

Fly Line to Leader Transitions

The transition of your fly line to a leader requires a connection that has little change in mass and geometry. Absent that equal mass transition, the fly line and leader may hinge and result in a poor exchange of energy. If the fly line to leader transition is made with a nail knot and the mass of the butt of the leader is close the same as the fly line, then the transition will be correct.

Most fly lines today are made with a small welded loop and most leaders are tied with a small perfection loop at the butt end of the leader. When the two are joined together with a loop to loop connection, the combination provides a good transition that typically works well during casting. However, some fly lines do not have a welded loop and those that do will eventually wear out and the loop will have to be replaced with another form of a loop connection. This is typically accomplished with a piece of monofilament line (usually nylon) that has a diameter equal to or close to the diameter of the fly line tip. Making a loop requires a nail knot to attach monofilament to the fly line and a small perfection loop that is approximately one quarter to one half inch in diameter and located within an inch or two from the end of the fly line. Finally the nail knot should be coated with UV Knot-sense to ensure that the nail knot stays secure and in place. An example of correct and incorrect transitions is shown below.

Having the opportunity to see such a variety of loop to loop transitions on visitors fly lines at the school, I often find loops tied with small diameter nylon (.008 to .011") extended four to six inches away from the end of the fly line and/or loops that are too large. Such combinations of loop to loop connections are likely to provide poor transitions and result in hinging during the delivery of the cast. The correct size of nylon for making this loop connection should be between .024 and .027" for most 3 to 8 weight fly lines. If you use a copolymer material that floats (specific gravity~1), then the transition will not have a tendency to sink. Nylon has a specific gravity of approximately 1.14.

In the event that your leader is not turning over properly, you might take a look at this transition point.

