

Resources:

1. Learn to Fly Fish in 24 Hours - An Hour-by-Hour Start-up Guide, Robert J. Sousa, Ragged Mountain Press / McGraw-Hill, 2007
2. The 24 Greatest Flies You Don't Leave Home Without, Robert J. Sousa, Ph.D., Husking Bee Books, 2010
3. The Boy Scout Fly-Fishing Merit Badge Handbook
4. Tools: <http://www.youtube.com/watch?v=DB6tss3hGZc>
5. Fly Tying Videos: <http://globalflyfisher.com/video/fly-tying>
6. Woolly Bugger: <https://www.youtube.com/watch?v=L5vMStjCwok>
7. Elk Hair Caddis: <http://globalflyfisher.com/video/beginning-fly-tying-elk-hair-caddis>
8. Fishing Knots: <http://www.animatedknots.com/indexfishing.php>

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Pete Adams, Editor



Boy Scouts of America Beginner's Fly Tying Handbook



**Simple and effective flies for
fresh and saltwater fly fishing**

BSA National Fishing Committee





Table of Contents

<i>Introduction</i>	3
<i>Basic Tools</i>	4
<i>Hooks</i>	5
<i>Materials</i>	6
<i>Fly Tying Techniques</i>	8
<i>Nymphs</i>	10
<i>Wet Flies</i>	12
<i>Streamers</i>	14
<i>Poppers</i>	19
<i>Dry Flies</i>	20
<i>Terrestrials</i>	22
<i>Fly Tying Resources and Acknowledgments</i>	24



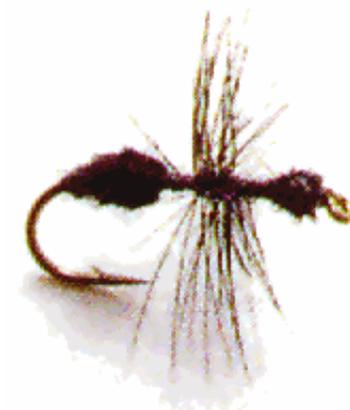
Fur Ant - Terrestrial

Materials:

Hook:	Standard dry fly, size 14 - 20
Thread:	Black 6/0
Abdomen:	Black rabbit dubbing
Thorax:	Black rabbit dubbing
Hackle:	Black

Tying Instructions:

1. (optional) Crush the hook barb.
2. Start thread at rear of hook and dub the abdomen to the center of the hook.
3. Tie in hackle for legs.
4. Dub the forward section to the eye.
5. Palmer the hackle between the 2 body sections. While ants have three sections to their bodies, the 2 section fly seems to work better. A very thin waist between the two sections is important.
6. Whip finish the head and add a small drop of head cement.
7. Trim the hackle on the underside close for a lower ride in the water.



Perhaps the best thing about fishing terrestrial patterns is that you can fish them any time! Fish them early, mid-day, afternoon or evening. The ant is one type of insect that is always there - except below freezing.

Fishing terrestrials is an easier task for beginning fly anglers. Presentation for these land insects should be normal for the circumstances. Ants don't live in the water, and get on or into the water by happenstance. This is light rod fishing - although you may be pleasantly surprised at the size of fish who take your fly.

Ten-foot 6X leaders work well with the smaller size ant patterns on a floating line. While you still need to mend line for a drag-free float, the presentation of the fly is a gentle 'slap' on the surface. The theory is trout are alerted to the presence of terrestrials by the sound of the insect hitting the water. Since ants are one of the trout's favorite foods, any decent effort will be rewarded.

All ant patterns should ride just in the surface film, not 'high and dry.'



Foam Beetle - Terrestrial

Materials:

- Hook: Standard dry fly hook, size 12 to 18
- Thread: 3/0 or 6/0 thread, color to match body
- Body: Closed cell foam, color of the insect you want to match
- Indicator: Poly yarn or egg yarn
- Legs: Rubber leg material, color to match or contrast body

Tying Instructions:

1. (optional) Crush the hook barb.
2. Lay in the thread behind the eye, cover the shank, and bring it back to 1/4 of the shank from the eye. This is the "starting point".
3. Select a strip of closed cell foam about the width of the hook gap. Cut one end into a "V" and tie it down to the hook shank to just beyond the start of the hook bend. The strip should be hanging beyond the bend.
4. Move the thread back to the starting point. Pull the foam gently forward over the hook shank to create a humped back. Secure to the hook at the starting point, and then tie the foam down to the hook all the way to the hook eye.
5. Return the thread to the starting point. Pull the foam back over the hook and secure to the starting point.
6. Trim the foam to leave a slight tag end extending over part of the humped back.
7. (optional) If desired for visibility, tie in a small bunch of brightly colored yarn on top of the fly at the starting point. Trim the yarn short on top.
8. Tie in a pair of rubber legs on each side of the hook at the starting point. If you need to, straighten the legs out before you cinch the thread tight and lay in a number of half hitches to secure.
9. Clip the legs to be even on both sides of the fly and cement your half hitches.



This is another simple but effective fly. It's also fairly durable and will float forever.



Introduction

The great American conservationist and author, Aldo Leopold in his book *The Sand County Almanac* stated that double is the pleasure of an angler who catches a fish on a fly they themselves have tied. You are about to do just that! With your skill and guile, you will create with commonly available materials something a fish believes to be worthy of eating. Awesome!



Adams Dry Fly

I've always said that if you enjoy fishing, I don't care what style of fishing you use - bait, lure, spin or even cane pole. Then I add, if your goal is to catch a lot of fish...and I mean a lot of fish...you surely need to add fly fishing to your skill set. Why? Because a fly angler can deliver a fly to a fish that mimics closely in size, shape, texture, color and silhouette what a fish expects to see. Flies can be ultra small - so small as to fit into the ear of President Roosevelt on a dime - to very large.

If an angler, using various techniques, can make a fly behave the way the predator expects its prey to behave - whack - Fish On! That's the game. To determine where the fish are likely to be, deliver a fly that mimics closely what it is feeding on and then make it behave in a natural way. Use proper hooking setting techniques and you will catch a lot of fish...guaranteed.

There are two basic types of flies - wet flies and dry flies. Wet flies are fished underwater where most fish do most of their feeding most of the time. When the fish strikes, you need to strip set the hook by pulling the fly line back toward you. Dry flies, on the other hand, float so using your rod tip to set the hook like in lure angling is the best technique.

Remember, your job as an angler is to make that fish strike your fly. You are a hunter and you want to provoke an attack. Be the fly!

Robert J. Sousa, Ph.D.

Certified Fisheries Scientist



Basic Tools

Fly tying, like many crafts, uses some unique tools and techniques. You don't need many special tools to get started, and some can be avoided by using common household items or just your fingers.



Vise - A simple, sturdy vise is the basic foundation for fly tying. There are many types, ranging widely in quality, features, and price. Most vises use simple, cam-actuated, adjustable steel jaws to firmly grip a wide range of hook sizes. Just make sure it's sturdy so it will last for many years.

Bobbin - Perhaps the next most important tool is a thread bobbin. This simple device holds and controls the thread as you tie your flies. Most of them use spring tension to hold the spool of thread between two knobs, which fit into the holes on each end of the spool. The thread is fed through a tube in the bobbin.

Scissors - There are many types of scissors used in fly tying. To start, all you need is a fine-tipped pair for delicate work and a larger pair for general work. Use the larger pair to cut tough materials like synthetic fibers, flash, and wire. Keep the fine pair for softer materials like hackle, natural hair, and thread. Keep all your scissors sharp for the best performance.

Bodkin - With this simple tool, basically a needle with a handle, you can pick out material after its tied to the hook, apply a small drop of cement to secure the head of your fly, clean out excess cement from the hook eye, and more. Some of them include a hole in the end of the handle that serves as a half hitch tool.

Hackle Pliers - Basically a spring clip used to grab the end of a hackle feather, they come in several basic styles and allow you to turn hackle evenly around the hook. If you need one, keep it simple, but get one that won't slip or grab the feather so tight that it breaks it. Many fly tiers just use their fingers to wrap hackle.

Hair Stacker - This tool is used to even up the ends of hair used for wings and tails. To use it, cut a clump of hair from the skin, clean out any fuzzy underfur with your fingers or a fine comb, and put the hair tips into the stacker. Tap the



Pete's Adams - Dry Fly

Materials:

Hook:	Standard dry fly, size 10-20
Thread:	Gray or black 6/0 or 8/0
Wing:	Grizzly hen hackle tips
Tail:	Brown and grizzly spade hackle fibers
Underbody:	Opal or Pearl Mylar tinsel
Body:	Gray dubbing or muskrat fur
Hackle:	Brown and grizzly

Tying Instructions:

1. (optional) Crush the hook barb.
2. **Lay in** the thread behind the eye, wind down the shank, and return to $\frac{1}{4}$ of the shank from the eye.
3. Select, clean, and align 2 grizzly hen hackle tips so they flare away from one another. The tips should be the length of the hook shank. Using the **pinch technique**, make 3-4 firm wraps of thread to tie them in with the tips forward over the hook eye. Make the first 1 or 2 wraps under light thread tension so that the feathers don't twist.
4. Trim the butt ends of the hackle tips and wrap the thread back to the hook bend. Select some stiff spade hackle (the hackle found at the edges of the rooster neck) from both the grizzly and brown. Tie in a few fibers of grizzly, then brown, and then grizzly. Less is more - don't get the tail too bulky!
5. Tie in a piece of opal Mylar tinsel at the base of the tail and wrap the thread to behind the wing. Wrap the tinsel toward the wing, tie off, and clip excess. **Palmer** the thread back to the base of the tail.
6. Select a small pinch of gray dubbing or trim a small clump of muskrat underfur close to the skin; remove the long guard hairs.
7. Dub a **sparse** tapered abdomen of dubbing or muskrat underfur, stopping an eye width before you get to the hackle tip wing tie in point.
8. Pinch the hackle tips together and pull them back. Make 3-4 tight wraps of thread in front of the hackle tips to keep them upright. Trim any hackle barbs that get squashed in the process.
9. Behind the wing (and over that spot you left bare while dubbing the abdomen) tie in a prepared brown hackle, with a grizzly one over it. Run the thread up in front of the wing.
10. The second hackle you tied on (the one on top) is the first one you wind forward - the grizzly. Make 1 or 2 wraps behind the wing, and 2-3 in front of it. Try to keep the space between the wraps uniform. Tie off and trim.
11. Next, wind the brown hackle forward. Look closely at the hackle stem where it contacts the hook shank and try to position the wraps between the grizzly hackle. Tie off and trim.
12. Make a small thread head and add a drop of head cement.





X-Caddis - Dry Fly

Materials:

- Hook: Standard dry fly, sizes 12-20
- Thread: 6/0 or 8/0 - color to match body
- Tail: Crinkled Zelon - amber gold or caddis gold, or equivalent
- Body: Dubbed beaver or Antron - tan, brown, olive or black to match the naturals
- Wing: Natural deer or elk hair

Tying Instructions:

1. (optional) Crush the hook barb.
2. Attach tying thread near bend and wind forward to within 1½ to 2 eye-widths of the eye.
3. Separate out a few fibers of Zelon. The length of material should equal at least 3 shank lengths or more for ease of handling. Secure it where the thread was left in step 2 and trim excess. Next twist it one turn clockwise. While holding the twist, fold the Zelon back onto itself forming a loop that is more than a gap width, but less than a shank length. Secure this now overlapping end just behind the first, and trim excess.
4. Twist the Zelon tightly counterclockwise. While holding the twisted bubble shuck wind thread toward bend to secure it on top of hook. Stop where you want the shuck to begin.
5. Wax thread, spin on dubbing, and wind a body forward to just behind where the wing will be tied in.
6. Untwist the thread, and lay a flat thread-base for the wings.
7. Twist the thread counterclockwise by spinning the bobbin.
8. Select a portion of deer or elk hair, clean out under fur and stack it. Place hair on top of the hook with tips at rear of body. Secure the wing with twisted thread placing each wrap to rear of the first wrap. If the hair flares too much, un-wrap the thread and wind rearward from the tie down point to make the hair lay more along the body.
9. Pick up the butts and put four or five half hitches tightly against the wing. If the thread twists, untwist the thread before half hitching.
10. Trim butts leaving a small stub. Natural caddis have a small head.
11. Add a touch of head cement to the thread wraps to help the wing stay in place.

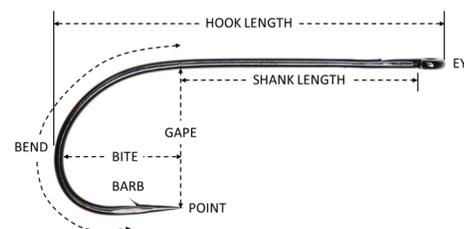


stacker gently on the table, and then hold the stacker on its side, separate the tube from the base, and remove the hair.

Half Hitch Tool - This simple tool helps you to tie the half hitch knot to either secure material as you tie or to finish off the fly when you're done. The tool is usually a hexagonal metal rod, tapered and hollowed out at each end. The parts of a ballpoint pen can also be used instead of buying a special tool.

Hooks

Most manufacturers use a numerical scale to describe hook size. The larger the number, the smaller the hook. A size 14 hook, for example, is smaller than a size 10 hook.



Bend - Hooks come in many shapes or styles, usually defined by the shape of the bend. Some styles include Aberdeen, Perfect, Beak, Sneck, Dublin, Wilson, York, Sproat, O'Shaughnessy, Limerick, and Continuous. Most flies are tied on just a few hook styles.

Eye - The eye of the hook is where the fly is tied to the leader tippet. It may be turned up, straight, or turned down, depending on the type of fly and how it is tied to the tippet.

Shank - This is the part of the hook where most of the materials are tied to form the fly. It is usually straight, but may be curved in some hook styles. Its length may be standard, short (1XS, 2XS, etc.) or long (1XL, 2XL, etc.). A 2XL hook, for example, has a shank as long as a hook two sizes larger.

Point - The point is the sharp end of the hook that penetrates the mouth of a fish. The shape and sharpness of the point determines how well it penetrates. Point types include needle point, rolled-in, hollow, spear, beak, mini-barb, semi-dropped and knife-edge. Keep your hook points razor sharp!

Barb - The barb can improve the holding power of the hook once a fish is hooked. Many people use barbless hooks or crush the barb with pliers before they tie a fly. We highly recommend it. This makes it easier to hook the fish and to remove the hook from the fish, you, or your merit badge counselor!

Gape (or Gap) - This is the distance from the shank to the point of the hook. This distance, and the shape and sharpness of the point, are important for consistently hooking fish. A hook's size is usually based on its Gape, which should be selected based on the type and size of fish you want to catch.



Bite (or Throat) - This is the distance from a line drawn between the hook's point and shank to the bottom of its bend (see the picture). This distance must be deep enough for the hook to penetrate past the barb.

Material - Hooks are usually made of very stiff wire from high-carbon steel, steel alloyed with Vanadium, or stainless steel. The first two are often coated to reduce corrosion and are used in fresh water. Stainless steel is often used in salt water because it is very corrosion resistant. Hook wire diameter varies with hook size. It's diameter may be standard, fine (1XF, 2XF, etc.) or heavy (1XH, 2XH, etc.). A 2XH hook, for example, is made of wire like a hook two sizes larger.

Materials

Fly tying materials include anything used to construct a fly on a hook. Materials not only include all sorts of natural and dyed furs, hairs and feathers, but a wide array of synthetics.



Natural materials include furs from rabbits, minks, muskrats, foxes, bears and squirrels; hair from deer, elk and moose; and feathers from chickens, pheasants, turkeys, ducks, geese and partridges.

Synthetic materials have allowed fly tyers to replace rare and sometimes illegal and endangered furs and feathers and well as create completely new types of flies. Synthetics include rubber legs; foam strips, cylinders and pre-molded parts; plastic tubing, sheets and cords; chenilles and yarns; and all sorts of flashy materials that can be used to build tails, wings, bodies and other parts.

Adhesives such as silicone, epoxy, lacquer and other modern materials are used in artificial flies to secure the final thread wraps or to coat the entire head or body of the fly for durability, extra weight, and to build a lifelike shape. Clear or colored fingernail polish makes a great (and inexpensive) sealer and adhesive.

Wire is used for extra weight and ribbing. Lead wire is the traditional method of weighting flies, but lead substitutes are becoming very popular.

Beads, cones and dumbbells of glass, plastic, copper, brass, nickel, tin, lead and tungsten are used, primarily at the head of the fly, to add weight, flash, and visual appeal. A front-weighted fly swims up and down when jigged.

Threads include Monocord, GSP (Gel Spun Polypropylene), nylon, Kevlar, and others. Most are made to be strong but thin to minimize thread buildup or



Lefty's Bug - Popper

Materials:

- Hook: Standard streamer, size 14 - 2
- Thread: Black or Tan, 6/0 or 3/0
- Tail: Gray or red squirrel tail
- Body: Small cork, about 1/2 total hook length
- Paint: Yellow (or other color) Model Paint (Testors is good)

Tying Instructions:

1. (optional) Crush the hook barb.
2. **Lay in** thread at the eye of the hook. Wind to the bend and back to the eye, covering the entire shank. Tie off and cut the thread.
3. Use a fine hacksaw blade or hobby saw to cut a groove fore and aft about 1/8" deep in the cork. You want to enclose the entire shank with the cork, but you do not want to narrow the gap, especially in the smaller sizes.
4. Using five minute epoxy or super glue, place a generous amount of glue into the slot of the cork and place it on the hook close to the eye. Set it aside, upside down, to dry. You can fill the slot and cork pits later if you want, but the fish won't care.
5. Paint the cork and set it aside to dry. If you use yellow, when the paint is dry it may have a mustard cast to it; this is what you want. If you seal the cork before painting, it will take the color faithfully. Alternatively, you can leave the cork natural or decorate it with waterproof markers.
6. (optional) Add painted or stick-on eyes after painting the body. Use a drop of epoxy or super glue for the stick-on eyes. Seal the whole cork with clear popper sealer or very thin epoxy if stick-on eyes are used.
7. (optional) Add rubber legs by running a needle through the body and drawing the rubber through so it sticks out both sides. Trim to length.
8. Return the hook with attached cork to the vise and **lay in** the thread behind the cork. Cut a small to mid sized bunch of squirrel tail or other stiff hair and using the **pinch technique** bind it down with several wraps, and follow by wrapping securely just to the barb. The tail should extend straight off the back about the length of the shank. Add a bit of clear fingernail polish to the wraps for durability.



Note: This pattern is not only easy to make, it casts very well and sits in the water with the tail down for good hooking. Consider building a bunch of cork bodies in different sizes and colors at one time. It will speed up production and you'll end up with a great selection of poppers for your fly box.



Mickey Finn - Streamer

Materials:

Hook:	Mustad 9672, size 12 - 2
Thread:	6/0 or 3/0, black
Weight:	(optional) Lead wire, same diameter as hook wire
Body:	Flat silver tinsel
Rib:	(optional) Oval silver tinsel
Wing:	Yellow over red over yellow bucktail or calftail

Tying Instructions:

- (optional) Crush the hook barb.
- Lay in** the thread behind the eye.
- (optional) Tie in a length of lead or lead substitute wire, the same diameter as the hook wire, a short distance behind the head. Wrap it to the bend for a heavy fly, less for a lighter fly. Wrap thread back and forth over the wire, coat with fingernail polish, and let dry.
- Using the **pinch technique**, tie in a length of oval silver tinsel ribbing on top of the hook shank, starting just behind the hook eye and wrapping back to the bend to secure the tinsel.
- Wind the thread forward to the tie-in point behind the hook eye. Tie in a length of flat silver tinsel body material.
- Wrap the flat tinsel back to the bend. Each wrap should touch the previous wrap so there are no gaps.
- Reverse direction and wrap the tinsel forward to the tie-in point, overlapping the first layer. Secure with several turns of thread and cut excess.
- Wrap the oval ribbing, starting near the bend, and **palmer** forward in open turns. Secure with thread and cut excess. For a durable fly, coat the body and rib with clear fingernail polish and let dry.
- Cut a sparse bundle of yellow bucktail or calftail, and an equal bundle of red. Comb out any underfur with dubbing needle or comb.
- Stack the hair to align tips. Divide the yellow bundle into two equal bundles.
- Measure the first yellow bundle to about 1½ times hook shank length.
- Using the **pinch technique**, tie in the first yellow bundle with several soft thread wraps. Apply moderate thread tension for the first few wraps, and then increase tension for several more wraps. If you have problems getting the hair to stay on top of hook, reduce the amount of hair.
- Trim the butt ends of the hair at an upward angle, then wrap the thread forward to cover the tapered ends.
- Measure the red hair bundle to the same length as the first yellow bundle and place it directly on top of yellow bundle. Tie in as in steps 12 and 13.
- Measure the second yellow bundle to the same length as first and tie in as in steps 12 and 13. Form a neat head, tie a few half hitches, and apply clear or black fingernail polish.



bulk. They come in several different sizes (diameters) and many colors, and some are pre-waxed. Waxed threads are best because they tend to bind materials in place between tying steps and because they're good for dubbing.

Selecting Materials

If you are just starting to tie your own flies, then following a well-known pattern or recipe is best as you build your skills on your first few flies. In addition to those that are included here, there are thousands of patterns available on the Internet and in many fly fishing books and magazines.

The materials list for each pattern describes what works best for the fly, and will sometimes suggest alternatives. As you gain experience, you may want to create your own patterns using materials you choose. In most cases, you want to simulate something that you think a fish will want to eat. This means you should match the colors, textures, stiffness, and other characteristics of your materials to the characteristics of the prey that the fish expect to see.

Preparing Materials

Why spend time on preparing and grooming the materials? Most dyed materials haven't been washed properly after the dye bath. In some cases, color from one material will bleed into another, especially when the fly gets wet. Imagine a fly with a white wing and a dyed red hackle. If the materials haven't been prepared properly, the white wing may end up pale pink in time.

Most materials improve in quality after a good wash and a gentle drying. Hackles assume their natural shape and are much easier to tie with. With the feathers in their own proper shape it's faster and easier to judge length of barbs and the taper of the feather. Hair materials probably benefit the most. Combing removes unwanted underfur and fluff that does no good on the hook. Washing cleans the hairs and makes them much easier to tie with, leading to better and more attractive flies.

Even natural dubbing can benefit from a wash. You won't see a great improvement in quality, but you get rid of excess dye and the little pieces of hide that are sometimes present. Once dry, you can also give many dubbings a whirl in a small coffee grinder. You can create your own custom dubbing by adding furs and other materials together, and then blending them to get the color, texture and flash you want. Don't use Mom's blender - no-one wants fur in their coffee!

Storing Materials

After you have prepared your materials, store them in labeled Ziploc bags to keep them organized and to keep insects and other critters from destroying them. Since direct sunlight will cause some materials to fade with time, store the bags in a dark, dry place.



Fly Tying Techniques

These techniques are common to many of the fly patterns in this handbook. They assume you are right-handed. For lefties, please reverse the instructions.

Securing the Hook

Properly placing the hook in the vise is important for trouble-free fly tying. The jaws should grip the hook **firmly** on the **lower** part of the bend so you have room to secure materials at the rear of the shank. The hook shank should be **parallel** to the work table and the point and barb should be slightly exposed.

Setting up the Bobbin

To set up the bobbin, insert the thread spool between the knobs and pull out a few inches of thread. Use a bobbin threader or a dentist's floss threader, inserted down the bobbin tube, to capture the thread and pull it up the tube. If you don't have a threader you can slide the end of the thread into the bottom of the tube and suck it up the tube. Adjust the tension of the bobbin by spreading or compressing the bobbin arms. The bobbin is normally held so the spool is in the palm of your hand and the tube is pointed **parallel** to the hook shank.

Laying in the Thread

A base wrap of thread serves as the foundation of your fly. It must be snug and well placed.

1. Hold the bobbin horizontally in your right hand with the tube facing left.
2. Grab the tag end of the thread in your left hand and lay the thread over the top of the hook shank, forming an "X".
3. Make several close wraps of thread around the hook shank to the right and then wrap back over the wraps you just made to lock the thread.
4. Wrap thread along the hook shank to build a foundation.
5. Trim off the excess thread and wrap to the starting point for your pattern.

It is important to note that, when tying a fly, the thread should always be under control with some tension. If slack is allowed, materials will come loose.

Tying Materials on the Hook

There are a number of special techniques used to tie in materials to make a fly. These techniques are used to make the flies in this handbook.

Pinch Technique - When material is wrapped on top of the hook, the thread tends to pull the material around the hook away from you. This is called **thread torque**. To solve this, either place the material on the side of the hook



Lefty's Deceiver - Streamer

Materials:

Hook:	Mustad 34007 (salt) or 3366 (fresh), size 2 - 2/0
Thread:	3/0 white, black, or to match topping
Weight:	(optional) Lead wire, same diameter as hook wire
Body:	Silver Mylar tinsel
Tail:	4-6 Yellow saddle hackles, not splayed
Flash:	(optional) Red Krystal Flash
Hackle:	Yellow bucktail on belly, red bucktail above
Throat:	(optional) Red Krystal Flash
Topping:	Peacock Herl

Tying Instructions:

1. (optional) Crush the hook barb.
2. **Lay in** the thread and cover the hook shank.
3. (optional) Tie in a length of lead wire (see Bunny Fly), cover with thread wraps and coat with head cement.
4. Prepare and arrange 4-6 saddle hackles in a bunch so they are facing each other, concave side in. Make sure tips are aligned. They should be about two times the length of the hook, with the stems reaching to just short of the eye.
5. Using the **pinch technique**, tie in the saddle hackle bunch just above the barb. Use gentle pressure at first to avoid twisting the hackles, then increase pressure to make them secure.
6. (optional) Tie in a few strands of Krystal Flash on each side.
7. Tie in silver Mylar tinsel above the barb, wrap it to just short of the eye, return, tie off, and clip excess.
8. Cut a bunch of yellow bucktail for the belly and sides. Clean out the fuzzy underfur, align the tips in a hair stacker, and tie the bunch in under the front of the fly. It is important that the hair extend back well past the bend to minimize fouling of the tail when casting.
9. Cut a smaller bunch of red bucktail for the top. Clean it, align the tips, and tie it on top of the hook, aligned with the belly.
10. Tie in a few short strands of red Krystal Flash for a throat.
11. Tie in a few strands of peacock herl for a topping.
12. Trim all loose ends, build a neat head, half hitch, and coat with a drop or two of head cement. Paint eyes on the head if desired.



Other color combinations include all Black, all White, Olive & Brown, all Chartreuse, Red & White, Chartreuse & White, Blue & White, and Olive & White.



DC Wiggler - Streamer

Materials:

- Hook: Mustad 34007 (salt) or 3366 (fresh), size 6 - 2
- Thread: Clear mono or 6/0 flat waxed nylon (match body)
- Weight: Black bead chain
- Flash: Krystal Flash
- Tail: 2-4 long thin saddle hackles (grizzly shown)
- Body: Chenille (color to match tail)
- Body Hackle: Saddle hackle (color to match tail)
- Weed guard: 20-lb mono (optional)

Tying Instructions:

1. (optional) Crush the hook barb.
2. **Lay in** thread behind the eye and cover the shank.
3. Tie in bead chain eyes one hook eye diameter behind the eye, using figure-eight wraps. Soak the wraps in head cement for durability.
4. (optional) Tie in a mono weed guard on top of the shank and wrap halfway down the bend, then wrap back to above the barb. Leave the end free for now.
5. Tie in flash extending behind the hook about 3-4 hook lengths.
6. Tie in a saddle hackle tail above the barb and then along the shank using the **pinch technique**.
7. Tie in body hackle first and then chenille, just above barb.
8. Wind a chenille body in closely spaced turns. Wrap around the bead chain eyes and tie off behind the eyes. Trim the excess.
9. Palmer the body hackle forward and tie in behind the bead chain eyes.
10. (optional) Tie in the weed guard at the hook eye, half hitch, and cement the head.



This fly is good in both saltwater and freshwater. It can be tied in a number of barred colors, including grizzly, olive, tan, yellow, brown, and chartreuse. You can also use heavier lead barbell eyes or no weight at all to vary the action and use the fly in different places, shallow and deep.



nearest you so it rolls up into the position you want, or use the **pinch technique** to hold the material firmly in place while you attach it. To do this, pinch the material snugly on top of the hook between your left-hand thumb and forefinger. Draw the thread up between these fingers, and then down between the fingers, over the material and behind the hook. Draw the thread straight down to capture the material on top of the hook. Repeat a few more times to tightly bind the material in place.

Dubbing - The most common method is direct dubbing or touch dubbing. Rub a thin coat of tacky dubbing wax on the thread. Rub your fingers up and down the thread to spread the wax evenly. Now take a pinch of fine fur and stretch it out a bit, then twirl it on the waxed thread in one direction only. Wrap the dubbed thread on the hook to form the body. For large flies, create a loop of thread, distribute dubbing between the threads of the loop, spin the loop to lock the dubbing, and wrap the loop on the hook.

Palmering - To palmer a material such as hackle, it is tied in at the front or rear of the fly. The body is normally built, and then it is then wound in open turns to the other end and tied off. A more durable method uses a ribbing wire. The wire is normally tied in at the tail end. The hackle is tied in at the head of the fly and wound down to the tail in open turns. The wire is then wound from the tail to the head in open turns to cross over and secure the hackle, and then tied off at the head. The hackle and wire are then trimmed.

Half Hitch - Assuming you are using a half hitch tool:

1. Hold the bobbin in your left hand and pull it toward you.
2. Lay the tool on top of the thread.
3. Wrap the thread once around the end of the tool.
4. Place the hollow end of the tool against the hook eye.
5. Slide the knot off the tool, making sure it goes over the head wraps.
6. Repeat several times to secure the fly.

If you don't have a tool handy, you can use your finger! Just wrap the thread loosely around the end of your finger, point it at the hook eye, and slip the knot off, making sure it goes where you want it. With your bodkin, seal the knots by using a dab or two of clear or colored fingernail polish.

Fly Patterns

The patterns given here are grouped into seven types: streamers, nymphs, wet flies, dry flies, terrestrials, bass bugs, and saltwater. The tools, materials and techniques discussed above will be used to tie these fly patterns.



Bead Head Pheasant Tail - Nymph

Materials:

Hook:	Standard-length, heavy nymph, sizes 8-18
Thread:	6/0, color to match body
Weight:	Brass bead to match hook (see table on other page)
Tail:	Pheasant tail fibers
Body:	Pheasant tail fibers
Rib:	Fine copper wire
Case:	Pheasant tail fibers
Thorax:	Peacock herl
Legs:	Pheasant tail fibers



Tying Instructions:

1. (optional) Crush the hook barb.
2. **Lay in** thread on the hook, just behind the eye. Cover the hook with thread until it hangs just above the barb.
3. Tie in a piece of fine copper wire on top of the hook shank. Form the tail by tying in 6 to 8 barbs of pheasant tail, and then wrap the thread 2/3 of the way toward the hook eye and under the pheasant tail fibers.
4. To form the abdomen, wrap the pheasant tail in closely spaced turns around the hook shank, forming a tapered cylinder like a carrot. The abdomen should cover about 2/3 of the hook shank. Tie off and clip excess material.
5. To make the wing case and legs, tie in another bunch of pheasant tail with the tips pointing over the hook eye. Make them long enough to almost reach the hook point when they are folded back. Wrap the thread from just in front of the abdomen to just behind the eye and back again.
6. To make the thorax, tie in 2-3 strands of peacock herl and then wrap the thread to just behind the eye.
7. Wrap the peacock herl in closely spaced turns up to just behind the eye, tie off and clip excess. Then counter-wrap the copper wire in an open spiral all the way up the abdomen, around the pheasant tail wing case material, and up the thorax. Tie off just behind the eye and clip excess. This reinforces the fly, provides a natural rib, and adds a little flash.
8. Fold the pheasant tail tips that were pointed over the eye so they point back to the sides and under the thorax. Secure with a few turns of thread.
9. Fold the remaining pheasant tail over the top of the thorax, tie off behind the eye and clip excess. Finish off by forming a small, neat head, adding a few half hitches to secure it, clipping the excess thread, and (optional) adding a drop or two of head cement to the wraps to make the fly more durable.



Clouser Minnow - Streamer

Materials:

Hook:	Standard-length, straight-eye saltwater (Mustad 34007) or freshwater (Mustad 3366) hook, size 2-12
Thread:	3/0, color to match wing
Weight:	Lead or other heavy metal dumbbell eyes
Tail:	White or other light bucktail
Flash:	Silver, pearl or other Krystal Flash to complement wing
Wing:	Chartreuse or other bucktail, darker than tail

Tying Instructions:

1. (optional) Crush the hook barb.
2. With the hook rightside-up in the vise, **lay in** the thread and then tie in the barbell eyes about 2 hook eye diameters behind the hook eye with tight figure-eight wraps.
3. Tie in a sparse bunch of stacked white bucktail in front of the dumbbell eyes. Cross the thread under the eyes and continue tying down the bucktail along the shank behind the eyes. Wrap gently so the hair doesn't flare too much. Wrap the thread back up the shank and under the eyes. Trim the excess bucktail.
4. Turn the hook upside-down in the vise so the point is above the shank. If you have a rotary vise, just turn the vise to orient the hook upside-down.
5. Tie in a sparse bunch of Krystal Flash in front of the eyes, just a little longer than the bucktail. Trim the excess.
6. Tie in a sparse bunch of stacked chartreuse bucktail in front of the eyes, about the same length as the first bunch. Wrap it firmly so it flares up above the tail and flash.
7. Trim excess bucktail, form a neat head, **half hitch** a few times, cut the thread, and apply head cement or epoxy. Epoxy is best for toothy fish.



This fly can be tied in many color combinations and sizes to match local baitfish in both fresh and salt water. Synthetics may be used instead of bucktail for the tail and wing, and are more durable for toothy fish.



Woolly Buzzer - Streamer

Materials:

- Hook: 3X or 4X long streamer hook, size 2 -12
 Thread: 3/0, color to match body
 Weight: Lead or lead substitute wire, same diameter as hook wire (or a metal bead at the head of the fly)
 Tail: Blood Marabou, color to match or contrast with the body
 Flash: Krystal Flash, color to match the tail
 Body: Chenille, color to match local forage (often olive or black)
 Hackle: Soft hen hackle, color to match or offset body

Tying Instructions:

- (optional) Crush the hook barb.
- (optional) Wrap lead wire around the hook shank or slide a metal bead up to the eye.
- Lay in** thread on the hook, just behind the eye or bead. Cover the lead wire in crisscross wraps and wrap back to the end of the shank, just above the barb or tip. Coat the lead wire with head cement.
- Even the tips of a clump of marabou. Using the **pinch technique**, tie the clump at the rear end of the hook shank so the marabou tail is no longer than the hook. Wrap thread over the marabou up to the lead wire (if present) and back to the rear of the hook shank. Trim the excess marabou close to the hook.
- (optional) Tie in 2 or 3 strands of flash on each side of the tail, just a little longer than the tail.
- Hold the hackle by the tip and gently stroke down the feather toward the butt. A good quality feather will feel soft and slightly waxy. Using the pinch technique, tie in the hackle by its tip, extending behind the hook, shiny side up, in the same spot as the tail.
- Cut a section of chenille and pull off about ¼ inch of fibers from the core threads that hold the chenille together. Using the pinch technique, tie in the threads right where you just tied the tail and hackle.
- Advance the thread to the eye. Wind the chenille forward in closely spaced turns to the eye and bind down with the thread, making sure not to crowd the eye. Trim excess chenille close to the hook.
- Palmer** the hackle forward in an open spiral, evenly spacing each wrap, to the front of the fly. Trim excess hackle, form a neat head, **half hitch** a few times, cut the thread, and apply head cement.



Bead Head Hare's Ear - Nymph

Materials:

- Hook: Standard-length, heavy nymph, sizes 8-18
 Thread: 6/0, color to match body
 Weight: Brass bead to match hook (see table below)
 Tail: Guard hairs from a hare's mask or ear
 Rib: Small brass or gold wire
 Abdomen: Hare's ear dubbing
 Wingcase: Natural turkey tail feather
 Thorax: Hare's ear dubbing

Tying Instructions:

- (optional) Crush the hook barb.
- Slide the bead onto the hook with the small hole forward, **lay in** the thread behind it, and cover the hook shank to just above the barb.
- Cut a small pinch of hare's mask fur, remove the underfur, and use the **pinch technique** to tie in the guard hairs just above the barb. They should be about as long as the hook gap.
- Tie in the wire rib.
- Wax the thread and create a sparse dubbing rope with mixed hare's mask fur. Wrap a tapered abdomen halfway up the hook shank.
- Palmer** wrap the wire rib forward counter-clockwise. Tie off and trim excess wire.
- Tie in a section of turkey tail feather as wide as the hook gap so it extends backward over the abdomen.
- Wax the thread and create another sparse dubbing rope with mixed hare's mask fur. Wrap a full thorax and finish with the thread just behind the bead.
- Pull the turkey tail feather forward and then make one or two thread wraps to secure it behind the bead.
- Trim the excess feather, then make several more securing wraps and whip finish or use several half hitches directly behind the bead.
- Use a bodkin to pick out thorax hairs to simulate buggy legs.



Bead Size	Hook Size
5/64"	#18
3/32"	#16
7/64"	#14
1/8"	#12
5/32"	#10 & #8



Partridge and Orange - Wet Fly

Materials:

Hook: Mustad 3906B or equivalent, size 10-16
 Thread: 6/0 Orange
 Body: Orange Floss
 Hackle: Gray or Brown Partridge

Tying Instructions:

1. (optional) Crush the hook barb.
2. Start the thread on the hook behind the eye and clip the excess.
3. Tie in orange floss, wrap it to the bend, and back toward the eye. Leave about 2 eye-lengths open for hackle and head. Tie off the floss and trim excess.
4. Select your hackle feather. It should be sized so the barbs extend about to the back of the bend and are slightly longer than the shank. Holding the feather by the tip, stroke the fibers backward so they stand out from the stem. Strip the fibers from the side of the feather that will lie against the hook shank.
5. Tie in the hackle just back from the eye, so the natural curve of the feather is towards the hook or so the convex side faces you.
6. Do NOT advance the thread to in front of feather yet. Make 1½ to 2 wraps with the partridge hackle, and then leave the hackle pliers hanging down below the hook, still holding the butt of the feather. Make sure you keep the convex side of the feather facing forward as you wrap. At this point, the thread is still behind the wrapped hackle.
7. Now bring the thread forward through the hackle, being sure to wrap down the stem once as you go. Be careful not to bind down any fibers. Now advance the thread to the eye and trim the excess butt of feather.
8. Form a neat, tapered head. Lay in a few half hitches, cut the excess thread, and finish with head cement.



Wet flies are a very old type of fly, but are very effective. The traditional method of fishing this type of fly is "greased line" with a floating fly line and some of the leader treated with floatant to keep it on the surface. Cast across stream, hold the rod toward your bank, move the rod out toward the fly, and feed slack to slow the drift. The idea is to get a mostly drag free drift, while keeping the line tight enough that you feel the strike.



Hare's Ear Spider - Wet Fly

Materials:

Hook: Mustad 3906B or equivalent, size 10-16
 Thread: 6/0 Black
 Rib: Gold Mylar Tinsel
 Body: Hare's Mask Dubbing
 Hackle: Partridge Cape

Tying Instructions:

1. (optional) Crush the hook barb.
2. Wrap the hook with thread, traveling down the hook shank and stopping above the hook point.
3. Tie in a piece of Mylar tinsel with the gold side facing out. Move the thread up the hook shank and then back down to cover the tinsel.
4. Wax the thread. Take and pinch some dubbing and stretch it out a bit. Twist the dubbing counter clockwise on the thread. The main reason to do this is so that the body is more durable.
5. Dub up toward the eye of the hook leaving about 2-3 eye lengths open. Leaving space allows room for the hackle.
6. Make 2-3 turns of tinsel at the base of the body. This will create a small tag and also allows you to make sure that the tinsel is facing the correct way. Wrap the tinsel forward in even turns. 4-5 turns is good for a #10 hook. On smaller hooks, you might make less wraps. Tie the tinsel off and clip the tag end.
7. Tie in a hackle from the cape with the good (shiny) side out. To size the hackle, choose an oversized feather that is about 1½ times the distance of the hook gap. Clip the stem of the feather off.
8. Wrap the hackle around the hook shank a couple of times. If the fibers get matted, twist them a bit with your fingers. If you don't like how the fibers lie, cock the head by twisting to get the hackle to lie straight.
9. After you cock the head and twist the fibers, wind the thread back into the hackle. This locks it into place and makes the fibers lie where you want them to be. This saves you from creating all sorts of difficult hackle folds and makes the hackle slope back. A correctly wrapped wet fly has a hackle wrapped in a cone shape like the one shown.
10. Make a few half hitches and cut off any tag ends of thread. You can rough up the body by rubbing it with a Velcro dubbing stick or a dubbing brush tool, or by picking it out with a bodkin.

