THE CASTING CLINIC

With Al Kyte

THE STRAIGHT AND NARROW

Having taught at U.C. Berkeley for any years, it's no surprise that Al Kyte is an exceptional instructor, and that he is also a fine researcher and writer. His study of the biomechanics of fly casting, for example, have helped explain how different casting styles achieve the same result, and his book, ***Fly Fishing: Simple to Sophisticated*** *(published by Human Kinetics), is both a plainly written yet extraordinarily thoughtful how-to guide. Simply put, Al knows his stuff, and we are extremely pleased that he has agreed to write a column on casting. It's a subject surrounded by confusion and myth, but critical, of course, to attaining success in fly fishing.*

The overhead cast is the most widely used fly-fishing cast, as well as the foundation for distance and specialty casts. However, this basic cast can be difficult to master. Instructors typically emphasize either loading the rod, that is, bending it against the weight of the fly line, or stopping the rod to transfer its energy to the fly line. Yet we need to vary how much we load the rod and where we stop it as we change the casting distance. These variations occur so that something more important can remain the same - the fly line moving back and forth along a straight path. Focusing on this straight path offers a promising way to think about, practice, and improve your casting.

I teach a straight path by introducing the concept of a 'target line' that corresponds to the straightened fly line at the end of a forward cast - with the fly about a foot above the water (or grass). I want my beginning students to aim the fly line there early in their learning, and I urge experienced students to use this directional guide for longer, more difficult casts, as well. On a 20-foot cast, this target line may be angled downward from the rod tip as much as 30 degrees below horizontal (Figure 1). This angle gradually approaches horizontal as you lengthen the cast. On the longest casts, the target line is raised from the water for the best fly-line carry, typically 15 to 20 degrees above horizontal.

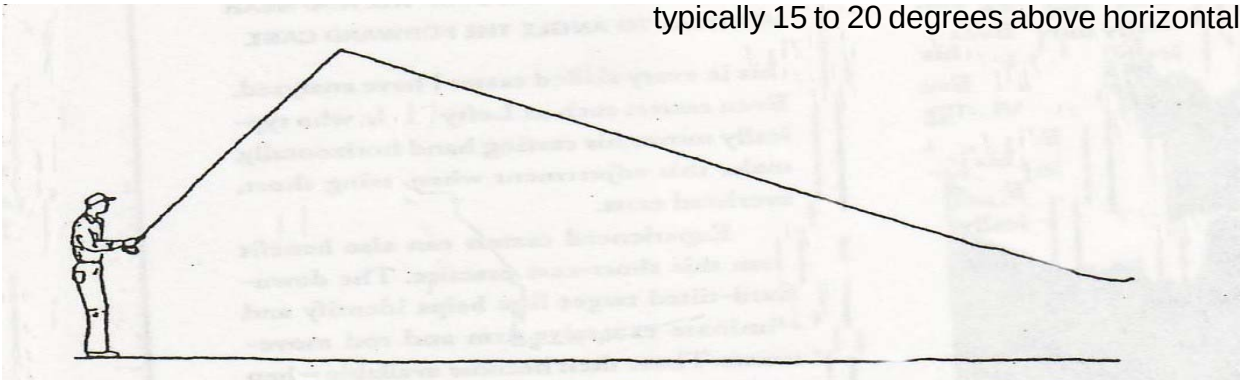


FIGURE 1. INTENTION: START OFF WITH A DOWNWARD-ANGLED "TARGET LINE."

Changing the angle with increased casting distance is nothing new. Mel Krieger introduced it as 'tilting the casting arc', and, in so doing, he pointed out the limitations of using a fixed clock face to teach casting. A '10-to-2' casting stroke stops the rod in a way that provides a good target line for middle-distance casts, but not for short or long ones.

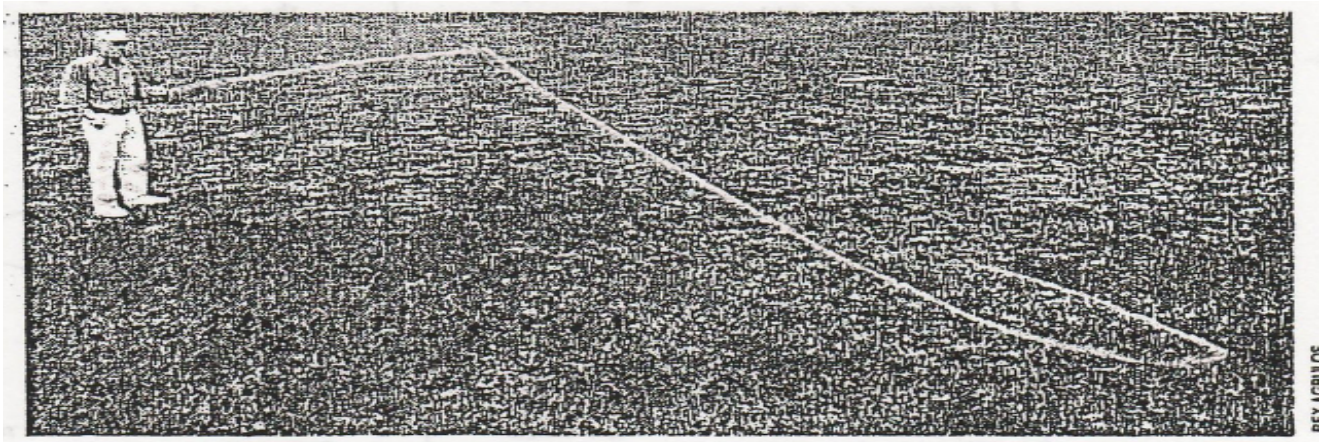
I emphasize a target line because I see so many casters move the rod and fly line back and forth haphazardly. They grasp the importance of straightening the fly line, but not of straightening it in a preconsidered, optimal direction. Typically, they straighten the line too high in front, which invites dropping it too low in back.

Knowing your intended target line sets the direction for the straight-line movements of the cast. First, the back cast straightens the fly line for direct positioning behind the target line. This allows the rod tip to pull the fly line forward in the target direction during the forward cast. If the tip is not moved straight, poorly shaped, inefficient casting loops result. The final straight-line movement is the continued unrolling of the fly line in the same direction. We accomplish this by stopping the rod abruptly, with its tip close under the moving fly line, thus forming a narrow loop against any air resistance. This sequence constitutes what I consider to be the essential physics of an efficient overhead cast. Everything we do in our own movements and with the fly rod, regardless of individual styles, should contribute to the straight movement of the fly line.

I start my beginning students with a 20-foot cast, shorter than most teachers use. Moving the fly line forward along such a downward-angled target line almost forces students to concentrate on direction. This target line also sets up an upward-angled back cast and a nearly vertical stop of the rod butt (Figure 2, on the next page). This upward emphasis helps limit wrist and arm movements that would drop the fly line on the back cast. On the forward cast, the downward angle requires lowering the rod tip to avoid hitting the descending fly line. Thus, on short casts, the caster's hand moves more downward than forward (Figure 3). I have observed this in every skilled caster I have analyzed. Even casters such as Lefty Kreh, who typically moves his casting hand horizontally, make this adjustment when using short, overhead casts.

Experienced casters can also benefit from this short-cast practice. The downward-tilted target line helps identify and eliminate excessive arm and rod movements. These then become available when needed for longer casts to provide additional force and distance. I have found that most intermediate students benefit at least as much from improving the efficiency in their basic casting strokes as from learning a variety of specialty casts.

Try this practice yourself. Measure 20 feet from your casting position and mark the spot - two 9-foot rod lengths plus two feet will do it. Then start false casting to straighten the line close to the ground above that 20-foot mark, forming your



CASTING SIDEARM PROVIDES AN EASY WAY FOR YOU TO EXAMINE YOUR CASTING STROKE TO MAKE SURE IT'S FOLLOWING THE DESIRED TARGET LINE.

target line. On the back cast, initially turn and look to find the rod's stop position that sends the fly line upward, behind that target line. On the forward cast, try lowering your casting hand, rather than reaching it forward. Move the hand directly upward on the back cast and downward on the forward cast. If this is difficult, you have probably been wasting arm movements and could benefit from shortening your stroke. Stop the cast with your rod tip close below the moving fly line to form a narrow loop (Figure 4).

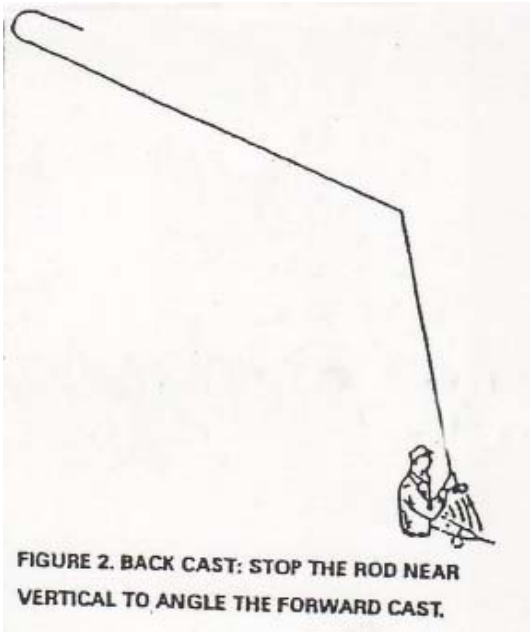


FIGURE 2. BACK CAST: STOP THE ROD NEAR VERTICAL TO ANGLE THE FORWARD CAST.

When you can do these movements consistently, lengthen your cast. Notice that the target line is already closer to horizontal, the stopping point for your back cast is a little farther back, and your timing is a little slower. As you continue to cast farther, the changing target line leads to additional changes, including extended hand movements that become more horizontal than vertical. Focusing on a changing target line, in contrast to rigid clock positions, thus teaches you the cast-to-cast adjustments you need when fishing. I like to introduce this flexibility into the students' learning as early as possible - as soon as they show some consistency in their 20-foot casts.

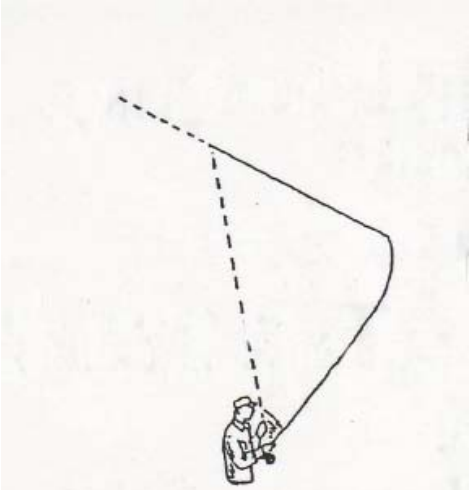


FIGURE 3. FORWARD CAST: USE A DOWNWARD PATH FOR THE HAND AND ROD TIP.

Casting sidearm offers another way to practice the straight path of the fly line and rod tip (see photo). The sidearm cast brings your rod tip down where you can more easily see the straight-line physics. Your target line is now off to your side as the level of your rod tip. As you make a back cast, watch the fly line straightening behind the target line. As you move the rod forward, control the tip's movements along that line. When you stop the rod close to the moving fly line, watch the small loop form and continue the line forward. If you take an extra fly line and lay 60 or 70 feet of it out straight on the grass, you have a visual guideline directly below the target line. Position yourself with your rod tip directly over the midpoint of that fly line and make your sidearm casts, occastionally dropping your back cast or forward cast to the grass. If you stop the rod correctly, your fly line should land directly on top of the one already there.

There are many dimensions to an effective fly cast. A target line helps teach the one I consider to be most important - controlling your fly line to follow the straight and narrow.

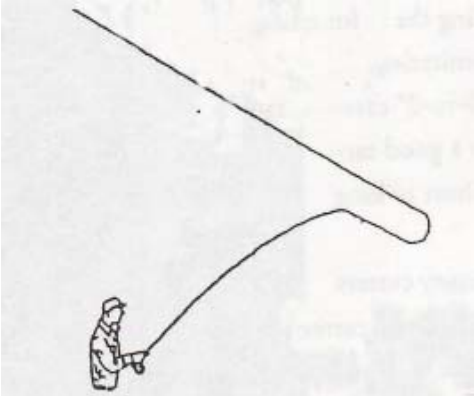


FIGURE 4. STOP: YOU WANT THE ROD TIP CLOSE TO THE FLY LINE TO ACHIEVE A NARROW LOOP.