3D ARCHERY EXPLAINED

By: P.J. Reilly

Come Feb. 26 in Foley, Alabama, the archery world unofficially will shift gears from indoors to the outdoor 3D season as the Archery Shooters Association kicks off its 2016 slate of tournaments with the Hoyt Archery Alabama Pro/Am.

That got us thinking that now would be a good time to give an overview of 3D archery in the modern world.

What is 3D archery? Well it's a shooting format in which archers walk a target course in the woods, or through fields – or both.

Think of it like a golf course, where the "holes" are three-dimensional, foam targets that look like various game animals – deer, bears, leopards, antelope, etc. So archers move from station to station, where they shoot at these animal targets at various distances, in varying settings. It started as a way for bowhunters to practice on lifelike targets in places similar to where they hunt.

Unlike golf, an archer only takes one shot to hit each target. Every "hole" on a 3D course is a Par 1. Points are earned by arrows hitting various scoring rings on the targets. And a typical 3D round is 40 targets, versus 18 holes.

There are recreational 3D shoots held by archery clubs, individuals and organizations all over the country. They may or may not be competitive events. Some are held strictly for hunting practice.

The two primary organizations dedicated to competitive 3D shooting are the Archery Shooters Association, commonly referred to as ASA, and the International Bowhunting Organization, commonly called IBO. Each holds sanctioned tournaments from late winter through August. While

there are some similarities between the two organizations, each has its own competition divisions and scoring system.

The targets used for 3D tournaments bear scoring rings on the areas of the animal bodies where the vital organs would be. That is, archers try to shoot the targets in the heart-lung areas – just like bowhunters would do on real animals.

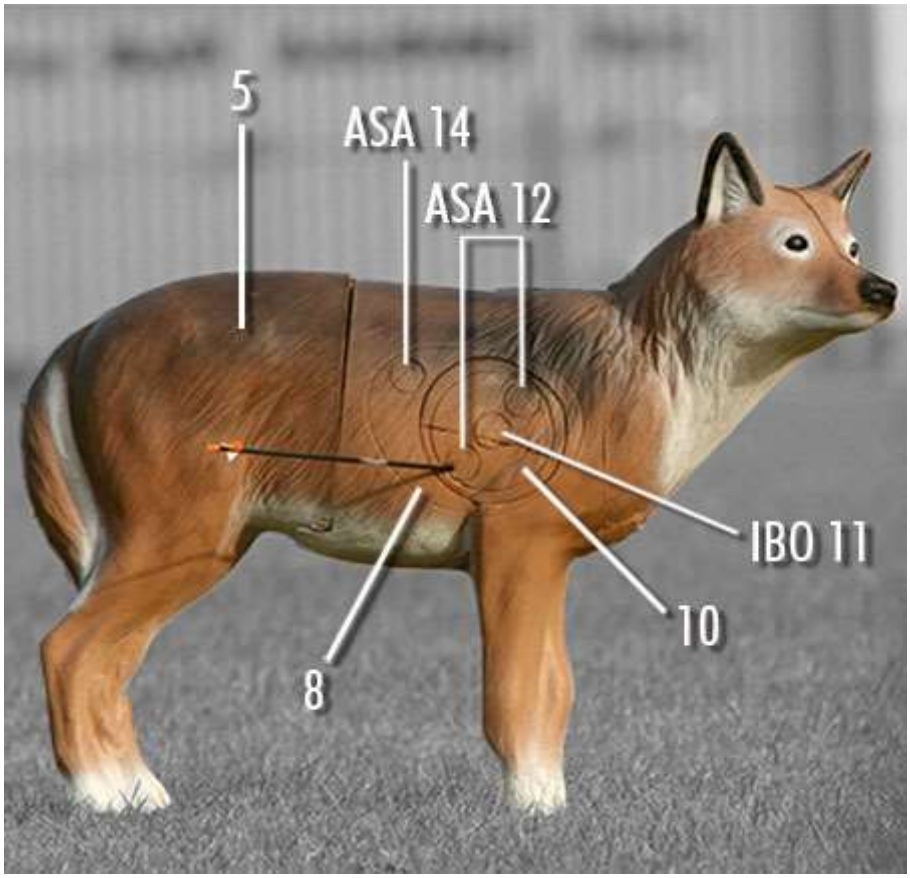
For ASA, there will be a large, mostly-circular area framing the vitals zone. Any arrow that lands outside this area is worth 5 points. Inside the large vitals area, there will be a smaller circle, with three even smaller circles inside of it.

One of those smallest of circles will sit dead center inside the next-sized circle, and the two others will be positioned around it. Only IBO uses the dead-center circle, while ASA uses the two circles around it.

For ASA, the two inner circles are worth 12 points, the next-size circle is worth 10 points and any arrow that hits outside the 10 ring, but inside the large vitals ring is worth 8 points.

Sometimes, there will be another 12-ring sized circle in a corner of the 8-point area. Arrows placed in this circle are worth 14 points at tournaments that allow them.

For IBO shoots, the 5, 8, and 10 rings mirror ASA's. But arrows that hit the small circle in the center of the 10-ring are worth 11 points.



All an arrow has to do is touch the line of a scoring ring to earn the points awarded by that ring.

Depending on the rules of a particular shoot, the distance to the targets might be marked, or they might not. The two 3D tournament styles are “known distance” and “unknown distance.”

At the unknown distance events, you have to judge for yourself how far away the target is from the shooting stake. Rangefinders are not allowed. Being good at judging yardage is critical, because arrows can hit the target high or low of your aiming spot if you judge the distance incorrectly.

Arrow speed can cover up some mistakes in range estimation, since the faster an arrow flies, the flatter its trajectory will be. And many of today's compound bows are capable of producing arrow speeds well over 300 feet per second. However, the ASA has a maximum speed limit of 290 fps for their tournaments. That top speed is lower for some divisions, but no archer may have a bow-arrow setup faster than 290 fps.

IBO has a speed limit of 260 fps for some youth classes, but then no speed limit for other classes, provided archers shoot arrows that weight at least 5 grains per pound of their bow's draw weight. For example, an archer shooting a bow set at 70 pounds, must shoot an arrow that weighs no less than 350 grains. If an archer shoots an arrow that weighs 5 grains per pound of draw weight, and the arrow speed is less than 290 fps, then that archer can shoot an arrow that weighs less than 5 grains per pound. However, the lighter arrow's speed cannot exceed 290 fps.

Currently, there is much debate in the archery world over whether professional tournaments should feature known or unknown distances. Some feel the target distances should be marked because judging distance might be more important than archery skill in unknown distance tournaments. Others believe the unknown distance events are superior because they require another skill besides archery prowess in order to win.

What's right? That's up to each archer to decide.

When it comes to archery equipment you'll see at a 3D tournament, it runs the gamut. There are divisions for archers who shoot different equipment, so you'll see archers carrying compound bows with long stabilizers and scopes with magnifying lenses; archers with bowhunting setups, featuring short stabilizers and sights with multiple, fixed pins; and archers carrying traditional recurve bows and longbows, among others.

Because they take place outdoors, there are many variables that can affect archers at a 3D event. You've got to deal with all the elements of weather, moving shadows, varying light and uneven terrain. It's definitely different from indoor, target archery.

But that's what makes it so much fun.