DARRIN CHRISTENBERRY: JUDGING DISTANCE FOR 3D ARCHERY

By: P.J. Reilly

Darrin Christenberry of Spencer, Ind., has been competing as a professional archer for 16 years. In 2002 – his first year on the ASA pro 3D circuit – he was named the ASA Rookie of the Year.


He has twice won the IBO National Triple Crown, claiming it in 2003 and 2006. Also in 2006, he was the ASA Shooter of the Year.

Christenberry has a string of other ASA and IBO titles under his belt, and so it is safe to say that he is pretty good at one of the key strategies of competing as a pro in 3D archery.

Judging distance.

We asked Christenberry about tackling this part of the game. If you want some insight into how one of the best in 3D archery does it, check out his answers to our questions.
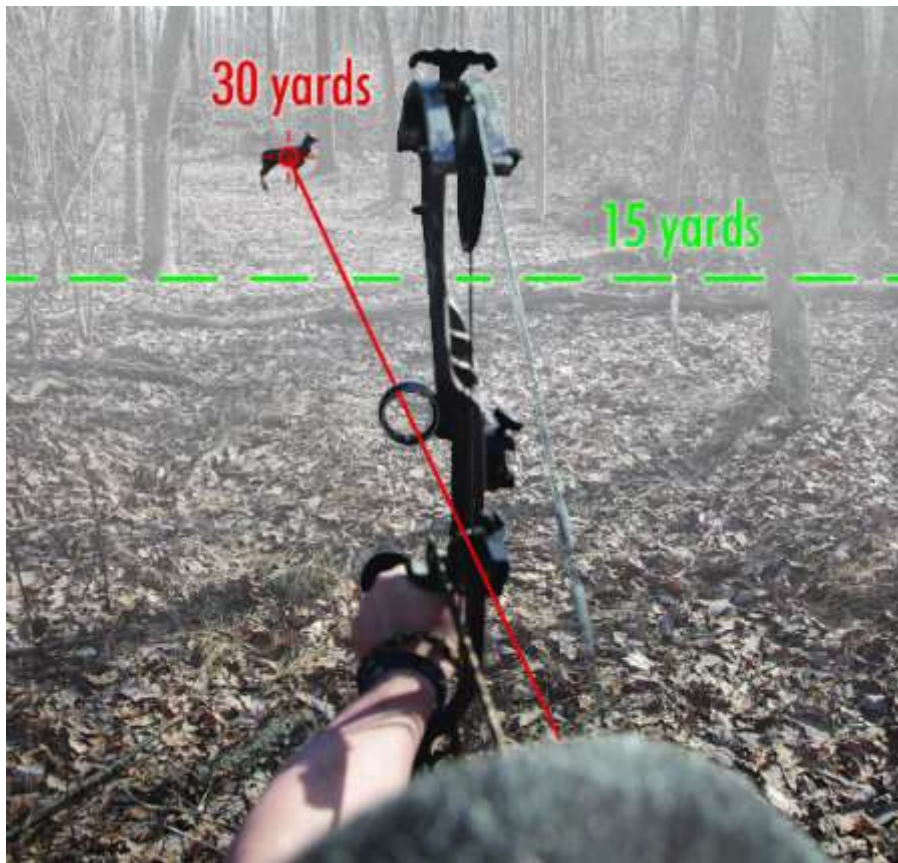
LAS: What bow will you be shooting this season? And what is its draw length and weight?

DC: I will be shooting the Elite Victory for ASA and IBO events. The ASA bow is set at 65 pounds, and the IBO bow is 71 pounds. The draw length on both bows is 30.125 inches.

LAS: When you step to the shooting line, what is your process – step by step – for judging the distance to the target?

DC: The very first thing I do is look directly at the target and get a "first glance" estimate of what I think the target could be. The second thing I do is stare directly at the feet of the target, if they are not hidden, and scan the ground back and forth trying to find what I believe to be exactly half way between me and the target. Once I find the "half-way point," I try to judge that distance and double it to get my second number, so I can compare it to my first glance.

After that, I try to find a tree, a stump or something near the target to focus all of my attention on, and try to guesstimate the distance to it. I will work my way down the path to the target looking at every object I can to refine my guess. Once I have all of this data gathered, I can finally set my sight and decide how aggressive to aim.

LAS: Do you practice this process at home? How do you practice?

DC: I do practice this way! I spend a lot of time judging my targets in the wide open field or yard. The best way that I have described it over the years is to say I take a mental photograph of each target, at every distance. When I practice, I am trying to memorize all of these photos. When I get to a tournament and try to get my first glance, I am mentally flipping through all of those photos of that particular animal trying to find a match.
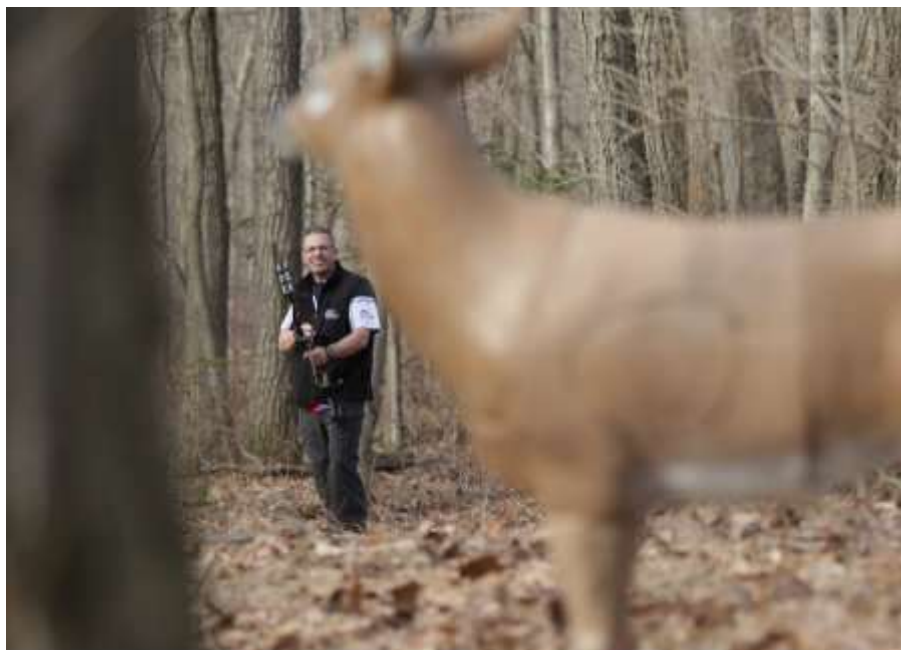
The body size of the animals is the ONLY thing that does not change from tournament to tournament. Whether we are shooting in the hills of West Virginia or a mud bog in Texas, the only thing that is exactly the same is the size of each target. I try to memorize the size of the animals, and use depth perception to figure out what "photo" to use.

LAS: Obviously, guessing the exact distance is best, but do you leave yourself some wiggle room? That is, do you feel you will still put your arrow where you want if you are within 1 yard? 2 yards? 3 yards, etc.?

DC: I believe you get a 1-yard wiggle while you are aiming. You can catch some lines if you get within a yard on your yardage estimation. If I'm not 100-percent sure when I draw my bow back, I will aim safe, meaning I favor where I'm aiming to limit the damage if I'm wrong.

When I am shooting my best rounds and things are clicking, I can usually tell exactly how far the target is, or was, by where my arrow hits. When I set my bows up, (arrows) will hit perfectly at every yardage if I do my part. When I am aiming at a target and my brain takes the mental snapshot of where the pin was when the shot broke, I can tell by where the arrow lands how far the target actually is.

Don't get me wrong. It's not a perfect science, but if I judge a target for 40 yards, break as close to perfect as I can with the shot, if my arrow hits an inch above the 12 ring, the target was probably 38-39 yards. If it hits one inch below the 12 ring, it was probably 41-42 yards. You can practice this in the yard or at the range to know EXACTLY what you and your bow are capable of.

LAS: A lot of archers talk about having a gut feeling when they have guessed right or wrong. Do you experience this? How does it cause you to adjust?

DC: I do! If you spend a lot of time looking at targets and working on your yardage estimation, you learn the targets.

I think certain people have one or two targets that they favor, just because they are so confident when they look at it, they know how far it is. I have stepped up to the stake before and instantly (get that gut feeling) know how far it is to the target. From past experience, I should just set my sight, make the best shot I can and go with it.

I will look at the trees, look at the ground, work my way back and forth to the target, and then, for whatever reason, change my mind. After I make the shot, I usually see that I should have gone with my gut.

LAS: If you believe in the gut feeling factor, where do you think it comes from?

DC: Years of practice, thousands of targets, thousands of yardage estimations, etc. There aren't too many target scenarios that I haven't seen over the years. You gain confidence or learn from your mistakes and that's what gives you the gut feeling.

LAS: Do you use the size of the target in your sight window as a factor in judging distance? If so, what specifically are you looking at to make that judgment?

DC: I don't. I believe that is called "framing", which is a method of rangefinding......against the rules! I have judged a target before, went to full draw and knew by the size of the animal in my scope that I either had too much or too little yardage on that particular shot. At that point, you have to aim high or low to make the adjustment. Once you come to full draw, you are not allowed to move your sight.

LAS: Do you find you are better at judging in a wooded environment or field? Why?

DC: With the method that I mainly use, judging by body size on my first glance, the terrain or surroundings don't affect my estimations as much. Most of my practice is in my wide open yard so that the only thing I have to judge is the target.

LAS: How important are objects, such as trees, rocks, etc., between you and the target for helping you judge distance?

DC: Very important. As I stated earlier, I like to use the body size initially. It's always nice to have something else to look at to try and confirm what your brain is telling you.

LAS: Is your judgment affected by uphill or downhill angles? If so, why, and how to you work around it?

DC: Not usually. We don't see much terrain until we get to the IBO shoots, and in most cases the hills aren't too bad until we get to the World shoot at one of the ski resorts.

LAS: Do you deduct yardage from your estimate when shooting uphill or downhill to account for the steep angle?

DC: Yes, I will, if I think there needs to be a cut. For years, I heard people say that you had to cut yardage for the downhill shots, and you need to add yardage for the uphill shots. Depending on the distance to the target, you actually have to cut yardage in both directions. I don't have a perfect mathematical formula that I use on the 3-D range. I usually go with my gut.