

CUB SCOUT SHOOTING SPORTS ACTIVITIES

BB Gun Shooting – Cub Scouts

BB gun shooting is an exciting, worthwhile activity for Scouts, and it is one of the most popular program activities held at camps. BB gun shooting provides fun and adventure, yet also teaches skills, discipline, self-reliance, and sportsmanship. We will teach Tiger Cubs with their adult partners, Cub Scouts, Webelos Scouts, and AOL Scouts how to use BB guns safely. (*Lion Cubs are NOT allowed to use BB guns.*)

Intelligent, supervised use of BB guns is consistent with the principle of “safety through skill.”

Approval has been given for BB gun (defined as a smoothbore spring-piston or air rifle propelling shot known as “BBs”) safety and marksmanship programs in district or council Cub Scout programs. **The barrel velocity must be 350 feet per second maximum.** Tiger Cubs and Cub Scouts are not permitted to use any type of handgun or any other type of or firearm.

The use of pellet air rifles is restricted to Webelos Scouts in a long-term camp setting and qualifies when in compliance with the following:

- The air rifle pellet gun range meets or exceeds BSA and NRA recommendations and appropriate BSA Outdoor Programs/Properties design standards. The range is on council-owned property.
- All air rifles are in good repair and are provided. All air rifles used in BSA shooting sports have a trigger pull in excess of 2.5 pounds and are tested with a 2.5-pound weight or scale at least once a week while in use. If any trigger mechanism fails, the air rifle is immediately removed from service. Documentation of the tests is maintained.
- All air rifles (CO₂, pump, break barrel, etc.) are limited to single-shot designated for target shooting, velocity of 500 to 540 feet per second, and energy levels not to exceed 7.5 joules.
- Safe, separate and locked storage (can be the same building) is provided for pellet guns, pellets, and CO₂ cylinders and bulk tanks.
- Air rifle propellant is limited to CO₂ cylinders or air compressor/scuba tanks. Refilling is conducted by qualified adults with appropriate controls. If scuba tanks are used, each tank must be visually inspected annually and hydrostatically tested every five years by a qualified technician.

A Brief History of BB Gun

In ancient history, blowguns began to appear in many different parts of the world. Although crude, these primitive devices were very accurate. They were made from bamboo or other hollowed-out woods.

A blowgun is a tube into which a hunter blows to shoot a projectile out the other end. This idea was transferred into gun form somewhere in the 1500s. The bellows gun, invented around 1580, is the earliest known air-powered gun.

A few decades later, the first pneumatic (pump-up) air gun was created in France for King Henry IV. The nobility usually owned these early guns, since they were too expensive for commoners.

In the late 1700s, some units of the Austrian army were equipped with air rifles.

In America, records show that in the 1800s, Lewis and Clark had an air gun for hunting and impressing the native Americans. The native Americans called it “the smokeless thunder stick.”

In 1885, in the United States, the Markham Air Rifle Company became one of the first companies to sell BB guns. These pneumatic rifles eliminated bullets and used a small pellet the size of a ball bearing, soon to be called a “BB.”

A few years later, a company that sold steel windmills decided to also sell BB rifles. By 1895, this company had stopped producing windmills and made air rifles full-time and changed the company name to Daisy.

Daisy’s guns were mostly made of steel, which improved the gun’s strength and design. The Daisy air rifle became popular very quickly, and within five years Daisy had sold 250,000 BB guns. Soon, Daisy bought out all of its competition.

Daisy also promoted to youth by making special BB guns that related with popular historical characters like Davy Crockett.

In 1984, the Olympic Games featured air guns for the first time.

Today, BB guns are still being produced in both rifle and pistol forms and are very popular among all age groups.

Leadership

BB gun shooting must be conducted by trained, qualified, on-site rangemasters who direct the operation of the range program and BB gun shooting instruction. The ratio of BB gun rangemasters to shooters is 1-to-8 on the firing line. To qualify as a BB gun rangemaster, the rangemaster must be at least 18 years old and be trained by a National Camping School-trained shooting sports director or a National Rifle Association rifle instructor.

The BB gun rangemaster also must be registered with the Boy Scouts of America.

The local council issues a Training Course Pocket Certificate, No. 33767, and keeps a record of those who have been certified. BB Gun Rangemaster, course code CS 32. Certification must be renewed every two years.

Training BB Gun Rangemasters

This training is conducted by a National Camping School Shooting Sports Director. This training should be conducted on a BB gun range. Include a practical exercise on how to set up a BB gun range, referencing the diagram in this appendix for the range layout, and have the participants walk through the process of running the range.

The outline to train BB Rangemasters can be found in the appendix on page 126.

Training Cub Scouts

The objective is to teach Cub Scouts how to use a BB gun safely, to teach basic BB gun shooting skills, and to have fun. They should have the opportunity to fire a BB gun during the first orientation period. This activity is not intended necessarily to produce expert marksmen.

The instructor must always be mindful of their responsibility to make safety thoroughly understood before, during, and after instruction and practice. At the same time they must have warmth, patience, and understanding for the Scout who finds the skill difficult to learn.

Teaching Tips

The coach-pupil method is effective for all types of skill training and is particularly effective in shooting sports. To put this method into practice:

1. Put the BB gun in the Cub Scout's hand as soon as possible so they can understand the BB gun while the basics are explained.
2. Group participants into pairs (Scout and parent/guardian would be ideal).
3. The instructor demonstrates the activity or action to be followed before the whole group. When demonstrating techniques, be sure to do them correctly. The instructor then circulates among the pairs giving a word of advice or assistance, recognizing good work, correcting errors, and determining how well the participants understood the method.
4. The Scout practices while the parent coaches. Let Scouts shoot the first round. At a predetermined signal, reverse the roles. Progressively, participants are learning by observing, by doing, and by coaching.
5. Use a positive approach. Use praise sincerely. Before making a correction, question the fault to find the cause. Show the youth what they are doing wrong.

6. Avoid long discussions on the parts of the equipment used. Teach just enough so participants will know how to safely use the equipment.
7. Allow each Scout to feel the satisfaction of hitting a target as quickly as possible.
8. Scouts do not have to load one BB at a time and shoot before loading another BB. They can load at one time all the BBs they are given.
9. In the following outline, "Cub Scout BB Gun Shooting Training," the time needed to conduct each section is not indicated because it will vary depending on the number of Cub Scouts participating.

Cub Scout BB Training—Youth

Section I

A. Safety Guidelines, page 55

B. Equipment, page 61

1. Review diagram of Spring-Piston Gun (*Ensure to cover stock, butt, trigger, trigger guard, forearm, muzzle, rear sight, and safety.*)
2. Targets (Refer to **Cub Scout Shooting Sports Guide**, No. 510-322, in Appendix 20 of this guide)
3. Maintenance
 - The BB Gun should be unloaded when stored.
 - The safety mechanism should be engaged.
 - The BB Gun should be protected from scratches or scraps from other guns.
 - The BB Gun should be locked or otherwise secured in a safe, dry location, separate from ammunition.

Section II

A. BB Gun Shooting Basics, page 56

1. Eye Dominance, page 56
2. Shooting Shoulder, page 56
3. Breathing, page 56
4. Sight Alignment, page 56
5. Trigger Squeeze, page 56
6. Follow-Through, page 57

B. BB Gun Shooting Practice Fun, page 59

Section III (optional activities)

A. Shooting Positions, page 57

1. Free-Arm Standing Position, page 57
2. Bench Rest Position, page 57
3. Prone Position, page 58
4. Sitting Position, page 58

B. BB Gun Shooting Games and Activities, page 59

C. Cub Scout Awards (Refer to **Cub Scout Shooting Sports Guide**, No. 510-322, in Appendix 20 of this guide)

Tiger Cubs and BB Gun Shooting

Tiger Cubs and their adult partners may participate in BB gun shooting activities. The adult partners must be included in all shooting activities. Each Tiger Cub must be paired with their adult partner before being allowed to shoot. In most cases, when Tiger Cubs and their adult partners participate in BB gun shooting, it will be at a day camp.

Keep in mind that youth of this age have very short attention spans (20 to 30 minutes maximum), and tire easily. They probably have little previous experience working as a group and may require more time to understand how the range operates. Tiger Cubs have a wide range of ability and experience levels, so be ready for anything!

Safety Guidelines

When training youth to shoot, be sure to have proper equipment, secure and safe ranges, and clear safety instruction.

Gun safety is a simple but continuous process. Youth must first learn about safe gun handling. Safe handling skills are developed through practice. The most important safety element is attitude. All the safety knowledge and skills are of little value unless they are used. Being safe means consciously keeping a BB Gun under control.

Before handling any gun, a Scout must always get permission from their parent or guardian. If this is their first BB Gun shooting experience, they should sit down with an adult and discuss under what circumstances the gun can be handled. They must understand that the BB gun is not a toy.

Before using a gun:

- Always get permission from your parent or guardian.
- Always have an adult present when you use a gun.
- Know how the gun works and how to use it.
- Always be sure of your target and what is beyond the target.
- Always wear eye protection.
- Never reuse BBs.

These basic rules apply to handling a BB Gun under any circumstances:

1. **Always keep the gun pointed in a safe direction.** This is the primary rule of gun safety. “Safe direction” means the gun is pointed so that even if it were to go off, it would not cause injury or damage. The key to this rule is to control where the muzzle or front end of the barrel is pointed at all times. Common sense dictates the safest direction depending on circumstances.
2. **Always keep your finger off the trigger until you are ready to shoot.** When holding a gun,

rest your finger along the side of the gun or the trigger guard. Until you are actually ready to fire, do not touch the trigger.

3. **Always keep the gun unloaded until ready to use.** When you pick up a gun, carefully point it in a safe direction. Engage the safety, if possible. Then, while keeping your finger off the trigger, open the action and look inside the chamber(s) to make sure it is clear of ammunition. If the gun has a magazine, remove it before opening the action and make sure it is empty. If you do not know how to open the action or inspect the chamber(s), leave the gun alone and get help from someone who does.
4. **Know how to use a gun safely.** Before handling a gun, learn how it operates. Know its basic parts and how to safely open and close the action. Know how to remove ammunition from the gun or magazine.
5. **Be sure the gun is safe to operate.** Just like other tools, guns need regular maintenance to remain in good working order. Regular cleaning and proper storage are part of the gun’s general upkeep. If there is any question about a gun’s ability to function, then do not use it. Get someone to fix it!
6. **Use only the correct ammunition for the gun.** Only the BB designed for a particular BB gun can be fired safely in that gun. Do not shoot the gun without loading the proper ammunition.
7. **Wear eye protection.** Always wear eye protection. Shooters and instructors should wear approved safety goggles at all BB gun ranges. BBs may ricochet.
8. **Never use alcohol or drugs before or when shooting.** Alcohol or any other substance likely to impair normal mental or physical function must not be used before or while handling or shooting guns. This may include prescription medications.
9. **Most guns have a mechanism called a safety** that helps prevent the gun from accidentally firing. However, a safety is a mechanical device, which can and will fail. Shooters must be trained that the safety mechanism is not a sure, safe way to prevent a gun from firing. Many accidents have occurred because shooters have relied on the safety mechanism to work.
10. **Although not mandatory for BB gun shooting, ear protection may also be worn.** Shots fired from guns are loud, and the noise could damage the hearing of some shooters.
11. **Know your target and what is beyond the target.** Be absolutely sure to identify the target beyond any doubt. Equally important, be aware of the area beyond the target. Never fire in a direction where there are people or where any other potential for mishap might exist. Think first. Shoot second.

12. **Store guns so they are not accessible to any unauthorized person.** Deciding where and how to store guns and ammunition depends on several factors and include security and accessibility. Safe and secure storage means untrained individuals (especially children) are denied access to guns and ammunition.

What Causes Gun Accidents?

Most air gun accidents are caused by ignorance and/or carelessness.

- Ignorance: A lack of knowledge
- Carelessness: A failure to use knowledge

Safety Reminders

What should a Cub Scout do if they find a gun in another place?

- STOP!
- DON'T TOUCH!
- LEAVE THE AREA!
- TELL AN ADULT!

Sun Safety on the Shooting Range

The American Academy of Dermatology advises the following protection tips against damaging rays:

- Limit exposure to sun between 10 a.m. and 4 p.m. when the sun's rays are the strongest.
- Generously apply sunscreen with a sun protection factor (SPF) of at least 15 and reapply it every two hours when outdoors, even on cloudy days.
- Wear protective, tightly woven clothing, such as a long-sleeved shirt and pants.
- Wear a hat with a wide, 4-inch brim and sunglasses with UV protective lenses.
- Stay in the shade whenever possible.
- Avoid reflective surfaces, which can reflect up to 85% of the sun's damaging rays.

BB Gun Shooting Basics

Eye Dominance

Before shooting a gun, the participants should determine which eye is dominant. Just as people are either right- or left-handed, one eye is more dominant than the other. Discovering which eye a shooter favors is important because it could determine on which side the gun is held.

To find which eye is dominant, have participants extend both arms in front of them and form a small hole with their thumbs and index fingers. Instruct them to look at a distant object through the opening and then pull their hands back to their face. The eye that is in line with the object is dominant.

Assign youth, leaders, and parents in pairs to assist each other, then have them check with the rangemaster.

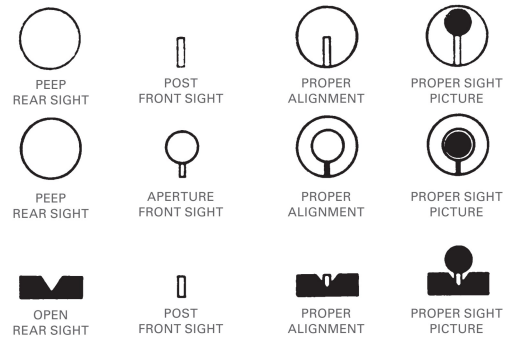
Shooting Shoulder

It is recommended that a shooter use the shoulder that is on the same side of the body as the dominant eye. If the right eye is dominant, place the firearm against the right shoulder. If the left eye is dominant, use the left shoulder.

Breathing

When shooting, stop breathing before firing a shot. Breathing causes the body to move and makes it difficult to maintain a steady sight picture. Before firing, relax and get comfortable. Then exhale and stop breathing. This technique will help shooters aim by reducing the body and rifle movement in relation to the target. Do not stop breathing for longer than eight to 10 seconds while aiming at the target. If you are not able to shoot within that time, stop, take a breath or two, and repeat the process.

SIGHTING CHART



Sight Alignment

The shooter must learn proper sight alignment. This is the relationship of the front and rear sights to the eye. The shooter's dominant eye must be lined up with the front and rear sights, and the sights must be positioned so the front sight device is aligned properly with the rear sight.

Proper sight alignment is a key to accurate shooting. Any misalignment of the front sight with the rear sight introduces an angular error that is multiplied with distance.

A correct sight picture is obtained by achieving the proper alignment and then putting the aligned sights into their proper relationship with the target.

Focus should be on the front sight.

Trigger Squeeze

Trigger squeeze is the term used to explain how pressure is applied to the trigger. Some other terms commonly used are trigger pull, trigger control, trigger press, and trigger movement. While all these terms are correct, the preferred term is trigger squeeze because it accurately describes the smooth application of pressure required.

When ready to begin squeezing the trigger, the index finger should be on the trigger so the trigger is about halfway between the tip of the finger and the first joint.

The trigger must be squeezed straight back in a smooth, continuous manner without disturbing the sight alignment. Once trigger squeeze has begun, keep squeezing smoothly and continuously—do not speed up or slow down or apply pressure in a start-and-stop manner. Use the same type of pressure that would be used to squeeze a drop of liquid from a medicine dropper—a gradual, steady application of pressure until the drop finally falls. Just as it would be impossible to predict the instant the drop of liquid will fall, it should be impossible to predict the precise instant the gun will fire. Each shot should come as a surprise.

For best results, the trigger squeeze should be done as the shooter holds steady on the correct sight picture.

Follow-Through

The shooter must also master proper follow-through. Follow-through means to continue to do everything that was being done at the time the shot was fired. In other words, keep aiming until the BB hits the target.

The idea is to prevent any unnecessary movement before the projectile leaves the barrel. Because an air gun takes longer to send a projectile out of the barrel, proper follow-through is particularly important.

Shooting Positions (All positions are described for right-handed shooters. Reverse for left-handed shooters.)

Proper body position is essential to achieve a good shooting score. When learning any shooting position, these basic steps must be followed:

1. Study the position.
2. Practice the position without a gun. (Learn to put the feet, legs, body, head, and arms in the correct position without holding a gun.)
3. Practice the position with a gun.
4. Align the position properly with the target.
Adjust the position so the gun points naturally at the target.
5. Shoot from the position.

Free-Arm Standing Position

Body position:

- **Feet.** Stand with feet shoulder width apart and body weight evenly distributed.
- **Body and head.** Keep the body and head comfortably erect.
- **Face.** Place your cheek against the stock so you are looking down the barrel.
- **Knees.** Keep the knees straight but not locked.
- **Left arm.** Rest the left arm against the rib cage to support the rifle.

- **Left hand.** Place the left hand under the fore-end of the rifle to support the weight of the rifle.
- **Right hand.** Grasp the rifle grip with the right hand.
- **Right shoulder.** Position the rifle butt against the right shoulder so the sights are at eye level.



**FREE-ARM
STANDING POSITION**

Bench Rest Position

Body position:

- **Body & Feet.** Seated at the bench. Body leaning forward slightly, and feet flat on the floor.
- **Head.** Keep the head comfortably erect.
- **Face.** Place your cheek against the stock so you are looking down the barrel.
- **Left arm.** Rest the left elbow against the bench to support the rifle.
- **Left hand.** Place the left hand under the fore-end of the rifle to support the weight of the rifle.
- **Right hand.** Grasp the rifle grip with the right hand.
- **Right shoulder.** Position the rifle butt against the right shoulder so the sights are at eye level.



BENCHREST POSITION

Prone Position

Body position:

- **Body.** Lie on the ground, facing the target and angles slightly left.
- **Right knee.** Slightly bend the right knee.
- **Right leg.** Draw the right leg up, keeping it parallel to the back, and place the right foot on the ground.
- **Face.** Place your cheek against the stock so you are looking down the barrel.

- **Left elbow.** Extend the left elbow forward.
- **Left hand.** Hold the fore-end of the rifle with the left hand.
- **Right hand.** Grasp the rifle grip with the right hand.
- **Right shoulder.** Position the rifle butt against the right shoulder so the sights are at eye level.



PRONE POSITION

Sitting Position

Body position:

- **Body.** Sit cross-legged at a 45-degree angle to the line of fire.
- **Feet.** With the sides of the feet flat on the ground, rest the calves on the upper sides of the feet.
- **Elbows.** Rest both elbows on the legs just in front of the knees.
- **Face.** Place your cheek against the stock so you are looking down the barrel.
- **Left hand.** Hold the fore-end of the rifle with the left hand.
- **Right hand.** Grasp the rifle grip with the right hand.
- **Right shoulder.** Position the rifle butt against the right shoulder so the sights are at eye level.



SITTING POSITION

Basic Shooting Activity

This shooting activity covers many of the basic fundamentals needed in shooting a BB gun. Pair Scouts and adults as shooters and coaches.

1. Greet the participants.
2. Bring the participants onto the range.
3. Show the gun and say “This is a BB gun.”
4. Point to the barrel and say, “This is the barrel.”
5. Point to the muzzle and say, “This is the muzzle. It is the end the BB shoots out.”

Always keep the gun pointed in a safe direction.

6. Point to the action and say, “This is the action. It has the trigger—the part you squeeze to shoot.”

Always keep your finger off the trigger until you are ready to shoot.

7. Say, “The action also has the chamber where you put the BB to load the gun.”

Always keep the gun unloaded until ready to use.

8. Point to the stock and say, “This is the stock.” Then demonstrate how to hold the gun: Put the butt of the stock against your shoulder, hold the grip with the hand of the same arm, keeping your finger off the trigger and pointed in the same safe direction as the gun. Hold the forearm with your other hand.
9. Say, “You will use the free-arm standing position like this.” Demonstrate the position that is recommended for your range.
10. Have everyone on the range put on eye protection, either safety glasses or goggles.
11. Say, “Shooters, please move forward at my command.” Then give the command, “ON THE FIRING LINE.”
12. Assume the shooting position.
13. Have shooters pick up their guns, keeping them pointed in a safe direction downrange.
14. Have shooters again assume the shooting position, this time with the gun, and look through the sights. Explain how the sights are used.
15. Once all shooters know how to assume the shooting position and how to properly hold the gun, explain and demonstrate how to charge the gun.
16. Have shooters load BBs into the chamber. (Explain further.) Close and ready the gun.
17. Return to your shooting position. Note that everyone can make ready and load the gun.
18. Give the command “READY ON THE FIRING LINE.”
19. When shooters are in the ready position, give the command “COMMENCE FIRING.” Shoot all your five shots.
20. Watch for safety and help as needed.
21. Give the command “CEASE FIRE.” Everyone is to stop shooting.
22. Give the command “CLEAR ALL GUNS.” Have everyone clear their gun.
23. Explain and demonstrate how to make a gun safe. Explain how to ground the gun for position and range.

BB Gun Shooting Games and Activities

A variety of games or activities can be done with BB gun shooting skills. Different ranges could be set up to play a particular game or courses could be set up where

participants go from station to station. BB gun shooting games and alternate activities work well, especially when youth are in camp for more than one day or if a council sponsors a special BB gun shooting camp for Cub Scouts. Shooting games are designed to improve shooting skills. Remember—safety is a must.

The following games and activities are appropriate for Tiger Cubs with their adult partners, Cub Scouts, Webelos Scouts and Arrow of Light Scouts.

Fun Target Activities

- Make 8.5-by-11-inch targets with several squares on each. Put a number in each square. Shooters can see the squares but not the numbers in them. After firing at the page, the shooter adds up the numbers from the squares that their BBs hit. The highest score is the winner.
- Place dots on a target, then shoot at the back side of the target. Count the score from the dotted side.
- Suspend table tennis balls in a box to use as targets.
- Create a target by taping round candy to the back of a box. When the target is hit by the BB the candy shatters.
- Set up balloons as targets.
- Set up crackers as targets. Have participants shoot at the narrow edges of the crackers.

Tic Tac Toe

Place three rows of three balloons on a target mat. Divide the group into two lines and have them stand in a single file 20 feet from the target. At the signal to shoot, each shooter will shoot one BB and step back. The second and each succeeding person will shoot one at a time. The first team to break three balloons in any line is the winning team.

BB Gun Shooting Practice Fun

A practice station is a simple, basic BB gun shooting range, but is very fun for the boys. Many Cubs have few opportunities to shoot guns, so having the opportunity at a council camp or event to practice is a great experience for them.

Discuss and emphasize the primary rules of proper gun handling. Point out that all guns are potentially dangerous.

Practice the following skills:

- Have participants always point the muzzle in a safe direction and to be sure of their target.
- Show how to handle a gun while standing and when walking.
- Demonstrate and practice various gun-handling situations—how to pass the gun to another person, how to cross a fence with it, how to store it in an automobile, and how to get in and out of a boat

with it. Use real or artificial situations, but use the Scouts as demonstrators and require them to practice with others watching.

- Review sight pictures and sight alignment. Give reasons for sighting in a gun before shooting. Tell how little mistakes in sight alignment cause big misses on the target.
- Explain sight adjustment—move the rear sight in the direction you want the BB to go.
- Have relays, prone position without magazine, using sling or sandbag and paper targets.
- Explain the use of BB dishes.
- Demonstrate sitting, kneeling, and standing shooting positions.
- Shoot five rounds per Cub Scout using the standing position.

Range Layout

A sample outdoor BB Gun range layout is included at the end of this section. Safety is a primary concern when operating a BB Gun range, and all safety rules must be followed.

If at all possible, the range should be laid out so shooting is done in a northerly direction so shooters are never facing the sun.

Shooting on a Safe Range

A safe range must have three things:

1. A safe area.
2. A safe distance
3. A safe backstop

1. **Safe area.** Whether inside or outside, be sure the range is set up so no one can accidentally walk in front of the firing line. When indoors, make sure doors and side windows are locked. When outside, make sure to always shoot in a safe direction. In either case, never point the gun toward windows or where people might walk.
2. **Safe distance.** Maintain at least 15 feet between the shooter and the target.
3. **Safe backstop.** A backstop to trap BBs and hold the target can easily be made from a large cardboard box. Do not shoot at a hard surface that could cause a ricochet. If using a tarp as a backstop, it is important to verify that the tarp is made of a heavy canvas material and not a thin plastic canvas material. It is best to hang the material at a 45-degree angle. Bales of straw also work well.

Important! Arrange facilities so there is no possibility of non-participants inadvertently walking behind the targets while shooting is in progress! No one may stand directly in front of the target while shooting is in progress!

Inflatable Ranges (Only commercially manufactured equipment is allowed to be used.) *(A BSA certified BB Gun Rangemaster or individuals specified in NCAP standard SQ 407 must supervise the range.)*

If an inflatable range is utilized, appropriate side and rear boundaries must be in place. (Minimum 10 ft. on the side, 15 ft. behind the target zone and 15 feet behind the shooting line.) There must also be a distinct gated entrance to access the shooting line. *(Manufacturers guidelines must always be followed if they are more stringent.) (You may only use manufacturers recommended equipment.)*

Range Operation Rules

When operating the range, the safety rules must be remembered and constantly obeyed.

1. If the range is outdoors, fly a red range flag whenever the range is in use. The flag should be large enough and high enough on a flagpole to be seen from all approaches to the range.
2. Shooters reporting to the firing line will be issued a specific number of BBs and a BB dish that will be placed in plain sight at the firing point.
3. Shooters will be instructed that in case of a misfire the BB gun will be kept pointed at the target. The instructor will be called. If the malfunction is due to a broken part, the gun, after being cleared of BBs, will be removed from the firing line.
4. BB guns must be left with the action open or at half-cock, in the case of lever action spring-piston air guns, except when the shooter is in position on the firing line and has been given the command to load. (Half-cock position on a lever action spring-piston air gun is with the lever down, but without the spring compressed or cocked. To check to see if the gun is cocked, pull the lever forward; if there is no pressure on the lever, the spring is compressed and the gun is cocked.)
5. As soon as the command to cease firing is given, the BB guns must be opened and placed on the shooting mat with their muzzles pointing down-range, actions open or at half-cock, whether or not the shooter has completed firing all his shots. This rule must be enforced and obeyed absolutely.
6. In preparing to fire, the targets are first placed in position. The shooters then take their places on the firing line. While the first group is firing, the targets are prepared for the next group of shooters and they are told their firing point. When the first group has completed firing and all BB guns are unloaded and actions open or at half-cock, the fired targets are taken down and the new targets set up.
7. No one, shooter or instructor, is allowed in front of the firing line after the order has been given

to load and before the order has been given to cease firing—actions open.

8. No one is allowed on the firing line except the shooters and their coaches or instructors.
9. Horseplay of any kind is forbidden on the range. Spectators and those who are waiting their turn to fire are not permitted to do anything that may distract the attention of the shooters from the business of shooting accurately and safely.
10. All BB guns not in use should be kept in racks with the actions open or at half-cock.

Sample Range Rules Poster



GENERAL SHOOTING RANGE RULES

- | | |
|---|---|
| 1. This range may be opened only by a qualified BSA-certified range master. | 5. Absolutely no running on the range. |
| 2. All commands issued by the range master must be obeyed immediately. | 6. No horseplay or unnecessary talking on the range. |
| 3. Stay behind the firing line. Do not straddle the firing line. | 7. If in doubt about the rules, ask your leader or range master for advice or help. |
| 4. Do not pick up a gun, bow, arrow, or slingshot unless told to by the range master. | |

This poster can be found in the *Cub Scout Shooting Sports Guide*, No. 510-322, in Appendix 20 of this guide.

Range Commands

When ready to start firing, the rangemaster commands: “ON THE FIRING LINE.”

Immediately, each shooter takes his assigned place at his firing point and prepares to fire, but does not load. The rangemaster checks the location of each shooter to ensure correct firing point and target number.

The rangemaster makes sure the range is clear, then asks: “IS THE LINE READY?”

If there is any shooter who is not ready or whose target is in bad order, that shooter immediately raises his arm and calls:

“NOT READY” and gives the number of his target.

The rangemaster will immediately call:

“THE LINE IS NOT READY.”

The rangemaster will investigate the difficulty and assist in correcting it. When the difficulty has been corrected, the rangemaster calls:

“IS THE LINE READY?”

If all is ready, the rangemaster then calls:

“THE LINE IS READY.”

(This means the line is ready on the right, ready on the left, and ready on the firing line.)

The rangemaster calls:

“LOAD.” Shooters load the BB gun chambers.

The rangemaster calls:

“READY ON THE FIRING LINE.”

The rangemaster commands:

“COMMENCE FIRING.”

After firing, the rangemaster commands:

“STOP FIRING — CLEAR ALL GUNS.” All BB gun chambers and magazines are unloaded and shooters leave the firing line with the actions of their BB guns open.

Repeat the above steps for all succeeding shooters.

The rangemaster will immediately command “STOP FIRING” if any incident occurs that could result in possible injury to some living thing should firing continue.

“AS YOU WERE” means to disregard the command just given. “CARRY ON” means to proceed with whatever was being done before the interruption occurred.

Equipment

Range Accessories

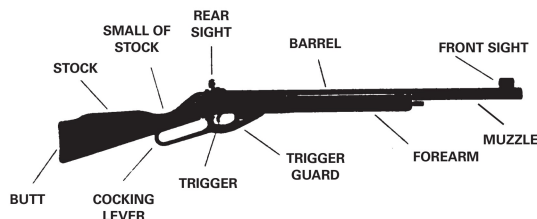
- Tarps to provide shade over the pads protecting the shooters and the guns
- BB dishes at each firing point
- Shooting mats at each firing point
- A desk with storage space for equipment for recording scores. It should be behind the ready line and near the bulletin board.
- Ample waste receptacles behind the firing line for fired targets and trash
- Sandbags or other rest equipment for each firing point
- Range flag and pole for use during range operation
- BB gun racks to store BB guns that are not in use

Air Guns

Air guns, traditionally regarded as guns for beginners, are now enjoyed by shooting enthusiasts at all skill levels. Some, such as the familiar BB gun, are excellent for beginners, while other types are designed for the seasoned competitor. Whether used for recreation or sport, for field use or as an inexpensive training tool, air rifles are an excellent way to enjoy shooting.

In recent years, air guns have undergone dramatic improvements, making them more reliable, durable, and accurate. Air guns can be fired safely by shooters of all ages and experience levels on a wider variety of ranges than any other type of firearm.

Spring Piston Guns



Spring-piston air guns use a manually operated lever, pivoting barrel, or other device to move a piston that in turn compresses a mainspring located in the frame or receiver portion of the gun.

When the piston is completely retracted, the mainspring is fully compressed. The piston will remain in this retracted position until the shooter releases it by pulling the trigger. The piston, under pressure from the compressed mainspring, moves rapidly forward when it is released, and compresses the air in front of it. The compressed air then forces the projectile out of the barrel.

In this type of air gun, the air that propels the projectile is not stored in a reservoir prior to firing; the air is compressed by the movement of the piston after the trigger is pulled.

Pneumatic Guns

Pneumatic air guns use the principle of stored compressed air or gas and can be divided into two categories: single-stroke/multi-pump guns and compressed CO₂/air guns.

Air Gun Ammunition

There are five basic types of air gun ammunition: BBs, pellets, lead balls, darts, and bolts.

Keep BB Gun shooting equipment in good condition. Repairing guns and keeping target faces and mats in good condition can save money and make shooting experiences more successful.

Eye Protection

Eye protection must be available for all individuals on a BB Gun range. The best ones are those with side shields.

Backstops

Baled straw stacked behind the target will stop shots. Also, several layers of burlap, old canvas, or rugs hanging loosely over a horizontal pole or plank 1 or 2 inches wide will stop many shots. If tarps are used, check them for weakness during the season. Heavy duty moving blankets may also be used as long as it is monitored.

Cub Scout Shooting Sports Awards

Cub Scouts earn the shooting sports awards in the following order:

1. **Rank-level patch.** Complete level 1 requirements. This involves participation in archery and acquiring basic knowledge of proper technique, safety, and operations. The patch is only awarded one per program (rank) year.



2. **Discipline device (pin).** Complete the level 2 requirements. This is designed to help a Cub Scout develop and demonstrate further skills, proficiency, and knowledge in BB Gun shooting. These skills are rank specific and provide a progression of skills appropriate for each age and rank of Cub Scouting.



How To Set Up Outdoor Target BB Gun Range

Set up for wide-open, cleared space.

1. Select the Orientation of the Range
 - Avoid shooting into the sun by facing North.
 - The ground should be flat and free of obstacles.
 - Look for a natural backstop such as a berm to stop BB's, or a ballistic cloth or double layer, heavy duty tarp capable of stopping a bb as a trap. If there is no berm, provide a minimum of 195 yards of open area behind the targets.
 - The safety zone on the side should be 30-50 feet.
2. Place Range and Safety Lines
 - Rope, eco-friendly spray paint or chalk are ways to lay down the range lines outdoors. Follow the guidelines illustrated on the following page.
 - Shooting Line – The Shooting Line is between 15-30 feet from the Target Line depending on the skill level of the participants.
 - Waiting Line – Shooters stand behind the Waiting Line before and after shooting their arrows. It is meant to act as a safety area between the class and the Shooting Line. The Waiting Line is placed 15 feet behind the

Shooting Line.

- **OPTIONAL: Controlled Access/Spectator Line** – Anyone who wants to watch participants shoot can gather behind this line. This line needs to be placed far enough behind the Waiting Line to prevent distraction from the spectators (at minimum 15 feet)
3. Set Up Targets
 - Place targets in front of the natural berm. If a natural berm is not available, place targets in a wide-open space with a minimum safety zone of 150 feet behind the targets.
 - Evenly space targets in front of the berm. Space between targets is dependent on placement of shooting positions.
 - One method of hanging targets is to put up posts to hold "snow fence." Attach the snow fence to the posts. Targets can be attached to the snow fence with clothes pins.
 - A temporary target holder can be made using old political signs with their wire ground stands. (Paint over the political signs if they are used.)
 4. Place the Equipment
 - Eye protection should be available in the waiting area. All participants on the range must wear eye protection.
 - BB Guns – May be on the top of the bench if using bench rest positions, or on the mat used for the prone positions. If shooters are shooting from the free-arm standing position, there should be some type of stand where the guns may be placed when not in use.
 - BB's – Should be between the shooting line and the ready line under the control of the rangemaster.

Outdoor Range Layout: Wide Open Space

