



How to.....

Fly Cast Curves and

Mends Stream Side

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Dedication

This book is dedicated to my one constant in my life over the past 45 years, my wife Deb. She has unselfishly and tirelessly accompanied me as we have traveled throughout the US in pursuit of mastery of this incredible sport. Her support and encouragement has forever been my compass.



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Welcome & Introduction

Congratulations and “Thank You” on your purchase of this book How to Fly Cast Curves and Mends Stream Side. It is my opinion this book is the perfect complement to the website theCampFlyFishingSchool.com. As you continue to grow in your expertise you will want to use both as resources.

In this book you will find techniques on how to manipulate your fly line. With this ability you will become a better fisherman capable of adjusting to the infinite variety of water conditions likely to encounter. Whether the current flow is left to right, right to left, straight upstream or directly downstream, you will now be equipped with the skill to meet the challenge. I would caution you against progression too fast to throwing curves and mends. You should be proficient at good loop control to 45 ft. before progression to more difficult and demanding casts. The better your foundation the easier and less frustration you will experience when you attempt to master advanced techniques.

Sometimes just one or two seconds more of a drag free drift is all that is required for that trophy to make up her mind to strike or not. With disciplined practice you will be well on your way to throwing those curves and mends required to convince that old sow it truly is a midge and not some imitation.

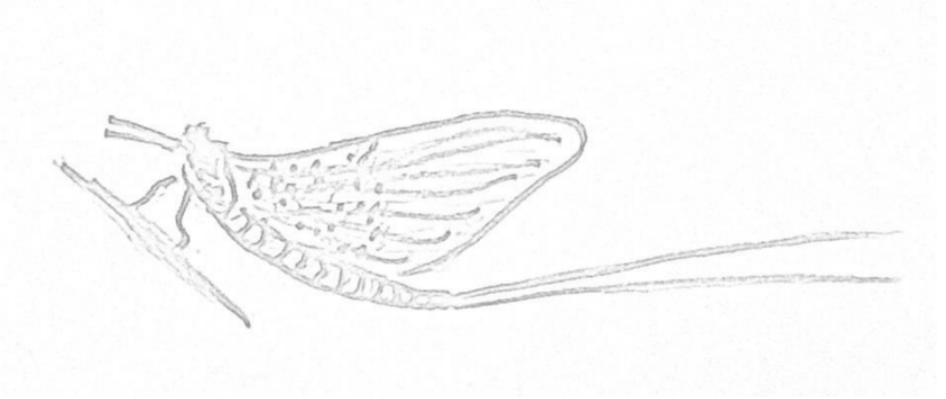
Use the NOTES pages to keep track of your progress. Take the book with you to workshops where you will definitely want to write down tips such as at the Fly Fishers International annual fair where some of the worlds’ best instructors gather to share their sport.

You will, also, be given the know how to throw around a target or fish helping to present a fly in such a fashion more likely to induce a strike. So what are you waiting for? Get your rod and get ready to improve your strike percentage dramatically. Please practice good

stream etiquette and conservation practices while only keeping what you plan to eat. Oh! And don't forget to leave the bananas at home, Ha! I have been told they are bad luck.



Notes



Definitions

Aerialized Mend: the alteration of fly line shape done after the stop while the fly line is air borne

Curve Casts: a cast which results in any layout where the leader lays on the water making a curve to the right or left. Part of the fly line may be incorporated into the curve along with the leader.

Drag Free Drift: the length of time the fly floats without being dragged downstream it is allowed to free float on the water similar to the naturals.

Layout: the position of the fly line and leader as it lays on the water.

Mend: a manipulation of the fly line after the stop (if the fly line is still air borne) which can be used to induce slack in the layout or done later when fly line is on the water to assist in a drag free drift.

Negative or Curve to the Right Cast: a cast which results in the layout where the curve is to the right. Many pros have ceased using the term “Negative Curve”. (righthanded caster)

On the Water Mend: a manipulation of the fly line done while it lays on the water.

Positive or Curve to the Left Cast: a cast which results in the layout where the curve is to the left. Many professionals have ceased using the term “Positive Curve”. (righthanded caster)

Stop: the time during the cast when the forward motion of the cast has ceased and the fly line overtakes the rod tip forming a loop

Curve Casts

What are Curve Casts & Why throw them?

Occasionally you will encounter situations which require something other than the usual PULD cast with a straight layout of the line and leader. It may be that stump near the bank you will want to cast around. Or, perhaps, it's that fish facing away from you. If you make a straight cast you will line her and possibly ruin your opportunity. A curve around the front of the head to bring the lure in in front of her may be just the ticket. Or just maybe it's that current flow which requires some slack in the line to allow for a second or two more drag free drift. The situations are almost endless. Learning these techniques may help turn the tide in your favor.

As per our definition, a curve casts results in a layout whereby the leader along with possibly some part of the fly line lays on the water in the shape of a curve with the fly landing either to the right or to the left. See Fig 1. These curves may vary in the amount of line incorporated in the

curve as well as to the degree of curve.

The curve cast begins the moment you start the forward cast. This is irregardless of how many false cast you have performed. During the false cast you will be adjusting line length and setting yourself up

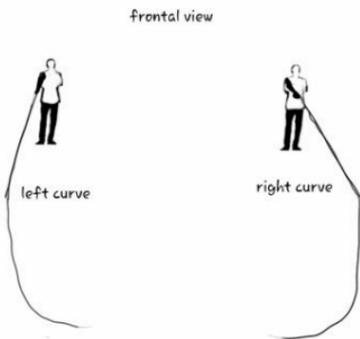


Fig.1 Frontal View Curve Cast layouts

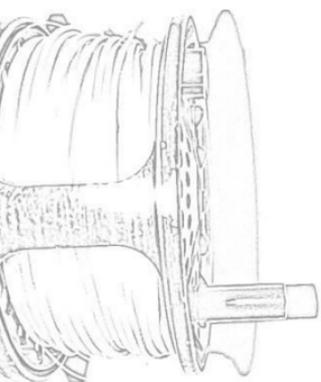
for the most appropriate and efficient curve cast. Read on to see how to affect your curve layout to benefit your situation.

Mechanics of Curve Casts

Prior to performing a curve cast it helps to understand how the curves are perpetuated. One of the key components of the cast is the design of the fly line and the leader. This, I believe is one of the most misunderstood and overlooked components. The other major component is the movement of the rod tip.

Let's consider the fly lines' contribution to performing a curve cast. Most fly lines have some type of taper to the end of the line. This goes from one extreme to the other. The level line, for example, has a taper which does not change throughout the length of the line. You could argue that it has no taper. The fact that this line has an unchanged mass throughout the line, it is able to transmit the energy you impart into the cast all the way to the fly, then when the loop reaches the leader and the mass decreases, the speed at which the loop turns over increases dramatically and helps to throw the fly and land in a straight layout. Those fly lines designed with a lot of mass in the front section of the fly line are designed to cast bulkier, heavier flies. If too much energy was thrown into the cast you will see the fly have a dramatic kick at the end of the cast and uncontrolled layout will result. Without getting off track too far here, let me just say one way to avoid that kick is to lengthen the tippet a foot or more. There are other remedies, however and a topic for another book. Ideally you generally want a fly line and leader designed for the type of fly you are casting as well as to the amount of power you are putting into the cast. The loop should unroll and expend its' energy completely at the target in a curve for a gentle landing.

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Another line design on the other end of the spectrum of line tapers has an ever decreasing line diameter for a significant portion of the front end of the fly line. These are designed that way to dissipate the energy as the loop unrolls so the smaller flies land without much of a disturbance on the surface. You can now see where the taper of the fly line and leader is crucial in helping to turn the loop over and make an curve cast with the fly you have chosen to fish with.

Having a rod which has a soft action built into its' design can impart a lot of waves into the fly line and, also, alters the final layout. These rods require wider casting arcs, longer stroke lengths and smoother application of power. If you find a lot of extra waves in your fly line layout that you didn't intend, one alternative is to try a firmer, faster action rod. Preferable, I would rather you try altering your arc, grip strength, stroke length and power application before spending a dime for another rod. In other words, master what you have- within reason of course.

Curve Cast to the Left: OK, now we have equipment up to the task of throwing our fly. The **Positive Curve or Curve Cast to the Left** can be performed either of two ways. Let's consider scenario 1. You are bass fishing parallel along a bank on your left side. It's windy or not and you are right handed. About 40 ft. ahead the bank takes a sharp turn to the left creating a "point". You get about 50ft. of line off the reel, make a side arm or horizontal cast with an abrupt stop at about 1:00 with additional power to carry the additional 10 ft. you shoot and need to go around the corner (12:00 would be directly in front of you). You can

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retrieve the lure and it will very closely follow the layout of you fly line as it is retrieved, unless it is a heavy fly- In which case it may cut the corner. To adjust for this, cast farther away from the side of the bank. If you can adequately carry 50 ft. of line with good control, then carry all of it and simply stop around 1:00 and the line will curve around the corner. A slight increase in power will be needed to get the line to fully curve. See Fig 3.



Figure 2A: Top View of Clock Face for the purpose of this book

Figure 2B: Side View of Clock Face



Direction of Cast →



Fig 3 Top View Left Curve to cast around a point or stump

Direction of Cast ↑

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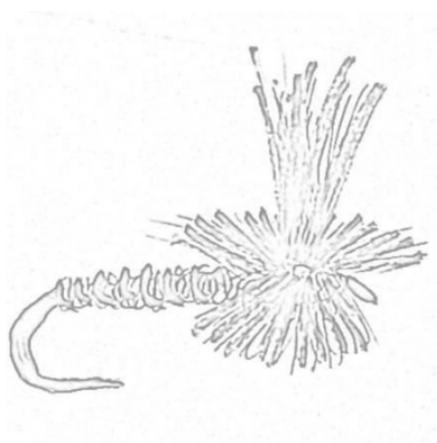
Should you cast with too much power, you may witness what I call a “reverse wave” which travels back up the fly line. It will impart slack as shown in the Fig 4 below. This wave can be eliminated with several moves. Try casting softer. Another trick is to make a sudden “pull back “ or flip of the rod tip to the right immediately after the stop. This will in addition to eliminating the unwanted wave will add a few feet of fly line into the curve, resulting in even more slack.



Fig4 Top View Reverse Wave as result of casting too hard

Before going into Scenario 2 let's review one of the basic principles governing good efficient casting. This is the 180° rule. Let me try to clearly set the stage. You have a target at 25 ft. In order to cast accurately to the target casting vertically, you will need to throw a high back cast and a forward cast 180 degrees in a downward fashion. I discuss this in my book “How to Fly Cast Stream Side” under the heading of Trajectory, Fig 13. The same holds true when casting horizontally performing the curve cast to the left. Your back cast will not be directly behind you, but thrown out to the side to keep it 180 degrees from the forward cast. Think of it this way. If you were casting in the vertical plane, simply lay that plane on its side. Now where does your back cast go? The farther away your target gets the more your back cast moves closer to becoming directly behind you. See Fig 5 and Fig 6 below. 180 degree Rule applies at close Range

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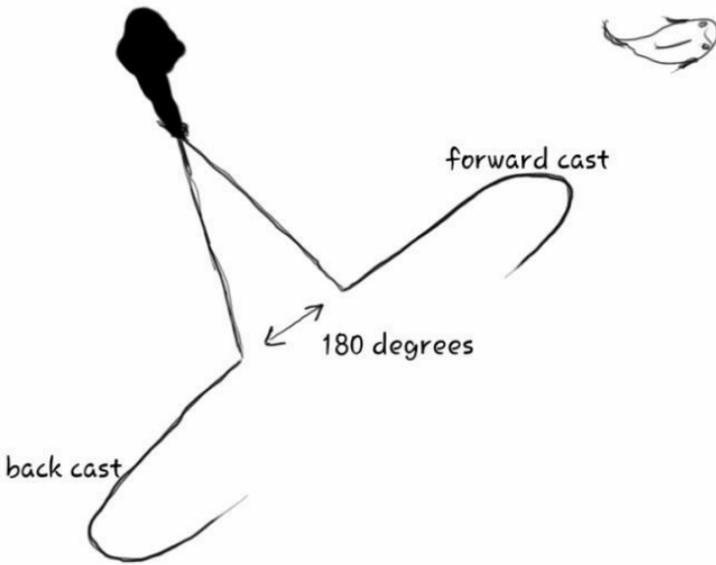


Fig 5 Top View Target 25 ft. Narrow arc

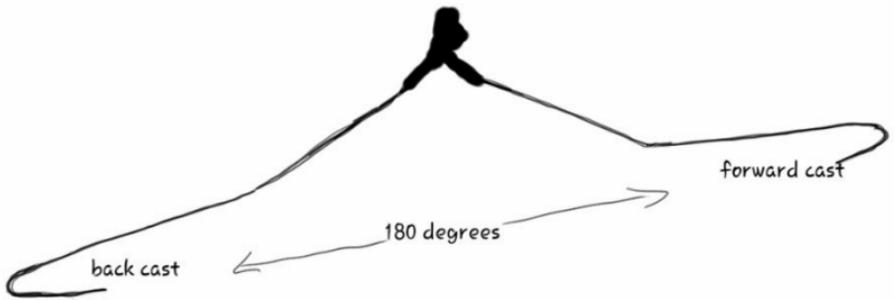
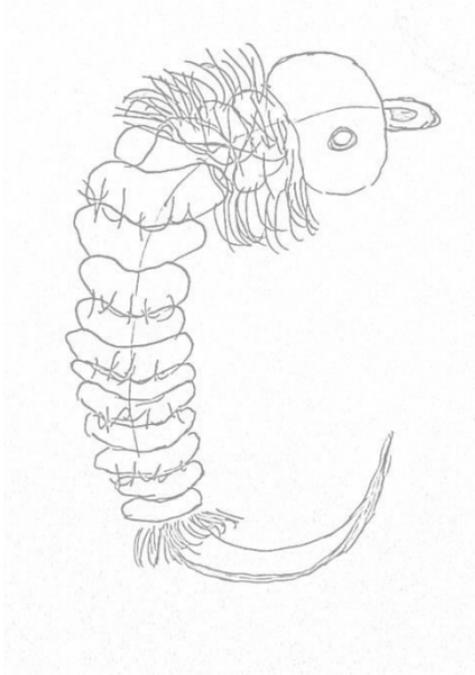


Fig 6 Top View Target 50 ft. Arc widens, 180 degree rull applies

Scenario 2. Fair warning, this cast will require you trusting me on this one because you will be changing your casting significantly. You are going to finesse the line into a curve to the left- not bully it as in scenario 1 above. This cast is done with little to no wind when a subtle presentation is required. As you perform the forward cast you have to sloooooow things down and avoid a sudden stop but make a very protracted stop. See what I mean? Trust me.

Notes



Now imagine you are wade fishing and spot a rainbow 30 ft. directly in front of you facing away and there is little to no wind. The cast and mistake most fishermen make is to perform a PULD with a straight line cast over the fish with the fly landing in front of her. This runs the chance of spooking the fish and ruining your best opportunity of the day. See Fig. 9. Surely she was 22in. and at least 10#. The better option is to throw the cast we described earlier as in scenario 1 performing a positive curve to the left. Since there is no wind we want a delicate landing so we are going to choose a kinder, gentler approach. You will carry 35 ft. of line to allow for a 5 ft. curve around and in front of the fish. Experiment with different lengths of line and see what works for you. 38 ft. might give you a better curve since you will be casting a few feet ahead of the big SOW. Now calm down. Don't get too excited. You will need to make an off shoulder cast for your presentation cast. See Fig 7. Begin the forward cast by sweeping the rod forward on you left side (rod passes over your head) deaccelerating as you move the rod forward and then to right. The Stop will be done slowly NOT abruptly. Direct the fly line slightly ahead of the target under powering it so it never completes the unrolling of the loop. It should land as in Fig 8. Look familiar?



Fig 7 Off Shoulder Frontal View

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You will stop the rod tip slightly to the right of the fish as you sweep it around and in front of you. Making such a cast with a high degree of accuracy requires a lot of practice to master. In my opinion it is one of the most difficult. That should not discourage you from practicing and mastering it. It will pay off in big dividends for those spooky fish in shallow, clear and calm water. If you have trouble getting the line to lay down in front of you, try these two tips. As you are performing the sweep and the rod is directly in front of you at its' lowest position in the sweep, perform a short upward movement. End up with the rod tip slightly higher, maybe a foot or so and to the right of center. Also, I find if I squat about 6 inches as I perform the sweep, this helps to drive the line into the water. Those two maneuvers will assist you in driving the line into the water in front of you. Spey casters use the technique of raising the rod tip to lower the line encouraging it to touch down at the point of the lift when they perform switch and spey cast maneuvers. It works here too.

So, perhaps, now you can understand why the cast is to a large degree dependent on your mind set. You have to rethink everything you've been told so far- Applying power to an abrupt stop, for example. Not with this cast. This is a good thing. It means you are an advanced caster- one who can manipulate the fly line to accommodate varying circumstances.

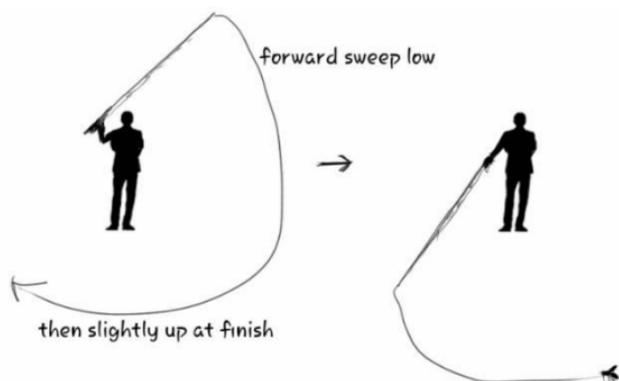
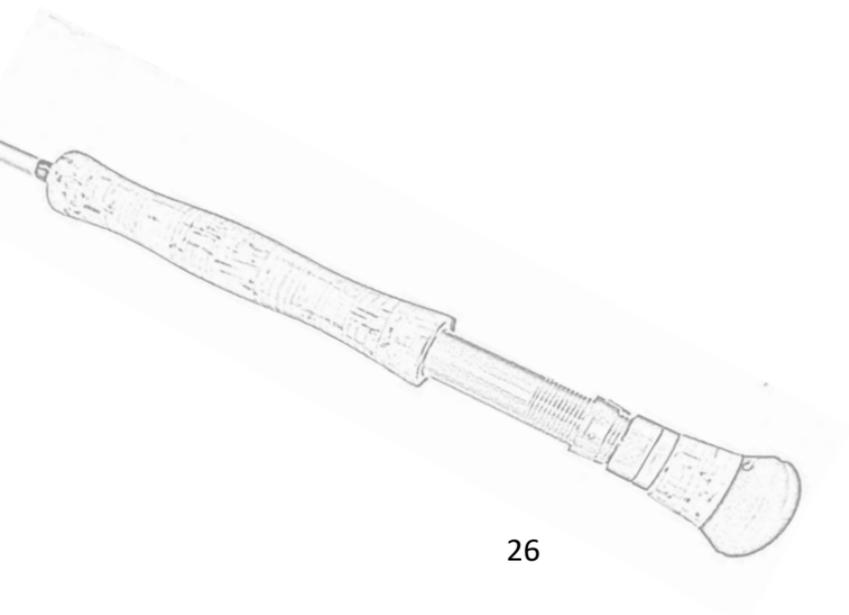


Fig 8 Frontal View Initial Set up to Final Lay out of left curve

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Let's discuss another twist to the above scenario. The water is moving towards you and you are dry fly fishing. The best option here is to cast on your dominant side, carry 35ft. of line, make a horizontal cast, Fig.10, and only making a slight curve to the left to land the fly a few feet directly in front of the target which will now drift downstream into her field of vision, also known as cone of vision. Do NOT make the mistake most fishermen/women make in Fig 9 below. This is called "lining" the fish.



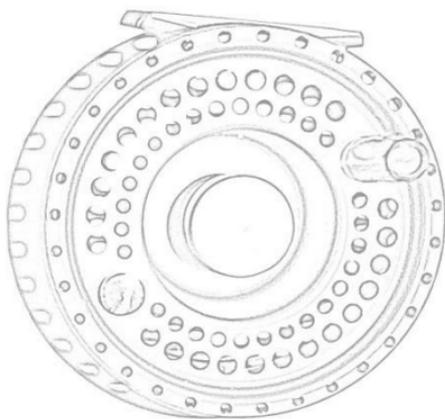
Fig 9 Direction of Cast → Top View



Fig 10 Fly will drift into field of vision (cone of vision) of the fish

River flow ← Top View

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Mechanism for Throwing Curve Cast to the Right:

If you are ambidextrous then simply do the mirror image of everything we've worked on so far. For those of us who aren't, however, let's take another look. Under windy conditions, let's take a look at Method 1. How do we perform a "Negative" curve or curve cast to the right. You are right handed and need to move from casting in the near vertical to more horizontal. We want the curve to go to the right so we need to move the rod off shoulder. It may help to bend at the torso somewhat to the left as well. This will move the plane the rod is moving even more to the horizontal. Slightly overpower the cast, come to a firm stop at approximately



11:00 and the leader should end up curving to the right. See Fig 11. Should you see that reverse wave again by casting too hard, you still have the option to soften the cast or perform that "pull back" immediately after the stop. This will throw a wave in the opposite direction and eliminate that unwanted wave.

Fig11 Off Shoulder Curve cast to the Right

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Method Two:

If there is no wind, you have the option to use this method. Just as in the Curve Cast to the Left, when you perform the Curve to the Right, we start off vertically, sweep or swing the rod tip around the right horizontally gradually deaccelerating and angling down all the while. One additional tip that sometimes help is to squat as you make the sweep. This accentuates the downward direction of the cast. At the very end of the cast you begin to rise up. Also, try this one last tip. When the rod tip is pointing directly in front of you and at its' lowest point begin a small upward movement of the rod tip- just about a foot of upward movement before the stop which should occur just a hair left of center (say 11:00 o'clock) as you yourself rise from squatting. See Fig 12 below.

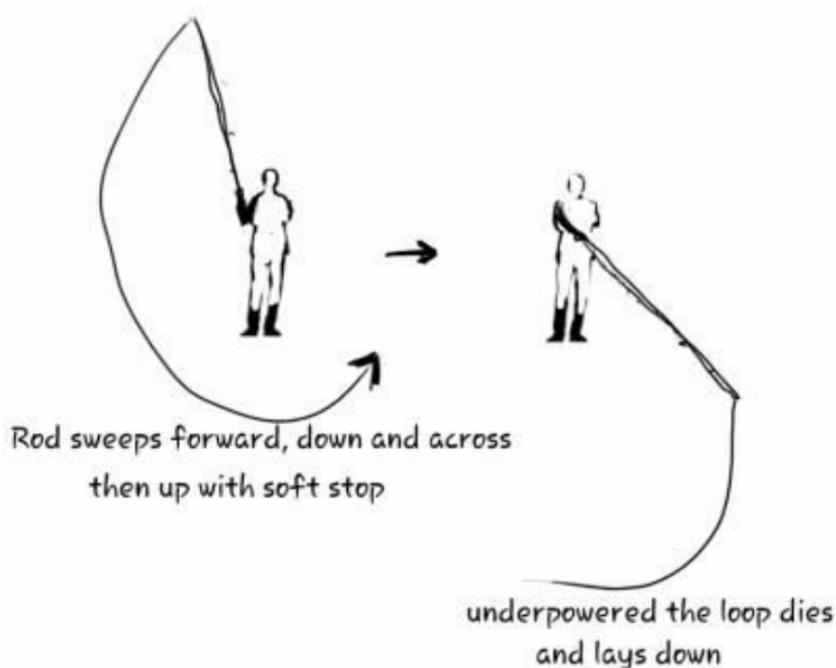
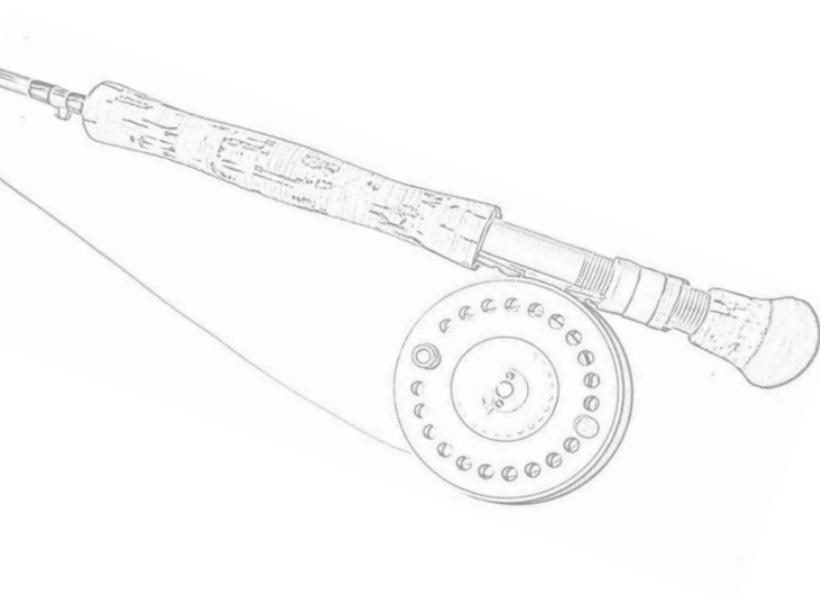


Fig 12 Frontal View Sweep to Left to produce layout of curve to right

Notes



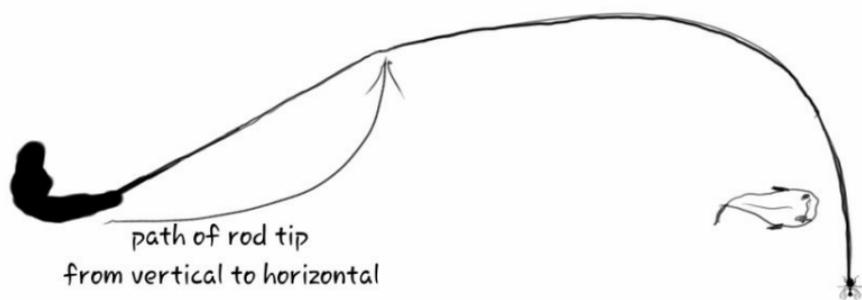
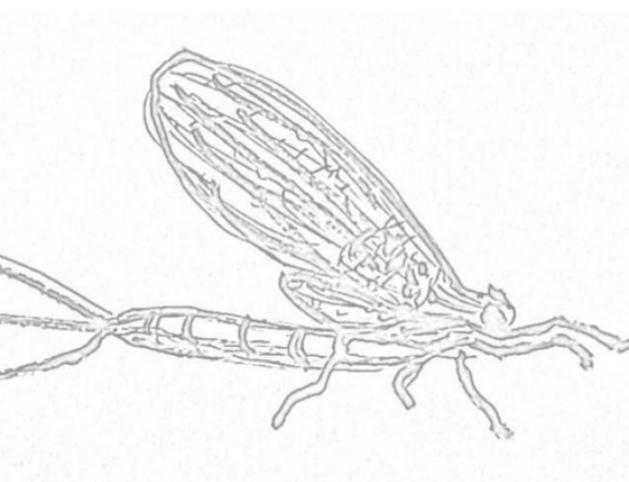


Fig 13. Top View of Rod Tip path

In Fig. 13 above rod tip starts in vertical position. With underpowered cast, sweeps forward gradually descending with a soft stop.

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Throwing Mends

Recognizing and understanding that the characteristic candy cane shape of the fly line is dictated by the path the rod tip takes from the start to the end of the cast is paramount. So is any other shape that it might look like as it goes through the air and ultimately lay out on the water.

What is a Mend and Why throw them:

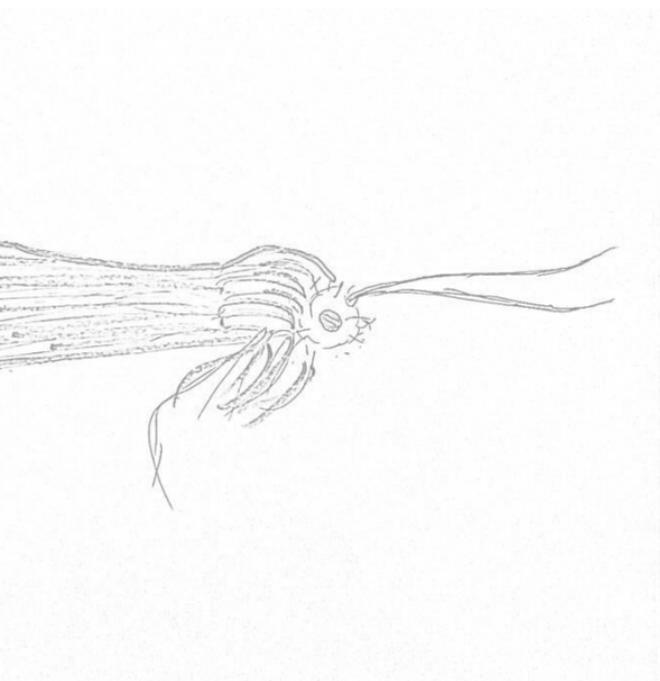
So what are mends that we create in the air and why do we perform them? An “aerial” mend is a manipulation in the rod leg of the fly line made by moving the rod tip after the stop of the forward cast. This manipulation is done to put slack in the line in a specific place and in a specific shape. This allows us to accommodate currents which may cause the fly to drag. We can cast around obstacles or around the head of a fish facing away from us as well.

Types of Mends:

If you move the rod tip sideways or up and down after the stop you will incorporate waves in the rod leg which will ultimately put slack in the lay out on the water. This will shorten the total length of the cast. If you want to maintain the initial distance you will need to slip or shoot the same amount of line as the distance you take up by creating the slack. So if I create 5 ft. of slack in the lay out I have to shoot 5 feet of line to maintain the distance.

Should you move the rod tip up and down for a mend, you add slack into the lay out without consideration of the width of the cast. Most mends are done with a side to side motion of the rod tip. You can alter the width of the waves in the

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layout by altering the speed in which you move the rod tip as well. If you move it slowly the wave will take up more of your layout. If you move the rod tip quickly to the right and then back to center, you will create a narrow wave. The further to the right and left you move the rod tip, the deeper the wave will be.

If you choose to put a wave in the layout near the fly, you will need to make the rod tip movement immediately after the stop. The longer you wait to move the rod tip, the closer to you the wave will be.

Now perform a PULD with 30 ft. of line from the reel to the fly. Immediately after the stop quickly move the rod tip 6in. to the right and back to center. What happened? Your layout should look like Fig 14 below.



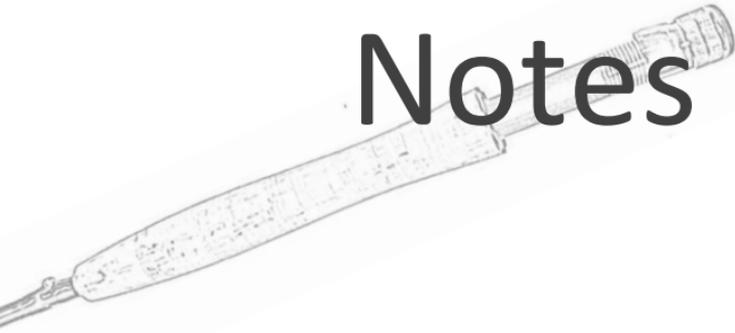
Fig 14. Direction of Cast ← Top View

Now make the same cast and wait one second after the stop to make the same 6 in. movement of the rod tip from the right back to center. Where is the slack wave now? See Fig 15 below.



Fig 15 Delay of maneuver moves curve closer to rod tip

Notes



You will find that you will need a rather firm grip of the rod handle to keep control of the rod tip. A loose grip will allow for additional vibrations in the rod tip that may not be desirable.

The slack waves in the lay out are performed to allow for casting around obstacles or for allowing the current to pull on that portion of the fly line without moving your fly, thus creating what is called a drag free drift of the fly. It may only be drag free for a few seconds, but that may be all that is required for the strike.

Practice making multiple waves in the fly line like the one below. You will need to move the rod tip back and forth the entire time the line is in the air. See Fig 16

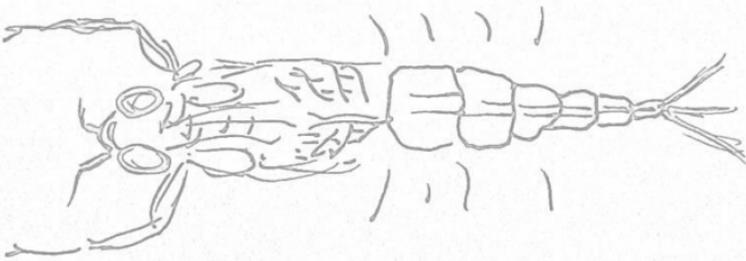


Fig 16 Direction of Cast ← Top View

Now make a large wave to the right and left of center half way to the fly. For this you will need to pause briefly after the stop then move the rod tip 2 ft or more to the right and quickly to the left 2 ft or more returning to center quickly. See Fig 17 As always, follow the fly to the water with the rod tip approaching the water the same time the fly does. This way you are always in a fishing position and ready for the strike. Lowering the rod tip too slow or not at all allows gravity to take over and the fly line drops directly below the rod tip robbing you of distance. Lowering it too fast causes you to pull the line back eliminating some of the slack and, again, robbing you of distance. The rod tip should always approach the water at the same time the fly does.

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- The sooner I move the rod tip the closer to the fly I put the mend
- The farther I move the rod tip, the larger the mend



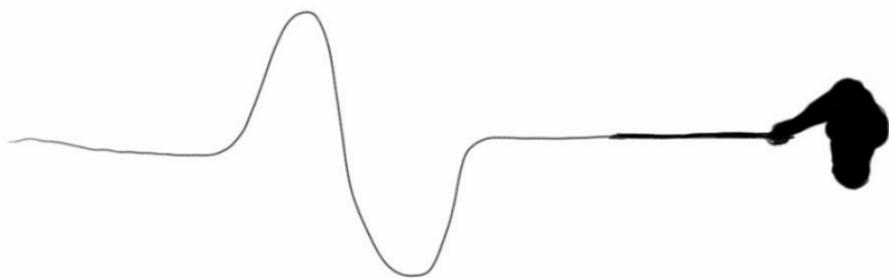


Fig 17 Direction of Cast ←

Once you are comfortable with the above drills, practice shooting line at the same time so your fly lands at 30 ft. even with your mends. If you are adding 10 ft. of slack to the layout, you will have to shoot or carry 10 extra ft. of line to reach the initial target.

Reach Mends:

Doug Swisher popularized this cast on a VHS known as “Advanced Fly Casting”. It is an excellent way to add slack upstream and can be mastered with a little practice. When training for this cast slow your casting down some and open the loops. This will give you a second or two more to perform the mend. Also, you may wish to cast 3-4ft. above the water which, again, gives you a little more time before the fly and fly line hits the water. If it is windy, you will need to adjust your trajectory a little lower to the water surface to keep the wind from blowing the line off course and affecting the lay out. If you are performing a reach mend to the right to position slack upstream, at the stop, immediately lower the rod tip to the water on your right side at least 45degrees from the target (rod tip should be at about the 2:30 position). Now check your lay out. Your fly line and leader from the rod



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tip to the fly should be relatively straight. If it sways inward, your lay down of the rod tip was too late and /or too slow.

Obviously, by laying the rod tip at that final position you are drawing the fly back a few feet. To compensate for this, practice shooting line at the stop to make up the shortfall in distance.

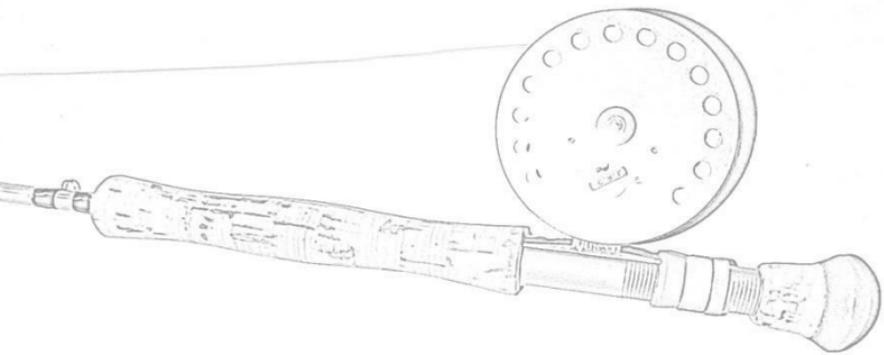
Once the cast is complete, reposition the rod tip close to the water pointing it in the direction of the fly and follow it as it floats downstream. Once the slack is gone, you can do a water mend upstream keeping slack in the line.

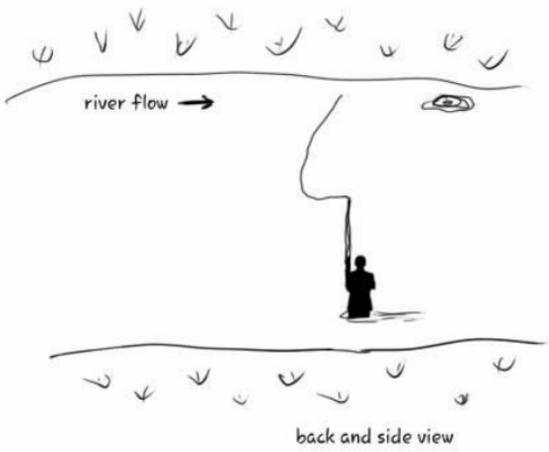
Whether you make the reach cast to the right or left is totally dependent on the river flow. If you are on the right bank (facing downriver the bank of the river closest to you is on your right side) you can consider a reach mend to the left to add slack to the lay out. See Fig. 18. By the same token, should the current be the reverse, you would make a reach cast to the right.

For the Reach Mend Cast to the left consider placing your left foot slightly rearward of the right foot. This allows you to more easily lay the rod down on your left side. You can make the cast off your dominant shoulder or off shoulder. If you cast off shoulder, you won't have as far to go to lay the rod tip down on your left side at the 10:30 position (45degrees upstream from the target). With a vertical cast, at the stop, immediately lower the rod tip from vertical off your dominant side to the water on the left side at about the 10:30 position.

As you become more and more proficient with these reach mends, you can make the cast faster and with tighter loops. You can slip line as well.

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The farther the reach mend cast is made upstream, the less efficient it becomes. If you make a cast directly across the stream with a reach upstream to the left, it is most efficient as in Fig. 18.

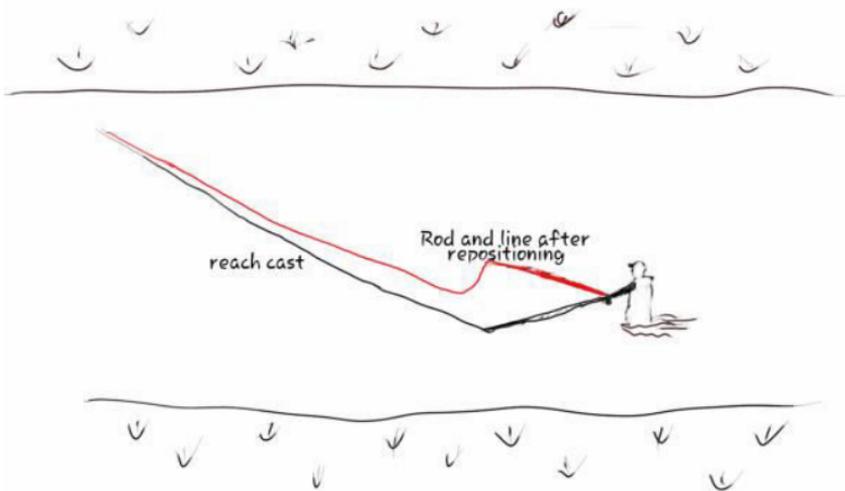
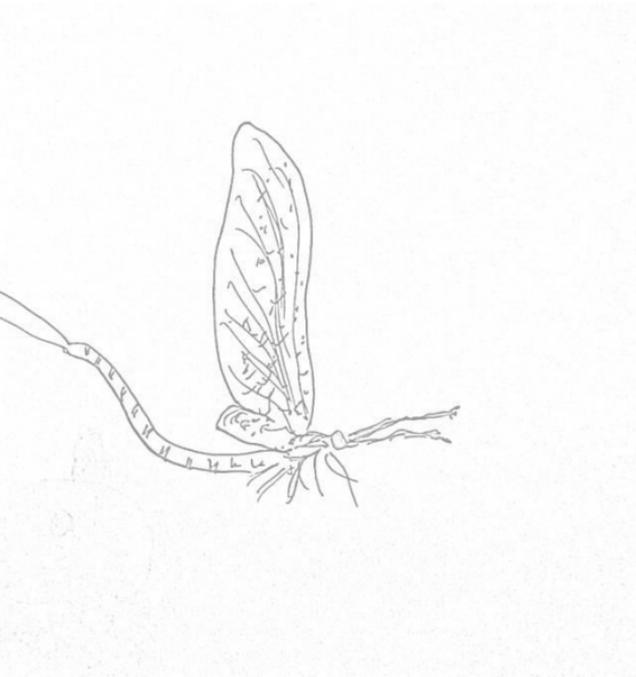


Fig.19 Reach Mend to the Left Far Upstream

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As you can see from Fig.19 most of the slack is near the caster. This is a downfall to this maneuver. If you are making cast in narrow streams with equal water flow from bank to bank then this is a great cast. If, however, you are making long cast farther upstream, then consider one of the other mending maneuvers.

As stated before, aerial mends are performed for the purpose of laying out slack in the layout to allow for a longer drag free drift of the fly and/or to cast the line around a snag or fish allowing the lure to be retrieved in front of the fish.

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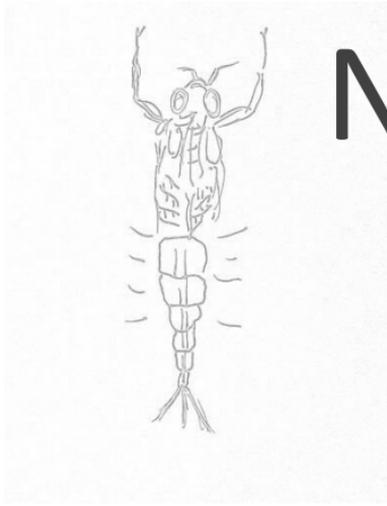
On the Water Mends:

Once the line is on the water, you can lift the line off the surface to reposition it upstream without moving the leader and/or fly by lifting the rod tip and performing a quick circular motion in the upstream direction. The size of the circular motion will determine how much line is moved. Practice not moving the leader and fly. This will buy you a few more seconds of drag free drift of your fly and hopefully a trophy.

You have the skills now to master some of the most demanding situations you are likely to encounter. Remember to practice often in short sessions. Have a singular purpose and master it.

Please practice good stream etiquette and release what you don't eat for others to enjoy.

All the best.



Notes

Resources & Suggested Readings

theCampFlyFishingSchool.com by Keith Richard, MCI

FlyFishersInternational.com

“Modern Fly Lines” by Bruce Richards

“The 5 Essentials” by Bill and Jay Gammel

“Presentation” by Gary Borger

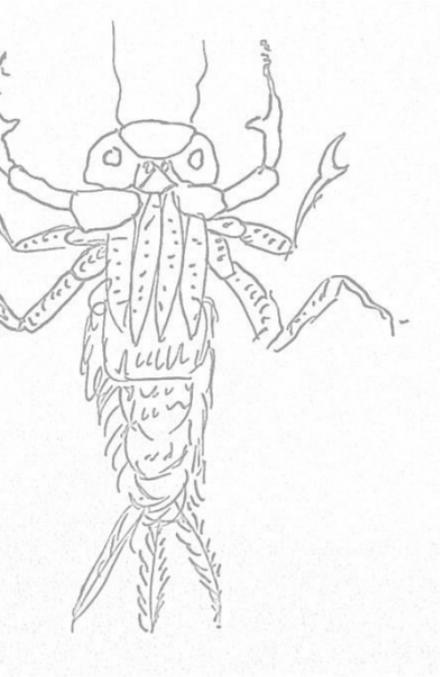
“Accuracy” by Joan Wulff

“Casting With Lefty Kreh” by Lefty Kreh

“How to Design Fly Casting Leaders Stream Side” by Keith Richard

“How to Fly Cast Stream Side” by Keith Richard

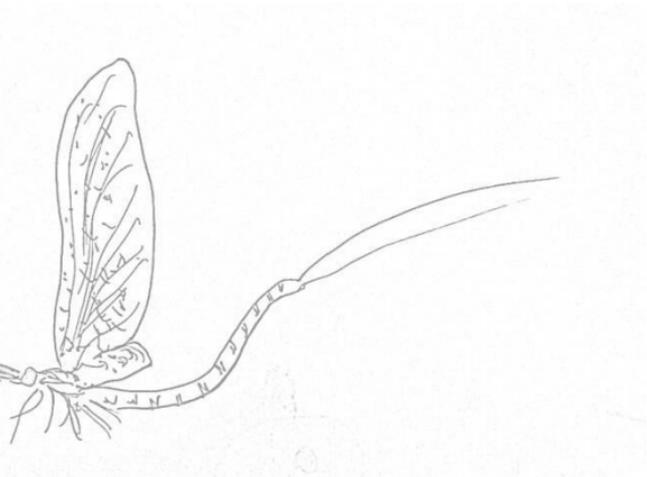
Notes



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Biography & Contact Info

Keith Richard, recipient of FFI Jay Gammel Award for lasting contributions to the teaching of fly casting education and native of Breaux Bridge, LA is the owner of the Camp Fly Fishing School. Having obtained his first certification by FFI in 2005 and his Master certification in 2009 he then served 3 years on the FFI Casting Board of Governors. Presently he maintains his L2 status which certifies him to test candidates who wish to become instructors. Currently he enjoys traveling throughout the U.S. performing workshops and casting instruction at the FFI annual fair and Regional and local Conclaves. He is the author of the fly fishing website, theCampFlyFishingSchool.com and can be reached at krichardthecamp@yahoo.com



Recipient of the Fly Fishers International
2019 Jay Gammel Award for long
lasting contributions to
fly casting education



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