

Fly Fishing 101: Learn About Fly Fishing

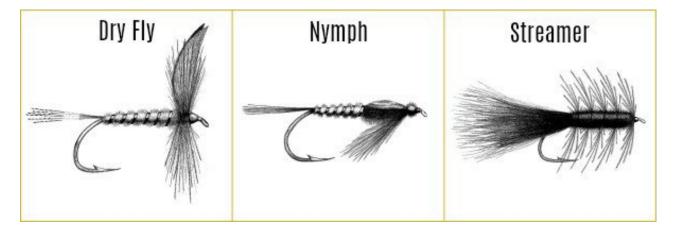
Class Materials

October 21, 2023



What is a Fly?

- Imitation of a food source the fish eats in the water
- Stimulator/attractor to annoy or entice fish



- Dry flies designed to look like flying insects that land and float on top of the water
- Nymphs resemble aquatic creatures generally float at or below the surface.
- Streamers designed to mimic aquatic life (leeches, minnows)

Differs from Conventional Fishing

Conventional

- One line from reel to lure/hook
- Weight of lure pulls line from reel
- Line is retrieved into reel

Fly fishing

- Combination of lines from reel to fly
- Weight of line cast the fly fly is too light
- Line remains off reel during casting and retrieve

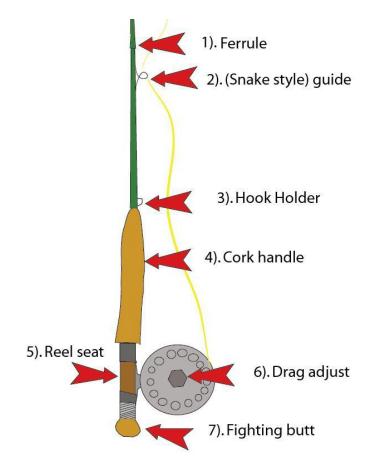


Fly Rod Purpose

- Cast fly to fish control direction and distance
- · Assist in fighting fish
- Stiffness flexibility under load, heavier flies/lines need stiffer
- Action speed of recovery slow, medium, fast
 - Slow feels rod flex sooner longer time to cast
 - Fast hold line in air longer longer casts

Fly Rod Design

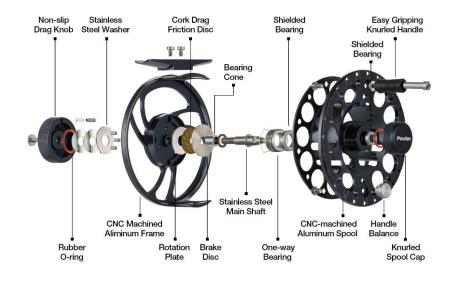
- Ferrules join rod sections
- Guides keep line from tangling
- · Hook holder keep fly attached when moving
- Handle grip various styles
- Reel seat attached reel
- Butt large rods have fighting butt Weight 0 (lightest) to 16
- Length 6 -11 feet (9 most common)
- Action/flex affects casting
- Beginners 8 1/2 to 9 feet, 5-6 weight





Fly Reel

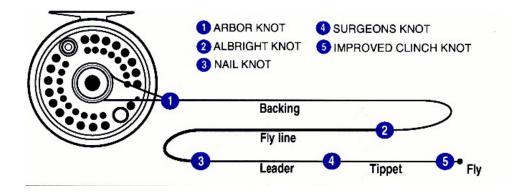
- Purpose hold line and provide drag
- Balance to rod comfort
- Arbor site line retrieval speed



Setup

Backing

- Fills up reel 100 yards +
- Protect against long runs
- Typically 20-30 lb. test



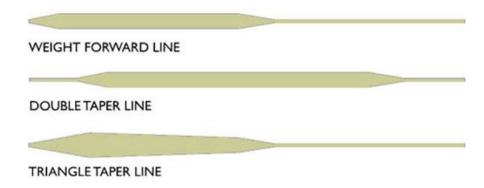


Fly Line

- Provides weight to cast flies (matched to rod)
- Length 90 -100 feet
- Weight in first 30 feet

	-				
Level Tip	Front Taper	Body	Back Taper	Running Line	Grains (Grams)
4' (1.21 r	m) 8' (2.43 m)	24' (7.31 m)	3' (0.91 m)	51° (15.54 m)	140 (9.07)

- Floating, sinking, intermediate
- Various tapers to aid casting



Leader/Tippet

Leader

- Transition from the thick fly line to the thin tippet - "X" size
- Tapered to assist turnover of fly
- Typically 7 -10 feet long

Tippet

- Attached fly to leader
- Sized by "X" designation, typically 0X to 10X (thinest)
- Fly hook size may determine tippet size
- 4X 5x most common

LEADER & TIPPET SIZE CHART

SIZE IN X	0X	1X	2X	3X	4X	5X	6X	7X	8X
DIAMETER	.011"	.010"	.009"	.008"	.007"	.006"	.005"	.004"	.003"
APPROXIMATE BREAKING STRENGTH	15.5 LBS	13.5 LBS	11.5 LBS	8.25 LBS	6 LBS	4.75 LBS	3.5 LBS	2.5 LBS	1.75 LBS
FISH TYPE	SALMON, STEELHEAD	BONEFISH, REDFISH, PERMIT	LARGE & SMALL- MOUTH BASS	BASS & LARGE TROUT	TROUT	TROUT & PANFISH	TROUT & PANFISH	TROUT & PANFISH	TROUT & PANFISH

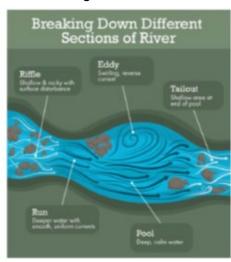


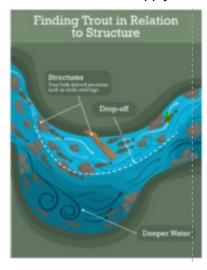
Other Equipment

- Forceps hook removal, pinching barbs
- Floatant keep dry flies afloat
- Split shot help sink flies
- Net land fish, protect fish, fingers and tippet/leader
- Waders/boots boot foot vs stocking foot
- Sunglasses polarized to see fish and underwater structure
- Vest/sling pack/fanny pack carry gear

Finding Fish

- Safety/shelter structure rocks, ledges, weeds, trees and branches
- Oxygen closer to current
- Food bugs, minnows, crawfish, etc. what/where is the supply?





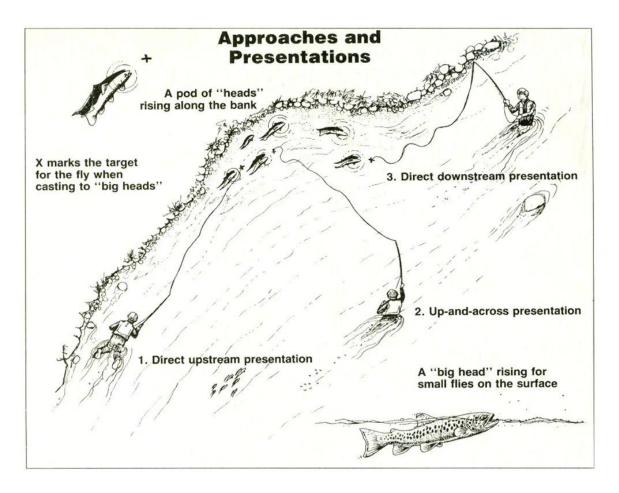


Fly Presentation

- Placing a cast without alerting the fish
- Dinner is usually served drifting in the current
- Look natural imitate a naturally drifting insect
- Imitate what they eat
- Manipulate your fly in the current avoid drag
- Delicate Presentation aim for the trees
- Upstream presentation if possible



- Better drag free drift
- Fish sees fly first



Fighting Fish

- Set hook by lifting rod tip
- Fly rod is shock absorber protects tippet
- Line guides create friction tire fish
- Move rod opposite of fish direction
- Keep fish away from structure
- Exception large gamefish



GLOSSARY

Action - term used to describe the flexing characteristics of a rod, generally broken into three categories: fast, medium, and slow. Fast-action rods tend to be stiff and can perform well against the wind and with larger flies; medium-action rods flex further into the body of the rod, require less force to load, and are typically used in freshwater fishing; slow-action rods flex nearly to the butt, load at short distances, and are most often used for dry-fly fishing.

Attractor - a fly pattern tied with certain fish-enticing characteristics, meant to elicit a strike rather than to realistically imitate an insect.

Backcast - that portion of any fly cast that extends behind the caster (as in false casting).

Backing - usually braided Dacron, used to take up space on the spool before the fly line is attached; on salmon, steelhead, and saltwater reels, also becomes important in fighting fish.

Dead Drift - a perfect float (the fly is traveling at the same pace as the current); used in both nymph and dry-fly fishing.

- **Drag** (1) term used to describe an unnatural motion of the fly caused by the effect of the current on the line and leader. Drag is usually detrimental, though at times useful (such as imitating the actions of the adult caddis).
 - (2) Resistance applied to the reel spool to prevent it from turning faster than the line leaving the spool (used in playing larger fish).

Dropper - anything added to the main leader or to the fly, most often a second fly or a weight.

Dry Fly - any fly fished upon the surface of the water; usually constructed of non-water-absorbent materials; most commonly used to imitate the adult stage of aquatic insects.

Emerger - pertaining to aquatic insects, the name used to describe that time frame when the nymph reaches the surface and the adult hatches out; the emerging nymph may well be the single most important nymph phase for the fly fishers to imitate.

False Cast - standard fly-fishing cast; used to lengthen and shorten line, to change direction, and to dry off the fly.

Flat - an area of water with a relatively stable depth, often over a sand or grass bottom; common area for fish to forage for food.

Floatant - chemical preparation that is applied to a dry fly (before using the fly) to waterproof it.

Fluorocarbon - tippet or leader material nearly invisible underwater. Heavier than mono and more likely to sink.

Forceps - instrument widely used in fly fishing to remove flies from the jaws of a hooked fish; feature pliers-like jaws with locking clips so that once they are clamped to the hook, they stay there until released.

Hatch - a large number of the same species of insects emerging around the same time.

Imitative Flies - flies to more closely match specific insects; most effective in slow-moving, clear water, with finicky trout in fertile streams with large populations of aquatic insects.

Impressionistic Flies - flies to loosely suggest a variety of insects or insect families; usually most effective in medium to fast water, in streams with sparser populations of aquatic insects.



Indicator - floating object placed on the leader or end of the fly line to "indicate" the take of the fly by a fish or to indicate the path of the drift of the fly; used when nymph fishing with a slack line.

Leader - the section of monofilament or fluorocarbon line between the fly line and the fly; usually tapered to deliver the fly softly and away from the fly line. Line Weight - the weight (measured in grains) of the first 30 feet of a fly line, used as a way to standardize fly lines in matching them to fly rods of differing stiffness.

Loading the Rod - used to describe the bend put in the rod by the weight of the line during the cast.

Loop-to-Loop - quick and easy connection system typically used to attach a fly line to a leader by making a loop at the end of the leader (perfection loop knot), pulling the fly-line loop through the leader loop, then pulling the entire leader back through the loop attached to the end of the fly line.

Mending Line - method used after the line is on the water to achieve a drag-free float, typically consisting of a flip, or series of flips.

Palming - use of the palm of the hand against the spool edge of a rimless fly reel as a means of applying drag against the release of line in fighting a fish.

Presentation - the act of putting the fly on the water and offering it to the fish. The object is to present the fly in a manner similar to the natural insect or food form that you are imitating.

Retrieve - bringing the fly back towards the caster after the cast is made; can be done in a variety of ways; important points of retrieving are to keep the rod tip low and pointed straight down the line.

Rod Flex - synonymous with action.

Strike Indicator - floating object placed on the leader or end of the fly line to "indicate" the take of the fly by a fish or to indicate the path of the drift of the fly; used when nymph fishing with a slack line

Stripping line - retrieving the line by pulling it in through your fingers.

Tag (Tag End) - the end of the line that is used to tie a knot.

Tippet - the end section of a tapered leader; the smallest diameter section of a tapered leader; the fly is tied onto the tippet.

Turn Over - how the fly line and leader straighten out at the completion of the cast.

Wind Knot - overhand knot put in the leader by poor casting, reducing the strength of the leader

X - measurement used to designate diameter of leader and tippet material used in conjunction with a numeral, as in 4X; To determine the actual diameter of 4X or any "X" number, subtract the numeral from the number 11 (eleven); the result is the diameter in thousandths of an inch; for example, the diameter of 4X material is .007".

Fishing Ethics: Additional Resources

Maryland fishing regulations

https://dnr.maryland.gov/fisheries/pages/regulations/index.aspx

General Ethics and good things to know

• Orvis: https://www.youtube.com/c/orvis/search?query=ethics

Fly Fishers International

 https://www.flyfishersinternational.org/Learn/Learning-Center-Resources/Fly-Fishing-Skills/Safety-Etiquette

Conservation

https://www.flyfishersinternational.org/Learn/Learning-Center-Resources/Conservation

More specific information about respecting the resource

Catch and Release for Freshwater and Saltwater

https://www.flyfishersinternational.org/Conservation/Ethos/Catch-Release

Michigan catch and release video

https://www.youtube.com/watch?v=TQRGP4dY2rl

Bass - removing deep hooks in largemouth bass

https://www.youtube.com/watch?v=9FIJ74-79pk

Boy Scouts Leave No Trace Fishing

• https://www.youtube.com/watch?v=PzsCGnso9BU&t=365s

Taxidermy information

https://www.mckenziesp.com/

NOTE: All the hyperlinks in this handout may be accessed online by going to the Seneca Valley TU Website (https://senecavalleytu.org) and clicking Quick Links in the main navigation, then Fishing Resources and Fly Fishing 101.

Tthere is a Fishing 101 page that shares much of the same information but is not this handout.

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Fly Fishing Rigging & Knots

Rigging

Among the websites with general rigging information and other general information are:

- Take me fishing at https://www.takemefishing.org/
- Fly Fishers International at https://www.flyfishersinternational.org/Learn/Learning-Center-Resources/Fly-Fishing-Skills/Knots-Rigging

Knots

There are five main types of knots used by fly fisherman, each designed to meet a specific need. I list a few options for each type, but there are often many more, these are commonly used.

- Connect leader to fly line without loop
 - Use a nail knot
- Connect leader to fly line with loops
 - Use a handshake knot
- Create a loop
 - Use a perfection loop
 - Use a surgeons loop
- Connect leader to tippet or tippet to tippet
 - Use a triple surgeons knot
 - Use an Orvis tippet knot
- Connect leader/tippet to a terminal connection (fly, tippet ring, swivel)
 - Use a clinch knot (fluorocarbon) or improved clinch (monofilament)
 - Use an Orvis knot
 - Use a Davey knot

There are many different websites with knot information. Some have static instructions, while others have diagrams and animated instructions. There are instructions for the specific knots on these websites.

Among the set we use is:

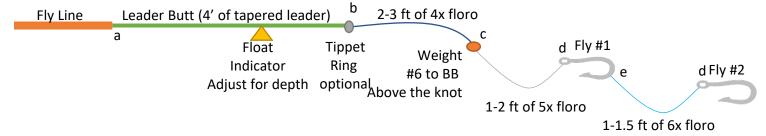
- Orvis at https://howtoflyfish.orvis.com/fly-fishing-knots/
- Net knots at https://www.netknots.com/fishing knots
- 101knots at https://www.101knots.com/

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Rigging Examples

Example of a standard nymph rig



a – knots: if your fly line does not have a loop use a nail knot; if it has a loop then a handshake knot

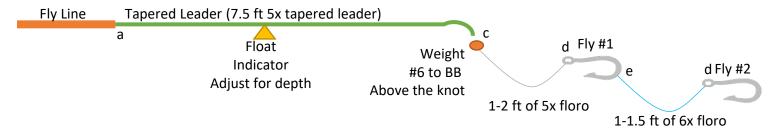
b – knots: if you are using a tippet ring use an improved clinch knot for both leader butt and tippet; if no tippet ring use a triple surgeons knot or Orvis tippet knot

c – knots: use a triple surgeons knot or Orvis tippet knot to attach tippet sections together

d – knots: use an improved clinch, Orvis knot or Davey knot to attach fly to tippet

e – knots: use an improved clinch or Orvis knot to attach tippet to bend of hook

Example of a nymph rig on a new leader



a – knots: if your fly line does not have a loop use a nail knot; if it has a loop then a handshake knot

b – knots: if you are using a tippet ring use an improved clinch knot for both leader butt and tippet; if no tippet ring use a triple surgeons knot or Orvis tippet knot

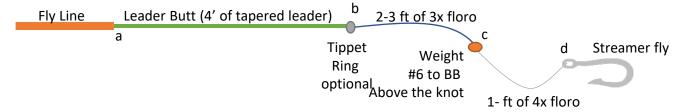
c – knots: use a triple surgeons knot or Orvis tippet knot to attach tippet sections together

d – knots: use an improved clinch, Orvis knot or Davey knot to attach fly to tippet

e – knots: use an improved clinch or Orvis knot to attach tippet to bend of hook

Rigging Examples

Example of a streamer rig



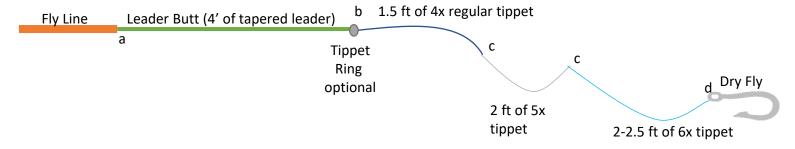
a – knots: if your fly line does not have a loop use a nail knot; if it has a loop then a handshake knot

b – knots: if you are using a tippet ring use an improved clinch knot for both leader butt and tippet; if no tippet ring use a triple surgeons knot or Orvis tippet knot

c – knots: use a triple surgeons knot or Orvis tippet knot to attach tippet sections together

d – knots: use an improved clinch, Orvis knot or Davey knot to attach fly to tippet

Example of a dry fly rig using a tippet ring



a – knots: if your fly line does not have a loop use a nail knot; if it has a loop then a handshake knot

b – knots: if you are using a tippet ring use an improved clinch knot for both leader butt and tippet; if no tippet ring use a triple surgeons knot or Orvis tippet knot

c – knots: use a triple surgeons knot or Orvis tippet knot to attach tippet sections together

d – knots: use an improved clinch, Orvis knot or Davey knot to attach fly to tippet

e – knots: use an improved clinch or Orvis knot to attach tippet to bend of hook

Fishing Access: Where to Fish (and When)

General Information:

Maryland DNR Public Fishing Access Guide:

https://gisapps.dnr.state.md.us/coastalatlas2019/PublicFishingAccess/

This is a great resource for both freshwater and saltwater access. It is searchable and you can limit it by county and species of fish you would like to catch. Each listing contains detailed information about hours, ease of access, parking, whether restrooms are available, and more.

Maryland Trout Stocking

https://dnr.maryland.gov/fisheries/Pages/trout/stocking.aspx

Hundreds of thousands of trout are stocked throughout the state each spring and fall. You can sign up for email updates, and there is also a map detailing when and where trout are stocked.

Maryland Fly Fishing Trail

• This is a work in progress – see attached handout, website under development.

Streamflow Data

• https://dashboard.waterdata.usgs.gov/app/nwd/?region=lower48&aoi=state-md
Check before you go to ensure that conditions are promising and safe.

When to Fish

- 1. Anytime is a good time to go fishing, and there are plenty of good places to go fishing anytime.
- 2. Other good times: dusk/dawn; cloudy overcast days; spring and fall for warm water species; spring, fall, and winter for trout

Find the Fish

Q: What makes for good fish real estate?

A: Oxygen/temperature, food, shelter

Rivers and stream common characteristics:

- 1. riffle → pool → run structure
- 2. current seams

Ponds, lakes, and reservoir common characteristics

- 1. drop-offs
- 2. feeder streams

Important characteristics commonly found in all types of water: Structure (downed trees, rocks/rocky points, weed beds (both submerged and on the surface)), shade, overhanging grass/brush, eddies, and underwater springs.

Find the fish, but don't let them find you!

Resources:

- Orvis Flyfishing Learning Center: https://howtoflyfish.orvis.com/
- Charlie Gelso & Larry Coburn, Guide to Maryland Trout Fishing, The Catch and Release Streams, 3rd edition, 2014
- Steve Moore, Maryland Trout Fishing, The Stocked and Wild Rivers, Streams, Lakes, and Ponds, 2011
- Harry Murray, Fly Fishing for Smallmouth Bass, 1989
- Maryland/Delaware Atlas and Gazetteer, 2022
- Google Maps: https://maps.google.co
- Seneca Valley TU: https://senecavalleytu.org/newsletters-and-maps/

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Fly Fishing & Casting Learning Resources (Print, Video & Organizations)

Books (Can be found on Amazon, search by Title)

- LL Bean Fly Fishing Handbook, Second Edition. (2006) by Dave Whitlock
- LL Bean Fly Casting Handbook, Revised and Updated. (2007) by Macauley Lord and Jim Rowinski
- The Orvis Guide to Beginning Fly Fishing 101 Tips for the Absolute Beginner. Tom Rosenbauer. 2009
- The Orvis Fly-Fishing Guide. Revised and Updated (2017) by Tom Rosenbauer

Adaptive Caster

Seneca Valley TU – Adaptive Caster series: https://senecavalleytu.org/the-adaptive-caster/

Fly Fishers International Learning Center – Casting

- Fly Fishers International Learning Center: https://www.flyfishersinternational.org/Learn/Learning-Center-Resources/Fly-Fishing-Skills/Introduction-to-Fly-Fishing
- Fundamentals of Fly Casting Loops
 https://www.flyfishersinternational.org/Learn/Learning-Center-Resources/Fly-Casting/Casting-Instruction/Fundamentals-of-Fly-Casting
- Pick-Up/Lay-Down Cast
 https://www.flyfishersinternational.org/Learn/Learning-Center-Resources/Fly-Casting/Casting-Instruction/Pick-Up-and-Lay-Down-Cast
- False Casting
 https://www.flyfishersinternational.org/Learn/Learning-Center-Resources/Fly-Casting/Casting-Instruction/False-Casting
- Change-of-Direction Casts
 https://www.flyfishersinternational.org/Learn/Learning-Center-Resources/Fly-Casting/Casting-Instruction/Change-of-Direction
- Roll Cast <u>https://www.flyfishersinternational.org/Learn/Learning-Center-Resources/Fly-Casting/Casting-Instruction/Roll-Casting</u>

Fly Casting Clinics and Educational Programs

- Antietam Fly Anglers (MD): https://www.afa-md.org
- Tidal Potomac Fly Rodders (DC metro): https://www.tpfr.org/casting-church
- Goose Creek Casting Club Facebook Group (VA): https://www.facebook.com/groups/3007646762816388/
- Potomac Valley Fly Fishers (MD): https://www.potomacvalleyflyfishers.club/
- Seneca Valley Chapter of Trout Unlimited (MD): https://senecavalleytu.org

SVTU Fly Fishing 101 Fall 2023 Program

Fly Fishing & Casting Learning Resources (Print, Video & Organizations)

Fly Tying

- SVTU Fly Tying Resources and Classes: https://senecavalleytu.org/fly-tying-resources/
- Fly Fishers International Introduction to Fly Tying
 https://www.flyfishersinternational.org/Learn/Learning-Center-Resources/Fly-Tying/Introduction-to-Fly-Tying
- Fly Fishers International Fly Tying Manual Fundamental Flies
 https://www.flyfishersinternational.org/Portals/0/LearningCenter/Presentations/FlyTying/FFI Fundamental Flies Beginner Fly Tier Manual.pdf?ver=FzXU1dNKlzv78Gb5cr7QIQ%3d%3d

Fish Behavior (FFI)

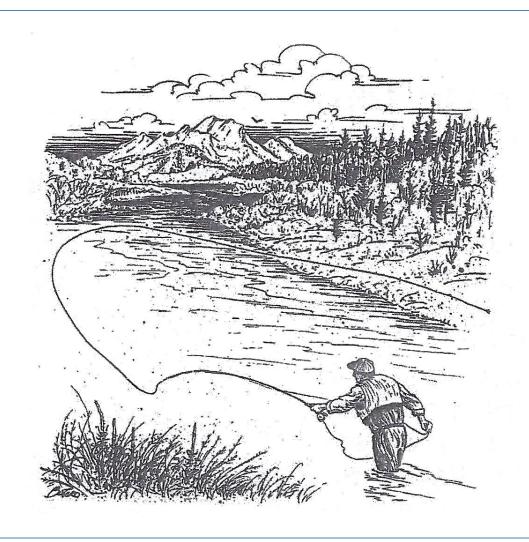
Fish Behavior
 https://www.flyfishersinternational.org/Learn/Learning-Center-Resources/Fly-Fishing-Skills/Freshwater-Behavior

Conservation (FFI)

- Fly Fishers International (FFI): https://www.flyfishersinternational.org
- Conservation and Fly Fishers
 https://www.flyfishersinternational.org/Learn/Learning-Center-Resources/Conservation/Conservation-the-Fly-Fisher
- Personal Conservation
 https://www.flyfishersinternational.org/Learn/Learning-Center-Resources/Conservation/Personal-Conservation
- Catch-and-Release Freshwater https://www.flyfishersinternational.org/Portals/0/Documents/Conservation/FFI Catch Release Freshwater Brochure.pdf

Quick Links (SVTU)

Quick links to Fly Shops, Conservation, and Fishing Groups: https://senecavalleytu.org/quick-links/



The information in this document was sourced from the book: "Fly Casting with M. Maloney & G LaFontaine".

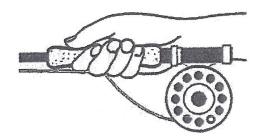
This information is provided by Dave Cleaves for Seneca Valley TU Fly Fishing 101.

Hand Grips

Fly casting is presented in this guide from the perspective of a right-handed caster.

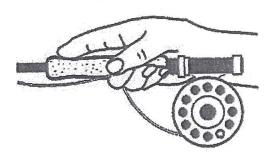
Thumb on top

 Advantage: The thumb and the strongest muscles in the hand are in the right position to push the rod forward



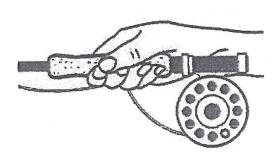
Forefinger on Top

- Advantage: Pointing with the forefinger is "naturally" accurate.
- **Disadvantage**: The forefinger is not as strong as the thumb.



Free Wrist Grip

- Advantage: Puts hand in a natural throwing position.
 Used by some tournament fly casters for distance.
- Disadvantage: Support from a digit against the rod shaft is lacking

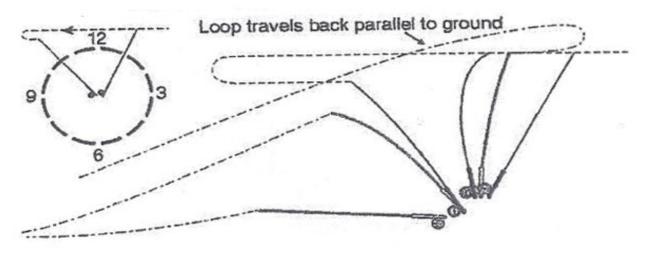


Tight Loop & Wide Loop

Caution: Always wear glasses to protect your eyes, even when casting without a fly.



The Casting Stroke



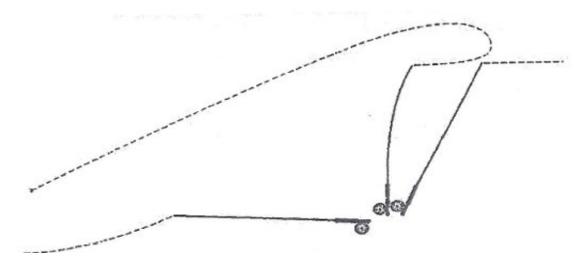
The Complete Casting Stroke

Essential Elements

Here are essential elements to a well-executed cast. A good cast is characterized by well-formed, smooth loops in both the forward cast and the backcast.

- There must be no slack in the fly line as you begin the cast.
- Your cast should start with the rod tip slightly above the water.
- The path the tip of the rod travels dictates the path of the fly line! The rod tip should follow a
 relatively straight path.
- The application of power should occur smoothly, not abruptly, in both the backcast and the forward cast.
- Where the tip of the rod stops dictates the depth of the loop.
- You should stop crisply and then pause at the end of each backcast and forward cast.

Standard Backcast



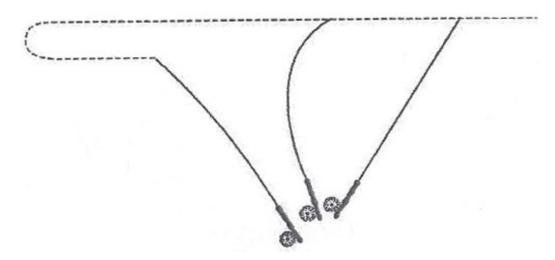
Technique

- With 30 to 35 feet of line and leader, start with your rid tip slightly above the water, with your line straight in front of you and no slack.
- While keeping a firm wrist, lift your rod hand along a relatively "straight" path, accelerating smoothly and continuously and stopping with the rod tip general at 1 o'clock.
- Apply enough power to keep the line from dropping back toward the water.
- Stopping crisply at 1 o'clock allows a loop to be formed, while pausing at 1 o'clock allows the line to straighten before beginning the forward cast.

Concerns

- Failure of the rod tip to move in a straight path may result in no loop, a poor loop, or the line being driven into the ground.
- Failure to "pause" creates a "whip effect".

Standard Forward Cast



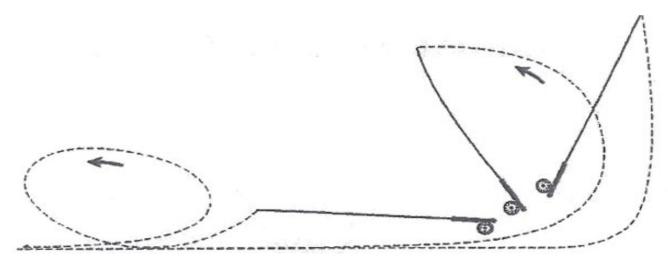
Technique

- Begin the forward cast a moment before the line straightens behind you.
- Keep a firm wrist, pull the rod tip forward in a relatively "straight" path, accelerating smoothly and continuously, stopping the rod tip slightly below the plane of the fly line and generally at around 10:30.
- Stopping the rod tip in this position prevents the line from running into itself.
- Pause to allow all the line to pass the rod tip, then gently lower the tip, following the line to the water.
- You are now in the same position from which you initiated the original backcast.

Concerns

 Starting the cast too soon may cause the line to "buggy whip" and the fly will snag the line or possibly snap off.

Standard Roll Cast



Technique

- Strip out 35 to 40 feet of line and leader.
- **Gently** raise the rod tip to 1 o'clock, ending with your rod hand at head height.
- Tilt the rod slightly away from your body and allow the line to hang **motionless** to the side and behind you.
- Thrust the rod down and forward by reaching with the arm and rolling with the hand toward the target. Stop abruptly. (Your rod should now be parallel to the water.)
- Be sure to aim to the left of the line lying on the water to avoid crossing it.
- Finish by letting the rod tip follow the line to the water to avoid creating slack

Special Application

When fishing, use a "**roll-cast pickup**" to lift the line off the surface without ripping water into the air. On the forward roll, stop rod early, not pushing it out parallel to the surface. This throws a rolling loop into the air. Then make a regular cast.

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