Hunting and Range Estimation

Adapted from an article by Jason Butler

Botching a wide open shot to an animal due to a faulty range estimate is a modern-day bowhunter's nightmare. Mentally pegging the correct shooting distance is a big challenge, even for those who only shoot at close distances. The best 3-D shooter in the club won't do well on the hunt unless he can eyeball distances with better-than-average accuracy.

Judging the correct shooting yardage to a living, breathing, adrenaline surging big game animal that scurries in quick is anything but gravy, even when you think you're cool as a cucumber and conditions seem favorable. Most times you will be forced to eyeball the range, draw your bow quickly, then shoot. The whole episode will take only a few seconds at most. That's it. There's little time for second-guessing.

The solution, somewhat, is an ultra-precise laser rangefinder. Today's rangefinders are dependable, trustworthy, and affordable. Every bowhunter and 3D shooter should own one. Even if you don't take hunting shots past 20 yards you can practice eyeballing different distances inside that range, then check yourself with the rangefinder. It helps build mental confidence for pinpoint accuracy, even at close range.

But here's the catch. Rangefinders take time and effort during the moment of truth when that buck or bull is standing in the clear looking in your direction. Most hunting sequences happen all-too-quickly for there to be enough time to snatch the rangefinder from your neck or hip, take a reading, clip on to the string and shoot. Animals rarely stand still, so the situation can change on a dime, as it usually does, leaving you with only your naked-eye ranging techniques.

Too, there are those times, with bowhunters in set stands, where pre-arranging shot distances is common. Climb aloft, settle in, whip out the rangefinder and start dotting the surrounding landscape with readings and memorize landmarks for future reference. This is a good idea in theory, and it often works to a T. The only kink is that often-related sports term that starts with the letter A-adrenaline. Don't be surprised when the chips are down if your have trouble remembering your name let alone various distances you pegged hours or even days earlier.

There are three principal shot situations you are likely to find yourself face-to-face with in the woods. If you practice hard at estimating your ranges diligently in hunting-type encounters listed below, you'll bag more game animals with your bow, and missed shots will be rare.

Slopes

Shooting uphill and downhill poses a major problem for some archers. Bows sights are typically aligned for horizontal shots, so when you shoot uphill or downhill, the factors of trajectory differ somewhat. The steeper the angle, the more you will shoot high, and must compensate. Generally, you compensate less for uphill shots (about 66%) than downhill shots at the same degree of angle. It seems hunters commonly overestimate the distance when an animal is above or below level ground. Even the slightest slope can enhance a tricky distance reading. Simple practice time can give you a feel for how your arrow shoots differently on upward and downward slopes.

Mother Nature

As visibility diminishes from less-than-ideal weather conditions, fouling a shot from misjudgment of range is easy to do. Fog. rain, dim light, all of these things can fool even an experienced.

gifted eye. Heaven help you if your eyesight isn't the best to begin with. The key is practice. How many archers actually practice estimating distances when it's raining out or getting dark? You guessed it, not too many! Try spending plenty of time on the range under similar conditions. There's nothing like hands-on trial- and-error in such circumstance to make sure your bow shoots on the money when likewise conditions unfold.

Target Size

Factors like the actual body size of an animal should be considered when pegging the distance of a shot. Believe it or not, animal size does have an overall effect on what type of range estimate you will come up with. Conventional ranging wisdom says smaller targets look farther away than they appear and bigger targets seem closer than they actually are. You must keep this in mind when shooting at animals varying in size.

Jason was on his first elk hunting trip a few years ago in eastern Idaho when he realized first hand that an elk is much larger than a whitetail or mule deer. Finally, toward the end of the week a bull came in to his guide's seductive cow calling and stood statue still at what he thought was 30-yards on the money. So he shot. And he missed. He saw my green fletching fly inches under his bulldozer size chest. He was stumped and really bummed out. The bull, hightailed the heck out of there. After a bit of pondering Jason figured out what happened. He had simply underestimated the range. Come to find out he was 40 yards not 30. Jason is used to shooting whitetails. This elk looked like a big tank, much bigger than any living-breathing thing he'd ever shot before, so the elk appeared closer than he actually was standing. Hence, he pegged the range 10-yards shy. He'd practiced on an elk 3-D target all summer long, sure, but during those few intense seconds it just didn't seem to matter, because he was shakier than a leaf in a windstorm. The opposite can happen on smaller animals. They may look farther away.

Conclusion

Bowhunters need to work doubly hard at estimating distances under real life hunting-type circumstances. Most hunters are not nearly as good at ranging animals as they presume they are. It takes time, and a whole lot of patience and effort. And remember, every little bit of practice helps.