TASK 6 ROLL CAST

Gordy,

I appreciated Guy Manning's expectation of idealized loop shape. I also expect the same. I can end at the closer-in-front position that Guy mentions with good loops if I start back further. I suspect we have very similar total tip travel in rotation and some differences in tip travel in non-rotating *translation*. *My roll casts must have the same loop control as overhead* casts in order for me to assert that my roll casts, as taught, are truly half of an overhead cast. (Keep in mind that this discussion regards idealized casts performed for instruction or demonstration and testing. Fishing often demands less and, sometimes demands elaborate combinations of idealized casts.)

A series of partial criteria for proper cast formation with single-handed rods delivering a basic loop along a straight line include: (no haul/no shoot)
1) flat top leg/fly leg
2) parallel legs
3) under a certain maximum width
4) leader completely turns over before line falls
5) fly contacts surface first
6) leader falls to surface at rate intended for the specific cast
7) line lays out straight.
8) Rod tip stops at a level higher than casters head on front cast to form loop
9) Reel *face* (opening where line comes off) remains aimed at target (or in casting plane) throughout entire cast - both front cast and back cast. -*NO reel* ***twist***!
Advanced casters may seek the energy balance of producing a top-wrinkle in the loop as the front taper speeds up to enter the loop in a conservation-of-energy phenomenon. Some of my advanced casters play with generating three or four of these waves as an observable indicator of efficient casting effort. The relative depth of these "top wrinkles" can also vary and the minimal effort that produces these while still straightening out the leader represent an efficiency more impressive than huge distances cast.

Clarifying two points -
8) Rod tip stops at a level higher than casters head on front cast to form loop.

The rod leg proceeds from the rod tip at angle of no less than 90-degrees (no shoot/no haul). This tip position includes initial rebound as loop forms. With a very flexible rod, the rebound will be greater with solid stop, so the stop must be initiated earlier to allow for this additional tip travel. The net result is that the *stroke* must be shortened and the rod flex continues the rotation or *arc*.

Probably the biggest early challenge I faced as an instructor was adapting to the wide variety of rods presented by students for classes. Realization of the counter flex role in rod leg projection helped. Applying minimal force, sometimes seeking the "top-wrinkle" as the front taper entered the loop, I also generated much less counter flex versus the testosterone laden student attempts aka "be gentle with it" from Tom White.

Given that the loops legs are parallel in *this* instance, the initial loop trajectory cannot be altered without *de-parallelling* the loop legs. Once the loop forms, the trajectory (and fly leg) is set and the only alteration the caster can make becomes embedded in the rod leg (mend). SO, the *stop point higher than the head* really ties into distance required for the loop *to completely straighten* AND - *The fly to land first*. The longer the distance, the higher rod tip at the stop, within reason. The more flexible the rod, the less the available stroke to effect this high stop (This may be the reason those casting very-flexible rods -or carrying heavy line mass - seem to resort to the haul for every cast. This is also the reason why most MCI's succeed on the test with a stiffer rod - light salt water 7-wt - than they might usually fish.)

Second Point-
9) Reel *face* (opening where line comes off) remains aimed at target (or in casting plane) -
is a simplifying approach to students. Once they become certified, they can twist all they want, but I bet they never twist the rod in it's long axis on true accuracy - or at least not very successfully. Most "reel twisters" do not have fly-leg and rod-leg of loops align with the rod movement-to-stop plane - AKA tracking optimization. This varies from *under-slung* loops approaching a "Switch cast", to side-to-side loop leg back casts as seen in Oval casts and so-called Belgian casts. (remember this is only applied to classic overhead casts absent shoot and absent haul).

When I teach potential instructors, and students, to analyze their own casts and layouts, they can identify sub-optimal tracking as 1) leader kicks to side 2) reel loses alignment with target 3) line lays out off-center, etc. Tracking may be *implied* from line layout and loop roll-out, and this enhances observation as an instructor. This implication approach also applies to examiners comprehension of the performance.

Likewise the flat fly-leg reflects good pre-stop tip path that is near SLP. Loop size does not change from initiation unless rod-leg is amended after RSP+rebound. SO, loops can be judged for height/width at the end of the turnover. If the trajectory is downward, then the examiners should be able to evaluate loop width without requiring the unrealistic expectation of fly-leg no higher than head.

I wish I had the freedom to cast with Guy Manning in front of a pair of high-speed cameras. I expect I would learn a lot. Maybe when the kids are out of college?

Gary Eaton, MCI