Pete Rademacher the inventor of the BB gun trap shoot.

Pete Rademacher was exposed to Instinct Shooting and learned the basic fundamentals of the system during the days of Floyd Patterson fight training camp sessions. Immediately following the title fight, he induced Lucky McDaniel, the man who developed the BB Gun technique for teaching Instinct Shooting to shot gunners and riflemen, to join his promotional company in Georgia. For several years he traveled with McDaniel and after watching a continued string of successful two eyed shooters graduate after one lesson

each, Pete learned to teach the system. He had fine success at \$35.00 per lesson and one lesson was all that was required to impart the knowledge.

Indoor Instinct Shooting Range

The Indoor Range was designed for use with spring powered BB guns since most families have one or more and need a safe place to use them. BB guns are recognized by shooter education organizations as fine training guns for beginners and are used by older people to develop good shooting techniques.

The basis of development of the Indoor "Instinct Shooting" Range was to make it possible and easy for anyone to learn this unbelievable technique of Instinct Shooting. McDaniel and Rademacher always taught outside and cold weather often hampered their instruction. Rademacher's second thought was to provide a range for learning and practicing the technique in the home. Once the idea of the effect of pin-point concentration is learned through use of the range, the system can then be applied to moving targets, such as running game, birds, trap and skeet shooting very effectively. Instruction for learning the technique is included.

The range can handle spring powered BB's up to about 350 feet per second. The rayon baffles are tough and durable and will stand great abuse. The back-up 8 oz. duck canvas is added protection. Spring powered guns like the Daisy pump or lever action are ideal for use with the Indoor Range.

This range has had successful acceptance because of the complete safety with the use of it to stop BB's and because of its dual purpose construction. Teaching Instinct Shooting - the shooter can actually see BB's hit the

plastic target before dropping safely into the catch basin and shooters can also use it with National Rifle Association paper targets as a conventional target range. When using an Instinct training range the shooter quickly realizes that wherever both eyes concentrate is exactly where the gun points when mounted properly to cheek and shoulder. The gun will point wherever the shooter looks provided the shooter does not look at the gun or try to sight or aim.

This is all accomplished by both eyes seeing only the spot desired to be hit and allowing depth perception, peripheral vision, binocular asperity and the sixth sense called automatic reflex that senses the picture is correct and tells our involuntary nerve circuit to activate the trigger finger. This system does away with most every step taught so painfully and slowly to army recruits and most beginning game and trap and skeet shooters. Sighting, triangulation, deep breathing, trigger squeeze, and position are all unnecessary with Instinct Shooting. Gun safety is of course necessary with every system. Instinct Shooting eliminates the thought process (reaction time) and substitutes an automatic reflex action accounting for automatic adjusting to moving targets without looking down the gun barrel to lead.

The range is now manufactured in two styles - the conventional Instinct Training Range - 6' tall, with tubular frame and plastic target which will allow actual strike of the BB to be seen - and the Official International BB Gun Range which was used by the National Jaycees and Daisy in July 1966 at Vandalia as the official target for the first International

BB Championships. This is manufactured in two positions, the low position for prone, sitting and kneeling and the high for standing.

BB Gun Trap Range

The BB Gun Trap Range idea came to Rademacher some years ago upon watching McDaniel move in front of his student a pace at a time tossing steel washers vertically in the air with the washer spinning and the flat surface to the shooter. He always felt that this could develop into a great sport for shooting practice and a fine way to encourage and interest new shooters to really become enthusiasts.

He was an amateur mechanical engineer by self study and development in his father's machine shop. He knew that overcoming inertia with a spring could result in a target's being ejected vertically from a machine in a manner such as McDaniel used to toss washers for his student. Trial and error in his - (pliers and screwdriver, hammer and bench vise) workshop and the use of a friend's welder resulted in his dream's coming true, that of BB Gun Trap Shooting. Rademacher's first thought was to use aluminum targets. He induced another friend to make 125 - 4" by 1/8" discs for him for a trade - two BB Guns and a finished trap range (if he ever got it into production). Of course the metal discs made the BB bounce back seriously fast at the shooter and safety glasses were required. Then he made a target mold and the Remington Clay Bird factory manager, John Walker, gave him a box of compound. This nearly drove him out of his home because the kitchen surface burner was his furnace and the tap in the sink cooled the

mold. He did it like this - pour the mold full, put on the top - jump on it with his 208 lb. frame to flatten the disc of clay, cool it under the cold water tap and extract the target. He couldn't interest Remington, Mechling, Bob White or a Canadian firm in making targets. Then the idea occurred to him, use plastic - one could see the shot hit the target as with the Indoor Range and targets could be used over and over.

By this time he had been accepted for a position at Hamlin Products/McNeil Corporation of Akron. Hamlin Products is a metal stamping company supporting the automotive industry and producing Isometric and various other popular physical fitness exercise equipment. His shooting ranges were in the mill with dies being made to stamp parts. Mr. M. D. Walklet, President, very close to the project and Hughie Mueller, plant engineer, very interested in shooting, and Rademacher had a thought; die - cut the centers out of the plastic discs so a BB strike would make them separate in a molded two piece plastic target with a name coined "Break-away". This reusable target is grooved on one part and has knobs on the other for contact holding; it is a perfect target of two colors that separate. It can be used thousands of times for fun and practice by the good shooter and the beginner and the entire family in the backyard or at summer camps.

Herein we have the latest concept, put practically into operation and readily and economically available for every sportsman, boys club, boy scout, summer camp, girl scout and family. It is noiseless and safe and can be used indoors, such as in high schools, with the proper backstop which is now developed. Rademacher used it September 20, 1965 on the Tonight Show

with Johnny Carson in the N.B.C. studio. The BB's which hit the plastic target stop and drop straight down to the floor and those that miss are caught in the backstop.

The BB gun trap range is a complete shooting range and is comprised of a trap, trap table, bench, twenty five reusable plastic "Break-away" targets and a trap house made of canvas duck and tubing.

Rademacher is in the process of marketing these items through wholesale distributors in the sporting goods and hardware fields, using representatives on a commission basis. Prices to the general public which he suggested for retail sale are \$12.95 for the Indoor Range and \$29.95 for the BB Gun Trap Range.

The BB Gun Trap targets are designed to handle any kind of air or CO-2 gun. The manufacturer's reason for making a complete package with the canvas tubing trap house was to make it a complete trap shooting range. They suggest however when using pellet guns to incline a piece of plywood or heavy masonite against the trap house for added protection for the trap operator.

Further testing indicates that the targets can be used for shot gun shooting at ranges of thirty five yards or more without destroying or damaging the plastic.

Many articles have appeared testifying to the effectiveness of the "Instinct" method of shooting. Excerpts for four of them appear below.

NEWS REVIEWS

Winnipeg Free Press Sports News tells about trap shooting in an article by Jimmy Robinson, writer for Sports Afield Magazine. He says:

"To many articles that tell you how to go about this business of duck and goose shooting start hindmost forward. What really decides the difference between eating pintail or stew is your choice of a shotgun and your ability to use it. What's the use of hunting if you can't hit anything?

The average hunter shoots about fifty shells during the hunting season, then puts his gun away for another year. He's not familiar with his gun nor with the flight of his targets, and the result is a series of disheartening misses. So each hunter, if he wants to bring home a mess of game, must learn to hit moving targets before he goes afield. How can he learn?

Pete Rademacher seems to have the answer. Fight fans will recall him as the former Olympic champion, who fought world heavyweight champion Floyd Patterson, but now he is known for his invention of the BB gun trap shoot.

It's an indoor and outdoor BB gun trapshooting rig, complete with plastic targets and launchers. Rademacher's shooting rig is based on 'instinct shooting'--firing with both eyes open. 'A gun, when moved with the head and eyes, will point automatically at the target. Reflex action, depth of perception and peripheral vision with both eyes aligns the gun automatically. Your total concentration is on the top of the target.'

Rademacher has already instructed over 5,000 shooters, both young and old. The target is thrown from a small trap, room high and is made of rubber about six inches in diameter. The gun used was a Daisy air rifle. The rig will afford a lot of fun and practice for both young and old and cost about \$35." (8)

"There has been a widespread use of the BB gun trapshooting method of improvement of marksmanship. The army's new secret weapon is the BB gun. All twelve of the Army posts that conduct basic training will start putting BB Rifles in the hands of trainees in December 1969. Three thousand are on order. These are real BB guns except the stock is lengthened to make the boy-size gun man-size.

The army thinks trainees who use BB guns have a better chance of surviving face-to-face encounters with the enemy in Vietnam. The job is to train men to do the right thing instinctively in a very special combat situation--the sudden appearance of an enemy at extremely close range.

'Aimed fire is time consuming--maybe just in milliseconds--but it is time-consuming,' said Lt. Col. Harry J. Bohlen, a unit training officer at the Pentagon. So in a tight spot like this the army doesn't want the man to aim. That's where a new combat technique called 'Quick Kill' comes in. And with it the BB gun.

For most of the new 'Quick Kill' methods have been under constant test at a handful of training stations. The trainee probably feeling rather silly watches while an instructor tosses a three-inch metal disc in the air. The BB gun's sight has been removed, but the man swings it up and gets off a fast shot.

'In about an hour,' said Major Takahashi, 'The average man is hitting that disc in midair about ten to fifteen feet away eight times out of ten. Then he starts shooting at smaller discs, about two inches, and pretty soon he can hit that nearly every time.'

While still bubbling with confidence, the man gives up his BB gun and returns to using his regular training rifle, the M-14. He has to keep using the no-aim method while shooting at man-shaped silhouette targets at close range. The M-14 sights are taped to assure that he does.

The principle behind 'Quick Kill' is that when a person points his finger at something, the object, his finger and his eye fall into perfect alignment." (1)

While the army looks at it as a "Quick Kill" method The Arizona Republic newspaper looks at it from a kid's point of view, that of future hunter and sportsman. "Instead of aiming through sights, you just slap the gun high to your cheek, ignore the rear sight, and with both eyes open point the front head at the flying target. . . and squeeze the trigger." The surprise comes when you discovered you're hitting better than ever!

Bob Whitaker, the author of the article, "BB Trap Range" says,

"After brief instruction, L. V. Yates and I had our kids nailing targets fairly consistently. The biggest problem was convincing them the instinct method worked. We must have shot 500 rounds and the kids still were going strong.

The BB trap range is bound to help kids learn shooting. It teaches them to swing and shoot with both eyes open--both essential to good shooting. Shooters station themselves behind the trap 'house' which has a heavy canvas awning to protect the operator from misfired BBs. The trap can be adjusted to sling out low, high or cross-flying birds.

We often mixed up our angles to produce a BB gun version of 'Crazy Quail'. Easiest to hit were those birds flipped straight up. We found a tendency to undershoot the targets--probably a holdover from regular rifle shooting habits. The BB gun trap range sells for less than \$35, while an indoor range carries a price tag of about \$15." (3)

This paper stated earlier the importance of gun safety. The following is a set of rules of firearm safety.

FIREARM SAFETY

I. Introduction:

A. The need for caution with firearms.

1. The need for safety exists wherever guns are - at home or in the field.

B. Accidents Defined:

1. Webster -- "An event that takes place without one's foresight or expectation, especially one of an afflictive or unfortunate character."

2. Conclusion -- Since the definition says "without expectation" it's easy to understand the reason for that dramatic cry - "I didn't know it was loaded."

C. Education as an answer:

1. Many people, especially children, who are not shooters are exposed to firearms in the home.
2. Almost all accidents are caused by ignorance and carelessness -- and lack of training.

II. Firearm Safety in the home:

A. Types of firearms usually found in the home.

1. Hunting.

Usually rifles and shotguns.

2. Target.

Rifles, pistols and shotguns.

3. Home protection.

Most often pistols.

4. Collector or souvenir.

May be any kind but are usually rifles or pistols.

Special Caution:

War souvenirs are dangerous.

B. Accident situations and precautions.

1. Handling and demonstrating.

a. Treat every gun as if it were loaded.

Point the muzzle in a safe direction.

Remove the magazine if it has one.

Open the action and leave it open.

Don't trust the safety.

It should be 'on' but it's always possible for it to be inoperative or that it may have been moved.

2. Cleaning.

- a. Treat it as if it were loaded.

Point the muzzle in a safe direction.

Remove the magazine if it has one -- or empty it if it isn't removable.

Open the action.

Keep other people away if possible.

- b. Check for proper functioning of all parts.

- c. Lubricate properly.

Not too much -- not too little. Proper weight.

- d. Before you store it -- check the bore (for patches, gobs of grease, cleaning rod sections, etc. -- yes, even they are left at times.)

3. Storage

- a. Out of reach.

- b. Unloaded and uncocked.

- c. Locked up if possible.

- d. Guns and ammunition stored in different places.

- e. Clean.

- f. Ammunition out of sight.

4. Transportation

- a. Unloaded and uncocked.
- b. Cased or wrapped if possible.

III. Firearm Safety in the Field

A. Common types of firearms used.

1. Plinking.

Rifles and pistols.

2. Hunting.

- a. Shotguns, rifles, a few pistols.
- b. Shotguns do most damage at close range.
- c. Shotguns involved in over half of all field firearm accidents.

3. Target shooting.

- a. Rifles and pistols.

4. Skeet and trap shooting.

- b. Shotguns.

B. Accident situations and precautions.

1. Intentional Discharge.

- a. Zone of fire.

Remedy:

Zoning of area when hunting with a group.

Vigilance in swinging on game.

Adequate backstop.

- b. Visibility.

Remedy:

Recognition of game.

Eyesight checks.

Contrasting colored clothing.

Good light conditions.

c. **Mistaken identity.****Remedy:**

Knowledge of game.

Positive identification.

2. **Accidental discharge.**a. **Falling.****Remedy:**

Always carry gun so muzzle can be controlled.

Don't climb, jump or run with a loaded gun.

Keep barrel free of obstructions.

When the footing is bad, unload or open the action.

b. **Transportation. (applies to cars, boats, planes)****Remedy:**

Firearms must be unloaded before putting in car,
while in car, and until outside car.

Guns not in use, or for any reason unattended,
should be unloaded.

c. **Handling.****Remedy:**

Check safety before loading.

Don't point at anything you don't intend to shoot.

Don't handle by the muzzle.

Keep fingers away from the trigger.

Don't use as club, prod or prop.

Avoid all horseplay.

Unload completely before cleaning or adjusting.

Stow it securely.

IV. Conclusion:

A. Basic Rules of Firearm Safety.

1. Treat every gun as if it were loaded.
2. Always point the muzzle in a safe direction.
3. Be sure of your target.

B. Additional precautions.

1. Guns carried into camp or home must be unloaded.
 - a. When going to or returning from the shooting areas guns should be unloaded and cased if possible.
 2. Barrel and action must be clear of obstructions.
 - a. Remove oil and grease with cleaning equipment and make visual check.
 3. Carry only ammunition that fits the gun you're carrying.
 4. Carry the gun in such a way that the muzzle will always be under control - even if you stumble or fall.
 5. Be familiar with the way game looks in the field.
 6. Never point a gun at anything you don't intend to shoot.
- Avoid all horseplay while handling a gun.

7. Unattended guns should be unloaded.
 - a. Guns and ammunition should be in separate locked storage beyond reach of children and careless adults.
8. Never climb a tree or fence or jump a ditch with a loaded gun.
9. Never pull a gun toward you by the muzzle.
 - a. It should never be pointed at any part of the body.
10. Never shoot a gun at a flat hard surface or the surface of water.
 - a. Be sure the backstop is adequate and safe from ricochet.
11. Avoid alcoholic drinks before or during shooting. (4)

Common sense and a little courtesy go a long way toward a good relationship between hunters and farmers. Here are some suggestions to help you:

1. Always get permission to hunt. The farmer has the legal right to grant or refuse hunting privileges on his land.
2. Act as a gentleman and a sportsman. Observe game laws and gun safety rules.
3. Keep the hunting party small.
4. Drive only on established roads and trails, not over fields and pastures.
5. Leave gates as you find them.
6. Observe fire safety rules with cigarettes and matches.

7. Offer the farmer a share of the game in appreciation for hunting privileges.

8. Don't leave litter in the area where you hunt.

Have fun hunting if you follow these eight suggestions.

Ten Rules of BB Gun Care and Handling

1. Treat a BB gun as if it were loaded and ready to shoot, just as you would a cartridge rifle.
2. Never point a gun at a person or anything else you don't want to shoot, even if you think the gun is uncocked or unloaded. BBs can blind anyone they strike in the eye.
3. Be sure the gun barrel and action are clean and free of obstruction.
4. Always keep the muzzle of your gun pointed in a safe direction and under control. During target practice, it should point down range at all times.
5. Keep your finger outside of the trigger guard until you are actually ready to shoot.
6. BBs can cause falls if left on the floor, so keep them picked up.
7. Guns should always be unloaded when not in use.
8. Unlike powder weapons, BB guns do not have to be cleaned after each use.

But before each target session, the plunger mechanism should be given three or four drops of household oil in the oil hold in front of the rear sight on the barrel. Then, holding the muzzle down, "dry fire"

several times to distribute the oil properly. Also oil all visable moving parts very lightly.

9. When cocking, always hold muzzle upwards so BB will properly feed into shooting tube. Always follow through with a full stroke when cocking, to prevent double-firing of BB's.
10. Store your BB gun in a dry place. Protect rear sight so it will not be knocked out of alignment. (2)

Proper safety is a must at any stage of handling a gun. The real purpose of having a gun at all is to use it accurately and well. For this purpose, the Hamlin Target Trap is unexcelled.

HAMLIN TARGET TRAP

Shooting a BB gun is fun, and the enjoyment can be greater for both youngsters and adults when there is a safe area for shooting at moving aerial targets. Because of the hazard of rebounding BB shot and broken glass and the litter made by shot up cans and bottles, impromptu targets are poor.

The Pete Rademacher BB Gun Trap Shooting Range made by Hamlin products throws rubber-like plastic break-away target disks in the air for outdoor moving target practice with BB guns only. From this practice, the elements of wingshooting can be learned, and brief instructions for this are supplied with the range.

Supplied in kit form, the range can be assembled without complications when the clear and complete instructions are followed. Assembly of the

range examined by National Rifle Association took about 15 minutes, with only a screwdriver and pliers needed. The range consists of a cloth shield stretched over a black painted tubular steel frame to protect the trap operator, an 8½-lb. red-top trap supporting table on legs of plated steel, a matching removable seat, and a box of 25 targets.

Unbreakable targets

The unbreakable targets are 1/8" thick and about 4" in diameter. They are made of 2 pieces, having a black outer ring and a 2 3/4" orange colored center. When hit by a BB shot, the 2 pieces separate, yet are easily put back together so the target may be used again.

The trap is adjustable for angle, elevation, and distance. Targets are easiest to hit when thrown as close as possible to vertical, since then the greatest target area is presented to the shooter. Also, the targets may not come apart if they are hit on a sharp angle.

In trial by National Rifle Association, the well-made range was found to be simple and easy to use. (5)

Wingshooting Practice Range

BB-Stop and Catcher for Learning Instinct Shooting

To hit targets moving through the air, it is necessary to learn to shoulder a shotgun with a smooth motion, following the target. When the gun is shouldered correctly, the sighting eye, focused on the target, sights along the gun barrel at the instant the gun is shouldered and cheeked. This technique can be practiced indoors, either 'dry' with an

empty shotgun or with a BB or pellet gun to interest a young beginner.

When practicing shouldering and sighting techniques of wingshooting indoors, with a fixed target and a spring-powered BB gun, a BB-stop of good size is needed so no BB will miss.

A $38\frac{1}{2}$ " wide by 29" high cloth BB-stop on a tubular steel frame, the Pete Rademacher Indoor Instinct Shooting Range, is a BB-stop with a catch basin into which spent BB's drop so they may be recovered for reuse. Its maker cautions that the stop is for use only with spring-powered BB guns, and indeed it is not sufficiently sturdy to stop pellets fired from more powerful arms, such as CO-2 gas-powered guns.

On the muslin cloth backing of the stop are 3 pieces of cloth, $19\frac{1}{2}$ " wide by $8\frac{1}{2}$ " deep, that hang from stitched attachments along the top so they overlap. These stop most of the BB's that miss the 4"-diameter hanging rubber-like target disk.

The principle is: starting with the BB gun ready to fire and held in a low gun ready position, as a shotgun might be carried in the field, the shooter then looks at the target disk, shoulders the gun, and fires without using the sights. With his eyes focused on the target, he is able to see the BB as it strikes the target. A miss also can be seen, but is more difficult to distinguish. Practice in this manner trains the shooter in the instinctive pattern of gun pointing.

A few BB-gun bullseye targets cut so they may be hung over the target are included with the BB stop for use in the usual sort of aimed bullseye target shooting. However, this puts them too high for convenient shooting from prone. They are best used shooting from other positions.

Following the clear and complete instructions, about $\frac{1}{2}$ hour was needed to assemble and set up the $7\frac{1}{2}$ -lb. BB-stop kit tested by National Rifle Association. Extended firing resulted in no damage to the material of the stop, and spent BB's fell regularly to the catch basin from which they were readily removed. (10)

The Indoor Instinct Shooting Range is satisfactory for its intended use of teaching reflexive response to a moving target. The ultimate proof of being a good shot comes on the trap range and in the field.

INDOOR TRAPSHOOTING

Trapshooting is a highly competitive, participant sport where par for the course is a perfect score. But it does not always take a perfect score to win, nor is it necessary to be a high scoring shooter to derive keen enjoyment from the game.

To break the flying target is the objective, and to improve your score is the constant incentive. If, you understand why you lost a certain target and can break the next bird by making the proper correction, you are well on your way toward improving your average.

"How far do you lead a certain target?" is a question that has been asked by new shooters of experienced shooters since the first clay targets were thrown from traps.

On every trap field shooters talk about being "behind that angle" or "under or over that straight-away," but reference figures have never been available showing the theoretically correct "leads."

To amplify and clarify the perennial question "How far should I lead a certain target?" Remington-Peters herewith pass along this recently developed data.

Question: Actually what does occur when you try to hit a clay target?

Answer: In a split second, you point the gun in the direction the target is moving; "swing-through" the target; pull the trigger, and thus start shot moving toward the point where your sight picture indicates the flight of the target.

If you miss, it is because you pointed the gun incorrectly. Either your horizontal or vertical "lead" was wrong, or both.

Even though you accidentally "over-lead" a sharp angle can still save the bird for you, providing your vertical "lead" is correct.

Horizontal and Vertical "Leads"

After calling "Pull" and immediately following the appearance of the target, the experienced shooter swings his gun in the direction the bird is moving and instantly computes how far ahead (horizontal), and how far above or below (vertical), he must align his barrel (take his sight-picture), to break the target.

Horizontal "lead" requires very little explanation. The newest student will understand that to hit a target in flight, the projectile (shot charge) must be placed in front of the objective - the target.

Vertical "lead" is not so well understood although it is obvious that at 20 yards along its flight the target is still climbing toward its apex,

and that this upward thrust must always be considered if the target is going to be scored as a hit.

Positioning the Gun

With head erect, bring the gun up to where the stock touches your cheek, and your eye lines up with your sight. Then slide your stock rearward and push your shoulder forward. The stock is always brought to the face - never the face to the stock.

When mounting the gun in this manner your line-of-sight is always directly over the center of the gun barrel, and the stock comes to the same position on your shoulder every time.

Positioning the Body

Lean or bend forward slightly with the left foot a short step in front of the right (if you are a right handed shooter). The left hand is well out on the fore-end to support the barrel, but is not strained or stiff. Your feet never move after you get into position. Swing the body from the ankles and hips. Be relaxed. Development of an easy position for the shooting stance is of the utmost importance.

Pointing the Gun

In trapshooting DO NOT aim AT the target. You either point ahead of the target or swing the muzzle of your gun through the target, pull the

trigger and follow-through with your swing. The follow-through is as important in trapshooting as in golf.

Every target presents a different situation which tends to make trapshooting a fast game, appealing to folks who want action. Only through practice and experience can you know what you should do in the split second when you swing in the direction of the flying target and pull the trigger.

Hints for Better Scores by New Shooters at Trap

At the firing point concentrate on one thing only, to break the target. Avoid any attention to what your squad mates may be doing.

If you miss, forget it. Your competitors likely will also be missing an occasional target. Never give up, as most races are won by a single target margin.

Don't peek. Always keep your cheek tight on the gun stock, and break your targets one at a time. Don't count up your score until the event is finished.

If you shoot from your right shoulder, control of the gun rests in the right hand and arm, with the left hand doing not much more than supporting the barrel. Left siders, of course, reverse this process. As you gain experience, you will point your gun as easily as you point a finger.

After pulling the trigger, continue to swing-through the target. If you stop your swing when you pull, or before, it is a certain miss.

Observe the best shooters. Study their easy, relaxed positions. Watch body and gun move as a single unit, then by dry-firing at home in front of a full length mirror smooth up your own stance; your gun positioning; and your swing.

LESSON PLAN FOR TWO WEEK PERIOD

General familiarity with types of firearms, safety rules and process of aiming and discharging a gun quickly and accurately can be taught in a physical education class in ten fifty minute class sessions by using a BB gun trap shoot. A lesson plan for a complete cycle is shown below.

LESSON PLAN FOR TWO WEEK PERIOD
FOR TEACHING SAFETY, SPEED AND ACCURACY USING THE
BB GUN TRAP SHOOTING PROGRAM

DAY	ACTIVITY	OBJECTIVES	MATERIALS
1 Monday	Bring in various guns and shells and tell how they operate. Refer to (Fig. 1-2), pages 28,29.	To have the student demonstrate his recognition of different types of firearms and explain their operation.	Shot guns BB gun Rifle BB Rifle cartridge Shot gun shell Refer to (Fig. 1-2), pages 28,29.
2 Tuesday	Safety talk with student participation. Students demonstrate correct method of carrying a gun, loading and unloading a gun, and crossing fences.	To have the student list different rules of safety and explain the reasons for the rules	Refer to pages 10-18.
3 Wednesday	Lecture over parts of the trap house and the procedure they will use. Refer to (Fig. 3-5), pages 30-32. Demonstrate by instruction step by step. Explain range procedure.	To have the student show his mastery of the BB gun and trap shoot by actual operation.	BB gun trap range Trap table Trap house Refer to (Fig. 3-4), pages 30, 31.
4 Thursday	Review of procedure student participation on the range. Refer to (Fig. 5) page 32.	To have the student demonstrate the level of skill he has achieved.	" " " "
5 Friday	" " " "	" " " "	" " " "

DAY	ACTIVITY	OBJECTIVES	MATERIALS
6 Monday	Film "Shooting With the Masters"* 30 minutes. Discussion of range etiquette and strategy.	To have the students show his knowledge of range etiquette and strategy by taking part in an active class discussion.	Film Film projector and screen.
7 Tuesday	Student participation on the range.	To show student mastery of speed and accuracy by actual firing at targets.	BB gun Trap range Trap table Trap house
8 Wednesday	""	""	""
9 Thursday	Competition between groups.	""	""
10 Friday	Father and son shoot. In the evening.	""	""

* "Shooting With The Masters" 30 minute film, National Rifle Association.
1600 Rhode Island Avenue N.W., Washington D.C. 20036.

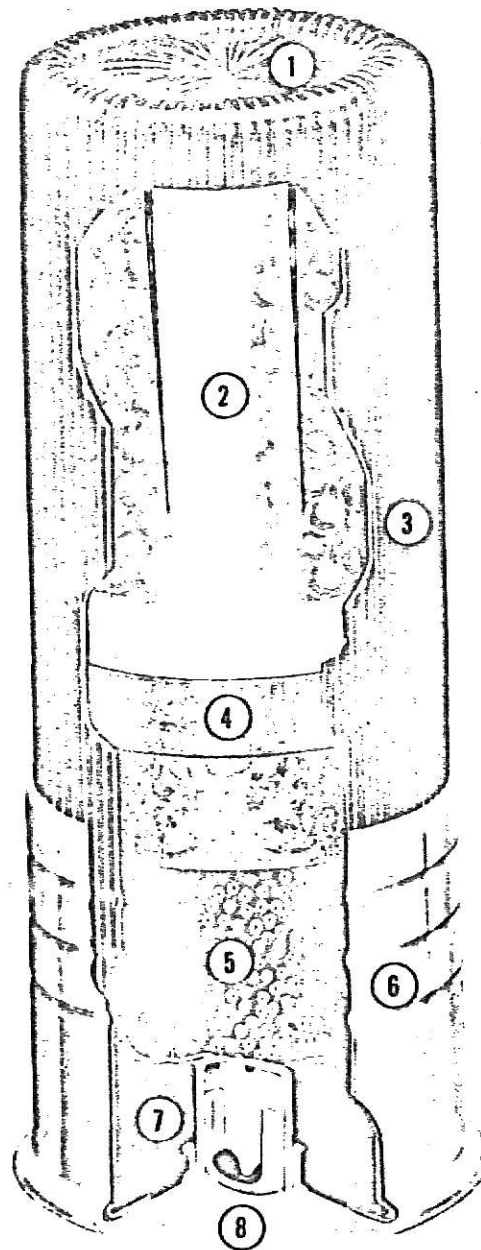


FIGURE 1

INSIDE VIEW OF COMPRESSION-FORMED SHOT SHELL

An inside look at the compression-formed shot shell. 1. Folded crimp. 2. Shot enclosed in plastic shot protector. Uniform, polished shot. 4. Gas sealing and cushioning wads. Molded fiber that cushions the shot and seals the powder. 5. Smokeless powder. Clean, progressive burning. 6. Metal head. 7. Base wad. 8. Primer.

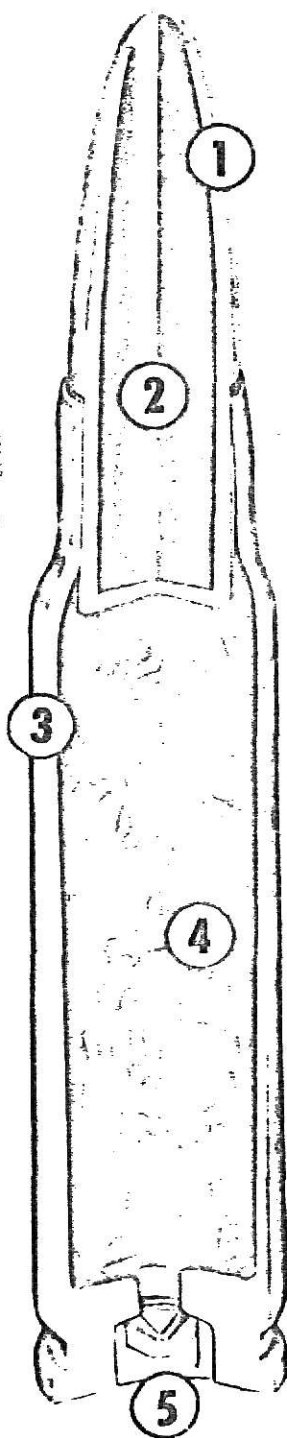


FIGURE 2

INSIDE VIEW OF CENTER-FIRE CARTRIDGE

Figure is a center fire cartridge. 1. Bullet jacket. 2. Lead core. 3. Case. 4. Powder. 5. Primer.

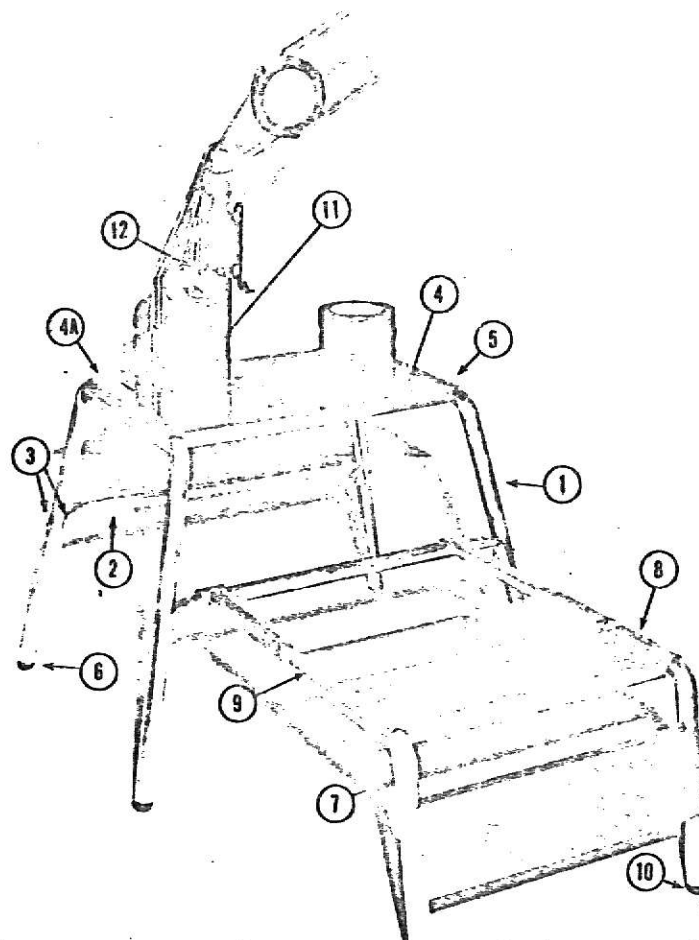


FIGURE 3

ASSEMBLY AND OPERATION OF TRAP TABLE

Trap Table Assembly: Fasten legs (1) to braces (2) with bolts and nuts (3). Attach table slat (4) and slat (4-A) to leg-brace assembly with metal screws (5). Be sure to put slat with holes for trap on left side as shown in illustration. Place plastic caps (6) on bottom of table legs. Next put bench slats (8) on bench legs (7) with metal screws (9). Place plastic caps (10) on bench legs. Screw trap (11) to trap table slat (4-A). Attach trap target thrower arm spring by turning threaded spring nut 4 turns--then attach bottom of spring to anchor hook (12). Hook curved ends of bench legs over brace on trap table and trap is ready to use.

Operating Trap: Operator will find it best to sit with legs under trap table. Target should be inserted in trap when slinger arm is in upright position. Trap is cocked by pulling slinger arm down until it catches on trap sear. Once slinger arm with target inserted is in cocked position, operator can release by depressing trigger--when shooter calls "Pull" for the target. As soon as target is thrown the operator inserts next target and recocks slinger arm. With a little practice operator can easily keep up with calls for target release by shooter. Operator should keep head back from path of moving slinger arm.

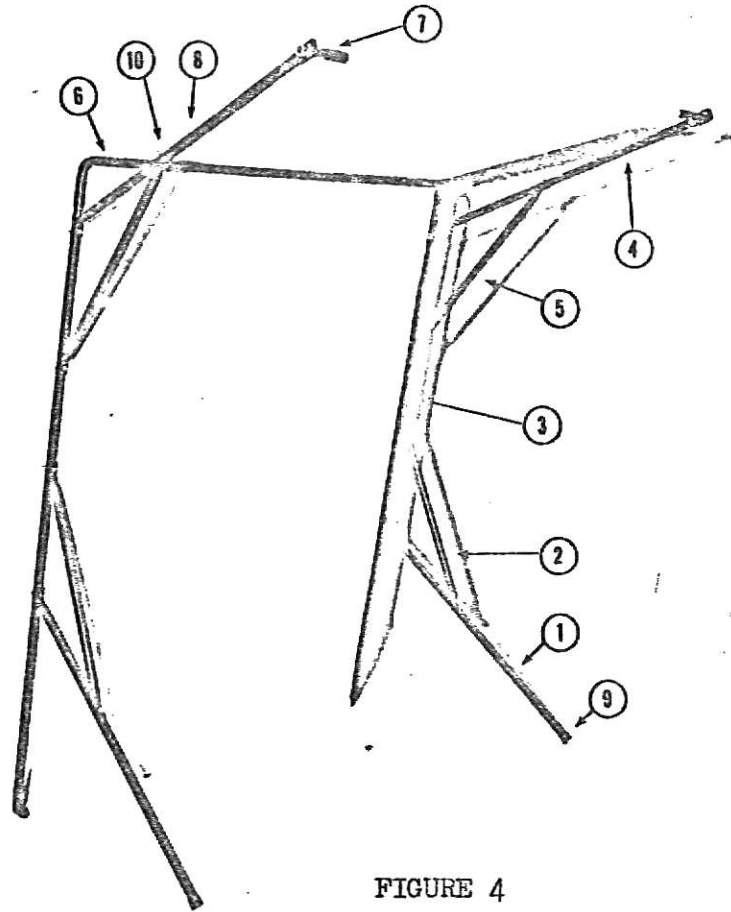


FIGURE 4

ASSEMBLY AND OPERATION OF TRAP HOUSE

Trap House Assembly: Attach legs (1) to main uprights (3) with bolts and wing nuts (10). Next attach leg braces (2) to legs (1) and main uprights (3) with bolts and wing nuts (10). Attach top arms (4) and top arm braces (5) to main uprights (3) with bolts and wing nuts. Place one rear cross bar (6) through bottom loop in canvas (8) and slip onto bottom ends of main uprights (3). Place second rear cross bar (6) over top ends of main uprights (3). Put front cross bar (7) through loop in top of canvas and bring canvas up and over top rear cross bar (6). Slip front cross bar (7) into holes at the ends of top arms (4). Place plastic caps on legs (1) and ends of top cross bar (7). Note: House will sit at slight angle to protect trap operator from stray pellets and falling targets. To store--Slip front cross bar (7) out of holes at ends of top arms (4). Pivot top arms and legs inward.

Range Set-Up: Place trap house about 12 feet from a predetermined shooting line with open side away from shooters. Place trap table and bench inside house so trap operator is facing away from shooters. Make certain that trap is slightly in front (about 6 inches) of upper level of house so that targets will have clear, vertical flight. Shooters should take position directly back of trap house and not off to either side. This position will give best straight-on view of vertically flying target and maximum protection for trap operator. More skilled shooters can be handicapped by moving one, two, or three, or more feet back of shooting line.

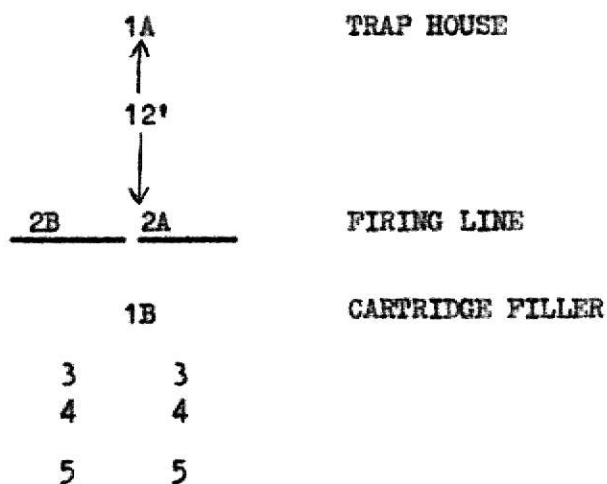


FIGURE 5
ROTATION METHOD USED ON RANGE

Student number one from group A will be operating the trap house when the target is set, he will call out "set". He will remain there until each student shoots five times each.

Student number one from group B will fill the extra cartridge with BB's.

Student number two from each group stands with gun pointing in the air at the firing line. When he is ready to shoot he will call out "pull".

When the trap house runs out of discs, student running trap will raise his hand and then the instructor will blow a whistle. At this time all shooting stops, guns held in the air and numbers three, four and five pick up discs.

At this time, number one comes to the firing line and number two gives his gun to number one. Two A then goes to the trap house and two B goes to the cartridge filler. Students three, four, and five return discs to the trap house and then move up one number in their respective lines.

CONCLUSION

General public opinion and the opinion of the National Safety Council is that some type of firearm safety should be taught to the young people, the future hunters and gun owners of tomorrow.

Through this study, the BB gun trap shoot provides an effective, inexpensive method of introducing firearm use and safety to young people as well as the older hunter who wants to improve his speed and accuracy. The program is also very adaptable to a class schedule and can be used with a large group of people. The program would not only be effective at a local level but also as a national program.

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INSTINCT SHOOTING: ITS PLACE IN THE
TEACHING OF SAFETY AND ACCURACY WITH GUNS AND FIREARMS

by

DANIEL JOSEPH LANKAS

B. A., Kansas State University, 1969

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Physical Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1970

In 1956, Pete Rademacher, former boxing champion and sportsman was exposed to instinct shooting and learned the basic fundamentals of the system. Pete Rademacher has developed and refined the instinct shooting program to its nationally-known fame of today.

This system does away with sighting, triangulation, deep breathing, trigger squeeze and position. It eliminates the thought process (reaction time) and substitutes an automatic reflex action accounting for automatic adjusting to moving targets without looking down the barrel to lead.

With the aid of the Hamlin/McNeil Corporation of Akron, Ohio, the program was developed for manufacturing. The complete BB gun trap range is a complete shooting range and is comprised of a trap, trap table, bench and twenty-five reusable plastic "Break-away" targets and a trap house at a selling price of thirty-five dollars.

The instinct shooting method has won the endorsement of the United States Army and numerous sportwriters as a means of teaching inexperienced shooters quickness and accuracy. The method also has won approval for helping older shooters detect and correct their errors.

Firearm safety can be taught along with the instinct shooting method. Students must be educated in firearm safety at home as well as in the field. Points concerning (1) handling, (2) cleaning, (3) firing, (4) storing, and (5) accident prevention are covered in this program.

The indoor instinct shooting range is satisfactory for its intended use of teaching reflexive response to a moving target. The ultimate proof of being a good shot comes on the trap range and in the field. Trapshooting is

a highly competitive, participant sport and requires practice and skill in (1) horizontal and vertical leads, (2) positioning the gun, (3) positioning the body, and (4) pointing the gun.

A flexible, daily, fifty-minute lesson for a secondary school physical education class can be built around the BB gun trap shoot program. Objectives of the class would include student familiarization with different types of firearms, safety rules and practices, use of the BB gun and trap shoot range, etiquette and strategy and improvement of shooting skills.