THE LOOP

The Federation of Fly Fishers Journal for Certified Casting Instructors
Summer 2007

Intro to the Double Spey

By Greg Pearson

The Double Spey is a great cast and probably one of the easiest speycasts to learn with either a double handed or single handed rod. The Double Spey is a downstream shoulder cast, meaning the formation of the backcast (also know as D loop) is always on the downstream side of your body. This makes this a perfect and very safe cast for when the wind is blowing downstream.

One of the reasons that the double spey is a relatively easy speycast to learn is because it breaks down into 3 segments. We can get comfortable with the first stage (the foundation), then add the second stage (the support structure and walls) and finally the third stage or outbound cast (the roof if you will). If we build this cast one stage upon the other it will go quickly and we are less likely to end up with a good looking roof only to find out it doesn't function well due to a shaky foundation or support structure.

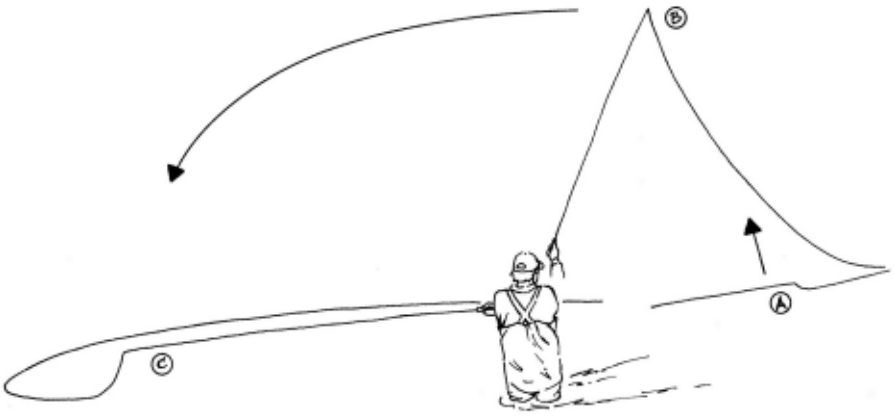
One of the reasons that the double spey is a relatively easy speycast to learn is because it breaks down into 3 segments. We can get comfortable with the first stage (the foundation), then add the second stage (the support structure and walls) and finally the third stage or outbound cast (the roof if you will). If we build this cast one stage upon the other it will go quickly and we are less likely to end up with a good looking roof only to find out it doesn't function well due to a shaky foundation or support structure.

To set the scene, imagine that you are looking down river and standing on the right bank or what we would call river-right side and your line is washed tight in the current directly downstream from you. Our goal is to get the fly from down river directly below you to out into the middle of the river at an angle of 45-90 degrees depending on the situation.

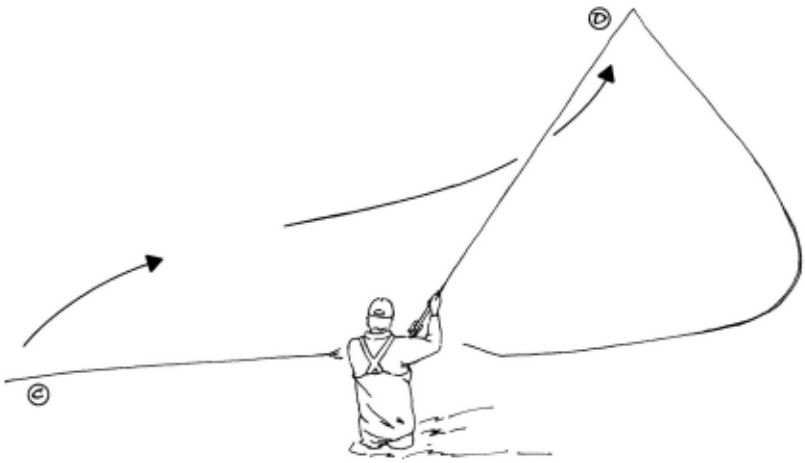
Stage One

The first stage to the double spey is simple but very important. Our goal here is to take the line that is dangled below us in the current and reposition it so that the end of the fly line is a rod length away and downstream of our right shoulder. To accomplish this start with your rod close to the water **(A)** and aiming down the line lying on the water. Slowly lift the rod to around 1 o clock **(B)** above you and slightly out over the river. At this point let the rod tip complete the arch shape so that it ends up close to the water's surface up stream of you **(C)** by simply letting your right arm cross over your left. Now inspect the line. If the end of the line (the nail knot or loop that connects fly line to leader) is a rod length away from you on your downstream side then you are ready for the second stage of the cast. However, if the end of the line is too far downstream or up near or above you, rollcast the line back downstream and try again this time using less force if the line went too high or more if it didn't make it far enough up stream. Don't proceed until you can place the end of the line consistently rod length away on the downstream side.

(continued on page2)

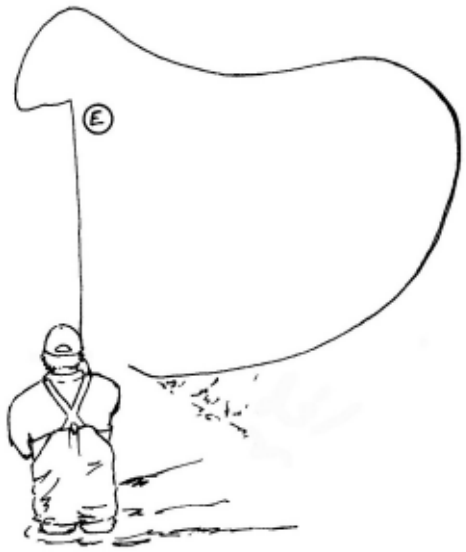


Double spey - Stage 1



Double spey - Stage 2

Double spey - Stage 3



Stage Two

Our goal with the second stage is to sweep the line off of the water in front of us and reposition it into a D-loop (backcast) directly opposite or final target with the leader and a couple feet of fly line still stuck to the water's surface. We ended stage one with the rod tip upstream of us and near the water's surface **(C)** with our arms crossed. Now start slowly sweeping the rod tip out in front of you low to the water and ever rising (never dipping). The rod is going to travel in an arch out in front of you, climbing and accelerating with a bit of an up lift to a positive stop over your right shoulder at the 1:00-1:30 position **(D).** If done correctly you should be in the firing position for your forward cast with rod back at 1:30, the end of the line and leader are lined up and pointing at your target and a back cast that looks like a pointy D. It is very important as the rod tip travels from **(C)** to **(D)** that it does so in an arch out toward the middle of the river and then back behind you and up to 1:30. Once you are doing this with regularity continue onto the 3rd stage.

Greg Pearson is a CI from Salt Lake City, Utah

Stage Three

The third stage is the forward cast. With a single-handed rod, start slow and accelerate to a hard stop just like your regular overhead cast. It is the same with a double-hander but now we can take advantage of the long lever and two hands to work it. Keeping your rod pinned at 1:30 with your bottom hand slightly in front of your top hand slowly start your forward stroke accelerating both hands forward. Just before the hard and high stop of the rod pull the bottom hand into your belly. This late pull with the bottom hand makes this a very efficient lever and generates your line speed. Remember that the line follows the path of the rod tip so track straight to the target and stop the rod high **(E)** for a nice tight loop.

Happy casting, good luck and have fun.

For more information on speycasting, check out the DVD called 'Spey to Z', presented by Scientific Anglers. Our author, Greg Pearson, Way Yin and Topher Browne are in it and all proceeds go to various conservation efforts.

Casting Physics Simplified

by Walter Simbirski

This paper provides two part overview of physics as it applies to flycasting. It is intended as an introduction to basic physics for those who do not have a background in the subject or as a refresher for those who have but would like a quick review.

The concepts discussed in part one of this paper include:

* scalar and vector quantities
* vector mathematics
* velocity, acceleration, force, momentum, energy
* potential and kinetic energy
* conservation of energy

Who is this paper intended for?

People who want a refresher or haven't studied these concepts and would like an introduction.

Scalars and Vectors

First let's take a look at scalar versus vector quantities. In order to understand the difference between speed and velocity we need to understand the difference between scalar and vector quantities.

By definition, a scalar quantity is one that has magnitude, or a measurable amount such as miles per hour, only. A vector quantity is one that has both magnitude and direction.

Speed is a scalar quantity. Velocity is a vector quantity.

Why is this important? Imagine that I leave my home city of Calgary and travel at a speed of 60 miles per hour for three hours. Where am I at the end of three hours? Without knowing the direction I'm traveling in I could end up in Edmonton, Montana, British Columbia, or even Saskatchewan (well – almost in Saskatchewan).

Now let's do the same exercise but specify that I am traveling due north, i.e. I travel at a velocity of 60 miles per hour due north for three hours. Where do I end up? Unfortunately for me, I would be in Edmonton.

Other examples of scalar quantities are time, speed, temperature, density, mass, energy, and volume.

Examples of vector quantities are velocity, acceleration, and force.

To recap: A scalar quantity is one which does not depend on direction. A vector quantity is one that has both a magnitude and a direction.

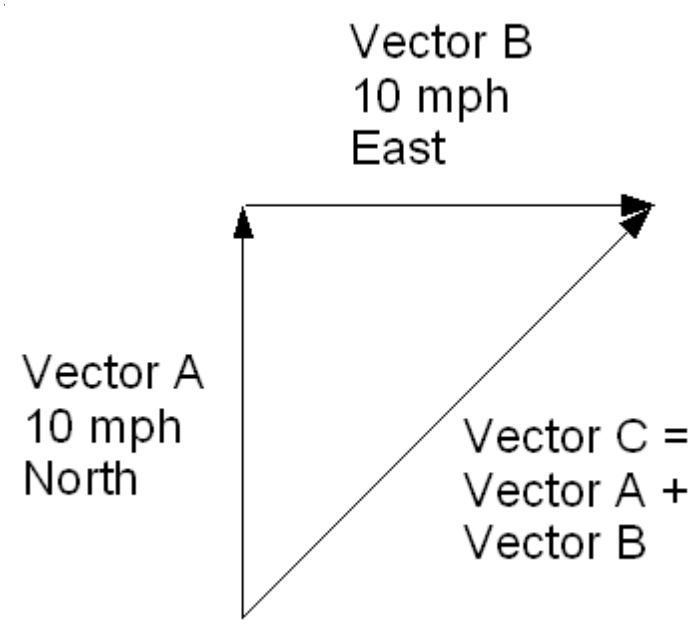
Vector Mathematics

Another aspect that differentiates scalar and vector quantities is the mathematics required to combine vector quantities is a bit more complex than combining scalar quantities.

As an example, imagine that we are standing on a frictionless surface and there is a 10 mile per hour wind blowing. After a while we would end up sliding across the surface at 10 miles per hour. Now if the wind speed increased by 10 miles per hour we would eventually end up being blown along at 20 miles per hour. When talking about speed we can say that 10 miles per hour plus 10 miles per hour equals 20 miles per hour.

Now let's change things a bit. Let's say that the wind is initially blowing at 10 miles per hour due north. If the wind speed increases by 10 miles per hour in a due northerly direction then we will end up traveling at 20 miles per hour due north. Our speed is 20 miles per hour, our velocity is 20 miles per hour due north.

But what if the wind is initially blowing 10 miles per hour due north and now a cross wind of 10 miles per hour due east is added? How fast are we going now? What direction are we going in?



If we look at the representative diagram we can see that our direction would be north east. In addition we could measure vector C to determine its magnitude. Another way to determine the magnitude of vector C is to use Pythagorean theorem, i.e. In a right triangle the square of the hypotenuse is equal to the sum of the squares of the other two sides.

In mathematical notation:

$$C^2 = \sqrt{A^2 + B^2}$$

In this case the magnitude of C is approximately 14 miles per hour.

(continued on page6)

To recap: To add scalar quantities we simply add the magnitude of the quantities. To add vector quantities we can draw the two vectors on a graph and measure the results, use Pythagorean Theorem, or use trigonometry to determine the resulting magnitude and direction.

Acceleration and Velocity Defined

Velocity is the combination of speed and direction. When we say the velocity of an object is constant we mean that both the speed and direction of the object are not changing.

Another definition for velocity is the rate of change of position. If we know the position of an object at a specific time and at some later time we find the object has moved to a different position, then we can determine the change in the object's position and, since we know how long it took for the object to move to the new position, we can determine the average velocity of the object. Note that this is the *average velocity* since we don't know the path that the object traveled to get to the new position. The object may have actually traveled to the new position indirectly.

Acceleration is any change in velocity. If either the speed of the object is changing AND/OR the direction of the object is changing then the object is accelerating. If the speed remains constant but the direction is changing then the object is accelerating. If the direction is constant but the object is speeding up then it is accelerating. If the direction is constant but the object is slowing down then the object is accelerating.

You may want to say the object is decelerating, and you would be correct, but physicists prefer to call this negative acceleration so that they don't have to keep using different symbols when a negative sign will do the trick, e.g., if an object's current speed is 10 mph and we decelerate at 10 mph per second (assuming deceleration in the same direction we are traveling so we can avoid vector mathematics for now) we could calculate the object's speed in one second using deceleration as:

$10 + (-10 \times 1) = 0$

or using negative acceleration:

$10 - (10 \times 1) = 0$

In this example the difference is minor but in more complex examples it can become tedious to try to keep track of the various signs.

To recap: Velocity is a combination of speed and direction. Acceleration is any change in velocity. If an object in motion changes its speed or direction then it is accelerating.

Force

The Most Important Equation in Fly Casting

$$F = m \times a$$

Where:

F = force
m = mass
a = acceleration

i.e.: Force equals mass times acceleration.

What this tells us is that if we see an object accelerating through space and we know the mass of the object then we know how much force is being applied to the object. Not really exciting in that context but let's rearrange the equation a little bit:

$a = F / m$

Now we can see that if we apply enough force to an object to move it, then we can tell how fast that object is going to be moving at any time after we begin applying a force to the object.

Some things to consider here:

* Once we get the object moving it will continue to accelerate if we continue to apply force to it. It doesn't matter how small the force is, as long as any force is applied to the object, the object will accelerate.
* If no forces are applied to an object that is currently in motion it will continue to move in the same direction and at the same speed forever. Another way of saying this is – an object in motion tends to stay in motion unless acted upon by an external force. In the real world no object maintains the same velocity forever because we cannot completely escape external forces such as friction or gravity.
* One way to cast our fly line farther is to get it moving faster. To make it move faster we can apply force for a longer period of time. The velocity of the object is directly related to how long we apply force to it, i.e. if we apply the force twice as long then we double the velocity of the object. Another option is to apply a greater amount of force. If we apply a force to an object then after 1 second it will be moving with a given velocity. If we double the amount of force we apply to the object then after 1 second its velocity will be doubled. When we are casting a fly we are limited to the how long we can apply force because we can only move the rod tip a certain distance before we "run out of arm". What if we make one cast with the maximum rod tip travel we can attain and then repeat the same cast but apply twice as much force? How much faster will the rod tip be traveling at the end of the second cast? We can use the equation that relates distance to acceleration as follows:

  $d = \frac{1}{2} at^2$

  Where:

  d = distance
  a = acceleration
  t = time

  A little manipulation and we can see that:

  $t = (2d/a)^{\frac{1}{2}}$

(continued on page8)

This tells us that if we double the acceleration over the same distance we decrease the amount of time we are applying the force to roughly 70%. This means that the rod tip velocity we attain at the end of the cast is 140% of the velocity we achieved when applying half as much force. Note that this does not take into account that the rod flexes during the cast and unloads at the end of the cast.

* If something we measure doesn't change over time then we say the value being measured is constant. For example, if a car travels at 60 miles per hour for some period of time then the car is said to be traveling at a constant speed of 60 miles per hour. If the force and mass are constant then the resulting acceleration is constant. We use the term "time varying" when something doesn't stay constant. You could say that an object which is experiencing acceleration is experiencing time varying velocity. If the force or mass of the object is time varying then the acceleration will also be time varying.
    * How could the force change or be time varying? Think of applying pressure to your car's gas pedal gradually – the harder you press on the gas pedal the greater the force the engine will apply to the drive train and the greater the acceleration you will experience while sitting in the car. You could have an increase in negative acceleration by gradually pressing on the brake rather than the gas pedal.
    * How could the mass change? Think of the space shuttle at launch time. As soon as the rockets are ignited they go to full on and stay full on until the fuel is exhausted. The force applied to the shuttle is constant while the rockets are on but the fuel is burned up within a few minutes resulting in a constant decrease in mass while the rockets are on. This means that the acceleration is increasing since the mass of the shuttle is decreasing.

To recap: If you apply enough force to an object to get it to move the object will accelerate as long as force is applied to it. Take away all forces and the object will continue to move in the same direction at the same speed forever. The acceleration an object experiences can be predicted with the equation a=F/m.

Kinetic Energy

Once we have an object moving it possesses kinetic energy. The amount of energy is defined by the equation

$E_k = ½ mv^2$

Where:

E_k is the kinetic energy of the object
m is the mass of the object
v is the velocity of the object

Conservation of Energy

In a closed system, i.e. one in which energy cannot enter or leave, the total amount of energy in the system remains constant. Energy can be converted from one form into another, such as when kinetic energy is converted to heat, but the total amount of energy remains the same. While we would need to expand any system in the real world to include the entire universe in order to have a truly closed system we can sometimes find systems that act like a closed system for brief periods of time.

A whip or fly line can approximate a closed system at times, especially when a crack sound is generated as the loop travels down the line or whip. If we are not shooting line then just like the whip the mass of the moving part of the line decreases as the loop moves to the end of the line or whip. But since energy is conserved the velocity of the whip will increase. The cracking sound occurs when the speed of the moving part of the whip exceeds the speed of sound and breaks the sound barrier. The same thing happens when a fly line makes a cracking sound. It should be noted that whips are intentionally designed to crack while fly lines are not. The mass, very noticeable taper, and low internal resistance of the whip make it relatively easy to generate the cracking sound. Fly lines have much lower mass, less noticeable tapers, and relatively high internal resistance all of which make it more difficult to make a cracking sound with fly line.

If we are shooting line then the mass of the moving part of the line is increasing and results in the overall velocity of the line decreasing. You can't shoot line and cause the line to crack.

Momentum

In a sense we have already discussed momentum. Momentum is the property of an object to remain in motion, or at rest, when there are no external forces acting upon it. In other words - if no forces are applied to an object that is currently in motion it will continue to move in the same direction and at the same speed forever. If the object is currently not moving then it will not move unless some external force is applied to it.

Momentum is defined by the equation:

$p = m \times v$

Where:

p = the momentum of the object
m = the mass of the object
v = the velocity of the object

Momentum is sometimes referred to as inertia, or more properly – inertial mass. Momentum gives us an idea of how difficult it would be to slow down, or stop, a moving object. We can see that if two objects are moving at the same speed the object with the greater mass will require more effort to stop. It's one of the reasons that one can cast a heavy fly line farther than a lighter line.

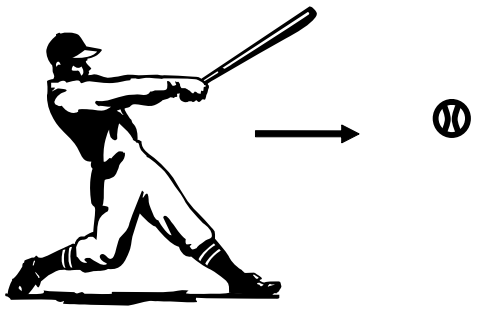
Because momentum is based on velocity it is also a vector quantity.

Vector Mathematics Revisited

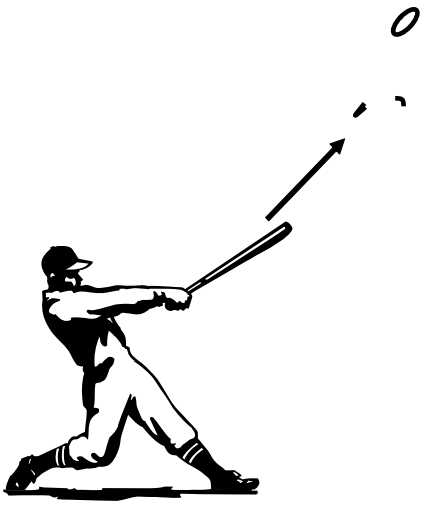
Mathematicians and physicists like to use vectors because it simplifies certain calculations.

For example, imagine hitting a baseball. If we hit the ball squarely so that it travels horizontally we can see that all of the baseball's momentum is directed horizontally and we can perform various calculations to tell us how fast the ball is moving, etc.

(continued on page 10)

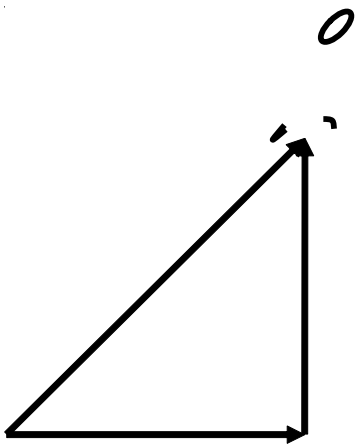


But what if we hit the ball upwards at a 45 degree angle? The ball will be traveling horizontally as well as upwards but how fast will it be traveling horizontally?



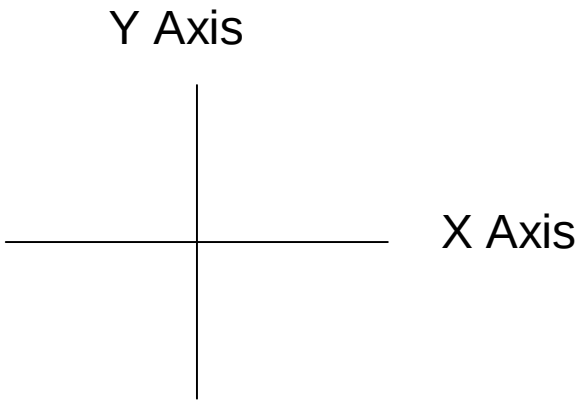
If we rely on intuition we would be tempted to say that, since the ball is traveling upwards at the same speed as it is traveling horizontally the horizontal speed must be half of the total speed but that would be wrong.

Instead, consider the following diagram. In this case, if the length, or magnitude, of the vector going up at a 45 degree angle is 1 then the length of the horizontal and vertical vectors will be roughly 0.7. You can calculate this by using the Pythagorean theorem (i.e., the square of the hypotenuse is equal to the sum of the squares of the other two sides), by using trigonometry, or simply by measuring the sides of the triangle.



Now that you know the velocity of the ball in the upward direction you could calculate how far it is going to travel before striking the earth. For example, if the upward portion of the ball's velocity is 64 feet per second, the force of gravity will slow it down by 32 feet per second every second. In other words, in 2 seconds the ball will stop traveling upwards and will begin to fall. Since the force of gravity is constant the ball will take another 2 seconds to return to the earth (more accurately to the height at which it was hit but we will ignore this for the sake of simplicity). So it takes a total of 4 seconds for the ball to reach its peak and then fall back to earth. During this 4 seconds the ball was also traveling horizontally at 64 feet per second so it traveled 256 feet. By separating the horizontal and vertical components of velocity we are able to determine the horizontal distance the ball travels without a lot of complex calculations.

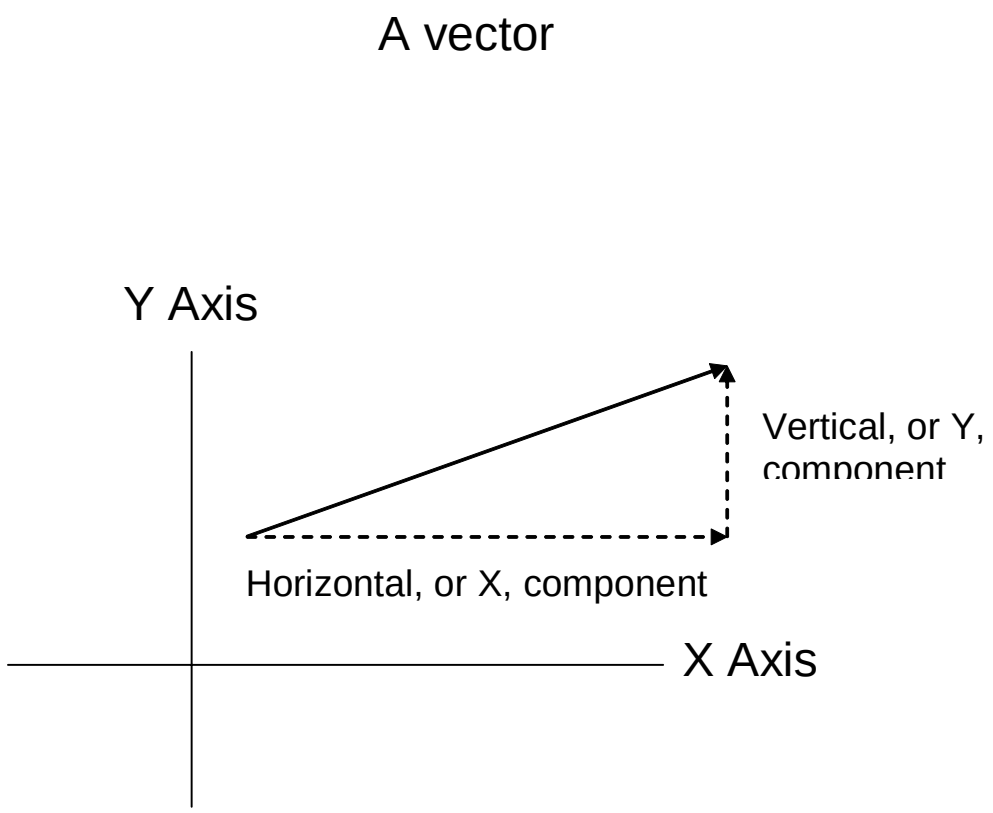
If you remember all of those boring graphs you were forced to draw in school you will remember that the axes of the graphs were labeled with the X axis representing the horizontal direction and the Y axis representing the vertical.



Any vector that we draw on the X and Y axis charts can be represented by a combination of a horizontal and a vertical vector. The horizontal and vertical vectors are called the components of the original vector.

(continued on page 12)

Any vector that we draw on the X and Y axis charts can be represented by a combination of a horizontal and a vertical vector. The horizontal and vertical vectors are called the components of the original vector.



To Recap: A vector can be broken up in to component vectors. Using components can simplify some calculations

Part Two

In part two of this paper we will talk about angular or rotational mechanics and frames of reference.

So far we've talked about linear mechanics – the type of physics associated with things that move, or try to move, in straight lines. But what about things that rotate, or spin, or travel in a circle such as a spinning top, the movement of the earth around the sun, or the loop in a fly line?

When something is traveling in a circle, like the tip of a propeller blade, then it is constantly changing direction and, by our previous definitions, the object is constantly accelerating. If we try to represent the movement by component vectors then the component vectors are constantly changing as well. This can make calculations regarding the movement of the object very complicated.

Another concept we will discuss in part two is frames of reference, i.e., how or where we look at a system in order to simplify our understanding of it.

From The Editors

Its that time of year again - Conclave time. Yeah! Are you going to be there?

Hope you enjoy this issue! We have started working on the principal that if no one complains, we must be doing a good job. Let us know if you have any comments.

It has been a busy spring for me so hope you have been busy as well with casting or fishing projects.

I had the privilege of attending the four day Casting Event in northern Italy at the begining of June. We certified CIs, MCIs and THCIs. A real success! We met some awesome people and fell in love with Italy.

Back home in British Columbia, the weather has been very unusual - we keep waiting for spring and now waiting for summer. We have had summer one day at a time and then back to rain and cool weather - its not even decent casting weather - the rivers are too high! Weird weather on the west coast. Who has our sun and heat? I think it is in Montana and is waiting for us at the Conclave.

Back to the Loop now! Please read the article on Tom White. Our fishing and casting community has lost a man who embodied the spirit of teaching and fine casting that we promote. If you didn't know Tom, you would have enjoyed him - a nice man, a fine caster and a knowledgable teacher. He will be missed and hard to replace. Although we count many members of our Casting Program as friends, when I was writing the article, I found out a lot more about Tom aside from the 'casting and fishing side' so have a read.

CONCLAVE 2007

WHAT: Board of Governor's Meeting.

WHEN: Tuesday, July 31

WHERE: Livingston, MT in the HIgh School

All CIs, THCIs and MCIs are invited to attend. We can't promise it will be exciting, but you can meet the Board and see what we do the rest of the year to administer the Casting Program.

Our series on the Two-Handed casts continues with an informative article on the Double Spey.

As well, we have Part One of an article on Casting Physics. There will be a test at the end! So make sure you read and understand it all. Yikes! - physics wasn't my best subject in school so maybe I'll learn something.

And lastly, I would like to thank our authors who so generously contribute articles to the Loop. They put up with my nagging and e-mails asking (sometimes begging!) for articles. Sometimes it takes more than six months for them to deliver but they figure out that I won't go away.

Take care - go casting or fishing - life is short!

Talk to you soon.
Denise & Liz

THE LOOP STAFF

Editors: Denise Maxwell & Liz Watson
goldnwst@telus.net, 604-945-9002
lizz58@aol.com, 305-849-1672
Program Coordinator:
fffoffice@fedflyfishers.org, 406-585-7592
Chair, Board of Governors: Tom Jindra
tomjindra@cox.net, 504-392-7511
Fly Illustrations: Jason Borger

You can have a link from your FFF website listing to your own e-mail address.
We welcome your submissions via e-mail.
Please attach a short (1-3 sentences) instructor biographical statement, including your location and Certification level.
Also be aware that the back issues of the Loop are posted on the Program's web site. Any illustrations should be in JPEG format.
The Loop reserves the right to decline any submission for any reason, and to edit any submission.
Submissions may be to the editors or the National Office:

FFF Casting Instructor Certification Program
215 E Lewis
Livingston, MT 59047
Fax: (406)-585-7596

E-mail: fffoffice@fedflyfishers.org

The Loop is a quarterly publication of the FFF Board of Governors for Casting Instructor Certification.

Two Steps to Improve Practice

by Al Buhr

The first step to improvement is to stop deceiving yourself. Practicing with your favorite fishing line that casts “so easy” will feel good, however it will likely slow improvement. A modern fly line will utilize a mix of compound tapers to enhance the presentation and be less demanding in casting skill. This ease of performance is a key component in a great fishing line and in turn, for the same reason, can make it a questionable practice line. Casting with a favorite line is like having a friend that always tells you how great you cast; both may not be telling whole story.

A line to use for practice (single or two-handed) is a Double Taper (DT) line. By design, it is the least forgiving fly line to cast. Its short front taper and long level body demands a degree of skill to cast well. In comparison, the modern fly line will cast with ease in a variety of situations and may mask casting faults and/or inefficient rod mechanics. Use of a double taper line makes any fault obvious and dramatic. During your speycasting practice, maintain a high level of expectation. If your casting performance lowers, do not blame the DT line; rather make improvements to your cast as indicated by the line. This is not an easy line to cast, making it a great tool to reveal your level of skill. For some old traditional speycasters, the DT line remains the only proper line to use, while most speycasters use a version of the modern spey line. There is no doubt, the DT line is a good choice to define anyone’s speycast.

The second step for improving practice is slowing the cast’s tempo to define your technique. After the basic rod movements of a cast are understood, slow the tempo and define the rod’s movements. Slowing the tempo will help to reveal the subtle movements within the cast, as well as, require each of these segments to smooth and align with the next. This will help to harmonize the cast into a fluid movement. Slow the tempo in gradual increments as each reduced pace is mastered.

Slowing the tempo to edge of collapse will reveal the importance of each segment within the cast. This is a good way to learn the “how and why” of each subtle movement. Be objective in analyzing the movements and discover the “nuts and bolts” within the cast. Learning the substance within each cast gives better understanding to in turn, effectively teach others these key elements.

A way to foster a slower tempo is to practice without any fly or yarn. Any hurried movement or inappropriate power application will cause the bare leader to “snap” or “pop”. This is an easy, simple, surefire way to control a beginning speycaster’s tempo.

Slowing tempo and defining the technique is a good way to develop a revealing demonstration cast. Mastering the subtle components within the cast allows a controlled display of the cast. Then, the demonstration done at a reduced pace, allows the students extended time to see the cast form.

Slowing the cast’s tempo is a good way to practice for improvement. A consequence to slowing the tempo, will make the practice session more relaxing and fun.

Practicing to improve your casting skills should be enjoyable, and it is a great way to make your fishing more successful.

Al Buhr is a CBOG and also the Chair of the THCI (Two Handed Casting Instructor) Committee.

AGENDA FOR TUESDAY, July 31, 2007

Board of Governors • Casting Instructor Certification Program •

Federation of Fly Fishers • Park High School • Livingston • Montana

Tom Jindra • Chair

Dan Wright • Acting Secretary

9:00 AM Call to order: Chair Tom Jindra
Call the roll: Acting Secretary Dan Wright (5 minutes)
Election of secretary: Jindra (5 minutes)
Introduction of guests: Jindra (5 minutes)
Additions to agenda: Jindra (5 minutes)
Accept the minutes from 2006: Wright (15 minutes)
Accept retirements: Jindra (5 minutes)
Election of governors: Jindra (5 minutes)
Emeritus nominations: Jindra (5 minutes)

10:00 AM The Loop: Denise Maxwell and Liz Watson (10 minutes)
Awards: Tony Vitale (10 minutes)
Continuing Education: Vitale (15 minutes)

11:00 AM Instructors Test Update: Chuck Easterling (15 minutes), handout at meeting

NOON **Lunch**

1:00 PM Masters Test Update: Sprague (45 minutes)

2:00 PM Two-Hand Instructors: Al Buhr (10 minutes)
Ethics: John Breslin (5 minutes)
Web Site: Denise Maxwell (10 minutes)
Glossary: Bruce Richards (15 minutes)
Disabilities: Phil Gay (5 minutes)

3:00 PM Conclave Casting Program: Larry Allen and Bruce Williams (15 minutes)
Strategic plan: Jindra (5 minutes)
International: Dan McCrimmon (15 minutes)
Election of Executive Committee: Jindra (5 minutes)
Election of chair: Jindra (15 minutes)
Comments from the audience

4:00 PM Adjournment

Teaching the Extremes

by Allen R. Crise

I call this Teaching the Extremes. It is a 'way' the student can take home after the lesson and be able to use to self teach.

I was working on my Rollcasting, Tom White style, during my practice today. I know that Stroke has a lot to do with my rollcast, in getting the rod loaded. What I did not know was how much the micro haul had to do with getting the line speed up.

I worked with my timing on my haul keeping it very short. Just to match the rod's tip in travel during recovery, Short and fast. To my smile was added some Grin. I know that Tom's long arms have nothing to do with his 100 ft rollcast when he put his arms in side his shirt and makes the cast with just his hands out.

So I worked on keeping very tight to the body looking for what it took. I would make a normal forward cast with 45 ft of line out. Watching just my hands. Then shortened my stroke and then my arc to less than normal. Of course I had to add the line speed with a haul. Not getting the deep rod load because I did not have the line pulling out behind me. I made up with more *SPEED* over a short haul.

This was Self-teaching by extremes. Changing one thing at a time from too much to too little. I was able to find just how many *"Zoomies*"* it took to do what I wanted. I set the boundaries that I needed to meet. Then worked on the variables.

You, the instructor, set the boundaries, The student has to find their own *Zoomies**. I will let the student self-learn. They will add too much power, then too little power. Then reduce the too much and add to the too little. This is the self learning by doing the "Extremes". Always allow the student this time. Sure some will be wrong. They will see what happened.

* *Zoomies* is a term from my past nuclear life. It is an unknown force, or speed thing that *YOU* have to find.

I can not tell you to put 14 zoomies into the backcast as you would not covert that into something you knew until you made several casts and found out what <u>your</u> zoomie rate was.

Not really measurable, You can't see them, you know that they are there. As an instructor you can set the boundaries only zoomies come from practice.

Allen R. Crise is an FFF-Master Casting Instructor and FFF-SOC VP Education from Glen Rose, Texas

Rod Tip Path

Its Effect on the Cast

by Bruce Richards

The top guide of the fly rod is the direct connection between a flycaster and his/her fly line. The path that the tip of the rod takes during the cast determines what the fly line will do, understanding the relationship between the path the tip takes and what the fly line does can be very helpful in understanding and improving casting.

The line goes where the rod tip goes, if the tip travels in a straight line (See fig. 1) so does the fly line, resulting in a small, tight loop. What happens when the tip doesn't travel straight?

The most common "alternative" tip path, especially among beginners, is what I call a convex, or "domed" path. (See fig. 2). When the rod tip travels in an upward arc during the cast it tends to throw the top of the loop high, and the bottom of the loop low. Loops with high tops and low bottoms are, by definition, wide, inefficient loops. This usually happens when an angler bends his/her wrist too much during the casting stroke. Controlling the bend of the wrist causes the rod tip to travel in a straighter line which makes the loop smaller.

Another common non-straight tip path commonly seen is concave, or downward arc. (See fig. 3) When the tip travels in this down then up path it drags the line with it, down, then up. When the line follows the tip back up it will necessarily cross itself and form what is called a tailing loop. Tailing loops cause "wind knots" and can cause flies to hit the rod. While there are several possible ways to make a rod tip travel in a concave path, my 25 years of instructing experience leads me to believe that 99+% of tailing loops are caused by an abrupt application of power.

When a rod is stroked smoothly it bends (loads) smoothly as the weight of the line is accelerated. If power is applied abruptly, the rod tip cannot keep up with the butt of the rod because of the resistance of the weight of the line. When this happens the

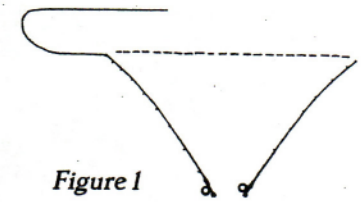


Figure 1

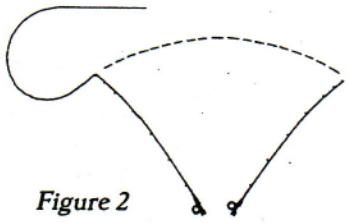


Figure 2

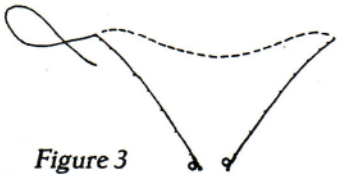


Figure 3

(continued on page 19)

Thomas Alver White 1941-2007

Thomas Alver White died in Vancouver WA, June 23rd, 2007 at the age of 66 after a courageous 8 month battle with brain cancer.

Born March 28, 1941 in Norman, AR the youngest of three children born to Harrison and Dorothy White. He grew up in Sedro-Woolley, WA and graduated from Sedro Woolley High School in 1959. In 1961 while serving proudly in the Air Force he married Karen Payne from Burlington, WA.

Tom was one of the original owners of Cascade Loggers Supply in Chehalis, WA. Tom's outlook was "if you do something you love, everything else will fall into place." Following that philosophy Tom spent the rest of his life fishing and sharing that love with others.

Tom started in the fishing industry guiding on the Cowlitz River. Tom was a marketing rep for many well known fishing and sporting goods companies as well as a junior partner in the G. Loomis rod company when it was founded in the early 1980's.

Tom was one of the finest pure casters who have ever lived. He was the first fly caster to pass the Masters Certified Angler exam from the Federation of Fly Fishers. He also sat on the federation's board of governors and was a lifetime member. Tom moved to Marathon, FL in 2000 and received his USCG captain's license, a requirement for fly fishing guides in Florida and something Tom was very proud of.

Tom is survived by his sister Jean Molitor and brother-in-law Don of Mount Vernon; daughter Natalie Driscoll and husband Brad of Vancouver, WA; son Nathan White of Portland and granddaughters Grace Driscoll and Darian White.

Following are some comments from members of the Casting Board of Governors

Don Simonson, CBOG

Tom was one of my mentors in the FFF casting instructor process. He tested me in Puyallup for my entry entry level instructor certification in 1995. He has worked with me and given me so many casting tips its unbelievable. I always sought him out at the Conclave to ask questions and have him demonstrate certain casts. He was a true gentleman and great instructor and I will miss him dearly

Tim Rajeff, CBOG

Tom used to kid me a lot when I was working at G Loomis Rod Company 15 years ago. You could always rely on Tom to tell a good joke and brighten your day. He was the person that administered the casting certification test to my partner Katherine Hart and without his encouragement and fun nature she might not have passed. Tom will always have a special place in our hearts and memories.

Liz Watson, CBOG

You could easily twist Tom's arm to go to the park for a little casting work. I think Tom loved casting more than he loved fishing and I think we all know his passion for fishing. And he loved to share his casting passion. This is what made Tom such a great teacher....he really had fun watching and teaching and learning from other casters. He was ready with compliments for students when they deserved them. He also didn't mince words if a seasoned caster was getting sloppy with their casts. Tom could tell you your casts suck with a big grin on his face and after a laugh, he could work through the problem with the caster. After all, Tom didn't name his yellow Labrador Retriever "Gunner" or "Caliber" or "Sandy" or "Trouble" or "Fish" or any

thing else.....he named him "Loop."

Yep, Tom was all about casting.

Bruce Richards, CBOG

Tom and I have been friends for many years and I had deep respect for his fly fishing and casting talent, and his skills as a guide and instructor. Tom and I had a mutual mentor years ago, a wonderful man named Rod Towsley. Rod had the job I now have at Scientific Anglers, many years ago. Tom and I had similar viewpoints on many fly fishing subjects due to Rod's influence.

Tom was a wonderful man and good friend, I am very sad to know he is gone. Please know that he had great influence in the fly fishing world and was loved by many close fly fishing friends, he will be deeply missed.

Mel Krieger, CBOG

Tom has been a good friend and a very dedicated participant in our casting program. His delight in discussing any form of casting was unmatched. I loved watching his face as he demonstrated some new casting concept. He will be sorely missed by the entire fly fishing community and by me.

Dusty Sprague, CBOG

Tom is one of the best roll casters in the world and teachers of roll casting.... He is one of the most caring and sensitive people I have ever met and I really miss him.

Joan Wulff, CBOG

Tom White was a sales rep for Royal Wulff Products - and others - when I first met him but when I think of him it is all about his moving on to become one of the stars of the Certification program and his involvement with the Bonefish Club in Ascension Bay. I think he became truly fulfilled in his last years. I will miss him.

This is reprinted from Keynoter.com.
Comments by Cal Sutphin

Not knowing me except for my voice on the radio, Tom heard me the day after Christmas three years ago brag about my wife buying me my first fly rod. He drove to the radio station on Boot Key and waited for me to get off the air. He introduced himself and said he'd be honored to give me my first fly lesson.

Well, three years later, knowing Tom White was my honor. Tom was my mentor, friend and most importantly my fishing buddy.

To all fly fishermen and ladies who knew Tom, on your next trip out to the flats, tip a cold Corona to Tom after your fishing is done. You know he would always have a cold one waiting for you aboard for the ride home.

Rod Tip Path (continued from page 17)

rod "overbends" which can only result in the rod tip momentarily dipping below the straight path. Beginning casters often have this problem until they realize that a smooth stroke is important. Soft, slow actioned rods are prone to throw tailing loops in the hands of less experienced anglers as they require an even smoother stroke to prevent "overbending" and tailing loops.

The above examples all dealt with the vertical component of tip path. What happens if the rod tip doesn't travel straight horizontally? I will address this potential problem in a later article discussing accuracy.

By understanding and analyzing your loops you should now be able to determine what rod tip path you are throwing, and make any necessary corrections to improve your casting.

Bruce Richards is a CBOG and this article is reprinted from Fly Fish America and is also included in the recommended reading list for the Master's Study Guide.

Presentational Casting

(the Wrap-around, Bump, and Under and Over casts)

by John Lynde

The Wrap-Around Cast

"Once upon a time a wise old trout resided beneath the arch of a stone bridge which spanned an English chalk stream. He tarried there to feed, and waxed large and fat; and since his lie was invisible to all men he dwelt in peace, unmindful of the lines, leaders and artificial flies which plagued the trout in other parts of the stream. But haply there came a day when a passing fly fisher beheld the widening rings of a rising fish reflected upon the underside of the ancient stonework. The angler thereupon essayed to make his cast into the arch, but by chance his line so struck the pier of the bridge that by a miracle his leader and fly were bent from their forward course and swept around the pier, and under the arch. Then came the sound of a mighty splash and a great commotion did ensue. Thus was the wrap-around cast conceived!"

Figure 45. Plan of the wrap-around cast

For the wrap-around cast, you will again need a forward tapered leader. You will also need to place an obstruction, such as a post, in the water unless one is already there for your convenience.

Casting with a sideways-overhead cast, calculate your distance from the obstruction so that the last foot or two of line next to the leader will reach it. Then aim a sideways entry at the obstruction, which will cause the leader to 'cow-tail' to the left. (Fig. 45) To perform a wrap-around cast to the right is more difficult, though it can be done successfully with a backhand cast if everything is in your favor.

The Bump Cast

The bump cast is used primarily to throw a bass bug on to the water with sufficient zest to advertise its arrival. This conspicuous presentation is also occasionally successful in stimulating a trout into rising, particularly if the fly represents a terrestial insect such as might fall from a tree.

Using a double-tapered floating line with a forward tapered leader, make a fairly high overhead cast, checking the line before it extends fully so that the leader knuckles over, slamming the fly to the surface (Fig. 46). The bump cast is simply an upright version the positive curve cast. With a little practice you can bump the fly down and cause it to skip or bounce a couple of times towards you on the surface before the line falls by raising the rod slightly as the bump takes place.

The rise of a fish to a bumped fly is usually sudden and furious, so be prepared!

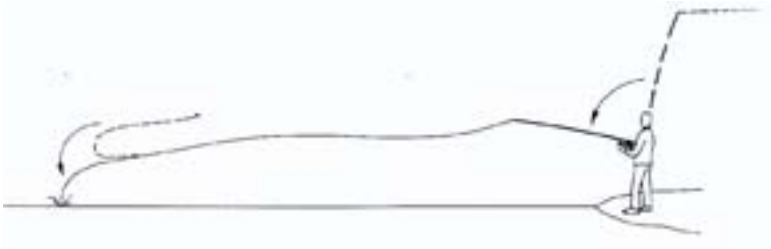


Figure 46. The bump cast

The Under and Over Cast

Casting a big fly, such as a bass bug, with a trout rod requires a technique of its own. However, it is easily accomplished by making the fly follow an eliptical circuit.

Owing to the bass bug's large size, the leader will need to be stout even at the tip, and here we find an exception to the rule of tapered leaders. A level leader comprising six or eight feet of 15 or 20 pound test nylon will do very nicely with a double-tapered floating line. Making false casts in the overhead style, tilt your rod to the right in the back casts and hold it in an almost vertical plane in the forward casts, so that the fly travels backwards low and swings high on its forward trajectory (Fig. 47).

Speed up your false casts so that the fly is travelling very fast through its elipse, then shoot line and follow through after your final cast. The under and over cast can be combined with the bump cast by checking the line on the final forward cast.

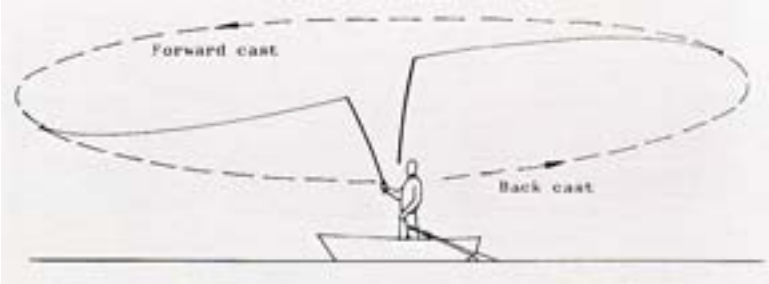


Figure 47. The under and over cast

Editor's Note: This segment was taken from the book by John Lynde called 'Thirty-four Ways to Cast a Fly', published in 1969. Look for more from this book. I find that it is a great source of information with perhaps ***dated language*** *but you must remember that Mr. Lynde was British and this book was published almost forty years ago.*

CONGRATULATIONS

New Casting Instructors

Blake McHenry,	W Simsbury, CT
David Hulsey,	Talking Rock, GA
Kevin Bonasera,	Washington, NC
Peter Stoltze Slagelse,	DENMARK
Loc Vetter,	Arnold, MD
Eric Cook,	Marietta, GA
Pete Taylor,	Easton, MD
William Holmes,	Castlerock,Lodonderry UK NORTHERN IRELAND
Andy Gowans Carlisle,	Cumbria UK
John Bueter,	Baldwin MI
Nick Hatch,	Chicago IL
Cary Pugh,	Arlington VA
John Matenaer,	Sheboygan WI
Skipper Kessler,	Sweeny TX
Lloyd Fryer,	Bakersfield CA
Bob Smith,	Ventura CA
David Leger,	Somonauk IL
Martyn Armstrong,	Salsisbury, Wiltshire, UK
Walter Swanson,	Bellevue WA
Steve Osterhaus,	Sister Bay WI
Roy Sedge,	Jensen Beach FL
Blake McHenry,	CT
David Lemke,	TX
Harry Crofton,	TX
Jeffrey Beecroft,	CA
Beppe Saglia,	Italy
Roberto Zucca,	Italy
Stefano Mondini,	Italy
John Hand,	FL
Charlie Perkins,	MI
Douglas Hintzman,	MI
John Rocchio,	PA

New Master Instructors

Colin Chartres,	UK
Ian Gamble,	UK
Stig Mikael,	Denmark
Alberto Sangiorgio,	Italy
Mauro Mazzo,	Italy
Raffaele Mascaro,	Italy
Stephen Limm,	CA
Mac Brown,	NC

New THCI Instructors

Massimo (Max) Malli,	Italy
Mauro Mazzo,	Italy
Raffaele Mascaro,	Italy
Marco Bianchi,	Italy

Editor's Note:

We normally don't list the successful Casting Instructors (CIs) in the Loop due to space - just the Masters and THCIs, but we have had such a successful year that we made room.

Everyone that has worked hard deserves the recognition.

***Congratulations** - now get out there and put it to work!*

Hope this list grows even more!

Good casting!

Upcoming Events for 2007

Livingston, MT	*July 30 - Aug 4, 2007*	*CI, MCI & THCI*
FFF Fly Fishing Show & Conclave - Rick Williams (THCI)		
MUST REGISTER FOR CONCLAVE TO SIGN UP		
Schimmert, HOLLAND	*Aug 18 - 19, 2007*	*CI*
William Van der Vorst	*Int'l Test Payment Options*	
Co. Mayo, IRELAND	*Sept 1 - 2, 2007*	*CI, MCI*
John Breslin		
Christchurch, NEW ZEALAND	*Sept 9-10, 2007*	*CI, MCI*
Soon Lee/Dan McCrimmon		
Buddina, AUSTRALIA	*Sept 12-14, 2007*	*CI, MCI*
Soon Lee/Dan McCrimmon		
Jindabyne, AUSTRALIA	*Sept 19-22, 2007*	*CI, MCI*
Soon Lee/Dan McCrimmon		
Redding, CA	*Sept 15 - 16, 2007*	*CI Prep class*
Guy Manning		
Mtn Home, AR	*Oct 6, 2007*	*CI, MCI*
Southern Council Conclave - Chuck Easterling		
Redding, CA	*Oct 19, 2007*	*CI*
NCC FFF Festival of Fly Fishing		
Guy Manning		
Richland Center, WI	*Oct 19 - 21, 2007*	*CI, MCI*
John Breslin		
Valsesia, ITALY	*Oct 19 - 21, 2007*	*CI, MCI, THCI*
Raffaele Mascaro/Mauro Mazzo	*Int'l Test Payment Options*	

Ascension Bay Bonefish Club, Mexico	*CI Workshops*	*December 3 & 10, 2007*
Dusty Sprague & Dan Wright (CBOGs)	*MCI Workshops*	*December 4-5 & 11-12, 2007*

Contact them at: dsprague01@comcast.net or dan@flycastingacademy.com)