

## Bow Sight Settings

*“How do I calibrate my sight effectively?”* In one second an arrow will fall  $1\frac{1}{2} \times (32 \text{ ft/s}^2) \times (1 \text{ s} \times 1 \text{ s})$  or 16 feet. In two seconds it falls 64 feet (16 in the first second, 48 in the second) and in three seconds, 144 feet (16 in the first second, 48 in the second, 80 in the third).

We put this into practical use by positioning our sight pins for longer distances further apart. For example, while our 10 and 20 pins may be 0.2 inches apart, our 40 and 50 pins may be 0.6 inches apart (This depends on the starting speed of the arrow).

**Calibrating Your Sight For 10 To 100 Yards.** Begin by getting a 20-yard marking on your sight. If you're using a standard freestyle (moveable) target sight you can simply mark this with a pencil. If you're setting pins then set one pin for this distance. Next, shoot several arrows at thirty yards to obtain a sight setting there. Move to forty, fifty, and sixty yards and do the same. Seventy and eighty may take a little more work since your skill level and/or accuracy may not be as high. Do the best you can.

Now examine the mark spacings on your tape or the spread between your pins. Do the spaces grow as the distances grow? According to the laws of physics, they should.

If any of the marks you've made seem to be out of place, reshoot that distance to check the mark. When you're sure of your marks, measure between the pairs of marks to locate marks for 25 yards, 35 yards, 45 yards, etc. For example, find the midpoint between 30 and 40-yd. and place a 35 mark slightly closer to the 30-yd. mark. Remember, the distance from 30 to 35 should be smaller than the distance from 35 to 40.

**Close Range Sight Settings.** The close-range sight marks are some of the more difficult to get. You'll have no trouble getting the 15-yard mark, but in close at ten yards, 30-ft, 25, and 20 feet, you'll have to spend some time. Between ten and fifteen yards away your arrows cross up from below your line of sight (The arrow starts below your sight aperture after all.) to above your line of sight, not to return down to the line of sight until they hit the target. Because of this situation, distances closer than this crossover point require you to move your sight down the sight bar. To make sense of this, imagine shooting an arrow from two yards. To do it you would have to sight across the arrow shaft unless you could move your sight pin down to rest on the shaft. Since that's not possible, shooting two yards is difficult because your arrow has not yet climbed up to the line of sight. For a 10 foot shot, you may need to set your sight set for about 35 yd.