



**Study Guide**  
*for*  
**CICP Casting Instructor**  
**Certification Exam**

**February 2025**

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## 1. INTRODUCTION

Congratulations on your decision to pursue the Casting Instructor (CI) certification. We appreciate your dedication to achieve the high standards of instruction required by the Casting Instructor Certification Program (CICP) within Fly Fishers International (FFI). Achieving the CI will confirm you are a well-rounded single hand casting instructor with the ability to assist students in a wide range of fly fishing situations. The CI Exam is demanding but rewarding. We hope you find the journey as rewarding as the accomplishment of earning the CI.

The history of the CICP and a video overview can be found [here](#):

<https://www.flyfishersinternational.org/Get-Involved/Casting-Instructor-Certification/Overview>

This study guide is intended to help you efficiently prepare for and pass the CI exam. The amount of preparation time required to pass the exam depends on your current casting and teaching abilities, how much you practice, how well you practice, and how much you study casting principles.

As part of your preparation, *we strongly advise you work with a mentor*. They are invaluable in navigating the many things you need to learn. The FFI website has a worldwide list of Master Casting Instructors (MCIs). Most are willing to help if asked. Long distance mentoring has proven to be effective if you cannot find a mentor near you.

For information about the administration process and fees for certification be sure to visit the FFI website under Become a Certified Instructor.

We recommend you begin with an overview of the entire study guide. It is designed to progressively build a thorough understanding of casting mechanics and teaching methodology. The sequence of tasks in the study guide builds stepwise on casting skills, rather than simply following the order of tasks in the exam. As you work through the study guide, advance only after mastering the previous subject matter. If overwhelmed, take a step back, then proceed and in small steps, one section at a time.

Be sure to download a copy of the current exam dated February 20, 2025. You may choose to use a hardcopy for taking notes or to keep a copy on your mobile device and make notes electronically. **Study the exam thoroughly. Every part is important.**

Organizing your study materials will help ensure that your preparation process is effective and efficient. Decide on a way to organize your information. This study guide has individual sections that make it easy to organize them in a three-ringed binder. Many prefer using their computer files instead of hardcopy documents, and others use “quiz cards” – 3” x 5” or 4” x 6” index cards with questions on the front and answers on the back. Your organization system should provide easy access to information, allowing you to find information now and in the years to come as you pursue fly casting instruction.

This study guide provides an orderly way in which to prepare and includes many resources for further study. It also includes information that will be covered in the written exam. If you have mastered the material in this guide, you should know the answers to the written exam questions.

It is important that you *know the current casting FFI definitions* which appear in the CI Exam and are familiar with the *Candidate Roadmap* found on the FFI website under Resources for CI Certification.

## 2. CASTING MECHANICS AND TECHNIQUES

### a. The Five Essentials of Fly Casting

Below are two articles authored by Bruce Richards, MCI that appeared in previous editions of *The Loop*. They are included here (italicized text below) because they are replete with information necessary for all instructors.

#### **1. *Gammel's Five Essentials Revisited* by Bruce Richards (*The Loop*, Fall 2023)**

*In 1990, Bill and Jay Gammel developed the "Five Essentials," which have been foundational for those wanting to cast and instruct well. Knowing these essentials and how they affect every cast is necessary for casters who want to truly understand fly casting. In this article, I'd like to add some detail to each of the essentials and modernize them a bit to include the official FFI fly casting definitions which were adopted in 2015 and updated in 2024. I would not meddle with the Gammel Essentials without Bill's blessing, which I got!*

***The First Essential: In order to form the most efficient, least air resistant loops, and to direct the energy of the cast to a specific target, the caster must move the rod tip in a straight line. This essential is actually what results when the other four essentials are done properly.***

*The loop we use most when fly casting is a narrow loop **with a straight fly leg**. These loops are most energy efficient and can be cast most accurately. To achieve this kind of loop the rod tip must travel in a relatively straight line **during the casting stroke**. The rod tip path during the casting stroke largely determines whether the fly leg is straight or not. If the rod tip path is curved; up, down, right or left, the fly leg will be similarly curved, and less efficient, less accurate. When the rod tip path during the casting stroke is relatively straight the most efficient loops are formed.*

*Tip path deviations in the vertical plane (up or down) are typically caused by rod bend issues. Horizontal tip path deviations (right or left) are normally caused by rod tip tracking errors. The rod tip path **during the casting stroke** determines what the fly leg will look like, and what the rod tip does **after the casting stroke ends and the loop has formed** determines what the rod leg will look like. The fly leg is moving much faster than the rest of the loop must be straight for the loop to be efficient and accurate. So, what must a caster do to make the rod tip path and fly leg straight?*

**Second Essential: The size of the casting arc must vary with the length of line past the rod tip.**

*This essential states that it is the length of line being cast that determines the size of the casting arc, which certainly is part of the story. When we cast, we pull the fly line with the fly rod. The mass of the fly line resists the motion of the flexible fly rod causing it to bend. If there is more fly line being pulled there is more line mass and the rod will bend more, all else being equal. But if the line is simply thrown harder/faster the rod will bend more also. It isn't just the length of line that determines how much the rod bends, but also how hard it is thrown, how much force the caster applies. This essential would be stated a little more clearly if it said: the size of the casting arc must vary with the **degree which the rod bends**.*

*Why is this important? The path of the rod tip during the casting stroke largely determines the shape of the fly leg of the loop, whether it will be curved, or straight. By matching the width of the casting arc to rod bend we can control the rod tip path to get the fly leg shape and loop size we want. Most of the time we want the fly leg of the loop to be straight and the loop to be narrow.*

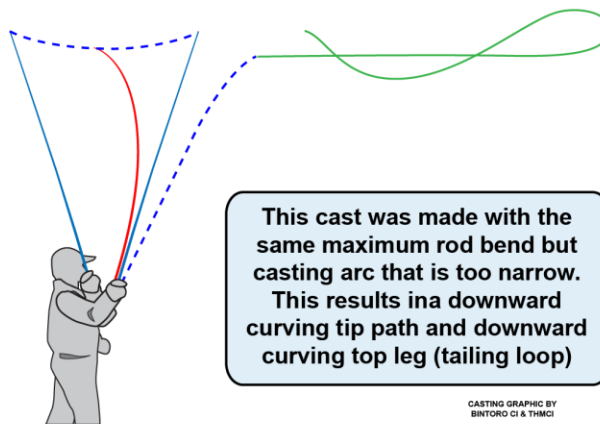
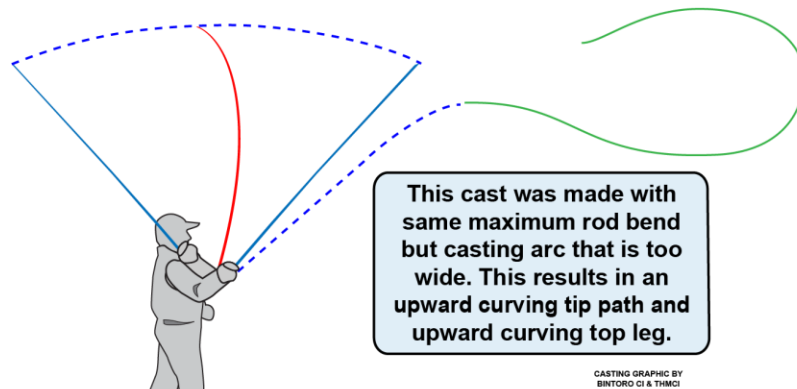
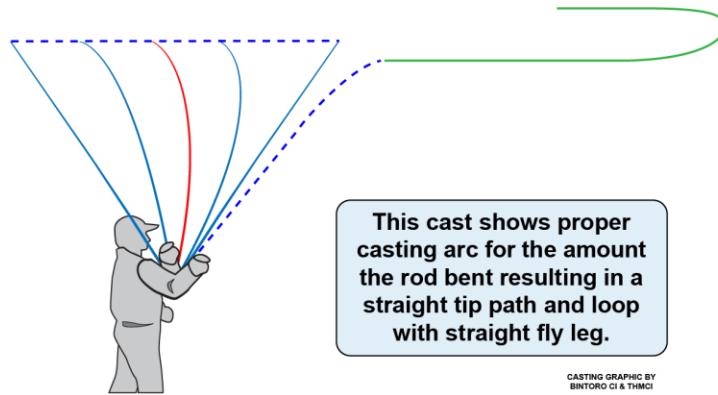
*The casting arc is **the angle change of the rod butt during the casting stroke**. The casting stroke starts when rod acceleration becomes sufficient to result in forming a loop. The casting stroke ends when the loop forms. That is when the rod unbends and straightens, the rod tip slows, and the fly line overtakes the rod tip (rod straight position 1: RSP1). The change in rod butt angle between those two points is the casting arc.*

*Look at the 3 drawings below. The first shows a cast where the casting arc is properly matched to the rod bend. You can see that the rod tip path throughout the casting stroke is straight and that yields a narrow loop with a straight fly leg. (See **Graphic #1**)*

*The next drawing shows a cast made with the same maximum rod bend but a casting arc that is too wide. You can see that this causes an upward curving tip path and a wide loop with upward curving fly leg. To straighten the tip path and the fly leg the caster should simply narrow the casting arc to match the rod bend. Another option would be to increase rod bend (more force) to match the casting arc but that would also increase line speed significantly. (See **Graphic #2**)*

*The third drawing shows a cast made with the same rod bend but a casting arc that is too narrow which results in a rod tip path that dips downward which causes a tailing loop. To straighten the rod tip path, the caster should widen the casting arc. Another option would be to reduce rod bend to match the casting arc but that would decrease line speed significantly and probably be too slow. (See **Graphic #3**)*

THESE 3 DRAWINGS SHOW CASTS MADE WITH  
THE SAME MAXIMUM ROD BEND.  
(shown in red)



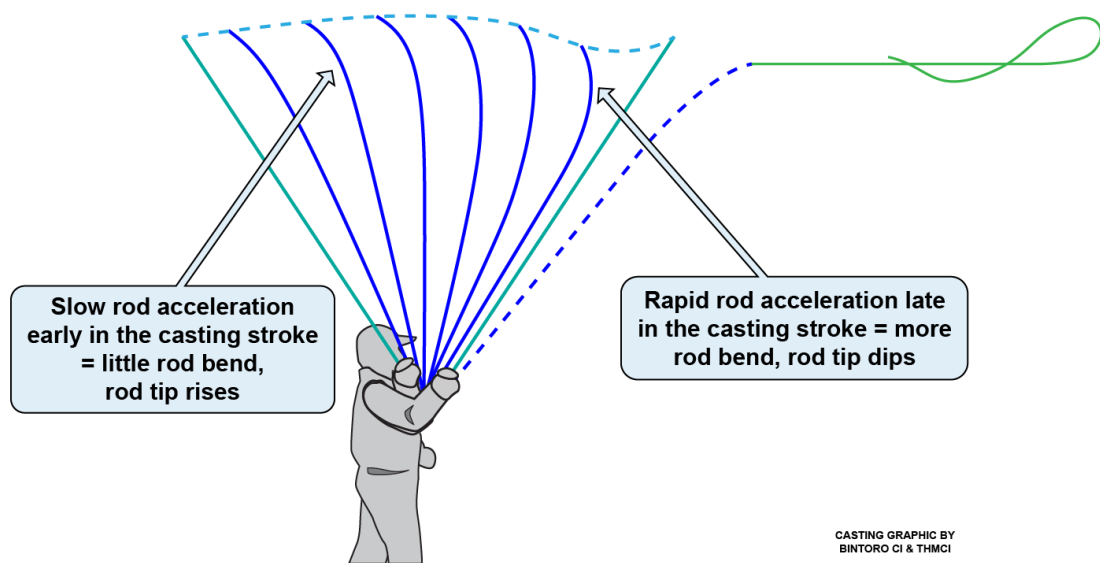
Graphic #1, #2, and #3

**Third Essential: Power must be applied in the proper amount at the proper place in the stroke.**

One thing that is necessary for the rod tip path to be straight is that the rod bends in an evenly increasing way during the casting stroke. For that to happen, the rate of rod acceleration needs to be about the same from the beginning of the casting stroke to the end. That is called

“constant” acceleration. To achieve that, force (“power”) must be applied in a smooth, constant way also. Of course, the right amount of force must be used to accelerate the rod and line to the needed speed.

If the acceleration is not reasonably constant, the rod tip path will not be as straight as we’d like. It is very common for casters to accelerate the fly rod **too slowly early in the casting stroke then much faster later in the casting stroke**. Slow acceleration doesn’t bend the rod much. Fast acceleration bends the rod much more. If the rod is accelerated as just described, here’s what the tip path looks like. (See **Graphic #4**)



Graphic #4

If the rod is accelerated in a constant manner, with more constant application of force, the rod bends as in **Graphic #1**, and the tip path, and fly leg, is straighter. (See **Graphic #1**)

There is a common misunderstanding that continues to negatively affect casting instruction. Sometimes instructors confuse **rod speed with rod acceleration**. Every fly cast starts with the fly rod going slowly and ends with the fly rod going fast. It is how we move the fly rod from slow to fast that is most important. That is acceleration, the change in speed (more accurately, velocity). Some instructors still ask their students to accelerate the fly rod slowly in the beginning of the casting stroke then accelerate it quickly at the end. That is one of the **two most common causes of tailing loops**, inappropriate application of power/force. For a straight rod tip path, the rod must accelerate at near the same rate from the beginning of the casting stroke to the end.

It is sometimes claimed that tailing loops are also caused when a caster accelerates the rod too quickly early in the casting stroke then slows rod acceleration later in the casting stroke. While

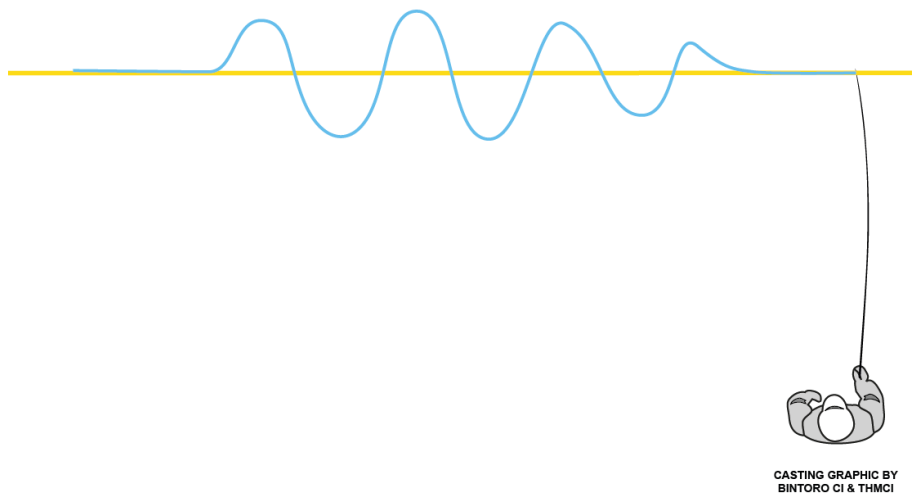
this would cause a tailing loop it is very difficult to do, and I've never had a student make this casting error.

**Fourth Essential: Slack line should be kept to an absolute minimum.**

Efficiency is important when fly casting. When picking up the line or false casting, the straighter the line is when we start the casting stroke the more efficiently we can cast. The more directly aligned this line is with the intended tip path of the coming casting stroke the more efficient the cast will be.

When we pull on the line with a fly rod a couple things happen. First, the line moves. Second, the rod bends against the mass of the line. But if the line isn't fairly straight neither of those motions are efficient. Part of the line doesn't move and only part of the mass of the line works to bend the rod so it bends less.

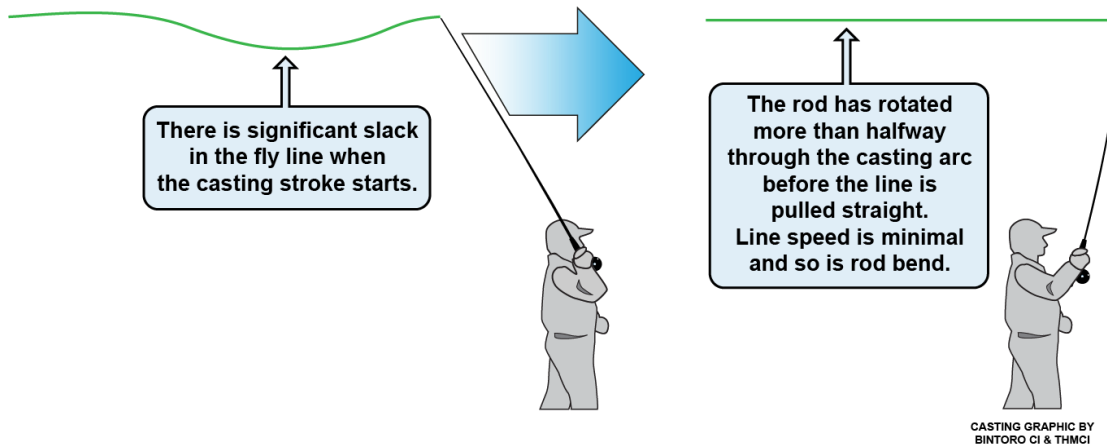
Try this horizontal, on the ground casting drill.... Lay out 40 ft. of fly line on the ground but with the fly only 20 ft. away. There will be 20 ft. of slack in the middle of the line as seen below. Try to make a cast. (See Graphic #5)



Graphic #5

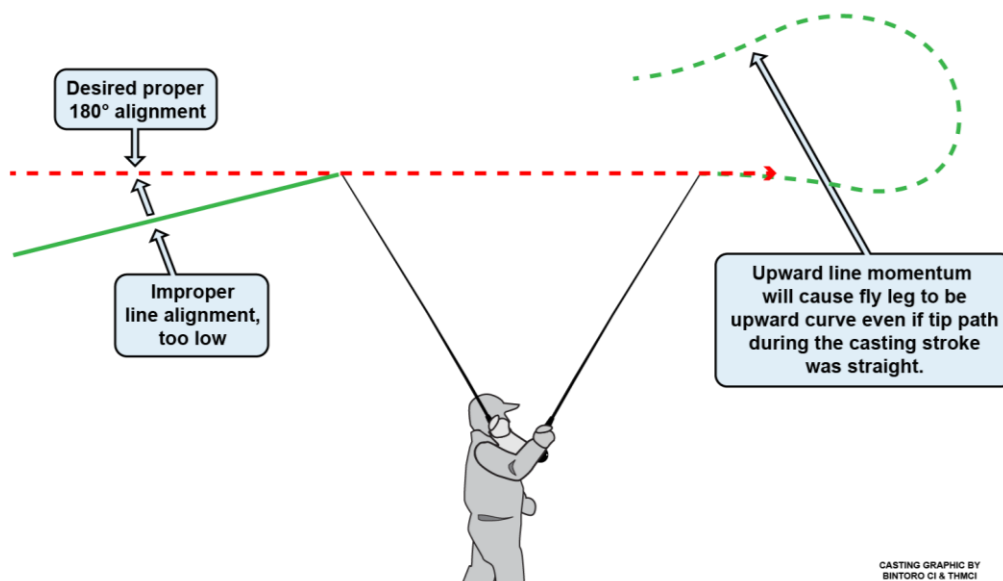
When the caster pulls on the line with the rod only the part of the line connected straight to the rod moves initially, the line beyond the slack does not. Also, only the part of the line connected straight to the rod offers much resistance and causes the rod to bend. With slack, only part of the line is moved, and rod bend is much less than if the line was straight. For most efficient casting we want all the line to move when the rod moves and all the mass of the line to bend the rod. Now try the same cast again but pull the line out straight to 40 ft. Now when the rod tip moves all the line moves also and the mass of all the line works to bend the rod.

The same thing happens in an overhead cast. If there is slack, the line doesn't move as it should, and the rod doesn't bend as it should requiring the caster to apply more force. (See Graphic #6)



Graphic #6

Another form of slack is when the fly line is straight but not aligned with the intended direction of the cast being made. For most efficient casting, the line must be aligned as much as possible with the intended tip path of the coming cast when the casting stroke starts. This is called the “180 Degree Principle”. The line can be out of alignment in any plane, high, low, right or left. Alignment that is too low is shown below. (See **Graphic #7**)

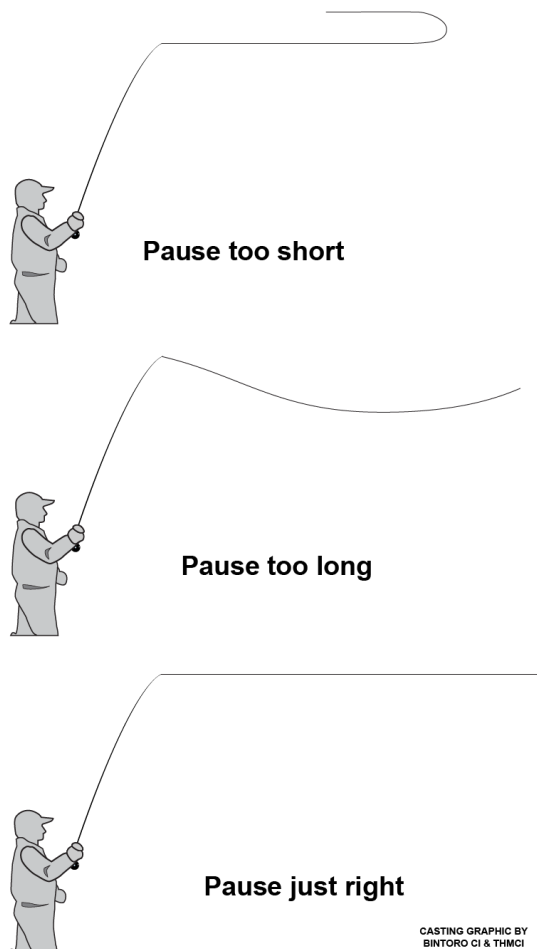


Graphic #7

When the line is 180° aligned with the direction of the coming cast all the energy of the cast goes to moving the line in one direction. When alignment is off some of the energy of the cast goes to pulling the line into alignment with the rod tip path so the cast is less efficient. Also, when the line is not 180° aligned line momentum will cause the fly leg of the coming cast to be curved rather than straight, again reducing efficiency.

**Fifth Essential:** *There must be a pause between each (casting) stroke, which varies in duration with the amount of line outside the rod tip.*

*This essential is actually a subset of the fourth essential regarding slack. If the pause between casting strokes is too long or too short slack will result as the line will be curved not straight. Only if the timing is just right will the cast be most efficient. Two factors determine the proper pause duration, line length as the essential states, but also line speed. Obviously, when casting any length of line, the higher the line speed the shorter the pause will be. The drawings below show how pause affects slack. In the first, the loop has not yet fully straightened and there is obvious slack in the line. In the second, the loop has fully straightened and started to fall, again, slack. In the last drawing, the loop has just fully straightened, if the next cast starts precisely at this point there is little slack and a much more efficient cast. (See Graphic #8)*



Graphic #8

## **Acknowledgment**

*We have Bill and Jay Gammel to thank for explaining these fly casting essentials so many years ago. The Essentials are as important today as they were then, and every good caster and instructor needs to understand them. And I want to thank Bill for reviewing this article!*

## **Additional references**

Bahadur, S. *Casting Masters Then and Now*: Bill and J.W. (Jay) Gammel. *The Loop*, July 2016

Gammel, B., Gammel J. *Making Adjustments on the Fly*, *The Loop*, Summer 2010

Gammel B., Gammel J. *Five Essentials* by Bill and Jay Gammel. *The Loop*, Summer, 2009; reprinting of the original booklet.

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Bruce Richards' article below helps us better understand the importance of the STOP and the effect it has on loop shape. Understanding the role that rod acceleration and deceleration play in the Stop is central to learning how to cast efficient loops. Learning when to stop, and at what rate, will greatly improve loop control, which is a major component of the Casting Instructor Exam.

## **2. Fly Rod Deceleration “The Stop” by Bruce Richards**

*When we fish, we use a lot of different loops depending on what we are trying to accomplish. But the loop that is most efficient, used most often and is the loop we all strive to cast most of the time is a narrow loop with a straight fly leg.*

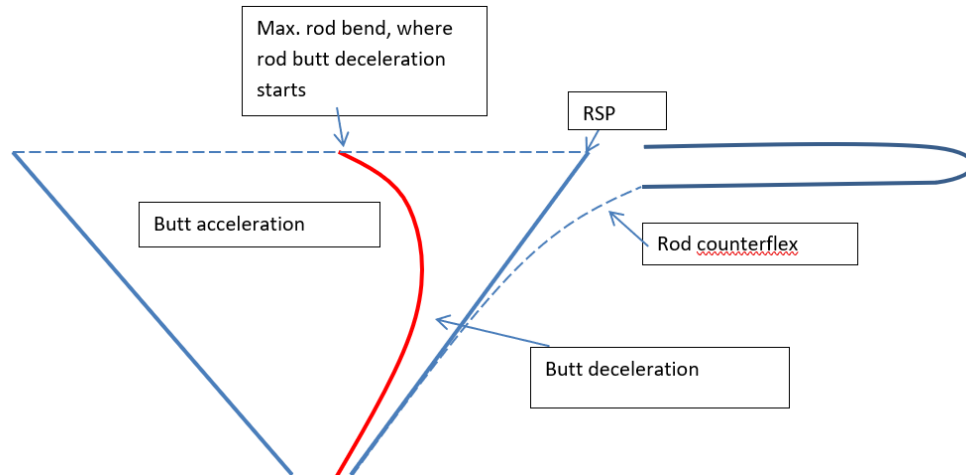
*When we cast, we accelerate the rod butt then decelerate it (“the Stop”)<sup>1</sup>. When we do that, the rod bends, of course, and the rod tip also accelerates. When we decelerate the rod butt, the rod unbends, and the rod **tip** continues to accelerate until the rod is straight (rod straight position – RSP 1) when the loop forms. These rod motions are collectively known as the casting stroke. To make the best, most efficient loops, the rod tip path during the casting stroke must be as straight as possible.*

*We know that when we accelerate the rod butt in a very smooth, constant way that the rod tip path will be pretty straight during that phase of the cast. But how should we decelerate the rod to continue that straight rod tip path? See **Graphic 1A** to view an ideal cast.*

*(For this article, we will assume that rod acceleration is good/constant and not the reason for any loop problems.)*

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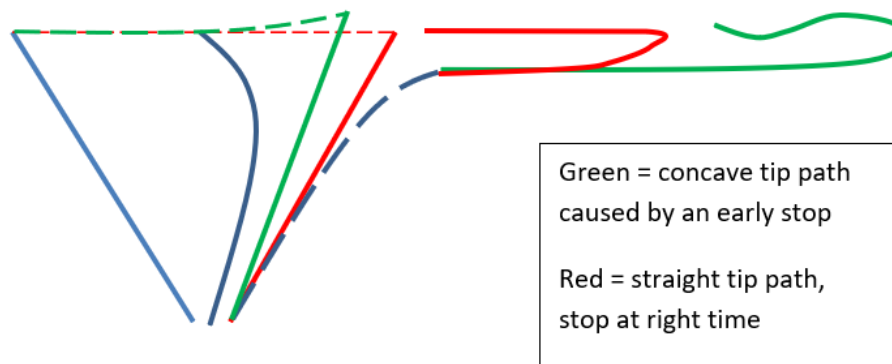
<sup>1</sup> Please note that the FFI definitions define Stop as deceleration of the rod (not the rod butt) resulting in loop formation.



**Graphic 1A**

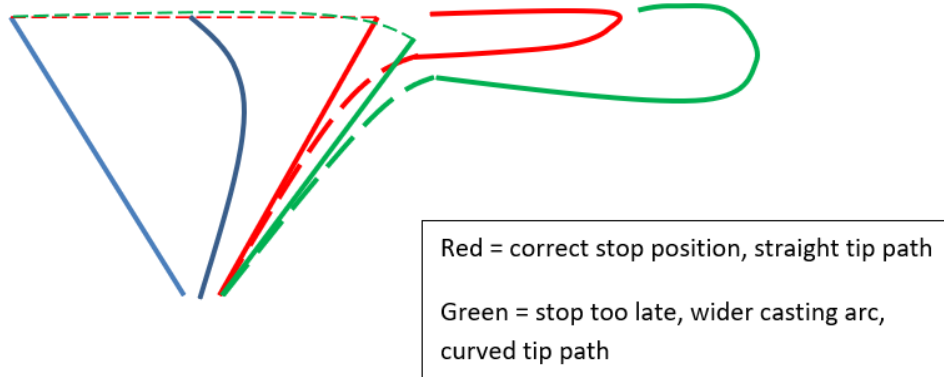
*There are two things we control when we decelerate/stop the rod butt: when we start deceleration and the magnitude of the deceleration.*

*If we stop the rod at the wrong time, too early or too late, the rod tip path at the end of the casting stroke won't be as straight as it could be and neither will the fly leg of the loop. If we stop the rod too early, the casting arc will be narrowed, the rod tip path will rise during the deceleration phase causing a dip in the tip path, and a tailing loop will result. This is not a common problem with typical students. **Graphic 2A.***



**Graphic 2A**

*If we stop the rod too late, the casting arc will be too wide, the rod tip path will curve down at the end of the casting stroke, and the fly leg of the loop will curve down. This is a very common problem. **Graphic 3A.***

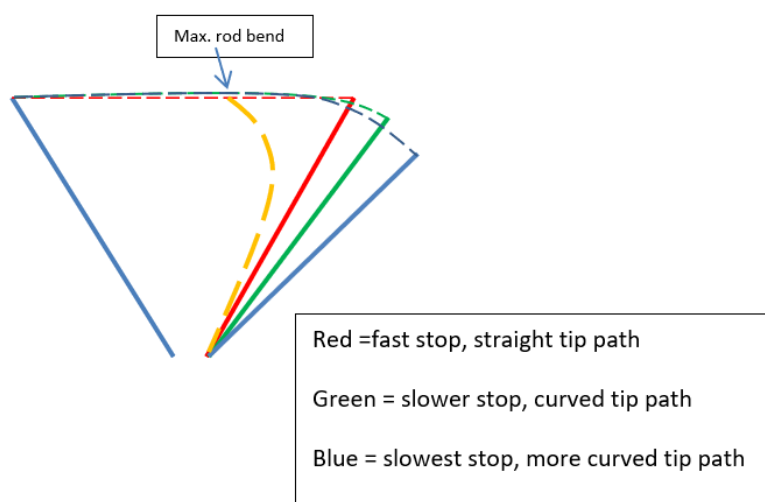


Graphic 3A

Stopping the rod at the right time is important. Stopping it quickly enough is also important. Remember that “the stop” is the process of decelerating the rod butt. The rod butt doesn’t ever stop instantaneously, humans aren’t capable of stopping the rod that fast. Assuming rod butt deceleration starts at the right time, the faster the rod is stopped, the straighter the rod tip path will be.

Assuming that our goal is to cast loops with very straight fly legs, the rod can’t be stopped too fast. Stopping the rod slowly will cause the rod tip path to curve at the end of the casting stroke and that will curve the fly leg. For most typical fly fishing, that isn’t a big problem. We don’t need the most efficient loops to fish effectively at typical fishing distances. But for casting long distances, or casting in the wind, very straight fly legs are necessary.

Stopping the rod too slowly yields the same result as stopping the rod too late. Remember that we can’t stop the rod butt instantaneously; that means that the rod butt continues to rotate as it decelerates. The more the rod butt rotates during the stop, the more curved the rod tip path will be which will cause the fly leg to be more curved also. **Graphic 4A** shows three casts where the rod butt was decelerated at different rates, and the resulting rod tip paths.



Graphic 4A

*It seems there is some confusion about how fly rods should decelerate to make the best loops. Many instructors instruct their students to make a “positive” stop. I’ve read dozens of dictionary definitions of the word “positive” and not one of them relates to how something should decelerate. As instructors, we need to use words that clearly mean what we want to say; “positive” doesn’t do that. Rapid deceleration, or abrupt deceleration are much better descriptors. I’ve heard it said that stopping the rod too fast will cause tailing loops, but that isn’t true either. If deceleration starts at the right time and the stop is very fast the rod top path will be straighter as will the loop fly leg.*

*I’ve talked about stopping the rod at the right time and rate, but how do we know we’re doing that? I’m sure there is some way to mathematically calculate that time but there is no way to practically use that information while casting. But it is easy to determine if you’ve gotten it right just by observing the fly leg of the loop.*

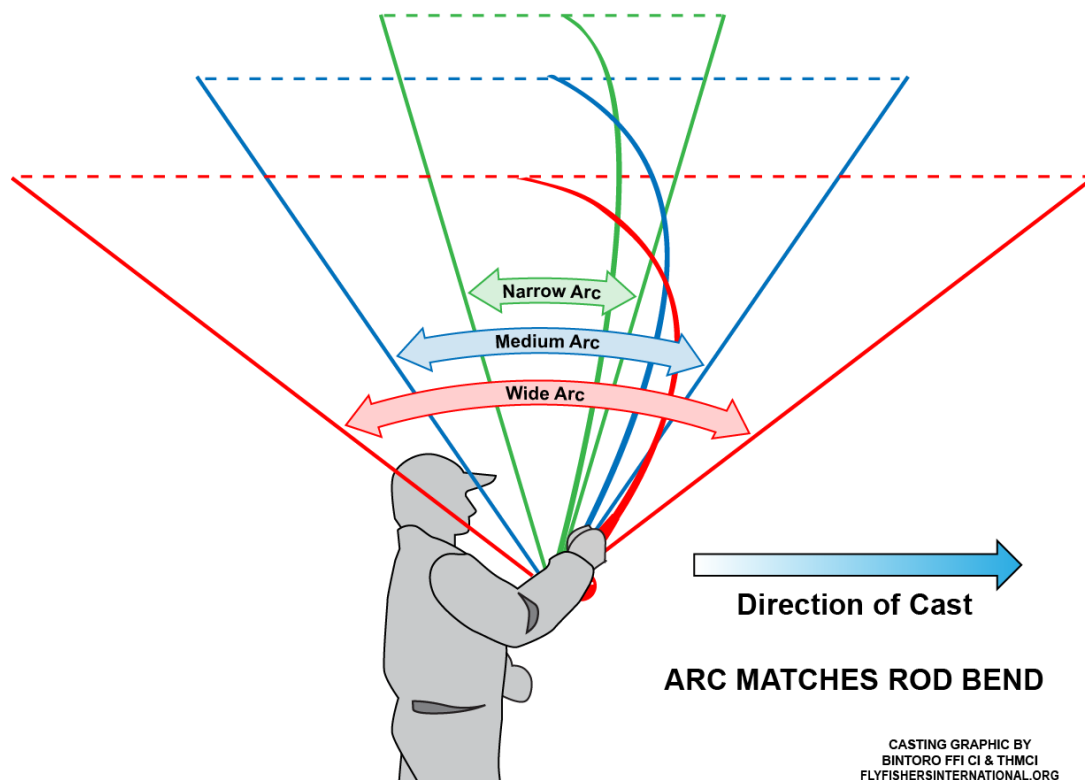
*First, make sure that you are stopping the rod very quickly, that is easy to do. Most casters don’t make a concerted effort to stop the rod very quickly. If your stops are slow, “lazy”, it will be difficult to tell if you are stopping at the right time. When you are sure that your stops are abrupt just look at the fly leg of the loop. If it is curved upward (convex), your casting arc is too wide because your stop is too late. If the fly leg is curved downward (concave, tailing loop) your casting arc is too narrow. Adjust when you start your “stop” until your fly legs are straight.*

*To control our loop shape, how we decelerate the rod is as important as how we accelerate it. If we stop the rod too early, we will get a tailing loop. If we stop the rod too late, we will get a loop with a convex curved fly leg. If we stop the rod very quickly (at the right time/place), we will get a straight fly leg. The slower we decelerate the rod, the more curved the fly leg will be. Fixing stop related loop problems is really quite easy when it is well understood. Learn to read loop fly legs and how they are affected by rod deceleration, and you will be able to fix your own loops, and those of your students, very quickly.*

## **b. Varying Casting Arc and Trajectory**

A wide variety of casts must be made well to pass the CI exam. General performance standards require that most of these loops have relatively straight fly legs and be narrow. Some of the casts are delivery casts, so loop trajectory must be adjusted so the fly is delivered effectively. To maintain the needed loops and trajectory, a candidate must understand how to adjust the casting arc, both width and orientation, to achieve the needed result.

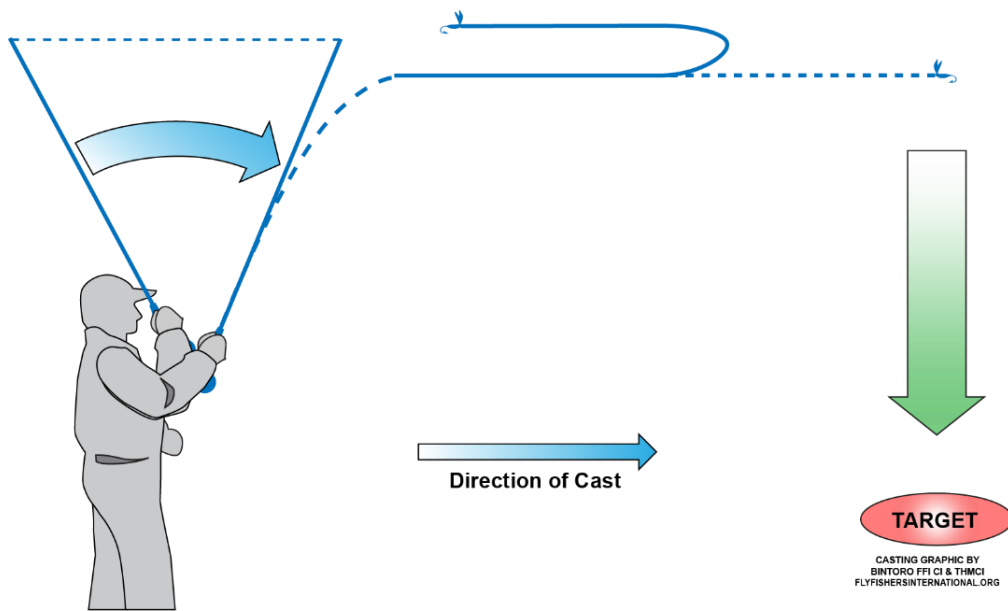
To make loops with relatively straight fly legs, it is necessary for the rod tip path during the casting stroke to also be relatively straight. Fortunately, we cast with flexible fly rods which allow this to happen. The graphic below shows the relationship between rod bend and casting arc for three different casts. The green rod isn’t bent very much, and you can see how narrow the casting arc must be to keep the rod tip path straight. The red rod is bent dramatically and to keep the tip path straight, the casting arc is very wide.



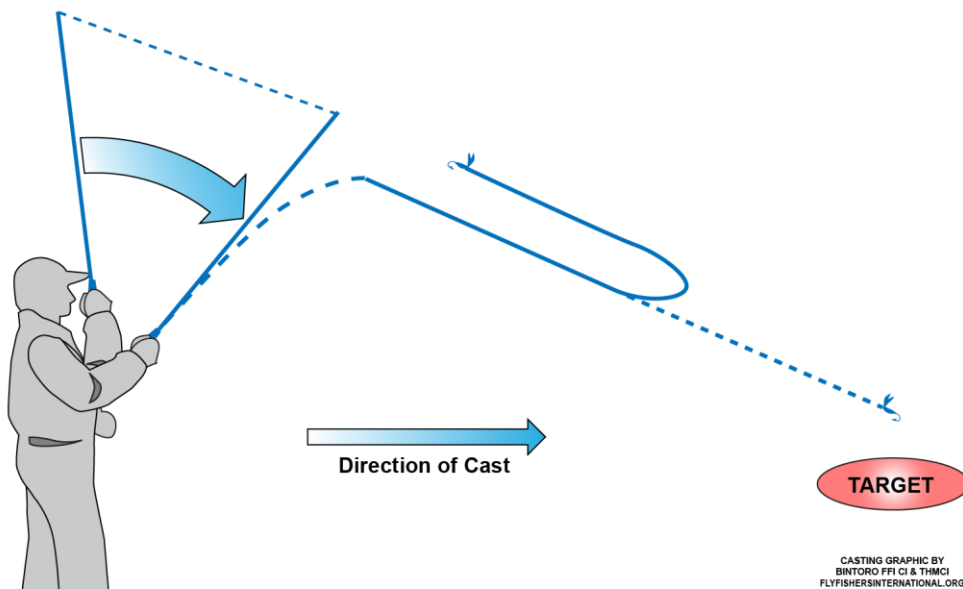
When we cast, we apply the amount of force needed to the rod to make the desired cast. The force will change dramatically as we make the wide variety of casts we often make in a day. Other things cause rod bend to change too. How much line we carry, heavy or wind resistant flies, cast speed, etc. As all of those things change, rod bend also changes, and we must know to adjust our casting arc to maintain a straight rod tip path and good loop.

How do we know if we're adjusting correctly? All we must do is look at the fly leg of the loop. If it is relatively straight, then the caster has adjusted the casting arc to rod bend properly. If the fly leg is curved, up or down, the adjustment wasn't quite right. If the fly leg curves up the casting arc is too wide. If the fly leg curves down (tailing loop), the casting arc is too narrow for the amount of force applied. Yes, that is a bit simplistic but the most important skill we can have as instructors is understanding how to analyze loops to determine what is wrong with a cast to correct it.

Once you've mastered the ability to adjust your casting arc to match the rod bend, you will need to know how to adjust trajectory to effectively deliver the fly to a target. Here is a typical fishing cast with an initially horizontal trajectory. When the loop is cast horizontally it will fall a bit, but when it opens the fly will still be far above the target and will have to fall a considerable distance to get to the water. The odds of the fly falling straight down to the target are not high, especially if there is wind.



To greatly improve accuracy, we need to adjust the trajectory of our cast, so the line and leader unroll with the fly much closer to the target, so that it falls only a short distance to the target. The cast we make is the same with the only difference being a change in trajectory. To change trajectory, we simply need to tilt the casting arc, so the rod tip path aims down toward the target. The fly leg of the loop goes where the rod tip path points. You can see the result in the drawing below.



How much we change trajectory depends on the distance of the cast. For very short casts, the trajectory will have a steep pitch, up in back and down in front. For a long cast, the trajectory change will have a shallower pitch. Tasks 12 and 13 on the CI exam call for accuracy casts at three distances, each target requires a change in cast trajectory for consistent accuracy. The next time you cast, experiment with changing trajectory to see how it affects fly delivery at different distances. Try aiming to targets at 20 ft., 30 ft. and 45 ft.

Knowing how and why to change casting arc to achieve the loops we need is a key skill for any caster/angler/instructor. Knowing how to change the orientation of the casting arc to change loop trajectory for effective deliveries is another necessary skill.

### 3. SUBSTANCE AND STYLE

The *substance* of a fly cast is directly related to the Five Essentials. Casting actions outside the Five Essentials are considered *style*. Every caster has or will develop an individual style; how they stand, grip the rod and the choice of casting plane.

Prior to a casting lesson, ask the student where he/she fishes, what species of fish they'll pursue, and what methods they use. For example, do they fish for bonefish from a boat? Do they fish lakes from a float tube? Do they fish small streams? This information will help determine optimal casting styles, such as side arm casting when saltwater fishing, high arm position when low in the water in a float tube, or vertical casting in small streams to avoid stream side brush. If the Five Essentials are adhered to and the cast is effective and appropriate for the situation, then style is a personal choice.

When considering style choices, ask if the student has physical limitations. A bad shoulder is the most common source of pain/soreness and might not allow the hand to be much higher than the shoulder. Elbow and wrist pain are also common and may require a style modification. For more information on casting injuries, see <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7588766/>.

Casting style should be considered when conducting a demonstration for a student. Different casting styles each have their own advantages and disadvantages. Can the style easily be seen? Can the style choice be something a student can understand, repeat, and retain?

Personal style develops over time, and all certified instructors should develop demonstrations of different styles. If the Five Essentials are followed, style can be individualized and unique and the proficient instructor will recognize the difference.

## **4. LEARNING TO SEE THE CAST**

### **a. Learning to Watch and Analyze the Loop**

Learning to see and diagnose casts is the first step toward fully understanding casting mechanics. Gaining this skill can be a challenge for candidates, but the skill is a hallmark of a good instructor!

Watching the line form a loop, seeing the shape of the fly leg, and the size of the loop and then recognizing what is inefficient or 'undesirable' about the loop is only half of what is asked of a good casting instructor. The other half is understanding what body motions contributed to the loop size and shape. Before moving into applying corrections to casting faults, learning to see the loop is the first step in identifying and correcting faults (Chapter Five).

When you start working to improve your ability to watch and learn from your loops, we suggest practicing the Horizontal Casting Drill found in Appendix A. Horizontal casting develops the ability to see loops, leading to a better understanding of them. Additionally, it provides a technique for:

- Teaching beginners to break a cast into its two parts, a forward cast and a back cast.
- Teaching the importance of the rod tip traveling in a straight-line.
- Developing an understanding of the application of force.
- Teaching loop control through manipulation of arc size and force application.
- Teaching how to increase translation to increase casting stroke length.
- Practicing and teaching the double haul.
- Teaching how to cast a tight loop under a low-hanging obstacle.

### **b. Using Targets to Identify the Result of the Loop Shape**

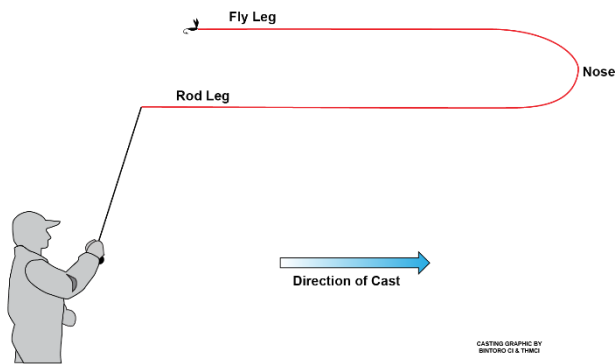
Learning to see the shape of the loop takes practice. As mentioned above, the Horizontal Casting Drill is an excellent way to see loop shape. Use it not only in your own practice, but also for teaching students. The addition of targets along a tape measure for the forward cast and the back cast during the drill are beneficial in identifying the result of the loop shape. Targets do several things. First, they allow you to measure the results of a cast and its loop shape by seeing whether the fly hit the target. Did it land too far or too short of the target, or, too far left or right of the target? By seeing the results of your cast, you can better determine what changes need to take place for improvement. Second, by using targets, the eye and body connection can be strengthened.

While focusing on your loop shape with targets during the Horizontal Casting Drill, cast at a 45° angle above the tape measure. Make sure all slack is removed from the line before initiating the forward cast. End the forward cast with the fly line on the grass along the tape. Ask yourself:

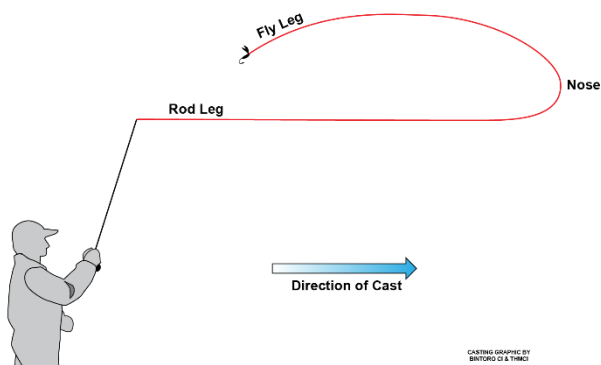
- What shape was the fly leg of the loop? Was it straight or curved?

- Did it travel alongside the tape measure or land four feet away from it?
- Did it unroll all the way? If not, was enough force used during the casting stroke?
- What was the size of the loop (the distance between the fly leg and the rod leg).
- Was the loop narrow or wide?

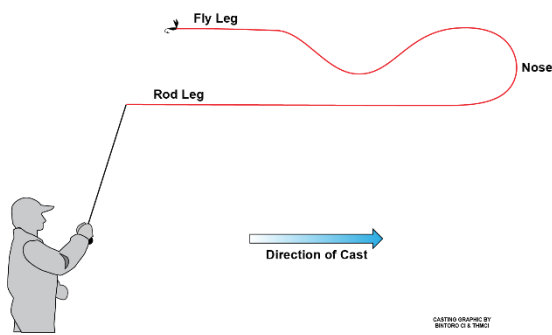
Being able to see and recognize loop shapes is the first step toward analysis and fault correction. Be sure to be familiar with the following loops shapes:



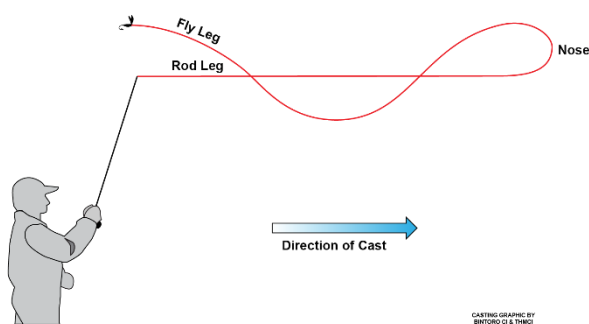
**Narrow Loop**



**Wide Loop**



**Loop with Concave Fly Leg**



**Tailing Loop**  
(fly leg concave and crosses rod leg)

After making the horizontal forward cast, make a horizontal back cast along the tape measure and allow the line, leader and fly to fall to the ground. Ask yourself the same questions as you did on the forward cast. Once you feel comfortable with the forward and the back casts being done separately, you can advance to false casting along the tape measure. Horizontal false casting is not only a great fishing skill, but it comes into play in Task 7, false casting from a near vertical to a horizontal plane.

To really advance your loop control, the next objective would be to continue horizontal false casting, intentionally making narrow and wide loops, and loops with straight and curved fly legs. Being able to cast faults intentionally is a sure way to gain a deeper understanding and control of your loops.

## 5. FAULT IDENTIFICATION AND THE FIVE ESSENTIALS

### a. Fault Identification

Understanding casting faults begins with careful observation of fly line loops and fly rod and body movements. Observations of these features of the cast can be done in real time by watching the individual's cast, or by creating and analyzing videos of casters with smart phones, action cameras, or larger mirrorless cameras. Video analysis can be enhanced by using sport analysis apps such as OnForm.

Bruce Richards' **Six-Step Method** is the recommended way to identify and correct casting faults. See [A Six Step Method](#) Richards, B., *The Loop*, Spring 1999. Bruce summarized the Six-Step Method as follows.

*The six steps analyze the cause of the problem from top to bottom, then cure the problem from the bottom to top. The initial step of the CAUSE is to describe to the student what is wrong with the (1) LINE. The next step is to explain what the (2) ROD is doing to cause the line problem. The final step is to explain what the (3) BODY (usually hand/wrist/arm) is doing to make the rod and line misbehave.*

*The CURE part of the process tackles the same steps, but in reverse order (bottom to top). The initial step is to explain what to do differently with the (4) BODY. The next step is to describe how the body modifies the motion of the (5) ROD, and then how that affects the (6) LINE in order to produce the desired results.*

When observing the parts of the loop using this method, it is important to recognize that the rod tip path during the casting stroke determines what the shape of the fly leg will be, and how the rod tip moves after the casting stroke determines the shape of the rod leg. As we learn to identify casting faults, we are primarily looking at the fly leg of the casting loop because most casting faults are seen in the fly leg. To learn more about loop shapes and how they perform see the article [How Loops Work](#). Richards, B. *The Loop*, Fall 2022. <sup>2</sup>

### Using the Five Essentials to aid in Fault Identification

When learning to identify and fix faults, it's important to be very familiar with the Five Essentials and realize how these essentials affect the cast and associated loop. The Five Essentials are summarized immediately below. Additional information can be found in section 2, above.

1. To form the most efficient, least air resistant loops, and to direct the energy of the cast to a specific target, the caster must move the rod tip in a ***Straight Line during the casting stroke.***
2. The size of the ***Casting Arc*** must vary with how much the rod bends.
3. ***Force (Power original term)*** must be applied in the proper amount at the proper place in the stroke (***Proper Force***). And it must be applied smoothly.
4. ***Slack*** line should be kept to an absolute minimum, with the intended rod tip path and fly line closely aligned both laterally and vertically with the target at the start of each Casting Stroke (180 degree principle).

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<sup>2</sup> Note: Mr. Richards writes that there are only two parts to a loop, while the FFI definitions recognise three, which is the number of loop parts the CI Exam requires candidates to identify.

5. There must be a ***Pause*** between casting strokes, which varies in duration with the amount of line outside the rod tip and line speed.

## **b. Using the Essentials During the CI Performance Exam**

Below we provide a summary of how each of these essentials are relevant to the casting faults to be identified and corrected in Task 19 of the CI Performance Exam.

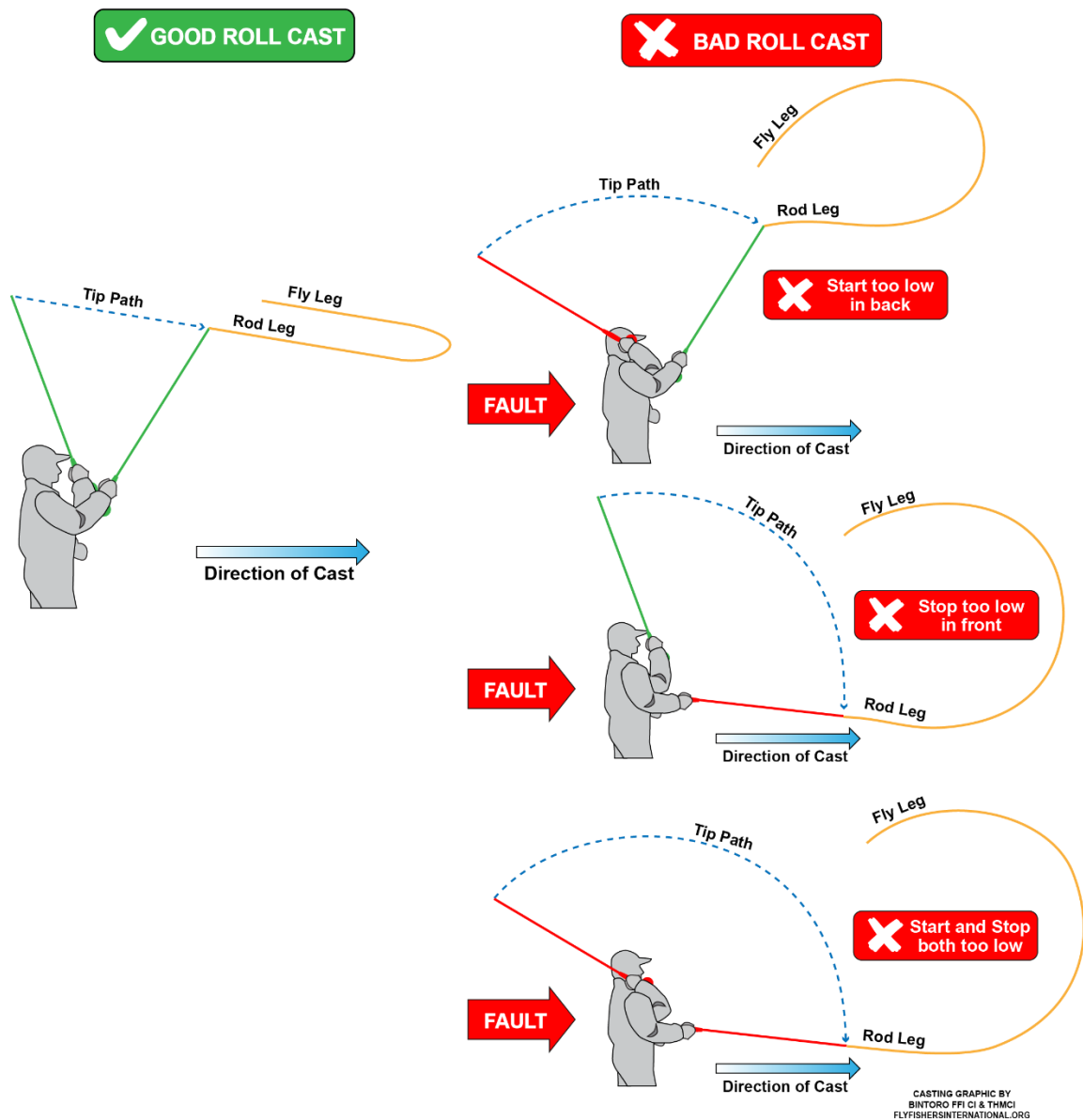
### **Overhead Casting Faults**

- **Over-bending the wrist.** The size of the casting arc must vary with the amount the rod bends. Too wide a casting arc for the bend of the rod results in a wide loop, too narrow a casting arc for the bend of the rod results in a tailing loop. Over-bending the wrist typically results in a casting arc that is too great for the bend in the rod resulting in a wide loop. When applying the Six-Step Method discussed earlier to over-bending the wrist, it would read something like this:
  - Watch the *fly leg of the loop*. What does it look like? The fly leg is a big upward curve.
  - What was the rod tip path? The rod tip path was also a big upward curve.
  - What is the *body motion or action* that caused the tip path problem? The caster bent their wrist too much during the casting stroke.
  - Fix the body motion, bend the wrist less.
  - This will straighten the *tip path*.
  - This will make the fly leg straighter.
- **Poor application of force.** An efficient casting stroke must have the right amount of force for the casting arc.
  - Force must be applied smoothly; rod acceleration must be nearly the same from the beginning of the casting stroke to the end (constant acceleration producing a steady increase in speed). If the change in force is abrupt, the rod tip may dip and rise (results in concave or tailing loop) at some point during the casting stroke.
  - If there is too much force for the casting arc, the rod tip will dip into a concave path and cause a tailing loop.
- **Failure to remove slack.** In Task 19, the third fault to be considered is failure to remove slack. While slack can be caused by poor timing, it can also be present in the line just prior to the first back cast. When slack is present during the first back cast, it prevents the rod from bending properly and providing enough line speed for the cast to be successful. The caster will usually try to overcome the lack of bend and line speed by moving the rod tip in a wide sweeping casting arc creating a very wide loop.

- **Poor tracking.** Poor tracking occurs when the rod tip does not travel in a straight line in the horizontal plane. The rod tip path during the casting stroke is curved right or left and that results in the fly leg also being curved right or left. Poor tracking is often caused by twisting the wrist or rotating the shoulder or body during the casting stroke.
- **Poor timing.** We refer to the length of the pause between casting strokes as “timing”. If the pause is too long or too short, slack will result. When cast “timing” is correct, the cast starts when the fly line/leader is almost but not quite straight. The length of line being carried, and line speed will cause timing to vary.

### **Roll Casting Faults**

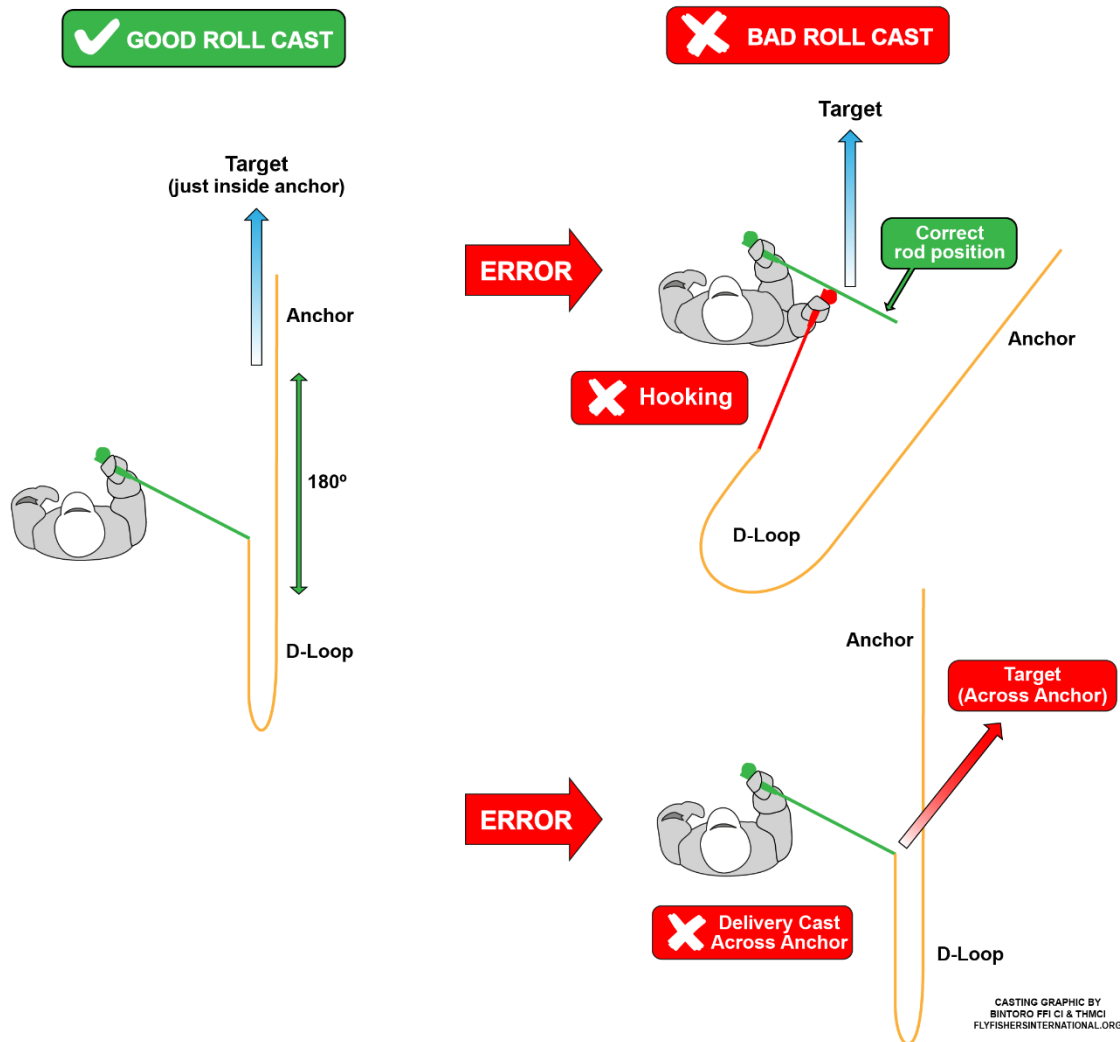
- A very common roll cast fault is a loop that is too wide, where the fly leg has a big upward curve and does not properly deliver the fly. This fault happens when the casting arc is too wide, producing a convex or domed-shaped tip path which is then mirrored in the fly leg. It is amplified when too much force is applied early in the casting stroke. Wide arcs can happen in several ways:
  - By starting the casting stroke with the rod too low, e.g., when the rod tip is pointed backwards at 2:00 or lower;
  - By finishing the casting stroke with the rod too low (this appears in Exam Fault Task 19); or
  - By both starting and finishing with the rod too low.



- When roll cast loops are too wide, examine both the casting stroke start and stop positions and application of force. The proper amount of force applied at the correct time is an essential; if too much force is applied too early in the casting stroke, a wide loop will result. Too wide of a casting arc, as well as early rotation in the forward stroke, can also contribute to a wide loop.

- **Roll Casts Faults Appearing in Task 19 of the CI Exam:**
  - **Forward stop too low.** This fault is also known as “running the stop sign”. A low forward stop with the rod almost touching the ground or water results in a wide casting arc. The resulting wide convex fly leg causes the loop to fall in a puddle and not deliver properly. This is shown in the diagram above.
  - **D loop placed directly behind the caster.** A D loop that is placed behind the caster’s body, rather than being out to the side of the caster, creates a safety hazard. This fault is called “**Hooking.**” Please see the diagram below.
  - **Delivery cast crosses the anchor causing a collision.** A common fault is when the delivery cast crosses the anchor causing a collision. This occurs when the delivery cast is aimed over or across the anchored line. Think of directing the cast to the inside and parallel to the anchored line. Casting to the outside of the anchored line (over it) will result in a collision. Using the reference to railroad tracks, the anchored line is the outer track. Please see the diagram below.

## VIEW FROM ABOVE



As you prepare for Task 19, we recommend that you write a script for each fault using the Six-Step Method. Although only three faults will be demonstrated by the examiner, you will not know which three. Therefore, be prepared to complete each fault analysis/correction in about 1.5 minutes.

You have begun the process of filling your proverbial toolbox with tools that fix problems. It is an ongoing process that will continue as you work with more students. For instance, when adjusting the casting arc, one tool might be the use of pool noodles placed in the correct stop positions. Another tool might be clapping your hands when the caster needs to change direction. You may borrow other instructor's tools that you find helpful, being certain to give

credit to the originator of the drill or tool, if known, as it helps keep the history of fly fishing intact. Label each “tool” as a kinesthetic, auditory, or visual teaching method.

For more information on the Six-Step Teaching Method see the article [The Six Step Teaching Method](#). Richards, B., *The Loop*, Spring 2005.

## **6. PREPARING FOR THE PERFORMANCE EXAM: CASTING**

### **a. Equipment**

The CI exam tasks do not require any special gear, but it makes sense to optimize what you use to make task performance as easy as possible.

#### **Rod**

The test limits the rod to no longer than 9 ft. and rated for a 7 wt. line or lighter. Most 6 or 7 wt. rods will work fine for the CI exam, when paired with an appropriate fly line. There is no one perfect combination, you just need to find one that casts well for you and allows you to make all the required casts.

There is a very common misperception that stiff rods are needed to make long distance casts. That is definitely not true, very stiff rods make distance more difficult for most casters and all the shorter casts are more difficult too. Using a less stiff rod, or a stiff rod with a heavier line, makes all exam casts much easier. The article [Rod and Line Matching for Best Exam Performance](#) explains this subject more fully. Richards, B. (*The Loop*, Summer 2024).<sup>3</sup>

#### **Line**

Most standard or long head WF floating lines work well for the CI exam. Recommended are special “instructor” or competition lines made in bright colors which make them easier for examiners and students to see. Line weight is limited to 7 wt., *as rated by the line manufacturer* (lines no longer need to meet AFTTA weight standards for 7 wt. lines). Remember that there is no requirement that you must use a 7 wt. line on a 7 wt. rod. For many casters, a 7 wt. line on a 6 or even 5 wt. rod will be the ideal rig. A 6 wt. line on a stiff 5 wt. rod usually works very well too. Try different rod/line combinations to find the one that works best for you. Pick a rod/line combination that makes the distance cast easy but also works well for the other tasks at shorter distances. It is highly unlikely that a true 7 wt. line on a stiff 7 wt. rod will be best for you.

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<sup>3</sup> But please be aware Mr. Richards was writing when only relatively light AFTTA compliant lines were allowed on the CI Exam.

## **Leader**

Leaders must be at least 7.5 ft. long. Tapered leaders are not required but are necessary for good casting performance. A leader that performs very well would be 0X or 1X. Long and light leaders are troublesome for the Exam and for teaching. Some commercial bass and bonefish leaders meet those specifications right out of the package.

## **Fly**

The fly will be a simple piece of high visibility yarn, like egg yarn. You want the fly to be big enough to see but not so big that the drag makes it hard to cast. A yarn fly that is about ½" long works well for most casters.

### **b. Practice Kit**

Prepare a practice kit and include a 100' tape measure, colorful low-profile soccer cones, roll-cast anchor tool for grass (optional), a copy of the performance exam, extra tippet, yarn, a writing utensil, this study guide, a notebook (paper or electronic), and optional tools or props. Be sure to include *sunscreen, eye protection and water*. Safety is an important factor to incorporate and portray.

### **c. Plan for Practice and Study**

Consistent and effective study and practice is essential for you to successfully pass the Performance Exam. Time spent in several short practice sessions (30-60 minutes) is better spent than the same aggregate amount of time in fewer sessions. Your practice should be focused on specific tasks that you are working to master. In other words, have a goal you hope to accomplish during each practice session. Making videos of practice sessions can help ensure that you are doing what you set out to do. As you master a skill or task, be sure to continue to practice it as you work on additional tasks. Suggestions regarding the order in which to study and to practice various skills are provided below. Do not hesitate to alter these suggestions if you find a different routine to be more productive. It is important to remember that Task 1 (pick up and false cast) is a foundation cast which reappears throughout the Exam, and we recommend you spend a disproportionate amount of time on it throughout your preparation. Some prefer to focus initially on Task #1 until it is nearly mastered before moving on.

- Learn the information presented in the study guide. It is designed to provide you with explanations of the concepts and practical skills to allow you to pass the Written and Performance Exam.
- Learn the definitions that pertain to the Casting Instructor exam.
- Study and master the concepts presented in Chapter 2, Casting Mechanics and Techniques.
- Learn To Perform tasks 17, 1, 2, and 3. These tasks (teach a PULD, demonstrate narrow, wide loops and tailing loops) all require understanding basic casting mechanics and require that you master pick-up, loop formation, and false casting.

- Learn To Perform tasks 7 and 8 to develop the ability to cast in multiple planes and at multiple speeds.
- Learn to extend the line from 20 ft to 45 ft. without hauling. This will help build the skill needed to accomplish task 12 targets (on-side accuracy) and will require learning how to adjust your casting stroke as line distance changes.
- Once you can do this, then work on keeping 50 ft of line in the air with good loops. Task 21 now allows you to haul, and we suggest you take advantage of it. (So does task 12, but we suggest hauling only if needed). Take care not to over practice at distances beyond 40 ft. to avoid strain.
- Learn To Perform accuracy tasks 12 and 13. These tasks require being able to see the fly above a target, learning to cast to a target at varying distances, making on-side and off-side casts, and adjusting casting arc, casting stroke length and trajectory as distance changes.
- Learn To Perform roll cast tasks 9-11. These can be interspersed with the previous steps and help build the forward casting stroke. Teaching task 18 could be addressed as well.
- Learn To Perform tasks 4, 5, and 6. These tasks add to the skills and knowledge of loop formation by requiring you to add aerial mends (task 4 and 6), and slack line cast (task 5). These casts and mends are very much centered on your basic false casting with the addition of rod leg manipulation (aerial mend) or trajectory change (slack line cast).
- Learn To Perform tasks 14 and 15 (double hauling and casting to a distance of 75 ft). Good loop control is a very important prerequisite when mastering these tasks.
- Read and understand the teaching section of this study guide, which will provide teaching tactics and a lesson plan format. This knowledge, combined with your knowledge of the Six-Step Method and other previous learning, will help enable you to successfully perform Teaching tasks 16 - 22.
- Master Teaching tasks 16 - 22. Develop teaching scripts that are 3 to 4 minutes long for each task and practice them until they are organized, concise, and efficient. This will allow you to stay within the timelines specified and allow time for questions. Make sure your demonstration casts are high quality and match your explanations.

## **7. Performance and Teaching Tips**

### **a. Performance Tasks (Tasks 1-15)**

**Task 1** –Casting 40ft (12.2m), demonstrate a minimum of six false casts with narrow loops on both the forward and back casts.

- This task is critical for success in the Exam. First, you will have very little chance of properly performing many of the tasks in the exam if you are not casting good conforming loops back and front.

- *Perhaps even more importantly, Task 1 repeats itself as the start of almost every other Task of the exam. If your casts don't conform, you will fail those Tasks even if you hit targets, do nice mends, and so forth.*
- Be certain that your loops conform to the General Performance Standards.
- *What Else to Watch:* Wide back cast loops, especially pickups with 180 degree violations due to horizontal tip path.<sup>4</sup> Tailing loops; curved tracking and lateral 180 degree violations both causing out-of-plane loops, too much force, casting too fast. Watching back cast loops generally helps you control them, and an open stance can help with both that and increasing stroke length for greater control. Watching the reel can help keep your tracking straight.

**Task 2.** Casting 40ft (12.2m), demonstrate wide loops on both forward and back casts.

- Occasionally, the wide loops demonstrated are not wide enough. The wide-loop casts should be 3 ft. wider than the narrow loops demonstrated in Task 1.
- No ticking allowed.
- *What Else to Watch:* Applying too much force early and upwards while moving the whole arm in a convex path on both forward and back casts can help avoid ticking.

**Task 3.** Casting 40ft (12.2m), demonstrate a tailing loop on a forward cast.

Know two common actions by a caster that can result in tailing loops:

- Improper (Uneven) Force Application. The most common cause of a tailing loop is accelerating the rod unevenly, which makes the rod tip dip and rise to cause a tailing loop. This often happens by going too slowly early in the casting stroke, leading to faster acceleration later to compensate.
- A casting arc that is too narrow for the bend in the rod, which causes a concave rod tip path. Inappropriate application of force is present with too narrow a casting arc (same amount of energy applied in a shorter distance). A certain amount of energy is required to make the cast. If that proper amount of energy is applied over too short a distance (narrow casting arc) there will be a tailing loop due to the resulting concave tip path. The only fix is widening the casting arc. Reducing energy will result in too little rod/line speed to make the cast. Increasing stroke length tends to increase arc width as well
- Note that in Teaching Task 20, candidates must explain how creep might contribute to a tailing loop.

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<sup>4</sup> Consider [this diagram by Bruce Richards](#) applied to a back cast pickup, which needs to be angled upwards to avoid a 180 degree violation. After the pickup back cast, the line will fall quickly, so all the subsequent casts should have a more horizontal tip path.

- *What Else to Watch:* Casting too fast with too much force. Understand tails are most easily demonstrated by **contrasts** in force/sudden power spikes, which bounce the rod tip. Casting relatively slowly and then thumbing it hard is a simple way to do this. Good back casts.

**Task 4.** Starting with the fly at 40ft (12.2m), demonstrate a reach mend without slipping line. Then demonstrate a second reach mend with slipping line. The candidate will be asked to explain the uses of the two mends.

- Know the difference between a cast and a mend, and the difference between an aerial and water mend.

#### Helpful Definitions:

*Mend:* Manipulating the fly line layout by rod movement after loop formation on a delivery cast. A mend affects the rod leg and not the fly leg of the loop.

*Aerial Mends* – mending before the line/leader lands on the water.

*Water Mends* – mending after the line/leader lands on the water.

*Shooting Line:* Increasing the amount of fly line outside the rod tip by releasing the line after the Stop.

*Slipping Line:* Increasing the amount of fly line outside the rod tip by releasing the line and moving the rod either before or after a Casting Stroke.

*A Fly Being Dragged:* Unnatural movement of the fly at a different speed from the current. Drag is created by the current pulling on the line/leader. Drag can be obvious, with the fly speeding up and skating across the water, but sometimes it is very subtle and hard to see. Even subtle drag can cause rejections by fish.

*Drag-Free Drift:* The fly moving downstream in a natural manner at the same speed as the current, giving no indication that it is tethered to a fly rod.

Aerial Mends are most often used in moving water to produce drag-free drifts. When teaching an aerial reach mend, it is best for the student to learn it first without slipping line and then progress to slipping.

In the CI exam, the reach mend tasks begin with a 40 ft. overhead cast. At the stop of a forward cast, the rod is immediately reached either right or left and lowered before the fly lands. When *not* slipping line, the reaching action consumes approximately 10 ft. of the line's length and halts the fly's forward movement, causing the fly to land less than 40 ft. away. A reach mend without slipping line is used to cast a fixed amount of line. This is useful when placing the fly precisely in a narrow feeding lane upstream of the fish. For instance, in a river flowing from right to left and the target landing point 30 ft. away, casting 40 ft. of line and reaching to the

right allows the fly to land in the target lane above the fish. It is excellent for dry fly presentation at short distances.

Slipping line while reach-mending allows the line to slip through the guides during the reach and avoids pulling the line back. The advantage with slipping is that the caster doesn't need to cast past the target leading to spooked fish or snagging a grassy bank.

In the CI exam, be sure to pull enough extra line off the reel so the yarn fly lands near the 40 ft. target after slipping line during the reach. You might start by experimenting with 10 extra feet. Cast a good loop a little high to allow time to move the rod before the line falls. Then, just as the loop forms, mend immediately.

- *What Else to Watch:* Not stopping crisply. Stopping too low and in front of caster. Waiting too long after stop to start moving rod. Good Back casts.

**Task 5.** Casting 40ft (12.2m), demonstrate a cast that produces a slack line presentation.

- This task calls for a slack line presentation (without an aerial mend after the stop) that reduces drag on the fly.
- There are several ways to produce slack line.
  - A Pile Cast is one.
    - When performing a Pile Cast, don't lower the rod tip too quickly after the stop or else it will become a Pile Mend.
    - Practice with different loop shapes, narrow and wide; wide loops can produce more slack.
    - Be able to explain when this cast might be used. One example might be adding slack when fishing downstream.
    - If performing an Elliptical cast to set up the pile cast delivery:
      - It is easier to prevent ticking on the back cast.
      - Be sure to maintain continuous tension throughout the cast. There is no pause between the back cast and forward cast.
      - The casting plane changes from a sidearm cast to a more vertical or overhead casting plane. This separation of planes creates an oval shape to the back loop.
      - An elliptical cast, which is also known as a Belgian or oval cast, is also quite useful for casting large or heavy flies, sink tips and other complicated payloads.
- *What Else to Watch on Pile Cast:* Ticking on back cast. Forward cast aimed too high (fly lands closer than 20 ft.) or too flat (lands beyond 30 ft.). Loss of control in wind.

- A pile cast is only one option for this task, however, and it can be highly problematical in windy conditions. Other ways to do this which work better in the wind include:
- Bounce cast. A slightly overpowered overhead cast which is stopped suddenly and hard, causing the line and leader to bounce back at the caster and land with ripples of slack in it.
- “High stick finish”: making a normal overhead cast but letting the line land with the rod high. Dropping the tip to the ground/water will produce lots of slack near the rod tip.

**Task 6.** Casting 40ft (12.2m), demonstrate an aerial mend that produces a presentation with a series of waves in the line.

- The wiggle mend is a slack line presentation with a series of aerial mends. Mends occur after loop formation but before the line hits the water. Reducing your line speed on the forward cast of a slack line mend helps make the “wiggles” more pronounced. Excess force can straighten your line
- Begin the side-to-side rod movement after the stop and continue that motion all the way until the fly line reaches the water/grass surface. The farther you move the rod, the bigger the mends will be. Keeping the wrist firm helps control the tip movement. See diagram on the last page of the *CI Exam*.
- The leader needs to be relatively straight on delivery. In order to accomplish this, there must be a minuscule delay before starting the mends.
- Be able to explain when this cast might be used. Examples include: 1) Downstream presentation of a fly; 2) If a fish is in slower current than the current speed midstream, placing mends in the mid current will allow for a longer drag free float.
- *What Else to Watch:* Inconsistent wave sizes, mending with too much force, not following falling line with rod tip, leader not reasonably straight, not enough points, no firm stop, incorrect trajectory. Tailwind can straighten out wiggles. Good back casts.

**Task 7.** Casting 40ft (12.2m), demonstrate a series of false casts beginning with the rod in the near vertical plane and progressing to the horizontal plane over a series of 6 to 8 false casts. The candidate must make at least two false casts at each plane.

- Think of the vertical as being straight overhead at almost 12 o’clock.
- There should be at least three different rod planes with controlled in-plane loops demonstrated.
- This Task no longer requires increasing line speed as you progress from vertical to horizontal, but you may find it helpful to speed up to avoid ticking. Another option is to keep the rod plane quite high above the ground when it approaches horizontal.
- If you do speed up ,your will rod bend will increase, which requires widening the casting arc. This is usually most effectively done by also increasing stroke length.

- *What to Watch:* Tracking: scooped/underslung loops at horizontal from down and up tip path instead of moving the rod flat. Watching the reel orientation helps. Loss of loop control if arc (and stroke) improperly adjusted if speed increases.

**Task 8.** Casting 40ft (12.2m), demonstrate slow, medium, and fast false casting.

- There needs to be a noticeable difference between the three casting speeds. Be sure to practice casting very, very slowly as well as casting fast. A 'slow' cast that is slower makes the contrasting medium and fast casts easier to create and see.
- Explain the changes in the five essentials relevant to this task.
- In order to move the rod faster, either more force is needed and/or it needs to be applied over a longer distance. As the rod moves faster, the rod will bend more, requiring widening the casting arc. This is usually best done along with an increase in stroke length.
- The higher the line speed, the shorter the pause.
- *What Else to Watch:* Ticking and loop control.

**Task 9.** Casting 40ft (12.2m), demonstrate narrow loop and wide loop roll casts.

- If you stand on the tape, it's a good idea to lay your line out well to your casting arm side before setting up your roll cast. Starting the fly on the tape and then keeping the rod tip out to your side when setting up will point your anchor across and inside the target line and risk involuntarily demoing the cast across the anchor fault if you aim parallel to the tape.
- For narrow loops, start the casting stroke at 1 o'clock (be careful not to have too wide a casting arc), apply force smoothly, stopping the rod at about 10:30 with a crisp stop.
- On narrow loops, it is expected that the fly line rolls out completely with the leader relatively straight.
- For wide loops, increase the casting arc so that it is too wide for the amount the rod bends. Start the casting stroke at 2 o'clock and end at 9:30.
- *What Else to Watch:* Hooking, failure to align anchor, D Loop and forward cast, casting across anchor, too much power, too low forward stop.

**Task 10.** Casting 40ft (12.2m), demonstrate an off-side narrow loop roll cast.

- Be sure that the rod tip remains “off-side” throughout the entire cast, not just during the set up.
- *What Else to Watch:* As in on-side roll cast above, plus not adjusting to increased hooking risk and the D Loop closer to caster than for an on-side roll cast.

**Task 11.** Casting 40ft (12.2m), demonstrate a narrow loop roll cast pickup and delivery and explain when this cast might be used.

- Be sure to practice this cast on water and grass.
- Be prepared to finish the task with a controlled back cast and forward cast meeting the 4’ or less loop size.
- For this task, while keeping the same casting arc, tilt your casting trajectory upward in the front and lower in the back to allow enough time to change directions and not tick the water on the back cast (for example, 1:30 rather than 1:00 on the back cast, to 10:30, rather than 10:00 on the forward cast).
- Know when to use this cast, such as when fishing and the fly and leader have sunk, have slack or have snagged on an object.
- *What Else to Watch:* As in roll cast tasks above, plus not aiming forward delivery trajectory high enough, ticking from pausing too long before first aerial back cast.

**Task 12.** Beginning with the fly in hand, present the fly to targets at 20, 30 and 45ft (6.1, 9.1, 13.7m) on-side.

- Change your trajectory as you go from 20’ to 45’ while maintaining four-foot loops or less. Loop control is half of the task requirement.
- Choose a yarn fly color and size you can see easily on both water and grass.
- Consider the sun and wind direction when laying out the course giving you the best chance of success. You can change the direction of the course if desired.
- You may want to experiment with a closed stance (the foot on the side of the casting arm forward) and a more vertical cast.
- If you do this, consider an elbow up/elbow down casting style to provide stroke length and control, especially for the 45 ft target.
- Inexpensive soccer cones make good targets. If you practice accuracy using rings, the addition of a small bullseye can help focus your aim on dead center. However, rings are rarely used during exams.
- Pausing slightly longer after the forward cast will cause the fly to hover above the target allowing you to judge both side-to-side accuracy and distance.

- Hauling and shooting are allowed but you will probably be more consistent and accurate without doing either, if you don't need to. Most candidates pinch the line against the cork with their rod hand before the delivery cast.
- Because the distances are fixed, a little bit of strategy and tactics can help.
  - Make sure you eyeball the amount of line outside the tip when you practice starting fly in hand, so that you have the right length of line/leader to hit the first 20 ft target without making adjustments;
  - Know exactly how many shoots it takes to extend first from 20ft to 30 ft then from 30ft to 45ft;
  - When you initially strip the line in from 55ft, take careful note of the amount of line off the reel as you strip in to the 45ft target. Use this mental picture as a double check in estimating the distance to that far target.
- *What Else to Watch:* Be sure back cast loops conform. Trajectory and 180 degree principle. Last Cast Syndrome overpowering and ripping open the forward cast loop on delivery. Tracking errors are fatal, especially for the 30 and 45 ft targets.

**Task 13.** Demonstrate off-side accuracy casting to targets as described in Task 12.

- Changing your stance can help with this task. Try dropping your off-side foot (i.e., the foot on the same side as your rod tip) back a foot or two and turn your body a little sideways.
- Be sure that the rod tip stays on your off-side while false casting. See the diagram of the off-side cast on the last page of the exam. Visualize a wall on your off-side and scrape that wall with the rod tip from the back cast through the forward cast.
- Having your casting partner watching your back cast loops can be a big help when training on this task. Tracking and back cast loop control off-side can be challenging.
- Don't be afraid to change the tape (i.e., the direction you are casting) if the wind is coming into your off-side while casting.

**Task 14.** Casting 50ft (15.2m) throughout the task, demonstrate at least 4 consecutive false casts while double hauling, including on the pick-up and delivery casts.

- The length of haul for the back cast and the forward cast should be the same. Look at your hauling hand while casting. Video can help you see the length of the haul.
- Watch your loop size to meet the exam standard. Focus on smoothness, not force.
- Your hauling hand should mirror your rod hand, also starting and finishing the haul at the beginning and the end of the casting stroke.
- There are many good articles written on the subject of double hauling, several of which can be found in *The Loop* on the FFI Website.

- Clean your fly line so it will slide through the guides easily while hauling and returning the fly line. Clean line is important for distance as well.
- *What Else to Watch:* Making sure to haul on every casting stroke (including the pickup). Watch for tails, tracking, and 180 degree principle adherence. Try for same haul length forward and back, avoiding short forward cast hauls. Good back casts.

**Task 15.** Demonstrate a cast to at least 75ft (22.9m).

- To cast 75 ft. starting from 50 ft., you need to make several changes to your cast.
- First, casting more line further requires that the line go faster, and to do this the rod needs to speed up. We could just apply more force over the same distance. But doing this and not tailing is not always easy. Another way to do it is by applying a similar amount of force over a longer distance.
- When we move the rod faster it will bend more and require you to widen your casting arc to maintain a straight rod tip path. If we speed the rod up by increasing stroke length, this will help us widen our casting arc at the same time. An open stance (casting side foot back) will help with this. This longer stroke is usually easier to control and more efficient, since our bigger muscles get involved.
- Hauling is permitted (and encouraged); it adds quite a bit of line speed when done properly. Your hauls should get longer as the length of line you are carrying gets longer.
- Hauling can also reduce the work done by the rod hand, narrow the casting arc and shorten stroke length compared to an unhailed cast of the same distance.
- This task is easiest if you plan to shoot 10-15 ft. or so to reach 75 ft, which means you must lengthen your cast to at least 60-65 ft. before delivering the fly.
- Practice shooting line, including when to shoot and when not to shoot.
- Improvements in distance casting are accomplished with practice and in small increments.
- This task should be graceful and easy.
- Avoid “last cast syndrome.” Do not be tempted to increase force on your delivery cast, which may result in a tailing loop at the finish of the cast. Instead, focus on keeping your loops stable, your hauls consistent, and eliminate any slack during the false casting cycle. The cast will deliver itself if these basics are observed.
- *What to Watch:* Make sure to have a routine with a fixed number of casting strokes to reach a consistent shooting point. Tracking and 180 Degree Principle adventures, which are particularly harmful as line length and speed increase. Haul timing, length and symmetry. Good back casts.

## **b. Teaching Tasks (Tasks 16-22)**

The Teaching Tasks section has two main purposes. First, to demonstrate your ability to relay information efficiently and effectively to students. Second, to demonstrate your understanding of fly casting mechanics and concepts.

If you want to know what you must cover, read the expectations for each task listed on the exam. If a candidate has a thorough knowledge of casting mechanics, it should be easy to write a script for each task. Be sure to include a combination of auditory (verbal), visual and kinesthetic teaching methods throughout the teaching section as you develop the scripts. It is best not to wait until the very last to prepare them. Start earlier in your journey and let your teaching method evolve with you.

When preparing, compare your studies with that of a stage play. Before stepping onto the stage, an actor will surely know their lines. The teaching tasks are not any different. It is recommended to first write out your answers as simply as possible. Read them out loud and time them. Send them to a mentor for review. Next practice in real time. Practice in front of people or take a video. Be sure to give yourself enough time to go through the above process for all the teaching tasks.

**Task 16.** Explain and demonstrate to a beginner caster how to form a casting loop and change its shape.

- Avoid over-explaining! Keep things simple. This task focuses on a beginning student. A common fault would be to overload the beginning caster with technical terminology.
- Define what a loop is, describe the three loop components (fly and rod legs, and nose) and these three basic loop shapes (narrow with straight fly leg, convex fly leg and tailing), using both static and dynamic demonstrations.
- Explain and demonstrate how loops are formed. Emphasize rod tip path and its relationship to loops. Static and/or dynamic methods of demonstration may be used.
- Include student involvement in structured practice, drills, or exercises or a combination of any or all of these.
- Be able to demonstrate a narrow, wide, and tailing loop.
- Teaching this task through ground demos in slow motion is very effective.

**Task 17.** Teach a beginner caster the Pickup and Laydown Cast (PULD).

### **First Back cast Loop**

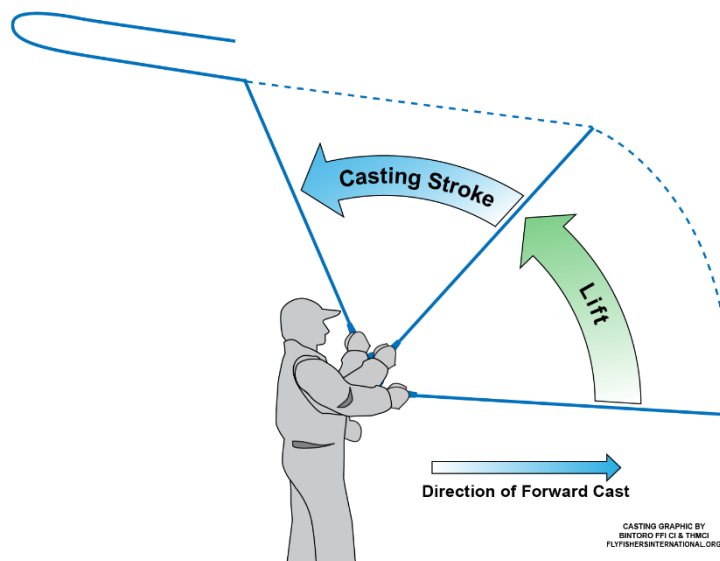
Understanding how to execute the initial pick-up when performing narrow back cast loops is critical to the success of the CI exam. Lift position can vary slightly and that will affect back loop trajectory, but the casting arc must stay the same.

Here is an example of a 40 ft. PULD cast. Lift to 10:30 or 45 degrees in order to position the rod properly to begin an effective backcast. During the lift, medium speed is required; lift too slow

and slack may form, preventing the rod from beginning to bend, and too fast a lift throws the line upwards.

Be careful not to pause at 10:30. Once at the 10:30 position, initiate the casting stroke with smooth acceleration to the Stop at 1:00. After a slight pause, initiate the forward cast and stop at 10:30. After the stop, the rod tip then follows the line as it goes forward and down to the ground.

The tip path trajectory has been established at 10:30-1:00 and 1:00 to 10:30 following the 180 Degree Principle. This casting arc is tilted slightly up in back, down in the front – a typical fishing cast trajectory.



- Demonstrate the PULD cast. Make sure your cast is as good as the initial back cast in task #1.
- Use short, simple steps and remember the caster's ability level outlined in the task.
- Describe when the PULD cast might be used. Ask yourself "why is it being taught?" It is:
  - A basic fly fishing cast.
  - A foundation for other casts and an efficient way to learn how to begin and end them.
- Explain and teach each step in how to do the PULD cast including a description of a) initial line organization, b) initial rod tip position, c) lift, d) backward acceleration to a stop, e) a pause, f) forward acceleration to a stop, and g) lower the rod tip to the water following the line down.

- Have the student/examiner pantomime the PULD one step at a time or use a kinesthetic method. This is a teaching task not just a demonstration.
- Have the “student” do the entire cast.
- The demonstration and instruction must match.

**Task 18.** Teach a beginner caster to make a roll cast in which the fly line rolls out completely with the leader relatively straight.

- Be clear on the steps you use to teach the roll cast.
- Be able to describe:
  - Anchor: The fly and leader/fly line in contact with the water at the bottom of the D Loop.
  - D Loop: A round shaped back cast loop between the rod tip and the anchor of an Anchored cast.

- Understand the Functions of:

- An Anchor:
  - Stops the line from slipping backwards during the formation of the D Loop and the forward delivery.
  - May assist in providing tension against which the rod pulls, thereby creating load.

Note: The anchor should always be on the downwind side of the caster and aligned with the target prior to the forward cast.

- The D Loop:
  - It is our back cast – the line behind the rod tip that we energize to make the forward cast; it’s just folded over itself rather than straight like in an aerialized cast.
  - Helps aim forward delivery – when the D Loop, the anchor and the forward cast line up laterally with the target (180 principle for anchored casts) we maximize the likelihood of a safe; accurate, and efficient forward delivery.

- Know the many times a roll cast can be useful, such as:
  - When an aerialized back cast cannot be made due to obstructions
  - To remove slack from the line
  - When raising a sunk line to the surface
  - When a fly is stuck on an obstacle such as a rock
  - Getting a large blunt-faced fly airborne with minimal water disturbance

- The force needed to make a roll cast is more than what is needed to make an aerialized cast of the same distance. Only the line in the D Loop can be effectively energized and it must have enough momentum to also overcome the water “stick” of the line/leader.
- Roll casts are not generally good change of direction casts, and the longer the line the harder it is. With casts of around 40 feet, the greatest angle change that can be made is approximately 15 degrees before the delivery cast suffers.

**Task 19.** Identify and correct three casting faults commonly made by beginner casters while learning the overhead cast and roll cast.

- The Task 19 [Aerial/Overhead casting faults](#) and [Roll Cast faults](#) were discussed earlier. They are listed again below along with some suggestions.
- Be able to identify and correct each fault by using the *Six-Step Method*
- Some of these faults like tracking, hooking and casting across the anchor are difficult to see in a side view from the caster, so feel free to safely move around for a view close to in front of or behind the caster, and within reason to ask your “student” to cast again if you couldn’t see the fault clearly.
- **Overhead Casting Faults**
  - o *Over-bending the wrist*
    - It may make sense to suggest better rod or hand start and stop positions.
  - o *Poor application of force*
    - You may be most likely to see a power spike resulting in a tailing loop or a concave fly leg. A longer, smoother stroke producing a steady increase in rod speed is a good fix.
  - o *Failure to remove slack (self-explanatory)*
  - o *Poor tracking*
    - You are likely to see a tip path curved sideways producing out-of-plane loops.
    - A good fix can be keeping the reel in one plane and pointing at the target throughout the casting cycle.
  - o *Poor timing*
    - You could either see too short a pause (crack the whip, or for really short pauses an undulating line which doesn’t properly unroll) or too long a pause (ticking).
- **Roll Cast Faults**
  - o *Forward stop that is too low*
    - Usually too low near the ground/water. You might suggest a higher forward stop then follow down.
  - o *D-loop is placed directly behind the caster (hooking)*

- Encourage student to keep rod tip well out and away from them, especially during final phase of D loop setup just before delivery.
- *Delivery cast crosses the anchor causing a collision*
  - Encourage the student to aim just inside the anchor.

**Task 20.** Teach an intermediate caster the cause and correction of tailing loops.

- A static visual aid of tailing loops is helpful, such as the line laying on the ground with the fly leg crossing the rod leg twice.
- A concave rod tip path is the root cause of all tailing loops. The concavity is caused by either using too small a casting arc, failure to smoothly apply force, or both.
- Creep (drag which leads to casting fault) can contribute to a tailing loop if drag results in too narrow a casting arc and the caster then applies power inappropriately.

**Task 21.** Teach an intermediate caster the adjustments needed to maintain consistent narrow loops while false casting to change distance from 30ft (9.1m) to 50ft (15.2m), and the reasons for those adjustments.

- This task requires an understanding of the Gammels' Five Essentials and how they are adjusted. Given that slack must be kept to a minimum and the path of the rod tip travels in a relatively straight line, the remaining essentials that must be adjusted are pause/timing, casting arc, and force.
- When changing cast distance from 30 to 50 feet:
  - Casting a longer line requires that either more force be applied or it be applied over a longer distance.
  - This change in force application causes the rod to bend more.
  - More rod bend requires that the casting arc be wider.
  - The pause needs to be longer.
  - Hauling is now allowed on this task, and it may be a good idea to introduce it as the line gets to 50 ft.

Explain and demonstrate this concept: *Short line, shorter stroke length; long line, longer stroke length.* Know that when extending the cast increasing stroke length may *not be* necessary, but increasing casting arc is! However, in practice, increasing stroke length is common and can increase casting efficiency, particularly when casting longer distances.

Teach this concept: As the length of the carried line increases, applied force and/or the distance over which we apply it must also increase. Increasing the distance over which we apply force by increasing stroke length can be an effective way to avoid overpowering the cast. Short cast, short stroke; long cast, long stroke. The demonstration should make these adjustments easily seen while maintaining consistent loop size of 4' or less, gradually extending line from 30'-50'.

**Task 22.** Teach an intermediate caster how to cast safely with a head wind, a tail wind, and then teach three methods of casting safely with the wind blowing onto the casting arm side. For a light wind, teach a method keeping the line on the upwind side of the caster for all or part of the cast. For stronger winds, teach two methods keeping the line on the downwind side of the caster throughout the cast.

- Explain the challenges each different wind direction presents, including any safety concerns. Do one wind direction at a time.
  - Casts might include: horizontal cast, off shoulder overhead casting, a back cast presentation (Barnegat Bay) a forward cast away from the target and an off-side forward cast toward the target (Galway), an Elliptical cast or casting with your non-dominant hand.
  - With headwind and tailwinds, we want to focus most on the loop that is being thrown into the wind. The fly leg of the loop must be straight, line speed increased, and the trajectory appropriate for the desired delivery. For a head wind, trajectory should be up in back/down in front. For a tailwind, a flat or slightly lowered back cast is followed by an upward trajectory forward delivery cast.

## 8. TEACHING PRINCIPLES

### a. Setting the Stage for Learning

In the Spring 1998 issue of *The Loop*, Mel Krieger wrote that "...instruction provides avenues for learners." The Casting Instructor certification is more than being able to perform a task. Qualified instructors transfer knowledge that is memorable, repeatable, and clearly understood in a fun, comfortable and motivating manner. Certified instructors are inspiring, adaptable, patient, non-judgmental, and able to build student confidence in a non-threatening environment. An instructor is successful when the student says, "That was fun and I learned so much!" and is excited to go out and try their newly acquired skills. (Echer C., *The Loop*, Spring 1995).

Learning to teach takes experience and is a lifelong journey. The more you teach, the more you will learn, and the better instructor you will become. Below you will find teaching methodologies and examples to help you build your foundation as a new Casting Instructor.

## **b. Get to Know Your Students**

Spend time prior to the lesson getting to know your students and determining their ability level. Use the following questions as a guide:

- Do you have any physical restraints or limitations that may affect casting?
- What equipment will you bring to the class?
- Where and how do you fish?
- Have you taken lessons before?
- Why do you want to learn to cast well? What is your motivation?
- What specifically do you want to learn?
- How much time do you plan to commit to casting? One lesson or a series?
- How much time are you able to commit to practice between lessons?

## **What Effective Teachers Do**

### Create an environment conducive to learning

- Demonstrate kindness, empathy, patience, and respect
- Use non-threatening language
- Suppress their ego
- Are good listeners
- Honor the student's individuality
- Empower the student
- Make it fun!

### Develop Lesson Plans

Each time you have a casting lesson with an individual or group, prepare a lesson plan (see examples in Appendix C). Print them out and keep them on a clipboard in your teaching kit. Your lesson plans should consider factors including the skill level and number of your student(s), time and space available, and of course safety. Keep each lesson simple, only covering one or two topics. Break the lesson into steps, each step building on the previous step. Try to incorporate opportunities for auditory, visual, and kinesthetic learning into each lesson when appropriate.

Be sure to leave time for independent practice. That may mean walking to the restroom or your car for a few minutes, not watching the student. This helps to allay the student's self-consciousness.

At the conclusion of the lesson, review what was achieved, reinforcing the lesson and praising the student for her/his accomplishments. Ask the student "what is your takeaway from today?" Or ask, "what was your "ah ha" moment when your fly went into the target?" This is the

verification of what the student learned. Review any notes written by you or the student. If possible, make a video of the lesson highlights and any homework that may have been suggested including practice drills.

When your lesson includes encouragement, positive feedback, repetition, and builds sequentially on previously learned material, you will help pave the way to long term learning.

**For More Information on Teaching, see:**

- Sprague D., Richards B. (July 2019) Notes on Teaching, *The Loop Journal*
- Jim Sommercorn (Nov. 2020) The Tenets of Teaching, *The Loop Journal*
- Kreiger, M. (Fall 2020) Observations on Teaching Fly Casting, *The Loop Journal*
- Lord, M. (Spring 2009) Direct Instruction a New Paradigm for Teaching, *The Loop Journal*
- Gammel, B. (Fall 2002) One Hour Lesson Plan, *The Loop Journal*

**c. Discover Optimal Learning Styles**

There are three sensory styles used when teaching and learning casting: auditory, visual, and kinesthetic. When teaching, find which style (or combination of styles) works best for your student. For instance, if the student has one sense impaired, another is naturally heightened. Below are examples of the three styles:

***Auditory***

- Hearing the fly rod “whoosh” as a result of too much force, or the line make a whipcrack sound when the pause is too short.
- Hearing, seeing, and feeling a pool noodle stopping a back cast in the proper place. A pool noodle can be found at any dollar store. Cut one in half and use it for props like stopping the rod for the proper arc.
- Counting out loud or using a metronome phone app to help with timing.
- Verbal or auditory cues, which could be a word or a noise like a clap.

***Visual (seeing/demonstration)***

- Watching the instructor demonstrate a task to be learned
- Watching their loop and what it does when they move differently
- Watching their loop when side-arm casting
- Watching a video analysis of a cast
- Watching another caster’s loop shape
- Watching another caster’s body movements, such as the hand

***Kinesthetic (being aware of body position and movement)***

- Pantomime.
- Ask the student to feel the movement of the cast with eyes closed.
- Overloading the fly rod to help with the feel of the double haul.
- Ask student to cast a fiberglass rod to feel the rod load.
- Hands-On teaching, i.e., casting with the instructor's hand just above the student's hand on the rod blank (after asking for permission).
- Ask student or group to run in place with active arms. Note the arm position, the 90-degree bend in the arms, the rotation at the shoulder, the drop in the elbows. Running in place allows you to feel the motions of a basic cast.
- While helping a student cast more from the shoulder, place a ball inside the elbow and squeeze the ball with the forearm and bicep. Cast by lifting and rotation at the shoulder without dropping the ball.

**Additional Information**

- Goodwin, Ty (Winter 2008), Using Learning Styles in Casting Instruction, *The Loop Journal*
- Sommercorn, J. (Summer 2019), The Tenets of Fly Casting Instruction, *The Loop Journal*

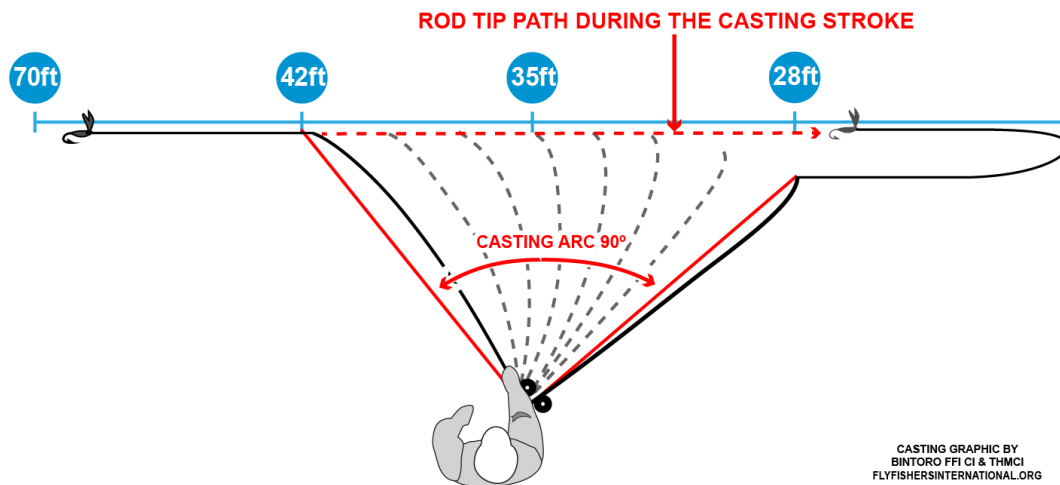
## 9. APPENDICES

### Appendix A – Horizontal Casting Drill

\*Casting arcs may vary depending on the rod/fly line combination and the amount of force applied to the cast.

Stretch out a tape to 70'. Make sure the tape is perpendicular to the wind.

- Place a central cone at 35' and then a cone at 28' and one at 42'.

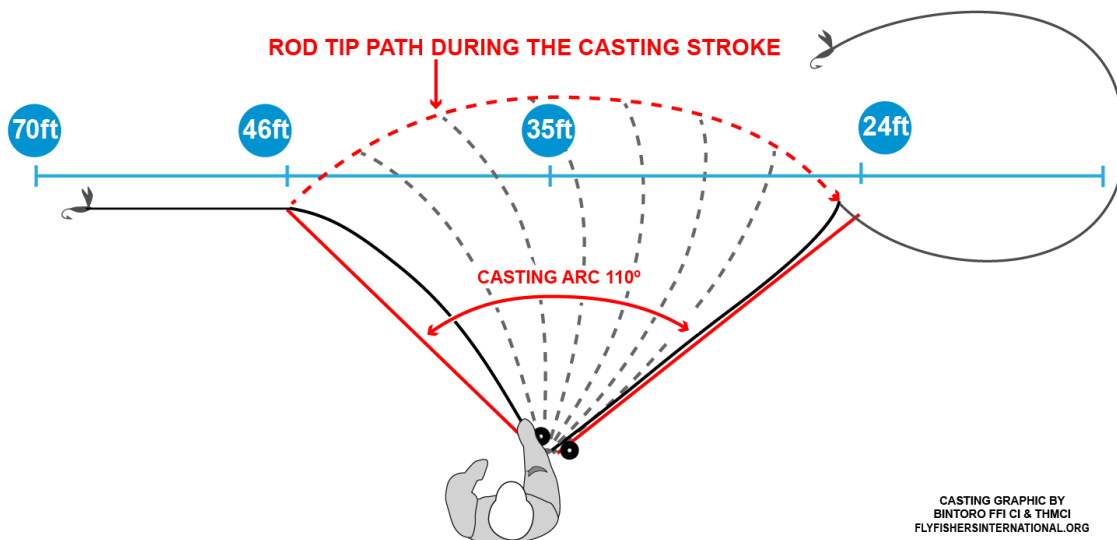


- Stand away from the tape with the wind at your back and place your rod at right angles to the tape with the rod tip about 1' over the tape and your casting arm (not your body) even with the 35' cone. This will be your casting position for this exercise.
- Pull fly line off the reel and cast your yarn to the 70' mark, with the line parallel to the tape.
- Hold the rod so the tip is about a foot or so above the grass and pin the line to the cork with the rod hand palm up and the reel parallel to the ground. Bring your rod tip so it is just above the 42' cone. Remove any slack.
- Using appropriate acceleration and a firm stop, make a cast in the opposite direction and stop your rod tip at the 28' cone. Your line and leader should have landed almost parallel to the tape. You have created a narrow loop due to a straight-line rod tip path.
- Now, taking care to remove any slack, make a cast with the rod tip beginning at 28' and stopping at 42'. Let the line rest. You again have a narrow loop, the line landing close to the tape.

- To demonstrate what is happening, stand at the 35' cone, pinch the line to the cork and with the rod straight hold the line outside the tip with your line hand so it is taut. Now place your rod tip right on the 42' cone.
- Holding the line tight with your line hand begin slowly moving the rod towards the 28' cone. Pull with your line hand to progressively bend the rod to keep the tip moving straight along the tape. As you approach the 35' cone the rod should be close to its maximum bend. As the rod passes the 35' cone, let the rod progressively straighten out until it is fully straight when it reaches the 28' cone. (Left handed casters should start with the rod tip at the 28' cone and move it to the 42' cone to avoid having to cross their arms).
- You have created a straight-line path (SLP) of the rod tip with the correct arc for the bend of the rod (Essentials #1 & #2). This exercise allows you to really see the SLP, bend of the rod and casting arc.

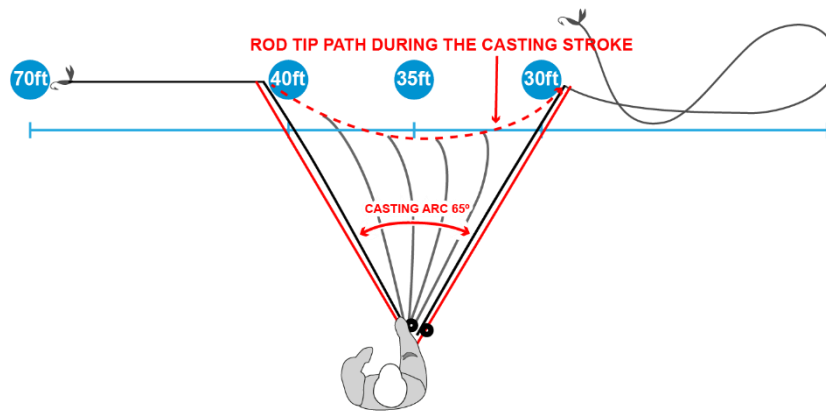
Now place two more cones; one cone at about 46' and one cone at 24'. Move them 2 or so feet away from the tape in the direction of the caster. Now repeat the drill using the same amount of force and no slack. This time when you cast, start and stop your rod tip at the 2 new cones. You will notice that your loop became much wider, and the line landed on your side of the tape.

You have a casting arc of approximately 110 degrees (too wide for the amount of bend in the rod). The line is no longer parallel to the tape. You have demonstrated a dome, rainbow, or a windshield wiper rod tip path, which creates a big or wide loop.



Using the same slow motion technique you used to demonstrate the narrow straight-line rod tip path, now show the domed shape rod tip path in slow motion.

Now place 2 cones at 40' and 30'. Repeat the same exercise. You will now have the line crossing over itself - a tailing loop. You now have a casting arc of maybe 65 degrees (too small for the amount of bend in the rod). To illustrate this dip in the rod tip path, simply repeat the slow-motion demonstration beginning at the 30' cone. This time as you begin to demonstrate the stroke in slow motion, simply pull the rod tip down below the tape and then let it go back up to the tape. You have created a dipped rod tip path or, in FFI vocabulary, a “concave rod tip path”. This will always result in a tailing loop. To help remember that a concave rod tip path causes a tailing loop just think, “Only a CAVE man throws a tailing loop.”



## Appendix B – Teaching

The following two sections on teaching methodology have been adopted from the CI Study Guide dated March 31, 2016. Both sections were written by Dayle Mazzarella, MCI, a retired high school coach. The CI Study Guide's focus is guidance to becoming a certified instructor. For those of you that wish to dive more deeply into effective teaching the following two sections are a great way to start. Additional resources on teaching/coaching can be found in the Resources Appendix F.

### Teaching Tactics

In this section we will explore specific teaching tactics that may optimize results. While these tactics work especially well with a large student-to-teacher ratio they are equally effective in one-on-one lessons when the instructor becomes the partner. Much of the teaching information is borrowed from *Tools for Teaching* by Fred Jones, Ph.D. Two other helpful books are *Practice\_Perfect* by Lemov, and *The Talent Code* by Coyle.

#### *Pairs / Partners*

Extensive research demonstrates that properly working in pairs accelerates the learning process. This occurs because using partners creates more emotion, more repetitions, more reflection, and thus more active engagement on the part of the participants.

#### *How to use Pairs*

Check for understanding: Turn to your partner and take 15 seconds to review with your partner what you were just taught. Wait. Raise your hand if you and your partner said something to the effect of “the longer the line, the longer the pause”. Note: The student and instructor receive immediate feedback as to understanding. No one student is singled out and all students participate.

#### *Partners Teach Each Other*

We have gone through the 6 steps of how to make a roll cast.

- Partner A turn to Partner B and demonstrate and explain the 6 steps. You have 1 minute. Wait.
- Now Partner B turns to Partner A and explains and demonstrates the 6 steps in a roll cast to him/her. You have 1 minute.

Partners help in the correction of faults and in the process of creating more positive repetitions. This is “discrimination training” – knowing the difference between a good repetition and a not-so-good repetition.

The instructor is walking by a pair practicing a pick up and lay down drill. “Bill, your pick up is excellent, nice smooth acceleration; make sure you stop at 1 o'clock. Jim, hold your noodle back here at 1 o'clock; when Bill hits it with his rod, he'll know he needs to stop.”

Now, leave that pair and go to the next pair. Jim is paying very close attention to where the rod should stop.

Partners use each other to verbalize and clarify learning through self-reflection. “Take 15 seconds each to discuss with your partner the most important thing you learned in the last half hour.”

### ***Praise, Prompt, Leave (PPL)***

#### The Process:

1. When you see the error, take two relaxing breaths and clear your mind.
2. Take a second look at the work, and ask yourself, “What is right so far?”
3. Choose two features of correct performance that would be most useful in serving as a springboard to the prompt.
4. Describe these two features in simple declarative sentences.
5. Describe what you want the student to do next in one or two simple declarative sentences.

#### Why use PPL?

1. Enables instructor to move more rapidly in large groups. Don’t get “stuck” with one pair!
2. Allows instructor to give frequent positive feedback.
3. Helps embed in the instructor and student the idea of sequential learning.  
Instructor needs to find the first error in the sequence, correct that error, and then move on.
4. Allows instructor to avoid referring to a negative action on the part of the student.  
This teaching tactic minimizes the negative and instead, focuses primarily on the positive.
5. Helps reinforce the idea of simplicity thus eliminating cognitive overload. Correct one error at a time!

### ***Visual Instructional Plan (VIP)***

The VIP acts as a recipe for the student. The VIP is a step-by-step sequential summary of the skill being learned. It is a note card for students to help them learn the task and be able to take it home.

#### Why use a VIP?

1. In group lessons this allows the instructor to better utilize PPL.

2. "Mary, check your VIP and look at Step 4; concentrate on stopping your rod at the 1 o'clock position." Mary now hears the step, reads/sees the step, and then practices the step.
3. The VIP allows the student to gain a degree of self-sufficiency not otherwise possible. In a group of 20 people, the lone instructor may only get around to each pair every 2 minutes. (PPL is required!) If all pairs have a VIP, they can work independently while waiting for the instructor.
4. When the student goes home, he or she is more likely to practice effectively if he/she has a VIP.

## **Structured Lesson Plans**

The following lesson plan is a good model to follow whether teaching one person for 1 hour or a large group for 4 hours. All the steps should be followed whenever possible and in the order presented.

### **Setting the Stage (10% of the total time)**

Setting the Stage represents the "preliminary business" of the lesson, which precedes the presentation of new material.

#### *Raise the level of concern:*

Why is the mastery of this skill of immediate relevance and importance? (motivation)

#### *Review:*

What skills from yesterday and other previous lessons will we be using today? Perform them as a warm-up.

#### *Goals and Objectives:*

What will we be doing today, and what will we attempt to achieve? Why? What will students be expected to learn?

### **Acquisition**

#### *Explanation: (Less than 5% of the total time)*

Explain the nature of the skill and related conceptual material as well as the steps of skill performance in sequence.

#### *Modeling: (Less than 5% of the total time)*

Demonstrate the entire skill and then the steps involved.

#### *Structured Practice 1: (25% of the total time)*

Walk the group through the performance of the skill all together, one step at a time, in a highly structured fashion.

*Structured Practice 2: (25% of the total time)*

Using the VIP, the student now reviews and teaches the task with another student – one step at a time. Teacher circulates and uses PPL.

### **Consolidation**

*Guided Practice: (30% of the total time).*

The student begins “putting it all together” by smoothing out transitions between steps. The student repeats skill performance semi-autonomously with periodic monitoring and corrective feedback as needed. Instructor uses PPL to “work the crowd.”

*Generalization and Discrimination:*

Variations of the skill should be learned, and predictable errors and misconceptions must be discriminated in order to prepare the student for thoroughly autonomous Independent Practice.

*Independent Practice: (A VIP – Visual Instructional Plan helps.)*

Independent Practice assumes mastery to the point that the student can, in effect, be his or her own teacher. Thus, Independent Practice should only follow a demonstration of skill competency during Guided Practice. In addition, the student must be able to discriminate a good repetition from a poor repetition.

## **Structured Practice**

*Structured Practice* is the most important part of the lesson. Teaching holistically is a good way to delay or even prevent learning. As an example, when we watch the typical roll cast instruction many students need to be continually reminded to tilt the rod to the side. Just as commonly, the student hurries his/her rearward lift so that the line flies behind them, or they tilt the rod back to 3:00, or they start too fast on their forward cast, or they don’t stop high enough on the forward cast. *Or any combination of the above.* The end result is a student practicing the cast with multiple faults, and the instructor pointing out the errors over and over - too often with little improvement. Using this methodology, by the time the student has a rod and line and starts the roll cast sequence they have tilted the rod to the side 42 times. Students have raised it to the D Loop position 36 times - *slowly*. Students have checked their hand/wrist/rod position 36 times. Students are developing myelin, incorrectly referred to as muscle memory. (A great book on this subject is *The Talent Code* by Coyle.) Students are imprinting success with few errors. The instructional effort is placed at the *beginning* of the teaching sequence instead of less effectively at the end. “Pay me now or pay me later.”

Maybe the best analogy for Structured Practice is the auto industry. After every step of the manufacturing process the product is checked for errors - imagine what would happen if they built the entire car and *then* checked for errors? The object of structured practice is to ELIMINATE FAULTS AS WE BUILD THE SKILL!

There is no substitute for practicing the delivery of your presentations. Practicing them often will build your confidence and hone your delivery. Doing so with a casting partner can benefit both of you.

Note: For a detailed look at Structured Practice in a group setting, refer to Mazarella, D., Large Group Instruction, *The Loop 2015*.

## Appendix C – Lesson Plan Examples

### A. Example 1: “Let’s learn the Pick-up and Lay Down Cast” – Lesson Plan

Demonstration of the entire cast: Silently perform the cast 2 – 3 times.

Describe the Purpose of the Pick-up and Lay Down Cast is to simply present the fly to a fish or to slightly change the direction of the cast. The Pick-up and Lay Down Cast is a fundamental cast when learning to fly cast and all other overhead casts use the elements found in this cast. (FYI – This last sentence is called an “anticipatory set” or “hook” in teaching and gives the students an incentive to learn this cast. All good casting lesson plans have a “Hook.”)

List the Steps of the cast (while performing the cast):

1. Start
2. Accelerate to a Stop
3. Pause
4. Accelerate to a Stop
5. Drop

If necessary, provide a few more Details for any of the steps:

- A proper Start requires the line to be straight out in front of you with no slack and the rod tip in the water
- Start by slowly lifting, then without stopping:
- Accelerate smoothly
- Pause to allow the line to unroll in the air behind you
- The Drop positions the rod tip and line on the water for another cast or to catch a fish!

Have the students Pantomime the cast with just their index finger while you say the steps as you cast.

Make any Adjustments to the students’ pantomime technique as necessary to confirm their comprehension.

Ask the students if there are any Questions.

End by giving the students their Assignment: Now pull out enough line to make a 35’ cast and make 20 Pick-up and Lay Down casts using the 5 Steps you just learned.

After the students complete their assignment, gather together to cover the most frequent Faults & Fixes.

*Lesson plan provided by: Willy George, MCI, THMCI*

## **B. Example 2: Lesson Plan for a Reach Mend without Slipping Line – (1 hour lesson plan)**

### **1) Term clarification - 5 minutes**

- a) Discuss the difference between a presentation cast and a presentation mend.
  - i) A presentation cast is the result of rod motion during the casting stroke.
  - ii) A presentation mend is the result of rod motion after the casting stroke.
- b) Difference between on water mends and aerialized mends
  - i) water mends reposition the line after it has landed on the water
  - ii) aerialized mends reposition the line before the line lands on the water.

### **2) Move into Reach Mend specific information - 5 minutes**

- a) Tell purpose of Reach Mend
  - i) to position the fly line and leader upstream of the fly.
- b) Tell benefits of the reach mend
  - i) main benefit - creates a longer drag free drift due to the line and leader being upstream of the fly
  - ii) positions the fly to land in the fish's feeding lane while the fly is in the air
  - iii) mend is not spooking a fish due to lack of water disturbance
  - iv) line is mended before water currents have affected the line.
  - v) casting fly past target area to aim and then pulling it back to the target. (i.e. casting over feeding lane, upstream of the fish, the mend puts fly in the feeding lane to float down to the fish)

### **3) Teaching Reach Mend - 15 minutes**

- a) Demonstrate mend to students
- b) Teach steps of mend
  - i) loops should have straight fly leg
- c) cast in a more vertical plane
  - i) slower casting speed
  - ii) slightly higher trajectory in front allows more time to mend
  - iii) on presentation cast, after normal stop, reach the rod tip straight left or right (upstream) by drawing the line from the stop position directly to water level at a 90-degree angle
  - iv) drag line straight in the air while making the mend to ensure the line lands straight

#### **4) Practice - 25 minutes**

- a) with pool noodle as a group (optional)
- b) pair up if larger class
- c) cast without line by holding the line against rod
- d) cast with line to targets.

Have contact with every student as they complete the cast. Praise, Prompt, Leave.

#### **5) Main faults**

- a) not having a defined stop prior to reach movement.
- b) too low of a trajectory that does not allow time to complete the reach
- c) too small of a reach angle that does not get the line and leader behind the fly
- d) not allowing for the shorter casting length due to line being taken up by the reach movement, resulting in the fly being off target.
- e) reaching rod down, then across to make the mend instead of just across. This reduces time to make the mend.
- f) not pulling the line straight in the air on the mending movement, which results in slack in the line as it lands on the water and creates drag.

#### **6) Summary - 10 minutes**

- a) Review steps
- b) questions or problems

*Lesson plan provided by: Trisha Campbell, CI*

## Appendix D – Review Questions

As you prepare for the exam the following questions can guide you in organizing your understanding of each exam task.

- What does this cast have to do with casting instruction? Why is it used?  
What are the basic requirements to learn this cast?
- How is this cast used when fishing?
- How would you teach this skill/cast? (Include analogies, progression of the lesson, say-see-do techniques.)
- What are common faults in this skill/cast? How would you identify them?  
Know Bruce Richards' Six-Step Method. How would you correct them?
- What are the primary Five Essentials involved in performing this task/skill?
- What drills would you suggest when practicing this skill/task?

### Sample Questions by Topic

#### Loop Control

- What are the rod tip paths that produce a narrow loop, wide loop and tailing loop?
- Name two actions that result in a tailing loop.
- How does the path of the rod tip relate to the size of the loop?
- How does the 180-degree principle apply to overhead casting?
- If the casting arc is too wide for the bend of the rod which loop shape will result: wide, narrow, or tailing?
- When comparing a bamboo rod with a fast action graphite rod, which will have a wider casting arc when false casting similar loops?

#### Line Control

- What is a mend?
- Why would you slip line or not slip line during a reach mend?
- What fishing situation would you use a pile cast?
- What is an elliptical cast and when might you use it?
- What are the fishing benefits of learning how to cast from the vertical plane to a more horizontal plane?
- What casting adjustments need to be made when casting from a vertical plane to a horizontal plane?
- When would you want to use a reach mend?

#### Roll Casts

- Describe the 180-degree principle for anchored casts as it applies to the roll cast.
- In what fishing situation would you use a roll cast pickup?

- If too much force is applied too early during a roll cast what happens to the loop?
- What are at least three reasons we do a roll cast?
- Is a roll cast a good change of direction cast?

#### Accuracy Casts

- How does fly line trajectory affect accuracy?
- What changes in timing (pause) occur when casting from 20' to 45' (with similar casting speed)?
- How do I correct my fly landing to the right or left of the target?

#### Distance Casts

- How much line can we typically shoot?
- When casting a distance of 75', approximately how much line will need to be carried in the air during false casting?
- As the casting distance increases what happens to the length of the haul?
- When teaching the double haul, how do you teach when the haul begins?
- What results happen if the haul is too early?

#### Teaching Tasks

- When you are demonstrating a cast where should the observer stand relative to you and the sun?
- What is the biggest risk in your instructional approach when teaching a beginner?
- What teaching tools would you employ to demonstrate rod tip path to a beginner?
- When would the PULD cast be used?
- Where should an instructor stand to best identify poor tracking?
- Define Gammel's Five Essentials and integrate each in Task 21 Adjustments to change distance from 30' to 50'.
- What is the most important concept to convey in teaching Task 22 when casting with wind?

## **Appendix E – Test Day**

### **Before Exam Day**

Scout out the location. Directions. Parking. Restrooms. Food and drink. Grass area: sun, background, shelter from wind. Find out if water is available for the roll casts. If there is, practice the roll cast on water and the grass. Sort your equipment out the night before. Clean the fly line, add and stretch new leader and tie-on new yarn.

### **Exam Day**

Make sure you arrive early to set up and warm up. Keep a positive attitude. If you have a pre-test routine, stick to it. Give the examiners space before the Exam. They often need to meet to get themselves organized, especially at events with several candidates.

### **Setting the Casting Course**

Examiners may have set up a course. Review it with them. If you are not happy with it, indicate that you'd like to change it. Examiners are very agreeable to changing the course to your liking, other than changing distances. Make sure the cones are the way you want them, often the way in which you practice. If you want to use your own gear, say so. If you set up your own course, walk through it with the examiners. Pay careful attention to background and wind. Make very sure you can see your front and back loops.

### **Wind Direction**

Getting this right is critical. When testing the best wind direction for all casters is when the wind is blowing from the non-casting arm side. Most also prefer it to be slightly from the back. Practice to see what you prefer and make sure the course is set up with your preferred wind direction. Remember you can change direction if conditions change.

### **During the Exam**

Trust your training and preparation and try as much as possible to relax. Your examiners know most candidates will start off a bit nervous and will do their best to help you over any initial nervousness. They will first run you through how your assessment will work, as they do with all FFI Exams.

Exhibit a positive, can-do, confident, and keen-to-learn attitude. Don't hesitate to call for a break. Unless you need to say something, don't. Avoid volunteering things and offering gratuitous opinions. Stick to the task at hand. Use as few words as possible when answering questions. Answers should be concise and accurate. If your examiners want more, they will ask. It's a good idea to make sure you are clear with your examiners whether you are answering a question or speaking as you would to a student or to another instructor.

### **Do-Overs**

Do-overs can result from examiners just needing to take another look. But it is more likely that they may have seen something that does not meet Task requirements. They are generally

supposed to let you know why they are asking to see the cast again. If you think your cast may not have met task requirements, think very hard about what the problem might be before casting again. In your mental review, consider the scoring boxes, which contain many of the most common problems candidates encounter. If, however, you are sure you made a good cast just relax and do it again.

Listen closely and be very attentive to direct and indirect prompts from the examiners. They can't tell you how to fix things, but they can sometimes give prompts or ask helpful questions. As examples, "How might you fix a student's wide back cast?", "What is good tracking?" Alternatively, they might offer a reminder of a task's expectations, and follow with a repeat request. These prompts should be sending you a very loud and clear message of what the examiners want to see done differently.

### **Mistakes**

We all from time to time make truly horrible casts that fail entirely. If this happens, you can deploy your sense of humor and proactively turn it into a teaching moment. Let your examiners know what happened and how you plan to fix it.

### **After the Exam**

Some of the FFI's most able and experienced instructors have spent a lot of time watching very carefully and taking extensive notes on your performance. This is a gold mine of information that you should take advantage of, win, lose or draw.

If you passed, you should make every effort to get feedback while the team is still there, and their memories are fresh. Some examiners are a bit reluctant to point out things a passing candidate can improve on for fear of dampening a successful experience. So just ask. Be sure to get a photo of you with the examiners and a photo of the last page of your exam. Review the paperwork process with your examiners.

If you did not pass, above all, make every effort to be calm, receptive and professional. Take a deep breath, a drink of water and perhaps a moment to yourself, if needed. Examiners know how hard it is to fail. They will review the exam with you and should send notes a few weeks after the exam. Stay in touch with them and be sure you understand where the improvement needs to be made. It is the wish of your examiners that you give it try again when ready and pass.

## Appendix F – Resources

**FFI Website:** [www.flyfishersinternational.org](http://www.flyfishersinternational.org)

- FFI Online Webinars  
<https://www.youtube.com/user/fedflyfishers/playlists>

### Videos

Joan Wulff Teaches Fly Casting: Search Vimeo

Sample: The Roll Cast <https://vimeo.com/70576601>

Fly Casting Tips and Techniques Distance Fly Casting: George Revel

<https://www.youtube.com/watch?v=EBKgdd6QA9g>

How to Master the Roll Cast: Carl McNeil

<https://www.youtube.com/watch?v=aRaCV5c63mY>

Tips for fly casting in the wind: Carl McNeil

<https://www.youtube.com/watch?v=4zH0uA9xLY0>

The Orvis Company – Fly Casting Pete Kutzer

Be an Archer with your cast: Molly Semenik & Heather Hodson

[https://www.youtube.com/watch?v=mUrjXyxsI\\_Y&list=PLFbpDTLLWc0971h14MtlkDHgbn-rrPmkl&index=18](https://www.youtube.com/watch?v=mUrjXyxsI_Y&list=PLFbpDTLLWc0971h14MtlkDHgbn-rrPmkl&index=18)

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