



SELECTING A ROD

Match the rod to your fishing; buy a balanced outfit.

TO BEGIN YOUR FLY FISHING for bass, trout, panfish, or saltwater fish you'll need a fly rod. Choosing the right rod is important. When fly fishing you apply energy to the rod in casting. The energized rod casts the line, which delivers the fly to the fish. If the fly is delivered properly, the presentation is natural and the fish takes the fly. The right fly rod, line, and leader are all critically important to successful presentation of the fly.

The rod materials you can choose from include graphite, fiberglass, and bamboo. You can make do with an inexpensive new or used graphite or glass fly rod for your first forays into fly fishing. But keep in mind that in fly rods you get what you pay for. The more expensive rods provide better materials and workmanship, so the more you fly fish the more you will come to appreciate the performance the high quality rods can provide. They can make you a better caster and thus a better fisherman.

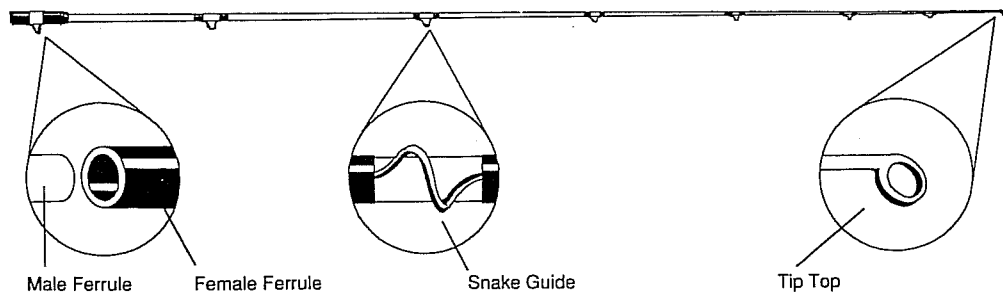
You want what is called a "balanced outfit," a rod and line that are right for each

other. Rods are designed by manufacturers to take a certain weight of line. In other words, a "6-weight rod" takes a 6-weight line, a 4-weight outfit takes a 4-weight line, and so on. If you look at a rod you'll probably find some printing or writing just above the cork grip. It will say something like this: G75-3, which means that the rod is graphite (G); it is 7'6" long (75), and it is designed to cast a 3-weight line (3). Rods range in size from 1-weight to 15-weight. The larger the number the heavier the line it will cast.

Unfortunately, there is no uniformity in the way rod manufacturers code their rods. Some rods give the rod length and the line for which it is matched on a butt cap located on the butt of the rod. Others give the rod length and line weights for which the rod is balanced above the cork grip in this fashion: "9' for 8-9 line." It means that the rod is nine feet long and that either 8-weight or 9-weight lines can be used with it. If you buy a beginner's rod/reel/line outfit, the line and rod are all matched.

FLY ROD TIP END

Many top rod manufacturers offer excellent, inexpensive beginner's outfits, complete with balanced line, rod, and reel. Rod manufacturers also offer two-, three- and four-piece rods.



Male Ferrule

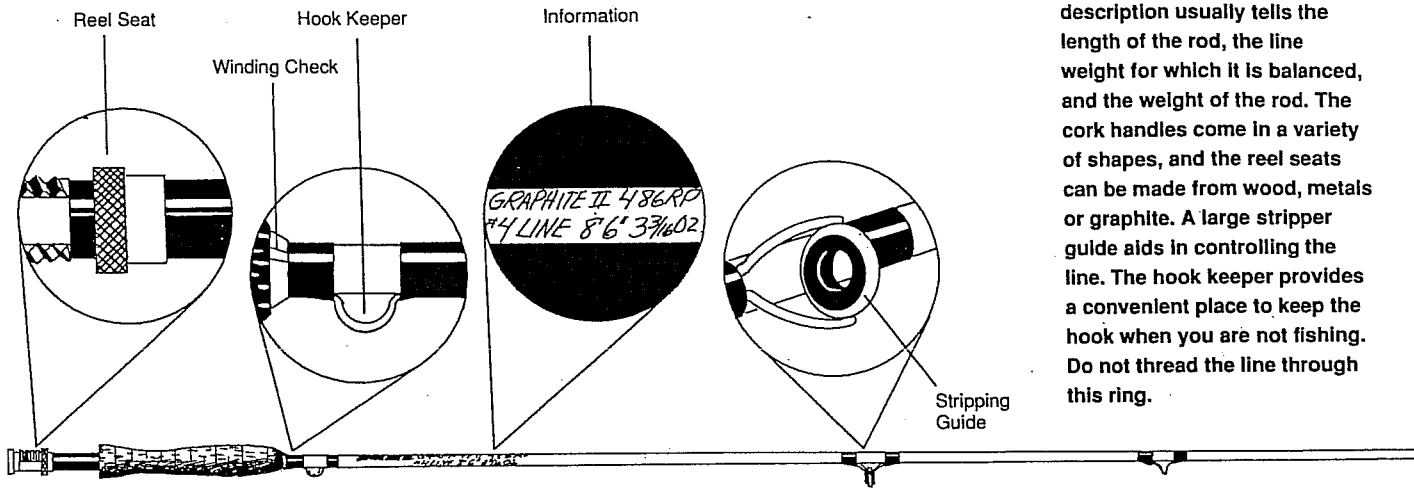
Female Ferrule

Snake Guide

Tip Top

FLY ROD BUTT END

The most important information found on a rod is written just above the rod handle. The description usually tells the length of the rod, the line weight for which it is balanced, and the weight of the rod. The cork handles come in a variety of shapes, and the reel seats can be made from wood, metals or graphite. A large stripper guide aids in controlling the line. The hook keeper provides a convenient place to keep the hook when you are not fishing. Do not thread the line through this ring.



How to Chose the Right Rod

How do you choose the right rod weight (in other words the right line weight) for the fishing you intend to do? Keep in mind that in fly fishing the line provides the weight to deliver the fly when you cast. The larger the fly the more wind resistant and heavy it is, so the larger (heavier) the line you need to deliver it. Thus when fishing for larger fish with larger flies you need a larger rod designed to cast the larger line and flies you will use (see the chart of line weights and uses).

If you start your fly fishing by going after trout or panfish, you will use relatively small flies, and delicate presentation of the fly is often critical. A 6-weight rod is the choice of most beginners, because it can cast small flies delicately and the line can, if required, transport relatively large flies to distant targets, especially when the line is matched with the right leader and tippet.

Trout rods range from tiny 1-weights up to 8-weight, and bass fishermen even use 9- and 10-weights for fishing very large flies. You should start your trout and panfish fishing with a 6-weight. You can buy the very light or very heavy rods later as you become more specialized in your fishing.

Should you buy a two-piece, 3-piece, or 4-piece rod? Most anglers begin with a 2-piece because they fish close to home and thus do little travel. As you begin to travel to exotic fishing places, 4-piece travel rods may become more important to you (they can be

hand-carried aboard an airplane).

You can buy inexpensive items in this first outfit. Your casting and fishing skills are at a learning level, and at this point in your fishing some inexpensive reels and rods will serve you well. As your skills mature, you'll naturally want to improve your tackle with the high-performance reels and rods. When buying tackle at a fly shop, ask the clerk to put the outfit together and assist you in casting with it. A knowledgeable store clerk will help you with those important first casts, and he should be able to help you determine if the rod is the right length for you and the fishing you will do.

The length of rod you choose is important. For instance, if you fish small, brush-lined streams most often a 6- to 8-foot rod may be more suited to your needs than a longer rod. On the other hand, if you fish broad rivers, where casting room is no problem, an 8- to 9-foot rod makes more sense. Long rods offer the advantage of easier line control, and higher backcasts that keep the line and fly free of grass and brush.

When you buy at a retail store or receive your outfit in the mail, look it over carefully to see if the rod blank is straight when the rod sections are joined with the line guides aligned (see the rod nomenclature illustration). Check to see that the reel spool works properly and the reel fits the reel seat and locks tightly when the reel-seat ring(s) is tightened.

ROD/LINE USES & SIZES

ROD/LINE WEIGHT	USES AND FLY SIZES
1-2	trout, panfish, #26-#18
3-6	trout, bass, panfish, #26-#1/0
7-8	trout, steelhead, bonefish, redfish, Atlantic salmon, bass, #20-#1/0
9-11	steelhead, Atlantic salmon, Pacific salmon, bluefish, small tarpon, dorado, stripers, #6-#2/0
12-15	tarpon, billfish, tuna, #2/0-#8/0



ASSEMBLING YOUR TACKLE

DAVE WHITLOCK

*Assembling your tackle properly
can help you become a better angler.*

GETTING OFF ON THE RIGHT FOOT in fly fishing begins with obtaining a well-balanced tackle system and knowing how to assemble it. Putting all the components together can be confusing, bewildering, and down right discouraging without some help or good advice. The best place to get assistance is at the shop where you purchased the equipment. Fly-fishing friends or local fly-fishing clubs are also usually willing to show you how they do it. If you have to go it alone, here is a guide to procedures that will allow you to make the most of preparing, using, and storing your fly tackle.

Fly Tackle Components

FLY TACKLE CONSISTS of seven components—rod, reel, backing, fly line, leader, tippet material, and flies. Seldom do these come totally assembled

and ready to fish. Usually each item comes in a separate package, so the procedures of attaching the backing to the reel, fly line to backing, leader to fly line, tippet to leader, and fly to tippet must be done before

casting and fishing with the tackle. Assembly requires learning and using a few knots.

Before you begin assembly, pick a well-lighted area with a chair and table. Have on hand a pair of small scissors, fingernail clippers, a small pair of needle-nose pliers, a pencil, a few small screw drivers, a size 8 needle, a small

strawlike tube or large needle, and a bottle of flexible nail polish or fly head cement.

First, you must decide which hand you will use to reel in the line. Fly-fishing tradition has usually dictated cranking the reel with the hand used to do the casting. However, this requires switching the fly rod from the left hand to the right or from the right hand to the left. Using one hand to cast and fight a fish and the other hand to operate the reel has more advantages than the traditional switching-hands method. I believe it is almost always better to crank the reel with your free hand (the left hand for right-handed casters and the right hand for leftys).

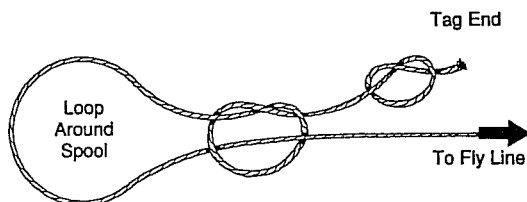
Consult the reel instructions to see if your model is reversible. Most reels, because of tradition, come set up to retrieve with the right hand. The reel's line guard and the drag system will be set accordingly. If conversion is possible, the manufacturer will supply conversion instructions with the reel, along with operating instructions. A small screwdriver is usually the only tool you will need for the conversion.

When the reel is set up for the hand you choose, attach the reel to the reel seat on the rod's butt section. Make sure the reel is hanging below the rod and the reel handle is on the correct side for the hand you have decided to use to crank the reel. The reel's line guard should face forward.

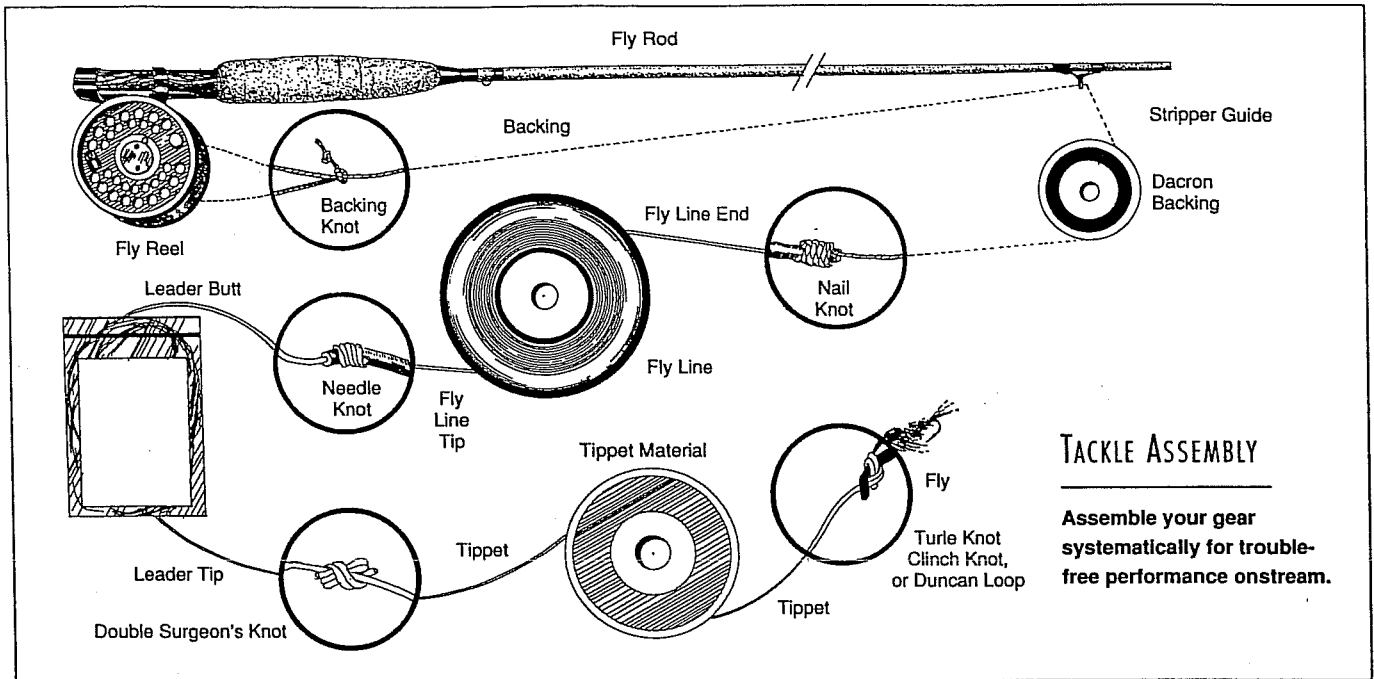
Attaching Backing to the Reel

USE ONLY BRAIDED NYLON or dacron line for fly-

ARBOR KNOT



Attach nylon or dacron backing to the arbor of your spool with an arbor knot or a Duncan loop. Pass the line through the stripper guide before tying the knot.



TACKLE ASSEMBLY

Assemble your gear systematically for trouble-free performance onstream.

line backing. Never use nylon monofilament for backing. Monofilament stretches too much to be used for backing.

Free the end of the backing line from its spool and pull off about six feet. Pass the backing line down through the rod's large stripper guide (the one closest to the reel) on the rod's butt section. Now pass the backing around the reel's spool, entering at the line guard opening (forward and front of reel), passing it around the spool and back out the line guard opening. Take care not to allow it to pass between any of the reel's frame posts.

Tie an arbor knot or a Duncan loop knot (see page 7) with the backing tag end and incoming line, and slip it down tight against the spool arbor (center post). Trim off the excess tag end after the knot has been slipped down tight on the spool arbor.

Winding Backing Onto the Spool

PLACE A PENCIL, stick, or dowel through the hole in the backing spool. Have another person hold the spool as you wind the backing onto the reel. Be sure the backing unwinds slowly, under light tension.

Holding the rod's butt section by its handle with one hand, begin winding the backing onto the reel with your other hand. Keep the backing spooling onto the reel evenly by using one of your rod-hand fingers to move the backing back and forth across the spool. Keep reeling under mod-

est tension until the needed amount of backing is on the reel. Be sure to stop reeling before the end of the backing comes through the rod butt's stripper guide.

The backing and fly line together should fill the spool to within a half inch of the cross frame of the fly reel. This space compensates for less careful line spooling when you are fishing.

Fly Line-to-backing Connection

USE A SMALL, NEAT tube or nail knot to attach the smaller backing line to the larger fly-line end.

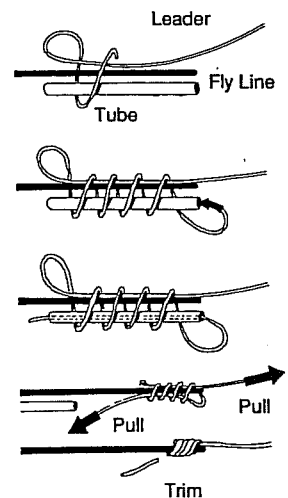
Either end of a level or double-taper fly line can be attached to the backing, but be absolutely sure you attach only the back end of a weight-forward fly line to the backing. Most weight-forward fly lines have a small tab on the back end stating "this end to reel." If your weight-forward line does not have such a tag, tie the backing to the long, small-diameter end which is the back end of this type of taper.

Once the knot is tied to the fly line back end (known as the running line), overcoat this junction with a coat or two of flexible, fast-drying, waterproof cement for an even smoother more durable junction. Allow the cement to dry before winding the fly line onto the reel.

Winding Fly Line Onto the Reel

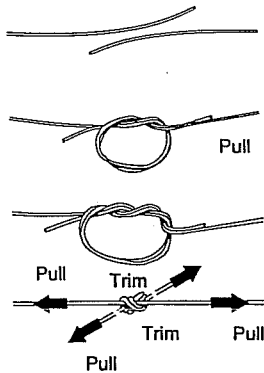
REPEAT THE SAME PROCEDURE AS USED TO WIND THE backing onto the spool to put the fly

TUBE KNOT



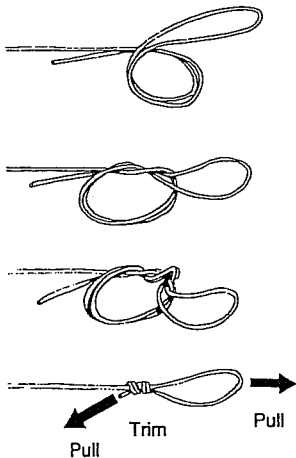
The tube knot or nail knot works best for attaching small diameter backing to the larger fly line. Be sure to attach the backing to the reel end (not the fly end) of a weight-forward fly line.

DOUBLE SURGEON'S KNOT



The double surgeon's knot is used to tie the tippet to the leader. It works well for joining different diameters of monofilament in tippet sections of the leader.

SURGEON'S LOOP



For loop-to-loop connections, the double surgeon's loop is the easiest knot to use because it is easy to tie. You can also use loops to attach your tippet to your leader, as shown on the opposite page.

line onto the fly reel. If there is not enough room for the complete fly line, you must remove the fly line, cut the fly-line-to-backing junction and remove enough backing from the spool to allow the full line to fit onto the reel. If you have a weight-forward line, you may remove a section of the fly line's back end if the needed space adjustment is not too large (10 to 20 feet).

Leader-to-Line Connection

THE NEEDLE KNOT is the best way to join the leader butt and fly line tip with a small, smooth connection (see page 19). Next best would be to use the tube or nail knot. Either knot, when tied and trimmed neatly and overcoated with cement, functions beautifully.

Tippet-to-leader Connection

THE SIMPLEST, most efficient knot to tie monofilament to monofilament is the double surgeon's knot. Be sure you wet or lubricate the knot with floatant before you pull it tight. Trim the ends closely when you are sure the knot is well tightened.

Carefully wind the leader on the reel except for about eight inches of the end. Pass this end through one of the holes in the spool's side. This allows you to locate the end quickly when you are ready to assemble the tackle before fishing. It also prevents the end from burying under the line or leader coils on the reel, causing a tangle or half hitch in the fly line. If there is a small stick-on label included with your fly line indicating its weight and taper, be sure to put it on the inside of the spool for future reference.

Loop-to-loop Connections

SOME FLY FISHERS FIND changing leaders and tippets with the procedures just outlined to be too time consuming. By putting a fixed-loop knot on the end of a short section of permanent leader butt section a fast simple loop-to-loop connection can be used to change leaders quickly.

Simply put a second loop in the new leader's butt end and pass one loop through the other to make the connection. The same procedure applies for loop-to-loop leader-tippet changes. Just unlock the loops when you want to change.

Use either a perfection loop or double surgeon's loop (not to be confused with the double surgeon's knot) for these loop-to-loop connections.

Assembly of Fly Tackle for Use

1. Uncasing the Fly Rod—Your fly rod

and fly reel should be carried in protective cases. If your equipment was supplied with cases, be sure to use them. If your rod does not have a case, you can purchase one made of aluminum or fiberglass, or you can make one of PVC tubing and end caps. Rod sacks and protective reel cases are also available at most fly shops or from mail-order suppliers. (When purchasing a rod or reel case, be sure the cases you buy will fit your equipment. Don't assume that your rod breaks down into sections of equal length. If possible, take your rod and reel along with you when you buy cases for them.)

Remove your fly rod from its tube and cloth bag. Put the tube lid in your pocket as you open the tube. Once the rod is pulled out of the cloth bag, put the bag back into the tube and replace the cap. This keeps your bag and tube dry and clean and prevents loss.

2. Fly Rod Assembly—Put the rod's sections together by connecting the ferrules. Most rods are two-piece, so there will be only a single ferrule connection. Multi-piece pack rods with as many as six sections have additional ferrules. With pack or travel rods, begin assembling the rod at the butt end and progress to the tip.

Line up the guides and slightly tighten the ferrule. Never push, force, or twist the ferrule excessively—damage or locking of the rod sections may occur if you do.

Look down the rod to make sure the guides are all in a straight line. To avoid rod damage do not lay the rod down or prop it against an irregular surface as you unpack your fly reel. Be especially cautious of doors and car trunks, which break more rods than fish do.

3. Fly Reel Attachment to Rod—Remove the fly reel from its bag or case. Do not drop it. Most fly reels will be damaged if dropped onto a hard surface. Position the reel correctly, making sure the handle is on the proper side, and tighten the reel seat hardware down snugly on the reel foot. Never tighten the reel to the seat by using excess finger pressure or pliers.

4. Pulling Line Through the Rod's Guides—Find the leader's end and pull the entire leader and 10 to 15 feet of fly line from the reel. Pull line off with one hand while holding the rod with the other. Never lay the rod down and pull the line out. This will cause reel damage and allow grit to get into the reel. If grit does get into the reel, remove the spool and rinse off both the frame and spool with fresh water. This will usually flush away most of the grit.

Double over the fly line about two feet

from the leader and pass the doubled end through each guide, pulling the excess line and leader after it.

5. Straightening the Leader and the Fly Line—Because both the leader and fly line are stored in small coils on your reel, they will not be straight enough for good casting and fishing performance. You must straighten each.

Hold the fly line firmly just above the leader junction knot. Grasp the leader at the junction with both hands and begin pulling, using sliding strokes, working slowly down to the leader tip. This heats and stretches the coiled leader. Feel the leader get warm in your grip, then stretch it very tightly for about 30 seconds. This heating, stretching and cooling will straighten the leader. Repeat if necessary. Avoid using so-called leader straighteners. These can easily overheat the leader and weaken and damage it.

Pull as much fly line as you will be casting out through the rod's tip guide. Slowly pull on and stretch short sections of the fly line. This should remove most of the line coils. Repeat this step if necessary. In cold weather (below 40 degrees F) be extremely careful not to quickly pull the fly line very tight or the plastic finish may crack. You can also attach the leader and line to a stationary object then pull the entire length at once. Now rewind the fly line onto the reel. It will remain straightened for a day's use.

6. Dressing the Fly Line—If you are using a floating fly line and intend to clean or dress it with waterproof floatant, this is the most opportune time to do it. While the fly line is stretched, apply the cleaner with a clean cloth or dressing applicator. Fly lines, new and used, always last and perform better if they are regularly cleaned and dressed. Products designed to clean and condition fly lines are available at most fly shops.

7. Fly Attachment—Attach your fly to the leader tippet with the Duncan loop, Turle knot, or improved clinch. The Duncan loop, or Uniknot, is usually the most practical and versatile. Because the loop formed is adjustable, the fly can be held tight or loose, or with a large shock loop, with a simple loop size adjustment.

8. Fly Retention—To hold or store the fly temporarily before you begin casting it, or between fishing periods, put the fly in the rod's hook-keeper and tighten the line so it will not fall out. If the leader goes inside the rod's guides at this point, pull it entirely out, pass the leader around the reel seat, hook the fly in the keeper or the closest rod

guide, and bring the leader under tension again with the fly reel.

Disassembling Your Tackle

IMPROPERLY DISASSEMBLING and storing your tackle can cause damage or deterioration, or delay before its next use. After a day of fishing, it is easy to neglect your tackle and forget it until next time. Avoid problems by following these next steps.

Fly Removal—Cut the fly off the leader and carefully store it in an open area (hat band or vest fly-drying patch).

Line/Leader on Fly Reel—Carefully and evenly wind your fly line and leader back onto the reel under light tension only. You can wipe the fly line nearly clean and dry with a towel.

Do not wind the line onto the reel too loosely or too tightly. Either will cause line damage or tangles.

Reel Storage—Remove the reel from the rod. Wipe it clean with a towel. Put it into its storage bag or case, but do not close it tightly. Allow air to reach it so any moisture remaining in and on it can evaporate.

Fly Rod Disassembly—Take a careful, firm grip on the two sections and pull the ferrules apart. If the ferrules become stuck, have your partner also take hold of each section as both of you pull the sections apart. Be particularly careful that you do not bend or twist either section as you pull them apart.

Use a towel or cloth to dry and clean the rod. A spray window cleaner will safely remove any dirt or greasy film.

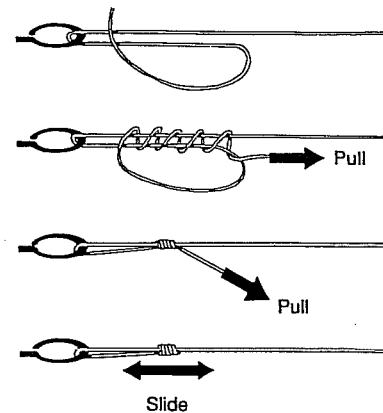
Rod Storage—After the rod has been wiped dry, place it, ferrules down, in the cloth bag. Do not get the bag wet. Now place the rod, inside its bag, into the rod case or tube.

If you must store either a damp rod or damp bag, remember to remove them from the case and allow them to dry when you get home or return to your motel room.

Storage—Keep both the rod and reel in a cool, dry, dark place away from sunlight when possible. Be sure you do not seal either the rod or reel case tightly during long storages. When storing your reel and fly line for a few months, it's best to remove the line from the reel, clean it and store it in large loose coils to extend its life. Fly lines have soft, flexible coatings or finishes that will deform if left tight on a reel for long periods.

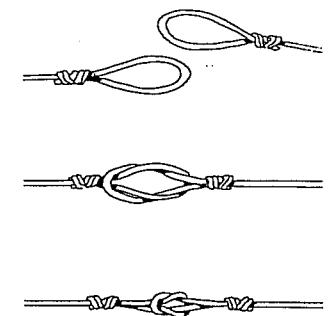
Well maintained fly-fishing equipment is a joy to use and less likely to fail when the fish of a lifetime is at the end of your line. Routine maintenance and care will ensure that your equipment gives you the best service for your investment.

DUNCAN LOOP



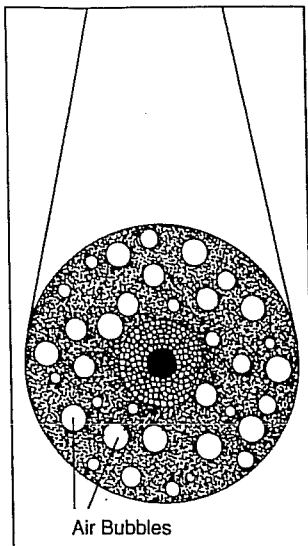
The Duncan loop is a versatile knot. Here it is used to tie the tippet to the fly.

LOOP-TO-LOOP KNOT



Loop-to-loop connections are used to attach a tippet to the leader, tippet sections to each other, or a leader to a permanent butt on the fly line.

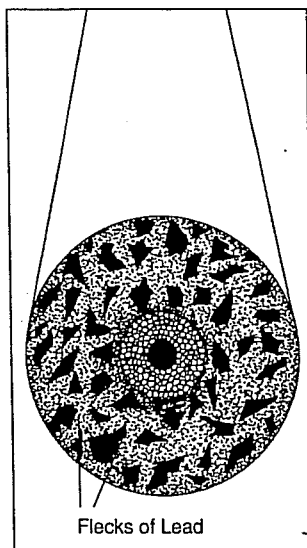
FLOATING LINE



Air Bubbles

By varying the characteristics of the floating line's coating and the air bubbles, or microballoons, in the coating, manufacturers can make lines with different characteristics.

SINKING LINE



Flecks of Lead

Adding flecks of lead or tungsten to the coating of a fly line makes the density greater, which creates a sinking line. The denser the line, the faster it sinks. Sinking lines generally have a smaller diameter than floating lines.

given: 90ft./30 yd./27.4m. Each designation tells you something important about the function of the line.

Line Care

LINES SHOULD BE WASHED in mild soap and water and wiped dry or cleaned with a line cleaner after use, because they accumulate dirt and algae on their surface, thus making casting difficult and making floating lines sink. After cleaning, allow the line to dry in the shade (ultraviolet light from the sun destroys the chemicals in a line) or wipe it dry and dress the line with lubricant provided by the manufacturer or with Armor-All. Some newer lines require less dressing

because they have lubricants in the line coating that gradually weep toward the surface.

When you are not fishing the line, detach the fly and wind the line onto the reel until your next trip. Long storage on a reel can create reel-coils in the line, but to remove the coils you only need to stretch or cast the line. At the end of the season clean your lines thoroughly and wind them back onto their original line spools. Always keep your lines stored out of direct sunlight. The sun's ultraviolet rays and high heat (a hot car trunk, for instance) can cause the line coating chemicals to deteriorate swiftly. With proper care your lines should last you from three to five years under normal use.

LINES FOR SITUATIONS

FRESHWATER FISH SURFACE FEEDING ON SMALL (#14-#22) FLIES

recommended

2- to 6-weight weight-forward (WF) or double-taper (DT) floating. Standard tapers work well, but use a line with a long belly and a long front taper when the water is clear and the surface is flat and you want extra-delicate presentations of small flies on light tippetts.

FRESHWATER OR SALTWATER FISH SURFACE FEEDING ON LARGE BAITFISH OR OTHER FOODS

recommended

8- to 15-weight weight-forward floating lines with a short belly and a short front taper. Relatively hard line surface and core.

FRESHWATER OR SALTWATER FISH FEEDING JUST UNDER THE SURFACE ON SMALL OR LARGE BAITFISH OR OTHER FOODS

recommended

5- to 10-weight weight-forward intermediate lines (sink rate 1.25 to 1.75 inches per second [ips]) or sinking-tips Type I (#1).

FRESHWATER OR SALTWATER FISH FEEDING IN STILLWATER FROM TWO TO FOUR FEET DEEP ON BAITFISH, LEECHES, NYMPHS, OR OTHER FOODS.

recommended

5- to 10-weight weight-forward uniform-sinking or shooting-taper lines (sink rate 2 to 3.5 ips) or sinking-tips Type I or II (#1 or #2).

FRESHWATER OR SALTWATER FISH FEEDING ON BAITFISH OR OTHER FOODS FROM THREE TO SEVEN FEET DEEP IN STILLWATER.

recommended

5- to 11-weight weight-forward uniform-sinking or shooting-taper lines (3.25 to 5.50 ips) or sinking-tips Type I, II, or III (#1, #2, or #3).

FRESHWATER OR SALTWATER FISH FEEDING ON BAITFISH OR OTHER FOODS FROM 10 TO 20 FEET DEEP.

recommended

6- to 11-weight weight-forward uniform-sinking or shooting-taper lines (3.75 to 6.5 ips) or sinking-tips Type I, II, III, or IV (#1, #2, #3, or #4).

specialty

Specialty lines—bonefish, bass, big-game, and Teeny T-series tapers—should be chosen for each specific type of fish you pursue. You can get the best advice on the right choice from a fly shop.



CASTING BASICS

*The fundamentals you need to know
before you get started*

IN SPIN CASTING the weight of the lure pulls the line off the reel. In fly casting the weight of the line carries the fly to the fish. In fly casting you must learn to use the rod to cast the weight of the fly line. You can do that quickly by following five basic principles of good fly casting.

1. The line (and fly) goes in the direction you point the rod tip during the cast.

2. Good fly casting is not strength-related; it is timing-related. Thus you must practice the timing of the cast to become a good caster. How much practice? At least 15 minutes a day to become a good caster in a month.

3. Proper stroking and stopping of the rod are fundamental to good fly casting. The caster loads energy into the rod during

the casting stroke. The rod releases the energy into the line in the cast. The caster loads a little energy (a short, low-energy stroke) into the top of the rod for short casts; he loads a lot of energy (a short, powerful stroke) into the middle and bottom of the rod for a long cast.

4. Casting arcs (the arc the rod makes in the air during the cast) are small for short casts and large for long casts.

5. Stopping the rod after the casting stroke is critical to forming the casting loop, and it allows the rod to unload, thus casting the line.

Fly fishers seldom need to cast more than 50 feet when fishing. Yet becoming proficient at long-distance casting can improve all your casting. You should learn to cast short (30 feet) first and then practice at greater and greater distances.

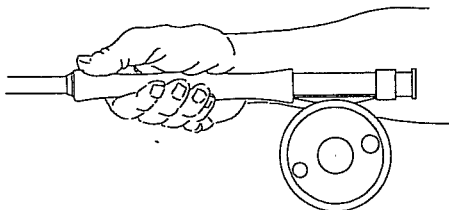
You can't learn casting from a book. You must do it. The more you practice the better you'll become. Practice on a lawn or pool. Casting while fishing is not practice. Practice allows you to focus on casting fundamentals without distractions.

Getting Started

THE BEST WAY TO LEARN casting is from an expert instructor—a friend, or relative. You can also find instructors at fly-fishing schools, fly shops, or fly-fishing clubs. If one is not available, take the balanced rod, reel, and line you have bought to your back yard. You'll need at least 120 feet (60 feet in each direction) of lawn with no overhead obstructions.

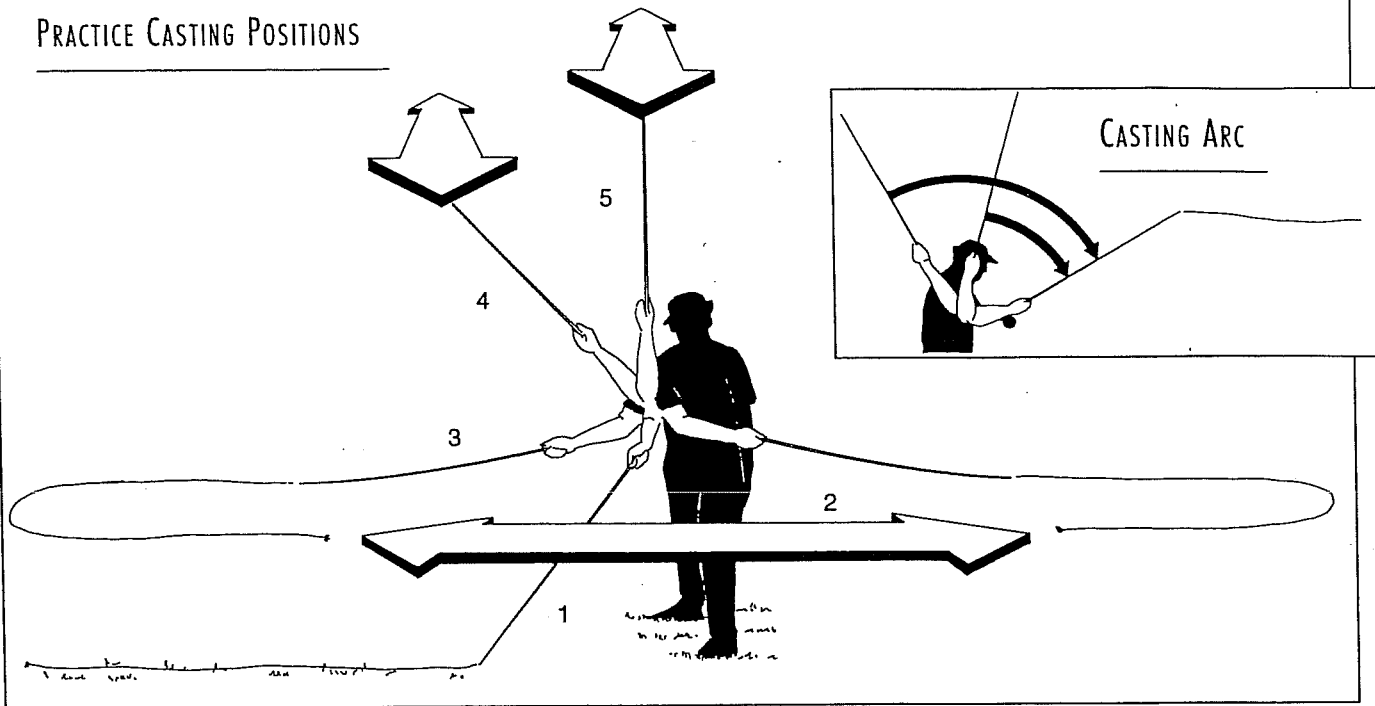
Mark your fly line with an indelible mark-

THE CASTING GRIP



The proper grip is important. Keeping your thumb on top of the rod helps you apply force to the stroke and direct the rod tip accurately and in plane.

PRACTICE CASTING POSITIONS



er at 30 feet. The marker will indicate how much line you have out when you cast. Also place hats or some other objects on the lawn 30 and 60 feet from where you will stand. The markers will help you develop the sense of distance that is critical in casting accurately to fish.

The Grip

GRASP THE ROD FIRMLY with your casting hand and place your thumb on top of the rod grip. When you are learning casting keep the rod butt under and in line with your wrist and forearm. That way the rod will remain in plane during your cast. If the rod comes out of plane during the cast the tip wanders and the line follows the tip, wandering and spoiling the cast.

Stand on the lawn with your feet slightly apart. Thread the line off the reel and up through the line guides and out the tip top of the rod. Tie a 9-foot leader onto the end of the line using the tube knot (shown in the Assembling Your Tackle article) and tie a small piece of yarn to the end of the tippet. Pull about 20 feet of line off the reel and lay it out on the lawn to the right of where you stand (to the left if you are left-handed). Make sure the line is drawn tight on the lawn and is not lying in S-curves (number 1 in the above illustration) or it will not cast well.

Using a horizontal side-arm cast, flick the rod tip forward from your right to your left (from your left to your right (1), if you are left-handed) and watch the line form a loop and roll out to your left (2) and then settle to the grass.

Using your arm and a flick of your wrist together (the way you'd throw a frisbee backward and a baseball forward), cast the line repeatedly back and forth in backcasts and forward casts (2, 3). Try to make the line form candy-cane-shaped loops in both your backcasts and forward casts. Loop formation is the intent of your casting—the tighter the loops the better the cast.

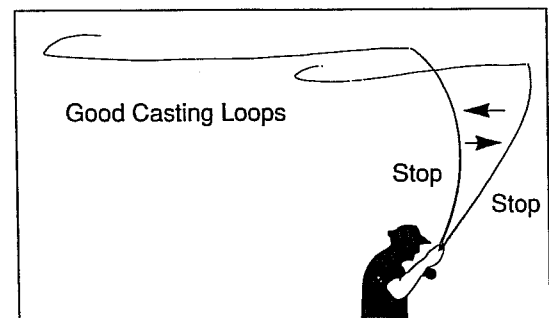
As you stroke the rod back and forth (2, 3), keep a firm wrist and stop the rod abruptly after each stroke. Stopping the rod allows the line to form a loop off the rod tip. It also allows the rod's tip to turn over to unload energy into the line efficiently. The energy in the rod casts the line. You must stop the rod when making both the forward cast and the backcast to become a good fly caster.

After casting sidearm for 15 minutes, or

YOUR FIRST PRACTICE

The casting principles remain the same for all casting positions. Start your practice with a sidearm cast then move to 45-degree casts and finally to vertical casts. Try to maintain good casting loops. Longer casts require a wider casting arc.

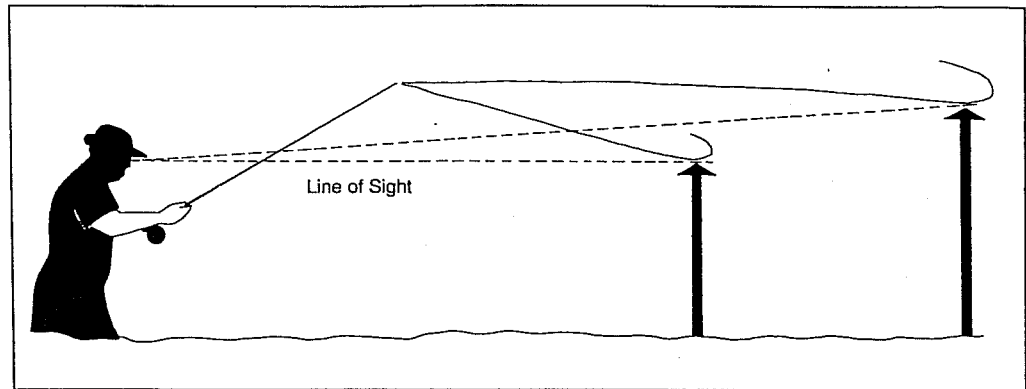
LOADING THE ROD



Loading energy into the rod requires good timing, not strength. You should feel the rod bend as you cast. Stop the rod immediately after the backstroke and the forward stroke.

AIMING THE CAST

Unless it's windy, you should not aim your cast directly at your target; instead, aim just above it. The longer the cast, the higher you should aim.



until you feel comfortable with the feel of the line and the rod, try casting the rod at a 45-degree angle (4) and then vertically (5). You'll use all these casting positions when you are fishing, so get used to them. You want to groove your casting stroke in the position that is most comfortable for you—sidearm, 45 degrees, or vertical. The casting principles remain the same for all casting positions. The sidearm cast allows you to watch the line and thus to teach yourself timing and loop formation.

Aiming the Cast

FOR SHORT CASTS you aim about four feet above the water (or lawn). As your casts get longer aim higher to allow the line and fly more time to reach the target. Learning to aim accurately is a hallmark of expert casting. You should spend considerable practice time learning to aim and to hit targets on the lawn.

Using the practice steps, you should be able to teach yourself how to cast the line, leader, and yarn (fly) from 15 to 30 feet in your first hour of practice. Now you can present a fly to bass and panfish in a pond

or to fish in a stream or on the ocean.

Expert casting takes practice, but 15 minutes a day (every day in summer) of practice can make you an expert caster in one season. Here are some helpful tips when practicing casting or when fishing.

1. Wear protective glasses (polarized sunglasses) to prevent eye injury.
2. Push yourself to greater (measured) distances in casting the yarn fly only after you achieve competence at the shorter distances—15 feet, then 20, then 30 and so on.


3. Have a good caster watch and critique your casting.

Here are some basic errors in casting and how to correct them.

Problem: Backcast dropping to the lawn or water. **Fault:** the rod tip is flopping over (pointing too low), sending the cast to the ground. **Correction:** Stop the rod tip high. Keep a firm casting wrist.

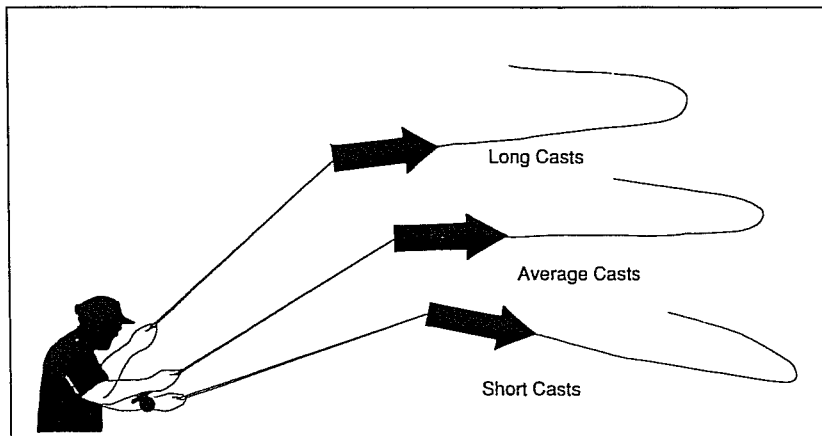
Problem: Tailing loops. **Fault:** Stroking the rod too hard or too soon. **Correction:** Stroke more gently. Allow the line time to straighten out in the backcast completely before stroking the forward cast.

Problem: Fly snaps off with a crack in the backcast. **Fault and Correction:** Same as for tailing loops.

Problem: The cast dies before reaching the target. **Fault:** Underpowered cast caused by loose line or by a floppy wrist stroke. **Corrections:** Tighten the line before the pick-up for the backcast. Use a firm wrist stroke on the backcast and forward cast and stop the rod immediately after the stroke. 

DIRECTING THE ROD TIP

The farther you intend to cast, the higher you must aim. The line will travel in the direction that you stop the rod tip.





UNDERSTANDING LEADERS

LEADERS ARE TAPERED MONOFILAMENT strands that connect the fly line to the fly. They are designed to cast (present) flies the way the fish expects to see food items. The right leader for your fishing is critical to your success.

Fly leaders have three sections—butt, midsection, and tippet. Leaders are tapered from the wide, heavy butt to the narrow, light tippet to help turn the fly over in casting. They are either hand-tied, with segments between knots, or they are knotless with a continuous taper from butt to tippet point. With the rapid improvement in monofilament technology, leaders can now be designed with hard butts and soft tippets and with a variety of stiffness, diameter/strength, and abrasion characteristics to fit virtually every fishing requirement. The packaging today tells everything you need to know about the leader and how it will perform.

What do we mean by the-right leader? The one that suits the fishing situation. For instance, when you are fishing small flies on flat water for trout or panfish the leader must also be small in diameter and thus in breaking strength. It must have a relatively soft tippet for soft presentation of the fly, and it must be long enough to assure that the fish is not spooked by the line hitting the water during the cast.

The general rules are: The smaller the fly, the smaller the leader diameter (tippet end), or the larger the fly, the larger the leader diameter. Also, the smaller the fly and the flatter the water and the spookier the fish, the longer and thinner the leader needed to fool them. Some spring-creek trout are so finicky that you may have to go as light as 7X or even 8X, while on salt water the tippet may have a breaking strength of 20 pounds with a shock tippet of 100 pounds tied in.

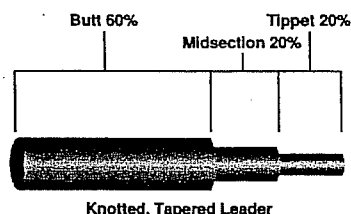
Fortunately leader manufacturers have labeled their products to help you choose the right leader for your fishing. For instance, a bass leader should be relatively short and stiff to turn over the large flies you will use. Similarly, saltwater leaders will be relatively stiff, strong, and very abrasion resistant to withstand the large sharp teeth of saltwater fish and the powerful runs those fish make.

The connection you make between your leader butt and the fly line is important. If you decide to use a knot, the easiest is the tube or nail knot. The needle nail knot is the most secure of all the leader/line connections, but it takes much more time to tie. (The needle/nail knot connection is recommended for saltwater fishing.)

Some manufacturers make braided leaders that come with Chinese finger-puzzle-and-sleeve connections (you stick the line into the braid and it grabs; you dab on glue or slip on a sleeve). Braided leaders work fine in relatively calm fishing, less well in the wind, and they tend to hold water and thus become heavy.

A standard leader for stream trout, bass, and panfish is nine feet. Stillwater leaders may run as long as 22 feet and spring-creek leaders are often 12 feet or longer. As the wind rises casting such leaders becomes more and more difficult, so experienced fishermen shorten the tippet to aid in turning the fly over in the wind. For dry-fly fishing on flat water, the leader and fly line are usually dressed with silicon paste to make them float. Wind knots in tippets are the curse of the fly fisherman. When you find one you should cut the fly off above the knot and retie. (You may have to tie on a new tippet.) A wind knot can reduce the breaking strength of your leader by 50 percent and large fish will break off.

LEADER PARTS



Knotted, Tapered Leader

X-RATING

Here are some examples to help you understand the X-rating of tippets—the diameter of the monofilament and its X designation. The important thing to notice on leader packaging is the diameter and the tippet pound-test rating. The X rating/pound-test rating varies from brand to brand of leaders.

DIAMETER	X-RATING	FLY SIZE
.003"	8X	#20-#28
.004"	7X	#20-#28
.005"	6X	#18-#26
.006"	5X	#14-#20
.007"	4X	#6-#14
.008"	3X	#6-#12
.009"	2X	#4-#10
.010"	1X	#4-#8
.011"	0X	#4-#6



THE BEST KNOTS

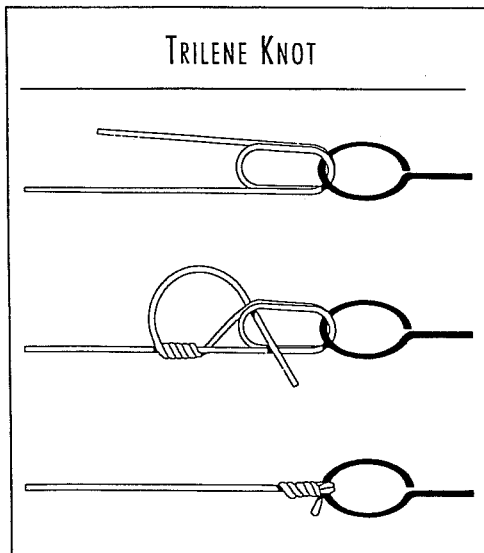
*Learn to tie the right knots
and you will lose fewer fish.*

KNOTS FORM THE MAJOR link between you and your fly and the fish. Because fly-fishing tackle requires a number of knots for connections between the line and backing, the line and leader, sections of the leader, the leader and tippet, and the leader and fly, it is essential that you learn to tie the strongest knot for a particular application, and that you tie it properly. The strength of any knot depends on the knot being tied properly. You may choose to tie a knot with a high breaking strength, perhaps on the order of 90 to 95-percent, but if you don't tie the knot properly, the breaking strength may drop to 50 percent or less. In fly fishing, your knots must work or you will lose fish.

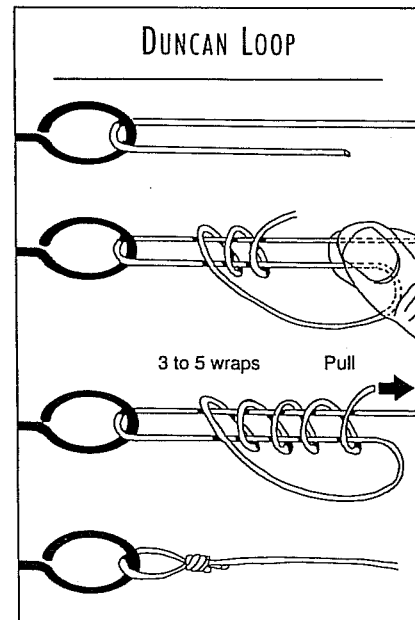
Each of the knots shown here is best suited to a particular application, and some, like the Duncan Loop, serve multiple purposes. You probably won't need to use all of them, and you will likely find some more to your liking than others. Keep in mind that each knot tier will tie his knots a little differently. There are many variables in knot tying—how quickly and how tightly you pull the knot

tight, the diameters of the materials being tied together, how well the knot is lubricated before being pulled tight, and others. Tie and try each knot shown here, then choose the ones that work best for you.

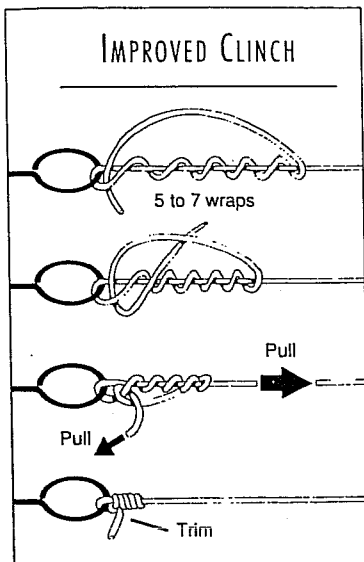
These tips should help you tie stronger



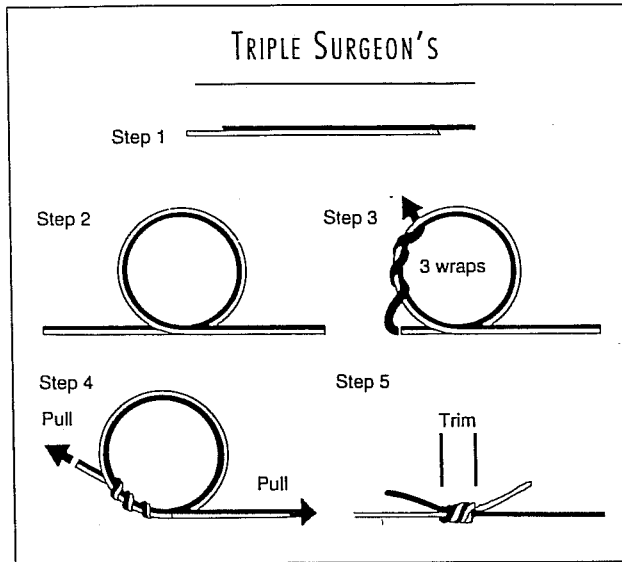
The Trilene Knot uses two wraps of monofilament through the hook eye to increase its strength and durability.



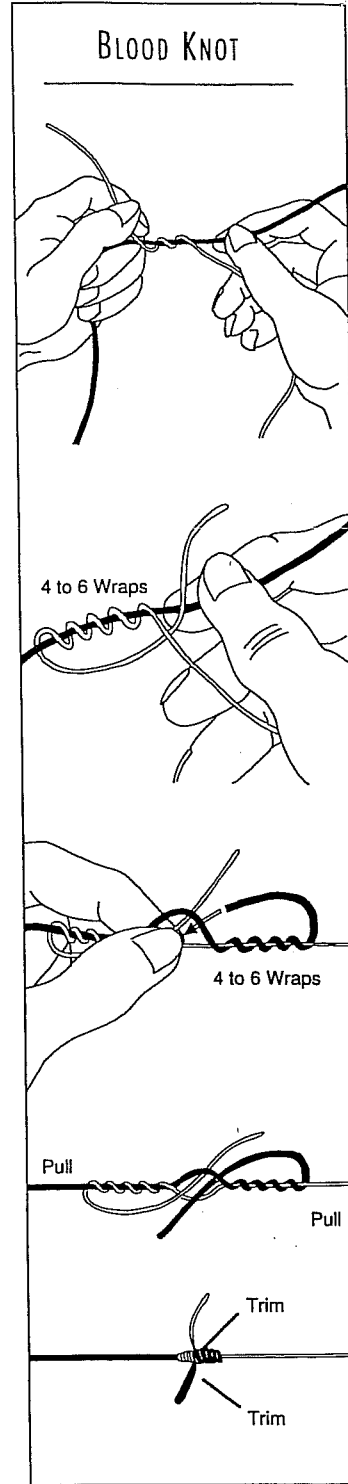
Use the Duncan Loop to attach your fly to your tippet. Leave the loop open to allow the fly to swing freely, or close the loop tight against the hook eye for a tight hold.



Use the improved clinch knot to tie flies to tippets. Pull the tag end and standing tippet tight after completing the first step (top) to get an unimproved clinch knot.



If you can tie a simple overhand knot, you can tie a surgeon's knot. The double or triple surgeon's knot works well for attaching tippets to leaders, and to connect sections of a leader, offering a simpler alternative to the blood knot but with slightly greater breaking strength.



The blood knot makes a strong connection between leader sections, especially monofilament segments of significantly different diameters, and the leader and tippet. Pull on the two standing ends to snug up the knot.

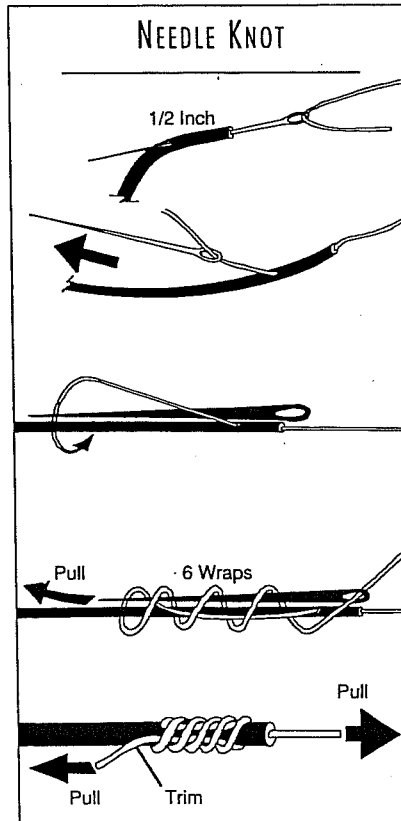
and more uniform knots:

Lubricate the knot—either with water, saliva, or a lubricant such as fly foatant—before pulling it snug. Lubricating the knot helps it slide into place more easily, without damaging friction or heat. Knots tied with dry monofilament can be much weaker than knots tied with a lubricant. (If you use saliva, avoid getting even a few drops of stream water in your mouth, because most stream water carries bacteria and potentially dangerous viruses such as giardia lamblia.)

Pull the knot snug in one smooth, continuous motion. Sometimes you may have to guide the knot wraps into place as you pull it snug. Lubrication helps.

Clip the tag end or ends as close as you can to the knot without risking damage to the knot from the clippers. One nick in a knot can severely reduce its effectiveness.

Check your knots and the leader for damage periodically while you are fishing. Often knots become damaged through fishing, especially if you are catching fish, fishing weedy or brushy areas, or nymphing near the stream bottom. Sticks, stones, and fish teeth can easily damage monofilament. If the knot or leader looks damaged, replace it. Whenever you try to get just one more cast from a damaged knot, that knot "will" break. You'll feel very foolish if you lose the fish of a lifetime or the best fish of the day because you were too lazy to retie a knot that needed attention.



Use the needle knot to attach your leader butt to your fly line. Shave the butt end of the leader so it threads easily through the needle. Snug the wraps up carefully and evenly by pulling on the tag and standing parts of the leader.



HANDLING AND RELEASING FISH

Ways to safely return the fish to water

SOME FISH YOU MIGHT want to keep to eat and others you may want to release alive to grow and be caught another day. Some wild fish populations can stand a lot of harvest (panfish) and others cannot. It takes six or seven years to grow a large trout or bass. If you want to preserve the large fish for future fishing, then you'll need to handle them properly or they will die. Here's how to handle fish you intend to release.

Fish have delicate gills through which they breath oxygen. And their bodies have delicate internal organs. Here are five steps to follow to prevent injury to the fish you catch for release.

1. If possible don't handle the fish. It is covered with a protective slime. When you handle the fish you disturb the slime and the fish can develop a fungus in the spots you touch and die. Do not touch a fish with a dry hand. Simply reach down and release the hook from the fish's mouth and allow it to swim away untouched. Small pliers or forceps facilitate hook removal.

2. If you must handle the fish, do so gently by turning the fish on its side in your hand, where it will become immobile, or by turning it completely upside down in the water (facing upcurrent), where it will usually become immobile. Then you can remove the hook and release the fish easily without a struggle.

3. When handling the fish, make sure that

you do not put your fingers into the gills. The fish can survive if it begins to bleed slightly from the gills, but its chances of surviving major gill damage are slim.

4. Don't squeeze the fish when handling it because you can damage its delicate internal organs.

5. Make sure that you revive the fish completely before releasing it. If the fish is exhausted it will turn over on its side or upside down. Make sure you hold it upright and in a gentle flow of water so it can get its gills working and recover oxygen from the water. In still water hold the fish gently and glide it back and forth in the water so the water flows through the gills, providing oxygen to the fish. As the fish revives, its gills will work more energetically until it is able to remain upright in the water and finally swim away on its own.

Don't try to revive the fish in the fast current. If it slips away, it will begin spinning and turn upside down and you won't be able to save it. Revive stream fish in the gentle flows near the bank.

RELEASE TECHNIQUE



Holding a fish upside down temporarily immobilizes it so that you can remove the hook. Keep the fish's head out of the water while you hold it upside down.