## **ARCHERY RANGES:**



## DESIGN REFERENCE FOR VARIOUS SIZED ARCHERY RANGE LAYOUTS INCLUDING DETAILS FOR QUIVER AND BOW RACK.

**Introduction:** This guideline provides information related to the design of archery ranges at Boy Scout camps. The primary purpose of this range will be to provide a teaching area for the instruction and qualifying for the Archery Merit Badge. The current merit badge requirements allow Scouts to qualify by shooting certain scores on any one of several styles of tournament ranges. The distance from shooter to target on these ranges varies from 30 feet to 70 meters (230 feet). The merit badge also allows a Scout to qualify on a "Field Course" which is a route through areas with designated shooting stations and targets at various ranges. Additionally Scouts may qualify on an indoor range. the purpose of this document is to lay out the basic requirements to establish these ranges at council camps.

**Location:** The archery range is usually located on the outskirts of the camp away from troop sites and other heavily used areas. It is a common practice to locate the range near other "field sports" facilities such as the shotgun and rifle ranges. These programs all require large areas and frequently share program staff.

**Size and Shape:** There are three types of ranges and one course that will be illustrated in this document. These are defined by the standard ranges as established by the International Archery Federation (IAF), National Field Archery Association (NFAA), and the National Archery Association (NAA). Ranges provide a better teaching environment for groups, so more emphasis will be put on these facilities than the various field courses that may be used to qualify for the merit badge. Information on setting up a range indoors will be provided at the end of this document.

The shortest and most common archery range is the BSA 10-yard (30 feet) range using 32" targets. The National Archery Association's "Junior 900" range has targets at 30 meters, 40 meters and 50 meters (164 feet) using 48" targets. The longest range that a Scout would qualify on is part of the National Archery Association's Junior Olympic Archery Development program. This range had target set at various distances ranging from 25 meters to 70 meters (230 feet) using 48" targets. These three outdoor ranges will be illustrated with associated lines and safety areas. The width of ranges will vary based on the number of shooting lanes. The width will include 25 feet for each side safety area and 5 feet for each shooting lane. Based on the ratio of one instructor per 12 shooters, these illustrations will show 12 lanes, but this may vary.

**Direction of Fire:** As with most shooting sports, a north orientation is preferred to avoid glare from the sun.

**Gallery Line:** The gallery line should be a minimum of 10 feet behind the waiting line and defines the spectator area from the range.

**Waiting Line:** The waiting line should be a minimum of 10 feet behind the shooting line and marks the place where shooters wait before approaching the firing line. Equipment cases may be located between the waiting line and shooting line.

(continued on page 2)







(continued from page 1)

**Shooting Line:** This line defines the place where Scouts stand while shooting at targets. On permanent ranges this line sees a lot of foot traffic and a special surface, such as a decomposed granite path, should be considered.

**Target Line:** Shooters will stand at this line to retrieve arrows from targets. At many ranges a path from the shooting line, along the edge of the range, leads the shooters to the target line. This is done to provide range discipline and helps limit how much time is spent retrieving arrows.

**Firing Range:** This is the area between the firing line and target line. It should be fairly flat and level, sod covered with decent drainage. It should be comprised of a number of shooting lanes, each five feet wide.

Side Safety Areas: Twenty-five feet to each side of the firing range should be considered safety area.

**Overshot Safety Area:** The first 150 feet beyond the target should be considered the overshot safety area. This area should be cleared and mowed to allow the recovery of arrows.

**Fencing and Protection:** The range should be clearly defined by fencing and marked with signs to prevent accidental entry to the range. This fence should include the area between the gallery line to the far end of the overshot safety area and include both side safety areas.

**Storage of Equipment:** guns and equipment must be kept in locked storage when not in use on the range. Such storage may be in suitable facility near the range or a designated controlled program equipment area.

**Other Facilities:** As the range is typically located at the edge of camp, there a few other facilities that are beneficial. A program shelter will provide a shaded area for waiting or instruction. Drinking water and latrines should be convenient to the range as well. If the range is located near the shotgun and rifle ranges these facilities may be shared.

## References:

Archery Merit Badge Pamphlet, No. 33259A Archery Instructors Training, Basic Certification, Second Edition Guide to Safe Scouting, No. 34416D Camp Program & Property Management SCALE: 1" = 30'-0"

