THE CASTING CLINIC With Al Kyte

AN EFFICIENT CAST

When practicing your cast, do you work mostly on tightening loops, on becoming more accurate, or on adding distance? Whatever I am working on, I am also working on becoming more efficient - expending as little energy as necessary.

I first started thinking seriously about efficiency a few years ago when testing 10 weight rods, some so stiff as to put strain on my casting arm. In addition to becoing increasingly concerned about rod design, I started asking myself how I could move more efficiently to minimize such strain.

At the next fishing show I worked, efficiency came up during a breakfast conversation with two fellow early risers - Lefty Kreh and Jerry Siem. As we exchanged thoughts on casting, they both talked about the role of efficiency in supporting their different casting styles, and both had impressive arguments. I came away convinced that there is more to efficiency than I had realized.

Then I recalled from my study of sports movements several things about efficiency. First, efficiency is about conserving energy - simplifying movements to eliminate wasted motion. Second, efficiency should be looked at in relation to what you are trying to accomplish - the purpose of your movement. And third, efficiency should take into account differences in the task being performed, in those performing them, and in the tools being used. These could include differences in casters' strength, flexibility, and hand quickness as well as the length, lightness, and stiffness of the fly rod. We start to see that different movements may be efficient for a given purpose or for a particular individual.



You can begin to get a grasp on how this all comes together by contrasting two different casting purposes - short line accuracy and maximum distance. This contrast will help give you some ideas that may change your cast to allow you to do more with less.

Casting Short for Accuracy

When casting from 20 to 50 feet, neither extreme speed nor great force is required for success. Seldom are you tapping into the potential of what a fly rod can do. Accuracy within this range benefits from simplifying movements to achieve consistency in the ways your loops form and your line unrolls. Short, controlled movements of the rod tip are likely to serve you better than long, fast ones. This efficiency of short casts might be expressed as 'moving as few parts as it takes to do the job'.

Typically, for short, accurate casts, you rely on short hand movements. When casting in close, there is no need to add force by moving your body or legs. The efficiency of a short hand movement comes from emphasizing the rotation of the rod from its butt, rather than from moving that butt - and the entire rod - back and forth. Thus energy is conserved by getting the most tip movement from the least hand movement. Beyond restricting your own movements, you can also limit the movement of the rod further by concentrating the bend into the top two or three feet of the tip section, in what Mel Krieger has called 'tip casting'. This tip emphasis is accomplished by stopping the movement of the rod butt within a narrow angle or arc. So, you

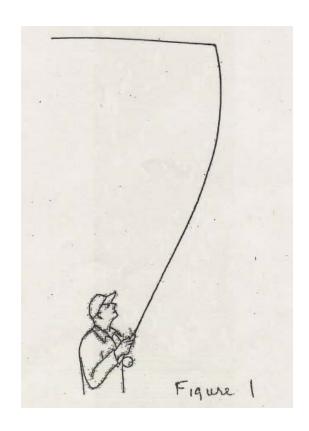
maximize tip movement by minimizing butt movement.

Tip casting tiny loops is one of the great pleasures of fly fishing small streams. So, when teaching guide schools, I am often surprised by how few fly fishing guides have even heard of tip casting, let alone know how to do it. To practice this skill, leave no more than 12 feet of fly line, plus leader, beyond the rod tip. False cast with just your rod hand, looking up to watch the rod tip throughout the cast (Figure 1). With so little line out, you should be able to stop the rod to limit its butt movement to within an angle of 60 degrees, or two clock positions. If you are not doing this, you are not yet tip casting.

Individual differences between casters are seldom important when casting a short line; people with a variety of physical characteristics can cast accurately. Yet, the rod you select can contribute to your consistency, which helps you become more efficient. When working on accuracy, I look for a rod that offers delicacy without sacrificing control. Fast, tip-flexing rods may be stiff enough throughout the middle to prevent me from feeling the rod tip working, thus interfering with delicacy. At the other extreme, a slow, full-flexing rod may lack the stiffness in the butt to track consistently, thus sacrificing control. So, for this purpose, I prefer a midflex or medium-fast rod, with flexibility down into the middle that progresses gradually to a firm lower butt section.

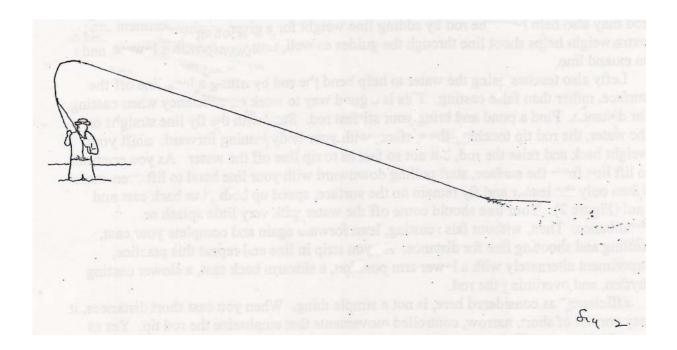
Casting for Distance

Casting for maximum distance calls for additional force and speed. As mentioned in a previous column, ('Adding Distance', California Fly Fisher, vol. 10, no. 2, July/August 2002), you may adjust to these demands by lengthening the casting stroke, widening the rod angle to accommodate a deeper bend, hauling to add hand speed, and aiming higher for additional line carry. You are now moving the whole rod farther forward as well as rotating the tip, thus increasing your own movements as well as those of the fly rod. Instead of expressing efficiency as 'moving as few parts as it takes to do



the job', we might now express it as 'adding as many parts as it takes to be able to accomplish the job.'

When people attempt long casts, individual style differences become apparent. Differences in the length of the casting stroke are particularly noticeable. Big, strong-shouldered casters sometimes acieve impressive distances with few additions to their basic strokes. Their strength allows them to be efficient while continuing to use relatively short, simple movements. However, most of us lack that degree of strength and become efficient by extending our casting movements to tap into additional force from other parts of the body. Yet achieving efficiency gets tricky here, because extending your movements complicates them to a degree. We gain the efficiency to perform the task but, in the process, sacrifice simplicity of movement. Distance casting that involves big flies, heavy lines, and the possibility of hooking big saltwater fish requires a relatively heavy, stiff fly rod. For me, the degree of stiffness throughout the butt of such rods is critical. The rod needs back



bone to fight big fish, yet I also want as much flexibility as possible to take pressure off my casting arm. Efficiency in avoiding muscular strain also includes using the strongest muscles available, which may lead you to lower your casting arm. Combining a low arm position with a firm wrist invites strong shoulder muscles to take over from weaker muscles that move the elbow and wrist. Rocking your body back and forth also brings in additional large muscles of the trunk and legs to help bend the rod early in the cast. Other adjustments to the casting arn include Lefty Kreh's sidearm back cast, which minimizes strain that comes from lifting the weight of a heavy rod overhead, and some casters' emphasis on a long, leisurely casting stroke to minimize strain from starting a forceful movement suddenly.

Gaining efficiency with a heavy, stiff rod also may include other ways to help your rod may also help bend the rod by adding line weight for a given casting distance. This extra weight helps shoot line through the guides as well, thus requiring fewer false casts to extend line.

Lefty also teaches using the water to help bend the rod by lifting a long line off the surface, rather than false casting. This is a good way to workon efficiency when casting for distance. Find a

pond and bring your stiffest rod. Start with the fly line straight on the water, the rod tip touching the surface, with your body leaning forward. Shift your weight back and raise the rod, but not so fast as to rip line off the water. As you continue to lift line from the surface, start pulling downward with your line hand to lift even more. When only the leader and fly remain on the surface, speed up both your back cast and haul (Figure 2). Your line should come off the water with very little splash or disturbance. Then, without false casting, lean forward again and complete your cast, hauling and shooting line for distance. As you strip in line and repeat this practice, experiment alternately with a lower arm position, a sidearm back cast, a slower casting rhythm, and overlining the rod.

Efficiency, as considered here, is not a simple thing. When you cast short distances, it may consist of short, narrow, controlled movements that emphasize the rod tip. Yet as you add distance, efficiency may include longer, faster, wider movements, the strong muscles of additional body parts, and techniques to compensate for the stiffness of a big rod. Hopefully, there is something in all this that helps you to discover an effortless cast, one that adds pleasure to each day you fish.