

Milford High School Physical Education

Archery Handout

Terminology

Bounce-off: An arrow that fails to stick in the target and bounces off.

Bow: Device made of a piece of flexible material that is used to propel an arrow. A bow' string connects the two ends.

Bow sight/peep sight: Mechanical device installed on the bow and string so the archer can aim directly at the target.

Crest: The markings on the shaft of an arrow to distinguish one arrow from another.

Drawn Weight: The weight, measured in pounds, used to bring the bow back to a full draw. It is the weight of the bow drawn to the standard draw length.

End: A set of number of arrows that are shot before going to the target to score and retrieve them.

Field archery: An archery round which an archer shoots from a variety of distances in the fields and woods.

Field captain: Man in charge of an archery event.

Fletching: It is the feathers, plastic vanes, or other devices that are attached to the arrow' shaft to stabilize the flight of the arrow.

Grip: Part of the handle where the hand is in contact with the bow.

Hanging arrow: An arrow that fails to stick in target completely and literally hangs down.

Lady paramount: Woman in charge of an archery event.

Laminated bow: A bow made of several layers of different materiel glued together.

Let down: Returning from full draw to the undraw position with control without releasing the string.

Longbow: Bow at least 4 feet tall with straight ends commonly used in medieval times by the European archers.

Nocking point: The area of the bow' string covered by the nock.

POA: Point of Aim.

Quiver: A device used to hold the arrows.

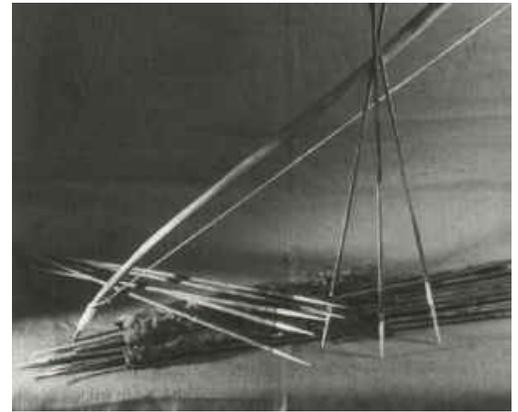
Recurve bow: Short bow with butt ends curving away from the archer.

Archery Short History

Bows, as we know them today, are far from the first ones known to be used go back as far as 23000BC. It was developed as a hunting and war weapon. Traces of stone arrowheads have been found all over the world.

Egyptians used long branches attached at both ends by a string shooting light pointy wood sticks. Wood has been the material of choice for thousands of year to build both, bows and arrows.

Construction became sturdier by using a lamination process with glue. It would make the bows a lot stronger and long lasting. To obtain more drawn weight to be transferred to the arrow, people build longer bows that allow them to shoot further away and obtaining enough impact power. The arrows evolved with fletching made out of feathers glued on the shaft of the arrow at the nocking end. The fletching offers more stability and control over the arrows' flight. Later on, Greeks and Persians developed recurve bows that allowed the bows to be shorter with a stronger drawn weight up to 160 pounds. It permitted the archer to shoot from horseback instead of the back of chariots. That construction style brought a shorter draw length that allowed the use of shorter and lighter arrows. Later one the crossbows where invented and used to win battles in the great Crusades. The Native Americans made the bows and arrows famous through the Western battles with the US Cavalry.



1879 AD -



The First Tournament of the National Archery Association held in Chicago, USA.

Bows and arrows contests were used to demonstrate archers' skills. In today's modern world, space age materials offer opportunities to develop better stronger bows and arrows. Mechanical pulleys and cams incorporated in the bows limbs create high release power for a 60-70% easier draw pull. They are called **compound bows**. Common construction materials used for both are: aluminum, graphite, plastics and carbon fiber. Technology brought in bows and arrows is fantastic. The arrows come in all kind of different setup for vanes and tips, size and length. Bows have sights with laser points and distance reading, steel strings and mechanical arrow rest. The archer can use a mechanical release "clicker" instead of the finger hold.

Competition

Many types of bow and arrow competitions are available. Olympic shooting is the most traditional one, allowing the use of recurve bows only. Competitor archers shoot from a line at different distances, but usually 70 meters, on a round ten rings target. The target's rings go from the outside to the middle with two white rings, two black rings, two blue rings, two red rings and two yellow (gold) rings called the bulls' eye. The scoring may differ. Olympic scoring goes with one point per ring from the outside in. The last white outer ring is worth 1 point. The middle ring is worth 10 points. Competitors usually shoot ends of 3 arrows. In class, we use color scoring with odd numbers. The white is worth 1 point and the yellow (gold) is worth 9 points. In the 1990's, the ASA (Archery Shooters Association) is formed to promote 3-D Archery. The targets are animal like designs placed in variable terrains. Main vital area representations are worth more points to the archers.