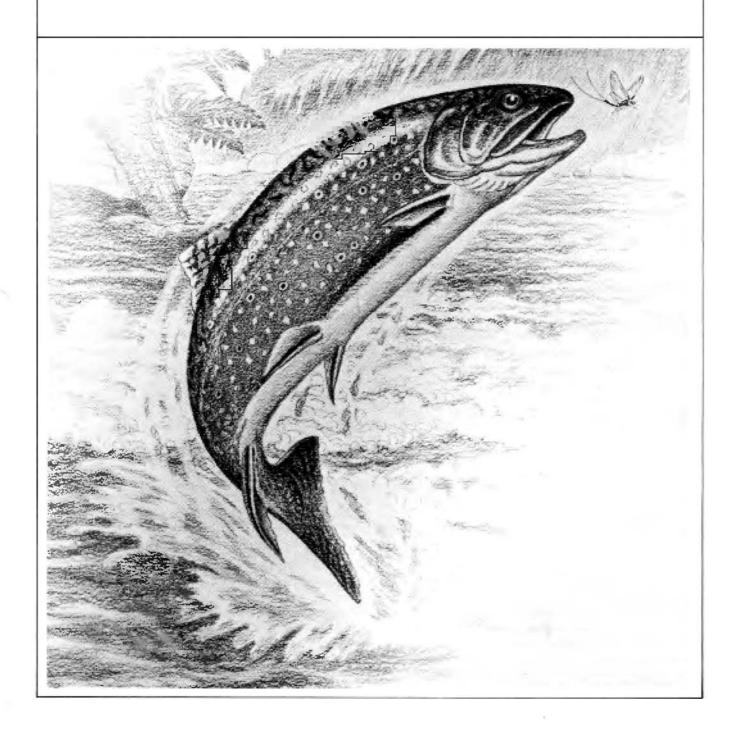
Basic Fly Tying by Ronald A. Howard, Jr.



Basic Fly Tying

by

Ronald A. Howard, Jr.

CONTENTS

Introduction	3
Equipment and materials	3
Basic tying techniques	5
Streamer and bucktail flies	6
Spiders and variants	8
Bivisible and hackle flies	9
Wet flies	9
Winged dry flies	13
Nymphs	14
Hair wing and hair body dry flies	15
Bass and panfish bugs	17
Sharing activities	18
Fishing them	18

I would like to express my thanks to John W. Kelley, Charles Dvorak. Edward Schano. Harold Carley, Dwight Webster, and Gordon (Scotty) Little, who read this manuscript and offered helpful criticisms. Thanks are also due Raymond and Joanne Davenport and the members of their 4-H Club for testing the material presented in this manual. And a special thanks to Francis W. Davis who provided the cover art as a donation to 4-H Natural Resources programs.

To the users I wish happy tying and tight lines.

NOTE: Flies shown in text were tied by the author. Color photos were taken by Douglas M. Payne.

The author is a former extension associate in the Department of Natural Resources, New York State College of Agriculture and Life Sciences, at Cornell University.

Introduction

Probably the oldest known method of sport fishing is the use of artificial flies. History tells us that the early Macedonians caught speckled fish with a pointed hook wrapped with a bit of red wool and a feather from a cock's hackles (neck feathers). A modern version of that fly, the red hackle, is a well-known wet fly today. Many fishermen feel that the oldest sport fishing method is the most enjoyable and the most productive.

The very nature of sport fishing lies in making the fish catching process both pleasurable and challenging. Humans, who have strength, technology, and reasoning ability on their side have restricted their approach in order to increase the fun of their sport. Fly fishing permits us to return fish with little harm, and the potential for returning fish unharmed can increase our enjoyment of the sport. We try to extract as much pleasure as is possible from each trip afield. Many techniques are used to this end: photography, reading, and rod making, to name just a few. Fly tying is one of the most rewarding of these pleasure stretching activities. Catching fish is a challenge. Catching fish under difficult, often self-imposed, conditions is rewarding. Catching fish under these same conditions with a lure you have created is even more rewarding still.

Fly tying is neither hard nor boringly easy. Like most manual skills, tying requires a certain degree of coordination, patience, and practice as well as some native ability. There are no mysterious secrets to fly tying, but every experienced hand has learned a few tricks of the trade. Knowledge of these tricks can speed your progress, but nothing can replace actual tying practice. Your first attempts will feel clumsy, and the results may look odd; but as you gain experience both the clumsiness and the oddities will disappear. You will find that even while you may be frequently dissatisfied with your beginning efforts, the fish will still accept your offerings.

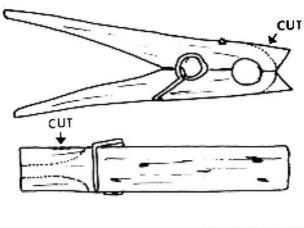
Equipment and Materials

The equipment needed for fly tying need not be extensive. One must have something to hold the hook, commonly a vise; but a pair of vise grip pliers or even your fingers will do in a pinch. The vise should hold the hook securely while exposing the shank for easy access. A pair of scissors, a pair of hackle pliers, a dubbing needle, and something to hold the thread complete the necessary hardware. Body materials, hackle, thread (2/0 and 6/0 are suggested), and head cement are readily available. Your stock of materials will grow as time goes on; and, no doubt, you will want

to add to or to change some of your tools. These few basics will do for the present.

Hackle Pliers

A serviceable pair of hackle pliers can be made from a spring-type clothespin (figure 1). Select a pin with straight grained jaws. Round the tips of the clothespin so that they form a single curved tip. Now, thin the jaws from both sides until they leave a set of jaws \%" to \%" wide. Wrap a rubber band around the spring several times to increase the tension. Finally, place a piece of fine sandpaper in the jaws, allow them to close firmly, and draw the sandpaper through. Repeat that process after turning the sandpaper over. Your hackle pliers should now have smooth, squared grasping surfaces with a fairly narrow rounded tip. They will serve quite well in tying most flies.



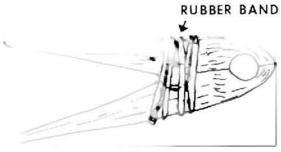


Figure 1. Hackle pliers

Dubbing Needle

The dubbing needle (figure 2) has many uses: picking out tied-under hackle points, roughening fur bodies, splitting divided wings, applying a drop of head cement, and many others. You can make one from a short piece of dowel and a strong sewing needle. Taper one end of a 3" piece of 1/4" dowel. Holding the needle about 3/4"-1/2" from its eye with vise grip pliers, dip it

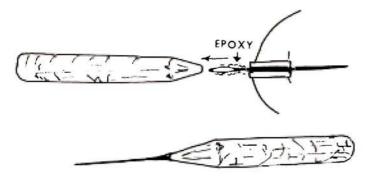


Figure 2. Dubbing needle

in epoxy; then force it into the tapered end of the dowel, leaving the point exposed. Smooth the epoxy around the base of the needle and set it aside. Your dubbing needle will be ready in a few hours.

Whip Finishing Tool

A whip finishing tool is handy for finishing the heads of your flies. You can make one from a wooden match stick, a short piece of monofilament, a length of thread, and a drop of varnish. Cut the tip of a match stick at an angle so that a fairly long tapered end is produced. Clip off a short piece (about 4") of 4-pound-test monofilament (you may want to use 2-pound-test for smaller flies); and bind it to the tapered end, leaving a bit of material behind the wrappings (see figure 3). Now bring the other end of the mono around to the other side of the taper, forming a small loop. Bind it down, and wrap for the length of the taper. Finally, turn the remaining ends under and bind them down securely. Half-hitch or whip finish (wrap over a loop; then, using that loop, pull the thread under itself) the end of the thread. Apply a drop of lacquer to finish the tool.

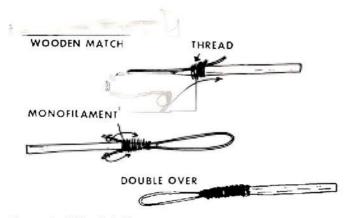


Figure 3. Whip finishing tool

Materials

Both materials and tools for fly tying may be found in many sporting goods stores. The classified ads of major sporting magazines frequently list sources of supply as well. Although listing the following suppliers intends no endorsement, here are several mail order tackle dealers who carry tying supplies. Catalogs are available on request.

Fireside Angler Box 823A

The Orvis Company Manchester, VT 05254

Melville, NY 11746

E. Hille Box DS

Reed Tackle Box 390

Williamsport, PA 17701

Caldwell, NJ 07006

The materials listed below are needed in order to tie the flies in this booklet. Many of them are readily available. Others will need to be ordered.

assorted loose neck hackles (dry fly) assorted loose saddle hackles red, black, yellow floss red, black wool natural, black, yellow, and scarlet bucktail natural, yellow, and green deer body hair natural calf tail (brown and white) 6/0 and 2/0 black nylon head cement .020 lead wire peacock herl woodchuck, red fox belly, and raccoon furs lemon wood duck flank mallard flank speckled turkey wing quills red wing quill pair mallard wings pair hen pheasant wings medium and fine flat silver tinsel medium oval silver tinsel fine flat gold tinsel

hooks:

8 - 4x or 6x long #12 - 5x short

#12 - x fine

#10 - x stout

#10 - 3x long

4 - x stout

Hackles are feathers, usually from the neck or midback region of a bird. The most frequently used hackles are taken from domestic roosters, but many other birds have useful hackle feathers. Quills are either the center shaft of the feather or a stripped portion of a feather vane (for example, stripped peacock herl) when referred to in a body material context. Wing quills are sections cut from the flight feathers of birds, generally waterfowl. Small feathers on the leading edge of the wing (marginals) are often used as nymph wing cases.

Dubbing is nearly any fibrous material that can be spun (dubbed) into a spindle and wound on the hook shank. Nearly any fur is useful as dubbing, with muskrat, fox, beaver, otter, raccoon, and rabbit being most in demand. Wool yarn of all descriptions is useful. Floss is a slightly twisted or untwisted material, usually of silk, rayon, or nylon. Chenille and tinsel of all sorts are available from many sources. If you are getting the idea that almost anything is useful to the fly tier, you are absolutely right.

Hooks

Hooks for fly tying range from about #5/0 to #28. The larger the number, the smaller the hook. For every gap size (hook number) there is a standard length and a standard wire size. Deviations from the standard are indicated by "x's". For example, a #12 hook that is one hook size longer than standard on wire three hook sizes smaller than standard is designated as a #12-1x long, 3x fine hook. Similarly, a #6 hook with a shank four hook sizes shorter than normal and on wire five hook sizes heavier than regular is a #6-4x short, 5x stout hook, that is, the hook has a #6 gap, a #10 shank length, and #1 wire.

Thread

Traditionally silk thread has been used in fly tying, but nylon thread is stronger and more readily available now. You can start with spools of 2/0 and 6/0 black nylon. Larger numbers over the slash indicate smaller thread diameters. Alphabetic symbols are used for the larger threads. The smallest of those, size A, is about twice the diameter of 2/0. It is the largest thread commonly used in fly tying.

The thread used on any fly should be the smallest size that can do an adequate job. Sizes 9/0 through 5/0 are usually used on dry flies and smaller wet flies. Larger wets may call for 4/0 thread. Streamers and bucktails, as well as most hair bugs, are tied with 2/0 or 3/0 thread. Very bulky hair bugs or large salt water flies may require the added strength (and increased winding pressure) of size A thread to hold their materials in place. A coating of beeswax strengthens the thread and aids in the application of dubbing materials.

Basic Tying Techniques

Your hook should be clamped firmly in the vise. Its shank should be parallel to the table surface, and at least to start, the point should be covered by the jaws. You may wish to use a different hook position as you gain experience (see, for example, figures 9 and 16).

The thread, its size governed by the type of fly, should now be attached to the shank. Some tiers prefer to hold it in the left hand, wrapping away from them back over the free end several times with moderate pressure. Others attach the thread with several half hitches. Try both methods and stay with your preference. Throughout the tying process some tension should be maintained on the thread when it is not in active use.

Care in tying is the real secret to good flies. A few "tricks" can make carefully tied flies an easier accomplishment. II a piece of material is held tightly in place while being tightly bound to the hook with several (enough but not too many) turns of tying thread, a well tied fly can be made without excessive and often unsightly bulk. Tinsel should be tapered where it is tied on so that it can be wound compactly on the hook. Good tinsel bodies demand smooth surfaces under the tinsel. Dubbing should be sparse and tightly held unless otherwise specified in the pattern.

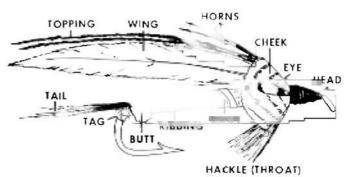


Figure 4. Composite streamer fly

In order to tie a fly you must be able to read the pattern for it. The streamer in figure 4 illustrates many of the terms used in patterns, while the other typical flies in figures 5-8 illustrate any terms peculiar to

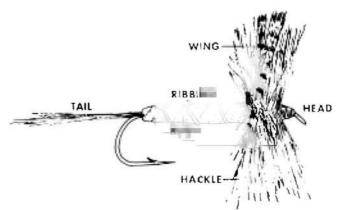


Figure 5. Typical dry fly

their types of flies. Note that the nymph (figure 6) has a wing case (or pad) and a body divided into abdomen and thorax. Remember to look at the entire pattern before you begin to tie. Some materials must be tied in well before being applied. The materials for the streamer would be applied in the order; tag, tail, but, body, ribbing, tackle (throat), wing, topping, horns, check, eye, head. The ribbing must be tied in before the body is wound on. Similarly, many nymph wing cases must be tied in before the body is bound on. Common sense and a little experience will eliminate most pattern reading errors.

The fly is finished by winding a neat head. Whip finishing is accomplished by placing the loop of the whip finisher along the head of the fly with the open end toward the eye then winding over it. The free end of the thread is passed through the loop, and the loop is withdrawn. Trimming the thread and applying a drop of head cement, lacquer, or varnish completes the fly.

But tying is learned by tying, so let's begin.

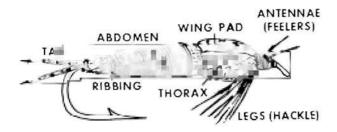


Figure 6. Nymph

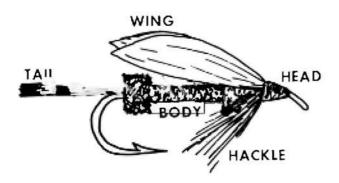


Figure 7. Typical wet fly

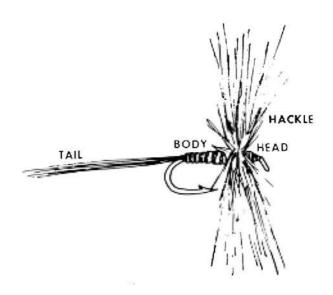


Figure 8. Variant, one of the long-tailed, long-hackled flies

Streamer and Bucktail Flies

Streamers (feather wing) and bucktails (hair wing) are tied to imitate small nymphs or minnows or as attractors. One of the older and more useful attractor patterns is the Micky Finn, while one of the better imitative patterns is the black-nosed dace. Remember as you are working on these two flies that sparsely tied bucktails and streamers give the best results in the East.

Micky Finn

Hook: 4x-6x long Thread: 2/0 or 3/0 black

Rib: oval silver tinsel (optional)

Body: flat silver tinsel

Wing: yellow over scarlet over yellow bucktail

Head: black

Tying Instructions

This section may seem overly obvious, but it is your first try. Succeeding flies will rely upon your using the basics presented here. Only new or different procedures will be detailed in following sections.

1. Clamp a hook in the vice securely, covering the barb.

2. Bind the thread to the hook shank about \(\frac{1}{6}\)" from the eye (you may want to adjust this length later to accommodate your own sense of head proportion). If you are right-handed, your windings should be clockwise, that is coming under the shank toward you and going over the shank and away.

3. Clip a clothespin or pair of hackle pliers to the thread to hold some tension. (If you are using a bobbin, let it hang.)

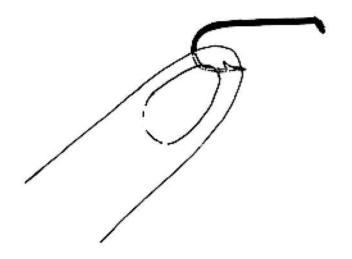


Figure 9. Hook in vise

- Cut a length of tinsel with a taper at one end, and bind the tapered end to the hook with several turns of thread (see figure 10).
- 5. Wrap the tinsel carefully over the hook shank as you have wrapped the thread. Be sure the tinsel touches itself but do not overlap the edges. Carry the wrapping to the rear of the shank, then wrap it back over itself to the thread. Tie it off and trim the end.
- 6. Cut a small bunch of yellow bucktail from the skin. 7. Holding the hair firmly between the thumb and fore-finger of the left hand, place it in the desired location on the hook; and hind it down. To do a neat and strong job, the thread should also be passed between the thumb and forefinger at least three times. This will assure that the hair stays where you wish (see figures 11 and 12).
- 8. Trim the butts of the hair.
- 9. Repeat the procedure with small bunches of scarlet, then yellow hair. All three wings should be about the same length and just slightly longer than the book shank.
- 10. Wind a nearly shaped head.
- 11. Whip finish the head.



COMPLETED TINSEL BODY

Figure 10. Tying a double-wound tinsel body

12. Trim the end of the thread with your scissors, and apply a drop of head cement with the dubbing needle. If the eye of the hook has become clogged with dry cement, clear it with the point of the dubbing needle. Your first Micky Finn is complete.

Now let's try another hucktail.

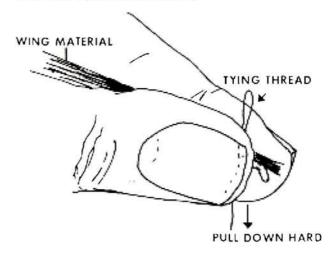


Figure 11. Binding on the bottom wing material

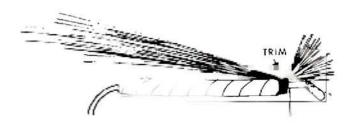


Figure 12. Bottom wing tied in ready for trimming

Black-nosed Dace

Houk: 4x-6x long Thread: 2/0 or 3/0 black

Tail: short tuft of scarlet wool Rib: narrow oval silver tinsel

Body: flat silver tinsel

Wing: brown over black over white bucktail, sparsely

dressed

Head: black

- 1. Clamp hook in vice and bind on thread near bend.
- Bind on small piece of red wool yarn leaving about \(\lambda_{16}'' \)
 beyond thread.
- 3. Bind in the ribbing.

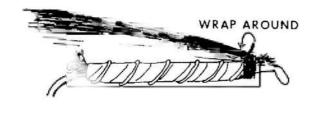




Figure 13. Use of separation wrap to isolate materials

- 4. Carry thread to head space over the wool.
- 5. Trim wool.
- 6. Bind in a length of flat silver tinsel.
- 7. Wind tinsel to end of thread and back.
- 8. Wind ribbing evenly over the body material and tie it off.
- 9. Secure very small bunch of white bucktail to shank followed by black and brown bucktail. All three should be of about equal size and length, and they should remain separate. Take a wrap around each if necessary to keep them separated (see figure 13).
- 10. Trim the ends, form the head and whip finish.

Streamers are much like bucktails in both construction and use. Let us try a simple one.

Black Ghost

Hook: 4x-6x long

Thread: 2/0 or 3/0 black

Tag: flat silver tinsel

Tail: yellow hackle fibers or golden pheasant crest

Body: black floss, tapered slightly

Rib: flat silver tinsel

Hackle: yellow or golden pheasant crest

Wings: white saddle hackles

Head: black

Tying Instructions

- 1. Bind on medium silver tinsel.
- Take 3 or 4 turns of tinsel from the bend of the hook forward (see figure 4) and tie off.
- 3. Bind in a small bunch (15-30 fibers) of yellow hackle fibers with the natural tips to the rear.
- 4. Trim the butts of the tail fibers.
- 5. Bind on ribbing tinsel, leaving free end to rear of hook.
- 6. Bind in black floss over butt of ribbing tinsel.
- 7. Carry thread to head region.
- 8. Wind floss over shank, building a slightly tapered body.

9. Apply ribbing-evenly.

10. Apply hackle: strip off bunch of fibers and bind them beneath the hook shank. (This is called bearded hackle.) They should be about \(\frac{1}{3} \) as long as the shank.

11. Trim the butts of the hackle fibers.

12. Select 2 saddle hackles that match (have similar curvatures and sizes when held with their dull sides together).

13. Strip the fibers from the bases of the hackle until only slightly more than the desired length of feather remains.

14. Holding the hackles together (shiny sides out) bind them to the hook shank with several turns of thread. They should be slightly longer than the hook.

15. Build a head, whip finish, and varnish.

Summary

The experiences so far have taught you several things. First, they have illustrated the method of holding the hook in the vise and attaching the tying thread. You have seen how to wrap tinsel bodies, floss bodies, and ribbing. Bearded hackle and both hair and feather wings have been applied. The hold-tightly-and-bind-tightly technique has also become a habit. Finally, you have gained a sense of proportion and learned how to finish the head of a fly.

Spiders and Variants

Now let's try a different type of fly. Spiders and variants are long tailed, long hackled dry flies which have short bodies or none at all. They are very high floating dries and they come down very softly on the water. These flies will teach you how to wind on hackles, and they will catch fish too.

Badger Spider

Hook: 5x short-regular fine wire

Thread: 6/0 black

Tail: long badger hackle fibers

Body: fine flat gold or silver tinsel (optional)

Hackle: long stiff badger

Tying Instructions

1. Bind on thread at the rear of the hook.

2. Strip tail fibers from a long hackle, and bind them to the hook. The tail should be 4 to 6 times longer than the width of the hook gap.

Select two stiff badger hackles (saddle hackles are good for this purpose) and strip the soft webby fibers from their outlls.

4. With the shiny side of the hackle facing you and the butts of the quills pointing toward the eye of the hook, bind the hackles to the hook shank at the base of the tail windings.

5. Clip the butts of the hackles and carry windings to the eye of the hook.6. Grasp the tip of the top hackle with the hackle pliers and

8

wind it around the hook shank toward the eye. (The spider should look quite bushy, so keep the windings compact.)

7. Tie the hackle tip in at the head and trim it.

8. Repeat that procedure with the second hackle.

9. Wind a small, neat head, whip finish, and apply a drop of head cement. NOTE: You may apply a short tinsel body if you desire. Use fine tinsel (gold or silver). The it in at the tail, and use a single wrap for 2-6 turns. The body should be short and light.

Variants are another type of fly which use the long tail and long hackle pattern. Try your hand at a cream variant, a fly you will find in most fly boxes in the eastern United States.

Cream Variant

Hook: 5x short-regular fine wire #12-#18

Thread: 6/0 black-cream, white, or tan may be used

Tail: long cream

Body: cream quill-lacquered

Hackle: long stiff cream

Head: small, color of tying thread

Tying Instructions

 Tie in the tail. The same length (4-6 times the width of the gap) applies.

- Tie in the small end of a well-soaked stripped hackle quill. If these have not been prepared in advance, a minute or two in hot water will soften them sufficiently.
- 3. Wind the quill tightly to the shoulder and bind it down.
- 4. Clip the butt of the quill and wind over the clipped end.
- 5. Select 2 matched cream hackles, strip the webby fibers from them, and bind them on as before.
- Clip the butts of the quills and wind over them to the eye of the hook.
- 7. Wind on the hackles and trim their tips.
- 8. Whip finish and apply a drop of head cement.
- 9. Apply two coats of head cement over the quill body.

Bivisible and Hackle Flies

There are a couple of other types of wingless (hackle) flies: bivisibles and "hackles", including the gray hackle, brown hackle, and so on. Both of these are simple ties. The hackle flies have several body types, tails, and two hackles of the type in the pattern. For example, a gray hackle is tied with either a grizzly (Plymouth Rock) tail or a red hackle fiber tail, a peacock or a yellow-ribbed-with-silver body, and grizzly hackles. You can construct as many combinations as you wish. Bivisibles are all hackle flies with a white hackle at the head for better visibility. They are good fish takers. In fact, some anglers use them almost exclusively. Bivisible hackles are palmered (wound from tip to butt) so that the fly will taper out from tail to head. Brown, grizzly, dun (blue gray), badger, and black are all good colors.

Brown Bivisible

Hook: regular-fine wire

Thread: 6/0 black

Tail: brown hackle fibers or the tips of two hackles

Body: none

Hackle: brown with white at the head

Head: small, black

Tying Instructions

I. Secure thread near the bend of the hook.

- 2. Tie in a small bunch of brown hackle fibers about the length of the hook shank. (Omit this step if hackle point tail is to be used.)
- Select a matched pair of backles and strip the webby fibers from their bases.
- 4. Holding the hackle tips brush the fibers toward the butt of the hackle so that they stand out from the shaft at nearly right angles. (This will help you in winding them on neatly.) Some tyers strip hackle from underside of quill or fold the feather so all fibers are on the upper side of the quill.
- 5. Tie the hackles in by their tips (leaving the tips exposed to the rear of the hook if they are to be the tail.)
- 6. Grasp the butt of the top hackle with your hackle pliers and wind the hackle evenly toward the eye of the hook. Remember to leave space for 2 or 3 turns of white hackle at the head. NOTE: If the fibers tend to turn under the feather, merely pick them out with your dubbing needle as you tie.
- Repeat with the second hackle, trim both, and wind over the butts.
- 8. Tie in a white hackle the same size as the brown ones. (It may be tied in by either the butt or the tip, but using the butt section is easier.)
- Take several turns of the white hackle, then tie it off and trim the end.
- 10. Form head, whip finish, and apply a drop of head cement.

Wet Flies

You have tried your hand at a couple of streamers and some simple dry flies. Now let us attempt to tie a representative wet fly or two. The hackle flies may be tied as wets by tying the hackle sparsely and swept back as directed below. In almost all cases, the wet flies used in eastern trout fishing should be sparsely dressed. The Professor is one of the more popular "fancy" wets.

Professor

Hook: regular, heavy wire Thread: 6/0 to 4/0 black Tail: strip of red wing quill

Body: yellow floss

Ribbing: narrow silver tinsel Hackle: brown, sparsely ited Wing: mallard flank section

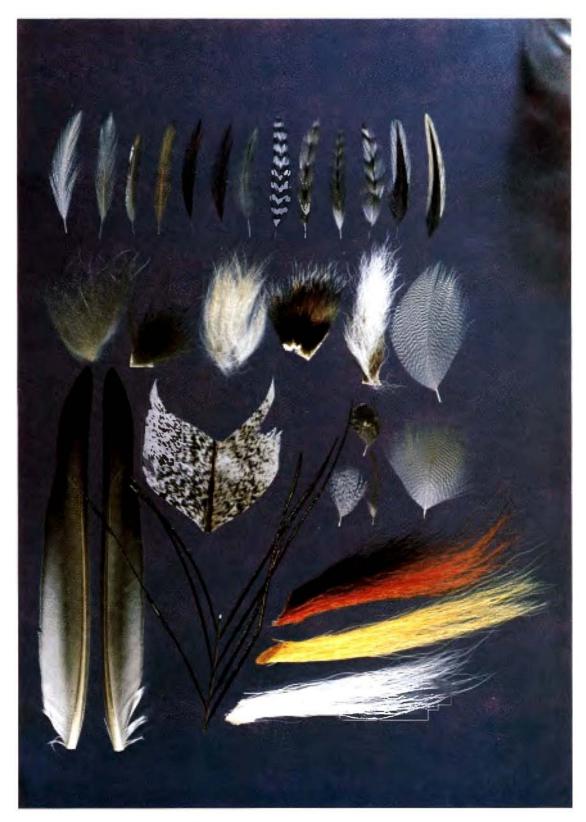


Plate 1 Some fly tying materials

Top row: cream, light ginger, ginger, dark ginger, red (Coachman brown), black, medium blue dun, grizzly, ginger grizzly, red grizzly, cree, badger, golden badger hackles; Second row: Light raccoon, dark raccoon, red fox belly, woodchuck, calf tail, mallard flank; Third row: mallard wing quills, speckled turkey, brown (above) and gray (below) partridge, golden pheasant crest, lemon woodduck flank; Bottom: peacock herl, scarlet, yellow, and natural bucktail pieces.



Plate 2 Sample flies

Top row: Micky Finn, Black-nosed Dace, Black Ghost; Second row: Badger Spider, Cream Variant, Brown Bivisible, Professor; Third row: Leadwing Coachman, March Brown, Ginger Quill, Light Cahill; Fourth row: Leadwing Coachman Nymph, Green Drake Nymph, C.K. Nymph, Oak Leaf Roller; Fifth row: Royal Wulff, Yellow Irresistible; Sixth row: Black Ant, Micro-mouse, Frog; Bottom: Muddler Minnow.

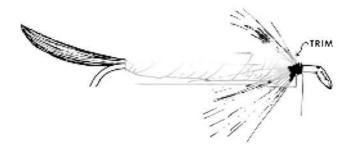


Figure 14. Wet fly hackle smoothed back, ready for trimming and wing application

Tying Instructions

- 1. Clamp hook in vise and secure tying thread.
- 2. Bind in a narrow section of red goose (or other) quill.
- 3. Tie in ribbing tinsel.
- 4. Tie in yellow floss and carry thread to shoulder.
- 5. Wind on a tapered body and tie off floss.
- 6. Wind tinsel tightly and evenly over the floss. You should have about 2½ to 3½ turns of ribbing.
- 7. Tie in a soft brown hackle (one only).
- 8. Wind on the hackle (2 to 4 turns only).
- 9. Moisten the fingertips and smooth the hackle back and down.
- 10. Secure the hackle in the swept-back condition.
- 11. Trim off any fibers remaining above the body (figure 14).
- 12. Strip a section of fibers from a mallard flank feather and secure it as a wing.
- 13. Trim the butts of the fibers. (Tapering them toward the eye of the hook aids in forming a neat compact head.)
- 14. Wind the head, whip finish, and apply head cement.

The Professor is typical of the flank feather winged wets. The Leadwing Coachman is a quill wing wet with a peacock herl body. It is an excellent fly for trout wherever they are found.

Leadwing Coachman

Hook: regular, heavy wire

Thread: 6/0 black

Tag: flat gold tinsel, 2 or 3 turns

Body: peacock herl

Hackle: brown

Wing: mallard wing quill slips

Head: black

Tying Instructions

- 1. Clamp hook in vise and secure tying thread.
- 2. Bind in a length of fine flat gold tinsel.
- 3. Double wrap tinsel for 3 or 4 turns and tie it off.
- 4. Tie in several (2-4) heavy strands of peacock herl.
- 5. Wind the tying thread and peacock herl around one another and carry both together to the shoulder.
- 6. Bind herl to shank and trim ends.

- 7. Wind on several (2-4) turns of brown hackle.
- 8. Smooth it back and down, and secure it with thread.
- 9. Cut narrow slips from a pair of matched (one right, one left) wing feathers (see figure 15).

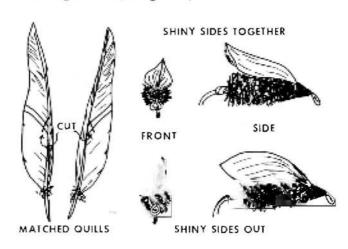


Figure 15. Wing quills and wet fly quill wings

- 10. Match the two wings. If their shiny sides are together with the natural curve pointing upward they will knit to form a tent-like wing. If their duller sides are together with the natural curve pointing down, they will form a flat wing. Both of these are used. Try them and see which you prefer. The first technique forms a better looking wing, while the second forms a more durable one.
- 11. Holding the wings firmly in place, bind them down with several turns of thread.
- 12. Trim the butts of the quill segments and wind a compact head.
- 13. Whip finish and apply a drop of head cement.

The March Brown is an extremely old English pattern. It is tied in several ways, and all of them will catch fish. The version using a dubbed raccoon fur body and a pheasant quill wing is a very successful fly for many anglers. Perhaps you will enjoy success with it too.

March Brown

Hook: regular, heavy wire

Thread: 6/0 black

Tail: brown hackle, partridge, or grouse

Ribbing: fine flat silver tinsel

Body: raccoon fur, fairly full and tapered

Hackle: brown, partridge, or grouse

Wing: cock or hen pheasant wing quill slips

Head: black

- Tie in a sparse tail about as long as the hook shank.
 Many prefer partridge, but all of the listed materials will work well.
- 2. Tie in a length of fine flat silver tinsel.

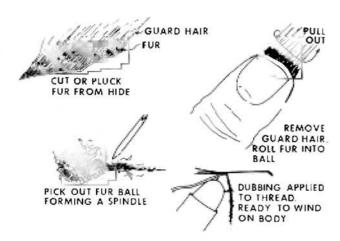


Figure 16. Dubbing preparation

- 3. Pluck or cut a bit of raccoon fur from the hide. Holding it by the base in one hand, remove the long guard hairs with the other (figure 16).
- 4. Roll the fur into a ball, then tease it (pick apart) into a spindle shape with the dubbing needle.
- 5. Hold the fur spindle along the tying thread and spin it into a compact, yarnlike mass.
- 6. Wind the fur on, tapering it toward the shoulder.
- 7. Tie it off and strip any remnants from the thread.
- 8. Wind the ribbing tinsel over the body material. (Remember, 21/2 or 3 turns is about right), and tie it off.
- 9. Tie in the partridge, grouse, or brown hackle feather and apply the hackle.
- 10. Clip and match sections from a pair of pheasant wing quills with the more heavily marked sides facing out.
- 11. Apply the wing and trim the quill butts.
- 12. Wind a compact head, whip finish, and apply a drop of head cement.
- 13. Using your dubbing needle, pick out some of the fur to form a slightly roughened body.

Winged Dry Flies

Many fly fishermen would agree that fishing dry flies is one of the most enjoyable kinds of trout fishing (or any other fishing, for that matter). You have sampled a few dry fly types earlier. Now let us try to tie some of the standard, divided wing dries. An old, and very useful pattern, using quill wings, is the Ginger Quill.

Ginger Quill

Head:

Hook: regular Thread: 6/0 black

Wings: slate duck wing quill slips

Tail: ginger (light brown) Body: stripped peacock herl

Hackle: ginger black

- 1. Attach thread at shoulder region.
- 2. Cut and match a pair of narrow slips from a duck wing
- 3. Hold them with their convex sides together (so that they tend to spread apart), and with their tips toward the eye of the hook (see figure 17).
- 4. Bind the wings in place with several turns of thread.

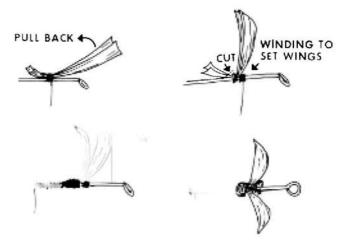


Figure 17. Dry fly guill wings and the figure-eight wrap

- 5. Bend the wings up to right angles with the hook shank, and build up a few turns of thread in front of them to hold them in that position,
- 6. Divide the two sections by splitting them with the dubbing needle.
- 7. Pass the thread between the wings several times to spread them. This is accomplished by using a "figure eight" wrap (see figure 17). A drop of lacquer at their bases makes them more durable, but it is not necessary.
- 8. Trim the butts of the quills and wind over them to the tail region. Keep your windings tight and even.
- 9. Tie in a small bunch of ginger hackle fibers leaving 1-11/2 times the shank length beyond the windings.
- 10. Tie in the end of the peacock herl, (You may also tie in some fine silver wire if a rib is desired.)
- 11. Trim the tied-in ends of the hackle fibers and the stripped herl section, and carry the thread evenly over them to the rear of the wings.
- 12. Wind the quill (herl) up to the area just behind the wings, and bind it down.
- 13. If ribbing is desired, wind it in the opposite direction (counterclockwise) over the body and tie it off (see figure 5).
- 14. Select a pair of hackles with fibers about 11/4 to 11/4 times the length of the hook gap and strip the webby fibers from their bases.
- 15. Bind the hackles in, and trim their butts.
- to. Wind over the hackle butts to the head of the fly.
- 17. Wind on the first hackle, taking 3-4 turns behind the wing and 2 or 3 in front of it.
- 18. Bind in the tip and trim it.

- 19. Repeat the process with the second hackle.
- 20. Wind a small, compact head.
- 21. Whip finish and apply a drop of head cement.
- 22. Give the body quill two coats of head cement.

The Ginger Quill in appropriate sizes will imitate many of the pale brownish flies that hatch through the middle of the season. A light bodied divided wing fly in appropriate sizes is needed frequently. The Light Cahill is an excellent fly for that need.

Light Cahill

Hook: regular, fine wire Thread: 6/0 tan or black

Wings: lemon woodduck flank

Tail: light ginger Body: creamy fox fur

Hackle: light ginger or ginger and cream mixed

Head: same as tying thread

Tying Instructions

- 1. Bind the thread to the book in the shoulder region.
- 2. Strip a bunch of fibers from a lemon flank feather.
- Bind the feather fibers to the hook in the same manner as described above.
- Split the clump in half with the tip of the dubbing needle and secure it with a figure-eight wrap.
- 5. Trim the butts of the wing fibers and wind over them to the tail of the fly.
- Bind in a few light ginger (creamy tan) hackle fibers about 1 to 1½ times the length of the hook shauk.
- 7. Trim the butts of the tail material.
- 8. Plack a bit of creamy fur (red fox belly fur is best) from the skin and prepare the dubbing as you did for the March Brown.
- 9. Apply the dubbing sparsely and compactly up to the shoulder.
- 10. Tie in the hackles as before.
- 11. Wind on the hackles and tie them off.
- 12. Whip finish and apply a drop of head cement.

Nymphs

Since you have covered wets, dries, streamers, and bucktails in their basic forms, you have only nymphs remaining in order to complete your basic pattern types. The background you have had to this point will permit the use of much more brief sets of instructions. The Leadwing Coachman nymph is a standard fish catcher.

Leadwing Coachman Nymph

Hook: 2x-3x long regular to heavy wire

Thread: 6/0 black

Tail: brown hackle fibers Body: peacock herl (bronze) Hackle: brown-soft, 2 turns only

Wing Pad:

shaped marginal feather from mallard wing

Head: medium sized and black

Tying Instructions

- 1. Bind in the tail. Keep it fairly short and sparse.
- 2. Bind in 4 to 6 heavy strands of peacock herl.
- 3. Wind the body on as instructed in the section on wet flies: Leadwing Coachman.
- 4. Apply 2 turns of brown backle. (Nymph backle should be very sparse.)
- Sweep the hackle back as for a wet fly and trim the fibers on the top of the hook.
- Shape a wing pad from a duck wing marginal feather (see figure 18).
- 7. Bind the wing pad over the trimmed hackle area.
- 8. Wind a moderate sized head and linish.

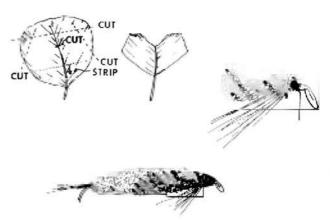


Figure 18. Trimming duck marginal feather for wing case

Frequently, especially in the evening, a light colored nymph is effective. A favorite light pattern is the Green Drake Nymph.

Green Drake Nymph

Hook: 2x-4x long, regular to heavy wire

Thread: 6/0 olive or black

Tail: two cream hackle points, tied divided

Body: creamy tan fur, full and rough Hackle: cream, long and soft, 2 turns only

Wing

Pad: marginal feather from hen pheasant wing

Head: moderate, of tying thread

- 1. Secure the tips of two small cream hackles as a tail.
- 2. Divide the hackle tips with a figure-eight type wrap.
- 3. Spin a loosely held dubbing strand, and apply it as a full (fairly fat) body. Quite a few tips of fur should be showing. The body should look rough.
- 4. Wind on a cream hackle and trim it as above.

- Bind in a small hen pheasant marginal feather as a wing pad.
- 6. Build up a moderate head and finish.

Both of the above nymphs can be tied weighted by putting a few turns of lead foil or wire on the hook shank before tying. (The lead should always be lacquered to prevent discoloration of the body material.) A far better weighted nymph, one that is an essential pattern, is the C.K. nymph, designed by Virginian, Chuck Kraft.

C.K. Nymph

Hook: #8-4x long Thread: black

Tail: a short clump of lemon wood duck fibers

Body: black wool over .020 lead wire Ribbing: dark grizzly hackle—long and soft

Head: black

Tying Instructions

1. Wrap 1/2 to 1/4 of the hook shank with lead wire.

2. Lacquer and allow to dry a few seconds.

 Wind thread back and forth over the tightly wound lead body, building up smooth tapers on either side of the lead (see figure 19).



Figure 19. C.K. lead body with thread tapers

- Bind in a clump of wood duck flank fibers as a tail. Keep is short and bushy.
- 5. Tie in the ribbing hackle. (Either palmer or regular style will do, but palmered hackle is less durable.
- 6. Tie in wool and wind it to the head of the fly.
- Bind it down and trim the end.
- Wind the ribbing backle evenly over the body to the head.
- 9. Tie it off and trim the end.
- 10. Wind a fairly large head and finish it.
- 11. Trim the ribbing hackle fibers to about $\frac{1}{8}$ " to $\frac{1}{4}$ " in length.

Note: Although most nymphs are fished with a "dead drift", the C.K. is practically worthless unless it is given a twitching action against or across the current. Try it; you'll like it.

Hair Wing and Hair Body Dry Flies

Most of the hair wing and hair body flies are tied as attractor patterns with good floating and visibility characteristics. The Wulff patterns are hair wing dries. They were originally designed by the famous angler, Lee Wulff, as Atlantic salmon flies. Trout fishermen, first in the western states, began to use them in smaller sizes when fishing "heavy water", that is, in rapids or other turbulent areas. In larger sizes they are good for bass, while the trout sizes (#14-#8) are also good for panfish.

The Irresistibles, Rat-faced MacDougal, and Humpy, are representatives of the hair bodied flies. Like the Wulff series, they are good floaters and fine attractor patterns. The Humpy is tied by bending a clump of deer hair from the tail to the shoulder and binding it down. All the others of this series employ clipped spun deer hair for body material.

Some of the terrestrial (land insect) imitations are tied using these same techniques. Beetles and oak leaf roller worms are particularly effective.

A leaf roller will help to develop your technique.

Oak Leaf Roller

Hook: #10-#16 regular-2x long, fine wire

Thread: 3/0 black or olive

Body: yellow-green deer body hair

Head: black

Tying Instructions

- 1. Anach the tying thread at the bend of the shank.
- 2. Clip a small clump of yellow-green deer body hair.
- 3. Hold it at the rear of the hook and take one turn over it while gradually relaxing your grip slightly. The hair should flare on both ends.
- 4. Wind thread in zig-zag fashion through the flared hairs so that they spin around the hook. This should look like very coarse, roughly wound hackle.
- 5. With the thumb and forefinger of the left hand behind the hair clump, push the front of the clump tightly together with the nails of the thumb and fingers of your right hand. (The barrel of a discarded ballpoint pen is a good tool for this job.)
- Take a couple turns in front of the hair clump, then repeat the entire process until the hook shank is covered.
- 7. Wind a moderate head and finish it.
- 8. Cut the hair to shape with your scissors. Trim gradually and turn the fly frequently as you trim so that the desired shape is attained. The worm should be about 1½ times the thickness of a pencil lead.

The Irresistible series is a set of similar flies except for hackle and body color. The Natural Irresistible uses natural deer hair and blue dun hackle. The White Irresistible has a white body and badger buckle, and the Yellow Irresistible is a yellow bodied, brown hackled fly. The Rat-faced MacDougal is exactly like the Natural Irresistible except for its grizzly hackles. These can be very difficult ties, so do not give up if your first few attempts are less than perfect.

Yellow Irresistible

Hook: regular, fine wire

Thread: 6/0 black (use heavier thread if necessary)

Tail: brown hackle fibers

Body: yellow deer body hair clipped to shape

Wing: brown calf tail

Hackle: brown Head: black

Tying Instructions

- 1. Tie a tail using a fairly large clump of brown hackle fibers.
- 2. Trim the butts of the tail fibers and wind over them.
- 3. Spin a body of yellow deer hair covering the hook to just beyond the halfway point as you work toward the eye, that is, leave a slightly long hackle and wing area.
- 4. The off the thread with a couple of half hitches or a whip finish
- 5. Trim the body to shape (see figure 20).



Figure 20. Shaped hair body for Irresistible

6. Tie in a pair of brown backles.

7. Tie in a clump of brown call's tail about \(\frac{1}{3} - \frac{1}{2} \) the diameter of a pencil.

8. Trim the butts of the hair, stand the hair upright, and divide it evenly to form the wings.

9. Wind the hackle on as before.

10. Form the head and finish it.

After struggling with that last fly, you should have little difficulty with a Royal Wulff.

Royal Wulff

Hook: regular, fine wire

Thread: 6/0 black

Wing: white calf tail or deer hair Tail: woodchuck guard hairs

Body: peacock herl, scarlet floss, and peacock herl in

equal thirds

Hackle: dark brown

Head: black

Tying Instructions

- 1. Cut a small clump of fine deer belly hair or white calf's tail from the skin.
- 2. Even the tips of the hairs, and bind the clump on as you did the flank feather wing.
- Clip the butts of the wing material and form the wings as before.
- 4. Wind thread evenly to the rear of the hook.
- Bind in an evened set of 15-25 woodchuck guard hairs (long body hairs). Both the tail and the wings should be about the length of the shank or slightly longer.
- 6. Bind in a heavy strand of peacock herl at the base of the tail and wind it over the rear third of the body region.
- 7. Tie off the herl and tie in a strand of scarlet floss.
- Wind the floss thickly over the middle third of the body and tie it off.
- 9. Apply a second heavy herl to the forward third of the body and tie it off.
- 10. Attach two dry fly hackles from a dark brown cape (Rhode Island Red) and wind them on.
- 11. Finish with a head and lacquer.

Muddler Minnow

The Muddler Minnow is a very versatile fly. Tied first by Don Gapen as a sculpin (a forage fish) imitation, it is now frequently used as a dry fly as well. It will serve in both capacities, taking both bottom feeding fish when fished wet and rising trout when they are feeding on grasshoppers.

Hook: 3x-4x long Thread: 2/0 or 3/0 black

Tail: slip of speckled brown urkey quill

Body: flat gold tinsel

Wing: speckled turkey over black bucktail (sparse)

Collar: natural bucktail Head: clipped deer body hair

- 1. Tie in a slip of turkey quill as a tail.
- 2. Wind evenly and compactly to the shoulder.
- 3. Attach and wind on a length of flat gold tinsel.
- 4. Tie in a few wisps of black bucktail.
- 5. Tie a pair of short slips of turkey quill, wet fly fashion over the bucktail.
- 6. Trim all ends. About 1/5 of the shank should remain.
- 7. Clip a small bunch of natural deer hair and hold it on the shank so that it reaches about ½ of the way along the body.
- Bind it in place, allowing it to spin around the hook shank as a collar (see figure 21).
- 9. Push the hair back as you did in tying the hair bodied flies, then spin a tightly wound head of deer body hair.
- 10. Whip finish the tying thread.
- 11. Clip the hair to shape.

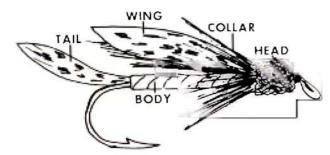


Figure 21. Muddler minnow

Bass and Panfish Bugs

Although the flies you have been tying so far may be used for many types of fish, you have been mainly concerned with trout patterns. The following patterns, while useful for trout from time to time, are mainly for use on warm water fish, particularly bass and panfish. Of all the panfish, bluegills are among the top in providing fly rod sport. Let us make a pair of effective bluegill catchers, one for the surface and one that sinks.

Black Ant

Hook: regular, heavy wire (#8-#14 are best)

Thread: 6/0 black

Body: black floss, lacquered Hackle: black—1 or 2 turns only

Head: large, black

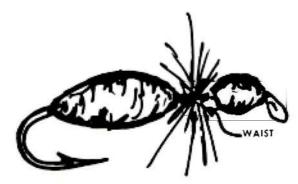


Figure 22. Black ant

Tying Instructions

- 1. Attach a piece of black floss about \% of the way back along the shank.
- Wind back and forth over the back ½ to ¾ of the shank, forming a plump double-tapered body.
- 3. Tie in a small black hackle at the front of the taper.
- 4. Wind on the hackle-1 or 2 turns only.

- Tie in a piece of black floss in front of the hackle as you did for the rear of the body.
- 6. Wind a smaller, shorter taper at the head. (The hackle should be in a narrow "waist" section between the head and the body. See figure 22.)
- 7. Tie off the head and whip finish.
- Saturate both head and body with several coats of head cement. (The fly should feel hard and have a very glossy appearance.)

The Black Ant is a fast sinker and an excellent bluegill fly. (Trout like it too!) For your floating bluegill taker, let's try a Micro-mouse.

Micro-mouse

Hook: regular, heavy wire (#8-#12 best)

Thread: 3/0 black

Tail: black goose wing fiber Body: clipped natural deer hair

Head: small, black

Tying Instructions

- 1. Bind on a single fiber from a goose wing. (Most tiers prefer black but any color may be used.)
- 2. Spin a tightly packed body of natural deer body hair. (You may use colored hair if you wish.)
- 3. Tie off at the head and finish.
- 4. Clip the underside of the lure flat and about $\frac{1}{2}$ the gap thick.
- 5. Clip the top and sides of the body in a teardrop shape, tapering to a small head. If desired you may leave ears and whiskers, but they are more for fisherman appeal than fish appeal.

Now let's try a couple of lures for the bluegills' bigger cousins, the black bass. A hair mouse may be tied on a larger hook, say a #4 or a #2, to attract bass. A hair frog is also a good bass catcher.

Frog

Hook: regular, heavy wire (#2/0 to #6 best)

Thread: 2/0 olive or black

Legs: green over white, yellow, or brown bucktail

Body: yellow-green deer body hair

Head: small, black

- 1. Clamp a short piece of fine soft wire in your tying vise.
- 2. Attach a length of tying thread to the wire.
- Bind the bucktail (colors you wish to use for legs) to the wire, concealing it and leaving a "foot's worth" of the natural tips beyond the wire.
- 4. Wind over about ½" to ¾" of the wire and whip finish the winding.
- 5. Repeat that process with the other leg.

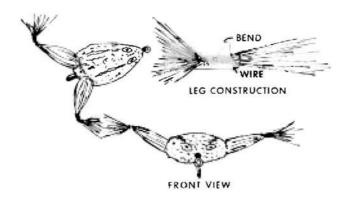


Figure 23. Deer hair frog

- 6. Cut the wire near the ends of the whipped over areas.
- 7. Bend the wire under the winding so that the "leg" and the "foot" are at a 60 to 90 degree angle to each other. (Remember that the legs are for opposite sides of the frog!)
- Spin a very small bunch of green bucktail onto the rear of the hook.
- 9. Attach the legs, flaring their but ends into the other hair.
- 10. Spin a tight body of green body hair. (A few small areas of yellow of brown hair may be tied, not spun, in if you want spots on your frog.)
- 11. Finish the head and cut the frog body to shape, taking care not to cut the legs (see figure 23).
- If desired you may add spots, stripes, and eyes using lacquer or paint.

Sharing Activities

The techniques, skills, and end products from this project can be used in many ways. Displays of equipment, materials, and finished flies are possible school, club, or fair exhibits. Photographs of various phases of fly tying could also make a good exhibit. Mounted sets of flies could even be shown at craft fairs or sold as decorator items.

Although you probably will not get rich as a fly tier, you may help to pay for your equipment and materials

by selling some of your flies to friends. Flies also make excellent gifts either as display items or as working flies. By tying fancy flies on jewelry pins one can create some unusual gifts.

Demonstrations of fly tying would be appropriate for clubs, school groups, scouts, or local sportsmen's clubs as well as local and state fairs. But the best demonstration of the flies is to the fish they are intended to fool.

Fishing Them

A few things should be said about how to use the flies you have tied. Lures, like your frog, should be fished to imitate the movements of the living things they are supposed to suggest. Most trout flies that are fished on the surface should be drifted "dead", that is, with no movement except that given them by the currents. Wets can be fished similarly, but they frequently produce better when given small twitches and jerks or a slow, steady retrieve. Streamers are often best when they are made to dart like a small fish.

Form, size, and color are all important in fishing flies. Try to capture an insect that the fish are taking. Then you can imitate it in size, form, and color to increase your chances of taking fish. If you are refused (the trout ignore your offering) experiment with other flies that are similar. As a last resort, try something very different; for example, a spider, a wet fly, or a streamer, if the fish are on the surface. Sometimes the change will produce results.

Your rod should be 7-8 feet long with a line in the #5 to #7 class, matching the rod. The suggested line numbers are printed on most rods now, making matching easy. Either a level (L) or double taper (DT) line will do for a start. A floating line (F) is suggested. Tapered leaders will aid in good fly presentation. The 7½ foot leaders are sufficient for early season use, but 9 footers are needed later on.

This is the first booklet of a forthcoming series for the Fish and Fishing Project. Perhaps you will want to explore the others, too.

Notes



Helping You Put Knowledge to Work

Quantity discount available

This publication is issued to further Cooperative Extension work mandated by acts of Congress of May 8 and June 30, 1914. It was produced with the cooperation of the U.S. Department of Agriculture, Cornell Cooperative Extension, New York State College of Agriculture and Life Sciences. New York State College of Human Ecology, and New York State College of Veterinary Medicine, at Cornell University. Cornell Cooperative Extension provides equal program and employment opportunities. Lucinda A. Noble, Director.

196/260 Reprinted 1/90 2M CP E90643G