# **Acknowledgments**

Scouting America greatly appreciates the National Range and Target Activities Subcommittee members for their expertise and recommendations in the development of the *National Range and Target Activities Manual*.

We would also like to acknowledge the longstanding relationship with the National Rifle Association (NRA) in the goal of training youth and adults in the safe use of firearms.

Scouting America would like to acknowledge the relationship with USA Archery for the relationship in developing and training youth and adults in safe archery experiences.

# SCOUTING AMERICA'S COMMITMENT TO SAFETY

In Scouting, we will not compromise the safety of our youth, volunteers, and employees. Safety is a value that must be taught and reinforced at every opportunity. We are all responsible and must hold each other accountable to provide a safe environment for all participants.

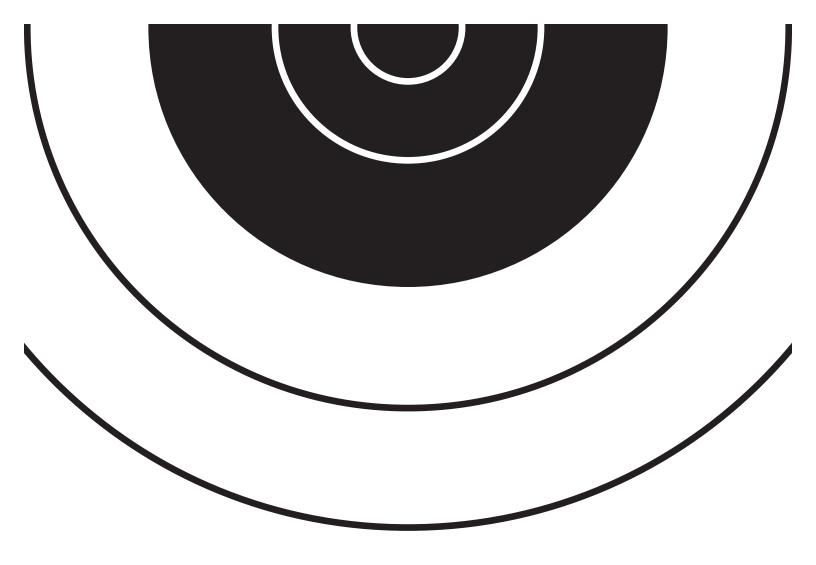
We are committed to abuse prevention by utilizing:

- Mandatory youth protection training.
- Criminal background checks.
- Banning one-on-one adult and youth interactions.
- Mandatory reporting of suspected abuse to law enforcement.
- A volunteer screening database.

We are committed to injury and illness prevention by integrating safety measures in our handbooks, literature, and training materials including the *Guide to Safe Scouting*. We expect leaders to use the four points of SAFE when delivering the program. **SAFE** Scouting measures include:

- Youth are **Supervised** by qualified and trustworthy adults who set the example for safety.
- Activities are **Assessed** for risks.
- Pre-requisite **Fitness** and **skill** levels are confirmed before participation.
- Appropriate **Equipment** is utilized and **Environmental** conditions are monitored.

When incidents do occur, we expect a timely, clear, and complete incident report. We are committed to learning from the data and modifying program guidance for the prevention of future occurrence.



# INTRODUCTION

The purpose of Scouting America's range and target activities is first and foremost centered around teaching firearm safety. Scouting America's range and target activities are developed and implemented through age-appropriate training and experiences. Scouting America adheres to its longstanding policy of teaching its youth and adult members the safe, responsible, and intelligent handling, care, and use of firearms, archery, and hand-held throwing sports in planned, carefully managed, and supervised programs for each youth who chooses to participate.

In addition, participating in range and target activities provides Scouts the opportunity to learn responsibility, self-discipline, problem solving, concentration, sportsmanship and acquire lifelong skills and hobby interest.

Scouting America follows the SAFE practices and requires all ranges to have Standard Operating Procedures (SOP) that are approved for that range. Range supervision and instruction are overseen by qualified staff with a key focus of Scout safety.

The Scouting America's National Range and Target Activities Subcommittee understands the need for clarification in the terminology and delivery of range and target activities. The Guide to Safe Scouting and this manual contains information for all the range and target activities and provides guidance for their implementation in Scouting. No other range and target activities are authorized at this time. Information on approved firearms, ranges, qualified supervision, training requirements, targets, and ammunition is included.



## Scouting is SAFE - Range and Target Activities

Scouting America adheres to its longstanding policy of teaching its youth and adult members the safe, responsible, and intelligent handling, care, and use of firearms, archery and hand-held throwing sports in planned, carefully managed, and supervised programs. Safety during range and target activities must remain top of mind.

## Supervision

Youth are supervised by qualified and trustworthy adults who set the example for safety. Supervision includes:

- Range Management a range safety position(s) who oversee the shooting stations and participants. At a minimum, all Scouts BSA troops, Venturing crews, and Sea Scout ships who provide unit-level sponsored/ planned range and target activities must have at least one registered unit leader 21+ years of age take the Range Activity SAFEty online training at my. Scouting. This individual must be present at the range during the activity.
- Instruction participants with the right demeanor, skills, abilities and validated credentials to teach safety and develop the participant's ability at that activity.
- During live fire, range safety positions and instructors may be supplemented by coaches, registered leaders, and even parents and partners to support a safe experience for participants.
- Cub Scout range and target activities are only conducted and supervised by local Councils. Cub Scout pack unit level sponsored range and target activities are prohibited.

#### Assessment

Activities are assessed for risks during planning. Leaders have reviewed applicable program guidance or standards and have verified the activity is not prohibited. Risk avoidance or mitigation is incorporated into the activity. Assessment includes:

- Validating the range and target activities are age-appropriate for the participants being served. Please review the Guide to Safe Scouting Age-Appropriate Guidelines Chart prior to beginning the activity.
- When utilizing council's nationally authorized camp property's range(s) or commercial ranges, standard operating procedures for each venue are available, fitting the discipline, equipment and ammunition being used.
- Verification of state and local laws regarding range and target activities are followed.

#### Fitness and Skill

Participants' Annual Health and Medical Records are reviewed, and leaders have confirmed that prerequisite fitness and skill levels exist for participants to take part safely. This includes:

- · An instructor reviewing participant's ability (with or without accommodations) to safely operate the device, firearm, or bow, or throwing object.
- Participants have received the appropriate on-site safety briefing before participation including the three rules of firearm safety.

#### **Equipment and Environment**

Safe and appropriately sized equipment, courses, camps, campsites, trails, or playing fields are used correctly. Leaders periodically check gear use and the environment for changing conditions that could affect safety. This includes:

- Before any use, and periodically, all equipment (shooting devices, firearms, bows, slingshots, hawks, knives, target frames or targets, etc.) should be inspected by a range supervision and instruction and qualified gunsmiths or archery retailer.
- Safe and secure storage and transportation for firearms, ammunition, bows, etc.
- Personal Protective Equipment for all participants and observers is available and used as required. Including:
  - Eye protection
  - · Hearing protection
  - Armguards
  - · Finger Tabs or finger savers
  - Appropriate attire

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# CHAPTER I: QUALIFIED SUPERVISION—ROLES AND RESPONSIBILITIES

# Introduction to Range and Target Activities and the Positive Aspects

Throughout Scouting America from Cub Scouting to Venturing and Sea Scouting, all programs use responsible outdoor activities to promote character development and values-based leadership training. Range and target activities have the ability to attract and retain youth in the movement. Millions of young people participate in one or more of the sports annually—archery, rifle and shotgun activities, etc.—guided by adults who have the certification, skills and knowledge to provide quality programs in a safe and effective way.

Key to safe and effective unit activities is informed, trained, and conscientious unit leadership. Various activities can present some degree of risk; those risks can be mitigated by training and commitment of Scouting volunteer leaders. When activities are properly conducted under the appropriate guidelines, they can be safe, fun filled, exciting, and rewarding.

The registered adult leader(s) in charge are always responsible for ensuring that all activities adhere to the age appropriate guidelines and follow the program design of Scouting America. However, Scouting America policy does not specify that the unit leader must be the one to satisfy all the criteria for supervision of specific program activities. All Scouts BSA troops, Venturing crews, and Sea Scout ships who provide unit-level sponsored/ planned range and target activities must have at least one registered unit leader 21+ years of age take the Range Activity SAFEty online training available on my.Scouting.org. This individual must be present at the range during the range and target activity(s). Participating in this training will help ensure a unit understands Scouting America's range and target activities policies.

For range and target activities, the unit leader may or may not hold specified certification(s) for the supervision of the range and in the case of Cub Scouting, range and target activities are not approved for a unit activity.

There are two main aspects of range supervision:

- 1. Range Management Those individuals who are in charge of range safety and overseeing the shooting stations and participants. These people are responsible for following the approved Standard Operating Procedures (SOP) for the range and overall range supervision. This person is the safety officer.
- 2. Range Instruction Those individuals whose primary concern is instruction in the type of shooting, referred to as a shooting discipline. This person is responsible to train in the proper use of and care for the equipment being used. This person may instruct advancement or recognition pieces. Their main responsibility is to instruct and foster competency in the participant.

This publication provides guidance on how to ensure proper safeguards are in place for a range and target activity, whether those safeguards are implemented by the facility operator or the unit. Skills and certifications are reviewed, as well as requirements for a proper facility. After reviewing this material, the leader should be confident in their ability to judge when a range and target activity is safe, when the risk is unacceptable, or when their background is insufficient to make that determination. Experienced, informed leaders develop a sense or intuition regarding an action. When an activity exceeds the leader's comfort zone, it should be curtailed or modified

# **Range and Target Activities Personnel Descriptions**

Beginning September 1, 2024, the position previously titled "Shooting Sports Director" will be renamed "Range Activities Director." Individuals holding a valid certificate from the Shooting Sports Director section of the National Camping School retain their certification until it expires. Expiration dates are indicated on an individual's official National Camping School certificate card. In this manual, the title "Range Activities Director" may also refer to those previously certified as "Shooting Sports Directors," provided their certification remains valid.

#### **Range Activities Director**

- Twenty-one years of age or older and currently certified with a valid certificate of training from the Range Activities Director or Shooting Sports Director section of National Camping School within the past five years.
- In charge of all range and target activities, including rifle, shotgun, muzzleloaders, throwing sports and archery during camp program.
- Manages staff that includes properly qualified instructors with current certifications and trains support staff.
- Sees that all areas are maintained and used properly, keeps an updated inventory of equipment, and is in charge of the safe and proper maintenance and use of this equipment.
- Can serve as a Range Safety Officer if the National Camping School certified Range Activities Director holds current NRA Range Safety Officer Certification.
- Can serve as an NRA Instructor if the National Camping School Range Activities Director holds current NRA Instructor certifications for the discipline for which supervision and instruction is required.

#### **NRA Certified Instructor**

 Twenty-one years of age or older. Current NRA Instructor rating in the specific program for which supervision and instruction is required. The National Camping School Range Activities Director can be the NRA Instructor.

#### **NRA Assistant Instructors**

- Eighteen years of age or older and holds current NRA assistant instructor's certificate in the appropriate discipline
- Can assist the NRA Instructor in supervising a range; however, this does not include running a live firing line.

## **NRA Range Safety Officer**

- Twenty-one years of age or older and holds current NRA Range Safety Officer credentials
- In charge of the firing line at any time it is in operation
- May not leave the firing line at any time while it is in operation

# Range and Target Activities Program **Counselors and Aides**

- Sixteen years of age or older and trained for specific duties by a National Camping School Range Activities Director
- Under on-site supervision of an NRA Range Safety Officer, may exercise crowd control, serve as training assistant for specified topics assigned by the NRA Range Safety Officer, move and maintain equipment, and act as a coach in a student coach/pupil setting
- May NOT supervise any live fire

# **Scouting America BB Gun Rangemaster**

- Eighteen years of age or older and trained by a National Camping School Range Activities Director or National Rifle Association rifle instructor
- Is in charge of the firing line at any time it is in operation
- BB gun rangemaster training must be renewed every two years, and this person must have a current Training Course Certificate, No. 33767

## **Scouting America Archery Director**

- 18 years of age or older
- An Archery Rangemaster who is trained by a National Camping School Range Activities Director or is instructor certified by the USA Archery using USA Archery Level 1 instructor course by a USA Archery Level 2 Instructor Trainer or a National Camping School Range Activities Director or a USA Level 1 Archery Instructor and would receive a Rangemaster certification.

• Responsibilities include the setup and operation of a safe archery range for Cub Scout, Scouts BSA, Venturing or Sea Scouting programs, Archery merit badge instruction, and management of an archery staff at camp.

# Scouting America Archery Rangemaster

- Eighteen years of age or older and trained by a National Camping School Range Activities Director or USA Archery Level 1 Archery Instructor to set up and operate a safe archery range for a Cub Scouts, Scouts BSA, Venturing or Sea Scouting archery program according to the standards located in this manual, "Archery and BB Guns."
- Archery rangemaster training must be renewed every two years, and this person must have a current Training Course Certificate, No. 33767.

# **Council Range and Target Activities** Coordinator/Chair

- 21 years old or older. National Camping School certification as a Range Activities Director is recommended.
- National Rifle Association certified instructor for one or more of the appropriate disciplines is recommended.
- Current NRA Range Safety Officer or NRA Chief Range Safety Officer certification is recommended.
- USA Archery Level 1 Archery Instructor certification recommended.

## **Definition of "Instructor Qualified"**

To be instructor qualified means the individual holds one or more of the following certifications depending on the discipline.

Trained and currently documented by:

- Scouting America National Camping School as a Range Activities Director for rifle, shotgun, co-op muzzleloading rifle, and archery.
- The National Rifle Association as a currently certified instructor for the specific discipline where instruction is taking place (rifle, shotgun, pistol, co-op muzzleloading rifle, or NRA/NMLRA muzzleloading instructor)
- USA Archery as a currently certified USA Archery Level 1 instructor or higher.

A copy of the current training certificate or document is to be on file at the local council office and/or camp.

The following Chart describes the disciplines for Scouting programs, and the supervision required to operate these programs. All range and target activities must follow the guidelines of the Guide to Safe Scouting and the age appropriate guidelines of Scouting America.

Participants	Safety equipment	Minimum program supervision requirements	Qualified staff to open the range	Minimum number of staff to operate	Ratio instructor : participant	Additional information
	Eye Protection	BB gun Rangemaster	BB Gun Rangemaster National Camping School Range Activities Director NRA Rifle Instructor Certified Military shooting instructor** Certified Law Enforcement Shooting Instructor** Certified 4-H Shooting Instructor**	1 qualified staff and appropriate assistants	1:1 adult to participant for Tiger Cubs 1:8 all others	Cub Scout participation at District or Council events Only
Scouts BSA, Venturing, Sea Scouting	Eye protection	BB gun Rangemaster	BB Gun Rangemaster National Camping School shooting Sports Director NRA Rifle Instructor	1 qualified staff and appropriate assistants	1:8	Not approved as a Cub Scout unit activity
	Eye Protection	BB gun Rangemaster	BB Gun Rangemaster National Camping School Range Activities Director NRA Rifle Instructor Certified Military shooting instructor** Certified Law Enforcement Shooting Instructor** Certified 4-H Shooting Instructor**	1 qualified staff and appropriate assistants	1:1 adult to participant for Cub Scout (all levels) 1:4 adult to participant Scouts BSA, Venturing, Sea Scouting	Cub Scout participation at District or Council events Only
Scouts BSA, Venturing, Sea Scouting	Protection Protection	BB gun Rangemaster	BB Gun Rangemaster National Camping School Range Activities Director NRA Rifle Instructor	1 qualified staff and appropriate assistants	1:4 adult to participant	Not approved as a Cub Scout unit activity
Scouts BSA, Venturing, Sea Scouting, Webelos and Arrow of Light Scouts (Long-term camp only)	Protection	NRA Rifle Instructor	National Camping School Range Activities Director NRA Rifle Instructor Certified Military shooting instructor** Certified Law Enforcement Shooting Instructor** Certified 4-H Shooting Instructor**	1qualified staff and appropriate assistants	1:8	Webelos Scouts and Arrow of Light Scouts may use pellet rifles on a council operated range while attending a long-term camp.  All pellet rifles (CO2, pump, break barrel, etc.) are limited to singleshot, designated for target shooting, velocity of 500 to 540 feet per second, with a minimum of 2.5 pound trigger pull.  See also Multigun Airsoft Experience Operational guidance.

\*Scouting America accredited camp means, Day Camp, Short-term Camp and Long-term camp following the NCAP standards. If a council or district has a day activity, standards for "unit activity," apply. Unless otherwise stated the supervision standard is the same for a camp or unit activity. | \*\*Requires approved waiver. In addition, if these positions are used, these individuals need to also be familiar with and follow the program outlined in the Cub Scout Range and Target Activities Guide located in chapter 23 of this manual. | † Required waiver for long-term camp only

# CHAPTER 2: SCOUTING AMERICA RANGE AND TARGET ACTIVITIES — A WEALTH OF YEAR-ROUND OPPORTUNITIES

#### **CUB SCOUT PROGRAMS**

Cub Scout range and target activities programs may be conducted only on a district or council level. Archery, slingshot and BB gun shooting are restricted to day camps, Cub Scout/Webelos Scout long-term camps, council-managed short-term camps, or to council or district sponsored activities where there are properly trained supervisors and all standards for Scouting America range and target activities are enforced. Archery, slingshot and BB gun shooting are prohibited at the pack level.

The use of pellet air rifles is restricted to Webelos Scouts and Arrow of Light Scouts in a long-term camp setting only.

# SCOUTS BSA, VENTURING AND SEA **SCOUT PROGRAMS**

Firearm programs may only take place on a nationally authorized camp property's range(s) or at a commercial firearm range. This does not apply to district or council programs that utilize BB devices, but applies to pellet rifles, airsoft (any type), rifles, pistols, shotguns, and muzzle loading rifles and shotguns. Some states, counties, or other jurisdictions may regulate BB guns as firearms depending on their design and capabilities. Councils must review and follow any local regulations before conducting programs.

The council's camp may be an ideal location for range and target activities. Here, safely designed ranges may be established for the long-term camping program. Under qualified leadership, Scouts, should be given a chance to participate in these skills year-round. Alert unit, district, and council leadership will discover community resources that will be available to units throughout the year. Local archery, National Rifle Association, and sportsmen's groups will often provide facilities and resources.

Scouts BSA, Venturing and Sea Scout members can shoot small-bore rifle, shotgun, muzzleloading rifle, muzzleloading shotguns, and archery following the five levels of shooting described in the chart in Chapter 1.

Scouts BSA members who are 14 years of age or older, or are 13 years of age and have completed the eighth grade, Venturing and Sea Scout members may participate in the NRA FIRST Steps Pistol Orientation sponsored by their council or district. No other pistol program is allowed, except for potential participation in approved council cowboy action programs. Pistol use is limited to pistols and revolvers as follows: .177 pellet pistol; .22 long rifle rimfire; .38 caliber special; or 9 mm only.

# For information about the Scouts BSA Merit badge programs refer to the following publications:

- Rifle Shooting merit badge pamphlet, No. 35942
- Shotgun Shooting merit badge pamphlet, No. 35948.
- · Archery merit badge pamphlet, No. 35856.

Long-term and Short-term camp programs. Scouting America camp programs offer a wide variety of range and target activities opportunities for Scouts. Each local council will serve as a resource for more information on what that council's camp offers.

Hunter education (Scouts BSA/Venturing and Sea Scouting). Contact your local department of natural resources for more information on hunter safety and education, or find information online at www.hunter-ed.com (Hunting programs are only approved for Venturing and Sea Scouting).

**Venturing Range and Target Activities Outstanding** Achievement Award. While working on the Ranger Range and Target Activities elective, Venturers and Sea Scouts are to complete one of the following disciplines: pellet pistol, air rifle, archery, muzzleloading rifle, shotgun, or small-bore rifle. However, Venturers and Sea Scouts who go beyond the basic requirement and complete five of the seven disciplines will earn the Venturing Range and Target Activities Outstanding Achievement Award. This medal and certificate are sponsored by many companies and organizations to recognize outstanding achievement in shooting sports.

For more information, go to https://www.scouting.org/ awards/awards-central/venturing-shooting/

# CHAPTER 5: RANGE OPERATION

In planning any range and target activities, consideration must be given to what equipment is required for that specific shooting discipline and venue. Care must be taken to provide, or arrange for, the safety of non-participants as well as personal protection of the participant. This chapter examines some of the items that should be considered.

The use of personal firearms and personal ammunition is prohibited in all Scouting programs at a camp property (see Standard SA-001). Personal firearms and personal ammunition may be used at a commercial firearm range, subject to restrictions regarding caliber, gauge, and action as described in this manual.

# **General Equipment Common to All Scouting Program Levels and Range Disciplines**

Range safety flag. As an indicator that the range is active, the range safety flag is to be displayed on a flagpole in a prominent place visible to approaching spectators and participants. Each range should have its own flagpole. It is recommended the flag be made of a bright red material approximately 48-by-36 inches in size. (This flag can be purchased from the NRA's online store.) The flag should be removed at the end of the shooting session.

Eve and hearing protection. Each participant must wear hearing and eye protection appropriate for the shooting discipline. Spectators in the immediate, designated area must also wear protection as appropriate. ANSI Z87.1 is the approved rating and the industry standard. Shooting sports safety glasses with this rating should be worn anytime safety glasses are prescribed.

This personal safety equipment may be provided by the event or furnished by the individual participant. If provided by the individual, the Range Safety Officer or NRA instructor should verify that eyeglasses have adequate lens area to offer protection. Hearing protection must fit properly

If eye and hearing protection is furnished by the event organizers, an assortment of sizes should be on hand to ensure proper fit. Youth sizes are available from many vendors of safety glasses. Earmuffs might be preferable to earplugs. When exchanging common-use items, be sure to clean and disinfect them before wearing them. Earplugs are NOT to be exchanged.

Empty-chamber indicator. An added safety measure while transporting or storing, or while the firearm is, UNLOADED AND NOT BEING USED ON THE FIRING LINE a visual empty-chamber indicator should be installed. Several commercial models are available which when installed in the chamber displays a brightly colored flag readily visible.

A simple alternate method is to use a piece of high-visibility, heavy monofilament trimmer line, cut approximately 12 inches longer than the barrel of the firearm. When inserted through the barrel, approximately 6 inches of line is visible at both the muzzle and the breech.

**Ammunition control.** A simple ammunition block, with an appropriate number of 15/64-inch-diameter holes drilled in a pattern of a multiple of five, should be used to control the ammunition being dispensed to the participants. Range personnel will load the blocks from the bulk ammunition storage, and issue only the number of rounds being fired for a given relay. If magazines are being used, range personnel will load magazine prior to distribution.

#### Comfort items.

- Sling. A leather or web sling will aid participants in the prone, kneeling, and sitting positions. They are easily adjustable to each participant and will steady the participant.
- Prone mat. A padded shooting mat of approximately 30-by-60 inches should be provided at each prone shooting position.
- Kneeling roll. A piece of carpet remnant approximately 8 inches wide and tightly rolled and bound to approximately 4 to 6 inches in diameter may be placed under the ankle of the down leg when shooting in the kneeling position.

First-aid kit. A first-aid kit must be readily accessible to the range or classroom. It should be well stocked and include items appropriate for potential injuries unique to the specific range and target activities venue. A medical log must be included in each kit. Details of each incident should be recorded. Any injury requiring first aid of any kind must be recorded in the First Aid Log for camp if the activity is a part of a Council long term, short term or day camp and if required, submit an incident report. Expended materials should be replaced before the next activity. Contents should be monitored and replaced as needed.

Emergency communications device. The procedure to summon emergency help must be considered during planning and be verified before the start of the event. The details of the exact location should also be noted in the event of an emergency. All range personnel should be familiar with the emergency procedures of the event and understand how to reach help.

# Range Equipment Appropriate to Each **Scouting Program Level**

**NOTE:** The Cub Scout range and target activities programs are authorized for District and Council events only and are not approved for use at the unit level. For approved shooting activities for each age level, refer to the age appropriate guidelines within the Guide to Safe Scouting.

#### BB Gun

**BB Gun.** Only a smoothbore, spring-type air gun propelling a coated steel ball projectile commonly known as a "BB" may be used.

**Target.** The target line is usually 16.5 feet from the firing line. The TQ-40 and AR-4 are the common targets for this distance. Paper plates or aluminum pie tins are also popular targets for Cub Scouts and training new shooters. Animal, zombie, and human form silhouettes are not approved for Cub Scout use. Appropriate animal silhouettes including wild game species normally hunted are appropriate for Scouts BSA, Venturers, or Sea Scout use. Zombie and human form silhouettes are not approved for use in any Scouting America range and target activities programs.

Personal Protection. All participants must wear eye protection.

#### Pellet Rifle

Pellet Rifle. Spring, piston or pneumatic (single stroke, multi-pump, air, or CO2 gas) pellet rifles with rifled barrels bored for .177-caliber skirted pellets may be used. Pellet rifles (CO2, pump, break barrel, etc.) are limited to single-shot, designed for target shooting with a look comparable to approved .22 rifles. Rifles may be used by Webelos Scouts, Arrow of Light Scouts, Scouts BSA, Venturers and Sea Scouts. Webelos and Arrow of Light use is restricted to long-term camps only.

- The pellet rifle range meets or exceeds Scouting America and NRA recommendations and appropriate Scouting America Outdoor Programs/Properties design standards.
- All pellet rifles in good repair are provided. All pellet rifles used in Scouting America range and target activities 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 pellet rifle is immediately removed from service. Documentation of the tests is maintained.
- · Webelos and Arrow of Light Scouts Only: All pellet 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.

• Pellet rifle propellant is limited to CO2 cylinders or air compressor/scuba tanks. Refilling is conducted by qualified/trained 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. Scuba tanks used for range and target activities purposes may not be used for scuba purposes.

**Pellet Rifle Target.** The target line is usually set at 33 feet from the firing line. The TQ-18 and AR-5 are the common targets for this distance. Paper plates or aluminum pie tins are also popular targets for training new shooters. Animal, zombie, and human form silhouettes are not approved for Webelos or Arrow of Light Scout use. Appropriate animal silhouettes including wild game species normally hunted are appropriate for Scouts BSA, Venturers, or Sea Scout use. Zombie and human form silhouettes are not approved use in any Scouting America range and target activities programs.

**Personal Protection.** All participants must wear eye protection.

#### Rifle

#### Rifle.

Scouts BSA, Venturing and Sea Scouts. May only use .22 caliber breech-loading, single-shot or a repeater type bolt-action rifles with a box-style magazine. (Only .22 caliber Short, long, long rifle may be used.) (Rifle tubular magazines are not allowed.) \*Note: Tubular magazines may be used in approved Cowboy action programs only following the guidelines in the Cowboy action guide in the appendix of this manual. Councils must be approved by the National Council to offer Cowboy action programs using the NCAP Intent to Operate form each year.

Ammunition. Current-manufacture cartridges appropriate for the caliber firearm being used. **Reloading** and use of reloaded ammunition is not approved for BSA programs. Tracer, armor-piercing and exploding ammo are not allowed.

# Sights.

- Open sights found on most rifles are limited to elevation adjustment.
- Aperture (peep) sights are fully adjustable and have an easy-to-learn sight picture. The easy adjustment will aid in qualification shooting.
- · Optical (red dot, telescopic) sights are also fully adjustable.

Targets. TQ-1, TQ-5, and A-17 targets are recommended at 50 feet. The A-23 is a popular small-bore rifle target at 50 yards and the A-25 is sized for 100 yards. Scouts BSA, Venturers, and Sea Scouts are allowed to use tasteful and appropriate animal silhouette targets (paper and 3-D targets) with all firearms approved for their use. Appropriate animal silhouettes

include wild game species that are normally hunted. Human form and zombie silhouette targets are not approved for use. Metallic silhouette animal targets are also approved for use.

Exploding targets are NOT approved for ANY shooting activity.

**Personal Protection.** All participants must wear eye and hearing protection.

# Shotgun

**Shotgun.** Modern, age-appropriate, target shotgun models, 12-, 16- or 20-gauge, may be used. Experience shows that beginning shotgun participants are more successful with a 20- or 12-gauge shotgun, putting more shot to the target.

**Chokes.** At the muzzle end of the shotgun is a "choke." Just as the nozzle of a garden hose determines the width of a jet of water, the choke affects the spread pattern of the pellets exiting from the barrel. There are four main chokes: skeet, IC (improved cylinder), M (modified), and F (full). For camp use, skeet and IC are recommended. If these are not available, modified would be the best choice.

Ammunition. Current-manufacture shotshells of the appropriate gauge contain No. 7½ to No. 9 shot. A shot size larger than 7½ is not to be used. **Reloads may** not be used in Scouting America range and target activities programs.

Trap/thrower. Hand throwers, manual traps, or automatic traps may be used. Care should be taken to match the target speed and flight path to the shooter's ability. Always refer to the manufacturer's operations and safety instructions before operating this equipment.

Trap location. For new shooters and merit badge qualification, the trap should present a straight-away, rising target, at a reasonable speed. Trap systems on trap and skeet fields and on sporting clays courses will provide the participant with some challenging presentations as skills are mastered.

Personal Protection. All participants must wear eye and hearing protection.

#### Muzzleloading Firearms

Because of the historical significance of muzzleloading firearms, Scouts BSA members, Venturers, and Sea Scouts are encouraged to learn to safely load and shoot a muzzleloader. On the range, each participant must be under the direct supervision (one-on-one) of a currently certified NRA or NRA/NMLRA muzzleloading instructor (for the appropriate discipline) when loading or firing the muzzleloader.

Scouts BSA, Venturing and Sea Scouts. May only use muzzleloading rifles or muzzleloading shotguns. (No muzzleloading handguns are permitted in the Scouting America program.)

Muzzleloading rifles. Recently manufactured (or assembled from a kit) percussion cap muzzleloading rifles or inline muzzleloading rifles of any caliber may be used. All muzzleloading rifles are subject to safety inspection by the instructor or range officer. Rifles made from kits must be checked by a qualified gunsmith.

**Propellant.** Only a commercially manufactured, sporting-grade black powder or black powder substitute offered for sale by a reputable firm should be used in muzzleloading firearms. For new shooters, the amount of propellant in grains should be at the minimum of the gun manufacturer's recommended load range.

#### Accessories.

- Ramrod. The ramrod is used to seat the patch and shot. It is usually mounted in the fore-end of the stock, just beneath the barrel. It is recommended that a more durable work rod be obtained for use on the range. The first time a new rod is used, it should be inserted into the empty barrel all the way down. A permanent mark should be scribed on the rod at the end of the muzzle. Then the same procedure should be used after a standard charge (powder, patch, and ball) has been placed in the barrel. This will enable the shooter to know whether the barrel is empty or has a standard charge.
- Powder flask and powder measure. Propellant shall be transferred from the original bulk container to a brass or plastic powder flask to be taken to the range. It shall then be poured into the powder measure before pouring into the barrel.
- Shot starter. (ml rifle) This tool allows the shooter to first get the ball and patch just started into the muzzle, and second to drive the ball a short distance down the barrel, before using the ramrod to seat the patch and ball against the powder charge.
- **Shot measure.** (ml shotgun) A small cup with a handle that allows the shooter to measure the exact amount of shot and then pour it directly into the
- Nipple wrench and nipple pick. The nipple wrench is simple tool used to remove the cap nipple should it become fouled. A nipple pick is a stiff wire that is used to clear debris in the nipple orifice (flash channel).
- **Capper.** Percussion caps are packaged 100 per tin. The capper allows the caps to be dispensed one at a time right onto the nipple.
- Patch puller, ball puller. These tools fit onto the end of the ramrod to remove the ball or patch from down in the barrel. Care must be taken when using these items.

- CO<sub>2</sub> ball discharger. This tool has a fitting to fit onto the nipple and has a small CO<sub>2</sub> cartridge to provide pressure to blow a patch and ball out of the muzzle of the gun. Always point the muzzleloader in a safe direction when using this device.
- Loading bench. Many Scout ranges are equipped with a loading bench that provides a stable and easy-to-reach platform for the muzzleloading firearm during the loading process.

Personal Protection. All participants must wear eye and hearing protection.

#### **Pistols**

Scouts BSA members who are 14 years of age or older, or are 13 years of age and have completed the eighth grade, Venturing and Sea Scouts may participate in the NRA FIRST Steps Pistol Orientation sponsored by the district or council. No other pistol program is allowed, except for potential participation in approved council cowboy action programs. No unit level sponsored pistol program is approved in any Scout America programs.

Handguns of any type are NOT permitted for Cub Scouting.

**Pistols and Revolvers.** Pistol use is limited to pistols and revolvers as follows: .177 pellet pistol; .22 long rifle rimfire; .38 caliber special; or 9 mm only.

**Sights.** Open sights may be fixed or adjustable. Optical sights (red dot and telescopic) sights are also fully adjustable, but care must be taken to provide an appropriate scope for the shooting distance. Laser sights have become extremely popular as a training aid for pistol shooting; however, they may not be permitted for certain qualification programs.

**Targets.** A 9-inch paper plate is recommended for training new shooters at 15 feet. The TQ-6, slow-fire, and TQ-7 rapid-fire targets are recommended at 25 feet. B-2, slow-fire, and B-3, timed and rapid-fire are popular pistol targets at 50 feet. The B-16, slow-fire, and B-8, timed and rapid-fire, targets are sized for 25 yards. Appropriate animal silhouettes include wild game species that are normally hunted. Human form and zombie silhouette targets are not approved for use. Metallic silhouette is becoming a popular target discipline at many clubs and ranges. NO exploding targets are allowed in any Scouting America program.

**Personal Protection.** All participants must wear eye and hearing protection.

Pointing any type of firearm or simulated firearm at any individual is unauthorized. Units with council approval may participate in formally organized historical reenactment events where firearms are used and intentionally aimed over the heads of reenactment participants. Leaders and the council approvers for participation must complete the SAFE Checklist during planning for attendance or participation.

#### Archery

#### Bows.

Cub Scouts. A light-draw-weight (15- to 20-pound), 54-inch, take-down, recurve bow is recommended because the bow will fit many archers who have different lengths of draw.

**Scouts BSA.** A light-draw-weight (20- to 25-pound), 62-inch or 66-inch, take-down, recurve bow is recommended because the bow will fit many archers who may have different lengths of draw.

Venturers and Sea Scouts. A light-draw-weight (20to 35-pound), 62-,66-, or 70-inch, take-down, recurve bow is recommended because the bow will fit many archers who may have different lengths of draw.

All bows should be equipped with an arrow rest in good condition and with a proper-length, well-served, 10- to 12-strand string with properly placed nock locator.

Always inspect the bow for cracks and splinters, and the condition of the bowstring and serving.

A universal draw length bow is popular in youth programs because it provides all the advantages of a compound bow but with an adjustable draw weight to accommodate participants of all abilities.

True compound bows are not recommended at this level because they must be set up to fit each individual archer.

**Arrows.** Care should be taken to inspect arrows before use.

- · Shaft material. Wood arrows are light but susceptible to warping and splintering. Fiberglass arrows are heavier, and more durable, and will last several seasons. Aluminum arrows are light and shoot true, but cannot be repaired if bent or kinked. Carbon fiber arrows are lighter, stronger, and preferred by most competitive shooters.
- Length. An appropriate length arrow for Cub Scout age youth will be approximately 24 to 26 inches. For Scouts BSA use will be approximately

26 to 30 inches. For Venturers and Sea Scout use, arrows will be approximately 28 to 32 inches. Care must be taken to avoid shooting an arrow that is too short for the archer or too short for the bow.

- Point. Arrows must be fitted with target points. No field points or broadheads.
- **Nock.** The nock should fit the serving of the bow being used. The arrow should not fall from the string if the nock opening is correct.
- Fletching/vanes. Either may be used; however, plastic vanes provide longer service with young participants.

#### Personal protection.

- Quiver. For each archer, either a personal side quiver or a ground quiver must be provided to store arrows during shooting.
- Finger protection. Archers must wear a finger tab or glove unless there are "no gloves" on the string.
- Arm protection. Each archer must wear an arm guard on the bow arm. Arm guards may be obtained in junior sizes for small arms.
- All protective equipment must be properly sized for the archer.

#### Sights.

- · Not recommended for Cub Scouts.
- · As the fundamentals of archery are learned, it is recommended that sights be added to the bow. Least expensive may be a simple quilter's pin affixed at the sight window by foam tape applied to the back of the handle.
- Relatively inexpensive target sights may be added to the bow, which will be a tremendous aid to the shooter for qualifying or competition.

#### Targets.

**Cub Scouts.** It is recommended that large-diameter target mats and faces be used to ensure success and to reduce the number of lost arrows. Ethafoam mats are commercially available in 48-inch, 36-inch, and 32-inch diameters, with five-color target faces to match. Animal, zombie, and human silhouettes are not approved for Cub Scout use.

Set the target line at no more than 10 yards in front of the shooting line, adding to the success of young archers. The mat should be mounted relatively low to the ground to make it easier to extract arrows from the target.

**Scouts BSA.** It is recommended that large-diameter target mats and faces be used to ensure success and to reduce the number of lost arrows. Ethafoam mats are commercially available in 48-inch, 36-inch, and 32inch diameters, with five-color target faces to match.

Scouts BSA participants are allowed to use tasteful and appropriate animal silhouette targets (paper and 3-D targets). Appropriate animal silhouette targets include wild game species that are normally hunted. Human form and zombie silhouettes are not approved for use.

Venturers and Sea Scouts. For new shooters, it is recommended that large-diameter target mats and faces be used to ensure success and to reduce the number of lost arrows. Ethafoam mats are commercially available in 48-inch, 36-inch, and 32-inch diameters, with five-color target faces to match. As Venturers and Sea Scouts develop skill, various target games and shooting distances may be introduced to provide a challenge for the participant. Venturers and Sea Scouts are allowed to use tasteful and appropriate animal silhouette targets (paper and 3-D targets). Appropriate animal silhouette targets include wild game species that are normally hunted. Human form and zombie silhouettes are not approved for use.

# **CHAPTER 6: SAFETY**

Scouting America adheres to its longstanding policy of teaching its youth and adult members the safe, responsible, and intelligent handling, care, and use of firearms, throwing equipment and bow and arrow in planned, carefully managed, and supervised programs.

Safe gun handling is of paramount importance. You must treat every firearm as if it were loaded. With that in mind, there are several universal rules of safe gun handling that must always be followed.

- 1. Always keep the gun pointed in a safe direction.
- 2. Always keep your finger off the trigger until ready
- 3. Always keep the gun unloaded until ready to use.

#### **Communications**

Each range should have reliable communication with the appropriate staff overseeing the event or activity.

#### **Emergency Response Plans**

A complete first-aid kit should be centrally located near the ranges. The location of the first-aid kit should be prominently marked. In the event of an accident, the established emergency protocols for the camp or activity should be followed.

#### **National Camping Standards**

For standards related to range and target activities and day camp, short-term and long term camp operation and management procedures, refer to the current National Camp Accreditation Program Standards at www. scouting.org/NCAP.

#### **Standard Operating Procedures**

All ranges must have their own written standard operating procedures (SOP) and have them posted at the range. See Appendix for a sample of an SOP.

# **Equipment Inspections—Firearms and Archery**

Prior to range operation, equipment must be inspected for safety and proper fuction. This inspection includes the firearm or apparatus being used as well as all protective equipment. During this inspection if any equipment is deemed unsafe or not sized appropriately for the participants, it must not be used. These inspections should be in advance of the activity or camp so if needed, corrective action can take place.

#### SAFE checklist

All shooting and throwing sports activities are expected to follow the Scouting America SAFE checklist. Leaders and staff conducting shooting sports activities must conduct this checklist prior to the event or activity. For a model SAFE checklist for range and target activities see the SAFE checklist at the beginning of this manual.

# **CHAPTER 7: ADDITIONAL CONSIDERATIONS**

#### General

**Lead protection.** Lead is a soft, dense metal that is an integral part of most bullets. Lead is toxic to humans in relatively small concentrations, with the most susceptible organs being the eyes, central nervous system, and gastrointestinal tract. Handling ammunition, setting up a range for shooting, counting out rounds for firing, loading and unloading a firearm, discharging a firearm, and cleaning a firearm can all leave lead residues on the skin. Two easy precautions can minimize the risk of inhaling or ingesting lead residues. First, when handling ammunition or a recently discharged firearm, minimize contact of the hands with other parts of the body, particularly the eyes, mouth, and skin. When you are finished handling ammunition or firearms, immediately wash your hands with soap and cold water. It is strongly recommended that a handwashing station be next to all ranges and storage areas where ammunition or firearms may be handled or used. Food and drink should not be permitted on a range or in storage areas.

The use of lead can also be an environmental concern and may require some additional consideration for a local council or the landowner. Care needs to be taken to contain the impact of the range on the environment.

Other environmental impacts: The discharge of a firearm can cause a loud report. This noise can also become an environmental concern when the range is close to neighbors or other land owners. Care must be taken in the selection of range locations keeping in mind the noise that could be caused during range and target activities.

Cleaning solvents. Solvents used for cleaning firearms typically contain petroleum distillates, ammonia, caustics, and other potentially hazardous chemicals. Hazards may include skin damage, lightheadedness caused by vapors, and risk of fire. In addition, once the solvent has done its job of cleaning a firearm, it not only contains the original chemicals, but now contains the residues from the firearm, which may include lead, copper, gunpowder, and burned plastic. As with lead, contact with the eyes, mouth, and skin should be discouraged while handling firearm cleaning solvents. Use of appropriate gloves and eye protection are strongly recommentded when using any cleaning materials and solvents. Food and drink should not be allowed in areas where cleaning takes place. A hand washing station with soap and cold water should be available near the firearm maintenance/cleaning area.

Considerations for people with special needs and disabilities. Another consideration concerns participants who may have physical, intellectual, cognitive and/or developmental challenges. Every effort should be made to serve all youth and adults in Scouting. This may require modification of facilities, equipment, content delivery or processes. Safety is the number one concern. The question may need to be asked to how accommodations can be made so that any individual can shoot safely. Considerations to influence the course of action may include: What challenges are afforded by the special need or disability? Does the participant have someone helping them? Can you communicate effectively with the participant and helper? Ask the participant, parent, and/or unit leader what is the best way to accommodate the participant (never assume disability is synonymous with inability). It may be necessary to temporarily close the range to other participants so you can work one on one on the range with a participant with the special need. Consideration must also be given to the provisions of the Americans With Disabilities Act.

For information about adaptive shooting with range and target activities, visit the inclusion toolbox https://ablescouts.org/toolbox/

# **CHAPTER 8: TRAINING COURSES**

In Scouting events and activities, our primary consideration is the safety of youth and adult members. To achieve that goal, Scouting America, in consultation with other organizations, has created specific guidelines for range and target activities. These organizations also provide training and instructor certification by discipline-specific subject matter experts to prepare those individuals who will serve in a leadership or supervisory role in the various shooting sports activities.

In general, for all certifying organizations, the instructor candidate must meet specific eligibility requirements, satisfactorily complete the instructor training curriculum, understand and agree to the responsibilities of a certified instructor, and maintain active certification status.

Listed here are the shooting sports training certifications recognized by Scouting America.

# **Scouting America Training**

# Range SAFEty Online Training for Units

At a minimum, all Scouts BSA troops, Venturing crews, and Sea Scout ships who provide unit-level sponsored/ planned range and target activities must have at least one registered unit leader 21+ years of age take the Range Activity SAFEty online training at my. Scouting. This individual must be present at the range during the activity.

# Scouting America National Camping School

Annually, seven-day National Camping Schools are conducted. The purpose of the National Camping School is to prepare Scouters who will be serving in management or supervisory roles in a council camp. Those who successfully complete the range activities section of the National Camping School, will be given a certificate of training as a Range Activities Director, which is valid for five camping seasons.

Participation must be approved by a local Scout executive, and enrollment is administered through the local council. For more information about National Camping School visit https://www.scouting.org/outdoor-programs/ national-camping-school/

It is also expected that the Scouting America range and target activities will serve the council as a resource year-round and be an active member of the council's range and target activities committee.

## Rangemaster Training

Operation of BB, archery, and slingshot ranges for activities and events, including day camp, long-term camp, and short-term camping programs require qualified, trained Rangemasters.

BB/slingshot rangemaster and archery rangemaster training (2 separate courses) are administered by the council's range and target activities committee and conducted by a National Camping School certified range activities director or a council approved currently certified National Rifle Association rifle instructor for the BB/slingshot rangemaster and a USA Archery instructor certification for archery rangemaster. In either case the instructor must be familiar with the Scouting America program for which they are instructing (ex. NRA rifle insutrctor must be familiar with Cub Scout range and target activities if instructing BB range course for Cub Scout BB rangemaster.)

These BB/Slingshot rangemaster and Archery Rangemaster certifications are valid for two years from the date of the training.

A currently certified NRA rifle instructor is qualified to serve as a BB/slingshot rangemaster only if that person is familiar with the program policies and delivery of the Scouting America program they will oversee. A currently certified USA Archery Level 1 instructor or higher may serve as the Archery Rangemaster for archery activities.

# **National Rifle Association Training**

#### NRA Certified Rifle Instructor

A NRA Certified Rifle Instructor is required to provide instruction for Scouting America rifle shooting activities involving Scouts BSA, Venturers, and Sea Scouts.

The NRA rifle instructor may teach the Scouting America 30-Minute Rifle Briefing, the NRA FIRST Steps Rifle Orientation, Scouting America Rangemaster training, the Rifle Shooting merit badge using the Rifle Shooting Merit Badge Teaching Guide, and the eighthour NRA Basic Rifle Course.

A currently certified NRA rifle instructor is qualified to serve as a BB Rangemaster for BB shooting and sling shot shooting activities provided the individual is familiar with the programs of Scouting America they will oversee.

# NRA Certified Shotgun Instructor

An NRA certified shotgun instructor is required to provide instruction for Scouting America shotgun shooting activities involving Scouts BSA, Venturers, and Sea Scouts.

The NRA shotgun instructor may teach the Scouting America 30-Minute Shotgun Briefing, the NRA FIRST Steps Shotgun Orientation, the Shotgun Shooting merit badge using the Shotgun Shooting Merit Badge Teaching Guide, and the eight-hour NRA Basic Shotgun Course.

#### NRA Certified Pistol Instructor

An NRA certified pistol instructor is required to provide supervision for Scouting America pistol shooting activities involving Scouts BSA, Venturers and Sea Scouts.

The NRA pistol instructor may teach the Scouting America 30-Minute Pistol Briefing, the NRA FIRST Steps Pistol Orientation involving older Scouts BSA youth, Venturing and Sea Scouts. Older Scouts BSA members must be 13 years of age and have completed eighth grade or be 14 years of age.

# NRA Co-Op Muzzleloading Rifle Certified Instructor

An NRA certified Co-Op muzzleloading rifle OR an NRA/NMLRA certified muzzleloading instructor is required to provide supervision for BSA muzzleloading rifle shooting activities involving Scouts BSA, Venturers, and Sea Scouts.

# NRA/National MuzzleLoading Rifle Association Certified Muzzleloading Rifle Instructor

The NRA certified co-op muzzleloading rifle or full NRA/NMLRA muzzleloading instructor is required to provide supervision for Scouting America muzzleloading rifle shooting activities involving Scouts BSA, Venturers, and Sea Scouts.

The NRA Co-Op muzzleloading rifle instructor or the NRA/NMLRA muzzleloading instructor may teach the NRA Basic Co-Op Muzzleloading Rifle Shooting Course and the muzzleloading option of the Rifle Shooting merit badge.

The NRA co-op muzzleloading rifle instructor may teach the NRA Basic Co-op Muzzleloading Rifle Shooting Course, and the Muzzleloading option of the Rifle Shooting merit badge.

# NRA/National MuzzleLoading Rifle Association Certified Instructor

An NRA/NMLRA certified muzzleloading instructor is required to provide supervision for Scouting America muzzleloading shotgun shooting activities involving Scouts BSA, Venturers, and Sea Scouts.

The NRA/NMLRA muzzleloading instructor may teach the NRA Basic Muzzleloading Shooting Course and the muzzleloading option of the Shotgun Shooting merit badge.

The NRA/NMLRA muzzleloading instructor may teach the NRA Basic Muzzleloading Shooting Course to Venturers and Sea Scouts.

# NRA Range Safety Officer

An NRA Range Safety Officer is required to provide live firing range supervision for all shooting activities involving Scouts BSA, Venturers, and Sea Scouts. No other certification is accepted.

The NRA Range Safety Officer is responsible for the range management.

# NRA Chief Range Safety Officer

An NRA chief Range Safety Officer or an NRA training counselor is qualified to teach the NRA basic Range Safety Officer course. The Chief Range Safety Officer may also assist Scouting activities in the role of the Range Safety Officer.

# NRA Training Counselor

Qualified, experienced, certified instructors may apply for appointment as a training counselor to recruit and train new instructors to teach basic firearms training courses. For information about becoming a NRA training counselor visit www.nrainstructors.org.

## **Archery Training**

# USA Archery Level 1 Instructor

The USA Archery Level 1 Instructor Certification course is administered by USA Archery, the national governing body for the Sport of Archery in the U.S., USA Archery, the National Field Archery Association and the Archery Shooters Association jointly recognize all certification levels.

Candidates for the USA Archery Level 1 instructor certification are primarily camp archery staff and those working with entry-level students. The USA Level 1 Archery Instructor Certification Course provides

graduates the necessary tools to maintain a high level of safety both on and off the archery range. The Level 1 Instructor will learn about range safety, range setup, the steps of shooting, equipment and repair, programs and lesson plans and is well prepared to teach beginner archery programs to people of all ages and abilities in a variety of disciplines.

USA Archery Level 1 Archery Instructors may teach the Basic Archery course and the Archery merit badge.

In addition, the certified instructor may serve as a Rangemaster for a Cub Scout archery activity.

# USA Archery Level 2 Instructor

The Level 2 Archery Instructor Certification Course includes the USA Level 1 Archery Instructor Certification Course and provides students with an introduction to the National Training System (NTS) Steps of Shooting for recurve and compound, equipment and accessory setup, athlete development and events. Candidates for the Level 2 instructor certification are instructors age 18 and older and Level 2 instructors may also take an online course to become a USA Archery Instructor Trainer so that they may train USA Archery Level 1 and USA Archery Level 2 instructors.



# SECTION V RANGE AND TARGET ACTIVITIES FOR CUB SCOUTS

# **CHAPTER 9: INTRODUCTION**

Archery, BB gun, and sling shot shooting for all ranks of Cub Scouts are restricted to District or Council organized day camps, the Cub Scout range and target adventures long term camp, short term camp or to council activities held on or off an accredited camp property where the district or council provides currently trained Scouting America range and target activities Rangemasters and all standards for Scouting America range and target activities are enforced.

Archery, BB gun, and sling shot shooting in Cub Scouting are prohibited at the pack level or den level. A multi-pack or multi-den event is not to be considered a district or council activity.

Range and target activities related adventures for Cub Scouts may be earned only at the camps and activities listed above.

These programs are designed to emphasize safety and marksmanship development under the direction of trained Rangemasters using nationally approved instructional methods.

This section is for National Camping School certified Range Activities Directors with archery and/or NRA rifle certification or for NRA instructors or USA Archery instructors who will teach the skills of archery, BB gun or sling shot shooting to Lions (archery and sling shot only) and Tigers with their adult partners, Wolf Cub Scouts, Bear Cub Scouts, Webelos Scouts and Arrow of Light Scouts. There is potential danger to the untrained participant and others. "Safety through skill" is the watch phrase.

Special facilities and supervision are required for range and target activities. Camp properties of local councils become the center for most of these activities.

Shooting sports training provides fun and adventure for youth. Archery, BB gun and sling shot shooting teach skills, discipline, self-reliance, sportsmanship, and conservation, all of which are elements of good character valued by Scouting America.

Adventure beckons when Lions and Tigers with their adult partners, Wolf Cub Scouts, Bear Cub Scouts, Webelos Scouts and Arrow of Light Scouts have mastered the skills. Mastery of these skills will help a youth feel confident in their abilities.

The council's camping property usually is an ideal location for range and target activities areas. Here, safely designed areas may be established for the Cub Scout range and target activities program. Under qualified leadership, Lions and Tigers with their adult partners, Wolf Cub Scouts, Bear Cub Scouts, Webelos Scouts, Arrow of Light Scouts and parents may be given the opportunity to participate in these activities.

Other community resources such as the local chapter of the National Rifle Association, archery clubs, and sports groups will often provide facilities and resources.

The skills needed to master shooting sports adds color and variety to the Cub Scout program. These activities can become a natural part of our camp setting.

# Leadership

In camp, leadership for range and target activities needs special attention by the camp director and their program director. Staff members must be certified per Scouting America qualifications for these activities and must be at least 18 years old with mature judgment and the ability to teach. In Cub Scout day camp, long-term camp, or short-term camps, the staff should be members of the program staff. Volunteer experts who come to camp for shorter periods may supplement their work.

All ranges in the Cub Scout program must be supervised by a qualified Rangemaster who is at least 18 years old and who meets the minimum state requirements. See specific qualifications and training requirements for archery Rangemaster and for BB gun and slingshot Rangemasters starting on page 165.

# **CUB SCOUT RANGE AND TARGET ACTIVITIES**

#### BB Gun Elective Adventures - Cub Scouts

BB gun programs are an exciting, worthwhile activity for Scouts, and it is one of the most popular program activities held at camps. The BB gun Cub Scout elective adventures provide fun and adventure, yet also teach skills, discipline, self-reliance, and sportsmanship. We will teach Tiger Cubs with their adult partners, Wolf Cub Scouts, Bear Cub Scouts, Webelos Scouts, and Arrow of Light 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. All ranks of Cub Scouts are not permitted to use any type of handgun or any other type of firearm.

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

- The pellet rifle range meets or exceeds Scouting America and NRA recommendations and appropriate Outdoor Programs/Properties design standards. The range is on nationally authorized camp property's range(s) or at a commercial firearm range. A commercial firearm range is a supervised facility that offers a controlled environment for safe firearm practice. It will provide shooting lanes, targets, and may offer equipment rentals and training in safe firearm handling and marksmanship. Standard operating procedures are required for each firearm type used on-site. Scouting's range and target activities must follow all of Scouting's range and target activities policies or range standard operating procedures that are equivalently stringent, including no variation from Scouting's limitations on firearms used. These ranges may be operated by a licensed business, a government entity or non-profit.
- All pellet rifles are in good repair are provided. All pellet rifles used in Scouting's range and target activities 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 pellet rifle is immediately removed from service. Documentation of the tests is maintained.
- All pellet 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 rifles, pellets, and CO2 cylinders and bulk tanks.
- Pellet 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 Guns

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 Cub Scout elective adventures 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 range activities director or a National Rifle Association rifle instructor.

The BB gun rangemaster also must be registered with Scouting 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 Range Activities 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 range design guideline posted on scouting.org/outdoorprograms, and have the participants walk through the process of running the range.

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

# **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.

To download lesson plans to instruct each rank of Cub Scouting BB gun elective adventures, visit www.scouting.org/outdoorprograms.

# 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:

- 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.
- Group participants into pairs (Scout and par-2. ent/guardian would be ideal).
- 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.
- 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.
- Allow each Scout to feel the satisfaction of hitting a target as quickly as possible.
- 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.
- 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 48

B. Equipment, page 54

- 1. Review diagram of Spring-Piston Gun (Ensure to cover stock, butt, trigger, trigger guard, forearm, muzzle, rear sight, and safety.)
- Targets (Available online at www.scouting. org/outdoorprograms)
- 3. Maintenance
  - The BB Gun must be unloaded when stored.
  - The safety mechanism must be engaged.
  - The BB Gun should be protected from scratches or scraps from other guns.
  - The BB Gun must be locked or otherwise secured in a safe, dry location, separate from ammunition.

#### **Section II**

- A. BB Gun Shooting Basics, page 49
  - Eye Dominance, page 49 1.
  - Shooting Shoulder, page 49
  - 3. Breathing, page 49
  - 4. Sight Alignment, page 50
  - 5. Trigger Squeeze, page 50
  - 6. Follow-Through, page 50
- B. BB Gun Shooting Practice Fun, page 52

# **Section III** (optional activities)

- A. Shooting Positions, page 50
  - 1. Free-Arm Standing Position, page 50
  - 2. Bench Rest Position, page 51
  - 3. Prone Position, page 51
  - 4. Sitting Position, page 51
- B. BB Gun Shooting Games and Activities, page 52
- C. Cub Scout BB Gun Elective Adventures

(Visit www.scouting.org/outdoorprograms.)

## 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 many 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 di**rection.** 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**

#### Eve Dominance

Before shooting a BB 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.

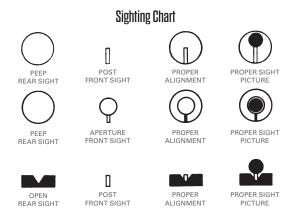
Assign youth, leaders, and parents in pairs to assist each other, then have them check with the rangemaster.

## 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.



#### 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.

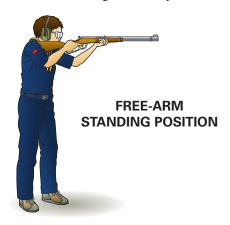
**Shooting Positions** (All positions are described for right-handed shooters. Reverse for left-handed shooters.)

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.



# 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.



# 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.



# **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, Wolf Cub Scouts, Bear 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 Cub Scouts. 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 posted online at https://www.scouting.org/outdoor-programs/ properties/resources/design-guidelines/. 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 Scouting America 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, and 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 downrange, actions open or at half-cock, whether or not the shooter has completed firing all their 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

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

This poster can be found in the Appendix of this guide.

# **Range Commands**

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

Immediately, each shooter takes their assigned place at their 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 their arm and calls:

"NOT READY" and gives the number of their 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: singlestroke/multi-pump guns and compressed CO<sub>2</sub>/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 Scouts (except for Lion Scouts) can earn the BB gun elective adventure for their rank. Information on these electives can be found at www.scouting.org/outdoorprograms.

## How To Set Up Outdoor Target BB Gun Range

Set up for wide-open, cleared space. Utilize the range design guideline for BB gun ranges #314. You can download the range design guidelines at https://www. scouting.org/outdoor-programs/properties/resources/ design-guidelines/.

- 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.

# CHAPTER IO: OTHER RANGE AND TARGET ACTIVITIES FOR ALL PROGRAM LEVELS

Many council programs have range and target activities that include slingshots, catapults, balloon launchers, rockets, and some other creative devices. These items are fun and, in most cases, seem harmless. However, any type of range and target activity can be dangerous, and if safety precautions are not taken, accidents can happen easily. Great care should be taken that safety is the key factor for any activity where items are shot through the air.

Before starting any range and target activity adults are expected to follow the SAFE checklist and all activities must fit within the age appropriate guidelines of Scouting America.

- Airsoft is not an approved shooting activity for Cub Scouts. It is approved for Scouts BSA, Venturers and Sea Scouts.
- · Chalkball/Paintball markers are not approved for Cub Scouts. Scouts BSA, Venturers, and Sea Scouts may only use chalkball/paintball markers to shoot at approved targets—never at another person as part of an approved chalkball program.
- Marshmallow shooters or blowguns or any device where breath is used to expel the projectile, as well as devices that require a straw or similar device in the mouth are not approved.
- · All range and target activities must be approved by the council range and target activities committee or a National Camping School certified range activities director.
- The use of catapults or other shooting devices must be approved by the council range and target activities chair or a National Camping School certified range activities director and must use appropriate projectiles. (Pumpkins and projectiles larger than a tennis ball are not authorized).
- A safe range must be provided for any activity, such as catapults, that involves shooting objects or water into the air.
- Proper supervision as described in earlier chapters is required for each of these activities.
- See Appendix for a list of additional unauthorized range and target activities.

#### Safe Ranges

A safe range must have three things:

- 1. A safe area
- 2. A safe distance
- 3. A safe backstop as appropriate for discipline
- 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.
- 2. Safe distance. Maintain at least 15 feet between the participant and the target.

3. Safe backstop. A backstop designed to keep projectiles from leaving the range. Do not shoot at a hard surface that could cause a ricochet.

#### **Pellet Rifles**

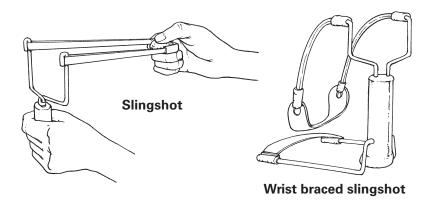
The use of pellet rifles by Webelos and Arrow of Light Scouts is restricted to a long-term camp setting and only qualifies when in compliance with the following requirements. Lions, Tigers, and Cub Scouts are not permitted to shoot pellet rifles.

- The pellet rifle range meets or exceeds Scouting America and National Rifle Association recommendations, including nearby latrine facilities, drinking water, first-aid kit, and emergency communications. See Outdoor Programs/Properties design standards on the Web at www.scouting.org/ properties.
- Pellet rifles in good repair are provided and must be appropriately sized for participants.
- · If any trigger mechanism fails, the air rifle is immediately removed from service. Documentation of the tests is maintained.
- For Webelos and Arrow of Light Scouts all pellet rifles (CO<sub>2</sub>, pump, break barrel, etc.) are limited to single-shot designated for target shooting, velocity of 500 to 540 feet per second, and evergy levels not to exceed 7.5 joules.
- Safe, separate, and locked storage (can be the same building) is provided for pellet rifles, pellets, and CO<sub>2</sub> cylinders and bulk tanks.
- · For supervision requirements and shooting experience see charts in Chapter 1.
- A handwashing station (with soap and cold water) is available for all participants to use upon leaving the firing line.
- THERE IS NO EATING OR DRINKING ON THE FIRING LINE.

# Slingshots and Wrist Braced Slingshots

Using slingshots is an affordable, fun activity in camps and many Scouts have not had previousl experience with them. Although exciting and fun, slingshots are not toys. Scouts must understand that they must follow the rules when shooting or they will not be allowed to participate.

Shooting items from slingshots and wrist braced slingshots can be dangerous. For these activities, follow the same safety guidelines and rules as used for BB gun shooting. Always shoot at an approved range following the design guidelines for either an archery or BB gun shooting range.



# **Equipment**

Slingshots are usually fork-shaped (Y) and made from very strong and durable wood or aluminum. Broom wood, which is both strong and lightweight and lends itself to carving, is also good for slingshots.

Wrist braced slingshots are a type of slingshot. They are designed to brace against the wrist and therefore seem to be steadier.

Many companies sell excellent slingshots and wrist braced slingshots. Companies that sell BB guns or archery equipment would be good resources for these items. Less expensive slingshots are available in many retail locations. When choosing the slingshot for your camp or activity, consider the experience level of your participants and make sure to obtain devices that are appropriately sized and of good quality.

## **Targets**

Targets for slingshots can be made from a variety of materials, including paper, cans, plastic bottles, and balloons. Paper targets can be homemade or purchased. Cans are excellent as they make a great sound when hit. Cans, plastic bottles, and balloons can be hung from strings or attached to netting. A sample target is shown on page 88. Practice with the slingshot or wrist braced slingshot on a bull's-eye about 2 inches in diameter and with the target 10 feet away, then move the target out to 25 feet.

#### Slingshot ammunition

- \*Do not use glass, steel, marbles, rocks or any other hard objects that may ricochet.
- \*Paintball/chalkball or clay balls are acceptable (must be approved for the range in use.)
- \*Use of small food items while not prohibited may be suitable for younger Scouts but may attract unwanted wildlife.

## Slingshot and Wrist braced slingshot Guidelines

(Instructions are for right eye dominant participants. Reverse instructions for left eye dominant participants where applicable.)

- 1. A certified BB Rangemaster must be present on the range and oversee the program.
- 2. A 1-to-1 adult-to-participant ratio must be used for Cub Scout level shooting and a 1:4 adult to participant ratio must be used for all other levels in Scouting.
- 3. Use a safe shooting range such as a BB gun range or archery range.
- 4. Properly sized protective eyeglasses or goggles must be worn by participants, adult helpers and rangemaster.
- 5. Participants must only pick up devices when instructed to do so.
- 6. Participants must only shoot when instructed and have a clear view of the target and what is beyond it.
- 7. If a slingshot becomes damaged during use or appears to be worn, this slingshot must be taken off the line and repaired or replaced.
- 8. Slingshots must only be aimed downrange in a safe direction and not into the air.
- 9. Participants must stay behind the firing line while shooting is taking place.
- 10. Participants should point their left foot and shoulder directly at the target with the body turned to the right and turn their head directly toward the target.
- 11. Center the ammo in the middle of the pouch. Hold the handle firmly in the left hand and pinch the ends of the pouch together with the thumb and index finger of the right hand, encompassing the ammo.
- 12. Hold the left arm out straight and firm. Draw the right hand back level with right cheek—NEVER TO THE EYE—while holding the pouch securely between the thumb and index finger of the right hand.
- 13. Aim and release the ammo pouch to shoot.
- 14. Always practice courtesy and good sportsmanship!

## **Catapults and Other Shooting Devices**

Catapults activities table top size used for STEM or den activities or pioneering projects less than 5 feet in height are the only approved apparatus. NOTE: contests where the object is to shoot a projectile for great distance are not approved. The potential energy for the catapult should be restricted as appropriate.

Catapults using hydraulic, gas, springs, counterweights, or any other gravity propelled device to provide the propulsion are prohibited. Care should also be taken when determining the number or use of rubber band or bungee cords.

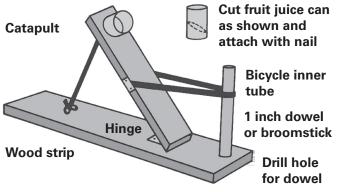
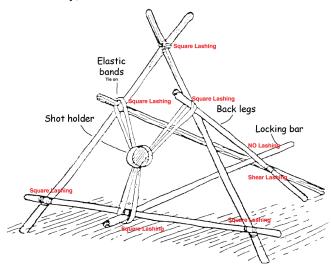


Table top example above (den meetings/STEM activity)



Catapult shown above made with Scout hiking staff.

## **Ammunition**

Water balloons - use small, biodegradable balloons, and fill them no larger than a ping pong ball. Note: When using balloons be sensitive to latex allergies that may be present.

Soft objects - no larger than the opening of a small juice can.

Only soft objects are approved.

The use of any projectile larger than a tennis ball is not approved.

Although specific rules have not been written about each type of shooting activity, these general guidelines apply:

- 1. Have fun and be responsible!
- 2. Always wear eye protection.
- 3. Do not aim any shooting device at a person. Never shoot any projectile, even if it is soft or seems to be harmless, at or near people, animals, or personal property. This includes water balloons.
- 4. A balloon launcher is not a toy and is made for the sole purpose of launching water balloons. Never launch water balloons at eye level.
- 5. Do not use any projectiles such as rocks, pebbles, or ball bearings that are hard or that could cause harm.
- 6. Never use a launcher if there are signs of wear. Check before each use.
- 7. When using a slingshot or balloon launcher, never put your finger or hand between the tubing connection and the handle.
- 8. Targets may be made similar to those for archery and BB gun shooting. Creative targets may also be made that relate to the camp theme.
- 9. The catapults must be launched on range which meets the criteria of a safe range: safe area, safe distance, and safe backstop as appropriate for the size.
- 10. The range must be established. This can be a temporary area appropriately sized for the activity. Make certain that no one will wander into the landing zone of the projectiles.

## Flash Ball

Flash Ball is a shooting sport for shotgun shooting based on clay pigeon shooting and offers a whole new experience. The throwers used can be easily adjusted to fire a number of varied trajectories. Adding a wider range of targets by using more than one machine makes this already addictive game even more challenging. Targets are filled with white non- toxic powder. When the player hits the target, it flashes, producing the same effect as the flash clays used at the Olympics and other major shooting events.

These programs are approved for use by Scouts BSA, Venturers, and Sea Scouts. Supervision for this activity must follow the guidelines for shotgun shooting.

## **Sporting Arrows**

These programs are only approved to be conducted at the council or district level camp and must follow the program outline in the appendix. They require a range layout that is larger in size than a standard archery range, as well as an initial financial investment to secure the needed equipment. The traps are stand-alone machines, and the targets are reusable.

## Glossary

action. A group of moving parts used to cock, compress air (in some models), load, fire, and unload an air gun.

anchor point. The particular spot on the archer's face to which the index finger comes on the draw to give consistency to shooting.

**arm guard.** A piece of leather or plastic that is worn on the inside of the forearm to protect the arm from the bowstring.

arrow plate. A substance on the side of the bow to give point contact with the arrow.

**arrow rest.** An extraneous device on the bow to provide point contact; also a resting point.

back. The side of the bow that is away from the shooter.

**BB.** The term BB is used to describe spherical steel pellets that are .177 inch (4.5 mm) in diameter. However, steel BBs actually have a maximum diameter of .175 inch. BB projectiles for air guns should not be confused with the .181-inch-diameter BB pellets used in shotgun shells.

**blunt.** A blunt-tipped arrow, often used for small game.

**bolt.** A hard, metal projectile with a sharp, pointed nose and plastic fins inserted in the rear portion of the projectile.

**bore.** The inside of the barrel of a gun.

**bow arm.** The arm that holds the bow (not the string).

**bow sight.** A device attached to the bow that allows the shooter to sight directly on the target (which cannot be done with the arrow tip except at point-blank range).

**bowstring.** The string of a bow, usually made of Dacron.

broadhead. An arrow with a sharpened metal tip for hunting live game.

**butt.** A backstop for holding arrows shot at a target. The shoulder end of a rifle stock.

caliber. The diameter of a projectile, the distance between the lands in a rifled barrel, or the bore diameter in a smoothbore barrel.

cant. The act of holding the bow tilted or slightly turned while shooting.

cast. The distance a bow can shoot an arrow.

CO<sub>2</sub> cylinder or tank. A metal cylinder tank that contains carbon dioxide gas (CO<sub>2</sub>). Available in small disposable cylinders for insertion in some models of CO<sub>2</sub> pneumatic air guns; also available in large tanks that are used to charge refillable cylinders and internal gas reservoirs in other models.

cocking lever. The part of a spring-piston air gun used to cock a spring-loaded piston that compresses air at the instant of firing.

compressed CO<sub>2</sub> /air pneumatic gun. A type of air gun using carbon dioxide gas (CO<sub>2</sub>) or air that has been compressed and stored in a metal cylinder, or air that is compressed by an external air pump. This type of air gun allows the firing of multiple shots without recharging.

**creeping.** Letting the string hand edge forward before release.

**crest.** Paint or decoration on the arrow shaft near the feathers.

cylindrical pellets. A cylindrically shaped air gun pellet that usually has a raised band encircling its base to act as an air seal.

dart. A hard metal projectile with a sharp pointed nose and organic or artificial hair or feathers inserted in the rear portion of the projectile.

**dieseling.** The ignition and detonation of low-flash point lubricants due to the high temperature generated during the rapid compression of air in a spring-piston air gun.

**draw.** The acting of pulling the bowstring back into the anchor position.

**drawing arm.** The arm that draws back the bowstring.

drift. Natural deflection of an arrow from its normal path due to outside factors, such as wind.

end. A specified number of arrows shot at one time (or from one position) before retrieving.

end loop. The part of the string that fits over the bow nock.

face. The part of the bow facing the shooter; also a target face.

**fast.** An expression used to warn people of arrows being shot.

**field archery.** A competitive round shot at various distances and laid out like a golf course.

**field arrow.** An arrow with a field point; used outdoors for field archery, stump shooting, roving, and small game.

**finger tab.** A tab worn on the drawing hand to protect the fingers and give a smooth release of the bowstring.

**fletching.** The feathers of the arrow that give guidance to the arrow's flight.

**flight.** A competitive round of shooting for distance; also, the path of an arrow.

forearm. The part of the arm between the elbow and the wrist.

**free style.** Shooting with the aid of a bow sight.

front sight. The sight on the muzzle of a gun.

glove. A covering worn to protect the fingers from the string.

**grooves.** The shallow, spiral cuts in a bore that, together with the lands, make up the rifling in the bore of a barrel.

**handle riser.** The center part of the bow.

**head.** The tip or point of the arrow.

**hold.** The act of gripping the bow; hesitating at full draw.

**index.** The raised piece of plastic on the nock of an arrow that is in line with the cock feather.

index vain. The arrow feather at right angles to the nock; often of a different color than the other feathers.

instinctive shooting. Aiming and shooting arrows instinctively rather than using the pre-gap or point-of-aim methods or a bow sight.

**jerking.** Letting the drawing hand jerk too far back as the arrow is released.

kick. The recoil of the bowstring and bow after the arrow is released.

laminate. A composite bow, usually of wood and fiberglass.

lands. The ridges of metal between the grooves in a rifled barrel.

**limbs.** The two ends of a bow, from the handle riser out.

**longbow.** A bow with no recurve.

multi-pump pneumatic air gun. A type of pneumatic air gun that uses several strokes of a lever to compress and store enough air in a reservoir or chamber for one

muzzle. The front end of the barrel from which a projectile exits.

**NRA.** National Rifle Association.

**nock.** The groove in the end of the arrow in which the bowstring fits; also, the groove at each end of the bow which holds the bowstring in place.

**nock locator.** The material on the bowstring used to indicate the exact nocking point for the arrow.

**nocking point.** The marked place on the bowstring where the arrow nock is placed before drawing and releasing.

over-bowed. Using a bow that is too heavy for the indi-

**overdraw.** Drawing the arrow back too far so that the tip passes the face of the bow. This is a dangerous practice.

**pellet rifle.** A gun that propels a projectile through its barrel by use of compressed air or carbon dioxide gas (CO<sub>2</sub>). Gunpowder is not used in this type of gun.

**plinking.** Informal shooting at a variety of targets.

**pneumatic air gun.** A type of air gun that uses stored compressed air. Divided into two subcategories: singlestroke or multi-pump pneumatics and air pneumatics.

**point.** The tip on the end of the arrow.

point-blank range. The only distance from the target at which the point-of-aim is right on the target center.

point-of-aim. A method of aiming using a point, usually in front of the target, with which the point of the arrow is aligned; allows for trajectory of the arrow.

pre-gap (pre-draw gap). A method of aiming.

**projectile.** A body projected forward such as a bullet from a gun.

quiver. A container to hold arrows; can be ground, back, side, or pocket type.

range officer. A trained, certified, on-site adult who directs the operation of a range program in a shooting

rear sight. The sight nearest the breech of a gun.

**recurve.** A bow that is curved on the ends.

reflexed bow. A bow with limb ends curving toward the back rather than toward the face of the bow.

release. The act of letting the bowstring slip off the fingertips.

**rifling.** Spiral grooves and lands in the barrel bore that provide a stabilizing spin to a projectile so that it will be more accurate in flight.

**roving.** An outdoor game played by two or more in which natural targets such as stumps, trees, or bushes are selected for accuracy competition.

**self arrow.** An arrow made entirely of one piece of wood.

self bow. A bow made entirely of one piece of wood, as opposed to other types of bows such as laminate.

**serving.** The thread wrapped about the bowstring to prevent fraying of the string.

**shaft.** The middle of an arrow; an unfletched arrow.

**shelf.** The place on the bow where the arrow rests.

**shooting sports director.** The person who has overall responsibility for the operation of the shooting program for council camps and activities.

sight alignment. The relationship between the front and rear sights, where the shooter sees that the post bead, disc, or front sight device is aligned properly with the rear sight.

sights. Mechanical, optical, or electronic devises used to align the axis of the barrel on the target.

**sinking.** The gradual loss of a bow's power.

single-stroke pneumatic air gun. A type of pneumatic air gun that uses one stroke of a lever to compress and store enough air in a reservoir or chamber for one shot.

**small of stock.** The narrow part of a rifle stock.

smoothbore. An informal name for a gun that has a smoothbore barrel.

**smoothbore barrel.** A barrel that does not contain rifling.

solid bow. A common reference to a bow that is made entirely of fiberglass or plastics.

**spring-piston air gun.** A type of air gun that uses a manually operated lever or other device to cock a spring-loaded piston, which compresses air at the instant of firing. The air that propels the projectile is not stored in a reservoir prior to firing.

**stance.** A standing position assumed when shooting an arrow.

**stock.** The wooden or metal piece to which the barrel or mechanism of a rifle are attached.

**string.** Preparing a bow for shooting; also, the bowstring.

string fingers. The three fingers used to draw back the bowstring.

string height. The distance between the bow and the bowstring at the handle.

**strung bow.** A bow that is ready to shoot.

target archery. A competitive round shot at affixed distances in an open area.

target arrow. A lightweight arrow with a target point.

throwing. Moving the bow hand to the left upon release.

**understrung.** A bow with a bowstring that is too long.

vane. A plastic fletching on an arrow.

weight. The amount of effort (in pounds) required to draw the bow a given length (normally measured at 28 inches).

weight in hand. The actual weight of the bow.

windage. The amount of drift in the flight of an arrow caused by wind.

wobble. The erratic motion of a flying arrow.

# APPENDIX 5 - CUB SCOUT BB GUN SHOOTING SPORTS

# BB Gun Community Event Program

A BB gun range can be set up at a community event, county or state fair, or other similar event. A BB gun activity allows councils and districts to promote adventure as they recruit youth to Scouting America. These events must be council- or district-sponsored only, not pack, or den events.

Youth. Minimum age: Tigers through Arrow of Light Scouts (already registered or of joining age)

**Equipment.** A smoothbore, spring-piston, or air rifle that propels BBs. The barrel velocity must be a maximum of 350 feet per second.

Ammunition. BBs only

Participant safety. Eye protection is required for all individuals on the range.

Participant training/facility setup. Spend five minutes reviewing the NRA's three rules of gun safety. Guns are tethered to a table and are loaded by instructors. Youth aim at targets and fire. Bench rest position only; large bull's-eye targets with a target carrier system; resetting metallic targets, balloons, or other fun, breakable targets.

Range supervision and ratio. One Scouting America BB Gun Rangemaster OR one currently certified National Camping School Range Activities Director OR an NRA-certified rifle instructor for every eight participants AND one adult supervising each Cub Scout participant while shooting. These additional adults may be parents, legal guardians, or other responsible adults.

# BB Gun Open Shooting Program for Fun

Councils and districts can conduct programs for fun and to introduce Cub Scout-aged youth to shooting sports programs while recruiting them into Scouting. These events must be council or district events only, not den or pack events.

**Examples.** This program could be a day-at-the-range event (fun shoot), NRA Day event (contact the National Rifle Association for information on NRA Day), Winchester/NRA Marksmanship Qualification Program, Cuboree, or district or council camp weekend shooting event. A BB gun open shooting experience could be held at a BSA facility or at a facility that has been approved by the council for district- or council-level activities. These facilities may have previously held day camps or resident camps for BSA summer camping programs.

Youth. Tigers through Arrow of Light Scouts

**Equipment.** Defined as a smoothbore, spring-piston, or air rifle propelling shot known as BBs. The barrel velocity must be a maximum of 350 feet per second.

Ammunition. BBs only

**Range.** A Scouting America-approved range. Ranges must meet the Scouting America range design guidelines available at https://www.scouting.org/outdoor-programs/properties/resources/design-guidelines/.

Training. Scouting America BB gun briefing taught by a BB Gun Rangemaster, National Camping School Range Activities Director, or an NRA-certified rifle instructor.

The NRA's three rules for safe gun handling will be taught, and the parts of a BB gun will be reviewed. See pages 55 and 61 of this manual.

**Participant safety.** Eye protection is required for all individuals on the range.

Range supervision. A BB Gun Rangemaster, National Camping School Range Activities Director, or an NRA-certified rifle instructor is to directly supervise the range, and one parent or legal guardian per participant must be present.

Ratio. One qualified instructor for every eight shooters AND one adult for each Cub Scout while they are shooting. These additional adults can be parents or guardians.

Course. Bench rest, prone, or standing. Targets could be paper, resetting metallic targets, balloons, or other fun, breakable targets. You can also use the Winchester/ NRA Marksmanship Qualification Program.

# BB Gun District- or Council-Level Competitive Range and Target Activities Program

Purpose. Retention of Cub Scouts, Webelos Scouts and Arrow of Light Scouts by offering progressive, yearround range and target activities within a district and/ or council. The program could begin with competition at a district level with the packs competing against each other, and the top pack in the district could advance to the finals competing against other packs at a councilwide event.

This event must be council- or district-sponsored only, not a den or pack event.

**Examples.** Ongoing programs include BB gun leagues sponsored by the district or council or a weekend BB gun event where the Cub Scouts, Webelos Scouts, and Arrow of Light Scouts are invited to participate in a shooting event; Scouts shoot for high score, best shot, or other rankings.

**Youth.** Minimum age: Tiger Cub- through Arrow of Light Scout-aged youth (already registered or of joining age)

BB guns. Smoothbore, spring-piston, or air rifle propelling shot known as BBs. The barrel velocity must be a maximum 350 feet per second.

Ammunition. BBs only.

Range. Ranges must meet the Scouting America range design guidelines available at https://www. scouting.org/outdoor-programs/properties/resources/ design-guidelines/.

**Training.** Scouting America BB gun briefing taught by Rangemaster, National Camping School Range Activities Director, or an NRA-certified rifle instructor. See pages 57-58 of this manual for acceptable shooting positions.

**Safety.** Eye protection is required while using BB guns or air rifles.

Range supervision. A Scouting America BB Gun Rangemaster, National Camping School Range Activities Director, or an NRA-certified rifle instructor must directly supervise the range.

Ratio. One qualified instructor for every eight participants.

**Course.** The format can be similar to a pinewood derby competition. A set number of weeks would be established, allowing the Scouts to shoot once a week and keep score. Scouts first shoot on a district level, with Scouts from different packs competing against each other to determine the top three shooters in the district. The top scorers would then move on to a final competition at the council level, and the top three would be awarded a council trophy.

# APPENDIX 6 - PROHIBITED ACTIVITIES

To review all Scouting America unauthorized activities, please visit https://www.scouting.org/health-and-safety/gss/gss07/

# APPENDIX 18 - CUB SCOUT RANGE AND TARGET ACTIVITIES ADVENTURE LESSON PLANS

A Guide to the Cub Scout Range and Target **Activities Adventures for Unit Leaders, Councils, Districts, and Range Masters** 

# **PREFACE**

Cub Scout range and target activities programs may be conducted only on a district or council level. Archery, BB gun shooting, and slingshot shooting are restricted to day camps, Cub Scout/Webelos Scout resident camps, council-managed family camping programs, or council activities where there are properly trained supervisors and where all standards for Scouting America range and target activities are enforced. All shooting ranges in the Cub Scout program must be supervised by a qualified Rangemaster who is at least 18 years of age and meets the minimum requirements. See specific qualifications and training requirements for Cub Scout Range and Target Activities Rangemasters in the Scouting America Range and Target Activities Manual, No. 430-938.

### **USING THIS GUIDE**

- · Archery, BB gun shooting, and slingshot shooting are not approved unit activities.
- The use of pellet air rifles is restricted to Webelos Scouts and Arrow of Light Scouts in a Boy Scouts of America resident camp setting only.
- Kindergarten-age youth in the Lion program may participate in Cub Scout archery or slingshot activities.
- Airsoft guns are not approved for use in the Cub Scout range and target activities program.
- · All local, state, and federal laws for BB guns, archery, and slingshot shooting must be followed.

This Cub Scout Range and Target Activities Guide is intended to assist leaders in helping their Cub Scouts earn the shooting sports awards. It is not a substitute for authorized Rangemaster training or for the safety procedures called out in the Scouting America Range & Target Activities Manual, No. 430-938, which is the reference for any range and target activities in Scouting America.

All volunteers participating in official Scouting activities should become familiar with the Guide to Safe Scouting. The Guide to Safe Scouting may be found online at www.scouting.org/scoutsource/ HealthandSafety/GSS.



# **SECTION 1: INTRODUCTION**

The goal of this guide is to support range and target activities directors, Rangemasters, and on-range adult volunteers as they assist Cub Scouts in meeting the requirements of the Cub Scout range and target activities adventures according to Scouting America policy and practice. This resources supports — but does not replace — the Scouting America Range and Target Activities Manual.

The Cub Scouting range and target activities disciplines of archery, BB gun shooting, and slingshot shooting are restricted to day camps, Cub Scout/Webelos Scout resident camps, council-managed family camping programs, or council activities held on or off Scouting America property where there are current and properly trained Scouting America Rangemasters and where all standards for Scouting America Range and Target Activities are enforced.

# **Purpose of the Cub Scout Range and Target Activities Adventures**

As decades of Cub Scouting have shown, most youth love to shoot!

Beyond capturing that enthusiasm, the Scouting America created the Cub Scout range and target activities adventures program to encourage in Cub Scouts the development of safe shooting practices and proficiency. As Cub Scouts participate in range and target activities and work toward an award, they not only build confidence in their abilities, but also develop self-reliance, sportsmanship, and conservation awareness — all elements of good character valued in Scouting.

Through experiential learning guided by a knowledgeable adult, Cub Scouts will learn the safe and responsible use of BB guns, slingshots, and archery equipment. The goal is for the Cub Scout to have fun in a safe environment, not to become an expert marksman, Rangemaster, or hunter.

# Lions, Tigers: Range and Target Activities

Lions and their adult partners may participate in archery or slingshot range and target activities. Tigers and their adult partners may participate in all Cub Scouting range and target activities. The adult partners must be included in all shooting activities. Each Lion/ Tiger must be paired with their adult partner before being allowed to shoot. In most cases, Lions/Tigers and their adult partners will participate in range and target activities 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 experience working as a group and may require more time to understand how the range operates. Lions/Tigers have a wide range of ability and experience levels, so be ready for anything!

# Structure of the Cub Scout Range and Target **Activities Adventures**

Cub Scout range and target activities adventures may be earned for any of the three following disciplines:

- Archery
- BB guns (available only for Tiger through Arrow of Light ranks.)
- Slingshots

A Cub Scout may choose to participate in only one of the disciplines or may choose to participate in all three disciplines. The requirements for each of the disciplines are structured similarly.

# CUB SCOUT BB GUN ADVENTURE LESSON PLAN

## **PURPOSE**

This lesson plan is provided for rangemasters to teach the BB Gun Adventures at a council-sponsored longterm camp, short-term camp, day camp or one day activity. The BB Gun Adventures are available for each Cub Scout rank, except for Lions.

Units are not authorized to hold range and target activities at the den or pack level. The information in this lesson plan is not meant to replace any information in the National Range and Target Manual or the Guide to Safe Scouting.

This lesson plan was developed as a guide for a 5-session day camp or twilight camp experience with (5) 45-minute sessions. The rangemaster may adjust this plan to meet the event's program schedule if the requirements are met as written.

The BB Gun Adventure is an ideal range activity for day camps lasting less than 5 days or even one day events. Suggestions for other events and mixed age dens are at the end of this lesson plan.

Tiger Scouts must have their adult partner with them while at the BB gun range.

NOTE: When the word 'demonstrate' is used in a requirement, a simple demonstration made by the Cub Scout showing their understanding will serve as meeting that requirement. Where the word 'discover' is used in a requirement, explanation accompanied by visual aids will serve as meeting that requirement. When appropriate, some demonstrations/discussions can be held away from the firing line. Each Cub Scout should do their best based on their physical abilities.

# REQUIREMENTS FOR ALL RANKS

- 1. Explain what you should do if you find a gun. Recite the 4 safety reminders (Tigers with the help of their adult partner).
- 2. Identify and wear the appropriate safety gear (Tigers with the help of their adult partner).
- 3. Demonstrate proper range commands (Tigers with the help of their adult partner, additionally Bear, Webelos and Arrow of Light Scouts are to demonstrate proper range commands and explain them to an adult or another scout).
- 4. Show how to use the safety mechanism. (Tigers with the help of their adult partner)

- 5. Demonstrate how to properly load, fire, and secure your BB gun (Tigers with the help of their adult partner).
- 6. Demonstrate one of the positions for shooting a BB gun (Tigers with the help of their adult partner, additionally Webelos and Arrow of Light are to demonstrate prone, bench and sitting positions for shooting a BB gun). Note: this is a demonstration requirement and not mandatory as a shooting requirement.
- 7. Shooting Requirements:

Tiger	Fire 5 BBs at the target. With the help of your Tiger adult partner, score your target. Repeat and do your best to improve your score. Fire at least 10 BBs.
Wolf	Fire 5 BBs at the target and score your target. Repeat twice and do your best to improve your score. Fire at least 15 BBs.
Bear	Fire 5 BBs at the target and score your target. Repeat twice and do your best to improve your score. Fire at least 15 BBs.
Webelos	Webelos Shoot 5 shots at a target. Repeat three times and do your best to improve your score each time. Shoot at least 20 BBs
Arrow of Light	Shoot 5 shots at a target. Repeat three times and do your best to improve your score each time. Shoot at least 20 BBs.

Discuss how to put away and properly store your BB gun and shooting equipment after use.

# **SESSION I (45 MINUTES)**

# PREPARATION & MATERIALS NEEDED

- Safety rules posters
- Appropriate safety equipment as specified in the National Range and Target Manual
- · Appropriate BB gun equipment as specified in the National Range and Target Manual
- · Approved targets

# **TOPIC: GEAR & SAFETY**

It is important that participants learn the importance of safety rules while participating in range and target activities and the need for appropriate safety gear.

· Participants and range staff must wear eye protection (safety glasses) when the BB gun range is used.

To prepare the participants for being on the shooting line, please do the following:

• Explain what you should do if you find a gun. Recite the 4 safety reminders.

- Demonstrate how to properly wear the safety equipment.
- Explain the range safety rules and range commands. It is important that the Rangemaster gets feedback from the group to ensure complete understanding of the safety rules and range commands. Tigers will have assistance from their adult partner. Note: Webelos and Arrow Light Scouts have the added requirement of explaining range commands to an adult or another Scout.

Move the group to the shooting line to do the following:

- · Show how to use the safety mechanism.
- Demonstrate how to properly load, fire, and secure your BB gun.
- Demonstrate one of the positions for shooting a BB
- Allow participants to shoot for the remaining time.

Requirements 1-6 should be complete after this session.

*Note: This session is important because it establishes* the basis for range safety and understanding range commands, but it is equally important that the participants get to shoot before leaving the session.

# **SESSION 2 (45 MINUTES)**

# **PREPARATION & MATERIALS NEEDED**

- Safety rules posters
- Appropriate safety equipment as specified in the National Range and Target Manual
- Appropriate BB gun equipment as specified in the National Range and Target Manual
- · Approved targets

# **TOPIC: RANGE ACTIVITY**

Review the range safety rules and range commands. To engage the participants, ask them to explain the rules and range commands in their own words (rather than telling them).

- · Participants shoot and attempt to complete requirement 7.
- Discuss how to put away and properly store your BB gun and shooting equipment after use. (Requirement 8)

Requirements 7-8 should be complete after this session.

# SESSION 3 (45 MINUTES)

# PREPARATION & MATERIALS NEEDED

- Safety rules posters
- Appropriate safety equipment as specified in the National Range and Target Manual
- Appropriate BB gun equipment as specified in the National Range and Target Manual
- · Approved targets

# **TOPIC: RANGE ACTIVITY**

Review the range safety rules and range commands. To engage the Cub Scouts, ask them to explain the rules and range commands in their own words (rather than telling them).

- Participants continue to shoot. If requirement 7 was not completed during the previous session, those Cub Scouts may continue working on that requirement.
- If requirement 7 was completed during the previous session, participants may play an approved BB gun game (suggested games listed at the end of this lesson plan).

# SESSION 4 (45 MINUTES)

# PREPARATION & MATERIALS NEEDED

- Safety rules posters
- Appropriate safety equipment as specified in the National Range and Target Manual
- · Appropriate BB gun equipment as specified in the National Range and Target Manual
- Approved targets

## **TOPIC: RANGE ACTIVITY**

Review the range safety rules and range commands. To engage the Cub Scouts, ask them to explain the rules and range commands in their own words (rather than telling them).

- Participants continue to shoot. If requirement 7 was not completed during the previous session, those Cub Scouts may continue working on that requirement.
- If requirement 7 was completed during the previous session, participants may play an approved BB gun game (suggested games listed at the end of this lesson plan).

# SESSION 5 (45 MINUTES)

# **PREPARATION & MATERIALS NEEDED**

- Safety rules posters
- Appropriate safety equipment as specified in the National Range and Target Manual
- Appropriate BB gun equipment as specified in the National Range and Target Manual
- · Approved targets

# **TOPIC: RANGE ACTIVITY**

Review the range safety rules and range commands. To engage the Cub Scouts, ask them to explain the rules and range commands in their own words (rather than telling them).

- Participants continue to shoot. If requirement 7 was not completed during the previous session, those Cub Scouts may continue working on that requirement.
- If requirement 7 was completed during the previous session, participants may play an approved BB gun game (suggested games listed at the end of this lesson plan).

# RANGE REQUIREMENTS

# **BB GUN RANGE SET-UP**

BB gun program may utilize an approved BB gun range.

- 1. Select the orientation of the range
  - a. Avoid shooting into the sun by facing North
  - b. The ground should be flat and free of obstacles
  - c. 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.
  - d. The safety zone on the side should be 30-50 feet.
- 2. Place range and safety lines
  - a. Rope, eco-friendly spray paint or chalk are ways to lay down the range lines outdoors. Follow the guidelines illustrated in the National Range and Target Manual.
  - b. Shooting Line The shooting line is 15 to 30 feet from the target line depending on the skill level of the participants.
  - c. 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 partici*pants 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)

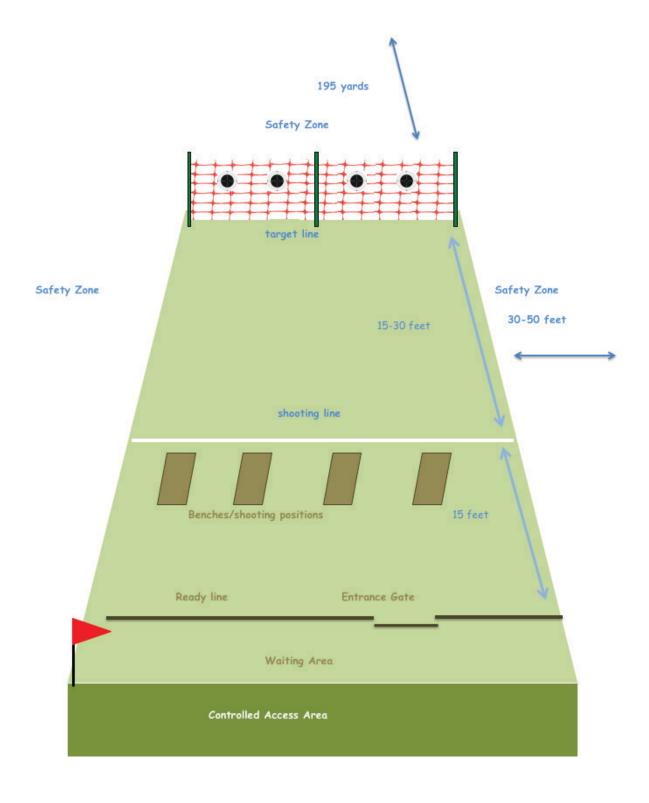
# 3. Set-up targets

- a. 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.
- b. Evenly space targets in front of the berm. Space between targets is dependent on placement of shooting positions.
- c. 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.
- d. A temporary target holder can be made using yard signs with wire ground stands.

# 4. Place the equipment

- a. Eye protection should be available in the waiting area. All participants on the range must wear eye protection.
- b. BB guns May be on the top of the bench if using the bench rest position, or on the mat used for the prone positions. If shooters are shooting from the standing position, there should be some type of stand where the BB guns may be placed when not in use.
- c. Ammunition Should be stored in a secure location between the shooting line and the ready line under the supervision of the rangemaster.

# OUTDOOR RANGE LAYOUT: WIDE OPEN SPACE



# SUGGESTIONS

Based on the format of your event, there might not be enough time in the program schedule to utilize 5 sessions to complete the BB Gun Adventure. You may also have dens with mixed ages and levels of knowledge and/or ability. There are times when a Cub Scout can attend only a few days of a day camp, so adjustments will need to be made.

Take the time to read the requirements, evaluate the number and the length of the sessions the event will have so you can determine what should be presented in the time allotted.

It is possible the adventure could be completed within 2 sessions or less depending on your event's program design:

- · Length of each session
- · Age of participants
- Experience level of the participants
- Number of participants in each den

### MIXED-AGED DENS

When dealing with dens of mixed ages, consider moving the more experienced participants (the older Scouts who have attended a range activity previously) to the shooting line after the safety briefing to begin their course of fire. The less experienced Scouts can then spend time learning range commands, how to use the safety equipment and how to use the BB gun equipment. This same method may be applied with larger groups. You may be required to recruit additional trained staff to maintain range supervision ratios.

# PARTIAL COMPLETION OF THE REQUIREMENTS

Depending on the type of event (i.e., one-day event) it is possible the adventure requirements may not be completed in their entirety. If this is the case, each participant should be given a list of the requirements completed so that they can bring it to the next councilsponsored event they attend.



# **GENERAL SHOOTING RANGE RULES**

- I. This range may be opened only by a qualified Scouting America-certified range master.
- 2. All commands issued by the range master must be obeyed immediately.
- 3. Stay behind the firing line. Do not straddle the firing line.
- 4. Do not pick up a gun, bow, arrow, or slingshot unless told to by the range master.

- 5. Absolutely no running on the range.
- 6. No horseplay or unnecessary talking on the range.
- 7. If in doubt about the rules, ask your leader or range master for advice or help.



# EYE DOMINANGE

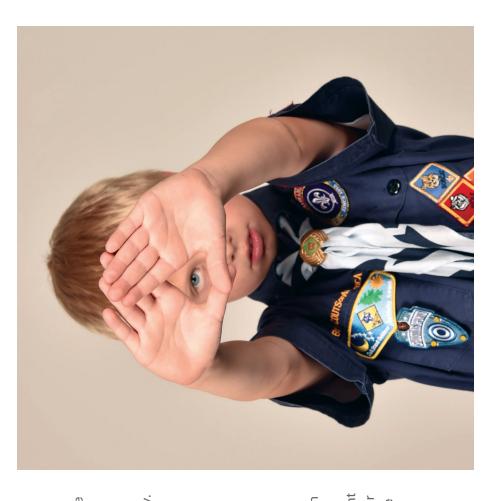
"cross dominant," meaning they may be right-hand dominant and left-eye Eye dominance is the unconscious preference to use one eye rather than the other to aim. The dominant eye often corresponds with the archer's dominant hand, but not always. There are a number of people who are dominant, or vice versa

event a shooter or archer is struggling to aim or hit the target consistently. shooting with their dominant hand, but trying to aim with their opposite dominant eye. They may try to line up their dominant eye to the target t is important to understand how to determine eye dominance in the by tipping their head over the bow or gun, causing their shots to be Eye dominance needs to be addressed when a shooter or archer is consistently left or right of center on the target.

a Cub Scout who is cross dominant shoot Important Note: It is not necessary to make with the non-dominant hand. The shooter may simply choose to continue shooting with the dominant hand

# To Find the Dominant Eye

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



and cover or close the

non-dominant eye.



# **BB GUN SIGHTING CHART**







FRONT SIGHT POST

PEEP REAR SIGHT



PROPER SIGHT PICTURE



PROPER SIGHT PICTURE





PROPER ALIGNMENT

APERTURE FRONT SIGHT

PEEP REAR SIGHT



PROPER ALIGNMENT



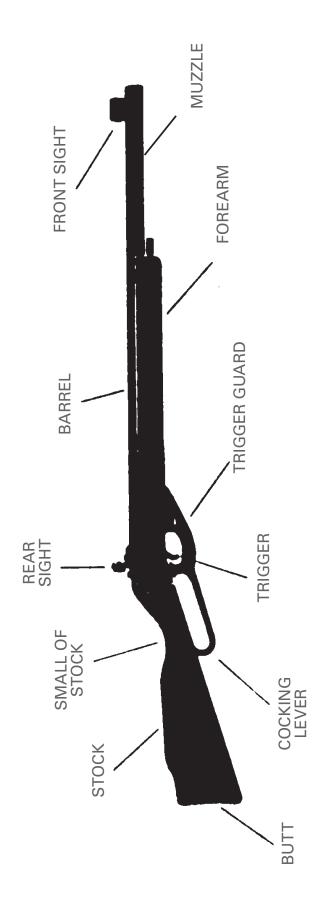


POST FRONT SIGHT

OPEN REAR SIGHT



# PARTS OF A BB GUN











DON'T TOUCH



# SUGGESTED BB GUN RANGE COMMANDS

OAD YOUR BB GUN.

ALL SHOOTERS ARE READY.

READY ON THE FIRING LINE.

**YOU MAY FIRE YOUR BB GUN.** 

COMMENCE FIRING.

STOP SHOOTING. CEASE FIRING. SHOW YOUR BB GUN IS EMPTY. LAY IT DOWN.

LOAD.

**CLEAR ALL GUNS.** 



# SUGGESTED BB GUN SAFETY RULES

I. Always keep the gun pointed in a safe direction.

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

3. Always keep the gun unloaded until ready to use.

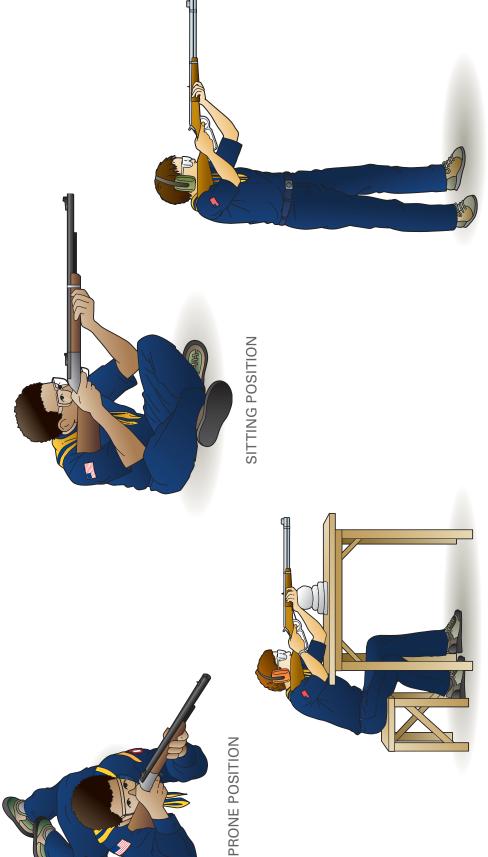
4. Know how to use a gun safely.

5. Be sure the gun is safe to operate.

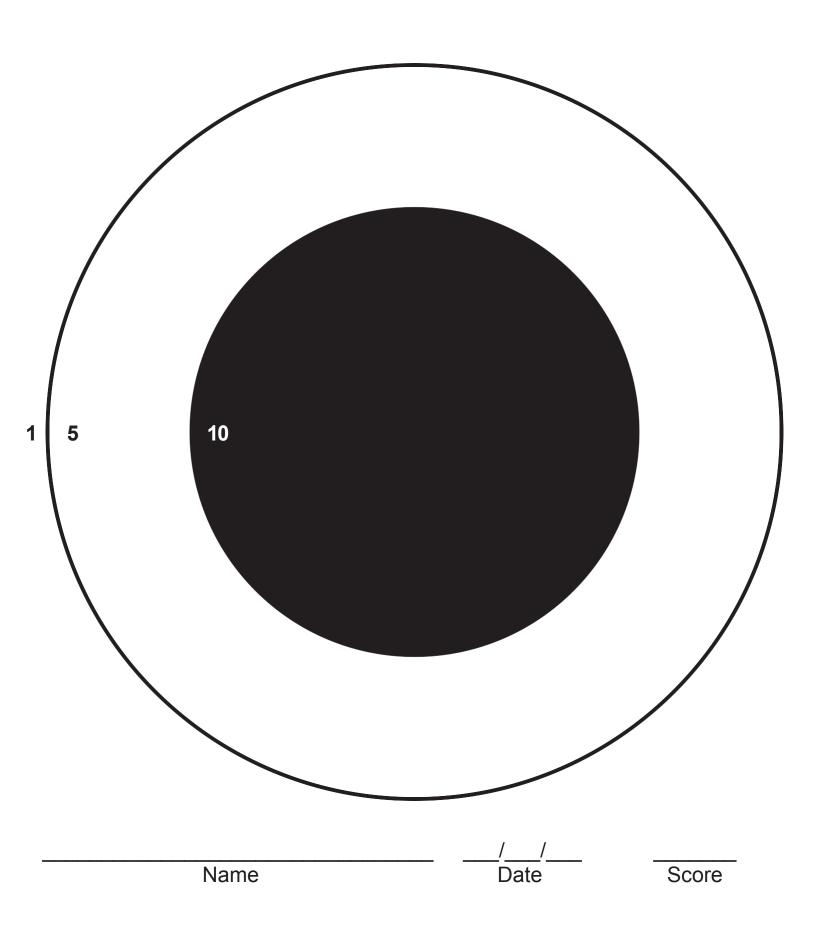
6. Use only the correct ammunition for the gun.



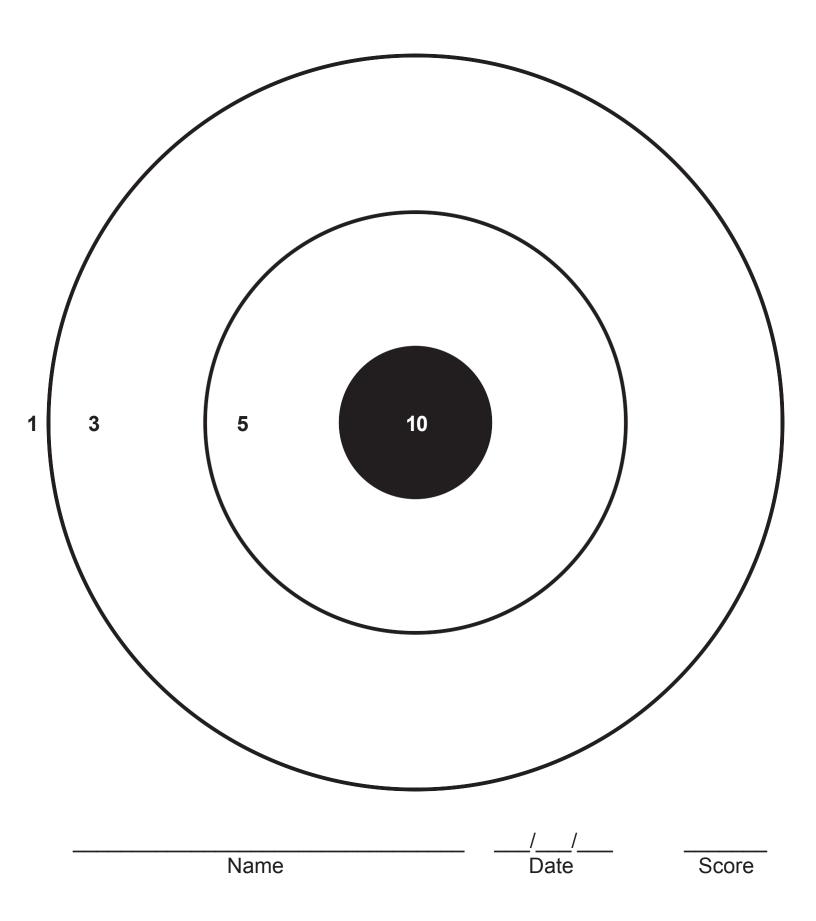
# **BB GUN SHOOTING POSITIONS**



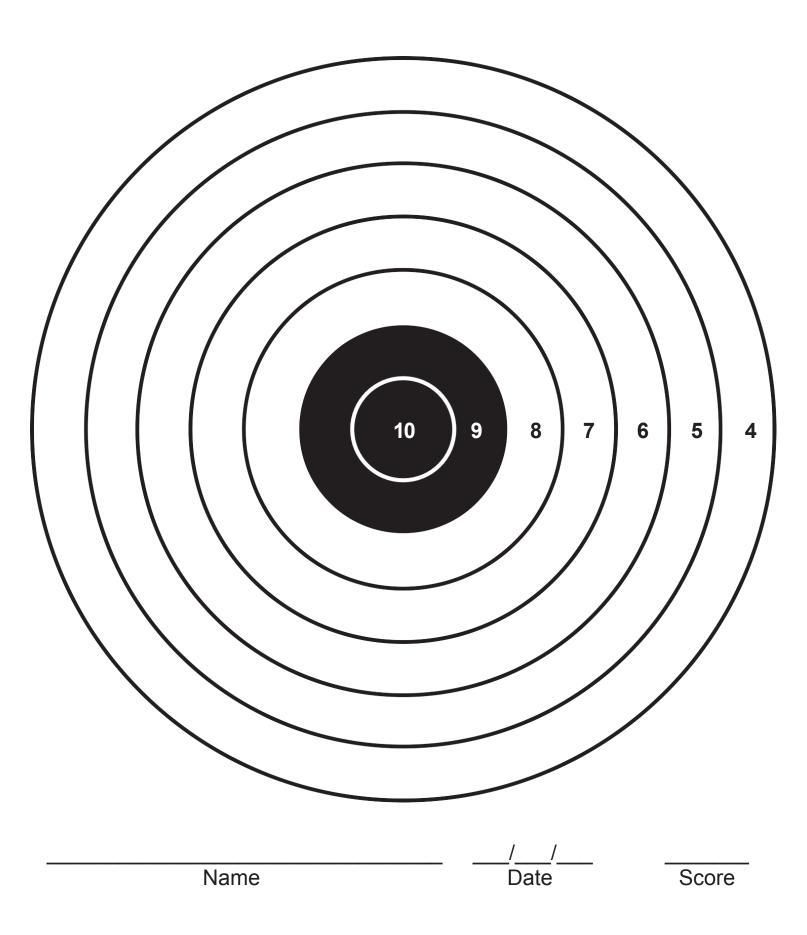
# **TIGER TARGET**



# **WOLF/BEAR TARGET**



# **WEBELOS/AOL TARGET**



# APPENDIX 2: ADDITIONAL ACTIVITIES

# Range and Target Activities Program Ideas

Range and target activities in Cub Scouting are operated by local councils and districts. The suggestions here are designed for use at council- and district-sponsored events that provide range and target opportunities.

The activities described below can be used with slingshots, archery equipment, and BB guns. An important practice across all of Scouting is that we do not use targets that feature human beings or animals.

Targets for BBs, arrows, and slingshots can be made from a variety of materials, including paper, cans, plastic bottles, and balloons. Paper targets can be homemade or purchased. Cans are excellent as they make a great sound when hit. Cans, plastic bottles, and balloons can be hung from strings or attached to netting.

The distance between the shooter and the target can be varied depending on the shooter's level of experience. The distance can be increased as skills improve.

# **Fun Target Activities for BB Shooting**

# **Target Squares**

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 his or her BBs hit. The highest score is the winner.

# **Mystery Dots**

Place dots on a target, then shoot at the back side of the target. Count the score from the dotted side.

# **BB** 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.

# **Cracker Shoot**

Set up crackers as targets. Have participants shoot at the narrow edges of the crackers.

# **Action BB Gun Shooting Course**

Set up an action BB gun shooting course using several games or targets as different stations in the course. Each station could encourage the shooters to use a different shooting position. One station could be used to do maintenance work for the BB gun shooting program.

# **Fun Target Ideas for Archery Shooting**

# Archery 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 archer will shoot one arrow 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.

# Wand Shooting

Place a strip of 1-inch masking tape over the target face from top to bottom. A point is scored when an arrow hits the tape anywhere on the target. 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 archer will shoot one arrow and step back. The second and each succeeding person will shoot one at a time. The first team to get two points is the winning team.

# **Shoot the Monster**

Participants shoot at a one-gallon plastic bottle, suspended with shock card within a tire and painted to look like a monster. The object is to hit the plastic bottle. This event can be scored individually or by den or pack.

# Ring the Bell

Participants shoot at bells through the open end of swinging tires. All tires are swung in unison with a rope tied to the bottom of each tire and extended to an area beyond the limits of firing on the side.

## Football Placekick

A scaled-down goalpost is erected behind a 4-foot-high canvas sheet. From the firing line the archer can see only the top portion of the goalpost uprights. An arrow shot between the uprights above the crossbar scores as a field goal (three points), while an arrow that passes over the canvas and under the crossbar scores as a touchdown (six points). A raised platform should be set up adjacent to the shooting positions so an observer can determine the scoring, since the archer is not able to see the lower portion of the goalposts.

# **Archery Practice Fun**

Any station set up for youth to practice skills is a fun station for the Cub Scouts. The program allows limited times to shoot arrows, so the opportunity to practice at a council camp or event is a great experience for them. A practice station is a simple, basic archery range, but a very fun one for the Scouts.

Archery stations could also be set up to practice stringing bows or to learn how to care for some of the equipment. Helping with some of the archery equipment could be a rainy day activity.

# **Action Archery Course**

An action archery course could be set up using several of these games as different stations in the course. A drawing of a sample action archery course is available in the Scouting America Range and Target Activities Manual.

# **Fun Target Ideas for Slingshot Shooting**

## Feed the Monster

Using a large piece of cardboard, sketch a monster. Cut a hole where the monster's mouth is located. Aim to feed the monster

# **Tin Can Alley**

Hang tin cans from string. Place them at various heights and distances from the shooting line.

# **Tire Target**

Hang tires (or hoops) at different heights and distances from the shooting line.

## Ring-a-Ding

Hang bells from strings. Shoot to strike the bells.

# **Chart Paper Target**

Create a large target with chart paper. Draw circles of different sizes on the chart paper. Apply different scores to the circles, with large circles being worth fewer points.

# **Slingshot Target Course**

A target course could be set up using several of these games as different stations in the course. A drawing of a sample action archery course is available in the Scouting America Range and Target Activities Manual and can be adapted for a slingshot target course.

# **Bikathlon**

The bikathlon event is modeled after the winter Olympic biathlon in which competitors cross-country ski and shoot rifles. In the bikathlon, the Cub Scouts bike around an off-road course, stop at various points, dismount from the bikes to shoot targets that fall over when struck, and then continue along the course. Though the sport requires a certain amount of strength for the biking portion, the shooting sports activity is the key to the event.

# **Setting Up the Course**

Make the course approximately one-third of a mile in length, in the form of a loop so the starting line and a finishing line are in the same position. One point along the course becomes the firing line—with a separate position for each racer. Identify each firing point with a color, as assigned to each participant. Place a bike rack in a safe place with easy access. The course should not

be in a rocky area, and the instructors should walk it to ensure that all dangerous obstacles have been removed. The course can be an existing track or laid out with cones or rope guides to make sure each biker follows the same route.

# Running the Race

The bicycle is ridden to the shooting point, the youth dismounts, parks the bike, and shoots the targets. The biker shoots at each target until it is hit and knocked over, then remounts the bike and finishes the race. A limit may be imposed on the number of shots for each target and a time penalty imposed if the target is not knocked over.

The youth finishing the race in the shortest time is declared the winner. The key to the event is not only to pedal fast, but also to shoot quickly and accurately.

Shooting is normally done from the standing position but may be changed at the range director's discretion.

Participants are never allowed to ride the course with the gun, arrows, or slingshots. These items are to remain at the firing point at all times.

Every participant is required to attend a brief orientation on bike safety and handling the shooting sports materials used on the course before being allowed to participate in the bikathlon.

This safety session should, as a minimum, cover the following:

- · Course layout and general rules
- Range procedure and safety
- · How the match is scored
- How to operate and load the guns
- Shooting safety and safe gun handling
- · Basics of sighting and shooting
- Bicycle use and riding safety
- Hands-on practice as time, personnel, equipment, and facilities allow

# **Archery Range Rules and Commands**

# **EQUIPMENT AND MATERIALS**

- Bikes
- Elbow and knee guards
- · Safety helmets
- Stopwatch or other timing device
- BB approach:

BB guns and BBs at each shooting station Safety glasses to be worn at the firing line

- Archery approach:
  - Bow and quiver of arrows at each shooting station
- Slingshot approach:
  - Slingshot and ammunition at each shooting station
- Alternative:

Use all of the above at different stations.

# **PERSONNEL**

Assign adults to the following positions:

- Match director (responsible for the event)
- Jury (three people who are responsible for solving any dispute that may arise during the match and to ensure compliance of the rules by participants)
- Rangemasters (responsible for safety on the range)
- · Statistical officer (responsible for tracking participants' total lapse time)
- Starter (the official who starts each relay or
- · Other personnel needed are timers, first-aid personnel, course marshals, and repair personnel (for guns, arrows, slingshots, and/or bikes)
- One staff member at each station

## **Photo and Illustration Credits**

All photos and illustrations are the property of or are protected by Scouting America.

# APPENDIX 19 - RESOURCES

# **People**

- · Who to call for help
  - Contact your local council's range and target activities committee chair
  - Scouting America: outdoorprograms@scouting.org
- Local council websites
- The National Rifle Association
- Contact USA Archery, www.usarchery.org
- Contacts at the National Shooting Sports Foundation

# **Facilities**

- Local council camps
- Local shooting sports clubs
  - National Wild Turkey Foundation, www.nwtf.org
  - Issac Walton League, www.iwla.org
- · Local ranges
  - State wildlife ranges. Contact your local department of natural resources.
  - Law enforcement ranges
  - National Forest Service ranges
- · Local gun and archery businesses
  - May have local range information

# Materials/Literature

- National Rifle Association, www.nra.org
- National Archery in the Schools Program, www.naspschools.org
- National Sporting Clays Association, www.mvnsca.com
- National Skeet Shooters Association, www.mynssa.com
- International Hunter Education Association, www.ihea-usa.org
- National Muzzle Loading Rifle Association, www.nmlra.org

# **Equipment**

- National Shooting Sports Foundation, www.nssf.org
- Archery Trade Association, www.archerytrade.org
- Daisy, www.daisy.com
- Crosman, www.crosman.com
- · Benelli, www.benelliusa.com
- Beretta USA, www.berettausa.com
- Browning, www.browning.com
- Remington, www.remington.com
- Winchester, www.winchester.com
- Federal Premium Ammunition, www.federalpremium.com

# **Programs**

# Advancement and recognitions

- Scouts BSA
  - Merit badges. Refer to Chapter 3, "Merit Badge Counselors," rifle shooting, shotgun shooting, archery.
- Cub Scout
  - Cub Scout Range and Target Activities adventures (BB, Archery, Slingshot)
- Venturing
  - Ranger Award
  - Venturing Range Activities Outstanding Achievement Award.