Developing Proper Archery Shooting Form

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Objectives
Participating youth and adults will:
1. Demonstrate and practice the fundamentals of proper archery shooting form.
2. Understand and apply the “10 steps to the 10 rings” when shooting.
3. Successfully shoot groups using instinctive shooting methods.
4. Establish mental and physical skills leading to consistently good shooting form.
5. Demonstrate proper form through “coaching” other shooters.
6. Have fun while learning.

Roles for Teen and Junior Leaders
• Demonstrate proper shooting form.
• Demonstrate form faults for correction by participants.
• Serve as on-line assistants.
• Serve as line captains or range officers.
• Provide positive reinforcement of proper form for students with form faults.
• Assist with locating overshot and undershot arrows.

Parental Involvement
• See Roles for Teen and Junior Leaders above.
• Provide or coordinate transportation to the range.
• Serve as coaches for one or two “coach-pupil” pairs on the shooting line.
• Provide or coordinate refreshments.
• Assist with developing exhibits or conducting summary activities.

Best Time to Teach
Any time of year

Best Location
Range space (indoor or outdoor) is required

Time Required
Approximately 1 hour

Materials/Equipment
- light recurve bows (15 to 30 percent left handed)
- matching arrows (26 to 31 inch lengths)
- finger tabs
- arm guards
- large target butts
- small stick-on dots (aiming points)
- ground quivers (see Fact Sheet 7: Ground Quivers)
- posters showing shooting steps
- shooting line, tape or materials to make one
- whistle (if group size warrants)

References
Teaching Outline

Note to Instructors: The outline is condensed to reduce the amount of space required. Good teaching style will likely require several repetitions for beginning shooters. DISCUSS and DEMONSTRATE proper shooting form (instructor should not shoot). PRACTICE the mimetic steps suggested without equipment, with an air bow or just a bow. Finally USE live firing with an emphasis on successfully shooting groups, disregarding the location of the groups on the target. LIMIT each shooter to about three to four arrows per end. SHOOT no more than four or five ends per shooter before pausing to DISCUSS the elements of form and giving the kids a chance to REST. This approach not only encourages development of good shooting form, but also helps prevent poor shooting habits caused by fatigue.

Presentation

1. Introduction
   A. Simple basics of good shooting
      1. Relaxed body
      2. Intensely focused mind
      3. Archer’s paradox
   B. Comfortable position
      1. Easy to repeat
      2. Minimum muscle activity
   C. Practiced form needed
      1. Concentration on one form item
      2. Instilling good habits
      3. Consistency needed
         • form
         • results
         • perfect practice
      2. Successful form taught
         • same for all archery
         • basic to good shooting

II. Archery form basics

A. Ten steps to success
   1. Stance and posture
   2. Bow-hand grip
   3. Nocking an arrow
   4. Setting a hook
   5. Raising the unit
   6. Draw
   7. Anchor
   8. Aim
   9. Release
   10. Follow through

B. Need to establish each step
   1. Good shooting routine

Application

ASK what is needed to shoot a bow successfully. Gently REJECT answers that emphasize strength and great physical skill.
EMPHASIZE consistent form and developing sound basic skills as well as concentration.

Have a parent or junior leader DEMONSTRATE one shot with a bow or with an airbow indoors.
ASK what the parts of this shooting sequence are. Use questions to get the participants to LIST the items included here.
2. Mind free to concentrate
3. Always emphasize safety

C. Stance

1. Normal standing position
   • relaxed
   • comfortable

2. Foot position
   • straddling line
   • shoulder width apart
   • line through toes to target
   • square stance value
     - straight line to target
     - string slap avoided
     - muscle fatigue

3. Hips and shoulders in line with target

4. Head
   • erect and relaxed
   • rotate toward bow-hand shoulder

D. Bow-hand position and grip

1. Relaxed grip
   • bow floats in hand
   • touch tips of index finger and thumb
   • use sling to hold bow in hand

2. Hand shake with bow
   • hand vertical
   • bow handle in web between thumb and fingers (U-shape)

3. Bow-arm elbow rotated out
   • arm swings parallel with the ground
   • bow-arm shoulder and elbow locked out

4. Two primary wrist positions
   • high wrist: wrist in line with forearm
     - one contact point
     - bow floats in web of hand
     - similar to free-floated rifle barrel

REINFORCE the need for constant safety awareness.
Using a rope, tape or other shooting line, have each participant PRACTICE taking a comfortable and square stance.

Using an arrow in place of the string or an airbow,
DEMONSTRATE why a square stance keeps the string away from the body.
NOTE that this is particularly important for female archers.

Have participants PRACTICE gripping a bow with a light touch.

PRACTICE elbow rotation by pushing against a wall or post with a flat hand and rotating the elbow out.
CHECK rotation by swinging hand toward chest.

DEMONSTRATE high-wrist position. DISCUSS its advantages/disadvantages and normal use.

ASK why might bowhunters prefer this style. Good answers focus on changes in form because of excitement.
- less sensitive to minor changes in grip and hand position
- preferred by many bow-hunters

- low wrist: hand above line of forearm
  - handle seated in relaxed hand
  - similar to glass-bedded rifle barrel
  - uniform grip yields consistent results
- preferred by target archers
  - reduced fatigue
  - consistent seating of bow in hand

E. Nocking an arrow

1. Bow used as shelf for beginners
   - at least 10 feet apart
   - sight window up
   - slide arrow forward
   - set arrow on rest
   - rotate index vane up
   - draw back to string
   - nock under nocking point indicator (between if 2 used)

2. Bow held vertically
   - reasons in target shooting
   - can’t bow slightly to drawing hand side
   - rotate slightly to let shaft clear string.
     - keep the shaft pointed down range
   - reach forward, placing arrow on rest
   - index vane out
   - slide back to string
   - nock under indicator

F. Setting a hock

1. Hooked finger tips draw bow string
   - back of hand flat
     - scout salute
     - thumb on little finger
   - fingers bent at second joint

2. Draw types
   - split-finger draw
     - Turkish
     - index finger above nock

DEMONSTRATE low-wrist position. DISCUSS its advantages/disadvantages and common uses.

ASK why might target archers prefer this type of wrist position. Good answers focus on reduced effects of muscle fatigue and consistent form.

DEMONSTRATE nocking an arrow using both techniques. Have each participant PRACTICE each technique with arrows pointed in a safe direction and without actually placing them on the string.

DEMONSTRATE and PRACTICE making a salute, then a book. Have shooters use finger tabs. CHECK to be sure they are worn properly.

DEMONSTRATE each draw type EMPHASIZE the use of the split finger draw and high anchor (corner of the mouth).
- ring and middle fingers below nock
- Apache draw
- cheekbone anchor
- three fingers under nock
- excellent close range anchor
- nock very close to eye

3. String placement
- String at first joint of fingers or slightly deeper
- Keep back of hand flat during draw
- “finger pinch” or arrow swinging away from rest
- curling hand during draw
- correcting it
  - salute
  - deeper grip

G. Concentration and raising unit into shooting position
1. Focus attention on target
   - bow arm elevated about 15 degrees
   - string arm in line with shaft
   - hook set on string
2. Rotate unit to shooting position
   - pivot arms at shoulders
   - raise to shoulder level
   - bow arm fully extended
   - string forearm in line with shaft
3. Many “instinctive” archers extend and draw in one motion

H. Draw
1. Smooth motion
   - flex elbow using arm muscles
   - pull elbow back with shoulder and back muscles
   - draw to anchor point
2. Concentration on target deepens during draw

I. Anchor
1. Consistent anchor point
   - “rear sight”
   - checkpoints

PRACTICE string placement with an airbow or by drawing a conventional bow only one inch.

DISCUSS “finger pinch” and how to correct it.

DEMONSTRATE and PRACTICE raising the entire unit.

DISCUSS the mechanics of drawing an arrow.
Have participants PRACTICE using an airbow, if one is available or use mimetics without equipment.

ASK – why is a consistent anchor point important? DISCUSS the dominant eye’s function as a rear sight.
2. High anchor
   - corner of mouth
     - index finger tip on upper canine tooth
     - thumb behind angle of jaw
   - point of cheekbone for Apache draw
3. Low anchor discussed later with sights

J. Aim
1. Instinctive shooting
   - concentrate on spot
   - small spot gives more accuracy and precision
2. Pause to check alignment
   - make sure you are set
   - shoot or let down within a few seconds
   - deliberate shooting
3. Drawing hand firmly anchored
4. Bow arm fully extended

K. Release
1. Very simple action
   - relax hook
   - pull elbow back
2. “Live” release
   - relax fingers
   - draw elbow back
   - fingers flow along side of face
   - bow rocks forward

L. Follow through critical to good shooting
1. Hold release position
   - until arrow hits target
   - bow arm extended in shooting position
   - string hand at end of release position
2. Avoid shooting when tired
   - leads to poor form
   - faults with follow through
   - poor shooting

DEMONSTRATE the corner of the mouth anchor and secondary checkpoints used with it.
Have participants TRY various combinations with or without equipment.

POINT OUT that true instinctive shooters do not aim, but concentrate on the target. COMPARE to throwing a ball.

REINFORCE the important of pausing momentarily at full draw to check position and hold.

Have participants DRAW one draw and relax fingers to feel a release.

DEMONSTRATE and PRACTICE a live release by pulling hooked fingers against each other with the hands across the chest, relaxing the string hand while pulling. Note movement of the hands and arms.

DEMONSTRATE a proper follow through using an airbow or shooting on the range. DISCUSS the bow arm and string arm.

ASK – why is it important to hold the follow through until the arrow hits?
SEEK answers that center on avoiding bad form, like letting hands drop.
• frustration
M. Relax before next shot
1. Concentration on entire end or match impossible
2. Treat each arrow as the only one
3. Cycle of concentration and relaxation

III. Shooting the first arrow
A. Spacing
1. 8 to 10 feel minimum
2. Maximum of two to three shooters per target
3. Minimum of one adult coach/instructor per two shooters
B. Shooting by the numbers
1. Coaches, is the flight ready?
   • coaches respond
   • repeat if needed
2. The flight is ready
3. Take your stance
4. Nock an arrow
5. Set your hook
6. Raise the unit
7. Draw to anchor
8. Focus on aiming point
9. When ready, release and follow through
10. Shoot your other two arrows when you are ready
11. When you have finished
    • Ground your bow on the quiver
    • Take one step back off the line
C. Retrieving arrows
1. Only one person at target
2. Line captain leads
   • watch for undershot arrows
   - damage to arrows
   - damage to feet
3. Pull arrows at butts
   • clear area behind shafts
   • support target beside shaft
   • pull straight back
   • slight twist helps

DISCUSS the importance of treating each arrow as if it were the only one.
ASK – can you concentrate to the maximum for very long? POINT OUT the need to relax between shots.

Have “coaches” CHECK each step with their shooters as the line captain walks the group through a shot. Parents, junior leaders or other instructors should back up the coach in EVERY coach-pupil pair. REPEAT until all members have shot an end of three arrows.

ENSURE that the line captain leads the group in retrieving all arrows and follows them back to the shooting line.
ASK – why is this important? DISCUSS their responses.

DEMONSTRATE the proper way to remove arrows from a shooting matt, butt or target. Let each member PRACTICE in turn.
4. Retrieve overshot arrows as a group
   • bow across target face as signal to other shooters
   • arrow upright in butt as signal
5. Line captain follows group back to line

IV. Shooting Groups
   A. Importance of groups
      1. Consistent form
      2. Consistent location
         • correcting impact point
   B. Group, not location, important
      1. Keep same aiming point
      2. Maintain form
   C. Shoot maximum of 9 to 12 arrows

V. Moving group to desired impact point
   A. Group necessary first
   B. Move aiming point
      1. Place new aiming dot
         • direction you want point of impact to move
         • Distance you want point of impact to move
      2. Shoot group using new aiming dot
      3. Correct by trail and error

VI. Summary
   A. Perfect practice makes perfect
   B. Perfect, consistent form gives consistent results
   C. Steps to a good shot
      1. Stance and posture
      2. Bow-hand grip
      3. Nocking an arrow
      4. Setting a hook
      5. Raising the unit
      6. Draw
      7. Anchor
      8. Aim
      9. Release
      10. Follow through
      11. Relax between shots
      12.