



STEM-Based

BOY SCOUTS OF AMERICA MERIT BADGE SERIES

# ARCHERY



"Enhancing our youths' competitive edge through merit badges"



## Note to the Counselor

## **BSA Standards**

The merit badge counselor must be sufficiently experienced in archery activities to teach Scouts the necessary skills and to respond effectively in the event of an emergency. We recommend the counselor use the most current printing of the *Archery* merit badge pamphlet, No. 35856; the *Guide to Safe Scouting*, No. 34416; and the BSA *National Shooting Sports Manual*, No. 30931, for further details on shooting sports.

## **Archery Activities**

Modern bows and arrows are potentially dangerous. As merit badge counselor, you must take responsibility to comply with all state and local laws. Additionally, you must ensure that all shooting activities are conducted on established and clearly marked target or field archery ranges with appropriate supervision by a qualified archery range master.

The following are standards established for bows and arrows used in Scouts BSA.

### Safe Area or Course

A key part of the counselor's responsibility is to know the range or course for conducting archery activities and to determine that it is well-suited and free of hazards. Safety procedures include but are not limited to:

- Inspect the range before use for any conditions that might pose a potential hazard to safe operation.
- Range flags must be flown while the range is in use.
- Range perimeter should be well-defined and the target line, shooting line, and waiting line must be well-marked.
- All spectators and archers waiting to shoot must remain behind the waiting line at all times.
- Bows and arrows should be used only in supervised places set aside for their use.

• On a field archery course or roving range, when searching for a lost arrow, participants should leave their bow standing against the target face and have a buddy standing by to intercept other archers who may follow. Stay on marked paths. Travel the direction in which targets are marked.

### **Equipment Selection and Maintenance**

The counselor should inspect all equipment to ensure bows, bowstrings, and arrows are in safe condition and appropriate for the Scout's height and maturity. Care should be taken to break and discard all cracked or fractured arrows. Draw a bowstring only with a nocked arrow of proper length. Failure to do this may result in overdrawing and breaking the bow or in personal injury.

## Personal Safety Equipment

The counselor must ensure that every participant always wear an arm guard and either a finger tab or glove.

## Safety Procedures and Policies

Adherence to archery safety procedures and standards can greatly reduce risk. These should be known and understood by all participants, and the counselor must ensure compliance. Here are some commonsense safety rules:

- A bow, like a gun, must never be pointed at a person.
- Never release an arrow without being able to see its full, clear path to the target.
- Before drawing a bow, make sure the range is clear of any persons or animals and that the archer is straddling the shooting line.
- Arrows should be nocked only on the shooting line at the archery range master's signal and pointed only in the direction of the target.
- Stop shooting immediately on signal from the range master or if anyone crosses in front of or behind the target.
- Never shoot an arrow up into the air.
- Broadhead arrows are for those who are licensed to hunt. They are not permitted in Scouting target archery activities.

### Discipline

Scouts must respect their counselor and range master at all times and follow their direction. Participants should always practice courtesy and good sportsmanship.

## Requirements

- 1. Do the following:
  - (a) Explain the five range safety rules.
  - (b) Explain the four whistle commands used on the range.
  - (c) Explain how to safely remove arrows from the target and return them to your quiver.
  - (d) Tell about your local and state laws for owning and using archery equipment.
- 2. Do the following:
  - (a) Name and point to the parts of an arrow.
  - (b) Describe three or more different types of arrows.

(c) Name the four principal materials for making arrow shafts.

- (d) Do ONE of the following
  - (1) Make a complete arrow from a bare shaft using appropriate equipment available to you.

#### OR

- (2) To demonstrate arrow repair, inspect the shafts and prepare and replace at least three vanes, one point, and one nock. You may use as many arrows as necessary to accomplish this. The repairs can be done on wood, fiberglass, or aluminum arrows.
- (e) Explain how to properly care for and store arrows.
- 3. Do the following:

(a) Explain the proper use, care, and storage of, as well as the reasons for using tabs, arm guards, shooting gloves, and quivers.

(b) Explain the following terms: draw length, draw weight, mechanical release and barebow.

- 4. Explain the following:
  - (a) The difference between an end and a round
  - (b) The differences among field, target, and 3-D archery

(c) How the five-color World Archery Federation target is scored

- (d) How the National Field Archery Association (NFAA) black-and-white field targets and blue indoor targets are scored
- 5. Do ONE of the following options.

#### **Option A—Using a Recurve Bow or Longbow**

(a) Name and point to the parts of the recurve or longbow you are shooting.

- (b) Explain how to properly care for and store recurve bows and longbows.
- (c) Demonstrate and explain USA Archery's "Steps of Shooting" for the bow you are shooting.
- (d) Demonstrate the proper way to string a recurve bow or longbow.
- (e) Using a bow square, locate and mark with dental floss, crimp-on, or other method, the nocking point on the bowstring of the bow that you are using.
- (f) Do ONE of the following:
  - (1) Using a recurve or longbow and arrows with a finger release, shoot a single round of one of the following BSA, USA Archery, or NFAA rounds:
    - (a) An NFAA field round of 14 targets and make a score of 60 points
    - (b) A BSA Scout field round of 14 targets and make a | score of 80 points
    - (c) World Archery/USA Archery indoor\* round and make a score

of 80 points

(d) An NFAA indoor\* round and make a score of 50 points

\*The indoor rounds can be shot outdoors if this is more convenient.

- (2) Shooting 30 arrows in five-arrow ends at an 80-centimeter (32-inch five-color target at 10 yards and using the 10 scoring regions, make a score of 150 points.
- (3) As a member of the USA Archery Junior Olympic Archery Development program (JOAD), earn your indoor or outdoor green, purple, and gray achievement award pins using a recurve bow or longbow.
- (4) As a member of the NFAA's Junior Division, earn a Cub or Youth 100-score Progression Patch.

#### **Option B—Using a Compound Bow**

- (a) Name and point to the parts of the compound bow you are shooting.
- (b) Explain how to properly care for and store compound bows.
- (c) Demonstrate and explain USA Archery's "Steps of Shooting" for the bow you are shooting.
- (d) Explain why it is necessary to have the string or cable on a compound bow replaced at an archery shop.
- (e) Locate and mark with dental floss, crimp-on, or other | method, the nocking point on the bowstring of the bow that you are using.
- (f) Do ONE of the following:
  - (1) Using a compound bow and arrows with a finger release, shoot a single round of one of the following BSA, USA Archery, or NFAA rounds:
    - (a) An NFAA field round of 14 targets and make a score of 70 points
    - (b) A BSA Scout field round of 14 targets and make a score of 90 points
    - (c) A World Archery/USA Archery indoor\* round and make a score of 90 points
    - (d) An NFAA indoor\* round and make a score of 60 points

For more

information

about scoring for

JOAD, go to

www.teamusa.

org/USA-Archery/

Archers/Junior-

Olympic-Archery-

Development/

JOAD-

Achievement-

Program.

(2) Shooting at an 80-centimeter (32-inch) five-color target using the 10 scoring regions, make a minimum score of 160 points. Accomplish this in the following manner:

Shoot 15 arrows in five-arrow ends, at a distance of 10 yards

#### AND

Shoot 15 arrows in fve-arrow ends, at a distance of 15 yards.

- (3) As a member of the USA Archery Junior Olympic Archery Development program (JOAD), earn your indoor or outdoor green, purple, and gray achievement award pins | using a compound bow.
- (4) As a member of the NFAA's Junior Division, earn a Cub or Youth 100-score Progression Patch.

\*The indoor rounds can be shot outdoors if this is more convenient.

## Archery Resources

#### Scouting Literature

*Basic Illustrated Archery; Rifle Shooting* and *Shotgun Shooting* merit badge pamphlets

With your parent's permission, visit the Boy Scouts of America's official retail website, www.scoutshop.org, for a complete listing of all merit badge pamphlets and other helpful Scouting materials and supplies.

#### **Books and Videos**

Adams, John. Archery (Know the Sport). Stackpole Books, 1996.

- Boga, Steven. Archery (Backyard Games). Stackpole Books, 1997.
- Camera, Anthony. *Shooting the Stickbow*, 2nd ed. Virtualbookworm. com Publishing, 2010.
- Fadala, Sam. *Traditional Archery*, 2nd ed. Stackpole Books, 2011.
- Hamlett-Wood, Michael. *Field Archery: A Complete Guide.* Robert Hale Ltd., 2002.
- Haywood, Kathleen M., and Catherine F. Lewis. *Archery: Steps to Success*, 4th ed. Human Kinetics, 2012.

- Johnson, Teresa. Archery Fundamentals, 2nd ed. Human Kinetics, 2014.
- Sapp, Richard. *Archer's Digest.* 7th ed. Krause Publications, 2003.
- United States Olympic Committee. *A Basic Guide to Archery.* Griffin, 1997.
- USA Archery. *Archery*. Human Kinetics, 2012.
- Wallentine, Douglas. *Making Indian Bows and Arrows, The Old Way.* Eagle's View, 1988.
- Wise, Larry. Bow and Arrow: The Comprehensive Guide to Equipment, Technique, and Competition. Stackpole Books, 1992.

The following books and videos are available from Quintessential Productions, website http://gproductsarchery.com.

Rowe, Ruth. Archery: The Basics. #053V (video).

- \_\_\_\_\_. Archery: Refining Your Form. #033V (video).
- \_\_\_\_\_. Fundamentals of Compound Target Archery. #030B (book).
- Rowe, Ruth, and Alan Anderson. Simple Maintenance for Archery. #031B (book).

Instructional archery videos, including Larry Wise's *The Complete Guide to Beginning Archery*, are available from Robinhood Video Productions Inc., 1600 Reynoldsburg-New Albany Road, Blacklick, OH 43004; telephone 614-322-1038; website www. robinhoodvideos.com.

## Periodicals

#### Archery Focus magazine

Telephone: 773-944-1186 Website: https://archeryfocusmagazine.com

## *U.S. and International Archer* magazine

Telephone: 520-742-5846 Website: https://usarcher.com

#### Organizations and Websites International Bowhunting Organization

Telephone: 440-967-2137 Website: www.ibo.net

#### National Field Archery Association

Toll-free telephone: 800-811-2331 Website: www.nfaa-archery.org

### USA Archery

One Olympic Plaza Colorado Springs, CO 80909 Telephone: 719-866-4576 Website: https://www.teamusa.org/ USA-Archery

#### World Archery Federation

Maison du Sport International Avenue de Rhodanie 54 1007 Lausanne Switzerland Website: https://worldarchery.org